



February 9, 2016

Sutro Tower, Inc.  
1 La Avanzada Street  
San Francisco, CA 94131-1124

Attention: Mr. Eric Dausman

Re: **Field Evaluation of Existing  
977-Foot Self-Support Tower  
San Francisco, California  
TCI Project Number 15.082.001**

Dear Mr. Dausman,

We are pleased to submit our report on the field observation of the above referenced self-support tower.

**Authorization / Purpose:**

Tower Consultants Incorporated was retained by Sutro Tower Inc. to conduct a field observation of the 977-foot self-support tower. The inspection work has been performed in accordance with the requirements of the ANSI/TIA-222-G standard.

The purpose of the field observation was to visually evaluate the condition and structural integrity of the tower. A routine inspection was performed of leg B, the east face trusses and strands, the bases and stack B above the 6<sup>th</sup> level.

The tower is located in San Francisco, California. J. Altmyer, P.E. & Y. Kabatski performed the site observations between July 2015 and October 2015.

**Field Observations:**

The inspection consisted of a tower climb and visual examination of the tower members, connections, antennas, feed lines and mounting hardware. Only those members that could be seen with binoculars and the naked eye were inspected.

**Structural Issues:**

The structural beams at levels 2, 3 and 4 were recently cleaned and painted and the structural elements of the tower appear to be in good condition with the exception of the following items: There are areas of the tower where rust has formed on the tower member surfaces. Minor to medium rust was seen on gusset plates between levels 1 and 6. We recommend that these areas be scraped and painted during the next maintenance project. There are four rusted

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gussets between levels 1 and 3 that will have to be cleaned, evaluated and painted or replaced. Many diagonal connections to leg members have drain holes that are plugged causing standing water that will lead to rusted steel. These drain holes should be unplugged and inspected next year to evaluate their condition. There are many corroded fasteners throughout the tower height. A criteria has been developed for replacing these nuts or bolts. Inspection and evaluation of the nuts and bolts should be continued in 2016. If the nuts or bolts meet the acceptance criteria specified by Simpson Gumpertz & Heger Inc., they should be painted and then evaluated in the future for additional corrosion. If the nuts or bolts do not meet the acceptance criteria then they should be replaced. There were four short bolts seen on level six that should be monitored for eventual replacement.

The tower skin showed no distress. There is a missing bolt for the skin frame in leg B between levels 2 and 3 that should be replaced. The strands and guy wires are in good condition. Some low frequency dampers on the guy strands have broken safety cables that should be repaired. There are a few rusted cotter pins on the tower and a few cotter pins were not properly bent.

The tower bases are in good condition. The exposed surfaces of the concrete foundation at the tower base are in good condition. The tower base is properly grounded.

For detailed information see the attached inspection data sheets and photo logs.

## Non-structural Issues:

The climbing facilities and platforms were secure and appear to be in good condition. The following items were noted:

- The catwalk hardware is rusted.
- A climb ladder safety cable is rusted at the end of the outrigger on level six.
- There is a missing step bolt for the climb ladder at the top of the tower.
- Minor rust was observed on step bolts on the top pole.

The tower lighting system appears to be in good condition with some minor exceptions. All of the lighting levels are operational and synchronized. The following items were noted:

- The lighting conduits, junction boxes and conduit hardware are typically rusted throughout the tower height. There is a severely rusted conduit at the leg A tower base.
- One of the junction box covers has a missing screw and there is one junction box that is missing a cover.
- Some conduit connectors are broken.
- One conduit support angle has two loose bolts.
- There are broken lights in leg B.

The antennas, transmission lines and associated mounting hardware appear to be in good condition with the exception of the following items:

- There are some abandoned feed lines and an abandoned conduit.

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- The rigid line spring hangers have rusted hardware and some have rusted springs.
- Some feed lines are loose.
- There are three broken spring hangers and two bent rigid line support angles on the tower and one rigid line spring hanger is missing two bumpers.
- The top antenna pole has a porthole cover that is missing bolts and there are loose bolts on the second pipe section.

For detailed information see the attached inspection data sheets and photo logs.

All non-structural maintenance work has been referred to Sutro personnel.

Should you have any questions or wish to discuss any aspect of this report, please do not hesitate to contact the undersigned.

Sincerely,

Jeff Altmyer, P.E.  
Tower Engineer  
Tower Consultants Incorporated

# Inspection Summary – Year 2016

## Description of Inspection:

- Routine inspection of Leg B
- Routine inspection of horizontal levels on East face
- Routine inspection of strands on East face
- Routine inspection of strand anchors on Leg B
- Routine inspection of base – all legs

## Special or In-Depth Inspections: None.

Note that a special inspection, as such term is defined in the Tower Standard Conditions recorded against the property on which the tower is located, reviewing work recommended during TCI's 2015 Annual inspection, is the subject of a separate report.

## Summary of Results:

The tower is in good condition with the exception of the following: Rusted fasteners, rusted members and some rusted gussets. There are leg gussets that have drain holes that are plugged which retains water. There are four short bolts on level six and a skin frame bolt is missing. Handrail cables are rusted and there is rusted catwalk hardware. Rusted conduit and conduit hardware and junction boxes. A junction box has a missing screw and one box is missing a cover. There are loose and abandoned feed lines. Three rigid line spring hangers are broken and two support angles are bent. The top stack has loose bolts and bolts are missing from a porthole cover.

**Summary of Recommendations:** See report text.

## Checklist:

- Has a severe event occurred since the previous inspection ?      Yes      **No**
- Have action items and recommendations from previous inspections been addressed in the scope of work ?      **Yes**      No
- Has the inspection log for future years been revised to account for scope of work and findings of this inspection ?      **Yes**      No

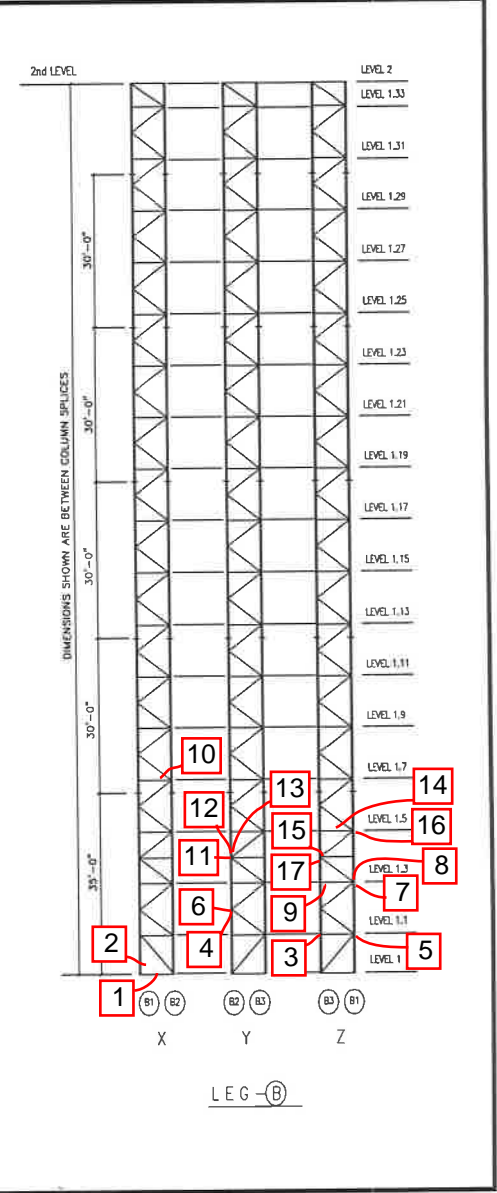
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**Date:**                      2-9-16 \_\_\_\_\_



## Inspection Data Sheet: Leg B (Level 1 to Level 2)

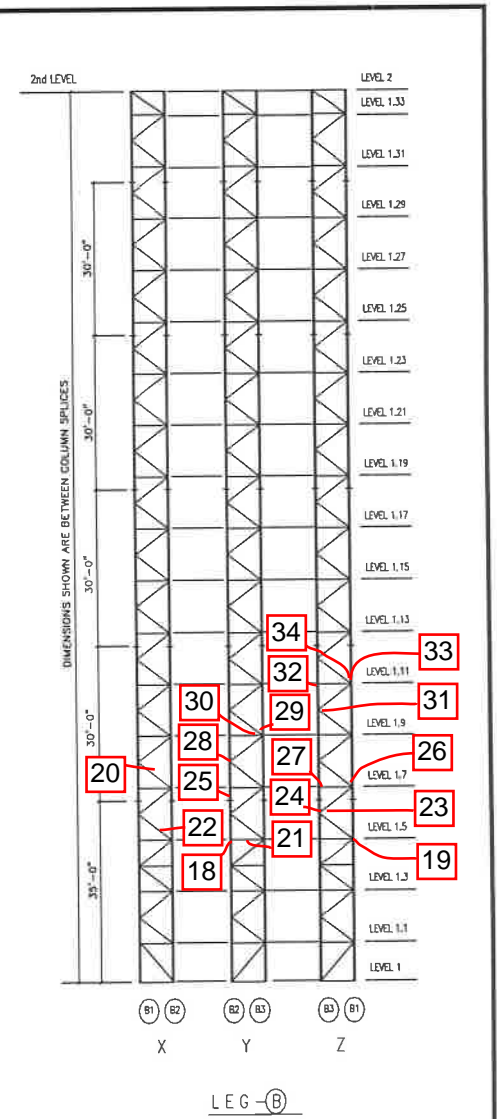
Observ. No.	Location / Identification			Photo No.	Observation Comments
	Column	Elevation	Item <sup>1</sup>		
1	CENTER	1	O	1	SOME COAX CABLES ARE CUT AND ABANDONED AT THE BASE
2	X-FACE	1	O	2	1-1/16" O.D. CONDUIT IS ABANDONED
3	B3	1.1	L	3	RUST ON LEG
4	Y-FACE	1.2	C	4	RUST ON GUSSET
5	Z-FACE	1.1	C	5	RF(1), DIAGONAL BOLT
6	Y-FACE	1.2	C	6	RF(2), DIAGONAL BOLTS
7	B1	1.3	L	7	RUST ON LEG
8	B1	1.3	C	8	RUST ON GUSSETS
9	Z-FACE	1.3	C	9	RF(2), BOLTS FOR SKIN FRAME
10	CENTER	1.7	O	10	(2) 6" RIGID LINES ARE ABANDONED
11	Y-FACE	1.4	C	11	RUSTED GUSSETS
12	Y-FACE	1.4	C	12	RF(3), DIAGONAL BOLTS
13	B2	1.4	L	13	RUST ON LEG
14	CENTER	1.5	O	14	LIGHT FIXTURE HAS MINOR RUST
15	Z-FACE	1.4	C	15	RF(1), DIAGONAL BOLT
16	Z-FACE	1.5	C	16	RF(1), DIAGONAL BOLT
17	Z-FACE	1.4	C	17	RF(2), FOR SKIN FRAME
<b>Sutro Tower</b>				Signature: _____	Page: <u>1</u> of <u>5</u>
<b>San Francisco, CA</b>				File: _____	Date: <u>2-9-16</u>



<sup>1</sup> Item designation: L=leg member, D=diagonal, H=horizontal, C=connection, O=others

## Inspection Data Sheet: Leg B (Level 1 to Level 2)

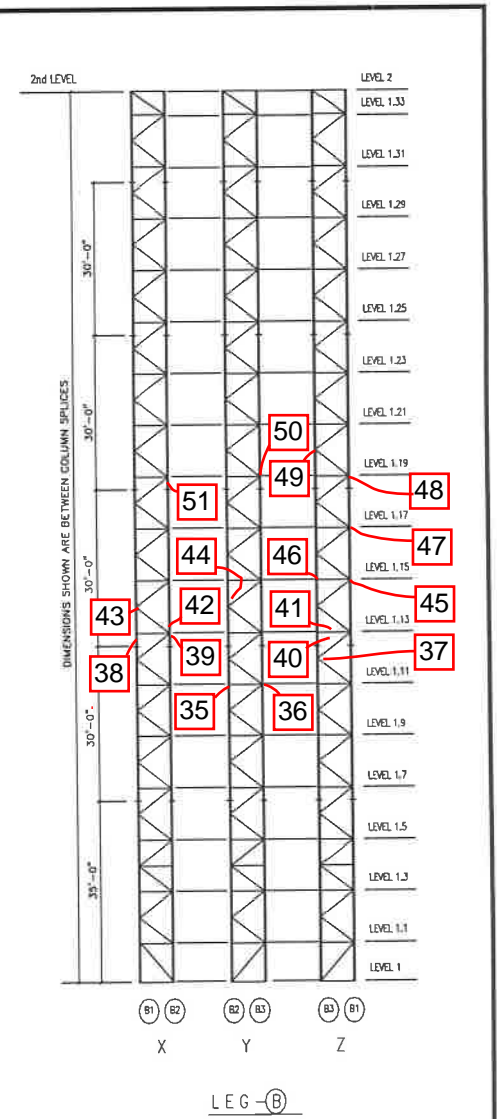
Observ. No.	Location / Identification			Photo No.	Observation Comments
	Column	Elevation	Item <sup>1</sup>		
18	Y-FACE	1.5	C	18	RUST ON GUSSET
19	Z-FACE	1.5	C	19	RUST ON GUSSET
20	ALL FACES	1 - 2	O	20	RUST ON SKIN AT VARIOUS LEVELS
21	Y-FACE	1.5	O	21	SPRING FOR 3" RIGID LINE IS RUSTED
22	X-FACE	1.6	D	22	BENT DIAGONAL MEMBER
23	Z-FACE	1.6	C	23	RF(4), DIAGONAL BOLTS AND RUST ON GUSSET
24	ALL LEGS	1.6	C	24	MINOR RUST ON LEG SPLICE BOLTS AND LEG
25	Y-FACE	1.6	C	25	RUST ON GUSSET AND LEG
26	Z-FACE	1.7	C	26	RUST ON GUSSET AND LEG
27	Z-FACE	1.7	C	27	RF(2), HORIZONTAL BOLTS AND RUST ON GUSSET
28	Y-FACE	1.8	C	28	RF(1), DIAGONAL BOLT AND RUST ON GUSSET
29	Y-FACE	1.9	C	29	RF(1), DIAGONAL BOLT
30	Y-FACE	1.9	C	30	RF(1), HORIZONTAL BOLT
31	Z-FACE	1.10	C	31	RF(1), DIAGONAL BOLT
32	Z-FACE	1.11	C	32	(1) MISSING 3/4" BOLT ON SKIN FRAME
33	Z-FACE	1.11	C	33	RF(1), DIAGONAL BOLT
34	Z-FACE	1.11	C	34	RF(2), HORIZONTAL BOLTS AND RUST ON GUSSET
<b>Sutro Tower</b>				Signature: _____	Page: <u>2</u> of <u>5</u>
<b>San Francisco, CA</b>				File: _____	Date: <u>2-9-16</u>



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## Inspection Data Sheet: Leg B (Level 1 to Level 2)

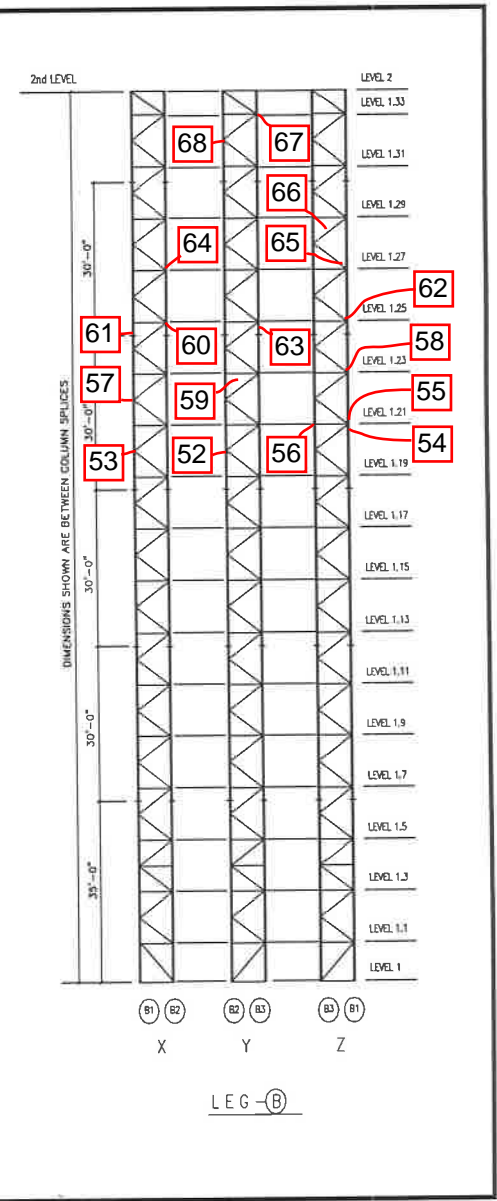
Observ. No.	Location / Identification			Photo No.	Observation Comments
	Column	Elevation	Item <sup>1</sup>		
35	Y-FACE	1.11	C	35	RF(2), HORIZONTAL BOLTS
36	Y-FACE	1.11	C	36	RUSTED GUSSET
37	Z-FACE	1.12	C	37	RF(3), DIAGONAL BOLTS
38	B1	1.13	C	38	RF(15), LEG BOLTS AND RUST ON LEG
39	B2	1.13	C	39	RF(2), LEG BOLTS
40	CENTER	1.13	O	40	1/2" COAX IS LOOSE
41	Z-FACE	1.13	O	41	(1) 1-5/8" AND (2) 1/4" FEED LINES ARE LOOSE
42	X-FACE	1.13	C	42	RF(2), DIAGONAL BOLTS
43	X-FACE	1.14	C	43	RF(1), DIAGONAL BOLT
44	Y-FACE	1.14	C	44	RUSTED GUSSET
45	Z-FACE	1.15	C	45	SEVERELY RUSTED GUSSET
46	Z-FACE	1.15	C	46	RF(1), HORIZONTAL BOLT
47	Z-FACE	1.17	C	47	SEVERELY RUSTED GUSSET
48	Z-FACE	1.19	C	48	(2) RUSTED GUSSETS
49	Z-FACE	1.20	C	49	(1) RUSTED GUSSET
50	B3	1.19	L	50	RUST ON LEG
51	ALL LEGS	1.19	C	51	MINOR RUST ON LEG BOLTS
<b>Sutro Tower</b>				Signature: _____	Page: <u>3</u> of <u>5</u>
<b>San Francisco, CA</b>				File: _____	Date: <u>2-9-16</u>



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## Inspection Data Sheet: Leg B (Level 1 to Level 2)

Observ. No.	Location / Identification			Photo No.	Observation Comments
	Column	Elevation	Item <sup>1</sup>		
52	Y-FACE	1.20	C	52	RF(1), DIAGONAL BOLT AND RUST ON GUSSET
53	X-FACE	1.20	C	53	RF(2), DIAGONAL BOLT
54	Z-FACE	1.21	C	54	SEVERELY RUSTED GUSSET
55	Z-FACE	1.21	C	55	RUST ON GUSSET
56	Z-FACE	1.21	C	56	RF(1), ON SKIN FRAME
57	X-FACE	1.22	C	57	RF(2), DIAGONAL BOLTS
58	Z-FACE	1.23	C	58	RUST ON (2) GUSSETS
59	CENTER	1.23	C	59	ABANDONED BIRD NEST
60	B2	1.25	C	60	MINOR RUST ON LEG SPLICE BOLTS
61	B1	1.25	C	61	MINOR RUST ON LEG SPLICE BOLTS
62	Z-FACE	1.25	C	62	RF(3), DIAGONAL BOLTS
63	Y-FACE	1.25	C	63	RF(1), HORIZONTAL BOLT AND RUST ON GUSSET
64	X-FACE	1.27	C	64	RF(2), HORIZONTAL BOLTS AND RF(1), DIAGONAL BOLT
65	Z-FACE	1.27	C	65	RF(2), HORIZONTAL BOLTS AND RUST ON GUSSET
66	Z-FACE	1.28	O	66	(3) CUT AND ABANDONED LINES
67	Y-FACE	1.33	C	67	RUST ON GUSSET
68	Y-FACE	1.32	C	68	RF(1), DIAGONAL BOLT
<b>Sutro Tower</b>				Signature: _____	Page: <u>  4  </u> of <u>  5  </u>
<b>San Francisco, CA</b>				File: _____	Date: <u>  2-9-16  </u>



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Photo 03.JPG  
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Leg B (Level 1 to Level 2)





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Photo 21.JPG  
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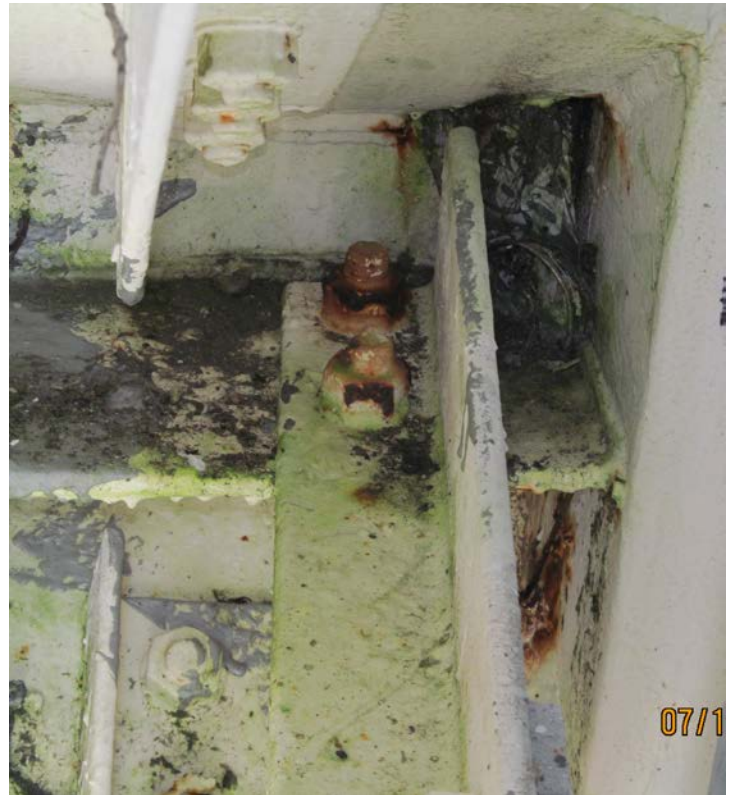


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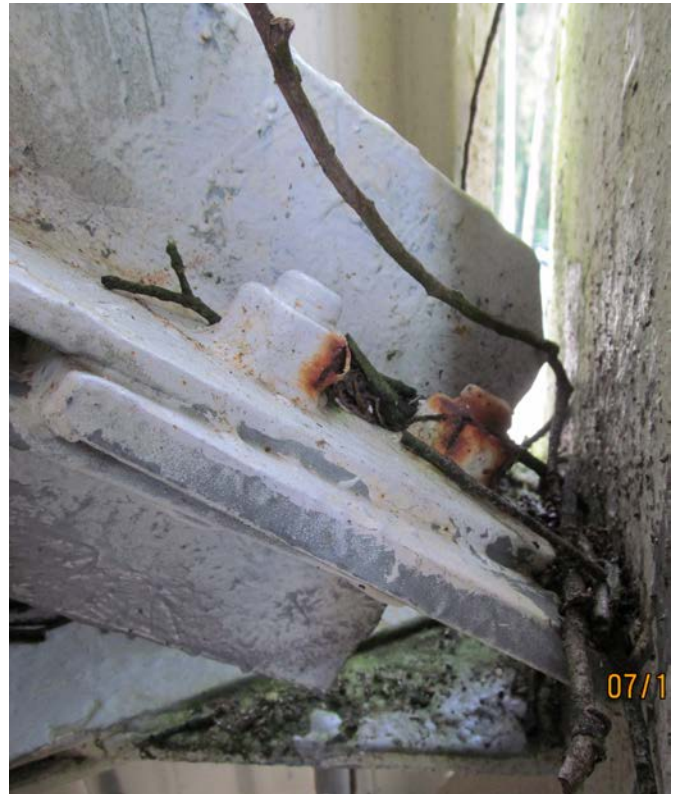


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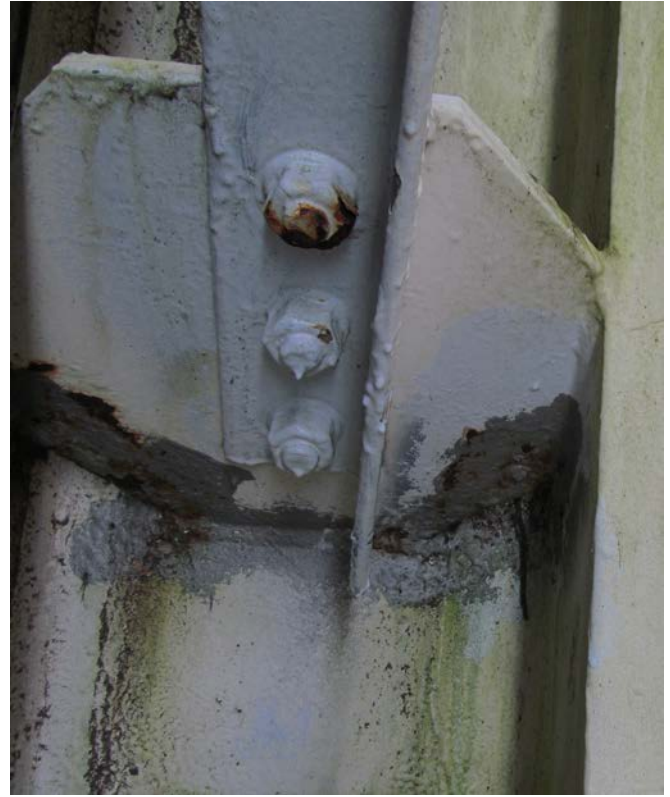


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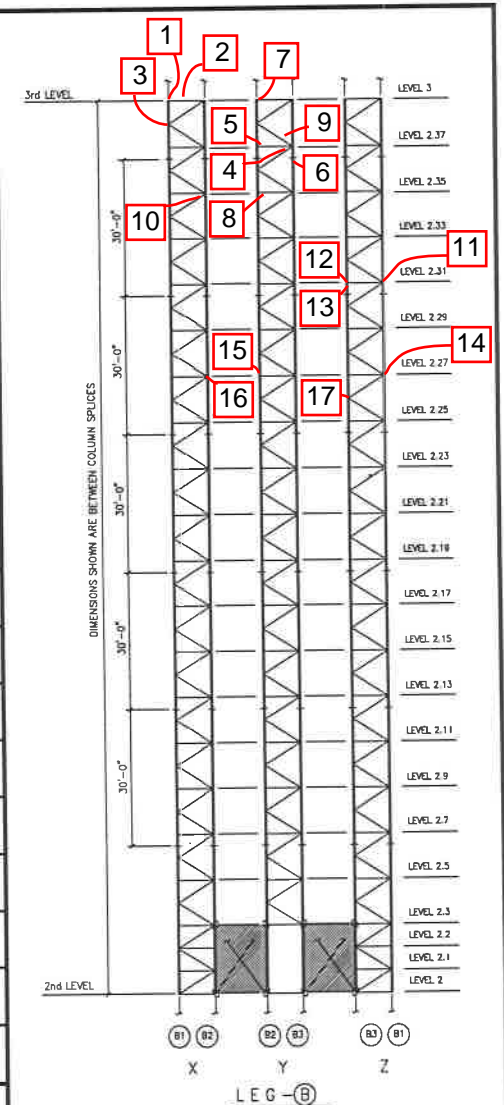
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Photo 69.JPG  
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## Inspection Data Sheet: Leg B (Level 2 to Level 3)

Observ. No.	Location / Identification			Photo No.	Observation Comments
	Column	Elevation	Item <sup>1</sup>		
1	B1	3	C	1	RF(3), LEG BOLTS
2	X-FACE	3	O	2	RUSTED HARDWARE FOR RIGID LINE SUPPORT
3	B1	2.38	C	3	RF(1), DIAGONAL BOLT
4	B3	2.37	C	4	RF(2), LEG BOLTS
5	Y-FACE	2.37	O	5	ABANDONED 1-5/8" FEED LINE
6	B3	2.37	C	6	MINOR RUST ON GUSSET
7	B2	2 - 3	O	7	TWO LOOSE 1/4" LINES
8	Y-FACE	2.35	O	8	BROKEN SUPPORT HANGER
9	Y-FACE	2.35 - 3	O	9	TWO LOOSE 1-5/8" LINES
10	B2	2.35	C	10	RF(1), DIAGONAL BOLT
11	B1	2.31	C	11	MINOR RUST ON GUSSET PLATE
12	Z-FACE	2.31	C	12	RUSTED BOLT ON SUPPORT ANGLE FOR SKIN
13	B3	2.31	C	13	RF(2), LEG BOLTS
14	B1	2.27	O	14	BENT SPRING HANGER AND SUPPORT ANGLE
15	Y-FACE	2.27	O	15	SUPPORT HANGER IS BROKEN FOR FEEDLINE BUNDLE
16	X-FACE	2.27	O	16	6" RIGID LINE SUPPORT IS MISSING TWO BUMPERS
17	Z-FACE	2.26	O	17	RIGID LINE BRACKETS HAVE RUSTED HARDWARE
<b>Sutro Tower</b>				Signature: _____	Page: <u>1</u> of <u>3</u>
<b>San Francisco, CA</b>				File: _____	Date: 2-9-16

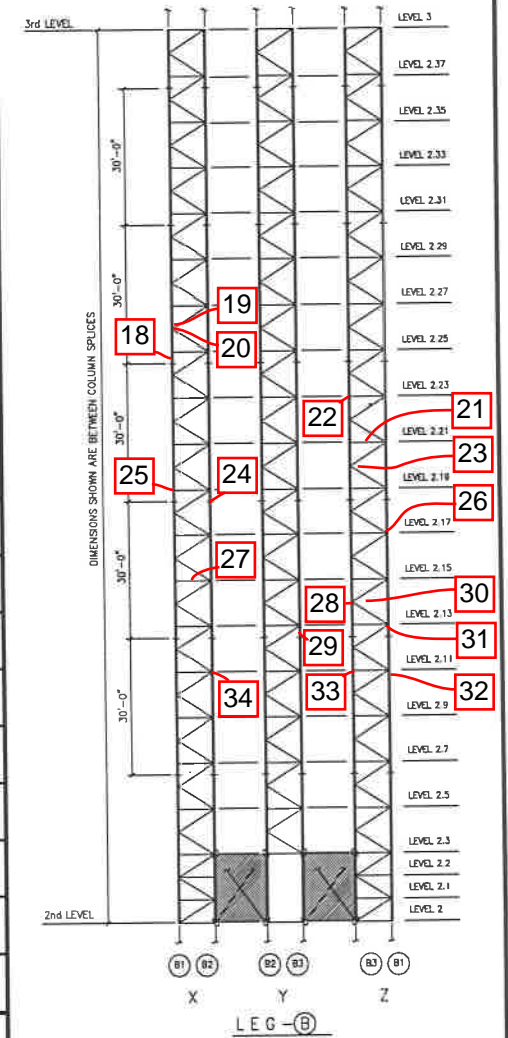


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## Inspection Data Sheet: Leg B (Level 2 to Level 3)

Observ. No.	Location / Identification			Photo No.	Observation Comments
	Column	Elevation	Item <sup>1</sup>		
18	B1	2.25	C	18	RF(1), LEG BOLT
19	B1	2.26	C	19	MINOR RUST ON DIAGONAL GUSSET PLATES
20	B1	2.26	C	20	MINOR RUST ON DIAGONAL GUSSET PLATE
21	Z-FACE	2.21	O	21	ABANDONED 5' PIECE OF CONDUIT
22	Z-FACE	2 - 2.23	O	22	(2) 3/8" LINES ARE NOT CONNECTED
23	Z-FACE	2.20	C	23	RF(2), DIAGONAL BOLTS
24	B2	2.19	C	24	RF(3), LEG BOLTS
25	B1	2.19	C	25	RF(5), LEG BOLTS
26	Z-FACE	2.17	C	26	RUST ON GUSSETS FOR HORIZONTAL
27	X-FACE	2.15	O	27	CONDUIT SUPPORT ANGLE HAS (2) LOOSE BOLTS
28	Z-FACE	2.14	C	28	RF(3), DIAGONAL BOLTS
29	B3	2.13	C	29	RF(2), LEG BOLTS
30	Z-FACE	2.14	O	30	BROKEN LIGHT
31	Z-FACE	2.13	C	31	RUSTED DIAGONAL GUSSET
32	Z-FACE	2.11	C	32	RUST ON GUSSET
33	Z-FACE	2.11	C	33	(2) RUSTED BOLTS ON SKIN SUPPORT ANGLE
34	X-FACE	2.11	C	34	(2) BOLTS RUSTED AND RUSTED GUSSET
<b>Sutro Tower</b>				Signature: _____	Page: <u>2</u> of <u>3</u>
<b>San Francisco, CA</b>				File: _____	Date: <u>2-9-16</u>



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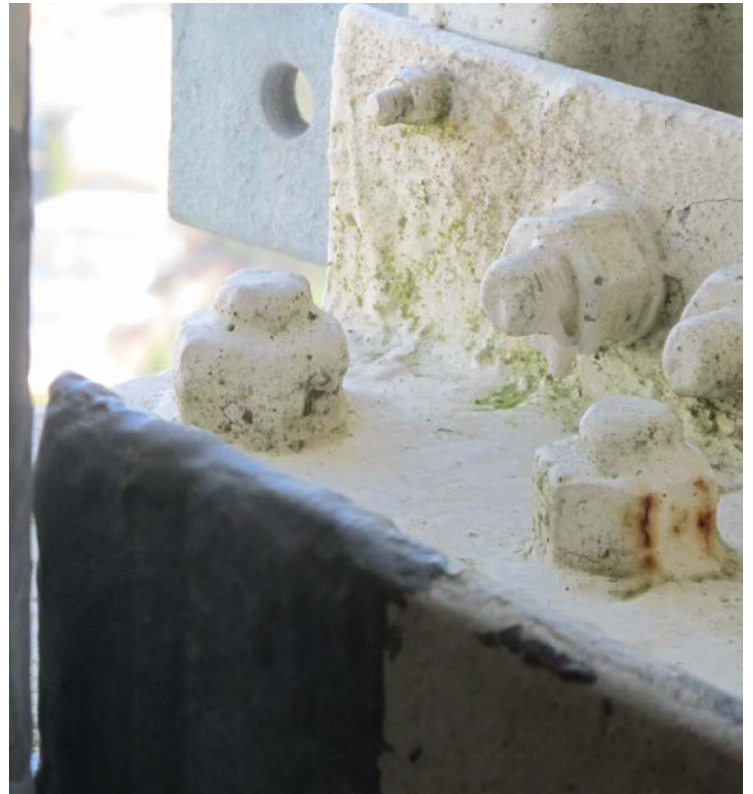


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Leg B (Level 2 to Level 3)



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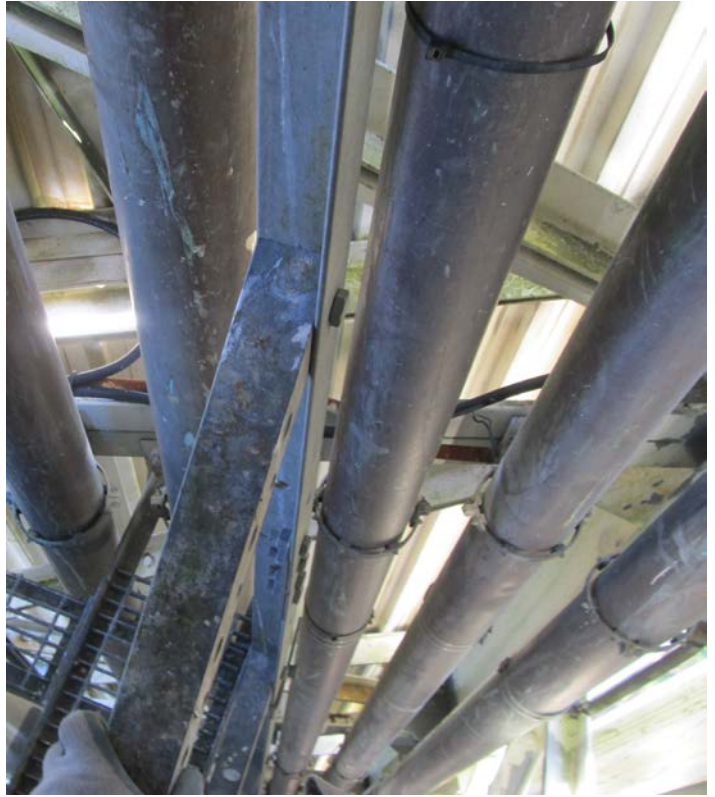


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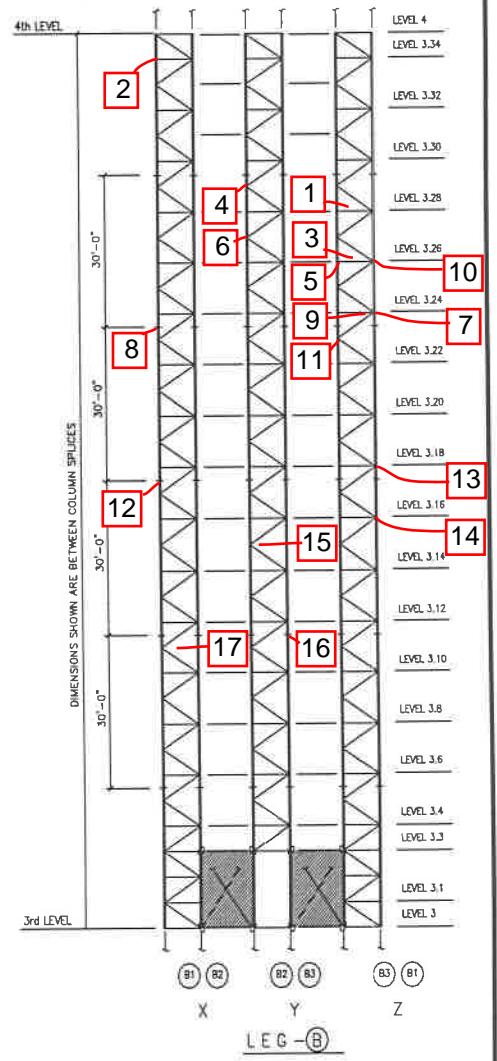


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## Inspection Data Sheet: Leg B (Level 3 to Level 4)

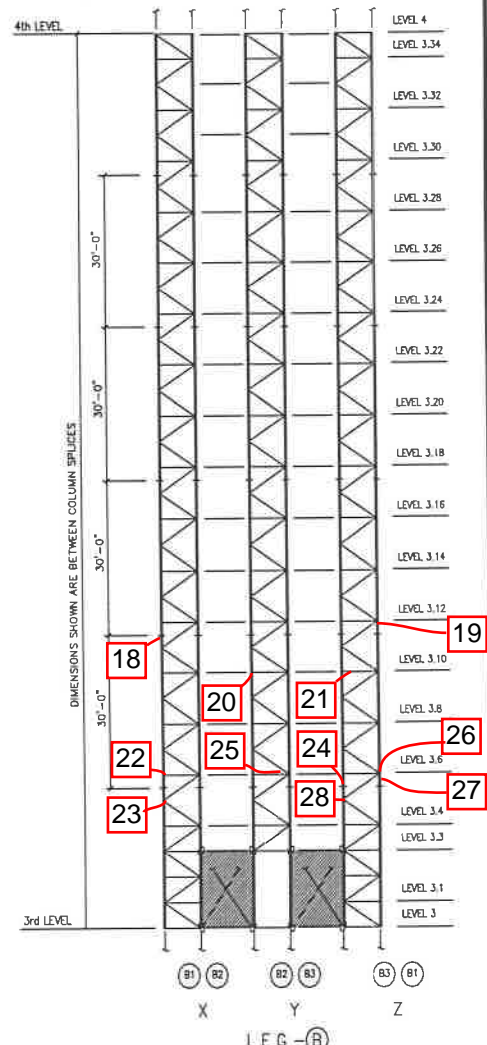
Observ. No.	Location / Identification			Photo No.	Observation Comments
	Column	Elevation	Item <sup>1</sup>		
1	Z-FACE	3 - 4	O	1	(2) LOOSE 3/8" FEED LINES
2	B1	3.34	L	2	RUSTED SPOT ON LEG
3	Z-FACE	3 - 4	O	3	RUSTED RIGID LINE HARDWARE
4	Y-FACE	3.29	O	4	BROKEN LIGHT
5	Z-FACE	3.26	C	5	MINOR RUST ON GUSSET
6	Y-FACE	3.27	O	6	BROKEN LIGHT
7	Z-FACE	3.24	C	7	RF(2), LEG BOLTS
8	B1	3.24	C	8	RF(6), LEG BOLTS
9	B1	3.24	C	9	RUST ON GUSSET
10	Z-FACE	3.26	C	10	RF(1), BOLT FOR HORIZONTAL SKIN SUPPORT
11	B3	3.23	L	11	RUST ON LEG
12	B1	3.18	C	12	RF(11), LEG BOLTS
13	Z-FACE	3.18	C	13	RF(2), BOLTS FOR HORIZONTAL SKIN SUPPORT
14	Z-FACE	3.16	C	14	RF(2), BOLTS FOR HORIZONTAL SKIN SUPPORT
15	Y-FACE	3.15	O	15	BROKEN LIGHT
16	B3	3.12	C	16	RF(2), LEG BOLTS
17	X-FACE	3.11	C	17	RF(1), DIAGONAL BOLT
<b>Sutro Tower</b>				Signature: _____	Page: <u>1</u> of <u>2</u>
<b>San Francisco, CA</b>				File: _____	Date: 2-9-16



<sup>1</sup> Item designation: L=leg member, D=diagonal, H=horizontal, C=connection, O=others

## Inspection Data Sheet: Leg B (Level 3 to Level 4)

Observ. No.	Location / Identification			Photo No.	Observation Comments
	Column	Elevation	Item <sup>1</sup>		
18	B1	3.12	C	18	RF(8), LEG BOLTS
19	B1	3.12	C	19	RUST ON GUSSET
20	CENTER	3.10	O	20	FLEX CABLE FOR CONDUIT HAS ONE RUSTED CONNECTOR AND ONE BROKEN CONNECTOR
21	CENTER	3.10	O	21	JUNCTION BOX IS MISSING A SCREW
22	B1	3.6	C	22	RF(1), LEG BOLT AND RUST ON LEG
23	X-FACE	3.5	C	23	RUST ON GUSSET
24	B3	3.6	C	24	RF(1), LEG BOLT
25	B3	3.6	C	25	RF(4), LEG BOLTS
26	B1	3.6	C	26	RF(8), LEG BOLTS
27	Z-FACE	3.6	C	27	RUST ON GUSSET
28	Z-FACE	3.5	C	28	RF(1), DIAGONAL BOLT
<b>Sutro Tower</b>				Signature: _____	Page: <u>2</u> of <u>2</u>
<b>San Francisco, CA</b>				File: _____	Date: <u>2-9-16</u>



<sup>1</sup> Item designation: L=leg member, D=diagonal, H=horizontal, C=connection, O=others





Photo 01.JPG  
8/27/2015



Photo 02.JPG  
8/27/2015



Photo 03.JPG  
8/27/2015



Photo 04.JPG  
8/27/2015



Photo 05.JPG  
8/27/2015



Photo 06.JPG  
8/27/2015



Photo 07.JPG  
8/27/2015



Photo 08.JPG  
8/27/2015





Photo 09.JPG  
8/27/2015



Photo 10.JPG  
8/27/2015



Photo 11.JPG  
8/27/2015

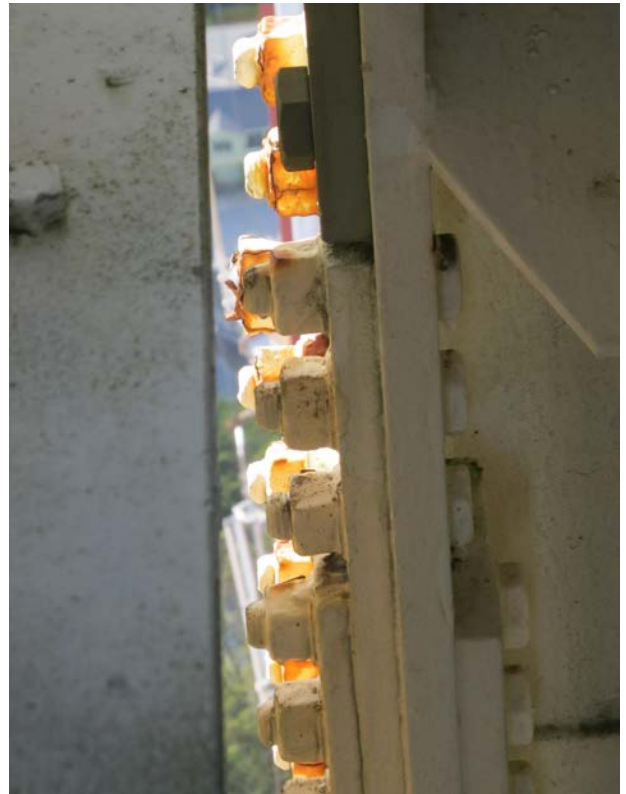


Photo 12.JPG  
8/27/2015



Photo 13.JPG  
8/27/2015



Photo 14.JPG  
8/27/2015



Photo 15.JPG  
8/27/2015



Photo 16.JPG  
8/27/2015





Photo 17.JPG  
8/27/2015



Photo 18.JPG  
8/27/2015



Photo 19.JPG  
8/27/2015



Photo 20.JPG  
8/27/2015



Photo 21.JPG  
8/27/2015

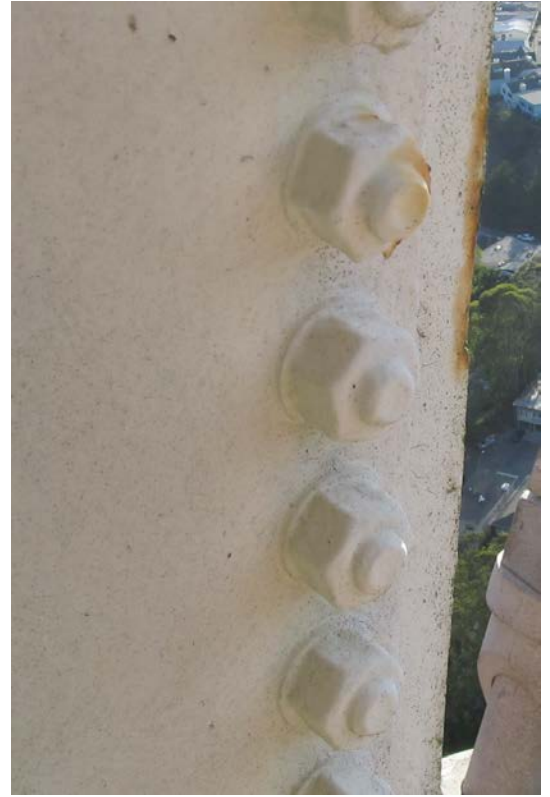


Photo 22.JPG  
8/27/2015



Photo 23.JPG  
8/27/2015



Photo 24.JPG  
8/27/2015

Leg B (Level 3 to Level 4)





Photo 25.JPG  
8/27/2015

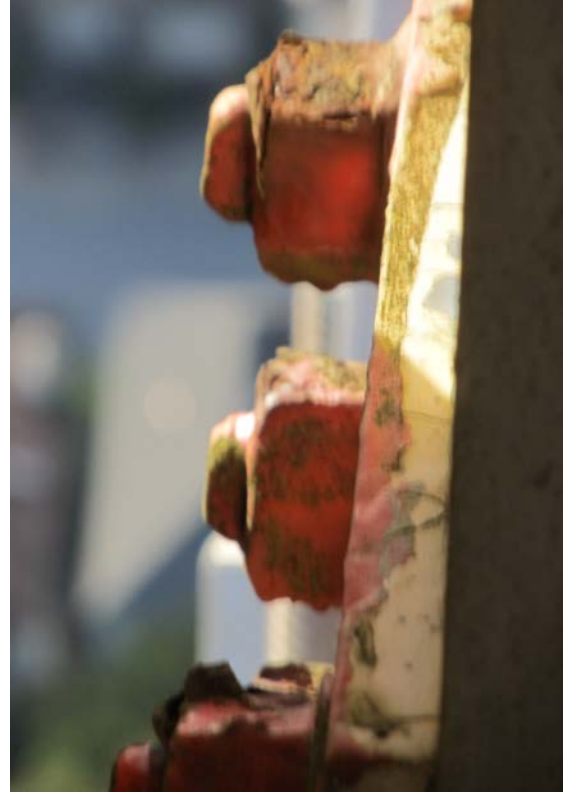


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8/27/2015



Photo 27.JPG  
8/27/2015

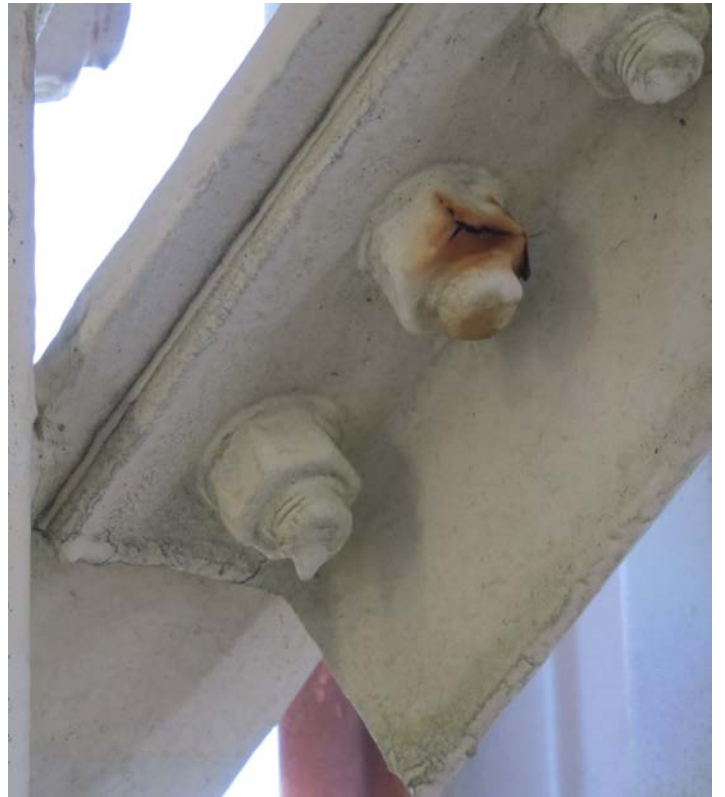
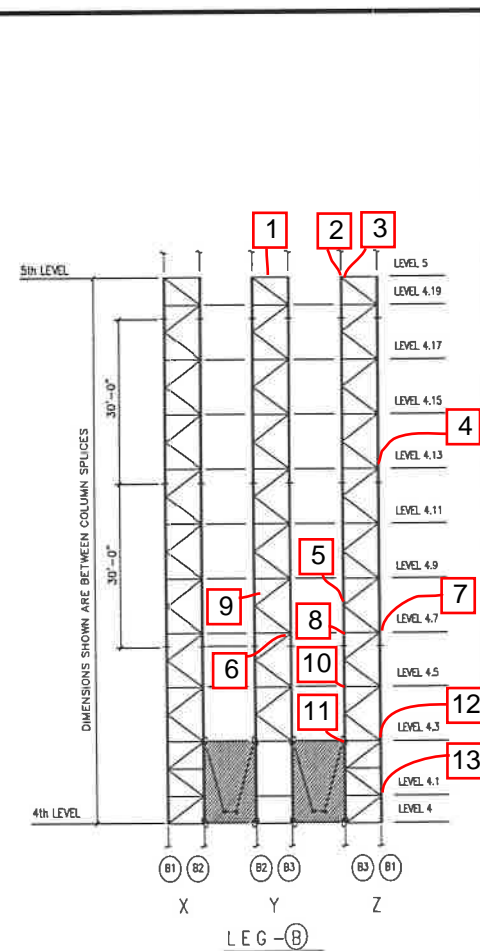


Photo 28.JPG  
8/27/2015

Leg B (Level 3 to Level 4)

## Inspection Data Sheet: Leg B (Level 4 to Level 5)

Observ. No.	Location / Identification			Photo No.	Observation Comments
	Column	Elevation	Item <sup>1</sup>		
1	Y-FACE	5	C	1	RF(1), LEG BOLT
2	B3	5	C	2	RF(2), HORIZONTAL BOLTS
3	B3	5	C	3	RF(1), LEG BOLT AND BOLT IS LOOSE
4	B1	4.13	C	4	RF(2), HORIZONTAL BOLT AND RUST ON GUSSET
5	Z-FACE	4.8	C	5	RF(2), DIAGONAL BOLT
6	Y-FACE	4.7	C	6	RF(1), DIAGONAL BOLT
7	B1	4.7	L	7	RUST ON LEG
8	B3	4.7	L	8	RUST ON LEG
9	Y-FACE	4 - 5	O	9	(2) 1/2" COAX ARE LOOSE
10	Z-FACE	4.5	C	10	RF(2), HORIZONTAL BOLTS
11	B3	4.3	O	11	BROKEN CONNECTOR FOR BEACON FLEX LINE
12	Z-FACE	4.3	O	12	BROKEN CONNECTOR ON CONDUIT
13	CENTER	4.1	O	13	JUNCTION BOX IS MISSING COVER WITH OPEN WIRES
<b>Sutro Tower</b>				Signature: _____	Page: <u>1</u> of <u>1</u>
<b>San Francisco, CA</b>				File: _____	Date: 2-9-16



<sup>1</sup> Item designation: L=leg member, D=diagonal, H=horizontal, C=connection, O=others





Photo 01.JPG  
9/24/2015

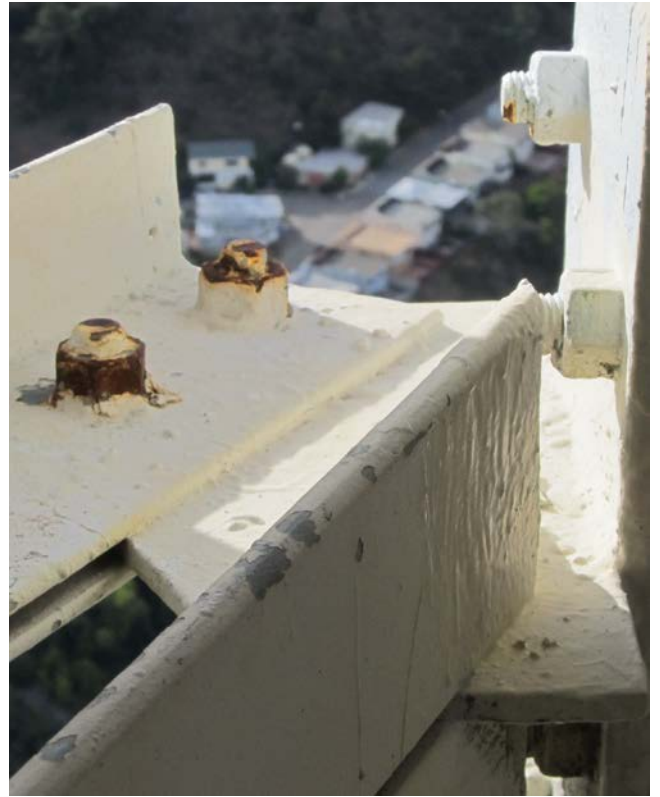


Photo 02.JPG  
9/24/2015



Photo 03.JPG  
9/24/2015



Photo 04.JPG  
9/24/2015



Photo 05.JPG  
9/24/2015





Photo 06.JPG  
9/24/2015



Photo 7.JPG  
9/24/2015



Photo 8.JPG  
9/24/2015

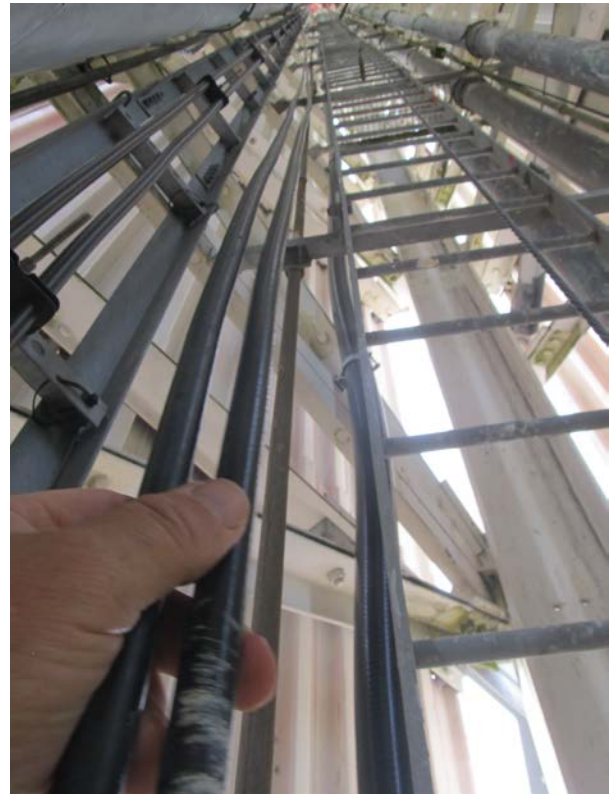


Photo 9.JPG  
9/24/2015



Photo 10.JPG  
9/24/2015



Photo 11.JPG  
9/24/2015



Photo 12.JPG  
9/24/2015

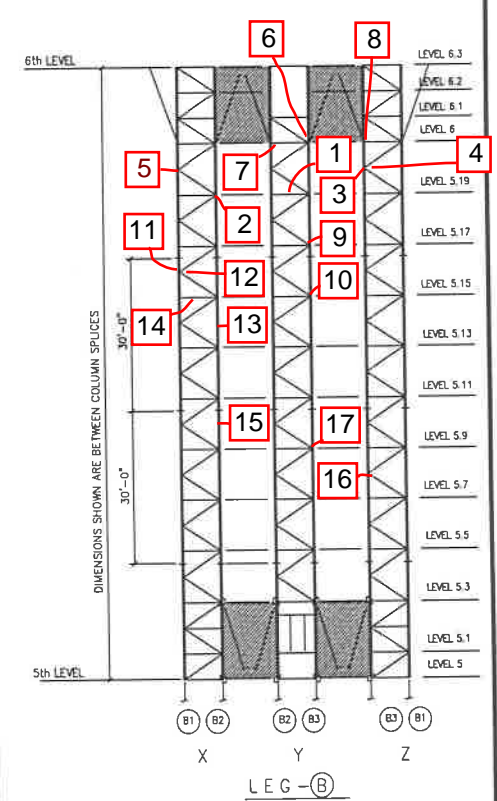


Photo 13.JPG  
9/24/2015



## Inspection Data Sheet: Leg B (Level 5 to Level 6)

Observ. No.	Location / Identification			Photo No.	Observation Comments
	Column	Elevation	Item <sup>1</sup>		
1	Y-FACE	5.19	O	1	BENT RIGID LINE SUPPORT ANGLE
2	X-FACE	5.19	C	2	MINOR RUST ON DIAGONAL GUSSET PLATE
3	B3	5.195	C	3	RF(5), LEG BOLTS
4	Z-FACE	5.195	C	4	RUSTED GUSSET PLATE
5	B1	5.195	C	5	RF(2) ON SUPPORT ANGLE
6	B3	6	C	6	RF(2), HORIZONTAL BOLTS
7	Y-FACE	6	C	7	RF(2) ON RIGID LINE SUPPORT ANGLE
8	B3	6	C	8	RUSTED GUSSET FOR LOWER BEAM
9	Y-FACE	5.17	C	9	DRAINAGE HOLES NEED TO BE CLEANED
10	B3	5.15	L	10	MINOR RUST ON LEG
11	B1	5.16	C	11	RF(1), DIAGONAL BOLT
12	X-FACE	5.16	O	12	BROKEN LIGHT
13	ALL FACES	5 - 6	O	13	ALL CONDUITS SHOW RUST
14	X-FACE	5.15	O	14	RUSTED HARDWARE FOR RIGID LINE HANGER
15	B2	5.10	L	15	MINOR RUST ON LEG
16	Z-FACE	5.8	C	16	MINOR RUST ON DIAGONAL GUSSET
17	Y-FACE	5.9	C	17	RF(1), DIAGONAL BOLT
<b>Sutro Tower</b>				Signature: _____	Page: <u>  1  </u> of <u>  2  </u>
<b>San Francisco, CA</b>				File: _____	Date: <b>2-9-16</b>



<sup>1</sup> Item designation: L=leg member, D=diagonal, H=horizontal, C=connection, O=others







Photo 01.JPG  
8/26/2015



Photo 02.JPG  
8/26/2015

Leg B (Level 5 to Level 6)



Photo 03.JPG  
8/26/2015



Photo 04.JPG  
8/26/2015



Photo 05.JPG  
8/26/2015

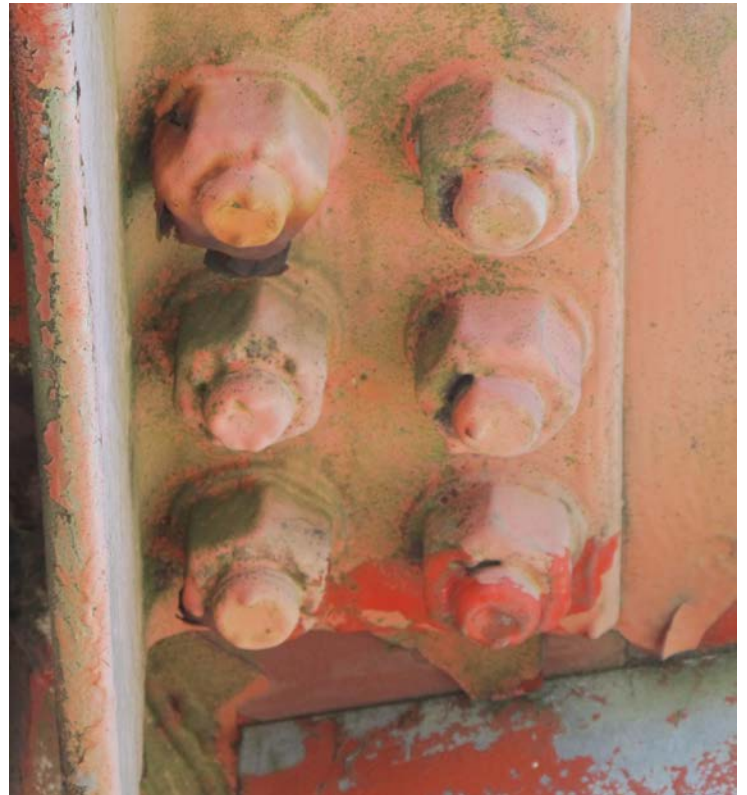


Photo 06.JPG  
8/26/2015





Photo 07.JPG  
8/26/2015



Photo 8.JPG  
8/26/2015



Photo 9.JPG  
8/26/2015

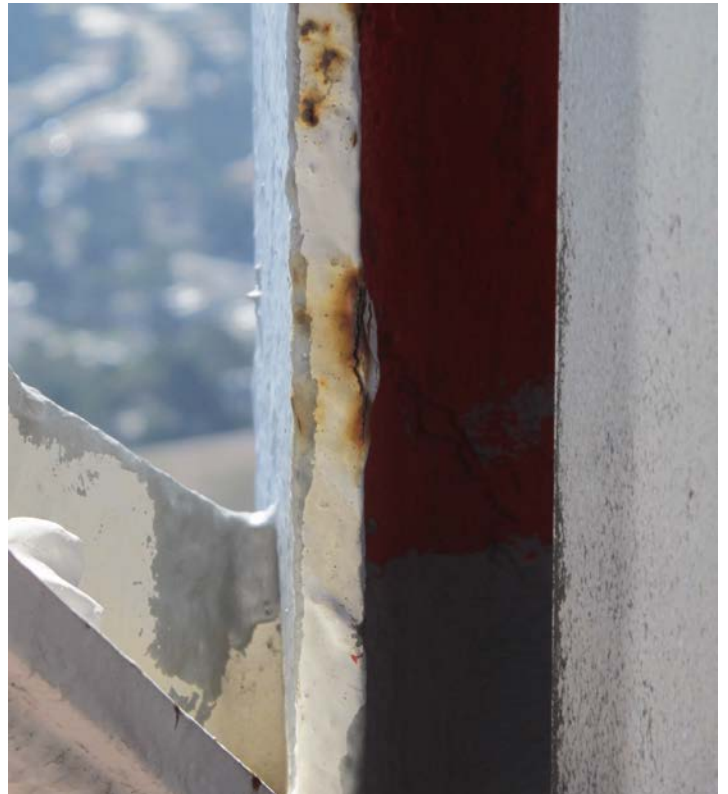


Photo 10.JPG  
8/26/2015



Photo 11.JPG  
8/26/2015



Photo 12.JPG  
8/26/2015



Photo 13.JPG  
8/26/2015



Photo 14.JPG  
8/26/2015





Photo 15.JPG  
8/26/2015



Photo 16.JPG  
8/26/2015



Photo 17.JPG  
8/26/2015

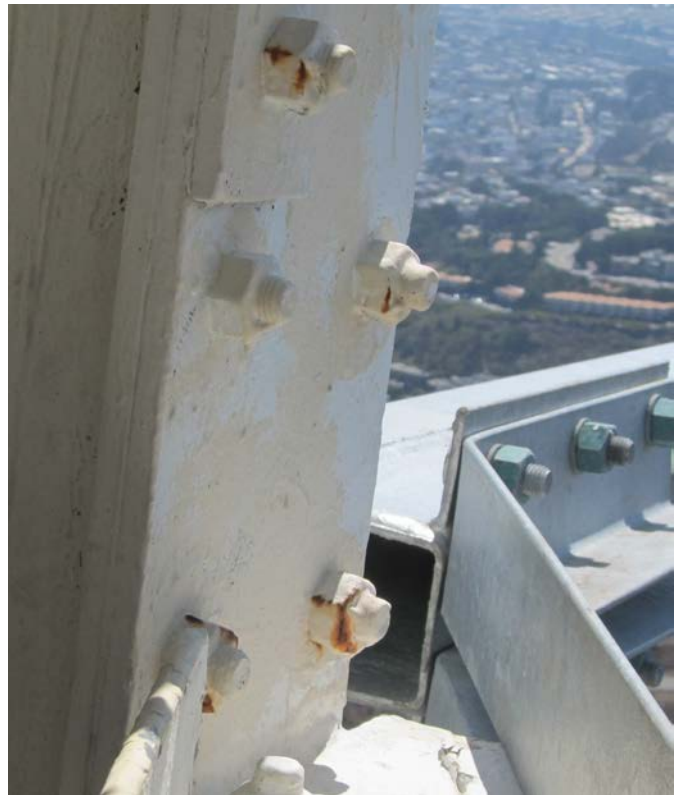


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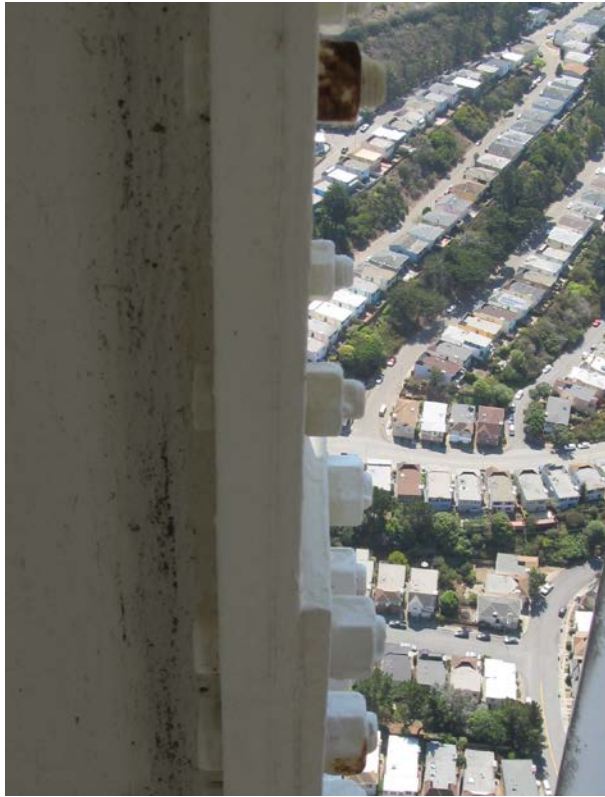


Photo 19.JPG  
8/26/2015



Photo 20.JPG  
9/24/2015



Photo 21.JPG  
9/24/2015



Photo 22.JPG  
9/24/2015





Photo 23.JPG  
8/26/2015



Photo 24.JPG  
8/26/2015



Photo 25.JPG  
8/24/2015







Photo 01.JPG  
8/25/2015

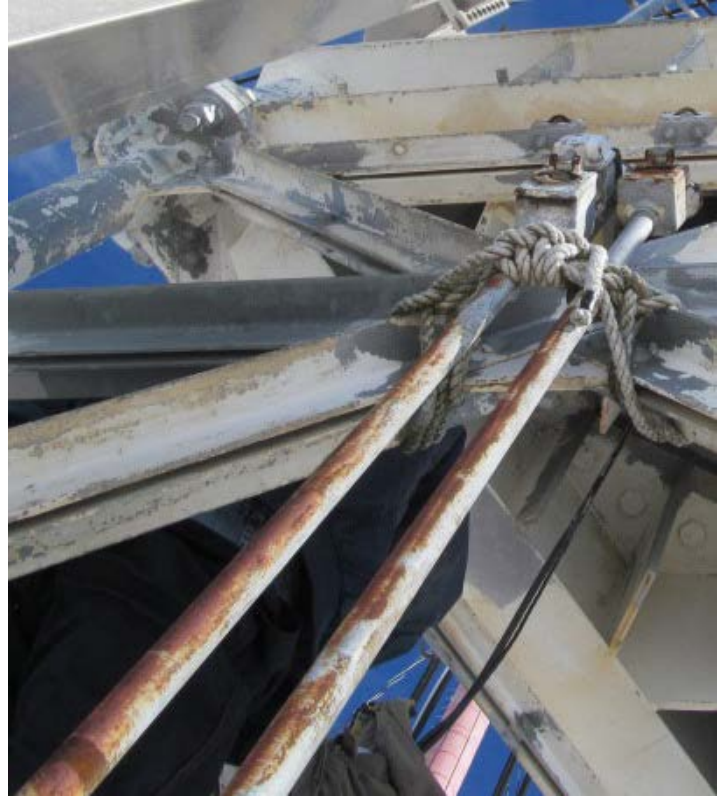


Photo 02.JPG  
8/25/2015



Photo 03.JPG  
8/25/2015



Photo 04.JPG  
8/25/2015

Antenna Mount Stack "B" (Level 6 to base of antenna)





Photo 05.JPG  
8/25/2015



Photo 06.JPG  
8/25/2015



Photo 07.JPG  
8/25/2015

**Antenna Mount Stack "B" (Level 6 to base of antenna)**











# Inspection Data Sheet: East Truss (Level 5)

Observ. No.	Location / Identification			Photo No.	Inspection Comments
	Chord <sup>1</sup>	Horiz. Location	Item <sup>2</sup>		
1	L	5.2	C	1	RF(3)
2	L	5.3	C	2	RF(7)
3	L	5.4	C	3	RF(7)
4	L	5.5	C	4	RF(6)
5	L	5.7	C	5	RF(4)
6	L	5.8	C	6	RF(2)
7	L	5.9	C	7	RF(1)
8	M	5.8	C	8	RF(4)
9	M	5.45	C	9	RF(4)
10	U	5.8	C	10	RF(1)
11	U	5.6	C	11	RF(2)
12	L	5.7	C	12	RF(2)
13	L	5.5	C	13	RF(1)
14	L	5.2	C	14	RF(2)
<b>Sutro Tower</b>				Signature: _____	Page: <u>  1  </u> of <u>  1  </u>
<b>San Francisco, CA</b>				File: _____	Date: 2-9-16

<sup>1</sup> Chord member designation: U = upper, M = middle, and L = lower

<sup>2</sup> Item designation: H = horizontal, V = vertical, D = diagonal, C = connection, and O = others

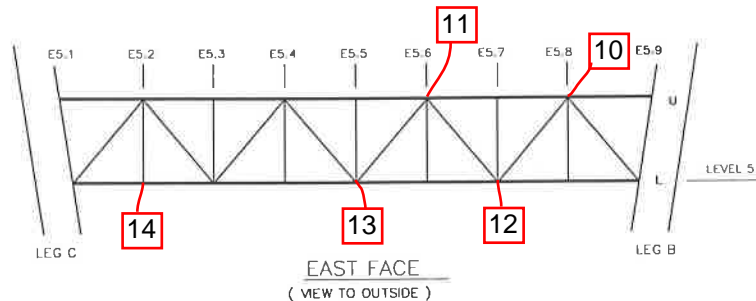
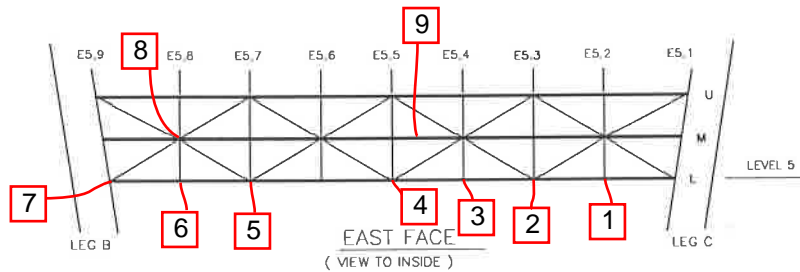




Photo 01.JPG  
9/24/2015

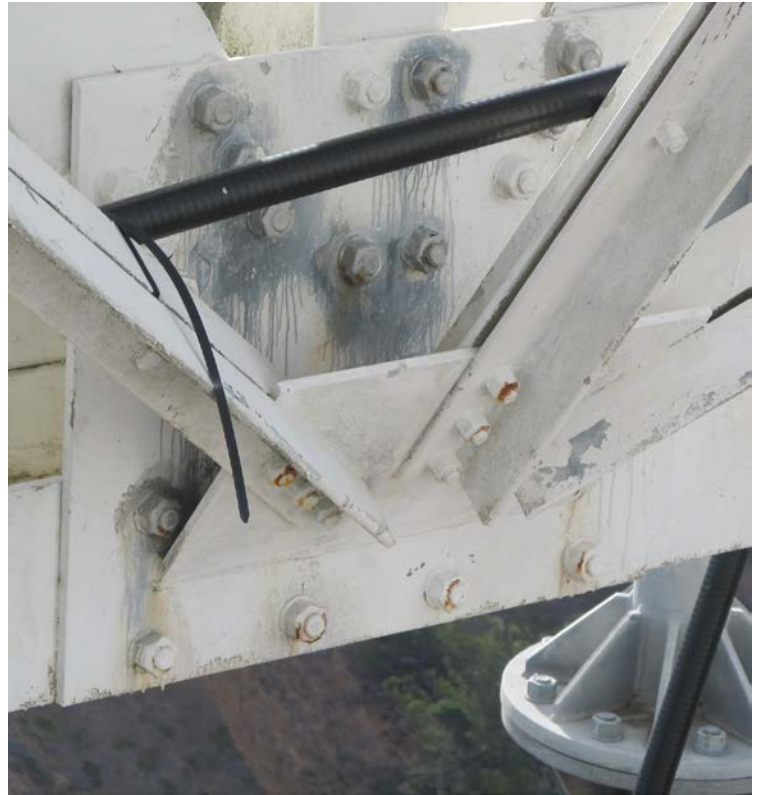


Photo 02.JPG  
9/24/2015



Photo 03.JPG  
9/24/2015

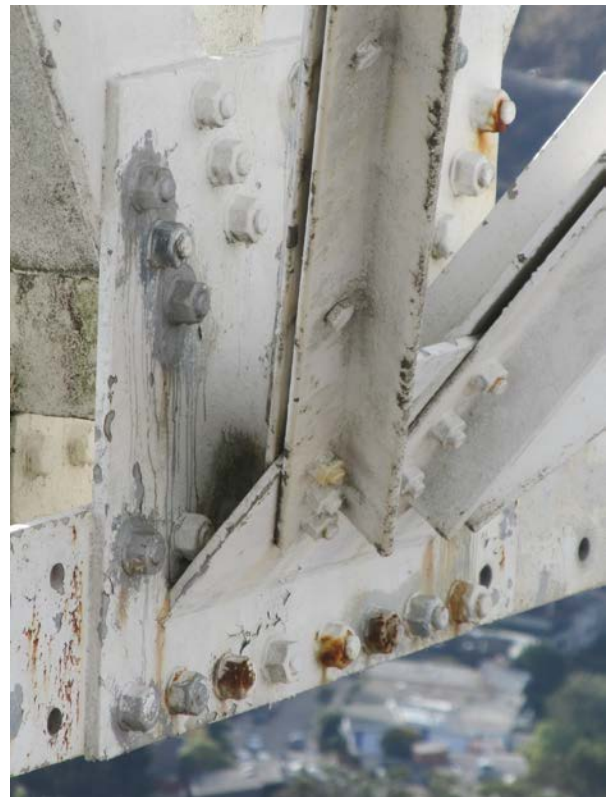


Photo 04.JPG  
9/24/2015





Photo 05.JPG  
9/24/2015



Photo 06.JPG  
9/24/2015



Photo 07.JPG  
9/24/2015

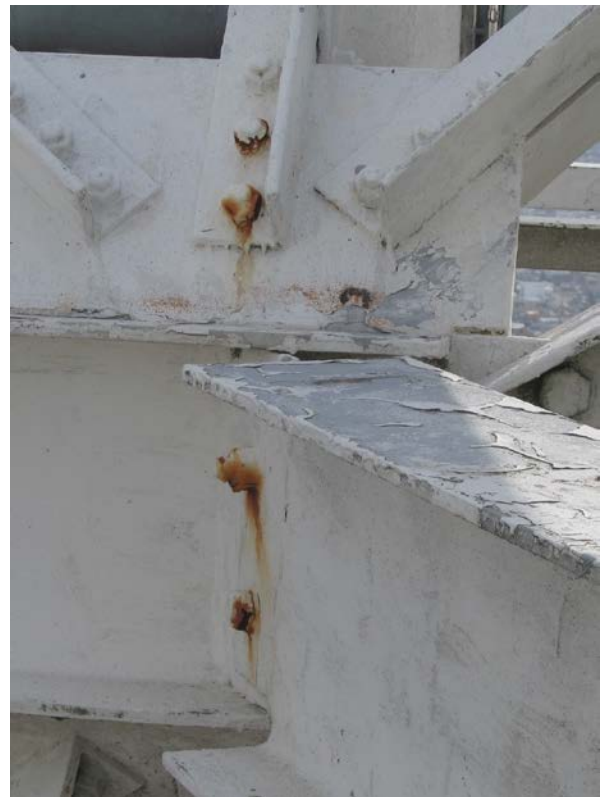


Photo 08.JPG  
9/24/2015



Photo 09.JPG  
9/24/2015



Photo 10.JPG  
9/24/2015



Photo 11.JPG  
9/24/2015



Photo 12.JPG  
9/24/2015





Photo 13.JPG  
9/24/2015



Photo 14.JPG  
8/25/2015

# Inspection Data Sheet: East Truss (Level 6)

Observ. No.	Location / Identification			Photo No.	Inspection Comments
	Chord <sup>1</sup>	Horiz. Location	Item <sup>2</sup>		
1	OL	6.25	O	1	HANDRAIL CABLES ARE RUSTED, TYPICAL
2	IU	6.27	O	2	(4) GRATING J-BOLTS ARE RUSTED
3	IU	6.26	O	3	SAFETY CABLE IS RUSTED
4	IL	6.23	O	4	FLEX LINE IS DISCONNECTED
5	IL	6.19	C	5	SHORT BOLT FOR RIGGING MEMBER
6	OL	6.20	C	6	SHORT BOLT FOR RIGGING MEMBER
7	IL	6.21	C	7	RF(1), LOWER BEAM CONNECTION TO LEG
8	OL	6.8	C	8	RF(6)
9	OL	6.6	C	9	(1) SHORT BOLT AND (1) RUSTED BOLT
10	OL	6.6	C	10	(1) SHORT BOLT AND (1) RUSTED BOLT
11	OU	6.5 - 6.6	C	11	RUST ON REINFORCEMENT BOLTS
<b>Sutro Tower</b>				Signature: _____	Page: <u>  1  </u> of <u>  1  </u>
<b>San Francisco, CA</b>				File: _____	Date: 2-9-16

<sup>1</sup> Chord member designation: OU = outer upper, OL = outer lower, IU = inner upper, and IL = inner lower  
<sup>2</sup> Item designation: H = horizontal, V = vertical, D = diagonal, C = connection, O = others

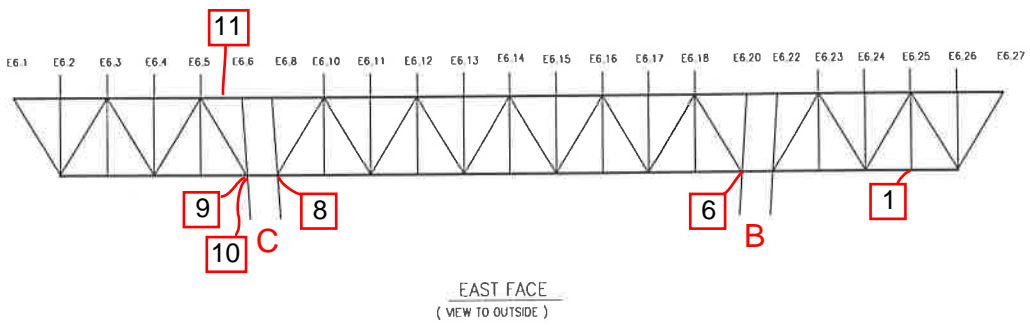
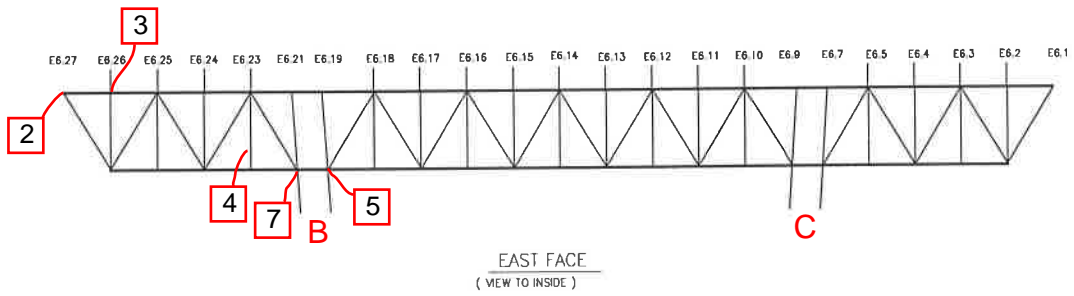






Photo 01.JPG  
8/24/2015



Photo 02.JPG  
8/24/2015



Photo 03.JPG  
8/24/2015

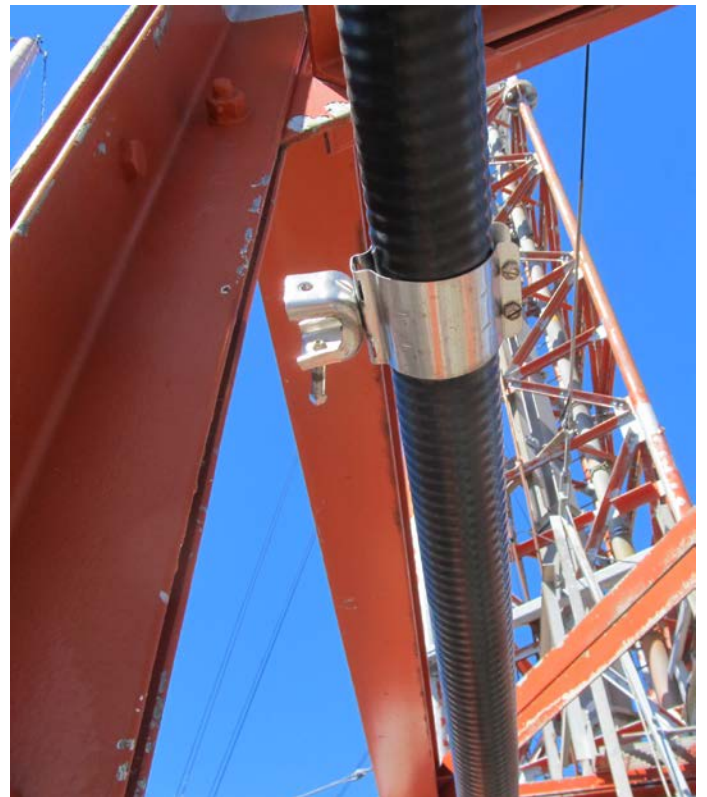


Photo 04.JPG  
8/24/2015





Photo 05.JPG  
8/24/2015



Photo 06.JPG  
8/24/2015



Photo 07.JPG  
8/24/2015



Photo 08.JPG  
8/24/2015





Photo 09.JPG  
8/24/2015



Photo 10.JPG  
8/24/2015



Photo 11.JPG  
8/24/2015







Photo 01.JPG  
8/26/2015



Photo 02.JPG  
8/24/2015



Photo 03.JPG  
8/25/2015



Photo 04.JPG  
8/26/2015

Strands, Misc.







Photo 1.JPG  
8/26/2015



Photo 2.JPG  
8/26/15



Photo 3.JPG  
8/26/15

Bases, Misc.