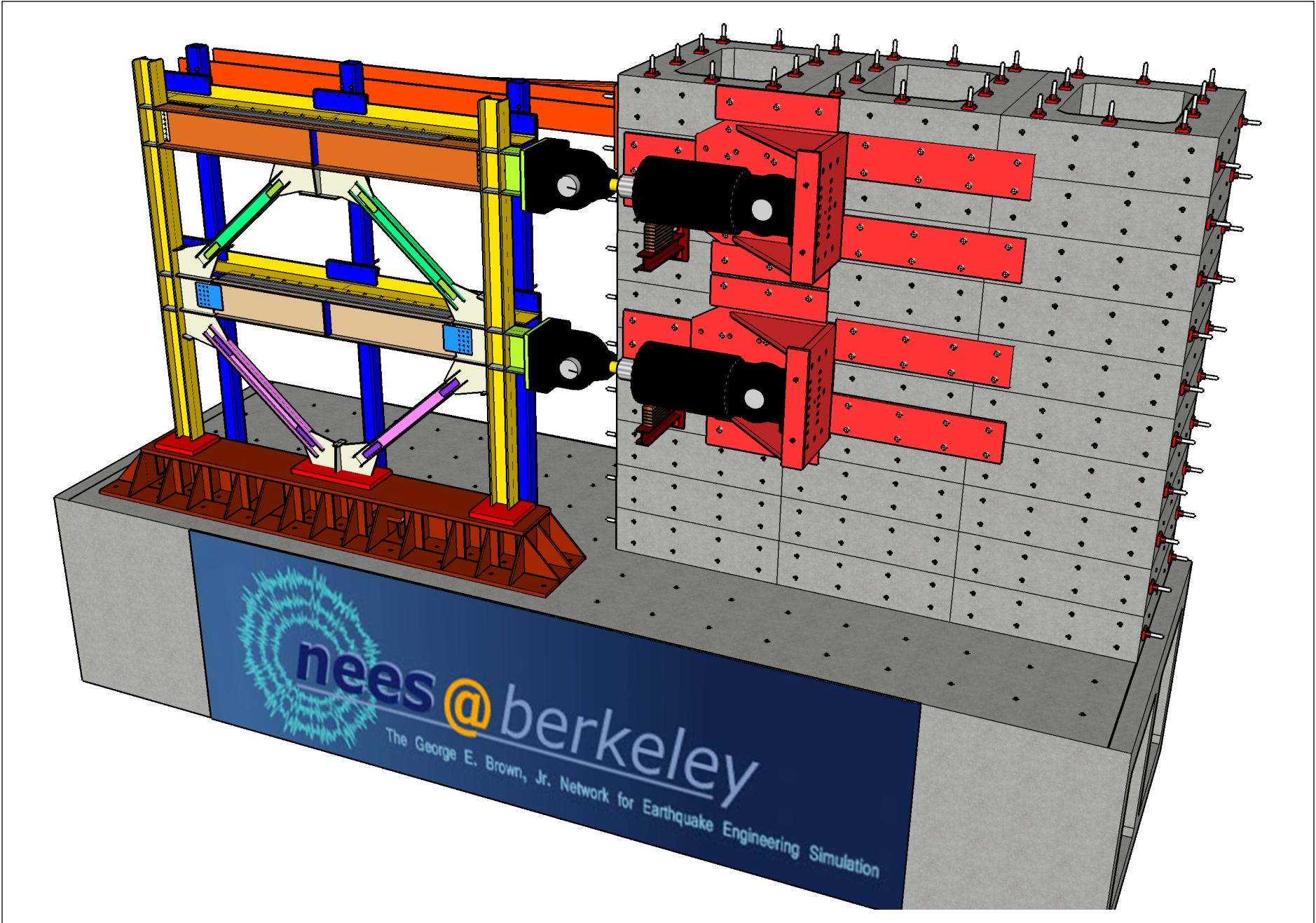

Appendix F

Channel Locations and Lists for Specimen TCBF-B-3



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Tomorrow's Braced
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TCBF-B-3, Sensor Locations
S.00



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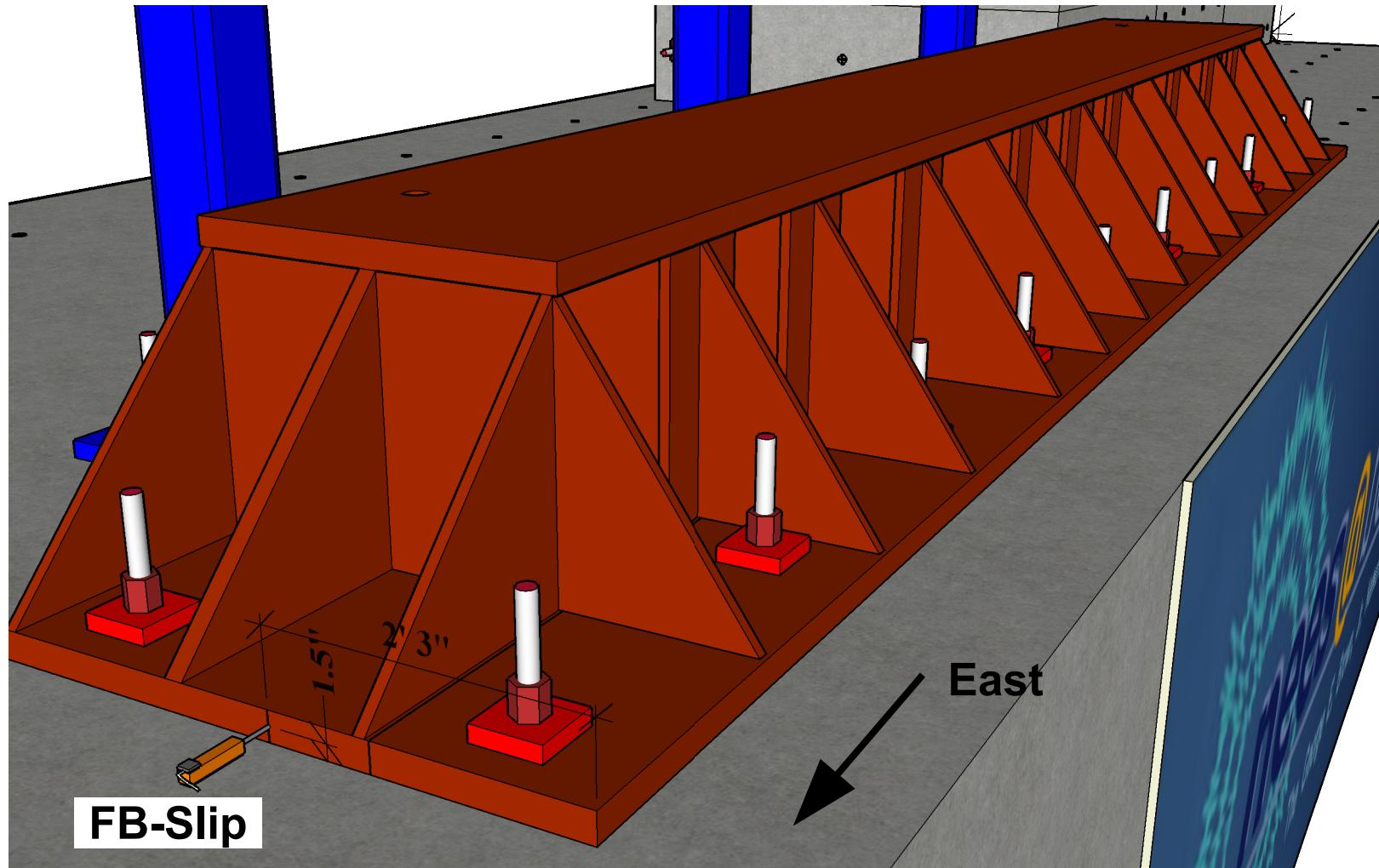
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Sensor
Locations

S.01



FB-Slip = floor beam slip monitoring (east side, location is shown in the figure)



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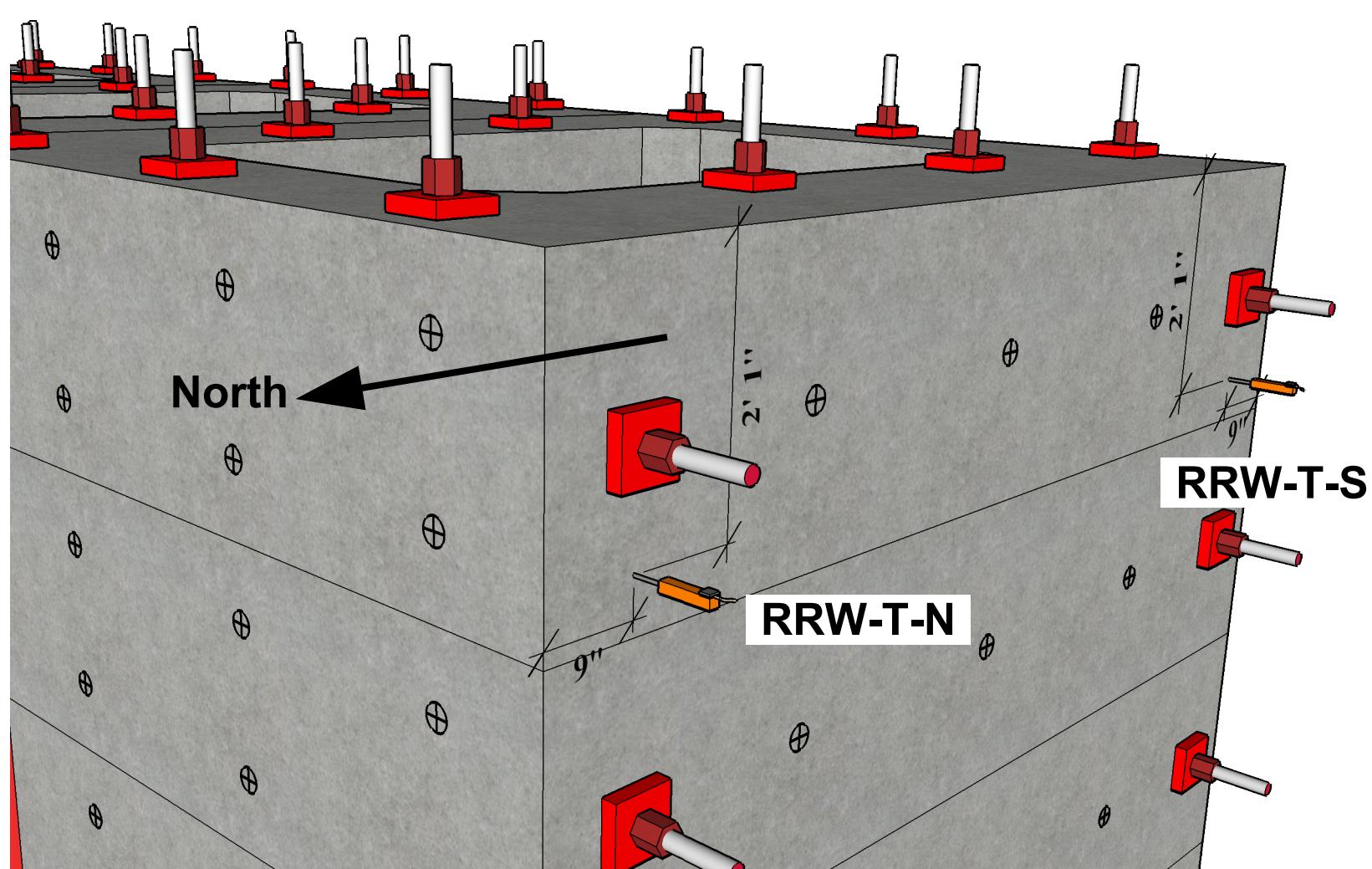
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Sensor Locations



**RRW-T-N = north side of reconfigurable reaction wall (RRW),
top deformation monitoring (location is shown in the figure)**

**RRW-T-S = south side of reconfigurable reaction wall (RRW),
top deformation monitoring (location is shown in the figure)**

S.02



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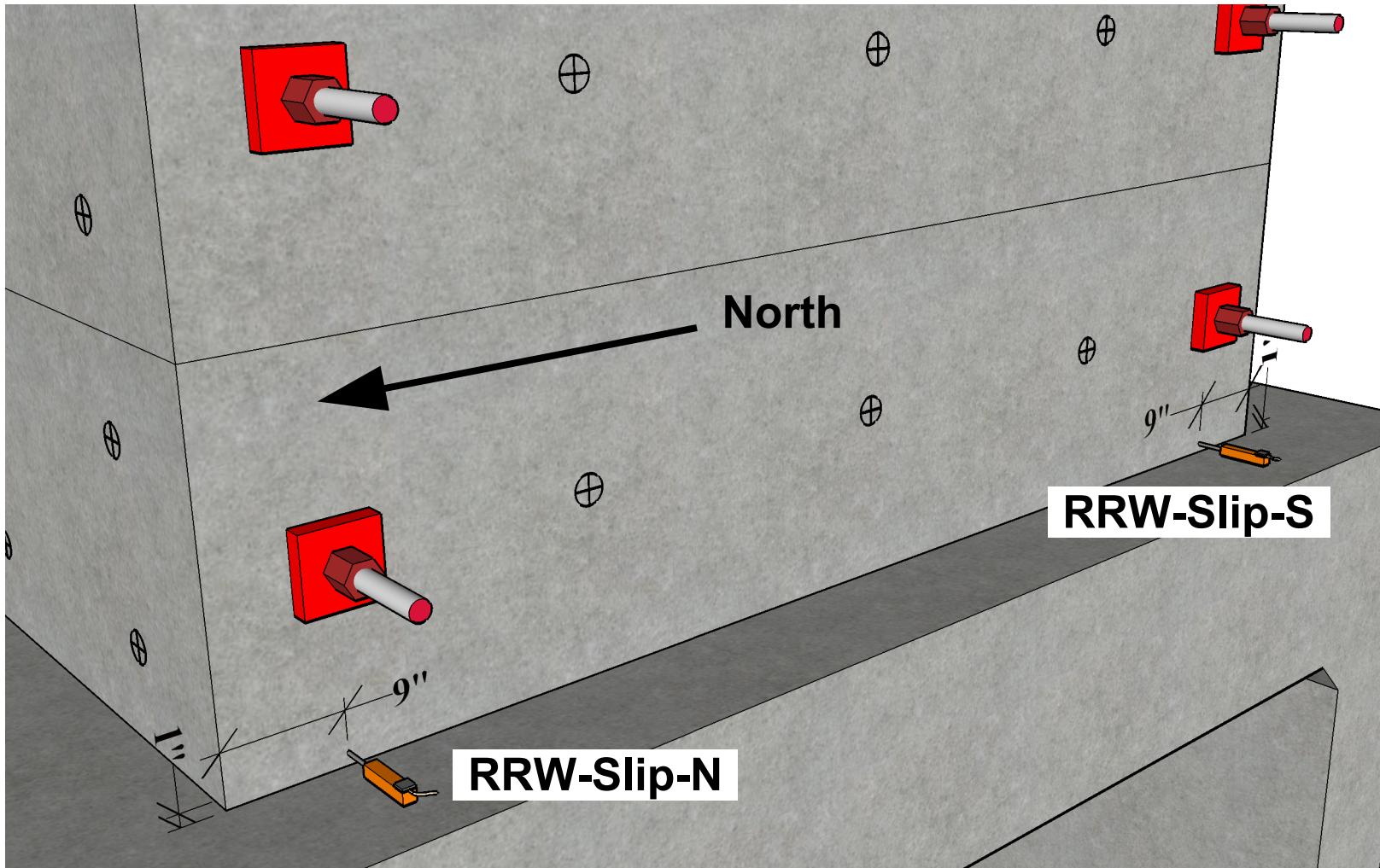
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Sensor
Locations



**RRW-Slip-N = north side of reconfigurable reaction wall (RRW)
near base, slip monitoring (location is shown in the figure)**

**RRW-Slip-S = south side of reconfigurable reaction wall (RRW)
near base, slip monitoring (location is shown in the figure)**

S.03



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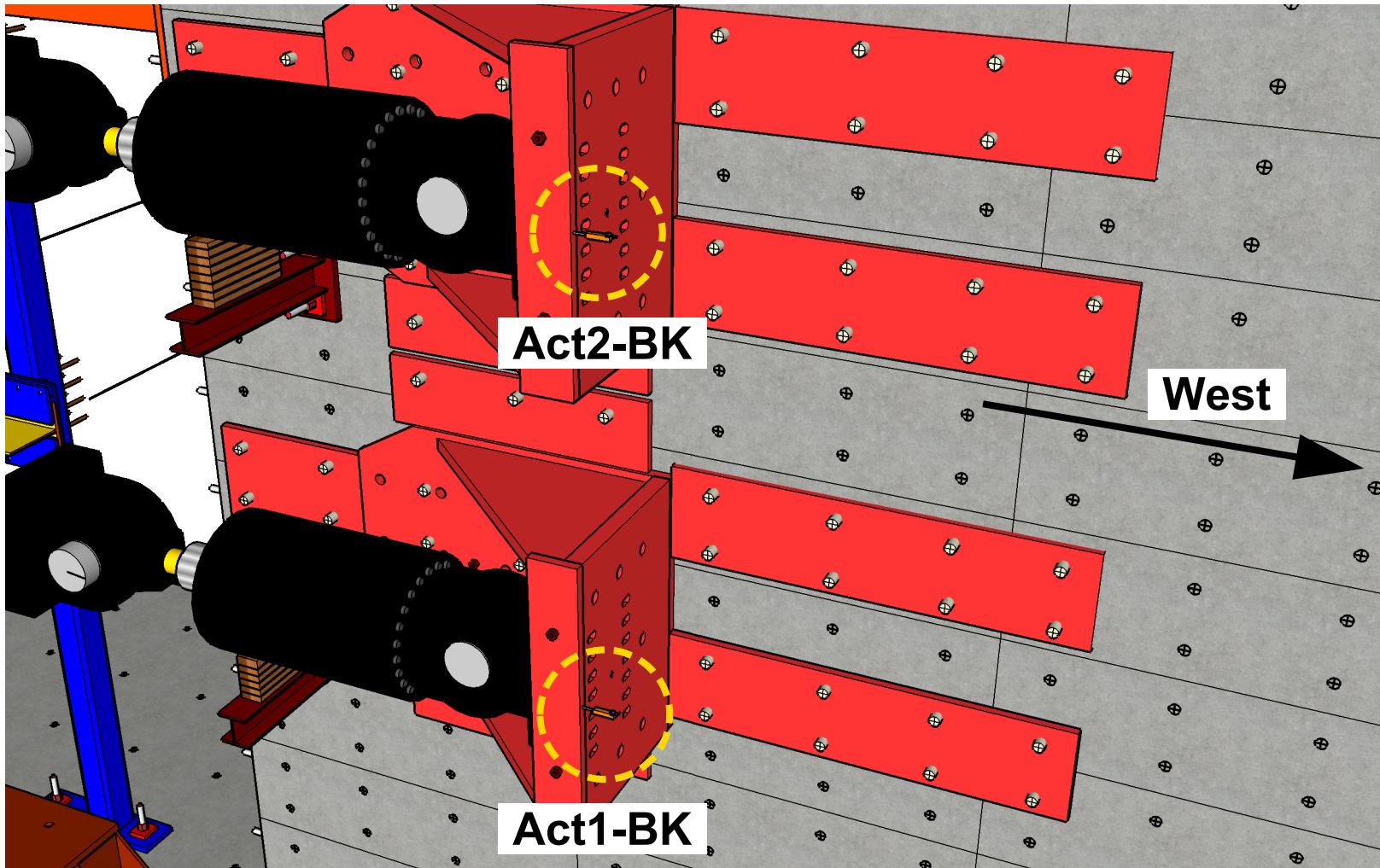
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Sensor
Locations



**Act1-BK = lower actuator bracket deformation monitoring
(location is shown in the figure)**

**Act2-BK = upper actuator bracket deformation monitoring
(location is shown in the figure)**

S.04



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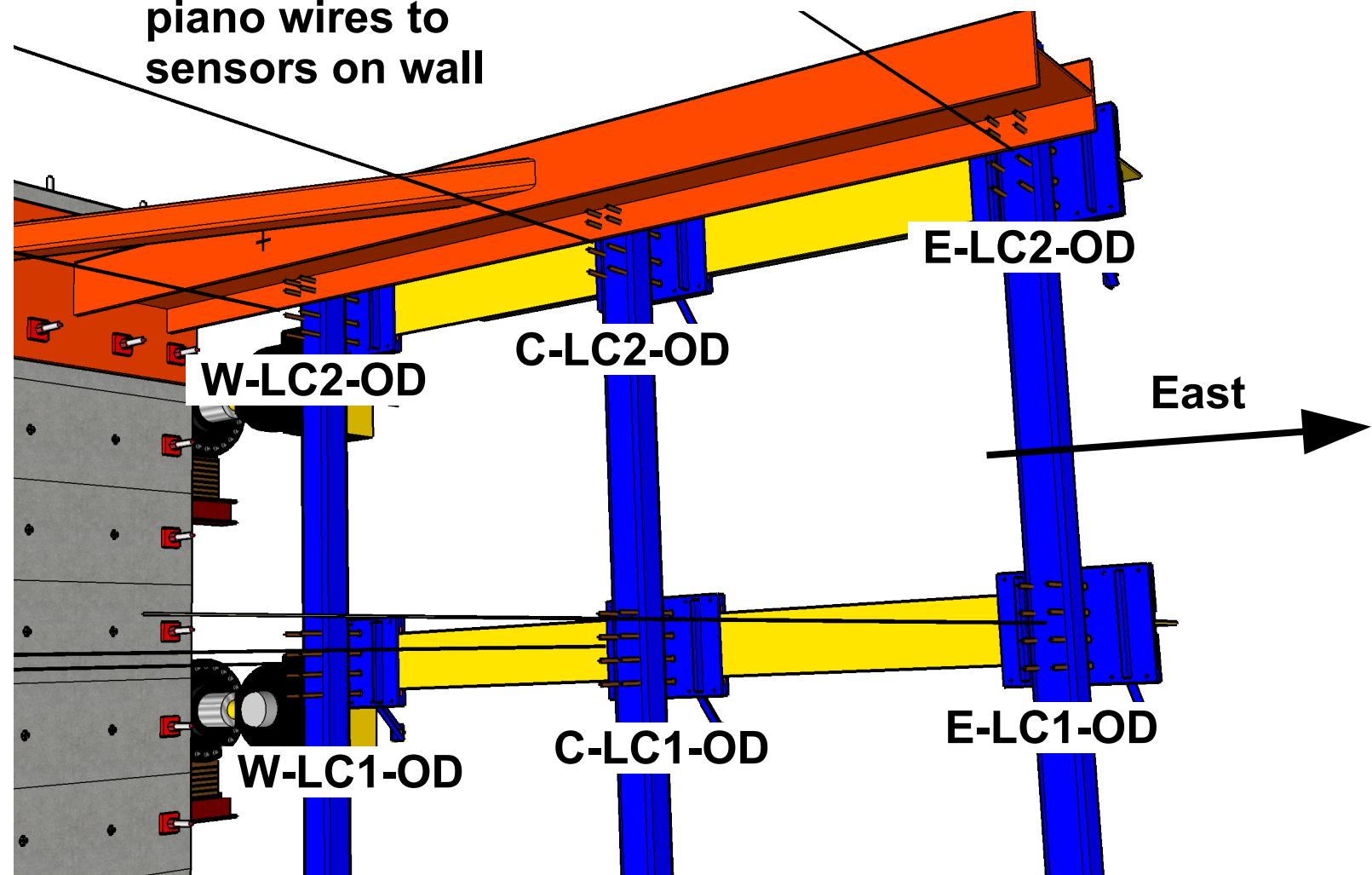
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Sensor
Locations

S.05



E-LC1-OD (location is shown in the figure)

- Out-of-plane Deformation monitoring
- LC1 or LC2 (1F or 2F HSS columns, lateral)
- E, W or C (east, west or center)



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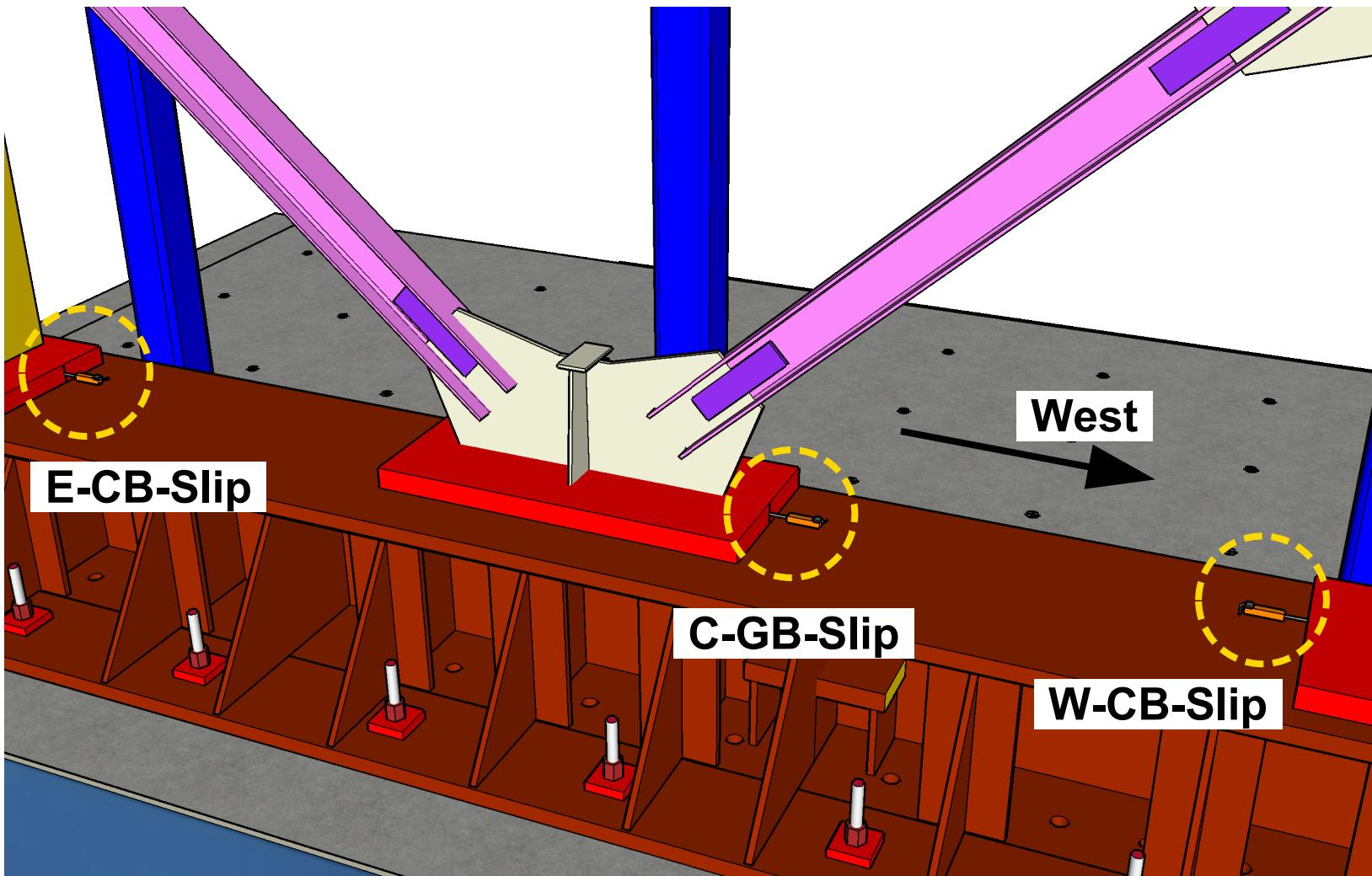
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Sensor
Locations



E-CB-Slip = east column base slip monitoring
C-GB-Slip = center gusset plate base slip monitoring
W-CB-Slip = west column base slip monitoring
(locations are shown in the figure, align with the braced frame center plane)

S.06



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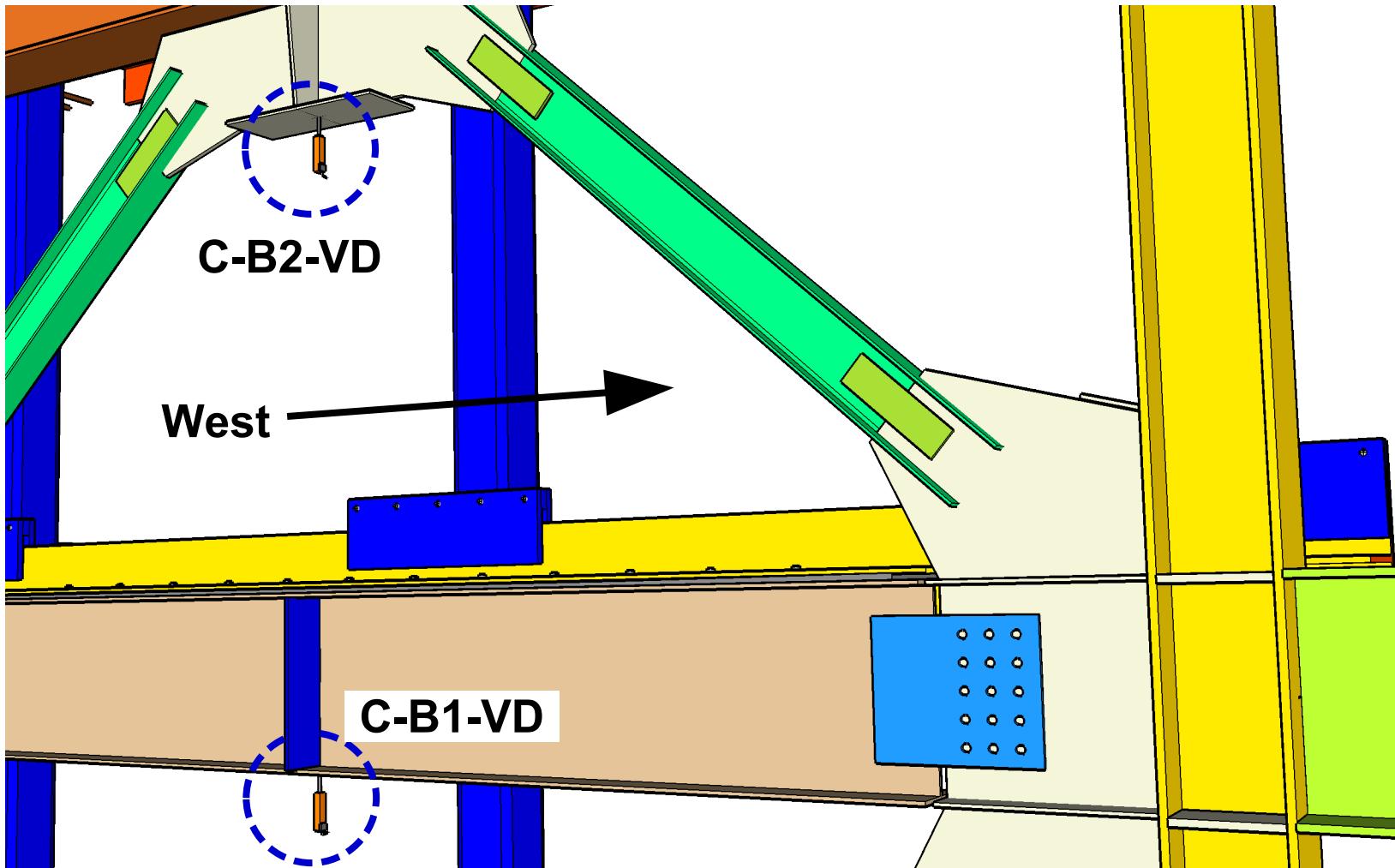
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Sensor
Locations



C-B2-VD = roof beam (2F) center deflection monitoring

C-B1-VD = lower beam (1F) center deflection monitoring

(locations are shown in the figure, align with the beam bottom flange centerline)

S.07



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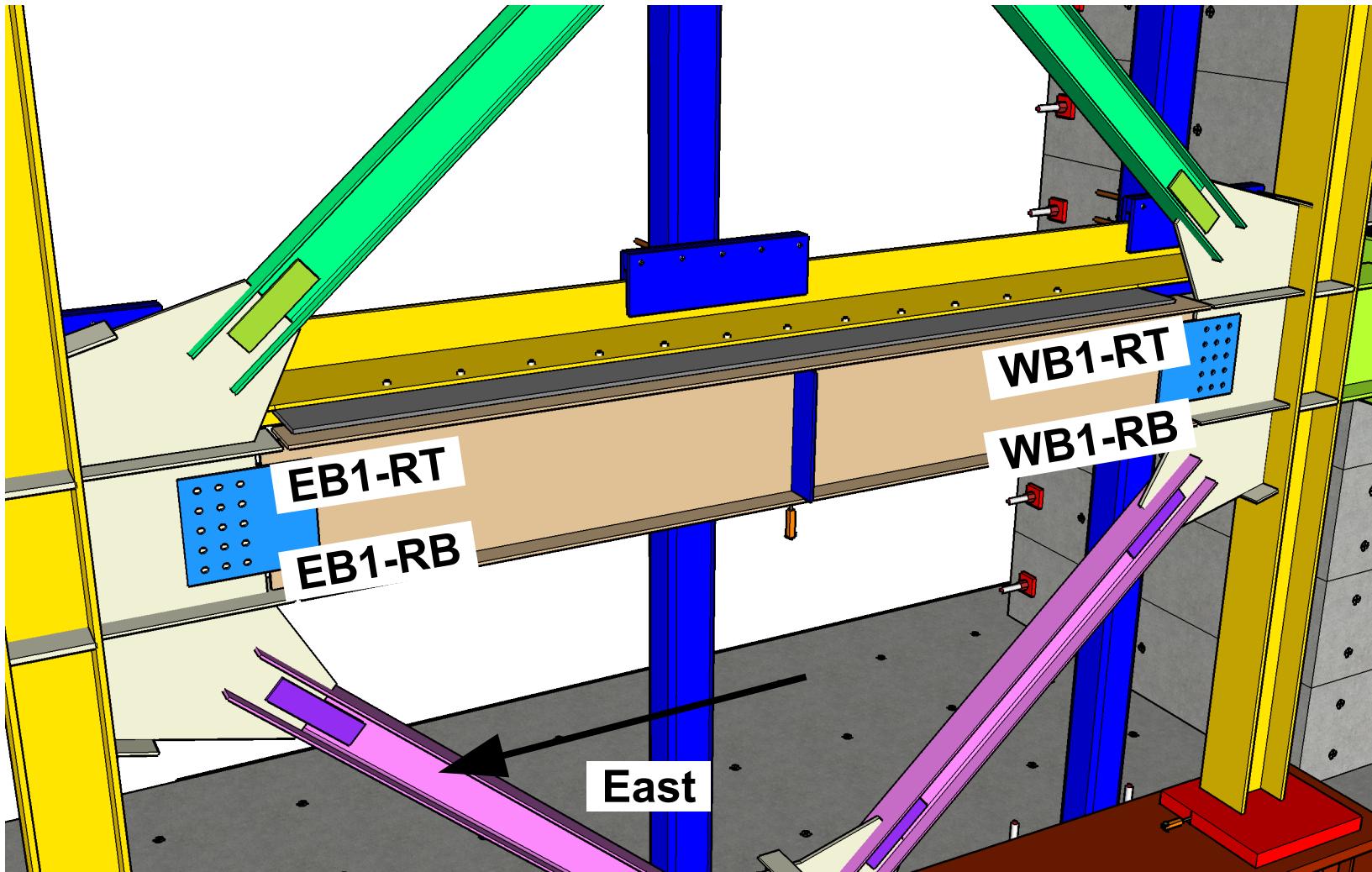
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Sensor Locations



WB1-RT, WB1-RB = west lower beam (1F) rotation monitoring

EB1-RT, EB1-RB = east lower beam (1F) rotation monitoring

RT, RB = top or bottom side

(locations are shown in the figure, distance between two centerlines of top and bottom sticks is 21")



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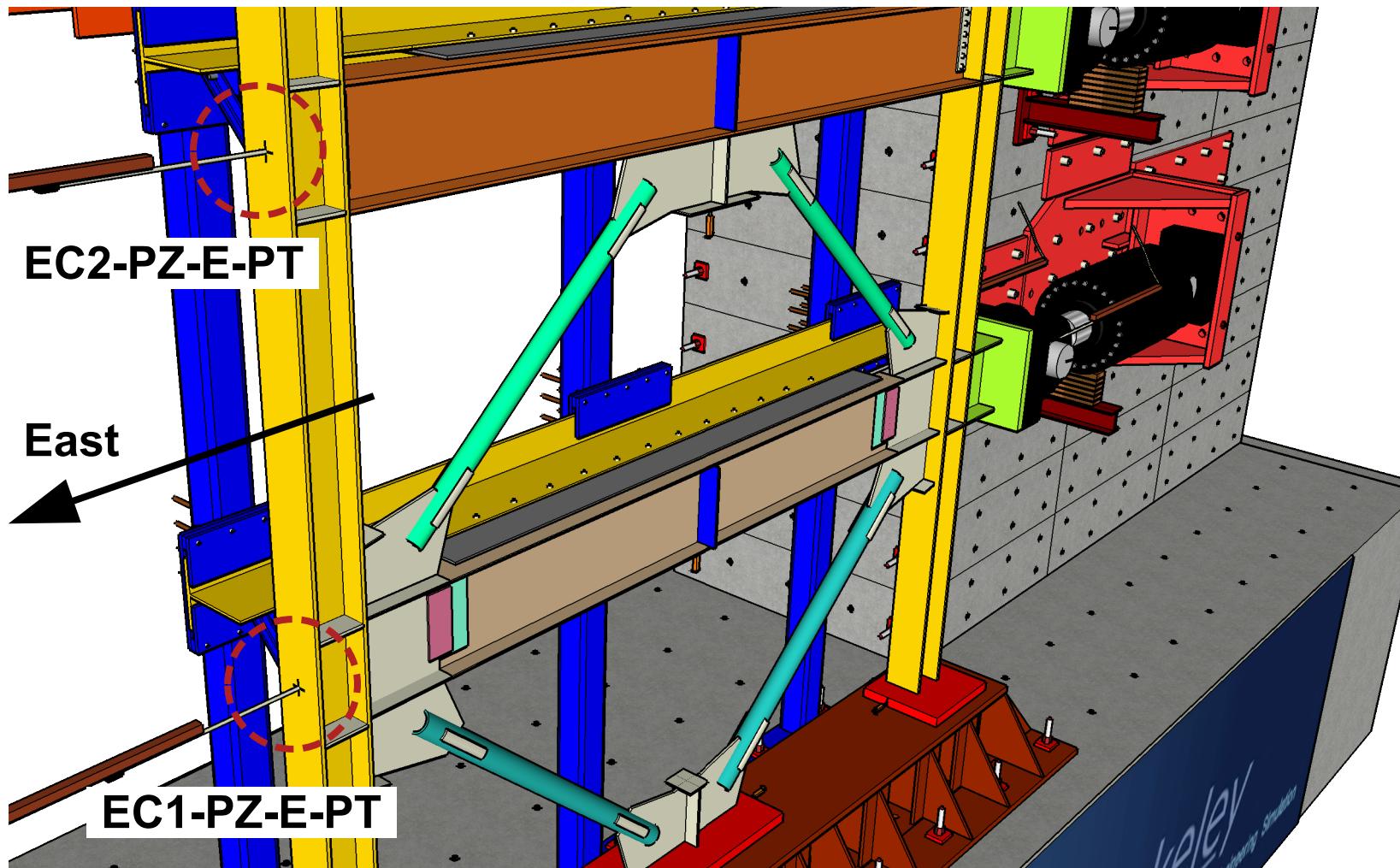
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Sensor
Locations



EC2-PZ-E-PT = roof level (2F) displacement monitoring
EC1-PZ-E-PT = lower level (1F) displacement monitoring

(locations are shown in the figure, align with the beam centerline at each floor level)

S.09



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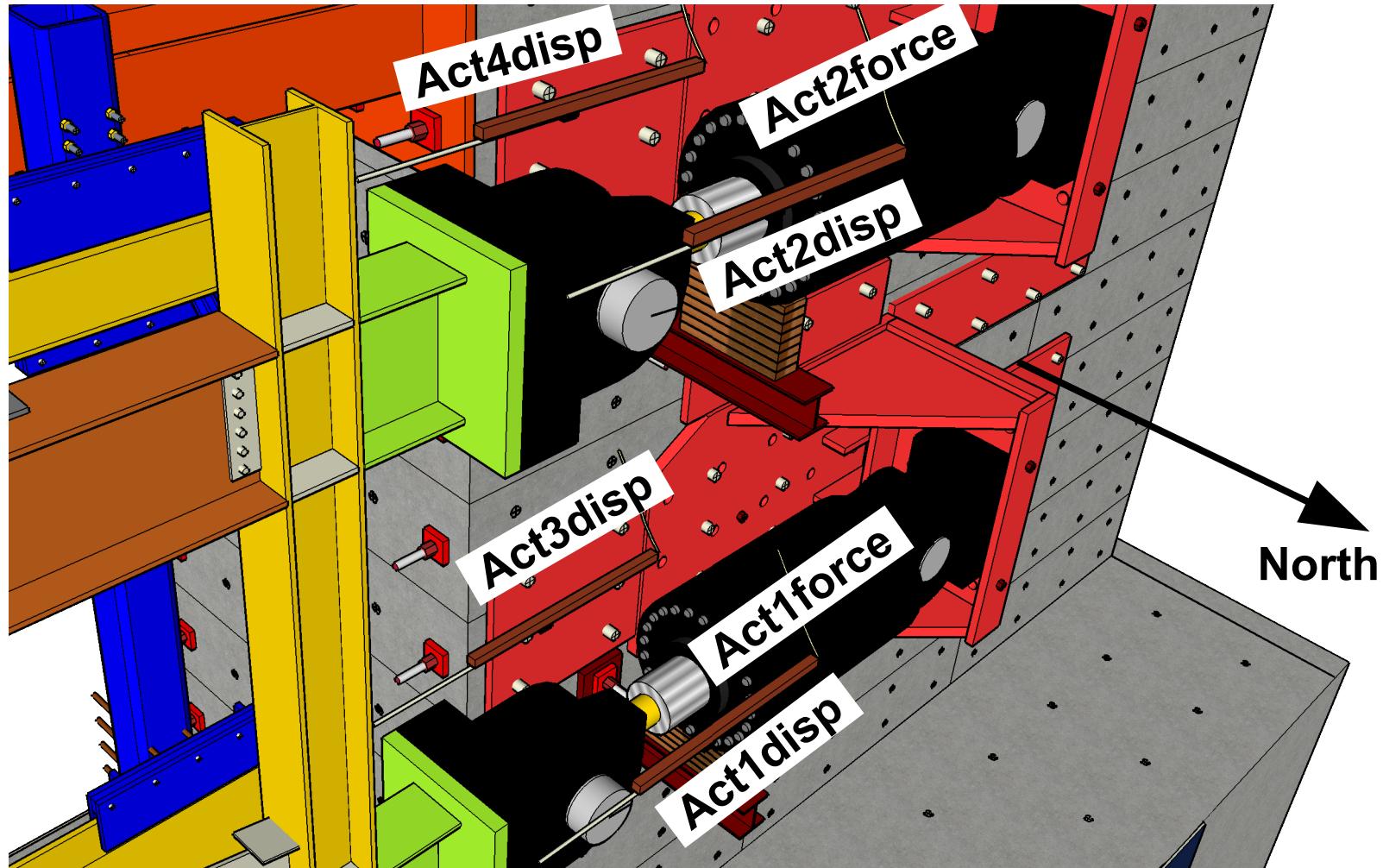
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Sensor
Locations



Act2disp, Act4disp = roof level displacement monitoring (north and south side)

Act1disp, Act3disp = lower level displacement monitoring (north and south side)

Act1force, Act2force = lower and roof level load cell (locations are shown in the figure)



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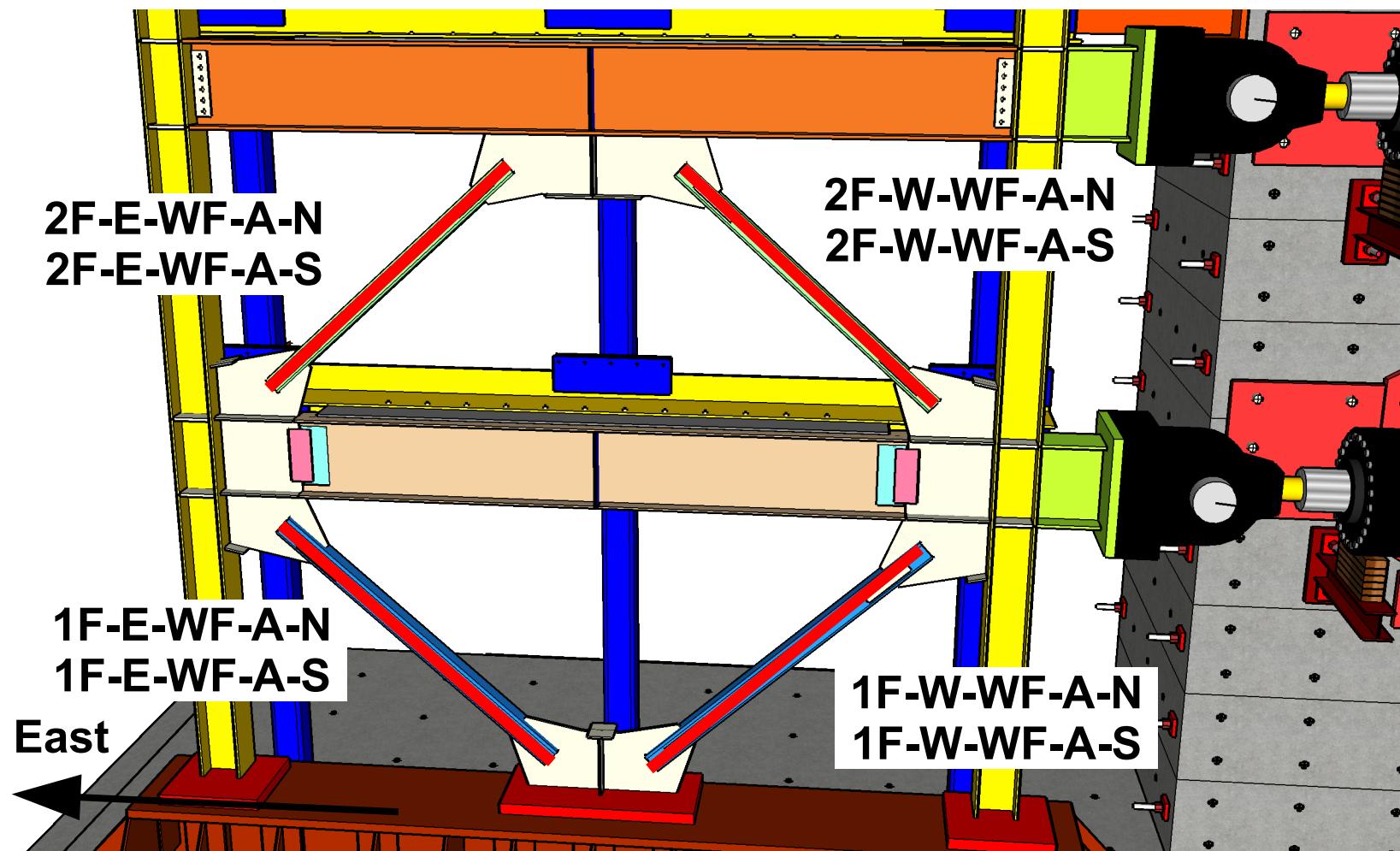
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Sensor
Locations



1F = first story; 2F = second story

E = east side; W = west side; A = axial direction

N = north side; S = south side

**Wide flange brace axial deformation monitoring along the axis
of brace (wire pot locations are shown in the figure)**

S.11



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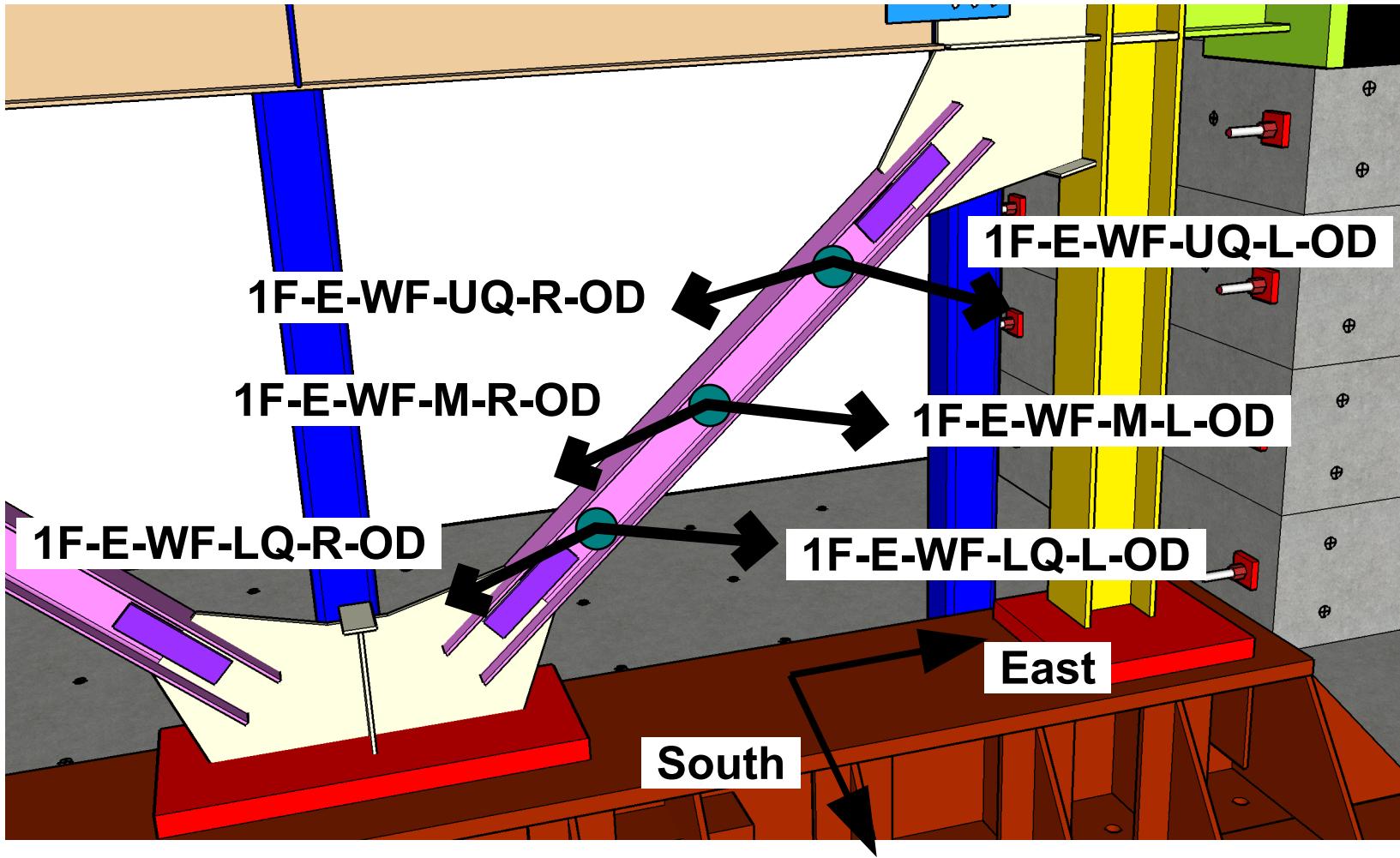
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Sensor Locations



Typical brace out-of-plane deformation monitoring (wire pot directions are shown in the figure for one brace, other braces are similar, six wire pots per brace)

1F-E-WF-UQ-R-OD

lefthand (L) or righthand (R) side when facing to south
upper quarter (UQ), middle (M) or lower quarter point (LQ)
east side brace (E-WF) or west side brace (W-WF)
first story brace (1F) or second story brace (2F)



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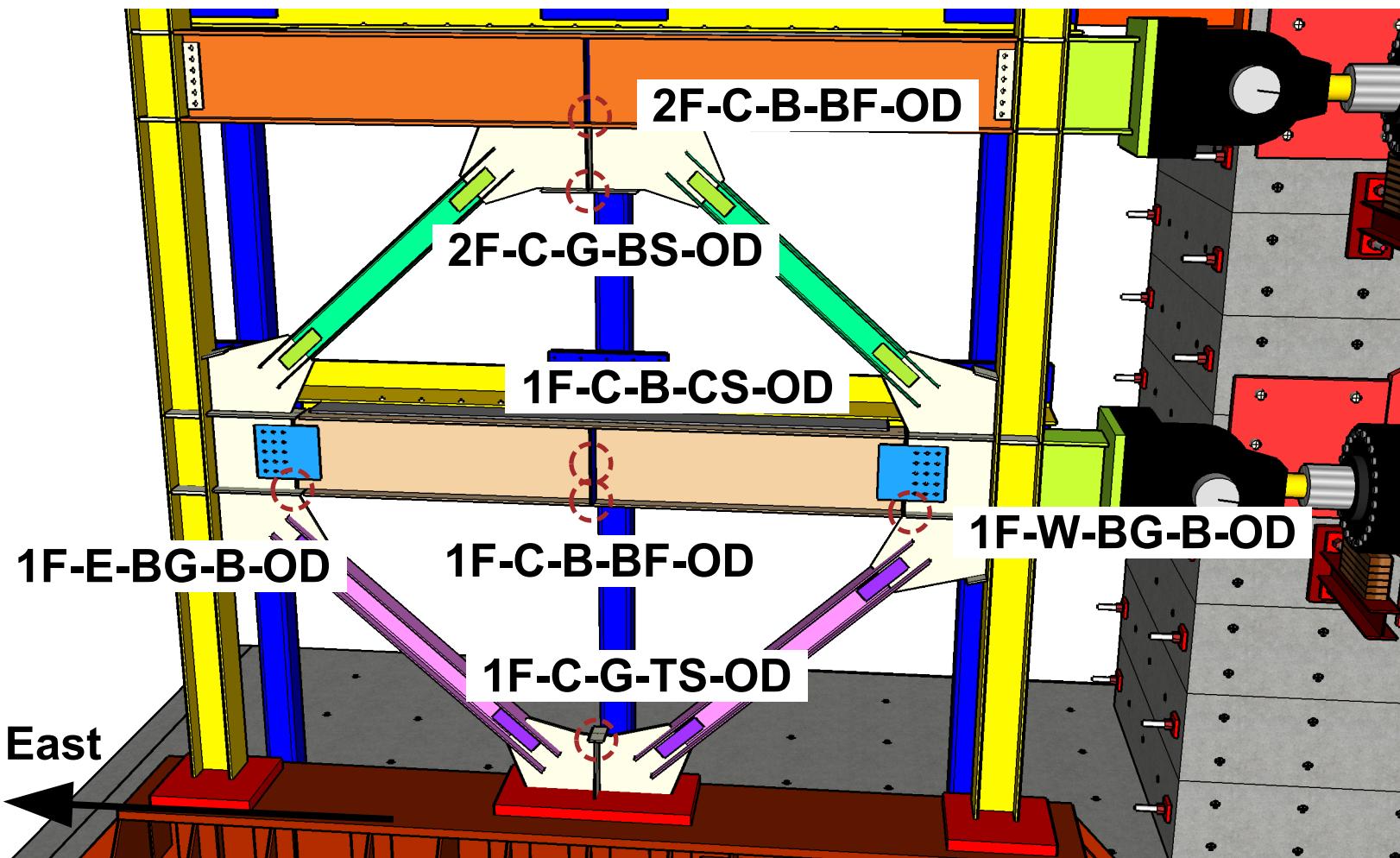
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Sensor
Locations



B = beam side corner; OD = out-of-plane deformation
C-B, C-G = beam or gusset center; BF = bottom flange
BS, CS, TS = bottom, center or top stiffener corner
BG = bottom gusset plate region
E, W = east or west side; 1F, 2F = first or second story
(wire pot target locations are shown in the figure)

S.13



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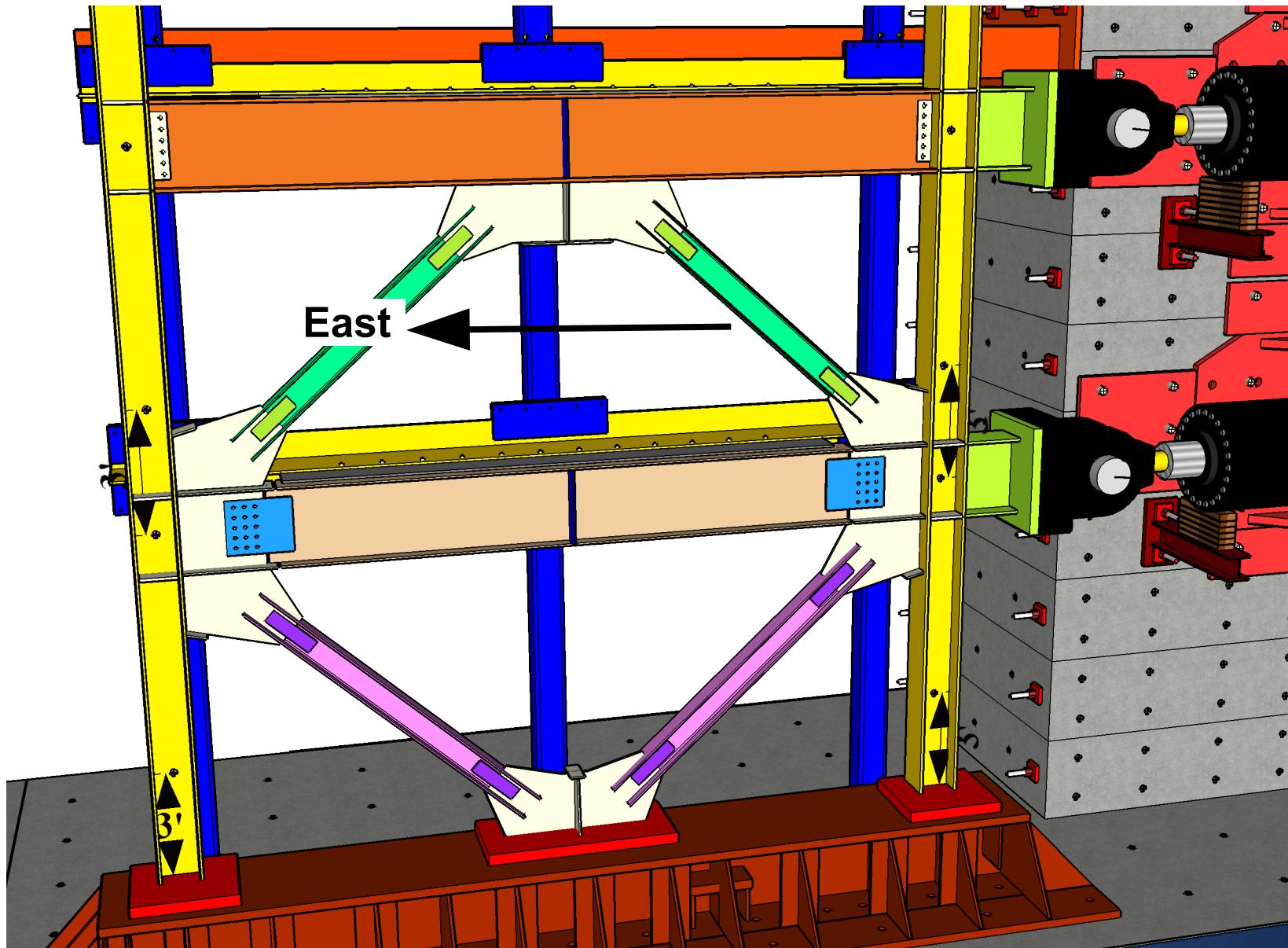
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Sensor Locations



Overview of eight rosette locations on the specimen (only the column and panel zone regions). Details and label keys are shown in the next page.



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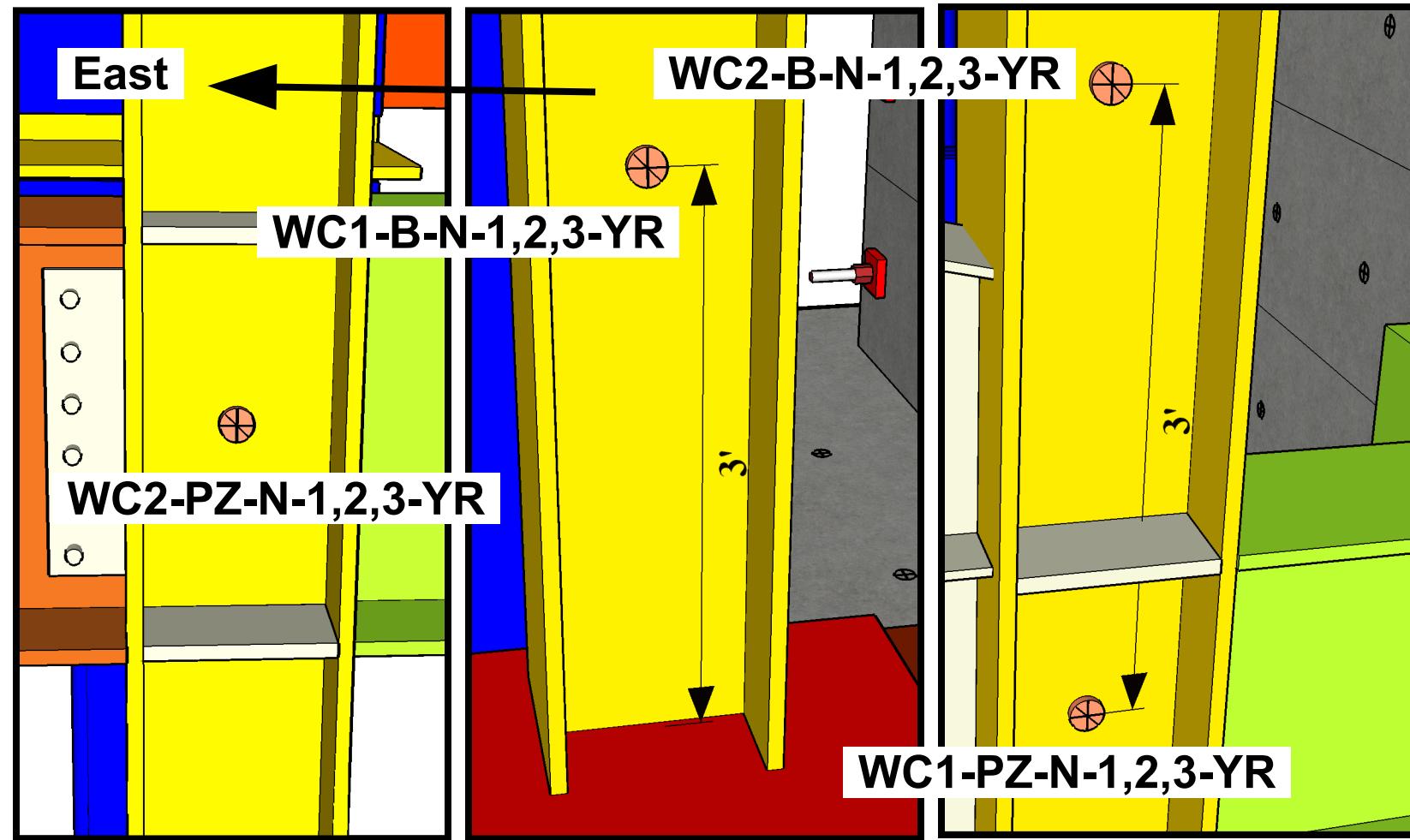
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Sensor Locations



WC1-B-N-1,2,3-YR

YR = rosette with larger measurement range

1 = 0 degree; 2 = 90 degree; 3 = 135 degree

N = glued at north side

B = bottom side of column; PZ = panel zone center

WC = west column; EC = east column; 1 = 1F; 2 = 2F

(rosette locations for the west column are shown in the figure,
align with the column centerline, east column similar)



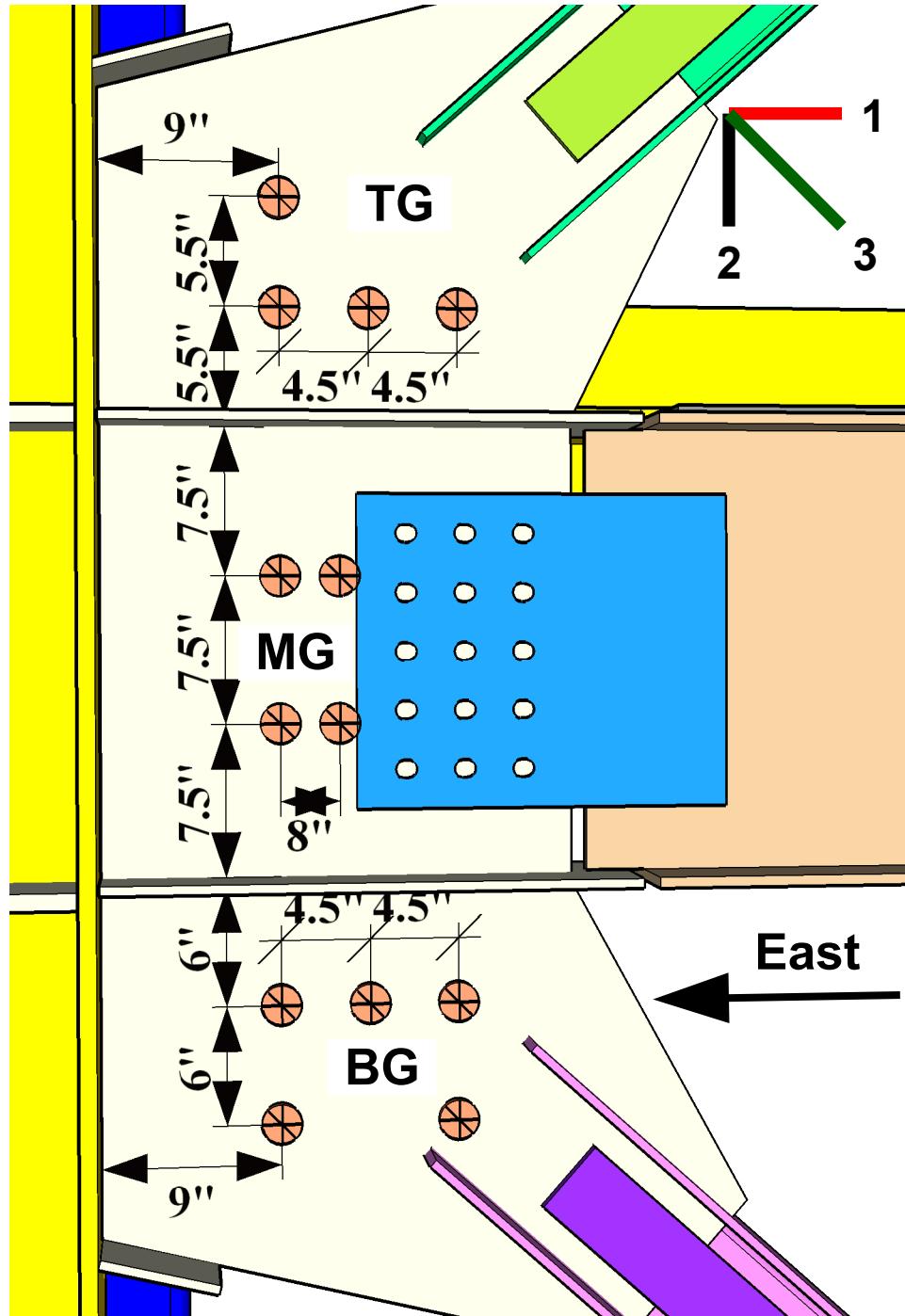
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Sensor
Locations

S.16



1F-E-TG-TL-1,2,3-N-YR

1F-E = east gusset plate

TG = top region

MG = middle region

BG = bottom region

TL = top left side

BL = bottom left side

TR = top right side

BR = bottom right side

TC = top center

BC = bottom center

1 = 0 degree (direction)

2 = 90 degree

3 = 135 degree

N = glued at north side

**YR = rosette with larger
measurement range**

**(thirteen rosette
locations for the one-
piece gusset plate, label
keys are shown above)**



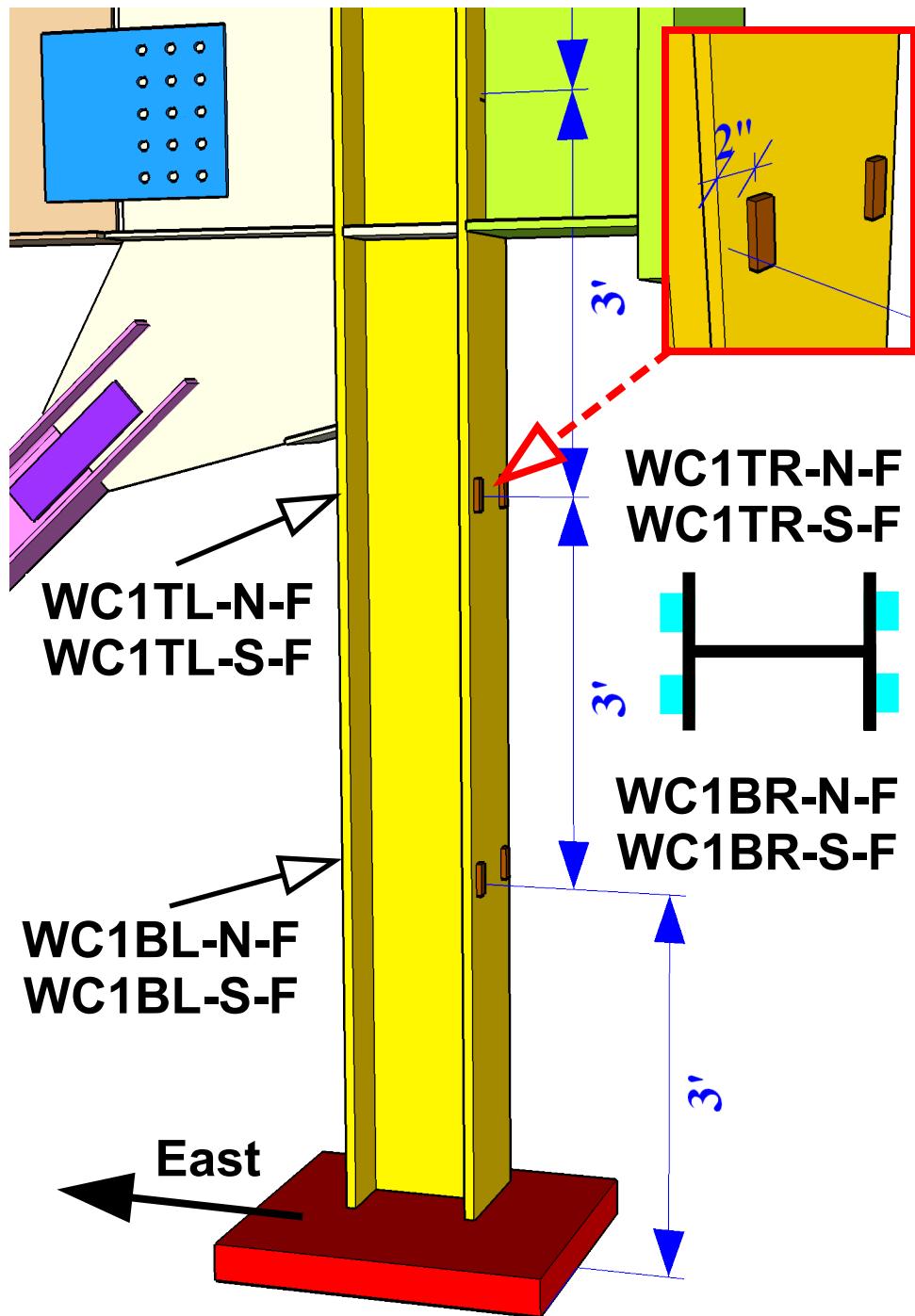
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Sensor
Locations

S.17



**WC1TR-N-F ...
EC1BL-S-F ...**

WC = west column

EC = east column

TL = top left side

BL = bottom left side

TR = top right side

BR = bottom right side

1 = first story

2 = second story

N = north side

S = south side

F = FLA strain gauge

**(total 32 strain gauge
locations for two
columns, label keys are
shown above, align with
the column flange
centerline; east column
similar)**

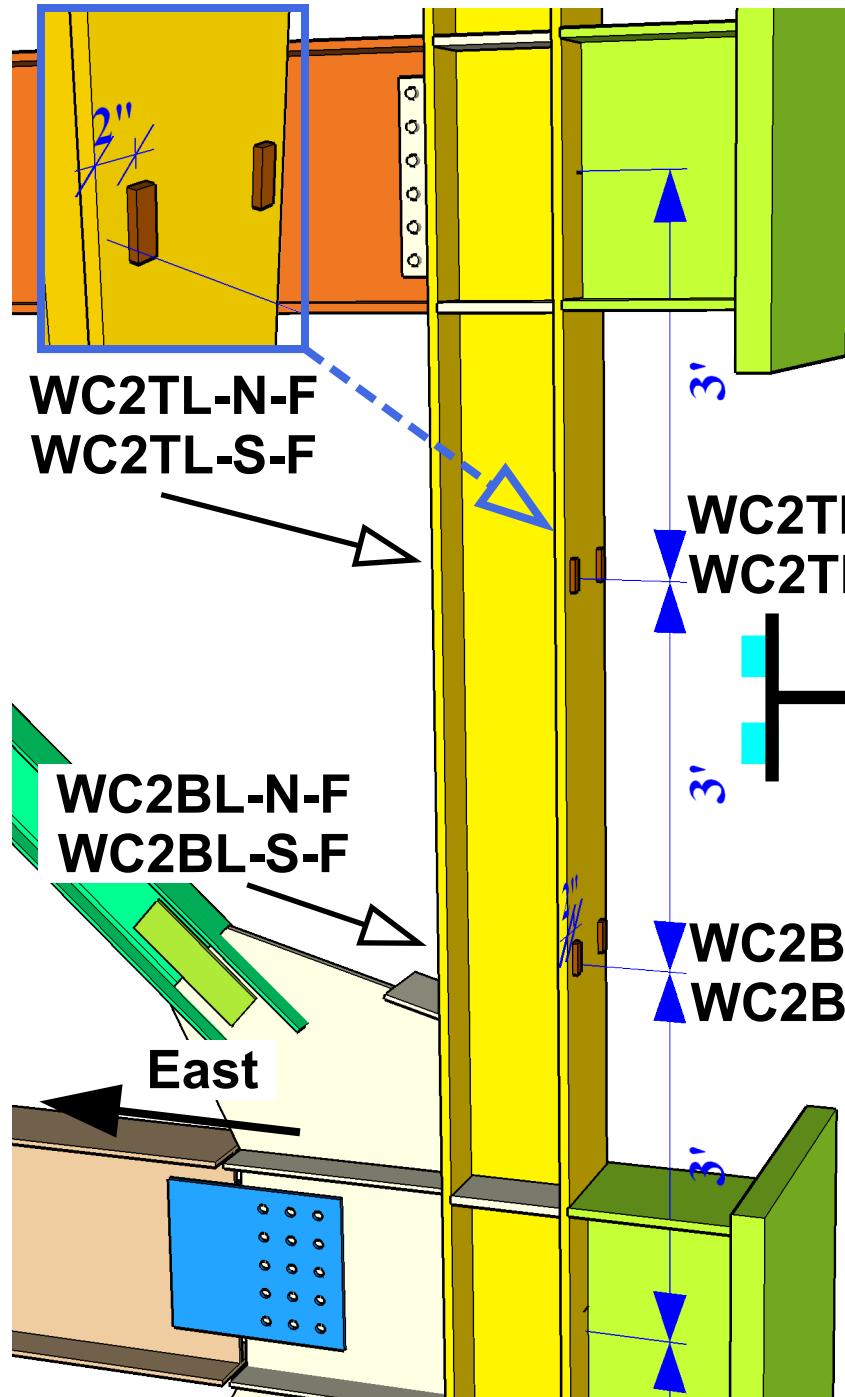


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Sensor Locations



WC2TR-N-F ...
EC2BL-S-F ...

WC = west column

EC = east column

TL = top left side

BL = bottom left side

TR = top right side

BR = bottom right side

1 = first story

2 = second story

N = north side

S = south side

F = FLA strain gauge

(total 32 strain gauge locations for two columns, label keys are shown above, align with the column flange centerline; east column similar)



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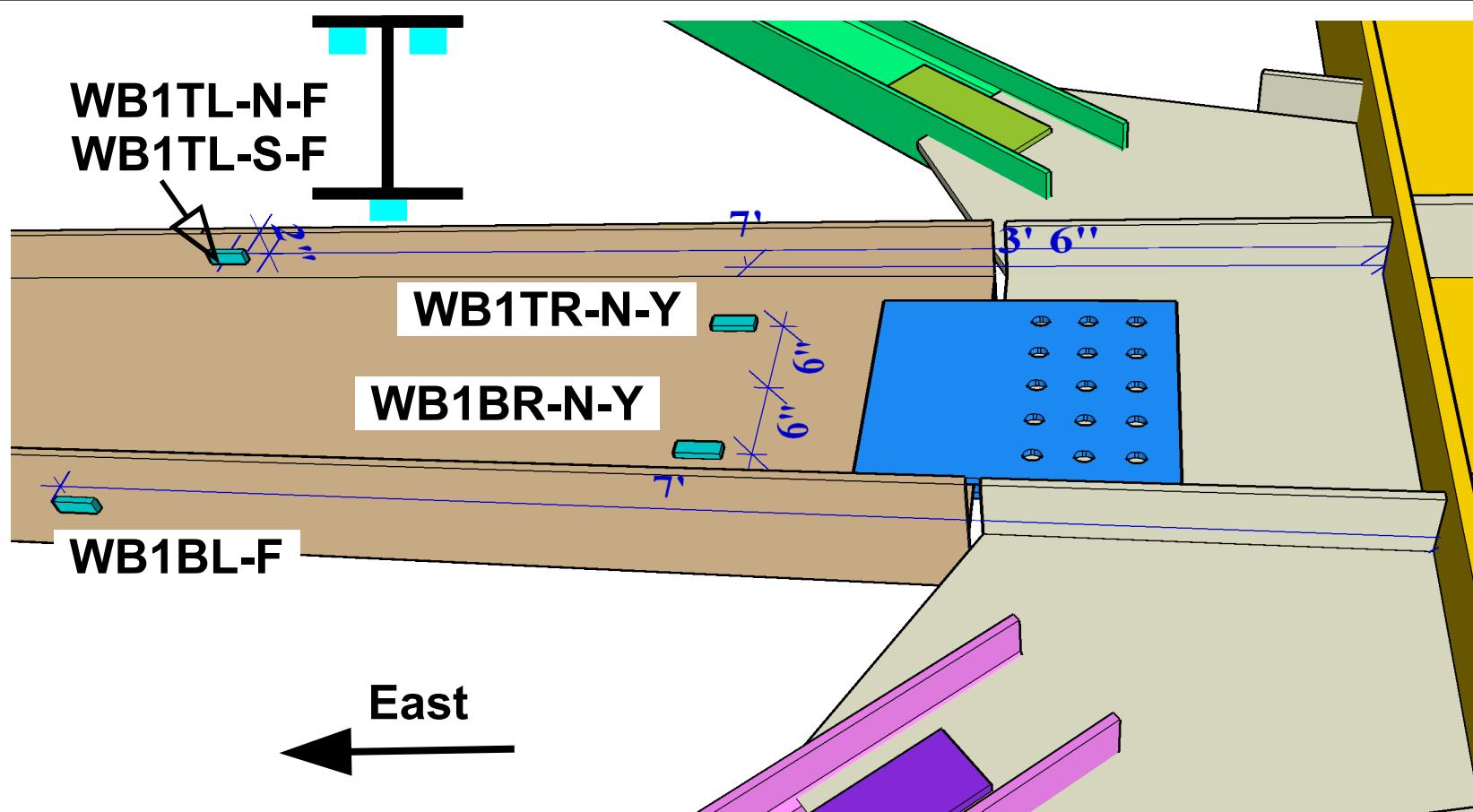
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Sensor
Locations

S.19



WB1TR-N-Y ...

WB1 = west lower beam; EB1 = east lower beam

TL = top left side; BL = bottom left side

TR = top right side; BR = bottom right side

N = north side; S = south side

F = FLA strain gauge; Y = YFLA strain gauge

(total ten strain gauge locations for the lower beam, label keys are shown above; east side similar and symmetric)

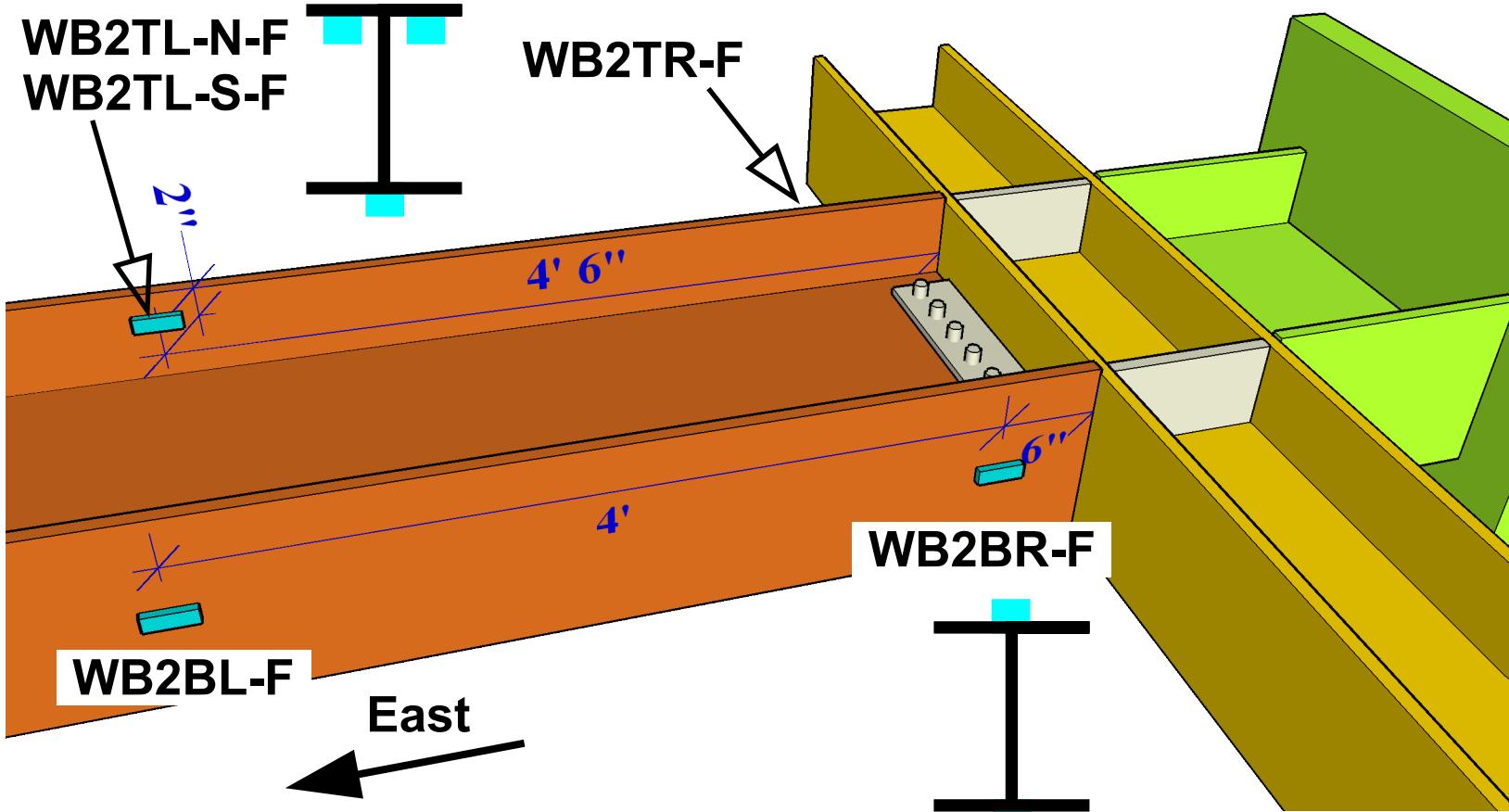


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Sensor
Locations



WB2TR-F ...

WB2 = west roof beam; EB1 = east roof beam

TL = top left side; BL = bottom left side

TR = top right side; BR = bottom right side

N = north side; S = south side

F = FLA strain gauge

**(total ten strain gauge locations for the roof beam, key labels
are shown above; east side similar and symmetric)**

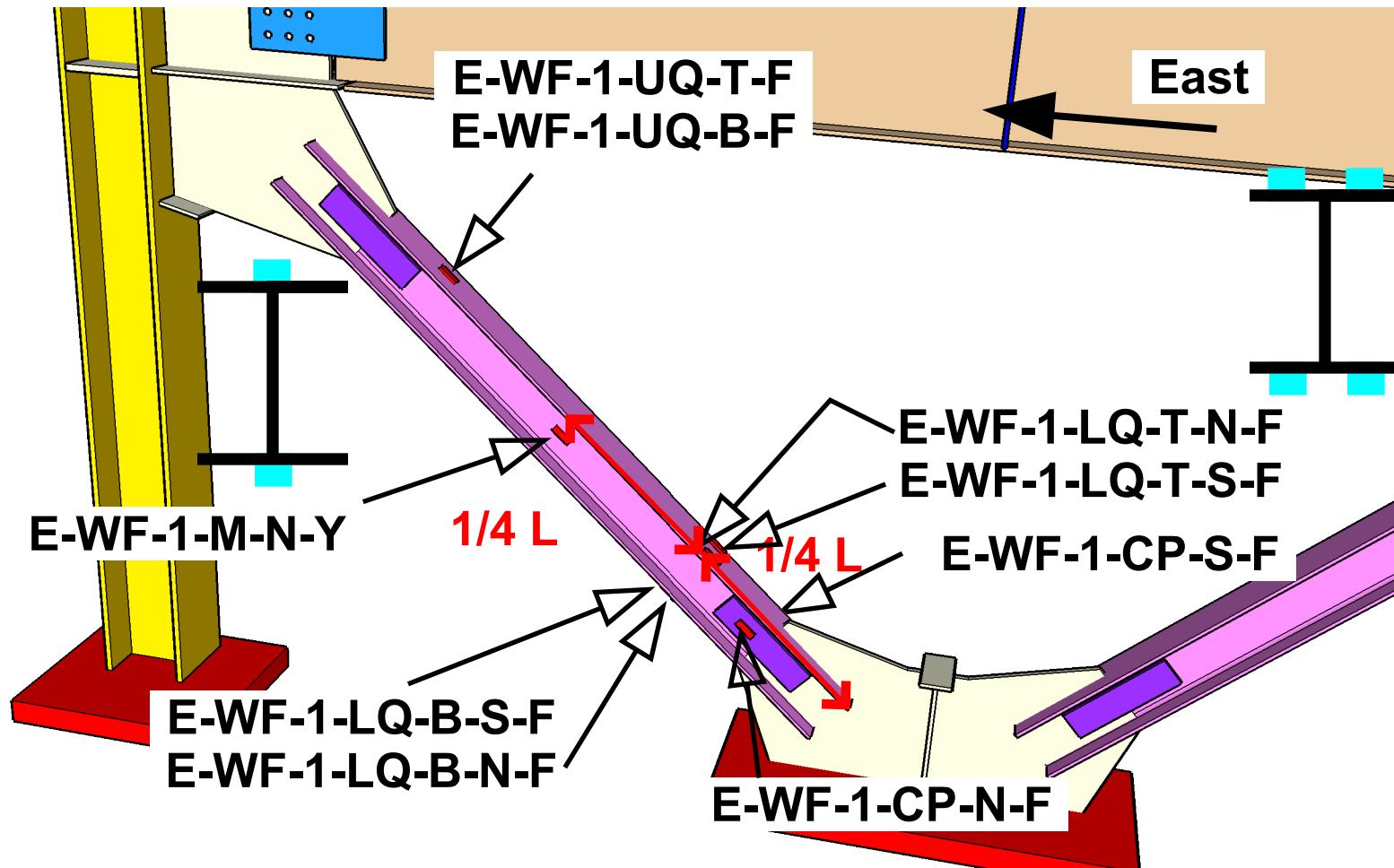


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Sensor
Locations



E-WF = east WF brace; W-WF = west WF brace; 1 = 1F

UQ, LQ = upper or lower quarter point; M = middle

T = top side; B = bottom side; CP = cover plate

N = north side; S = south side

F = FLA strain gauge; Y = YFLA strain gauge

**(total nine strain gauge locations for each brace, label keys
are shown above; west side similar and symmetric)**



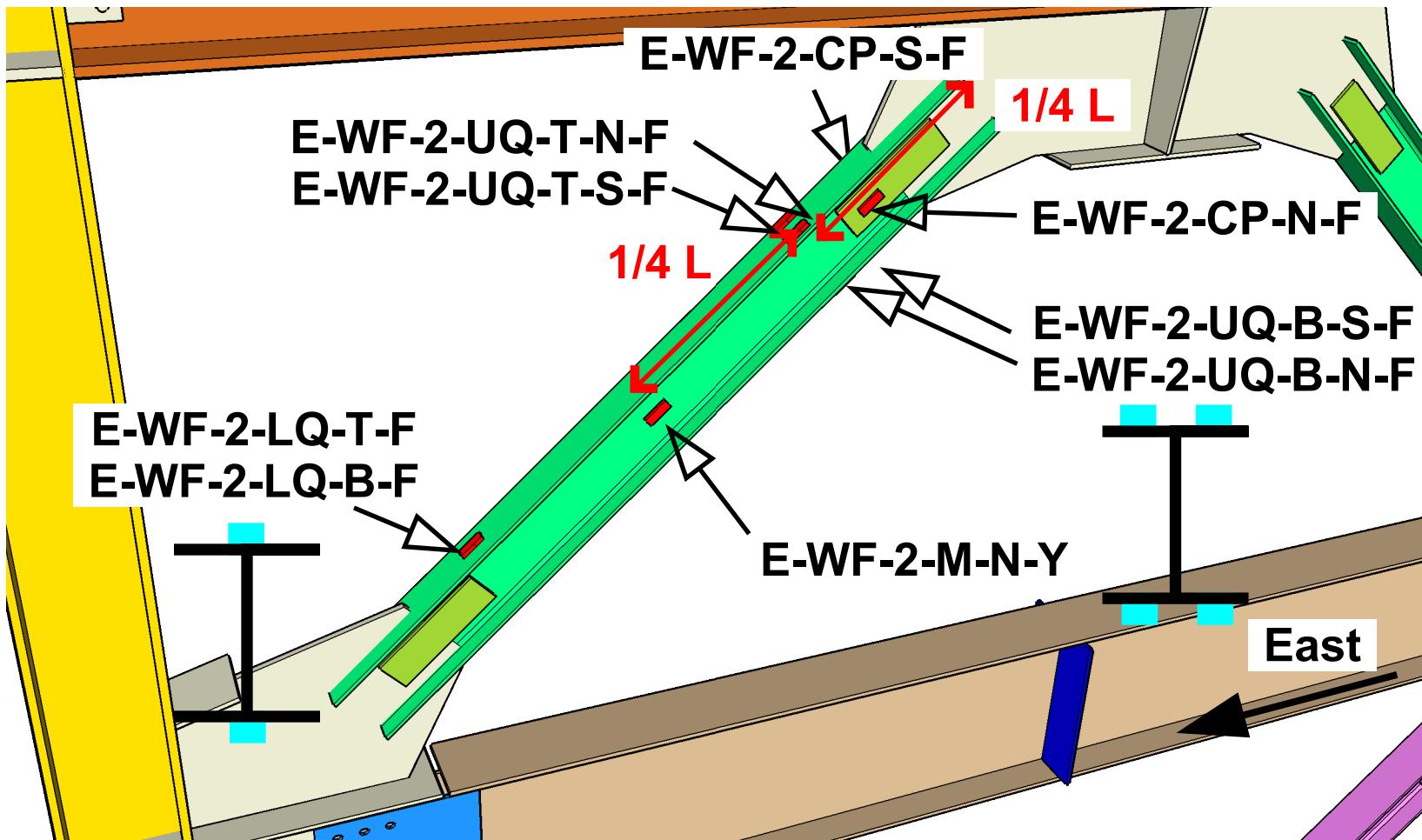
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Sensor
Locations

S.22



E-WF = east WF brace; W-WF = west WF brace; 2 = 2F

LQ, UQ = lower or upper quarter point; M = middle

T = top side; B = bottom side; CP = cover plate

N = north side; S = south side

F = FLA strain gauge; Y = YFLA strain gauge

**(total nine strain gauge locations for each brace, label keys
are shown above; west side similar and symmetric)**



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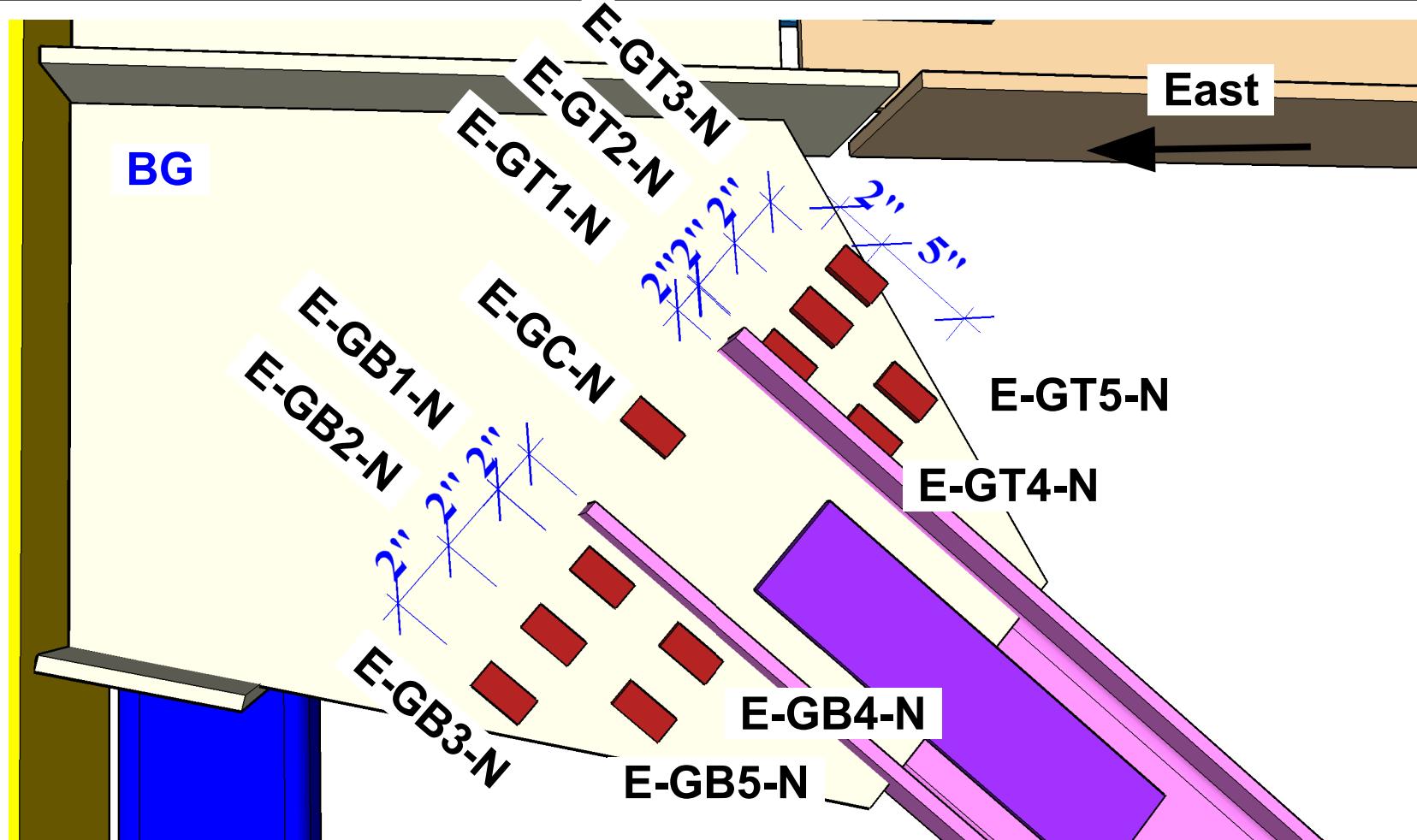
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Sensor Locations

S.23



E = east gusset plate; N = glued at north side

GT = top region; GB = bottom region; GC = centerline region

**(eleven strain gauge locations for the bottom one-piece
gusset plate, label keys are shown above)**



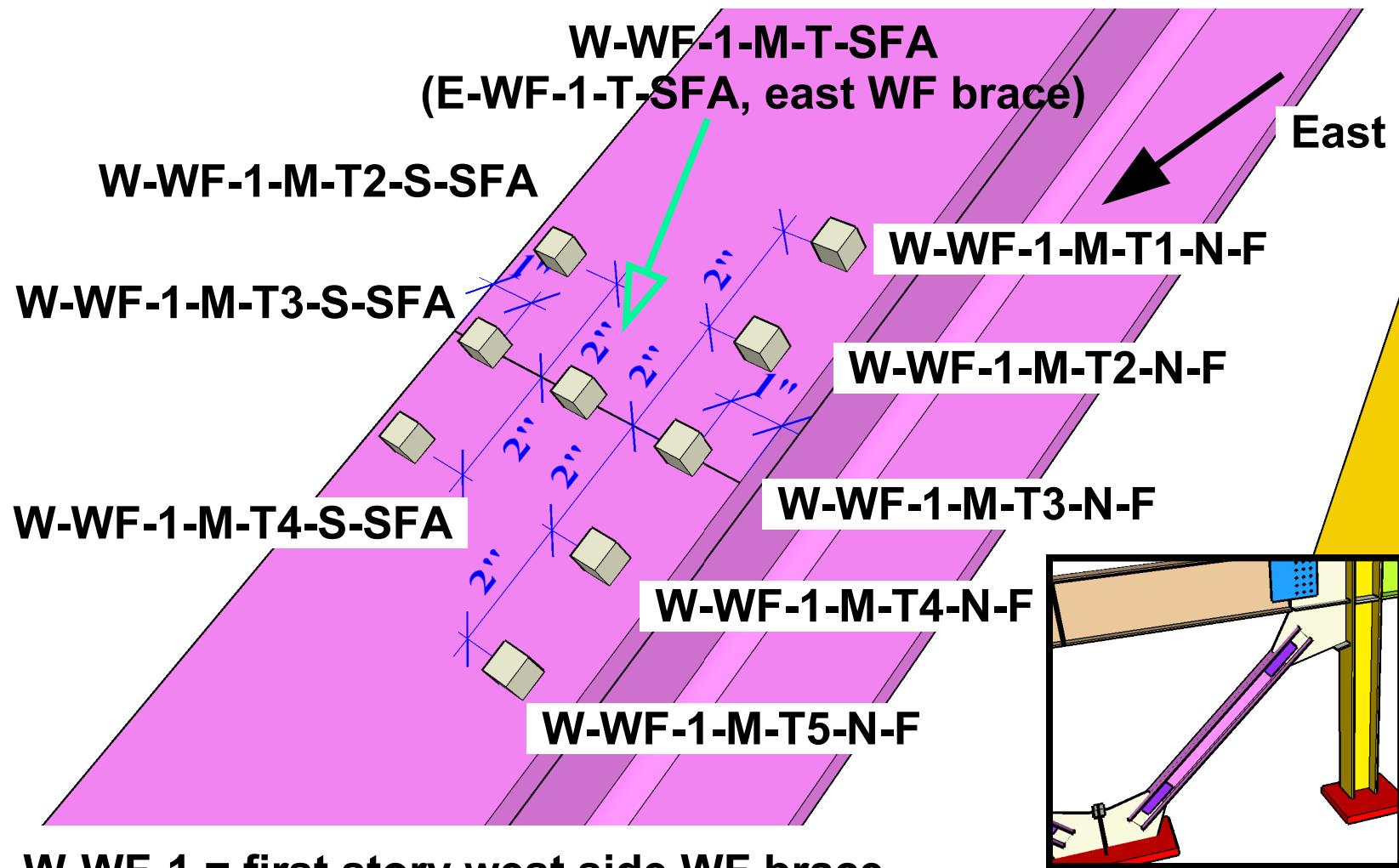
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Sensor
Locations

S.24



W-WF-1 = first story west side WF brace

M = middle region; T = top side; N, S = north or south side

F = FLA strain gauge; SFA = SFA stress gauge

T1, T2, T3, T4, T5 = specific locations as shown

**(nine gauge locations for west wide flange brace, one for
east brace, label keys are shown above)**



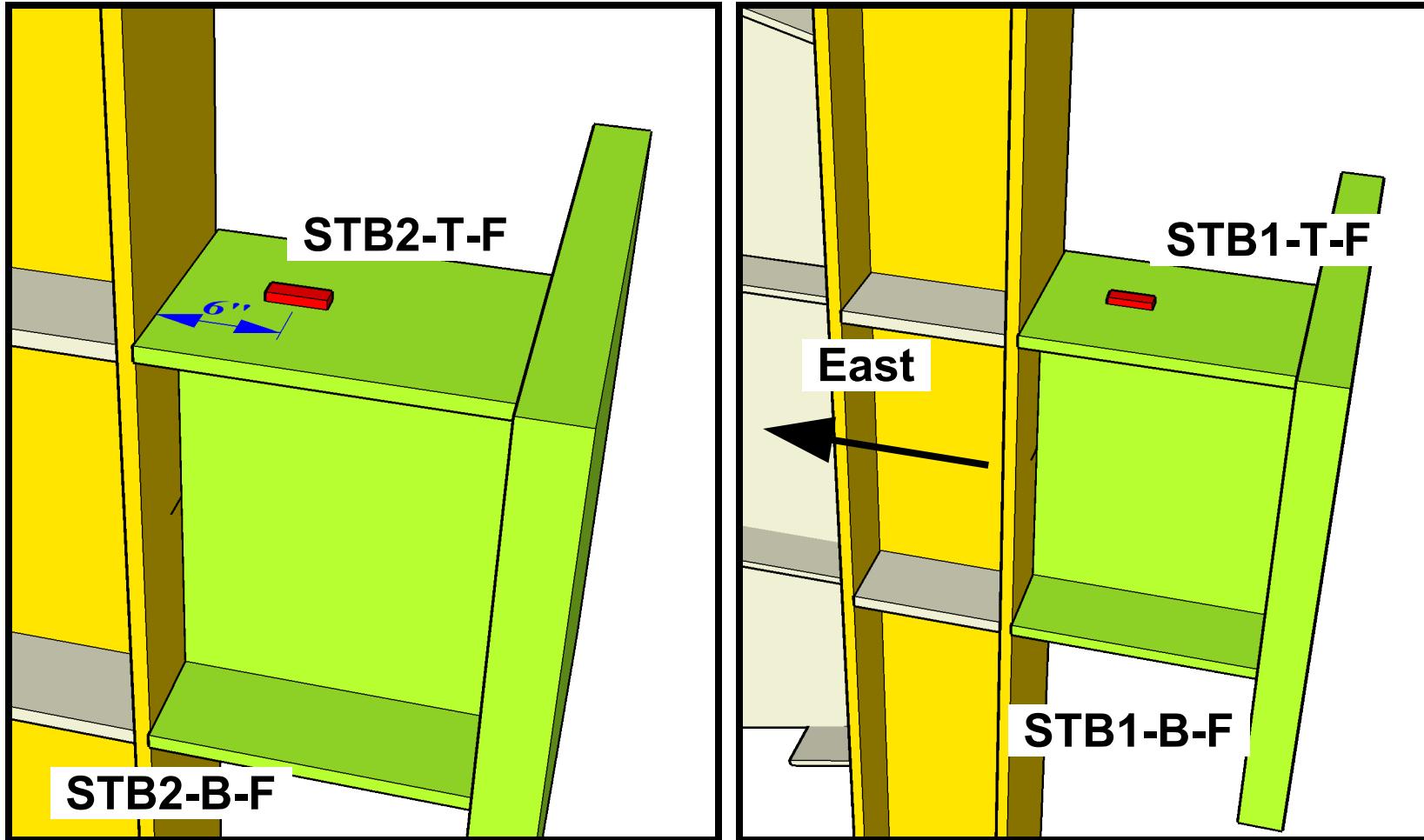
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Sensor
Locations

S.25



STB = stub beam

1, 2 = first story or second story

T = top flange side; **B** = bottom flange side

F = FLA strain gauge

(two strain gauge locations for each stub beam at each floor level, align with flange centerline, label keys are shown above)

Channel	ID	Label	Device	Range	Serial No.	Cable No.	DAQ Box ID	Note	Column #
1	ST12	FB-Slip	stick	2"	2004NC01023	308	0:3:0	Novo 50 (recalibrated)	14
2	ST13	RRW-Slip-N	stick	2"	2009NC01016	309	0:3:1	Novo 50 (recalibrated)	15
3	ST14	RRW-Slip-S	stick	2"	2009NC01020	306	0:3:2	Novo 50 (recalibrated)	16
4	ST15	Act1-BK	stick	2"	2009NC01011	361	0:3:3	Novo 50 (recalibrated)	17
5	S5	E-WF-1-UQ-T-F	strain gauge	-	-	5	0:1:0	1/4-Bridge	6
6	S6	E-WF-1-UQ-B-F	strain gauge	-	-	6	0:1:1	1/4-Bridge	7
7	S7	E-WF-1-M-N-Y	strain gauge	-	-	7	0:1:2	1/4-Bridge	8
8	S8	E-WF-1-M-T-SFA	strain gauge	-	-	8	0:1:3	Stress Gauge (1/4-Bridge)	9
9	S9	E-WF-1-LQ-TN-F	strain gauge	-	-	9	0:2:0	1/4-Bridge	10
10	S10	E-WF-1-LQ-TS-F	strain gauge	-	-	10	0:2:1	1/4-Bridge	11
11	S11	E-WF-1-LQ-BN-F	strain gauge	-	-	11	0:2:2	1/4-Bridge	12
12	S12	E-WF-1-LQ-BS-F	strain gauge	-	-	12	0:2:3	1/4-Bridge	13
13	S13	E-WF-1-CP-N-F	strain gauge	-	-	3	0:0:2	1/4-Bridge	4
14	S14	E-WF-1-CP-S-F	strain gauge	-	-	4	0:0:3	1/4-Bridge	5
15	S15	EB1BL-N-Y	strain gauge	-	-	381	0:11:0	1/4-Bridge	46
16	S16	EB1TL-N-Y	strain gauge	-	-	380	0:10:3	1/4-Bridge	45
17	S17	EB1BR-F	strain gauge	-	-	204/70	1:1:1	1/4-Bridge	71
18	S18	EB1TR-S-F	strain gauge	-	-	382	0:11:1	1/4-Bridge	47
19	S19	WB1BL-F	strain gauge	-	-	342/68	1:0:3	1/4-Bridge	69
20	S20	WB1TL-S-F	strain gauge	-	-	322/69	1:1:0	1/4-Bridge	70
21	S21	WB1BR-N-Y	strain gauge	-	-	338/84	1:4:3	1/4-Bridge	85
22	S22	WB1TR-N-Y	strain gauge	-	-	325/57	0:14:0	1/4-Bridge	58
23	S23	W-WF-1-CP-N-F	strain gauge	-	-	1	0:0:0	1/4-Bridge	2
24	S24	W-WF-1-CP-S-F	strain gauge	-	-	2	0:0:1	1/4-Bridge	3
25	S25	W-WF-1-LQ-TN-F	strain gauge	-	-	25	0:6:0	1/4-Bridge	26
26	S26	W-WF-1-LQ-TS-F	strain gauge	-	-	26	0:6:1	1/4-Bridge	27
27	S27	W-WF-1-LQ-BN-F	strain gauge	-	-	27	0:6:2	1/4-Bridge	28
28	S28	W-WF-1-LQ-BS-F	strain gauge	-	-	28	0:6:3	1/4-Bridge	29
29	S29	W-WF-1-M-N-Y	strain gauge	-	-	29	0:7:0	1/4-Bridge	30
30	S30	W-WF-1-M-T-SFA	strain gauge	-	-	30	0:7:1	Stress Gauge (1/4-Bridge)	31
31	S31	W-WF-1-UQ-T-F	strain gauge	-	-	31	0:7:2	1/4-Bridge	32
32	S32	W-WF-1-UQ-B-F	strain gauge	-	-	32	0:7:3	1/4-Bridge	33
33	S33	WC1TL-S-F	strain gauge	-	-	95	1:7:2	1/4-Bridge	96
34	S34	WC1TR-S-F	strain gauge	-	-	93	1:7:0	1/4-Bridge	94
35	S35	WC1TL-N-F	strain gauge	-	-	94	1:7:1	1/4-Bridge	95
36	S36	WC1TR-N-F	strain gauge	-	-	92	1:6:3	1/4-Bridge	93

Channel	ID	Label	Device	Range	Serial No.	Cable No.	DAQ Box ID	Note	Column #
37	S37	EC2BL-S-F	strain gauge	-	-	390	0:9:2	1/4-Bridge	40
38	S38	EC2BR-S-F	strain gauge	-	-	391	0:9:3	1/4-Bridge	41
39	S39	EC2BL-N-F	strain gauge	-	-	376	0:10:0	1/4-Bridge	42
40	S40	EC2BR-N-F	strain gauge	-	-	377	0:10:1	1/4-Bridge	43
41	S41	EB2BL-F	strain gauge	-	-	378	0:10:2	1/4-Bridge	44
42	S42	EB2TL-F	strain gauge	-	-	200/348	2:4:3	1/4-Bridge	149
43	S43	EB2BR-F	strain gauge	-	-	197/145	2:4:0	1/4-Bridge	146
44	S44	EB2TR-S-F	strain gauge	-	-	199/147	2:4:2	1/4-Bridge	148
45	S45	E-WF-2-LQ-T-F	strain gauge	-	-	48	0:11:3	1/4-Bridge	49
46	S46	E-WF-2-LQ-B-F	strain gauge	-	-	392	0:12:0	1/4-Bridge	50
47	S47	E-WF-2-M-N-Y	strain gauge	-	-	362	0:12:1	1/4-Bridge	51
48	S48	EB1TR-N-F	strain gauge	-	-	365	0:12:2	1/4-Bridge	52
49	S49	E-WF-2-UQ-TN-F	strain gauge	-	-	366	0:12:3	1/4-Bridge	53
50	S50	E-WF-2-UQ-TS-F	strain gauge	-	-	367	0:13:0	1/4-Bridge	54
51	S51	E-WF-2-UQ-BN-F	strain gauge	-	-	368	0:13:1	1/4-Bridge	55
52	S52	E-WF-2-UQ-BS-F	strain gauge	-	-	369	0:13:2	1/4-Bridge	56
53	S53	E-WF-2-CP-N-F	strain gauge	-	-	370	0:13:3	1/4-Bridge	57
54	S54	E-WF-2-CP-S-F	strain gauge	-	-	383	0:11:2	1/4-Bridge	48
55	S55	W-WF-2-CP-N-F	strain gauge	-	-	324/58	0:14:1	1/4-Bridge	59
56	S56	W-WF-2-CP-S-F	strain gauge	-	-	326/59	0:14:2	1/4-Bridge	60
57	S57	W-WF-2-UQ-TN-F	strain gauge	-	-	333/60	0:14:3	1/4-Bridge	61
58	S58	W-WF-2-UQ-TS-F	strain gauge	-	-	327/61	0:15:0	1/4-Bridge	62
59	S59	W-WF-2-UQ-BN-F	strain gauge	-	-	320/62	0:15:1	1/4-Bridge	63
60	S60	W-WF-2-UQ-BS-F	strain gauge	-	-	321/63	0:15:2	1/4-Bridge	64
61	S61	W-WF-2-M-N-Y	strain gauge	-	-	322/64	0:15:3	1/4-Bridge	65
62	S62	WB1TL-N-F	strain gauge	-	-	203/65	1:0:0	1/4-Bridge	66
63	S63	W-WF-2-LQ-T-F	strain gauge	-	-	315/66	1:0:1	1/4-Bridge	67
64	S64	W-WF-2-LQ-B-F	strain gauge	-	-	343/67	1:0:2	1/4-Bridge	68
65	S65	WB2BL-F	strain gauge	-	-	346/137	2:2:0	1/4-Bridge	138
66	S66	WB2TL-S-F	strain gauge	-	-	328/138	2:2:1	1/4-Bridge	139
67	S67	WB2BR-F	strain gauge	-	-	201/71	1:1:2	1/4-Bridge	72
68	S68	WB2TR-F	strain gauge	-	-	345/140	2:2:3	1/4-Bridge	141
69	S69	WC2BL-N-F	strain gauge	-	-	316/73	1:2:0	1/4-Bridge	74
70	S70	WC2BR-N-F	strain gauge	-	-	349/74	1:2:1	1/4-Bridge	75
71	S71	WC2BL-S-F	strain gauge	-	-	351/75	1:2:2	1/4-Bridge	76
72	S72	WC2BR-S-F	strain gauge	-	-	318/76	1:2:3	1/4-Bridge	77

Channel	ID	Label	Device	Range	Serial No.	Cable No.	DAQ Box ID	Note	Column #
73	ST16	Act2-BK	stick	2"	2009NC01019	355	0:4:0	Novo 50 (recalibrated)	18
74	ST1	E-CB-Slip	stick	1"	2004NC01014	379	0:4:1	Novo 25 (recalibrated)	19
75	S73	STB2-T-F	strain gauge	-	-	396	0:4:2	1/4-Bridge	20
76	R2-1	EC1-PZ-N-1-YR	rosette	-	-	384	0:8:0	1/4-Bridge	34
77	R2-2	EC1-PZ-N-2-YR	rosette	-	-	385	0:8:1	1/4-Bridge	35
78	R2-3	EC1-PZ-N-3-YR	rosette	-	-	386	0:8:2	1/4-Bridge	36
79	R3-1	EC2-B-N-1-YR	rosette	-	-	387	0:8:3	1/4-Bridge	37
80	R3-2	EC2-B-N-2-YR	rosette	-	-	388	0:9:0	1/4-Bridge	38
81	R3-3	EC2-B-N-3-YR	rosette	-	-	389	0:9:1	1/4-Bridge	39
82	R4-1	EC2-PZ-N-1-YR	rosette	-	-	196/149	2:5:0	1/4-Bridge	150
83	R4-2	EC2-PZ-N-2-YR	rosette	-	-	198/150	2:5:1	1/4-Bridge	151
84	R4-3	EC2-PZ-N-3-YR	rosette	-	-	195/151	2:5:2	1/4-Bridge	152
85	R5-1	WC1-B-N-1-YR	rosette	-	-	89	1:6:0	1/4-Bridge	90
86	R5-2	WC1-B-N-2-YR	rosette	-	-	90	1:6:1	1/4-Bridge	91
87	R5-3	WC1-B-N-3-YR	rosette	-	-	91	1:6:2	1/4-Bridge	92
88	R6-1	WC1-PZ-N-1-YR	rosette	-	-	317/77	1:3:0	1/4-Bridge	78
89	R6-2	WC1-PZ-N-2-YR	rosette	-	-	350/78	1:3:1	1/4-Bridge	79
90	R6-3	WC1-PZ-N-3-YR	rosette	-	-	302/79	1:3:2	1/4-Bridge	80
91	R7-1	WC2-B-N-1-YR	rosette	-	-	301/80	1:3:3	1/4-Bridge	81
92	R7-2	WC2-B-N-2-YR	rosette	-	-	323/81	1:4:0	1/4-Bridge	82
93	R7-3	WC2-B-N-3-YR	rosette	-	-	336/82	1:4:1	1/4-Bridge	83
94	R8-1	WC2-PZ-N-1-YR	rosette	-	-	352/141	2:3:0	1/4-Bridge	142
95	R8-2	WC2-PZ-N-2-YR	rosette	-	-	319/142	2:3:1	1/4-Bridge	143
96	R8-3	WC2-PZ-N-3-YR	rosette	-	-	329/143	2:3:2	1/4-Bridge	144
97	R9-1	1F-E-BG-TL-1-N-YR	rosette	-	-	101	1:9:0	1/4-Bridge	102
98	R9-2	1F-E-BG-TL-2-N-YR	rosette	-	-	102	1:9:1	1/4-Bridge	103
99	R9-3	1F-E-BG-TL-3-N-YR	rosette	-	-	103	1:9:2	1/4-Bridge	104
100	R10-1	1F-E-BG-BL-1-N-YR	rosette	-	-	104	1:9:3	1/4-Bridge	105
101	R10-2	1F-E-BG-BL-2-N-YR	rosette	-	-	105	1:10:0	1/4-Bridge	106
102	R10-3	1F-E-BG-BL-3-N-YR	rosette	-	-	106	1:10:1	1/4-Bridge	107
103	R11-1	1F-E-BG-TR-1-N-YR	rosette	-	-	107	1:10:2	1/4-Bridge	108
104	R11-2	1F-E-BG-TR-2-N-YR	rosette	-	-	108	1:10:3	1/4-Bridge	109
105	R11-3	1F-E-BG-TR-3-N-YR	rosette	-	-	109	1:11:0	1/4-Bridge	110
106	R12-1	1F-E-BG-TC-1-N-YR	rosette	-	-	110	1:11:1	1/4-Bridge	111
107	R12-2	1F-E-BG-TC-2-N-YR	rosette	-	-	111	1:11:2	1/4-Bridge	112
108	R12-3	1F-E-BG-TC-3-N-YR	rosette	-	-	112	1:11:3	1/4-Bridge	113

Channel	ID	Label	Device	Range	Serial No.	Cable No.	DAQ Box ID	Note	Column #
109	R13-1	1F-E-MG-TL-1-N-YR	rosette	-	-	113	1:12:0	1/4-Bridge	114
110	R13-2	1F-E-MG-TL-2-N-YR	rosette	-	-	114	1:12:1	1/4-Bridge	115
111	R13-3	1F-E-MG-TL-3-N-YR	rosette	-	-	115	1:12:2	1/4-Bridge	116
112	R14-1	1F-E-MG-BL-1-N-YR	rosette	-	-	116	1:12:3	1/4-Bridge	117
113	R14-2	1F-E-MG-BL-2-N-YR	rosette	-	-	117	1:13:0	1/4-Bridge	118
114	R14-3	1F-E-MG-BL-3-N-YR	rosette	-	-	118	1:13:1	1/4-Bridge	119
115	R15-1	1F-E-MG-TR-1-N-YR	rosette	-	-	119	1:13:2	1/4-Bridge	120
116	R15-2	1F-E-MG-TR-2-N-YR	rosette	-	-	120	1:13:3	1/4-Bridge	121
117	R15-3	1F-E-MG-TR-3-N-YR	rosette	-	-	121	1:14:0	1/4-Bridge	122
118	R16-1	1F-E-MG-BR-1-N-YR	rosette	-	-	122	1:14:1	1/4-Bridge	123
119	R16-2	1F-E-MG-BR-2-N-YR	rosette	-	-	123	1:14:2	1/4-Bridge	124
120	R16-3	1F-E-MG-BR-3-N-YR	rosette	-	-	124	1:14:3	1/4-Bridge	125
121	R17-1	1F-E-TG-TL-1-N-YR	rosette	-	-	125	1:15:0	1/4-Bridge	126
122	R17-2	1F-E-TG-TL-2-N-YR	rosette	-	-	126	1:15:1	1/4-Bridge	127
123	R17-3	1F-E-TG-TL-3-N-YR	rosette	-	-	127	1:15:2	1/4-Bridge	128
124	R18-1	1F-E-TG-BL-1-N-YR	rosette	-	-	128	1:15:3	1/4-Bridge	129
125	R18-2	1F-E-TG-BL-2-N-YR	rosette	-	-	129	2:0:0	1/4-Bridge	130
126	R18-3	1F-E-TG-BL-3-N-YR	rosette	-	-	130	2:0:1	1/4-Bridge	131
127	R19-1	1F-E-TG-BC-1-N-YR	rosette	-	-	131	2:0:2	1/4-Bridge	132
128	R19-2	1F-E-TG-BC-2-N-YR	rosette	-	-	303	2:0:3	1/4-Bridge	133
129	R19-3	1F-E-TG-BC-3-N-YR	rosette	-	-	133	2:1:0	1/4-Bridge	134
130	R20-1	1F-E-TG-BR-1-N-YR	rosette	-	-	134	2:1:1	1/4-Bridge	135
131	R20-2	1F-E-TG-BR-2-N-YR	rosette	-	-	135	2:1:2	1/4-Bridge	136
132	R20-3	1F-E-TG-BR-3-N-YR	rosette	-	-	136	2:1:3	1/4-Bridge	137
133	WP07	1F-E-WF-UQ-R-OD	wire pot	30"	2000NC51151	159	2:7:2	-	160
134	WP04	1F-E-WF-M-R-OD	wire pot	40"	2005NC51006	156	2:6:3	-	157
135	WP02	1F-E-WF-LQ-R-OD	wire pot	30"	2006NC51015	154	2:6:1	-	155
136	WP03	1F-E-WF-UQ-L-OD	wire pot	30"	2006NC51012	155	2:6:2	-	156
137	WP05	1F-E-WF-M-L-OD	wire pot	40"	2005NC01003	157	2:7:0	-	158
138	WP01	1F-E-WF-LQ-L-OD	wire pot	30"	2006NC51014	153	2:6:0	-	154
139	WP06	1F-W-WF-LQ-R-OD	wire pot	30"	2000NC51124	158	2:7:1	-	159
140	WP12	1F-W-WF-M-R-OD	wire pot	40"	2005NC01008	164	2:8:3	-	165
141	WP09	1F-W-WF-UQ-R-OD	wire pot	30"	2000NC51106	161	2:8:0	-	162
142	WP08	1F-W-WF-LQ-L-OD	wire pot	30"	2006NC51016	160	2:7:3	-	161
143	WP11	1F-W-WF-M-L-OD	wire pot	40"	2005NC01006	163	2:8:2	-	164
144	WP10	1F-W-WF-UQ-L-OD	wire pot	40"	2005NC51005	162	2:8:1	(recalibrated)	163

Channel	ID	Label	Device	Range	Serial No.	Cable No.	DAQ Box ID	Note	Column #
145	WP14	2F-E-WF-LQ-R-OD	wire pot	30"	2006NC51013	166/305	2:9:1	-	167
146	WP17	2F-E-WF-M-R-OD	wire pot	40"	2005NC51002	169/308	2:10:0	-	170
147	WP13	2F-E-WF-UQ-R-OD	wire pot	40"	2009NC01052	342	2:9:0	165/304 old cables N.G.	166
148	WP16	2F-E-WF-LQ-L-OD	wire pot	30"	2000NC51125	168/307	2:9:3	-	169
149	WP18	2F-E-WF-M-L-OD	wire pot	40"	2005NC51007	170/309	2:10:1	-	171
150	WP15	2F-E-WF-UQ-L-OD	wire pot	30"	2000NC51105	167/306	2:9:2	-	168
151	WP22	2F-W-WF-UQ-R-OD	wire pot	40"	2005NC01010	174/313	2:11:1	-	175
152	WP20	2F-W-WF-M-R-OD	wire pot	40"	2005NC01009	172/311	2:10:3	-	173
153	WP24	2F-W-WF-LQ-R-OD	wire pot	30"	2000NC51153	176/315	2:11:3	-	177
154	WP21	2F-W-WF-UQ-L-OD	wire pot	40"	2005NC51010	173/312	2:11:0	-	174
155	WP19	2F-W-WF-M-L-OD	wire pot	40"	2005NC01007	171/310	2:10:2	394 (171 N.G.)	172
156	WP23	2F-W-WF-LQ-L-OD	wire pot	30"	2000NC51111	175/314	2:11:2	-	176
157	WP25	1F-E-WF-A-N	wire pot	40"	2005NC51009	177	2:12:0	-	178
158	WP26	1F-W-WF-A-N	wire pot	40"	2005NC01004	178	2:12:1	-	179
159	WP27	2F-E-WF-A-N	wire pot	40"	2005NC01001	300	2:14:0	-	186
160	WP28	2F-W-WF-A-N	wire pot	40"	2000NC51131	399	2:14:1	(checked, not recalibrated)	187
161	-	-	-	-	-	-	2:13:0	not use	182
162	-	-	-	-	-	-	2:13:1	not use	183
163	-	-	-	-	-	-	2:13:3	not use	185
164	ST17	WB1-RT	stick	4"	2009NC01008	307	2:13:2	Novo100 (recalibrated)	184
165	ST18	EB1-RT	stick	4"	2009NC01009	183	1:8:0	Novo100 (recalibrated)	98
166	ST19	EB1-RB	stick	4"	2009NC01001	184	1:8:1	Novo100 (recalibrated)	99
167	ST20	RRW-T-N	stick	4"	2004NC01037	318/86	1:8:2	Novo100 (recalibrated)	100
168	ST21	RRW-T-S	stick	4"	2004NC01038	319/395	1:8:3	Novo100 (recalibrated)	101
169	WP30	1F-C-G-TS-OD	wire pot	40"	2005NC01005	21	0:5:0	-	22
170	WP47	2F-W-WF-A-S	wire pot	30"	2000NC51150	313	1:5:3	-	89
171	WP33	1F-E-WF-A-S	wire pot	40"	2009NC01054	24	0:5:3	(recalibrated)	25
172	WP29	1F-W-WF-A-S	wire pot	40"	2009NC01053	20	0:4:3	(recalibrated)	21
173	WP43	1F-E-BG-B-OD	wire pot	30"	2000NC51098	320	1:4:2	-	84
174	WP31	1F-C-B-BF-OD	wire pot	30"	2000NC51128	22	0:5:1	-	23
175	WP32	1F-C-B-CS-OD	wire pot	40"	2005NC51003	23	0:5:2	(recalibrated)	24
176	WP42	1F-W-BG-B-OD	wire pot	30"	2000NC51117	314	1:1:3	-	73
177	WP46	2F-E-WF-A-S	wire pot	30"	2000NC51152	312	1:5:2	-	88
178	WP44	2F-C-B-BF-OD	wire pot	30"	2000NC51126	310	1:5:0	-	86
179	WP45	2F-C-G-BS-OD	wire pot	30"	2000NC51129	311	1:5:1	-	87
180	-	-	-	-	-	182/363	2:12:3	not use	181

Channel	ID	Label	Device	Range	Serial No.	Cable No.	DAQ Box ID	Note	Column #
181	ST2	C-GB-Slip	stick	1"	2009NC01028	181	2:12:2	Novo 25 (recalibrated)	180
182	ST3	W-CB-Slip	stick	1"	2009NC01026	96	1:7:3	Novo 25 (recalibrated)	97
183	ST4	E-LC1-OD	stick	6"	2007NC01009	179	2:15:2	-	192
184	ST5	E-LC2-OD	stick	6"	2007NC01010	302	2:14:2	-	188
185	ST6	C-LC1-OD	stick	6"	2007NC01011	180	2:15:3	-	193
186	ST7	C-LC2-OD	stick	6"	2007NC51006	303	2:14:3	-	189
187	ST8	W-LC1-OD	stick	6"	2007NC51007	304	2:15:0	-	190
188	ST9	W-LC2-OD	stick	6"	2007NC51010	305	2:15:1	-	191
189	ST10	C-B1-VD	stick	4"	2007NC01006	144	2:3:3	-	145
190	ST11	C-B2-VD	stick	4"	2007NC01003	210	2:5:3	Novo100	153
191	ST22	WB1-RB	stick	4"	2009NC01004	316	2:2:2	Novo100 (recalibrated)	140
192	PT1	EC1-PZ-E-PT	Position Transducer	20"	-	323	2:4:1	Novo500	147
193	PT2	EC2-PZ-E-PT	Position Transducer	40"	-	-	3:0:0	MTS-STS, Roof Disp. Control	194
194	A1	EC2-PZ-E-PT	Position Transducer	40"	-	-	3:0:0	MTS-STS (Act3disp) Control	194
195	A2	Act2force	Load Cell	-	-	-	3:0:1	MTS-STS (Act3force)	195
196	A3	-	Position Transducer	40"	-	-	3:0:2	MTS-STS (Act1dispFT)	196
197	A4	Act3disp	Position Transducer	40"	-	-	3:0:3	MTS-STS (Act2dispFT)	197
198	A5	Act2disp	Position Transducer	40"	-	-	3:0:4	MTS-STS (Act3dispFT)	198
199	A6	Act4disp	Position Transducer	40"	-	-	3:0:5	MTS-STS (Act4dispFT)	199
200	A7	Act1disp	Position Transducer	40"	-	-	3:0:6	MTS-STS (Act4disp)	200
201	A8	Act1force	Load Cell	-	-	-	3:0:7	MTS-STS (Act4force)	201
202	TG1	TriggerCanon	TriggerCanon	-	-	207	3:1:5	D-Space	207
203	TG2	TriggerLeica	TriggerLeica	-	-	208	3:1:6	D-Space	208
204	500	IRIGday-500	-	-	-	-	3:15:0	For time sync. (BNC to STS)	210
205	501	IRIGHour-501	-	-	-	-	3:15:1	For time sync. (BNC to STS)	211
206	502	IRIGmin-502	-	-	-	-	3:15:2	For time sync. (BNC to STS)	212
207	503	IRIGsec-503	-	-	-	-	3:15:3	For time sync. (BNC to STS)	213
208	504	IRIGmsec-504	-	-	-	-	3:15:4	For time sync. (BNC to STS)	214
209	505	IRIGusec-505	-	-	-	-	3:15:5	For time sync. (BNC to STS)	215
210	506	IRIGstatus-506	-	-	-	-	3:15:6	For time sync. (BNC to STS)	216

Channel	ID	Label	Device	Range	Serial No.	Cable No.	DAQ Box ID	Note	Column #
1	PS1	EC1BL-S-F	strain gauge	-	-	13	0:0:0	S1	2
2	PS2	EC1BR-S-F	strain gauge	-	-	14	0:0:1	S2	3
3	PS3	EC1TL-S-F	strain gauge	-	-	15	0:0:2	S3	4
4	PS4	EC1TR-S-F	strain gauge	-	-	16	0:0:3	S4	5
5	PS5	EB2TR-N-F	strain gauge	-	-	339/198A	0:0:4	S77	6
6	PS6	WB2TL-N-F	strain gauge	-	-	193	0:0:5	S78	7
7	PS7	EC1-B-N-1-R	rosette	-	-	17	0:0:6	R1-1 (Red)	8
8	PS8	EC1-B-N-2-R	rosette	-	-	18	0:0:7	R1-2 (White)	9
9	PS9	EC1-B-N-3-R	rosette	-	-	19	0:1:0	R1-3 (Green)	10
10	PS10	EC1BL-N-F	strain gauge	-	-	38	0:1:1	S79	11
11	PS11	EC1BR-N-F	strain gauge	-	-	40	0:1:2	S80	12
12	PS12	EC1TL-N-F	strain gauge	-	-	37	0:1:3	S81	13
13	PS13	EC1TR-N-F	strain gauge	-	-	39	0:1:4	S82	14
14	PS14	WC1BL-S-F	strain gauge	-	-	34	0:1:5	S83	15
15	PS15	WC1BR-S-F	strain gauge	-	-	33	0:1:6	S84	16
16	PS16	WC1BL-N-F	strain gauge	-	-	36	0:1:7	S85	17
17	PS17	WC1BR-N-F	strain gauge	-	-	35	0:2:0	S86	18
18	PS18	EC2TL-S-F	strain gauge	-	-	52	0:2:1	S87	19
19	PS19	EC2TR-S-F	strain gauge	-	-	51	0:2:2	S88	20
20	PS20	EC2TL-N-F	strain gauge	-	-	49	0:2:3	S89	21
21	PS21	EC2TR-N-F	strain gauge	-	-	50	0:2:4	S90	22
22	PS22	WC2TL-S-F	strain gauge	-	-	55	0:2:5	S91	23
23	PS23	WC2TR-S-F	strain gauge	-	-	56	0:2:6	S92	24
24	PS24	WC2TL-N-F	strain gauge	-	-	120C	0:2:7	S93	25
25	PS25	WC2TR-N-F	strain gauge	-	-	54	0:3:0	S94	26
26	PS26	E-GT1-N	strain gauge	-	-	402	0:3:1	S95	27
27	PS27	E-GT2-N	strain gauge	-	-	44	0:3:2	S96	28
28	PS28	E-GT3-N	strain gauge	-	-	45	0:3:3	S97	29
29	PS29	E-GT4-N	strain gauge	-	-	46	0:3:4	S98	30
30	PS30	E-GT5-N	strain gauge	-	-	47	0:3:5	S99	31
31	PS31	E-GC-N	strain gauge	-	-	87	0:3:6	S100	32
32	PS32	E-GB1-N	strain gauge	-	-	85	0:3:7	S101	33
33	PS33	E-GB2-N	strain gauge	-	-	88	0:4:0	S102	34
34	PS34	E-GB3-N	strain gauge	-	-	152	0:4:1	S103	35
35	PS35	E-GB4-N	strain gauge	-	-	331	0:4:2	S104	36
36	PS36	E-GB5-N	strain gauge	-	-	401	0:4:3	S105	37

Channel	ID	Label	Device	Range	Serial No.	Cable No.	DAQ Box ID	Note	Column #
37	PS37	1F-E-BG-BR-1-N-R	rosette	-	-	41	0:4:4	R21-1 (Red)	38
38	PS38	1F-E-BG-BR-2-N-R	rosette	-	-	42	0:4:5	R21-2 (White)	39
39	PS39	1F-E-BG-BR-3-N-R	rosette	-	-	43	0:4:6	R21-3 (Green)	40
40	PS40	STB1-T-F	strain gauge	-	-	97	0:4:7	S74	41
41	PS41	STB1-B-F	strain gauge	-	-	98	0:5:0	S75	42
42	PS42	STB2-B-F	strain gauge	-	-	100	0:5:1	S76	43
43	PS43	W-WF-1-M-T1-N-F	strain gauge	-	-	36C	0:5:2	(C for color coded cable)	44
44	PS44	W-WF-1-M-T2-N-F	strain gauge	-	-	37C	0:5:3	-	45
45	PS45	W-WF-1-M-T3-N-F	strain gauge	-	-	38C	0:5:4	-	46
46	PS46	W-WF-1-M-T4-N-F	strain gauge	-	-	341	0:5:5	-	47
47	PS47	W-WF-1-M-T5-N-F	strain gauge	-	-	399	0:5:6	-	48
48	PS48	W-WF-1-M-T2-S-SFA	strain gauge	-	-	33C	0:5:7	Stress Gauge (1/4-Bridge)	49
49	PS49	W-WF-1-M-T3-S-SFA	strain gauge	-	-	34C	0:6:0	Stress Gauge (1/4-Bridge)	50
50	PS50	W-WF-1-M-T4-S-SFA	strain gauge	-	-	35C	0:6:1	Stress Gauge (1/4-Bridge)	51
51	73	IRIGday-73	-	-	-	-	0:9:0	For time sync. (BNC to STS)	52
52	74	IRIGHour-74	-	-	-	-	0:9:1	For time sync. (BNC to STS)	53
53	75	IRIGmin-75	-	-	-	-	0:9:2	For time sync. (BNC to STS)	54
54	76	IRIGsec-76	-	-	-	-	0:9:3	For time sync. (BNC to STS)	55
55	77	IRIGmsec-77	-	-	-	-	0:9:4	For time sync. (BNC to STS)	56
56	78	IRIGusec-78	-	-	-	-	0:9:5	For time sync. (BNC to STS)	57
57	79	IRIGstatus-79	-	-	-	-	0:9:6	For time sync. (BNC to STS)	58