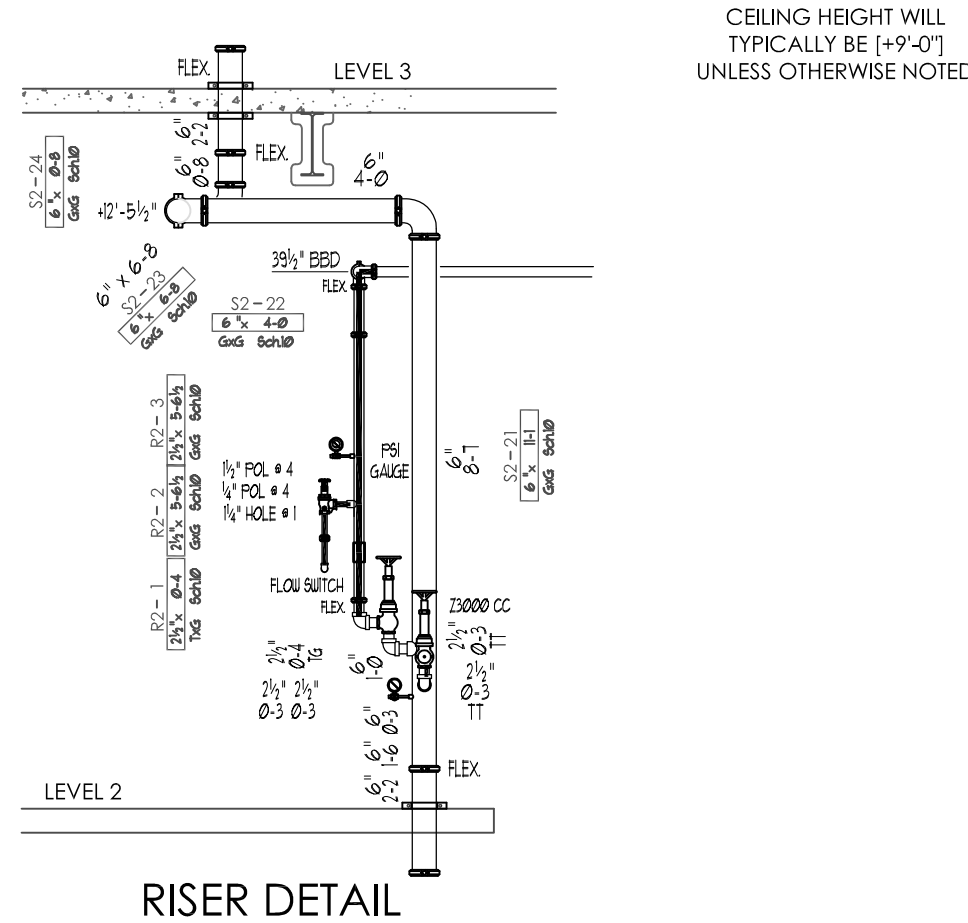




COSCO

Fire Protection

FIRE PROTECTION AND LIFE SAFETY SPECIALISTS

CALIFORNIA C-16/C-2 - S7921
LOS ANGELES OFFICE
800 Wilshire Blvd., Suite California 7921
call (114) 899-1800 • fax (714) 999-1020

SAN DIEGO • LOS ANGELES • FRESNO • SAN FRANCISCO • SACRAMENTO • PORTLAND • SEATTLE • ANCHORAGE

PROJECT:	CHOC Hospital 455 S. Main St. Orange, CA 92668
CONTRACT WITH:	McCarthy 2040 Southwest Birch St. Suite 300 Newport Beach, CA 92660
DRAWING TITLE	Level 2 - Area A

DATE: 12-1-09	
SCALE: 1/4"=1'-0"	
DRAWN BY: P.F.	
JOB NO. LC-7196	
SHEET NO. FP-2.A	

The image contains two circular professional engineer stamps from the State of California. The top stamp is for a Licensed Fire Protection Engineer, No. 1621, signed by George Provencer, dated 9-30-13. The bottom stamp is for a Registered Professional Engineer, No. M26855, signed by George Provencer, dated 9-30-13.

MCCARTHY APPROVAL	
A. Approved as written for Substantial Revision	☐
B. Review and Resubmit	☐
C. Rejected	☐

This review is for general conformance with Plans and Specifications only. Any deviations from same must be clearly noted by the Preparer here and not on the drawings. Review shall not constitute a complete check of detailed dimensions or counts to serve to inform the Preparer of contractual requirements for any error or deviation from contract requirements.

McCarthy

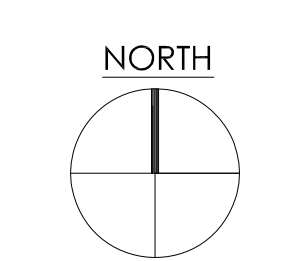
By _____ Date _____

SHOP DRAWING REVIEW NO. _____

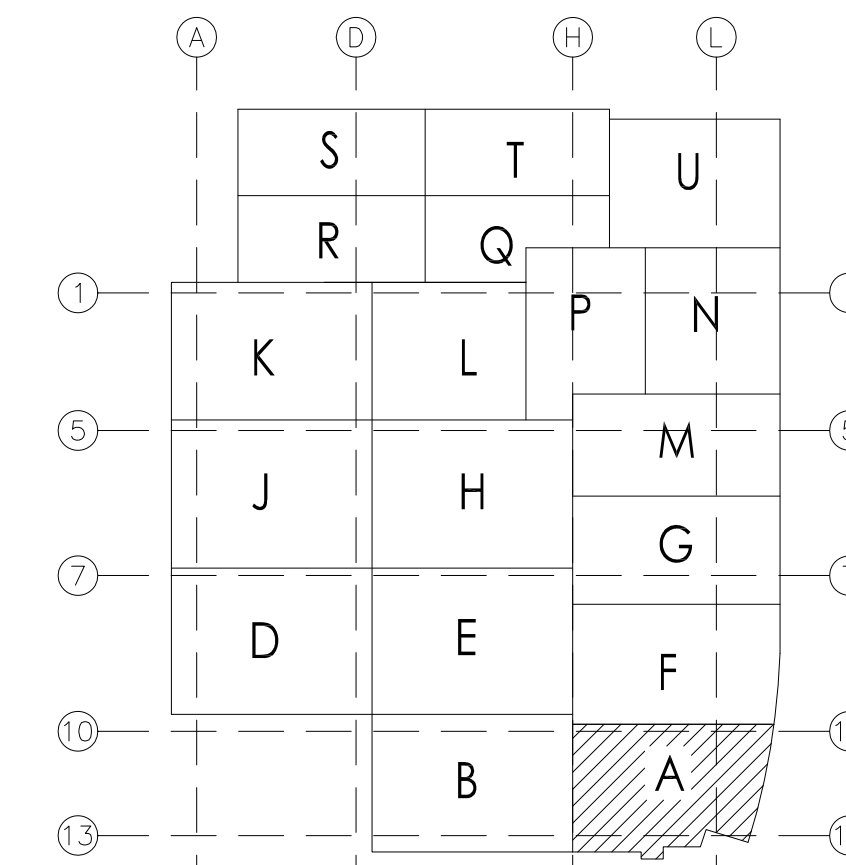
AGENCY APPROVAL

SYMBOL IDENTIFICATION LEGEND

	• LINE RESTRAINT
	• FIRE STOPPING THROUGH RATED WALL
	• CALCULATION DESIGN AREA
	• HYDRAULIC CALCULATION NODE
	• CENTERLINE OF PIPE BELOW TOP OF STEEL
	• CENTERLINE OF PIPE ABOVE FINISH FLOOR
	• CENTERLINE OF PIPE BELOW DECK (SAME AS TOP OF STEEL)
	• CENTERLINE OF PIPE ABOVE FINISH FLOOR
	• RIGID GROOVED PIPE COUPLING (UNLESS NOTED AS FLEXIBLE)
	• PIPE HANGER TO CONCRETE
	• PIPE HANGER TO STEEL
	• CEILING HEIGHT



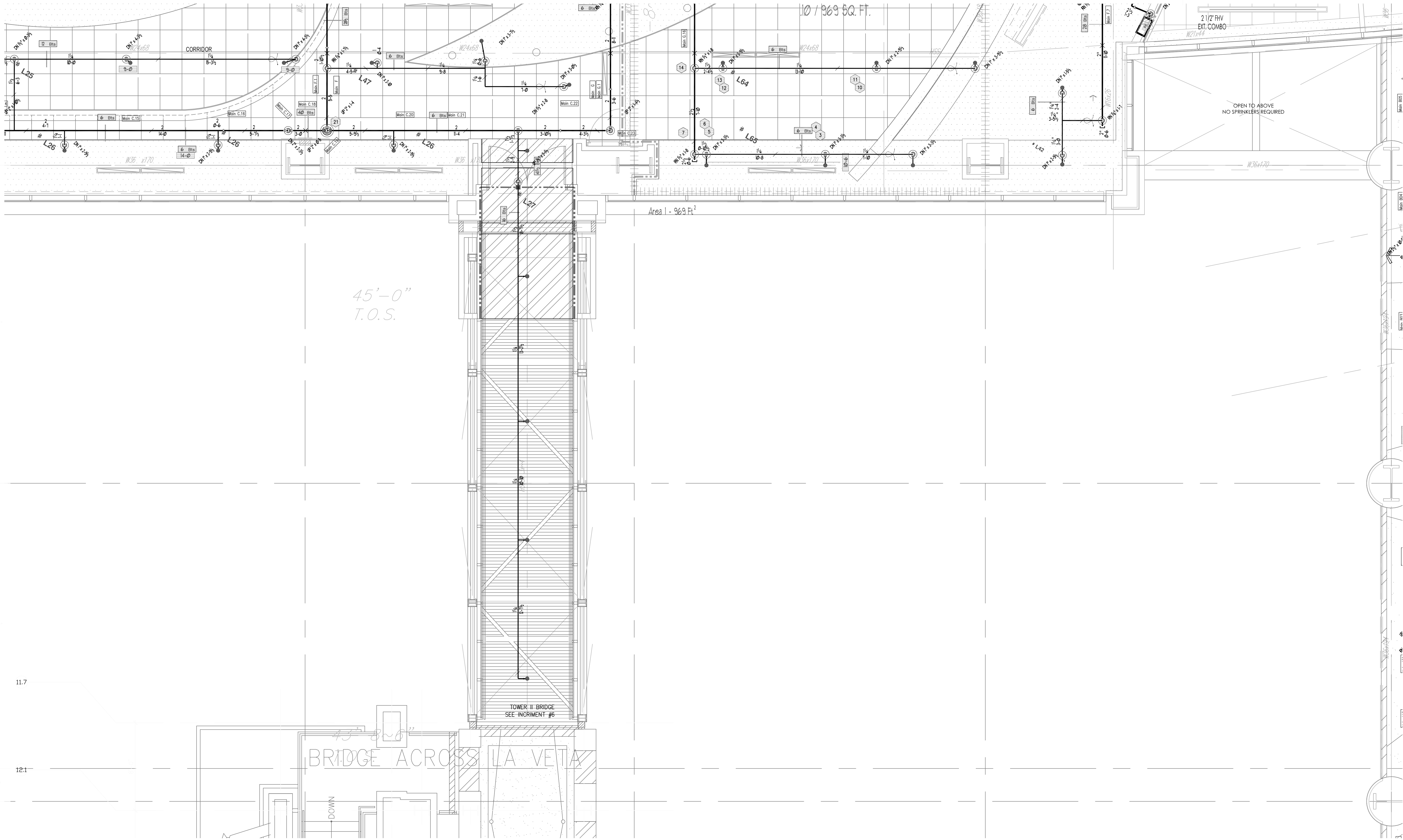
AS BUILT DRAWING
7-30-2012



A1 KEY PLAN

OSHPD No.: IL-072072-30 / INCREMENT #7C - DA#16

Xrefs: X:\xplan_2.DWG\X_x-plan 2 the voice.DWG\X_C-RCP-2.DWG\IIL2 BC.DWG\X_E-L2 RCP-CO_232.DWG\XM2_CLG ACCESS.DWG\X_XE_02 RCP-CO_134.DWG\V-A4.2A.DWG\PL-2ND-ACCESS PANEL.DWG\g-grid core 2.DWG\X_4206075_52-3A_B_C_D.DWG\MCM_2TH-SECTION.DWG\C-shell L2.DWG\g-grid core la veto bridge L2.DWG

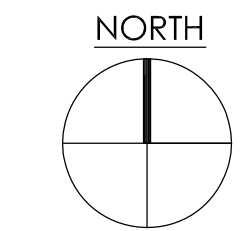


SYMBOL IDENTIFICATION LEGEND

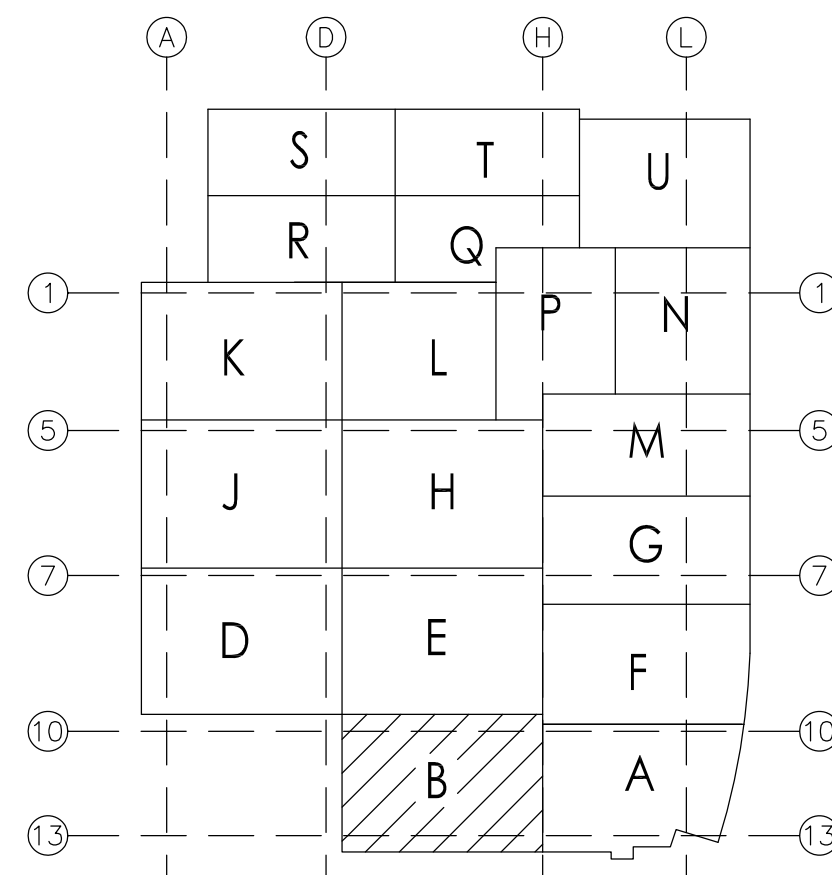
- LINE RESTRAINT
- FIRE STOPPING THROUGH RATED WALL
- CALCULATION DESIGN AREA
- HYDRAULIC CALCULATION NODE
- CENTERLINE OF PIPE BELOW TOP OF STEEL
- CENTERLINE OF PIPE ABOVE FINISH FLOOR
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- CENTERLINE OF PIPE ABOVE FINISH FLOOR
- RIGID GROOVED PIPE COUPLING (UNLESS NOTED AS FLEXIBLE)
- PIPE HANGER TO CONCRETE
- PIPE HANGER TO STEEL
- CEILING HEIGHT

CEILING HEIGHT WILL TYPICALLY BE 9'-0", UNLESS OTHERWISE NOTED ON THE PLAN.

AS BUILT DRAWING
Pat Fisher
7-30-2012



LEVEL 02 179.30' = 0'-0"
REFERENCE THIS SHEET



A1 KEY PLAN

OSHPD No.: IL-072072-30 / INCREMENT #7C - DA#16

PROJECT: CHOC Hospital
255 S. Main St
Orange, CA 92668
CONTRACT WITH: McCarthy
20401 Southwest Birch St, Suite 300
Newport Beach, CA 92660
DRAWING TITLE: Level 2 - Area B

DATE: 12-1-09
SCALE: 1/4"=1'-0"
DRAWN BY: P.F.
JOB NO.: LC-7196
SHEET NO.: FP-2.B



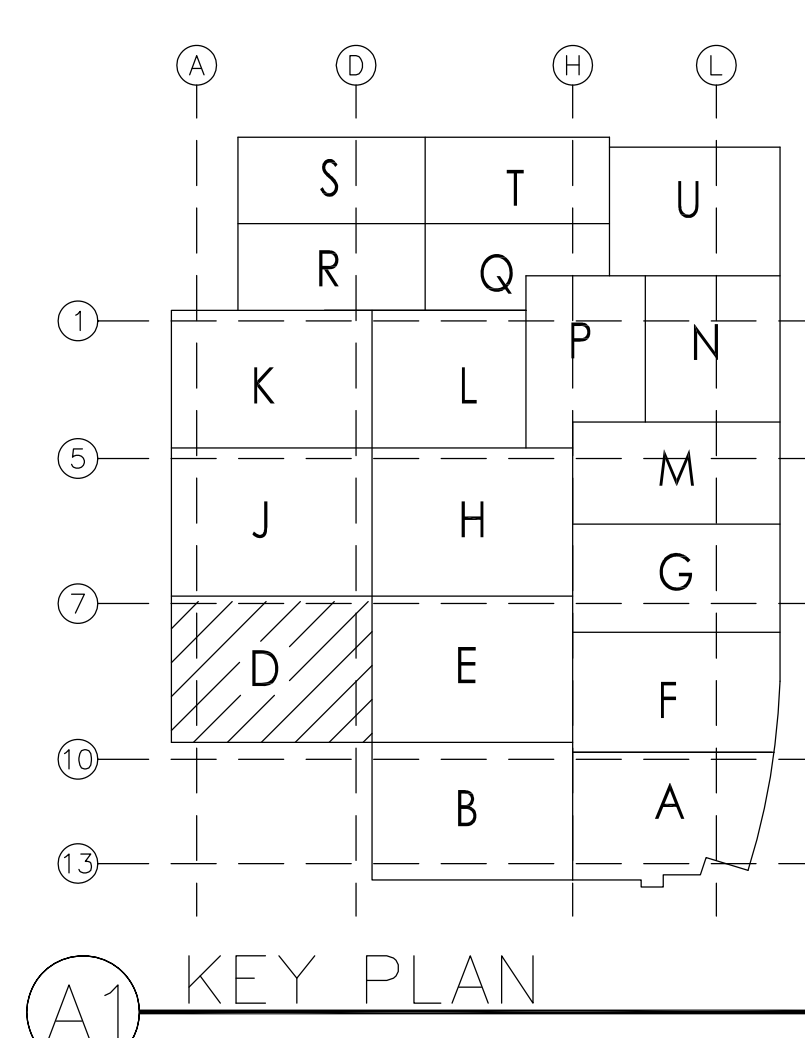
NO.	DESCRIPTION	REVISIONS	DATE	BY
0	OSHPD INCREMENT 7C SUBMITTAL		12-1-09	P.F.
1	OSHPD BACKCHECK #1		3-1-10	P.F.
2	OSHPD BACKCHECK #2		7-15-10	P.F.

SYMBOL	S/N	OFFICE	W/P	K-FACT	HEAD	FINISH	P/ATE	FINISH	T/W/P
TY3388			1/2"	1/2"	5.6	Chrome	White	155°	
TY2488			1/2"	1/2"	5.6	Chrome	White	155°	
TY462			1/2"	1/2"	5.6	Brass	White	155°	
VR64			3/4"	3/4"	8.0	Brass	White	155°	
VR300			1/2"	1/2"	5.6	Brass	White	200°	
VR302			1/2"	1/2"	5.6	Brass	White	200°	
VR303			1/2"	1/2"	5.6	Brass	White	200°	
VR305			1/2"	1/2"	5.6	Brass	White	200°	
TOTAL SPRINKERS THIS SHEET									4

MCCARTHY APPROVAL

By: _____ Date: _____
SHOP DRAWING REFERENCE NO. _____

COSCO
Fire Protection
FIRE PROTECTION AND LIFE SAFETY SPECIALISTS
1072 W. Lombard Rd.
LOS ANGELES OFFICE
LOS ANGELES • LOS ANGELES • FRESNO • SAN FRANCISCO • SACRAMENTO • PORTLAND • SEATTLE • ANCHORAGE
SAN DIEGO • LOS ANGELES • FRESNO • SAN FRANCISCO • SACRAMENTO • PORTLAND • SEATTLE • ANCHORAGE



APPROVALS BY:										OSHPD		TOTAL SHEETS	
										THIS SHEET		-	
Two Model WS - Horizontal Sideload	TC2888	1/2	1/2	5.4	Chrome	155F							
Two Model WS - Pendant Vertical Sideload	TY2488	1/2	1/2	5.6	Chrome	155F							
Viating Model QR SSP Concealed Pendant	YK6422	1/2	1/2	5.6	Bronz	200P							
SPRINKLER HEAD LEGEND:													
Viating Model QR SSP Concealed Pendant	YK6422	1/2	1/2	5.4	Bronz	155F							
Viating Model QR Extended Coverage Concealed Pendant	YK634	3/4	3/4	6.0	Bronz	155F							
Viating Microdot QR SSU UPRIGHT	YK3000	1/2	1/2	5.6	Bronz	200P							
Viating Microdot QR SSU UPRIGHT	YK3000	1/2	1/2	5.6	Bronz	200P							
Viating Microdot QR SSP Pendant	YK3020	1/2	1/2	5.6	Bronz	200P							
Viating Microdot QR SSP Horizontal Sideload	YK3035	1/2	1/2	5.6	Bronz	200P							

REVISIONS			
NO.	DESCRIPTION	DATE	BY
0	OSHPD INCREMENT 7C SUBMITTAL	12-1-09	P.F.
1	OSHPD BACKCHECK #1	3-1-10	P.F.
2	OSHPD BACKCHECK #2	7-16-10	P.F.
3	REVISED PER CO #134	10-2-11	P.F.



SYSTEM 2 - RISER RECAP

TOTAL SQUARE FOOTAGE
FOR THIS SYSTEM: 32,205

TOTAL HEAD COUNT
FOR THIS SYSTEM: 340

SYMBOL IDENTIFICATION LEGEND

	• LINE RESTRAINT
	• FIRE STOPPING THROUGH RATED WALL
	• CALCULATION DESIGN AREA
	• HYDRAULIC CALCULATION NODE
	• CENTERLINE OF PIPE BELOW TOP OF STEEL
	• CENTERLINE OF PIPE ABOVE FINISH FLOOR
	• CENTERLINE OF PIPE BELOW DECK (SAME AS TOP OF STEEL)
	• CENTERLINE OF PIPE ABOVE FINISH FLOOR
	• RIGID GROOVED PIPE COUPLING (UNLESS NOTED AS FLEXIBLE)
	• PIPE HANGER TO CONCRETE
	• PIPE HANGER TO STEEL
	• CEILING HEIGHT

AS BUILT DRAWING

Pat Fisher

7-30-2012

NORTH

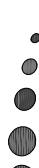
A north arrow pointing upwards, labeled 'NORTH' above it. Below the north arrow is a graphic scale bar with markings at 1, 2, and 4. The scale bar is divided into segments: a black segment from 0 to 1, a white segment from 1 to 1.5, a black segment from 1.5 to 2, and a white segment from 2 to 4.

SCALE: 1/4" = 1'-0"

LEVEL 02 179.30' = 0'-0"

REFERENCE THIS SHEET

OSHPD No.: IL-072072-30 / INCREMENT #7C - DA#16

 **COSCO**

Fire Protection

FIRE PROTECTION AND LIFE SAFETY SPECIALISTS

1073 W. Lombard Rd.
Brea, California 92621

LOS ANGELES OFFICE

1073 W. Lombard Rd.
Brea, California 92621

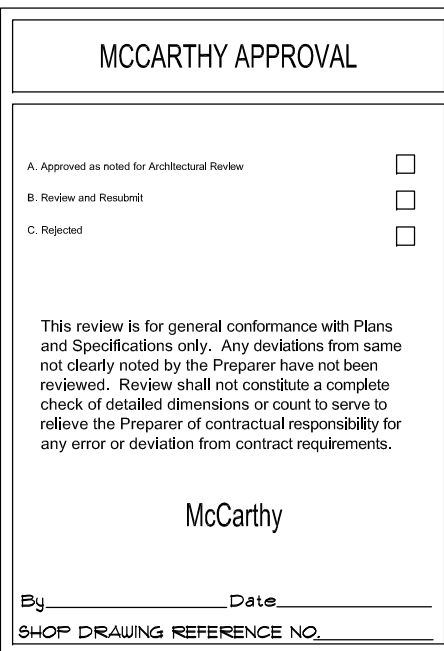
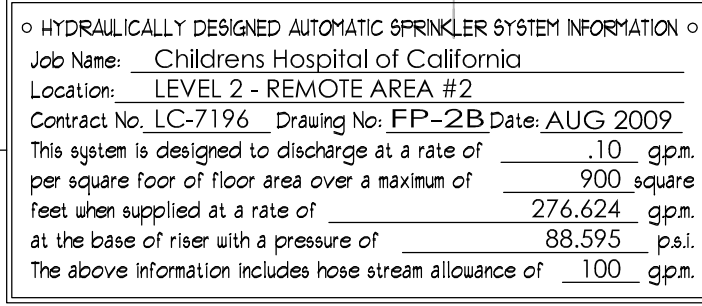
call (714) 989-1800 • fax (714) 989-1620

LOS ANGELES • IRVINE • SAN FRANCISCO • SACRAMENTO • PORTLAND • SEATTLE • ANCHORAGE

PROJECT:	CHOC Hospital 455 S. Main St. Orange, CA 92668
CONTRACT WITH:	McCarthy 20401 Southwest Birch St, Suite 300 Newport Beach, CA 92660
DRAWING TITLE	Level 2 - Area D

DATE: 12-1-09	
SCALE: 1/4"=1'-0"	
DRAWN BY: P.F.	
JOB NO. LC-7196	
SHEET NO. FP-2.D	 134

CEILING HEIGHT WILL TYPICALLY BE [9'-0"], UNLESS OTHERWISE NOTED ON THE PLAN.



REVISIONS			
NO.	DESCRIPTION	DATE	BY
0	OSHPD INCREMENTAL SUBMITAL	12-1-09	P.F.
1	OSHPD BACKCHECK #1	3-1-10	P.F.
2	OSHPD BACKCHECK #2	7-19-10	P.F.
3	REVISED PER CO #114	10-2-11	P.F.
4	REVISED PER CO #72	3-26-12	P.F.

- CEILING HEIGHT WILL TYPICALLY BE [9'-0"], UNLESS OTHERWISE NOTED ON THE PLAN

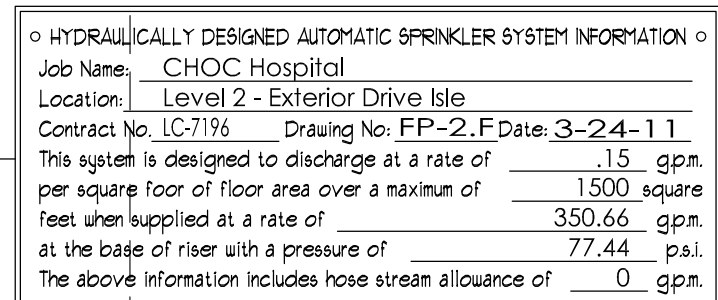
A1 KEY PLAN

March 26, 2011 4:41:06 p.m.

Xrefs: I:\J2 AD.DWG\C-RCP-2.DWG\X-plan 2.DWG\CHANGE ORDER 134 - X-PLAN-2.DWG\CHANGE ORDER 134 - C-RCP-2.DWG\V-A4.2A.DWG\X-grid core 2.DWG\X 4204075 S2-3A B C D.DWG\MC 2TH-SECTION.DWG\C-shell 12.DWG\X-grid core la veta bridge 12.DWG

PROJECT:	CHOC Hospital 455 S. Main St. Orange, CA 92668
CONTRACT WITH:	McCarthy 20401 Southwest Birch St, Suite 300 Newport Beach, CA 92660
DRAWING TITLE	Level 2 - Area E

DATE:	12-1-09
SCALE:	1/4"=1'-0"
DRAWN BY:	P.F.
JOB NO. LC-7196	
SHEET NO. FP-2.E	



MCCARTHY APPROVAL	
A. Approved as noted for Anticipated Review	☐
B. Review not Foreseen	☐
C. Rejected	☐

This review is for general conformance with Plans and Specifications only. Any deviations from same not clearly noted by the Preparer have not been reviewed. Review will not constitute a complete check of detailed dimensions or exist to serve to relieve the Preparer of contractual responsibility for any error or deviation from contract requirements.

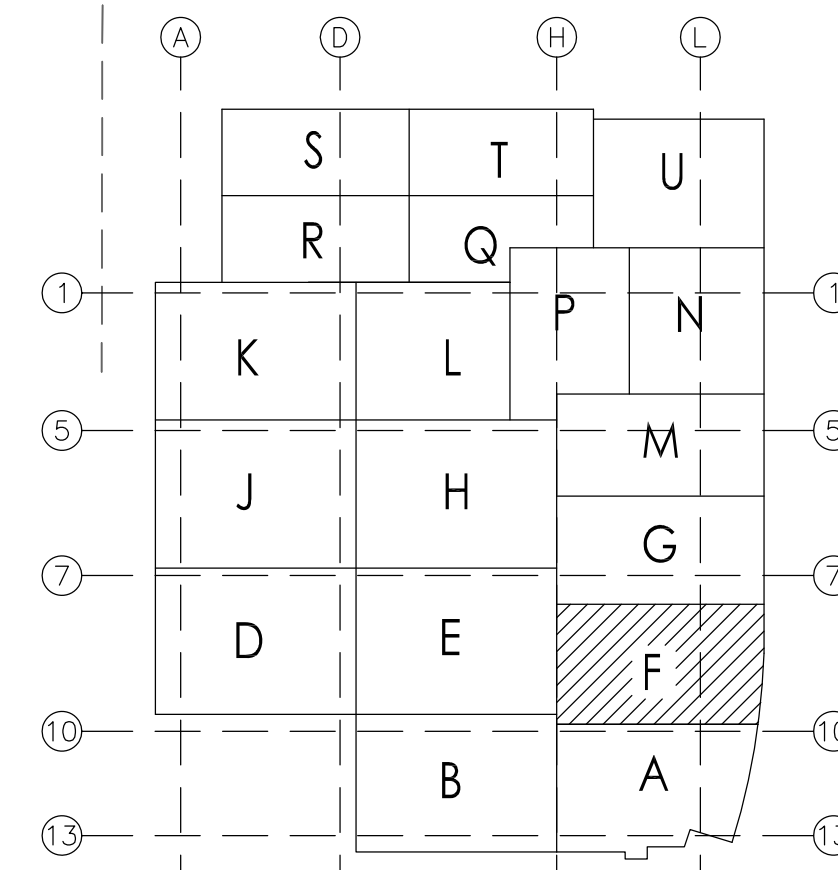
McCarthy

By _____
Date _____

NO DUPLICATIONS REQUIRED.

AGENCY APPROVAL

OSHPD No.: IL-072072-30
INCREMENT #7C - DA#16

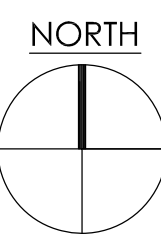


A1 KEY PLAN

- LINE RESTRAINT
- FIRE STOPPING THROUGH RATED WALL
- CALCULATION DESIGN AREA
- HYDRAULIC CALCULATION NODE
- CENTERLINE OF PIPE BELOW TOP OF STEEL
- CENTERLINE OF PIPE ABOVE FINISH FLOOR
- CENTERLINE OF PIPE BELOW DECK (SAME AS TOP OF STEEL)
- CENTERLINE OF PIPE ABOVE FINISH FLOOR
- RIGID GROOVED PIPE COUPLING (UNLESS NOTED AS FLEXIBLE)
- PIPE HANGER TO CONCRETE
- PIPE HANGER TO STEEL
- CEILING HEIGHT

CEILING HEIGHT WILL TYPICALLY BE [9'-0"], UNLESS OTHERWISE NOTED ON THE PLAN

Pat. Fisher



1 1/2 2 4

SCALE: 1/4" = 1'-0"

LEVEL 02 179.30' = 0'-0"

REFERENCE THIS SHEET

OSHPD No.: IL-072072-30 / INCREMENT #7C - DA#16

March 09, 2012 3:51:30 p.m.

Xrefs: X x-plan 2.DWG\X x-plan 2 the voice.DWG\X C-RCP-2.DWG\JL2 BC.DWG\X-E-L2 RCP-CO_232.DWG\XM2 CLG ACCESS.DWG\X XE_02 RCP-CO_134.DWG\Y-A4.2A.DWG\PL-2ND-ACCESS PANEL.DWG\X-grid core 2.DWG\X_4206075_S2-3A B C D.DWG\MC_2TH-SECTION.DWG\X-shell L2.DWG\X-grid core la veta bridge L2.DWG\

[illegible][illegible]

 **COSCO** | **Fire Protection**
FIRE PROTECTION AND LIFE SAFETY SPECIALISTS

1025 W. Lombard Rd.
LOS ANGELES OFFICE
LOS ANGELES, CA 90017
Beverly Hills, California 92821
call 714 969-1800 / 714 969-1620

SAN DIEGO • LOS ANGELES • IRVINE • SAN FRANCISCO • SACRAMENTO • PORTLAND • SEATTLE • ANCHORAGE

PROJECT:	CHOC Hospital 455 S. Main St. Orange, CA 92668
CONTRACT WITH:	McCarthy 20401 Southwest Birch St, Suite 300 Newport Beach, CA 92660
DRAWING TITLE	Level 2 - Area F

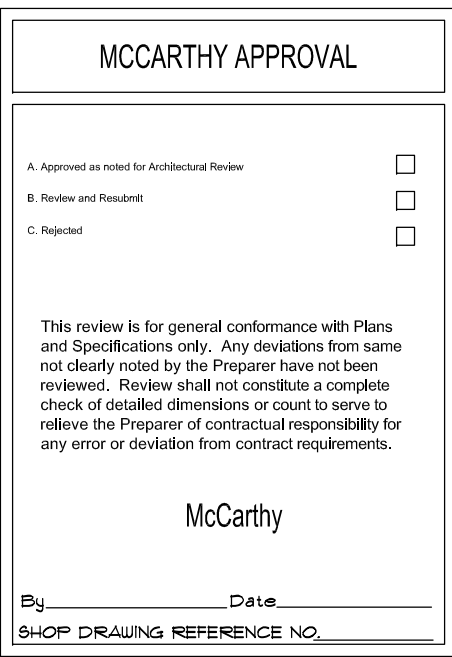
DATE: 12-1-09

SCALE: 1/4"=1'-

LC-7196

SHEET NO. _____

△

[illegible]

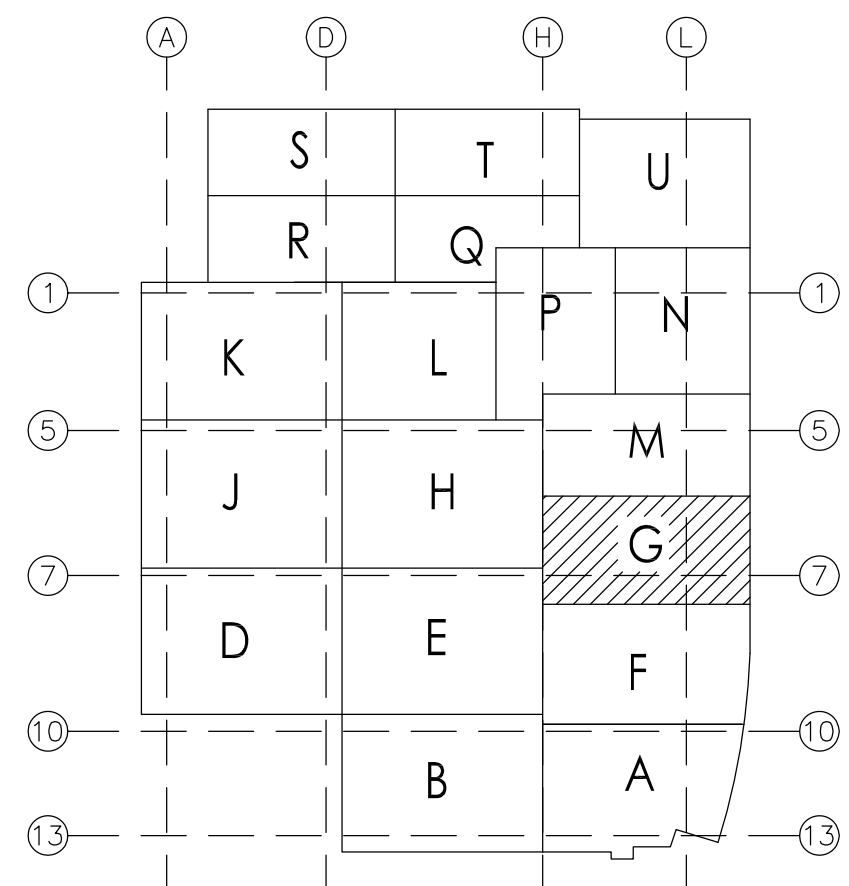
COSCO | Fire Protection
FIRE PROTECTION AND LIFE SAFETY SPECIALISTS
1075 W. Lambert Rd.
Brea, California 92621
call (714) 999-1800 / (714) 999-1820
SAN DIEGO • LOS ANGELES • FRESNO • SAN FRANCISCO • SACRAMENTO • PORTLAND • SEATTLE • ANCHORAGE

PROJECT	CHOC Hospital 45 S. Main St. Orange, CA 92668
CONTRACT WITH:	McCarthy 20401 Southwest Birch St, Suite 300 Newport Beach, CA 92660
DRAWING TITLE	Level 2 - Area G

DATE:	12-1-09	
SCALE:	1/4"=1'-0"	
DRAWN BY:	P.F.	
JOB NO.	LC-7196	
SHEET NO.	FP-2.G	297

CEILING HEIGHT WILL TYPICALLY BE [9'-0"], UNLESS OTHERWISE NOTED ON THE PLAN.

LEVEL 02 179.30' = 0'-0"
REFERENCE THIS SHEET



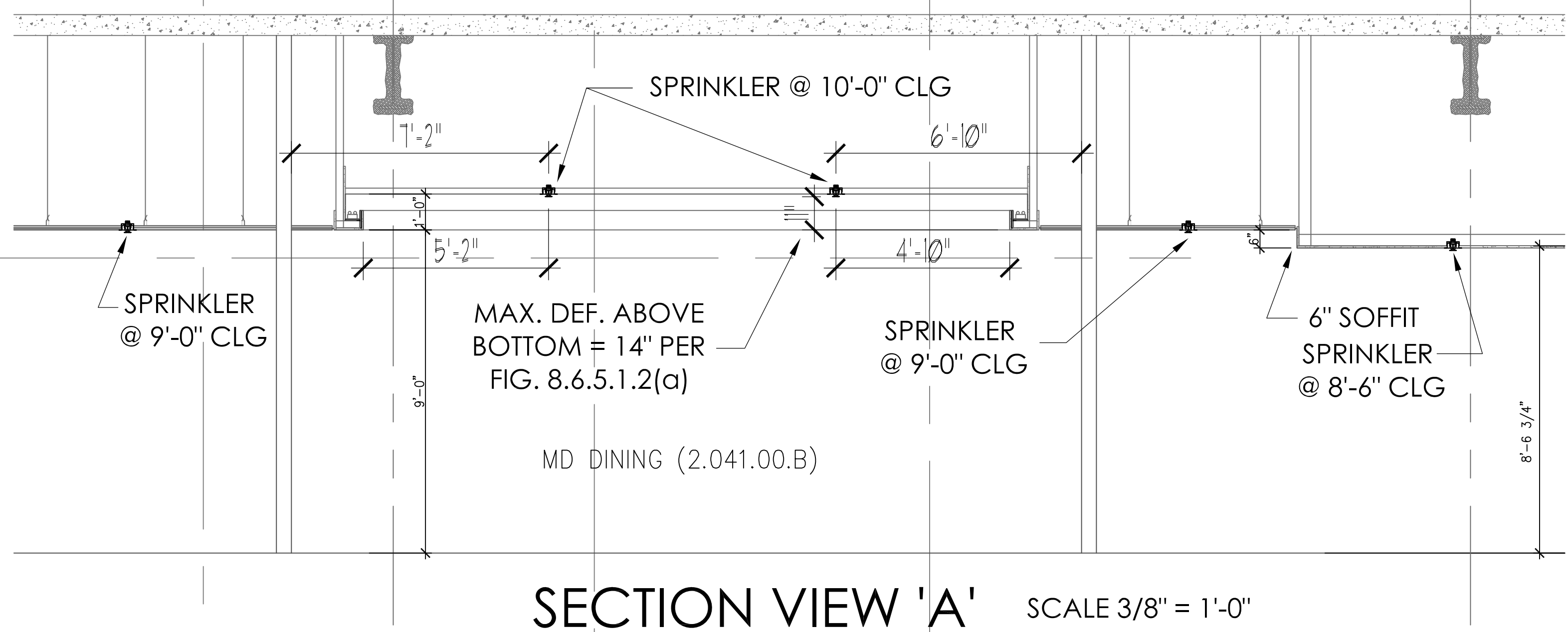
A1 KEY PLAN

OSHPD No.: IL-072072-30 / INCREMENT #7C - DA#16

March 09, 2012 3:51:30 p.m.

DATE:	12-1-09
SCALE:	1/4"=1'-0"
DRAWN BY: P.F.	
JOB NO. LC-7196	
SHEET NO. FP-2.H	





SECTION VIEW 'A' SCALE 3/8" = 1'-0"

[illegible]

 **COSCO**

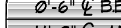
Fire Protection

FIRE PROTECTION AND LIFE SAFETY SPECIALISTS
SINCE 1961

LOS ANGELES OFFICE
1075 W. Lombard Rd.
Brea, California 92621
call (714) 989-1800 • fax (714) 989-1620

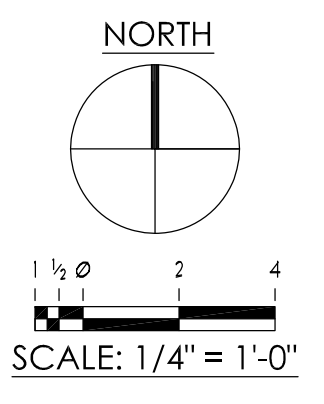
LOS ANGELES • IRVINE • SAN FRANCISCO • SACRAMENTO • PORTLAND • SEATTLE • ANCHORAGE

PROJECT: CHOC Hospital 455 S. Main St. Orange, CA 92668		CONTRACT WITH: McCarthy 20401 Southwest Birch St, Suite 300 Newport Beach, CA 92660	
DRAWING TITLE Level 2 - Area K			
DATE:	12-1-09		
SCALE:	1/4"=1'-0"		
DRAWN BY:	P.F.		
JOB NO.	LC-7196		
SHEET NO.	FP-2.K	 134	

- ## SYMBOL IDENTIFICATION LEGEND
- | | |
|---|--|
|  | • LINE RESTRAINT |
|  | • FIRE STOPPING THROUGH RATED WALL |
|  | • CALCULATION DESIGN AREA |
|  | • HYDRAULIC CALCULATION NODE |
|  | • CENTERLINE OF PIPE BELOW TOP OF STEEL |
|  | • CENTERLINE OF PIPE ABOVE FINISH FLOOR |
|  | • CENTERLINE OF PIPE BELOW DECK (SAME AS TOP OF STEEL) |
|  | • CENTERLINE OF PIPE ABOVE FINISH FLOOR |
|  | • RIGID GROOVED PIPE COUPLING (UNLESS NOTED AS FLEXIBLE) |
|  | • PIPE HANGER TO CONCRETE |
|  | • PIPE HANGER TO STEEL |
|  | • CEILING HEIGHT |

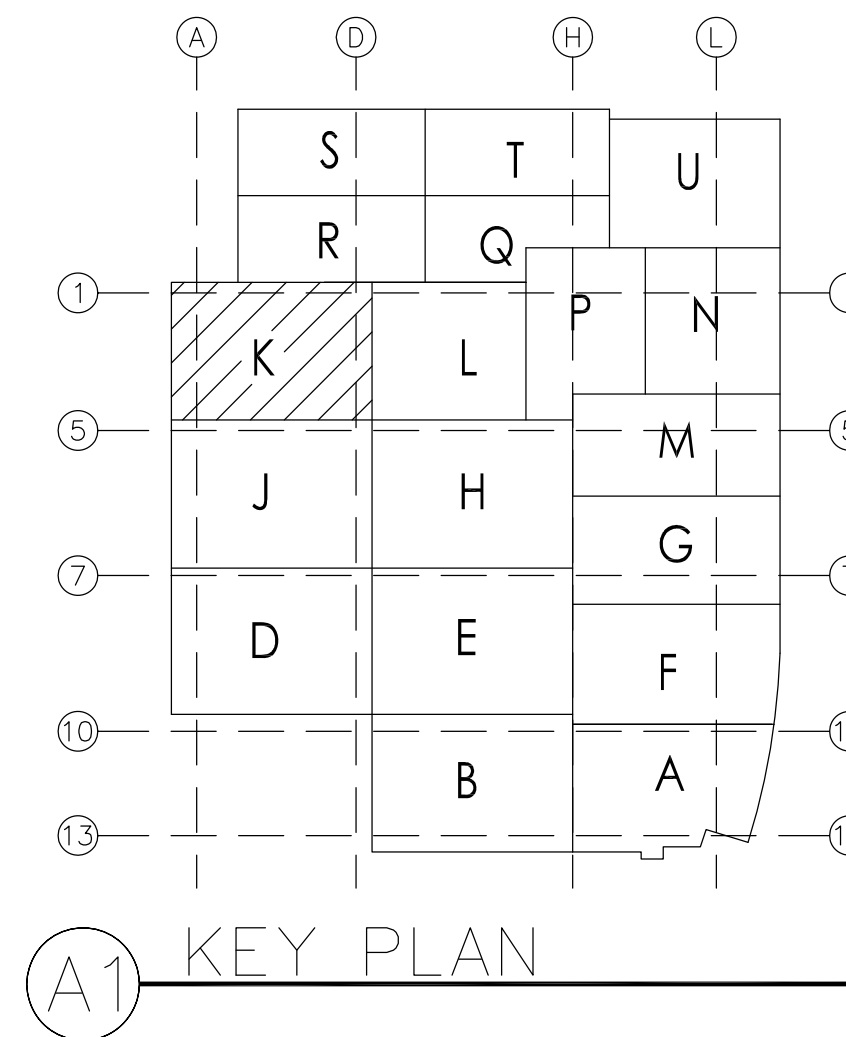
CEILING HEIGHT WILL TYPICALLY BE [9'-0"], UNLESS OTHERWISE NOTED ON THE PLAN.

AS BUILT DRAWING
Pat Fisher 7-30-2011



LEVEL 02 179.30' = 0'-0"

REFERENCE THIS SHEET

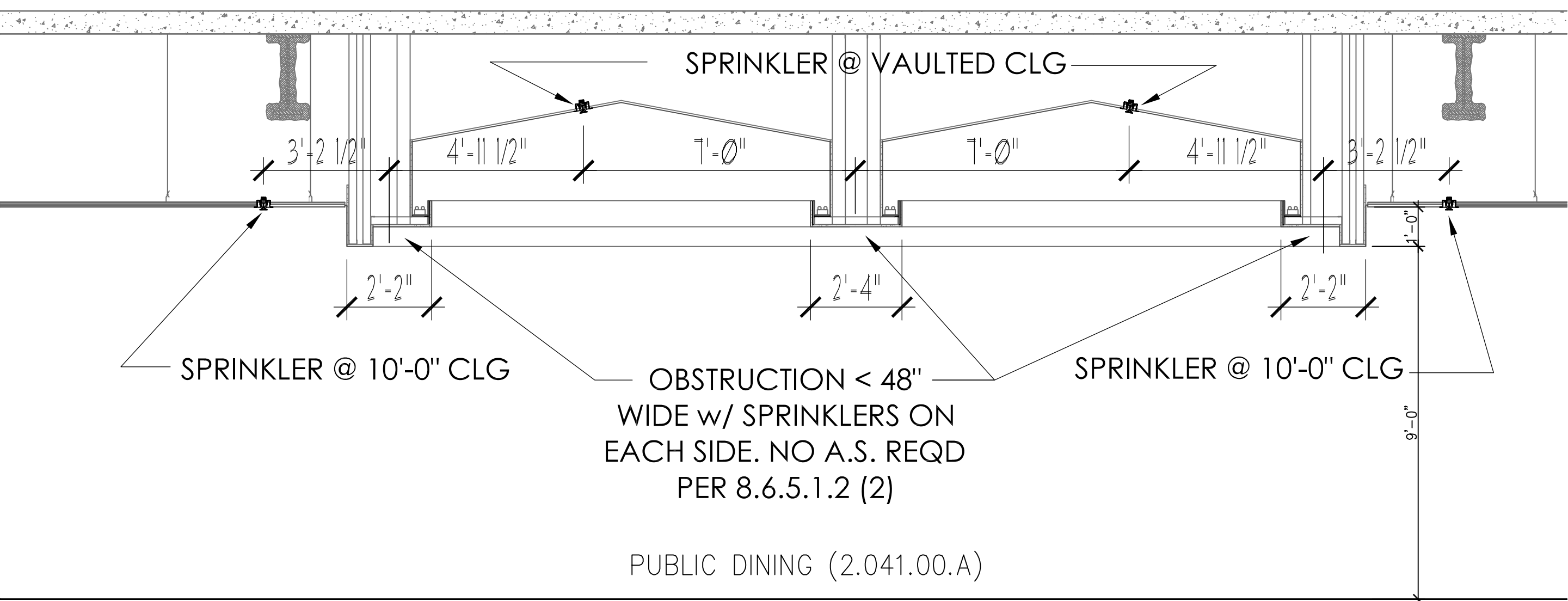
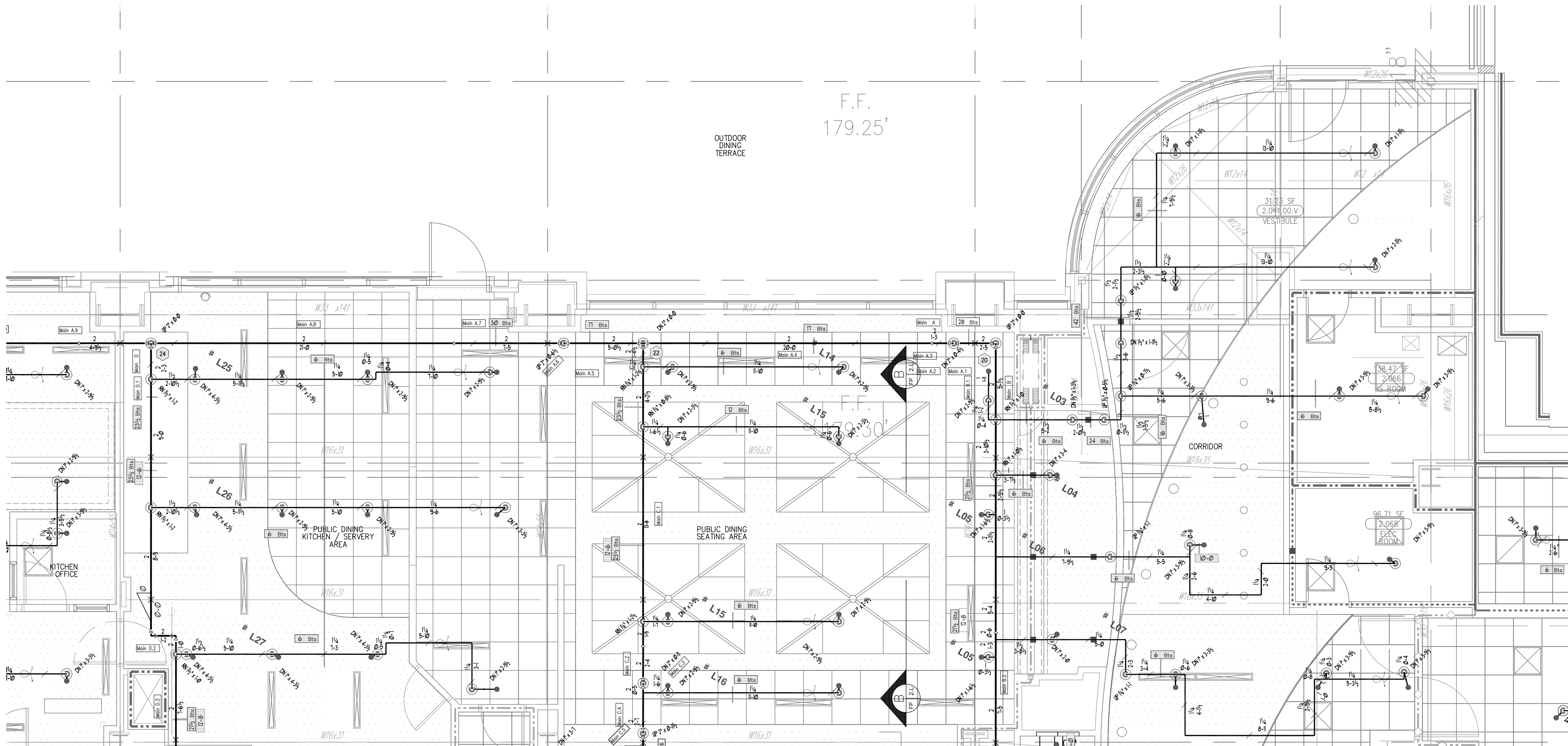


A1 KEY PLAN

OSHPD No.: IL-072072-30 / INCREMENT #7C - DA#16

Drawing: J:\LC-7196 CHOC\COSCO\CFP 02 AREA B & C CO 134.DWG

134



SECTION VIEW 'B' SCALE 3/8" = 1'-0"

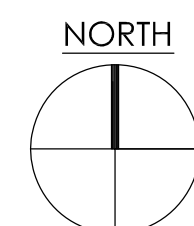
SYMBOL IDENTIFICATION LEGEND

- LINE RESTRAINT
- FIRE STOPPING THROUGH RATED WALL
- CALCULATION DESIGN AREA
- HYDRAULIC CALCULATION NODE
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- PIPE HANGER TO STEEL
- CEILING HEIGHT

CEILING HEIGHT WILL TYPICALLY BE 9'-0", UNLESS OTHERWISE NOTED ON THE PLAN.

AS BUILT DRAWING

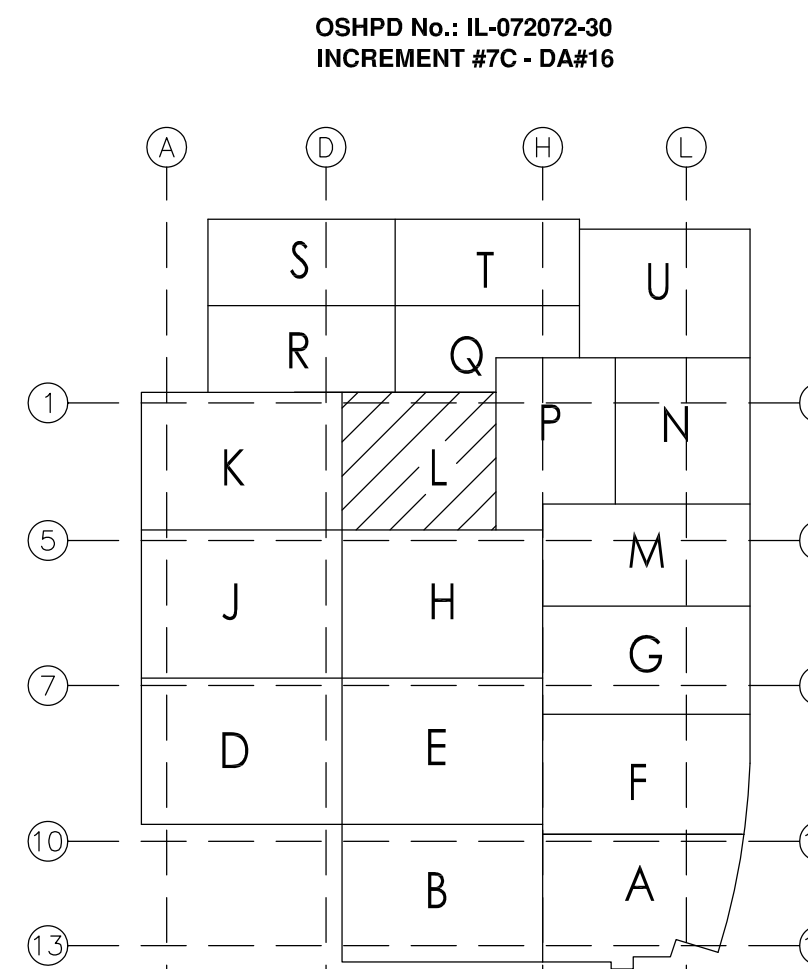
Pat Fisher 7.30.2012



SCALE: 1/4" = 1'-0"

LEVEL 02 179.30' = 0'-0"

REFERENCE THIS SHEET



A1 KEY PLAN

OSHPD No.: IL-072072-30 / INCREMENT #7C - DA#16

December 01, 2011 4:41:06 p.m.

Drawing: J:\LC-7196 CHOC\COSCO\CP 02 AREA 8 & C CO 134.DWG

Xrefs: I:\X12 AD.DWG\C-RCP-2.DWG\X-plan 2.DWG\CHANGE ORDER 134 - X-PLAN-2.DWG\CHANGE ORDER 134 - C-RCP-2.DWG\X-A4.2A.DWG\X-grid core 2.DWG\X-4206075_52-3A_B_C_D.DWG\X-MC 2TH-SECTION.DWG\C-shell L2.DWG\X-grid core la veta bridge L2.DWG\

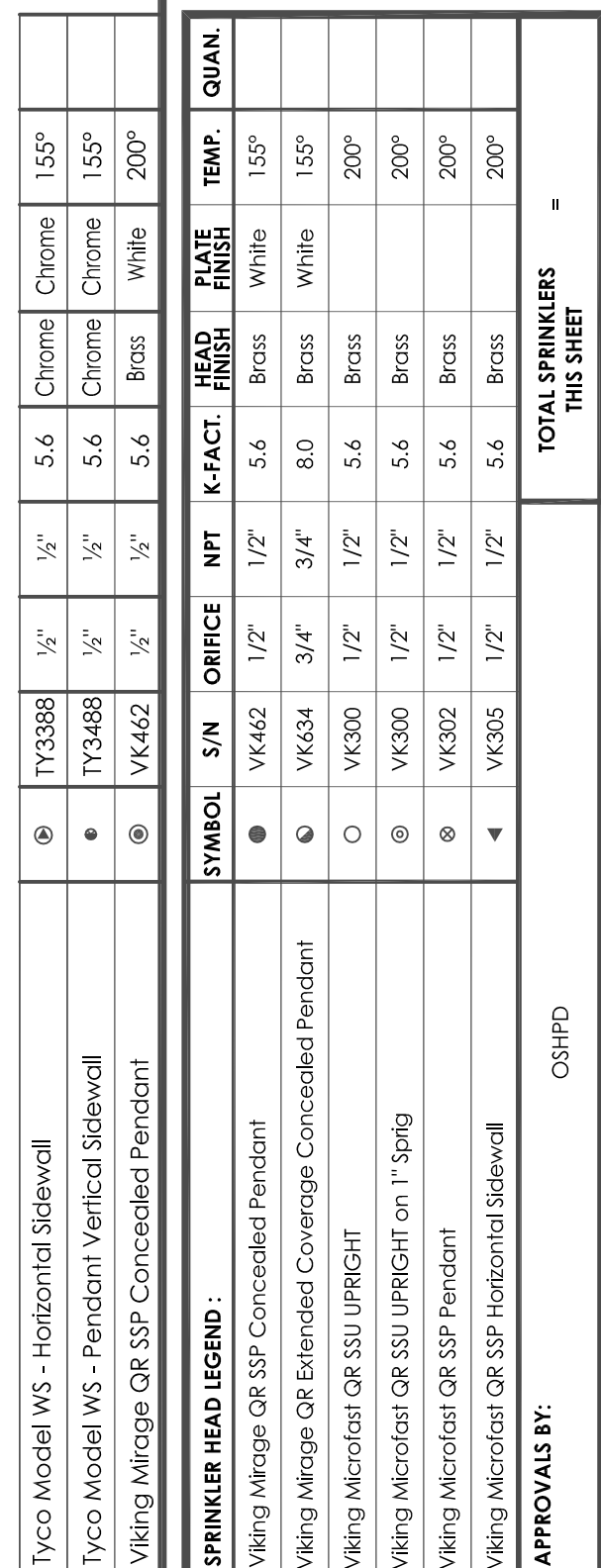
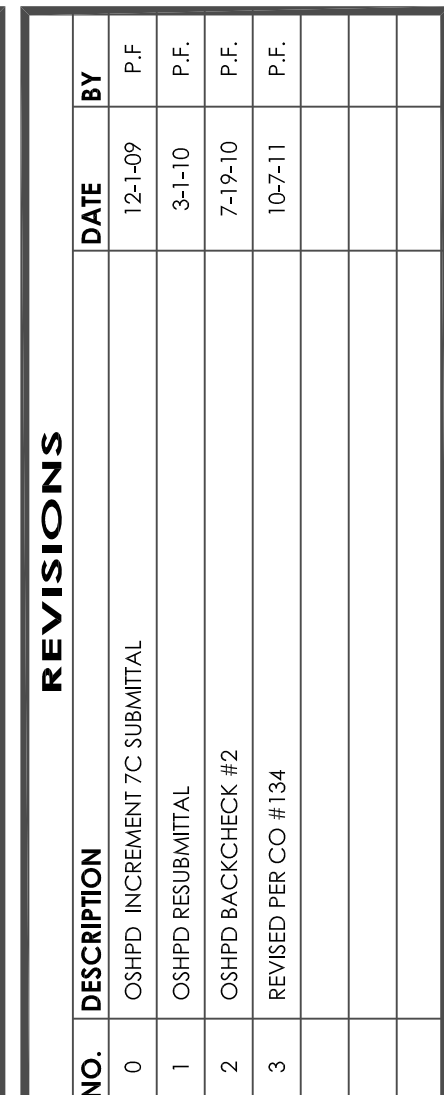


NO.	DESCRIPTION	REVISIONS	DATE	BY
0	OSHPD INCREMENT 7C SUBMITTAL		12-1-09	P.F.
1	OSHPD BACKCHECK #1		3-1-10	P.F.
2	OSHPD BACKCHECK #2		7-15-10	P.F.
3	REVISED PER CO #134		10-1-11	P.F.
TOTAL SPRINKLERS THIS SHEET				

COSCO
Fire Protection
FIRE PROTECTION AND LIFE SAFETY SPECIALISTS
LOS ANGELES OFFICE
1072 W. Lombard St.
LOS ANGELES, CA 90015
call (714) 899-1800 • FAX (714) 899-1603
SAN DIEGO • LOS ANGELES • FRENO • SAN FRANCISCO • SACRAMENTO • PORTLAND • SEATTLE • ANCHORAGE

PROJECT: **CHOC Hospital**
655 S. Main St.
Orange, CA 92668
CONTRACT WITH: **McCarthy**
20401 Southwest Birch St., Suite 300
Newport Beach, CA 92660
DRAWING TITLE: **Level 2 - Area L**

DATE: 12-1-09
SCALE: 1/4" = 1'-0"
DRAWN BY: P.F.
JOB NO.: **LC-7196**
SHEET NO.: **FP-2.L**



MCCARTHY APPROVAL	
A. Approved on basis for Architectural Review	☐
B. Review and Passcode	☐
C. Rejected	☐

This review is for general conformance with Plans and Specifications only. Any deviations from same not clearly noted by the Prepare have not been reviewed. Reviewer shall not constitute a complete check of detailed dimensions or count to serve to relieve the Prepare of contractual responsibility for any error or deviation from contract requirements.

McCarthy

By _____
Date _____

SHOP DRAWING REFERENCE NO.

 **COSCO**

Fire Protection

FIRE PROTECTION AND LIFE SAFETY SPECIALISTS

1073 W. Lombard Rd.
Brea, California 92621

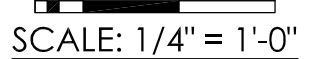
LOS ANGELES OFFICE

1073 W. Lombard Rd.
Brea, California 92621

call (714) 989-1800 • fax (714) 989-1820

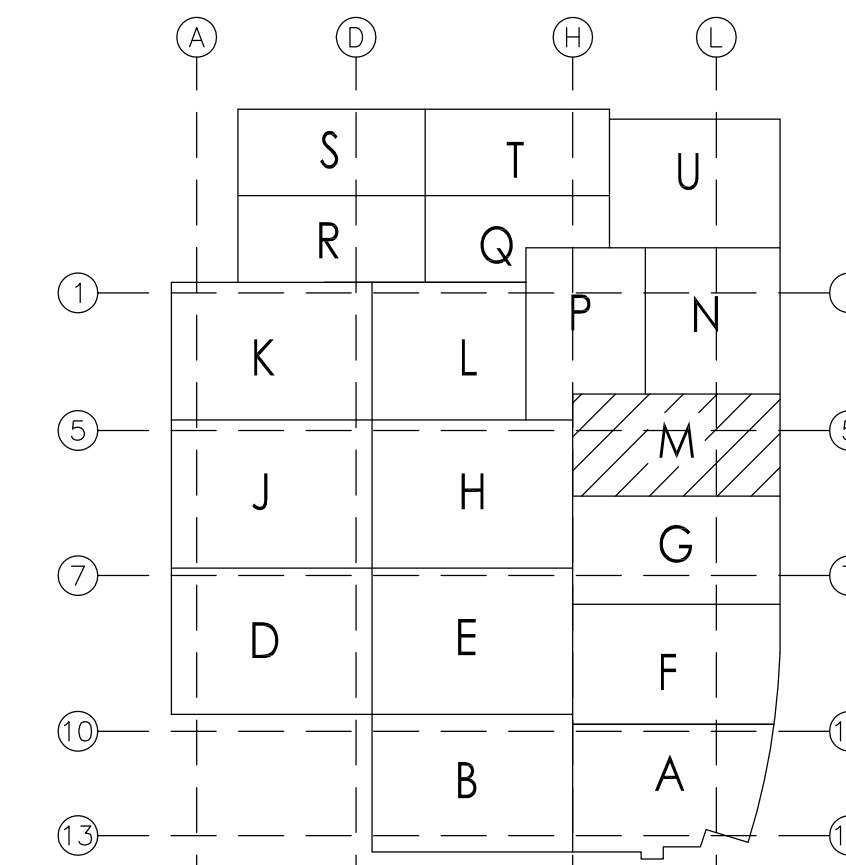
LOS ANGELES • IRVINE • SAN FRANCISCO • SACRAMENTO • PORTLAND • SEATTLE • ANCHORAGE

- AS BUILT DRAWING
Pat Fisher 7-30-2012



LEVEL 02 179.30' = 0'-0"

REFERENCE THIS SHEET



Ⓐ KEY PLAN

OSHPD No.: IL-072072-30 / INCREMENT #7C - DA#16

PROJECT: CHOC Hospital
455 S. Main St.
Orange, CA 92668

CONTRACT WITH: McCarthy
20401 Southwest Birch St, Suite 300
Newport Beach, CA 92660

DRAWING TITLE
Level 2 - Area M

DATE:	12-1-09
SCALE:	1/4"=1'-0"
DRAWN BY:	P.F.
JOB NO.	LC-7196

SHEET NO. FP-2.M	134
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