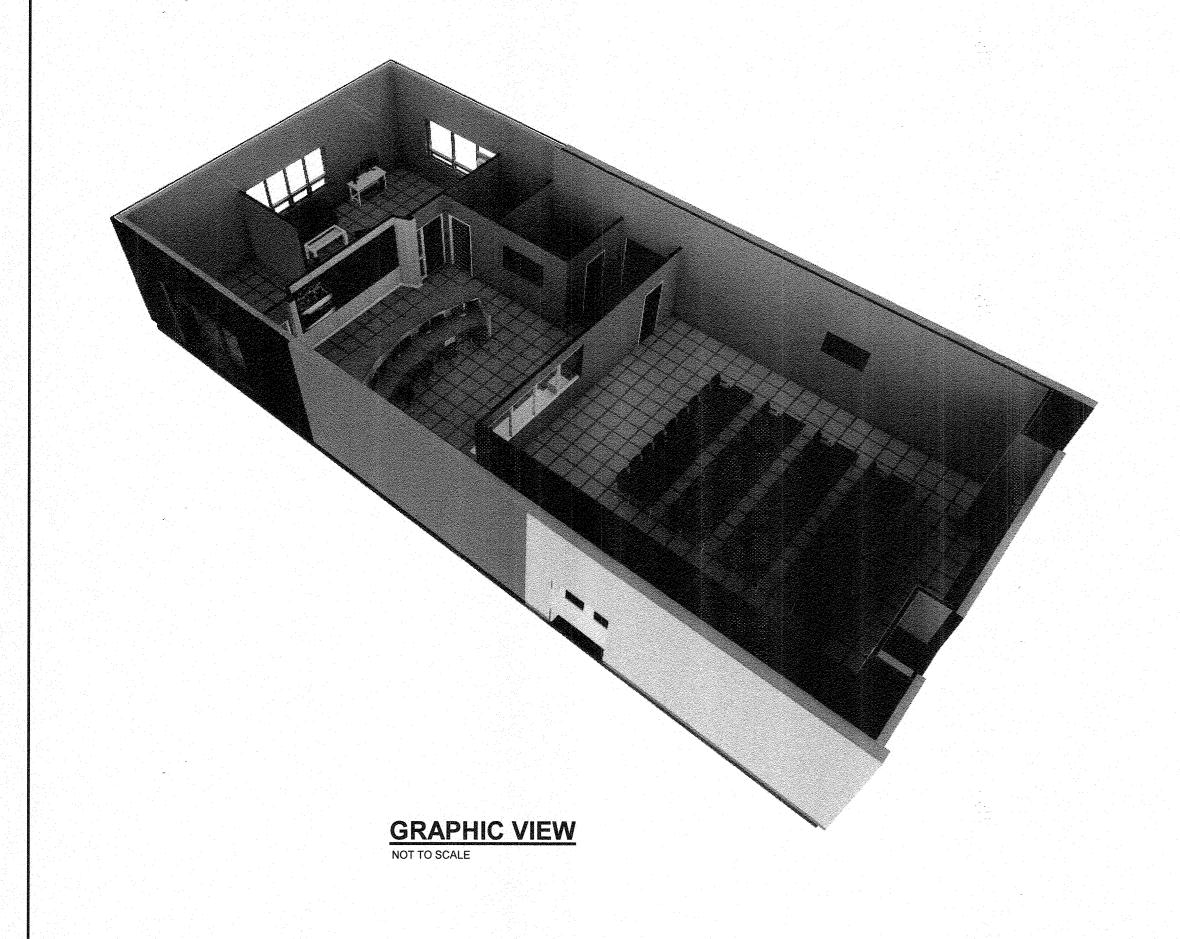
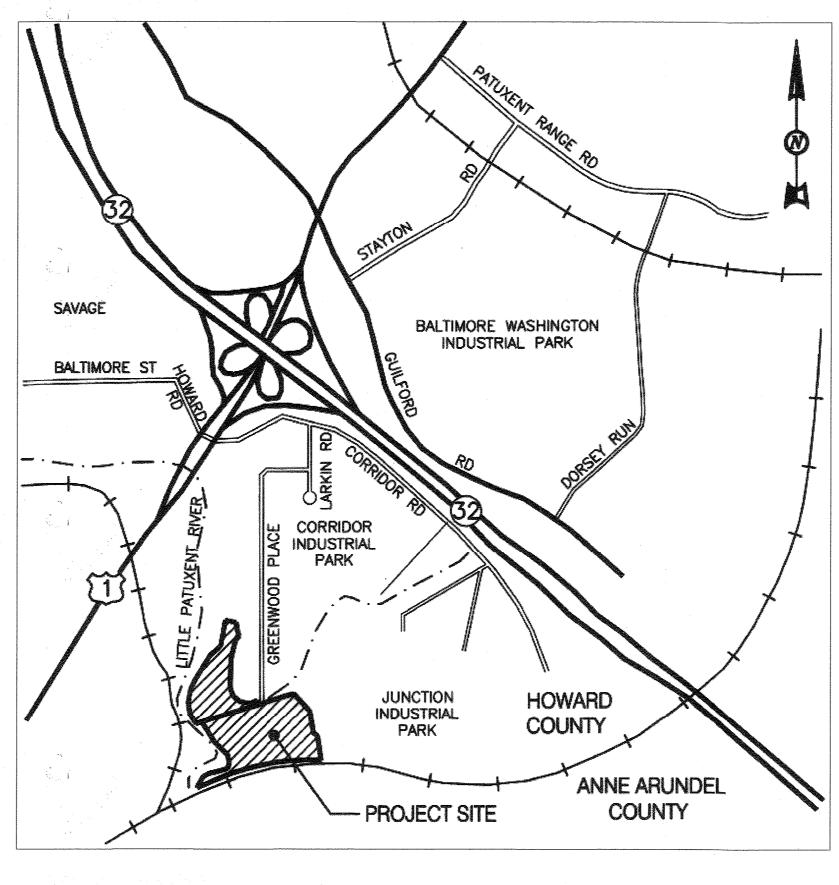
CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 **CONTRACT NO. 20-5099**

HOWARD COUNTY, MARYLAND LITTLE PATUXENT WATER RECLAMATION PLANT





	INDEX OF DRAWINGS
SHEET#	DESCRIPTION
G-101	COVER SHEET
G-102	ADMINISTRATION BUILDING LIFE SAFTEY PLAN
G-103	ABBREVIATIONS
G-104	GENERAL LEGEND
G-105	MECHANICAL LEGEND
G-106	ELECTRICAL LEGEND 1
G-107	ELECTRICAL LEGEND 2
G-108	ADMINISTRATION BUILDING PHASING PLAN
AD-100	ADMINISTRATION BUILDING DEMOLITION PLAN
A-100	DRYER BUILDING CONTROL ROOM PLANS
A-101	ADMINISTRATION BUILDING FLOOR PLAN
A-102	ADMINISTRATION BUILDING CONFERENCE ROOM
A-103	ADMINISTRATION BUILDING REFLECTED CEILING PLAN
A-104	INTERIOR ELEVATIONS
A-105	WALL TYPES AND DETAILS
A-106	DETAILS
A-107	SCHEDULES AND DETAILS
A-108	DETAILS
A-109	ADMINISTRATION BUILDING FURNITURE PLAN
HD-100	DEMOLITION FLOOR PLAN
H-100	NEW WORK FLOOR PLAN
H-101	DETAILS AND SCHEDULES
H-200	DRYER BUILDING CONTROL ROOM PLANS
ED-101	ELECTRICAL DEMOLITION PLAN
E-102	ADMIN. BUILDING PARTIAL LIGHTING PLAN
E-103	ADMIN. BUILDING PARTIAL POWER PLAN
E-104	ADMIN. BUILDING PARTIAL POWER PLAN
E-105	DRYER BUILDING CONTROL ROOM SCADA A/V
E-106	DRYER BUILDING PARTIAL PLAN - CAMERAS ELECTRICAL AND I&C PLAN
E-107	ELECTRICAL A/V BLOCK DIAGRAM
E-108	ELECTRICAL SCHEDULES

VICINITY MAP

NOT TO SCALE

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 18898, EXPIRATION DATE: 02-19-2021

DEPARTMENT OF PUBLIC WORKS

CHIEF, UTILITY DESIGN DIVISION



		Bernard Arthur St. Co.	the many speciments with			NAME OF TAXABLE PARTY.
9	10/15/2019	BY	NO.	REVISION		DATE
STATISTICS OF THE PARTY OF THE	CHK: PJD					
and the second	•					
MANAGEMENT	DRN: JW					
000000000000000000000000000000000000000	DES: JT				~	
1	:-	1	1			į.

600 SCALE MAP NO.

BLOCK NO.

CONTROL ROOM UPGRADE CAPITAL PROJECT S-6264 **COVER SHEET**

CONTRACT NO. 20-5099

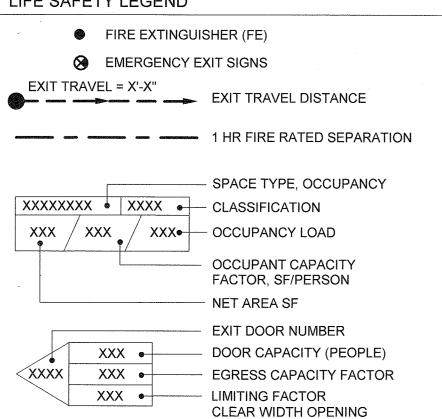
6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

SHOWN SHEET <u>1</u> OF <u>31</u>

G-101

SCALE AS



CODE ANALYSIS

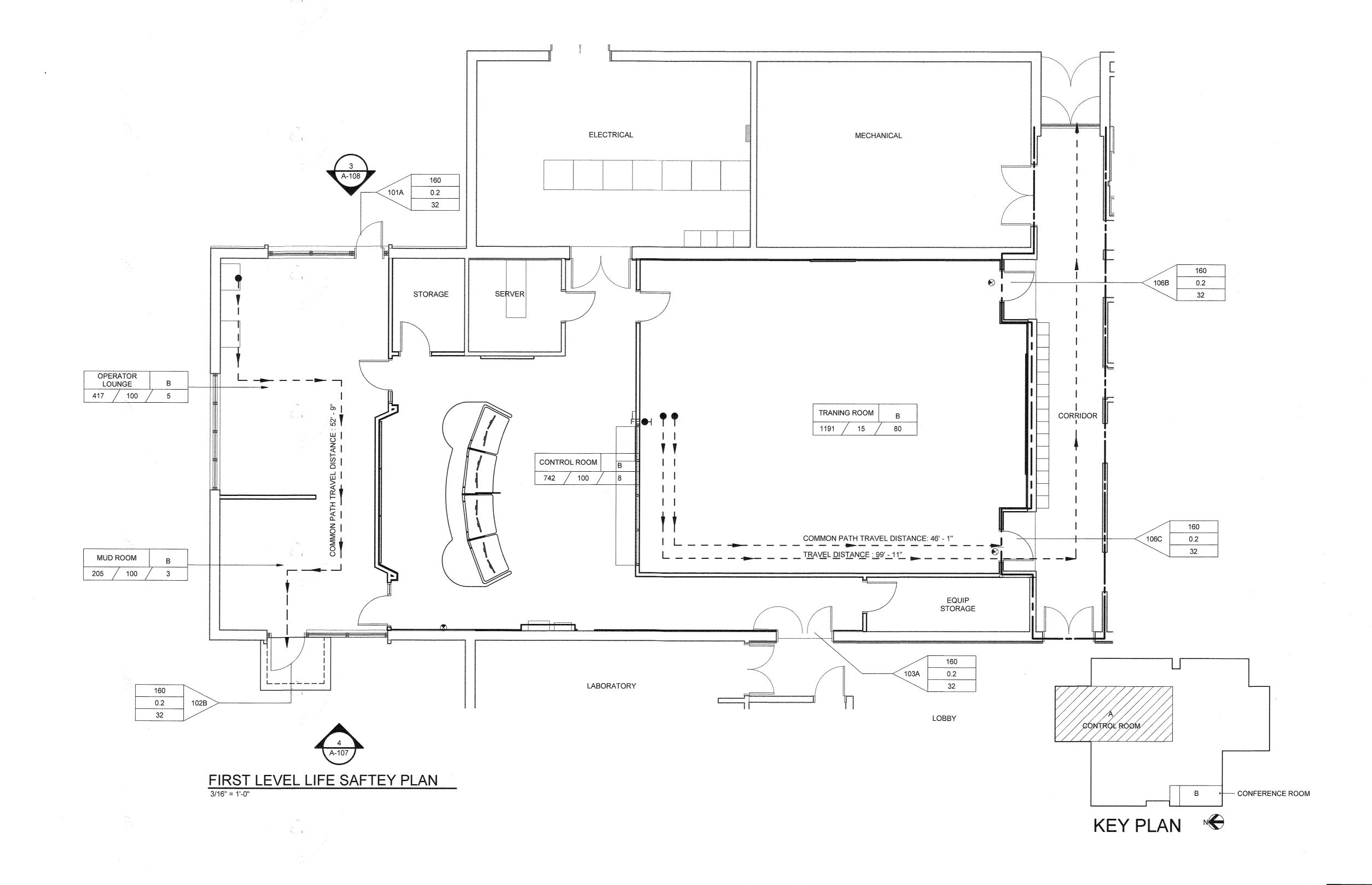
LIST OF CODES:

2015 INTERNATIONAL EXISTING BUILDING CODE, WITH AMENDMENTS 2015 INTERNATIONAL MECHANICAL BUILDING CODE, WITH AMENDMENTS 2015 NFPA 101 LIFE SAFETY CODE 2015 INTERNATIONAL BUILDING CODE, WITH AMENDMENTS 2014 NATIONAL ELECTRIC CODE WITH AMENDMENTS 2009 NATIONAL STANDARD PLUMBING CODE MARYLAND STATE ACCESSIBILITY CODE

BUILDING DATA:

- A. OCCUPANCY: B, BUSINESS (304)
- B. CONSTRUCTION TYPE (601): II B
- C. TOTAL RENOVATED BUILDING AREA: 2,986 SQ FT
- D. TOTAL OCCUPANCY LOAD: (1004.1.2) 1. BUSINESS=1795 SF /100=18 2. ASSEMBLY=1191 SF/15=80
- E. EGRESS
 - 1. MAXIMUM ALLOWABLE COMMON PATH OF EGRESS TRAVEL (1006.2): 75'-0" 2. ACTUAL PATH OF EGRESS TRAVEL=52'-9" 3. MAXIMUM ALLOWABLE EXIT ACCESS TRAVEL DISTANCE (1017.2) 200'-0" 4. ACTUAL MAXIMUM EXIT ACCESS TRAVEL DISTANCE = 46'-1"
- F. NUMBER OF EXITS REQUIRED / PROVIDED : 2/3
- G. AUTOMATIC SPRINKER SYSTEM (903.2): NOT REQUIRED EXISTING BUILDING IS NOT SPRINKLER
- H. PANIC HARDWARE: PROVIDED ON DOORS SCHEDULE





"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 18898, EXPIRATION DATE: 02-19-2021

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF ENGINEERING DATE CHIEF, UTILITY DESIGN DIVISION



	.088	98888	99986 - M	10000	e.		State of the last
8000		E O	J. DA	16/2			A STATE OF THE PERSON NAMED IN
86698		, V			\$ \$	# # # # # # #	S. C.
			V		O William		
		S/0 N	.18898 'A L	ARC	1,00	- /-	-

90000000000000000000000000000000000000	10/15/2019	BY	NO.	REVISION
Was VOCA				
	CHK: PJD			
1995	DRN: JW			
Non In				
MARK	DES: J.T			
- 48a	DE0 17			

ADMINISTRATION BUILDING LIFE SAFTEY PLAN

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

G-102

SCALE AS

SHOWN

SHEET

<u>2</u> OF <u>31</u>

'PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME. AND THAT I AM A DULY LICENSED REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 18898, EXPIRATION DATE: 02-19-2021

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF ENGINEERING DATE Mass V CHIEF, UTILITY DESIGN DIVISION





	DES: J.T				
808					
	DRN: JW		-		
100000000000000000000000000000000000000	CHK: PJD				
,	10/15/2019				
122/19		BY	NO.	REVISION	DATE

ABBREVIATIONS

BLOCK NO.

600 SCALE MAP NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 **CONTRACT NO. 20-5099**

SHEET

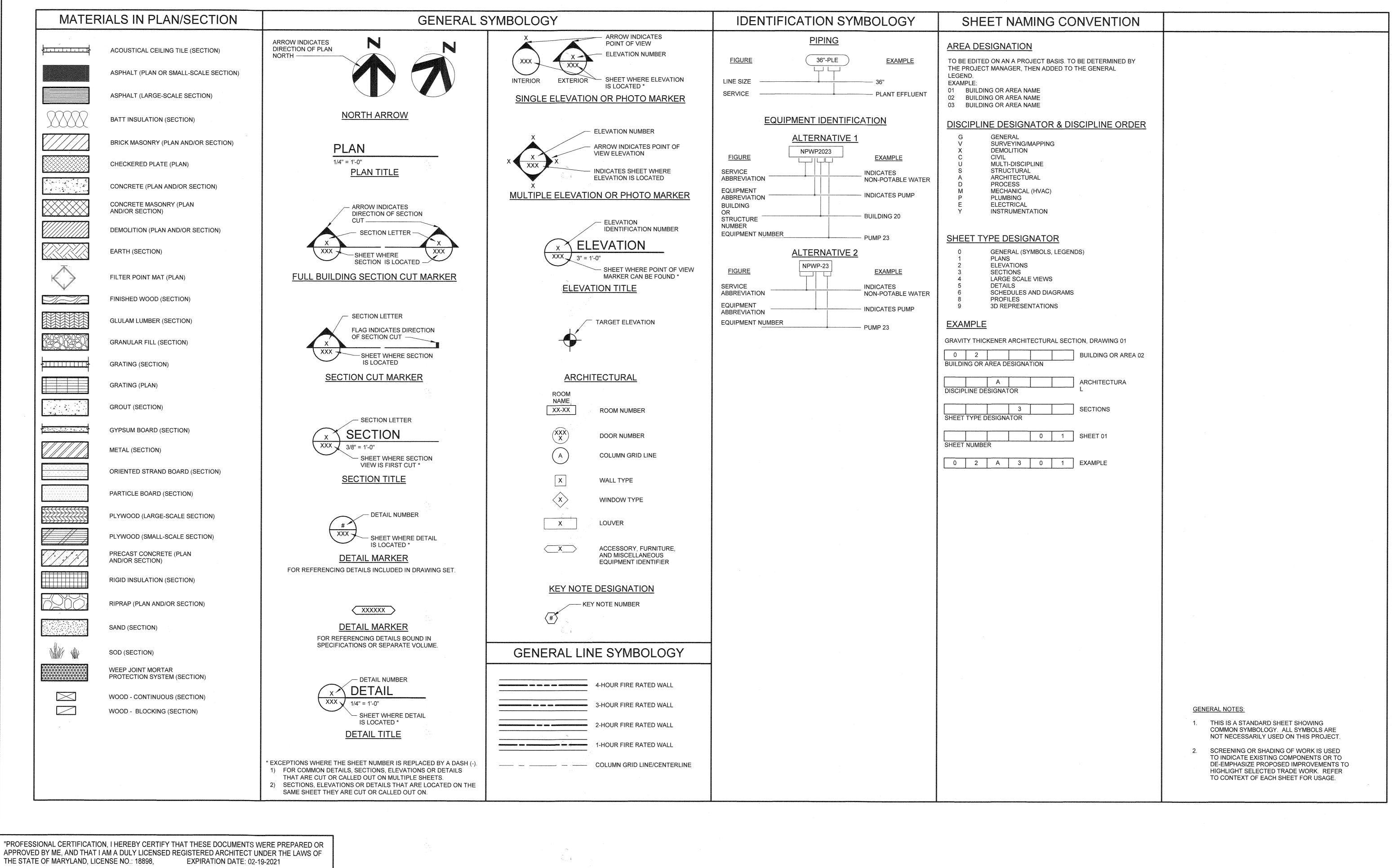
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

G-103

SHOWN

SCALE

<u>3</u> OF <u>31</u>



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, UTILITY DESIGN DIVISION



1	10/15/2019	BY	NO.	REVISION	DAT
CHARLES AND CONTRACTOR	CHK: PJD				
SALESCO STREET,	DRN: JW				
ASSESSMENT OF THE PERSON OF TH	DES: J.T				

GENERAL LEGEND

BLOCK NO.

600 SCALE MAP NO.

CONTROL ROOM UPGRADE CAPITAL PROJECT S-6264

CONTRACT NO. 20-5099

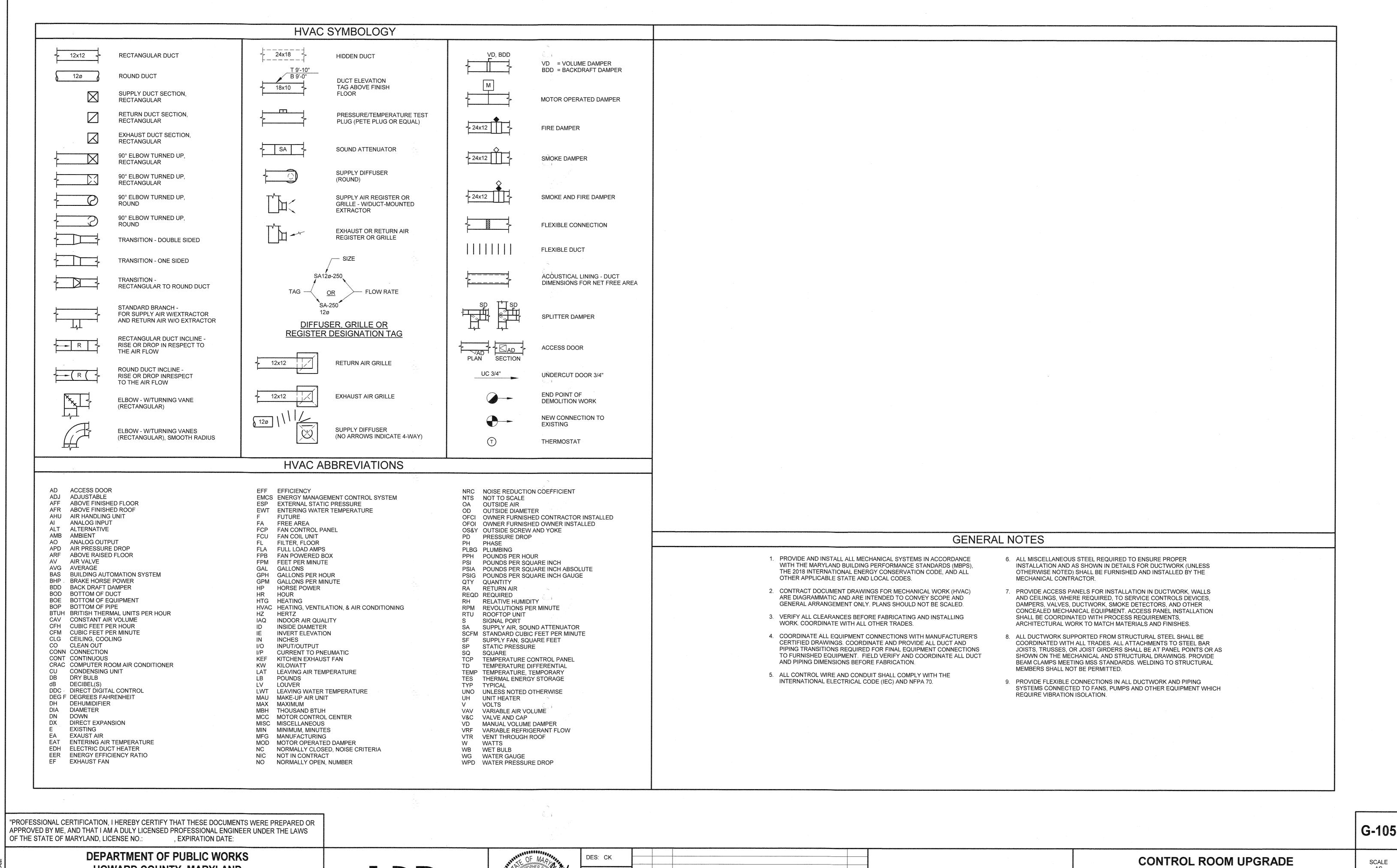
SCALE SHOWN

G-104

SHEET

<u>4</u> OF <u>31</u>

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



DRN: BR

CHK: CW

10/15/2019

BY NO.

REVISION

CHIEF, UTILITY DESIGN DIVISION

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

LEGEND, ABBREVIATIONS AND GENERAL

NOTES

BLOCK NO.

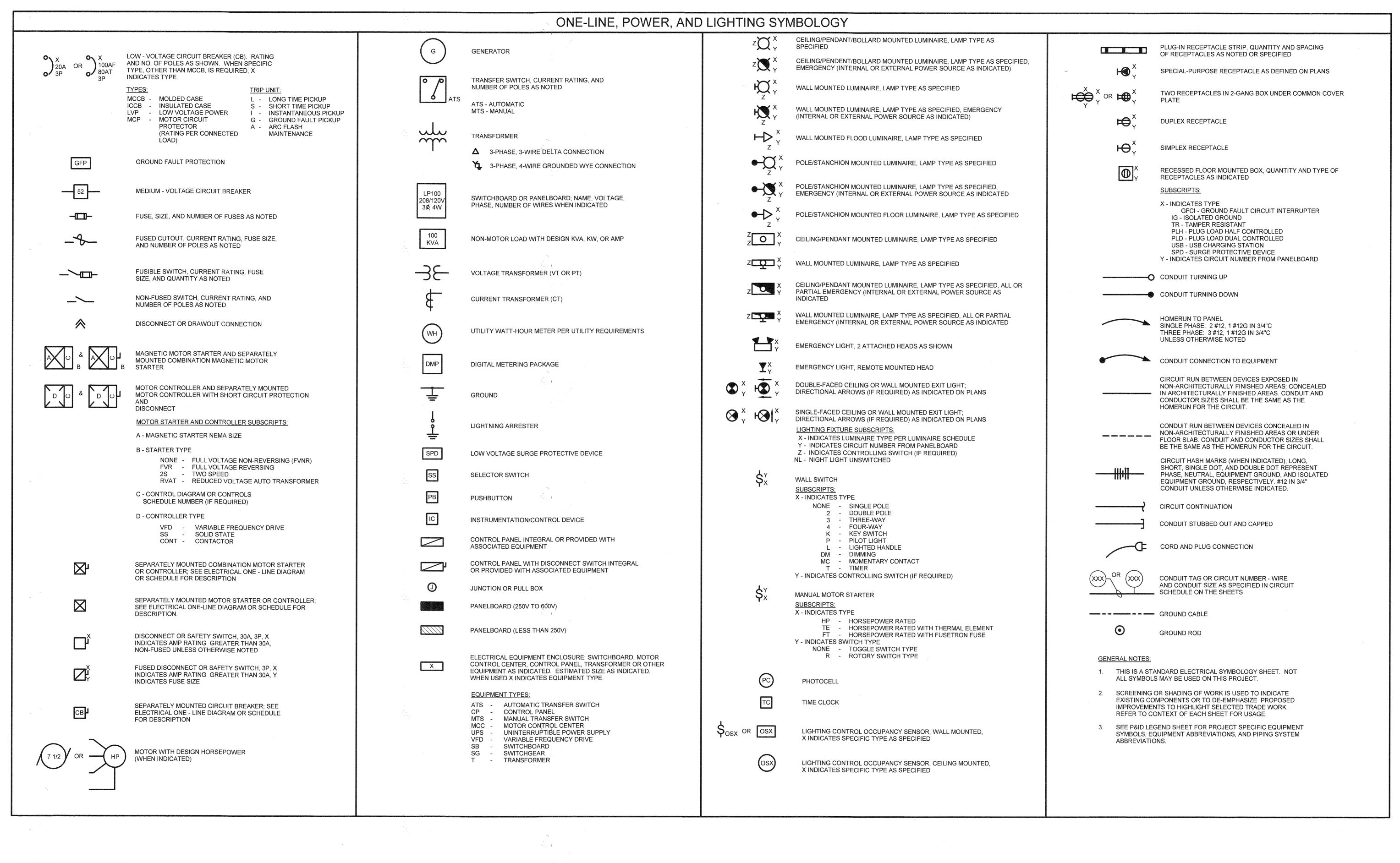
DATE 600 SCALE MAP NO.

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SHEET <u>5</u> OF <u>31</u>

SCALE

SHOWN



"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 37997, EXPIRATION DATE: 12/16/2019

> **DEPARTMENT OF PUBLIC WORKS** HOWARD COUNTY, MARYLAND

CHIEF, UTILITY DESIGN DIVISION





a,		even av person	AND DESCRIPTION OF THE PERSONS	
STATE OF THE PARTY	10/15/2019	BY	NO.	REVISION
9				
	CHK: RG	-		
	DRN: CLS			·
0000000				
-	DES: RLA			
- 1			1	

ELECTRICAL LEGEND 1

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 **CONTRACT NO. 20-5099**

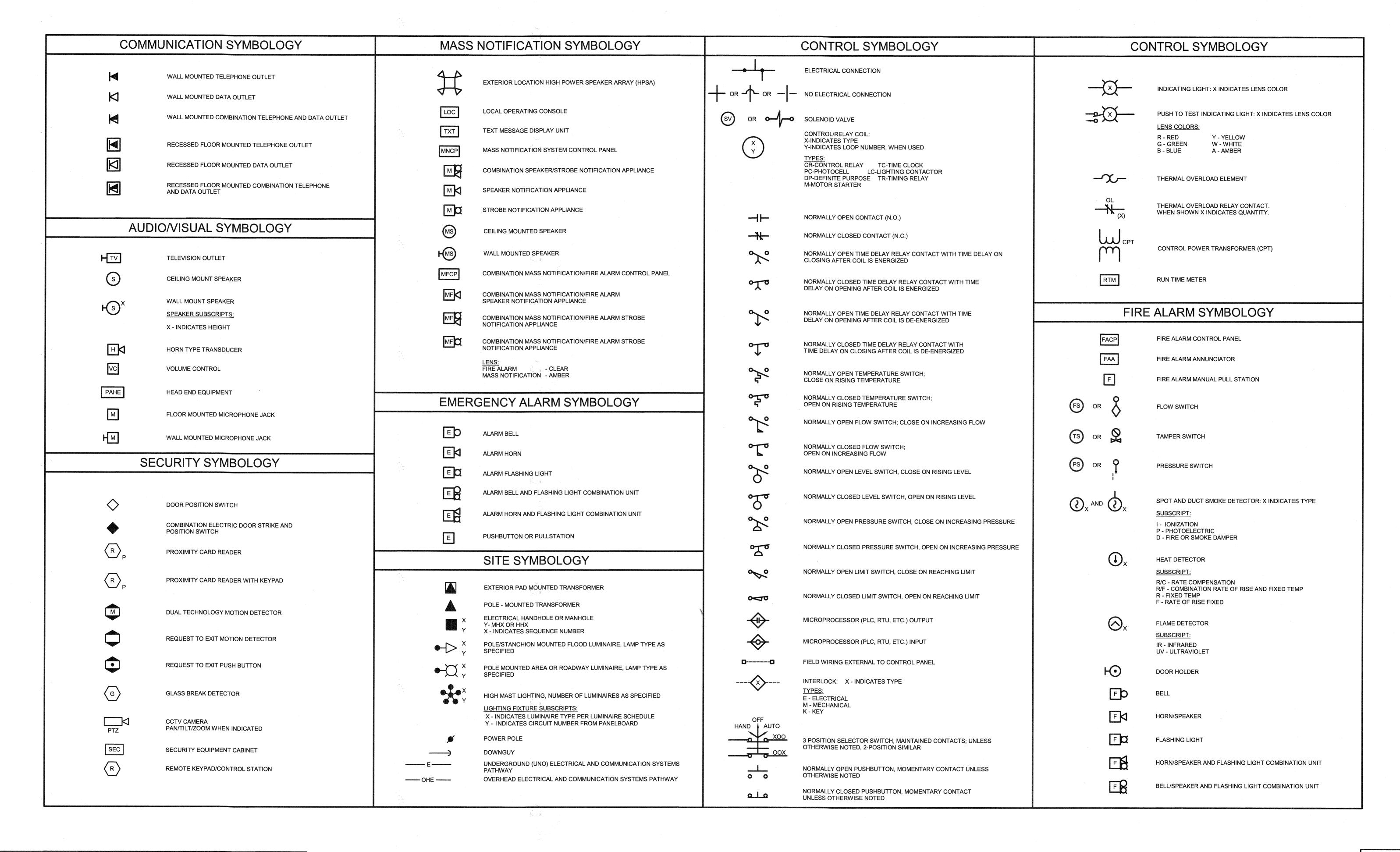
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE SHOWN

G-106

6 OF <u>31</u>

SHEET



"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 37997, EXPIRATION DATE: 12/16/2019

> DEPARTMENT OF PUBLIC WORKS **HOWARD COUNTY, MARYLAND**

1031-15

The Bureau of Engineering DATE CHIEF, UTILITY DESIGN DIVISION



Artistics of Marie	DE
PAO X	DF
PRO STORAL ENTENING	CH
NAL ENGINE	1

•••		BY	NO.	REVISION
leg	10/15/2019	DV	NO	DEV/OION
,	CHK: RG			
	DRN: CLS			
	DES: RLA			

ELECTRICAL LEGEND 2

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT

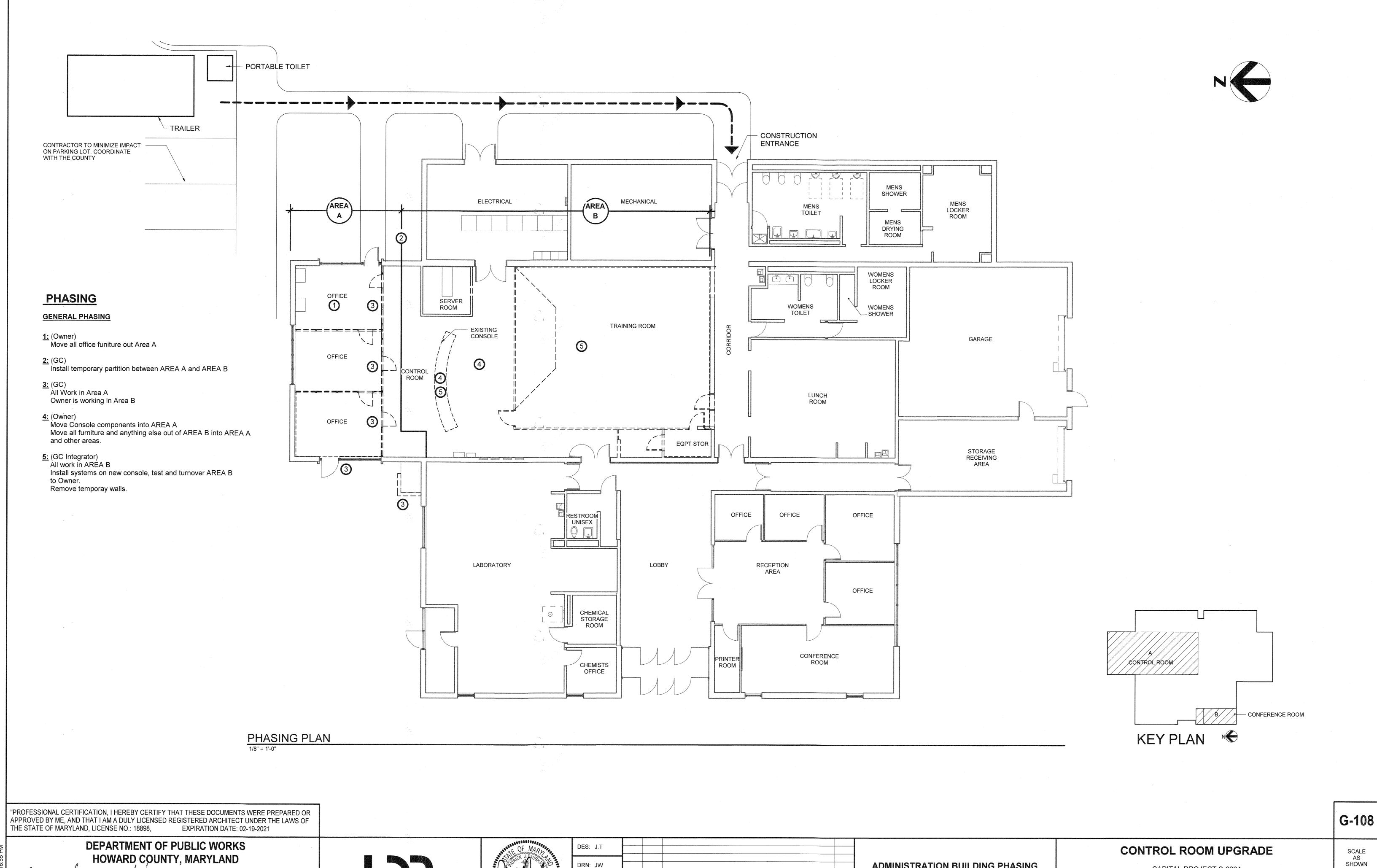
SCALE SHOWN

G-107

SHEET OF <u>31</u>

BLOCK NO.

HOWARD COUNTY, MARYLAND



ADMINISTRATION BUILDING PHASING

PLAN

BLOCK NO.

DATE 600 SCALE MAP NO.

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

SHEET

<u>8</u> OF <u>31</u>

DRN: JW

CHK: PJD

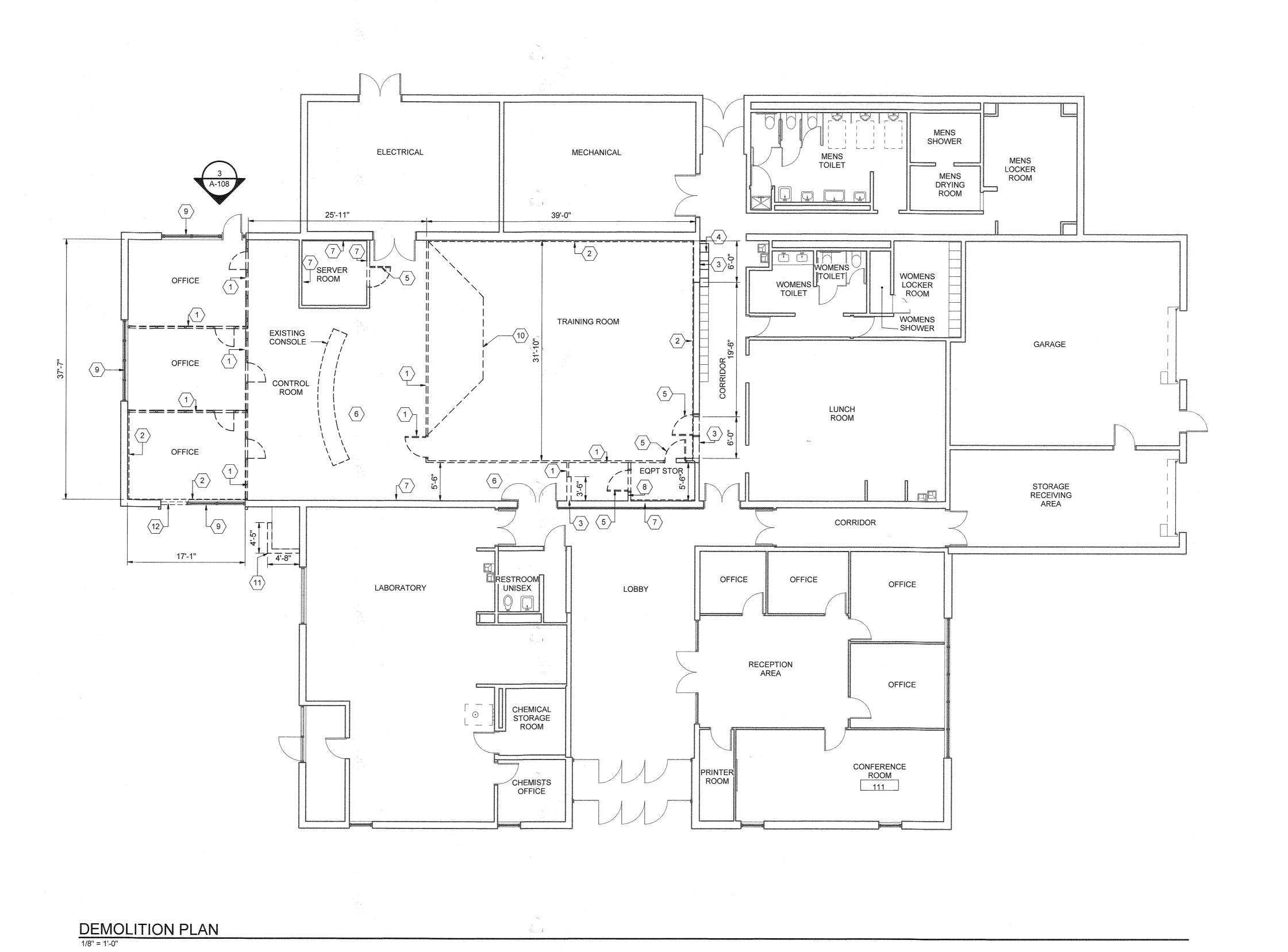
10/15/2019

BY NO.

REVISION

HOWARD COUNTY, MARYLAND

CHIEF, UTILITY DESIGN DIVISION

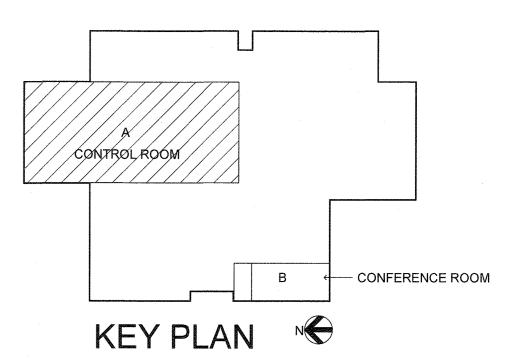




- 1. REMOVE SUSPENDED ACOUSTICAL TILE CEILING SYSTEM IN THREE OFFICES, CONTROL ROOM, TRAINING ROOM, EQUIPMENT STORAGE AND SERVER ROOM.
- 2. EXISTING ACCESS FLOOR SYSTEM IS MANUFACTURED BY LISKEY
- 3. CONTRACTOR TO PROTECT EXISTING EQUIPMENT IN SERVER ROOM DURING DEMOLITION AND NEW WORK.
- 4. EXISTING ACCESS FLOOR SYSTEM TO REMAIN IN ALL ROOMS UNDER BASE BID
- 5. CONTRACTOR TO FIELD VERIFY ALL CONDITIONS PRIOR TO COMMENCEMENT OF WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES

KEYNOTES X

- 1 SALVAGE ALL DEMOUNTABLE PARTIONS, FRAMING, DOORS AND ASSOCIATED HARDWARE AND TURN OVER TO OWNER FOR REUSE. DO NOT DAMAGE DURING REMOVAL PROCESS.
- 2 REMOVE DRYWALL & FURRING.
- 3 REMOVE SECTION OF CONCRETE MASONRY UNIT WALL AS REQUIRED TO FIT NEW CONDITIONS REFER TO NEW WORK SHEET A-101.
- 4 REMOVE FIVE LOCKERS AS REQUIRED TO COMPLETE NEW WORK.(FIELD VERIFY).
- 5 REMOVE DOOR AND FRAME.
- 6 ADD ALTERNATE NO.1 REMOVE ACCESS FLOOR PANELS IN CONTROL ROOM AND PROVIDE NEW.
- 7 EXISTING WALLS TO REMAIN.
- 8 REMOVE INTERIOR DRYWALL AND STUD
- 9 EXISTING WINDOW TO REMAIN.
- 10 REMOVE RAISED STAGE ASSEMBLY.
- 11 REMOVE 40" HIGH BRICK SCREEN WALLS
- 12 REMOVE PORTION OF EXTERIOR WALL AND SECTION OF WINDOW TO PROVIDE NEW DOOR OPENING.



"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 18898, EXPIRATION DATE: 02-19-2021

> **DEPARTMENT OF PUBLIC WORKS** HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF ENGINEERING ulista CHIEF, UTILITY DESIGN DIVISION



19	10/15/2019	BY	NO.	REVISION	
	CHK: PJD				
	DRN: JW				
	DES: J.T				

ADMINISTRATION BUILDING DEMOLITION PLAN

BLOCK NO.

DATE 600 SCALE MAP NO.

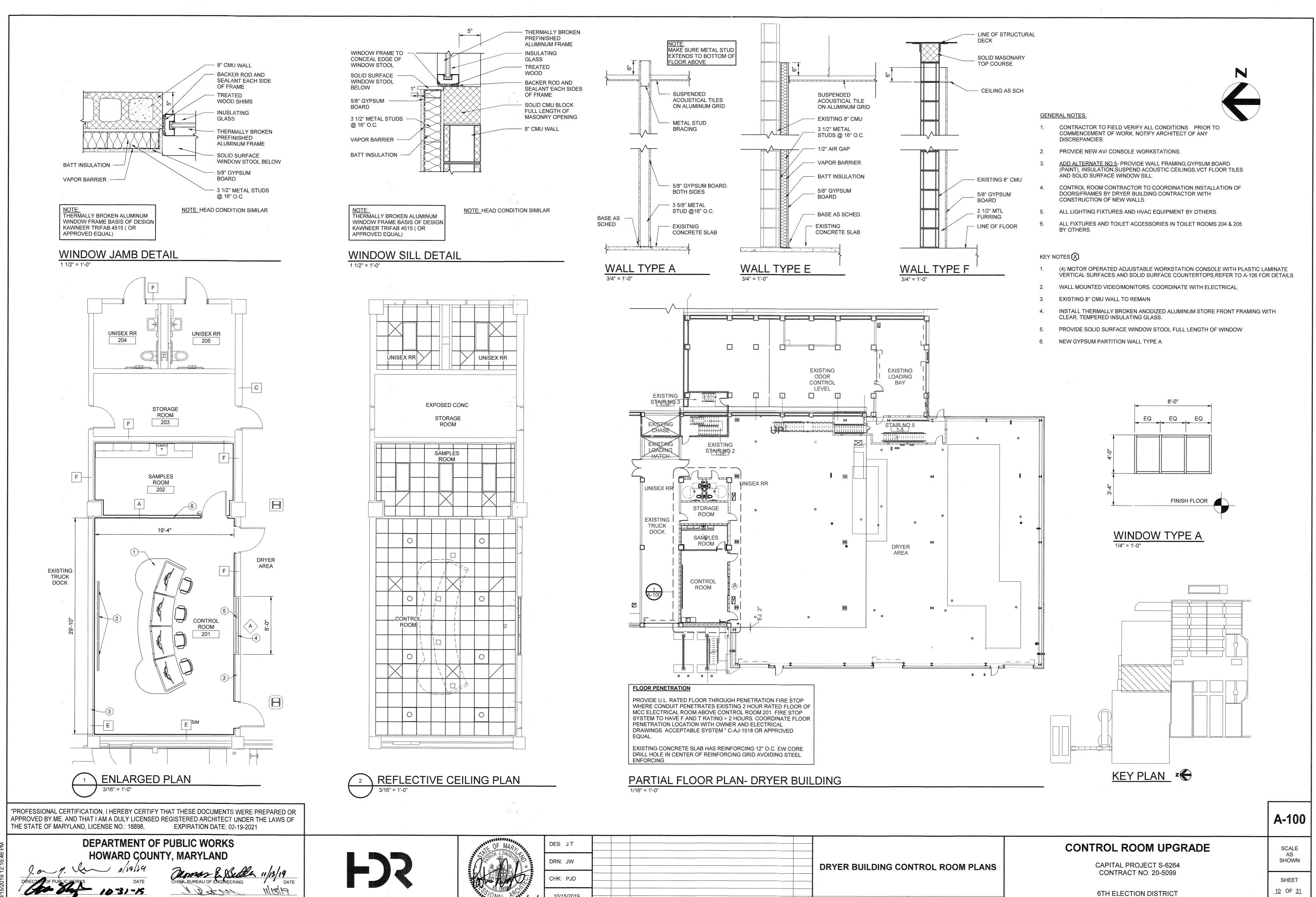
CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN SHEET <u>9</u> OF <u>31</u>

AD-100



BY NO.

REVISION

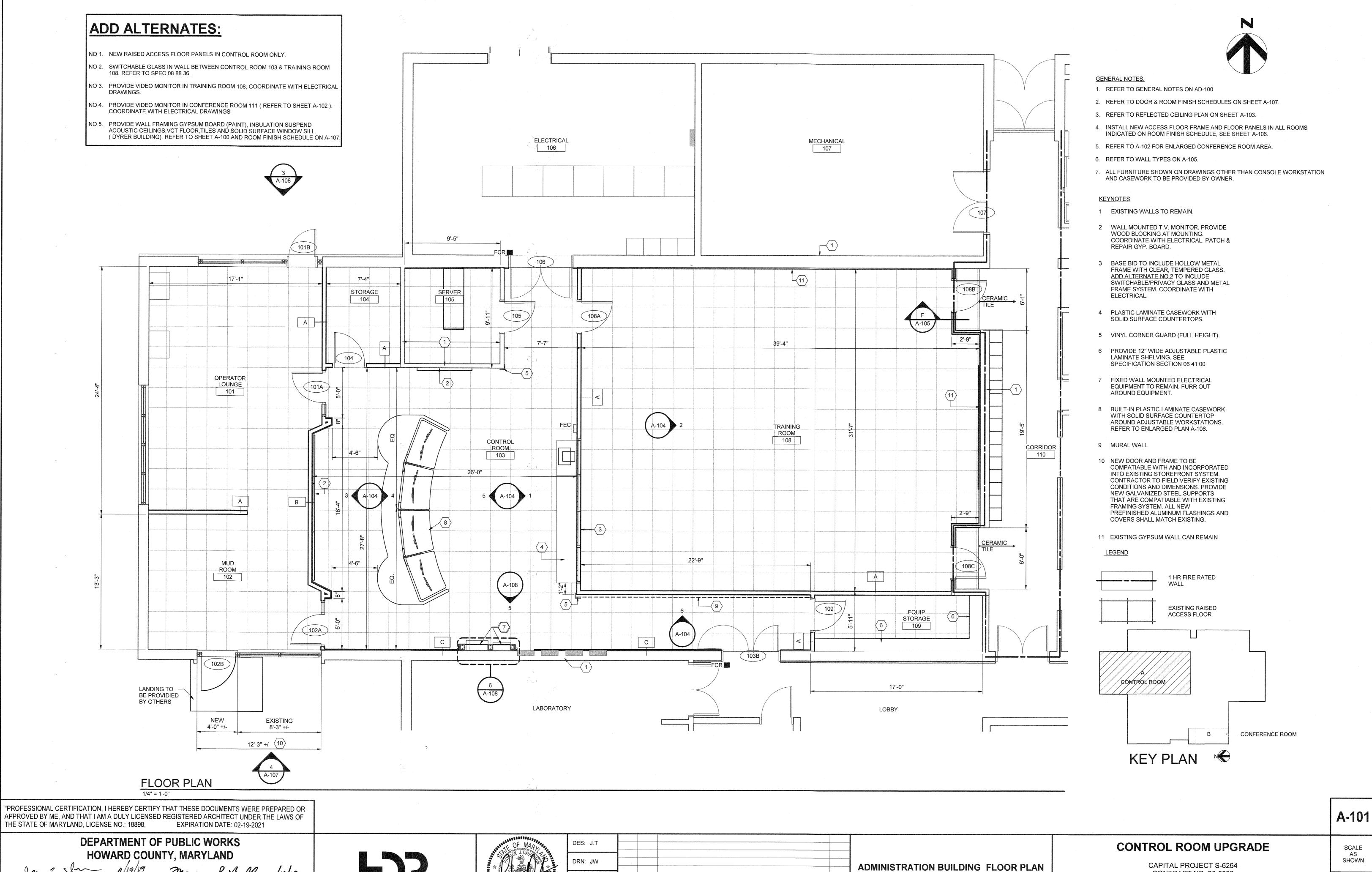
DATE 600 SCALE MAP NO.

BLOCK NO.

HOWARD COUNTY, MARYLAND

C:\rvt\2018\10134930-00-A_Jamal.WilliamsRMY

CHIEF, UTILITY DESIGN DIVISION



CHK: PJD

10/15/2019

BY NO.

REVISION

DATE 600 SCALE MAP NO.

BLOCK NO.

C:\rvt\2018\10134930-00-A_Jamal.WilliamsRMYXL_

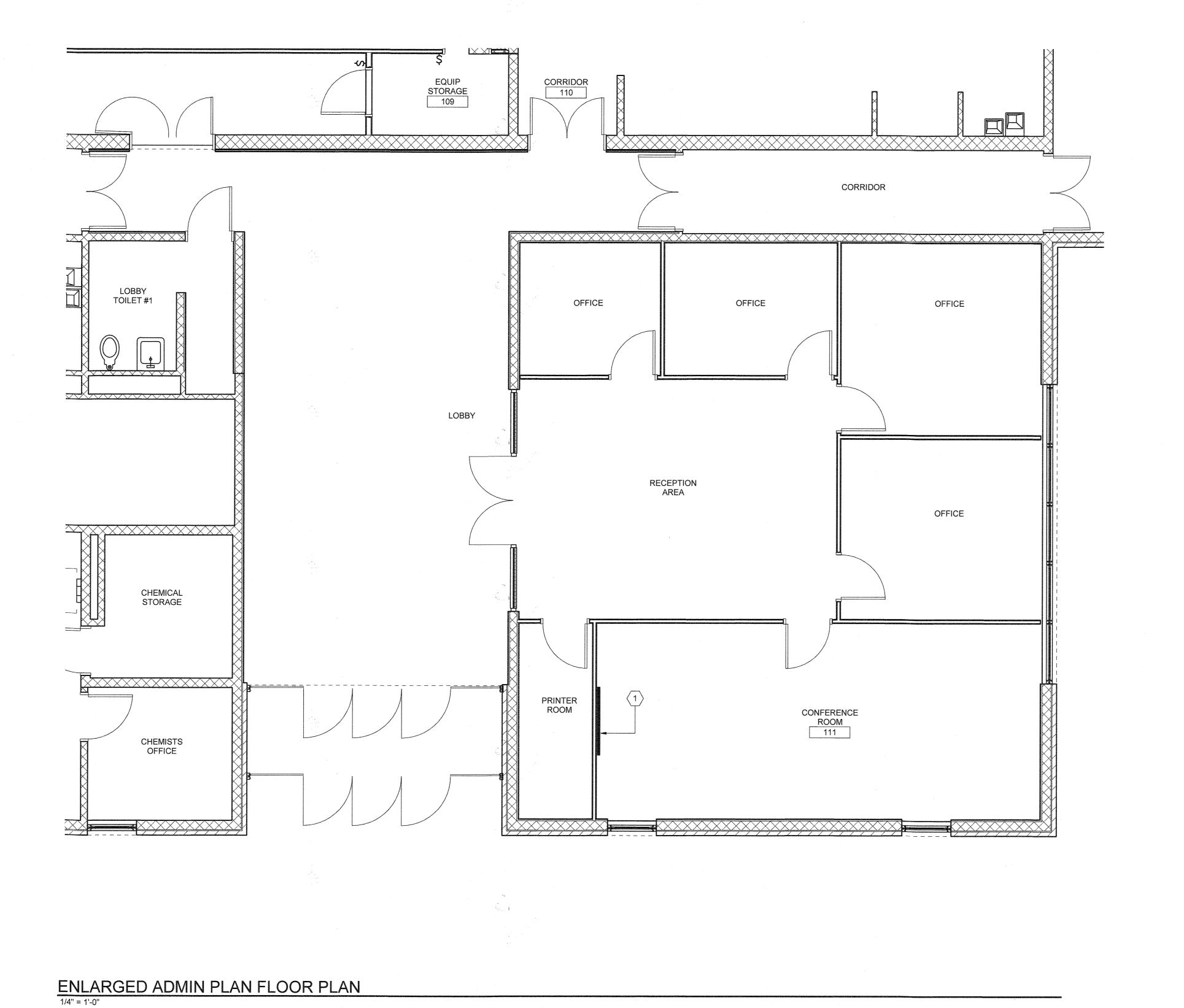
CHIEF, UTILITY DESIGN DIVISION

SHEET 11 OF 31

CONTRACT NO. 20-5099

6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

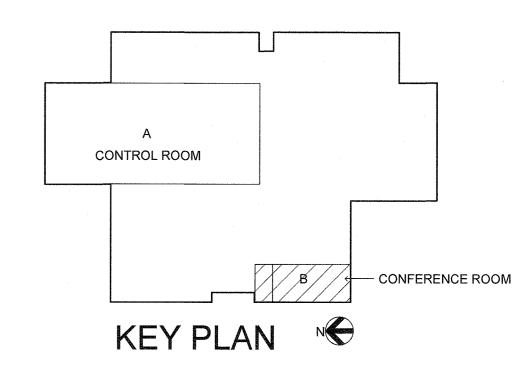




- COORDINATE WORK REQUIRED IN THIS AREA WITH ELECTRICAL
- CONTRACTOR TO FEILD VERIFY ALL CONDITIONS PRIOR TO COMMENCMENT OF WORK. NOTIFY THE ARCHITECT OF ANY DISCREPENCIES

<u>KEYNOTES</u>

1 ADD ALTERNATE NO.4 VIDEO MONITOR, COORDINATE
WITH ELECTRICAL DRAWINGS. PROVIDE BLOCKING AS
REQUIRED. PATCH AND REPAIR GYPSUM BOARD. PAINT
ALL WALLS IN ROOM 111



"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 18898, EXPIRATION DATE: 02-19-2021

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DATE

CHIEF, UTILITY DESIGN DIVISION

DATE

CHIEF, UTILITY DESIGN DIVISION

OF MARY	
OF MARY	. [
	C
POSTONAL ARCHIT	

m	10/15/2019	BY	NO.	REVISION	
	CHK: Checker				
	DRN: Author				
	DES: Designer				

ADMINISTRATION BUILDING CONFERENCE ROOM

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

10/15/2019 12:16:47 PM

A-102

SCALE AS SHOWN

SHEET 12 OF 31



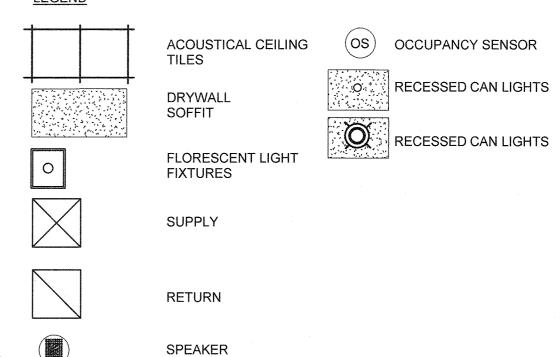


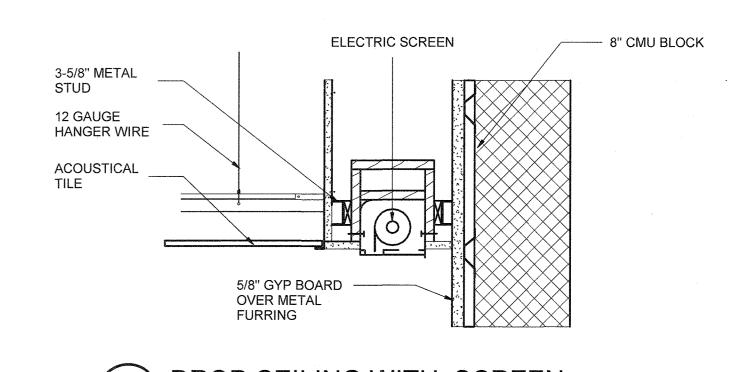
 COORDINATE SUSPENDED CEILINGS, LIGHTING FIXTURES & HAVC SUPPLY & RETURN GRILLS WITH EXISTING DUCTWORK TO REMAIN

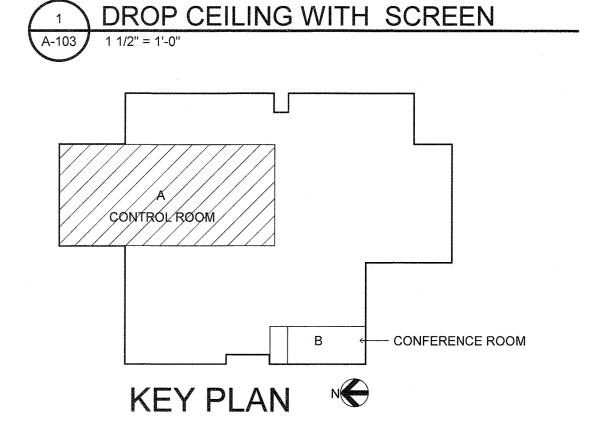
KEYNOTES

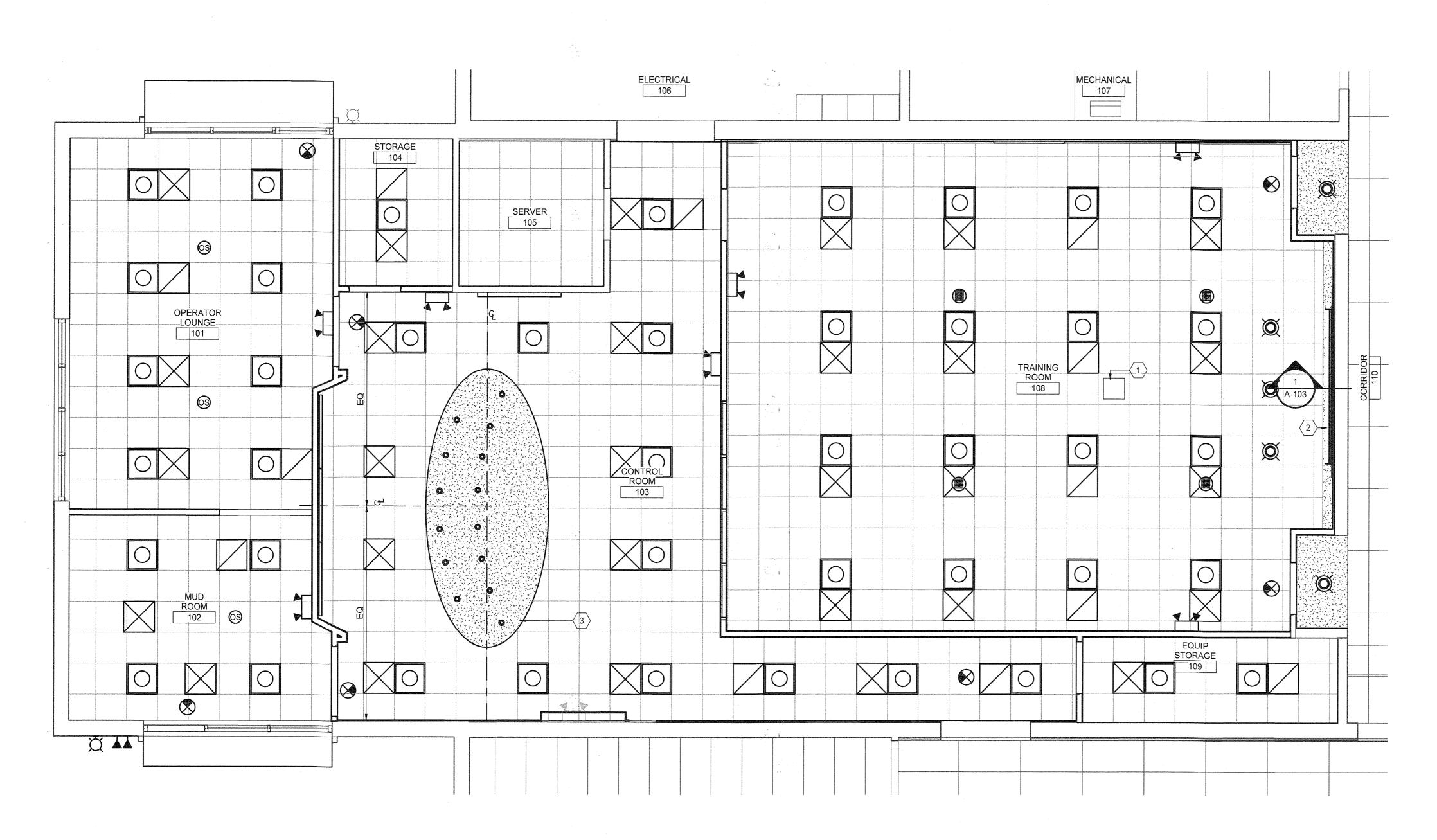
- 1 CONCEALED DROP DOWN PROJECTOR LIFT, COORDINATE WITH ELECTRICAL DRAWINGS.
- 2 CEILING RECESSED MOTOR OPERATED PROJECTOR SCREEN, COORDINATE WITH ELECTRICAL DRAWINGS. VERIFY SIZE WITH OWNER.
- 3 DROPPED GYPSUM BOARD SOFFIT OVER CONSOLE WORKSTATIONS. REFER TO ENLARGED PLAN A-106.

LEGEND









REFLECTED CEILING PLAN
1/4" = 1'-0"

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 18898, EXPIRATION DATE: 02-19-2021

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DIRECTOR OPUBLIC WORKS

CHIEF, BUREAU OF UTILITY'S

DATE



			NO.	TO VICTORY
امرا	10/15/2019	BY	NO.	REVISION
	CHK: PJD			
-	DRN: JW			
	DES: J.T			

ADMINISTRATION BUILDING REFLECTED CEILING PLAN

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

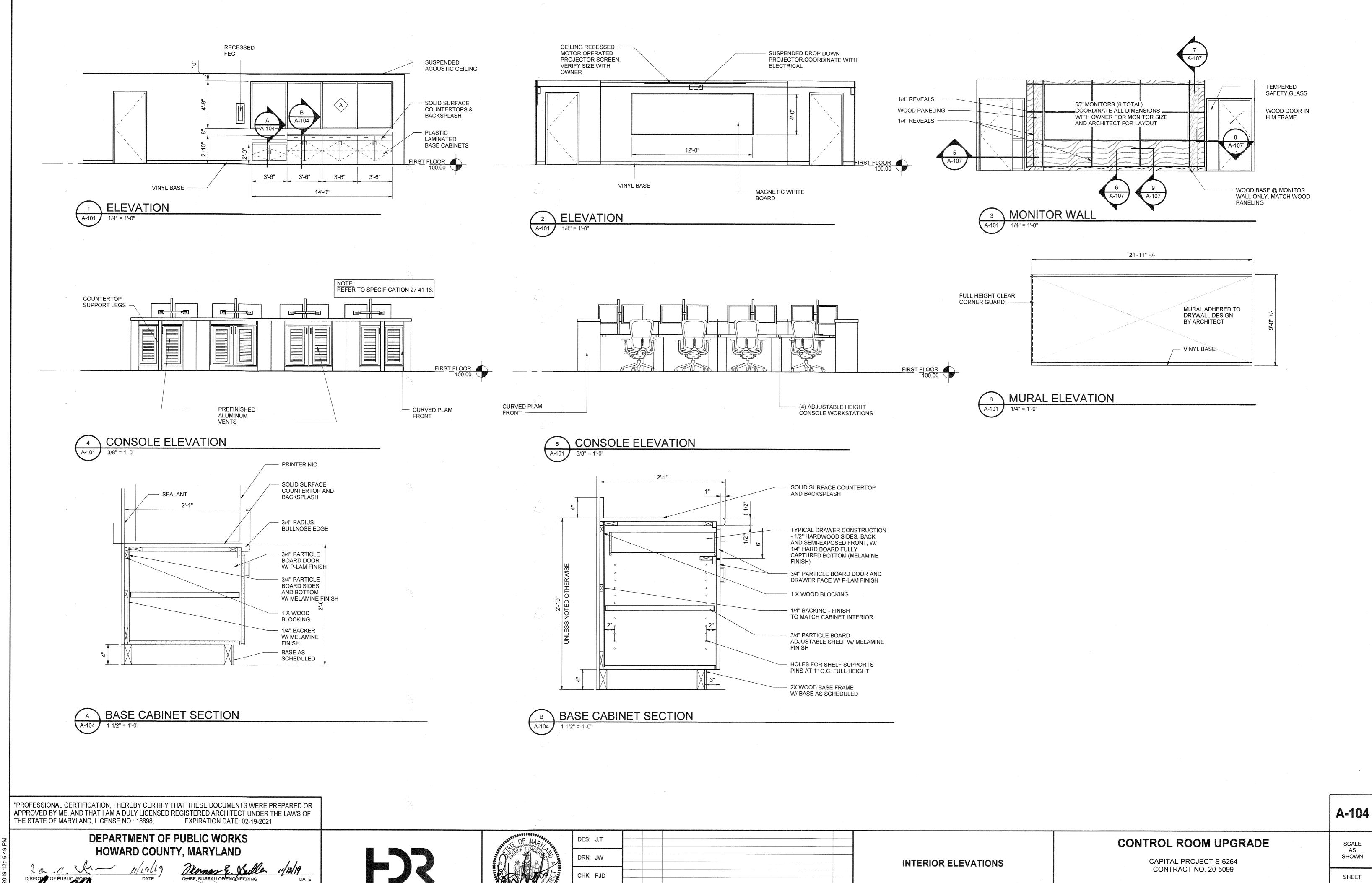
C:\rvt\2018\10134930-00-A_Jamal.WilliamsRMYXL_10/15/2019 12:16:48 PM

A-103

SCALE
AS

SHOWN

SHEET 13 OF 31



CHK: PJD

10/15/2019

BY NO.

REVISION

DATE 600 SCALE MAP NO.

BLOCK NO.

CONTRACT NO. 20-5099

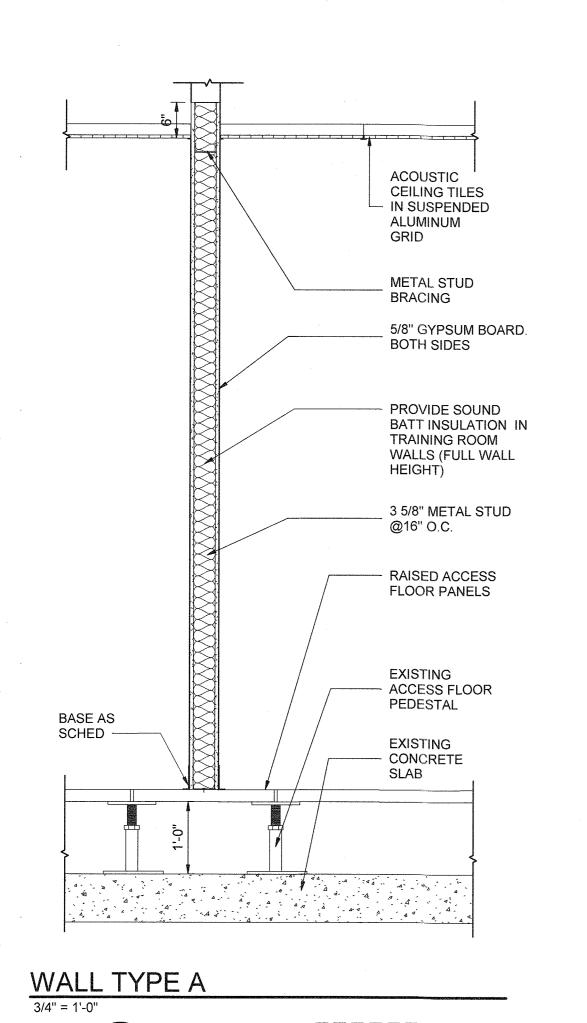
6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

SHEET

<u>14</u> OF <u>31</u>

CHIEF, UTILITY DESIGN DIVISION

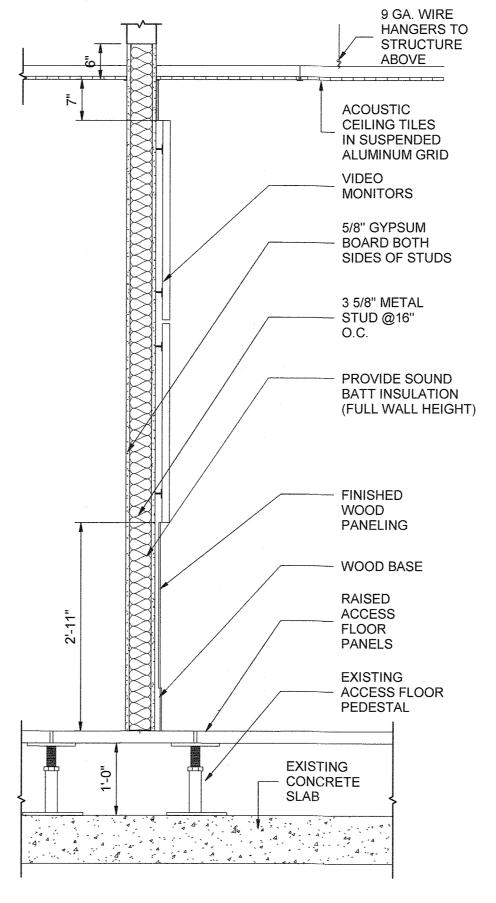


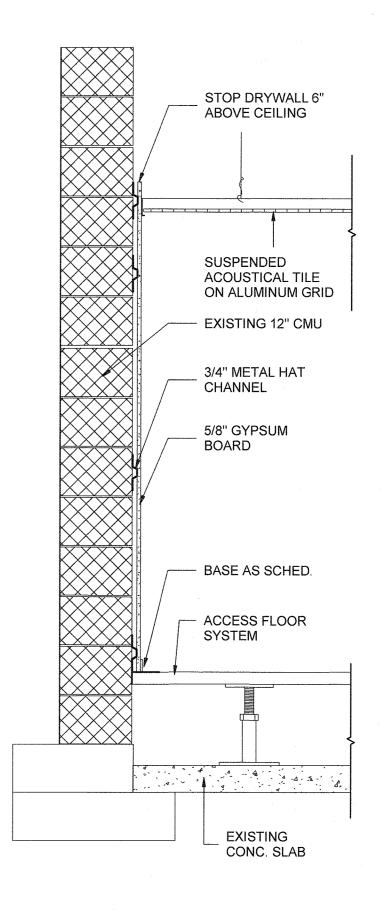
NOTE:

CONTRACTOR SHALL ENGAGE AN ENGINEER TO DESIGN METAL STUD CONNECTIONS AND VERIFY SIZING. SUBMIT CALCULATIONS WITH METAL STUD SUBMITTAL. CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE STATE OF MARYLAND.

GENERAL NOTE: PARTITION WALL BRACING

EXTEND METAL STUD PARTITION WALLS UP TO BOTTOM OF STRUCTURE. PROVIDE METAL STUD SLIP TRACK TO ALLOW FOR EXPANSION. FRAME AROUND DUCT WORK AS REQUIRED.DO NOT EXTEND GYPSUM BOARD TO BOTTOM OF STRUCTURE, STOP 6" ABOVE FINISHED CEILINGS

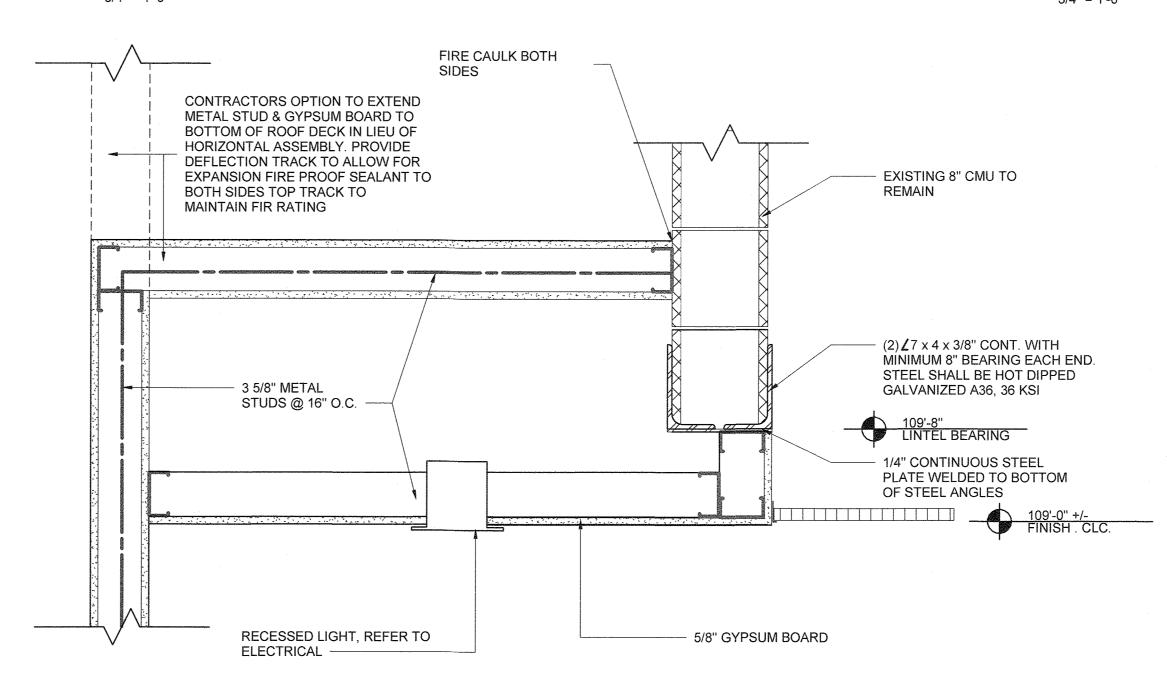




WALL TYPE B

WALL TYPE C 3/4" = 1'-0"





DOOR RECESS DETAIL

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY MÉ, AND THAT I AM A DULY LICENSED REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 18898, EXPIRATION DATE: 02-19-2021

SECTION @ DOOR RECESS

5/8" TYPE X GYP. BORAD BOTH SIDES

METAL STUDS @ 16

ONE HOUR

RATED WALL

RASIED ACCESS FLOOR

CAULKING **BOTH SIDES**

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

Demay & Bulle CHIEF, BUREAU OF ENGINEERING DATE CHIEF, UTILITY DESIGN DIVISION

EXISTING 8" CMU

EXISTING

TO REMAIN

EXISTING CERAMIC

100'-0"

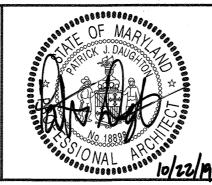
FLOOR

ACOUSTIC CEILING

FACE OF CMU WALL

BEYOND (PAINT)

109'-8" LINTAL BEARING



DES: J.T					
DRN: JW					WAL
CHK: PJD					
10/15/2019	BY	NO.	REVISION	DATE	600 SCALE MAP NO.

WALL TYPES AND DETAILS

BLOCK NO.

CONTROL ROOM UPGRADE CAPITAL PROJECT S-6264

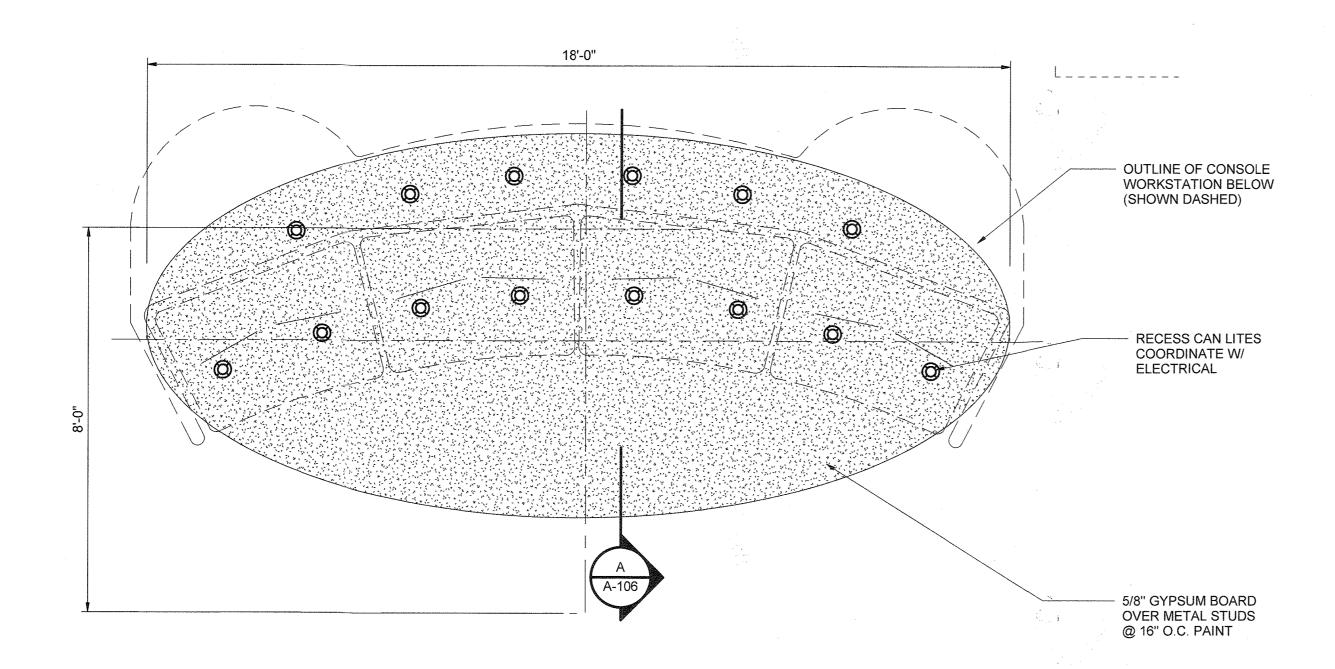
HOWARD COUNTY, MARYLAND

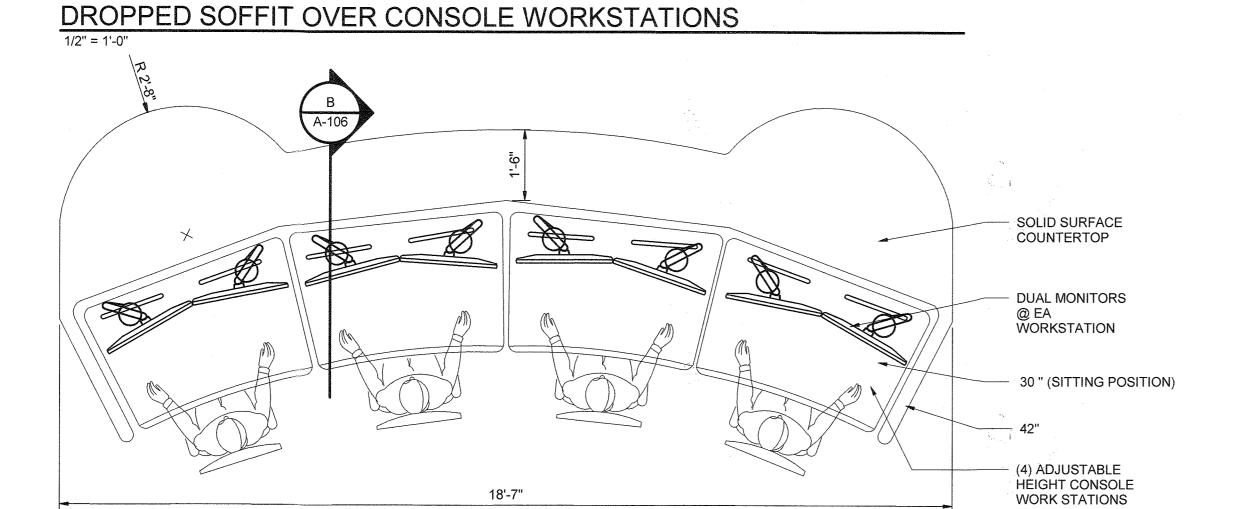
CONTRACT NO. 20-5099 **6TH ELECTION DISTRICT**

AS SHOWN SHEET <u>15</u> OF <u>31</u>

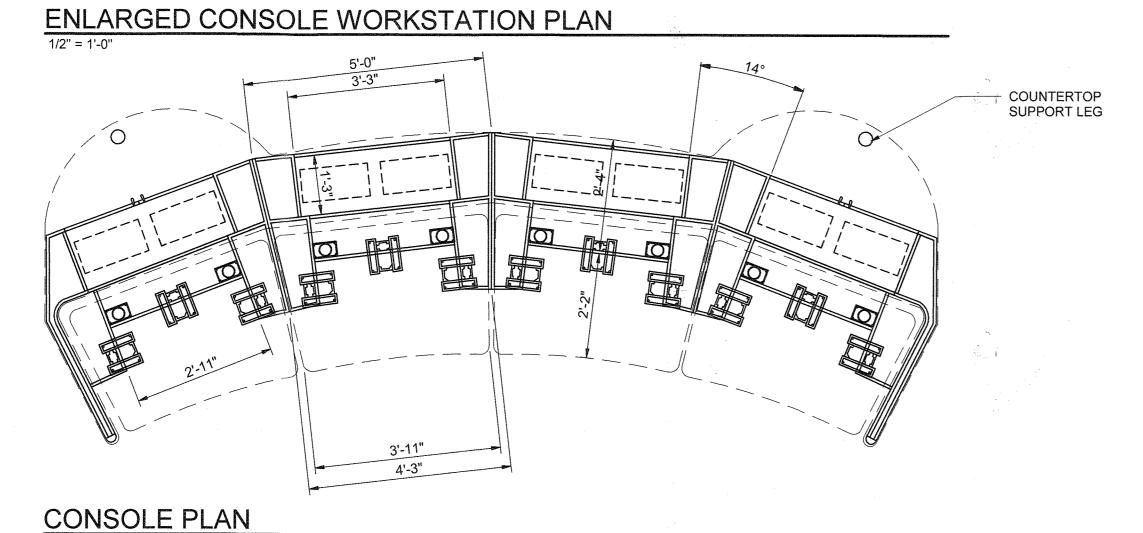
A-105

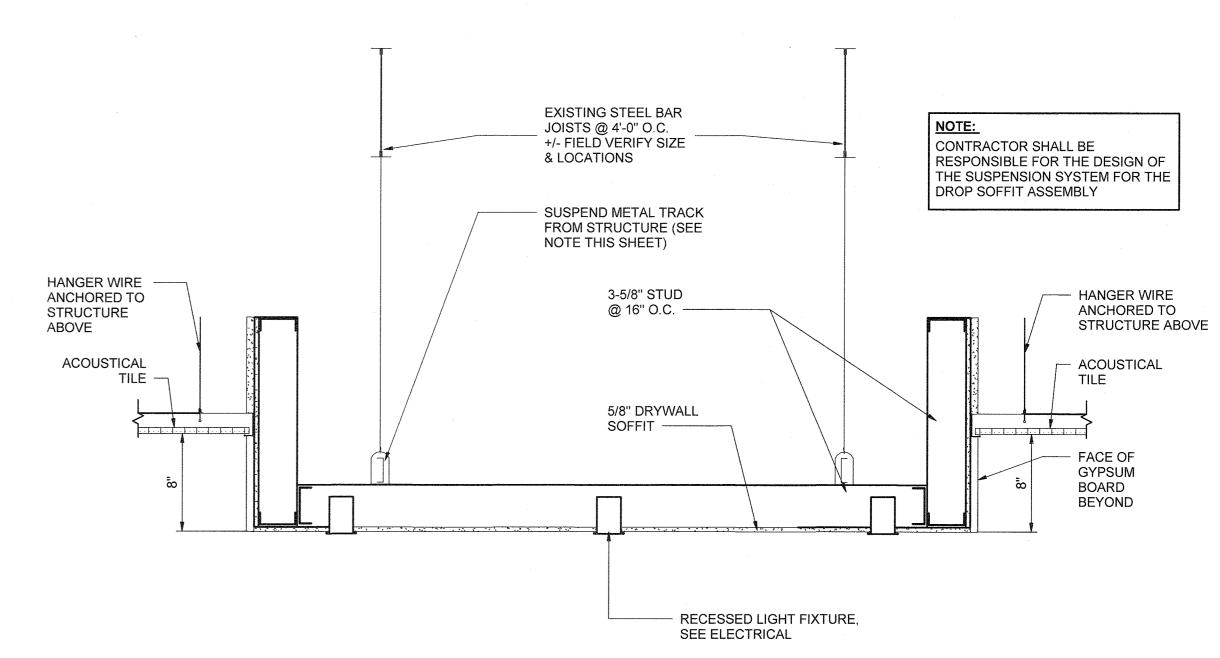
SCALE



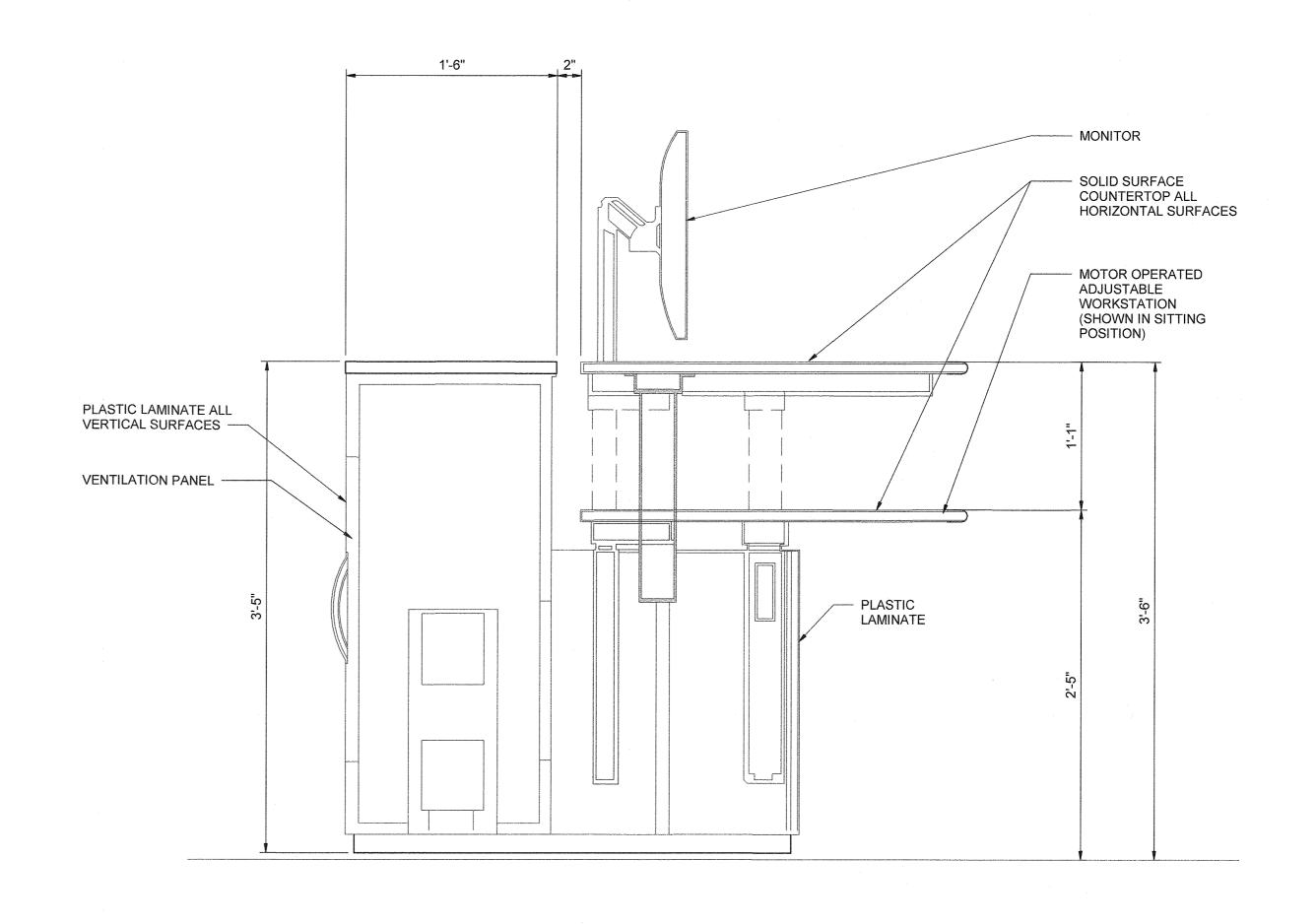


NOTE: COORDINATE GROMMET SIZES AND LOCATIONS WITH EQUIPMENT SUPPLIER





SECTION @ SUSPENDED SOFFIT



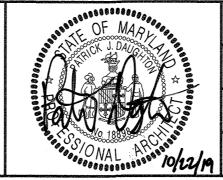
CONSOLE SECTION

600 SCALE MAP NO.

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 18898, EXPIRATION DATE: 02-19-2021

DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYLAND CHIEF, UTILITY DESIGN DIVISION



DES: J.T				
DRN: JW	ng positional and a second	-		
CHK: PJD	A Maria Caranteria de Cara			
10/15/2019	BY	NO.	REVISION	DATE

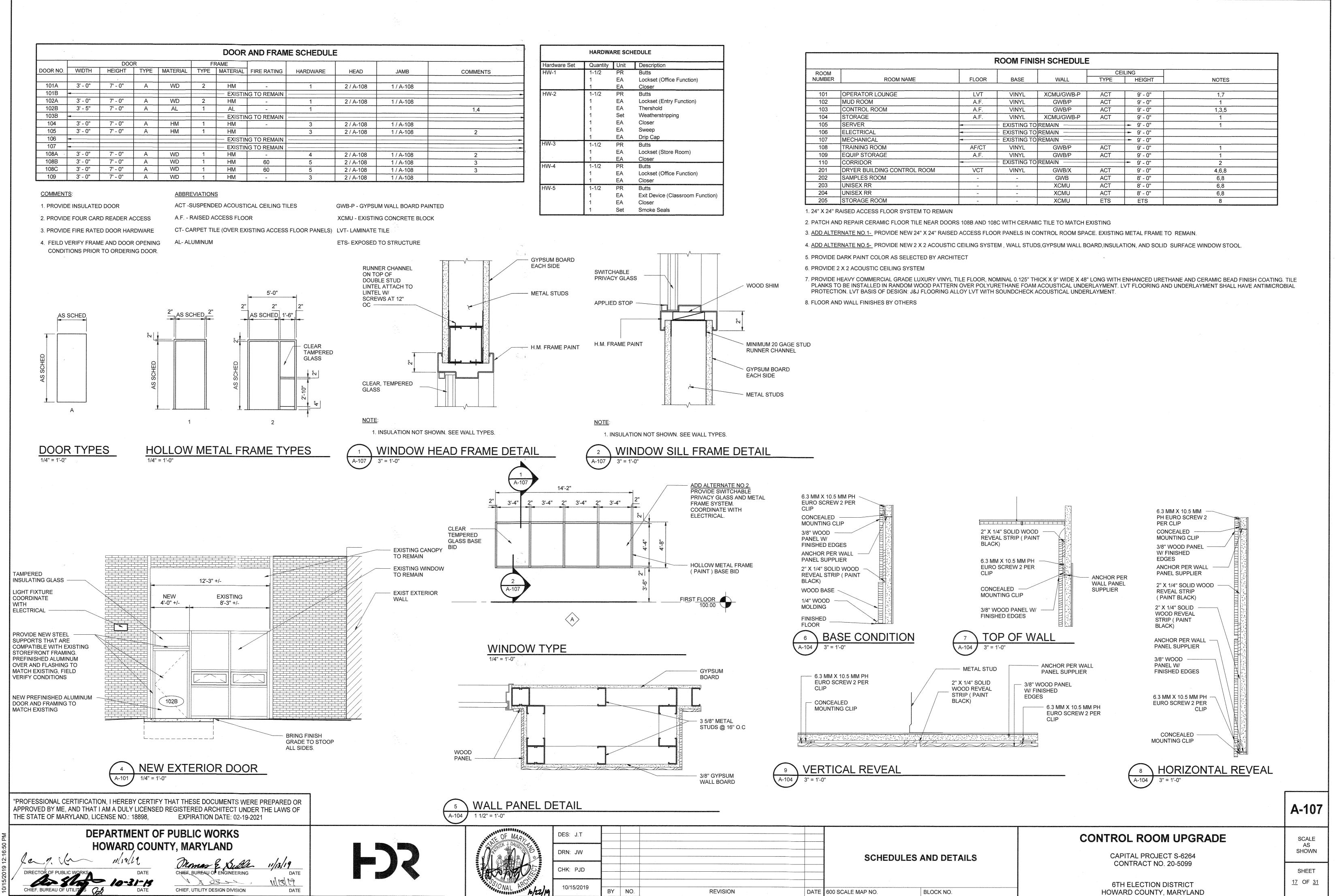
DETAILS BLOCK NO. CONTROL ROOM UPGRADE CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

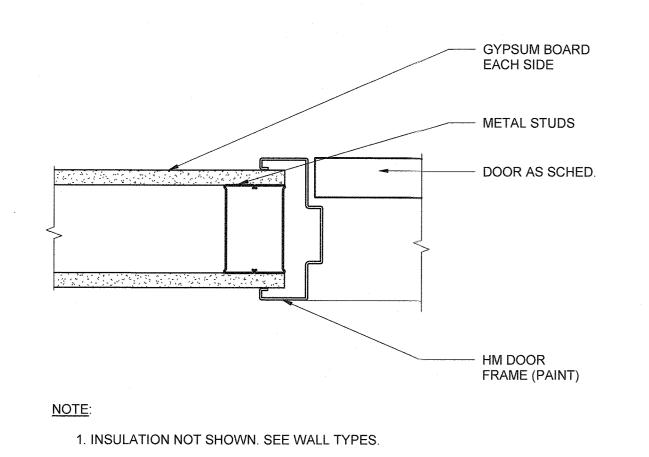
SCALE AS SHOWN SHEET

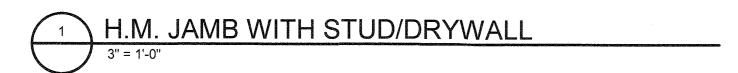
A-106

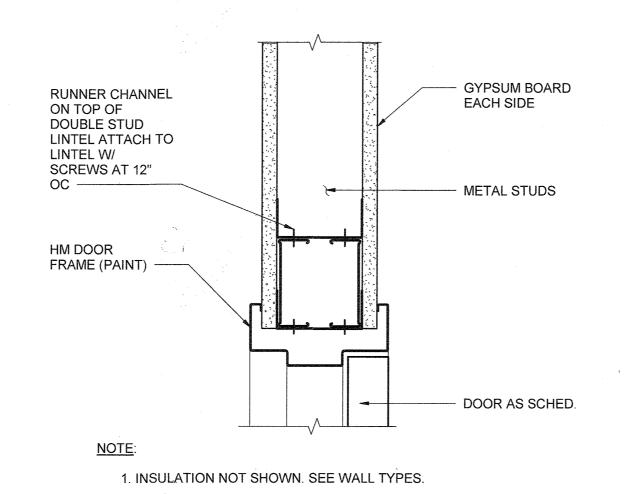
<u>16</u> OF <u>31</u>

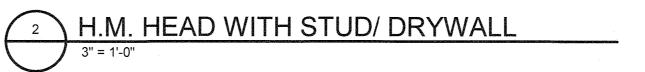


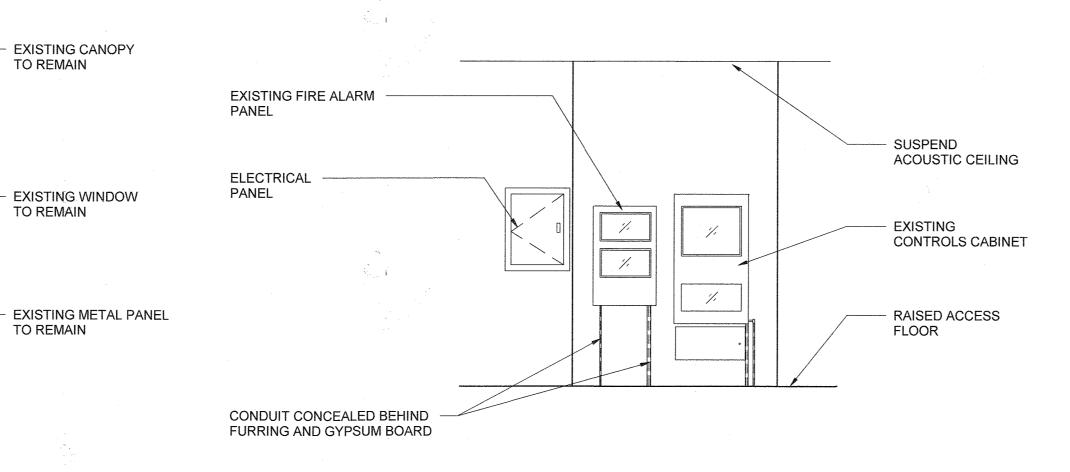
C:\rvt\2018\10134930-00-A_Jamal.WilliamsRMY





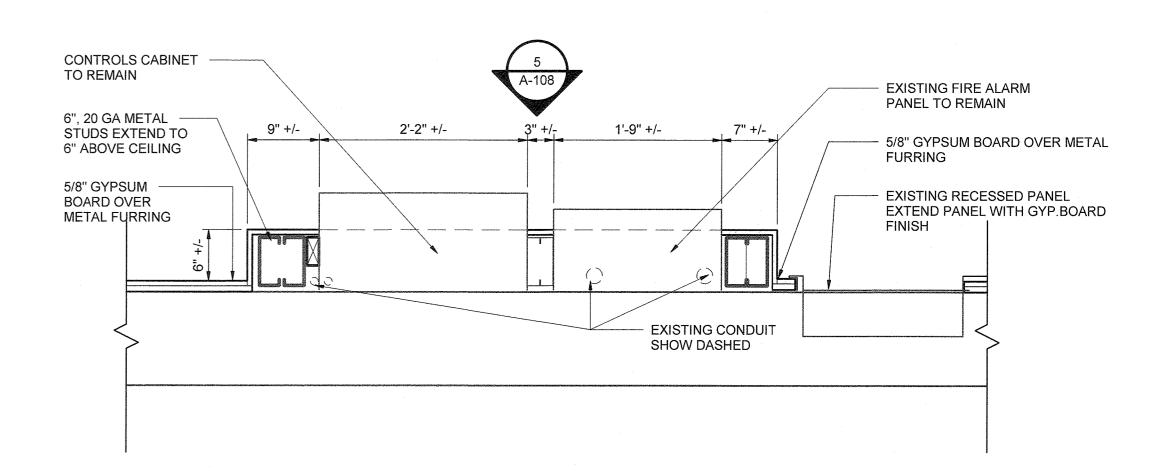












ELECTRICAL PANEL WALL DETAIL

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 18898, EXPIRATION DATE: 02-19-2021

> DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF BUREAU OF ENGINEERING CHIEF, UTILITY DESIGN DIVISION



EXISTING CANOPY TO REMAIN

- EXISTING WINDOW TO REMAIN



	DES: J.T					
000000000000000000000000000000000000000						
800	DRN: JW					
		┫				
8	CHK: PJD				*	
		No.				
22/M	10/15/2019					ļ
2419		BY	NO.	REVISION		DATE

DETAILS

BLOCK NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

SHOWN SHEET <u>18</u> OF <u>31</u>

A-108

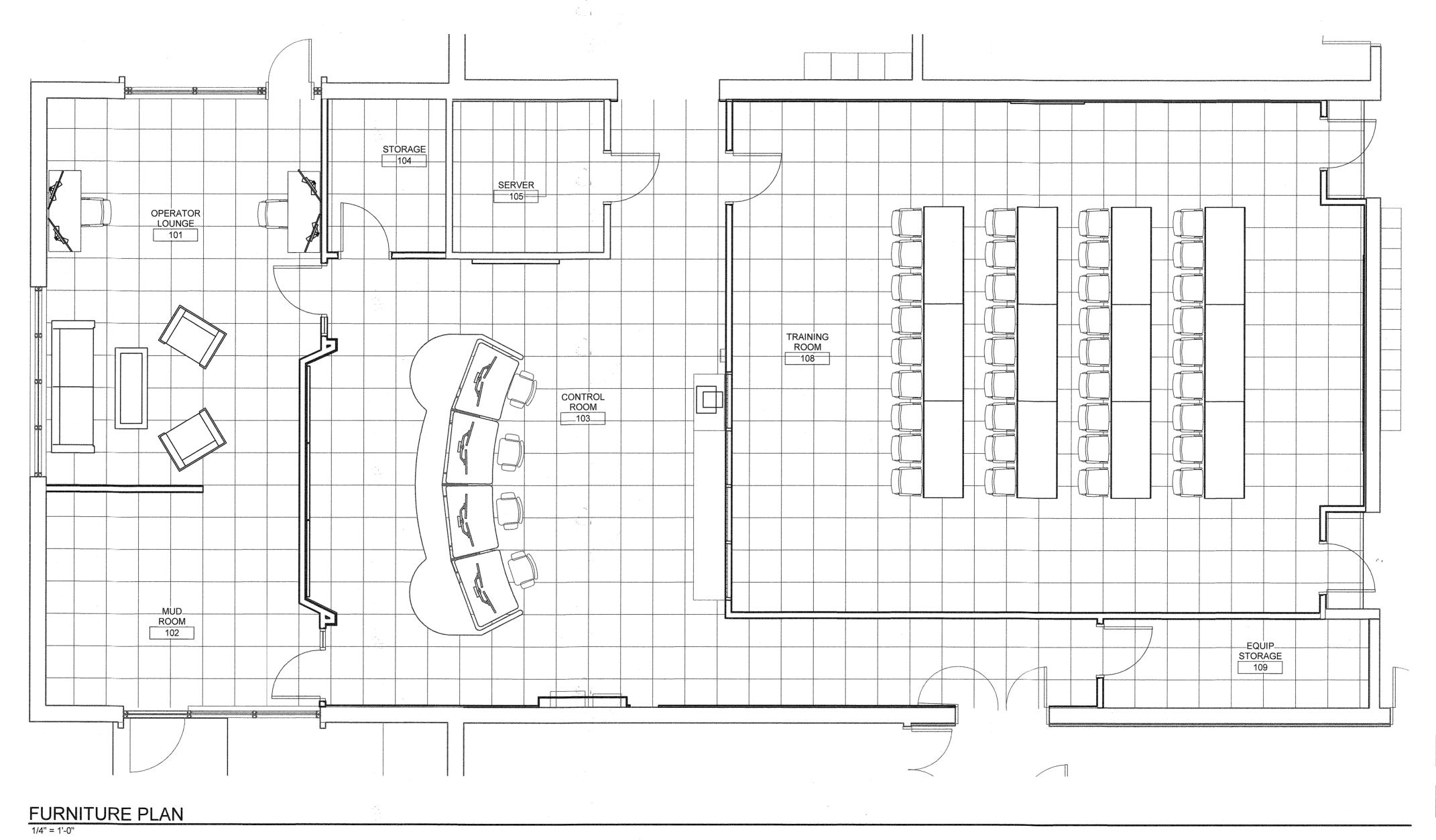
SCALE AS

EXISTING DOOR TO REMAIN

E 600 SCALE MAP NO.



- THIS DRAWING DEPICTS POTENTIAL FURNITURE LAYOUT AND IS FOR REFERENCE PURPOSES ONLY.
- ALL FURNITURE SHOWN IN OPERATOR LOUNGE 101 AND TRAINING ROOM 108 IS PROVIDED BY OWNER. (2) STAND ALONE WORKSTATIONS AND ALL CHAIRS IN CONTROL ROOM 103 ARE PROVIDE BY OWNER.



FOR -REFERENCE ONLY

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 18898, EXPIRATION DATE: 02-19-2021

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF ENGINEERING DATE



STEP OF MARY	
OF MARY	
OF MARI	(
100 NAL ARCHIT	

DEG. 0.1			-		····	
DRN: JW						
CHK: PJD				-		
10/15/2019	BY	NO.		-	REVISION	

ADMINISTRATION BUILDING FURNITURE PLAN

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

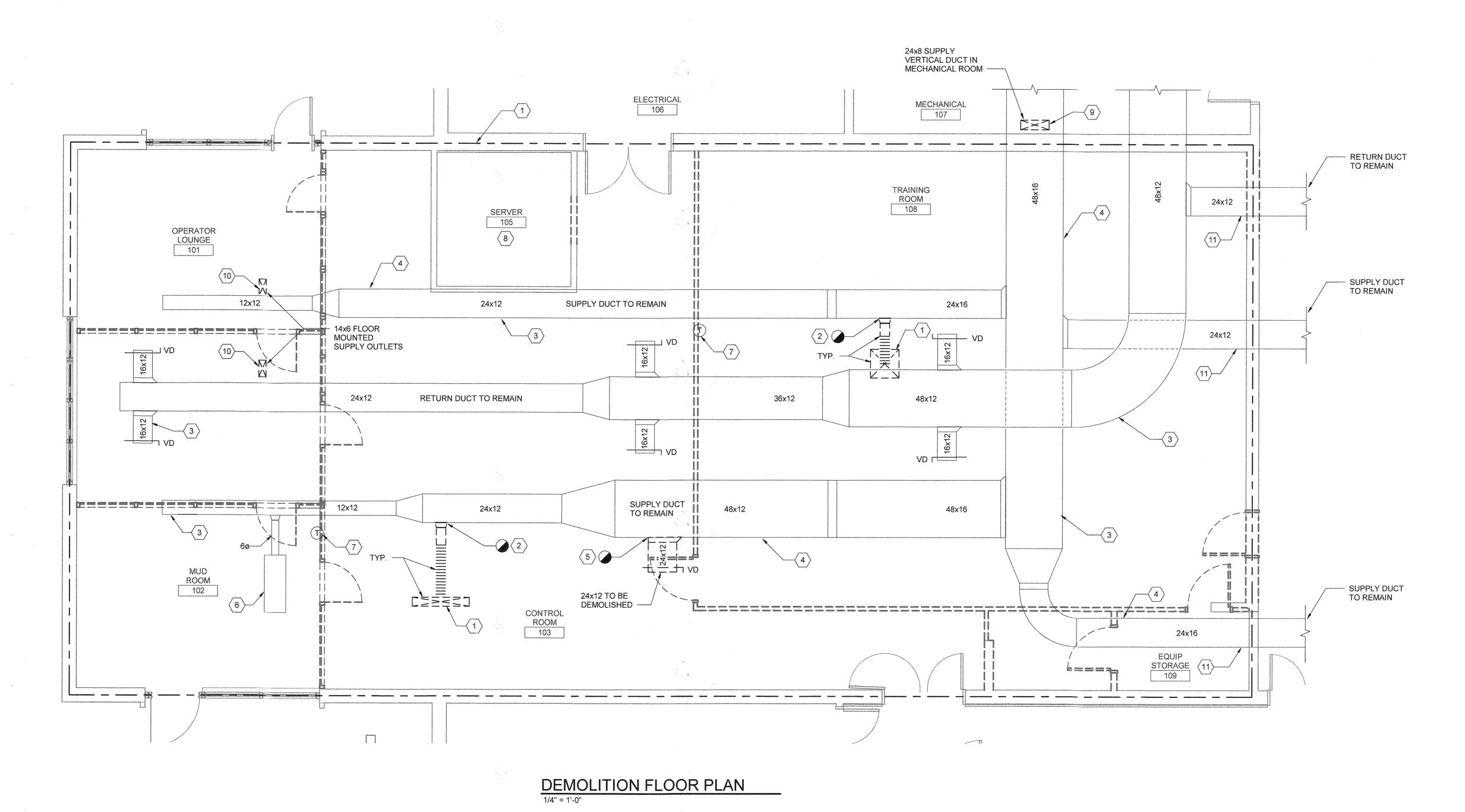
CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

SHEET

A-109

SCALE AS

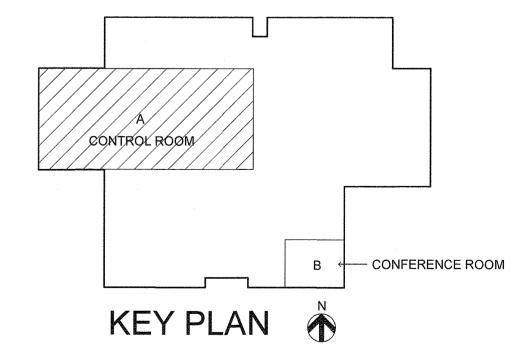
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



1. REFER TO PHASING PLAN ON G-108.

DEMOLITION KEY NOTES:

- 1. REMOVE ALL CEILING MOUNTED SUPPLY AND RETURN AIR OUTLETS WITHIN INDICATED AREA.
- 2. REMOVE ALL (CONNECTED AND NOT CONNECTED) SUPPLY TAKEOFFS AND BRANCH DUCTS UNLESS INDICATED OTHERWISE.
- 3. ALL RETURN DUCTWORK TO REMAIN.
- 4. REMOVE THERMAL INSULATION FROM SUPPLY DUCT.
- 5. REMOVE 24" X 12" SUPPLY DUCT BRANCH AS SHOWN.
- 6. FAN POWERED BOX TO REMAIN. 6" Ø DUCT BETWEEN BOX AND MAIN DUCT TO REMAIN. DUCT DOWNSTREAM OF THE BOX TO BE REMOVED. POWER AND CONTROL WIRING TO REMAIN.
- 7. WALL MOUNTED THERMOSTATS WITH ASSOCIATED CONNECTION WIRING TO BE SALVAGED AND PROTECTED FROM DAMAGE.
- 8. ALL HVAC INSTALLATIONS IN SERVER ROOM TO REMAIN.
- 9. VERTICAL 24" X 8" SUPPLY DUCT (AS SHOWN) IN MECHANICAL ROOM TO BE DEMOLISHED, CAPPED AND SEALED.
- TWO FLOOR SUPPLY OUTLETS (AS SHOWN) TO BE DEMOLISHED, CAPPED AND SEALED.
- 11. PERFORM AIR FLOW TRAVERSE READING (AT INDICATED LOCATION) ON SUPPLY AND RETURN DUCTS SERVING OTHER SPACES PRIOR TO DEMOLITION WORK. AIR FLOW VALUES TO BE RECORDED AND USED DURING MODIFIED SYSTEM AIR BALANCING PROCESS.



"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: , EXPIRATION DATE:

> DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

> > CHIEF, UTILITY DESIGN DIVISION



STATE OF MARIAN
TOPHER SOLATION
PROPERTY OF THE PROPERTY OF TH
1000 No 10003 000 X
0 0 0 50093 00 G
ONAL ESSES (0/22/17
-aasses 10/50/1

DES: CK			
DRN: BR			
CHK: CW			•
10/15/2019	BY	NO.	REVISION

DEMOLITION FLOOR PLAN

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

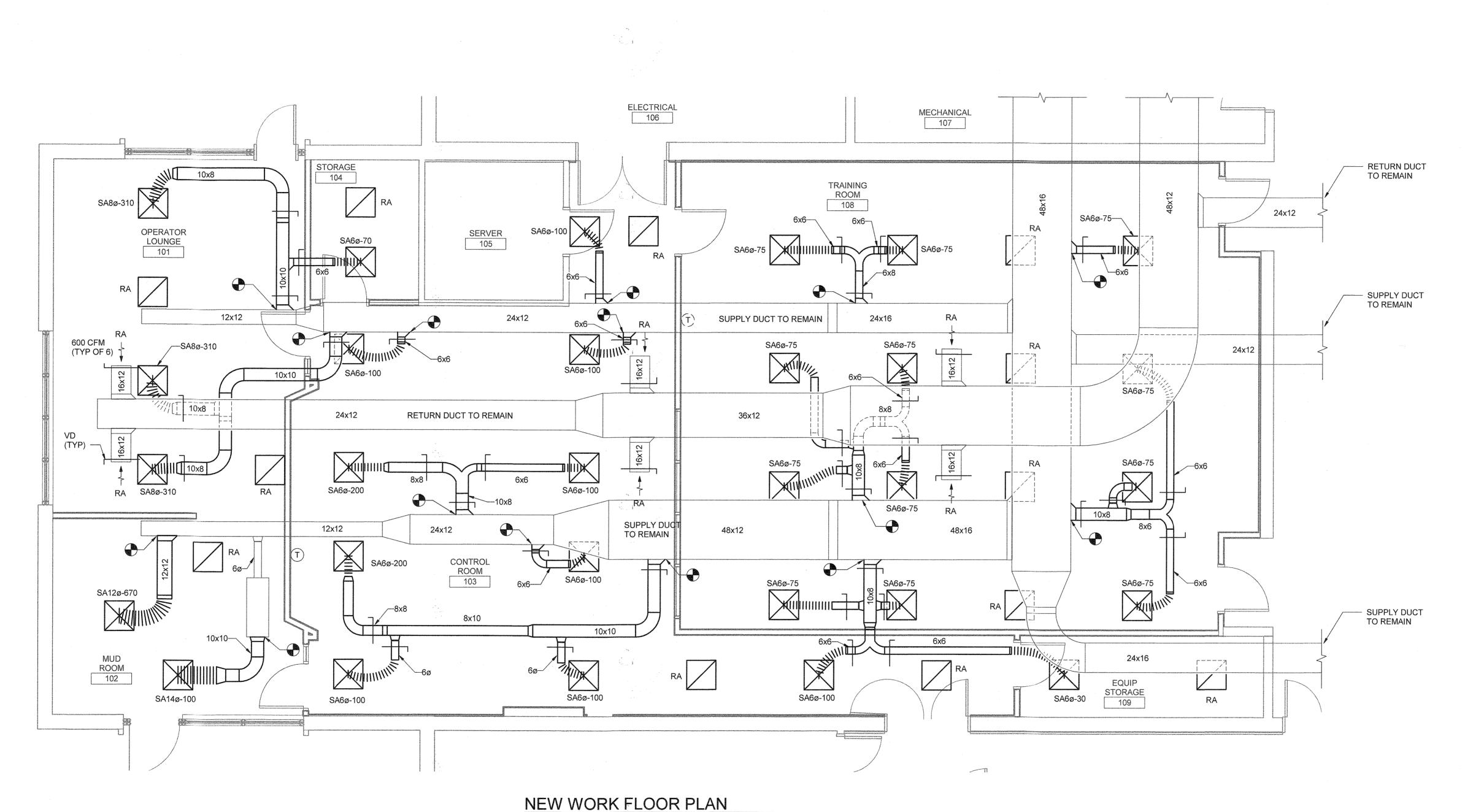
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SHEET <u>20</u> OF <u>31</u>

HD-100

SCALE AS

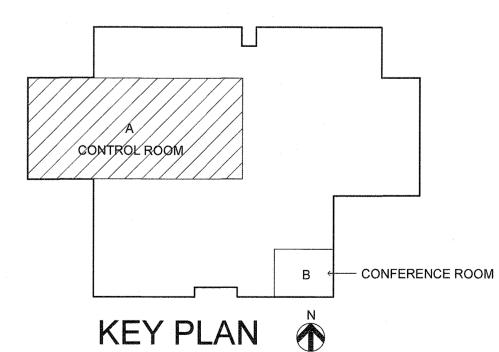
SHOWN



1. REFER TO PHASING PLAN ON G-108.

MECHANICAL NOTES:

- CAP AND SEAL ALL SUPPLY DUCT OPENINGS (RESULTING FROM TAKEOFF REMOVAL).
- THERMALLY INSULATE ALL EXISTING AND NEW SUPPLY DUCTWORK.
- SALVAGED WALL MOUNTED THERMOSTATS TO BE REINSTALLED AND TESTED.
- NO WORK SHOULD BE DONE IN SERVER ROOM OTHER THAN CAPPING SUPPLY DUCT OPENINGS.
- 5. PERFORM AIR BALANCE OF SUPPLY AND RETURN AIR AS PER INDICATED VALUES.
- 6. FLEXIBLE DUCT SIZE MATCHES DIFFUSER NECK SIZE.
- SEE AIR BALANCING KEY NOTE 11 ON MECHANICAL DEMOLITION FLOOR PLAN DRAWING. RECORDED VALUES TO BE EXECUTED DURING AIR BALANCING PROCESS.



"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: , EXPIRATION DATE:

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DATE

CHIEF, UTILITY DESIGN DIVISION

DATE



SCHOOL STATE OF STREET	10/15/2019	BY	NO.	REVISION
mannessessesses				
ANNUAL CONTRACTOR	CHK: CW			
Management				The second secon
SECRETARIA	DRN: BR			
CONTRACTOR				
STANCES	DES: CK			
٤	DEO 01/	8		

NEW WORK FLOOR PLAN

BLOCK NO.

DATE 600 SCALE MAP NO.

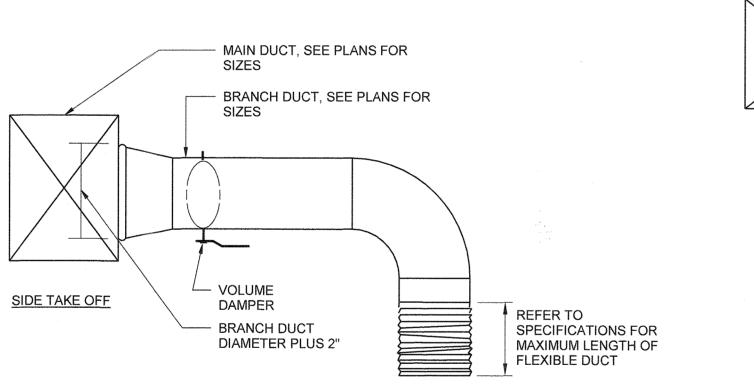
CAPITAL PROJECT S-6264
CONTRACT NO. 20-5099

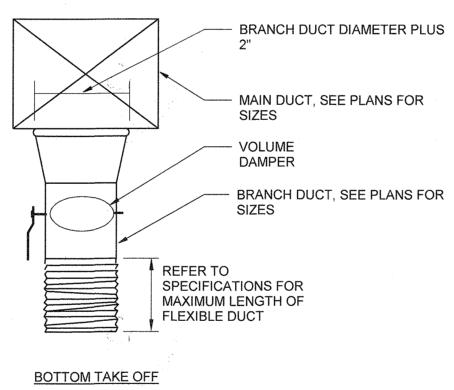
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET

<u>21</u> OF <u>31</u>

H-100

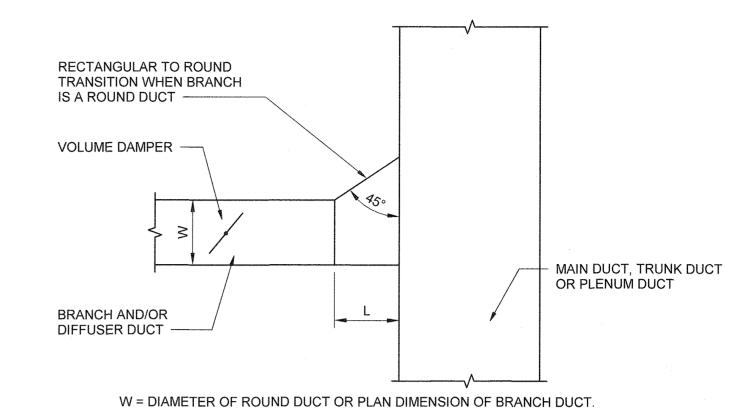
C:\rvt\2018\10134930-00-MP_Bennett.Riggins 10/15/2019 9:56:26 AM





NOTE: ALL ROUND BRANCH DUCT TAKE-OFFS FROM RECTANGULAR DUCTS SHALL BE MADE WITH SPIN-IN TYPE FITTINGS. THE MOUNTING GROOVE SHALL BE SO CONSTRUCTED AS TO ASSURE CONSTANT FIT CONTROL. BALANCING DAMPERS SHALL BE FACTORY INSTALLED WITH SPRING LOADED RETRACTABLE BEARINGS AND A POSITIVE LOCKING WING NUT FOR EASY READJUSTMENT WHEN NEEDED. FITTING SHALL BE MASTIC SEALED AND TAPERED

LOW VELOCITY ROUND DUCT TAKE OFF FITTING DETAIL



BRANCH DUCT TAKE OFF FITTING DETAIL

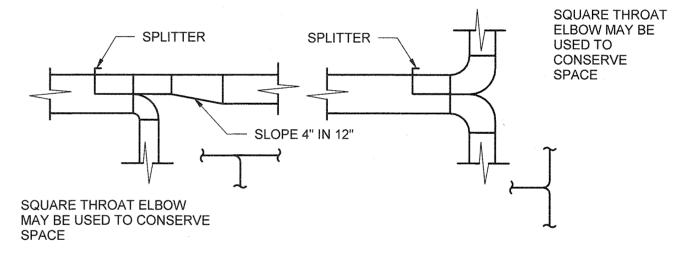
12" = 1'-0"

INSTALL MANUAL VOLUME DAMPERS

L = W/4 (4" MIN.)

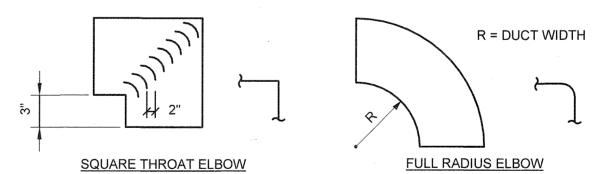
IN ALL LOW PRESSURE SUPPLY, RETURN AND EXHAUST DUCT

2. INSTALL SPLITTER DAMPER IN ALL LOW PRESSURE SUPPLY, RETURN AND EXHAUST DUCT BRANCHES SERVING TWO OR MORE OUTLETS.



RECTANGULAR BRANCH TAKE-OFF

RECTANGULAR TEE



NOTE:
1. SEE "BRANCH TAKEOFF & DAMPER" DETAIL, ALSO.

LOW PRESSURE DUCT CONNECTION

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: , EXPIRATION DATE:

> DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, UTILITY DESIGN DIVISION



and the same of		فرسنسي البازي كالالالا	and the second second second		
19	10/15/2019	BY	NO.	REVISION	
	CHK: CW				
	DRN: BR				
	DES: CK		-		

DETAILS AND SCHEDULES

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

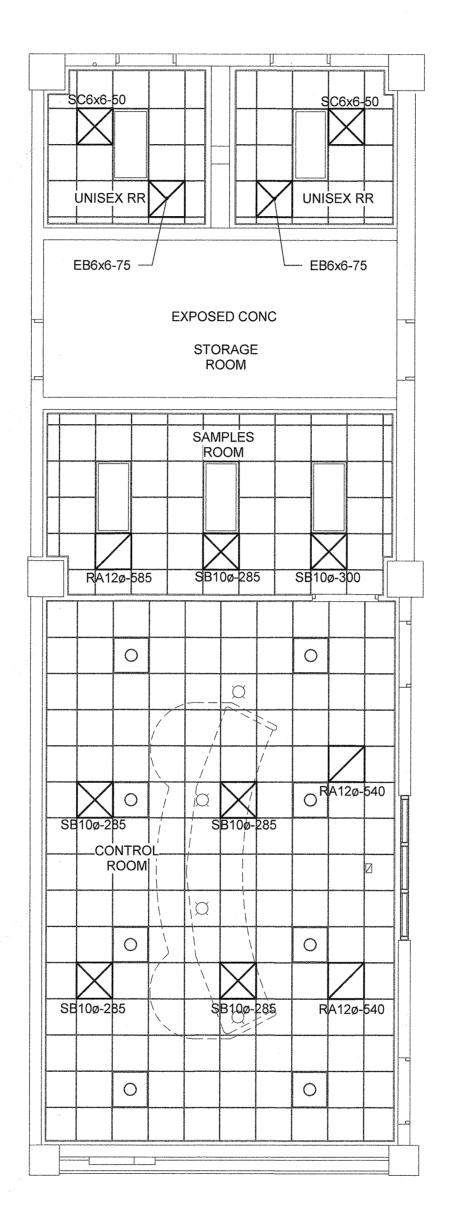
CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND H-101 SCALE AS

<u>22</u> OF <u>31</u>

SHOWN SHEET



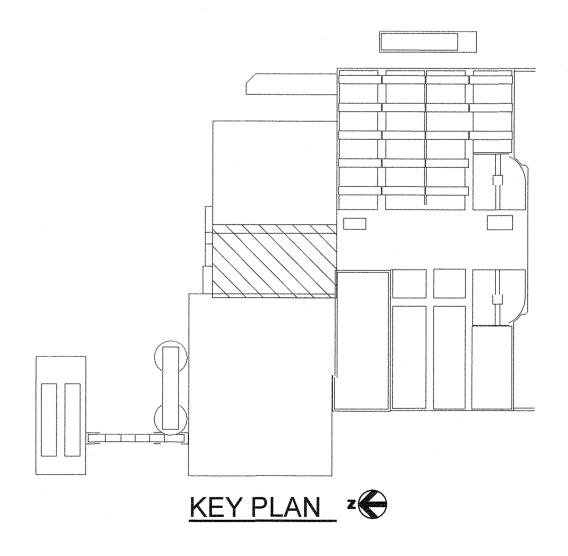


AIR OUTLET PLACEMENT PLAN
3/16" = 1'-0"

MECHANICAL NOTES:

- ABOVE CEILING HVAC EQUIPMENT AND DUCTWORK INSTALLATION TO BE PERFORMED BY OTHERS PRIOR TO AIR OUTLET INSTALLATION.
- SUPPLY DIFFUSERS, RETURN GRILLES AND EXHAUST GRILLES TO BE SUPPLIED BY OTHERS.
- 3. EXHAUST GRILLES IN RESTROOMS TO BE HARD DUCTED TO EXISTING EXHAUST DUCT.
- 4. SUPPLY DIFFUSERS AND RETURN GRILLES TO BE CONNECTED TO EXISTING DUCTWORK BY MEANS OF THERMALLY INSULATED FLEXIBLE DUCT. DUCT LENGTH NOT TO EXCEED 6 FEET LENGTH. AIR OUTLET NECK SIZE. PERFORM HARD DUCT EXTENSION IF FLEXIBLE IF NEEDED TO REACH AIR OUTLET LOCATION.
- AIR OUTLET SIZE, NECK SIZE AND AIR FLOW VOLUME ARE INDICATED BY OUTLET TAG.
- PERFORM AIR BALANCING TO FLOW VALUES INDICATED BY AIR OUTLET.

 NOTALL AIR CLITICITY BY FOLLOWING INSTITUTE ATTENTION.
- INSTALL AIR OUTLETS BY FOLLOWING IDENTIFICATION:
 A. SB- PRICE MODEL ASPD 24 x 24 PLAQUE CEILING LAY-IN SUPPLY DIFFUSER.
 - B. RA- PRICE MODEL APPDR 24 \times 24 PERFORATED CEILING LAY-IN RETURN GRILLE.
 - C. SC- PRICE MODEL 510 24 x 24 LOUVERED FACE CEILING LAY-IN DIFFUSER
 - D. EB- PRICE MODEL 530 24 x 24 LOUVERED FACE CEILING LAY-IN EXHAUST GRILLE



"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: , EXPIRATION DATE:

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, UTILITY DESIGN DIVISION

CHIEF, UTILITY DESIGN DIVISION

DAT

.

OF MARY

OF

DRN: BR

CHK: CW

10/15/2019

BY NO.

REVISION

DRYER BUILDING CONTROL ROOM PLANS

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

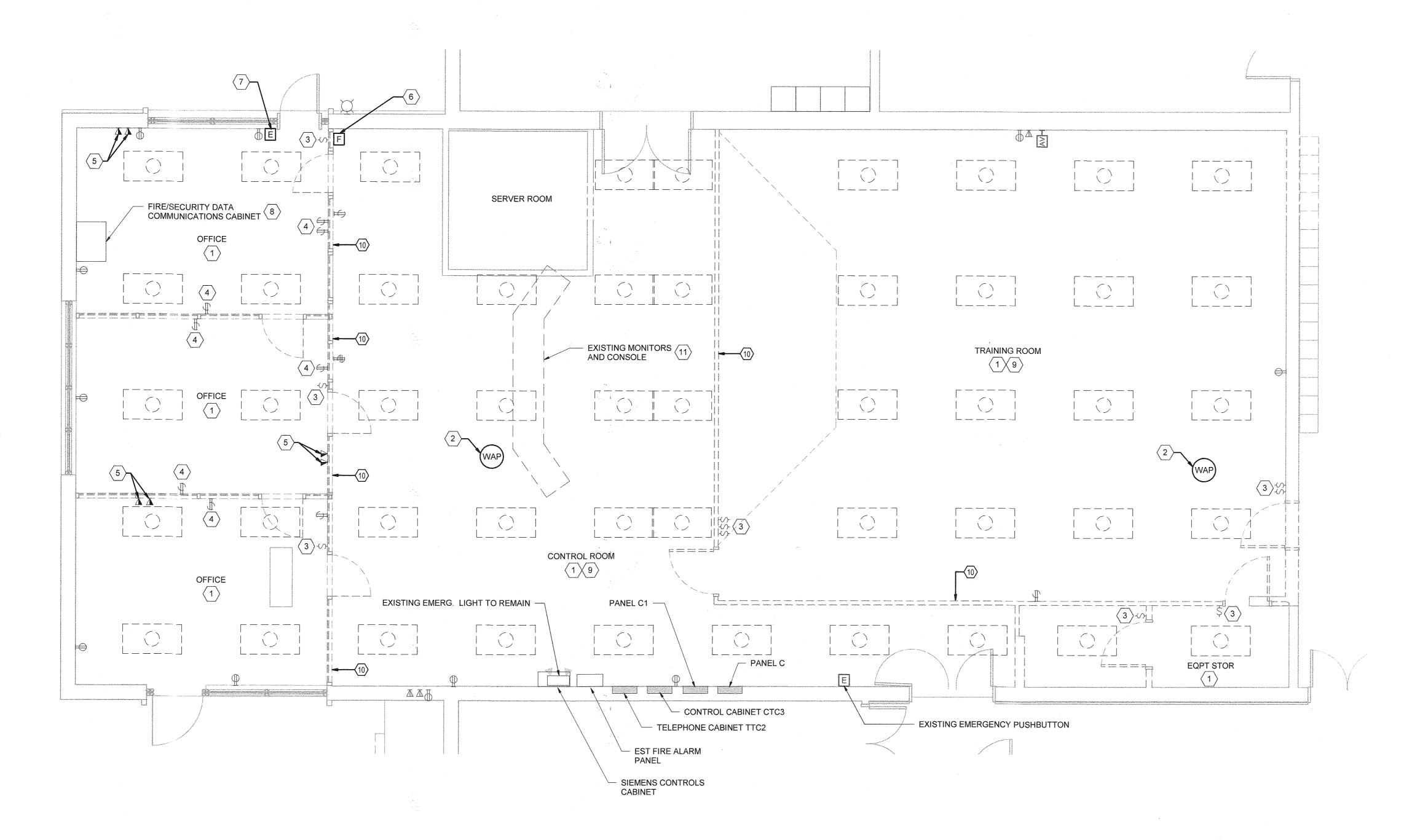
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

C:\rvt\2018\10134930-00-MP_Bennett.Riggi 10/15/2019 12:17:25 PM

H-200 SCALE AS

SHEET 23 OF 31

SHOWN



- 1. CONNECT ALL EXIT AND EMERGENCY FIXTURES TO THE NEAREST LIGHTING CIRCUIT AHEAD OF LOCAL SWITCHING.
- 2. REFER TO PHASING PLAN ON SHEET G-108.

KEY NOTES

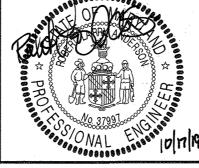
- 1. REMOVE ALL RECESSED TROFFERS.
- 2. CEILING MOUNTED WIRELESS ACCESS POINT. REMOVE AND REINSTALL IN NEW CONFERENCE AND TRAINING ROOM. SEE SHEET E-103.
- 3. REMOVE LIGHT SWITCHES. EXISTING LIGHTING CIRCUIT WILL BE USED TO REFEED NEW LIGHTS. EXTEND WIRES AND CONDUITS AS REQUIRED.
- 4. REMOVE RECEPTACLE. EXTEND WIRING AND CONDUIT TO NEW RECEPTACLE LOCATION. SEE SHEET E-103.
- REMOVE DATA OUTLET. EXTEND WIRING AND CONDUIT TO NEW DATA OUTLET LOCATION. SEE SHEET E-103.
- RELOCATE FIRE ALARM PULLSTATION. EXTEND WIRING AND CONDUIT AS REQUIRED.
- 7. RELOCATE EMERGENCY PUSHBUTTON STATION. EXTEND WIRING AND CONDUIT AS REQUIRED.
- 8. SECURITY CABINET TO BE RELOCATED. EXTEND ALL WIRING AND CONDUITS TO CABINET NEW LOCATION. SEE SHEET E-103.
- 9. REMOVE ALL UNUSED/ABANDONED WIRING, CABLES AND CONDUITS LOCATED UNDER EXISTING RAISED FLOOR.
- 10. REMOVE ALL ELECTRICAL AND DATA OUTLETS PRIOR TO WALL PARTITION REMOVAL.
- 11. EXISTING MONITORS AND CONSOLE TO BE REMOVED. EXISTING POWER CIRCUITS TO BE REUSED TO FEED NEW CONSOLE. EXTEND EXISTING WIRING AND CONDUITS AS REQUIRED.

ELECTRICAL DEMOLITION PLAN

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 37997, EXPIRATION DATE: 12/16/2019

> **DEPARTMENT OF PUBLIC WORKS** HOWARD COUNTY, MARYLAND

CHIEF BUREAU OF ENGINEERING CHIEF, UTILITY DESIGN DIVISION



19	10/15/2019	BY	NO.	REVISION
	CHK: RG			
	DRN: CLS	-		
	DES: RLA			

ELECTRICAL DEMOLITION PLAN

BLOCK NO.

CONTROL ROOM UPGRADE

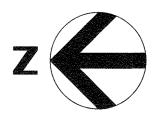
CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

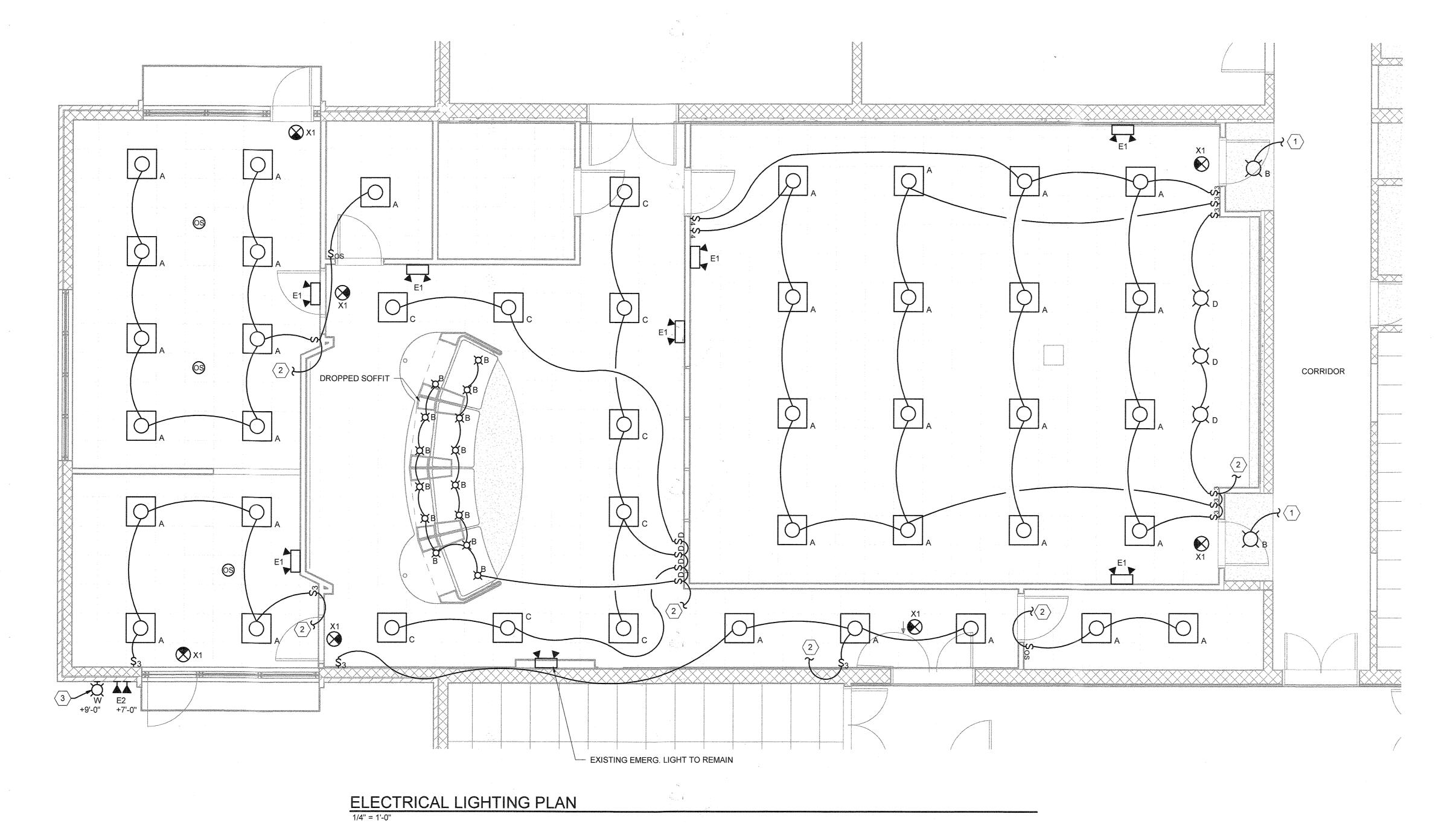
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN SHEET <u>24</u> OF <u>31</u>

ED-101

DATE 600 SCALE MAP NO.





- CONNECT ALL EXIT AND EMERGENCY FIXTURES TO THE NEAREST LIGHTING CIRCUIT AHEAD OF LOCAL SWITCHING.
- 2. REFER TO SHEET E-109 FOR LIGHT FIXTURE SCHEDULE.

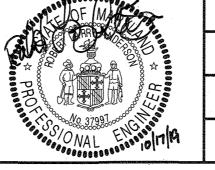
KEY NOTES

- 1. CONNECT TO EXISTING CORRIDOR LIGHTING CIRCUIT.
- 2. CONNECT TO EXISTING LIGHTING CIRCUIT.
- 3. CONNECT TO EXISTING EXTERIOR LIGHTING CIRCUIT.

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 37997, EXPIRATION DATE: 12/16/2019

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, UTILITY DESIGN DIVISION



	Ĭ			
DRN: CLS				
CHK: RG	NAME OF TAXABLE PARTY.			
40/45/0040				
10/15/2019	BY	NO.		RE
	Val N. Astronae . Astro	Contract of the last	<u> Degrada, a julius kanta kanta aya ada a</u>	

ADMIN. BUILDING PARTIAL LIGHTING PLAN

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

E-102

SHEET <u>25</u> OF <u>31</u>

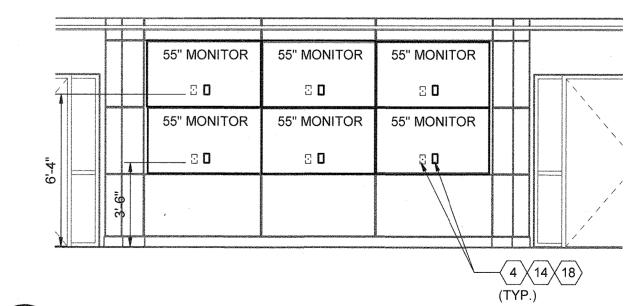
PARTIAL POWER PLAN 1

GENERAL NOTES

- 1. ELECTRICAL AND COMMUNICATION DEVICES SHOWN LIGHT ARE EXISTING TO REMAIN.
- 2. ALL POWER CIRCUITING SHOWN IS 2#12, #12G. IN 3/4"C. POWER HOMERUNS ARE ROUTED TO SPARE 20A, 1P CIRCUIT BREAKER IN PANEL C, PANEL C1, PANEL B OR UPS PANEL UNLESS OTHERWISE
- 3. REFER TO SHEET E-107 FOR SCADA AV BLOCK DIAGRAM.

KEY NOTES

- 1. EXISTING ELECTRICAL OR COMMUNICATION OUTLET IS RECESSED IN CEMENT BLOCK WALL. PROVIDE ELECTRICAL BOX EXTENDER TO ALLOW EXISTING ELECTRICAL OR COMMUNICATION OUTLET TO BE INSTALLED IN NEW FURRED OUT WALL.
- 2. PROVIDE A MULTIFUNCTION HDMI VGA 3RCA AV OUTLET.
- 3. CEILING MOUNTED SPEAKER PROVIDE FOR NEW PROJECTOR.
- 4. RECEPTACLE AND AV OUTLET PROVIDED FOR EACH WALL MOUNTED
- 5. FLOOR MOUNTED NETWORK RACK WITH VIDEO CONTROLLER.
- 6. PROVIDE PLENUM RATED HDMI CABLES FROM HUB TO IP ENCODERS/VIDEO CONTROLLERS LOCATED IN SERVER ROOM TRAINING ROOM AND CONFERENCE ROOM. PROVIDE 1X4 HDMI SPLITTER AT EACH WORKSTATION. HDMI SPLITTER SHALL BE MANUFACTURED BY KANEXPRO OR APPROVED EQUAL. PROVIDE ONE (1) HDMI CABLE PER MONITOR.
- 7. ROUTE 2#12, #12G, 3/4'C TO SPARE 20A, 1P CIRCUIT BREAKER IN UPS
- 8. ROUTE CAT.6 CABLE IN 3/4"C TO NETWORK SWITCH IN SERVER
- 9. RELOCATED COMMUNICATION OUTLET LOCATIONS. EXTEND WIRING AND CONDUIT AS REQUIRED.
- 10. PCS WORKSTATION PROVIDED BY ADDITION 8 CONTRACTOR.
- 11. INSTALL VIDEO CONTROLLER IN EXISTING FOXBORO SERVER RACK.
- 12. CONNECT FIRE ALARM NOTIFICATION DEVICE TO EXISTING FIRE ALARM PANEL WITH CLASS "B" WIRING. VOLTAGE DROP MUST NEVER EXCEED 14%.
- 13. CONNECT TO EXISTING CONSOLE CIRCUIT.
- 14. PROVIDE 2#12, #12G. IN 3/4"C TO SPARE 20A, 1P CIRCUIT BREAKER IN PANEL C1, CKT.#6 FOR MONITOR POWER.
- 15. EXISTING FOXBORO DCS AND BUSINESS WORKSTATIONS TO BE RELOCATED TO NEW CONSOLE.
- 16. PROVIDE TRANSFORMER AND JUNCTION BOX FOR LOW VOLTAGE WIRING FOR SWITCHABLE/PRIVACY GLASS. INSTALL TRANSFORMER AND JUNCTION BOX ABOVE SUSPENDED CEILING.
- 17. SWITCHABLE/PRIVACY GLASS WILL ONLY BE INSTALLED UNDER ADD ALTERNATE NO 2.
- 18. PROVIDE PLENUM RATED HDMI CABLES FROM EACH MONITOR TO VIDEO CONTROLLER IN SERVER ROOM. RUN CABLES ALONG CONTROL ROOM AND TRAINING ROOM CEILING.
- 19. PROVIDE HDMI CABLE FROM VIDEO CONTROLLER TO VIDEO DISPLAY.
- 20. NETWORK RACK, 55" MONITOR AND ASSOCIATED WORK WILL ONLY BE INSTALLED UNDER ADD ALTERNATE NO.3.
- 21. REINSTALL EXISTING CEILING MOUNTED WAP IN NEW CEILING.
- 22. CONNECT FIRE ALARM PULL STATION TO EXISTING FIRE ALARM PANEL WITH CLASS "B" WIRING.
- 23. 1-GANG RECESSED BRASS FLOOR OUTLET. COORDINATE INSTALLATION OF FLOOR OUTLET WITH RAISED FLOOR TILE INSTALLER.
- 24. CONNECT TO EXISTING 20A, 1P CIRCUIT BREAKER IN PANELBOARD. SEE GENERAL NOTE 2.



² VIDEO WALL DISPLAY ELEVATION

E-103

CHIEF, UTILITY DESIGN DIVISION



DES. REA		-		
DRN: CLS				
CHK: RG				W
10/15/2019	BY	NO.	REVISION	

ADMIN. BUILDING PARTIAL POWER PLAN

CONTROL ROOM UPGRADE **CAPITAL PROJECT S-6264**

SHOWN SHEET

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 37997, EXPIRATION DATE: 12/16/2019 **DEPARTMENT OF PUBLIC WORKS** HOWARD COUNTY, MARYLAND

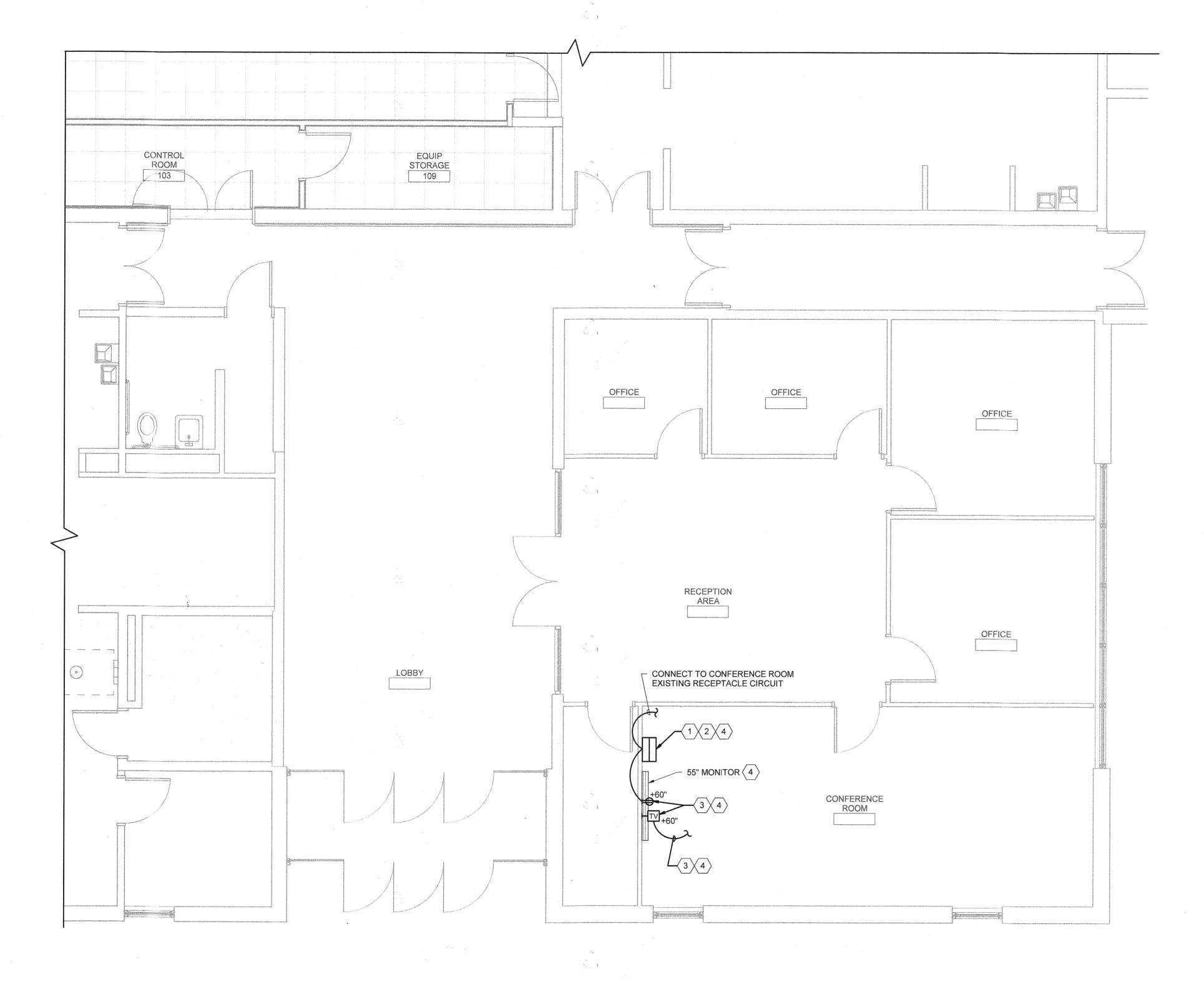
DATE 600 SCALE MAP NO. BLOCK NO.

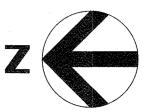
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

CONTRACT NO. 20-5099

<u>26</u> OF <u>31</u>

SCALE





- 1. ALL POWER CIRCUITING SHOWN IS 2#12, #12G. IN 3/4"C UNLESS OTHERWISE NOTED.
- 2. REFER TO SHEET E-107 FOR SCADA AV BLOCK DIAGRAM.

KEY NOTES

- 1. FLOOR MOUNTED NETWORK RACK WITH VIDEO CONTROLLER.
- PROVIDE PLENUM RATED HDMI CABLES ROUTED ABOVE CEILING FROM NETWORK RACK TO 1X4 HDMI SPLITTER AT EACH WORKSTATION IN CONTROL ROOM.
- RECEPTACLE AND AV OUTLET PROVIDED FOR WALL MOUNTED MONITOR. PROVIDE PLENUM RATED HDMI CABLE FROM MONITOR TO VIDEO CONTROLLER IN FLOOR MOUNTED NETWORK RACK.
- 4. NETWORK RACK, 55" MONITOR AND ASSOCIATED WORK WILL ONLY BE INSTALLED UNDER ADD ALTERNATE NO.4.

PARTIAL POWER PLAN 2

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 37997, EXPIRATION DATE: 12/16/2019

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS

CHIEF, BUREAU OF UTILITIES

DATE

CHIEF, UTILITY DESIGN DIVISION

NAME LAND

1/3/19

1/3/19

DATE

CHIEF, UTILITY DESIGN DIVISION

DATE





2000				
TO A STATE OF THE PARTY OF THE	DRN: CLS			
2000				
No.	CHK: RG		-	
	10/15/2019			
-	10/13/2019	BY	NO.	REVISION
		×		

ADMIN. BUILDING PARTIAL POWER PLAN

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

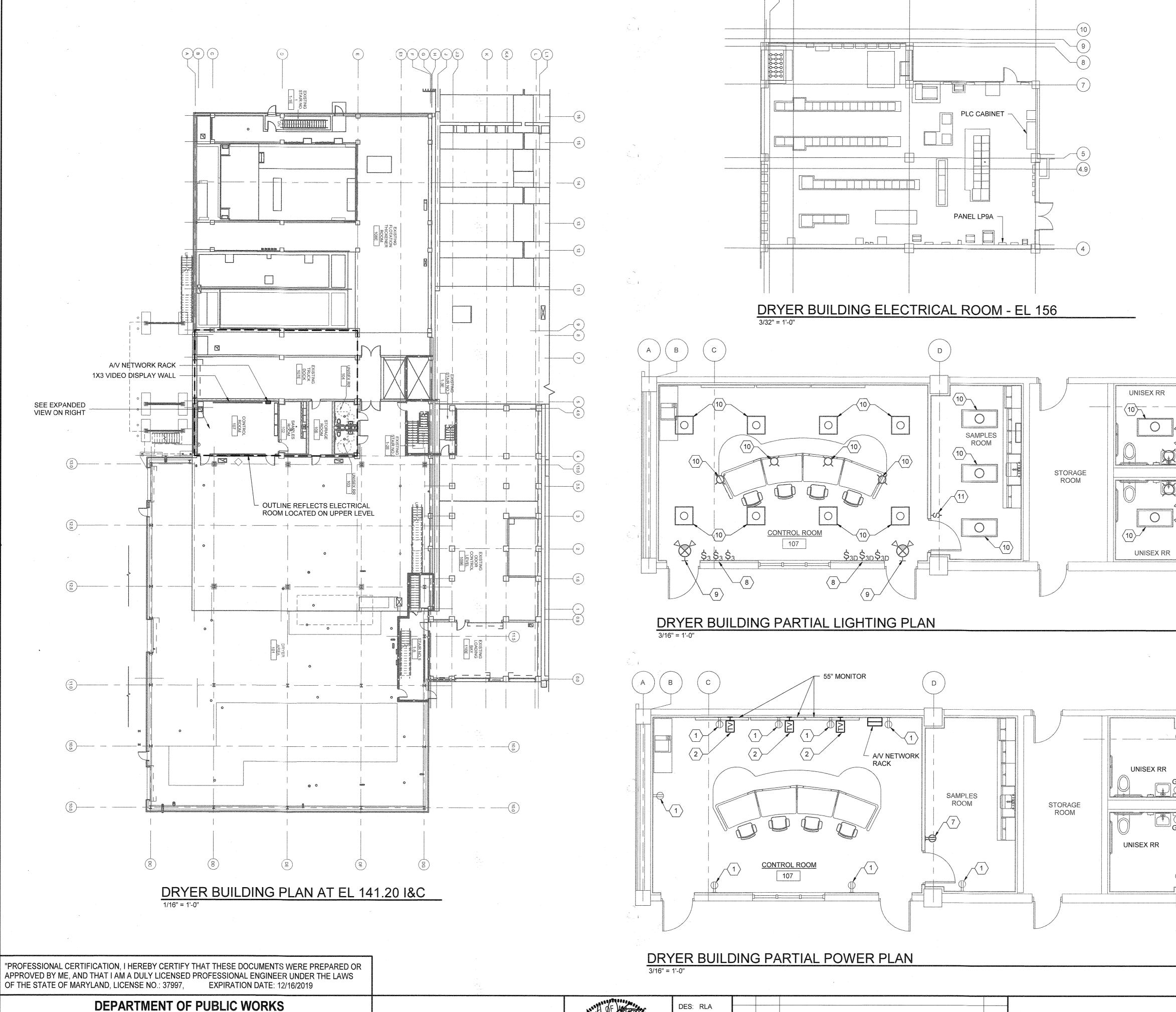
CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND E-104

E-104

SCALE AS SHOWN

SHEET <u>27</u> OF <u>31</u>

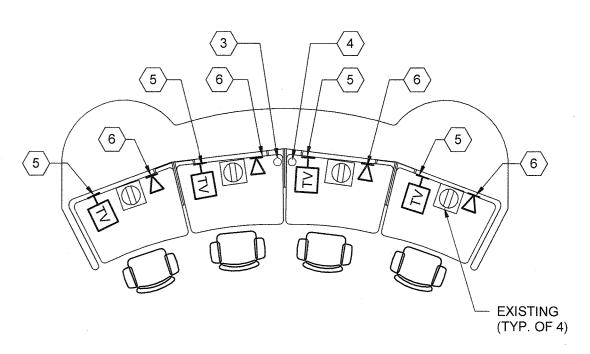




- 1. LIGHT FIXTURES, LIGHT SWITCHES AND RECEPTACLES WAS PROVIDED AND INSTALLED BY OTHERS.
- 2. ALL POWER CIRCUITING SHOWN IS 2#12, #12G. IN 3/4"C ROUTED TO SPARE 20A, 1P CIRCUIT BREAKER IN PANEL LP9A UNLESS OTHERWISE NOTED.
- 3. REFER TO SHEET E-107 FOR SCADA AV BLOCK DIAGRAM.
- 4. FLOOR OF DRYER BUILDING ELECTRICAL ROOM IS 2 HOUR FIRE RATED.

KEY NOTES

- 1. RECEPTACLE WAS PROVIDED AND INSTALLED BY OTHERS. REMOVE RECEPTACLE, INSTALL ELECTRICAL BOX EXTENDER AND REINSTALL RECEPTACLE FLUSH WITH NEW FURRED OUT WALL.
- 2. PROVIDE AV OUTLET FOR NEW WALL MOUNTED MONITOR. PROVIDE PLENUM RATED HDMI CABLE IN 3/4"C ROUTED TO VIDEO CONTROLLER IN FLOOR MOUNTED NETWORK RACK. MOUNT AV OUTLET 5'-6" AFF.
- 3. EXISTING CONDUIT STUB UP FOR NEW HDMI CABLES FROM WORKSTATIONS TO NETWORK RACK. CONDUIT FROM WORKSTATIONS TO NETWORK RACK PROVIDED BY OTHERS. FIELD COORDINATE EXACT LOCATION.
- 4. EXISTING CONDUIT STUB UP FOR NEW CAT6 CABLES FROM WORKSTATIONS TO PLC CABINET IN ELECTRICAL ROOM. CONDUIT FROM WORSTATIONS TO PLC CABINET PROVIDED BY OTHERS. FIELD COORDINATE EXACT LOCATION.
- 5. PROVIDE PLENUM RATED HDMI CABLE ROUTED TO VIDEO CONTROLLER IN FLOOR MOUNTED NETWORK RACK.
- 6. PROVIDE CAT6 CABLE ROUTED TO PLC CABINET IN ELECTRICAL
- 7. RECEPTACLE WAS PROVIDED AND INSTALLED BY OTHERS. RECEPTACLE IS SUSPENDED FROM CONCRETE CEILING. RELOCATE RECEPTACLE TO NEW WALL.
- 8. LIGHT SWITCHES WAS PROVIDED AND INSTALLED BY OTHERS. REMOVE LIGHT SWITCH, INSTALL ELECTRICAL BOX EXTENDER AND REINSTALL LIGHT SWITCH FLUSH WITH NEW FURRED OUT WALL
- 9. WALL MOUNTED LIGHT FIXTURE WAS PROVIDED AND INSTALLED BY OTHERS. REMOVE LIGHT FIXTURE, INSTALL ELECTRICAL BOX EXTENDER AND REINSTALL LIGHT FIXTURE FLUSH WITH NEW FURRED OUT WALL.
- 10. LAY-IN TROFFER AND/OR RECESSED LIGHT WAS PROVIDED AND INSTALLED BY OTHERS. THE FIXTURE ARE SUSPENDED FROM CONCRETE CEILING. RELOCATE FIXTURE TO NEW SUSPENDED
- 11. LIGHT SWITCH WAS PROVIDED AND INSTALLED BY OTHERS. SWITCH IS SUSPENDED FROM CONCRETE CEILING. RELOCATE SWITCH TO



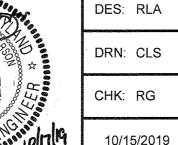
WORKSTATION POWER AND COMM. PLAN

CONTROL ROOM UPGRADE DRYER BUILDING CONTROL ROOM SCADA

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

HOWARD COUNTY, MARYLAND CHIEF, UTILITY DESIGN DIVISION





10/15/2019 BY NO. REVISION

BLOCK NO.

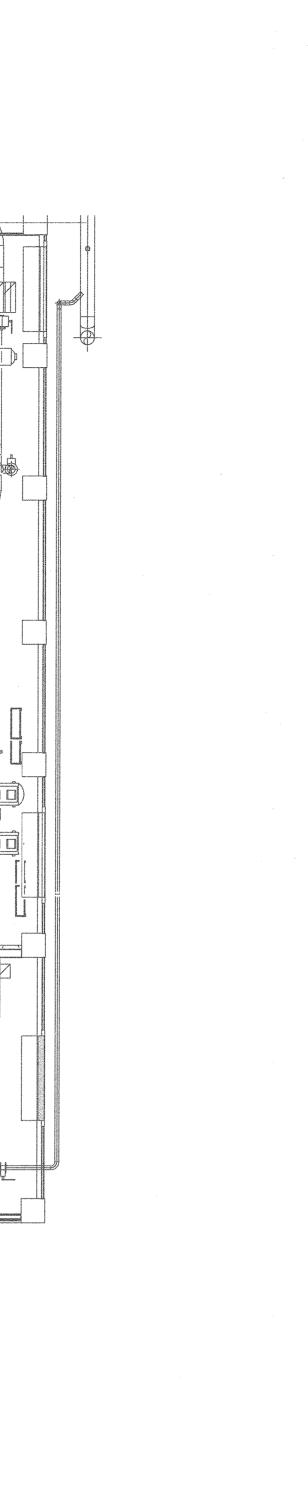
DATE 600 SCALE MAP NO.

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SHOWN

E-105

SCALE

SHEET <u>28</u> OF <u>31</u>





KEY NOTES

- 1. MOUNT CAMERA SUCH THAT VIEWER IS ABLE TO SEE NORTH SILO TRUCK LOADING AREA. MOUNT CAMERA OFF TO THE SIDE OF THE SILO SUCH THAT THE VIEWER IS ABLE TO SEE THE UNLOADING OF MATERIALS WITHOUT OPERATOR HAVING TO WALK ON DECK TO
- 2. MOUNT CAMERA SUCH THAT VIEWER IS ABLE TO SEE SOUTH SILO TRUCK LOADING AREA. MOUNT CAMERA OFF TO THE SIDE OF THE SILO SUCH THAT THE VIEWER IS ABLE TO SEE THE UNLOADING OF MATERIALS WITHOUT OPERATOR HAVING TO WALK ON DECK TO
- 3. MOUNT CAMERA SUCH THAT VIEWER IS ABLE TO SEE THE SCREEN AND CONVEYORS AREA.
- 4. MOUNT CAMERA SUCH THAT VIEWER IS ABLE TO SEE THE SCREEN AND DRAG CONVEYORS AREA.
- 5. PROVIDE CAT6 CABLE IN 3/4"C FROM CAMERA TO VIDEO
- CONTROLLER LOCATED IN DRYER ELECTRICAL ROOM AT THE NIP. SEE SHEET E-105 FOR DRYER BUILDING ELECTRICAL ROOM LOCATION.

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 37997, EXPIRATION DATE: 12/16/2019

BIOSOLIDS SILO NO. 1 11-DRY-6011-SILO

BIOSOLIDS SILO NO. 2 11-DRY-6111-SILO

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

was 1 CHIEF, UTILITY DESIGN DIVISION

DEWATERING AND DRYER BUILDING PARTIAL PLAN - CAMERAS

DS FOR SPECIAL SECTION OF THE PROPERTY SECTION OF THE

P7146

8 DRY-5111-

MCC-10-F21D

0



-	DRN: CLS			
***************************************	CHK: RG			
		7.2		
	10/15/2019	BY	NO.	REVISION
		L	augment and a second	

LXXXXX

MCC-10-F3D

MCC-10-F3A

P507

SD-001

P7164

SD-002

DS FOR 8-DR -5112-BL

8-DRY-4012-00N

XXXXXXX

MCC-10-F27 P5090

MCC-10-F23A P5080

DS FOR 8-DRY 5212-BLT

LP9B-38 P7165

> DRYER BUILDING PARTIAL PLAN -CAMERAS ELECTRICAL AND I&C PLAN

> > BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

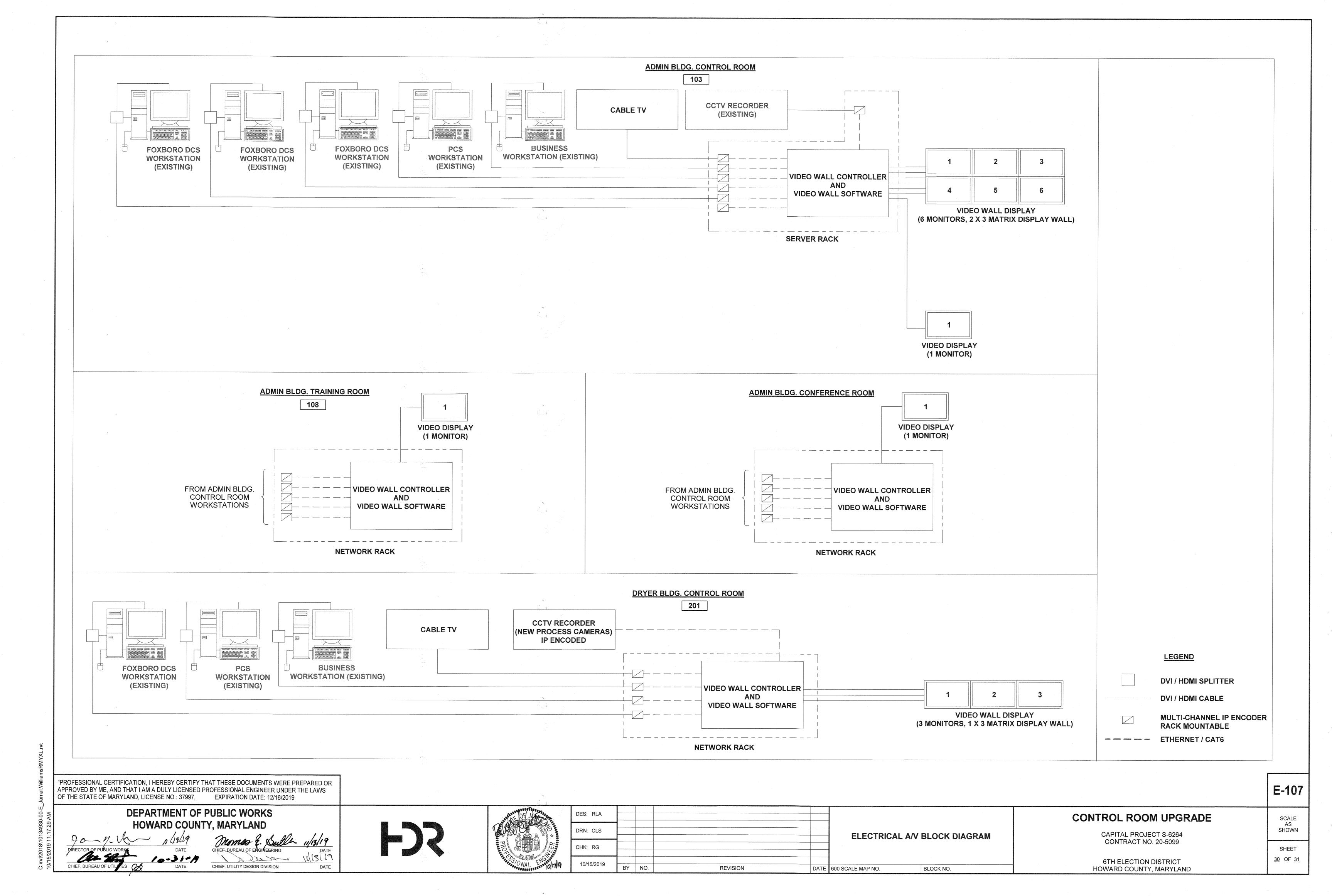
CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

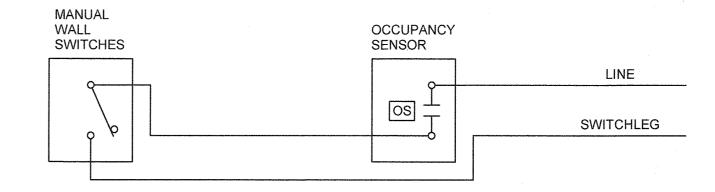
E-106

SHEET <u>29</u> OF <u>31</u>



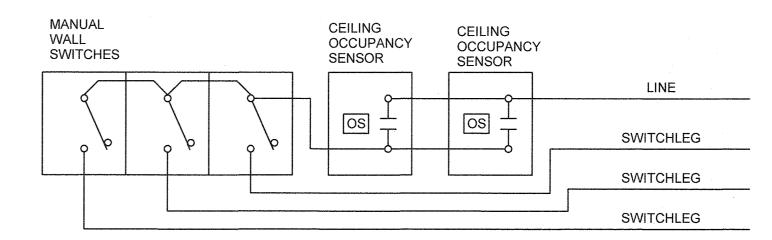
1. COMPLIANCE WITH NORTH CAROLINA GENERAL STATUTE 133-3 IS REQUIRED. THE MANUFACTURER AND SERIES NUMBERS PROVIDED IN THE ABOVE SCHEDULE ARE USED ONLY TO DENOTE THE QUALITY STANDARD OF PRODUCT DESIRED TO MEET THE SCHEDULED REQUIREMENTS AND DO NOT RESTRICT THE CONTRACTOR TO A SPECIFIC BRAND, MAKE, MANUFACTURER OR SPECIFIC NAME; THEY ARE USED ONLY TO SET FORTH AND CONVEY THE GENERAL STYLE, TYPE, CHARACTER AND QUALITY OF PRODUCT DESIRED TO MEET THE SCHEDULED REQUIREMENTS. EQUIVALENT PRODUCTS MAY BE ACCEPTABLE.

2. IF A CONFLICT OCCURS BETWEEN THE FEATURES LISTED IN THE SCHEDULED REQUIREMENTS AND THE FEATURES AVAILABLE FOR A LISTED MANUFACTURER/SERIES, THE SCHEDULED REQUIREMENTS SHALL TAKE PRECEDENCE.



LIGHTING CONTROLS WITH OCCUPANCY SENSOR AND MANUAL SWITCHES

NTS



LIGHTING CONTROLS WITH MULTIPLE

OCCUPANCY SENSORS AND MANUAL SWITCHES

NTS

CONTROLS DIAGRAM NOTES:

- LIGHTING CONTROLS DIAGRAMS INDICATE THE DESIGN INTENT FOR THE CONTROLS. PROVIDE ALL CONTROL WIRING, CONNECTIONS, CONTACTORS AND CONTROLS COMPONENTS NECESSARY TO ACHIEVE THE CONTROL FUNCTIONS INDICATED ON THE PLANS AND LIGHTING CONTROLS DIAGRAMS.
- SEE LIGHTING PLANS FOR EXACT NUMBER OF OCCUPANCY SENSORS AND MANUAL WALL SWITCHES.
- 3. THE TIME DELAY SETTING FOR ALL OCCUPANCY SENSORS SHALL BE SET TO 30 MINUTES.

"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 37997, EXPIRATION DATE: 12/16/2019

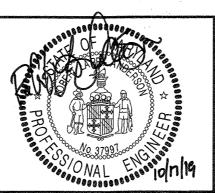
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, UTILITY DESIGN DIVISION

CHIEF, UTILITY DESIGN DIVISION

DATE





DES: RLA

THE STREET				
ACCEPTANCE OF THE	DRN: CLS			
STREET, STREET,			-	
CONTRACTOR	CHK. BG			
MONTH AND ADDRESS OF THE PARTY	OTIN: NO		-	
PROPERTY AND PERSONS	40/45/0040			
ALC: MICHIGANISM	10/15/2019	BY	NO.	REVISION
TOTAL STREET, SALES STREET, SA	CHK: RG 10/15/2019	BY	NO.	REVISION

ELECTRICAL SCHEDULES

BLOCK NO.

DATE 600 SCALE MAP NO.

CONTROL ROOM UPGRADE

CAPITAL PROJECT S-6264 CONTRACT NO. 20-5099

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET

E-108

<u>31</u> OF <u>31</u>

C:\rvt\2018\10134930-00-E_Jamal.WilliamsRMYXL.rvt