COST SUMMARY

Date:
Project: Hidden For Prviacy
Project Location: Hidden For Prviacy

Project Type: Commercial
Scope of Work: Fire Suppression
Total Base Bid: $ 134,391

BASE BID	TOTAL COSTS
BASE BID	$ 405,194
DEDUCT ALTERNATE	$ 134,391
Note: Click on any of the above text to go to the relevant Tab	

CSI Summary for Base Bid

Div. No.	CSI Division	Labor Cost	Material Cost	Total Cost	% of sub-total cost	
DIV-01	General Requirements	$ -	$ -	$ 23,907	7.8%	
DIV-21	Fire Suppression	$ 98,296	$ 185,993	$ 284,289	92.2%	
	SUB TOTAL	$ 98,296	$ 185,993	$ 308,196		
	MATERIAL TAX		$ 9,300	$ 9,300		5.0%
	OVERHEAD AND PROFIT			$ 61,639		20.0%
	BOND FEE			$ 9,478		2.5%
	CONTIGENCY			$ 16,581		5.4%
	TOTAL BASE BID			$ 405,194		

For Client's Use Only

Comparison with Sub-Quotes

Enter Sub-Quotes here	Difference	Comments
	$ 23,907	
	$ 284,289	
	$ 308,196	
	$ 9,300	
	$ 61,639	
	$ 9,478	
	$ 16,581	
	$ 405,194	

ITEM #	REF. SHEET	DETAIL	CSI SECT	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST

Estimate of Materials and Cost of Construction

CLICK HERE TO GO BACK TO COST SUMMARY

Sub-Total		$	308,196	
Material Tax & Inflation	5.0%	$	9,300	(Adjust the percentage for Material tax as required)
Overhead & Profit	20%	$	61,639	(Adjust the percentage for Overhead & Profit as required)
Contingency	5%	$	16,581	(Adjust the percentage for Contingency as required)
Bond Fee	2.5%	$	9,478	(Adjust the percentage for Bond Fee as required)
Total Base Bid		$	405,194	

Material Wastage 1	0%	(for Quantities in Each & LS)
Material Wastage 2	10%	(for Quantities in LF, SF, SY, CY, LBS, TONS)

Note: Contractor can add or Remove Allowances from DIV-1 Tab According to his Requirements

Date:
Project: Hidden For Prviacy
Project Location: Hidden For Prviacy
Project Type: Commercial

Contractor Name:
Company Name:
Client Email:
Website:
Cell:

Gross Area Building (SF) 18,026

ITEM #	REF. SHEET	DETAIL	CSI SECT	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
			DIV-01	**General Requirements**												$ 23,907
				Plan Design and Permitting												
1			DIV-01	Permit Fee	1	0%	1	LS		-		$ -			$ -	
				Equipment and Tools												
2			DIV-01	Tool Rentals	1	0%	1	LS		-		$ -			$ 2,685	
3			DIV-01	Mobilization/Demobilization (Temporary Control & Facilities)	1	0%	1	LS		-		$ -			$ 6,200	
				Cleaning and Final												
4			DIV-01	Final Cleaning	1	0%	1	LS		-		$ -			$ 3,500	
				Project Management & Supervision												
5			DIV-01	Project Management & Supervision	1	0%	1	LS							$ 11,522	
			DIV-21	**Fire Suppression**												$ 284,289
				Water Service Piping												
				Underground												
6	FA201 & FA202	Plan Notes	DIV-21	6" Underground Fire Protection Service	11	10%	12	LF	0.372	4.59	$ 68.3	$ 313	$ 47.5	$ 586.2	$ 900	
				Along Floor												
7	FA201 & FA202	Plan Notes	DIV-21	2" Main Fire Protection Drain	7	10%	8	LF	0.262	2.15	$ 68.3	$ 147	$ 27.6	$ 225.8	$ 372	
8	FA201 & FA202	Plan Notes	DIV-21	6" Sprinkler Pipe	1,328	10%	1,461	LF	0.372	543.37	$ 68.3	$ 37,085	$ 47.5	$ 69,382.3	$ 106,467	
9	FA201 & FA202	Plan Notes	DIV-21	4" Standpipe	130	10%	143	LF	0.330	47.04	$ 68.3	$ 3,210	$ 35.2	$ 5,017.3	$ 8,228	
				Along Roof												
10	FA201 & FA202	Plan Notes	DIV-21	6" Sprinkler Pipe	856	10%	942	LF	0.372	350.30	$ 68.3	$ 23,908	$ 47.5	$ 44,728.6	$ 68,636	
				Fire Suppression Standpipes/Riser												
				Standpipe(5' Assumed)												
11	FA201 & FA202	Plan Notes	DIV-21	4" Standpipe - UP	1	0%	1	EA	1.531	1.53	$ 68.3	$ 105	$ 130.0	$ 130.0	$ 235	
12	FA201 & FA202	Plan Notes	DIV-21	4" Standpipe - DN	1	0%	1	EA	1.531	1.53	$ 68.3	$ 105	$ 130.0	$ 130.0	$ 235	
13	FA201 & FA202	Plan Notes	DIV-21	6" Sprinkler Pipe - UP	4	0%	4	EA	2.156	8.63	$ 68.3	$ 589	$ 237.5	$ 950.0	$ 1,539	
14	FA201 & FA202	Plan Notes	DIV-21	2-1/2" Standpipe - UP	2	0%	2	EA	1.200	2.40	$ 68.3	$ 164	$ 163.3	$ 326.5	$ 490	
15	FA201 & FA202	Plan Notes	DIV-21	2-1/2" Standpipe - DN	1	0%	1	EA	1.200	1.20	$ 68.3	$ 82	$ 138.0	$ 138.0	$ 220	
				Sprinkler Pipe(5' Assumed)												
16	FA201 & FA202	Plan Notes	DIV-21	2" Sprinkler Pipe - UP	1	0%	1	EA	1.200	1.20	$ 68.3	$ 82	$ 128.3	$ 128.3	$ 210	
17	FA201 & FA202	Plan Notes	DIV-21	2" Sprinkler Pipe - DN	2	0%	2	EA	1.200	2.40	$ 68.3	$ 164	$ 128.3	$ 256.6	$ 420	
18	FA201 & FA202	Plan Notes	DIV-21	1/2" Sprinkler Pipe - UP	2	0%	2	EA	0.535	1.07	$ 68.3	$ 73	$ 62.5	$ 125.0	$ 198	
19	FA201 & FA202	Plan Notes	DIV-21	6" Sprinkler Pipe - UP	4	0%	4	EA	2.156	8.63	$ 68.3	$ 589	$ 237.5	$ 950.0	$ 1,539	
20	FA201 & FA202	Plan Notes	DIV-21	6" Sprinkler Pipe - UP	4	0%	4	EA	2.156	8.63	$ 68.3	$ 589	$ 237.5	$ 950.0	$ 1,539	
				Sprinkler Head												
				Recessed												
21	FA201 & FA202	Plan Notes	DIV-21	Recessed Sprinkler Head	102	0%	102	EA	0.320	32.64	$ 68.3	$ 2,228	$ 21.2	$ 2,162.4	$ 4,390	
				Upright												
22	FA201 & FA202	Plan Notes	DIV-21	Upright Sprinkler To Protect Attic Space	81	0%	81	EA	0.288	23.33	$ 68.3	$ 1,592	$ 25.6	$ 2,075.2	$ 3,667	
				Dry												
23	FA201 & FA202	Plan Notes	DIV-21	Dry Pendent Sprinkler Heads In Garage	5	0%	5	EA	0.320	1.60	$ 68.3	$ 109	$ 32.6	$ 163.1	$ 272	
24	FA201 & FA202	Plan Notes	DIV-21	Dry Sidewall Sprinkler Head	7	0%	7	EA	0.320	2.24	$ 68.3	$ 153	$ 28.4	$ 198.9	$ 352	
25	FA201 & FA202	Plan Notes	DIV-21	Dry Sidewall Sprinkler Head Installed Under Stairs	3	0%	3	EA	0.320	0.96	$ 68.3	$ 66	$ 34.1	$ 102.4	$ 168	
				Fire Suppression Valves												
26	FA201 & FA202	Plan Notes	DIV-21	6" Wet Alarm Check Valve	1	0%	1	EA	2.650	2.65	$ 68.3	$ 181	$ 1,385.6	$ 1,385.6	$ 1,567	
27	FA201 & FA202	Plan Notes	DIV-21	4" Check Valve	1	0%	1	EA	1.920	1.92	$ 68.3	$ 131	$ 625.3	$ 625.3	$ 756	
28	FA201 & FA202	Plan Notes	DIV-21	6" Double Check Valve Assembly	2	0%	2	EA	5.980	11.96	$ 68.3	$ 817	$ 8,952.7	$ 17,905.3	$ 18,722	
29	FA201 & FA202	Plan Notes	DIV-21	Post Indicating Valve Test Header	1	0%	1	EA	2.980	2.98	$ 68.3	$ 204	$ 1,308.6	$ 1,308.6	$ 1,512	

30	FA201 & FA202	Plan Notes	DIV-21	6" Zone Control Valve Assembly	2	0%	2	EA	3.880	7.76	$ 68.3	$ 530	$ 1,265.3	$ 2,530.5	$ 3,061	
31	FA201 & FA202	Plan Notes	DIV-21	2-1/2" FDVC	2	0%	2	EA	0.852	1.70	$ 68.3	$ 116	$ 198.6	$ 397.2	$ 514	
32	FA201 & FA202	Plan Notes	DIV-21	4" Storz FDC	1	0%	1	EA	1.720	1.72	$ 68.3	$ 117	$ 512.3	$ 512.3	$ 630	
33	FA201 & FA202	Plan Notes	DIV-21	4" FDC	1	0%	1	EA	1.280	1.28	$ 68.3	$ 87	$ 481.3	$ 481.3	$ 569	
				Connections/Fittings												
				Elbow												
34	FA201 & FA202	Plan Notes	DIV-21	6" x 1/2", 90 Deg. Elbow Up	1	0%	1	EA	1.200	1.20	$ 68.3	$ 82	$ 108.7	$ 108.7	$ 191	
35	FA201 & FA202	Plan Notes	DIV-21	6" x 6" 90 Deg. Elbow Down	107	0%	107	EA	1.410	150.87	$ 68.3	$ 10,304	$ 123.2	$ 13,182.4	$ 23,487	
36	FA201 & FA202	Plan Notes	DIV-21	6" x 6" 90 Deg. Elbow Up	33	0%	33	EA	1.410	46.53	$ 68.3	$ 3,178	$ 123.2	$ 4,065.6	$ 7,244	
37	FA201 & FA202	Plan Notes	DIV-21	6" x 6" 90 Deg. Elbow	57	0%	57	EA	1.410	80.37	$ 68.3	$ 5,489	$ 123.2	$ 7,022.4	$ 12,512	
38	FA201 & FA202	Plan Notes	DIV-21	4" x 4" 90 Deg. Elbow Down	2	0%	2	EA	0.952	1.90	$ 68.3	$ 130	$ 38.5	$ 77.0	$ 207	
39	FA201 & FA202	Plan Notes	DIV-21	4" x 4", 45 Deg. Elbow	2	0%	2	EA	0.952	1.90	$ 68.3	$ 130	$ 38.5	$ 77.0	$ 207	
40	FA201 & FA202	Plan Notes	DIV-21	6" x 6", 45 Deg. Elbow	1	0%	1	EA	1.400	1.40	$ 68.3	$ 96	$ 123.2	$ 123.2	$ 219	
41	FA201 & FA202	Plan Notes	DIV-21	4" x 4", 90 Deg. Elbow	1	0%	1	EA	0.952	0.95	$ 68.3	$ 65	$ 123.2	$ 123.2	$ 188	
				Tees												
42	FA201 & FA202	Plan Notes	DIV-21	4" x 4" x 4" Tee	1	0%	1	EA	1.200	1.20	$ 68.3	$ 82	$ 52.6	$ 52.6	$ 135	
43	FA201 & FA202	Plan Notes	DIV-21	6" x 6" x 6" Tee	48	0%	48	EA	1.580	75.84	$ 68.3	$ 5,180	$ 151.2	$ 7,257.6	$ 12,437	
				End Cap												
44	FA201 & FA202	Plan Notes	DIV-21	End Cap	2	0%	2	EA	0.188	0.38	$ 68.3	$ 26	$ 15.3	$ 30.5	$ 56	
SUB TOTAL									**Total Lab. Hours =**	**$ 1,440**	**Total Lab. Cost =**	**$ 98,296**	**Total Mat. Cost =**	**$ 185,993**	**$ 308,196**	**$ 308,196**
TOTAL SUGGESTED BID																**$ 405,194**

ITEM #	REF. SHEET	DETAIL	CSI SECT	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST

Estimate of Materials and Cost of Construction

CLICK HERE TO GO BACK TO COST SUMMARY

Sub-Total		$	102,125	
Material Tax & Inflation	5.0%	$	3,202	(Adjust the percentage for Material tax as required)
Overhead & Profit	20%	$	20,425	(Adjust the percentage for Overhead & Profit as required)
Contingency	5%	$	5,494	(Adjust the percentage for Contingency as required)
Bond Fee	2.5%	$	3,144	(Adjust the percentage for Bond Fee as required)
Total Base Bid		$	134,391	

Material Wastage 1	0%	(for Quantities in Each & LS)
Material Wastage 2	10%	(for Quantities in LF, SF, SY, CY, LBS, TONS)

Note: Contractor can add or Remove Allowances from DIV-1 Tab According to his Requirements

Date:
Project: Hidden For Prviacy
Project Location: Hidden For Prviacy
Project Type: Commercial

Contractor Name:
Company Name:
Client Email:
Website:
Cell:

Gross Area Building (SF)	3,442

ITEM #	REF. SHEET	DETAIL	CSI SECT	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
			DIV-21	**Fire Suppression**												$ 102,125
				Water Service Piping												
				Along Floor												
1	FA202	Plan Notes	DIV-21	6" Sprinkler Pipe	518	10%	570	LF	0.372	211.97	$ 68.3	$ 14,467	$ 47.5	$ 27,065.5	$ 41,532	
2	FA202	Plan Notes	DIV-21	4" Standpipe	30	10%	33	LF	0.330	10.89	$ 68.3	$ 743	$ 26.0	$ 858.0	$ 1,601	
				Along Roof												
3	FA202	Plan Notes	DIV-21	6" Sprinkler Pipe	367	10%	404	LF	0.372	150.18	$ 68.3	$ 10,250	$ 47.5	$ 19,175.8	$ 29,425	
				Fire Suppression Standpipes/Riser												
				Standpipe(5' Assumed)												
4	FA202	Plan Notes	DIV-21	4" Standpipe - DN	1	0%	1	EA	1.531	1.53	$ 68.3	$ 105	$ 130.0	$ 130.0	$ 235	
5	FA202	Plan Notes	DIV-21	2-1/2" Standpipe - DN	1	0%	1	EA	1.200	1.20	$ 68.3	$ 82	$ 138.0	$ 138.0	$ 220	
				Sprinkler Pipe(5' Assumed)												
6	FA202	Plan Notes	DIV-21	2" Sprinkler Pipe - DN	2	0%	2	EA	1.200	2.40	$ 68.3	$ 164	$ 128.3	$ 256.6	$ 420	
				Sprinkler Head												
				Upright												
7	FA202	Plan Notes	DIV-21	Upright Sprinkler To Protect Attic Space	38	0%	38	EA	0.288	10.94	$ 68.3	$ 747	$ 25.6	$ 973.6	$ 1,720	
				Fire Suppression Valves												
8	FA202	Plan Notes	DIV-21	4" Check Valve	1	0%	1	EA	1.920	1.92	$ 68.3	$ 131	$ 625.3	$ 625.3	$ 756	
				Connections/Fittings												
				Elbow												
9	FA202	Plan Notes	DIV-21	6" x 6" 90 Deg. Elbow Down	50	0%	50	EA	1.410	70.50	$ 68.3	$ 4,815	$ 123.2	$ 6,160.0	$ 10,975	
10	FA202	Plan Notes	DIV-21	6" x 6" 90 Deg. Elbow Up	16	0%	16	EA	1.410	22.56	$ 68.3	$ 1,541	$ 123.2	$ 1,971.2	$ 3,512	
11	FA202	Plan Notes	DIV-21	6" x 6" 90 Deg. Elbow	30	0%	30	EA	1.410	42.30	$ 68.3	$ 2,889	$ 123.2	$ 3,696.0	$ 6,585	
12	FA202	Plan Notes	DIV-21	6" x 6", 45 Deg. Elbow	1	0%	1	EA	1.410	1.41	$ 68.3	$ 96	$ 123.2	$ 123.2	$ 220	
				Tees												
13	FA202	Plan Notes	DIV-21	6" x 6" x 6" Tee	19	0%	19	EA	1.580	30.02	$ 68.3	$ 2,050	$ 151.2	$ 2,872.8	$ 4,923	
SUB TOTAL									Total Lab. Hours =	$ 558	Total Lab. Cost =	$ 38,079	Total Mat. Cost =	$ 64,046	$ 102,125	$ 102,125
TOTAL SUGGESTED BID																$ 134,391

FIRE PROTECTION ABBREVIATIONS

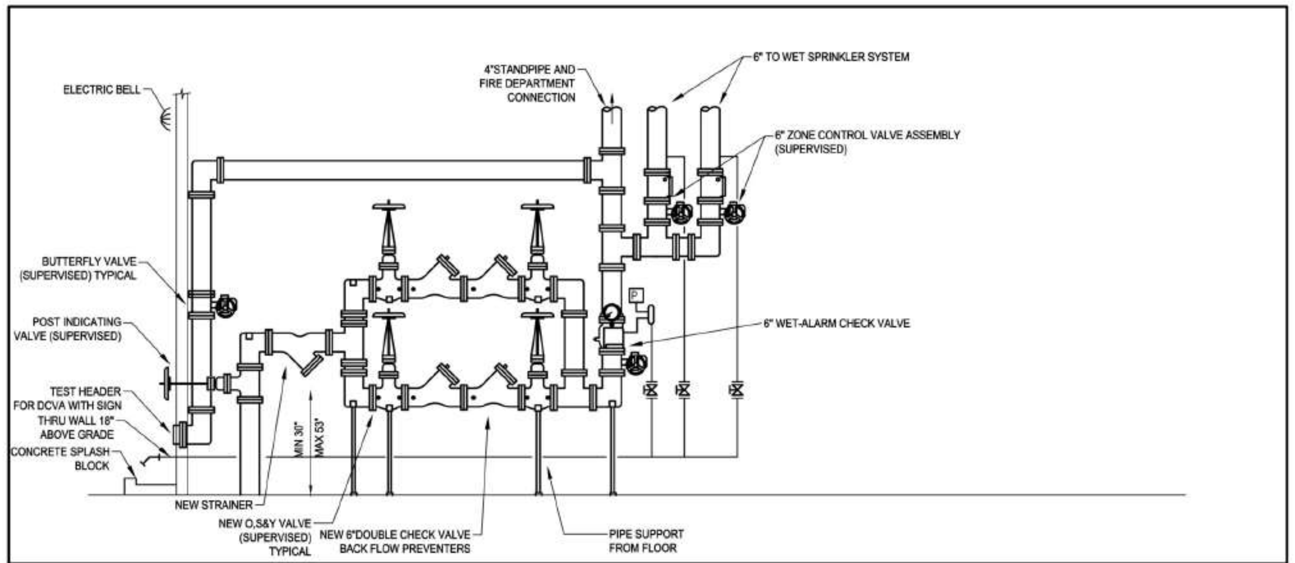
ABV	ABOVE	DWG	DRAWING	N.FWH	NON-FREEZE WALL HYDRANT
ABD	AUTOMATIC BALL DRIP	EA	EACH	N.I.C.	NOT IN CONTRACT
AC	AIR COMPRESSOR	ELEC	ELECTRICAL	NO	NORMALLY OPEN
ACD	ACCESS DOOR	ELEV	ELEVATION	NO.	NUMBER
ACV	ALARM CHECK VALVE	EMER	EMERGENCY	NTS	NOT TO SCALE
AD	AREA DRAIN	ENCL	ENCLOSE, ENCLOSURE	OD	OPEN SITE DRAIN DIAMETER, OUTSIDE
AFF	ABOVE FINISHED FLOOR	EQPT	EQUIPMENT	OSD	OS&Y OUTSIDE SCREW AND YOKE
AP	ACCESS PANEL	EST	ESTIMATE	%	PERCENT
APPD	APPROVED	ETBR	EXISTING TO BE REMOVED	PD	PRESSURE DROP/PUMP DISCHARGE
APPROX	APPROXIMATE	EVAP	EVAPORAT(E,ING,ED,OR)	PDI	PLUMBING DRAINAGE INSTITUTE
ARCH	ARCHITECTURAL	EXIST	EXISTING	PH	PHASE
AUTO	AUTOMATIC	F	FIRE/FIRE LINE	PG	PRESSURE GAUGE
AV	ACID VENT	FAI	FRESH AIR INLET	PLBG	PLUMBING
AVG	AVERAGE	FD	FLOOR DRAIN	PNEU	PNEUMATIC PRESS PRESSURE
AW	ACID WASTE	FDC	FIRE DEPARTMENT CONNECTION	PRV	PRESSURE REDUCING VALVE
BFP	BACKFLOW PREVENTER	FF	FINISHED FLOOR	PS	PRESSURE SWITCH
BLDG	BUILDING	FHC	FIRE HOSE CABINET	PSI	POUNDS PER SQUARE INCH
BOP	BOTTOM OF PIPE	FHR	FIRE HOSE RACK	RD	ROOF DRAIN
BOT	BOTTOM	FDHV	FIRE HOSE VALVE	RF	LDR ROOF LEADER
BRKT	BRACKET	FIG	FIGURE	RPM	REVOLUTIONS PER MINUTE
BWV	BACKWATER VALVE	FLR	FLOOR	S	SOIL
CA	COMPRESSED AIR	FM	FACTORY MUTUAL	SAN	SANITARY
CB	CATCH BASIN	FP	FIRE PROTECTION	SCHED	SCHEDULE
CFH	CUBIC FEET PER HOUR	F/S	FLOW SWITCH	SECT	SECTION
CI	CAST IRON	FSP	FIRE STANDPIPE	SH	SHOWER
CL	CENTER LINE	FT	FOOT, FEET	SK	SINK
CLG	CEILING	FU	FIXTURE UNIT	SP	SUMP PUMP/SPRINKLER
CO	CLEAN OUT	GAL	GALLON	SPECS	SPECIFICATIONS
CODP	CLEAN OUT DECK	HORIZ	HORIZONTAL	SPR	SPRINKLER LINE
COL	COLUMN	HP	HORSEPOWER	SF/SQ.FT.	SQUARE FOOT
COMB.A.	COMBINATION	HT	HEIGHT	SQ IN	SQUARE INCH
CONC	CONCRETE	ID	DIAMETER, INSIDE	S.S.	SERVICE SINK
COND	CONDENS(ATE,ER,ING,ATION)	I.E.	INVERT ELEVATION	SS	STAINLESS STEEL
CONN	CONNECTION	IN	INCHES	ST	STORM
CONST	CONSTRUCTION	INT	INTER(IOR,NAL)	STD	STANDARD
CONT	CONTINUE, CONTINUOUS	I.T.C.	INSPECTOR'S TEST CONNECTION	STP	STANDPIPE
CONTR	CONTRACTOR	KW	KILOWATT	STRUC	STRUCTURAL
COTG	CLEAN OUT TO GRADE	LAV	LAVATORY	TEMP	TEMPERATURE
COWP	CLEAN OUT WALL PLATE	LBS	POUNDS	THD	THREAD
CTE	CONNECT TO EXISTING R	LDR	LEADER	THRU	THROUGH
D	DRAIN	LF	LINEAR FEET	TOT	TOTAL
DEPT	DEPARTMENT	LP	LOW PRESSURE	T/S	TAMPER SWITCH
DET	DETAIL	MECH	MECHANICAL	TYP	TYPICAL
DF	DRINKING FOUNTAIN	MFR	MANUFACTUR(E, ER, ED)	UR	URINAL
DIA	DIAMETER	MH	MANHOLE	V	VENT
DIAG	DIAG(RAM, RAMMATIC, ONAL)	MIN	MINIMUM	V.I.F.	VERIFY IN FIELD
DISC	DISCONNECT	MSB	MOP SINK BASIN	VIV	VALVE IN VERTICAL
DISCH	DISCHARGE	MTG	MOUNTING	VOL	VOLUME
DN	DOWN	MTD	MOUNTED	VTR	VENT THRU ROOF
DOM	DOMESTIC	N	NITROGEN	W	WASTE LINE
DPV	DRY PIPE VALVE	NC	NORMALLY CLOSED	W/	WITH
DS	DOWNSPOUT	NFSP	NON-FREEZE SPRINKLER PIPE	W/O	WITHOUT
				ZCS	ZONE CONTROL STATION

FIRE PROTECTION GENERAL NOTES

1. AUTOMATIC WET TYPE SPRINKLER SYSTEMS SHALL BE IN ACCORDANCE WITH NFPA 13 FOR ORDINARY-HAZARD GROUP 1, (130 SF PER SPRINKLER MAX) AND LIGHT-HAZARD OCCUPANCIES (225 SF PER SPRINKLER MAX.)
2. ALL MATERIAL TO BE NEW AND UL LISTED.
3. ALL MATERIAL AND METHODS OF WORKMANSHIP SHALL BE IN ACCORDANCE WITH NFPA 13 AND PER ME STATE BUILDING CODE.
4. ALL HANGERS AND METHODS OF HANGING SHALL BE IN ACCORDANCE WITH NFPA 13.
5. ALL PIPE & FITTINGS SHALL BE IN ACCORDANCE WITH NFPA 13.
6. ALL SPRINKLER SUBJECT TO MECHANICAL INJURY SHALL BE PROVIDED WITH GUARDS AS REQUIRED BY NFPA 13.
7. PROVIDE LISTED THROUGH STOP PENETRATION PROTECTION FOR ALL AREAS WHERE RATED ASSEMBLIES ARE PENETRATED.
8. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION METHODS.
9. COORDINATE LOCATION OF SPRINKLER HEADS W/ REFLECTED CEILING PLANS ON ARCHITECTURAL DRAWINGS. HEADS SHALL BE CENTERED IN CEILING SYSTEM.
10. COORDINATE SPRINKLER HEAD LOCATIONS WITH DUCTWORK IN THE NEW BUILDINGS. SEPARATE SPRINKLER LINES AND ADDITIONAL SPRINKLERS WILL NEED TO BE LOCATED UNDER ALL DUCTWORK 48" IN OR WIDER.
11. COORDINATE SPRINKLER HEAD LOCATIONS WITH STRUCTURAL STEEL, INDUSTRIAL EQUIPMENT, EQUIPMENT DRAWINGS, OVERHEAD DOORS AND OTHER BUILDING SYSTEMS.
12. ADDITIONAL SPRINKLERS MAY BE REQUIRED UPON SITE OBSERVATION.
13. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROPER AMOUNT OF SPRINKLER HEADS PER HYDRAULIC CALCS WHETHER SHOWN ON THE PLANS OR NOT.
14. REFER TO ARCHITECTURAL DRAWINGS FOR SMOKE AND FIRE PARTITION LOCATIONS.
15. REFER TO ELECTRICAL DRAWINGS FOR FIRE ALARM DEVICES AND EQUIPMENT.

FIRE PROTECTION LEGEND

FP	FIRE MAIN		BALANCING VALVE
SPR	SPRINKLER PIPE		BALL VALVE
STP	STANDPIPE		BUTTERFLY VALVE
FDC	FIRE DEPARTMENT CONNECTION		CHECK VALVE
DR	DRAIN		GATE VALVE
	HEAT TRACED PIPING		GLOBE VALVE
X	NODE NUMBER		OS&Y VALVE (SUPERVISED)
	UPRIGHT SPRINKLER HEAD		PLUG VALVE
	RECESSED PENDENT SPRINKLER HEAD		PRESSURE REDUCING VALVE
	DRY PENDENT SPRINKLER HEAD		RELIEF VALVE
	DRY SIDEWALL SPRINKLER HEAD		SOLENOID VALVE
	STORZ CONNECTION		VALVE IN VERTICAL
	WET ALARM VALVE		BRANCH OFF TOP OF MAIN
	ZONE CONTROL VALVE ASSEMBLY		BRANCH OFF BOTTOM OF MAIN
	DOUBLE CHECK VALVE ASSEMBLY		ELBOW UP
			ELBOW DOWN
			END CAP
			TEE
			UNION



1 FIRE PROTECTION SERVICES ENTRANCE SCHEMATIC DESIGN

NOT TO SCALE

Revision:	Date:

CONSULTANTS

STRUCTURAL ENGINEER: Lim Consultants, Inc. 6 Pleasant Street Malden, MA 02148 T: 781.338.9300

MEP/FP ENGINEER: Architectural Engineers, Inc. 63 Franklin Street Boston, MA 02110 T: 617.542.0810

CIVIL ENGINEER: CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760 T: 508.875.2657

LANDSCAPE ARCHITECT: Hammer + Walsh Design, Inc. 281 Summer Street, 6th Fl Boston, MA 02210 T: 617.439.0125

ARCHITECT

WILLIAM PEVEAR ARCHITECTS

William Pevear Architects, Inc. 872 Massachusetts Avenue, Suite 2-9 Cambridge, MA 02139 T: 617.335.5186

STAMP

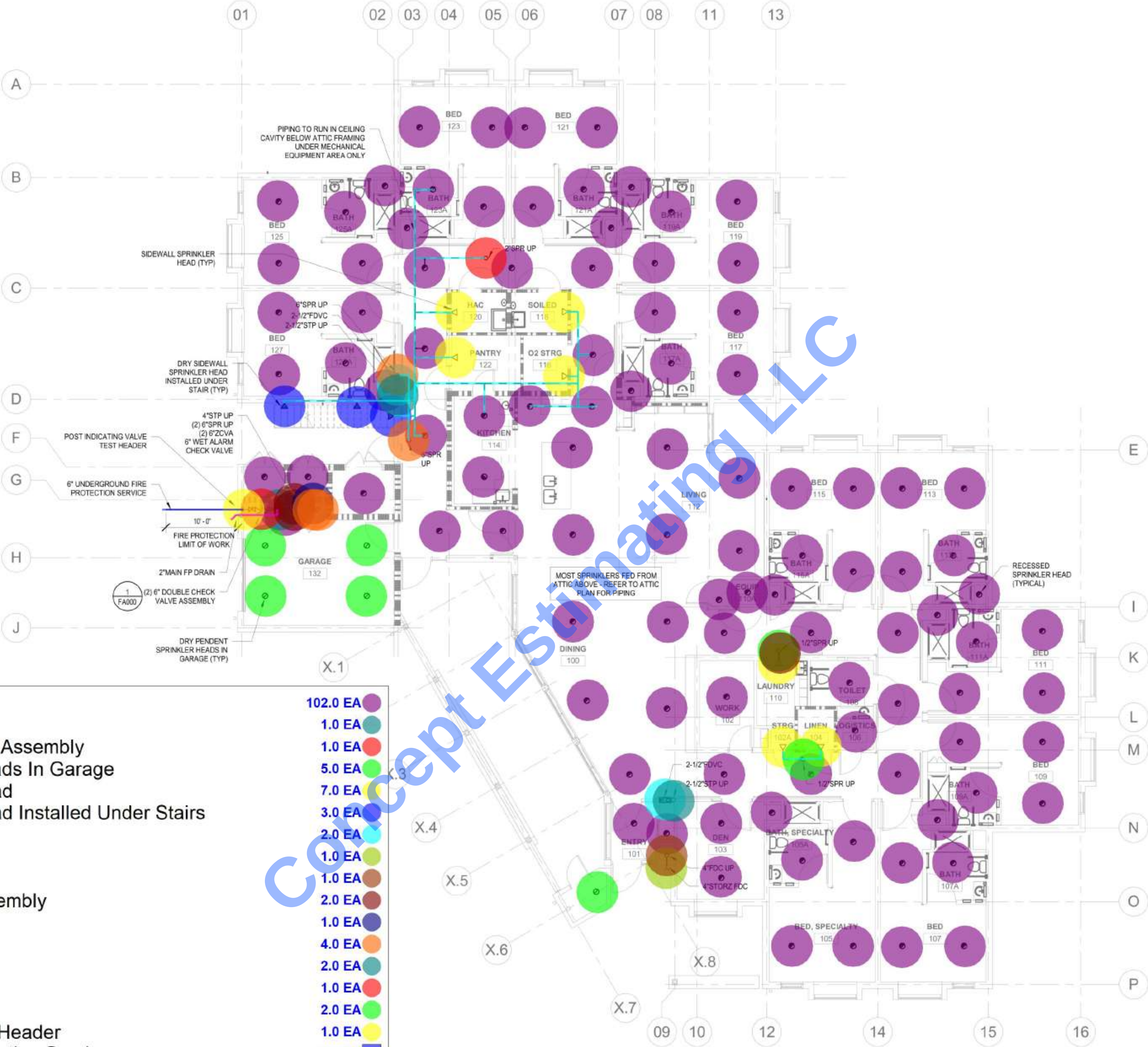
COMMONWEALTH OF MASSACHUSETTS JAMES B. SHANNON FIRE PROTECTION REGISTERED PROFESSIONAL ENGINEER

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title	Phase	Project Title	Project Number
FIRE PROTECTION LEGEND, NOTES AND ABBREVIATIONS	ISSUED FOR CONSTRUCTION	COMMUNITY LIVING CENTER PHASE 1	402-315
Approved:	FULLY SPRINKLERED	Location: VA MAINE HEALTHCARE SYSTEM - TOGUS 1 VA CENTER AUGUSTA, ME 04330	Building Number: 301 & 302
		Issue Date: 03/01/2019; Checked: JS; Drawn: KB	Drawing Scale: NTS
			Drawing Number: FA000

VA FORM 08 - 6231



Recessed Sprinkler Head	102.0 EA
6" Wet Alarm Check Valve	1.0 EA
(2) 6" Souble Check Valve Assembly	1.0 EA
Dry Pendent Sprinkler Heads In Garage	5.0 EA
Dry Sidewall Sprinkler Head	7.0 EA
Dry Sidewall Sprinkler Head Installed Under Stairs	3.0 EA
2-1/2" FDVC	2.0 EA
4" Storz FDC	1.0 EA
4" FDC	1.0 EA
6" Zone Control Valve Assembly	2.0 EA
4" Standpipe - UP	1.0 EA
6" Sprinkler Pipe - UP	4.0 EA
2-1/2" Standpipe - UP	2.0 EA
2" Sprinkler Pipe - UP	1.0 EA
1/2" Sprinkler Pipe - UP	2.0 EA
Post Indicating Valve Test Header	1.0 EA
6" Underground Fire Protection Service	11.2 FT
2" Main Fire Protection Drain	7.5 FT
6" Sprinkler Pipe (Along Floor)	152.4 FT
6" x 1/2", 90 Deg. Elbow Up	1.0 EA

CONSULTANTS

STRUCTURAL ENGINEER:	MEP/FP ENGINEER:	CIVIL ENGINEER:	LANDSCAPE ARCHITECT:
Lim Consultants, Inc. 6 Pleasant Street Malden, MA 02148 T: 781.338.9300	Architectural Engineers, Inc. 63 Franklin Street Boston, MA 02110 T: 617.542.0810	CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760 T: 508.875.2657	Hammer + Walsh Design, Inc. 281 Summer Street, 6th Fl Boston, MA 02210 T: 617.439.0125

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COMMONWEALTH OF MASSACHUSETTS · JAMES B. SHANNON · FIRE PROTECTION · REGISTERED PROFESSIONAL ENGINEER

Revision: | Date:

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE PROTECTION LEVEL 1 PLAN
Approved:
Phase: ISSUED FOR CONSTRUCTION
FULLY SPRINKLERED
Project Title: COMMUNITY LIVING CENTER PHASE 1
Location: VA MAINE HEALTHCARE SYSTEM - TOGUS, 1 VA CENTER AUGUSTA, ME 04330
Issue Date: 03/01/2019 | Checked: JS | Drawn: KB
Project Number: 402-315
Building Number: 301 & 302
Drawing Scale: 1/8" = 1'-0"
Drawing Number: FA201

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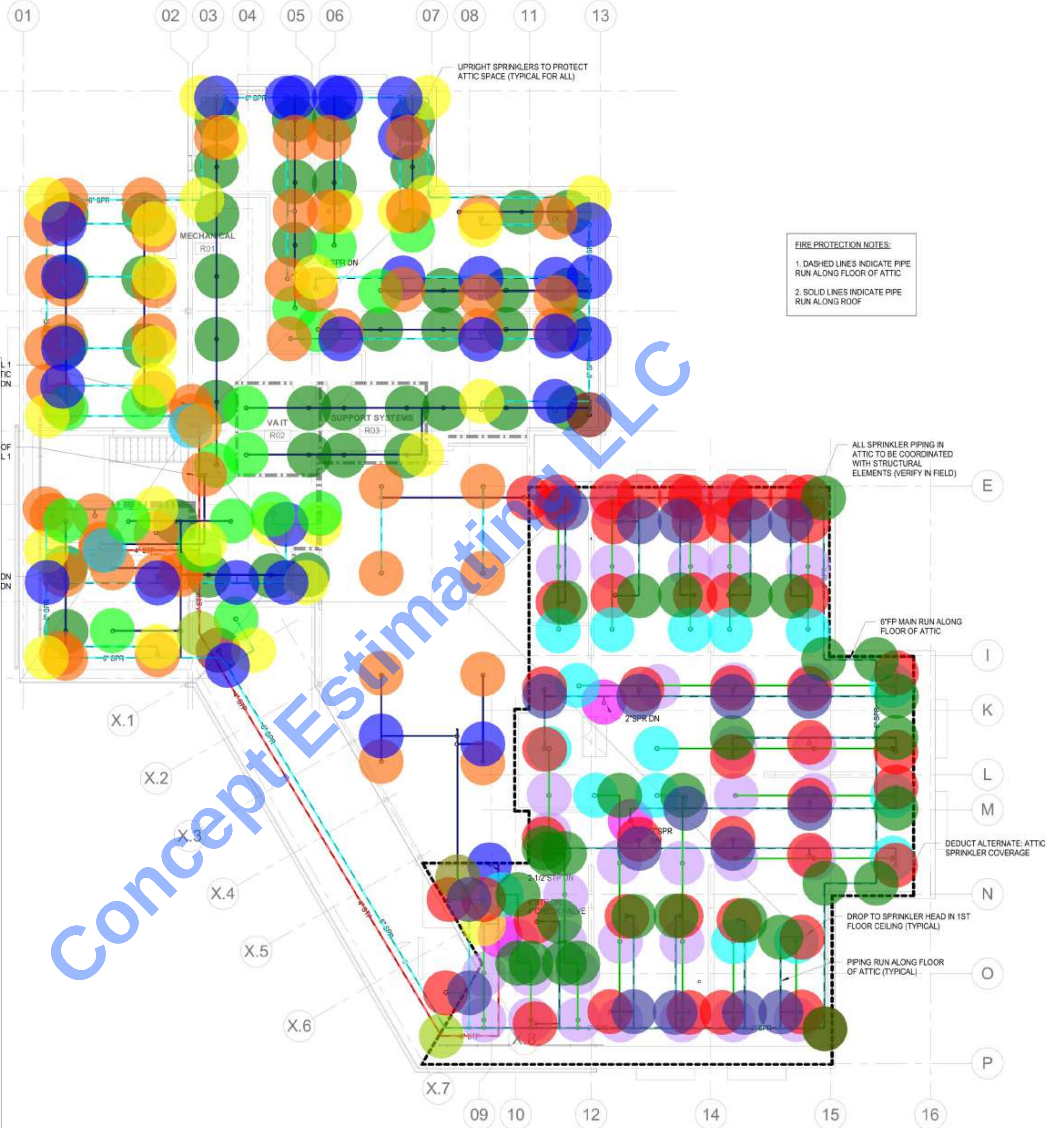

Upright Sprinkler To Protect Attic Space	43.0 EA
Upright Sprinkler To Protect Attic Space	38.0 EA
6" Sprinkler Pipe (Along Floor)	657.5 FT
End Cap	2.0 EA
4" Standpipe (Along Floor)	99.6 FT
4" Standpipe (Along Floor)	29.3 FT
6" Sprinkler Pipe (Along Roof)	489.1 FT
6" Sprinkler Pipe (Along Floor)	517.9 FT
6" Sprinkler Pipe (Along Roof)	366.2 FT
4" Check Valve	1.0 EA
4" Standpipe - DN	1.0 EA
2-1/2" Standpipe - DN	1.0 EA
2" Sprinkler Pipe - DN	2.0 EA
6" x 6" 90 Deg. Elbow Down	57.0 EA
6" x 6" 90 Deg. Elbow Up	17.0 EA
4" x 4" 90 Deg. Elbow Down	2.0 EA
4" x 4", 45 Deg. Elbow	2.0 EA
4" x 4", 90 Deg. Elbow	1.0 EA
4" x 4" x 4" Tee	1.0 EA
6" x 6" 90 Deg. Elbow	27.0 EA
6" x 6" x 6" Tee	29.0 EA
6" x 6" 90 Deg. Elbow Down	50.0 EA
6" x 6" 90 Deg. Elbow Up	16.0 EA
6" x 6" 90 Deg. Elbow	30.0 EA
6" x 6" 45 Deg. Elbow	1.0 EA
6" x 6" x 6" Tee	19.0 EA

Revision: Date:

CONSULTANTS

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COMMONWEALTH OF MASSACHUSETTS
JAMES B. SHANNON
FIRE PROTECTION
REGISTERED PROFESSIONAL ENGINEER

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title	FIRE PROTECTION ATTIC PLAN
Approved:	
Phase	ISSUED FOR CONSTRUCTION
	FULLY SPRINKLERED
Project Title	COMMUNITY LIVING CENTER PHASE 1
Location	VA MAINE HEALTHCARE SYSTEM - TOGUS 1 VA CENTER AUGUSTA, ME 04330
Issue Date	03/01/2019
Checked	JS
Drawn	KB
Project Number	402-315
Building Number	301 & 302
Drawing Scale	1/8" = 1'-0"
Drawing Number	FA202

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