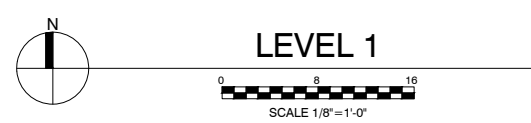
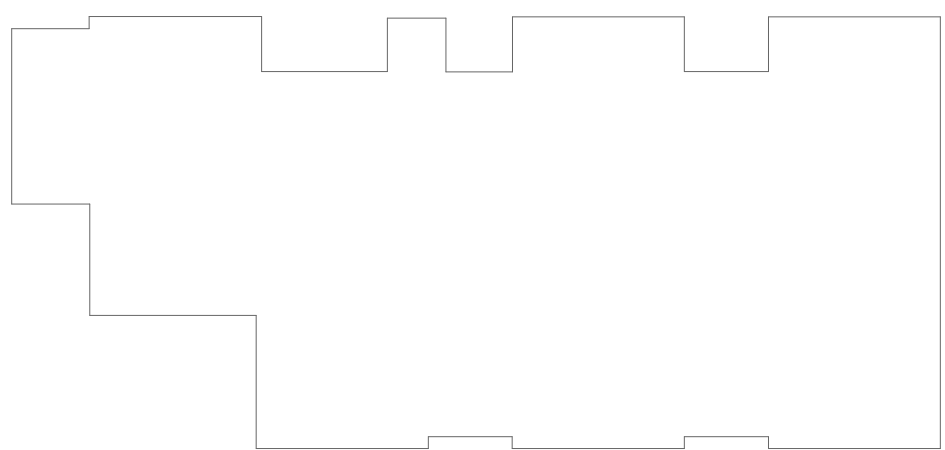


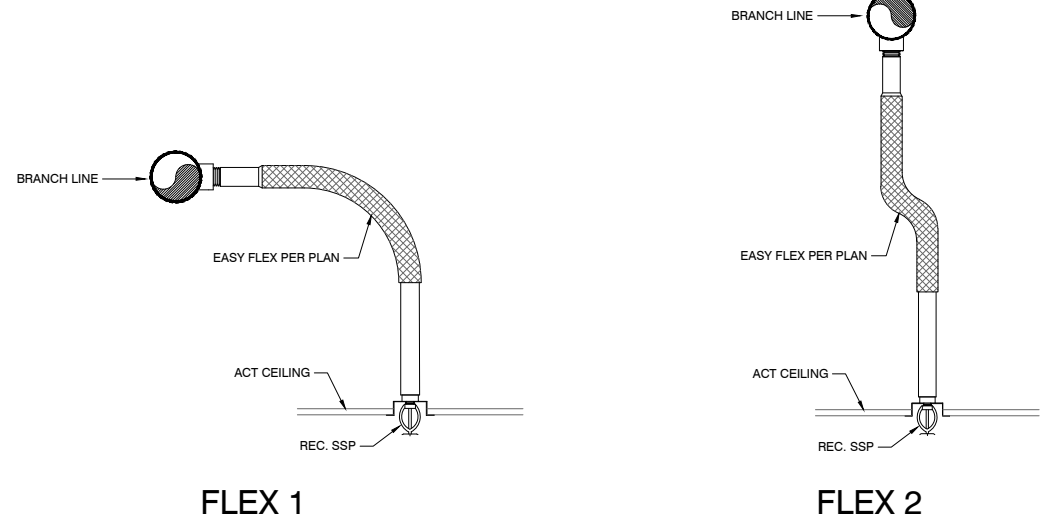
**AUXILIARY CALCULATED AREA**  
 DENSITY: 20 GPM OVER 907.5 SQUARE FEET  
 SYSTEM DEMAND AT ROR: 233.4 GPM AT 141.7 PSI  
 (INCLUDING 0 GPM FOR INSIDE HOSE STREAMS)



**FITTER/LISTER NOTES:**

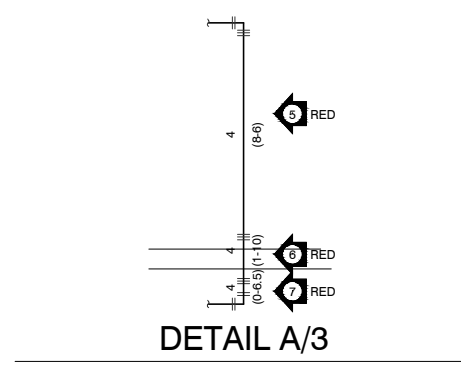
- ALL CPVC PIPING IS 1" U.N.O.
- ALL DROPS ARE TO BE 1" CPVC.
- HANGERS FOR CPVC PIPING ARE NOT SHOWN ON THE PLAN. HANGERS ARE REQUIRED WITHIN 6" OF THE SPRINKLER HEAD AT THE END OF THE LINE.  
 HANGER SPACING FOR CPVC PIPING IS PER THE MANUFACTURER'S LISTING AS FOLLOWS:  
 3/4" CPVC 5'-6" OC  
 1" CPVC 6'-0" OC  
 1 1/4" CPVC 6'-6" OC  
 1 1/2" CPVC 7'-0" OC  
 2" CPVC 8'-0" OC
- RELIABLE MODEL F1 RES 49/F1 RESIDENTIAL SPRINKLER SHALL NOT BE SPACED MORE THAN 18 FEET BETWEEN SPRINKLERS OR 9 FEET FROM A WALL
- RELIABLE MODEL F1 RES 49/F1 SPRINKLERS SHALL NOT BE SPACED AT MORE THAN 170 SQ. FT.
- RELIABLE MODEL F1 RES 49/F1 SPRINKLERS SHALL NOT BE SPACED LESS THAN 8FT BETWEEN SPRINKLER.
- ALL WALLS ARE FULL HEIGHT U.N.O.
- ALL STEEL PIPE IS NOTED BY SIZE AND LENGTH, FOR EXAMPLE: 1.25 1'-6"
- ALL CPVC PIPE IS NOTED BY SIZE ONLY, FOR EXAMPLE: 1.25 1'-6"
- ALL PIPE WITHOUT SIZE OR LENGTH IS 1" CPVC.
- LATERAL BRACING SHALL NOT BE REQUIRED WHERE PIPES ARE SUPPORTED BY RODS LESS THAN 6" PER NFPA 13 SECTION 9.3.5.3.8
- ALL PIPING THIS SHEET IS TO BE LOCATED AT 9'-11" AFF (5 BOD) UNO.
- ALL CEILING THIS LEVEL AT 9'-0" UNO.
- ALL STEEL DROPS THIS SHEET ARE TO BE 1 (0-2) WITH ADN UNO.
- ALL BRANCHLINE HANGERS ARE TO BE 6B UNO.
- ALL MAIN HANGERS ARE TO BE 4B UNO. EXCEPT STANDPIPE BULK IS 3B
- ALL FLEX DROPS ARE TO BE 4B EASY FLEX AND PER FLEX 1 DETAIL THIS SHEET UNO.
- SPRINKLERS OMITTED FROM BATHROOMS LESS THAN 55 SQ. FT. PER NFPA 13 SECTION 8.15.8.1.1
- SPRINKLERS OMITTED FROM CLOSETS LESS THAN 12 SQ. FT. PER NFPA 13 SECTION 21.20.19.2.1

\* INDICATES SPRINKLER INSTALLED WITH HEAD GUARD

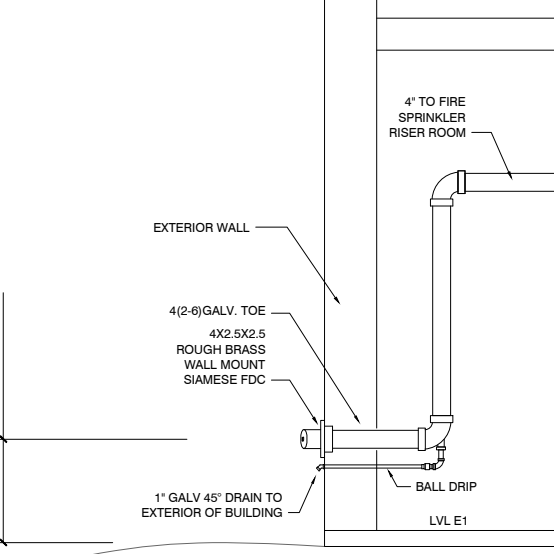


FLEX 1

FLEX 2



DETAIL A/3



FDC DETAIL

!CAUTION! 50% REDUCED PRINTS

**LEVEL 1**

HANGER LEGEND	
—	2-WAY EARTHQUAKE SWAY BRACE
—	4-WAY EARTHQUAKE SWAY BRACE
—	LETTER INDICATES TYPE
—	HANGER LOCATION
—	ELEVATION ABOVE REFERENCED POINT IN FEET AND INCHES
—	HYDRAULIC CALCULATION NODE
—	FLEXIBLE COUPLING
—	RIGID COUPLING

SPRINKLER LEGEND										
SYM	MANUFACTURER	S.I.N.	TYPE	MODEL	ORANGE	WHITE	4.0K	5.0K	1.2"	1.75
■	RELIABLE	R3516	SSP	F1RES49	WHITE	WHITE	4.0K	5.0K	1.2"	1.75
◀	RELIABLE	R5734	DRY HSW	F3QR	CHR	CHR	5.0K	5.0K	1"	1.55
■	RELIABLE	R3516	SSP	F1RES49	WHITE	WHITE	4.0K	5.0K	1.2"	1.75
○	RELIABLE	RA1425	SSU	F1FR-56	BRASS	—	5.0K	5.0K	1.2"	1.55
●	RELIABLE	RA1414	SSP	F1FR-56	CHR	CHR	5.0K	5.0K	1.2"	1.55
◐	RELIABLE	RA1425	SSU	F1FR-56	BRASS	—	5.0K	5.0K	1.2"	2.00
◑	RELIABLE	RA1664	DRY HSW	DH-56	CHR	CHR	5.0K	5.0K	1"	1.55
<	RELIABLE	RA1664	HSW	F1RES44	WHITE	WHITE	4.4K	5.0K	1.2"	1.55

ABBREVIATIONS	
REF	ABOVE FINISHED FLOOR
BOB	BOTTOM OF BEAM
BOB	BOTTOM OF RIB
BOB	BOTTOM OF JOIST
BOB	BOTTOM OF FURCH
BOB	BOTTOM OF TRUSS
CRS	CORNER TO SUIT
FIN	FINISH ORDER
IFW	INSIDE FACE OF WALL
OWW	OUTSIDE FACE OF WALL
NAS	NO AUTO SPRINKLERS
UNO	UNLESS NOTED OTHERWISE

SYMBOL LEGEND	
—	CENTERLINE OF PIPE TO REFERENCED STRUCTURE IN INCHES
—	2-WAY EARTHQUAKE SWAY BRACE
—	LETTER INDICATES TYPE
—	4-WAY EARTHQUAKE SWAY BRACE
—	LETTER INDICATES TYPE
—	HANGER LOCATION
—	ELEVATION ABOVE REFERENCED POINT IN FEET AND INCHES
—	HYDRAULIC CALCULATION NODE
—	FLEXIBLE COUPLING
—	RIGID COUPLING

REVISIONS			
NO.	DATE	BY	REASON FOR REVISION

CONTRACT WITH  
**ANDERSEN CONSTRUCTION COMPANY**  
 900 POPLAR PL.  
 SEATTLE, WA 98144

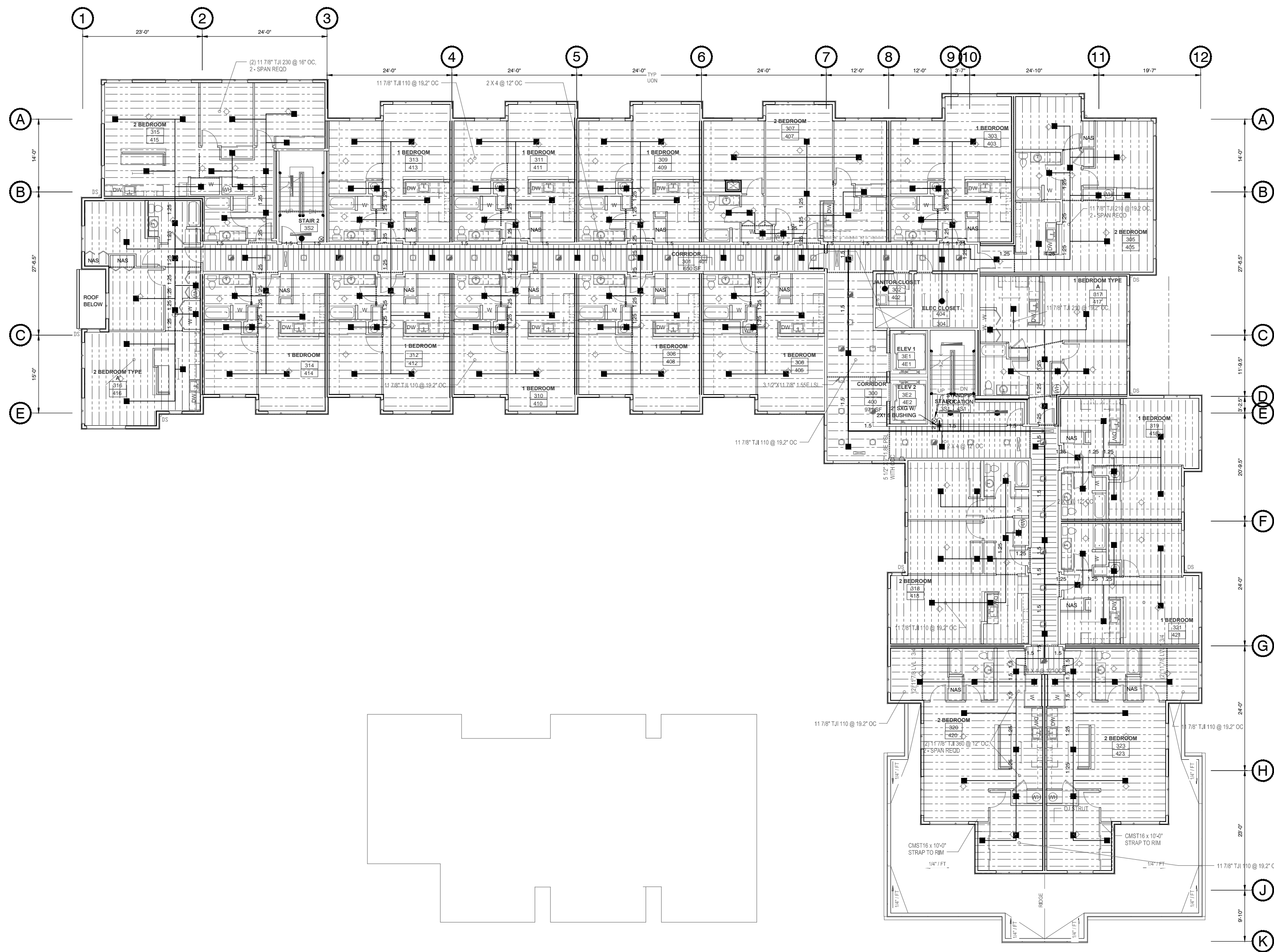
PROJECT MANAGER : BEN BRODSKY  
 PHONE : 206-396-7095  
 FAX : 206-763-6710  
 SUPERINTENDENT : SPANKY BARNES  
 PHONE : 253-358-0102  
 FAX :

**SMITH FIRE SYSTEMS, INC.**  
 1100 54th AVE EAST  
 TACOMA, WA 98424  
 CONTR. REG. NO. SMTHFS13607  
 Bus: (253) 926-1880 FAX: (253) 926-2350

**EAST FIR APARTMENTS BUILDING A**  
 1105 EAST FIR  
 SEATTLE, WA 98122

DESIGNER	PROJECT MGR	DATE	SHEET	JOB NO.
AARON N.	B. COOK	11/20/2013	3 OF 10	TC12012



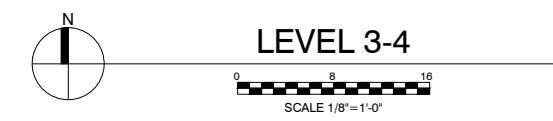


**FITTER/LISTER NOTES:**

1. ALL CPVC PIPING IS 1" U.N.O.
2. ALL DROPS ARE TO BE 1" CPVC.
3. SPRINKLER PIPING IN JOIST SPACES ARE TO BE 6" ABOVE THE BOTTOM OF JOIST (ABOJ).
4. HANGERS FOR CPVC PIPING ARE NOT SHOWN ON THE PLAN. HANGERS ARE REQUIRED WITHIN 6" OF THE SPRINKLER HEAD AT THE END OF THE LINE.  
HANGER SPACING FOR CPVC PIPING IS PER THE MANUFACTURE'S LISTING AS FOLLOWS:  

3/4" CPVC	5'-6" OC
1" CPVC	6'-0" OC
1 1/4" CPVC	6'-6" OC
1 1/2" CPVC	7'-0" OC
2" CPVC	8'-0" OC
5. RELIABLE MODEL F1 RES 49/F1 RESIDENTIAL SPRINKLER SHALL NOT BE SPACED MORE THAN 16 FEET BETWEEN SPRINKLERS OR 8 FEET FROM A WALL.
6. RELIABLE MODEL F1 RES 49/F1 SPRINKLERS SHALL NOT BE SPACED AT MORE THAN 145 SQ. FT.
7. RELIABLE MODEL F1 RES 49/F1 SPRINKLERS SHALL NOT BE SPACED LESS THAN 8FT BETWEEN SPRINKLER.
8. ALL WALLS ARE FULL HEIGHT U.N.O.
9. ALL STEEL PIPE IS NOTED BY SIZE AND LENGTH, FOR EXAMPLE:  $\frac{1.25}{1-6}$
10. ALL CPVC PIPE IS NOTED BY SIZE ONLY, FOR EXAMPLE: 1.25
11. ALL PIPE WITHOUT SIZE OR LENGTH IS 1" CPVC.
12. SPRINKLERS OMITTED FROM BATHROOMS LESS THAN 55 SQ. FT. PER NFPA 13 SECTION 8.15.8.1.1
13. SPRINKLERS OMITTED FROM CLOSETS LESS THAN 12 SQ. FT. PER NFPA 13 SECTION 21.20.19.2.1

!CAUTION! 50% REDUCED PRINTS



**LEVEL 3-4**

**LEVEL 3-4**

HANGER LEGEND		SPRINKLER LEGEND		ABBREVIATIONS		SYMBOL LEGEND		REVISIONS		CONTRACT WITH		DESIGNER	
SYM	MANUFACTURER	S.I.N.	TYPE	MODEL	SPACING	ORICE	ORICE	NO.	DATE	BY	REASON FOR REVISION	DESIGNER	PROJECT MGR
■	RELIABLE	R3516	SSP	F1RES49	WHITE	4.9K	1/2"	175	37			AARON N.	B. COOK
■	RELIABLE	R3516	SSP	F1RES49	WHITE	4.9K	1/2"	175	134				
●	RELIABLE	RAX1414	SSP	F1FR56	CHR	5.6K	1/2"	155	4				
●	RELIABLE	RAT1414	SSU	F1FR56	CHR	5.6K	1/2"	200	1				

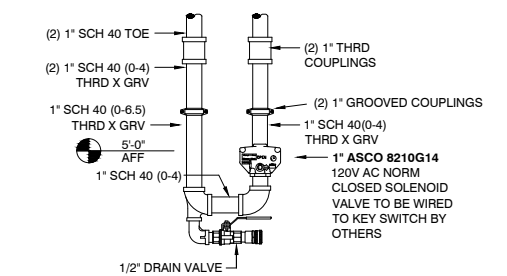
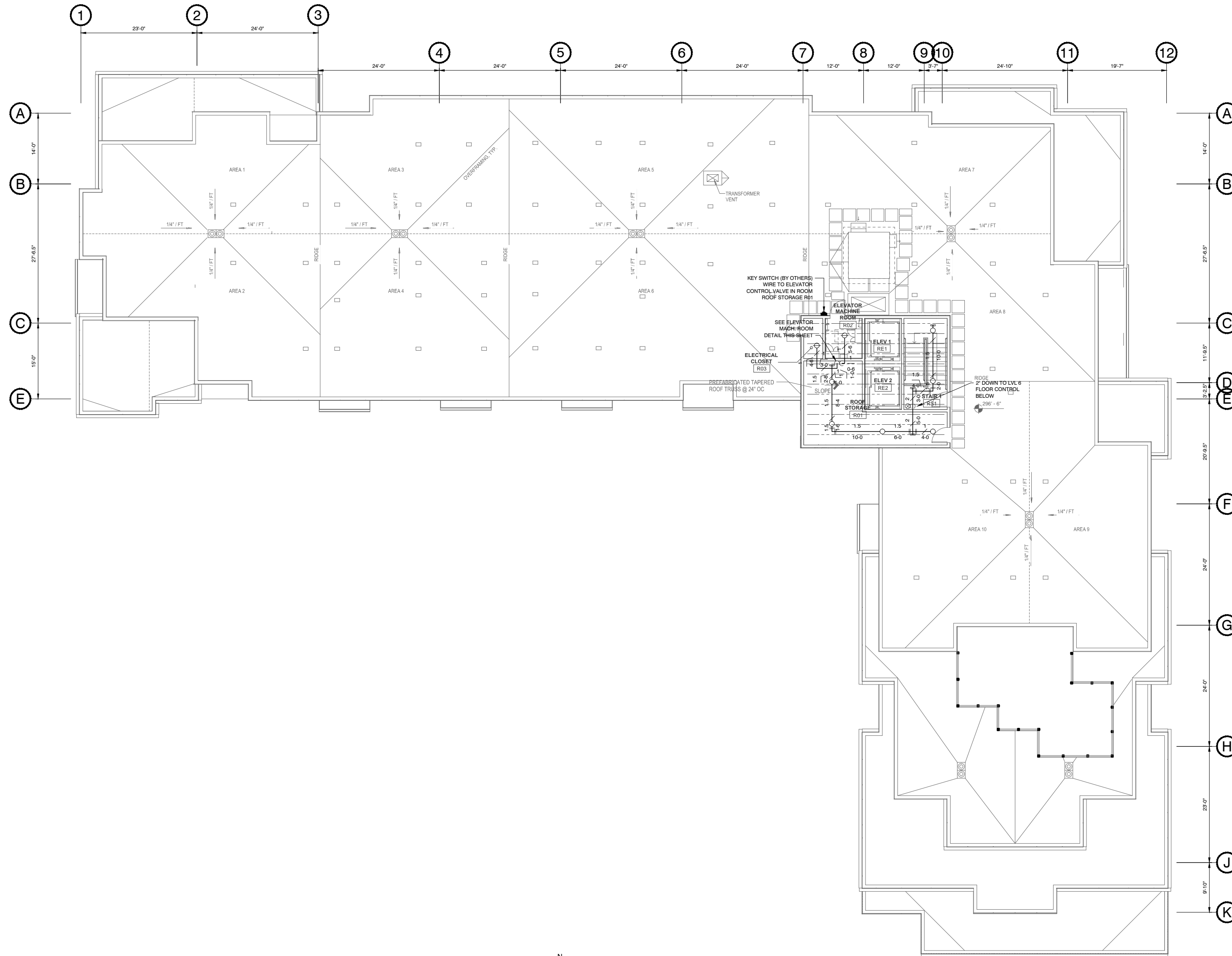
NO.	DATE	BY	REASON FOR REVISION

<p>CONTRACT WITH</p> <p><b>ANDERSEN CONSTRUCTION COMPANY</b> 900 POPLAR PL. SEATTLE, WA 98144</p> <p>PROJECT MANAGER: BEN BRODSKY PHONE: 206-396-7095 FAX: 206-763-6710 SUPERINTENDENT: SPANKY BARNES PHONE: 253-358-0102 FAX:</p>		<p><b>SMITH FIRE SYSTEMS, INC.</b> 1105 54th AVE EAST TACOMA, WA 98404 CONTR. REG. NO. SMTHFS13607 Bus: (253) 926-1880 FAX: (253) 926-2350</p> <p><b>EAST FIR APARTMENTS BUILDING A</b> 1105 EAST FIR SEATTLE, WA 98122</p>
--	--	---



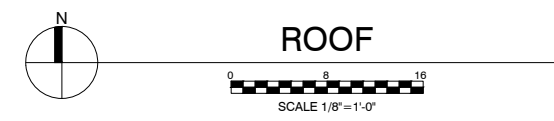




ELEV. CONTROL LOOP DETAIL

LISTER NOTES

1. ALL PIPING THIS SHEET IS TO BE LOCATED AT 6" BELOW JOIST.
2. ALL HANGERS ARE TO BE 5SW UNO.



!CAUTION! 50% REDUCED PRINTS

ROOF

HANGER LEGEND	
○	RELIAIBLE
⊕	RELIAIBLE

SPRINKLER LEGEND										
SYM	MANUFACTURER	S.I.N.	TYPE	MODEL	APPROX. PRICE	QUANTITY	SIZE	SPACING	NO. OF	REMARKS
○	RELIABLE	RA1425	SSU	F1FR-96	BRASS	---	5.6K	1/2"	155	6
⊕	RELIABLE	RA1425	SSU	F1FR-96	BRASS	---	5.6K	1/2"	200	2

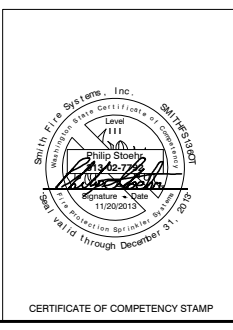
ABBREVIATIONS	
RF	ROOF FINISHED FLOOR
BOB	BOTTOM OF BEAM
ROD	BOTTOM OF ROOF
BOJ	BOTTOM OF JOIST
ROF	BOTTOM OF FURFUR
BOF	BOTTOM OF FLOOR
ROF	BOTTOM OF ROOF TRUSS
CTB	FIELD TO BE
FD	FIELD ORDER
IFOW	INSIDE FACE OF WALL
OFOW	OUTSIDE FACE OF WALL
OW	NO AUTO SPRINKLERS UNLESS NOTED OTHERWISE

SYMBOL LEGEND	
○	CENTERLINE OF PIPE TO REFERENCED STRUCTURE IN INCHES
⊕	2-WAY EARTHQUAKE SWAY BRACE LETTER INDICATES TYPE
⊕	4-WAY EARTHQUAKE SWAY BRACE LETTER INDICATES TYPE
⊕	HANGER LOCATION
⊕	ELEVATION ABOVE REFERENCED POINT IN FEET AND INCHES
○	HYDRAULIC CALCULATION NODE
⊕	FLEXIBLE COUPLING
⊕	RIGID COUPLING

REVISIONS			
NO.	DATE	BY	REASON FOR REVISION

CONTRACT WITH  
**ANDERSEN CONSTRUCTION COMPANY**  
 900 POPLAR PL.  
 SEATTLE, WA 98144

PROJECT MANAGER: BEN BRODSKY  
 PHONE: 206-396-7095  
 FAX: 206-763-6710  
 SUPERINTENDENT: SPANKY BARNES  
 PHONE: 253-358-0102  
 FAX: \_\_\_\_\_



CERTIFICATE OF COMPETENCY STAMP

KEY PLAN

**SFS SMITH FIRE SYSTEMS, INC.**  
 1105 54th AVE EAST  
 TACOMA, WA 98404  
 CONTR. REG. NO. SMTHFS13607  
 Bus: (253) 926-1880 FAX: (253) 926-2350

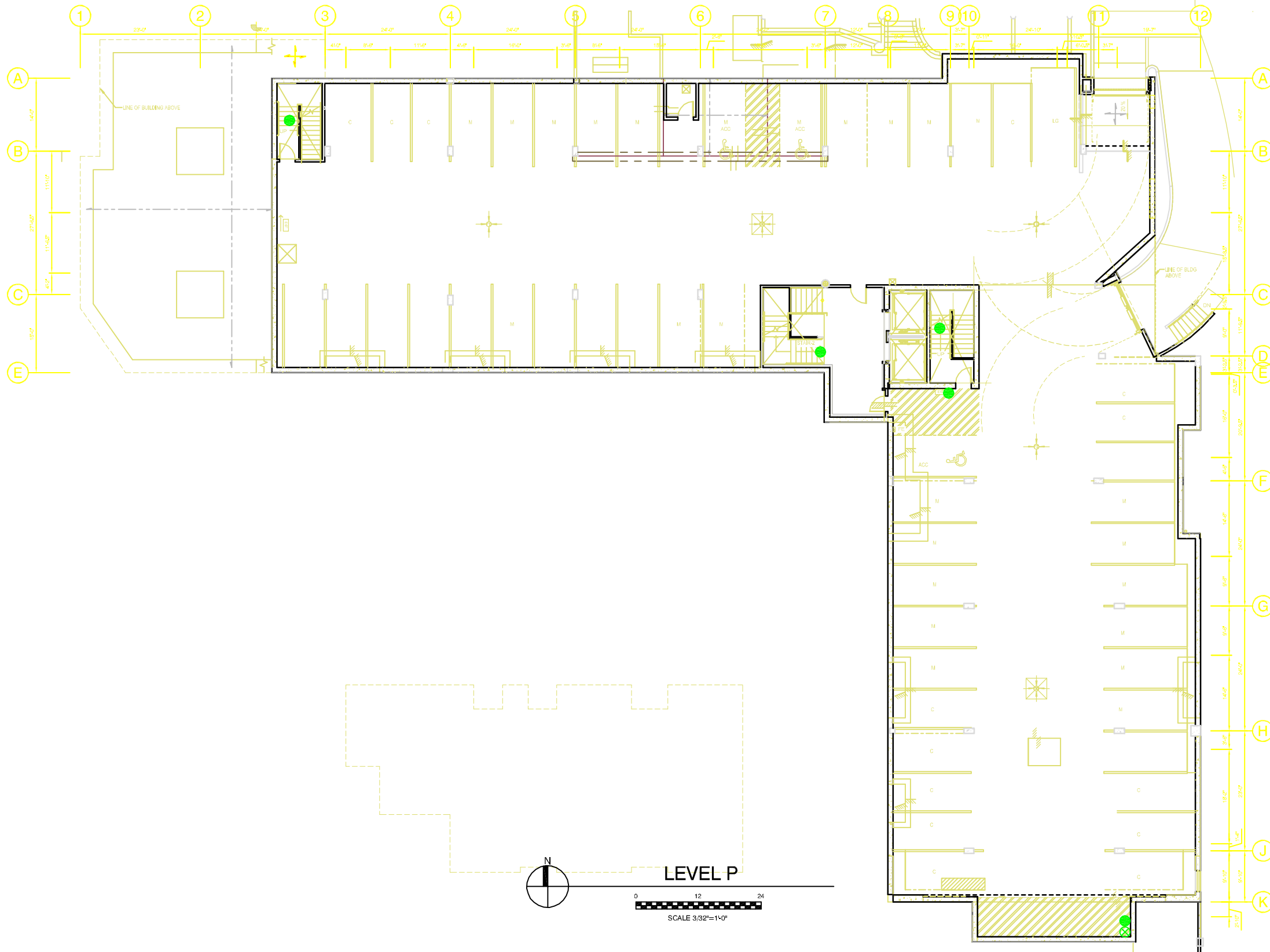
**EAST FIR APARTMENTS BUILDING A**  
 1105 EAST FIR  
 SEATTLE, WA 98122

DESIGNER	PROJECT MGR	DATE	SHEET	JOB NO.
AARON N.	B. COOK	11/20/2013	8 OF 10	TC12012









- INDICATES LOW POINT DRAIN LOCATION
- ⊗ INDICATES INSPECTORS TEST LOCATION

## LOW POINT DRAIN PLAN

SPRINKLER LEGEND									
SYM	MANUFACTURER	TYPE	MODEL	REG. PRESS.	ESQUIZONERA PRESS.	ORANGE SIZE	THREAD SIZE	TWSP. RATING	QUANTITY
TOTAL THIS SHEET									

ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
BOB	BOTTOM OF BEAM
BOD	BOTTOM OF DECK
BOJ	BOTTOM OF JOIST
BOP	BOTTOM OF PURLIN
BOV	BOTTOM OF TRUSS
C/S	CUT TO SUIT
FO	FIELD ORDER
I/FOV	INSIDE FACE OF WALL
O/FOV	OUTSIDE FACE OF WALL
NAS	NO AUTO. SPRINKLERS
UND	UNLESS NOTED OTHERWISE

SYMBOL LEGEND	
⊖	CENTERLINE OF PIPE TO REFERENCED STRUCTURE IN INCHES
⊖	2-WAY EARTHQUAKE SWAY BRACE LETTER INDICATES TYPE
⊖	4-WAY EARTHQUAKE SWAY BRACE LETTER INDICATES TYPE
⊖	HANGER LOCATION
⊖	ELEVATION ABOVE REFERENCED POINT IN FEET AND INCHES
⊖	HYDRAULIC CALCULATION NODE
⊖	FLEXIBLE COUPLING
⊖	RIGID COUPLING

REVISIONS			
NO.	DATE	BY	REASON FOR REVISION

CERTIFICATE OF COMPETENCY STAMP

CONTRACT WITH  
**ANDERSEN CONSTRUCTION COMPANY**  
 900 POPLAR PL  
 SEATTLE, WA 98144  
 PROJECT MANAGER : BEN BRODSKY  
 PHONE : 206-396-7095  
 FAX :  
 SUPERINTENDENT : SPANKY BARNES  
 PHONE : 253-358-0102  
 FAX :

	<b>SMITH FIRE SYSTEMS, INC.</b> 1106 54th AVE EAST TACOMA, WA 98424 CONTR. REG. NO. SMITHFS1960T Bus: (253) 926-1880 FAX: (253) 926-2350			
	<b>EAST FIR APARTMENTS          BUILDING A          1105 EAST FIR          SEATTLE, WA 98122</b>			
DESIGNER	PROJECT MGR	DATE	SHEET	JOB NO.
AARON N.	BRANDON C.	12-24-14	1 OF 1	TC12012

!CAUTION! 50% REDUCED PRINTS