

# DUNELAND SCHOOL CORPORATION

## 2018 MAIN OFFICE RENOVATION AT: JACKSON ELEMENTARY SCHOOL

811 N. 400 E., VALPARAISO, INDIANA 46383

TRIA PROJECT#: 18-002

ARCHITECT:

**TRIA ARCHITECTURE, INC.**

West Suburban Office: 901 McClintock Drive, Suite 100  
Burr Ridge, Illinois 60521

South Suburban Office: 1820 Ridge Road, Suite 209  
Homewood, Illinois 60430

Phone: 630.455.4500 Fax: 630.455.4040  
www.TriaArchitecture.com

M.E.P. CONSULTANT:

**OAS, LLC.**

769 Heartland Dr., Unit A  
Sugar Grove, Illinois 60554

### GENERAL BUILDING CODE REQUIREMENTS

#### BUILDING CODES REFERENCED:

2012 INTERNATIONAL BUILDING CODE WITH 2014 INDIANA AMENDMENTS

2006 INTERNATIONAL PLUMBING CODE 2ND EDITION AMENDED INDIANA 2012

2008 NATIONAL ELECTRICAL CODE WITH 2009 INDIANA AMENDMENTS

2012 INTERNATIONAL MECHANICAL CODE WITH 2014 INDIANA AMENDMENTS

INDIANA ENERGY CONSERVATION CODE 2010

2012 INTERNATIONAL FIRE CODE WITH 2014 INDIANA AMENDMENTS

2012 INTERNATIONAL FUEL GAS CODE 2ND EDITION WITH 2014 INDIANA AMENDMENTS

#### OCCUPANCY CLASSIFICATION:

EDUCATIONAL GROUP E

#### DESIGN FIRM REGISTRATION:

THOMAS R. SZURGOT

INDIANA LICENSE NUMBER: \*ARI0800173

### DRAWING INDEX

T1.00 TITLE SHEET, SITE LOCATION MAP, INDEX, AND  
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E1.00 PARTIAL FIRST FLOOR PLAN - ELECTRICAL - LIGHTING

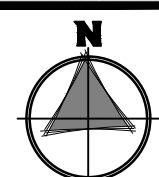
E2.00 PARTIAL FIRST FLOOR PLAN - ELECTRICAL - POWER

E3.00 SPECIFICATIONS - ELECTRICAL

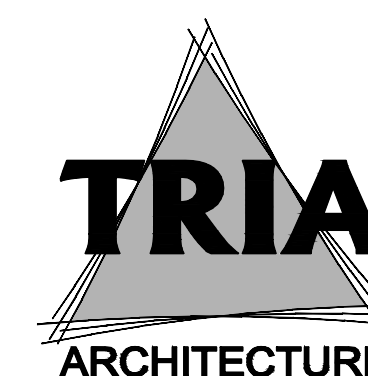
### SCHOOL BOARD

BOARD PRESIDENT	MRS. KRISTIN KROEGER
BOARD VICE PRESIDENT	MR. JOHN MARSHALL
BOARD SECRETARY	MR. BRANDON KROFT
BOARD MEMBER	MR. MICHAEL TROUT
BOARD MEMBER	MR. RONALD STONE
SUPERINTENDENT	DR. DAVID FRUIS

### JACKSON - SITE LOCATION MAP



ADMINISTRATION CENTER /  
DISTRICT OFFICE  
JACKSON ELEMENTARY SCHOOL



#### REVISIONS:

1	
2	
3	
4	
5	

T1.00

**ISSUED FOR PROPOSAL:**

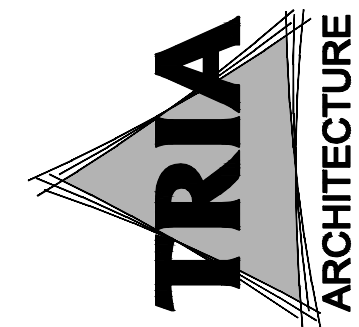
MARCH 7, 2018

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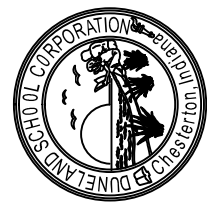
ARCHITECTURAL SYMBOLS AND ABBREVIATIONS

	SAFETY REFERENCE ROOM INFORMATION TAG		ROOF INSULATION TAGS	AP	ACOUSTICAL PANEL	PL	PLASTER
	SAFETY REFERENCE EXIT INFORMATION TAG		2'x4' RECESSED FLUORESCENT FIXTURE	BCS	BABY CHANGING STATION	PRT	PORCELAIN TILE
	SAFETY REFERENCE EGRESS PATH		RECESSED DOWNLIGHT	CH	COAT HOOK	PT	PAINT
	BREAK LINE		PENDANT LINEAR LIGHT FIXTURE	CT	CERAMIC TILE	PTD	PAPER TOWEL DISPENSER
	WINDOW TAG		2' x 4' RECESSED LINEAR LIGHT FIXTURE	CMU	CONCRETE MASONRY UNIT	PTTD	PAPER TOWEL TRASH DISPOSAL
	DOOR TAG		HVAC SUPPLY	CP	CONDENSATE PIPE	RBR	RUBBER
	NORTH ARROW		HVAC RETURN	CPT	CARPET	RBB	RUBBER BASE
	SECTION TAG		S.A.T. CEILING	CRT	CONCRETE	RBT	RUBBER TILE FLOORING
	EXTERIOR ELEVATION TAG		PLASTER OR GYP. BD.	CU	CONDENSING UNIT	RD	ROOF DRAIN
	INTERIOR ELEVATION TAG		ROOM NAME TAG	DF	DRINKING FOUNTAIN	RH	ROOF HATCH
	DETAIL TAG / DRAWING TITLE			EF	EXHAUST FAN	RTU	ROOFTOP UNIT
	WALL TYPE TAG			EP	ELECTRICAL PENETRATION	RST	RUBBER STAIR TREADS AND RISERS
	COLUMN LINE TAG			EQ	EQUAL	REF	REFRIGERATOR
	ELEVATION TAG (HEIGHT)			ETR	EXISTING TO REMAIN	SAT	SUSPENDED ACOUSTICAL TILE
	REMODELING NOTE TAG			EWC	ELECTRIC WATER CHILLER	SD	SOAP DISPENSER
	DEMOLITION NOTE TAG			EX	EXISTING	SGT	STRUCTURAL GLAZED TILE
	CASEWORK TAG			EXP	EXPOSED	SIM	SIMILAR
				FD	FLOOR DRAIN	SND	SANITARY NAPKIN DISPOSAL
				FE	FIRE EXTINGUISHER	SNP	SANITARY NAPKIN DISPENSER
				F.E.C.	FIRE EXTINGUISHER CABINET	STL	STEEL
				FP	FIRE PROTECTION	TDU	TRASH DISPOSAL UNIT
				GB	GRAB BAR	TRZ	TERRAZZO
				GL	GLAZING	TTD	TOILET TISSUE DISPENSER
				GP	GAS PIPING	TV	TELEVISION
				GYP.	GYP. BOARD	TYP	TYPICAL
				HC	HANDICAPPED ACCESSIBLE	UR	URINAL
				HM	HOLLOW METAL	VCT	VINYL COMPOSITE TILE
				LAV	LAVATORY	VIF	VERIFY IN FIELD
				M.E.	MATCH EXISTING	VP	VENT PIPE
				M	MIRROR	WC	WATER CLOSET
				MO	MASONRY OPENING	WD	WOOD
				MTL	METAL	WF	WASH FOUNTAIN
				MUA	MAKE-UP AIR	WL C	WALL COVERING
				N.I.C.	NOT IN CONTRACT		
				OH	OPPOSITE HAND		

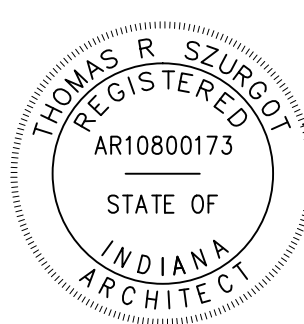


OAS, LLC  
CONSULTANTS  
O'HIGGINS AND ARNOLD SUSTAINABILITY, LLC  
780 EASTLAND DR. UNIT A SUITE 200E, LUMAS, IN 46054

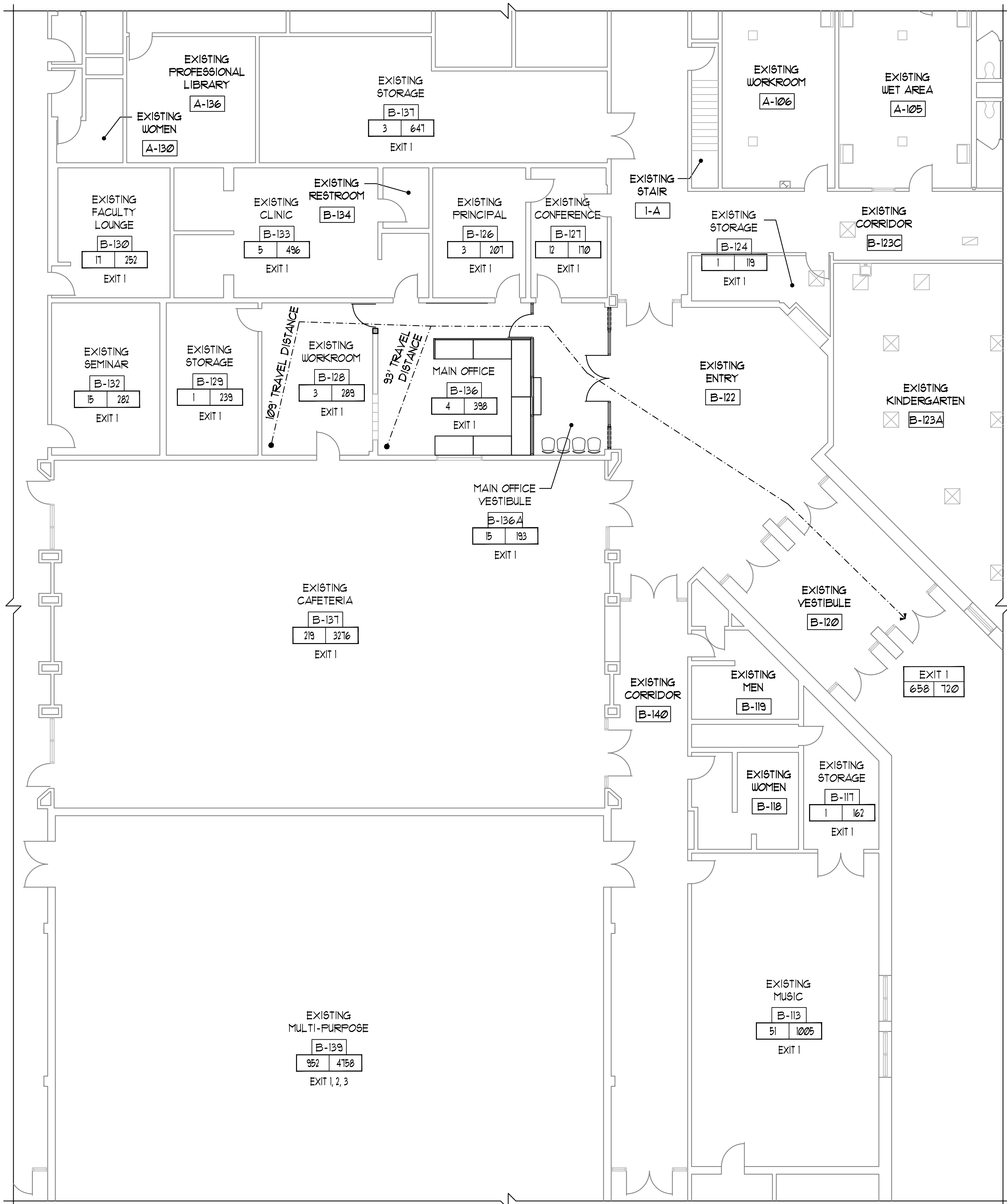
DUNELAND SCHOOL CORPORATION  
2018 MAIN OFFICE RENOVATION AT:  
JACKSON ELEMENTARY SCHOOL  
811 N. 400 E. VALPARAISO, INDIANA 46383



PROJECT NUMBER: 18-001	REVISIONS:
PROJECT MANAGER: MCS	1
DRAWN BY: PSN	2
USED FOR PROPOSAL: 03/07/2018	3
SYMBOLS AND ABBREVIATIONS	4



AG0.00

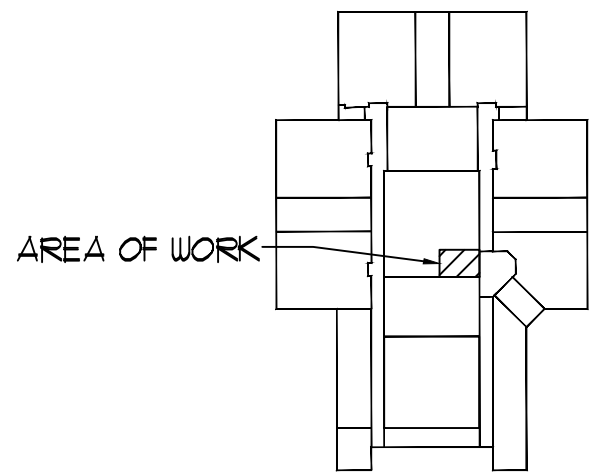


OCCUPANCY		
MAIN OFFICE VESTIBULE:	15	OCCUPANTS
MAIN OFFICE:	4	OCCUPANTS
EXISTING WORKROOM:	3	OCCUPANTS
TOTAL OCCUPANCY:	22	OCCUPANTS

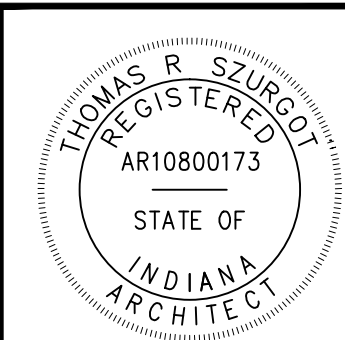
GENERAL NOTES	
1. ALL WORK SHALL COMPLY WITH LOCAL, MUNICIPAL AND STATE CODES.	

LEGEND	
	1-HOUR BUILDING SEPARATION CONSTRUCTION
(XXX)	FIRE RATING OF DOOR ASSEMBLY IN HOURS (ONLY NEW DOORS AND FRAMES ARE LABELED ON PLAN)
EX FEC	EXISTING FIRE EXTINGUISHER CABINET
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET RECESSED IN NEW WALL CONSTRUCTION
OCCUPANCY EXIT(S) USED AREA (S.F.) EXIT X	ROOM OCCUPANCY AND EXIT INFORMATION
EXIT NUMBER EGRESS CAPACITY USED EXIT X MAXIMUM EGRESS CAPACITY	EXIT EGRESS
	SAFETY REFERENCE EGRESS PATH AND DISTANCE

1 PARTIAL FIRST FLOOR SAFETY REFERENCE PLAN  
1/8" = 1'-0"

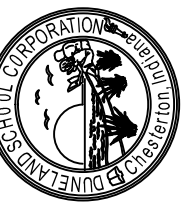


KEY PLAN  
NOT TO SCALE



AG2.10

DUNELAND SCHOOL CORPORATION  
2018 MAIN OFFICE RENOVATION AT:  
JACKSON ELEMENTARY SCHOOL  
811 N. 400 E. VALPARAISO, INDIANA 46383

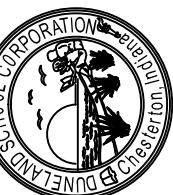


PROJECT NUMBER: 18-001	DATE: 08/01/2018
PROJECT MANAGER: NS	DATE: 08/01/2018
DRAWN BY: FSI	DATE: 08/01/2018
USED FOR PROPOSAL: 08/01/2018	DATE: 08/01/2018
PARTIAL FIRST FLOOR SAFETY REFERENCE PLAN	



OAS, LLC  
CONSULTANT  
O'HIGGINS AND ARNOLD SUSTAINABILITY, LLC  
780 EASTMAN DR. UNIT 1 SUITE 200E, LUMAS, IN 46033





PROJECT NUMBER: 18-001	REVISIONS:
PROJECT MANAGER: HSI	1
DRAWN BY: PSN	2
USED FOR PROPOSAL: 03/07/2018	3
EXISTING PARTIAL FIRST FLOOR PLAN	

## EXISTING PLAN REFERENCED NOTES

- EXISTING WALL CONSTRUCTION TO REMAIN.
- EXISTING DOOR AND FRAME TO REMAIN - PROTECT DURING CONSTRUCTION.
- EXISTING WINDOW AND GLAZING SYSTEM TO REMAIN - PROTECT DURING CONSTRUCTION.
- EXISTING MAIL SLOT CASEWORK TO REMAIN - PROTECT DURING CONSTRUCTION.
- EXISTING ELECTRICAL EQUIPMENT TO REMAIN - PROTECT DURING CONSTRUCTION.
- EXISTING BRICK FLOOR FINISH AND RUBBER WALL BASE TO BE REMOVED. SAWCUT AND REMOVE BRICK FLOOR AS REQUIRED TO PROVIDE WORK INDICATED. PREPARE FLOOR AND WALL FOR FINISH.
- EXISTING WALL CONSTRUCTION TO BE REMOVED TO THE EXTENT REQUIRED TO PROVIDE WORK INDICATED - REMOVE MASONRY IN WHOLE UNITS - REFER TO FLOOR PLANS AND MECHANICAL AND ELECTRICAL DRAWINGS.
- EXISTING DOOR AND FRAME TO BE REMOVED IN ITS ENTIRETY.
- EXISTING WINDOW AND GLAZING SYSTEM TO BE REMOVED IN ITS ENTIRETY.
- EXISTING CASEWORK/COUNTERTOP TO BE REMOVED IN ITS ENTIRETY.
- EXISTING CUBICAL FURNISHING TO BE REMOVED BY OWNER.
- EXISTING POWER POLE TO BE REMOVED IN ITS ENTIRETY - REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- EXISTING TEXTURED WALLPAPER FINISH TO REMAIN - PROTECT DURING CONSTRUCTION - PAINT.
- EXISTING TACK SURFACE TO REMAIN - PROTECT DURING CONSTRUCTION.
- EXISTING FLOOR FINISH AND ASSOCIATED WALL BASE TO BE REMOVED IN THEIR ENTIRETY - PREPARE FLOOR/WALL TO RECEIVE FLOOR FINISH AND BASE.
- EXISTING TRANSITION STRIP (RUBBER OR METAL ANGLE) TO BE REMOVED.
- EXISTING ELECTRICAL EQUIPMENT TO BE REMOVED BY OWNER.
- EXISTING FLOOR FINISH TO REMAIN - PROTECT DURING CONSTRUCTION.
- OPEN EXISTING WALL TO ADD STUDS/BLOCKING FOR DOOR FRAME ANCHORS.
- REMOVE EXISTING GYPSUM BOARD FROM EXISTING WALL.
- AT ALTERNATE PROPOSAL 1 ONLY - REMOVE WALL AS REQUIRED TO PROVIDE NEW ELECTRICAL WORK - REFER TO ELECTRICAL DRAWING.

## LEGEND

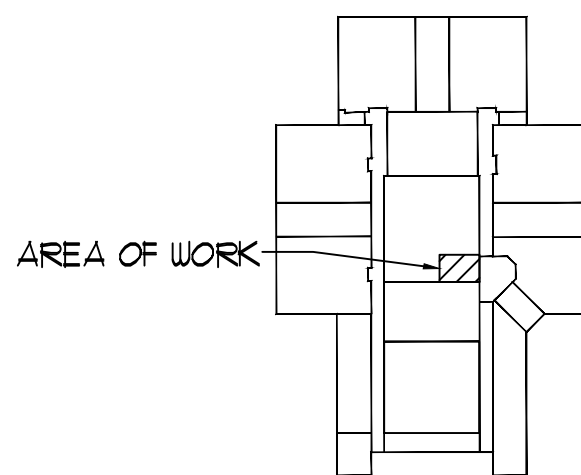
- EXISTING CONSTRUCTION TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN

## EXISTING PLAN GENERAL NOTES

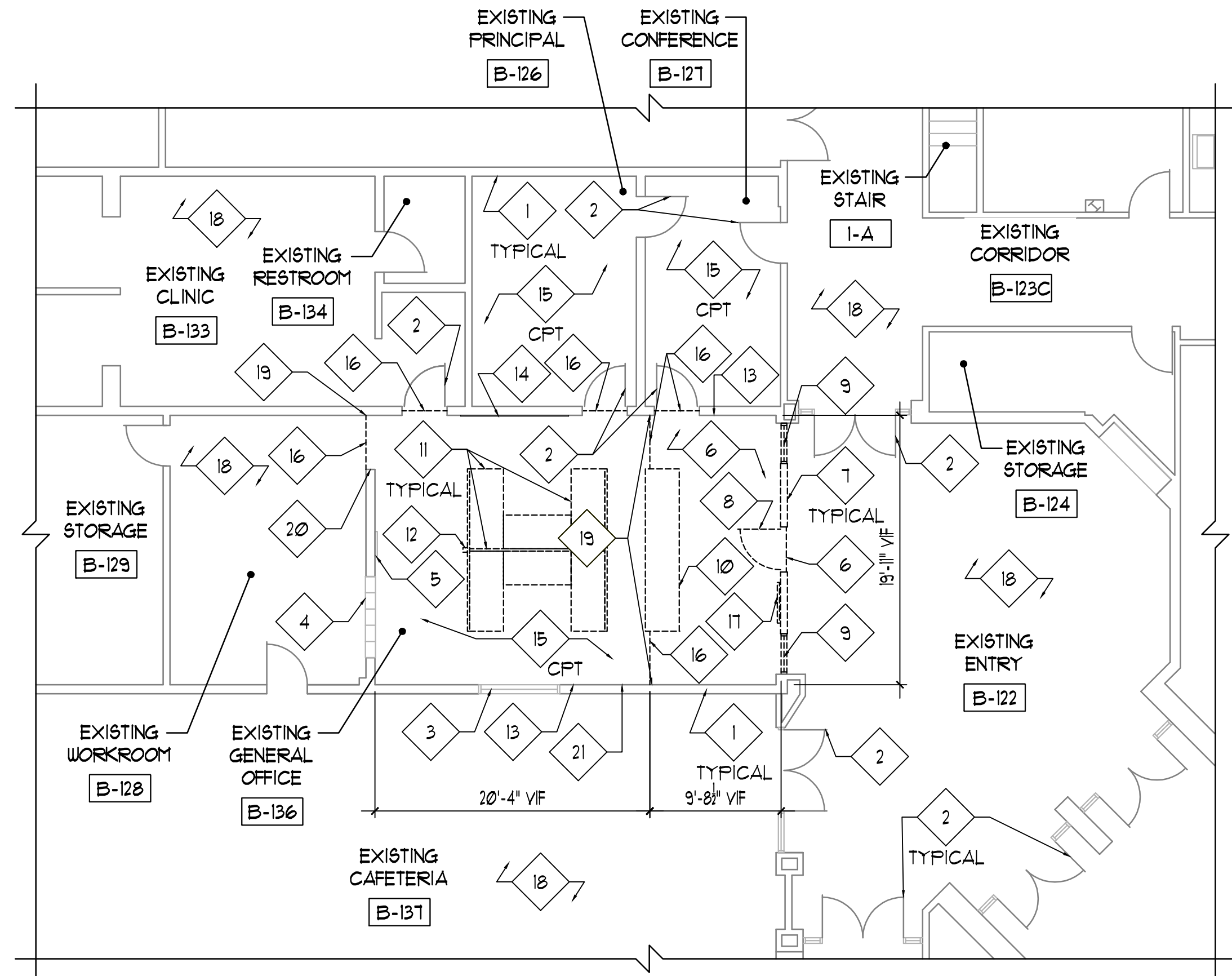
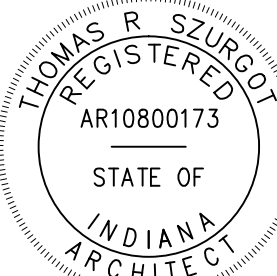
- REFER TO FLOOR PLANS FOR SCOPE OF NEW WORK.
- FIELD VERIFY ALL EXISTING CONDITIONS. IN THE EVENT THAT AN ITEM NOT SHOWN ON THE DRAWINGS CONFLICTS WITH WORK UNDER THIS CONTRACT, CONTACT THE ARCHITECT PRIOR TO REMOVAL OF THAT ITEM. ITEMS SHOWN ARE INDICATED TO GIVE A GENERAL SCOPE OF WORK. ANY ITEMS REQUIRING REMOVAL/DEMOLITION TO PROPERLY PERFORM CONTRACT WORK BUT NOT SPECIFICALLY SHOWN, SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST, PROVIDING THE CONDITION WAS VISIBLE DURING BIDDING.
- SHORE OR BRACE ALL EXISTING CONSTRUCTION AS REQUIRED TO PERFORM WORK.
- EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORING, CUTTING, PATCHING, INFILLING, REPAIRING, REFINISHING, AND REMOVAL/REPLACEMENT OF BUILDING CONSTRUCTION REQUIRED TO ACCOMMODATE THE INSTALLATION OR REMOVAL OF THEIR WORK. ALL PATCHING, REPAIRING, AND REFINISHING SHALL BE PERFORMED BY THOSE REGULARLY INVOLVED IN THAT TRADE AND SHALL MATCH THE ADJACENT CONSTRUCTION.
- REMOVE ALL EQUIPMENT LOCATED ON OR WITHIN WALL CONSTRUCTION SCHEDULED TO BE REMOVED, SO AS TO NOT DISRUPT EXISTING BUILDING OPERATIONS. DISCONNECT ALL ELECTRICAL WIRING, PULL WIRE BACK TO NEAREST JUNCTION BOX OR TO SERVICE.
- PROTECT ALL EXISTING FINISHES, EQUIPMENT, AND ADJACENT WORK NOT SCHEDULED TO BE REMOVED FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGED FINISHES, EQUIPMENT, OR ADJACENT SURFACES SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
- THE OWNER HAS FIRST RIGHT OF REFUSAL FOR ANY MATERIAL, EQUIPMENT OR FIXTURE TO BE REMOVED.
- WHERE POSSIBLE - RUN NEW ELECTRICAL WORK INSIDE WALL AND CEILING CONSTRUCTION (NEW AND EXISTING) - REMOVE EXISTING WALL/CEILING CONSTRUCTION SCHEDULED TO REMAIN AS REQUIRED TO PERFORM WORK INDICATED - PATCH ALL CONSTRUCTION TO PROVIDE A FINISHED CONDITION.
- AT ALL EXISTING GRASS AREAS, LANDSCAPING ITEMS OR CONCRETE/ASPHALT SURFACES TO REMAIN - PROTECT DURING CONSTRUCTION AND REPAIR ANY AREAS DAMAGED OR OTHERWISE AFFECTED DURING CONSTRUCTION.
- REMOVE/RELOCATE ALL ACCESSORIES ON WALL CONSTRUCTION TO BE REMOVED.
- GENERAL CONTRACTOR TO COORDINATE ALL ARCHITECTURAL WORK WITH INDICATED STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION WORK - NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PERFORMING WORK.
- PATCH ALL EXISTING OPENINGS AT ALL EQUIPMENT SCHEDULED TO BE REMOVED, INCLUDING ABOVE CEILING - MATCH EXISTING WALL CONSTRUCTION IN MATERIAL THICKNESS, SIZE AND COLOR, UNLESS NOTED OTHERWISE - REFER TO MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION DRAWINGS.

## FURNITURE / EQUIPMENT RELOCATION NOTES

- OWNER TO REMOVE AND REINSTALL ALL MAIN OFFICE LOOSE FURNITURE AND EQUIPMENT UNLESS OTHERWISE NOTED - REMOVED FURNITURE/ EQUIPMENT ITEMS WILL BE STORED ON SITE - CONTRACTOR TO COORDINATE MOVING SCOPE AND STORAGE LOCATIONS WITH OWNER PRIOR TO BEGINNING ANY WORK.



KEY PLAN  
NOT TO SCALE



1 EXISTING PARTIAL FIRST FLOOR PLAN  
1/8" = 1'-0"





EXISTING REFLECTED CEILING PLAN  
REFERENCED NOTES

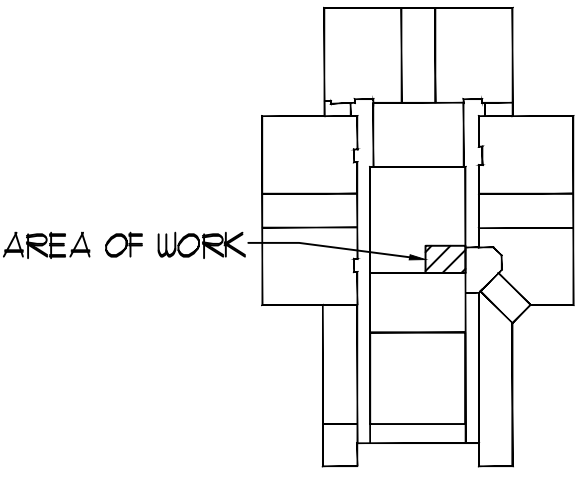
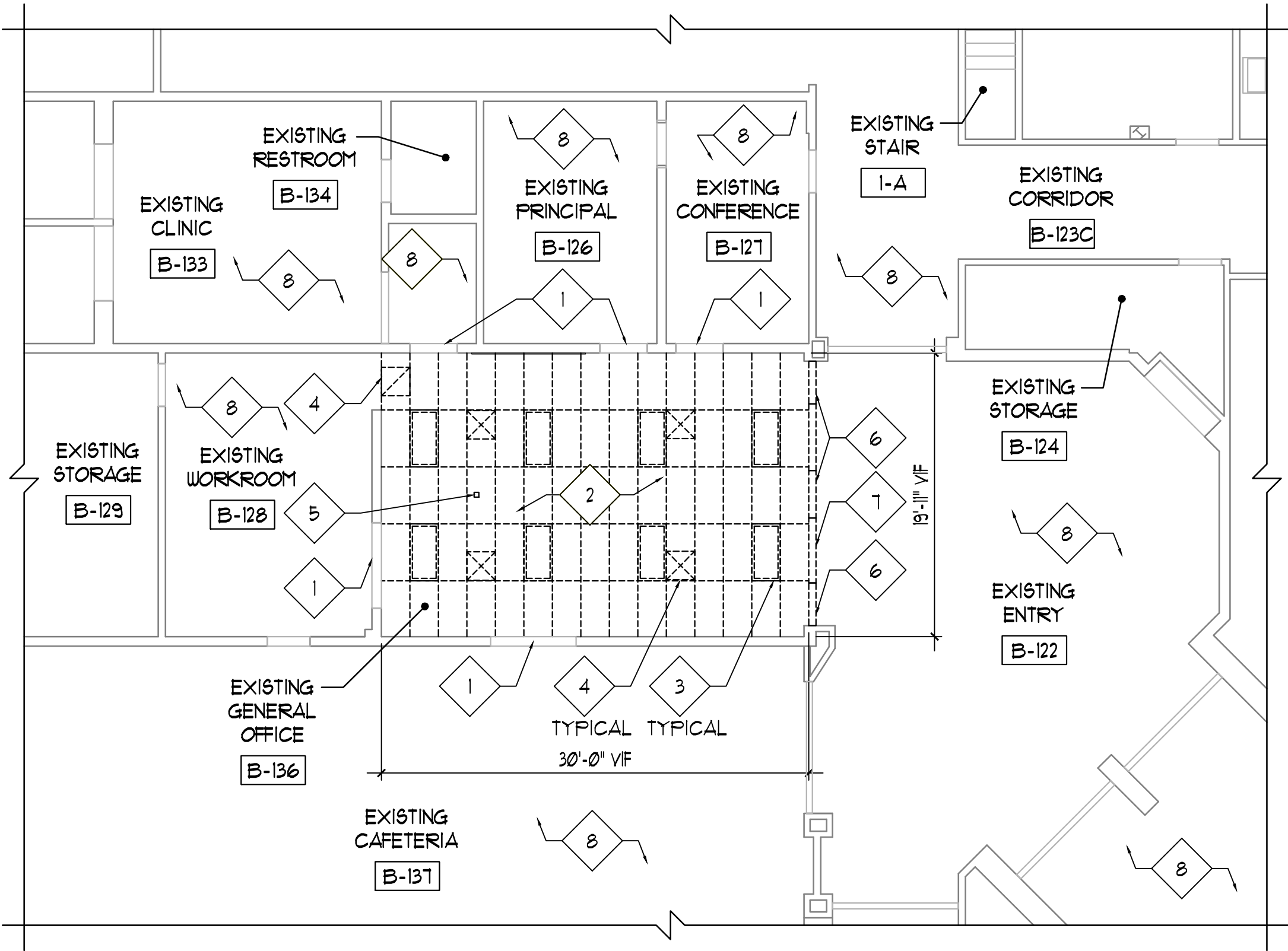
- EXISTING WALL CONSTRUCTION TO REMAIN.
- EXISTING SUSPENDED ACOUSTICAL TILE CEILING SYSTEM TO BE REMOVED IN ITS ENTIRETY.
- EXISTING LIGHT FIXTURES TO BE REMOVED - REFER TO ELECTRICAL DRAWING.
- EXISTING MECHANICAL EQUIPMENT TO BE REMOVED IN ITS ENTIRETY - REFER TO MECHANICAL DRAWINGS.
- EXISTING ELECTRICAL EQUIPMENT TO BE REMOVED IN ITS ENTIRETY - REFER TO ELECTRICAL DRAWINGS.
- EXISTING WALL CONSTRUCTION TO BE REMOVED.
- EXISTING WALL CONSTRUCTION ABOVE CEILING TO REMAIN.
- EXISTING CEILING SYSTEM AND LIGHTS TO REMAIN.

LEGEND

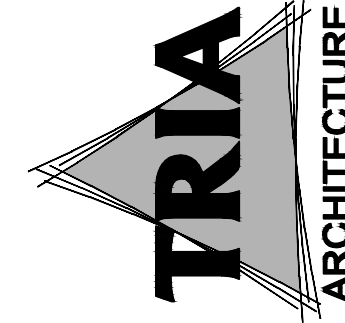
- 2'X4' SUSPENDED ACOUSTICAL TILE CEILING TO BE REMOVED IN ITS ENTIRETY. REMOVE ALL LIGHTS, LOUVERS, AND OTHER DEVICES - REFER TO MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION DRAWINGS.
- 2' X 4' RECESSED LIGHT FIXTURE TO BE REMOVED - REFER TO ELECTRICAL DRAWINGS
- MECHANICAL SUPPLY DIFFUSER TO BE REMOVED - REFER TO MECHANICAL DRAWINGS
- MECHANICAL RETURN/EXHAUST DIFFUSER TO BE REMOVED - REFER TO MECHANICAL DRAWINGS
- EXISTING CONSTRUCTION TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN

EXISTING REFLECTED CEILING PLAN  
GENERAL NOTES

- ALL EXISTING CEILING SYSTEMS, LIGHTS, EQUIPMENT AND CEILING-MOUNTED SPEAKERS TO BE REMOVED IN THEIR ENTIRETY UNLESS NOTED OTHERWISE - REFER TO MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION DRAWINGS.
- REFER TO SHEETS A1.10 AND MECHANICAL, ELECTRICAL AND FIRE PROTECTION DRAWINGS FOR SCOPE OF NEW WORK.
- REFER TO ELECTRICAL PLANS FOR ADDITIONAL CEILING MOUNTED DEVICES AND EQUIPMENT TO BE REMOVED.
- CONTRACTOR TO VERIFY ALL EXISTING CEILING HEIGHTS PRIOR TO BEGINNING WORK ON ANY CEILING SCHEDULED TO RECEIVE WORK.
- FIELD VERIFY ALL EXISTING CONDITIONS. IN THE EVENT THAT AN ITEM NOT SHOWN ON THE DRAWINGS CONFLICTS WITH WORK UNDER THIS CONTRACT, CONTACT THE ARCHITECT PRIOR TO REMOVAL OF THAT ITEM. ITEMS SHOWN ARE INDICATED TO GIVE A GENERAL SCOPE OF WORK. ANY ITEMS REQUIRING REMOVAL/DEMOLITION TO PROPERLY PERFORM CONTRACT WORK BUT NOT SPECIFICALLY SHOWN, SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST, PROVIDING THE CONDITION WAS VISIBLE DURING BIDDING.
- SHORE OR BRACE ALL EXISTING CONSTRUCTION AS REQUIRED TO PERFORM DEMOLITION WORK.
- EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORING, CUTTING, PATCHING, INFILLING, REPAIRING, REFINISHING, AND REMOVAL/REPLACEMENT OF BUILDING CONSTRUCTION REQUIRED TO ACCOMMODATE THE INSTALLATION OR REMOVAL OF THEIR WORK. ALL PATCHING, REPAIRING, AND REFINISHING SHALL BE PERFORMED BY THOSE REGULARLY INVOLVED IN THAT TRADE AND SHALL MATCH THE ADJACENT CONSTRUCTION.
- PROTECT ALL EXISTING FINISHES, EQUIPMENT, AND ADJACENT WORK NOT SCHEDULED TO BE REMOVED FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGED FINISHES, EQUIPMENT, OR ADJACENT SURFACES SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- THE OWNER HAS FIRST RIGHT OF REFUSAL FOR ANY MATERIAL OR EQUIPMENT REMOVED.



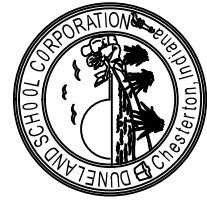
KEY PLAN  
NOT TO SCALE



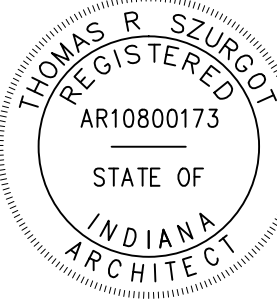
TRIA  
ARCHITECTURE

OAS, LLC  
CONSULTANTS AND ARCHITECTS, LLC  
780 EASTLAND DR. SUITE 1000, CHICAGO, ILLINOIS 60614

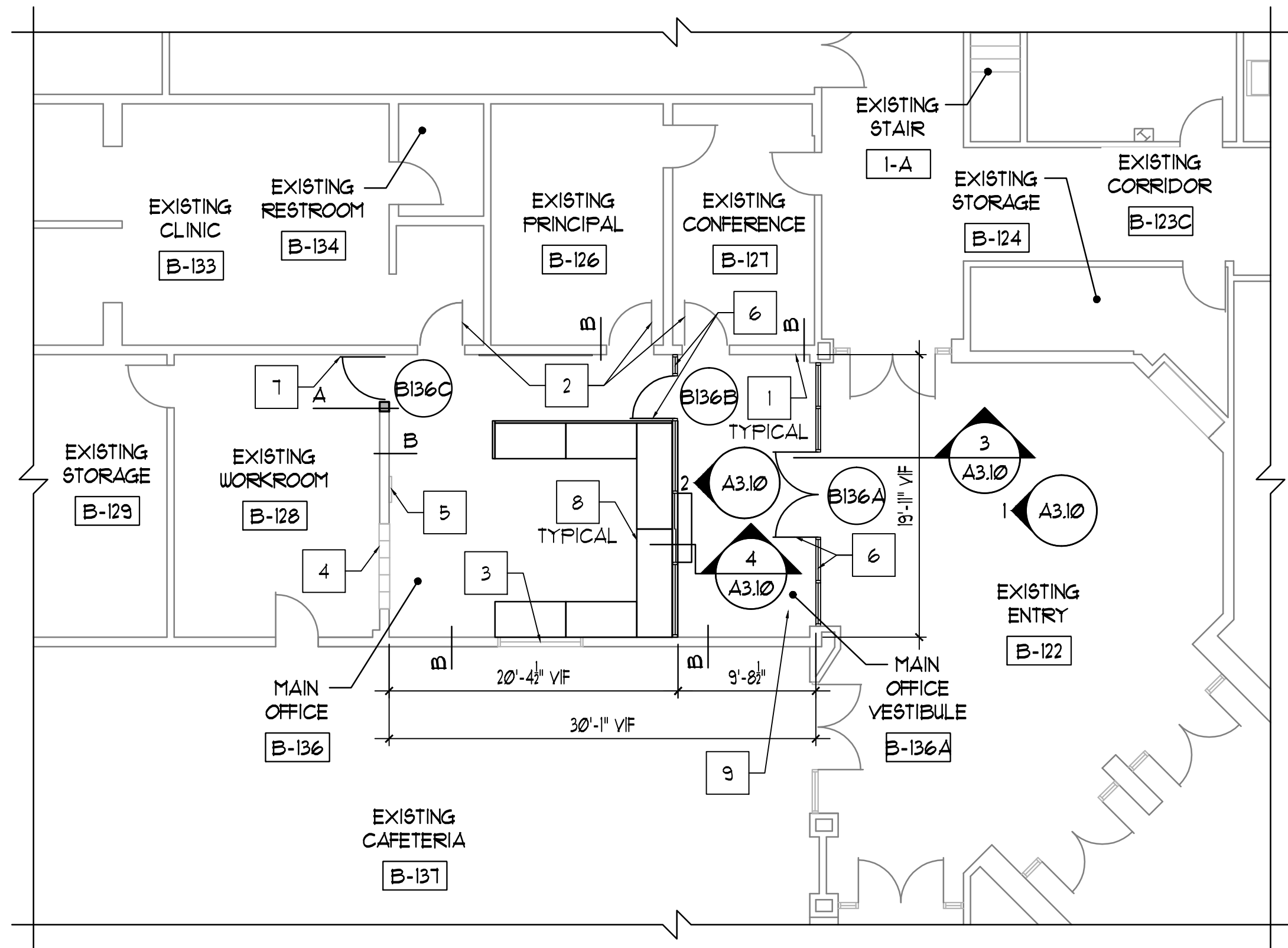
DUNELAND SCHOOL CORPORATION  
2018 MAIN OFFICE RENOVATION AT:  
JACKSON ELEMENTARY SCHOOL  
811 N. 400 E. VALPARAISO, INDIANA 46383



PROJECT NO.: 18-001  
PROJECT NAME: JES  
DRAWN BY: PSN  
DATE FOR PROPOSAL: 03/07/2018  
EXISTING PARTIAL FIRST FLOOR  
REFLECTED CEILING PLAN



A0.11



1 PARTIAL FIRST FLOOR PLAN  
1/8" = 1'-0"



## FLOOR PLAN REFERENCED NOTES

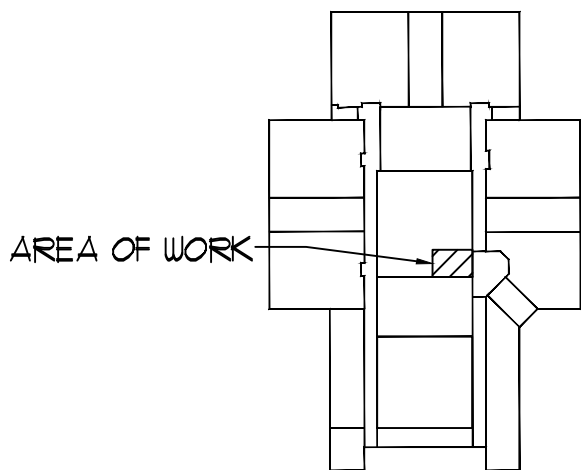
- EXISTING WALL CONSTRUCTION.
- EXISTING DOOR AND FRAME.
- EXISTING WINDOW AND GLAZING SYSTEM.
- EXISTING MAIL SLOT CASEWORK.
- EXISTING ELECTRICAL EQUIPMENT - REFER TO ELECTRICAL DRAWINGS.
- ALUMINUM DOOR, ALUMINUM FRAME AND GLAZING SYSTEM.
- WOOD DOOR AND HOLLOW METAL FRAME - PAINT FRAME.
- FURNISHINGS BY OWNER.
- PROVIDE LEVELER TO FLOAT FLOOR AT BRICK TO BE REMOVED.

## GENERAL NOTES

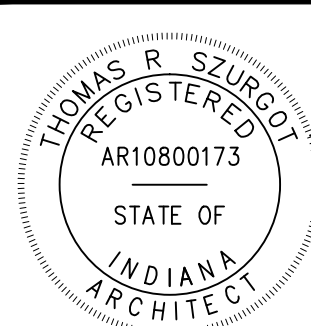
- VERIFY EXACT DIMENSIONS OF ALL EXISTING CONDITIONS IN FIELD.
- ALL CONTRACTORS SHALL REPORT ALL DISCREPANCIES OR DIMENSIONAL QUESTIONS TO THE ATTENTION OF THE ARCHITECT PRIOR TO INSTALLATION.
- REFER TO PROJECT MANUAL FOR PRODUCTS, MATERIALS, PROCEDURES AND ADDITIONAL INFORMATION NOT COVERED IN DRAWINGS.
- PROTECT ALL EXISTING FINISHES, EQUIPMENT, AND ADJACENT WORK FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGED FINISHES, EQUIPMENT, OR ADJACENT SURFACES SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- REFER TO SHEET A2.00 FOR DOOR AND FRAME SCHEDULE.
- REFER TO SHEET A2.00 FOR DESCRIPTION OF WALL TYPES.
- REFER TO SHEET A3.10 FOR FLOOR FINISH PLAN.
- REFER TO SHEET A3.50 FOR ROOM FINISH SCHEDULE.
- PATCH, PAINT, AND CLEAN EXISTING WALLS, FLOORS, AND CEILINGS AT ALL LOCATIONS OF ITEMS SCHEDULED TO BE REMOVED. FINISH TO MATCH ADJACENT SURFACES IN MATERIAL AND TEXTURE. REFER TO ELECTRICAL, MECHANICAL, PLUMBING AND FIRE PROTECTION DRAWINGS.
- PAINT ALL EXPOSED WALL, PLASTER OR GYPSUM CEILING AND SOFFIT, AND EXPOSED STRUCTURE UNLESS NOTED OTHERWISE.
- ALL EXPOSED PIPING, DUCTWORK, ELECTRICAL CONDUIT, AND ALL OTHER EXPOSED MECHANICAL, ELECTRICAL, AND PLUMBING ITEMS TO BE PAINTED UNLESS NOTED OTHERWISE.
- ALL HOLLOW METAL FRAMES (NEW AND EXISTING) WITHIN WORK AREAS SHALL BE PAINTED, UNLESS NOTED OTHERWISE - PAINT ALL EXPOSED SURFACES.
- AT REMOVED MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION EQUIPMENT, INFILL WALL CONSTRUCTION TO MATCH EXISTING ADJACENT WALL CONSTRUCTION. IF OPENING IS BELOW CEILING - PAINT.
- REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- UPON REMOVAL OF EXISTING WALLS, CONTRACTOR SHALL GRIND HIGH SPOTS OR FILL DEPRESSIONS IN FLOOR WITH A MATERIAL SUITABLE TO THE FLOORING MANUFACTURER AT LOCATIONS OF EXISTING WALLS SCHEDULED TO BE REMOVED. PROVIDE A SMOOTH FLOOR SURFACE FLUSH WITH ADJACENT SURFACES.
- PROVIDE LINTELS ABOVE ALL DOORS, CUT PENETRATIONS, ETC.
- CONTRACTOR TO REPAIR/PATCH ALL EXPOSED EXISTING HOLES IN EXISTING WALLS - FINISH TO MATCH EXISTING WALL CONSTRUCTION - AT FIRE RATED WALLS, PATCH ALL HOLES WITH APPROPRIATE MATERIAL TO PROVIDE CONTINUITY OF FIRE RATING.
- PATCH, SMOOTH AND LEVEL EXISTING FLOOR SURFACE AS REQUIRED BY FLOORING MANUFACTURER.
- REFER TO DRAWING A3.00 FOR ADDITIONAL ABBREVIATIONS.

## LEGEND

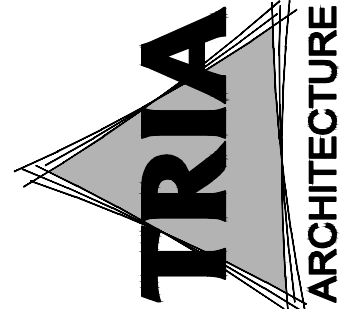
- EXISTING WALL CONSTRUCTION
- FRAMED WALL CONSTRUCTION



KEY PLAN  
NOT TO SCALE



A1.10



TRIA  
ARCHITECTURE

OAS, LLC  
CONSULTANTS AND ARCHITECTS, LLC  
780 EASTLAND DR., SUITE 100, ST. LOUIS, MISSOURI 63105

DUNELAND SCHOOL CORPORATION

2018 MAIN OFFICE RENOVATION AT:

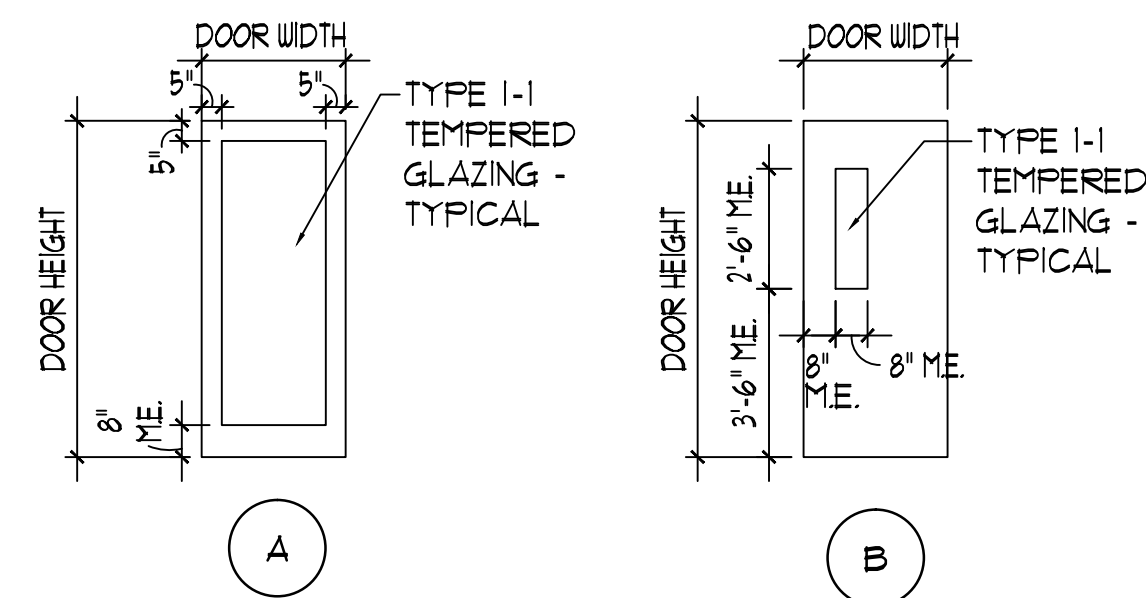
JACKSON ELEMENTARY SCHOOL

811 N. 400 E. VALPARAISO, INDIANA 46383

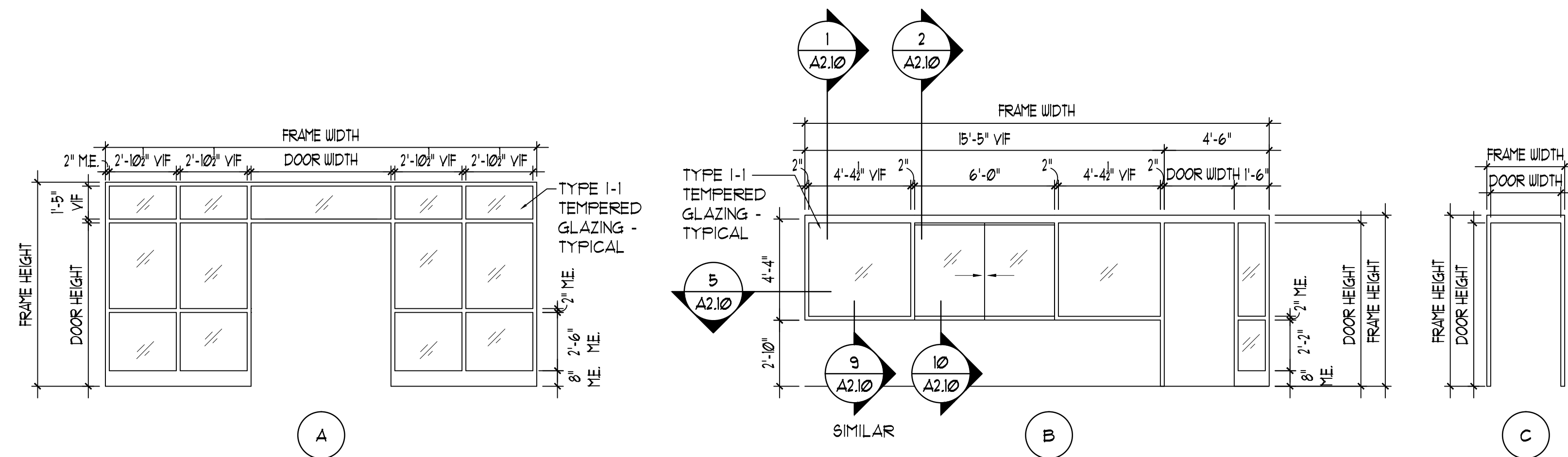


PROJECT NUMBER: 18-001  
PROJECT MANAGER: MS  
DRAWN BY: PSN  
USED FOR PROPOSAL: 03/07/2018  
PARTIAL FIRST FLOOR PLAN

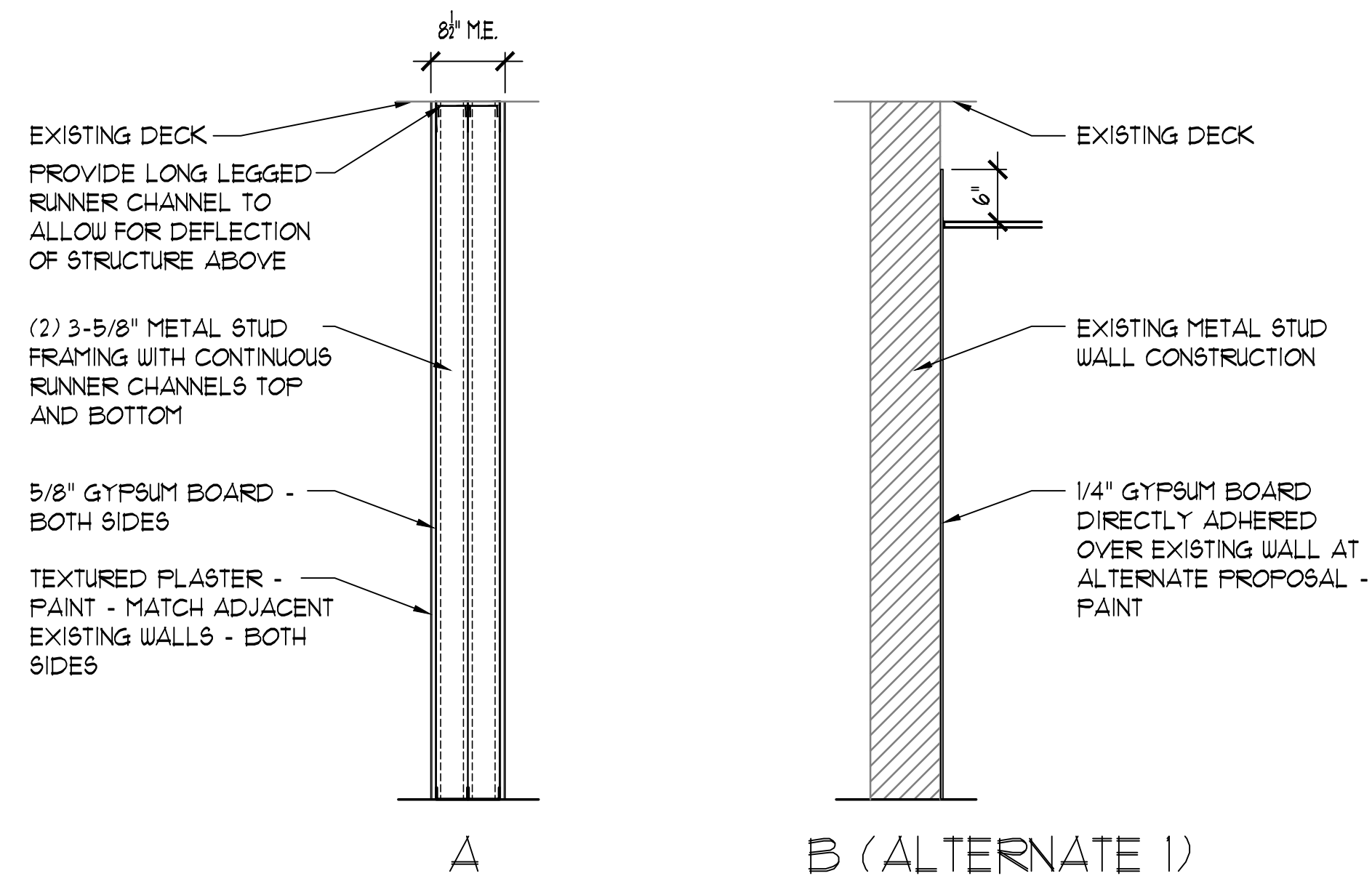
DOOR AND FRAME SCHEDULE																		
INT/ EXT	ROOM NO.	OP'NG NO.	DOOR						FRAME					DETAILS				REFERENCED NOTES
			SIZE		TYPE	MAT'L	HDWR SET	PROT. RATING HOURS	SIZE		TYPE	MAT'L	PROT. RATING HOURS	HEAD	JAMB	JAMB	SILL	
			WIDTH	HEIGHT					WIDTH	HEIGHT								
FIRST FLOOR																		
INT	B-136A	B136A	PAIR 3'-0"	7'-0"	A	AL	1	-	18'-6" VIF	8'-9"	A	AL	-	3/A2.10	6/A2.10	6/A2.10	11/A2.10	
INT	B-136A	B136B	3'-0"	7'-0"	A	AL	2	-	19'-11" VIF	7'-4"	B	AL	-	1/A2.10 2/A2.10	5/A2.10	5/A2.10	9/A2.10 10/A2.10	1
INT	B-136	B136C	3'-0"	7'-0"	B	WD	3	-	3'-4"	7'-4"	C	HM	-	4/A2.10	7/A2.10	8/A2.10	-	2



NOT TO SCALE



NOT TO SCALE



NOT TO SCALE

DOOR AND FRAME ABBREVIATIONS	
ALUM	ALUMINUM
EX	EXISTING
FRP	FIBERGLASS REINFORCED POLYESTER
HM	HOLLOW METAL
ME	MATCH EXISTING
SIM	SIMILAR
TPP	TYPICAL
VIF	VERIFY IN FIELD
WD	WOOD

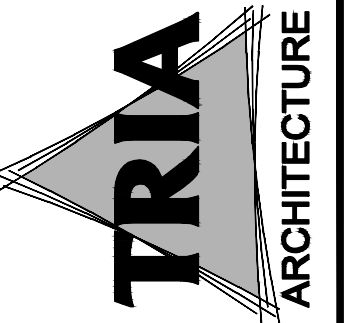
## DOOR AND FRAME GENERAL NOTES

1. CONTRACTOR TO VERIFY DIMENSIONS, QUANTITIES AND CONDITIONS OF ALL ROUGH OPENINGS IN FIELD.
2. REFER TO WALL TYPES FOR WALL CONSTRUCTION AT DOOR LOCATIONS.
3. REFER TO SPECIFICATIONS FOR DESCRIPTIONS OF HARDWARE SETS.
4. GROUT JAMBS SOLID AT ALL FRAMES INSTALLED IN MASONRY OPENINGS.
5. ALL EXPOSED ANCHORS ON HOLLOW METAL FRAMES ARE TO BE COUNTERSUNK INTO FRAMES, COVERED IN BONDO, SANDED SMOOTH, AND PAINTED TO MATCH FRAME.
6. REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.
7. VERIFY DIMENSIONS OF ALL DOORS AND FRAMES TO BE INSTALLED IN EXISTING WALL OPENINGS PRIOR TO SUBMITTING SHOP DRAWINGS.
8. HEIGHT OF DOOR OPERATING HARDWARE SHALL BE NO LESS THAN 34" AND NO MORE THAN 48" ABOVE FINISHED FLOOR. COORDINATE EXACT HEIGHT WITH OWNER AND ARCHITECT.
9. DOOR HARDWARE SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE.
10. DOOR OPERATING FORCE SHALL NOT EXCEED: EXTERIOR HINGED DOORS: 8.5 LB INTERIOR HINGED DOORS: 5 LB
11. ALL EGRESS DOORS ARE TO UTILIZE KEYLESS LOCKETS ON THE EGRESS SIDE. NO FLUSH BOLTS, DEAD OR DRAW BOLTS, ETC. WILL BE ALLOWED.
12. AT ALL OPENINGS SCHEDULED TO RECEIVE WORK - BONDO AND PAINT ALL FRAMES (NEW AND EXISTING).
13. ALL EXISTING FIRE RATED OPENINGS ARE TO BE MAINTAINED.

DOOR AND FRAME REFERENCED NOTES	
1.	DOOR TO RECEIVE ELECTRIC STRIKE AND CARD ACCESS READER SYSTEM - REFER TO ELECTRICAL DRAWINGS.
2.	HOLLOW METAL FRAME - FRAME DEPTH OF 8-1/2" VIF.

## WALL TYPE GENERAL NOTES

1. ALL WALL TYPES ARE TO EXTEND UP THROUGH, AND AROUND, ALL STRUCTURES, AND INTERFERENCES TO MAINTAIN CONTINUITY UP TO DECK - UNLESS NOTED OTHERWISE.
2. ALL WALL TYPES TO EXTEND ABOVE AND BELOW ALL OPENINGS AND PENETRATIONS.

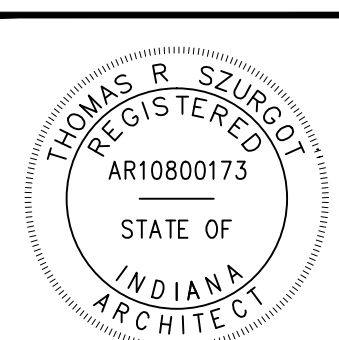


**OAS, LLC**  
O'HIGGINS AND ARNOLD SUSTAINABILITY, LLC  
769 HEARTLAND DR., UNIT A SUGAR GROVE, ILLINOIS 60554  
HIGGINS. CONSULTANTS

**DUNELAND SCHOOL CORPORATION**  
**2018 MAIN OFFICE RENOVATION AT:**  
**JACKSON ELEMENTARY SCHOOL**  
**811 N. 400 E. VALPARAISO, INDIANA 46383**

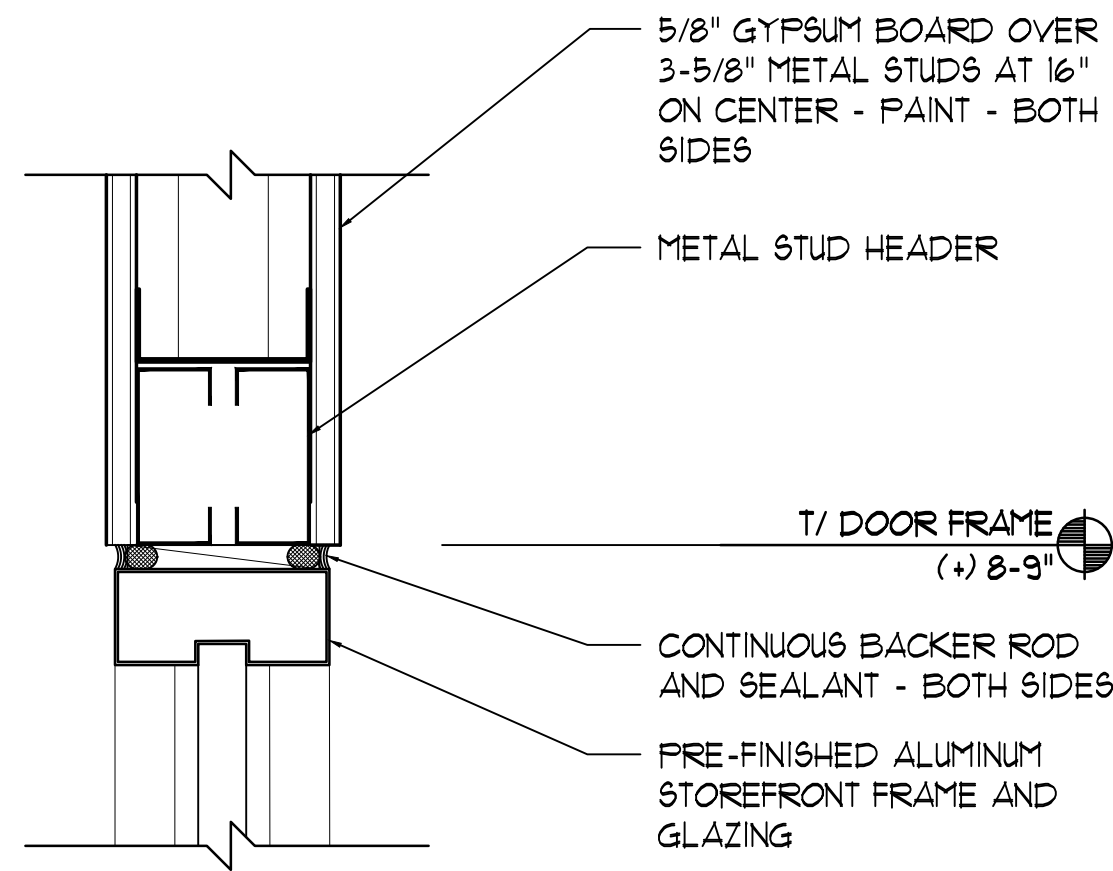


PROJECT NO.	
DRAWN BY:	FSH
PROJECT MANAGER:	MG
ISSUED FOR PROPOSAL:	03-07-2008
DOOR AND FRAME SCHEDULE,	
DOOR AND FRAME TYPES,	
AND WALL TYPES	

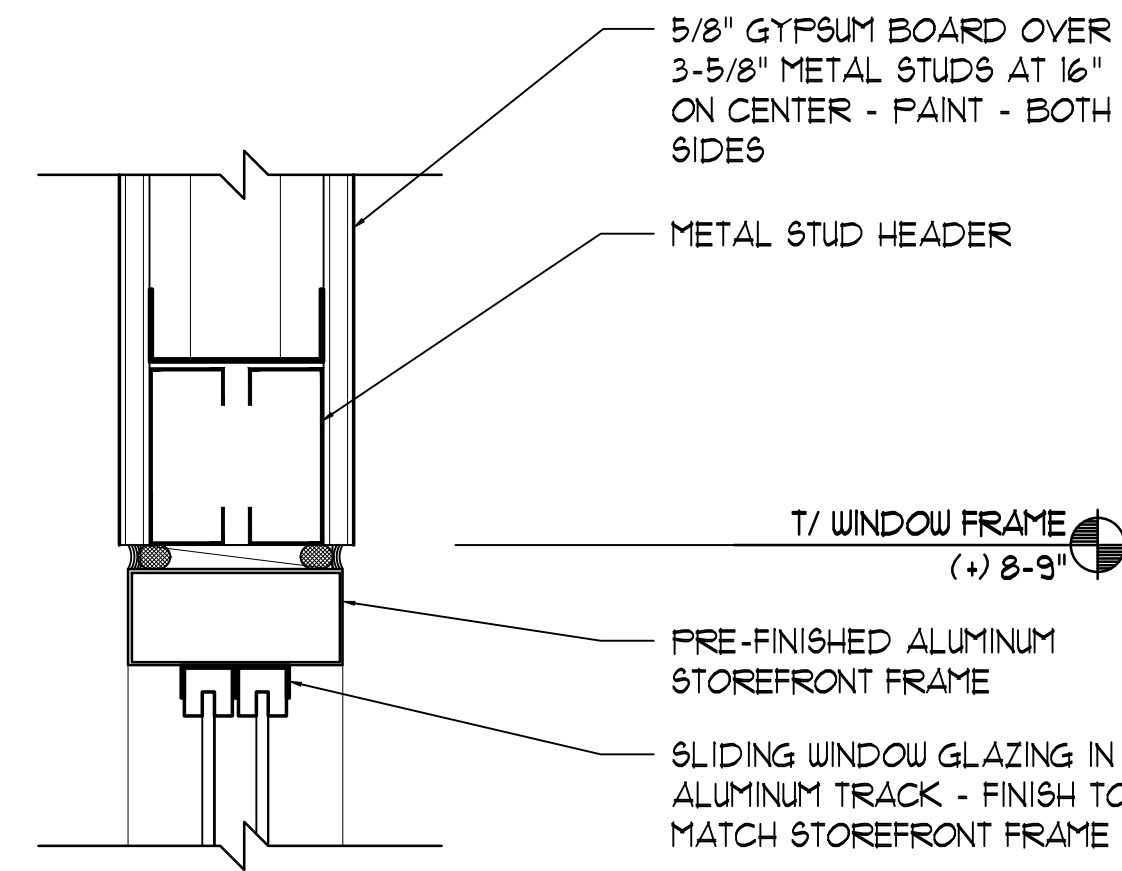


A2.00

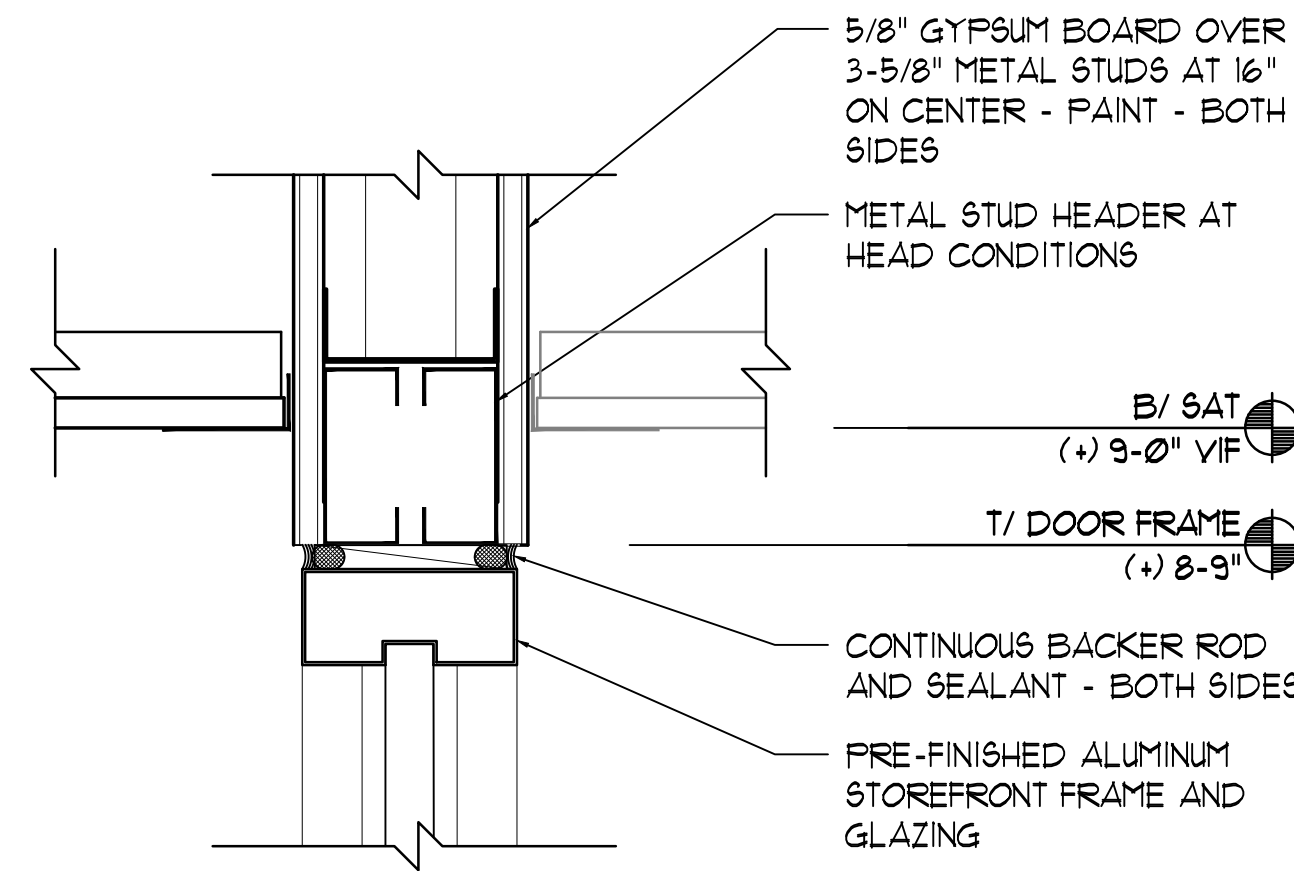




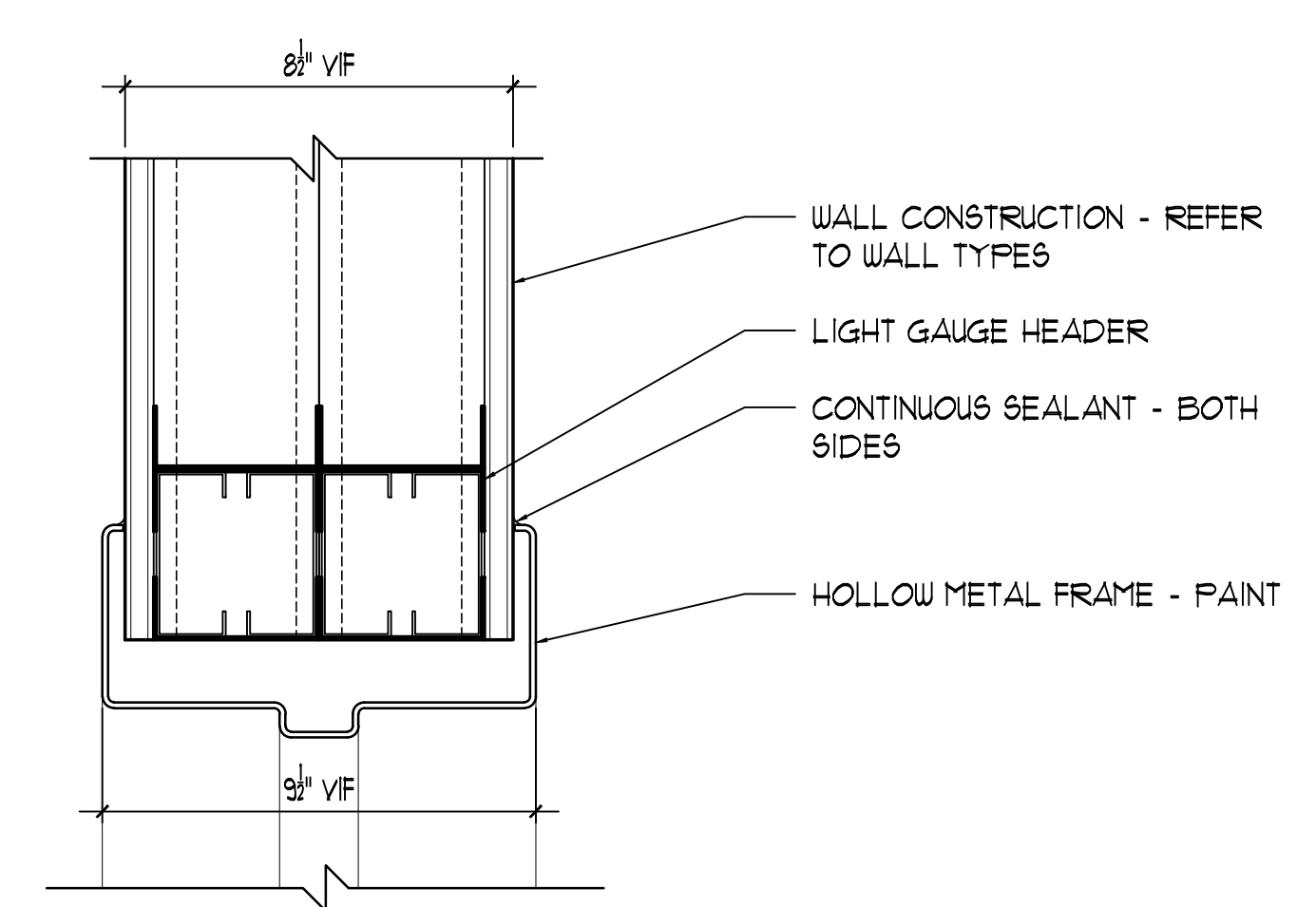
1 HEAD DETAIL  
3" = 1'-0"



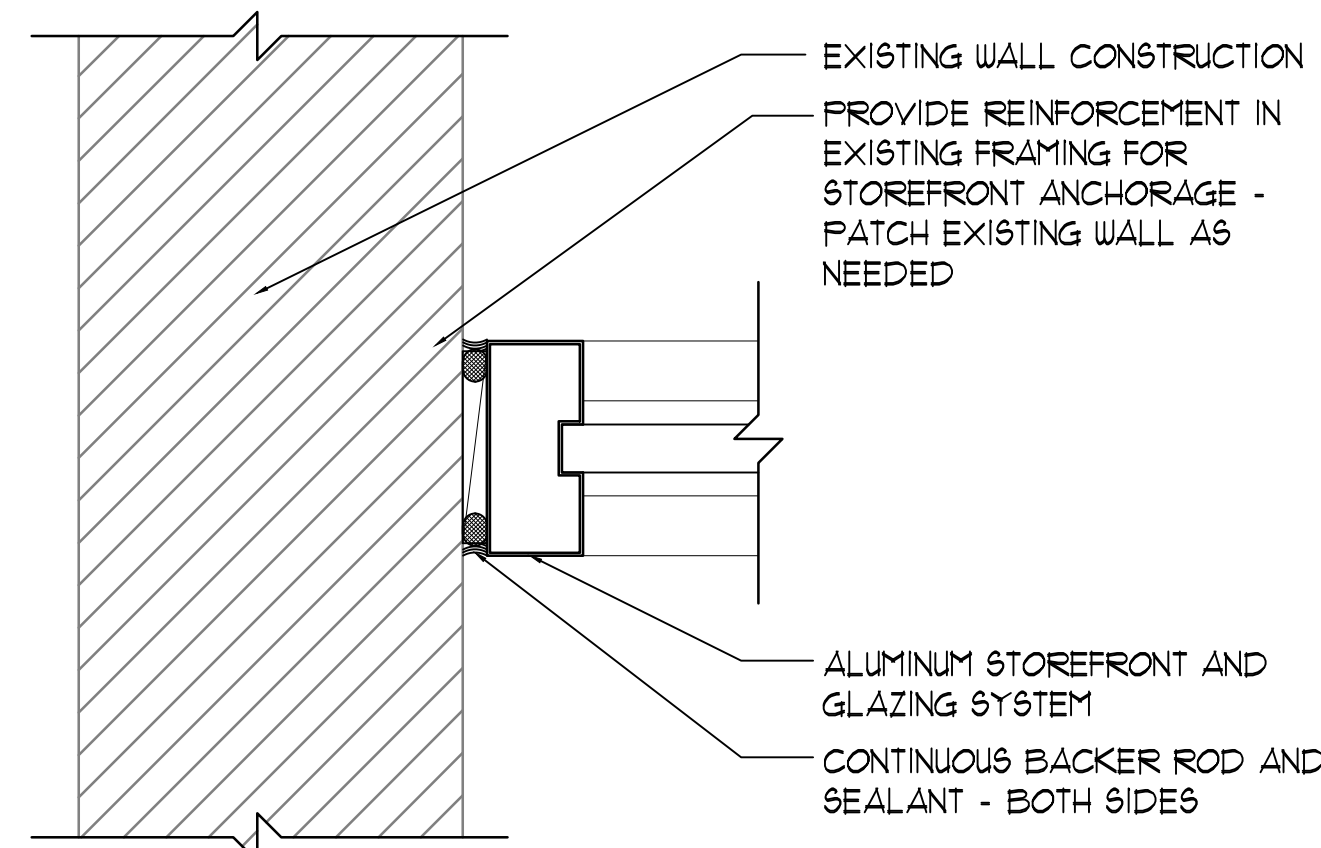
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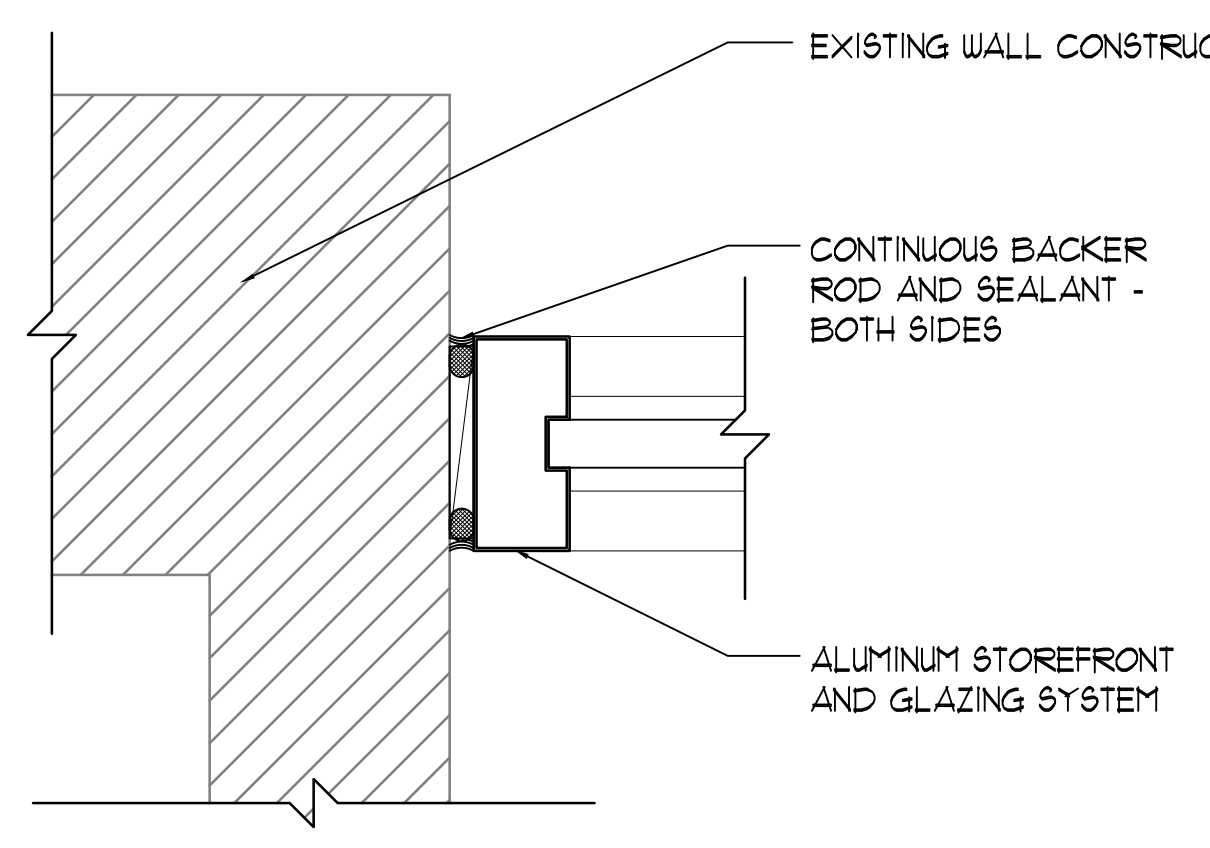
3 HEAD DETAIL  
3" = 1'-0"



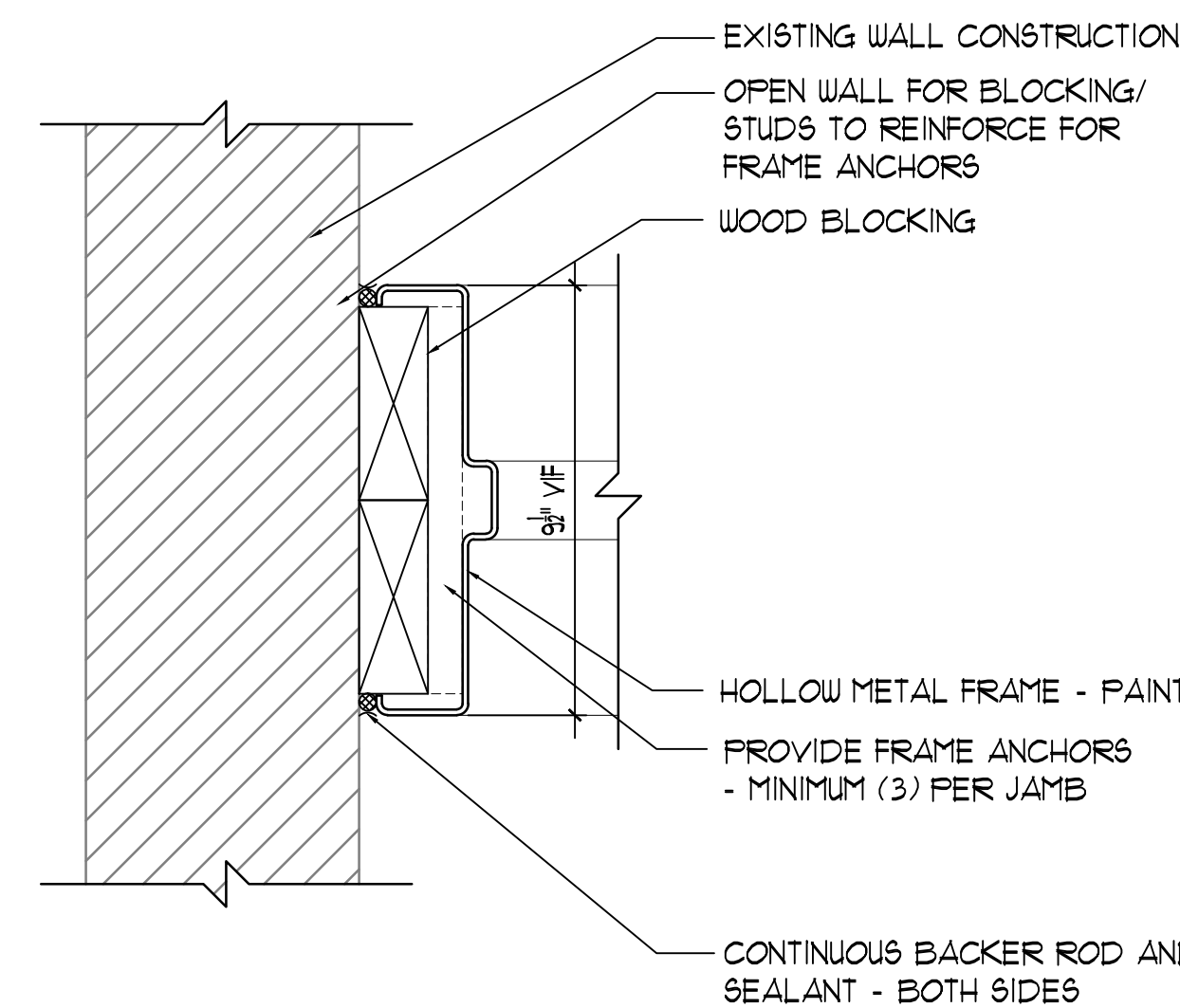
4 HEAD DETAIL  
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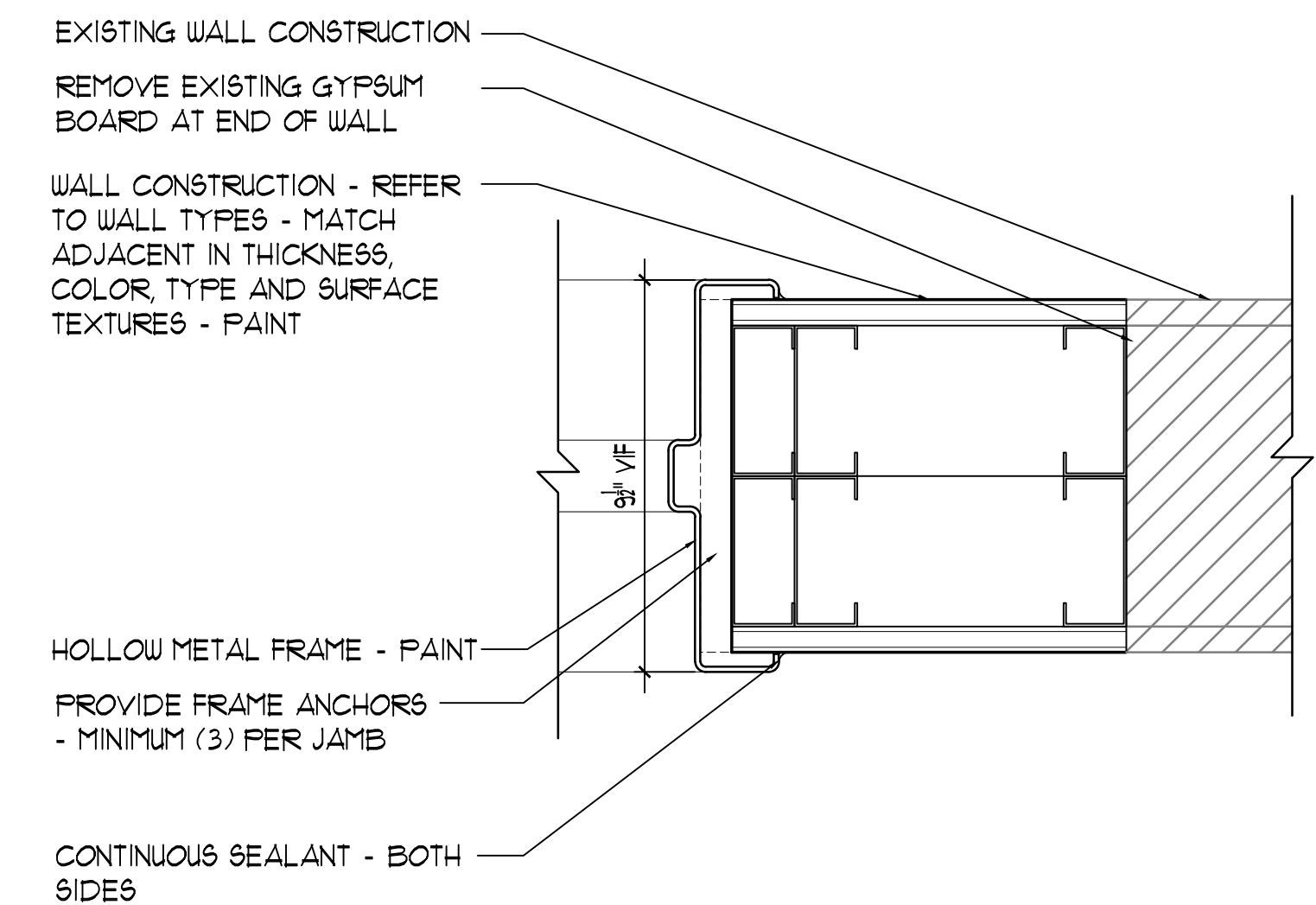
5 JAMB DETAIL  
3" = 1'-0"



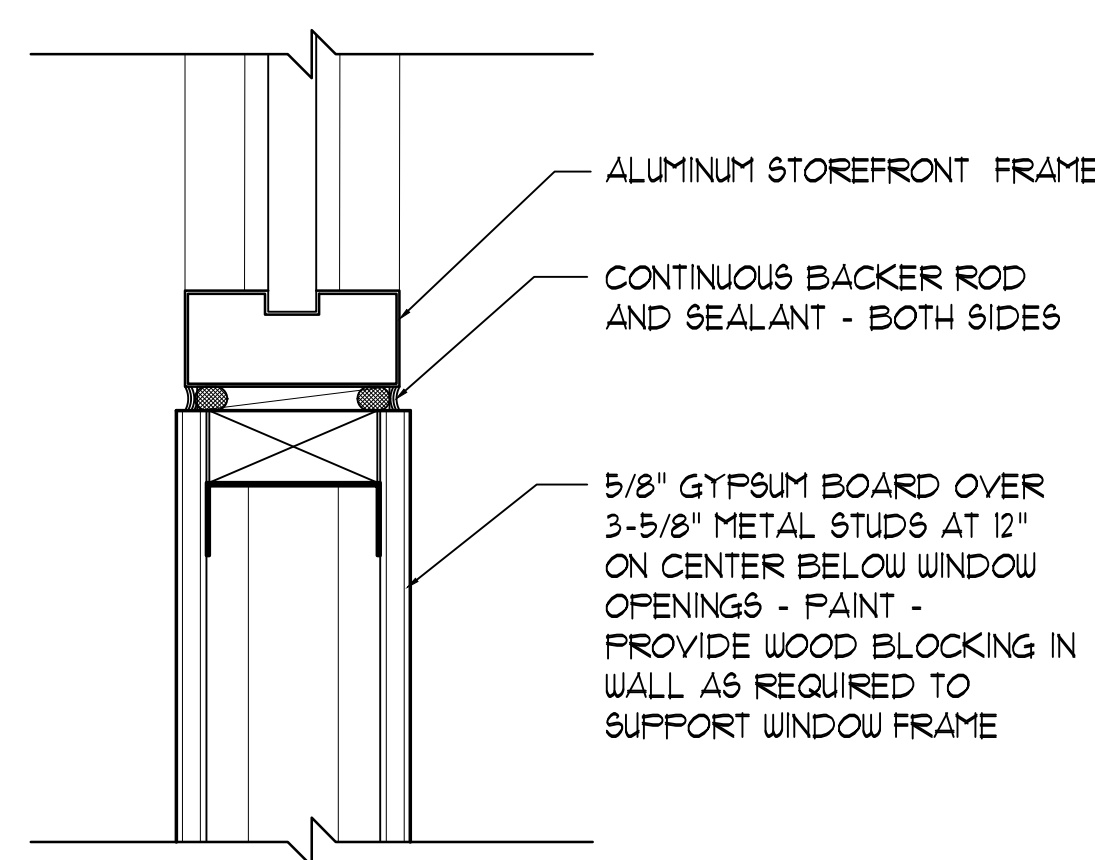
6 JAMB DETAIL  
3" = 1'-0"



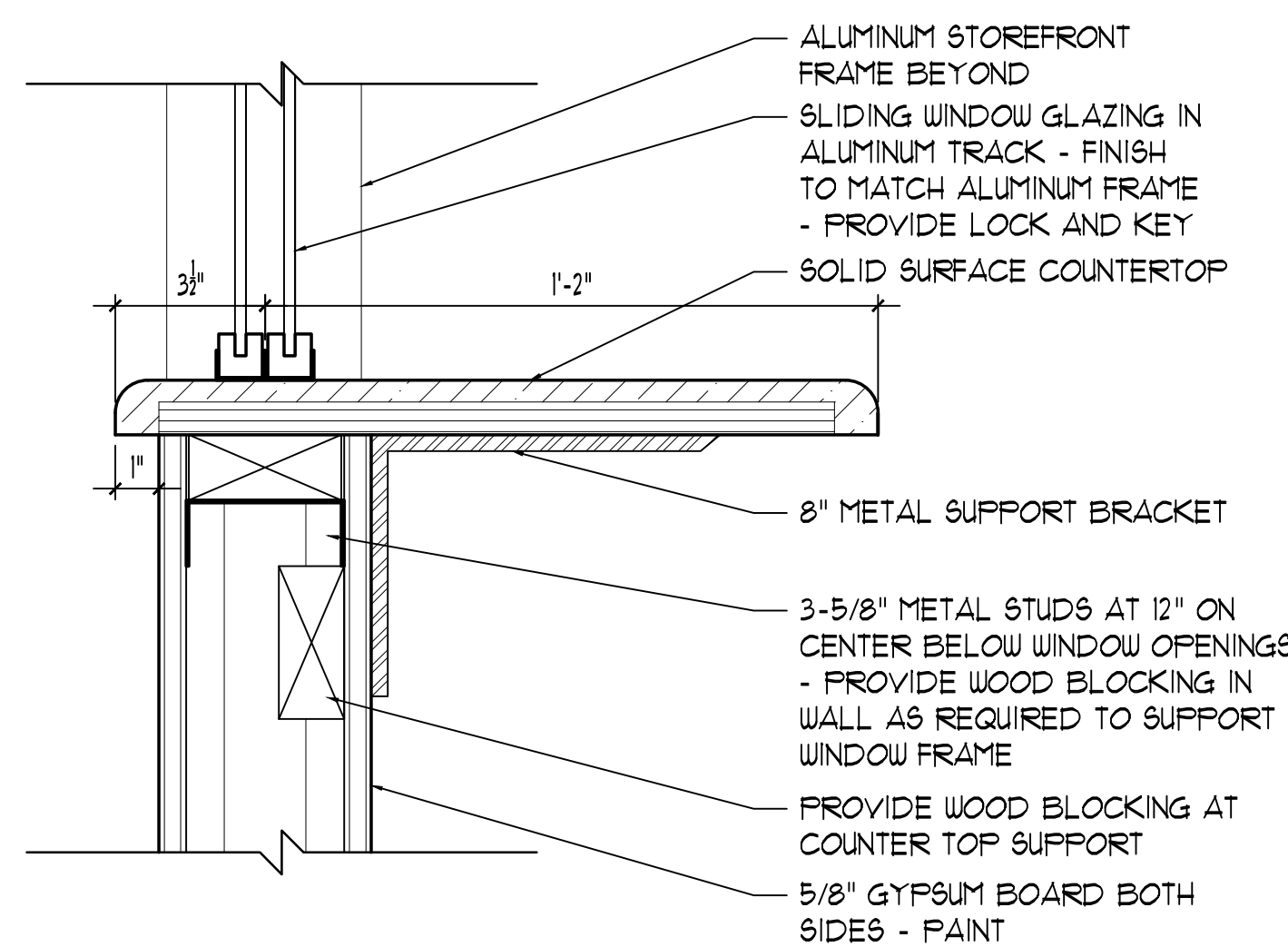
7 JAMB DETAIL  
3" = 1'-0"



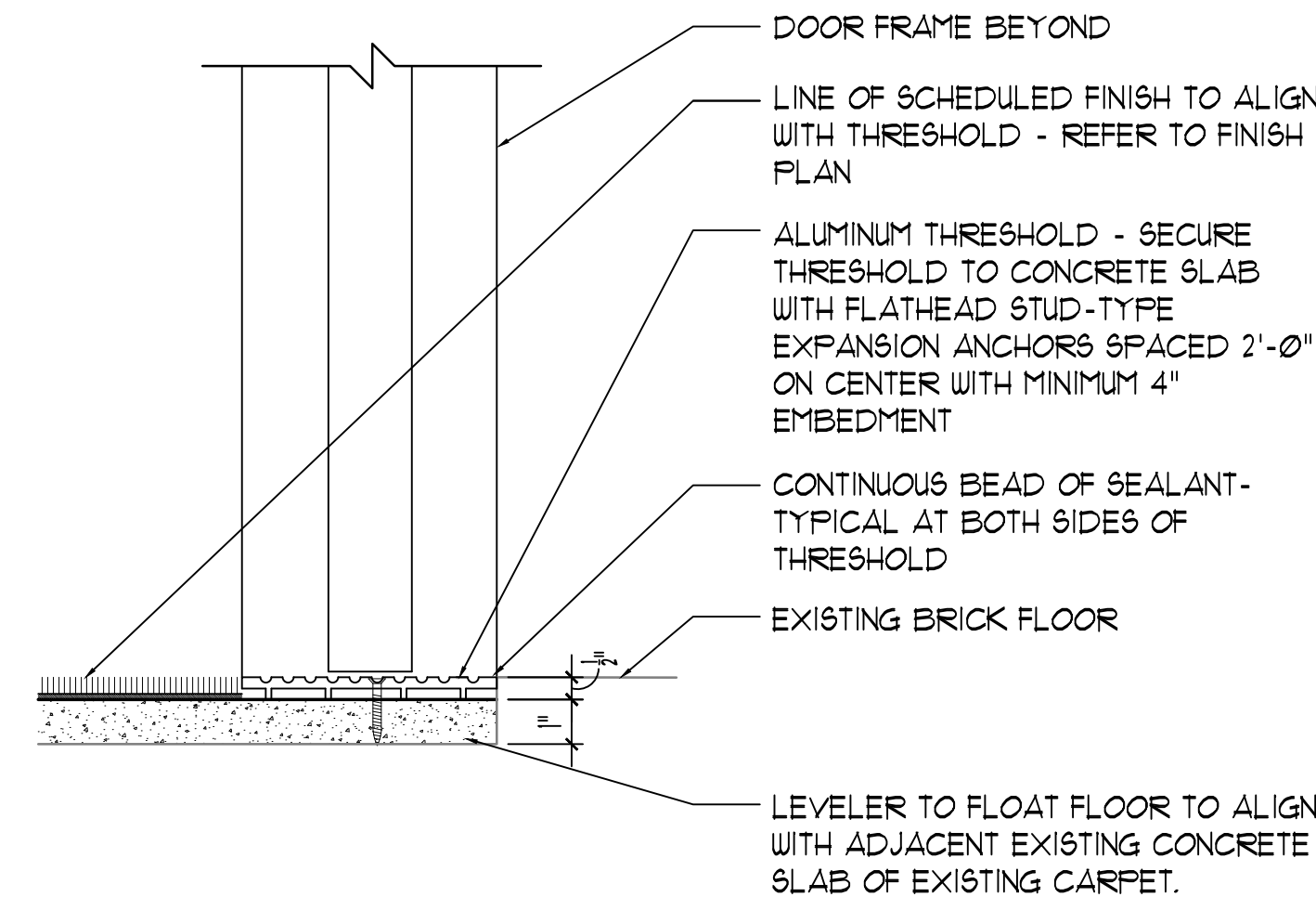
8 JAMB DETAIL  
3" = 1'-0"



9 SILL DETAIL  
3" = 1'-0"



10 SILL DETAIL  
3" = 1'-0"

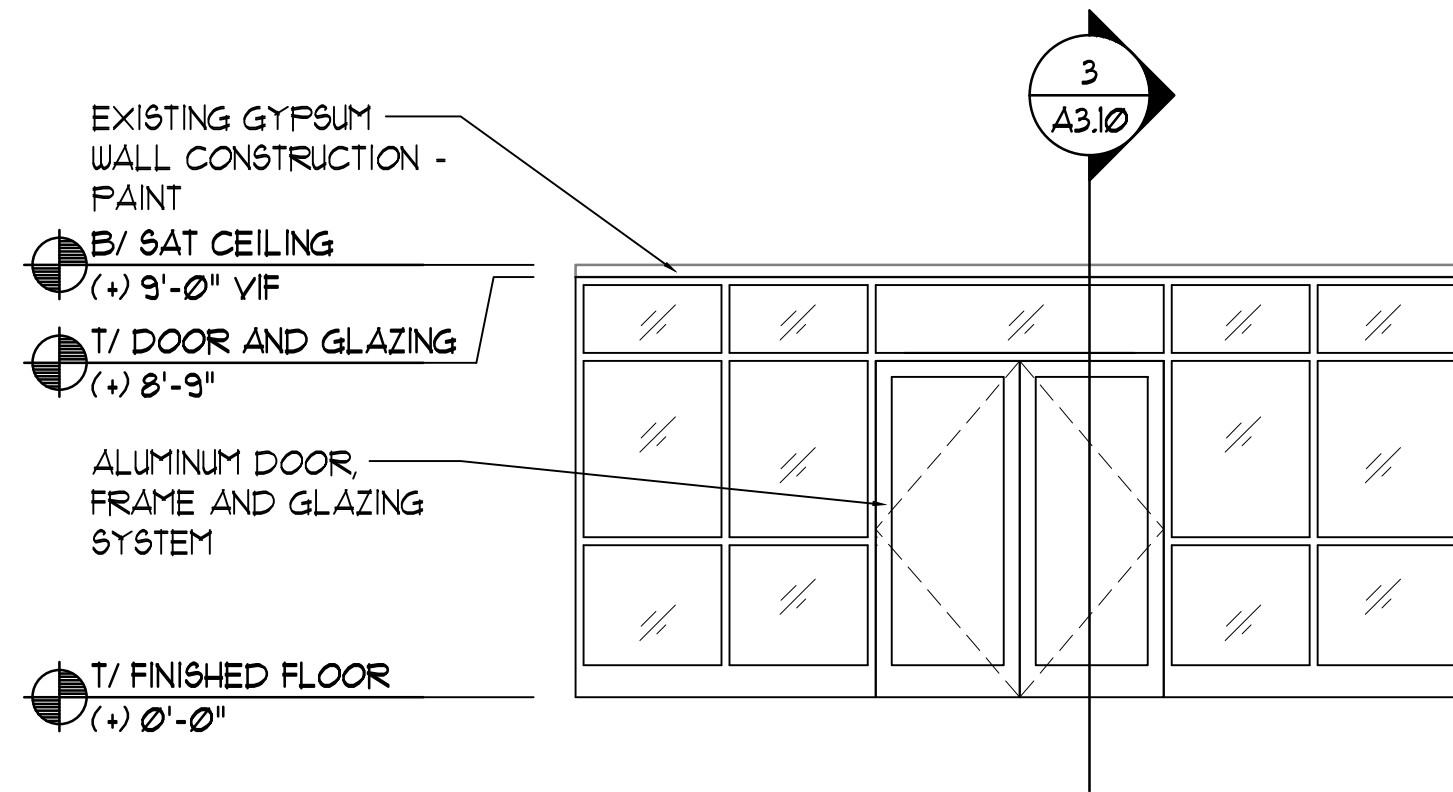


11 SILL DETAIL  
3" = 1'-0"

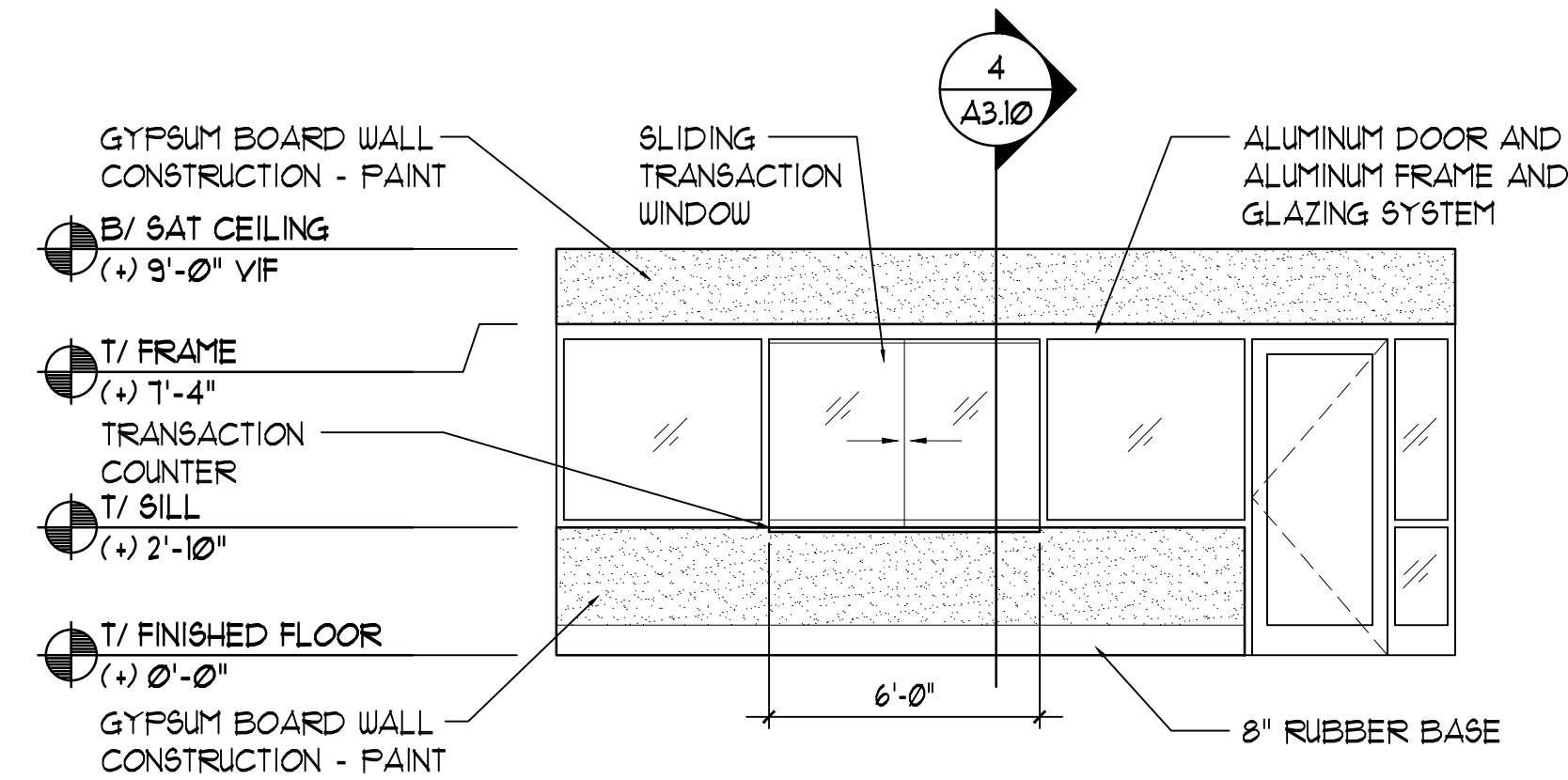
NOTES:

1. MAXIMUM GAP BETWEEN BOTTOM OF DOOR AND TOP OF SILL TO BE 1/4".

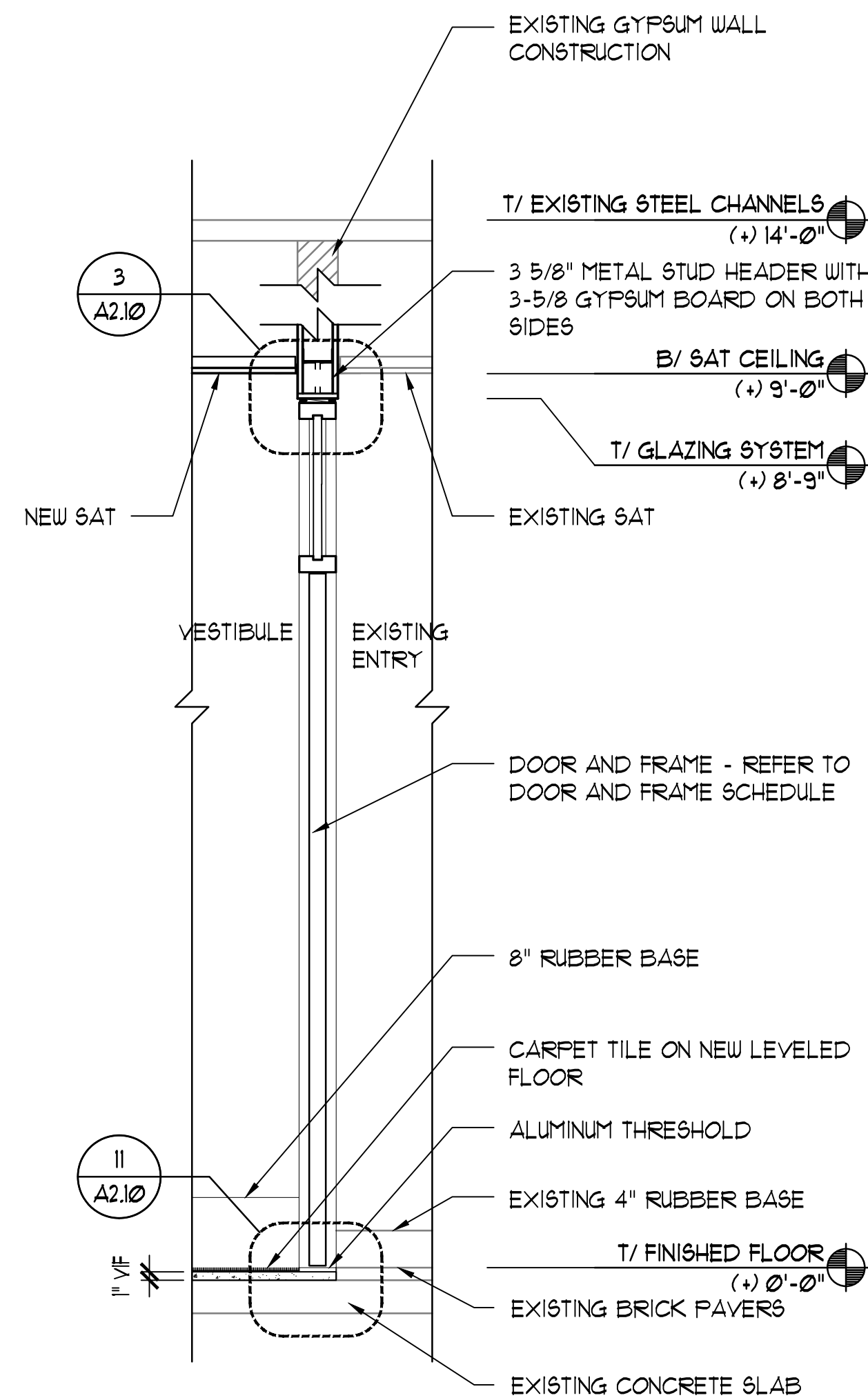




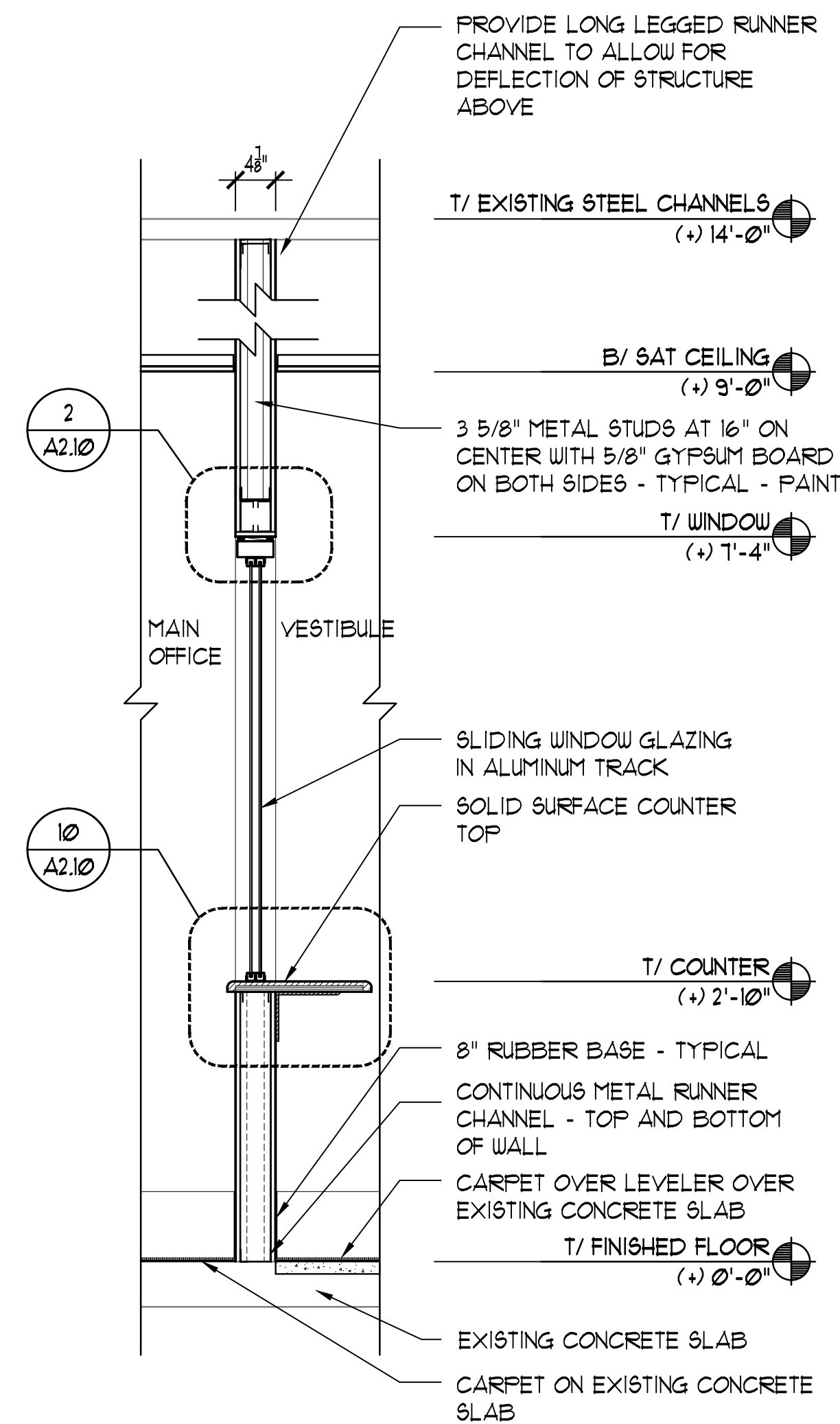
1 INTERIOR ELEVATION  
1/4" = 1'-0"



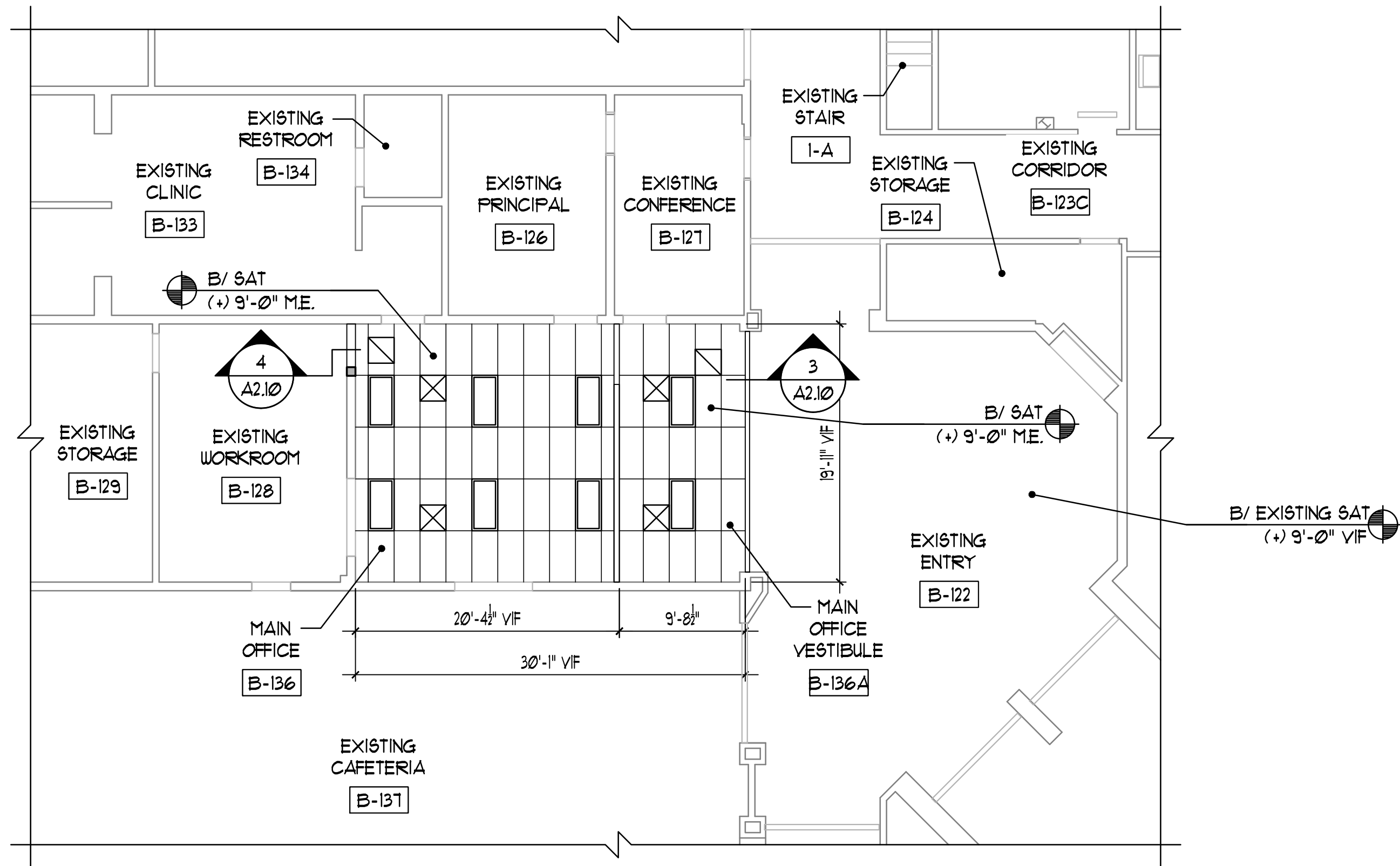
2 INTERIOR ELEVATION  
1/4" = 1'-0"



3 WALL SECTION  
3/4" = 1'-0"



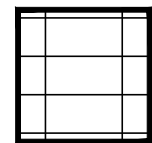
4 WALL SECTION  
3/4" = 1'-0"



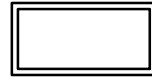
1 PARTIAL FIRST FLOOR REFLECTED CEILING PLAN  
1/8" = 1'-0"



## LEGEND



2'x4' SUSPENDED ACOUSTICAL TILE CEILING SYSTEM - TYPE I, UNLESS OTHERWISE NOTED - REFER TO SPECIFICATIONS



2' x 4' RECESSED LIGHT FIXTURE - REFER TO ELECTRICAL DRAWINGS



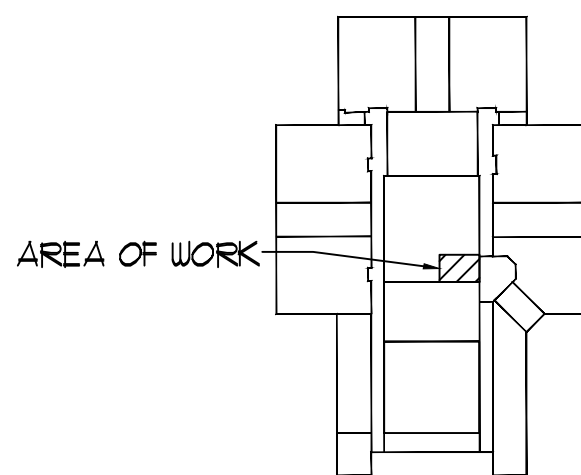
MECHANICAL EQUIPMENT - REFER TO MECHANICAL DRAWINGS



MECHANICAL EQUIPMENT - REFER TO MECHANICAL DRAWINGS

## EXISTING REFLECTED CEILING PLAN GENERAL NOTES

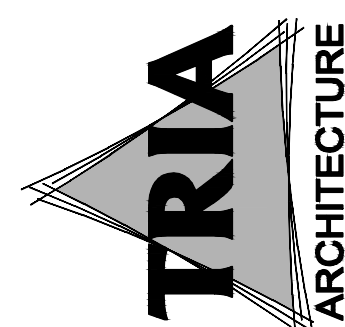
1. MAIN OFFICE CEILING HEIGHT SHALL REMAIN IDENTICAL TO PREVIOUS WHICH IS 9'-0" ABOVE FINISHED FLOOR - CONTRACTOR TO COORDINATE ALL HEIGHTS IN FIELD WITH MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION ITEMS (NEW AND EXISTING) - NOTIFY ARCHITECT OF ANY DISCREPANCY PRIOR TO INSTALLATION.
2. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL AREAS OF ABOVE CEILING WORK. REMOVE AND PATCH /OR RE-INSTALL EXISTING CEILINGS IN THESE LOCATIONS ONLY AS REQUIRED TO PROVIDE WORK INDICATED TO OCCUR PRIOR TO PHASE OF CEILING WORK.
3. CONTRACTOR TO VERIFY ALL EXISTING CEILING HEIGHTS PRIOR TO BEGINNING WORK ON ANY CEILING SCHEDULED TO RECEIVE WORK.
4. FIELD VERIFY ALL EXISTING CONDITIONS. IN THE EVENT THAT AN ITEM NOT SHOWN ON THE DRAWINGS CONFLICTS WITH WORK UNDER THIS CONTRACT, CONTACT THE ARCHITECT PRIOR TO REMOVAL OF THAT ITEM. ITEMS SHOWN ARE INDICATED TO GIVE A GENERAL SCOPE OF WORK. ANY ITEMS REQUIRING REMOVAL/DEMOLITION TO PROPERLY PERFORM CONTRACT WORK BUT NOT SPECIFICALLY SHOWN, SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST, PROVIDING THE CONDITION WAS VISIBLE DURING BIDDING.
5. SHORE OR BRACE ALL EXISTING CONSTRUCTION AS REQUIRED TO PERFORM WORK.
6. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORING, CUTTING, PATCHING, INFILLING, REPAIRING, REFINISHING, AND REMOVAL/REPLACEMENT OF BUILDING CONSTRUCTION REQUIRED TO ACCOMMODATE THE INSTALLATION OR REMOVAL OF THEIR WORK. ALL PATCHING, REPAIRING, AND REFINISHING SHALL BE PERFORMED BY THOSE REGULARLY INVOLVED IN THAT TRADE AND SHALL MATCH THE ADJACENT CONSTRUCTION.
7. PROTECT ALL EXISTING FINISHES, EQUIPMENT, AND ADJACENT WORK NOT SCHEDULED TO BE REMOVED FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGED FINISHES, EQUIPMENT, OR ADJACENT SURFACES SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
8. THE OWNER HAS FIRST RIGHT OF REFUSAL FOR ANY MATERIAL OR EQUIPMENT REMOVED.



KEY PLAN  
NOT TO SCALE



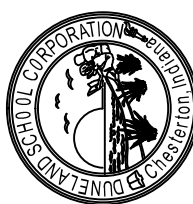
A7.10



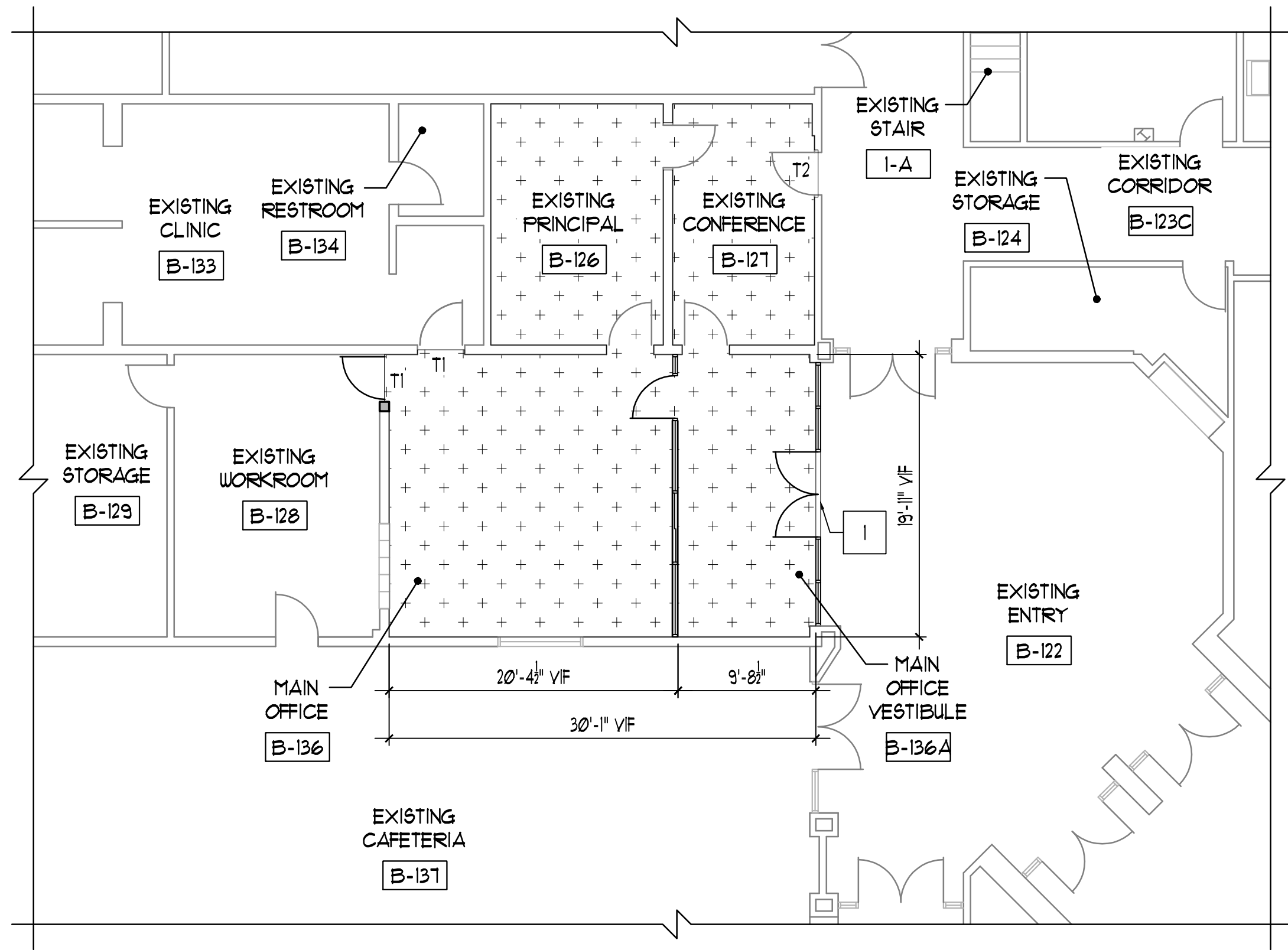
TRIA  
ARCHITECTURE

OAS, LLC  
OFFICIALS AND ARCHITECTS, LLC  
780 EASTMAN DR. UNIT 1 SUITE 200E, LINDSEY, IN 46354

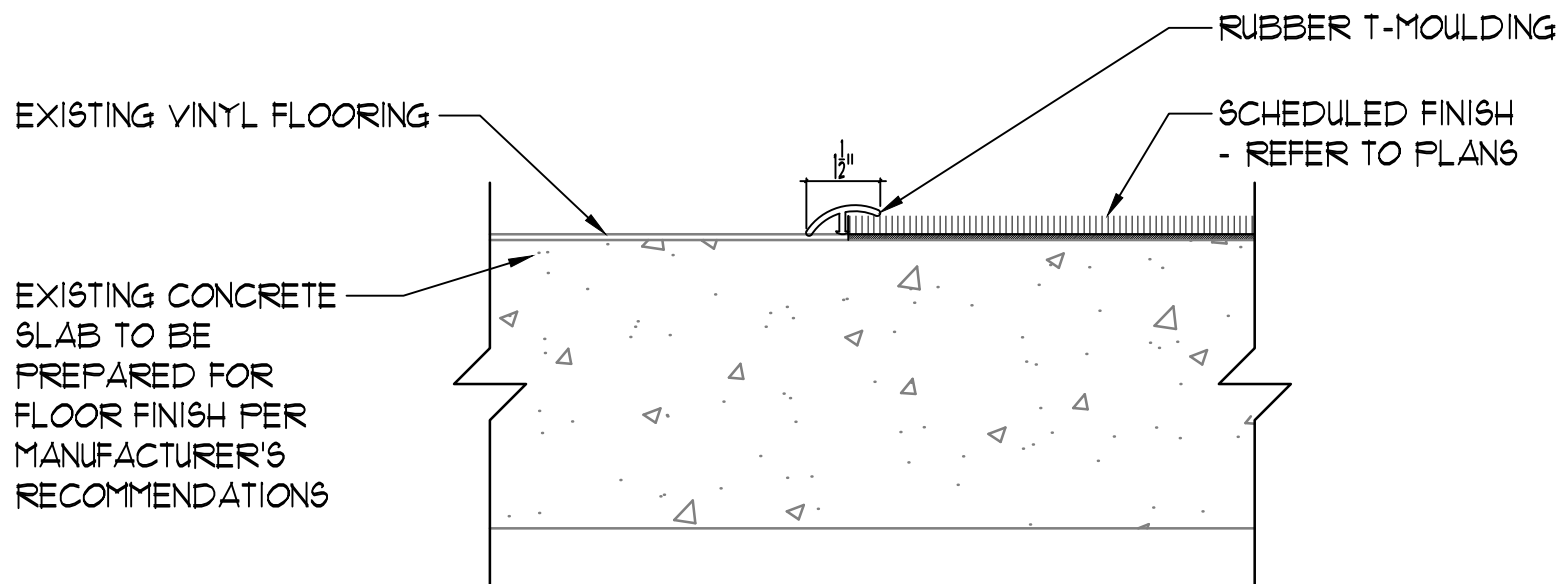
DUNELAND SCHOOL CORPORATION  
2018 MAIN OFFICE RENOVATION AT:  
JACKSON ELEMENTARY SCHOOL  
811 N. 400 E. VALPARAISO, INDIANA 46383



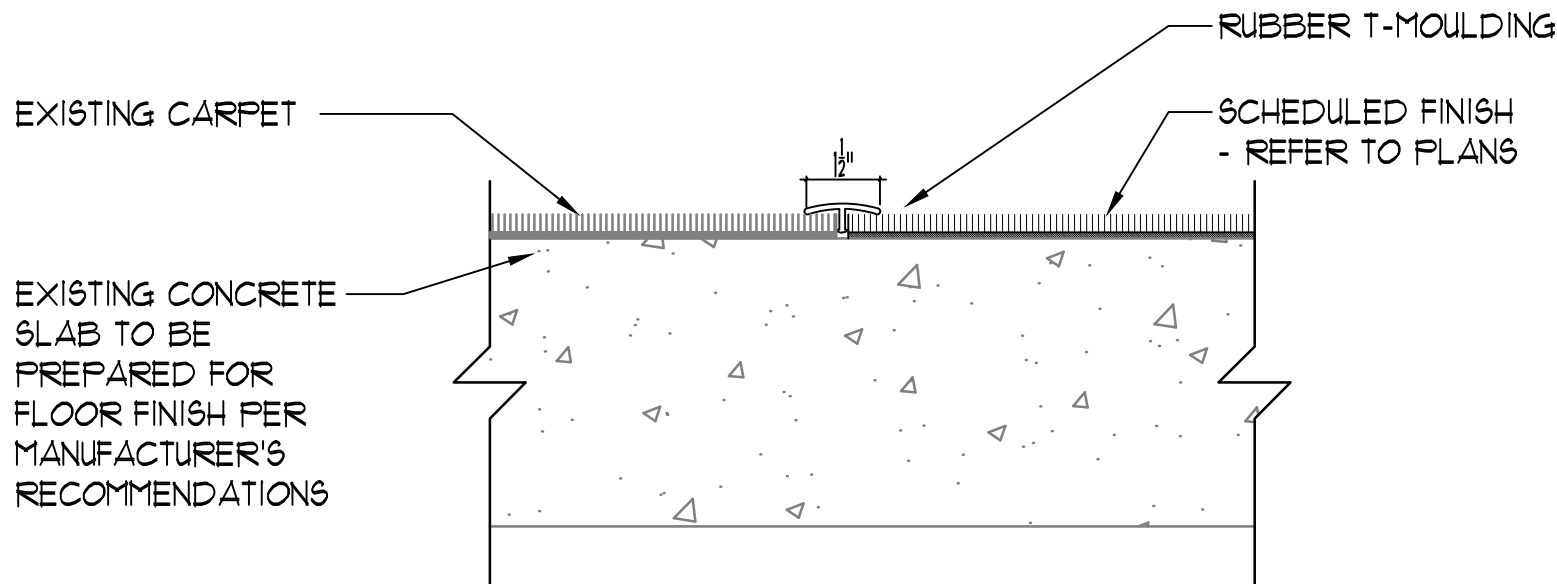
PROJECT NUMBER: 18-001  
PROJECT MANAGER: MS  
DRAWN BY: PSN  
USED FOR PROPOSAL: 03/07/2018  
PARTIAL FIRST FLOOR  
REFLECTED CEILING PLAN



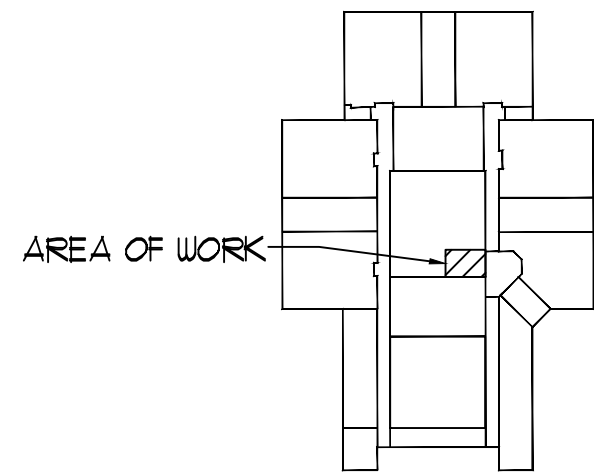
1 PARTIAL FIRST FLOOR FINISH PLAN  
1/8" = 1'-0"



2 T1 - TRANSITION DETAIL  
3" = 1'-0"



3 T2 - TRANSITION DETAIL  
3" = 1'-0"



KEY PLAN  
NOT TO SCALE



## FINISH PLAN REFERENCED NOTES

1. NEW DOOR THRESHOLD - REFER TO DETAIL 11/A2.10.

NOTE:  
CONTRACTOR TO VERIFY CONDITIONS AT EACH TRANSITION AND SIZE REDUCERS ACCORDINGLY.

## FINISH PLAN GENERAL NOTES

1. REFER TO SHEET A9.50 FOR ROOM FINISH SCHEDULES AND ADDITIONAL NOTES/SCOPE.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL PRODUCT INFORMATION.
3. MAKE EXISTING FLOOR SLAB SMOOTH AND FLAT TO FLOOR FINISH MANUFACTURER'S TOLERANCE WITH MATERIAL SUITABLE TO FLOOR FINISH. MANUFACTURER PRIOR TO INSTALLATION.
4. ALL TRANSITIONS BETWEEN DISSIMILAR FLOORING MATERIALS ARE TO RECEIVE A NEW TRANSITION STRIP - REFER TO DETAILS 2/A9.10 AND 3/A9.10.
5. PROVIDE WALL BASE AT ALL LOCATIONS OF NEW FLOORING AND/OR NEW WALL CONSTRUCTION - UNLESS NOTED OTHERWISE.
6. CARPETED AREAS ARE TO RECEIVE RUBBER STRAIGHT BASE.
7. AT AREAS WHERE PATCHING OF WALL BASE IS REQUIRED - FINISH TO MATCH ADJACENT IN MATERIAL, COLOR, HEIGHT, FINISH AND PROFILE.
8. DO NOT PAINT PRE-FINISHED ITEMS, FACE BRICK, AND TILE FINISHES.
9. AT ALL DOORS AND FRAMES INSTALLED IN EXISTING OPENINGS - PATCH AND PAINT EXISTING WALL, JAMB AND HEAD SURFACES AFTER FRAME INSTALLATION - DO NOT PAINT PRE-FINISHED ITEMS - MATCH EXISTING COLOR, UNLESS NOTED OTHERWISE.
10. AT ALL AREAS WHERE MECHANICAL AND ELECTRICAL EQUIPMENTS HAVE BEEN REMOVED - PATCH AND PAINT EXISTING EXPOSED CONSTRUCTION - MATCH ADJACENT EXISTING CONSTRUCTION IN MATERIAL, TEXTURE, SIZE, FINISH AND COLOR.

## FINISH LEGEND



CARPET - REFER TO SPECIFICATIONS FOR PATTERN AND COLOR

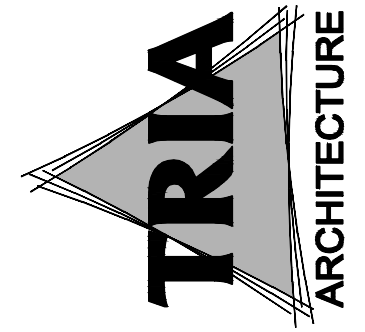


ROOM FINISH SCHEDULE													
ROOM NO	ROOM NAME	NORTH WALL		EAST WALL		SOUTH WALL		WEST WALL		CEILING	FLOORING	ROOM SIGN TYPE	REFERENCED NOTES
		WALL FINISH	WALL BASE	WALL FINISH	WALL BASE	WALL FINISH	WALL BASE	WALL FINISH	WALL BASE				
FIRST FLOOR													
B-126	EXISTING PRINCIPAL	ETR	RBB-1	ETR	RBB-1	ETR	RBB-1	ETR	RBB-1	ETR	CPT-1	-	3, 4
B-127	EXISTING CONFERENCE	ETR	RBB-1	ETR	RBB-1	ETR	RBB-1	ETR	RBB-1	ETR	CPT-1	-	3, 4
B-128	EXISTING WORKROOM	ETR	ETR	ETR/ PT-3	ETR/RBB-2	ETR	ETR	ETR	ETR	ETR	ETR	ETR	
B-136A	MAIN OFFICE VESTIBULE	PT-1	RBB-1	PT-1	RBB-1	PT-1	RBB-1	PT-1	RBB-1	SAT-1	CPT-1	-	3, 4
B-136	MAIN OFFICE	PT-1/ ETR	RBB-1	PT-1	-	PT-1	RBB-1	PT-2	RBB-1	SAT-1	CPT-1	ETR	1, 2, 3, 4

FINISH LEGEND	
PT-1	PAINT COLOR 1 (FIELD COLOR)
PT-2	PAINT COLOR 2 (ACCENT)
PT-3	PAINT COLOR 3 (MATCH EXISTING ADJACENT)
PT-4	PAINT COLOR 4 (DOOR AND FRAME PAINT COLOR)
ETR	EXISTING TO REMAIN
GYP	GYPSUM
CPT-1	CARPET TILE COLOR OR PATTERN 1
RBB-1	8" RUBBER BASE COLOR 1
RBB-2	4" RUBBER BASE COLOR 2 (MATCH EXISTING ADJACENT)
SAT-1	SUSPENDED ACOUSTICAL TILE CEILING SYSTEM TYPE 1

ROOM FINISH GENERAL NOTES	
<div>1. ALL INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE WITH LOCAL AMENDMENTS.</div> <div>2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.</div> <div>3. REFER TO FLOOR PLANS AND WALL TYPES FOR WALL CONSTRUCTION.</div> <div>4. REFER TO REFLECTED CEILING PLANS FOR CEILING CONSTRUCTION.</div> <div>5. REFER TO INTERIOR ELEVATIONS FOR MORE INFORMATION.</div> <div>6. ALL FINISHES, FURNITURE, AND EQUIPMENT ARE TO BE PROTECTED DURING WORK.</div> <div>7. ALL EXPOSED NEW CONSTRUCTION (LISTED IN THE SCHEDULE OR NOT) SHALL BE PAINTED, EXCEPT FOR PREFINISHED MATERIALS, UNLESS NOTED OTHERWISE.</div> <div>8. ALL EXISTING CONSTRUCTION ON SURFACES LISTED IN SCHEDULE, EXCEPT FOR PREFINISHED ITEMS OR FOR SURFACES LISTED AS EXISTING TO REMAIN, SHALL BE PAINTED UNLESS NOTED OTHERWISE.</div> <div>9. ALL EXISTING PAINTED SURFACES IMMEDIATELY ADJACENT TO AREAS AFFECTED BY CONSTRUCTION SHALL BE PAINTED AS NEEDED TO BLEND NEW CONSTRUCTION INTO EXISTING AND TO TOUCH-UP DAMAGED PAINT SURFACES ON EXISTING SURFACES.</div> <div>10. ALL EXPOSED PIPING, DUCTWORK ELECTRICAL CONDUIT, SPRINKLER PIPING, AND ALL OTHER EXPOSED MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION ITEMS TO BE PAINTED UNLESS NOTED OTHERWISE.</div> <div>11. ALL EXPOSED STRUCTURAL SURFACES INCLUDING BUT NOT LIMITED TO, FRAMING, DECKING, LINTELS ETC. SHALL BE PAINTED UNLESS NOTED OTHERWISE.</div> <div>12. ALL NEW HOLLOW METAL DOORS AND FRAMES (ALL EXPOSED FACES) SHALL BE PAINTED UNLESS NOTED OTHERWISE.</div> <div>13. ALL EXISTING HOLLOW METAL DOORS AND FRAMES (ALL EXPOSED FACES) IN WALLS LISTED IN SCHEDULE SHALL BE PAINTED, EXCEPT FOR LOCATIONS INDICATED TO BE EXISTING TO REMAIN.</div> <div>14. AT ALL DOORS AND FRAMES INSTALLED IN EXISTING WALL CONSTRUCTION - PATCH AND PAINT EXISTING WALL, JAMB AND HEAD SURFACES AFTER FRAME INSTALLATION.</div> <div>15. AT ALL LOCATIONS OF EXISTING EQUIPMENT, CASEWORK, OR FURNISHINGS TO BE REMOVED, PAINT THE EXISTING WALL CONSTRUCTION EXPOSED BY REMOVAL OF THESE ITEMS TO MATCH EXISTING ADJACENT WALL FINISHES.</div> <div>16. DO NOT PAINT PREFINISHED ITEMS (FACE BRICK, FIRE ALARM DEVICES, TILE FINISHES, ETC.).</div> <div>17. ALL FLOORING SHALL BE STABLE, FIRM AND SLIP-RESISTANT AND SHALL COMPLY WITH THE STATE OF INDIANA ACCESSIBILITY CODE.</div> <div>18. ALL FLOOR DRAINS, CLEANOUT COVERS AND ELECTRICAL FLOOR DEVICES ARE TO BE FLUSH WITH FINISHED FLOORING. REFER TO PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.</div> <div>19. TRANSITIONS IN FLOOR FINISHES, COLORS, OR PATTERNS ARE TO OCCUR AT THE CENTER OF DOORS UNLESS NOTED OTHERWISE.</div> <div>20. ALL TRANSITIONS BETWEEN FLOORING MATERIALS TYPES ARE TO RECEIVE A TRANSITION STRIP.</div> <div>21. FLOOR FINISHES INDICATED IN SCHEDULE SHALL CONTINUE UNDER ALL FIXTURES, EQUIPMENT, AND CASEWORK UNLESS NOTED OTHERWISE.</div> <div>22. PROVIDE 8" WALL BASE AT ALL LOCATIONS OF NEW FLOOR FINISH OR NEW WALL CONSTRUCTION - UNLESS NOTED OTHERWISE.</div> <div>23. REFER TO A200 FOR ALTERNATE PROPOSAL WALL TYPE AND FINISHES.</div>	

ROOM FINISH REFERENCED NOTES	
<div>1. DO NOT PAINT EXISTING TACK SURFACE AND WOOD FRAME.</div> <div>2. DO NOT PAINT EXISTING MAIL SLOT CASEWORK.</div> <div>3. IDENTIFICATION SIGNAGE WITH BRAILLE DESIGNATION ON WALLS ADJACENT TO LATCH SIDE OF ALL DOORS - PROVIDED BY OWNER. MOUNT SIGNS AT 60" ABOVE FINISHED FLOOR TO CENTERLINE OF SIGN AND 2" OFF DOOR FRAME ON WALL.</div> <div>4. DO NOT PAINT EXISTING WINDOW AND DOOR FRAME.</div>	



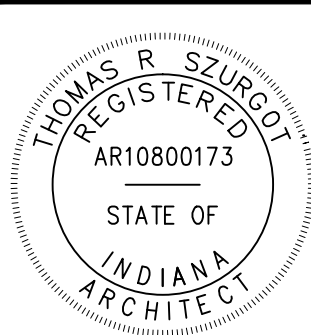
TRIA ARCHITECTURE  
OAS, LLC  
780 EASTLAND DR. SUITE 1000 CHICAGO, IL 60611  
OFFICIOUS AND AYNOLD SUSTAINABILITY, LLC

DUNELAND SCHOOL CORPORATION  
2018 MAIN OFFICE RENOVATION AT:  
JACKSON ELEMENTARY SCHOOL  
811 N. 400 E. VALPARAISO, INDIANA 46383

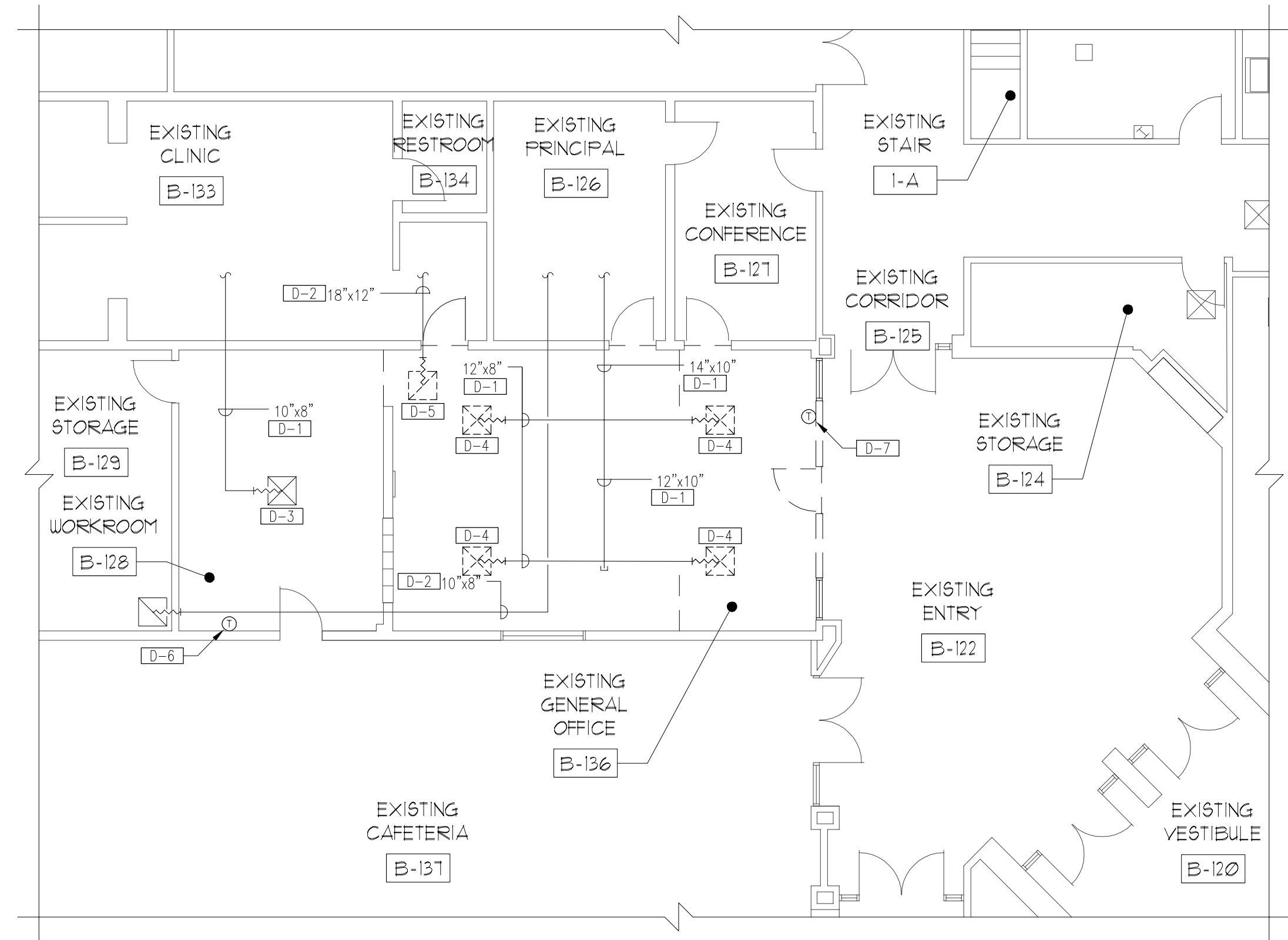


PROJECT NUMBER: 18-001	DESIGNER:
PROJECT MANAGER: MS	DESIGNER:
DRAWN BY: PS	DESIGNER:
USED FOR PROPOSAL: 01/07/2018	DESIGNER:

ROOM FINISH SCHEDULE AND NOTES

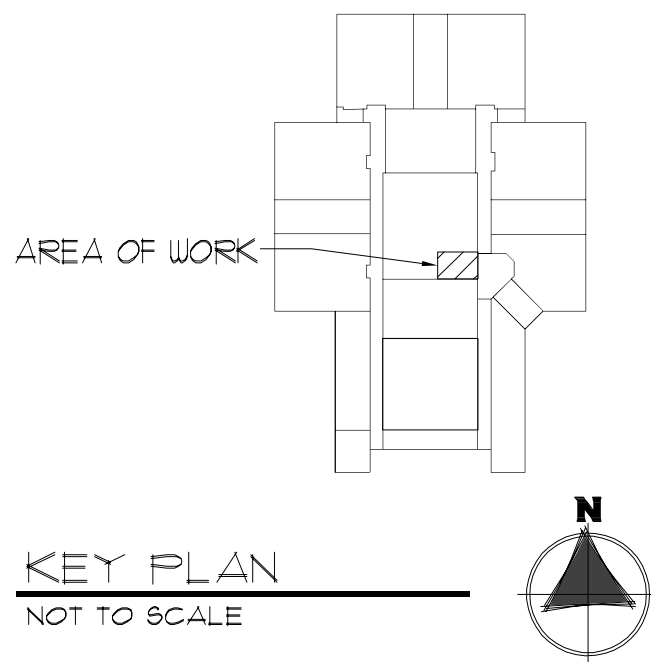


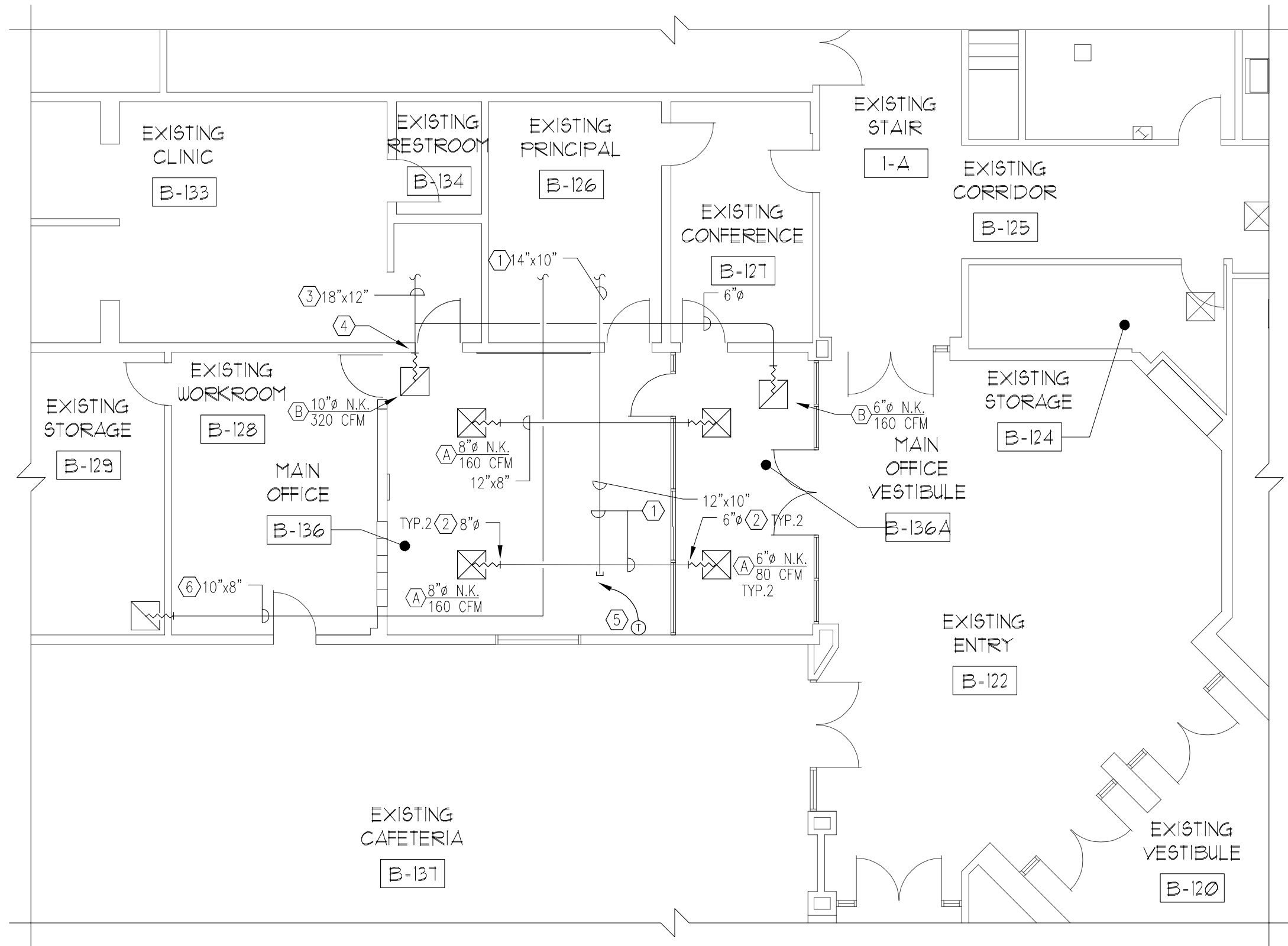
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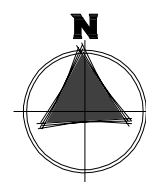
1 EXISTING PARTIAL FIRST FLOOR PLAN - MECHANICAL  
 1/8" = 1'-0"

DEMO NOTES	
D-1	EXISTING SUPPLY ZONE DUCT TO REMAIN.
D-2	EXISTING RETURN DUCT TO REMAIN.
D-3	EXISTING DIFFUSER TO REMAIN.
D-4	REMOVE EXISTING DIFFUSER AND DUCT SECTION TO CUT-OFF POINT SHOWN.
D-5	REMOVE RETURN REGISTER.
D-6	EXISTING ZONE THERMOSTAT TO REMAIN.
D-7	REMOVE EXISTING ZONE THERMOSTAT AND STORE FOR REINSTALLATION IN NEW LOCATION.





1
 PARTIAL FIRST FLOOR PLAN - MECHANICAL
 1/8" = 1'-0"



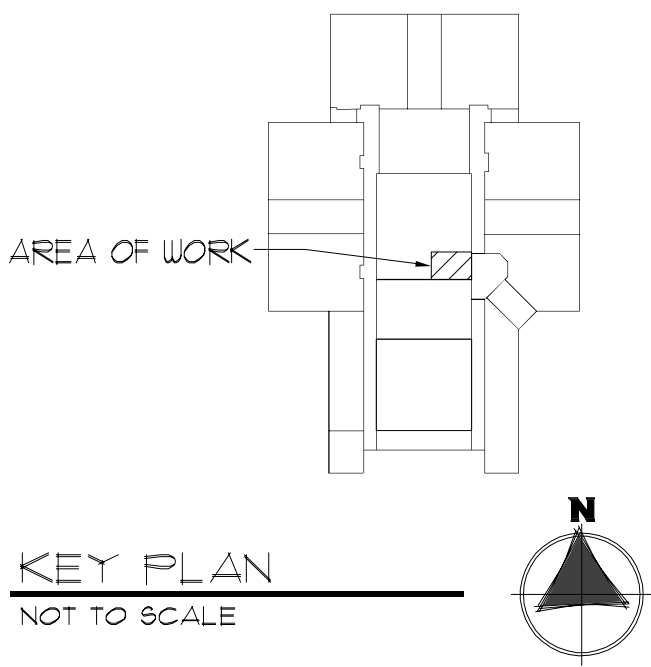
DIFFUSER, GRILLE AND REGISTER							
TAG	MANUFACTURER	MODEL NUMBER	TYPE	SERVICE	MATERIAL	MAXIMUM NO.	NOTES
A	TITUS	PAS	LAY-IN	SUPPLY	STEEL	30	1,2,5
B	TITUS	PAR	LAY-IN	RETURN	STEEL	30	1,2,5
NOTES: 1. OFF-WHITE BAKED ENAMEL FINISH 2. LAY-IN FRAME 3. ANODIZED FINISH 4. 1/2"x1/2"x1" GRID 5. OPPOSED BLADE DAMPER 6. PART OF RADIANT PANEL/AIR DIFFUSER ASSEMBLY							

KEYED NOTES	
1	EXISTING SUPPLY DUCT
2	TIE NEW FLEX DUCT TO NEW DIFFUSER TO EXISTING SUPPLY DUCT
3	EXISTING 18"x12" RETURN DUCT
4	TIE NEW FLEX DUCT TO NEW RETURN REGISTER TO EXISTING RETURN DUCT
5	RELOCATED ZONE THERMOSTAT. RECONNECT TO CONTROL SYSTEM.
6	EXISTING 10"x8" RETURN DUCT

DUCTWORK SHALL BE GALVANIZED SHEET METAL FABRICATED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA RECOMMENDATIONS. ALL SQUARE ELBOWS SHALL INCLUDE SINGLE THICKNESS TURNING VANES. DUCTWORK CONCEALED ABOVE CEILINGS OR IN SALES AREA MAY BE RECTANGULAR.

DUCTWORK SHALL BE INSULATED AS FOLLOWS:  
 INTERNAL INSULATION SHALL BE PROVIDED ON ALL NEW RECTANGULAR RETURN AND SUPPLY DUCTWORK. INTERNAL INSULATION ON INTERIOR DUCTWORK (WHERE REQUIRED) SHALL BE MINIMUM 1" THICK 1-1/2 PCF FIBERGLASS, NEOPRENE COATED AND ADHERED WITH AN APPROVED ADHESIVE WITH 100% COVERAGE AND STICK CLIPS ON 12" CENTERS.

CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO BEGINNING WORK.





MECHANICAL SPECIFICATIONS

BASIC MECHANICAL REQUIREMENTS

1. GENERAL
- 1.01. SUBMITTALS
- A. SUBMIT FOUR COPIES OF MANUFACTURER'S LITERATURE ON ALL PURCHASED AND FABRICATED COMPONENTS. SUBMITTAL SHALL INCLUDE MANUFACTURER'S SPECIFICATIONS, CAPACITIES, OPTIONS, O+M AND INSTALLATION INSTRUCTIONS, WIRING DIAGRAMS ETC.
- B. SUBMIT SHOP DRAWINGS AND PRODUCT DATA GROUPED TO INCLUDE COMPLETE SUBMITTALS OF RELATED SYSTEMS, PRODUCTS AND ACCESSORIES IN A SINGLE SUBMITTALS.
- C. MARK DIMENSIONS AND VALUES IN UNITS TO MATCH THOSE SPECIFIED.
- D. SUBCONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTING THEM FOR OWNER REVIEW. SUBCONTRACTOR SHALL STAMP EACH SHOP DRAWING TO CERTIFY THAT HE HAS REVIEWED IT FOR QUANTITIES AND COORDINATION WITH FIELD CONDITIONS AND OTHER TRADES. ENGINEER WILL NOT REVIEW ANY SHOP DRAWINGS THAT SUBCONTRACTOR HAS NOT STAMPED WITH HIS REVIEW CERTIFICATION.
- E. UPON COMPLETION OF THE PROJECT SUBMIT SIX COPIES OF OWNER'S OPERATING AND MAINTENANCE MANUALS IN RING BINDERS WITH TYPE WRITTEN OPERATING INSTRUCTIONS AND MAINTENANCE PROCEDURES (AND INTERVALS)FOR ALL SYSTEMS AND EQUIPMENT. INCLUDE COMPLETE MANUFACTURER'S DATA AS REQUIRED ABOVE WITH PARTS LISTS AND TELEPHONE NUMBERS OF LOCAL PARTS AND SERVICE REPRESENTATIVES.
- 1.02. REGULATORY REQUIREMENTS
- A. CONFORM TO INDIANA BUILDING CODE
- B. CONFORM TO CHESTERTON TOWN CODE
- C. CONFORM TO UNDERWRITERS' LABORATORIES.
- D. CONFORM TO NATIONAL ELECTRICAL CODE.
- E. CONFORM TO IMC 2012.
- 1.03. PROJECT/SITE CONDITIONS
- A. INSTALL WORK IN LOCATIONS SHOWN ON DRAWINGS, UNLESS PREVENTED BY PROJECT CONDITIONS.
- B. PREPARE DRAWINGS SHOWING PROPOSED REARRANGEMENT OF WORK TO MEET PROJECT CONDITIONS, INCLUDING CHANGES TO WORK SPECIFIED IN OTHER SECTIONS. OBTAIN PERMISSION OF OWNER BEFORE PROCEEDING.
- 1.04. SUBCONTRACTOR'S RESPONSIBILITY TO VERIFY EQUIPMENT DIMENSIONS AND/OR CAPACITIES
- A. THE DRAWINGS, SCHEDULES AND SPECIFICATIONS HAVE BEEN PREPARED USING ONE MANUFACTURER FOR EACH PIECE OF EQUIPMENT AS THE BASIS FOR DIMENSIONAL DESIGN. IF THE SUBCONTRACTOR PURCHASES EQUIPMENT LISTED AS A SPECIFIED ACCEPTABLE MANUFACTURER BUT IS NOT THE SCHEDULED MANUFACTURER USED FOR THE BASE DESIGN, THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL THE DIMENSIONS OF THE EQUIPMENT TO VERIFY THAT IT WILL FIT IN THE SPACE SHOWN ON THE DRAWINGS. MINOR DEVIATIONS IN DIMENSIONS WILL BE PERMITTED, PROVIDED THE ALL RATINGS MEET WHAT WAS SHOWN ON THE DRAWINGS AND EQUIPMENT WILL PHYSICALLY FIT INTO THE SPACE ALLOCATED WITH SUITABLE ACCESS AROUND EQUIPMENT FOR OPERATION AND MAINTENANCE ON THE EQUIPMENT.
- B. SUBCONTRACTOR AND/OR MANUFACTURER SHALL VERIFY THAT THE CAPACITY AND DUTY SPECIFIED MEETS THE CHARACTERISTICS OF THE EQUIPMENT HE SUBMITS FOR REVIEW.
- C. IF EQUIPMENT IS SUBMITTED FOR REVIEW AND DOES NOT MEET THE PHYSICAL SIZE OR ARRANGEMENT OF WHAT WAS SCHEDULED AND SPECIFIED, SUBCONTRACTOR SHALL PAY FOR ALL ALTERNATIONS REQUIRED TO ACCOMMODATE SUCH EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER. SUBCONTRACTOR SHALL ALSO PAY ALL COSTS FOR ADDITIONAL WORK REQUIRED BY OTHER SUBCONTRACTORS, OWNER, ARCHITECT OR ENGINEER TO MAKE CHANGES WHICH WOULD ALLOW THE EQUIPMENT TO FIT THE SPACE.
- 1.05. DRAWINGS AND DIMENSIONS
- A. SUBCONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL COORDINATION WITH ARCHITECTURAL ELEMENTS AND DIMENSIONS. THESE DRAWINGS ARE TO SHOW THE SCOPE OF MECHANICAL WORK ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF WALL, ROOMS, CEILINGS, ETC.
- B. SUBCONTRACTOR SHALL THOROUGHLY REVIEW THE ARCHITECTURAL, STRUCTURAL AND DRAWINGS FOR ALL OTHER TRADES PRIOR TO SUBMITTING HIS BID TO ASSURE THAT ALL COORDINATION IS INCLUDED IN HIS PRICE.
- C. SUBCONTRACTOR SHALL CHANGE DIMENSIONS TO EQUIVALENT SIZES AND ADD FITTINGS AND COMPONENTS AS REQUIRED TO FIT AND COORDINATE HIS WORK FOR A COMPLETE AND FULLY OPERATION SYSTEM WHETHER COMPONENTS ARE INDICATED ON THE PLANS OR NOT.
- D. DO NOT SCALE OR FABRICATE FROM THESE PLANS.
- 1.06. SCOPE OF WORK
- A. ALL WORK SHOWN ON THESE PLANS IS DIAGRAMMATIC TO INDICATE THE GENERAL INTENT OF THE MECHANICAL DESIGN AND CAPACITIES AND SIZES OF MAJOR COMPONENTS. SUBCONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING THE DESIGN INTENT AND CLARIFYING ANY QUESTIONS AND/OR INCONSISTENCIES PRIOR TO SUBMITTING HIS BID.
- B. SUBMISSION OF BID INDICATED THE SUBCONTRACTOR'S ASSURANCE OF COMPLETE UNDERSTANDING OF THE DESIGN INTENT AND THAT ALL NECESSARY COMPONENTS FOR A COMPLETE AND FULLY OPERATIONS SYSTEM, WHETHER SPECIFICALLY INDICATE ON THE PLANS OR NOT, ARE INCLUDED IN HIS PRICE.
- 1.07. WARRANTY
- A. SEE ARCHITECTS REQUIREMENTS

MECHANICAL INSULATION

1. GENERAL
- 1.01. WORK INCLUDED
- A. DUCTWORK INSULATION.
- B. DUCT LINER.
- 1.02. RELATED WORK
- A. DUCTWORK.
- 1.03. QUALITY ASSURANCE
- A. MATERIALS: FLAME SPREAD/SMOKE DEVELOPED RATING OF 25/50 IN ACCORDANCE WITH ASTM E84.
2. PRODUCTS
- 2.01. ACCEPTABLE MANUFACTURERS:
1. OWENS CORNING CORP.
2. CERTANTEED CORP.
3. KNAUF FIBERGLASS.
4. MANVILLE.
5. APPROVED EQUAL.
- 2.02. GLASS FIBER, FLEXIBLE DUCT WRAP (TYPE A)
- A. INSULATION: ASTM C553; FLEXIBLE, NONCOMBUSTIBLE BLANKET.
1. R VALUE: ASTM C518, 5.7 AT 75 DEGREES F.
2. MAXIMUM SERVICE TEMPERATURE: 250 DEGREES F.
3. MAXIMUM MOISTURE ABSORPTION: 0.20 PERCENT BY VOLUME.
4. DENSITY: 1.0 LB/CU.FT.
5. THICKNESS: 1-1/2 INCH.
- B. VAPOR BARRIER JACKET:
1. KRAFT PAPER REINFORCED WITH GLASS FIBER YARN AND BONDED TO ALUMINIZED FILM.
2. MOISTURE VAPOR TRANSMISSION: ASTM E96; 0.04 PERM.
3. SECURE WITH PRESSURE SENSITIVE TAPE.
- C. VAPOR BARRIER TAPE:
1. KRAFT PAPER REINFORCED WITH GLASS FIBER YARN AND BONDED TO ALUMINIZED FILM, WITH PRESSURE SENSITIVE RUBBER BASED ADHESIVE.
- 2.03. GLASS FIBER DUCT LINER, FLEXIBLE (TYPE C)
- A. INSULATION: ASTM C553; FLEXIBLE, NONCOMBUSTIBLE BLANKET.
1. K VALUE: ASTM C518, 0.27 AT 75 DEGREES F.
2. MAXIMUM SERVICE TEMPERATURE: 250 DEGREES F.
3. DENSITY: 2.0 LB/CU.FT.
4. NEOPRENE COATING ON AIR SIDE.
5. MAXIMUM VELOCITY ON COATED AIR SIDE: 4,000 FT/MIN.
- B. ADHESIVE:
1. WATERPROOF FIRE-RETARDANT TYPE.
- C. MECHANICAL FASTENERS: GALVANIZED STEEL, SELF-ADHESIVE PAD OR IMPACT APPLIED WITH PRESS ON HEAD. INSTALL IN ACCORDANCE WITH THE REQUIREMENTS OF SMACNA STANDARDS. COMPRESSION OF LINEAR SURFACE NOT TO EXCEED 10% OF THICKNESS.
- D. LINER SHALL BE ATTACHED TO SHEET METAL USING ADHESIVE COVERING 90% OF THE METAL SURFACE.
- E. COAT EDGE OF UPSTREAM END OF LINER WITH ADHESIVE.
3. EXECUTION
- 3.01. EXAMINATION
- A. VERIFY THAT DUCTWORK AND PIPING HAS BEEN TESTED BEFORE APPLYING INSULATION MATERIALS.
- B. VERIFY THAT SURFACES ARE CLEAN, FOREIGN MATERIAL REMOVED AND DRY.
- 3.02. INSTALLATION
- A. INSTALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- B. INSULATED DUCT AND PIPE CONVEYING FLUID BELOW AMBIENT TEMPERATURE:
1. PROVIDE INSULATION WITH VAPOR BARRIER JACKETS.
2. FINISH WITH TAPE AND VAPOR BARRIER JACKET.
3. CONTINUE INSULATION THROUGH WALLS, SLEEVES, HANGERS AND OTHER DUCT PENETRATIONS.
4. INSULATE ENTIRE SYSTEM INCLUDING FITTINGS, JOINTS, FLANGES, FIRE DAMPERS, FLEXIBLE CONNECTIONS AND EXPANSION JOINTS.
- C. INSULATED DUCTWORK CONVEYING AIR ABOVE AMBIENT TEMPERATURE:
1. PROVIDE WITH STANDARD VAPOR BARRIER JACKET.
2. INSULATE FITTINGS AND JOINTS. WHERE SERVICE ACCESS IS REQUIRED, BEVEL AND SEAL ENDS OF INSULATION.
- D. EXTERNAL DUCT INSULATION APPLICATION:
1. SECURE INSULATION WITH VAPOR BARRIER WITH WIRES AND SEAL JACKET JOINTS WITH VAPOR BARRIER ADHESIVE OR TAPE TO MATCH JACKET; VAPOR TIGHT.
2. INSTALL WITHOUT SAG ON UNDERSIDE OF DUCTWORK. USE ADHESIVE AND MECHANICAL FASTENERS WHERE NECESSARY TO PREVENT SAGGING. LIFT DUCTWORK OFF TRAPEZIE HANGERS AND INSERT SPACERS.
3. SEAL VAPOR BARRIER PENETRATIONS BY MECHANICAL FAST-ENTERS WITH VAPOR BARRIER ADHESIVE.
4. STOP AND POINT INSULATION AROUND ACCESS DOORS AND DAMPER OPERATORS TO ALLOW OPERATION WITHOUT DISTURBING WRAPPING.
- E. DUCT LINER APPLICATIONS:
1. ADHERE INSULATION WITH ADHESIVE FOR 90 PERCENT COVERAGE.
2. SECURE INSULATION WITH MECHANICAL LINER FASTENERS. REFER TO SMACNA STANDARDS FOR SPACING.
3. SEAL AND SMOOTH JOINTS.
4. SEAL LINER SURFACE PENETRATIONS WITH ADHESIVE.
5. DUCT DIMENSIONS INDICATED ARE NET INSIDE DIMENSIONS REQUIRED FOR AIR FLOW. INCREASE DUCT SIZE TO ALLOW FOR INSULATION THICKNESS.
- F. ALL INSULATION SHALL BE INSTALLED NEATLY IN A WORKMAN LIKE MANNER IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

DUCTWORK:

1. GENERAL
- 1.01. SECTION INCLUDES
- A. METAL DUCTWORK.
- 1.02. QUALITY ASSURANCE
- A. PERFORM WORK IN ACCORDANCE WITH SMACNA – HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE.
- B. MAINTAIN ONE COPY OF DOCUMENT ON SITE.
2. PRODUCTS
- 2.01. MATERIALS
- A. GALVANIZED STEEL DUCTS: ASTM A525 AND ASTM A527
- B. GALVANIZED STEEL SHEET, LOCK-FORMING QUALITY, HAVING G90 ZINC COATING OF IN CONFORMANCE WITH ASTM A90.
- C. INSULATED FLEXIBLE DUCTS:
1. BLACK POLYMER FILM SUPPORTED BY HELICALLY WOUND SPRING STEEL WIRE; FIBERGLASS INSULATION; POLYETHYLENE VAPOR BARRIER FILM.
2. PRESSURE RATINGS: 4 INCHES WG POSITIVE AND 0.5 INCHES WG NEGATIVE.
3. MAXIMUM VELOCITY: 4000 FPM.
4. TEMPERATURE RANGE: –20 DEGREES F TO 175 DEGREES F.
- C. FASTENERS: RIVETS, BOLTS, OR SHEET METAL SCREWS.
- D. SEALANT:
1. NON-HARDENING, WATER RESISTANT, FIRE RESISTIVE, COMPATIBLE WITH MATING MATERIALS; LIQUID USED ALONE OR WITH TAPE, OR HEAVY MASTIC.
- E. HANGER ROD: ASTM A36; STEEL, GALVANIZED; THREADED BOTH ENDS, THREADED ONE END, OR CONTINUOUSLY THREADED.
- 2.02. DUCTWORK FABRICATION
- A. FABRICATE AND SUPPORT IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE, AND AS INDICATED. PROVIDE DUCT MATERIAL, GAGES, REINFORCING, AND SEALING FOR OPERATING PRESSURES INDICATED.
- B. CONSTRUCT T'S, BENDS, AND ELBOWS WITH RADIUS OF NOT LESS THAN 1-1/2 TIMES WIDTH OF DUCT ON CENTERLINE. WHERE NOT POSSIBLE AND WHERE RECTANGULAR ELBOWS ARE USED, PROVIDE AIR FOIL TURNING VANES. WHERE ACOUSTICAL LINING IS INDICATED, PROVIDE TURNING VANES OF PERFORATED METAL WITH GLASS FIBER INSULATION.
- C. INCREASE DUCT SIZES GRADUALLY, NOT EXCEEDING 15 DEGREES DIVERGENCE WHEREVER POSSIBLE; MAXIMUM 30 DEGREES DIVERGENCE UPSTREAM OF EQUIPMENT AND 45 DEGREES CONVERGENCE DOWNSTREAM.
- 2.03. DUCT INSULATION
- A. FABRICATE IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
3. EXECUTION
- 3.01. INSTALLATION
- A. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- B. INSTALL AND SEAL DUCTS IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE.
- C. DUCT SIZES ARE INSIDE CLEAR DIMENSIONS. FOR LINED DUCTS, MAINTAIN SIZES INSIDE LINING.
- D. PROVIDE OPENINGS IN DUCTWORK WHERE REQUIRED TO ACCOMMODATE THERMOMETERS AND CONTROLLERS. PROVIDE PILOT TUBE OPENINGS WHERE REQUIRED FOR TESTING OF SYSTEMS, COMPLETE WITH METAL CAN WITH SPRING DEVICE OR SCREW TO ENSURE AGAINST AIR LEAKAGE. WHERE OPENINGS ARE PROVIDED IN INSULATED DUCTWORK, INSTALL INSULATION MATERIAL INSIDE A METAL RING.
- E. LOCATE DUCTS WITH SUFFICIENT SPACE AROUND EQUIPMENT TO ALLOW NORMAL OPERATING AND MAINTENANCE ACTIVITIES.
- F. USE CRIMP JOINTS WITH OR WITHOUT BEAD FOR JOINING ROUND DUCT SIZES 8 INCH AND SMALLER WITH CRIMP IN DIRECTION OF AIR FLOW.
- G. USE DOUBLE NUTS AND LOCK WASHERS ON THREADED ROD SUPPORTS.
- H. CONNECT TERMINAL UNITS TO SUPPLY DUCTS WITH ONE FOOT MAXIMUM LENGTH OF FLEXIBLE DUCT. DO NOT USE FLEXIBLE DUCT TO CHANGE DIRECTION.
- I. CONNECT DIFFUSERS TO LOW PRESSURE DUCTS WITH 5 FEET MAXIMUM LENGTH OF FLEXIBLE DUCT HELD IN PLACE WITH STRAP OR CLAMP.
- J. CONNECT FLEXIBLE DUCTS TO METAL DUCTS WITH ADHESIVE PLUS SHEET METAL SCREWS.
- K. DURING CONSTRUCTION PROVIDE TEMPORARY CLOSURES OF METAL OR TAPED POLYETHYLENE ON OPEN DUCTWORK TO PREVENT CONSTRUCTION DUST FROM ENTERING DUCTWORK SYSTEM.
- 3.02. SCHEDULES
- A. DUCTWORK MATERIAL SCHEDULE
- | AIR SYSTEM                            | MATERIAL       | PRESSURE CLASS |
|---------------------------------------|----------------|----------------|
| LOW PRESSURE SUPPLY RETURN AND RELIEF | STEEL<br>STEEL | 2"<br>~2"      |

TESTING ADJUSTING & BALANCING

1. GENERAL
- 1.01. REFERENCES
- A. AABC – NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE.
- B. ACC – TEST CODE FOR GRILLES, REGISTERS, AND DIFFUSERS.
- C. ASHRAE 111 – PRACTICES FOR MEASUREMENT, TESTING, ADJUSTING, AND BALANCING OF BUILDING HEATING, VENTILATION, AIR-CONDITIONING, AND REFRIGERATION SYSTEMS.
- D. NEBB – PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, AND BALANCING OF ENVIRONMENTAL SYSTEMS.
- E. SMACNA – HVAC SYSTEMS TESTING, ADJUSTING, AND BALANCING.
- 1.02. SUBMITTALS
- A. SUBMIT NAME OF ADJUSTING AND BALANCING AGENCY FOR APPROVAL WITHIN 30 DAYS AFTER AWARD OF CONTRACT.
- B. FIELD REPORTS: INDICATE DEFICIENCIES IN SYSTEMS THAT WOULD PREVENT PROPER TESTING, ADJUSTING, AND BALANCING OF SYSTEMS AND EQUIPMENT TO ACHIEVE SPECIFIED PERFORMANCE.
- C. PROVIDE REPORTS IN SOFT COVER, LETTER SIZE, 3-RING BINDER MANUALS, COMPLETE WITH INDEX PAGE AND INDEXING TABS, WITH COVER IDENTIFICATION AT FRONT AND SIDE. INCLUDE SET OF REDUCED DRAWINGS WITH AIR OUTLETS AND EQUIPMENT IDENTIFIED TO CORRESPOND WITH DATA SHEETS, AND INDICATING THERMOSTAT LOCATIONS.
- D. TEST REPORTS: INDICATE DATA ON AABC NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE FORMS.
- 1.03. QUALITY ASSURANCE
- A. PERFORM TOTAL SYSTEM BALANCE IN ACCORDANCE WITH AABC NATIONAL STANDARDS FOR FIELD MEASUREMENT AND INSTRUMENTATION, TOTAL SYSTEM BALANCE.
2. EXECUTION
- 2.01. EXAMINATION
- A. VERIFY THAT SYSTEMS ARE COMPLETE AND OPERABLE BEFORE COMMENCING WORK. ENSURE THE FOLLOWING CONDITIONS:
1. SYSTEMS ARE STARTED AND OPERATING IN A SAFE AND NORMAL CONDITION.
2. TEMPERATURE CONTROL SYSTEMS ARE INSTALLED COMPLETE AND OPERABLE.
3. PROPER THERMAL OVERLOAD PROTECTION IS IN PLACE FOR ELECTRICAL EQUIPMENT.
4. FINAL FILTERS ARE CLEAN AND IN PLACE. IF REQUIRED, INSTALL TEMPORARY MEDIA IN ADDITION TO FINAL FILTERS.
5. DUCT SYSTEMS ARE CLEAN OF DEBRIS.
6. FANS ARE ROTATING CORRECTLY.
7. VOLUME DAMPERS ARE IN PLACE AND OPEN.
8. ALL COIL FINS ARE CLEANED AND COMBED.
9. ACCESS DOORS ARE CLOSED AND DUCT END CAPS ARE IN PLACE.
10. AIR OUTLETS ARE INSTALLED AND CONNECTED.
11. DUCT SYSTEM LEAKAGE IS MINIMIZED.
12. HYDRONIC SYSTEMS ARE FLUSHED, FILLED, AND VENTED.
13. SERVICE AND BALANCE VALVES ARE OPEN.
- B. SUBMIT FIELD REPORTS. REPORT DEFECTS AND DEFICIENCIES NOTED DURING PERFORMANCE OF SERVICES WHICH PREVENT SYSTEM BALANCE.
- C. BEGINNING OF WORK MEANS ACCEPTANCE OF EXISTING CONDITIONS.
- 2.02. PREPARATION
- A. PROVIDE INSTRUMENTS REQUIRED FOR TESTING, ADJUSTING, AND BALANCING OPERATIONS. MAKE INSTRUMENTS AVAILABLE TO ARCHITECT/ENGINEER TO FACILITATE SPOT CHECKS DURING TESTING.
- B. PROVIDE ADDITIONAL BALANCING DEVICES AS REQUIRED.
- 2.03. INSTALLATION TOLERANCES
- A. AIR OUTLETS AND INLETS: ADJUST TOTAL TO WITHIN PLUS 10 PERCENT AND MINUS 5 PERCENT OF DESIGN TO SPACE. ADJUST OUTLETS AND INLETS IN SPACE TO WITHIN PLUS OR MINUS 10 PERCENT OF DESIGN.
- 2.04. ADJUSTING
- A. ENSURE RECORDED DATA REPRESENTS ACTUAL MEASURED OR OBSERVED CONDITIONS.
- B. PERMANENTLY MARK SETTINGS OF VALVES, DAMPERS, AND OTHER ADJUSTMENT DEVICES ALLOWING SETTINGS TO BE RESTORED. SET AND LOCK MEMORY STOPS.
- C. LEAVE SYSTEMS IN PROPER WORKING ORDER, REPLACING BELT GUARDS, CLOSING ACCESS DOORS, CLOSING DOORS TO ELECTRICAL SWITCH BOXES, AND RESTORING THERMOSTATS TO SPECIFIED SETTINGS.
- 2.05. AIR SYSTEM PROCEDURE
- A. ADJUST AIR HANDLING AND DISTRIBUTION SYSTEMS TO PROVIDE REQUIRED OR DESIGN SUPPLY, RETURN, AND EXHAUST AIR QUANTITIES AT SITE ALTITUDE.
- B. MAKE AIR QUANTITY MEASUREMENTS IN DUCTS BY PITOT TUBE TRAVERSE OF ENTIRE CROSS SECTIONAL AREA OF DUCT.
- C. MEASURE AIR QUANTITIES AT AIR INLETS AND OUTLETS.
- D. ADJUST DISTRIBUTION SYSTEM TO OBTAIN UNIFORM SPACE TEMPERATURES FREE FROM OBJECTIONABLE DRAFTS AND NOISE.
- E. USE VOLUME CONTROL DEVICES TO REGULATE AIR QUANTITIES ONLY TO EXTEND THAT ADJUSTMENTS DO NOT CREATE OBJECTIONABLE AIR MOTION OR SOUND LEVELS. EFFECT VOLUME CONTROL BY DUCT INTERNAL DEVICES SUCH AS DAMPERS AND SPLITTERS.
- F. VARY TOTAL SYSTEM AIR QUANTITIES BY ADJUSTMENT OF FAN SPEEDS. PROVIDE DRIVE CHANGES REQUIRED. VARY BRANCH AIR QUANTITIES BY DAMPER REGULATION.
- G. MEASURE STATIC AIR PRESSURE CONDITIONS ON AIR SUPPLY UNITS, INCLUDING FILTER AND COIL PRESSURE DROPS, AND TOTAL PRESSURE ACROSS THE FAN. MAKE ALLOWANCES FOR 50 PERCENT LOADING OF FILTERS.
- H. ADJUST OUTSIDE AIR AUTOMATIC DAMPERS, OUTSIDE AIR, RETURN AIR, AND EXHAUST DAMPERS FOR DESIGN CONDITIONS.
- I. MEASURE TEMPERATURE CONDITIONS ACROSS OUTSIDE AIR, RETURN AIR, AND EXHAUST DAMPERS TO CHECK LEAKAGE.
- J. WHERE MODULATING DAMPERS ARE PROVIDED, TAKE MEASUREMENTS AND BALANCE AT EXTREME CONDITIONS. BALANCE VARIABLE VOLUME SYSTEMS AT MAXIMUM AIR FLOW RATE, FULL COOLING, AND AT MINIMUM AIR FLOW RATE, FULL HEATING.
- K. MEASURE BUILDING STATIC PRESSURE AND ADJUST SUPPLY, RETURN, AND EXHAUST AIR SYSTEMS TO PROVIDE REQUIRED RELATIONSHIP BETWEEN EACH TO MAINTAIN APPROXIMATELY 0.05 INCHES POSITIVE STATIC PRESSURE NEAR THE BUILDING ENTRIES.
- L. CHECK ALL UNITS FOR MOTORIZED DAMPER LEAKAGE.
- ADJUST AIR QUANTITIES WITH MIXING DAMPERS SET FIRST FOR COOLING, THEN HEATING, THEN MODULATING.

AIR INLETS AND OUTLETS

- PART 1 – GENERAL
- 1.01. SECTION INCLUDES
- A. DIFFUSERS
- PART 2 – PRODUCTS
- 2.01. MANUFACTURERS
- A. TITUS.
- B. KRUEGER.
- C. PRICE.
- D. CARNES.
- E. METALAIRE.
- 2.02. RETURN GRILLES/REGISTERS – SEE SCHEDULE
- 2.03. SUPPLY DIFFUSERS – SEE SCHEDULE
- PART 3 – EXECUTION
- 3.01. INSTALLATION
- A. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- B. CHECK LOCATION OF OUTLETS AND INLETS AND MAKE NECESSARY ADJUSTMENTS IN POSITION TO CONFORM WITH ARCHITECTURAL FEATURES, SYMMETRY, AND LIGHTING ARRANGEMENT.
- C. INSTALL DIFFUSERS TO DUCTWORK WITH AIR TIGHT CONNECTION.
- D. PROVIDE BALANCING DAMPERS ON DUCT TAKE-OFF TO DIFFUSERS, AND GRILLES AND REGISTERS, DESPITE WHETHER DAMPERS ARE SPECIFIED AS PART OF THE DIFFUSER, OR GRILLE AND REGISTER ASSEMBLY.
- E. PAINT DUCTWORK VISIBLE BEHIND AIR OUTLETS AND INLETS MATTE BLACK.

DUCTWORK ACCESSORIES

- PART 1. GENERAL
- 1.01. SECTION INCLUDES
- A. AIR TURNING DEVICES/EXTRACTORS.
- B. FLEXIBLE DUCT CONNECTIONS.
- C. VOLUME CONTROL DAMPERS.
- PART 2. PRODUCTS
- 2.01. AIR TURNING DEVICES/EXTRACTORS
- A. MULTI-BLADE DEVICE WITH BLADES ALIGNED IN SHORT DIMENSION; STEEL CONSTRUCTION; WITH INDIVIDUALLY ADJUSTABLE BLADES, MOUNTING STRAPS.
- 2.02. FLEXIBLE DUCT CONNECTIONS
- A. FABRICATE IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS \_ METAL AND FLEXIBLE, AND AS INDICATED.
- B. CONNECTOR: FABRIC CRIMPED INTO METAL EDGING STRIP.
1. FABRIC: UL LISTED FIRE-RETARDANT NEOPRENE COATED WOVEN GLASS FIBER FABRIC TO NFPA 90A, MINIMUM DENSITY 3.0 OZ PER SQ YD.
2. NET FABRIC WIDTH: APPROXIMATELY 3 INCHES WIDE.
- C. LEADED VINYL SHEET: MINIMUM 0.55 INCH THICK, 0.87 LBS PER SQ FT, 10 DB ATTENUATION IN 10 TO 10,000 HZ RANGE.
- 2.03. VOLUME CONTROL DAMPERS.
- A. MANUFACTURERS:
1. RUSKIN.
2. AIR BALANCE.
3. VENT PRODUCTS.
- B. FABRICATE IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS \_ METAL AND FLEXIBLE, AND AS INDICATED.
- C. SINGLE BLADE DAMPERS: FABRICATE FOR DUCT SIZES UP TO 6 X 30 INCH.
- D. MULTI-BLADE DAMPER: FABRICATE OF OPPOSED BLADE PATTERN WITH MAXIMUM BLADE SIZES 4 X 72", ASSEMBLE CENTER AND EDGE CRIMPED BLADES IN PRIME COATED OR GALVANIZED CHANNEL FRAME WITH SUITABLE HARDWARE.
- E. END BEARINGS: EXCEPT IN ROUND DUCTWORK 12 INCHES AND SMALLER, PROVIDE END BEARINGS. ON MULTIPLE BLADE DAMPERS, PROVIDE OIL-IMPREGNATED NYLON OR SINTERED BRONZE BEARINGS.
- F. QUADRANTS:
1. PROVIDE LOCKING, INDICATING QUADRANT REGULATORS ON SINGLE AND MULTI-BLADE DAMPERS.
2. ON INSULATED DUCTS MOUNT QUADRANT REGULATORS ON STAND-OFF MOUNTING BRACKETS, BASES, OR ADAPTERS.
3. WHERE ROD LENGTHS EXCEED 30 INCHES PROVIDE REGULATOR AT BOTH ENDS.

- PART 3. EXECUTION
- 3.01. INSTALLATION
- A. INSTALL ACCESSORIES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. NFPA 90A, AND FOLLOW SMACNA HVAC DUCT CONSTRUCTION STANDARDS \_ METAL AND FLEXIBLE
- B. PROVIDE FLEXIBLE CONNECTIONS IMMEDIATELY ADJACENT TO EQUIPMENT IN DUCTS ASSOCIATED WITH ALL FANS AND MOTORIZED EQUIPMENT, AND SUPPORTED BY VIBRATION ISOLATORS.
- C. PROVIDE BALANCING DAMPERS AT POINTS ON SUPPLY, RETURN, AND EXHAUST SYSTEMS WHERE BRANCHES ARE TAKEN FROM LARGER DUCTS AS REQUIRED FOR AIR BALANCING. INSTALL MINIMUM 2 DUCT WIDTHS FROM DUCT TAKE-OFF.
- D. PROVIDE BALANCING DAMPERS ON DUCT TAKE-OFF TO DIFFUSERS, GRILLES, AND REGISTERS, REGARDLESS OF WHETHER DAMPERS ARE SPECIFIED AS PART OF THE DIFFUSER, GRILLE, OR REGISTER ASSEMBLY.
- E. MANUAL BALANCING DAMPERS SHALL BE MULTI BLADE TYPE FOR ANY DUCT WHERE THE DIMENSION PERPENDICULAR TO THE DAMPER BLADES IS GREATER THAN 14".

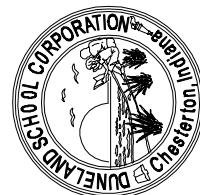


TRIA ARCHITECTURE



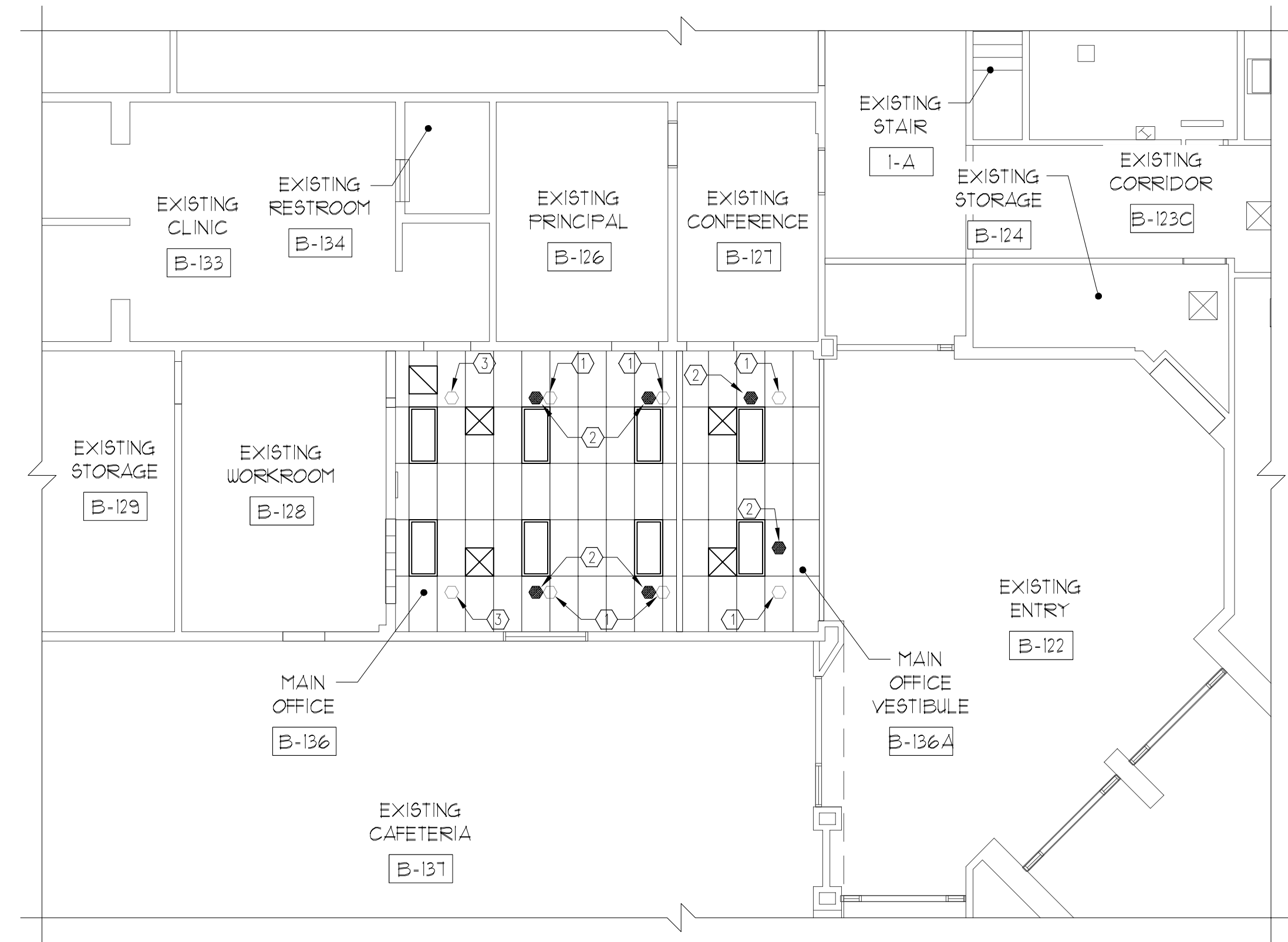
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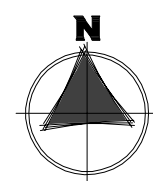


PROJECT NUMBER: 2007	REVISED:
PROJECT MANAGER: YG	DESIGNER:
DRAWN BY: OAS LLC	CHECKED:
USED FOR PROPOSAL: 01/07/08	APPROVED:
SPECIFICATIONS - MECHANICAL	

M2.00



1 FIRE PROTECTION - EXISTING AND NEW  
 1/8" = 1'-0"

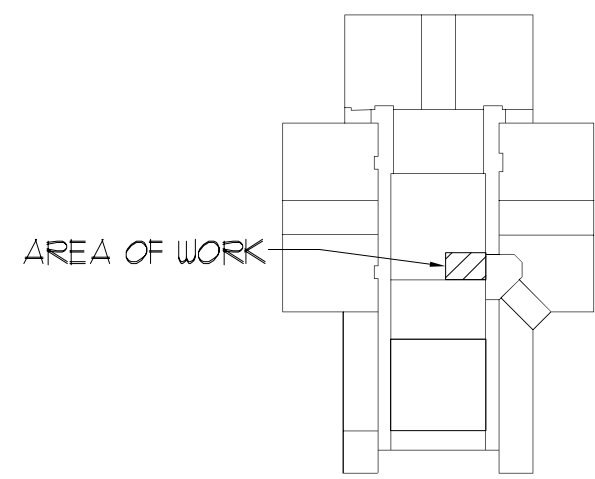


**KEYED NOTES**

① EXISTING HEAD TO BE RELOCATED TO CENTER OF NEW CEILING TILE. SEE KEYED NOTE 2.  
 ② RELOCATED HEAD POSITION.  
 ③ RELOCATE HEAD TO CENTER OF NEW CEILING TILE. MINIMUM RELOCATION.

**HEAD KEY**

● = EXISTING HEAD RELOCATED IN NEW LAY-IN CEILING.  
 ○ = EXISTING HEAD TO BE REMOVED AND RELOCATED.

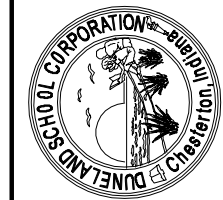


KEY PLAN  
 NOT TO SCALE



MEP/FP CONSULTANT  
 (P) 620538756  
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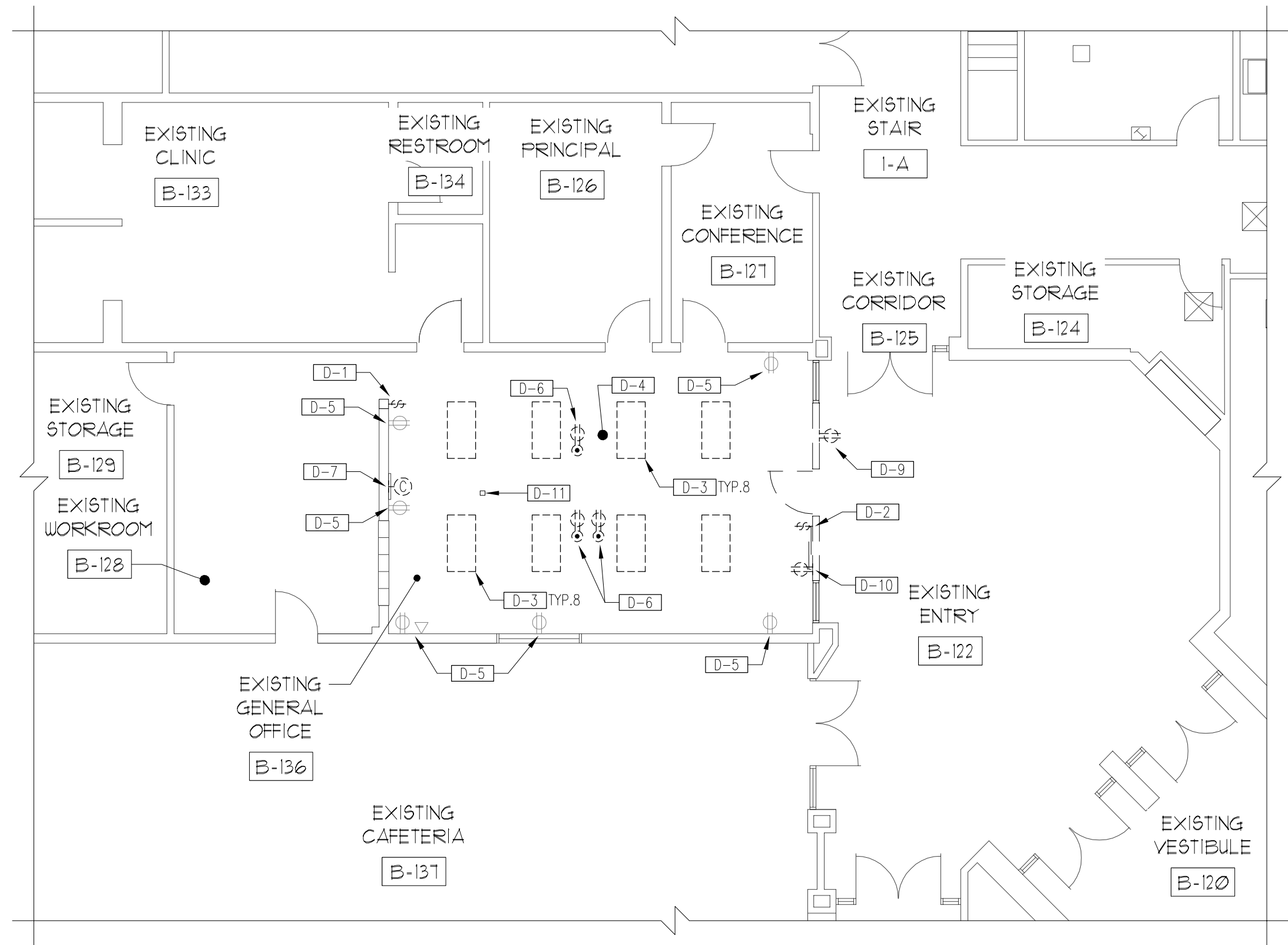
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 2018 MAIN OFFICE RENOVATION AT:  
 JACKSON ELEMENTARY SCHOOL  
 811 N. 400 E. VALPARAISO, INDIANA 46383



PROJECT NUMBER: 2-001	REV/S/D/S
PROJECT MANAGER: M.G.	1
DRAWN BY: OAS LLC	1
USED FOR PROPOSAL: 03/07/08	1
FIRE PROTECTION - EXISTING AND NEW	1

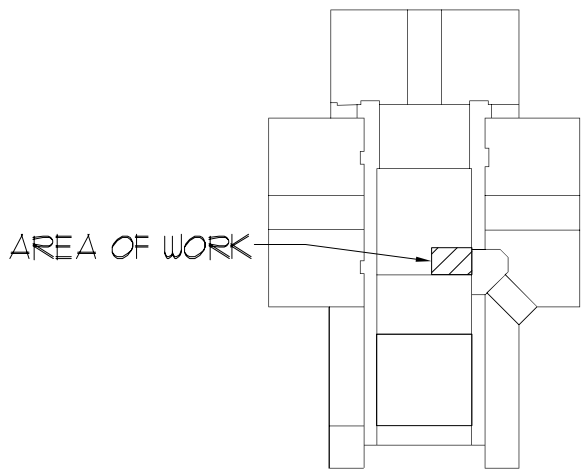
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PLOTTED BY: CAMERON COX
 DATE PLOTTED: 3/7/2018 8:37 AM
 FILE PATH AND NAME: P:\138-B-1 Jackson ES Main Office Renovation\138-B-1 E010



1
 EXISTING PARTIAL FIRST FLOOR PLAN - ELECTRICAL
 1/8" = 1'-0"
 [North Arrow]

- DEMOLITION NOTES
- D-1 REMOVE SWITCHES AND SWITCH LEG WIRING. PROVIDE SOLID COVER PLATE.
  - D-2 REMOVE SWITCH, BOX, CONDUIT AND WIRE TO NEAREST JUNCTION BOX.
  - D-3 REMOVE EXISTING LIGHTING FIXTURES AND WHIPS TO JUNCTION BOXES.
  - D-4 EXISTING LIGHTING CIRCUIT(S) TO REMAIN FOR NEW LIGHTING.
  - D-5 WALL OUTLET TO REMAIN.
  - D-6 FLOOR OUTLET TO BE REMOVED. PULL WIRE BACK TO WALL OUTLET.
  - D-7 MASTER CLOCK TO REMAIN.
  - D-8 POWER POLE TO BE REMOVED AND WIRE AND CONDUIT PULLED BACK TO PANEL.
  - D-9 OUTLET, BOX, WIRE AND CONDUIT TO BE REMOVED BACK TO NEAREST JUNCTION BOX.
  - D-10 RELOCATE EXISTING OUTLET TO ±8'-0" AFF FOR NEW T.V.. VERIFY EXACT MOUNTING HEIGHT IN FIELD.
  - D-11 POWER POLE TO BE REMOVED.



KEY PLAN
 NOT TO SCALE
 [North Arrow]



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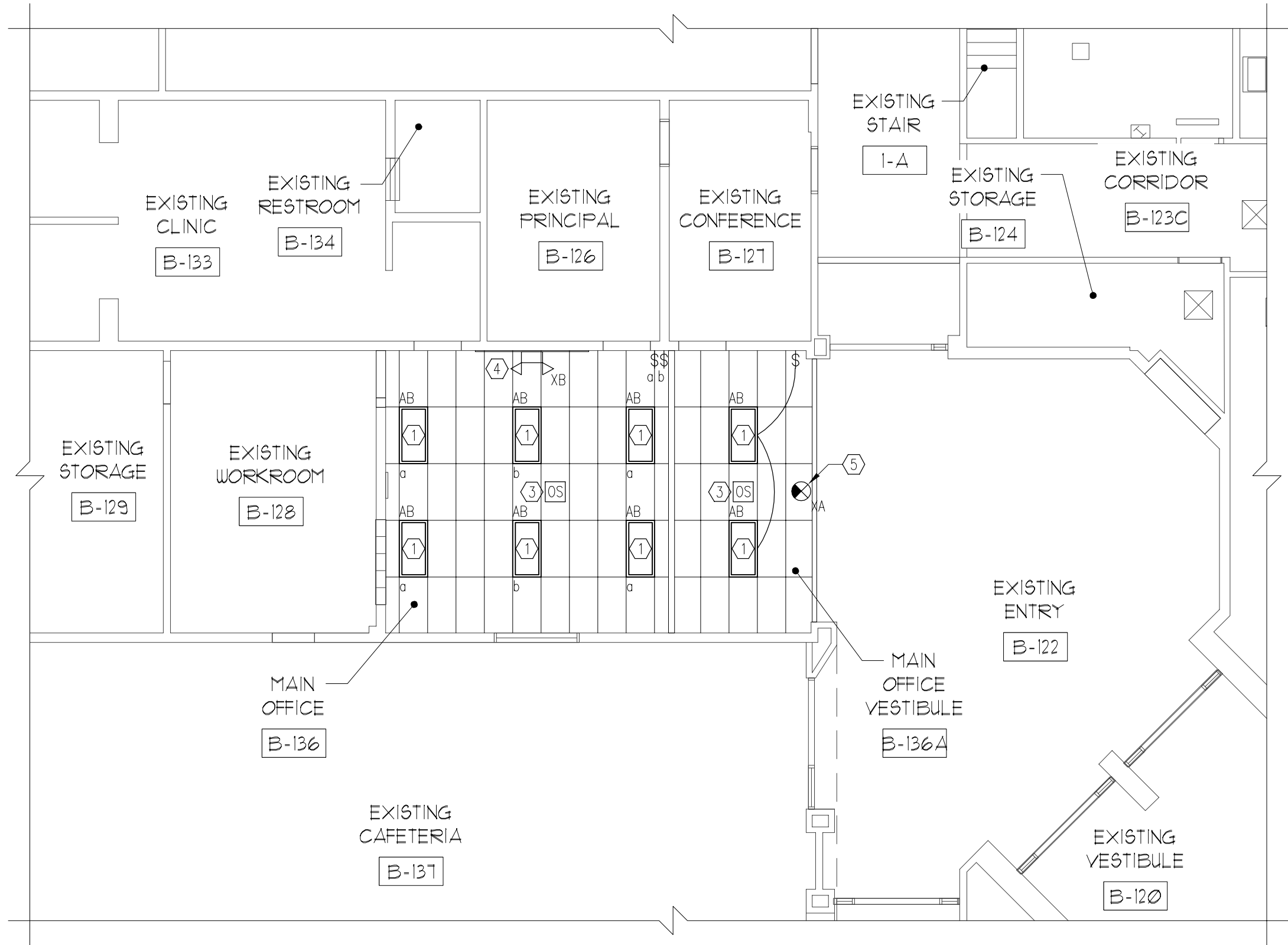


PROJECT NUMBER: 138-B-1	REVISED:
PROJECT MANAGER: M.G.	DATE: 3/7/2018
DRAWN BY: OAS LLC	DATE: 3/7/2018
USED FOR PROPOSAL: 03/07/2018	DATE: 03/07/2018
EXISTING PARTIAL FLOOR PLAN -	
DEMOLITION -	
ELECTRICAL	

E0.10

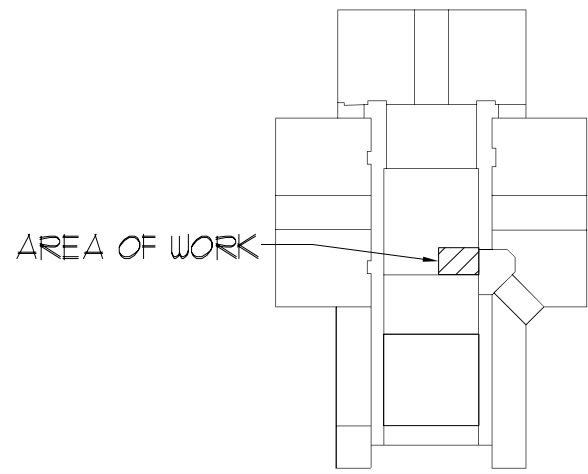


LIGHTING FIXTURE SCHEDULE								
TYPE	NO. OF LAMPS	LAMP TYPE	MOUNTING	ACCEPTABLE MANUFACTURER AND CATALOG NUMBER	VOLTS	INPUT WATTS	DESCRIPTION	REMARKS
AB	8	32WT8	RECESSED LAY-IN	LITHONIA #2GTL-4-40L-E2I-LP835	120	31	2'x4' LED LENSED FIXTURE WITH FLAT WHITE STEEL DOOR WITH PRISMATIC LENS	VERIFY FINAL PART NUMBER WITH ARCHITECT
				OR APPROVED EQUAL BY HUBBELL				
				OR METALUX LIGHTING				
⊗	1	LED	CEILING	LITHONIA #LE-S-W-I-R-ELN	120	N/A	SINGLE FACE EXIT SIGN WITH 6" RED LETTERS CAST ALUMINUM BODY, 90 MINUTE NI-CAD BATTERY BACK UP	FURNISH WITH ARROWS AS REQUIRED BY CODE, QUICK SHIP REQUIRED
				DUAL-LITE SESRWE				
				OR EQUAL BY SURE-LITES				
⏏	1	MR16	CEILING	LITHONIA #ELM2-LED	120	N/A	EMERGENCY BATTERY UNIT WITH DUAL LED HEADS AND 90 MINUTE BATTERY BACKUP	
				COMPASS #CU2-X				
				OR EQUAL BY SURE-LITES				



KEYED NOTES

- ① NEW LIGHTING TO REUSE EXISTING LIGHTING CIRCUIT POWER. REWORK SWITCH LEGS AS SHOWN.
- ② NEW SWITCH LEGS.
- ③ OCCUPANCY SENSOR.
- ④ TIE NEW EMERGENCY LIGHT INTO EXISTING LIGHT CIRCUIT.
- ⑤ TIE NEW EXIT SIGN INTO EXISTING LIGHTING CIRCUIT.

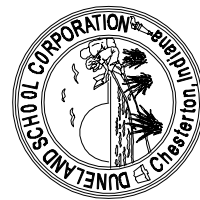


KEY PLAN  
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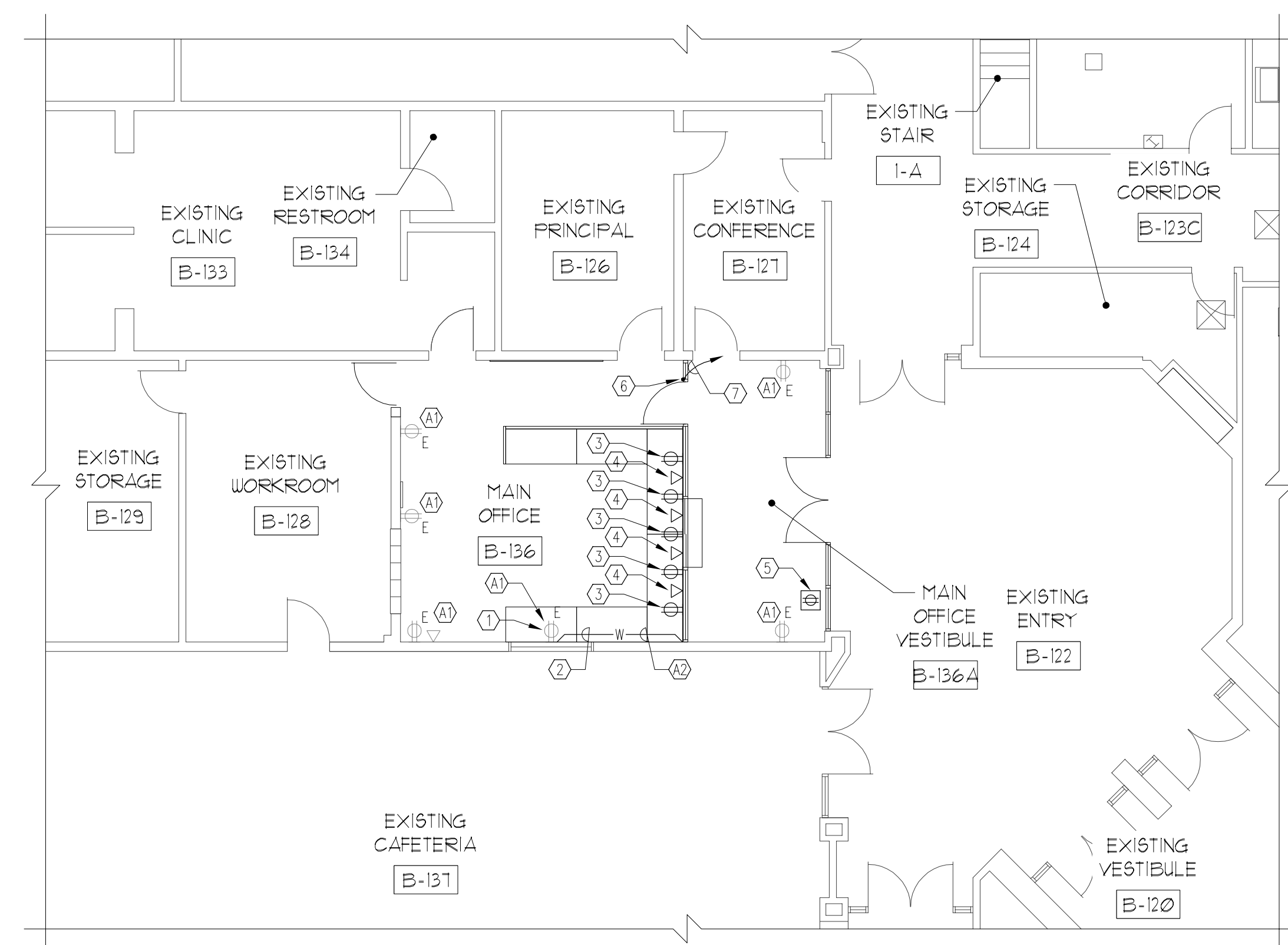
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 2018 MAIN OFFICE RENOVATION AT:  
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 811 N. 400 E. VALPARAISO, INDIANA 46383



PROJECT NUMBER: 138-B-1	REVISED:
PROJECT MANAGER: MGC	DATE:
DRAWN BY: OAS LLC	DATE:
USED FOR PROPOSAL: 03/07/2018	DATE:
PARTIAL FIRST FLOOR PLAN - ELECTRICAL - LIGHTING	DATE:

E1.00

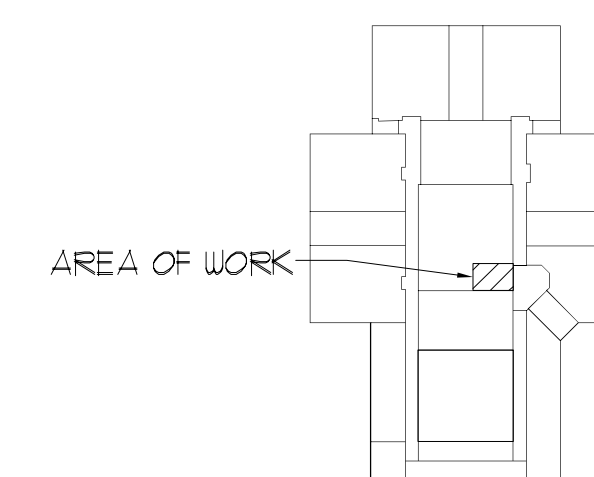


## KEYED NOTES

- ① PROVIDE WIRE MOLD BOX EXTENDER ON EXISTING OUTLET.
- ② PROVIDE SURFACE MOUNTED RACEWAY, WIREMOLD 500/700 SERIES AND EXTEND CIRCUIT INTO NEW WALL BELOW DESK/GLASS.
- ③ PROVIDE DUPLEX OUTLET IN NEW WALL.
- ④ PROVIDE DATA BOX, JACK AND FACE PLATE TO MATCH DISTRICT STANDARDS.
- ⑤ PROVIDE OUTLET BOX ABOVE EXISTING CEILING EXTENDED FROM HIGH ON WALL OUTLET BOX REMOVED.
- ⑥ PROVIDE POWER DROP INTO HOLLOW METAL DOOR FRAME FOR ELECTRIC DOOR STRIKE.
- ⑦ TIE INTO NEAREST POWER JUNCTION BOX AND EXTEND WIRING TO DOOR STRIKE.

**ALTERNATE BID NOTES**

- \*ALL OTHER KEYED NOTES OF BASE BID APPLY TO ALTERNATE.

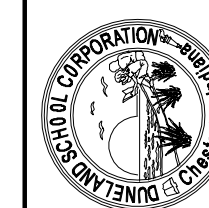


KEY PLAN  
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E2.00

**DUNELAND SCHOOL CORPORATION**  
**2018 MAIN OFFICE RENOVATION AT:**  
**JACKSON ELEMENTARY SCHOOL**  
**8111 N. 400 E. VALPARAISO, INDIANA 46383**

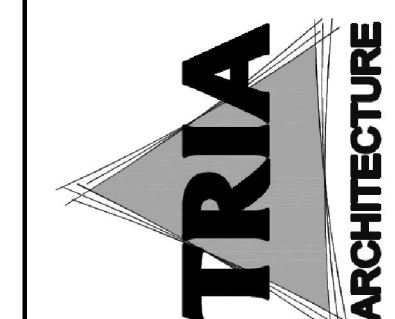


PROJECT NUMBER: 18-002	REVISIONS:
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ISSUED FOR PROPOSAL: 03/07/2018  
PARTIAL FIRST FLOOR  
PLAN - ELECTRICAL -  
POWER

**OAS**  
DH-Higgins & Arnold  
MEP/J.P. CONSULTANT:  
(P) 620-538-1936

MEP, J.P. CONSULTANT:  
(P) 620 538 1926



DIVISION 26 00 00 – ELECTRICAL

PART 1 – GENERAL

A. REQUIREMENTS

- 1. PRODUCTS AND EXECUTION SHALL BE PROVIDED FOR A COMPLETE AND FULLY OPERATIONAL ELECTRICAL SYSTEM THROUGHOUT THE EXTENT OF THE PROJECT, IN CONFORMANCE WITH APPLICABLE CODES, LAWS, ORDINANCES AND AGENCY STANDARDS OF GOVERNING BODIES HAVING JURISDICTION, AND IN STRICT ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND BUILDING STANDARDS.
- 2. PRODUCTS, INCLUDING EQUIPMENT, DEVICES, FIXTURES, AND MATERIALS SHALL BE NEW UNLESS NOTED OTHERWISE, UL LISTED, AND BEAR APPROPRIATE LABEL.
- 3. EXECUTION, INCLUDING PREPARATION, INSTALLATION, STARTING, AND TESTING SHALL BE PERFORMED BY SKILLED TRADES PERSONNEL, IN COMPLIANCE WITH THE ASSOCIATED MANUFACTURERS RECOMMENDATIONS, AND COORDINATED WITH THE OTHER CONSTRUCTION TRADES.

B. APPLICABLE CODES – SELECT ONE OF THE FOLLOWING GROUPS

- 1. INDIANA BUILDING CODE
- 2. CHESTERTON TOWN CODE
- 3. IECC 2012

C. APPLICABLE LAWS AND AGENCY STANDARDS

- |   |         |
|---|---------|
| 1. AMERICAN NATIONAL STANDARDS INSTITUTE                | ANSI    |
| 2. AMERICAN SOCIETY FOR TESTING AND MATERIALS           | ASTM    |
| 3. AMERICANS WITH DISABILITIES ACT                      | ADA     |
| 4. ELECTRICAL TESTING LABORATORIES                      | ETL     |
| 5. ELECTRONIC/TELECOMMUNICATIONS INDUSTRIES ASSOCIATION | EIA/TIA |
| 6. ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA    | IESNA   |
| 7. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION        | NEMA    |
| 8. NATIONAL FIRE PROTECTION ASSOCIATION                 | NFPA    |
| 9. UNDERWRITERS' LABORATORIES                           | UL      |

D. APPROVALS

- 1. EMERGENCY AND EXIT LIGHTING DOCUMENTS SHALL BE PREPARED AND SUBMITTED TO THE LOCAL FIRE DEPARTMENT FOR THEIR APPROVAL OF SYSTEM LAYOUT, CIRCUITING, AND FIXTURE TYPE. APPROVED DRAWINGS SHALL BE SUBMITTED FOR REVIEW PRIOR TO CONSTRUCTION.

E. SUBMITTALS

- 1. PRODUCT DATA SHALL BE PREPARED AND SUBMITTED FOR REVIEW PRIOR TO CONSTRUCTION FOR THE FOLLOWING PRODUCTS: RACEWAY COMPONENTS, WIRE, FUSES, CIRCUIT BREAKERS, RECEPTACLES, TOGGLE SWITCHES, DISCONNECT SWITCHES, MOTOR STARTERS, CONTACTORS, LIGHTING FIXTURES, BALLASTS, LAMPS, CONTROLS, FIRE ALARM DEVICES, LIFE SAFETY DEVICES.
- 2. TEST RESULTS SHALL BE PREPARED AND SUBMITTED PRIOR TO PROJECT COMPLETION FOR CABLE INSULATION, GROUNDING SYSTEM, EMERGENCY SYSTEM, FIRE ALARM SYSTEM, AND LIFE SAFETY SYSTEMS IN ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION, AND APPLICABLE CODES AND AGENCY STANDARDS.
- 3. MANUFACTURERS INSTRUCTIONS SHALL BE PREPARED AND SUBMITTED PRIOR TO CONSTRUCTION INCLUDING INSTALLATION MANUALS AND APPLICATION CONDITIONS AND LIMITATIONS FOR ELECTRICAL APPARATUS USE, STORAGE, HANDLING, PROTECTION, EXAMINATION, PREPARATION, INSTALLATION, AND STARTING.
- 6. PROJECT RECORD DOCUMENTS SHALL BE PREPARED USING AUTOCAD OR EQUIVALENT CAD PACKAGE. PROJECT RECORD DOCUMENTS SHALL BE SUBMITTED ON REPRODUCIBLE MEDIA AND ON DISKETTE PRIOR TO PROJECT COMPLETION FOR ELECTRICAL SYSTEMS. RECORD ACTUAL LOCATION OF EQUIPMENT, DEVICES, FIXTURES, ETC. RECORD ACTUAL ROUTING OF OVERHEAD FEEDERS.

F. COORDINATION

- 1. NOTIFY THE ENGINEER OF ANY CONFLICTING DESIGN INFORMATION OR ANY DESIGN INTENTIONS WHICH ARE NOT READILY INTERPRETED FROM THE CONTRACT DOCUMENTS PRIOR TO ANY PRODUCT SELECTION OR EXECUTION OF WORK. NOTIFY THE ENGINEER OF ANY PRODUCTS WHICH ARE DAMAGED, UNSUITABLE, INCOMPATIBLE, OR NON-COMPLIANT WITH ANY APPLICABLE CODES OR ORDINANCES OF ANY GOVERNING BODIES HAVING LAWFUL JURISDICTION.
- 2. COORDINATE CONSTRUCTION OF THE ELECTRICAL SYSTEM WITH THE ARCHITECT. FINAL LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT, FIRE ALARM EQUIPMENT, RECEPTACLES, SWITCHES, COMMUNICATION DEVICES, FIRE ALARM DEVICES, LIGHTING FIXTURES, ETC. SHALL BE AS DIRECTED BY THE ARCHITECT.
- 3. CONSTRUCTION TRADES: COORDINATE WORK WITH OTHER CONSTRUCTION TRADES.

- 4. EXISTING BUILDING SYSTEMS: REVIEW BUILDING STANDARDS WITH THE BUILDING ENGINEER. PERFORM A SITE VISIT TO VERIFY THE EXISTING SITE CONDITIONS. COSTS ASSOCIATED WITH UNFORESEEN CONDITIONS AS RESULT OF NOT PERFORMING A SITE VISIT SHALL NOT BE AN ENTITLEMENT FOR AN INCREASE TO THE CONTRACT. CONSTRUCTION SHALL BE PERFORMED WITHOUT INTERRUPTION TO THE BUILDING INTERFERENCE TO COMMON AREAS, CORRIDORS, EXITS OR EXISTING TENANTS. WHERE ANY CONSTRUCTION WOULD INTERFERE WITH THE DAILY OPERATIONS OF THE BUILDING OR OTHER TENANTS, AFTER-HOURS WORK OR TEMPORARY SERVICES SHALL BE PROVIDED AT NO INCREASE TO THE CONTRACT.

H. WARRANTY AND GUARANTEE

- 2. PROVIDE WARRANTY AND MANUFACTURERS CERTIFICATE FOR EACH PRODUCT, MINIMUM OF ONE YEAR OR LONGER AS SPECIFIED, FROM THE DATE OF OCCUPANCY. REPAIR AND/OR REPLACE ANY EQUIPMENT, DEVICES, FIXTURES, MATERIALS, ETC. WITH DEFECT AS REQUIRED AT NO INCREASE TO THE CONTRACT.
- 3. PROVIDE GUARANTEE OF INSTALLATION FOR A PERIOD OF ONE YEAR FROM THE DATE OF OCCUPANCY. REPAIR AND/OR REINSTALL ANY WORK WITH DEFECT AS REQUIRED AT NO INCREASE TO THE CONTRACT. PROVIDE GUARANTEE OF REWORK FOR A PERIOD OF ONE YEAR FROM THE COMPLETION OF REPAIR OR REINSTALLATION.
- 4. DAMAGE CAUSED TO FINISHES, SURFACES, CEILING TILES, EQUIPMENT, ETC. SHALL BE REPAIRED AND/OR REPLACED TO MATCH THE PRE-EXISTING CONDITION AT NO INCREASE TO THE CONTRACT.
- I. PAY FEES AND OTHER CHARGES INCIDENTAL TO THE ELECTRICAL WORK AND OBTAIN AND PAY FOR REQUIRED LIABILITY AND CASUALTY INSURANCE, PERMITS, LICENSES, INSPECTIONS, TAXES, ETC.
- J. CONSTRUCTION SHALL BE DONE DURING REGULAR WORKING HOURS AND DAYS, UNLESS OTHERWISE SPECIFIED. WORK REQUIRED TO BE PERFORMED DURING OVERTIME HOURS OR DAYS SHALL BE AS INDICATED.

PART 2 – PRODUCTS

- 1. CONDUITS SHALL BE HOT-DIPPED GALVANIZED OR ELECTRO-GALVANIZED STEEL, MINIMUM SIZE SHALL BE 3/4 INCH, EXCEPT POWER BRANCH CIRCUITS MAY BE 1/2 INCH (UNLESS NOTED OTHERWISE) AND FLEXIBLE CONNECTIONS TO RECESSED LIGHTING FIXTURES WHICH MAY BE 3/8 INCH. FLEXIBLE STEEL CONDUIT SHALL BE GALVANIZED STEEL, WITH UL LISTED LIQUID TIGHT JACKET AS REQUIRED, FOR FINAL CONNECTIONS TO MOTORS, RECESSED LIGHTING FIXTURES, AND LIFE SAFETY DEVICES. SUPPORTS, INCLUDING CHANNELS, ANGLES, RODS, AND FASTENERS SHALL BE HOT-DIPPED GALVANIZED STEEL. MANUFACTURER SHALL BE ALLIED, LTV/REPUBLIC, STEELDUCT, OR WHEATLAND.
- 2. CONDUIT FITTINGS SHALL BE STEEL, DIE CAST FITTINGS OF POT METAL ARE NOT ACCEPTABLE. ELECTRICAL METALLIC TUBING (EMT) FITTINGS SHALL BE COMPRESSION TYPE WITH INSULATED

THROATS; SET SCREW FITTINGS ARE NOT ACCEPTABLE. INTERMEDIATE METAL CONDUIT (IMC) AND HEAVY WALL CONDUIT (HW) FITTINGS SHALL BE THREADED JOINTS; SET SCREW AND COMPRESSION FITTINGS ARE NOT ACCEPTABLE. MANUFACTURER SHALL BE APPLETON, CROUSE HINDS/MIDWEST, OZ/GEDNEY, RACO, STEEL CITY, OR T&B.

- 3. OUTLET BOXES FOR ALL TOGGLE SWITCHES, RECEPTACLES, COMMUNICATION DEVICES, FIRE ALARM DEVICES, AND LIFE SAFETY DEVICES SHALL INCLUDE PLASTER RINGS, DEVICE PLATES, AND COVER PLATES WHERE REQUIRED. PROVIDE BOXES SUITABLE FOR PLENUM, WET, OR HAZARDOUS LOCATIONS AS REQUIRED. DEVICE COVER PLATES SHALL BE STAINLESS STEEL PAINTED TO MATCH FINISH. MULTI-GANG OUTLET BOXES SHALL INCLUDE SUITABLE ONE-PIECE DEVICE COVER PLATE. OUTLETS LOCATED ON OPPOSITE SIDES OF A PARTITION SHALL BE STAGGERED BY 12 INCHES, MINIMUM. MANUFACTURER SHALL BE APPLETON, RACO, OR STEEL CITY.
- 4. RACEWAY FOR POWER AND COMMUNICATIONS SHALL BE TWO COMPARTMENT STEEL, LENGTH AND FINISH AS REQUIRED, COMPLETE WITH ALL BASES, ADJUSTABLE STANCHIONS, HORIZONTAL SUPPORTS, TRIM PLATES, AND CONNECTING HARNESSSES. MANUFACTURER SHALL BE WIREMOLD.
- 5. SURFACE METAL RACEWAY INCLUDING POWER DEVICES, COMMUNICATION DEVICES, FITTINGS, CONNECTORS, FEEDS, ELBOWS, COUPLINGS, BLANKS, TEES, WIRE CLIPS, DEVICE BRACKETS, DEVICE COVERS, AND OTHER ASSOCIATED APPARATUS SHALL BE SIZED TO FACILITATE PULLING THE QUANTITY AND SIZE OF WIRES AND CABLES, AND INSTALLING THE DEVICES CONTAINED. RACEWAY SHALL BE CODE GAGE GALVANIZED STEEL, SHALL INCLUDE MOUNTING KNOCK-OUTS, AND SHALL BE FINISHED AS DIRECTED BY THE ARCHITECT. MANUFACTURER SHALL BE WIREMOLD.
- 6. WIRE SHALL BE 600 VOLT INSULATED COPPER, MINIMUM SIZE SHALL BE AWG #12, WIRE SIZES AWG #8 AND LARGER SHALL BE STRANDED. MANUFACTURER SHALL BE AMERICAN INSULATED WIRE CORP., CERRO, COLLYER, CAPITAL WIRE AND CABLE, OKONITE, SENATOR, SOUTH WIRE, OR TRIANGLE.
- 7. CABLE SUPPORTS SHALL BE APPROPRIATE FOR THE SIZE OF CONDUIT AND TYPE OF WIRE AND CABLES. CABLE LUBRICANT SHALL BE LESS THAN SIX PERCENT SOLID RESIDUE AFTER DRYING AND SHALL NOT CONTAIN ANY WAXES, GREASES, SILICONES, OR GLYCOL OILS.
- 8. GROUNDING SYSTEM, INCLUDING SERVICE AND EQUIPMENT GROUNDING AND BONDING, SHALL BE IN ACCORDANCE WITH CODE AND SHALL CONNECT ALL ELECTRICALLY OPERATED EQUIPMENT. PROVIDE A SEPARATE GREEN GROUND WIRE FOR EACH BRANCH CIRCUIT AND FEEDER.
- 9. RECEPTACLES SHALL BE DUPLEX NEMA 5-20R, BACK AND SIDE WIRED, SPECIFICATION GRADE, UNLESS NOTED OTHERWISE. SPECIAL RECEPTACLE CONFIGURATIONS, DUPLEX ISOLATED GROUND RECEPTACLES, DUPLEX GROUND FAULT INTERRUPTER RECEPTACLES, AND ARC FAULT INTERRUPTER RECEPTACLES SHALL BE AS REQUIRED OR AS INDICATED ON THE CONTRACT DOCUMENTS. GENERAL RECEPTACLE COLOR SHALL BE WHITE AND IG RECEPTACLE COLOR SHALL BE ORANGE UNLESS SPECIFIED OTHERWISE, VERIFY COLOR WITH ARCHITECT. MANUFACTURER SHALL BE BRYANT, HUBBELL, LEVITON, OR PASS & SEYMOUR.
- 10. TOGGLE SWITCHES SHALL BE SINGLE POLE 20 AMP, 120-277 VOLT, BACK AND SIDE WIRED, SPECIFICATION GRADE, UNLESS NOTED OTHERWISE. SPECIAL SWITCHES, INCLUDING 3-WAY, PILOT LIGHT AND MOMENTARY CONTACT, SHALL BE AS REQUIRED OR AS INDICATED ON THE CONTRACT DOCUMENTS. COLOR SHALL BE WHITE UNLESS SPECIFIED OTHERWISE, VERIFY COLOR WITH ARCHITECT. MANUFACTURER SHALL BE BRYANT, HUBBELL, LEVITON, OR PASS & SEYMOUR.
- 11. LIGHTING FIXTURES SHALL INCLUDE ALL APPROPRIATE ACCESSORIES, MOUNTING FRAME AND TRIM FOR CEILING TYPE. FLUORESCENT FIXTURES SHALL INCLUDE RAPID-START STANDARD-OUTPUT ELECTRONIC BALLASTS WITH NINETY PERCENT (90%) BALLAST FACTOR AND TOTAL HARMONIC DISTORTION OF TEN PERCENT (10%) OR LESS, TYPE OR APPROPRIATE COMPACT TYPE LAMPS. LIGHTING FIXTURES SHALL INCLUDE COORDINATED AIR HANDLING CAPACITY, PLENUM RATING, DAMP LABEL, WET LABEL, AND SHALL BE EXPLOSION PROOF WHERE REQUIRED. LIGHTING FIXTURES RECESSED WITHIN GRID TYPE CEILINGS SHALL INCLUDE SECURING CLIPS AS REQUIRED BY THE LOCAL AUTHORITY. FIXTURE MANUFACTURER SHALL BE AS INDICATED; ELECTRONIC BALLAST MANUFACTURER SHALL BE ADVANCE, MOTOROLA, OR MAGNETEK WITH MINIMUM 3 YEAR WARRANTY; LAMP MANUFACTURER SHALL BE OSRAM SYLVANIA, GENERAL ELECTRIC, OR PHILLIPS.

PART 3 – EXECUTION

- A. PENETRATIONS AND CHANNELS IN FLOORS AND WALLS SHALL BE VIA CUTTING AND CORING AS REQUIRED FOR THE SIZE OF PRODUCT, ONLY IN ACCORDANCE WITH THE ARCHITECT AND ENGINEER RECOMMENDATIONS, AND AS SCHEDULED WITH THE BUILDING MANAGEMENT. PATCH AND FILL SLEEVES, INSERTS, PENETRATIONS, AND CHANNELS WITH APPROPRIATE CODE APPROVED FIRE SEALING OR FILLING TO MATCH OR RESTORE THE ORIGINAL FIRE RATING OF THE CONSTRUCTION.
- B. MAKE FINAL CONNECTIONS TO VIBRATING EQUIPMENT, FIXTURES, AND DEVICES WITH FLEXIBLE METAL CONDUIT OR LIQUID TIGHT FLEXIBLE METAL CONDUIT AS REQUIRED. EXTEND GROUND WIRE THROUGH FLEXIBLE CONNECTIONS.
- C. INSTALL CONDUIT, FITTINGS, SUPPORTS, ETC. IN ACCORDANCE WITH CODES, STANDARDS, AND MANUFACTURERS RECOMMENDATIONS. THE VOLTAGES IDENTIFIED IN THE FOLLOWING SCHEDULE ARE LINE-TO-LINE OR LINE-TO-NEUTRAL. INTERIOR CONCEALED LOCATIONS ARE THOSE LOCATIONS WHICH ARE ABOVE CEILINGS, WITHIN WALLS, WITHIN FLOOR SLABS, AND WITHIN DEDICATED ELECTRICAL ROOMS. CONDUIT INSTALLATION SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:

VOLTAGE LOCATION	0V THRU 50V	ABOVE 50V THRU 250V	ABOVE 250V THRU 600V	ABOVE 600V
INTERIOR CONCEALED	EMT CONCEALED	EMT	<= 2" EMT >= 2 1/2" IMC	HWG
INTERIOR EXPOSED	EMT	<= 2" EMT >= 2 1/2" IMC	IMC	HWG

- D. INSTALL PULL BOXES, JUNCTION BOXES, AND OUTLET BOXES IN ACCORDANCE WITH CODES, STANDARDS, AND MANUFACTURING RECOMMENDATIONS. BOXES SHALL INCLUDE ACCESSIBLE COVERS, SHALL BE FABRICATED OF HEAVY GAGE GALVANIZED STEEL, AND SHALL BE SIZED WITH CODE TO ADEQUATELY FACILITATE PULLING AND CONNECTING THE QUANTITY OF WIRES, CABLES, AND FEEDERS CONTAINED. CONDUIT TERMINATIONS SHALL BE MADE WITH BUSHINGS AND LOCKNUTS. SUPPORTS FOR CONDUITS AND BOXES SHALL BE SUSPENDED DIRECTLY TO THE BUILDING STRUCTURAL COMPONENTS AND IN NO CASE SHALL THEY BE ATTACHED TO SUSPENDED CEILING GRID, DUCTWORK, OR PIPING COMPONENTS.
- E. INSTALL FEEDERS AND BRANCH CIRCUIT WIRING IN ACCORDANCE WITH CODES, STANDARDS, AND MANUFACTURERS RECOMMENDATIONS. INSTALL NORMAL POWER, EMERGENCY POWER, FIRE ALARM, AND LIFE SAFETY SYSTEMS WITHIN CONTINUOUS METAL RACEWAYS. INSTALL CONCEALED SECURITY AND COMMUNICATIONS WIRING WITHIN CONTINUOUS METAL RACEWAYS. SEPARATE EACH SYSTEM INTO INDEPENDENT RACEWAYS. PROVIDE CABLE SUPPORTS AS REQUIRED. TERMINATE CABLES PER CODE AND MANUFACTURERS RECOMMENDATIONS. PROVIDE TWO (2) HOLE LUGS FOR CABLE 250 kcmil AND LARGER. POWER WIRING INSULATION SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:

WIRE LOCATION	300 kcmil AND SMALLER	350 kcmil AND LARGER	ENVIRONMENTAL CONDITIONS
INTERIOR LOCATIONS	THHN/THWN	XHHW	DRY
EXTERIOR LOCATIONS	THHN/THWN THHN/THWN	XHHW XHHW-2	DAMP WET

- F. INSTALL ELECTRICAL DEVICES, INCLUDING LOCAL DISCONNECT SWITCHES, OVERCURRENT PROTECTION, RECEPTACLES, ETC. IN ACCORDANCE WITH CODES, STANDARDS, AND MANUFACTURERS RECOMMENDATIONS.

- G. INSTALL LIGHTING AND ASSOCIATED CONTROLS, INCLUDING FIXTURES, BALLASTS, LAMPS, TOGGLE SWITCHES IN ACCORDANCE WITH CODES, STANDARDS, AND MANUFACTURERS RECOMMENDATIONS.
- H. INSTALL SINGLE AND MULTIPLE DEVICE COVER PLATES AS REQUIRED. EXTEND EXISTING DEVICES TO FINISHED SURFACES AS REQUIRED.
- I. INSTALL FIRE ALARM AND OTHER LIFE SAFETY SYSTEMS IN ACCORDANCE WITH CODES, STANDARDS, AND MANUFACTURERS RECOMMENDATIONS.
- J. INSTALL INSCRIPTION PLATES AND IDENTIFICATION MARKINGS FOR PRODUCTS AND WRING INCLUDING THE SAME INSCRIPTIONS WHERE INDICATED ON THE CONTRACT DOCUMENTS. INSTALL PLASTIC LAMINATE NAMEPLATES ON ENCLOSURE FOR EACH DEVICE WITHIN METERING EQUIPMENT, DISTRIBUTION PANELBOARDS, BRANCH PANELBOARDS, MOTOR STARTERS, DISCONNECT SWITCHES, TRANSFORMERS, AND CONTACTORS. NAMEPLATES SHALL BE WHITE WITH BLACK CORE, 1 1/4 INCHES BY 3 INCHES MINIMUM, WITH 3/16 INCH LETTERING, SECURED TO EQUIPMENT WITH TWO MACHINE SCREWS. PREPARE AND INSTALL TYPE-WRITTEN PANEL DIRECTORY AND OTHER DEVICES WHOSE FUNCTION IS NOT READILY APPARENT. MARKERS SHALL BE SELF-STICKING FOR EACH WIRE AND CABLE AT TERMINATIONS AND AT EACH ACCESSIBLE POINT IN EQUIPMENT AND RACEWAY.
- K. CLEAN ELECTRICAL APPARATUS PRIOR TO COMPLETION OF CONSTRUCTION. KEEP WORK AREAS CLEAN AT ALL TIMES.
- L. ALTERATIONS AND DEMOLITION OF EXISTING SYSTEMS SHALL BE AS FOLLOWS:

- 1. PROVIDE ALL ALTERATIONS AND DEMOLITION OF THE EXISTING ELECTRICAL INSTALLATION AS REQUIRED, INCLUDING ANY INCIDENTAL MATERIALS TO EXECUTE ALL REMOVAL, REROUTING, RELOCATION, AND ANY OTHER MODIFICATIONS FOR PROPER ACCOMMODATION OF ALL NEW CONSTRUCTION AS INDICATED ON THE CONTRACT DOCUMENTS. ALL ALTERATIONS AND DEMOLITIONS SHALL BE AS INDICATED ON THE CONTRACT DOCUMENTS OR AS REQUIRED, INCLUDING ANY MODIFICATIONS NOT SPECIFICALLY IDENTIFIED ON ANY CONTRACT DOCUMENTS BUT REQUIRED TO COMPLETE ALL NEW CONSTRUCTION.
- 2. PROVIDE ALL MODIFICATIONS TO EXISTING EQUIPMENT AS REQUIRED OR AS INDICATED ON THE CONTRACT DOCUMENTS IN STRICT ACCORDANCE WITH THE EXISTING PRODUCT MANUFACTURERS RECOMMENDATIONS.
- 3. EXISTING RACEWAY, WIRE AND CABLE EXTENDING THROUGH THE CONSTRUCTION AREA BUT SERVING AREAS OUTSIDE THE CONTRACT SHALL BE REROUTED AND RECONNECTED AS REQUIRED. ALL MODIFICATIONS SHALL BE WITHOUT ANY INTERRUPTION TO THE BUILDING POWER, COMMUNICATIONS, SECURITY, FIRE ALARM AND LIFE SAFETY SYSTEMS, OR INTERFERENCE TO OTHER AREAS OR TENANTS. WHERE ANY MODIFICATIONS WOULD INTERFERE WITH THE DAILY OPERATIONS OF THE BUILDING OR OTHER TENANTS, AFTER-HOURS WORK OR TEMPORARY SERVICES SHALL BE PROVIDED WITH PRIOR WRITTEN APPROVAL FROM THE BUILDING.
- 4. EXISTING CONDUIT, WIRE, CABLE, SUPPORTS, HANGERS, AND OTHER ELECTRICAL INSTALLATION WHICH IS REMOVED, SHALL BE COMPLETELY REMOVED, BACK TO THE FIRST DEVICES OR THAT EQUIPMENT WHICH IS UNAFFECTED BY THE MODIFICATIONS. CONDUIT WHICH IS BURIED IN CONCRETE OR OTHERWISE INACCESSIBLE MAY BE ABANDONED AND CAPPED AT EACH END. ALL WIRE AND CABLE SHALL BE REMOVED FROM ANY ABANDONED CONDUIT.
- 5. EXISTING ELECTRICAL MATERIALS AND EQUIPMENT, INCLUDING LIGHTING FIXTURES, SWITCHES, RECEPTACLES, SPEAKERS, CONDUIT, OUTLET BOXES, FITTINGS, WIRE, CABLE, AND OTHER EQUIPMENT AND DEVICES WHICH ARE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STORED OR DISCARDED AS DIRECTED.
- 6. REUSE EXISTING ELECTRICAL PRODUCTS AS INDICATED ON THE CONTRACT DOCUMENTS ONLY AS IS FOUND PRACTICAL. EXAMINE THE CONDITION OF ALL SUCH PRODUCTS, DETERMINE SUITABILITY FOR RE-USE, AND PERIODICALLY NOTIFY THE ARCHITECT/ENGINEER OF FINDINGS FOR FINAL ACCEPTANCE OF RE-USE. WIRE AND CABLE FOR NEW CONSTRUCTION OR EXTENSION OF AN EXISTING INSTALLATION SHALL BE NEW, IN NO CASE SHALL EXISTING WIRE AND CABLE BE REUSED.
- 7. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR FULL EXTENT AND SCOPE OF PARTITION AND CEILING MODIFICATIONS.
- a. EXISTING CEILINGS TO REMAIN SHALL NOT BE ALTERED EXCEPT WHERE REMOVAL AND REPLACEMENT OF SURFACES IS REQUIRED TO MODIFY SYSTEMS WITHIN CEILING SPACE.
- b. EXISTING CEILINGS TO BE REMOVED SHALL INCLUDE DEMOLITION OF ALL FIXTURES, EQUIPMENT, SPEAKERS, RACEWAY, AND WIRE, INCLUDING OBSOLETE OR PREVIOUSLY ABANDONED PRODUCTS. REMAINING AREAS SHALL ONLY BE ALTERED AS REQUIRED AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- c. EXISTING PARTITIONS TO REMAIN SHALL NOT BE ALTERED EXCEPT WHERE REMOVAL AND REPLACEMENT OF SURFACES IS REQUIRED TO MODIFY SYSTEMS WITHIN PARTITIONS.
- d. EXISTING PARTITIONS TO BE REMOVED SHALL INCLUDE DEMOLITION OF ALL DEVICES, RACEWAY, AND WIRE INCLUDING ANY OBSOLETE OR PREVIOUSLY ABANDONED PRODUCTS. RACEWAY AND WIRING SYSTEMS SERVING OTHER REMAINING AREAS SHALL ONLY BE ALTERED AS REQUIRED AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- e. EXISTING FLOOR MOUNTED DEVICES SHALL BE DEMOLISHED. PROVIDE ABANDONING PLATES AND FIRE PROOFING AS REQUIRED.
- 8. REFER TO MECHANICAL AND PLUMBING DEMOLITION DRAWINGS FOR FULL EXTENT AND SCOPE OF ELECTRICALLY OPERATED EQUIPMENT MODIFICATIONS.
- a. DEMOLITION OF EXISTING MECHANICAL EQUIPMENT SHALL INCLUDE ASSOCIATED DISCONNECTS, RACEWAY, WIRE AND CONTROLS.



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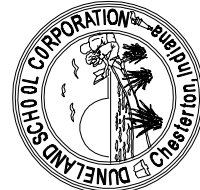
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THE HUBBARD GROUP, A UNIT OF SARGE DINEK, ILLINOIS, USA

DUNELAND SCHOOL CORPORATION

2018 MAIN OFFICE RENOVATION AT:

JACKSON ELEMENTARY SCHOOL

811 N. 400 E. VALPARAISO, INDIANA 46383



PROJECT NUMBER: 2-001  
PROJECT MANAGER: YG  
DRAWN BY: OAS LLC

USED FOR PROPOSAL: 01/07/08

SPECIFICATIONS -  
ELECTRICAL

E3.00