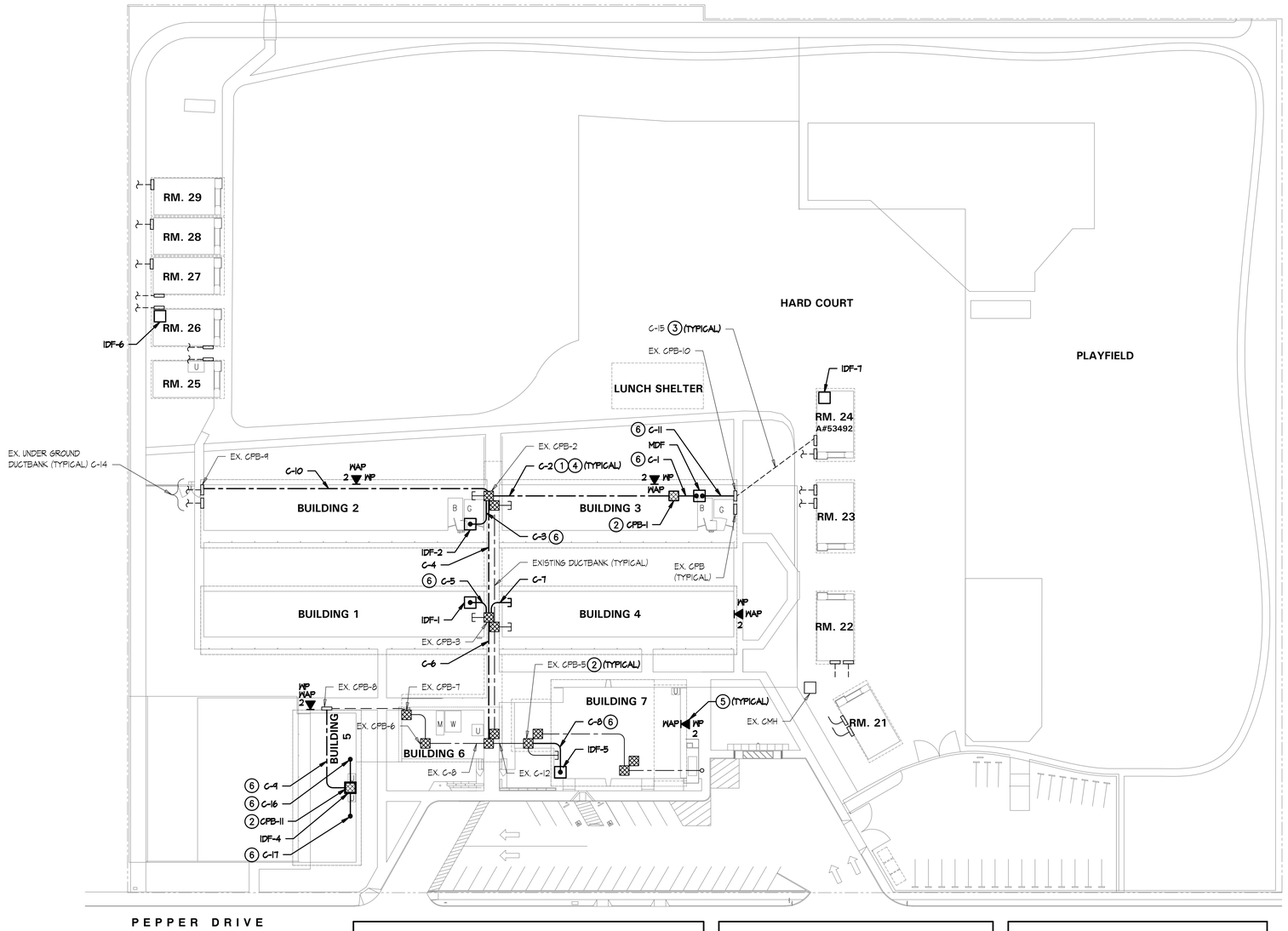


CONDUIT BREAKDOWN

CONDUIT SEGMENT NAME	FIBER CONDUITS W/3 1 1/4" INNERDUCTS EA. *			COPPER				FIRE ALARM / GROUND		SPARE
	F1	F2	F3	C1	C2	C3	C4	FA	G	SP
C-1	2"	2"	-	-	-	-	-	-	2"	-
C-2	2"	2"	-	-	-	-	-	-	2"	-
C-3	2"	-	-	-	-	-	-	-	2"	-
C-4	2"	2"	-	-	-	-	-	-	2"	-
C-5	2"	-	-	2"	2"	2"	2"	-	2"	2"
C-6	2"	-	-	-	-	-	-	-	2"	-
C-7	-	-	-	2"	2"	2"	2"	-	-	2"
C-8	2"	-	-	-	-	-	-	-	2"	-
C-9	2"	-	-	2"	2"	-	-	-	2"	-
C-10	2"	-	-	-	-	-	-	-	2"	-
C-11	2"	-	-	-	-	-	-	-	2"	-
C-12	EXISTING									
C-13	EXISTING									
C-14	EXISTING									
C-15	EXISTING									
C-16	-	-	-	2"	-	-	-	-	-	2"
C-17	-	-	-	2"	-	-	-	-	-	2"

* PROVIDE MAXCELL 2" 3-CELL FABRIC INNERDUCT IN 2" CONDUITS. USE (1) CELL PER CABLE TYPE.

COMMUNICATIONS DUCT BANK SCHEDULE

CONDUIT SEGMENT NAME	FROM	TO	TOTAL NUMBER OF CONDUITS		
			4"	2"	3"
C-1	MDF	CPB-1	-	3"	-
C-2	CPB-1	CPB-2	-	3"	-
C-3	CPB-2	IDF-2	-	2"	-
C-4	CPB-2	CPB-3	-	3"	-
C-5	CPB-3	IDF-1	-	7"	-
C-6	CPB-3	CPB-4	-	2"	-
C-7	CPB-3	BLDG. 4	-	4"	-
C-8	CPB-5	IDF-5	-	2"	-
C-9	CPB-8	IDF-4	-	4"	-
C-10	CPB-2	CPB-9	-	2"	-
C-11	MDF	CPB-10	-	2"	-
C-12	CPB-4	CPB-5	EXISTING	2"	CONDUITS
C-13	CPB-4	CPB-8	EXISTING	2"	CONDUITS
C-14	CPB-9	IDF-6	EXISTING	2"	CONDUITS
C-15	CPB-10	IDF-7	EXISTING	2"	CONDUITS
C-16	CPB-11	K-1	-	2"	-
C-17	CPB-11	K-2	-	2"	-

COMMUNICATION PULLBOX SCHEDULE

NAME	NAME	TYPE	DETAIL REFERENCE
CPB-1	18"SQ. X 12"D	NEMA_3R	A/E-12.3
CPB-2	EXISTING		
CPB-3	EXISTING		
CPB-4	EXISTING		
CPB-5	EXISTING		
CPB-6	EXISTING		
CPB-7	EXISTING		
CPB-8	EXISTING		
CPB-9	EXISTING		
CPB-10	EXISTING		
CPB-11	18"SQ. X 12"D	NEMA_3R	A/E-12.3

0 20' 40' 80' 120'

1" = 40'-0"

NORTH

1" = 40'-0"

KEYNOTES

1. SEE DETAIL C/ET-5.3 FOR CABLE DISTRIBUTION.
2. SEE DETAIL D/ET-5.3 FOR LABELING REQUIREMENTS.
3. SEE DETAIL E/ET-5.3 FOR LABELING REQUIREMENTS.
4. SEE DETAIL E/ET-12.1 FOR CONDUIT SUPPORT.
5. SEE BUILDING SIGNAL SHEET FOR ADDITIONAL DETAIL.
6. SEE DETAIL B/E-12.3 FOR ROOF PENETRATION.
7. SEE DETAIL A/E-11.3 AND C/E-11.3.

TRENCHING NOTE

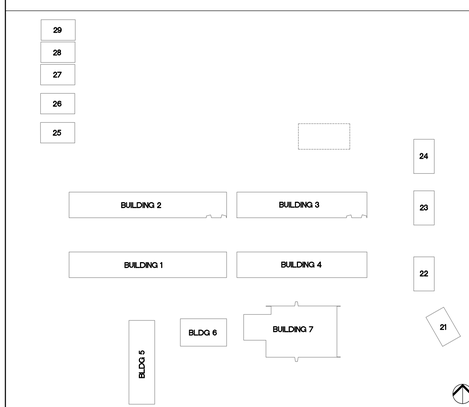
LOCATIONS OF EXISTING UNDERGROUND UTILITY AND OTHER UNDERGROUND OBSTRUCTIONS AND CONDITIONS ARE GENERALLY UNKNOWN. HIRE A UTILITY LOCATING SERVICE TO LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO DIGGING. VERIFY EXACT LOCATION SIZE AND EXTENT OF ALL OBSTRUCTIONS AND OTHER CONDITIONS WHICH MAY AFFECT THE PROPOSED WORK UNDER THE PROJECT. TAKE EVERY PRECAUTION TO PREVENT DAMAGE TO EXISTING WORK, INCLUDING HAND DIGGING AROUND EXISTING UTILITIES, TREE ROOT SYSTEMS, AND HARDSCAPE FEATURES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES SHALL BE IMMEDIATELY REPAIRED OR REPLACED IN ACCORDANCE WITH THE CLIENT'S DIRECTION AT THE CONTRACTOR'S EXPENSE.

SPECIAL NOTE

IT IS THE INTENT OF THIS CONTRACT TO LOCATE ALL DATA OUTLETS IN EACH BUILDING AND REPLACE THE DATA OUTLETS AND CABLING WITH CATEGORY 6 JACKS AND CABLE. ALL EXISTING VOICE OUTLETS ARE TO REMAIN IN SERVICE.

GENERAL NOTES

1. ALL EXISTING SYSTEMS NOT UPGRADED UNDER THIS CONTRACT TO REMAIN OPERATIONAL DURING CONSTRUCTION.
2. REMOVE ALL DISCONNECTED CABLING BACK TO SOURCE. NO CABLES ARE TO BE ABANDONED IN PLACE.
3. SEE DEMOLITION RISER, SHEETS ET-1.0 & ET-1.1
4. EXISTING CONDUITS NOT VERIFIED TO HAVE INNER DUCTS.
5. USE EXISTING UNDER GROUND DUCTBANK FOR CABLE DISTRIBUTION TO PORTABLE BUILDINGS.



KEYPLAN

NTS

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TREI # 12167
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REGISTERED PROFESSIONAL ENGINEER
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No.11533
exp.6/30/2014
ELECTRICAL
STATE OF CALIFORNIA

MARK FORTIE, RCDD
REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
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IT UPGRADE YEAR TWO
WD HALL ELEMENTARY
CAJON VALLEY UNION SCHOOL DISTRICT
1376 PEPPER DRIVE
EL CAJON, CA 92021

CONSULTANT

APPROVALS

DESCRIPTION

SIGNAL SITE PLAN

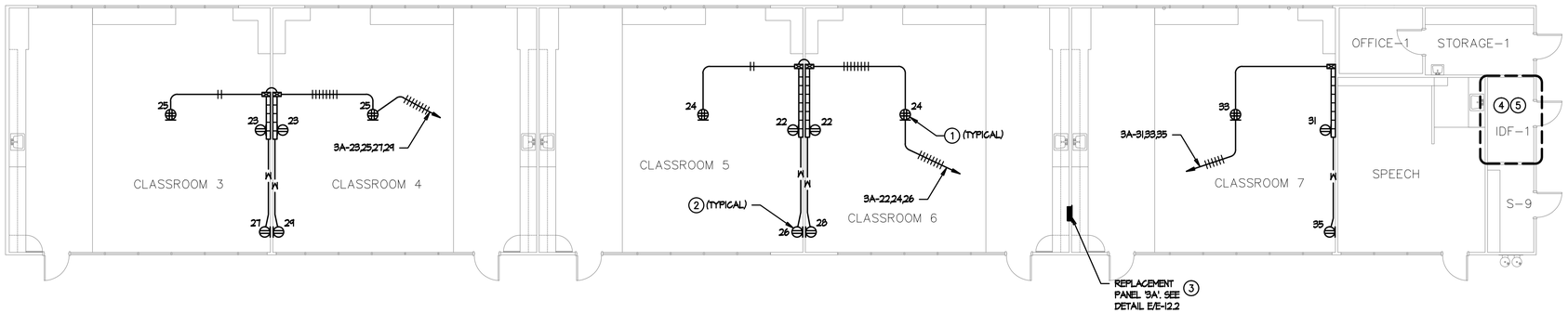
DATE
11/16/12

JOB #
12167

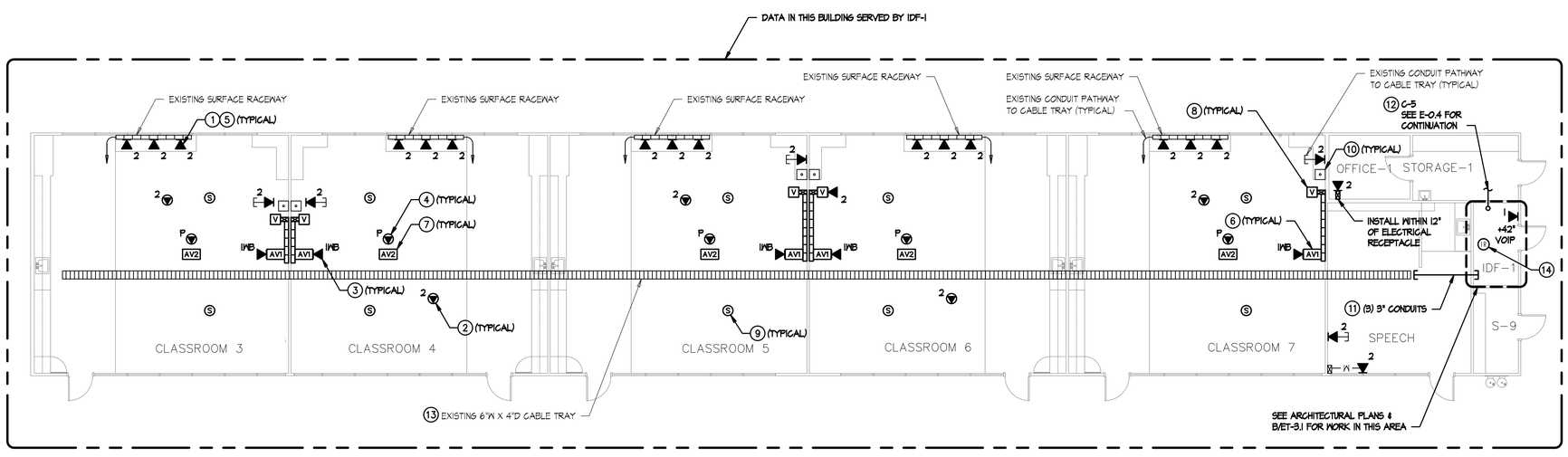
SHEET #
E-0.4

G:\12\12167\12167.00\ACADPROJ\12167.00_E-0.4 SIGNAL SITE PLAN.dwg 11/16/12 08:41:41

SIGNAL SITE PLAN



BUILDING 1 - POWER PLAN



BUILDING 1 - SIGNAL PLAN

NORTH

1/8" = 1'-0"

POWER PLAN KEYNOTES

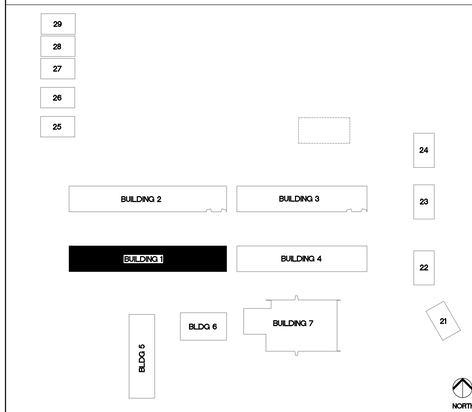
1. MOUNT DOUBLE DUPLEX RECEPTACLE IN CEILING TILE FOR CEILING MOUNTED PROJECTOR AND A/V POWER SUPPLY
2. PROVIDE RECEPTACLE MOUNTED AT +18" AFF FOR LAPTOP CART. PROVIDE DEDICATED BRANCH CIRCUIT. USE WIREMOLD 2300 WITH ASSOCIATED CONDUIT TRANSITION FITTINGS. PROVIDE FURRING AS REQUIRED.
3. SEE RESPECTIVE PANEL SCHEDULE FOR ADDITIONAL WORK AT EXISTING PANEL.
4. PROVIDE POWER OUTLETS FOR IDF. SEE E-10.1 FOR POWER AND LIGHTING WORK IN THIS AREA.
5. PROVIDE FIRE ALARM DEVICES FOR IDF ROOM. SEE EF-10.1 FOR FIRE ALARM WORK IN THIS AREA.

SIGNAL PLAN KEYNOTES

1. CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
2. CATEGORY 6 DATA OUTLET MOUNTED ABOVE LAY-IN CEILING DESIGNATED FOR WIRELESS NETWORK. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. SEE DETAIL F/ET-5.2.
3. (1) PORT CATEGORY 6 DATA OUTLET DESIGNATED FOR FUTURE INTERACTIVE WHITEBOARD. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. LOCATION TO BE AT CENTER OF TEACHING WALL AT +18" AFF. SEE DETAIL A/ET-5.5.
4. (1) PORT CATEGORY 6 DATA OUTLET AT CEILING MOUNTED PROJECTOR DESIGNATED FOR PROJECTOR MONITORING. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. CONTRACTOR TO COORDINATE EXACT LOCATION WITH CEILING MOUNTED PROJECTOR MOUNTING PLATE. SEE B/ET-5.5.
5. PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
6. AVI INTERFACE MOUNTED AT CENTER OF TEACHING WALL AT +18" AFF. PROVIDE EXTRON 2-GANG EMB SERIES WALL BOX FOR AVI INTERFACE. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
7. AUDIO/VISUAL FLYING LEADS AT CEILING MOUNTED PROJECTOR LOCATION. SEE ET-5.4 & B/ET-5.5 FOR DETAILS.
8. AUDIO VOLUME CONTROL OUTLET MOUNTED AT TEACHER'S STATION LOCATION AT +45" AFF. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
9. AUDIO/VISUAL SPEAKER FLUSH IN CEILING TILE. SEE ET-5.4 FOR DETAILS.
10. EXISTING PHONE (BOSEN HANDSET), TO REMAIN.
11. SEE DETAIL C/E-12.1
12. SEE DETAIL B/E-12.3
13. PROVIDE CONTINUOUS #6 GROUND FOR ENTIRE LENGTH OF CABLE TRAY SYSTEM. BOND EVERY SECTION AND EVERY CONDUIT. BOND TO TGB IN IDF ROOM.
14. CONNECT NEW IR INTRUSION DEVICE TO EXPANSION MODULE AT TERMINAL BLOCK LOCATION IN BUILDING. SEE RISER DIAGRAM ON ET-1.4.

GENERAL NOTES

1. SEE DATA RISER DIAGRAM ON ET-1.2 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.
3. PROVIDE NEW DMP BUILDING EXPANSION MODULE. CONNECT NEW AND EXISTING DEVICES TO MODULE. SEE SHEET ET-1.4.



KEYPLAN NTS

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TREI # 12167
V.PHATHANAK 11/16/12 - 8:41AM

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MARK FORTIE, RCDD
REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER BICSI
EXPIRES 12/31/13
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LICENSED ARCHITECT C12359 STATE OF CALIFORNIA

IT UPGRADE YEAR TWO
WD HALL ELEMENTARY
CAJON VALLEY UNION SCHOOL DISTRICT
1376 PEPPER DRIVE
EL CAJON, CA 92021

CONSULTANT

APPROVALS

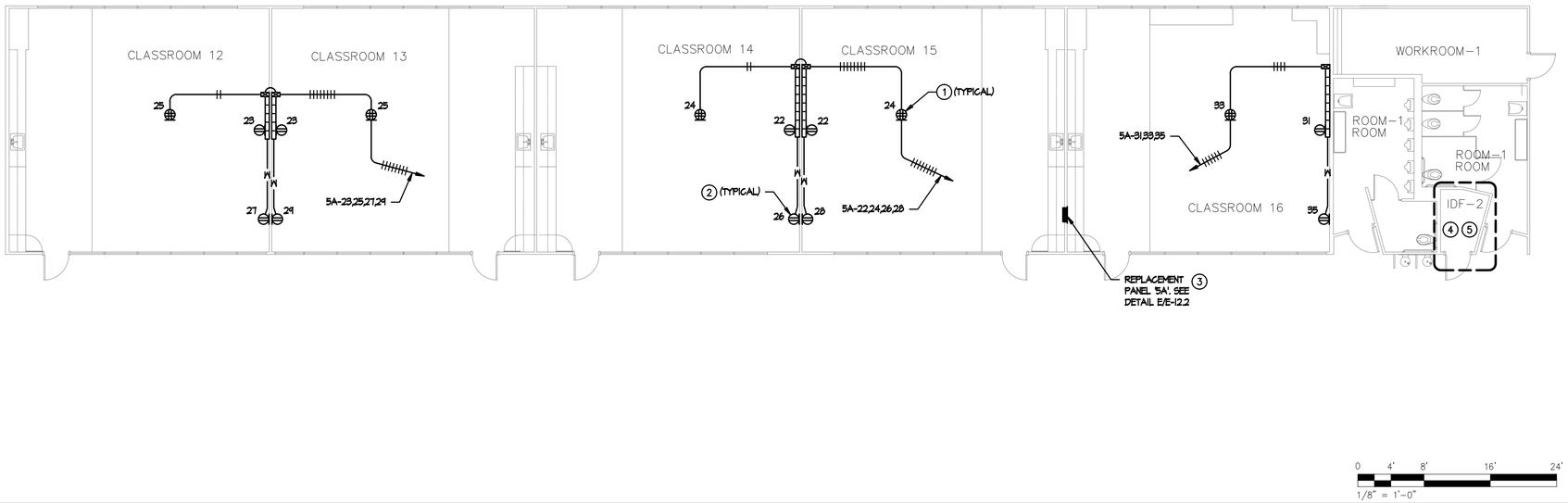
DESCRIPTION

BUILDING 1 POWER AND SIGNAL PLANS

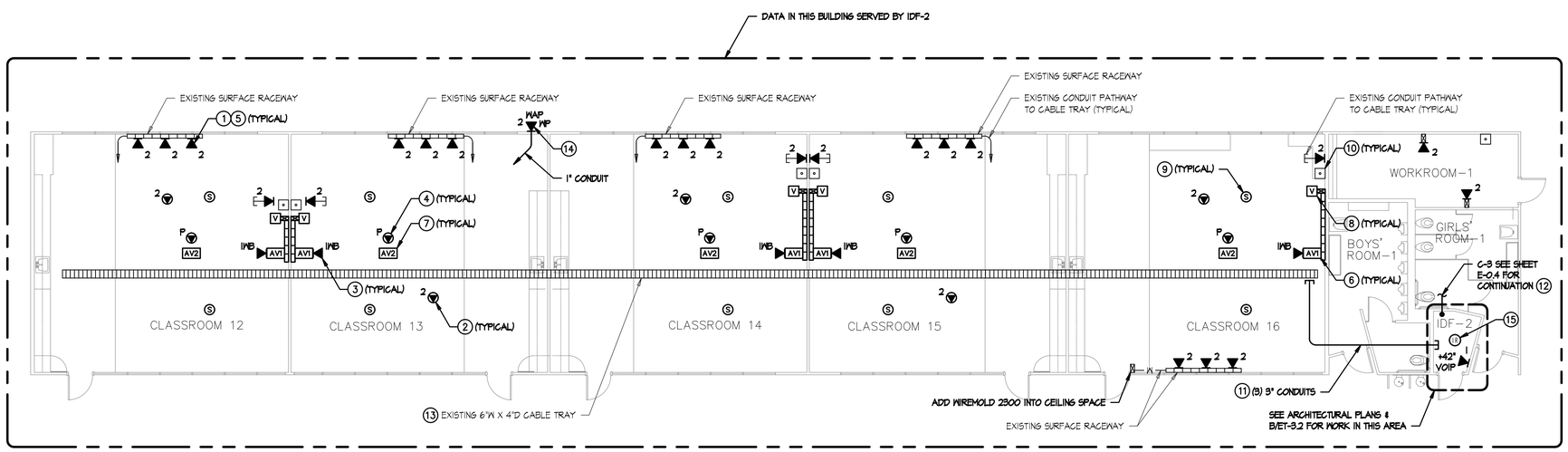
DATE 11/16/12

JOB # 12167

SHEET # **E-1.1**



BUILDING 2 - POWER PLAN



BUILDING 2 - SIGNAL PLAN

NORTH

1/8" = 1'-0"

POWER PLAN KEYNOTES

1. MOUNT DOUBLE DUPLEX RECEPTACLE IN CEILING TILE FOR CEILING MOUNTED PROJECTOR AND A/V POWER SUPPLY
2. PROVIDE RECEPTACLE MOUNTED AT +18" AFF FOR LAPTOP CART. PROVIDE DEDICATED BRANCH CIRCUIT. USE WIREMOLD 2300 WITH ASSOCIATED CONDUIT TRANSITION FITTINGS. PROVIDE FURRING AS REQUIRED.
3. SEE RESPECTIVE PANEL SCHEDULE FOR ADDITIONAL WORK AT EXISTING PANEL.
4. PROVIDE POWER OUTLETS FOR IDF. SEE E-10.1 FOR POWER AND LIGHTING WORK IN THIS AREA.
5. PROVIDE FIRE ALARM DEVICES FOR IDF ROOM. SEE EF-10.1 FOR FIRE ALARM WORK IN THIS AREA.

SIGNAL PLAN KEYNOTES

1. CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
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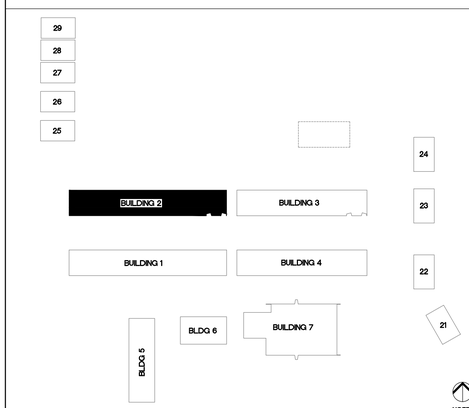
5. PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
6. AVI INTERFACE MOUNTED AT CENTER OF TEACHING WALL AT +18" AFF. PROVIDE EXTRON 2-GANG EMB SERIES WALL BOX FOR AVI INTERFACE. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
7. AUDIO/VISUAL FLYING LEADS AT CEILING MOUNTED PROJECTOR LOCATION. SEE ET-5.4 & B/ET-5.5 FOR DETAILS.
8. AUDIO VOLUME CONTROL OUTLET MOUNTED AT TEACHER'S STATION LOCATION AT +45" AFF. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
9. AUDIO/VISUAL SPEAKER FLUSH IN CEILING TILE. SEE ET-5.4 FOR DETAILS.
10. EXISTING PHONE (BOSEN HANDSET), TO REMAIN.
11. SEE DETAIL C/E-12.1
12. SEE DETAIL B/E-12.3
13. PROVIDE CONTINUOUS #6 GROUND FOR ENTIRE LENGTH OF CABLE TRAY SYSTEM. BOND EVERY SECTION AND EVERY CONDUIT. BOND TO TGB IN IDF ROOM.
14. DATA OUTLET WITHIN WEATHERPROOF ENCLOSURE FOR EXTERIOR WIRELESS ACCESS POINT. COORDINATE MOUNTING HEIGHT/LOCATION WITH WIRELESS ACCESS POINT INSTALLER.
15. CONNECT NEW IR INTRUSION DEVICE TO EXPANSION MODULE AT TERMINAL BLOCK LOCATION IN BUILDING. SEE RISER DIAGRAM ON ET-1.4.

GENERAL NOTES

1. SEE DATA RISER DIAGRAM ON ET-1.2 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.
3. PROVIDE NEW DMP BUILDING EXPANSION MODULE. CONNECT NEW AND EXISTING DEVICES TO MODULE. SEE SHEET ET-1.4.



KEYPLAN NTS

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V.PHATHANAK 11/16/12 - 8:42AM

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CAJON VALLEY UNION SCHOOL DISTRICT
1376 PEPPER DRIVE
EL CAJON, CA 92021

CONSULTANT

APPROVALS

DESCRIPTION

BUILDING 2 POWER AND SIGNAL PLANS

DATE 11/16/12

JOB # 12167

SHEET # **E-2.1**

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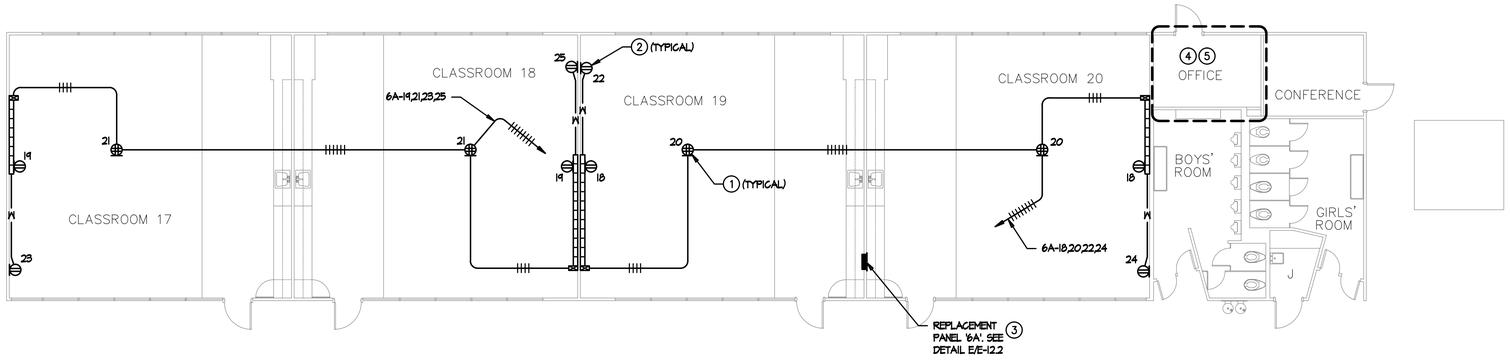
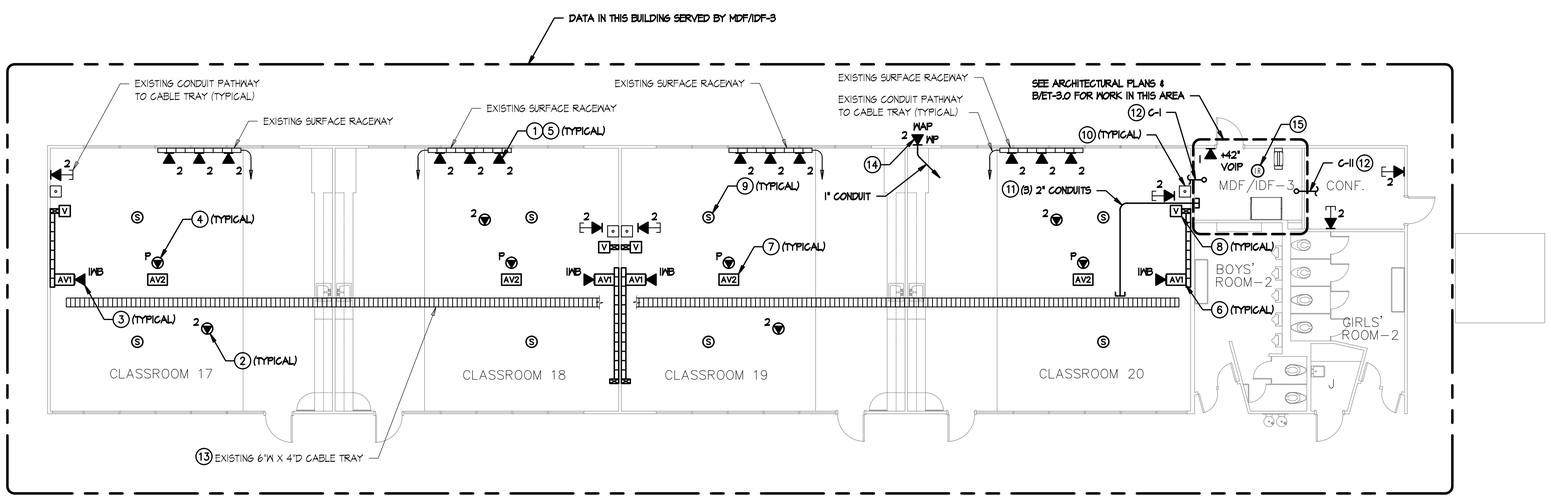


0 4' 8' 16' 24'
1/8" = 1'-0"

BUILDING 3 - POWER PLAN



0 4' 8' 16' 24'
1/8" = 1'-0"

BUILDING 3 - SIGNAL PLAN

NORTH
1/8" = 1'-0"

POWER PLAN KEYNOTES

1. MOUNT DOUBLE DUPLEX RECEPTACLE IN CEILING TILE FOR CEILING MOUNTED PROJECTOR AND A/V POWER SUPPLY
2. PROVIDE RECEPTACLE MOUNTED AT +18" AFF FOR LAPTOP CART. PROVIDE DEDICATED BRANCH CIRCUIT. USE WIREMOLD 2300 WITH ASSOCIATED CONDUIT TRANSITION FITTINGS. PROVIDE FURRING AS REQUIRED.
3. SEE RESPECTIVE PANEL SCHEDULE FOR ADDITIONAL WORK AT EXISTING PANEL.
4. PROVIDE POWER OUTLETS FOR MDF. SEE E-10.2 FOR POWER AND LIGHTING WORK IN THIS AREA.
5. PROVIDE FIRE ALARM DEVICES FOR IDF ROOM. SEE EF-10.1 FOR FIRE ALARM WORK IN THIS AREA.

SIGNAL PLAN KEYNOTES

1. CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
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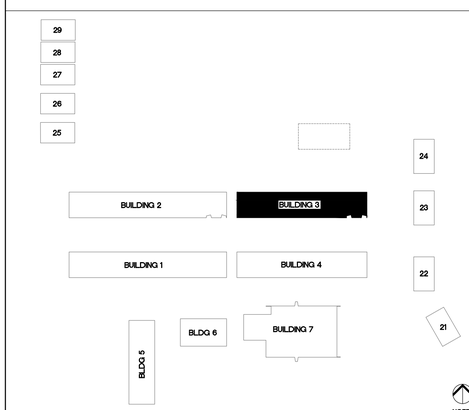
15. CONNECT NEW IR INTRUSION DEVICE TO EXPANSION MODULE AT TERMINAL BLOCK LOCATION IN BUILDING. SEE RISER DIAGRAM ON ET-1.4.

GENERAL NOTES

1. SEE DATA RISER DIAGRAM ON ET-1.2 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.
3. PROVIDE NEW DMP BUILDING EXPANSION MODULE. CONNECT NEW AND EXISTING DEVICES TO MODULE. SEE SHEET ET-1.4.



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EXPIRES 12/31/13
Regis. No. 081432

SPROTTE WATSON ARCHITECTURE PLANNING
450 S. Melrose Dr., Suite 200 Vista, California 92081 | 760.639.4120 | www.sprotewatson.com

LICENSED ARCHITECT PATRICIA A. SPROTTE C12359 REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

IT UPGRADE YEAR TWO
WD HALL ELEMENTARY
CAJON VALLEY UNION SCHOOL DISTRICT
1376 PEPPER DRIVE
EL CAJON, CA 92021

CONSULTANT

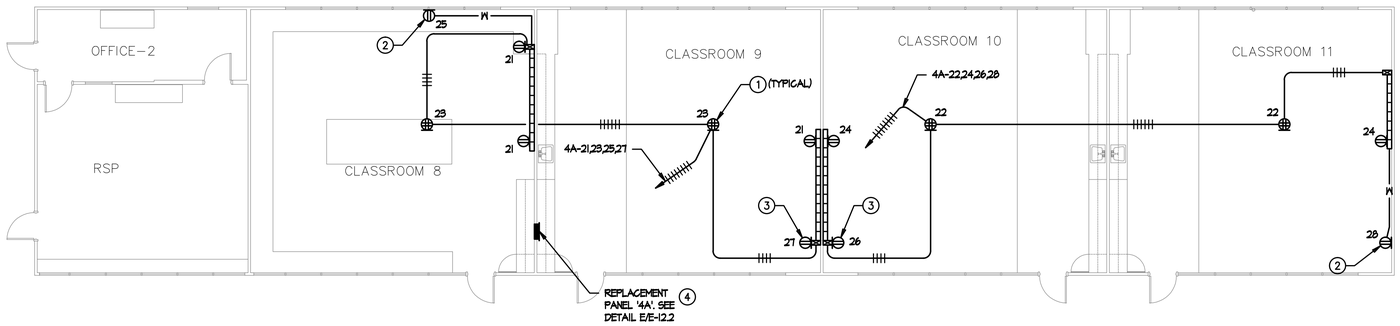
APPROVALS

DESCRIPTION
BUILDING 3 POWER AND SIGNAL PLANS

DATE
11/16/12

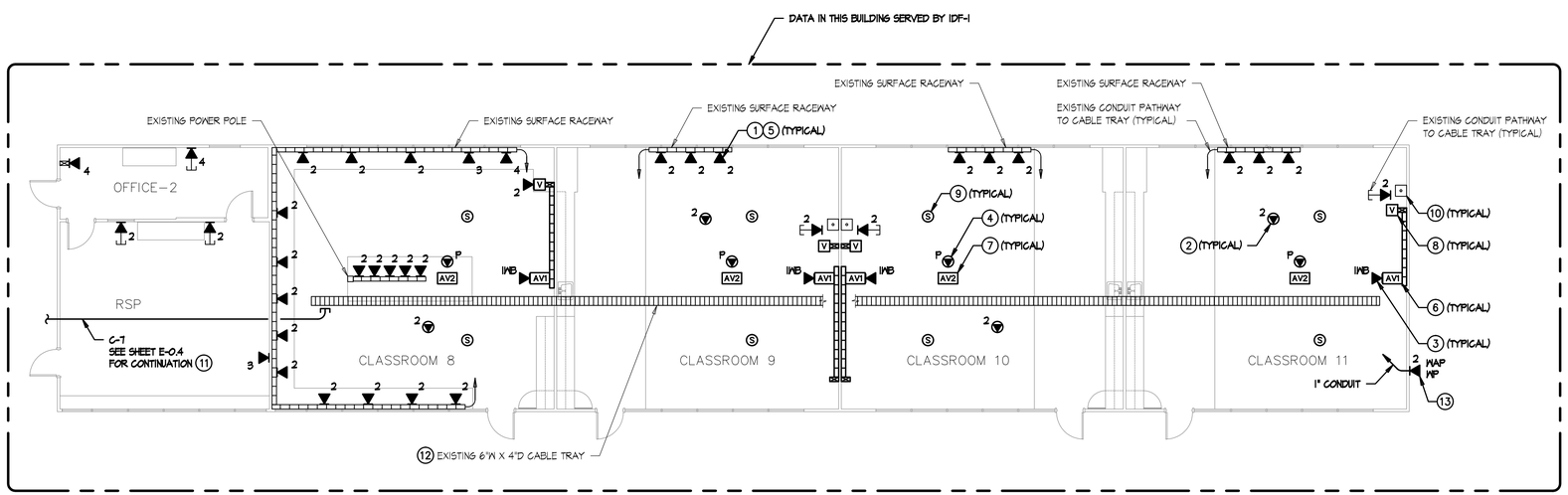
JOB #
12167

SHEET #
E-3.1



0 4' 8' 16' 24'
1/8" = 1'-0"

BUILDING 4 - POWER PLAN



0 4' 8' 16' 24'
1/8" = 1'-0"

BUILDING 4 - SIGNAL PLAN

POWER PLAN KEYNOTES

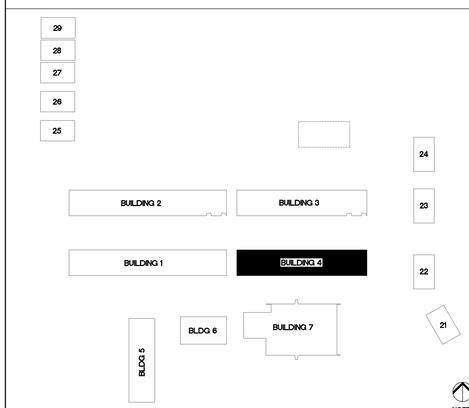
1. MOUNT DOUBLE DUPLEX RECEPTACLE IN CEILING TILE FOR CEILING MOUNTED PROJECTOR AND A/V POWER SUPPLY
2. PROVIDE RECEPTACLE MOUNTED AT +18" AFF FOR LAPTOP CART. PROVIDE DEDICATED BRANCH CIRCUIT. USE WIREMOLD 2300 WITH ASSOCIATED CONDUIT TRANSITION FITTINGS. PROVIDE FURRING AS REQUIRED.
3. PROVIDE RECEPTACLE MOUNTED AT +18" AFF FOR LAPTOP CART. PROVIDE DEDICATED BRANCH CIRCUIT.
4. SEE RESPECTIVE PANEL SCHEDULE FOR ADDITIONAL WORK AT EXISTING PANEL.

SIGNAL PLAN KEYNOTES

1. CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
2. CATEGORY 6 DATA OUTLET MOUNTED ABOVE LAY-IN CEILING DESIGNATED FOR WIRELESS NETWORK. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. SEE DETAIL F/ET-5.2.
3. (1) PORT CATEGORY 6 DATA OUTLET DESIGNATED FOR FUTURE INTERACTIVE WHITEBOARD. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. LOCATION TO BE AT CENTER OF TEACHING WALL AT +18" AFF. SEE DETAIL A/ET-5.5.
4. (1) PORT CATEGORY 6 DATA OUTLET AT CEILING MOUNTED PROJECTOR DESIGNATED FOR PROJECTOR MONITORING. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. CONTRACTOR TO COORDINATE EXACT LOCATION WITH CEILING MOUNTED PROJECTOR MOUNTING PLATE. SEE B/ET-5.5.
5. PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
6. AVI INTERFACE MOUNTED AT CENTER OF TEACHING WALL AT +18" AFF. PROVIDE EXTRON 2-GANG ENB SERIES WALL BOX FOR AVI INTERFACE. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
7. AUDIO/VISUAL FLYING LEADS AT CEILING MOUNTED PROJECTOR LOCATION. SEE ET-5.4 & B/ET-5.5 FOR DETAILS.
8. AUDIO VOLUME CONTROL OUTLET MOUNTED AT TEACHER'S STATION LOCATION AT +45" AFF. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
9. AUDIO/VISUAL SPEAKER FLUSH IN CEILING TILE. SEE ET-5.4 FOR DETAILS.
10. EXISTING PHONE (BOSEN HANDSET), TO REMAIN.
11. SEE DETAIL C/E-12.1
12. PROVIDE CONTINUOUS #6 GROUND FOR ENTIRE LENGTH OF CABLE TRAY SYSTEM. BOND EVERY SECTION AND EVERY CONDUIT. BOND TO TGB IN IDF ROOM.
13. DATA OUTLET WITHIN WEATHERPROOF ENCLOSURE FOR EXTERIOR WIRELESS ACCESS POINT. COORDINATE MOUNTING HEIGHT/LOCATION WITH WIRELESS ACCESS POINT INSTALLER.

GENERAL NOTES

1. SEE DATA RISER DIAGRAM ON ET-1.2 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.
3. PROVIDE NEW DMP BUILDING EXPANSION MODULE. CONNECT EXISTING DEVICES TO MODULE. SEE SHEET ET-1.4.



KEYPLAN NTS

NORTH
1/8" = 1'-0"

TURPIN & RATTAN ENGINEERING, INC.
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TREI # 12167
V.PHATHANAK 11/16/12 - 8:42AM

REGISTERED PROFESSIONAL ENGINEER DALE M. FRANCHAK No.11533 exp.6/30/2014 ELECTRICAL STATE OF CALIFORNIA

MARK FORTIE, RCDD
REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER BICSI
EXPIRES 12/31/13
Regis. No. 081432

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LICENSED ARCHITECT ARCHITECT C12359 REGISTERED PROFESSIONAL STATE OF CALIFORNIA

IT UPGRADE YEAR TWO
WD HALL ELEMENTARY
CAJON VALLEY UNION SCHOOL DISTRICT
1376 PEPPER DRIVE
EL CAJON, CA 92021

CONSULTANT

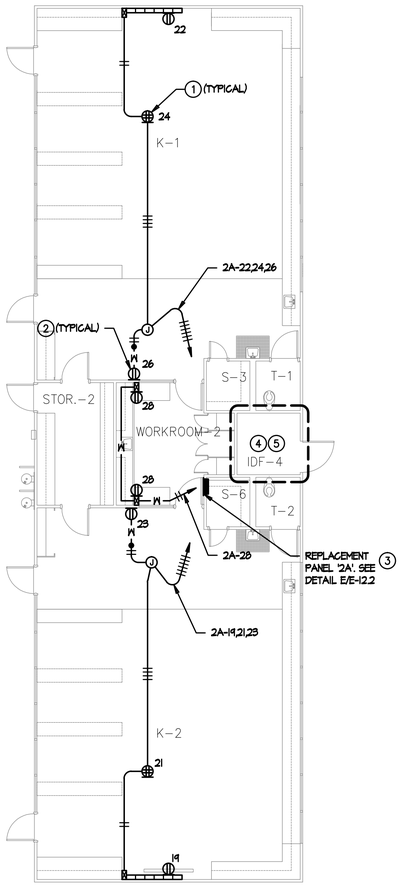
APPROVALS

DESCRIPTION
BUILDING 4 POWER AND SIGNAL PLANS

DATE
11/16/12

JOB #
12167

SHEET #
E-4.1



0 4' 8' 16' 24'
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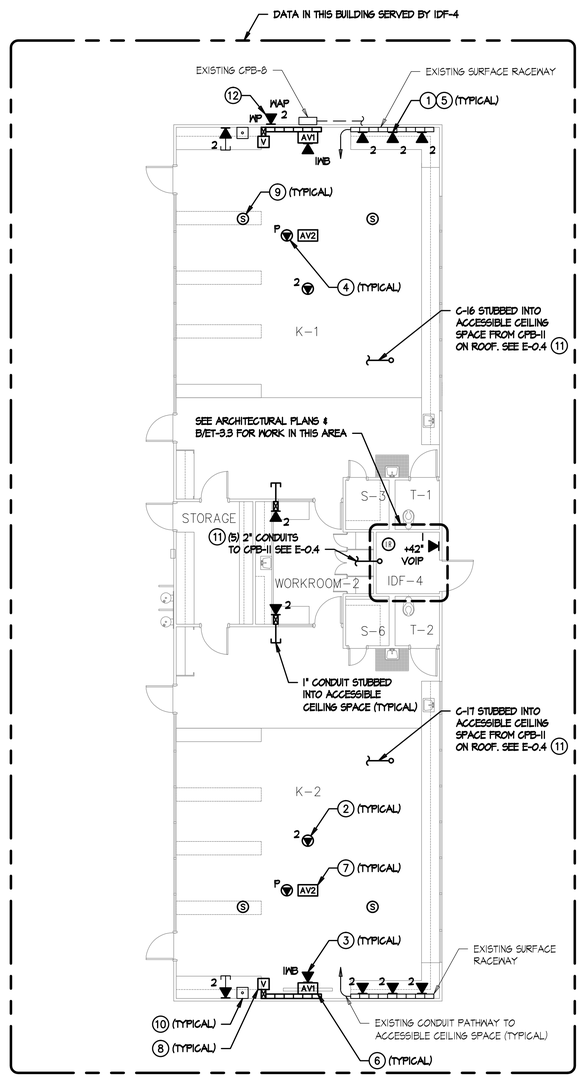
BUILDING 5 - POWER PLAN



0 4' 8' 16' 24'
1/8" = 1'-0"

BUILDING 5 - SIGNAL PLAN

POWER PLAN KEYNOTES

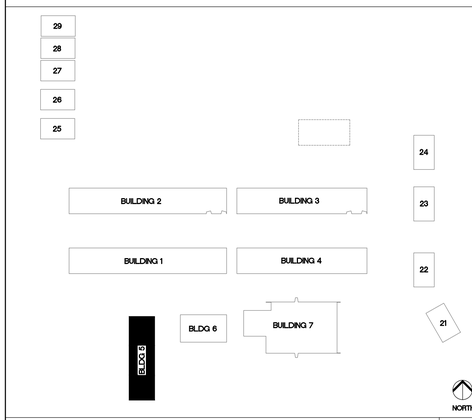
1. MOUNT DOUBLE DUPLEX RECEPTACLE IN CEILING TILE FOR CEILING MOUNTED PROJECTOR AND A/V POWER SUPPLY
2. PROVIDE RECEPTACLE MOUNTED AT +18" AFF FOR LAPTOP CART. PROVIDE DEDICATED BRANCH CIRCUIT. USE WIREMOLD 2300 DROP FROM CEILING WITH ASSOCIATED CONDUIT TRANSITION FITTINGS. PROVIDE FURRING AS REQUIRED.
3. SEE RESPECTIVE PANEL SCHEDULE FOR ADDITIONAL WORK AT EXISTING PANEL.
4. PROVIDE POWER OUTLETS FOR IDF. SEE E-10.2 FOR POWER AND LIGHTING WORK IN THIS AREA.
5. PROVIDE FIRE ALARM DEVICES FOR IDF ROOM. SEE EF-10.1 FOR FIRE ALARM WORK IN THIS AREA.

SIGNAL PLAN KEYNOTES

1. CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
2. CATEGORY 6 DATA OUTLET MOUNTED ABOVE LAY-IN CEILING DESIGNATED FOR WIRELESS NETWORK. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. SEE DETAIL F/ET-5.2.
3. (1) PORT CATEGORY 6 DATA OUTLET DESIGNATED FOR FUTURE INTERACTIVE WHITEBOARD. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. LOCATION TO BE AT CENTER OF TEACHING WALL AT +18" AFF. SEE DETAIL A/ET-5.5.
4. (1) PORT CATEGORY 6 DATA OUTLET AT CEILING MOUNTED PROJECTOR DESIGNATED FOR PROJECTOR MONITORING. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. CONTRACTOR TO COORDINATE EXACT LOCATION WITH CEILING MOUNTED PROJECTOR MOUNTING PLATE. SEE B/ET-5.5.
5. PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
6. AVI INTERFACE MOUNTED AT CENTER OF TEACHING WALL AT +18" AFF. PROVIDE EXTRON 2-GANG EMB SERIES WALL BOX FOR AVI INTERFACE. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
7. AUDIO/VISUAL FLYING LEADS AT CEILING MOUNTED PROJECTOR LOCATION. SEE ET-5.4 & B/ET-5.5 FOR DETAILS.
8. AUDIO VOLUME CONTROL OUTLET MOUNTED AT TEACHER'S STATION LOCATION AT +45" AFF. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
9. AUDIO/VISUAL SPEAKER FLUSH IN CEILING TILE. SEE ET-5.4 FOR DETAILS.
10. EXISTING PHONE (BOSEN HANDSET), TO REMAIN.
11. SEE DETAIL B/E-12.3
12. DATA OUTLET WITHIN WEATHERPROOF ENCLOSURE FOR EXTERIOR WIRELESS ACCESS POINT. COORDINATE MOUNTING HEIGHT/LOCATION WITH WIRELESS ACCESS POINT INSTALLER.
13. CONNECT NEW IR INTRUSION DEVICE TO EXPANSION MODULE AT TERMINAL BLOCK LOCATION IN BUILDING. SEE RISER DIAGRAM ON ET-1.4.

GENERAL NOTES

1. SEE DATA RISER DIAGRAM ON ET-1.2 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.
3. PROVIDE NEW DMP BUILDING EXPANSION MODULE. CONNECT NEW AND EXISTING DEVICES TO MODULE. SEE SHEET ET-1.4.



KEYPLAN — NTS

NORTH
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TREI # 12167
V:PHATHANAK 11/16/12 - 8:42AM

REGISTERED PROFESSIONAL ENGINEER — DALE M. FRANDHAL — No.11533 exp.6/30/2014 — ELECTRICAL — STATE OF CALIFORNIA

MARK FORTIE, RCDD
REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER — BICSI
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LICENSED ARCHITECT — C12359 — STATE OF CALIFORNIA

IT UPGRADE YEAR TWO
WD HALL ELEMENTARY
CAJON VALLEY UNION SCHOOL DISTRICT
1376 PEPPER DRIVE
EL CAJON, CA 92021

CONSULTANT

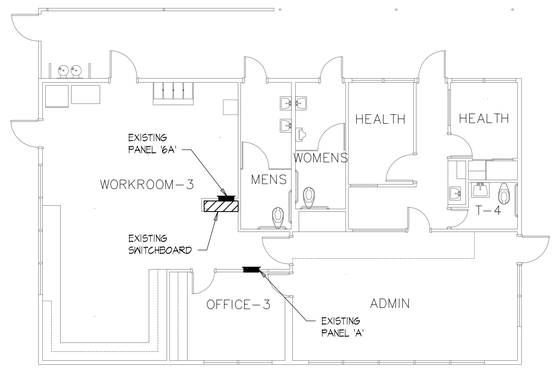
APPROVALS

DESCRIPTION: BUILDING 5 POWER AND SIGNAL PLANS

DATE: 11/16/12

JOB #: 12167

SHEET #: E-5.1



0 4' 8' 16' 24'
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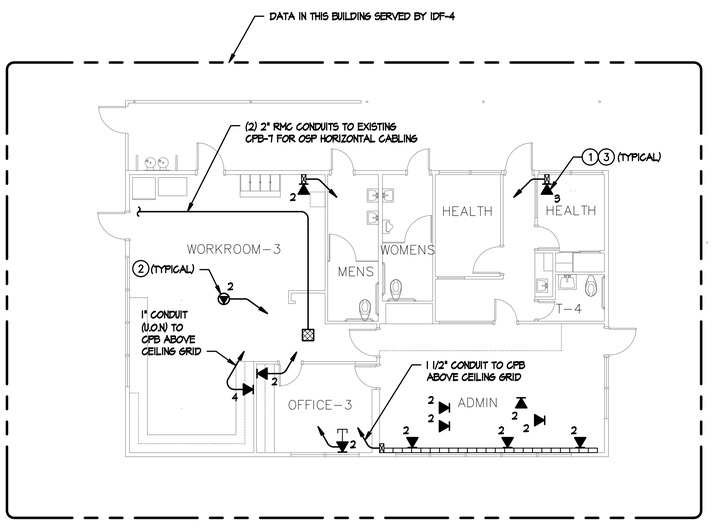
BUILDING 6 - POWER PLAN



0 4' 8' 16' 24'
1/8" = 1'-0"

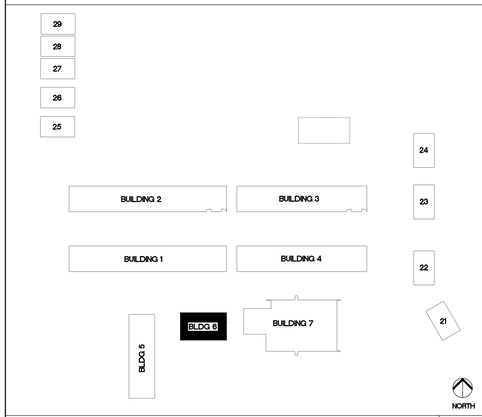
BUILDING 6 - SIGNAL PLAN

SIGNAL PLAN KEYNOTES

1. CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
2. CATEGORY 6 DATA OUTLET MOUNTED ABOVE LAY-IN CEILING DESIGNATED FOR WIRELESS NETWORK. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. SEE DETAIL F/ET-5.2.
3. PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
4. EXISTING PHONE (BOSEN HANDSET), TO REMAIN.

GENERAL NOTES

1. SEE DATA RISER DIAGRAM ON ET-1.2 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.
3. OSP CABLE RUNS NOT TO EXCEED 50' OUTSIDE OF RIGID METALLIC CONDUIT.
4. PROVIDE NEW DMP SECURITY SYSTEM KEYPAD AND CONTROL PANEL AND CONNECT TO NEW BUILDING EXPANSION MODULES IN OUTLYING BUILDINGS USING EXISTING SECURITY WIRING. RE-CONNECT EXISTING IR DEVICES USING EXISTING WIRING. SEE SHEET E-1.4.



KEYPLAN NTS

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STATE OF CALIFORNIA

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CONSULTANT

APPROVALS

DESCRIPTION
BUILDING 6
POWER AND
SIGNAL PLANS

DATE
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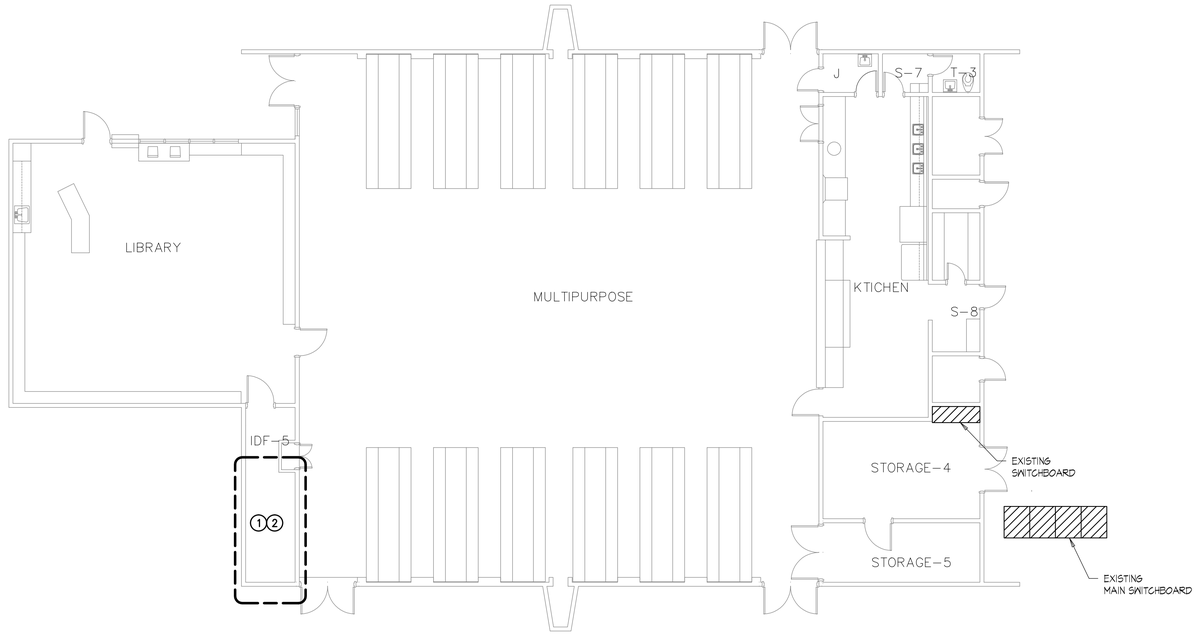
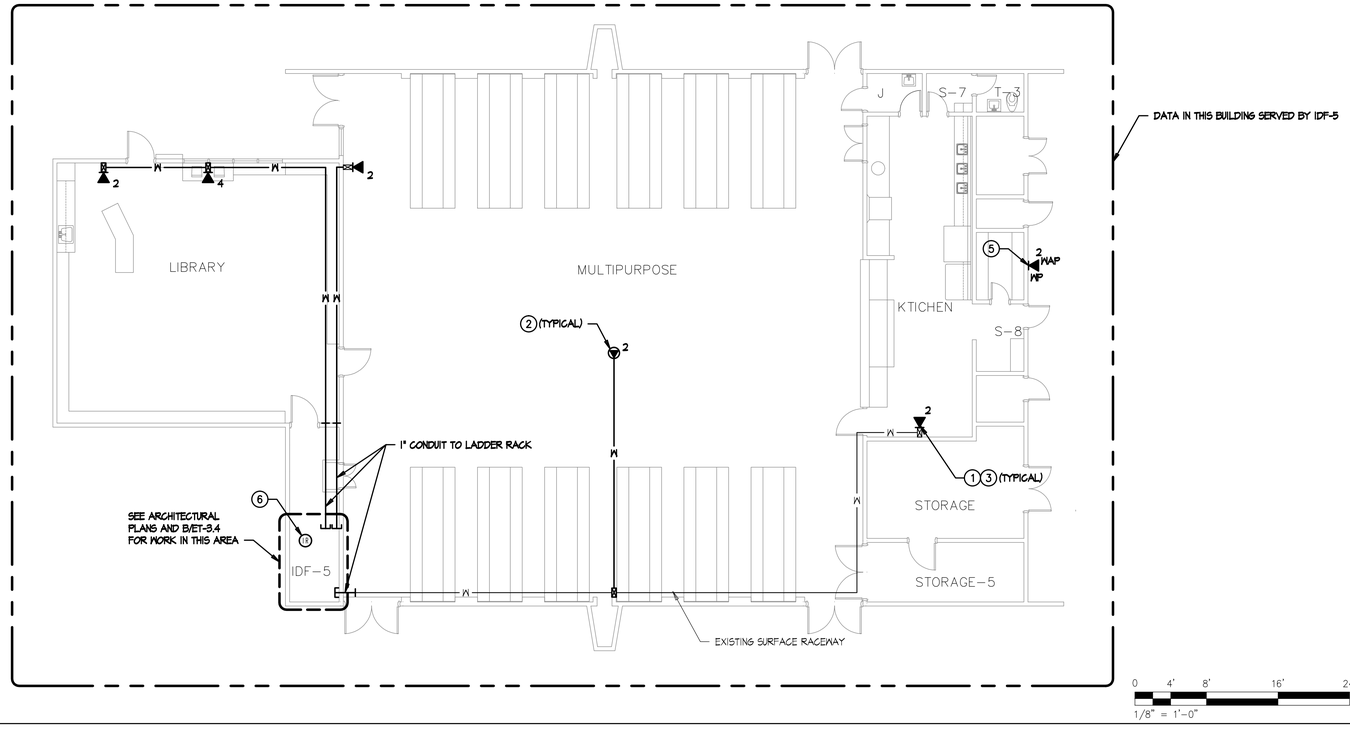
SHEET #
E-6.1



BUILDING 7 - POWER PLAN



BUILDING 7 - SIGNAL PLAN

POWER PLAN KEYNOTES

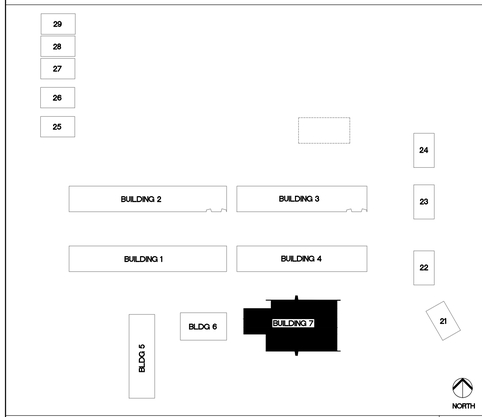
1. PROVIDE POWER OUTLETS FOR IDF. SEE E-10.3 FOR POWER AND LIGHTING WORK IN THIS AREA.
2. PROVIDE FIRE ALARM DEVICES FOR IDF ROOM. SEE EF-10.1 FOR FIRE ALARM WORK IN THIS AREA.

SIGNAL PLAN KEYNOTES

1. CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
2. CATEGORY 6 DATA OUTLET MOUNTED ABOVE LAY-IN CEILING DESIGNATED FOR WIRELESS NETWORK. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. SEE DETAIL F/ET-5.2.
3. PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
4. EXISTING PHONE (BOSEN HANDSET), TO REMAIN.
5. DATA OUTLET WITHIN WEATHERPROOF ENCLOSURE FOR EXTERIOR WIRELESS ACCESS POINT. COORDINATE MOUNTING HEIGHT/LOCATION WITH WIRELESS ACCESS POINT INSTALLER.
6. CONNECT NEW IR INTRUSION DEVICE TO EXPANSION MODULE AT TERMINAL BLOCK LOCATION IN BUILDING. SEE RISER DIAGRAM ON ET-1.4.

GENERAL NOTES

1. SEE DATA RISER DIAGRAM ON ET-1.2 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.
3. PROVIDE NEW DMP BUILDING EXPANSION MODULE. CONNECT NEW AND EXISTING DEVICES TO MODULE. SEE SHEET ET-1.4.



KEYPLAN NTS

NORTH

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1376 PEPPER DRIVE
EL CAJON, CA 92021

CONSULTANT

APPROVALS

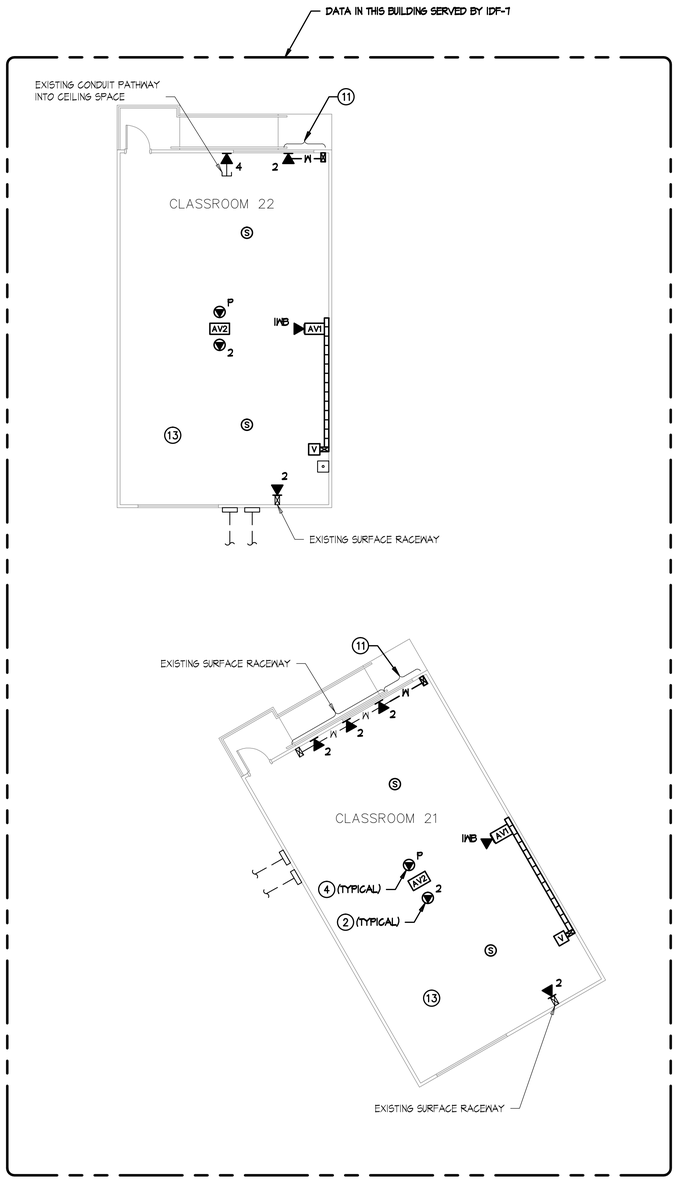
DESCRIPTION

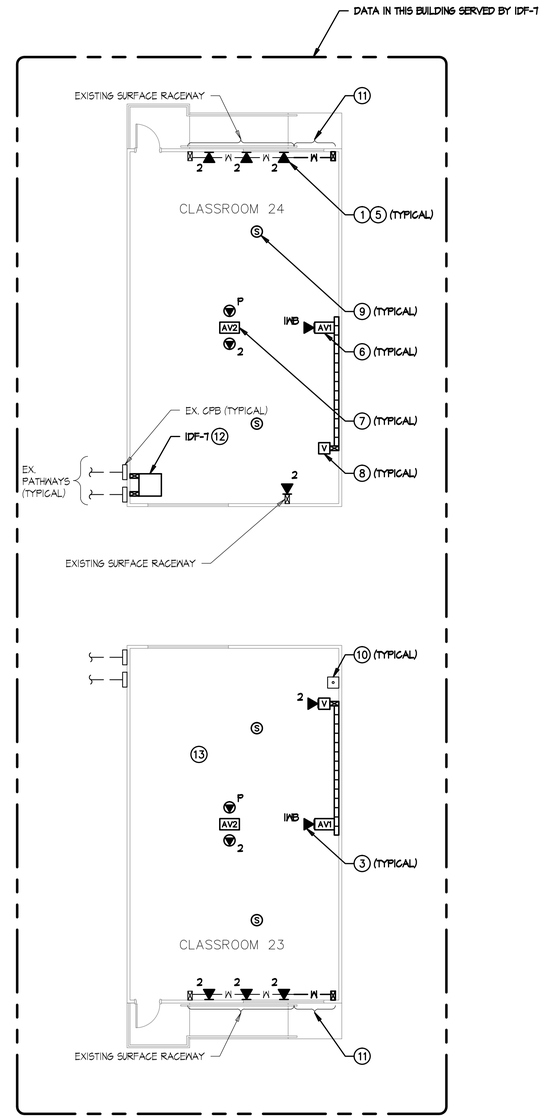
BUILDING 7 POWER AND SIGNAL PLANS

DATE 11/16/12

JOB # 12167

SHEET # E-7.1



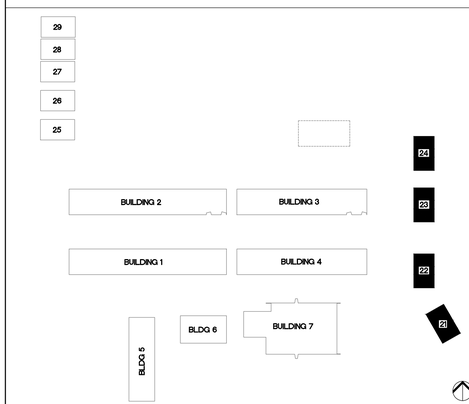


SIGNAL PLAN KEYNOTES

1. CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
2. CATEGORY 6 DATA OUTLET MOUNTED ABOVE LAY-IN CEILING DESIGNATED FOR WIRELESS NETWORK. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. SEE DETAIL F/ET-5.2.
3. (1) PORT CATEGORY 6 DATA OUTLET DESIGNATED FOR FUTURE INTERACTIVE WHITEBOARD. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. LOCATION TO BE AT CENTER OF TEACHING WALL AT +18" AFF. SEE DETAIL A/ET-5.5.
4. (1) PORT CATEGORY 6 DATA OUTLET AT CEILING MOUNTED PROJECTOR DESIGNATED FOR PROJECTOR MONITORING. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. CONTRACTOR TO COORDINATE EXACT LOCATION WITH CEILING MOUNTED PROJECTOR MOUNTING PLATE. SEE B/ET-5.5.
5. PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
6. AV1 INTERFACE MOUNTED AT CENTER OF TEACHING WALL AT +18" AFF. PROVIDE EXTRON 2-GANG EMB SERIES WALL BOX FOR AV1 INTERFACE. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
7. AUDIO/VISUAL FLYING LEADS AT CEILING MOUNTED PROJECTOR LOCATION. SEE ET-5.4 & B/ET-5.5 FOR DETAILS.
8. AUDIO VOLUME CONTROL OUTLET MOUNTED AT TEACHER'S STATION LOCATION AT +45" AFF. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
9. AUDIO/VISUAL SPEAKER FLUSH IN CEILING TILE. SEE ET-5.4 FOR DETAILS.
10. EXISTING PHONE (BOSEN HANDSET), TO REMAIN.
11. PROVIDE DUAL CHANNEL WIREMOLD 2300 TO ACCOMMODATE DATA CABLINGS. COLOR TO MATCH EXISTING (TYPICAL AT STUDENT WORKSTATIONS)
12. SEE DETAIL A/ET-5.6 FOR INSTALLATION.
13. SEE DETAIL B/ET-5.6 FOR OSP PATHWAYS.

GENERAL NOTES

1. SEE DATA RISER DIAGRAM ON ET-1.3 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.
3. USE EXISTING UNDER GROUND DUCTBANK FOR CABLE DISTRIBUTION.



KEYPLAN NTS

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EXPIRES 12/31/13
Regis. No. 081432

SPROTTE WATSON ARCHITECTURE PLANNING
450 S. Melrose Dr., Suite 200 Vista, California 92081 | 760.639.4120 | www.sprotewatson.com

LICENSED ARCHITECT
C12359
STATE OF CALIFORNIA

IT UPGRADE YEAR TWO
WD HALL ELEMENTARY
CAJON VALLEY UNION SCHOOL DISTRICT
1376 PEPPER DRIVE
EL CAJON, CA 92021

CONSULTANT

APPROVALS

DESCRIPTION
PORTABLE 21-24 SIGNAL PLANS

DATE
11/16/12

JOB #
12167

SHEET #
E-8.2

PORTABLE 21-24 - SIGNAL PLANS

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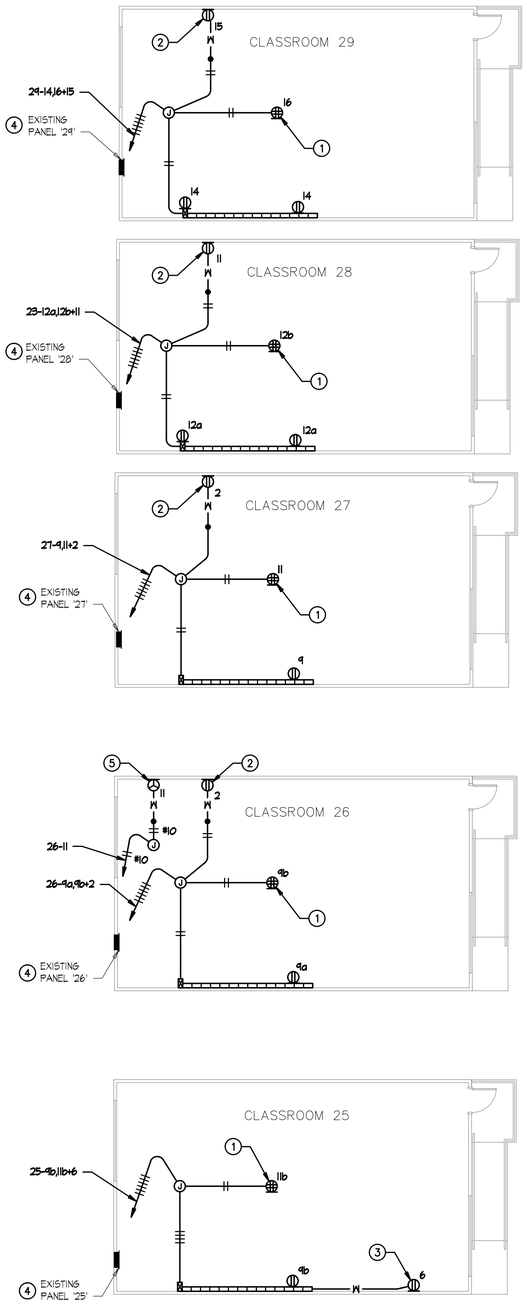
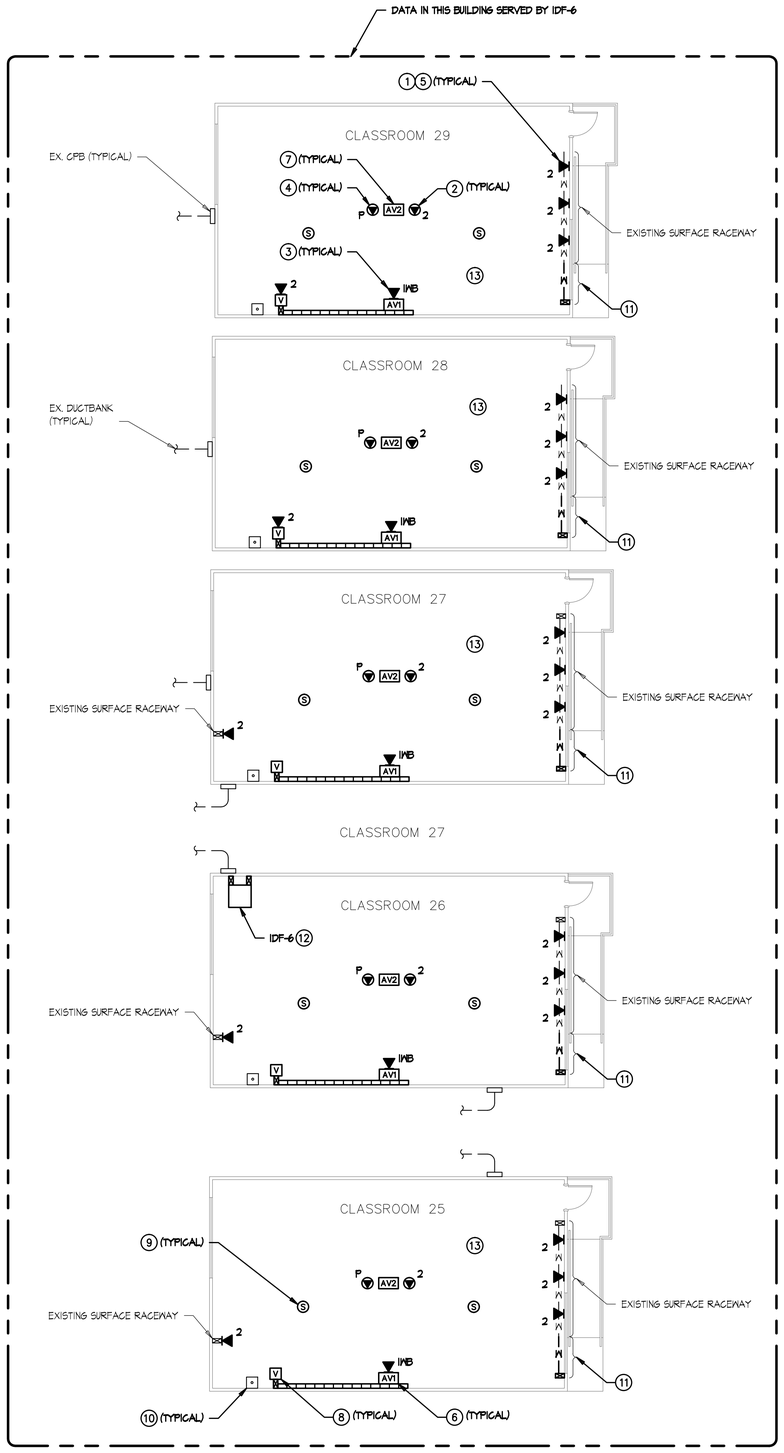


PORTABLE 25-29 - POWER PLANS



0 4' 8' 16' 24'
1/8" = 1'-0"

PORTABLE 25-29 - SIGNAL PLANS

POWER PLAN KEYNOTES

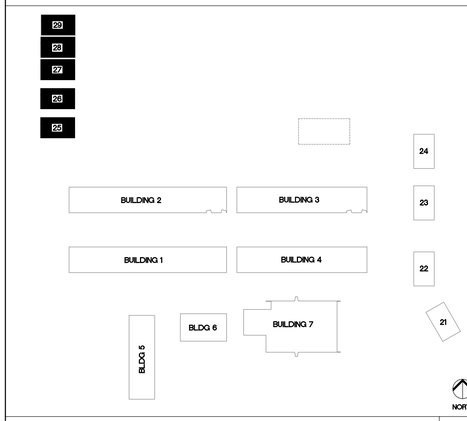
1. MOUNT DOUBLE DUPLEX RECEPTACLE IN CEILING TILE FOR CEILING MOUNTED PROJECTOR AND A/V POWER SUPPLY
2. PROVIDE RECEPTACLE MOUNTED AT +18" AFF FOR LAPTOP CART. PROVIDE DEDICATED BRANCH CIRCUIT. USE WIREMOLD 2300 DROP FROM CEILING WITH ASSOCIATED CONDUIT TRANSITION FITTINGS. PROVIDE FURRING AS REQUIRED.
3. PROVIDE RECEPTACLE MOUNTED AT +18" AFF FOR LAPTOP CART. PROVIDE DEDICATED BRANCH CIRCUIT. USE WIREMOLD 2300 WITH ASSOCIATED CONDUIT TRANSITION FITTINGS. PROVIDE FURRING AS REQUIRED.
4. SEE RESPECTIVE PANEL SCHEDULE FOR ADDITIONAL WORK AT EXISTING PANEL.
5. PROVIDE NEMA L5-30R, 120V OUTLET AT +18" FOR FLOOR MOUNTED IDF CONSOLE. PROVIDE DEDICATED BRANCH CIRCUIT UNLESS OTHERWISE NOTED. USE WIREMOLD 2300 DROP FROM CEILING WITH ASSOCIATED CONDUIT TRANSITION FITTINGS. PROVIDE FURRING AS REQUIRED.

SIGNAL PLAN KEYNOTES

1. CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
2. CATEGORY 6 DATA OUTLET MOUNTED ABOVE LAY-IN CEILING DESIGNATED FOR WIRELESS NETWORK. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. SEE DETAIL F/ET-5.2.
3. (1) PORT CATEGORY 6 DATA OUTLET DESIGNATED FOR FUTURE INTERACTIVE WHITEBOARD. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. LOCATION TO BE AT CENTER OF TEACHING WALL AT +18" AFF. SEE DETAIL A/ET-5.5.
4. (1) PORT CATEGORY 6 DATA OUTLET AT CEILING MOUNTED PROJECTOR DESIGNATED FOR PROJECTOR MONITORING. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. CONTRACTOR TO COORDINATE EXACT LOCATION WITH CEILING MOUNTED PROJECTOR MOUNTING PLATE. SEE B/ET-5.5.
5. PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
6. AVI INTERFACE MOUNTED AT CENTER OF TEACHING WALL AT +18" AFF. PROVIDE EXTRON 2-GANG EMB SERIES WALL BOX FOR AVI INTERFACE. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
7. AUDIO/VISUAL FLYING LEADS AT CEILING MOUNTED PROJECTOR LOCATION. SEE ET-5.4 & B/ET-5.5 FOR DETAILS.
8. AUDIO VOLUME CONTROL OUTLET MOUNTED AT TEACHER'S STATION LOCATION AT +45" AFF. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
9. AUDIO/VISUAL SPEAKER FLUSH IN CEILING TILE. SEE ET-5.4 FOR DETAILS.
10. EXISTING PHONE (BOSEN HANDSET), TO REMAIN.
11. PROVIDE DUAL CHANNEL WIREMOLD 2300 TO ACCOMMODATE DATA CABLING. COLOR TO MATCH EXISTING (TYPICAL AT STUDENT WORKSTATIONS)
12. SEE DETAIL A/ET-5.6 FOR INSTALLATION.
13. SEE DETAIL B/ET-5.6 OSP PATHWAYS.

GENERAL NOTES

1. SEE DATA RISER DIAGRAM ON ET-1.2 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.
3. USE EXISTING UNDER GROUND DUCTBANK FOR CABLE DISTRIBUTION.



KEYPLAN — NTS

NORTH
1/8" = 1'-0"

TURPIN & RATTAN ENGINEERING, INC.
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E-MAIL: ENGINEER@TREISD.COM
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V:PHATHANAK 11/16/12 - 8:43AM

REGISTERED PROFESSIONAL ENGINEER — DALE M. FRANCHAK — No.11533 exp.6/30/2014 — ELECTRICAL — STATE OF CALIFORNIA

MARK FORTIE, RCDD
REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER — BICSI
EXPIRES 12/31/13
Regis. No. 081432

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