



CITY OF PORTLAND, OREGON - BUREAU OF DEVELOPMENT SERVICES

1900 SW Fourth Avenue, Suite 5000 • Portland, Oregon 97201 • www.portlandonline.com/bds



Sign Permit Application

Permit number _____

FOR INTAKE, STAFF USE ONLY

Application date _____ Other inspections _____
 Issued date _____ Map zone _____ Applicable zone _____
 Approved by _____ Overlay zone _____
 Structural engineer's approval _____ Plan / historic district _____

APPLICANT: Complete all sections below that apply to the project. Please print legibly.

Installation address 7857 SE 13th Property tax account # _____

Business name Savory Spice Shop

Legal owner of sign _____

Address of sign owner _____

Property owner name _____

Address _____

Sign contractor name Security Signs Construction contractors board # 122809

Address 2424 SE Holgate Blvd, Portland, OR 97202

Day Phone 503 546 7114 FAX 503 230 1861 email melissa@securitysigns.com

For electric signs

Electrician's name Marc Linquist Electrician's license # 383 SIG

Which of the following best describes the proposed work?

- New sign
- Alteration to existing sign
- Addition to an existing sign, size increased by _____ %
- New awning
- Addition to existing awning
- Addition of a sign to existing awning

Type of sign, check all that apply

- Freestanding
- Sign on awning
- Painted wall/adhered
- Other _____
- Monument
- Fascia sign, over 400 lbs.
- Pitched roof
- Projecting
- Fascia sign 400 lbs. or less
- Sign on marquee
- Sign attached to canopy

Proposed sign dimensions

width of sign face	height of sign face	overall sign height	depth of fascia sign	total area of sign
<u>10</u> ft.	<u>1.5</u> ft.	<u>15</u> ft.	<u>2"</u> in.	<u>15.5</u> sq. ft.

- [Y] [N] Do you have permission of the property owner to erect this sign?
- [Y] [N] Changing image features? If yes, area of change _____ sq.ft. [Y] [N] Illuminated?
- [Y] [N] Complete listing or existing signs attached. Required, a complete listing including type and size area.
- [Y] [N] Site plan attached. If a site plan is required it must show size and location of existing signs, for site plan requirements see the Sign Permit Program Guide.

Applicant's signature Melissa Hayden

Applicant's name, printed Melissa Hayden Applicants phone # 503 546 7114

12-17803856

8/20



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B

Sign Permit Application

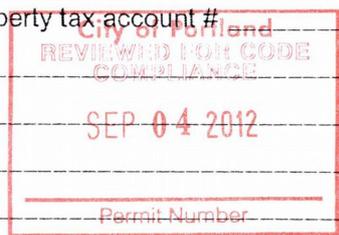
Permit number

FOR INTAKE, STAFF USE ONLY

Application date _____ Other inspections _____
 Issued date _____ Map zone _____ Applicable zone _____
 Approved by _____ Overlay zone _____
 Structural engineer's approval MW 8/31/2012 Plan / historic district _____

APPLICANT: Complete all sections below that apply to the project. Please print legibly.

Installation address 7857 SE 13th Property tax account # _____
 Business name Savany Spice Shop
 Legal owner of sign _____
 Address of sign owner _____
 Property owner name _____
 Address _____
 Sign contractor name Security Signs Construction contractors board # 122809
 Address 2424 SE Holgate Blvd, Portland, OR 97202
 Day Phone 503 546 7114 FAX 503 230 1861 email melissa@securitysigns.com
 For electric signs
 Electrician's name Marc Linquist Electrician's license # 383 SIG



12-178 0475G

Which of the following best describes the proposed work?

- New sign
- Alteration to existing sign
- Addition to an existing sign, size increased by _____ %
- New awning
- Addition to existing awning
- Addition of a sign to existing awning

Type of sign, check all that apply

- Freestanding
- Sign on awning
- Painted wall/adhered
- Other _____
- Monument
- Fascia sign, over 400 lbs.
- Pitched roof
- Projecting
- Fascia sign 400 lbs. or less
- Sign on marquee
- Sign attached to canopy

Proposed sign dimensions

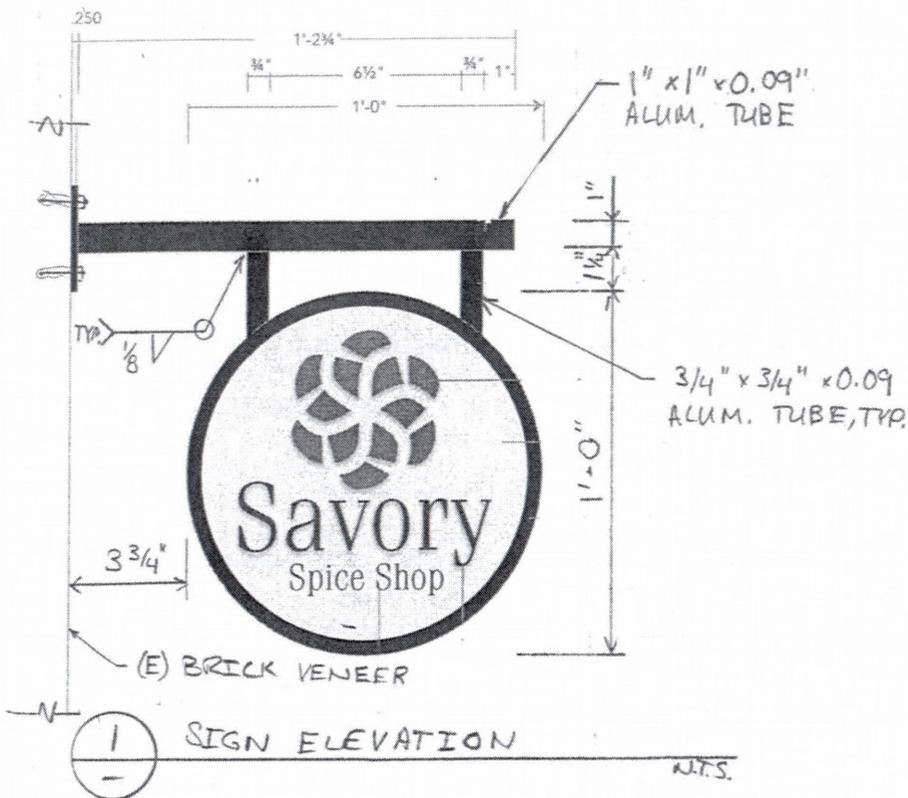
width of sign face	height of sign face	overall sign height	depth of fascia sign	total area of sign
<u>1'</u> ft.	<u>1'</u> ft.	<u>10'</u> ft.	<u>4"</u> in.	<u>10'</u> sq. ft.

- [Y] [N] Do you have permission of the property owner to erect this sign?
- [Y] [N] Changing image features? If yes, area of change _____ sq.ft.
- [Y] [N] Complete listing or existing signs attached. Required, a complete listing including type and size area.
- [Y] [N] Site plan attached. If a site plan is required it must show size and location of existing signs, for site plan requirements see the Sign Permit Program Guide.

[Signature] [Y] [N] Illuminated? N

Applicant's signature [Signature]

Applicant's name, printed Melissa Hayden Applicants phone # 503 546 7114



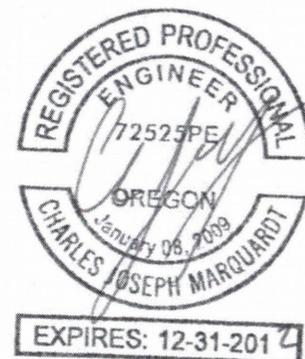
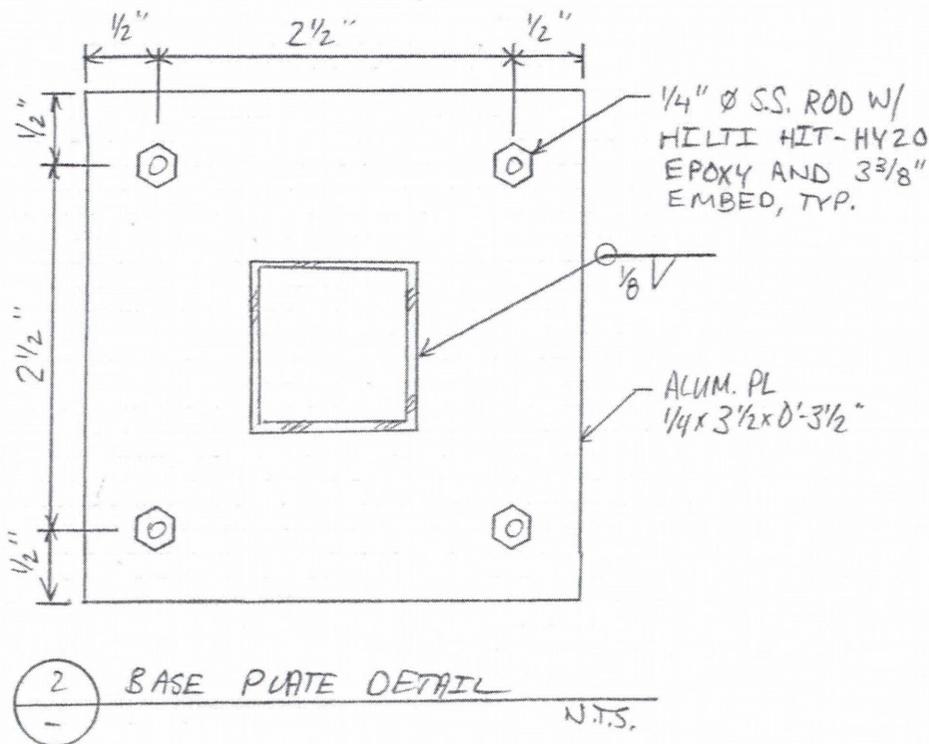
City of Portland
 REVIEWED FOR CODE
 COMPLIANCE

SEP 04 2012

Permit Number

NOTES:

1. SCOPE OF WORK IS FOR THE DESIGN OF THE SIGN SUPPORT ARMS AND THEIR CONNECTION TO THE (E) STRUCTURE.
2. SEE FOLLOWING PAGES FOR STRUCTURAL NOTES.



9570 SW Barbur Blvd
 Suite One Hundred
 Portland, OR 97219-5412

(503)246-1250
 Fax: 246-1395

Project Name Savory Spice Shop Projecting Sign Project # 120615

Location 7857 SE 13th Avenue, Portland, Oregon

Client Security Signs

By CJM Ck'd Kenn Date 8/24/12 Page S1 of 3

GENERAL

THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION AND CORRELATION OF ALL ITEMS AND WORK NECESSARY FOR COMPLETION OF THE PROJECT AS INDICATED BY THE CONTRACT DOCUMENTS. SHOULD ANY QUESTION ARISE REGARDING THE CONTRACT DOCUMENTS OR SITE CONDITIONS, THE CONTRACTOR SHALL REQUEST INTERPRETATION AND CLARIFICATION FROM THE ENGINEER BEFORE BEGINNING THE PROJECT. THE ABSENCE OF SUCH REQUEST SHALL SIGNIFY THAT THE CONTRACTOR HAS REVIEWED AND FAMILIARIZED HIMSELF WITH ALL ASPECTS OF THE PROJECT AND HAS COMPLETE COMPREHENSION THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL SAFETY REGULATIONS DURING CONSTRUCTION.

THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE SPECIFICALLY NOTED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION OR CONSTRUCTION LOADS. ONLY THE CONTRACTOR SHALL PROVIDE ALL METHODS, DIRECTION AND RELATED EQUIPMENT NECESSARY TO PROTECT THE STRUCTURE, WORKMEN AND OTHER PERSONS AND PROPERTY DURING CONSTRUCTION. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, ENGAGE PROPERLY QUALIFIED PERSONS TO DETERMINE WHERE AND HOW TEMPORARY PRECAUTIONARY MEASURES SHALL BE USED AND INSPECT SAME IN THE FIELD. ANY MATERIAL NOT AS SPECIFIED OR IMPROPER MATERIAL INSTALLATION OR WORKMANSHIP SHALL BE REMOVED AND REPLACED WITH SPECIFIED MATERIAL IN A WORKMANLIKE MANNER AT THE CONTRACTOR'S EXPENSE.

THESE PLANS, SPECIFICATIONS, ENGINEERING AND DESIGN WORK ARE INTENDED SOLELY FOR THE PROJECT SPECIFIED HEREIN. MILLER CONSULTING ENGINEERS DISCLAIMS ALL LIABILITY IF THESE PLANS AND SPECIFICATIONS OR THE DESIGN, ADVICE AND INSTRUCTIONS ATTENDANT THERETO ARE USED ON ANY PROJECT OR AT ANY LOCATION OTHER THAN THE PROJECT AND LOCATION SPECIFIED HEREIN. OBSERVATION VISITS TO THE JOB SITE AND SPECIAL INSPECTIONS ARE NOT PART OF THE STRUCTURAL ENGINEER'S RESPONSIBILITY UNLESS THE CONTRACT DOCUMENTS SPECIFY OTHERWISE.

NON STRUCTURAL PORTIONS OF PROJECT, INCLUDING BUT NOT LIMITED TO PLUMBING, FIRE PROTECTION, LAND USE, SITE PLANNING, EROSION CONTROL, ELECTRICAL, MECHANICAL, FLASHING AND WATER-PROOFING ARE BEYOND THE SCOPE OF THESE DRAWINGS AND ARE PROVIDED BY OTHERS. EXISTING STRUCTURAL ELEMENTS ARE DESIGNED BY OTHERS.

CONTRACTOR TO VERIFY ALL CONDITIONS PRIOR TO FABRICATION OR INSTALLATION. ENGINEER OF RECORD FOR THE PROJECT IS TO BE NOTIFIED IF CONDITIONS DIFFER FROM WHAT IS SHOWN ON THE DRAWINGS.

BUILDING CODE

ALL PHASES OF THE WORK SHALL CONFORM TO THE 2010 OREGON STRUCTURAL SPECIALTY CODE, EFFECTIVE DATE JULY 1, 2010, BASED ON THE 2009 INTERNATIONAL BUILDING CODE, INCLUDING ALL REFERENCE STANDARDS, UNLESS NOTED OTHERWISE.



 MILLER CONSULTING ENGINEERS	9570 SW Barbur Blvd Suite One Hundred Portland, OR 97219-5412	Project Name <u>Savory Spice Shop Projecting Sign</u> Project # <u>120615</u>
	(503)246-1250 Fax: 246-1395	Location <u>7857 SE 13th Avenue, Portland, Oregon</u> Client <u>Security Signs</u> By <u>CJM</u> <i>ck'd</i> <u>km</u> Date <u>8/24/12</u> Page <u>S2</u> of <u>3</u>

DESIGN LOADS

THE FOLLOWING ARE THE DESIGN REQUIREMENTS:

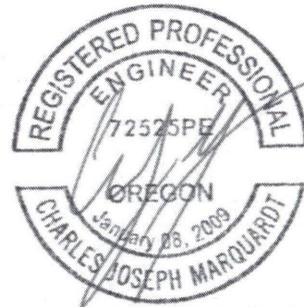
STRUCTURAL DESIGN CRITERIA	
OCCUPANCY CATEGORY	II
WIND DESIGN DATA	
BASIC WIND SPEED (3 SEC GUST)	95 MPH
IMPORTANCE FACTOR	I _w = 1.0
EXPOSURE	B

BRICK/CONCRETE/CMU ACCESSORIES

ANCHORS SHALL BE AS SPECIFIED ON THE DRAWINGS. ANCHORS SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S INSTALLATION CRITERIA AND PER THE CURRENT ICC EVALUATION REPORT FOR THE ANCHOR. ANCHORS ARE NOT TO CUT THROUGH ANY EXISTING STEEL REINFORCING.

ALUMINUM

ALL STRUCTURAL ALUMINUM SHAPES AND PLATES TO BE 6061-T6. ALL WELDS TO USE 4043 ALUMINUM FILLER ALLOY. A PROTECTIVE BARRIER SHALL BE PROVIDED BETWEEN ALL STEEL AND ALUMINUM TO PREVENT CORROSION. ALL WELDING TO CONFORM TO AMERICAN WELDING SOCIETY (AWS) D1.2. WELD LENGTHS SHOWN ARE EFFECTIVE AS SPECIFIED PER THE ALUMINUM DESIGN MANUAL. WELDING SHALL BE BY AWS CERTIFIED WELDERS FOR WELD TYPES SPECIFIED. WHERE WELD LENGTHS ARE NOT SHOWN, THE WELD SHALL BE FULL LENGTH OF MEMBERS BEING JOINED. ALL BUTT WELDS SHALL BE FULL PENETRATION WELDS UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS. ALL WELDS TO RECEIVE THE SAME FINISH COAT AS THE MEMBER BEING WELDED. ALL FASTENERS IN CONTACT WITH ALUMINIUM TO BE TYPE 304 STAINLESS STEEL WITH MATCHING NUTS OR HAVE A PROTECTIVE BARRIER TO PREVENT CORROSION. NUTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION.



EXPIRES: 12-31-2017



9570 SW Barbur Blvd
Suite One Hundred
Portland, OR 97219-5412

(503)246-1250
Fax: 246-1395

Project Name Savory Spice Shop Projecting Sign Project # 120615
 Location 7857 SE 13th Avenue, Portland, Oregon
 Client Security Signs
 By CJM Ck'd [Signature] Date 8/24/12 Page 53 of 3



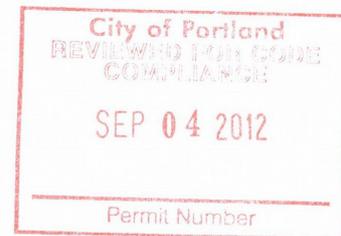
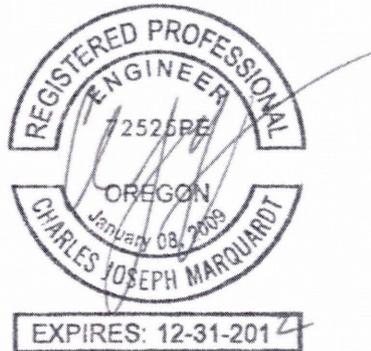
MILLER
CONSULTING
ENGINEERS

STRUCTURAL CALCULATIONS

Savory Spice Shop Projecting Sign
7857 SE 13th Avenue, Portland, Oregon
Security Signs

August 24, 2012
Project No. 120615
4 pages

Principal Checked: JMM



*** LIMITATIONS ***

Miller Consulting Engineers, Inc. was retained in a limited capacity for this project. This design is based upon information provided by the client, who is solely responsible for accuracy of same. No responsibility and or liability is assumed by or is to be assigned to the engineer for items beyond that shown on these sheets.

Scope of work is for the design of the sign support framing and its attachment to the existing structure.

LOADING:

DESIGN PER 2009 INTERNATIONAL BUILDING CODE (IBC)

WIND: ASCE7-05	95	MPH, EXP	B	MAXIMUM HEIGHT (h) =	15.00	ft
		(3 second gust)		IMPORTANCE FACTOR (I) =	1	
K1 =	0.00	(ASCE 7-05 Figure 6-4)		GUST FACTOR (G) =	0.85	
K2 =	1.00	(ASCE 7-05 Figure 6-4)		$F = qz \cdot G \cdot Cf :$		
K3 =	1.00	(ASCE 7-05 Figure 6-4)		Kz	qz	I
Kzt =	1.00	(ASCE Eqn. 6-3)		0.57	11.19	1
Kd =	0.85	(ASCE 7-05 Table 6-4)		= 17.1		
Cf =	1.80	(ASCE 7-05 Figure 6-20)		0 - 15 ft		
s =	1.00	ft	s/h =	0.07		
B =	1.00	ft	B/s =	1.00		

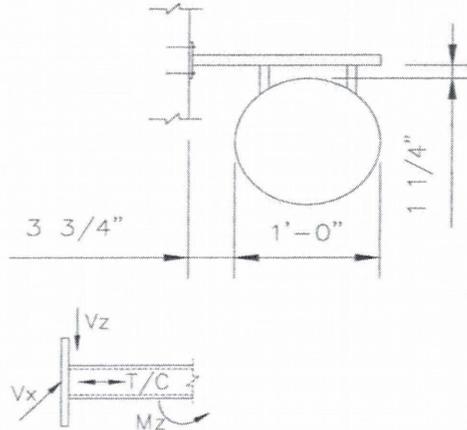
FORCES:

	Area (sq. ft.)	Wind load (psf)	Force (lb), Vx
Wind:	0.79	17.1	13

Dead: Vz = 6 lb (estimated at 8psf)

DROP ARM(S):

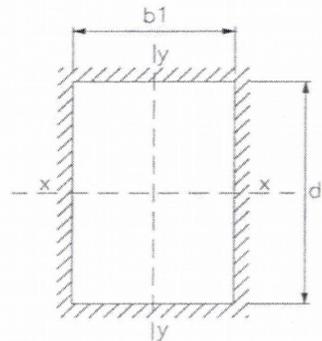
Number of Arms =	2	
Sign offset from mount arm =	1.3	in
Moment arm =	0.60	ft
% trib. to single arm =	50%	
Moment, My =	4	ft-lb per arm = 13*0.5*0.6
Shear, Vx =	7	lb per arm = 13*0.5
Tension, Tz =	3	lb per arm = 6*0.5



Use 6061-T6 0.75x0.75x0.09 aluminum tube
See page 3 for calculation.

DROP ARM BASE WELD CHECK(S):

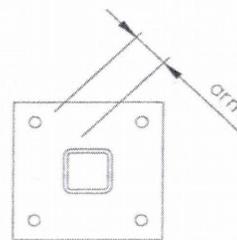
Arm Shape:	rectangular	
Weld size (w) =	1/8	in
Width of arm, b1 =	1	in
Depth of arm, d1 =	1	in
b =	1.18	in = 1+(2*0.707*0.125)
d =	1.18	in = 1+(2*0.707*0.125)
A =	0.39	in ² = 1.18*1.18-1*1
I =	0.08	in ⁴ = (1.18*1.18 ³ -1*1 ³)/12
S =	0.14	in ³ = 0.08/(1.18/2)
fb =	343	psi = 4*12/(0.14)
fv =	26	psi = (7+3)/0.39
fw =	368	psi
Fw =	5897	psi
		Allowable weld stress
		368 < 5897 OK



Use 0.125" fillet weld all around from arm to base plate

MOUNT ARM:

Sign offset from building face =	0.31	ft
Distance out to centroid =	0.81	ft (from building face)
Support type:	Cantilevered	
Arm Span =	1.31	ft
Moment, Mz =	11	ft-lb = 13*0.81
Moment, Mx =	5	ft-lb = 6*0.81
Torsion, My =	8	ft-lb = 13*0.6
Shear, Vx =	13	lb
Shear, Vz =	6	lb



Use 6061-T6 1x1x0.09 aluminum tube
See page 4 for calculation.



9570 SW Barbur Blvd
Suite One Hundred
Portland, OR 97219-5412

(503)246-1250
Fax: 246-1395

Project Name Savory Spice Shop Projecting Sign Project # 120615
 Location 7857 SE 13th Avenue, Portland, Oregon
 Client Security Signs
 By CJM Ck'd lms Date 8/24/12 Page 1 of 4

MOUNT ARM BASE WELD CHECK:

Arm Shape: rectangular		
Weld size (w) =	1/8	in
Width of arm, b1 =	1	in
Depth of arm, d1 =	1	in
b =	1.18	in = 1+(2*0.707*0.125)
d =	1.18	in = 1+(2*0.707*0.125)
A =	0.39	in ² = 1.18*1.18-1*1
I =	0.08	in ⁴ = (1.18*1.18 ³ -1*1 ³)/12
S =	0.14	in ³ = 0.08/(1.18/2)
fb =	1371	psi = (11+5)*12/(0.14)
fv =	541	psi = (13+6+8*12/1/2)/0.39
fw =	1912	psi
Fw =	5897	psi Allowable weld stress
1912 < 5897 OK		

Use 0.125" fillet weld all around from arm to base plate

MOUNT ARM FASTENER CONNECTION:

Forces at base plate(s):

Moment, Mz =	11	ft-lb per plate
Moment, Mx =	5	ft-lb per plate
Torsion, My =	8	ft-lb per plate
Shear, Vx =	13	lb per plate
Shear, Vz =	6	lb per plate

Number of fasteners:

# of rows =	1
# of columns =	1

Total number of fasteners = 1 per plate

Forces on anchorage:

Horizontal spacing =	2.5	in, from fastener to edge of plate
Vertical spacing =	2.5	in, from fastener to edge of plate
Tension, T =	77	lb per fastener = 11*12/2.5+5*12/2.5
Shear, Vx =	13	lb per fastener = 13/1
Shear, Vz =	6	lb per fastener = 6/1
Comb. Shear =	69	lb per fastener = SQRT(13 ² +6 ²)+8*12/SQRT((2.5/2) ² +(2.5/2) ²)/1

Try 1/4" dia. rods with Hilti HIT-HY 20 epoxy embedded 3 3/8"

T _{allow} =	365	> 77 OK
V _{allow} =	305	> 69 OK
Comb. Cap. =	0.44	< 1.00 OK

ACTUALLY (4) ANCHORS, BUT DUE TO CLOSE SPACING PLACED ALL LOAD TO A SINGLE ANCHOR

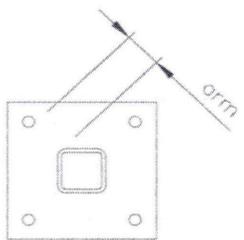
Use 1/4" dia. rods with Hilti HIT-HY 20 epoxy embedded 3 3/8"



MOUNT ARM PLATE(S):

Material: Aluminum		
Horizontal spacing =	2.5	in, between fasteners
Vertical spacing =	2.5	in, from fastener to edge of plate
Fastener Tension =	77	lb per fastener = 11*12/2.5+5*12/2.5
Moment arm =	1.06	in
Moment, M =	82	in-lb
Plate thickness =	1/4	in
effective width, b =	3.00	in
S =	0.031	in ³ = 3*(0.25) ² /6
Mc =	372	in-lb = 12000*0.031
82 < 372 OK		

Use 0.25" thick plate



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Project Name Savory Spice Shop Projecting Sign Project # 120615
Location 7857 SE 13th Avenue, Portland, Oregon
Client Security Signs
By CJM Ck'd [Signature] Date 8/24/12 Page 2 of 4

Aluminum Tube Design:

Section Properties:

b =	0.75	in
d =	0.75	in
t =	0.09	in
Scx =	0.039	in ³
Scy =	0.039	in ³
A =	0.22	in ²
ae _y =	0.14	in
ae _x =	0.14	in
rx =	0.261	in ³
ry =	0.261	in ³
lx =	0.015	in ⁴
ly =	0.015	in ⁴
J =	0.030	in ⁴

$= 0.75 \cdot 0.09^2$
 $= 0.75 \cdot 0.09^2$
 $= \text{SQRT}(0.015/0.22)$
 $= \text{SQRT}(0.015/0.22)$

Material Properties:

Aluminum Grade: 6061-T6
 Weld Filler Alloy: 4043

reaction does occur within 1" from welded area

E =	10100	ksi
Fcy =	15	ksi
Fly =	15	ksi
Weld shear cap. =	5897	psi (based on weld alloy strength)
ny =	1.65	
nu =	1.95	
Cb =	1	
k1 =	0.35	
k2 =	2.27	

Bs =	10.57	ksi
Ds =	0.03	
Cs =	126.72	
Bc =	18.22	ksi
Dc =	0.07	
Cc =	102.30	
Bp =	18.25	ksi
Dp =	0.08	

Bending:

M _x =	0	ft-lb
L _b =	1.25	in
Slenderness, S =	5	$= (1.3 \cdot 0.039) / (0.5 \cdot \text{SQRT}(0.015 \cdot 0.03))$
F _b =	9091	psi
f _b =	0	psi = $0 \cdot 12 / 0.039$
	0.00%	
M _y =	4	ft-lb
L _b =	1.25	in
Slenderness, S =	5	$= (1.3 \cdot 0.039) / (0.5 \cdot \text{SQRT}(0.015 \cdot 0.03))$
F _b =	9091	psi
f _b =	1231	psi = $4 \cdot 12 / 0.039$
	13.54%	

Compression in Beams, extreme fiber (3.4.14)

Slenderness Limitations:

S1	S2
139	4088
Lb limit, (in) =	38 1112

Strong Axis:

Stresses, psi:

S<S1	S1<S<S2	S2<S
9091	N/A	N/A

Weak Axis:

Stresses, psi:

S<S1	S1<S<S2	S2<S
9091	N/A	N/A

Shear:

V _y =	0	lb
h =	0.57	in = $0.75 - 2 \cdot 0.09$
Slenderness, h/t =	6.3	
F _v =	10400	psi
f _v =	0	psi = $0 / 0.14$
	0.00%	
V _x =	7	lb
h =	0.57	in = $0.75 - 2 \cdot 0.09$
Slenderness, h/t =	6.3	
F _v =	10400	psi
f _v =	50	psi = $7 / 0.14$
	0.48%	
Torsion =	0	ft-lb
Arm =	0	in ² = $(0.75 - 0.09) \cdot (0.75 - 0.09)$
f _t =	0	psi = $0 \cdot 12 / (2 \cdot 0.09 \cdot (0.75 - 0.09) \cdot (0.75 - 0.09))$
F _v =	10400	psi
	0.00%	

Shear in Elements: (3.4.20)

Slenderness Limitations: (h/t)

S1	S2
45	101

Strong Axis:

Stresses, psi:

h/t<S1	S1<h/t<S2	S2<h/t
10400	N/A	N/A

Weak Axis:

Stresses, psi:

h/t<S1	S1<h/t<S2	S2<h/t
10400	N/A	N/A

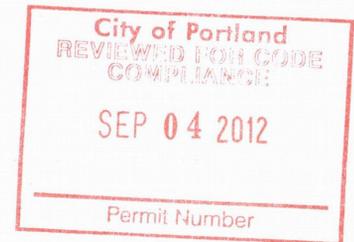
Tension: (3.4.1)

T =	3	lb
Ag =	0.22	in ²
Ft =	9091	psi, assumes that all element of the member are connected for tension
ft =	13.63636364	psi
	0.15%	

Combined Forces:

$0.14 < 1.00$ OK

Use 6061-T6 0.75x0.75x0.09 aluminum tube



MILLER
CONSULTING
ENGINEERS

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 By CJM Ck'd *[Signature]* Date 8/24/12 Page 3 of 4

Aluminum Tube Design:

Section Properties:

b =	1	in	
d =	1	in	
t =	0.09	in	
Scx =	0.081	in ³	
Scy =	0.081	in ³	
A =	0.31	in ²	
ae _y =	0.18	in	= 1*0.09*2
ae _x =	0.18	in	= 1*0.09*2
rx =	0.364	in ³	= SQRT(0.041/0.31)
ry =	0.364	in ³	= SQRT(0.041/0.31)
lx =	0.041	in ⁴	
ly =	0.041	in ⁴	
J =	0.082	in ⁴	



Material Properties:

Aluminum Grade: 6061-T6
Weld Filler Alloy: 4043

reaction does occur within 1" from welded area

E =	10100	ksi
Fcy =	15	ksi
Fty =	15	ksi
Weld shear cap. =	5897	psi (based on weld alloy strength)
ny =	1.65	
nu =	1.95	
Cb =	1	
k1 =	0.35	
k2 =	2.27	

Bs =	10.57	ksi
Ds =	0.03	
Cs =	126.72	
Bc =	16.22	ksi
Dc =	0.07	
Cc =	102.30	
Bp =	18.25	ksi
Dp =	0.08	

Bending:

M _x =	5	ft-lb
Lb _x =	15.75	in
Slenderness, S =	44	= (15.8*0.081)/(0.5*SQRT(0.041*0.082))
Fb _x =	9091	psi
fb _x =	741	psi = 5*12/0.081
	8.15%	Lb limit, (in) =
M _y =	11	ft-lb
Lb _y =	15.75	in
Slenderness, S =	44	= (15.8*0.081)/(0.5*SQRT(0.041*0.082))
Fb _y =	9091	psi
fb _y =	1630	psi = 11*12/0.081
	17.93%	

Compression in Beams, extreme fiber (3.4.14)

Slenderness Limitations:

S1	S2
139	4088
50	1463

Strong Axis:

Stresses, psi:

S<S1	S1<S<S2	S2<S
9091	N/A	N/A

Weak Axis:

Stresses, psi:

S<S1	S1<S<S2	S2<S
9091	N/A	N/A

Shear:

V _x =	6	lb
h =	0.82	in = 1-2*0.09
Slenderness, h/t =	9.1	
Fv _x =	10400	psi
fv _x =	33	psi = 6/0.18
	0.32%	
V _y =	13	lb
h =	0.82	in = 1-2*0.09
Slenderness, h/t =	9.1	
Fv _y =	10400	psi
fv _y =	72	psi = 13/0.18
	0.69%	
Torsion, My =	8	ft-lb
Am =	1	in ² = (1-0.09)*(1-0.09)
fv _t =	644	psi = 8*12/(2*0.09*(1-0.09)*(1-0.09))
Fv =	10400	psi
	6.19%	

Shear in Elements: (3.4.20)

Slenderness Limitations: (h/t)

S1	S2
45	101

Strong Axis:

Stresses, psi:

h/t<S1	S1<h/t<S2	S2<h/t
10400	N/A	N/A

Weak Axis:

Stresses, psi:

h/t<S1	S1<h/t<S2	S2<h/t
10400	N/A	N/A

Combined Forces:

0.26 < 1.00 OK

Use 6061-T6 1x1x0.09 aluminum tube



MILLER
CONSULTING
ENGINEERS

9570 SW Barbur Blvd
Suite One Hundred
Portland, OR 97219-5412

(503)246-1250
Fax: 246-1395

Project Name Savory Spice Shop Projecting Sign Project # 120615
Location 7857 SE 13th Avenue, Portland, Oregon
Client Security Signs
By CJM Ck'd JKM Date 8/24/12 Page 4 of 4



11'-1"

SCAN!
12-178038
12-178047

A Site verify install location.

B Align bottom with existing Umqua B display.

B

C

City of Portland
 REVIEWED FOR CODE COMPLIANCE
 SEP 04 2012
 Permit Number

NO REMOVAL OR PATCHING REQUIRED

ELEVATION
 Scale: None

Note: Lighting by others.

SECURITY SIGNS
 Quality Since 1925
 2424 SE Holgate Boulevard
 Portland, Oregon 97202
 503-232-4172 fax 503-230-1861
 www.securitysigns.com
 OR CCB# 122809 WA SECURS1020CF

INTERNATIONAL SIGN ASSOCIATION
 NORTHWEST SIGN COUNCIL

PROJECT MANAGER
 Kathryn Caine
 DESIGNER
 A. Rossi

PROJECT NAME
 Savory Spice Shop
 7857 SE 13th
 Portland, OR 97202

PAGE DESCRIPTION
 Photo Imple

REVISIONS
 1 8/15/12
 2 8/15/12

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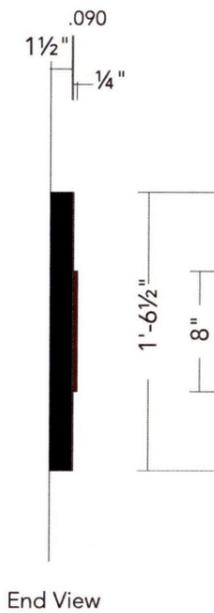
APPROVALS
 Contractor Signature
 Landlord Signature

DATE: **8/15/12**

PAGE #: **1 of 5**

DRAWING #: **12-ar450r2**

15-118041 2d
15-118038 2d
2CM



Aluminum angle painted Satin Black.

.090 Aluminum painted Satin Black and to match PMS 7499c Cream.

1/4" Thick acrylic letters painted to match PMS 491c Burgundy.

Digital print to match PMS 491c Burgundy.

1/4" Thick acrylic logos painted to match PMS 7490c Green.

A WALL DISPLAY — 15.42 Sq. Ft.
Scale: 1" = 1'-0"

Wall Display

Non-Illuminated.
Manufacture and install one (1) S/Fdisplay.

Installation

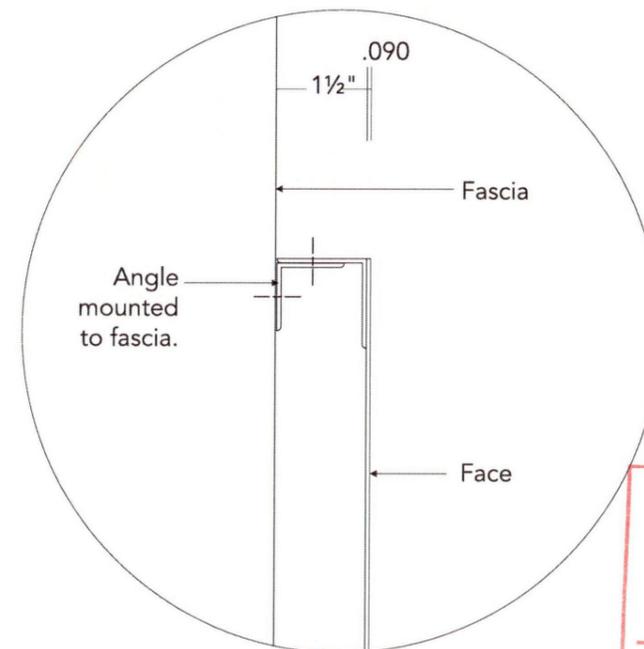
Wall Type: Masonry.
Mounting: Concealed.

Landlord Notes:

Penetrations in grout lines only if possible,
or use self sealing taps into brick to minimize brick deterioration.
Stainless steel mounting hardware only.
Seal all holes with Silicone caulk.

Colors

- PTM PMS 7499c Beige
- PTM PMS 7490c Green
- PTM PMS 491c Burgundy / Digital Print
- Satin Black



Concealed Mounting

Scale: None



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PROJECT MANAGER
Kathryn Caine
DESIGNER
A. Rossi

PROJECT NAME
Savory Spice Shop
7857 SE 13th
Portland, OR 97202

PAGE DESCRIPTION
Wall Display

REVISIONS
8/10/12
8/15/12
Layout revision. Height of display changed from 2'-0".

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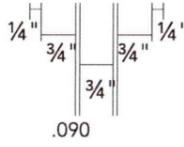
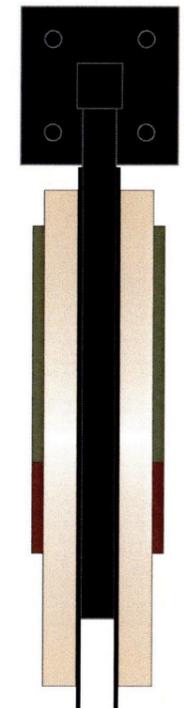
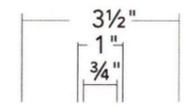
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APPROVALS
Client Signature
Landlord Signature

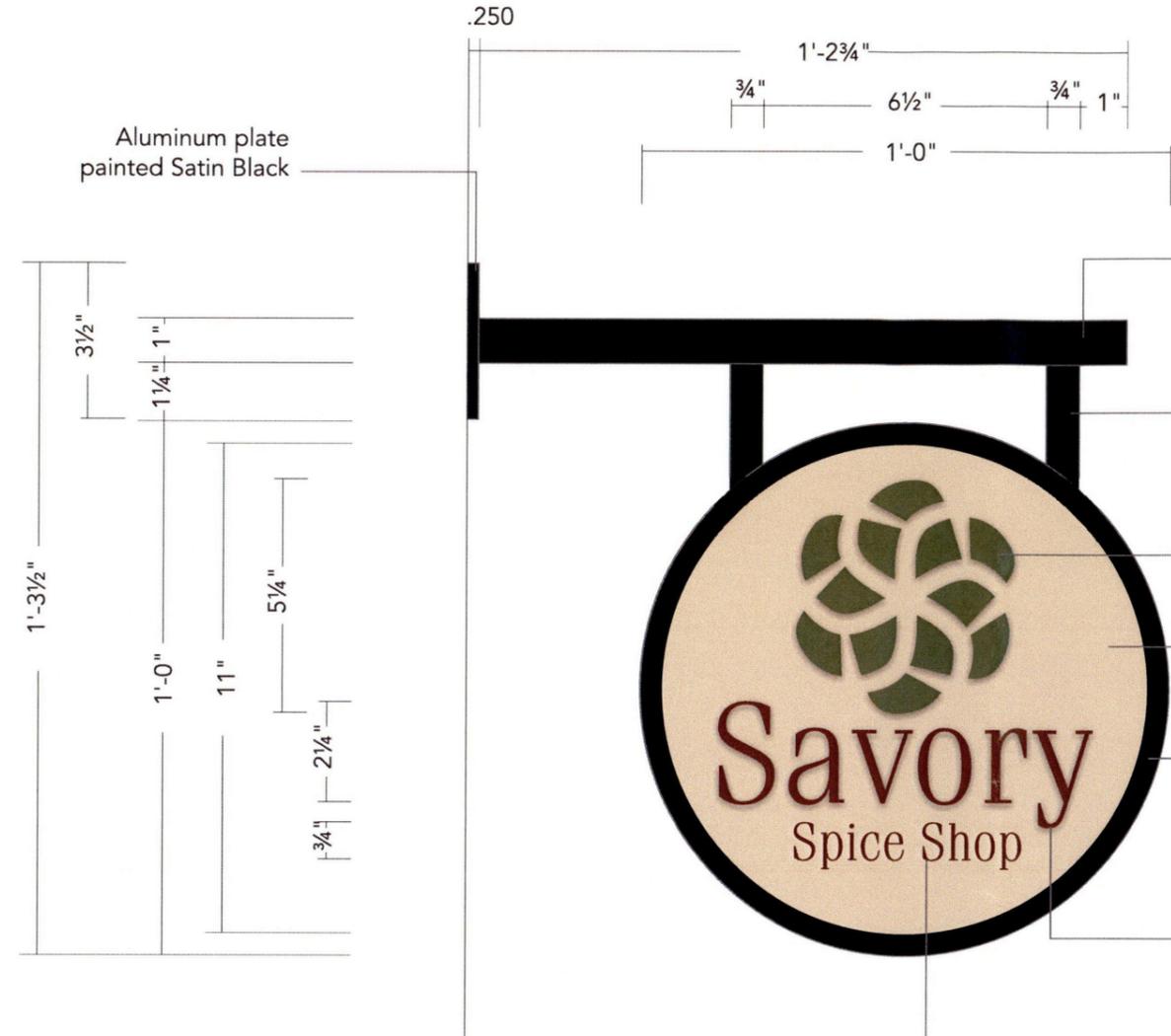
DATE: 8/15/12

PAGE #: 2 of 5

DRAWING #: 12-ar450r2



End View



Aluminum plate painted Satin Black

1" Aluminum square tube painted Satin Black.

3/4" Aluminum square tube painted Satin Black.

1/4" Thick acrylic logo painted to match PMS 7490c Green.

3/4" Thick PVC painted to match PMS 7499c Cream

.090 Aluminum backer panel painted Satin Black

1/4" Thick acrylic letters painted to match PMS 491c Burgundy.

Digital print to match PMS 491c Burgundy.



B PROJECTING DISPLAY — 1.00 Sq. Ft.
Scale: 3" = 1'-0"

Projecting Display

Non-Illuminated.
Manufacture and install one (1) D/F projecting display.

Installation

Wall Type: Masonry.
Mounting: Plate mount with shielded lags or appropriate hardware.

Colors

- PTM PMS 7499c Beige
- PTM PMS 7490c Green
- PTM PMS 491c Burgundy / Digital Print
- Satin Black

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INTERNATIONAL SIGN ASSOCIATION
W.S.A.
NORTHWEST SIGN COUNCIL

PROJECT MANAGER
Kathryn Caine
DESIGNER
A. Rossi

PROJECT NAME
Savory Spice Shop
7857 SE 13th
Portland, OR 97202

PAGE DESCRIPTION
Projecting Display

REVISIONS
8/10/12
8/14/12 Layout revision.
NA

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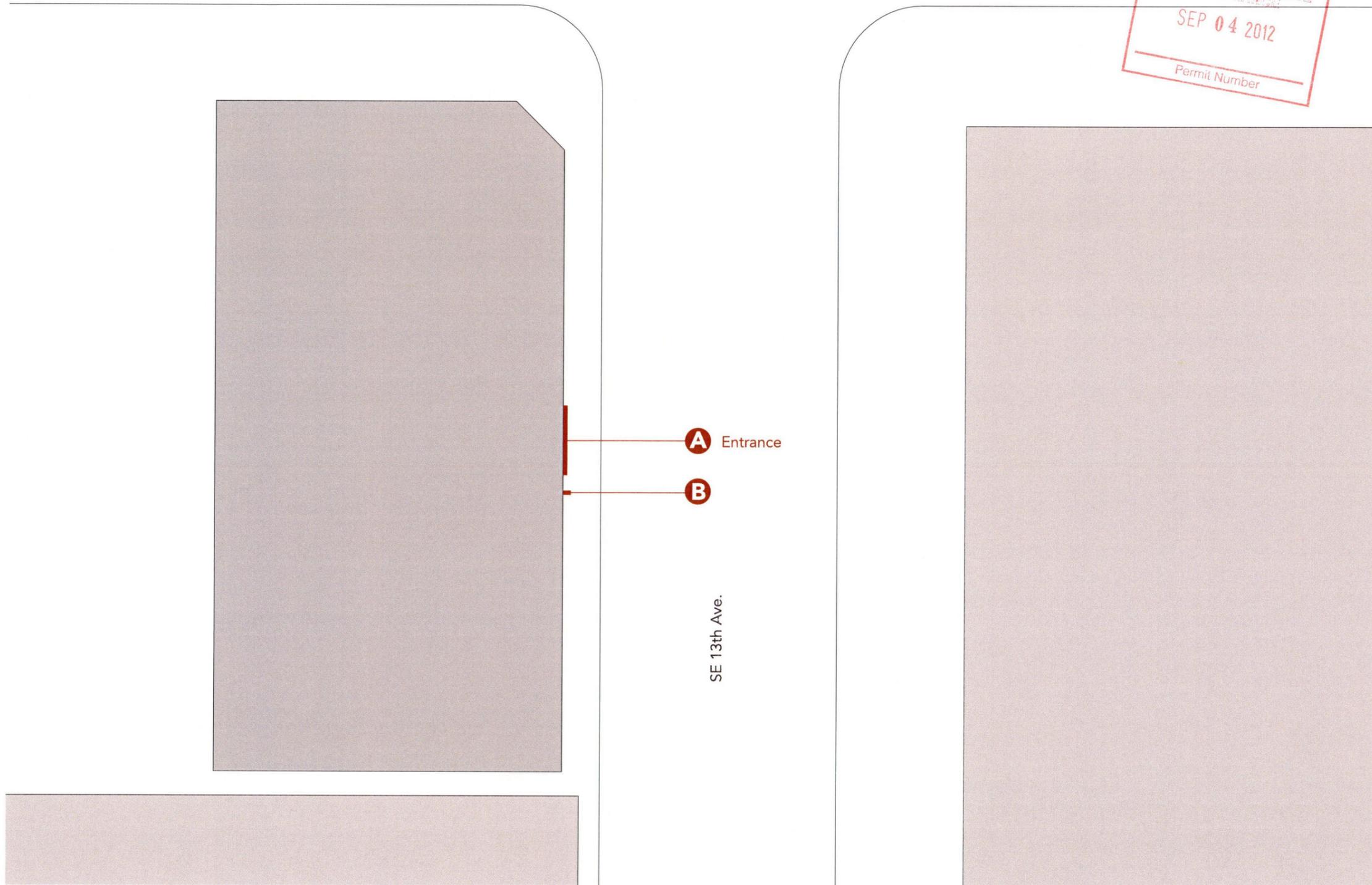
APPROVALS
Client Signature
Landlord Signature

DATE: **8/15/12**

PAGE #: **3 of 5**

DRAWING #: **12-ar450r2**

SE Bidwell St.



SITE PLAN
Scale: 1/16" = 1'-0"

City of Portland
 REVIEWED FOR CODE
 COMPLIANCE
 SEP 04 2012
 Permit Number

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 UL

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 Kathryn Caine
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 A. Rossi

PROJECT NAME
Savory Spice Shop
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PAGE DESCRIPTION
 Site Plan

REVISIONS
 8/10/12
 ◆ NA
 ◆ NA

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APPROVALS
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 Landlord Signature

DATE: **8/15/12**

PAGE #: **5 of 5**

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12-ar450r2