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- 1.C1.2 Demolition Plan Savage 1.C1.3 Site Engineering Plan Savage
- 1.C2.1 Topographical Survey 1 of 3 Tyler
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# Van Buren Public Schools Savage & Tyler Elementary Schools **Secured Entry Renovations**

Code Information

ELECTRICAL 1.ER. 0 Electrical Reference Information

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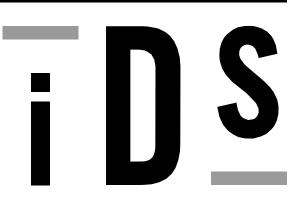
1.E5. 1 One Line Diagram 1.E6.1 Panelboard Schedules, Lighting fixture Schedule, Details

and Fire Alarm Diagram 1.E7.1 Details

> Tyler Elementary \_\_\_\_\_ 42200 Tyler Rd \_\_\_\_\_ Belleville, MI 48111 Site Map Registration Seal ž ECORSE RD SITE Signature Signature Signature TYLER RD Date Date Date



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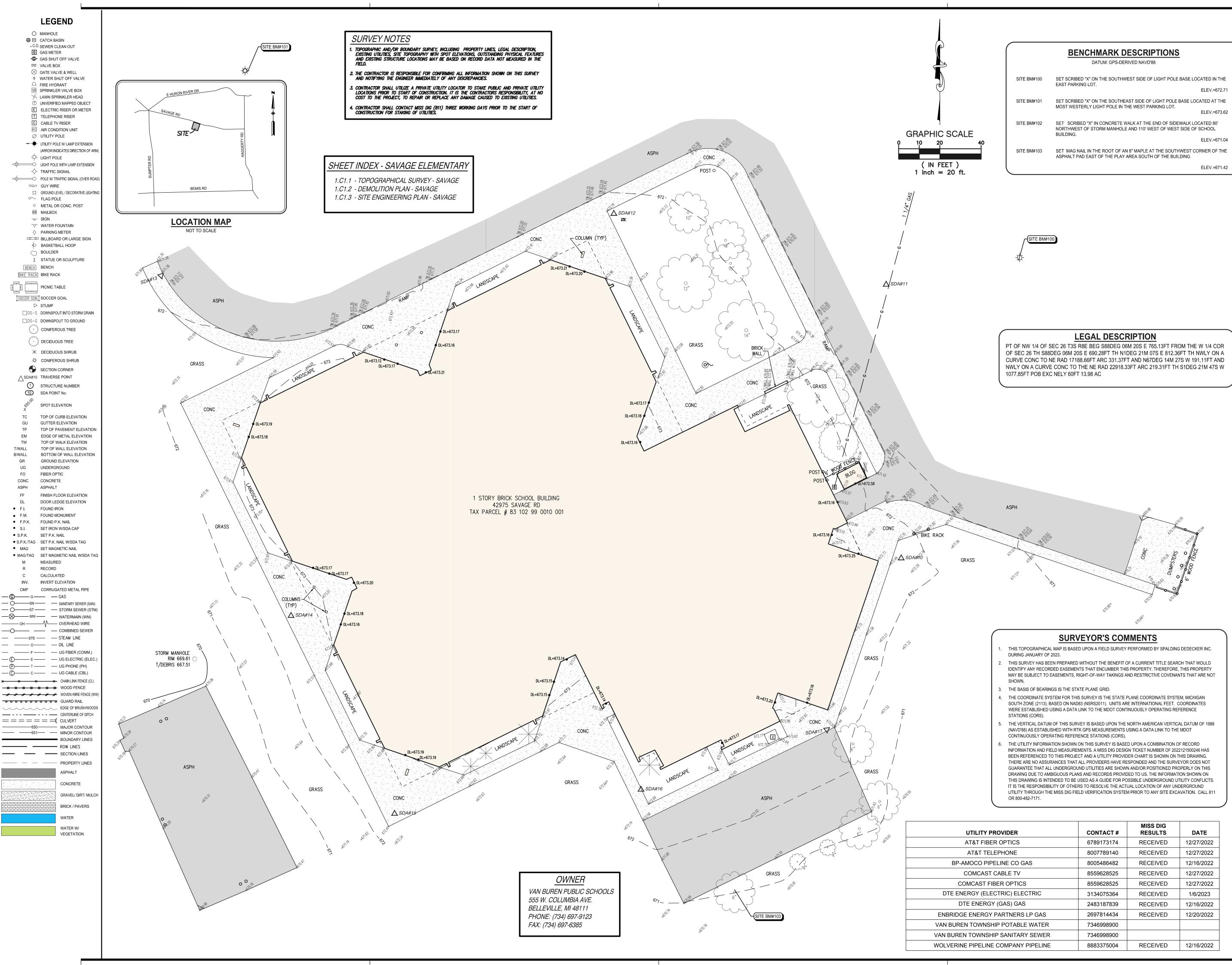
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Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
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ī <b>d</b> s Pr	oject Number
2011	1-3008

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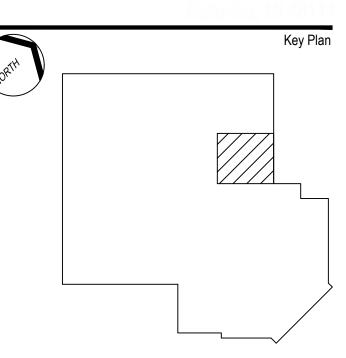
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Project Title



Van Buren Public Schools

# Savage & Tyler Elementary Schools Secured Entry Renovations



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	As Noted
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024

### $\circ$ 2024 INTEGRATED design solutionsluc

IDS Drawing Title Topographical Survey Savage

Drawing Number

1.C1.1

	EAST PARKING LOT.	
	ELEV.=672.71	
SITE BM#101	SET SCRIBED "X" ON THE SOUTHEAST SIDE OF LIGHT POLE BASE LOCATED AT THE MOST WESTERLY LIGHT POLE IN THE WEST PARKING LOT.	
	ELEV.=673.62	
SITE BM#102	SET SCRIBED "X" IN CONCRETE WALK AT THE END OF SIDEWALK LOCATED 80' NORTHWEST OF STORM MANHOLE AND 110' WEST OF WEST SIDE OF SCHOOL BUILDING.	
	ELEV.=671.04	
SITE BM#103	SET MAG NAIL IN THE ROOT OF AN 8" MAPLE AT THE SOUTHWEST CORNER OF THE ASPHALT PAD EAST OF THE PLAY AREA SOUTH OF THE BUILDING.	



OF SEC 26 TH S88DEG 06M 20S E 690.28FT TH N1DEG 21M 07S E 812.36FT TH NWLY ON A CURVE CONC TO NE RAD 17188.66FT ARC 331.37FT AND N67DEG 14M 27S W 191.11FT AND NWLY ON A CURVE CONC TO THE NE RAD 22918.33FT ARC 219.31FT TH S1DEG 21M 47S W

- IDENTIFY ANY RECORDED EASEMENTS THAT ENCUMBER THIS PROPERTY. THEREFORE, THIS PROPERTY MAY BE SUBJECT TO EASEMENTS, RIGHT-OF-WAY TAKINGS AND RESTRICTIVE COVENANTS THAT ARE NOT
- THE VERTICAL DATUM OF THIS SURVEY IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988
- INFORMATION AND FIELD MEASUREMENTS. A MISS DIG DESIGN TICKET NUMBER OF 2022121500246 HAS THERE ARE NO ASSURANCES THAT ALL PROVIDERS HAVE RESPONDED AND THE SURVEYOR DOES NOT GUARANTEE THAT ALL UNDERGROUND UTILITIES ARE SHOWN AND/OR POSITIONED PROPERLY ON THIS DRAWING DUE TO AMBIGUOUS PLANS AND RECORDS PROVIDED TO US. THE INFORMATION SHOWN ON THIS DRAWING IS INTENDED TO BE USED AS A GUIDE FOR POSSIBLE UNDERGROUND UTILITY CONFLICTS. UTILITY THROUGH THE MISS DIG FIELD VERIFICATION SYSTEM PRIOR TO ANY SITE EXCAVATION. CALL 811

	CONTACT #	MISS DIG	DATE
PROVIDER	CONTACT #	RESULTS	DATE
BER OPTICS	6789173174	RECEIVED	12/27/2022
ELEPHONE	8007789140	RECEIVED	12/27/2022
IPELINE CO GAS	8005486482	RECEIVED	12/16/2022
ST CABLE TV	8559628525	RECEIVED	12/27/2022
FIBER OPTICS	8559628525	RECEIVED	12/27/2022
LECTRIC) ELECTRIC	3134075364	RECEIVED	1/6/2023
GY (GAS) GAS	2483187839	RECEIVED	12/16/2022
SY PARTNERS LP GAS	2697814434	RECEIVED	12/20/2022
SHIP POTABLE WATER	7346998900		
SHIP SANITARY SEWER	7346998900		
NE COMPANY PIPELINE	8883375004	RECEIVED	12/16/2022

### ID S Project Number

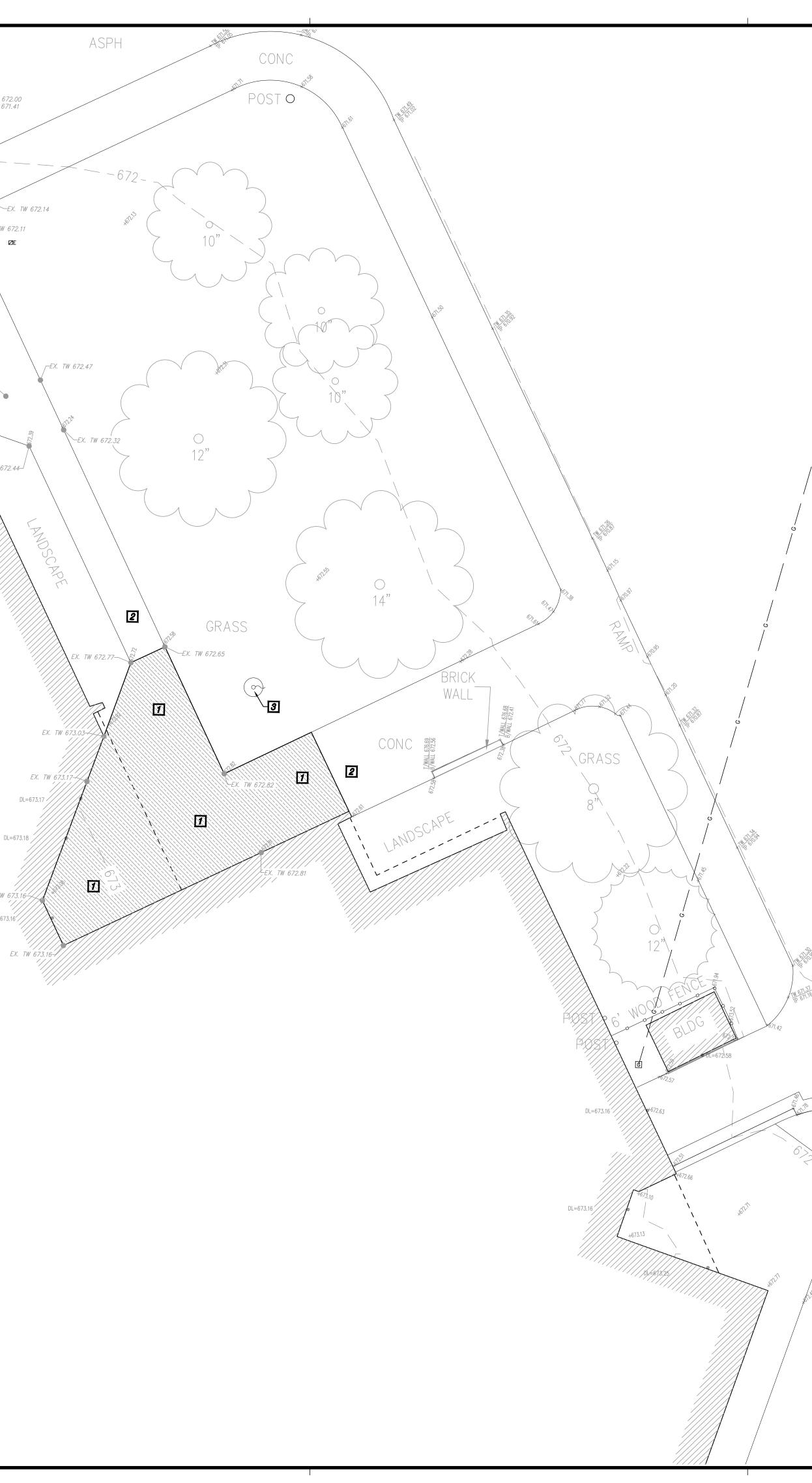
20111-3008 SDA Project No. NP24095

EX. TW 672.00 EX. TP 671.41 EX. TW 671.95-EX. TP 671.45 EX. TW 672.03-EX. TP 671.53 -EX. TW 672.11 ۲F  $\sim$  COLUMN (TYP) EX. TW 672.19-EX. TW 672.59-/ \$L=673.2}/ EX. TW 672.59 EX. TW 673.21- 19 = 673.28/ EX. TW 673.20-11 EX. TW 673.04-EX. TW 672.44-

1 STORY BRICK SCHOOL BUILDING 42975 SAVAGE RD TAX PARCEL # 83 102 99 0010 001

EX. TW 673.16

DL=673.16





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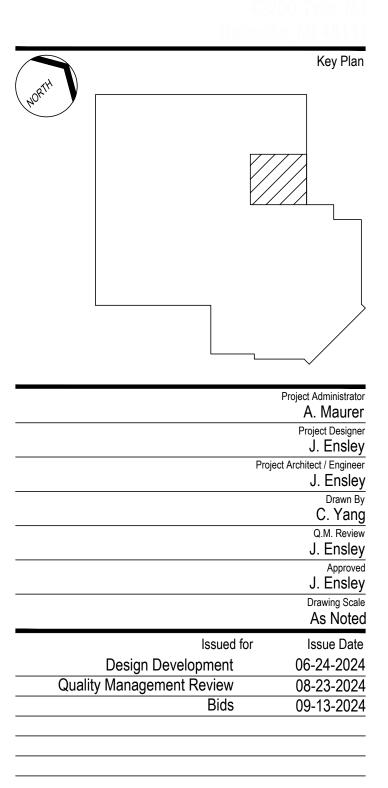
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Van Buren Public Schools

# Savage & Tyler Elementary Schools Secured Entry Renovations



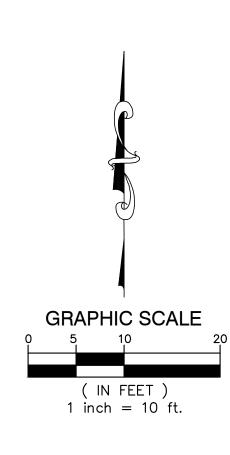
 $^{\circ}$  2024 integrated  $ext{design}$  solutionsluc IDS Drawing Title **Demolition Plan** Savage

Drawing Number

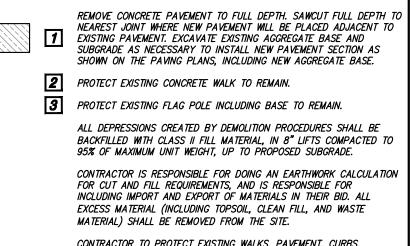
1.C1.2

ī **D** <u>s</u> Project Number

20111-3008 SDA Project No. NP24095



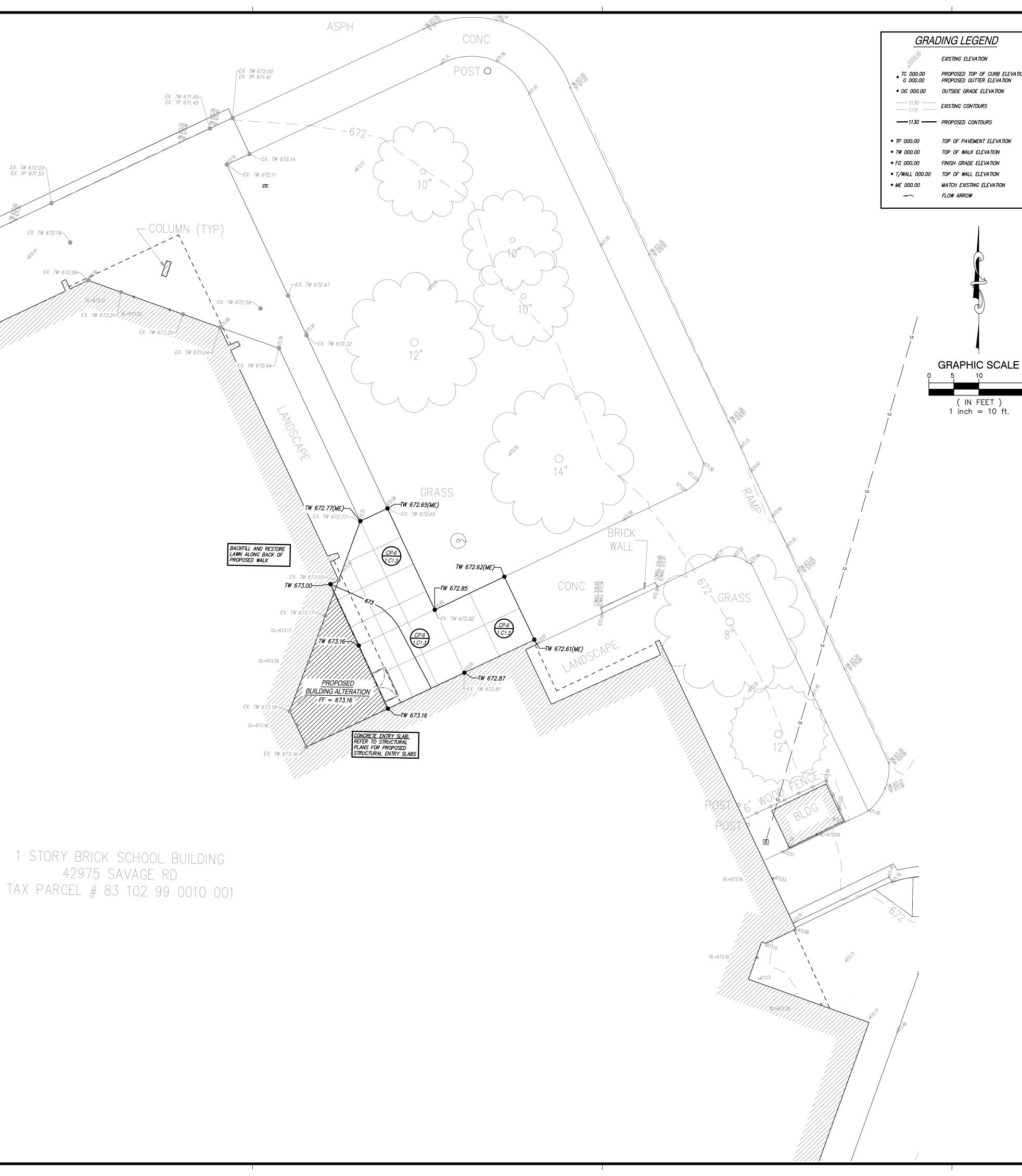
### DEMOLITION NOTES



CONTRACTOR TO PROTECT EXISTING WALKS, PAVEMENT, CURBS, GUTTERS, WALLS, FENCES, GATES, LANDSCAPING AND TREES TO REMAIN DURING CONSTRUCTION.

### BASE FILE DISCLAIMER

TOPOGRAPHICAL SURVEY HAS BEEN COMBINED WITH PROPOSED DESIGN INFORMATION FROM PREVIOUS CONCRETE SIDEWALK REPLACEMENT PROJECT TO CREATE CURRENT BASE FILE, INCLUDING EXISTING GRADE INFORMATION. CONTRACTOR TO FIELD VERIFY EXISTING GRADES PRIOR TO START OF WORK AND NOTIFY ENGINEER OF ANY ISSUES.



	LEGEN	V <u>D</u>	
YA TION	<ul> <li>PROPOSED WATERMAIN</li> <li>PROPOSED SANITARY</li> <li>PROPOSED STORM SEWER</li> <li>PROPOSED GAS MAIN</li> <li>PROPOSED ELECTRIC</li> <li>PROPOSED HYDRANT</li> <li>PROPOSED GATE</li> </ul>	<ul><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li><li><i>→</i></li>&lt;</ul>	PROPOSED SAN MANHOLE (SAN) PROPOSED STORM MANHOLE (MH) PROPOSED CATCH BASIN (CB) PROPOSED INLET (INL) PROPOSED END SECTION (ES)
	VALVE & WELL (GVW) PROPOSED TAPPING SLEEVE, VALVE & WELL (TSVW) STANDARD BITUMINOUS PAVEMENT	E C	PROPOSED FIELD CATCH BASIN (FCB) W/BEEHIVE COVER DR STANDPIPE (SP) W/ BAR GRATE COVER (COVER) (COVER) (COVER)
	HEAVY-DUTY BITUMINOUS PAVEMENT DEEP-STRENGTH BITUMINOUS PAVEMENT CONCRETE PAVEMENT	STORM SEWER STRUCTURE SANITARY SEWER STRUCTURE	(SEE DATA TABLE)
	CONCRETE SIDEWALK MILL PAVEMENT	WATERMAIN STRUCTURE	10 STRUCT. NO. XXX STRUCT. TYPE

### PAVING CONSTRUCTION NOTES

- EARTHWORK AND PAVEMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION UNLESS OTHERWISE NOTED IN THE FOLLOWING ITEMS.
- REMOVE ANY EXISTING TOPSOIL, VEGETATION, TREES AND OTHER DELETERIOUS MATERIALS TO EXPOSE THE SUBGRADE SOIL. TREE ROOTS SHALL BE COMPLETELY REMOVED.
- EXCAVATE TO THE DEPTH OF THE FINAL SUBGRADE ELEVATION TO ALLOW FOR GRADE CHANGES AND THE PLACEMENT OF THE RECOMMENDED PAVEMENT SYSTEM.
- 4. THE TOP 12 INCHES OF THE EXPOSED SUBGRADE SHALL BE COMPACTED TO A DENSITY NO LESS THAN 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR (ASTM D 1557–91).
- THE FINAL SUBGRADE SHALL BE THOROUGHLY PROOFROLLED UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS WHICH CANNOT BE MECHANICALLY STABILIZED SHALL BE REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
- 5. THE AGGREGATE BASE SHALL BE COMPACTED TO A DENSITY NO LESS THAN 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR (ASTM D 1557–91). THE BASE SHALL EXTEND A MINIMUM OF 1 FOOT BEYOND THE PAVED EDGE.
- CONTRACTOR SHALL PROTECT EXISTING CURB, GUTTER, SIDEWALK, WALLS, FENCES AND ALL OTHER EXISTING SITE FEATURES NOT INDICATED FOR REMOVAL OR REHABILITATION.
- 3. PLACE EXPANSION JOINTS WHERE NEW CONCRETE PAVEMENT OR WALKS ABUT BUILDING WALLS (PROPOSED OR EXISTING), COLUMN WALLS OR BASES, CONCRETE FOUNDATIONS OR BASES, CURBS, OR EXISTING CONCRETE PAVEMENT. PLACE JOINT SEALANT ON ALL EXPANSION JOINTS.
- . CONTRACTOR TO CONSTRUCT CONTRACTION AND EXPANSION JOINTS IN ALL NEW CONCRETE PAVEMENT. CONTRACTION JOINTS SHALL BE TOOLED WHERE SIDEWALK WIDTH IS 8' OR LESS, AND SHALL BE SPACED EQUAL TO THE WIDTH OF THE PAVEMENT (I.E. 8' SPACING FOR 8' WIDE WALK), BUT NOT MORE THAN 10' APART. PLACE EXPANSION JOINTS WITH JOINT SEALANT AT MAXIMUM 50' SPACING. CONTRACTOR SHALL GENERALLY MATCH THE JOINT PATTERNS FOR CONCRETE PAVEMENT WHEN SHOWN ON THE PLANS.
- 10. CONCRETE PAVEMENT SHALL MEET THE REQUIREMENTS FOR MDOT GRADE 4000 CONCRETE PER THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

### GRADING NOTES

20

- 1. CONTRACTOR TO PLACE ALL NEW PAVEMENT TO THE GRADES INDICATED. OR MATCH ORIGINAL GRADES IF NEW GRADES ARE NOT SHOWN. CONTRACTOR SHALL CONFIRM MINIMUM 1% PAVEMENT SLOPES ARE ATTAINED IN ALL AREAS.
- 2. PROPOSED GRADES MAY BE BASED ON AN INTERPOLATION OF DATA SHOWN ON THE TOPOGRAPHIC SURVEY. THIS INTERPOLATED DATA IS APPROXIMATE AND COULD DIFFER SLIGHTLY BASED ON THE ACCURACY OF THE SURVEY. CONTRACTOR SHALL CONFIRM THAT THE PROPOSED GRADES SHOWN ON THIS PLAN WILL NOT CREATE A STANDING WATER CONDITION (I.E. A LOW SPOT OR PAVEMENT SLOPES LESS THAN 1%) OR AN UNSAFE CONDITION WITH SLOPES IN EXCESS OF 5% CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF THEY BELIEVE THAT ONE OF THESE SITUATIONS WILL OCCUR BASED ON THE PROPOSED GRADES.
- 3. ALL PAVEMENT PLACED WITHIN BARRIER FREE PARKING AREAS (STALLS AND ACCESS AISLES) SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION, INCLUDING MEASURED DIAGONALLY ACROSS THE AREAS. CONTRACTOR SHALL ADJUST SLOPES AS NECESSARY TO PROVIDE ADA COMPLIANT SLOPES AS WELL AS PROVIDING RE-GRADED TRANSITION SLOPES OUTSIDE OF THE BARRIER FREE PARKING AREAS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF TRANSITION ZONES WILL EXCEED MAXIMUM 5% SLOPES. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE PATTERNS WITH ALL NECESSARY PAVEMENT RE-GRADING.
- 4. ALL BARRIER FREE RAMPS AND ADA ACCESSIBLE ROUTES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VERSION OF MDOT DETAIL R-28 "SIDEWALK RAMP AND DETECTABLE WARNING DETAILS".
- 5. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING STORM WATER RUNOFF DURING CONSTRUCTION OPERATIONS. OF PARTICULAR CONCERN WILL BE THE TIME PERIOD AFTER THE SITE HAS BEEN STRIPPED AND NOT YET RESTORED, BUILT UPON, OR PAVED. CONTRACTOR MUST INSTALL OR CONSTRUCT APPROPRIATE TEMPORARY MEASURES TO PROTECT ADJACENT PROPERTIES.

### RESTORATION NOTE

RESTORE ALL DISTURBED NON-PAVED AREAS WITH 3" OF CLEAN TOPSOIL AND SEED MIX (30% KENTUCKY BLUEGRASS, 20% PERENNIAL RYEGRASS, 50% CREEPING RED FESCUE). PLACE MULCH IN ALL SEEDED AREAS. ON SLOPES IN EXCESS OF 10 HORIZONTAL TO 1 VERTICAL PLACE NORTH AMERICAN GREEN DS150 MULCH BLANKET IMMEDIATELY AFTER SEEDING. USE METAL STAPLES PER MANUFACTURERS RECOMMENDATIONS TO HOLD MATTING IN PLACE.

PLAN GRADE

DETAIL

6" CONCRETE WALK

6" CONCRETE PAVEMENT 4" LIMESTONE AGG. BASE, 21AA OR MDOT CLASS II SAND

<u>CP-6</u> 1.C1.3



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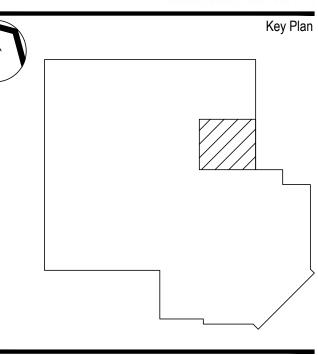
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Van Buren Public Schools

# Savage & Tyler Elementary Schools Secured Entry Renovations



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	C. Yan
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	J. Ensle
	Approve
	J. Ensle
	Drawing Sca
	As Note
	Issue Dat
0	6-24-202
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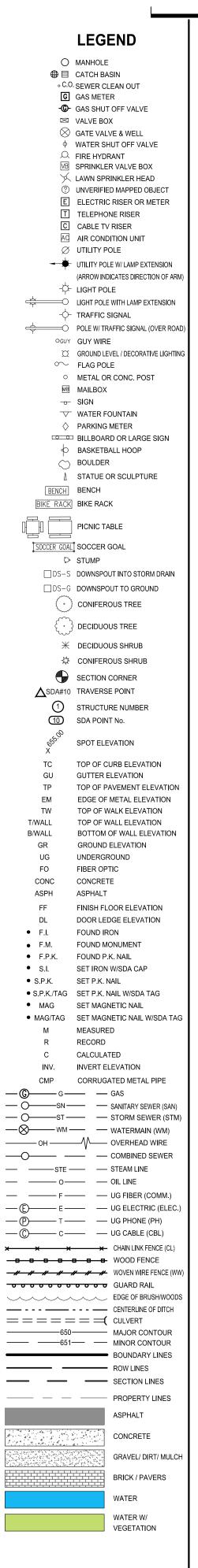
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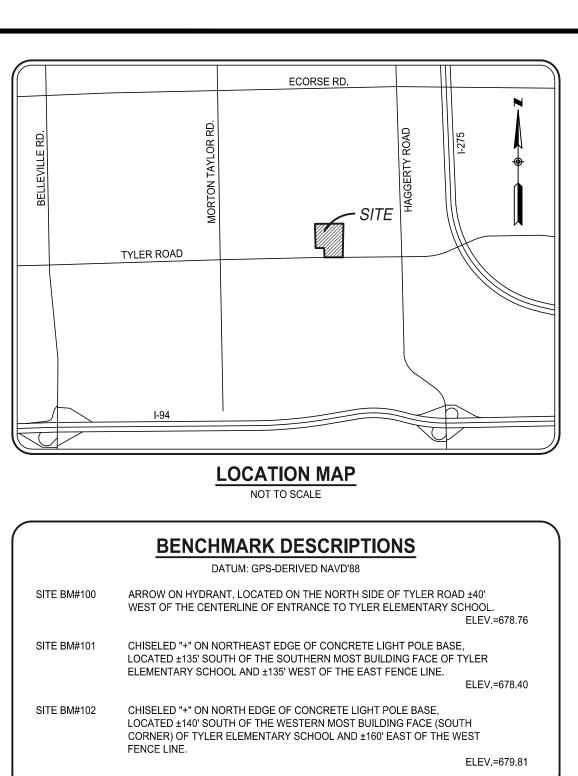
IDS Drawing Title Site Engineering Plan Savage

i D S Project Number

Drawing Number 1.C1.3

20111-3008 SDA Project No. NP24095





### SURVEYOR'S COMMENTS

THIS TOPOGRAPHICAL MAP IS BASED UPON A FIELD SURVEY PERFORMED BY SPALDING DEDECKER INC. DURING JANUARY OF 2023. THE PROPERTY LINES/RIGHT-OF-WAY LINES SHOWN ON THIS TOPOGRAPHICAL SURVEY ARE INTENDED TO BE AN APPROXIMATE GRAPHICAL REPRESENTATION OF THE PROPERTY LINES. SPALDING DEDECKER HAS BASED THE PROPERTY LINES AND RIGHT OF WAY LINES UPON A COMBINATION OF A PROVIDED LEGAL DESCRIPTION, FOUND FIELD MONUMENTATION AND OCCUPATION. PROPERTY LINES AS SHOWN IN DRAWING ARE BASED UPON THIS WORK. VARIATIONS MAY EXIST BETWEEN THE EXISTING PROPERTY DESCRIPTION AS SHOWN AND THE GRAPHICAL LINES COMPUTED IN THE DRAWING. A COMPLETE

PROPERTY LINE ANALYSIS IS NOT PART OF THE SCOPE OF SERVICES AND PROPERTY CORNERS HAVE NOT BEEN SET IN THE FIELD PER THE AGREED TO SCOPE OF SERVICES. THIS SURVEY HAS BEEN PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SEARCH THAT WOULD IDENTIFY ANY RECORDED EASEMENTS THAT ENCUMBER THIS PROPERTY. THEREFORE, THIS PROPERTY MAY BE SUBJECT TO EASEMENTS, RIGHT-OF-WAY TAKINGS AND RESTRICTIVE COVENANTS THAT ARE NOT SHOWN.

THE BASIS OF BEARINGS IS THE STATE PLANE GRID.

THE COORDINATE SYSTEM FOR THIS SURVEY IS THE STATE PLANE COORDINATE SYSTEM, MICHIGAN SOUTH ZONE (2113), BASED ON NAD83 (NSRS2011). UNITS ARE INTERNATIONAL FEET. COORDINATES WERE ESTABLISHED USING A DATA LINK TO THE MDOT CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS).

6. THE VERTICAL DATUM OF THIS SURVEY IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88) AS ESTABLISHED WITH RTK GPS MEASUREMENTS USING A DATA LINK TO THE MDOT CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS).

 THE PARKING LOT STRIPING SHOWN ON THIS SURVEY IS APPROXIMATE. DIMENSIONAL AND/OR ORIENTATION VARIATIONS MAY EXIST. THIS DRAWING SHOULD NOT BE USED FOR A PARKING SPACE COUNT.

THE UTILITY INFORMATION SHOWN ON THIS SURVEY IS BASED UPON A COMBINATION OF RECORD INFORMATION AND FIELD MEASUREMENTS. A MISS DIG DESIGN TICKET NUMBER OF 2022121500130 HAS BEEN REFERENCED TO THIS PROJECT AND A UTILITY PROVIDER CHART IS SHOWN ON THIS DRAWING. THERE ARE NO ASSURANCES THAT ALL PROVIDERS HAVE RESPONDED AND THE SURVEYOR DOES NOT GUARANTEE THAT ALL UNDERGROUND UTILITIES ARE SHOWN AND/OR POSITIONED PROPERLY ON THIS DRAWING DUE TO AMBIGUOUS PLANS AND RECORDS PROVIDED TO US. THE INFORMATION SHOWN ON THIS DRAWING IS INTENDED TO BE USED AS A GUIDE FOR POSSIBLE UNDERGROUND UTILITY CONFLICTS. IT IS THE RESPONSIBILITY OF OTHERS TO RESOLVE THE ACTUAL LOCATION OF ANY UNDERGROUND UTILITY THROUGH THE MISS DIG FIELD VERIFICATION SYSTEM PRIOR TO ANY SITE EXCAVATION. CALL 811 OR 800-482-7171.

### LEGAL DESCRIPTION SOURCE: BS&A ONLINE

OWNER: VAN BUREN PUBLIC SCHOOLS TAX PARCEL ID: 83-044-99-0001-005

ADDRESS: 42200 TYLER ROAD

PT OF SE 1/4 SEC 11 T3S R9E DESC AS BEG N88DEG 02M 33S W 1907.70 FT FROM SE 1/4 COR SEC 11 TH N88DEG 02M 33S W 405.97FT TH NODEG 28M 45S E 150FT TH N88DEG 02M 33S W 150FT TH NODEG 28M 45S E 1060.92FT TH S89DEG 31 M 15S E 554.71 FT TH SODEG 28M 45S W 875. 7FT TH SODEG 17M 41S W 350.15FT TO POB 14.44 AC

### UTILITY CHART

UTILITY PROVIDER	CONTACT #	MISS DIG RESULTS	DATE
123.NET, INC. FIBER OPTICS	(248) 431-4584	NOT RECEIVED	
AT&T FIBER OPTICS	(678) 917-3174	RECEIVED	12/29/2022
AT&T TELEPHONE	(800) 778-9140	RECEIVED	12/29/2022
COMCAST CABLE TV	(855) 962-8525	RECEIVED	12/29/2022
COMCAST FIBER OPTICS	(855) 962-8525	RECEIVED	12/29/2022
DTE ENERGY (ELECTRIC) ELECTRIC	(313) 407-5364	RECEIVED	1/6/2023
DTE ENERGY (GAS) GAS	(248) 318-7839	RECEIVED	12/19/2023
GREAT LAKES WATER AUTHORITY POTABLE WATER	(313) 799-0289	RECEIVED	12/15/2022
VAN BUREN TOWNSHIP POTABLE WATER	(734) 699-8900	NOT RECEIVED	
VAN BUREN TOWNSHIP SANITARY SEWER	(734) 699-8900	NOT RECEIVED	





### INTEGRATED design SOLUTIONS architecture engineering interiors & technology 1441 west long lake, suite 200

troy, michigan 48098 5211 cascade road SE, suite 300 grand rapids, michigan 49546 248.823.2100 www.ids-michigan.com

<u>CIVIL ENGINEER</u> SPALDING DeDECKER 905 south blvd. E rochester hills, michigan 48307 800.598.1600 www.sda-eng.com

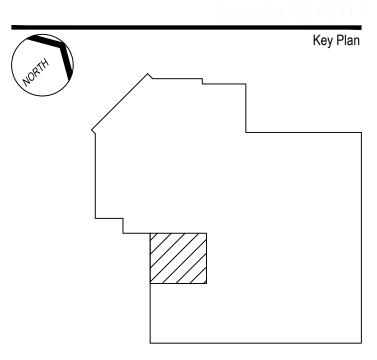
STRUCTURAL ENGINEER SDI Structures 275 east liberty ann arbor, michigan 48101 734.213.6091 www.sdistructures.com

Project Title



Van Buren Public Schools

## Savage & Tyler Elementary Schools Secured Entry Renovations



	Project Administrator
	A. Maurer
	Project Designer
	J. Ensley
Pro	ject Architect / Engineer
	J. Ensley
	Drawn By
	C. Yang
	Q.M. Review
	J. Ensley
	Approved
	J. Ensley
	Drawing Scale
	As Noted
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024

 $\circ$  2024 Integrated design solutionsllc

IDS Drawing Title Topographical Survey 1 of 3 Tyler

Drawing Number

1.C2.1

i D S Project Number

20111-3008

SDA Project No. NP24096

555 W. COLUMBIA AVE. BELLEVILLE, MI 48111 PHONE: (734) 697-9123 FAX: (734) 697-6385

VAN BUREN PUBLIC SCHOOLS

OWNER

**GRAPHIC SCALE** 

( IN FEET )1 inch = 60 ft

### SURVEY NOTES

- . TOPOGRAPHIC AND/OR BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS MAY BE BASED ON RECORD DATA NOT MEASURED IN THE FIELD.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL INFORMATION SHOWN ON THIS SURVEY AND NOTIFYING THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- CONTRACTOR SHALL UTILIZE A PRIVATE UTILITY LOCATOR TO STAKE PUBLIC AND PRIVATE UTILITY LOCATIONS PRIOR TO START OF CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY, AT NO COST TO THE PROJECT, TO REPAIR OR REPLACE ANY DAMAGE CAUSED TO EXISTING UTILITIES.
- 4. CONTRACTOR SHALL CONTACT MISS DIG (811) THREE WORKING DAYS PRIOR TO THE START OF CONSTRUCTION FOR STAKING OF UTILITIES.

### SHEET INDEX - TYLER ELEMENTARY

- 1.C2.1 TOPOGRAPHICAL SURVEY 1 OF 3 TYLER 1.C2.2 - TOPOGRAPHICAL SURVEY - 2 OF 3 - TYLER
- 1.C2.3 TOPOGRAPHICAL SURVEY 3 OF 3 TYLER 1.C2.4 - DEMOLITION PLAN - TYLER
- 1.C2.5 SITE ENGINEERING PLAN TYLER





### INTEGRATED design SOLUTIONS architecture engineering interiors & technology

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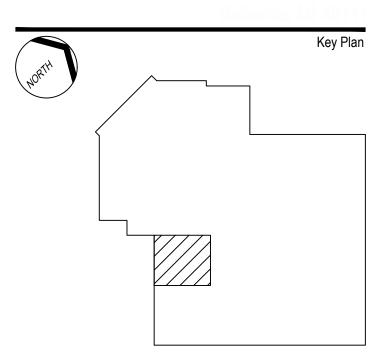
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Project Title



Van Buren Public Schools

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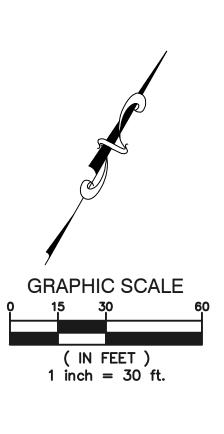
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IDS Drawing Title Topographical Survey 2 of 3 Tyler

Drawing Number

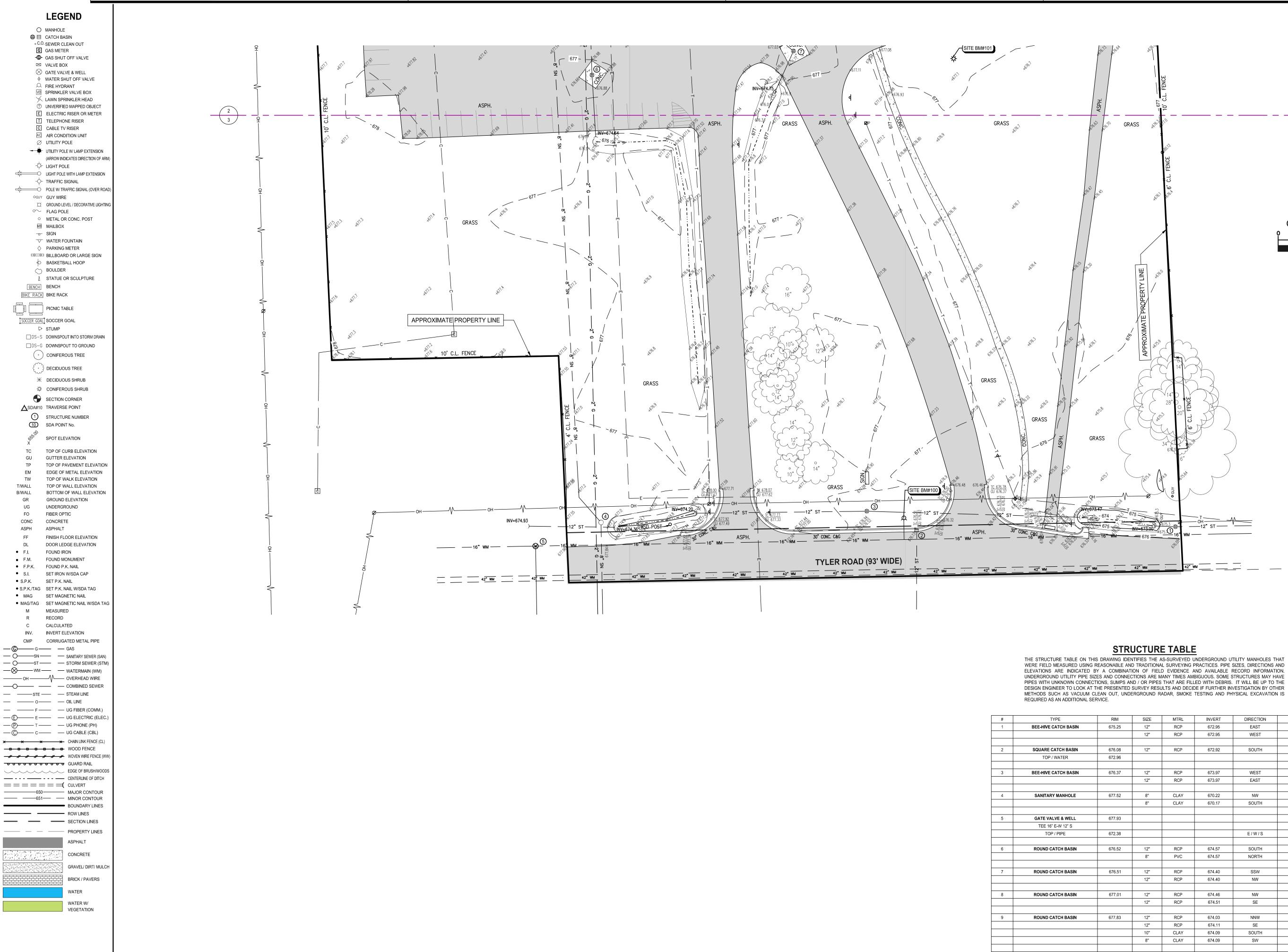
1.C2.2

ī **D** <u>s</u> Project Number



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**20111-3008** SDA Project No. NP24096



#	TYPE	RIM	SIZE	MTRL	INVERT	DIRECTION	CONNECT
1	BEE-HIVE CATCH BASIN	675.25	12"	RCP	672.95	EAST	ES
			12"	RCP	672.95	WEST	ES
2	SQUARE CATCH BASIN	676.08	12"	RCP	672.92	SOUTH	
	TOP / WATER	672.96					
3	BEE-HIVE CATCH BASIN	676.37	12"	RCP	673.97	WEST	ES
			12"	RCP	673.97	EAST	ES
4	SANITARY MANHOLE	677.52	8"	CLAY	670.22	NW	11
			8"	CLAY	670.17	SOUTH	
5	GATE VALVE & WELL	677.93					
	TEE 16" E-W 12" S						
	TOP / PIPE	672.38				E/W/S	
		070 50	40"	DOD	074.57		50
6	ROUND CATCH BASIN	676.52	12"	RCP	674.57	SOUTH	ES
			8"	PVC	674.57	NORTH	
7	ROUND CATCH BASIN	676.51	12"	RCP	674.40	SSW	ES
			12"	RCP	674.40	NW	8
8	ROUND CATCH BASIN	677.01	12"	RCP	674.46	NW	9
			12"	RCP	674.51	SE	7
9	ROUND CATCH BASIN	677.83	12"	RCP	674.03	NNW	
			12"	RCP	674.11	SE	8
			10"	CLAY	674.09	SOUTH	
			8"	CLAY	674.09	SW	10
10	ROUND CATCH BASIN	677.11	8"	CLAY	674.76	NNE	9
11	SANITARY MANHOLE	679.25	6"	CLAY	673.80	EAST	BLDG
			8"	CLAY	673.25	SOUTH	4
10		077.50	01		075.70	NODTU	
12		677.56	6" 6"	CPP	675.76	NORTH SOUTH	
		075.00	0	CLAY	675.14	SOUTH	
	TOP / DEBRIS	675.26					



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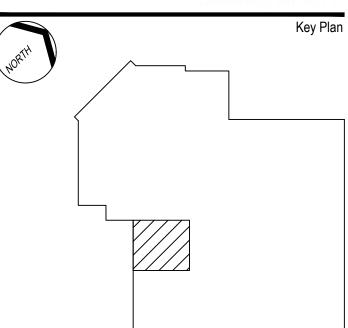
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Van Buren Public Schools

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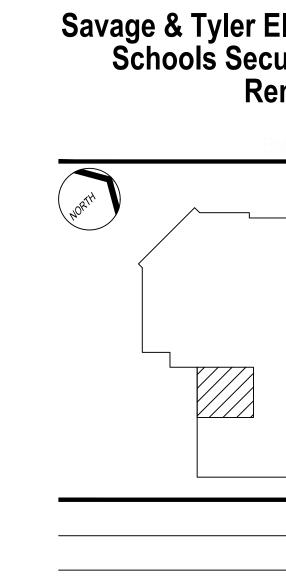
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IDS Drawing Title **Topographical Survey** 3 of 3 Tyler

Drawing Number

i **D** <u>s</u> Project Number

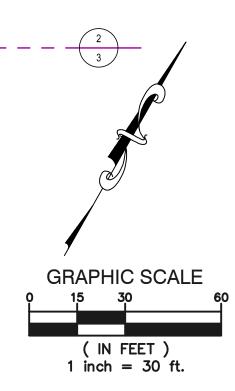
20111-3008



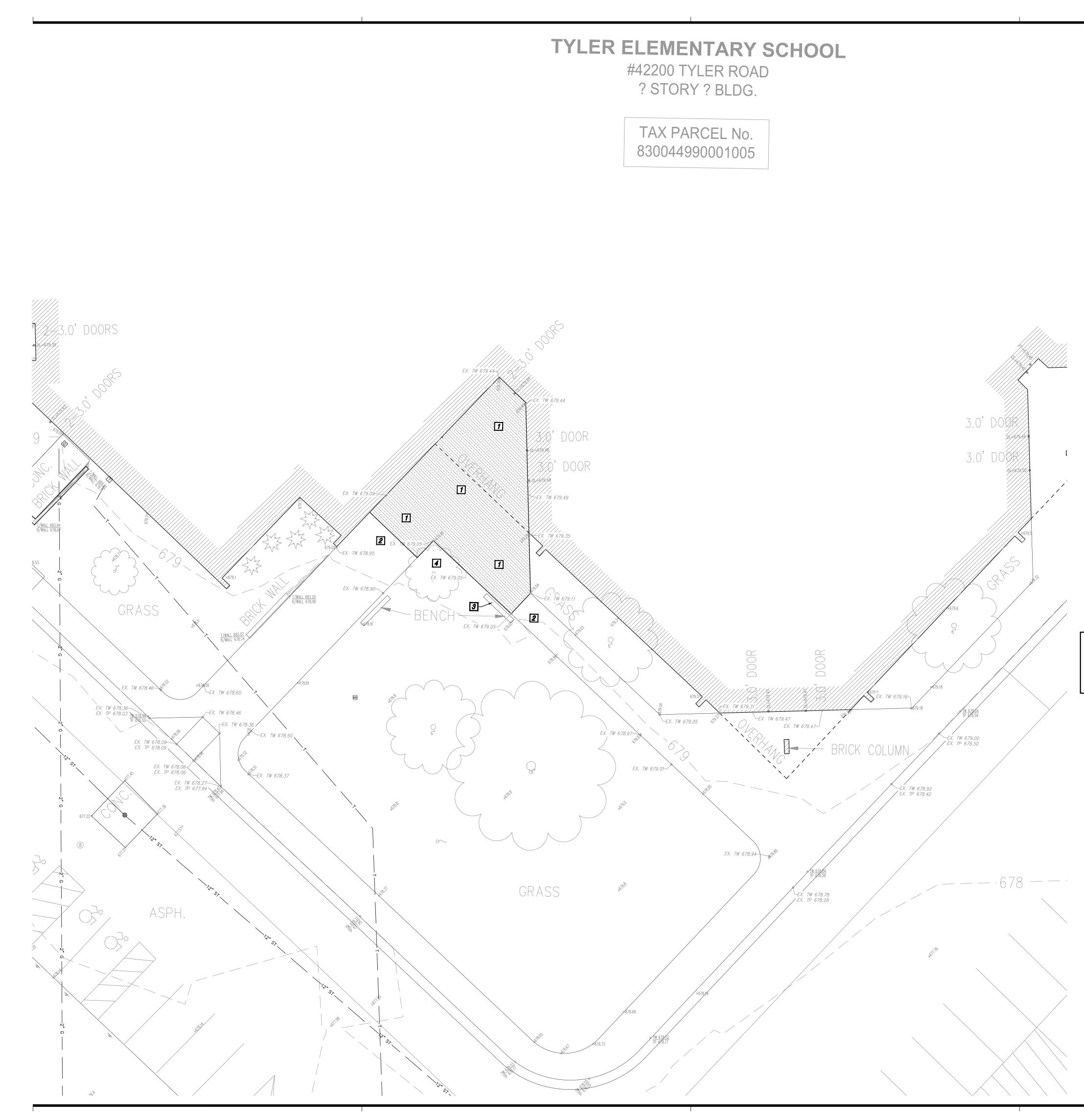
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1.C2.3 SDA Project No. NP24096





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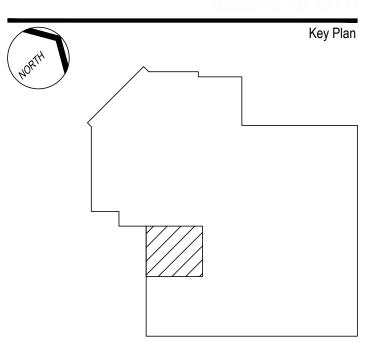
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Project Title



Van Buren Public Schools

# Savage & Tyler Elementary Schools Secured Entry Renovations



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	J. Ensley
	Project Architect / Engineer
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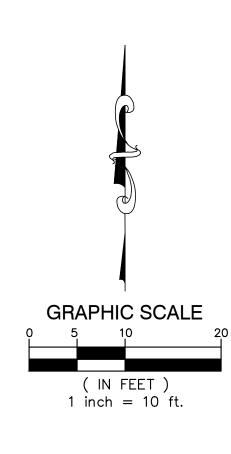
© 2024 INTEGRATED design SOLUTIONSLLC IDS Drawing Title Demolition Plan Tyler

Drawing Number

1.C2.4

ī**D**≗ Project Number

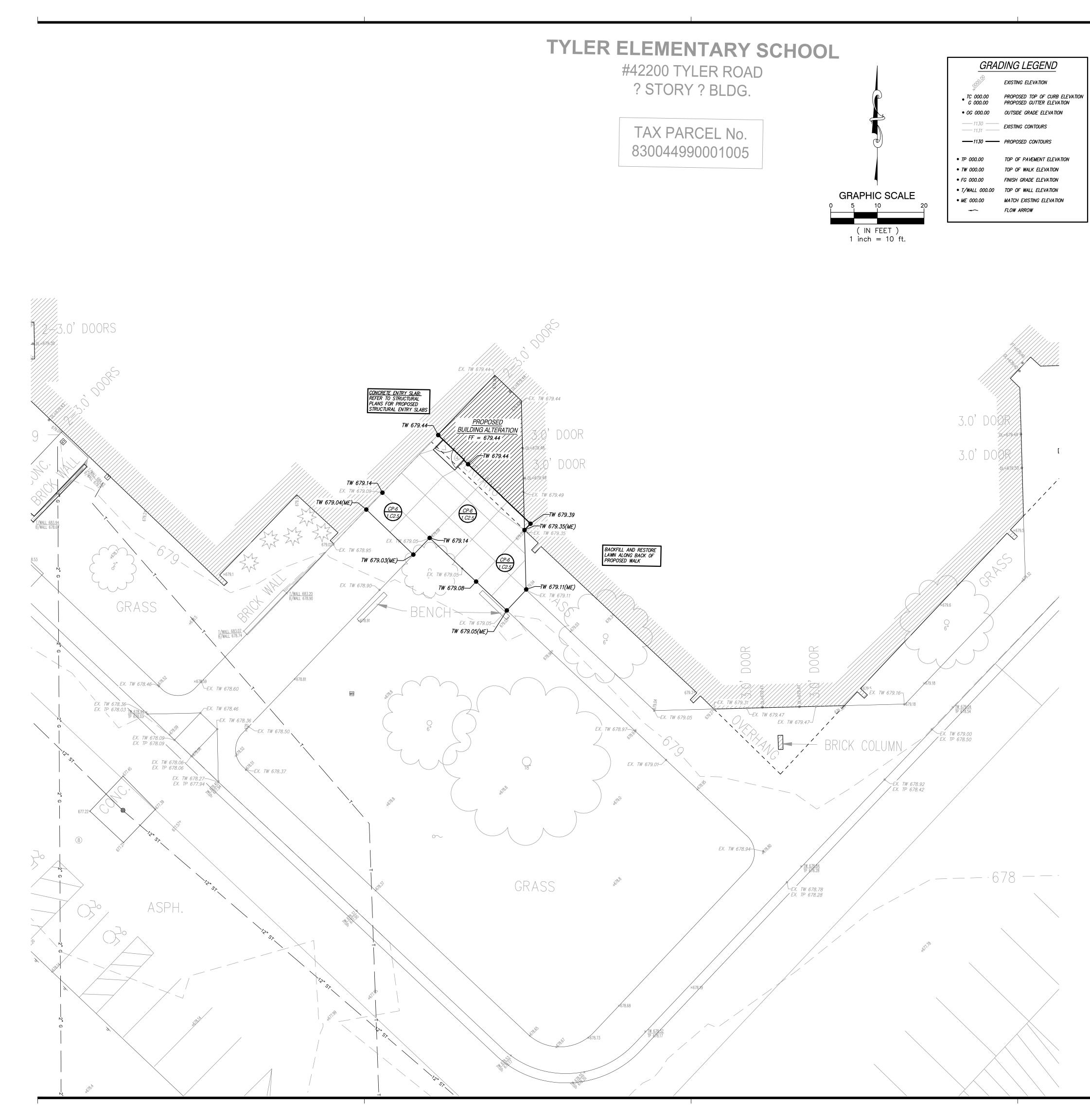




# DEMOLITION NOTES Image: Strain Stra

BASE FILE DISCLAIMER

TOPOGRAPHICAL SURVEY HAS BEEN COMBINED WITH PROPOSED DESIGN INFORMATION FROM PREVIOUS CONCRETE SIDEWALK REPLACEMENT PROJECT TO CREATE CURRENT BASE FILE, INCLUDING EXISTING GRADE INFORMATION. CONTRACTOR TO FIELD VERIFY EXISTING GRADES PRIOR TO START OF WORK AND NOTIFY ENGINEER OF ANY ISSUES.





# INTEGRATED design Solutions architecture engineering interiors & technology

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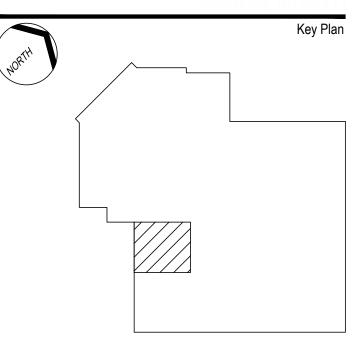
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Van Buren Public Schools

## Savage & Tyler Elementary Schools Secured Entry Renovations



	Project Administrat
	A. Maure
	Project Design
	J. Ensle
F	Project Architect / Engine
	J. Ensle
	Drawn I
	C. Yan
	Q.M. Revie
	J. Ensle
	Approv
	J. Ensle
	Drawing Sca
	As Note
Issued for	Issue Dat
Design Development	06-24-202
Quality Management Review	08-23-202
Bids	09-13-202

 $^{\circ}$  2024 Integrated  $ext{design solutionsllc}$  IDS Drawing Title

Site Engineering Plan Tyler

Drawing Number

1.C2.5

i D S Project Number

### PAVING CONSTRUCTION NOTES

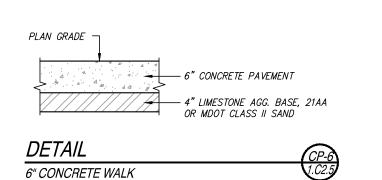
- 1. EARTHWORK AND PAVEMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION UNLESS OTHERWISE NOTED IN THE FOLLOWING ITEMS.
- 2. REMOVE ANY EXISTING TOPSOIL, VEGETATION, TREES AND OTHER DELETERIOUS MATERIALS TO EXPOSE THE SUBGRADE SOIL. TREE ROOTS SHALL BE COMPLETELY REMOVED.
- 3. EXCAVATE TO THE DEPTH OF THE FINAL SUBGRADE ELEVATION TO ALLOW FOR GRADE CHANGES AND THE PLACEMENT OF THE RECOMMENDED PAVEMENT SYSTEM.
- AND THE PLACEMENT OF THE RECOMMENDED PAVEMENT SYSTEM. 4. THE TOP 12 INCHES OF THE EXPOSED SUBGRADE SHALL BE COMPACTED TO A DENSITY NO LESS THAN 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR (ASTM D 1557–91).
- 5. THE FINAL SUBGRADE SHALL BE THOROUGHLY PROOFROLLED UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS WHICH CANNOT BE MECHANICALLY STABILIZED SHALL BE REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
- 6. THE AGGREGATE BASE SHALL BE COMPACTED TO A DENSITY NO LESS THAN 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR (ASTM D 1557–91). THE BASE SHALL EXTEND A MINIMUM OF 1 FOOT BEYOND THE PAVED EDGE.
- 7. CONTRACTOR SHALL PROTECT EXISTING CURB, GUTTER, SIDEWALK, WALLS, FENCES AND ALL OTHER EXISTING SITE FEATURES NOT INDICATED FOR REMOVAL OR REHABILITATION.
- 8. PLACE EXPANSION JOINTS WHERE NEW CONCRETE PAVEMENT OR WALKS ABUT BUILDING WALLS (PROPOSED OR EXISTING), COLUMN WALLS OR BASES, CONCRETE FOUNDATIONS OR BASES, CURBS, OR EXISTING CONCRETE PAVEMENT. PLACE JOINT SEALANT ON ALL EXPANSION JOINTS.
- 9. CONTRACTOR TO CONSTRUCT CONTRACTION AND EXPANSION JOINTS IN ALL NEW CONCRETE PAVEMENT. CONTRACTION JOINTS SHALL BE TOOLED WHERE SIDEWALK WIDTH IS 8' OR LESS, AND SHALL BE SPACED EQUAL TO THE WIDTH OF THE PAVEMENT (I.E. 8' SPACING FOR 8' WIDE WALK), BUT NOT MORE THAN 10' APART. PLACE EXPANSION JOINTS WITH JOINT SEALANT AT MAXIMUM 50' SPACING. CONTRACTOR SHALL GENERALLY MATCH THE JOINT PATTERNS FOR CONCRETE PAVEMENT WHEN SHOWN ON THE PLANS.
- 10. CONCRETE PAVEMENT SHALL MEET THE REQUIREMENTS FOR MDOT GRADE 4000 CONCRETE PER THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

### GRADING NOTES

- . CONTRACTOR TO PLACE ALL NEW PAVEMENT TO THE GRADES INDICATED, OR MATCH ORIGINAL GRADES IF NEW GRADES ARE NOT SHOWN. CONTRACTOR SHALL CONFIRM MINIMUM 1% PAVEMENT SLOPES ARE ATTAINED IN ALL AREAS.
- 2. PROPOSED GRADES MAY BE BASED ON AN INTERPOLATION OF DATA SHOWN ON THE TOPOGRAPHIC SURVEY. THIS INTERPOLATED DATA IS APPROXIMATE AND COULD DIFFER SLIGHTLY BASED ON THE ACCURACY OF THE SURVEY. CONTRACTOR SHALL CONFIRM THAT THE PROPOSED GRADES SHOWN ON THIS PLAN WILL NOT CREATE A STANDING WATER CONDITION (I.E. A LOW SPOT OR PAVEMENT SLOPES LESS THAN 1%) OR AN UNSAFE CONDITION WITH SLOPES IN EXCESS OF 5% CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF THEY BELIEVE THAT ONE OF THESE SITUATIONS WILL OCCUR BASED ON THE PROPOSED GRADES.
- 3. ALL PAVEMENT PLACED WITHIN BARRIER FREE PARKING AREAS (STALLS AND ACCESS AISLES) SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION, INCLUDING MEASURED DIAGONALLY ACROSS THE AREAS. CONTRACTOR SHALL ADJUST SLOPES AS NECESSARY TO PROVIDE ADA COMPLIANT SLOPES AS WELL AS PROVIDING RE-GRADED TRANSITION SLOPES OUTSIDE OF THE BARRIER FREE PARKING AREAS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF TRANSITION ZONES WILL EXCEED MAXIMUM 5% SLOPES. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE PATTERNS WITH ALL NECESSARY PAVEMENT RE-GRADING.
- 4. ALL BARRIER FREE RAMPS AND ADA ACCESSIBLE ROUTES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VERSION OF MDOT DETAIL R-28 "SIDEWALK RAMP AND DETECTABLE WARNING DETAILS".
- 5. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING STORM WATER RUNOFF DURING CONSTRUCTION OPERATIONS. OF PARTICULAR CONCERN WILL BE THE TIME PERIOD AFTER THE SITE HAS BEEN STRIPPED AND NOT YET RESTORED, BUILT UPON, OR PAVED. CONTRACTOR MUST INSTALL OR CONSTRUCT APPROPRIATE TEMPORARY MEASURES TO PROTECT ADJACENT PROPERTIES.

### RESTORATION NOTE

RESTORE ALL DISTURBED NON-PAVED AREAS WITH 3" OF CLEAN TOPSOIL AND SEED MIX (30% KENTUCKY BLUEGRASS, 20% PERENNIAL RYEGRASS, 50% CREEPING RED FESCUE). PLACE MULCH IN ALL SEEDED AREAS. ON SLOPES IN EXCESS OF 10 HORIZONTAL TO 1 VERTICAL PLACE NORTH AMERICAN GREEN DS150 MULCH BLANKET IMMEDIATELY AFTER SEEDING. USE METAL STAPLES PER MANUFACTURERS RECOMMENDATIONS TO HOLD MATTING IN PLACE.



**20111-3008** SDA Project No. NP24096

			NOT	ES AN	ID SCHEDULES	SUBMITT.
Foundatio	on Notes ar	nd Schedu	le			SUBMITTALS
Prepare so geotechnic Bottom of interior fou lower botto swing doo adjacent fo match join The contra structures, The contra removal of construct to See found Footing La footing	cal report all exterior f indations ar om of footing rs per detail ooting. Coor ts in sidewa actor shall c elevations actor shall si pavements actor is resp all shoring	g foundation ootings mu e left exposing to 42" bel FN-04 . Bo dinate dim lks. Dordinate dim lks. Dordinate pro- s, and utilition bracing, a ons ble for bracing, a ons and pro- l details for tions: chedule	ons in acco set be at lessed to free low grade ottom of fr ensions in menetration and protect es. All exit the design nd dewate otect adjac additiona FS-24T(2	east 42" m ezing wea . Provide f ost block plan with as through all excave cavations n, installat ering that cent struc I requirem	rith recommendations in the inimum below grade. If ther during construction, frost blocks at all exterior shall match bottom of architecture/site drawings to footing with MEP (sleeves, ations and adjacent shall be kept free of water. ion, maintenance, and s required to properly tures, pavements and utilities. ments	<ul> <li>SUBMITTALS</li> <li>Stamping of shop drawings by SDI does not approve any alteration or deviation the construction documents. If alterations, substitutions, and deviation the construction documents are indicated by the contractor in shop drawing are not approved by sdi's stamp or submittal comments. Alterations, substitiand deviations should not be included in the shop drawings - they must be submitted as a separate document to SDI for review.</li> <li>The following items related to the building structural system are to be submitte architect in accordance with the requirements of the project specification</li> <li>1) Concrete mix designs and control joint locations</li> <li>2) Concrete test results</li> <li>3) Slab joint layout</li> <li>4) Reinforcing bar shop drawings - footings, walls, piers, &amp; slabs</li> <li>5) Masonry vertical and horizontal reinforcing bar shop drawings including masonry dowel layout (foundation to wall dowels) provided by the mason to foundation contractor prior to foundation installation</li> <li>6) Masonry materials (block, grout, mortar)</li> <li>7) Veneer ties     <ul> <li>product information</li> <li>sealed engineering calculations for all brick cavity conditions</li> </ul> </li> </ul>
						<ul><li>9) Structural steel shop drawings</li></ul>
						10) All inspection reports as pertaining to the items listed above
	di	mensions				
abel	plan	th	min. ickness		reinforcement	
S-24	see pl	an 26	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(2) #5 bar	s, top⊥	
See achit	ectural for e	xtents and	dimensio	ns of all sl	ect's approval. ab depressions including	SPECIAL INSPECTIC
depresse depressio	d slab locati	ons. Contra eeping pad	actor to co s, and pits	ordinate a required	. Maintain slab thickness at and provide all slab by the mep drawings n.	The contractor shall coordinate owner-paid, independent inspections meeting all applicable requirements of IBC Chapter 17. For steel see also AISC 360 Chapter N, and for masonry see also ACI 530 Chapter 3.
						All inspections shall be documented with written reports and a final report;
label	total thickness	reir	nforcing	_	notes	submitted to the owner and copied to the architect, structural engineer, and building official. Reinspection of deficient work wil be required as necessar to confirm that corrections have been satisfactorily completed.
SL-1	5"	6x6-V	V2.9xW2.9	loca	typical, te reinforcing in top half of slab	Continuous Inspection is to be understood as an inspector present during hours of activity for the given operation, unless stated otherwise.
rovide 5		eling grout	bed unde		plate. Set edge of bearing	Periodic Inspection is to be understood as an inspector present sufficient t ensure regular and repeated evaluation, not less than daily, for the given operation, unless stated otherwise.
			•		shall be 36 ksi. I beam or joist bears on	Soils
masonry. plate PL-1	See framing unless not	g plans for ed otherwis	type requi se on plan	red at eac	h location. Provide bearing	Continuous inspection of procedures during placement and compaction of engineered fills.
	s with only ( ring plate, a			asonry, pi	ovide a welded connection	Periodic confirmation of sub-grade bearing capacities and excavation dept
the bearin		ne end (1/S	S0.2) and		vide a welded connection to nection to the bearing plate	<b>Concrete</b> Continuous testing of slump, air content, and temperature of concrete as
After the i	nterior spac	e has becc	ome tempe		ntrolled, and the beam aring pockets with cmu and	well as collection and subsequent testing of cylinders. (Continuous being understood as daily for each mix type and not less than 50% of all batches/truckloads being tested.)
	4 for typical	detail.				Periodic inspection of the placement of formwork, placement of reinforcing and curing practices.
abel p	lan size	plate thickness	emt stu		notes	Masonry
			1 3.0			

## STRUCTURAL DEMO

SUBMITTALS		REFERENCES				STRUCTURA	
SUBMITTALS         Stamping of shop drawings by SDI does not approve any alteration or deviation from the construction documents. If alterations, substitutions, and deviations from the construction documents are indicated by the contractor in shop drawings, they are not approved by sdi's stamp or submittal comments. Alterations, substitutions, and deviations should not be included in the shop drawings - they must be submitted as a separate document to SDI for review.         The following items related to the building structural system are to be submitted to the architect in accordance with the requirements of the project specifications:         1) Concrete mix designs and control joint locations	following referenced standards: Building Code 2015 Michigan Structural Loads ASCE-7 Concrete ACI 301 ACI 318: Build ACI SP 66: AC Portland Ceme Concrete M	ing Code Requirements for Structural Concrete and Commentary I Detailing Manual ent Association "Design and Control of lixtures"	DESIGN LOADS All loads are subject to mod Risk Category Roof Loading Roof Live Load Snow Load Snow Ground snow Importance factor	III 20 psf	ASCE-7 orm + drifting	STRUCTURA	LOADS
<ul> <li>2) Concrete test results</li> <li>3) Slab joint layout</li> <li>4) Reinforcing bar shop drawings - footings, walls, piers, &amp; slabs</li> <li>5) Masonry vertical and horizontal reinforcing bar shop drawings including masonry dowel layout (foundation to wall dowels) provided by the mason to the foundation contractor prior to foundation installation</li> <li>6) Masonry materials (block, grout, mortar)</li> <li>7) Veneer ties <ul> <li>product information</li> <li>sealed engineering calculations for all brick cavity conditions</li> </ul> </li> <li>8) Welder certifications for shop and field welders</li> <li>9) Structural steel shop drawings</li> <li>10) All inspection reports as pertaining to the items listed above</li> </ul>	SteelAISC 360-10: 3WeldingAmerican WeldSteel JoistsSteel Joists InsMetal DeckSteel Deck InsConstuctionASCE 37 (unloce)		Seismic Seismic Seismic importance factor Site classification of soil 1.0 second spectral res 0.2 second spectral res Seismic design categor Seismic-resisting syster Response modification Analysis procedure use	$\begin{array}{c} Ce = 1.0 \\ Ct = 1.0 \\ Ct = 1.0 \\ Pf = 25 \text{ psf} \end{array}$	inforced mason lateral force pro	•	
				0			
			СОМР	ONENTS & CLADDING UL	TIMATE (LRFD	•	
	α <u>(3)</u> ;	2 3	Zone	Effective Area Per ASCE 7-10 CH 26 (square feet)	positive	Ultimate Pressure (lbs per square foot negative	) overhang
SPECIAL INSPECTION	*			10	+ 16	-40	n/a
<b>STATEMENT of SPECIAL INSPECTIONS</b> The contractor shall coordinate owner-paid, independent inspections meeting all applicable requirements of IBC Chapter 17. For steel see also AISC 360 Chapter N, and for masonry see also ACI 530 Chatper 3.			1 (ROOF)	20 50 100 10	+ 16 + 16 + 16 + 35	- 38 - 36 - 35 - 66	n/a n/a n/a - 64
All inspections shall be documented with written reports and a final report; submitted to the owner and copied to the architect, structural engineer, and	2		2 (ROOF)	20 50	+ 34 + 32	- 60 - 52	- 64
building official. Reinspection of deficient work wil be required as necessary to confirm that corrections have been satisfactorily completed. Continuous Inspection is to be understood as an inspector present during all				100	+ 30	- 44	- 64
Periodic Inspection is to be understood as an inspector present during all hours of activity for the given operation, unless stated otherwise. Periodic Inspection is to be understood as an inspector present sufficient to ensure regular and repeated evaluation, not less than daily, for the given operation, unless stated otherwise.			3 (ROOF)	10 20 50 100	+ 35 + 34 + 32 + 30	- 66 - 60 - 52 - 44	- 64 - 64 - 64 - 64
Soils	a 3	2 3		10	+ 38	- 40	n/a
Continuous inspection of procedures during placement and compaction of engineered fills. Periodic confirmation of sub-grade bearing capacities and excavation depths.	¥a. 	VALL PRESSURES	4 (WALL)	20 50 100 10	+ 36 + 34 + 32 + 38	- 38 - 36 - 34 - 48	n/a n/a n/a n/a
<b>Concrete</b> Continuous testing of slump, air content, and temperature of concrete as well as collection and subsequent testing of cylinders. (Continuous being understeed as deily for each mix time and not less than 50% of all			5 (WALL)	20 50	+ 36 + 34	- 44 - 42	n/a n/a
understood as daily for each mix type and not less than 50% of all batches/truckloads being tested.) Periodic inspection of the placement of formwork, placement of reinforcing, and curing practices.	5 4	(5)	and away from build Parties using the ab	100 ve signs in the table above d ding surfaces, respectively. bove table are responsible fo			n/a
Masonry Periodic inspection, of constructed geometry, voids prior to grouting, mortar joints, reinforcement, anchors, cold and hot weather practices, as well as observation, collection, and subsequent testing of grout prisms.)	*a,	55 × a *		use with their scope re Ultimate LRFD forces per ilding width or 40% of mean s than 4% of least builidng w		ichever is	
Steel         Periodic inspection of completed bolted connections, welded conections, deck attachments, stud attachments, and related field practices. (Periodic being understood as 10% of completed connections visually evaluated.)         Final inspection of project completeness.         One-time shop inspection of shop practices and welder certificates	MATERIALS SOIL: Soil supporting foundations CONCRETE: Foundations	2,000 psf minimum allowable brg. capacity 5,000 psi at 28 days	the attention of relevant followed. The permanent structure indicated below - which r Means and Methods: th & their Subcontractors (0	,	M)/General Col linate all efforts construction tea rary shoring or to onstruction are t	to ensure that these line within the specific long acting, construction long he sole responsibility	hese notes to mits are mitations bads, etc. of the CM/GC
STRUCTURAL DEMOLITION	Interior Slab on Grade	4,000 psi at 28 days	provided at the discretion When electronic files are	nic structural drawing files, we n of the engineer of record o provided they are provided	nly after SDI ha for convenience	is received the signed e only, their accuracy	release form. cannot be
STRUCTURAL DEMO NOTES	Exterior Slab on Grade	5,000 psi at 28 days, 0.4 max w/c ratio, 6% air-entrainment	or requirements dictated	-			
1. Material having salvage value shall become the property of the owner unless otherwise directed by the owner. All other material and debris accumulated as a	Reinforcing bar Welded wire fabric	ASTM A615 (grade 60) ASTM A1064 flat sheets	Partial Completion of S	/erification of field dimension Structure: The structural do	ocuments depic	t a completed structur	e, and as
result of demolition shall become the property of the contractor and shall be removed from the premises by the contactor.	Synthetic fiber reinforcing	ASTM C1116 (Tuf-Strand SF by Euclid or equal)	procedures whereby the	not have full structural integr project is advanced through eans and Methods, and sha	intermediate st	tages of partial comple	tion must be
<ol> <li>Furnish, install, and maintain in safe conditions at all times temporary protection required to ensure safety for persons and property during demolition.</li> <li>Prior to the start of demolition work the general contractor shall determine the location of load bearing walls, beams, and columns. No load bearing structural walls, beams, or columns shall be demolished without specific approval from the engineer of record.</li> </ol>	MASONRY: CMU	ASTM C90 normal weight (net compressive strength f'm = 2500 psi,	sequencing, or unforseed structure towards comple braced by the Constructi all necessary shoring or	and bracing: Means and Me n field conditions may requir etion. Structural members a ion Team as necessary until bracing is identified in the co ngineered shoring or bracing	e temporary sho re not self-braci stabilized by vit construction docu	oring or bracing to adv ing and must be shore rtue of completed con uments. Common cons	ance the d and/or nections. Not
<ul> <li>4. No structural member or component shall be cut, notched, or otherwise altered unless approved in writing by the engineer of record.</li> <li>5. The contract structural drawings and specifications represent the finished</li> </ul>	Brick (clay masonry)	minimum unit strength = 3250 psi) ASTM C62 & C216 (net compressive strength = 1000 psi)	- structural buil - openings in w	ding framing prior to connect valls prior to lintel installation plans, elevations, and detail	tion and floor co	ompletion	e temporary
<ul><li>structure, and do not indicate the method or means of construction.</li><li>6. The general contractor or construction manager shall supervise and direct the work and shall be solely responsible for all construction means and methods executed on site.</li></ul>	Rebar positioners	Corelock rebar positioner by Wire-Bond, No. 376 rebar positioner by Heckmann Building Products or #RB rebar positioner by Hohmann&Barnard, Inc. or equal	The GC/CM are respons is fully captured in Subco	bible for ensuring that design contractor scope. I and bracing: The design o			
7. Temporary shoring of load bearing elements shall be designed by the contractor's registered structural engineer (other than the engineer or record).	Rebar splice connectors Mortar below grade	Spyra-Lox rebar lap-joint tie by Hohmann&Barnard, Inc. or equal ASTM C270, Type M (mortar cement)	performed by a Delegate Subcontractors. See "De Protection from weathe	ed Structural Engineer, other elegated Design Notes" on the er: During construction it is the uctural elements from the da	<ul> <li>than SDI, hirec</li> <li>his page for furh</li> <li>he Construction</li> </ul>	d by the CM/GC or one ler information. Team's responsibility	e of their to
	Mortar typical Mortar brick Grout in CMU cores	ASTM C270, Type S (mortar cement) ASTM C270, Type N ASTM C476	weather should be prote of footings to an elevatio recommendations of AC	cted from freeezing by appro n below frost depth. For hot	opriate means th and cold weath	hat may include lower er concrete placemen	ng the bottom t, follow
	Reinforcing bar Tie Wire	(3000 psi at 28 days) ASTM A615 (grade 60) ASTM A-82	pavements, and utilities. the design, installation, n required to properly cons	All excavations must be ke naintenance, and removal o struct foundations and prote	pt free of water. f all shoring, bra ct adjacent stru	The contractor is restricting, and dewatering inclures, pavements an	ponsible for that is d utilities.
	Horizontal Joint Reinforcement	A-82, hot-dipped galvanized per ASTM A-153	unsuitable soil must be r Geotechnical Report. Co Soils Testing Agency.	areas and depths of unsuita emoved and replaced with e pordinate these efforts with the	ngineered fill in ne Project Geot	accordance with the echnical Engineer and	⊃roject I the on site
	STEEL: Structural steel: W-shapes	ASTM A992 - Fy=50 ksi	the work is to be comple construction documents.	nderpinning is required the ( ted including conformance to Engineering of underpinning	o any requireme	ents already specified	in the
	W-shapes Channels, Angles, Plates HSS Round HSS Rectangular, Square Structural steel pipe	ASTM A992 - Fy=50 ksi ASTM A36 - Fy=36 ksi ASTM A500 Type B - Fy = 42 ksi ASTM A500 Type B - Fy = 46 ksi ASTM A53 - Type E or S, grade B, Fy = 35 ksi	performed by a licensed Anchor bolt placement Team. Prior to casting fo Coordinate the results of grid and anchor bolt loca	geotechnical engineer. :: Accurate placement of ancoundation concrete, all cast-in f this survey with the steel Solutions and to identify misplace	hor bolts is the n place column ubcontractor to ed anchors. Inc	responsibility of the C anchor rods must be ensure a common und correctly placed bolts i	onstruction surveyed. lerstanding of dentified after
	Structural steel bolts Washers	ASTM A325-N ASTM F436 hardened washer		t be addressed by the Const bacity. Calculations must be n forces are met.			
	Nuts	ASTM A563	Concrete foundations, af	construction on Foundation fter curing 7 days, can support	ort all types of lig		up to 10,000
	Welding electrodes (E-70 series) Steel roof deck	ASTM A233 ASTM A653-94 Structural Quality	<b>C C</b> <i>i</i>	provided that the equipments in excess of 10,000 lbs req			tions
	Grout below plates	grade 33, G-60 galvanized	Skid-steer loaders and o exposed concrete mat for	ther equipment on steel trac oundations.	ks are, in all ca	ses, prohibited from d	riving on
	Anchor bolts	ASTM F1554 threaded rods, 36 ksi uno	Unless approved by SDI building foundations.	, crane pads must be locate	d such that crar	ne surcharge loading o	overlap with
	Screw Anchors Adhesive for Anchors	Hilti Kwik HUS-EZ					
	Into Concrete Into Masonry	Hilti HIT-HY 200 Adhesive w/ SafeSet Hilti HIT-HY 270, HIT-SC sleeve if hollow					
	Headed steel studs	ASTM A108-Grade 1010-1020, welded per chapter 7 of ANSI/AWS D1.1					

20111-3008

<sup>™</sup> D<sup>S</sup> Project Number

Drawing Number



Typical Structural Notes and Schedules

IDS Drawing Title

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Bids 09-13-2024

Issued for Issue Date Design Development 06-24-2024 Quality Management Review 08-23-2024

N. LaForest Approved B. Toy Drawing Scale

Project Administrator A. Maurer Project Designer [H. Baghi<sup>r</sup> Project Architect / Engineer C. King Drawn By H. Baghi<sup>-</sup> Q.M. Review

Key Plan

Van Buren Public Schools

Renovations

Savage & Tyler Elementary

Schools Secured Entry

Project Title

STRUCTURAL ENGINEER SDI Structures 275 east liberty

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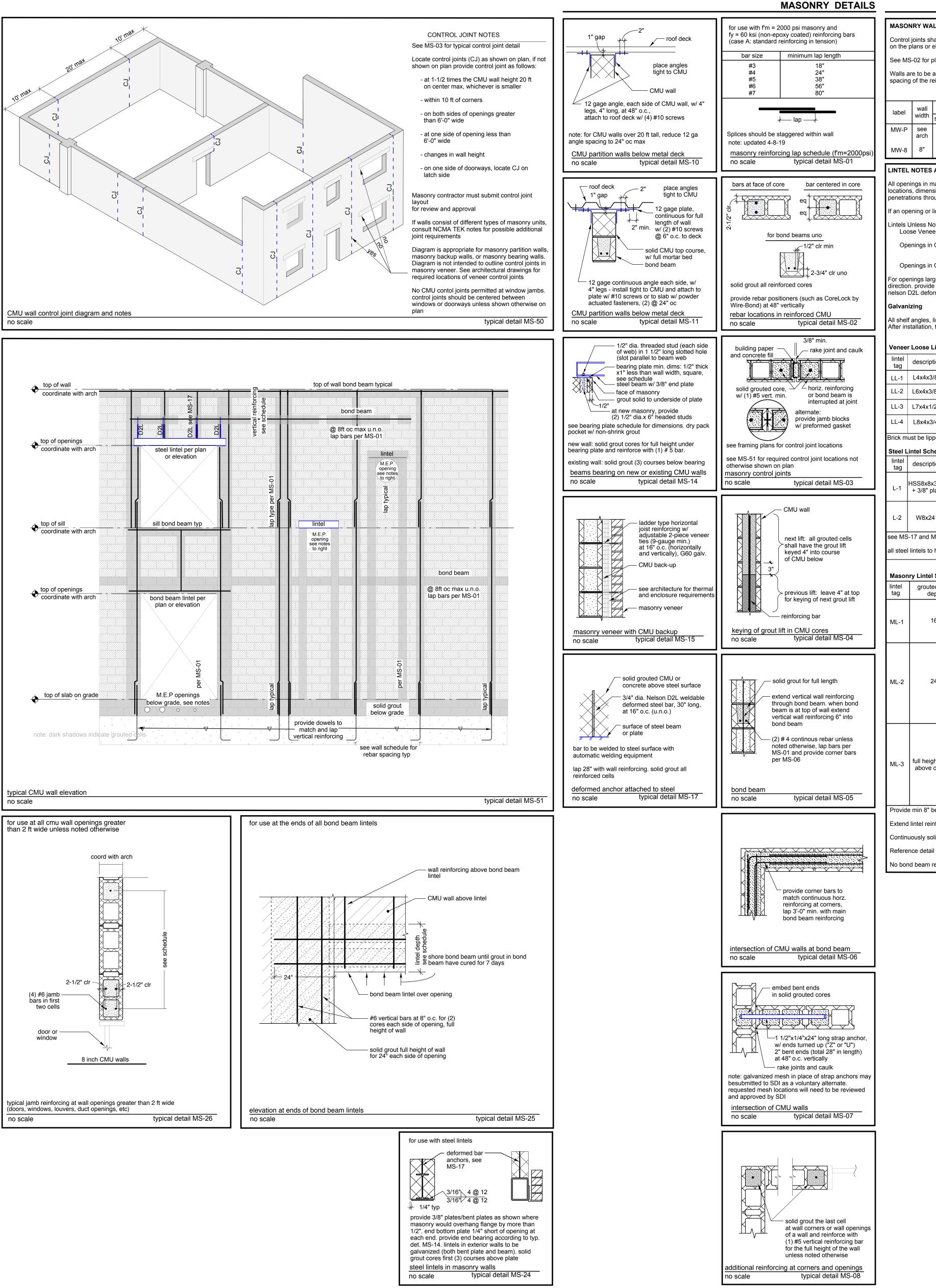
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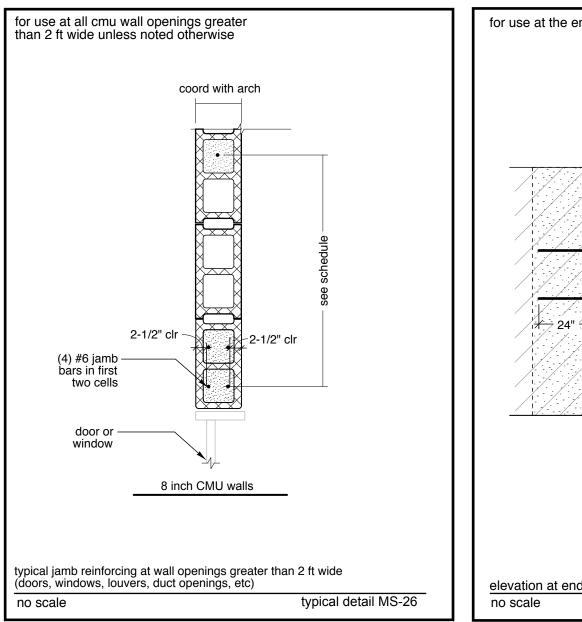
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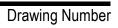
troy, michigan 48098

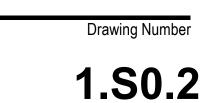
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MASONRY SCHEDULES					MASONRY SCHEDULES	MASONRY NOTES				
ALL NOTE	ES AND S	CHEDUL	E			CMU WALL NOTES AND SCHEDULES				
shall be pro	ovided in v	walls per	detail MS-0	3 as sho	wn on the plans or elevations. If not specified	General				
r elevations r placemen	•		MS-50. e grouted ce	ells.		Masonry construction and materials shall conform to the more stringent provisions of chapter 21 of the 2015 Michigan Building Code and the requirements of "Specification for Masonry Structures (TMS602-13) published by the Masonry Society.				
					g of the vertically grouted cores to match the buted walls will be noted special where required.	All work shall be laid true to a line, plumb and level in keeping with the tolerances defined in "Specifications for Masonry Structures (TMS602-13).				
reinf	vertical		ond beams		notes	The contractor shall employ hot or cold weather construction practices defined in "Specifications for Masonry Structures (TMS602-13). No work shal be done subject to freezing temperatures or on a frozen substrate.				
' size/spa #4@32		ered	none	all inter	ior cmu walls unless noted otherwise. see 1.S0.2	Masonry construction conformance with the construction documents shall be verified in accordance with IE level 1 quality assurance by an ICC certified structural masonry special inspector.				
#5@32	2" cent	centered     8 ft oc max		of wall bracing details.	Coordinate dimensions of all CMU block with architectural drawings. Verify top of CMU elevations with architecture.					
						All masonry shall be laid in a running bond unless specifically noted otherwise.				
S AND SCHEDULES masonry walls shall have a lintel placed over the opening. See architectural drawings for all ensions and elevations of doors, windows and wall openings. See MEP for all duct and utility						All grout shall be placed or supervised by a masonry certified in grout placement by the International Masonry Institute or approved alternate. Grout placement and consolidation shall conform with section 3.5 of the "Specifications for Masonry Structures (TMS602-13).				
	ot shown o	on the str	uctural drav	vings, co	ontractor shall provide a lintel per the following:	Provide ladder type horizontal joint reinforcing with preformed lapped corner reinforcing at 16" c/c vertically in all masonry walls (unless noted otherwise). Joint reinforcing shall be galvanized and have side wires of 9-gauge minimum conforming to ASTM A-82. Joint reinforcement shall be lapped a minimum of 8".				
Noted Othe leer Lintels in CMU blo	:	l'₋∩"·	see sched		<i>w</i> /2"x3/8 (8 in CMU)	Masonry joints shall be fully filled for solid units and face shell bedded with head joint depth equal to the face shell or greater for hollow units unless otherwise noted.				
in CMU blo			or (2	) L5x5x3		Position vertical bars per MS-02 solid grout all reinforced cores and all cores below grade. in lieu of lapping reinforcing bars, reinforcing bar splice couplers can be provided that have a tensile capacity of 125% the tensile capacity of the reinforcing bar being spliced.				
de bearing	plates an	d 3/8" en	d plates at e	ends of a	d below a beam, contact the architect for all W-shape and HSS lintels. provide 3/4" dia.	See typical detail MS-03 for control joints in masonry walls and detail MS-05 for bond beams. Continue vertical reinforcement through bond beams. See MS-51 for typical control joint diagram unless otherwise shown on plan.				
formed bar	anchors,	30" long,	@ 16" o.c.	along to	p of lintel as shown in MS-17.	All CMU door jambs, window jambs, and all CMU cores below beam or lintel bearing locations are to be solid grouted w/ (1) additional #5 vertical reinforcing bar.				
s, lintels, pla n, touch up	ates and b all memb	beams su bers with	pporting wit galvanic pa	hin exte int to res	rior walls shall be G-90 hot dip galvanized. store complete coverage.	Where masonry meets structural members subject to vertical deflection, provide allowance for vertical movement of L/240 of structural member.				
	<b>hedule (u</b> aphic	se with r	clr		veneers up to 4" thick) notes	Masonry walls are to be adequately braced during construction until floor and wall systems are complete. Design loads for temporary wall bracing at minimum shall be based on ASCE 37. Where masonry walls are constructed adjacent occupied spaces including but not limited to: existing buildings or pedestrian walkways, design loads for temporary wall bracing shall be taken from ASCE 7. Construction bracing shall be designed by the contractor and sealed by a PE licensed in the state that has jurisdiction over the project.				
(3/8	-	8" min 8" min	up to 4'-( up to 6'-(	)"		See details for bond beam locations. Bond beams shall continue for full length of walls unless noted otherwise, and have #4 corner bars (30"x30") lapping 24" with bond beam bars (see MS-06). Except for MW-P, Provide additional bond beams every 8' o.c. for the full height of all walls. See MS-05				
:1/2	-	8" min	up to 7'-(		provide (3) layers of 9 gage galv. deformed er-type joint reinf. in full mortar beds, extend 24"	See MS-50 for typical CMU wall elevation				
(3/4		8" min	up to 9'-4	1"	past opening ea side	Masonry Reinforcement Detailing, bending and placement of steel reinforcement shall be in accordance with "Specification for Masonry				
ipped wher	C C			_		Structures (TMS602-13).				
	or use wh aphic	i <b>ere indio</b> bear pla	U U	an or ele	notes	All steel reinforcement shall be placed and supported as necessary to maintain proper position as defined in "Specification for Masonry Structures (TMS602-13).				
8x3/8"			7x1/2"			All horizontal steel reinforcement shall be continuous around corners and lapped as shown in MS-06.				
plate						Where vertical steel reinforcement terminates at a bond beam, provide a standard 90 degree hook. Bar Splicing (laps)				
24		PL7x	7x1/2"			At base of all walls provide dowels to match and lap vertical wall reinforcing.				
I MS-24 for	r required	deformed	d bar ancho	rs.		See MS-01 for required bar splice lengths. Continuous vertical bars may be spliced where desired by contractor.				
to have (3)	courses o	of 24" long	g ladder typ	e 9 ga. j	oint reinf. at each end of lintel adjacent to opening	Horizontal bars in lintels must remain continuous and are not permitted to be spliced.				
al Cabadul	1-					Horizontal bond beam reinforcing may be spliced where desired by contractor.				
el Schedul uted lintel	reinford	ement	schema		use	M.E.P. Openings				
depth			section	s to		Submit all M.E.P. openings not specifically shown on the structural drawings for review and approvall - a lintel is required over all openings. See lintel schedule on this sheet for typical lintels that can be used for estimating purposes, final lintels must come from SDI.				
16"	(2) #5 botto	m	6" CMU 8" t	5 5 12" MU	openings up to 4'-0" uno	Below grade M.E.P. penetrations should be located beneath doorways unless specicially approved be SDI. All penetrations below doors must have 4" clear spacing between.				
				" cir to bot of bars		Masonry Exposed to Weather and/or Corrosive Enviroments Where structural masonry walls and/ or interior CMU partition walls are directly exposed to weather or corrosive enviroments, the following additional requirements apply:				
24"	(2) #5 botto	m		where tagged on plan or elevation		<ol> <li>The masonry unit and mortar shall be produced using an intergral water repellant (IWR) like RainBloc GP, or an approved alternative which meets ASTM E514 testing.</li> </ol>				
			C	5 12" MU		<ol><li>The exposed face of the masonry wall shall have a surface applied water repellant applied after construction directly to the exposed face of the masonry.</li></ol>				
						Examples of Exposed Walls or Corrosive Environments include: - single wythe exterior walls				
			wall	t of bars	openings	- indoor pools with exposed CMU				
ight of wall e opening	l (2) #5 botto		solid grout to top of wall	" cir to bot	up to 10 ft uno	- garages, labs, or workshops with exposed CMU				
			8" to 16	= ++ 2-3/		<ul> <li>loading docks</li> <li>A maintenence plan shall be put in place for the owner for the surface applied water repellant to be re-applied</li> </ul>				
" bearing ea	ach end		CMU			every 5-7 years for the life of the building.				
•		eyond ea	ch end of o	pening						
solid grout	full height	of lintel (	no cold join	ts permit	tted)					
			am lintel det							
n reinforcing	g laps are	permitte	d over oper	ings						





<u>i</u> D<sup>s</sup> Project Number

**Typical Masonrt** Notes, Details and Schedules

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Quality Management Review 08-23-2024 Bids 09-13-2024

Approved B. Toy Drawing Scale Issue Date Issued for Design Development 06-24-2024

Project Administrator A. Maurer Project Designer [H. Baghi<sup>r</sup> Project Architect / Engineer C. King Drawn By H. Baghi<sup>-</sup> Q.M. Review N. LaForest

Key Plan

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry

Project Title

Renovations

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275 east liberty

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248.823.2100 www.ids-michigan.com <u>CIVIL ENGINEER</u> SPALDING DeDECKER 905 south blvd. E rochester hills, michigan 48307

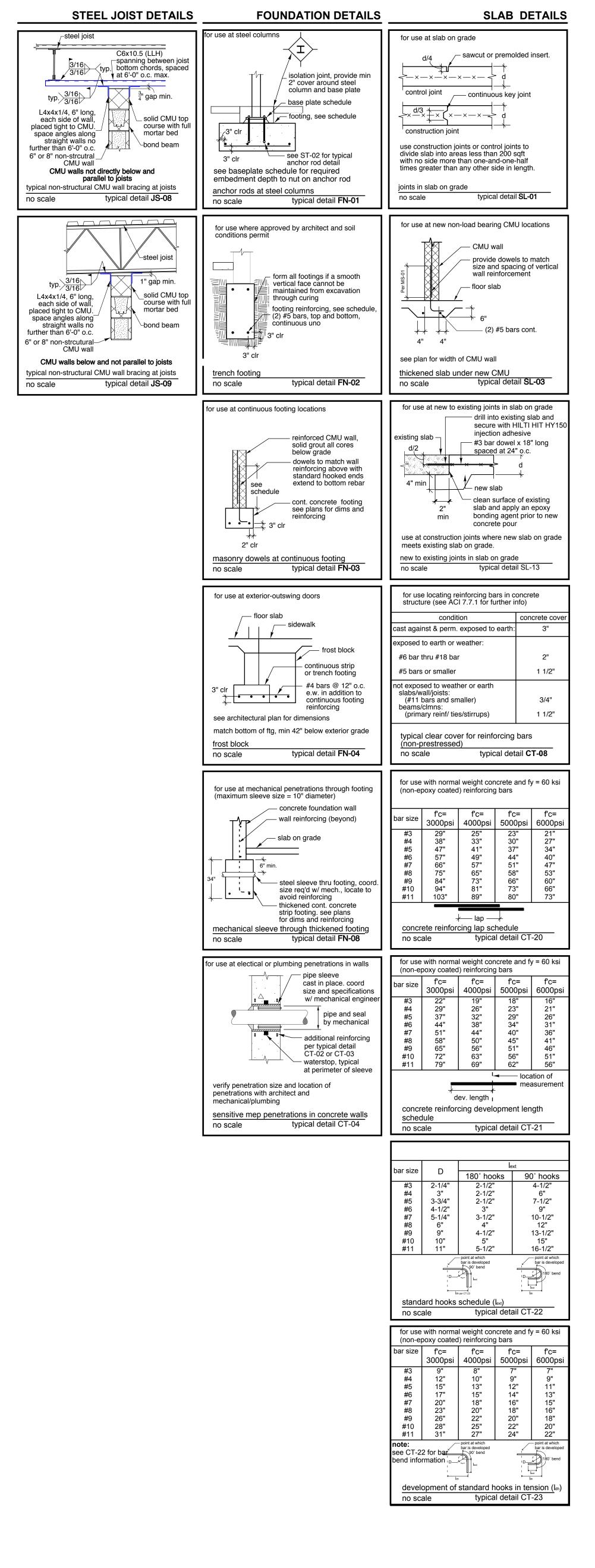
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troy, michigan 48098

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Drawing Number 1.S0.3

<u>i</u> D<sup>s</sup> Project Number



**Typical Details** 

IDS Drawing Title

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Design Development 06-24-2024 Quality Management Review 08-23-2024 Bids 09-13-2024

Project Architect / Engineer C. King Drawn By H. Baghi<sup>•</sup> Q.M. Review N. LaForest Approved B. Toy Drawing Scale Issue Date Issued for

Key Plan

Project Administrator

A. Maurer

[H. Baghi<sup>r</sup>

Project Designer

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



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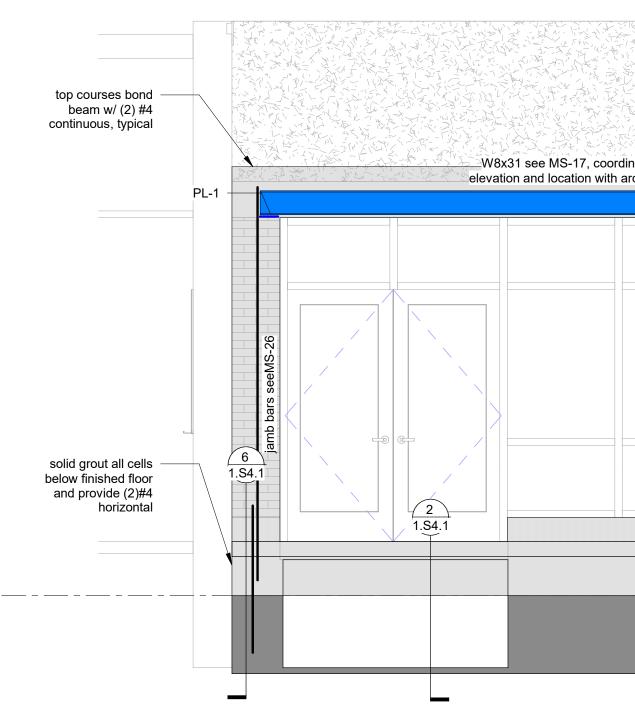
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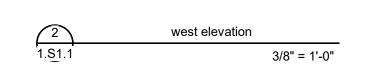
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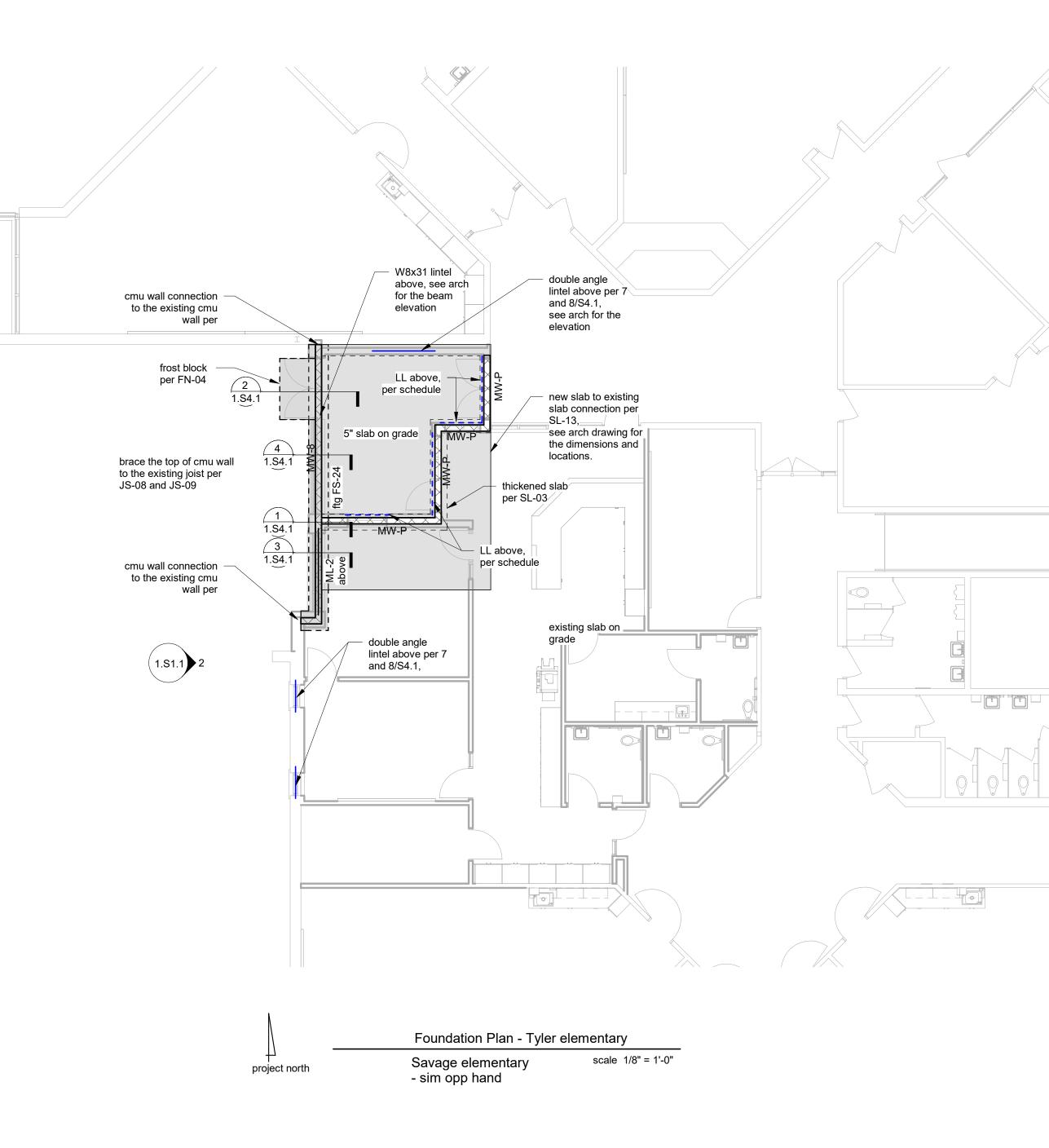
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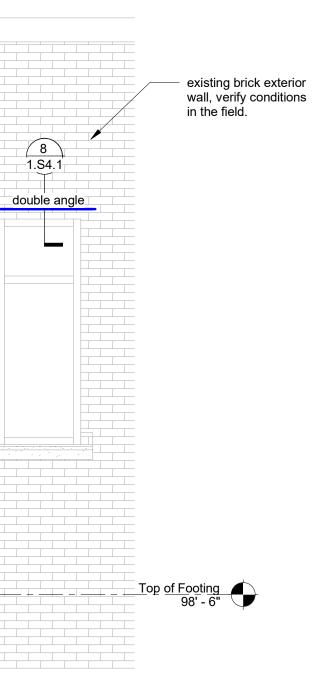
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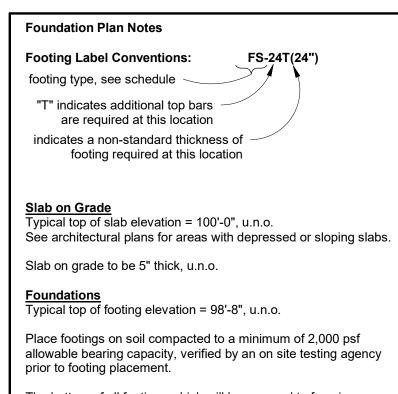


dinate beam arch drawings	PL-1			8 1.S4.1 double angle	
		ML-2	See WS-26		









The bottom of all footings which will be exposed to freezing temperatures permanently or during construction shall be lowered to at least 42" below grade. Provide a thickened slab below all interior cmu walls per SL-03/S0.3 unless a footing is shown. See architectural for cmu

See **Slab on Grade Notes** and **Foundation Notes and Schedule** on S0.1 and typical details on S0.3 and project specifications for more information and requirements.

wall locations.

# \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_

<u>i D</u>S Project Number



# INTEGRATED design SOLUTIONS architecture engineering interiors & technology 1441 west long lake, suite 200

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STRUCTURAL ENGINEER SDI Structures 275 east liberty ann arbor, michigan 48101 734.213.6091 www.sdistructures.com

Project Title



Van Buren Public Schools

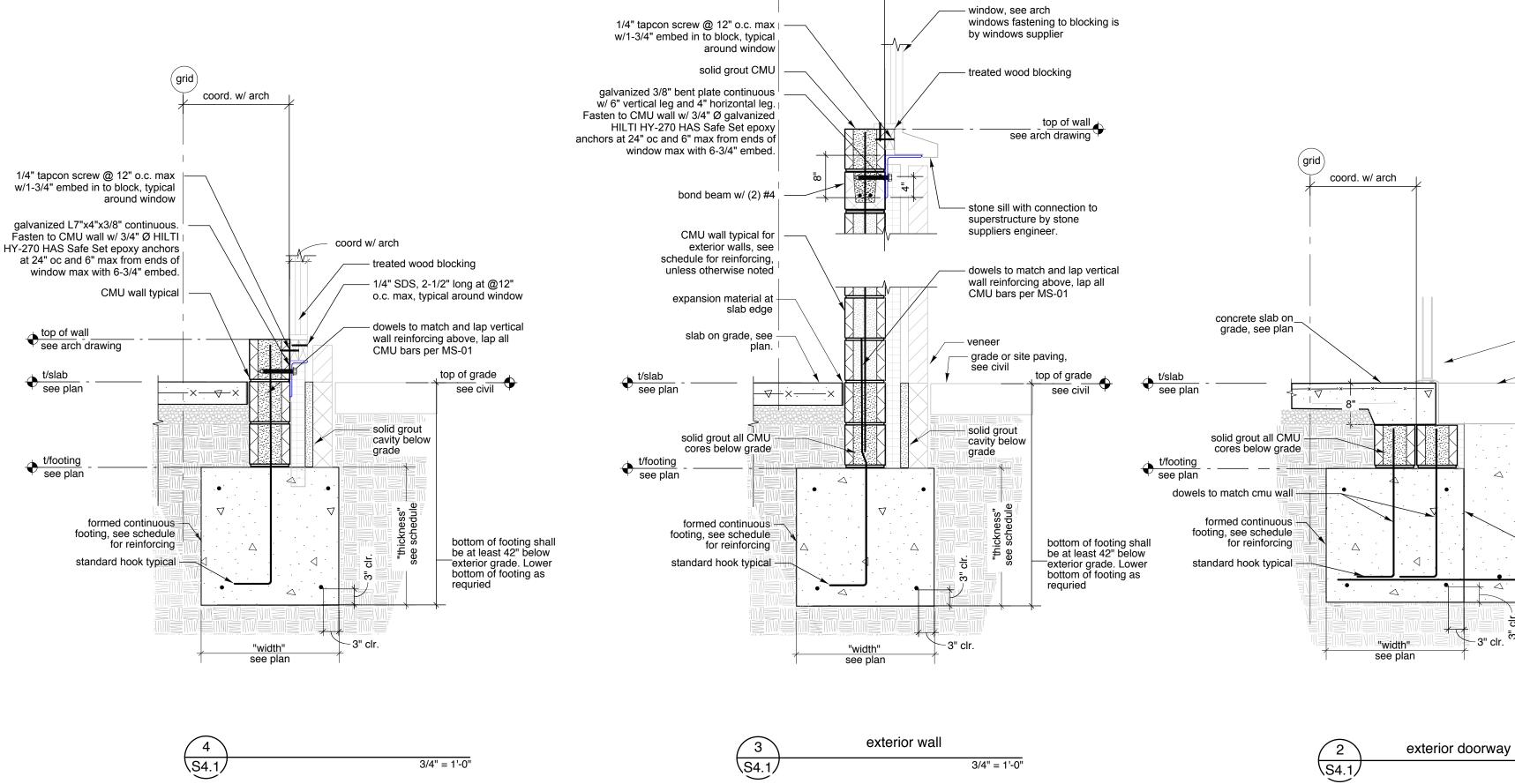
Savage & Tyler Elementary Schools Secured Entry Renovations

		Koy Plan
NORTH		Key Plan
	Pro	oject Administrator A. Maurer
		A. Maurer Project Designer
	Drainet A	H. Baghi
	Project A	rchitect / Engineer C. King
		Drawn By H. Baghi
		Q.M. Review
		N. LaForest Approved
		В. Тоу
		Drawing Scale
	Issued for	Issue Date
	Design Development	06-24-2024
	Design Development Quality Management Review	06-24-2024 08-23-2024
	Design Development	06-24-2024 08-23-2024
	Design Development Quality Management Review	06-24-2024 08-23-2024
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	Design Development Quality Management Review	06-24-2024 08-23-2024
	Design Development Quality Management Review Bids	06-24-2024 08-23-2024 09-13-2024
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	© 2024 INTEGRATED design IDS	06-24-2024 08-23-2024 09-13-2024
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	© 2024 INTEGRATED design IDS	06-24-2024 08-23-2024 09-13-2024

Drawing Number

1.S1.1

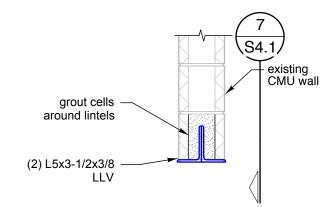




grid

coord. w/ arch

double angle lintel at non-bearing wall  $\left( 8 \right)$ S4.1 note: provide temporary shoring of existing CMU wall during installation of lintel 3/4" = 1'-0



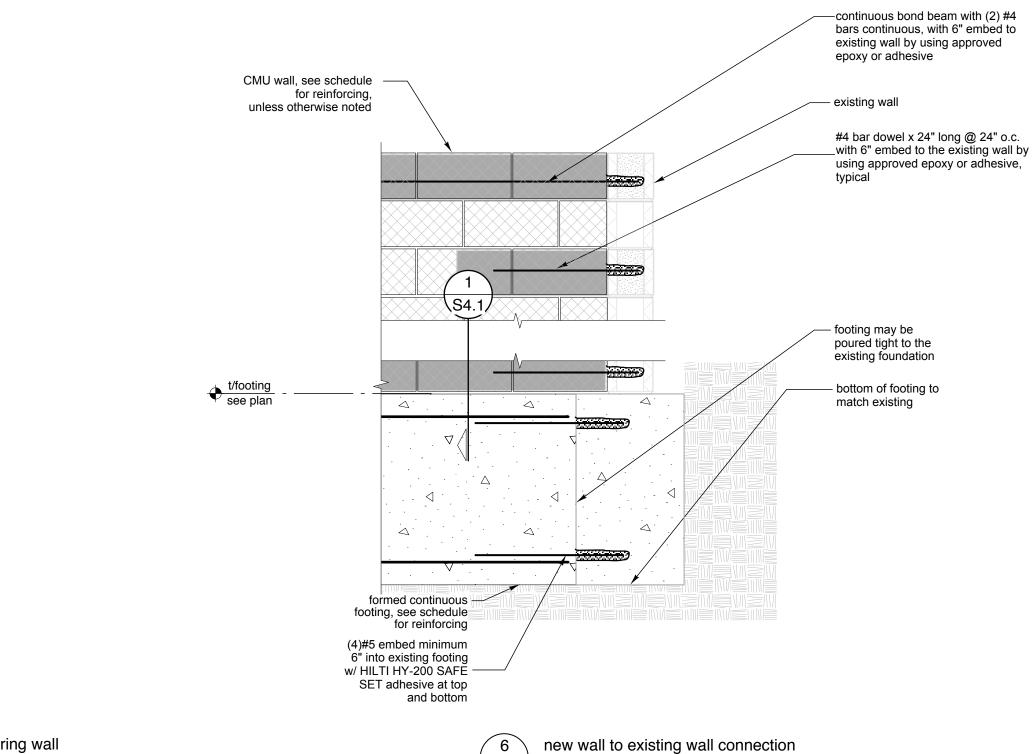
angle lintels solid grout min — 16" below angle bearing

existing cmu wall

### Foundation Section Notes: 1. All footings to bear on native soil, prepared according to recommendations in soils report, testing agency to inspect and verify prior to footing placement

2. See CT-08 for required concrete cover unless otherwise indicated

3. Lap continuous bars per CT-20

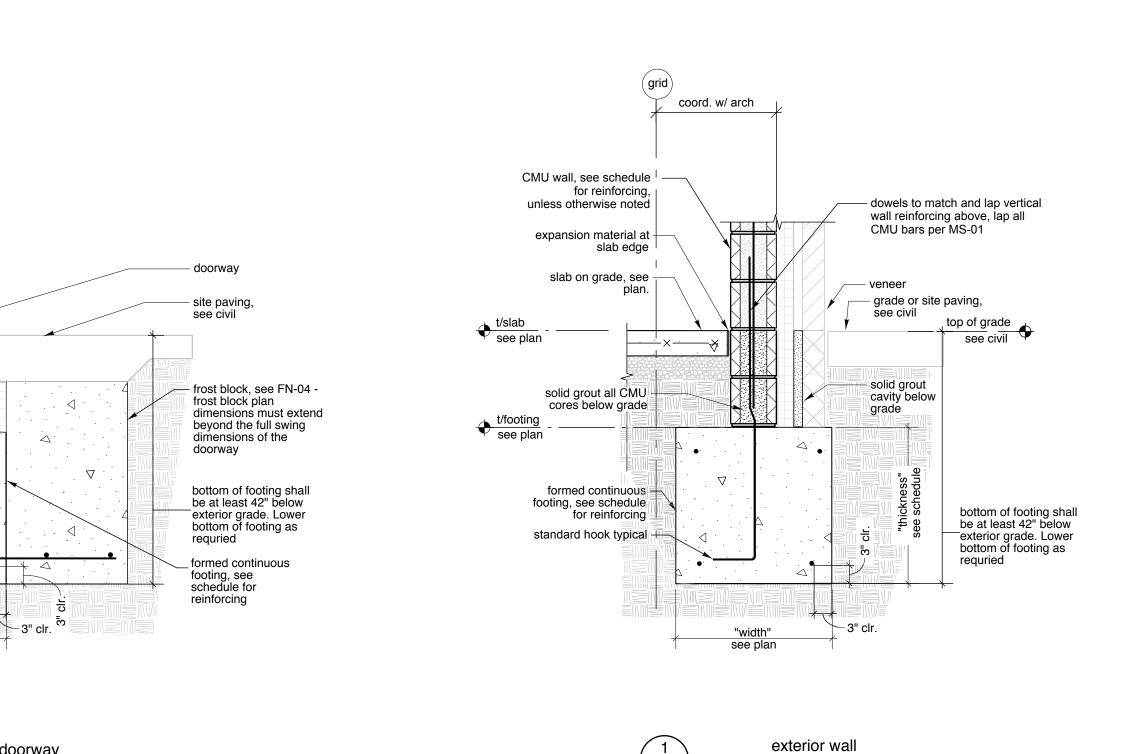


\S4.1

3/4" = 1'-0"

3/4" = 1'-0"

double angle lintel at non-bearing wall S4.1/ note: provide temporary shoring of existing CMU wall during installation of lintel 3/4" = 1'-0"



(S4.1)

3/4" = 1'-0"



D<sup>s</sup> Project Number



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Issued for Issue Date Design Development 06-24-2024 Quality Management Review 08-23-2024 Bids 09-13-2024

Drawn By H. Baghi<sup>•</sup> Q.M. Review N. LaForest Approved B. Toy Drawing Scale

Project Administrator A. Maurer Project Designer [H. Baghi<sup>r</sup> Project Architect / Engineer C. King

Key Plan

Van Buren Public Schools

Renovations

Savage & Tyler Elementary

Schools Secured Entry

Project Title

1441 west long lake, suite 200 troy, michigan 48098 5211 cascade road SE, suite 300 grand rapids, michigan 49546 248.823.2100 www.ids-michigan.com CIVIL ENGINEER

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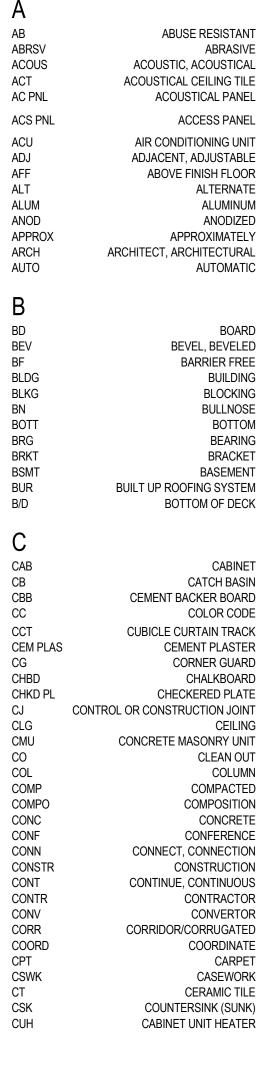
800.598.1600 www.sda-eng.com

> SDI Structures 275 east liberty

734.213.6091

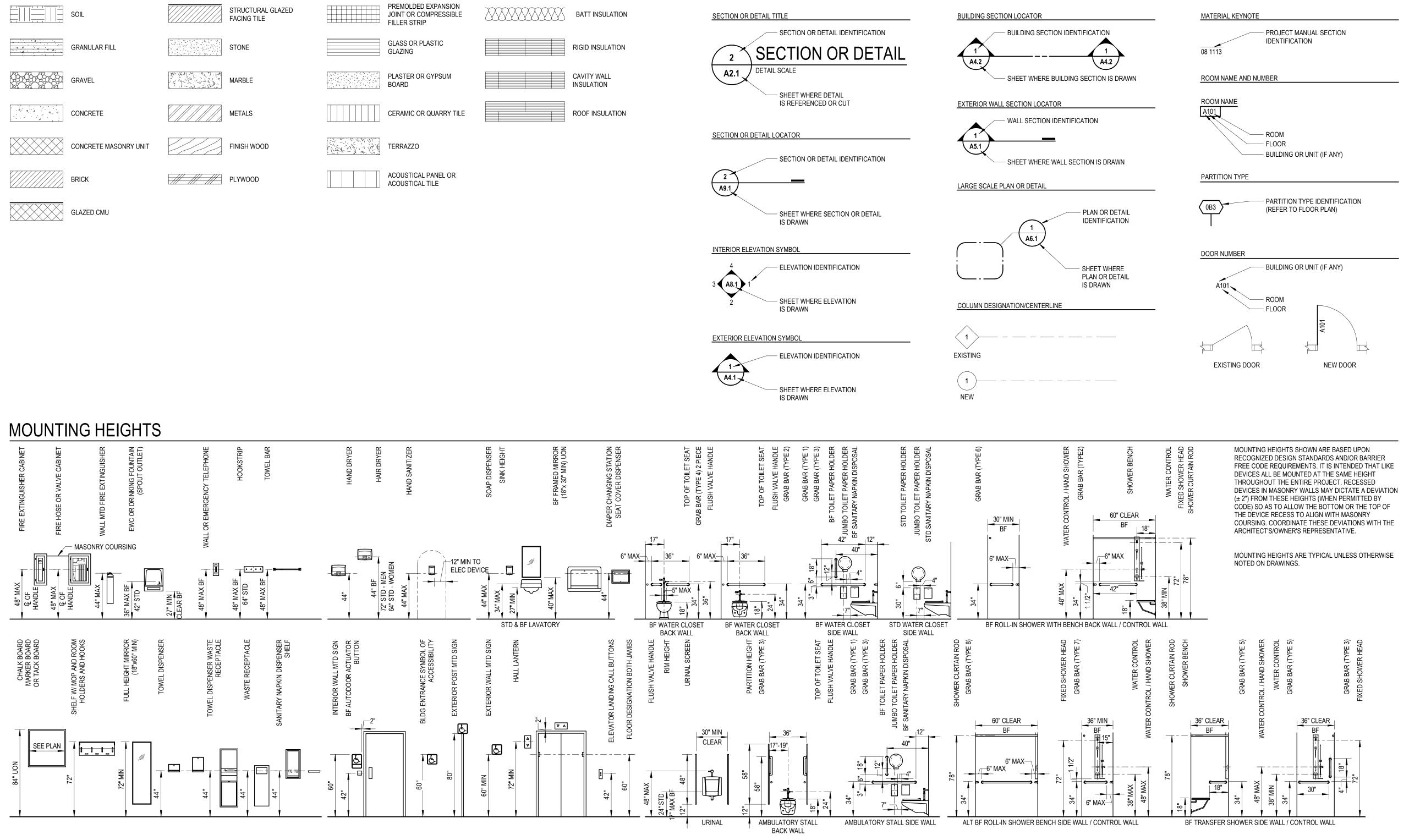
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# ABBREVIATIONS



# MATERIAL LEGEND

SOIL
GRANULAR FILL
GRAVEL
CONCRETE
CONCRETE MASO
BRICK
GLAZED CMU



D		F (CONT	)		
D	DEPTH	FH	, FIRE HYDRANT	J	
DBL	DOUBLE	FHC	FIRE HOSE CABINET	JC	JANITOR CLOSET
DWTR	DUMBWAITER	FHR	FIRE HOSE RACK	JT	JOINT
DT DR	DUTCH DOOR	FIN	FINISH, FINISHED	JST	JOIST
DEMO	DEMOLISH, DEMOLITION	FLASH	FLASHING	001	30131
DEMO	Democion, Democinion			IZ.	
DEPR	DEPRESSED	FLR	FLOOR	K	
DEPT	DEPARTMENT	FPRFG	FIREPROOFING	KD	KNOCK DOWN
DET	DETAIL	FR	FRAME		
DF	DRINKING FOUNTAIN	FRGM	FIRE RATED GLAZING MARKINGS	1	
DIA	DIAMETER	FRP	FIBERGLASS REINFORCED PANEL	L	
DIAG	DIAGONAL	FT	FEET, FOOT	L	LONG, LENGTH
DIFF	DIFFUSER	FTG	FOOTING	LAB	LABORATORY
DIM	DIMENSION	FTR	FIN TUBE RADIATION	LAM	LAMINATE, LAMINATED
DIR	DIRECTORY	FVC	FIRE VALVE CABINET	LAV	LAVATORY
DEFS	DIRECT APPLIED EXT FINISH SYSTEM	FWC	FABRIC WALL COVERING	LBL	LABEL
DMPF	DAMPPROOFING SYSTEM			LBS	POUNDS
DMT	DEMOUNTABLE	$\sim$		LF	LINEAR FOOT
DN	DOWN	G		LH	LEFT HAND
DR OPNG	DOOR OPENING	GA	GAGE, GAUGE	LHR	LEFT HAND REVERSE
DR	DOOR	GALV	GALVANIZED	LIMEST	LIMESTONE
DWG	DRAWING	GF CMU	GROUND FACE CONCRETE MASONRY	LINO	LINOLEUM
DT	DRAIN TILE	GRFC	GLASS FIBER REINFORCED CONCRETE	LKR	LOCKER
DWL	DOWEL	GRFG	GLASS FIBER REINFORCED GYPSUM	LLH	LONG LEG HORIZONTAL
DWR	DRAWER	GI	GALVANIZED IRON	LLV	LONG LEG VERTICAL
		GL	GLASS/GLAZED	LO	LOUVER OPENING
		GL CMU	GLAZED CONCRETE MASONRY UNIT	LP	LOW POINT
		GR	GRADE	LPRF	LIGHT PROOF
E		GRG	GLASS REINFORCED GYPSUM	LT WT	LIGHT WEIGHT
				LVT	LUXURY VINYL TILE
EA	EACH				
EF	EXHAUST FAN	GRL	GRILLE	Μ	
	EXTERIOR INSULATION FINISH SYSTEM	GYP BD	GYPSUM BOARD		
EJ	EXPANSION JOINT			MAINT	MAINTENANCE
EL	ELEVATION	Н		MATL	MATERIAL
ELEC	ELECTRIC, ELECTRICAL			MAX	MAXIMUM
ELEV	ELEVATOR	Н	HIGH, HEIGHT	MCC	MULTI COLOR COATING
ENCL	ENCLOSURE	HB	HOSE BIBB	MDS	METAL DIVING STRIP
ENTR	ENTRANCE, ENTRY	HC	HOLLOW CORE	MECH	MECHANICAL
ENTER MAT	ENTRY MAT SYSTEM	HDWD	HARDWOOD	MEZZ	MEZZANINE
EP	ELECTRICAL PANEL	HDWE	HARDWARE	MFR	MANUFACTURER
EPT	EPOXY PAINT	HD/SLR	HARDENER SEALER	MH	MANHOLE
F0	FOLIAL	1 1 1 4		N AIN I	

HM

HP

HPC

HR

ID

INCL

INFO

INSUL

IR GYP BD

IN

INT

IR

HORIZ

HORIZB

HOLLOW METAL

HIGH POINT

HOUR

HORIZONTAL BLINDS

INSIDE DIAMETER

INVERT ELEVATION

INFORMATION

INCH, INCHES

INTERIOR

INCLUDE, INCLUDING

INSULATE, INSULATION

IMPACT RESISTANT GYPSUM BOARD

IMPACT RESISTANT

BATT INSULATION

HORIZONTAL, HORIZONTALLY

HIGH PERFORMANCE COATING

MIN

MISC MKBD MLDG MO MRT

MTD

MTL

MT

MULL

NIC

NO

NOM

NRC NTS

MTL PNL

EQUAL

EQUIPMENT

EACH WAY

EXISTING

EXPOSED

EXTERIOR

FACTORY

FLOOR DRAIN

FOUNDATION

FINISH FLOOR

FIRE EXTINGUISHER

**EXPANSION BOLT** 

ELECTRICAL WATER COOLER

EXPOSED CONSTRUCTION

FIRE ALARM CONTROL PANEL

FIRE DEPARTMENT CONNECTION

FIRE EXTINGUISHER AND BRACKET

FIRE EXTINGUISHER CABINET

EXISTING FINISH/DOOR (PER SCHEDULE)

EQ

EQUIP

EW

EWC

EXIST EXP

EXT

FAC

FACP

FDC

FDTN

FEB

FEC

FIN FLR

STRUCTURAL GLAZED FACING TILE

FD

FE

EXP BT

EXP CONST

(E)

# SYMBOL LEGEND

MINIMUM

MISCELLANEOUS

MARKERBOARD

MASONRY OPENING

MARBLE THRESHOLD

METAL OR METALLIC

METAL THRESHOLD

NOT IN CONTRACT

NOICE REDUCTION COEFFICIENT

METAL PANEL

MOULDING

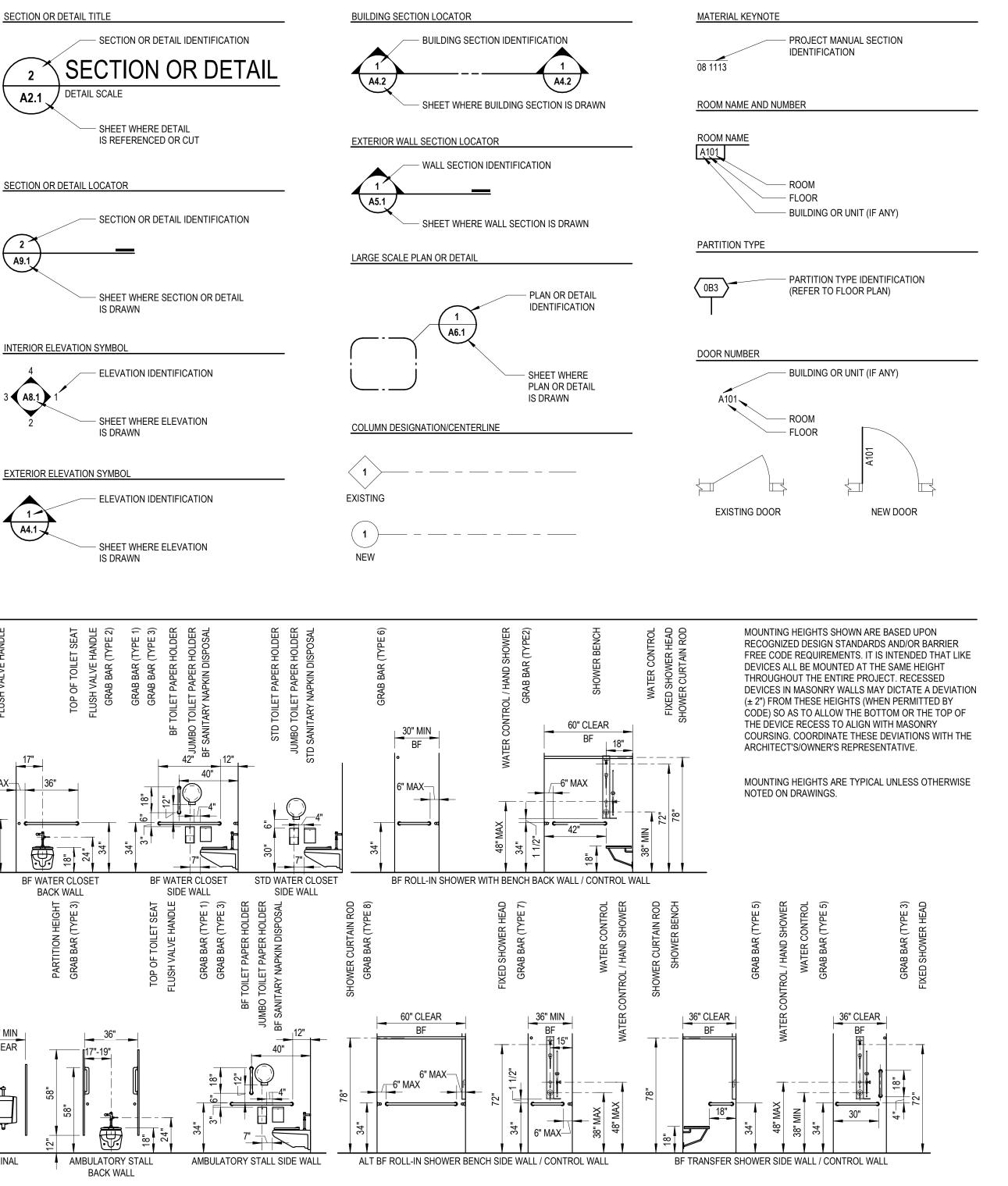
MOUNTED

MULLION

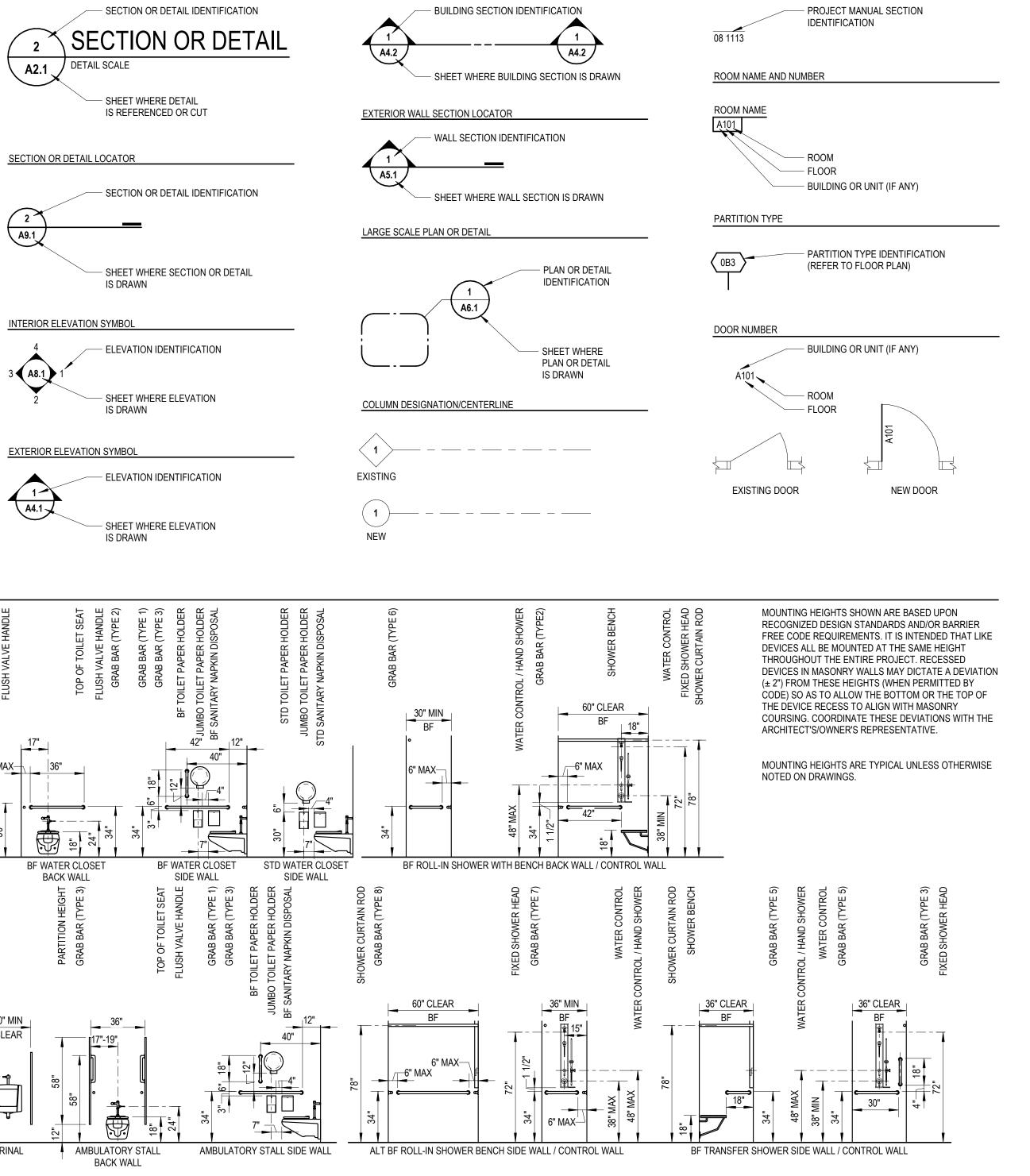
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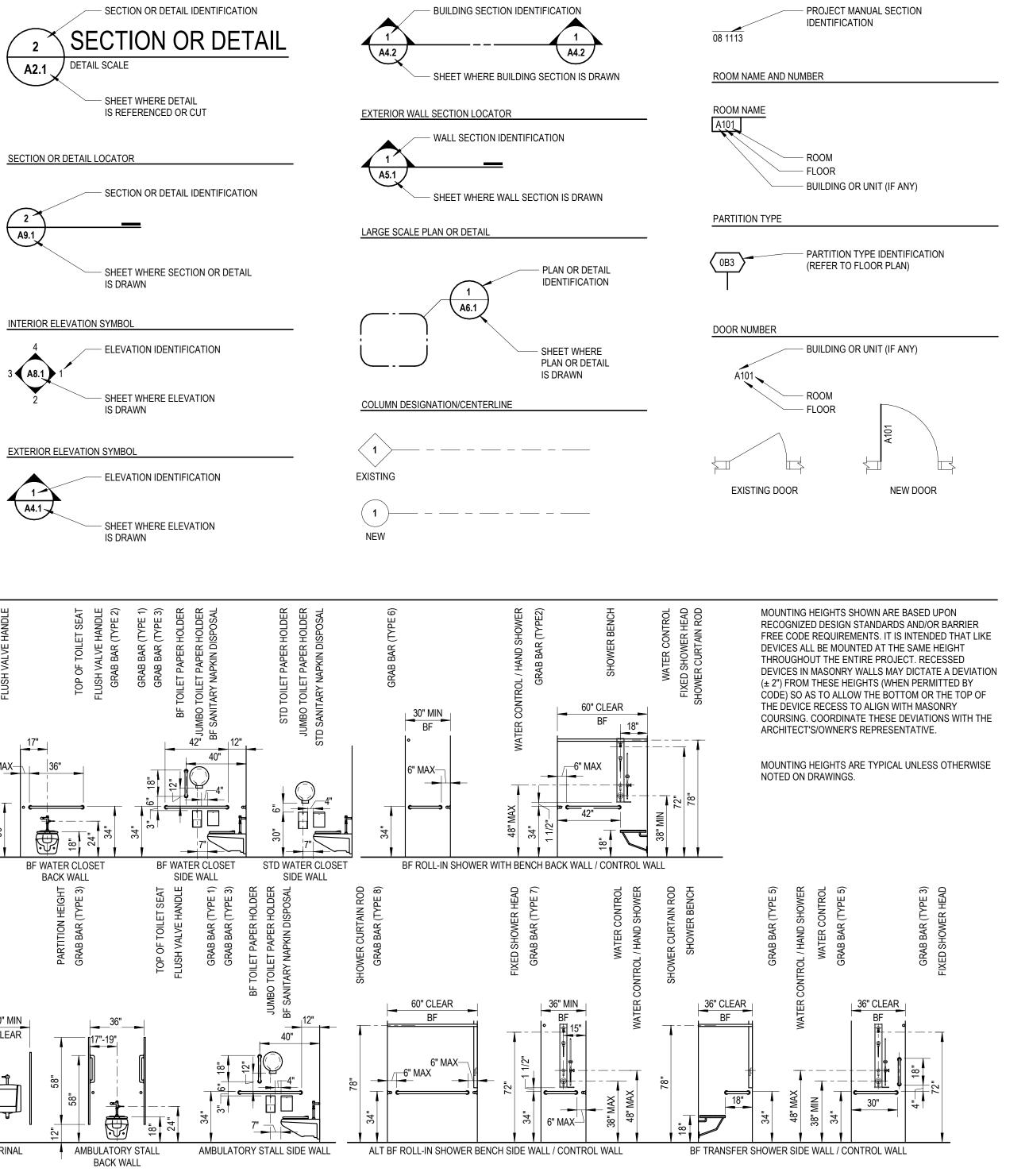
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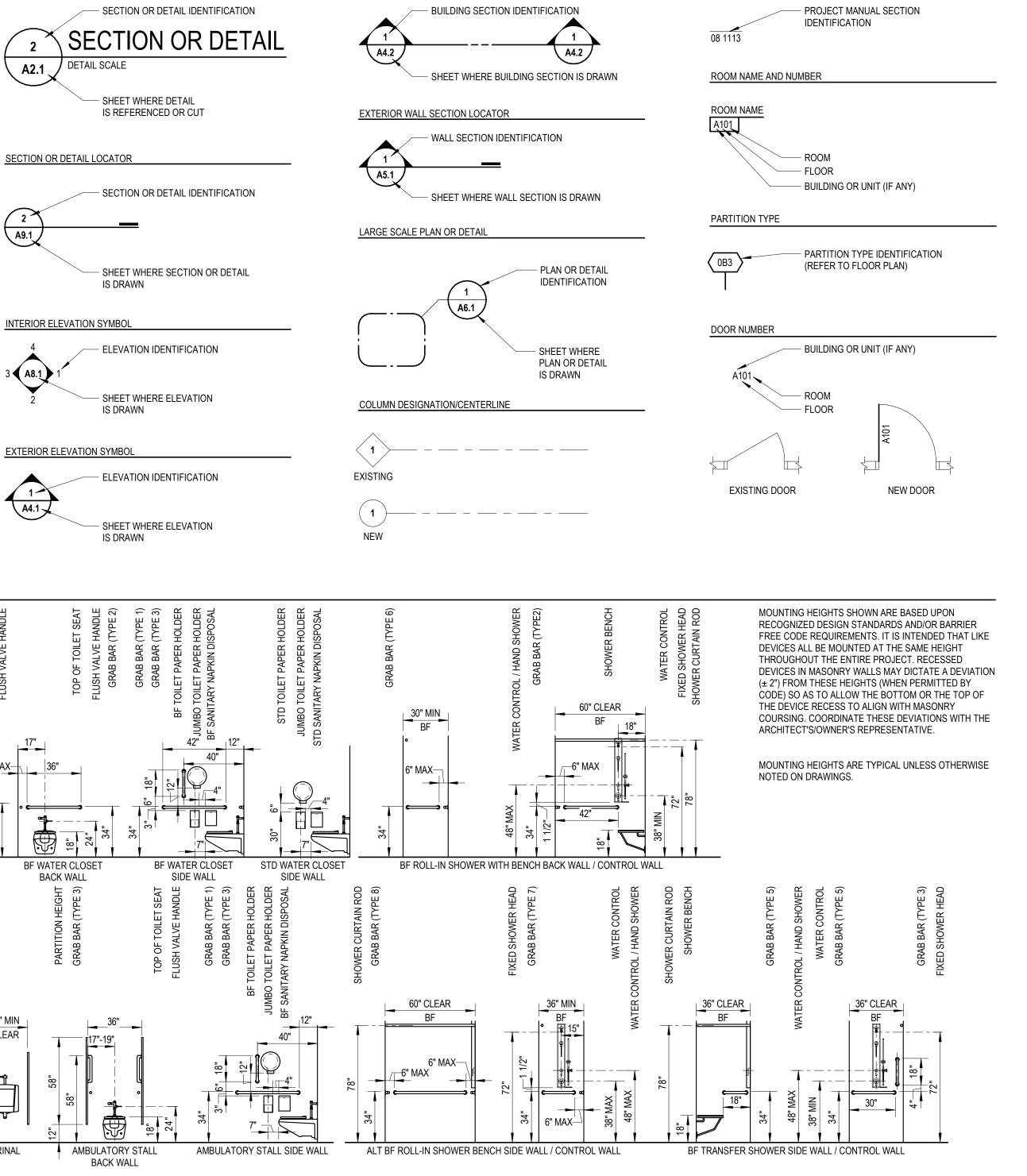
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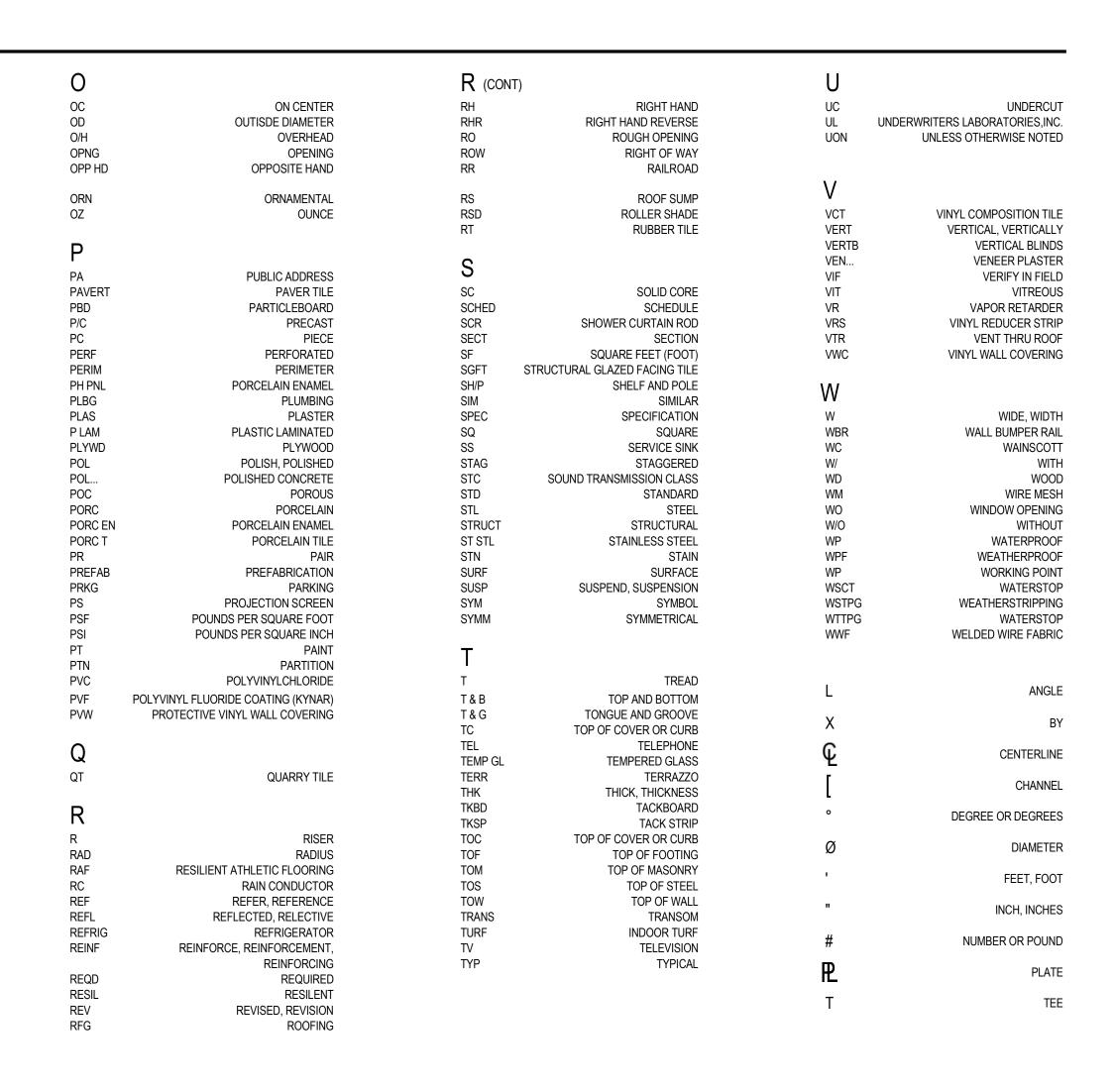


2		SE
A9.1		SH



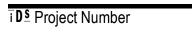






Drawing Number

20111-3008



1. AR.0

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Architectural Reference Information

	Project Designer A. Pelfrey
Project A	Architect / Engineer C. King
	Drawn By A. Pelfrey
	Q.M. Review
	N. LaForest
	Approved B. Sundberg
	Drawing Scale
	As Noted
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024

THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARD INFORMATION

SHOWN ON THIS SHEET

Savage & Tyler Elementary

Schools Secured Entry



Renovations

Key Plan

Project Administrator

Bids 09-13-2024

A. Maurer

Project Title

5211 cascade road SE, suite 300 grand rapids, michigan 49546 248.823.2100 www.ids-michigan.com CIVIL ENGINEER SPALDING DeDECKER 905 south blvd. E

rochester hills, michigan 48307

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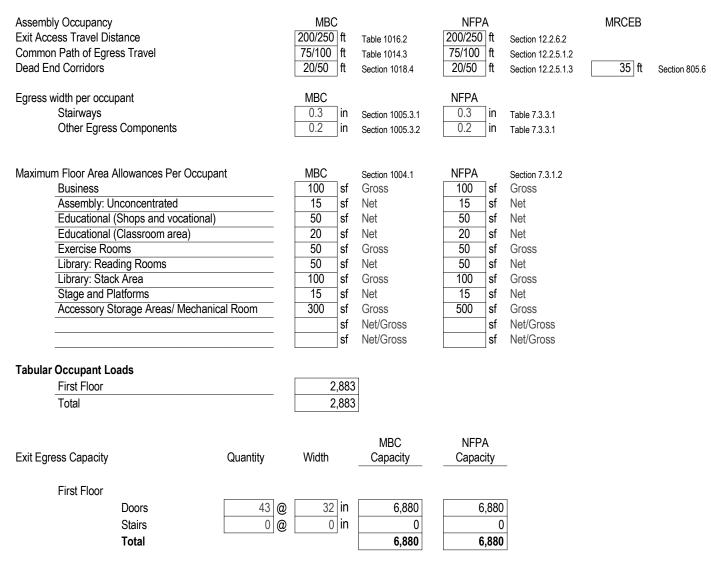
troy, michigan 48098



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# MEANS OF EGRESS



# LIFE SAFETY SYSTEMS

High-Rise Buildings Applicability

MBC Section 403.1 Fire Protection System Requirements Automatic Sprinkler Systems MBC Section 903 NFPA - See Occupancy Chapters & 9.7.1

Standpipe Systems MBC Section 905 NFPA - See Occupancy... NFPA 45

Fire Pumps

Fire Hazard Occupancy

Portable Fire Extinguishers MBC Section 906 IFC Section 906 NFPA See Occupancy Chapters & 9.7.4

Fire Alarm and Detection System Requirements Manual Fire Alarm System MBC Section 907 NFPA See Occupancy Chapters & 9.6

Emergency Voice/Alarm Communication System MBC Section 907.2.1.1 MBC Section 907.5.2.2

Elevator Requirements Ambulance Strecther Compliance

MBC Section 3002.4 Accessible Means of Egress

MBC Section 1007.2.1

Emergency and Standby Power System MBC Section 2702

Yes No

Full Partial None 

Required Not Required

Required Not Required Light (Low) Ordinary (Moderate) Extra (High)

Required Not Required Special Hazard Areas Only

Required Not Required

Required Not Required Per MRCEB Section 804.4.1, Exception #1

Yes No Yes No

Required Emergency Lighting and Exit Signs Not Required

# FIRE RATINGS AND SEPARATIONS

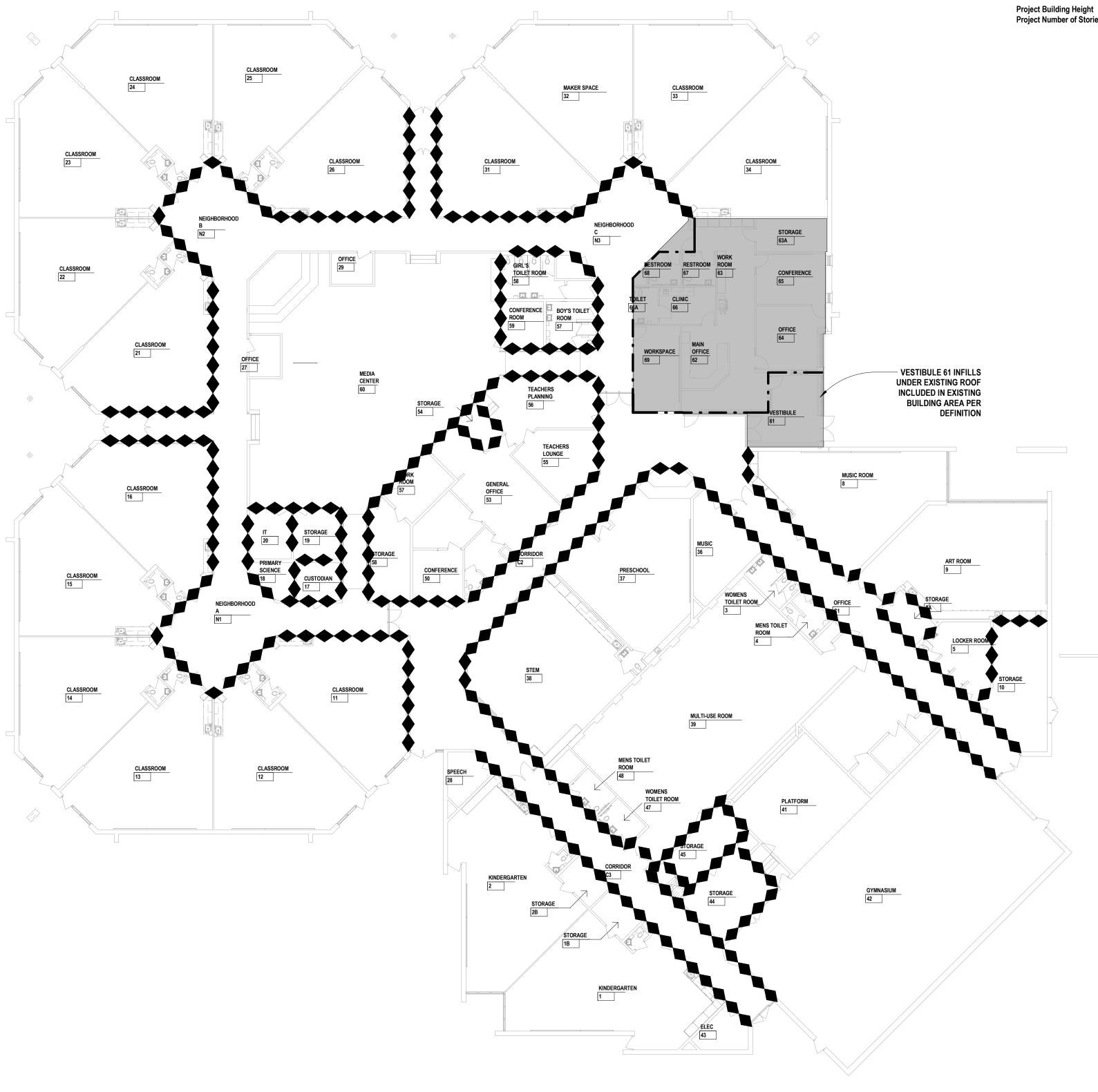
Primary Structural Frame Bearing Walls Exterior Interior Nonbearing Walls and Partitions >10 feet Fire Separation Distance Exterior Interior Floor Construction and Associated Secondary Members Roof Construction and Associated Secondary Members Separation of Occupancies Allowable Area Separations (Fire Walls) Fire Area Separations (Fire Barriers) Corridors (Fire Partitions) Smoke Tight Shaft Enclosures Smoke Compartments (Smoke Barriers) Incidental Use Areas Furnace Room Boiler Room

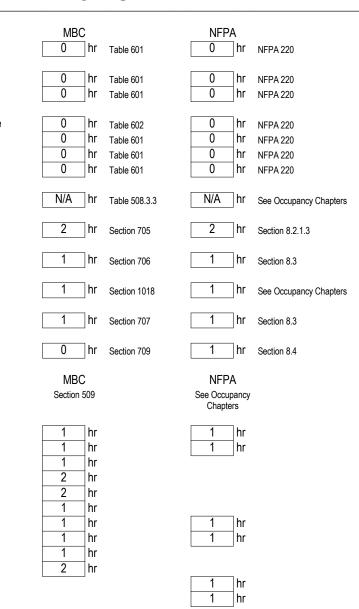
Refrigerant Machinery Room Hydrogen Cutoff Room Incinerator Room Paint Shops Laboratories and Vocational Shops Laundry Room >100sf Waste and Linen Collection Room Stationary storage batter systems Storage and Janitor... Maintenance Shops

# INTERIOR FINISH REQUIREMENTS

Interior Wall and Ceiling Finish Requirements Interior exit stairways, ramps and passageways Corridors and exit access stairways and ramps Rooms and Enclosed Spaces

Interior Floor Finish Requirements

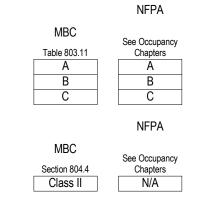


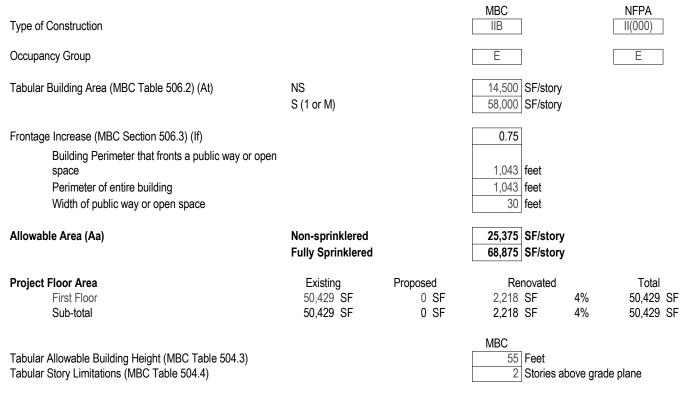


# CODE INFORMATION

APPLICABLE CONSTRUCTION CODES AND STANDARDS				
Building:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Building Code, Incorporating the 2015 Edition of the International Building Code			
	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Rehabilitation Code for Existing Buildings, Incorporating the 2015 Edition of the International Existing Building Code			
	Michigan Department of Licensing and Regulatory Affairs, Bureau of Fire Services, 2016 Fire Safety Rules for Schools, Colleges and Universities, Incorporating the 2012 Edition of the NFPA 101 Life Safety Code			
Barrier Free:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Building Code, Incorporating the 2015 Edition of the International Building Code			
	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2009 ICC A117.1 - Accessible and Usable Buildings and Facilities			
	U.S. Department of Justice and Architecture and Transportation Barriers Compliance Board, American with Disabilities Act (ADA) 2010 - Standards for Accessible Design			
Structural:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Building Code, Incorporating the 2015 Edition of the International Building Code			
Mechanical:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Mechanical Division, 2021 Michigan Mechanical Code, Incorporating the 2021 Edition of the International Mechanical Code			
Plumbing:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Plumbing Division, 2021 Michigan Plumbing Code, Incorporating the 2021 Edition of the International Plumbing Code			
Electrical:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Electrical Division, 2023 Michigan Electrical Code, Incorporating the 2023 Edition of the National Electrical Code			
Fire Alarm:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Electrical Division, Incorporating the 2013 Edition of NFPA 72 - National Fire Alarm and Signaling Code			

### **BUILDING INFORMATION** SINGLE USE AND OCCUPANCY





24 Feet

1 Stories above grade plane

Project Number of Stories above grade plane

LEGEND				
LIFE SAFETY NOTE: NOT ALL	SYMBOLS MAY BE USED			
+	EMERGENCY RESCUE/V			
<b>***</b>	EXISTING FIRE-RE			

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EMERGENCY RESCUE/VENTILATION WINDOW OPENING	
EXISTING FIRE-RESISTANT-RATED FIRE BARRIER. NEW PENETRATIONS OR OPENING PROTECTIVES WILL COMPLY WITH 1-HOUR FIRE-RESISTANCE- RATED FIRE BARRIER REQUIREMENTS	
1-HR FIRE-RATED PARTITION	
2-HR FIRE-RATED PARTITION	
3-HR FIRE-RATED PARTITION	
SMOKE TIGHT PARTITION	
AREA OF LEVEL 2 ALTERATION	
AREA COVERED BY EXISTING AUTOMATIC SPRINKLER SYSTEM	



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STRUCTURAL ENGINEER SDI Structures 275 east liberty ann arbor, michigan 48101 734.213.6091 www.sdistructures.com

Project Title

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations Key Plan

Project Administrator A. Maurer Project Designer A. Pelfrey Project Architect / Engineer C. King Drawn By A. Pelfrey Q.M. Review N. LaForest Approved B. Sundberg Drawing Scale 1/16" = 1' - 0" Issue Date Issued for Design Development 06-24-2024 Quality Management Review 08-23-2024 Bids 09-13-2024

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Life Safety Plan - Savage Elementary

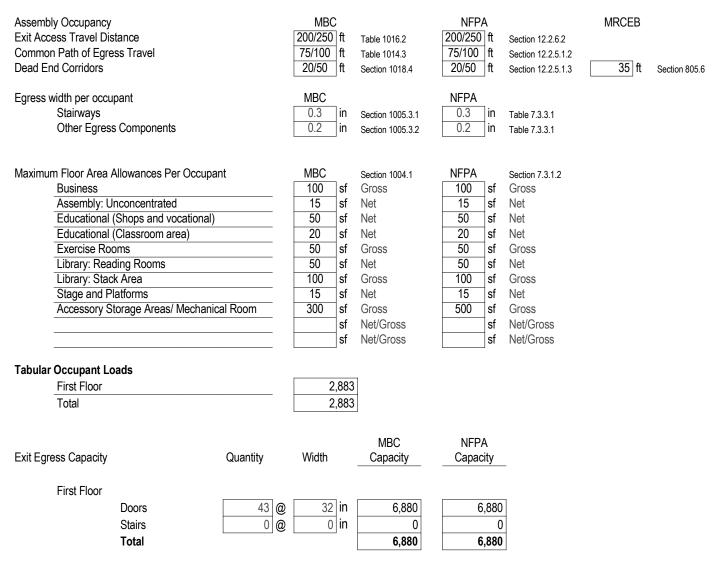
Drawing Number

20111-3008

ī **D**<sup>s</sup> Project Number



# MEANS OF EGRESS



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MBC Section 905 NFPA - See Occupancy... NFPA 45

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- Emergency Voice/Alarm Communication System MBC Section 907.2.1.1 MBC Section 907.5.2.2
- Elevator Requirements Ambulance Strecther Compliance
- MBC Section 3002.4 Accessible Means of Egress
- MBC Section 1007.2.1

### Emergency and Standby Power System MBC Section 2702

Yes No

Full Partial None

Required Not Required

Required Not Required Light (Low) Ordinary (Moderate) Extra (High)

Required Not Required Special Hazard Areas Only

Required Not Required

Required
Not Required Per MRCEB Section 804.4.1, Exception #1

Yes No Yes No

Required Emergency Lighting and Exit Signs
Not Required

# FIRE RATINGS AND SEPARATIONS

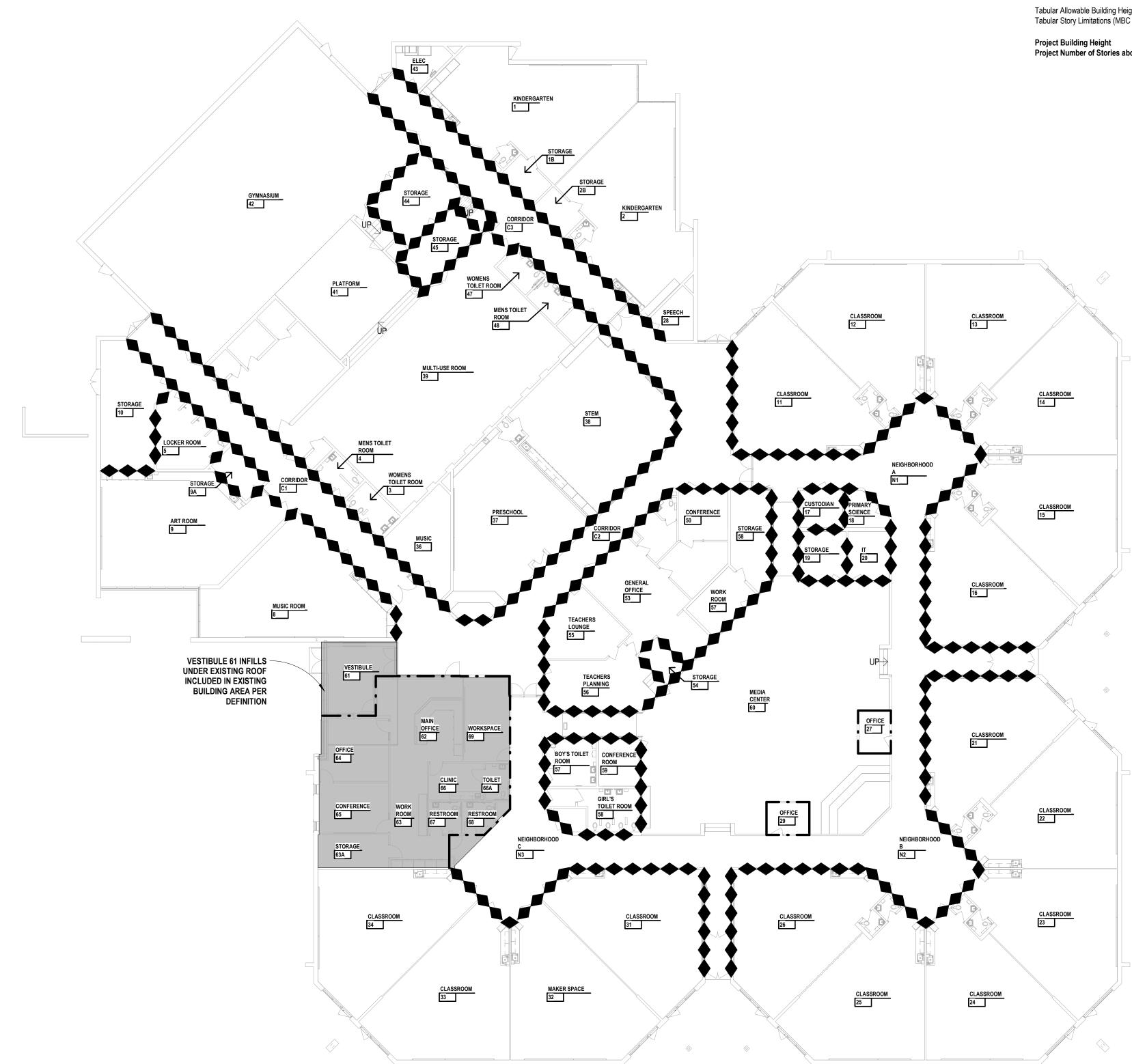
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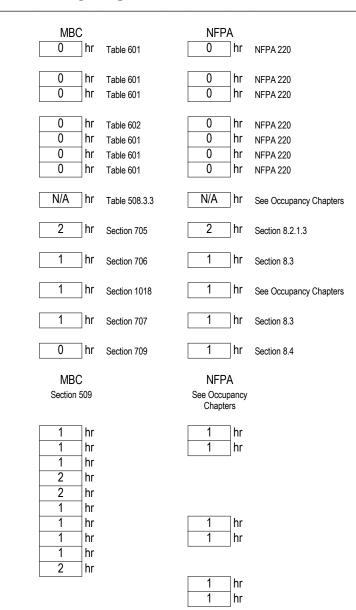
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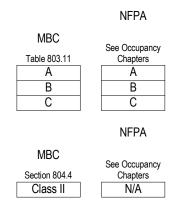




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# **BUILDING INFORMATION**



SINGLE USE AND OCCUPANCY						
Type of Construction			MBC IIB			NFPA II(000)
Occupancy Group			E			E
Tabular Building Area (MBC Table 506.2) (At)	NS S (1 or M)			SF/story SF/story		
Frontage Increase (MBC Section 506.3) (lf) Building Perimeter that fronts a public way or open space Perimeter of entire building Width of public way or open space			0.75 1,043 1,043 30	-		
Allowable Area (Aa)	Non-sprinklered Fully Sprinklered			SF/story SF/story		
Project Floor Area First Floor Sub-total	Existing 50,429 SF 50,429 SF	Proposed 0 SF 0 SF	2,218 2,218		4% 4%	Total 50,429 SF 50,429 SF
Tabular Allowable Building Height (MBC Table 504.3) Tabular Story Limitations (MBC Table 504.4)				Feet Stories ab	ove grade	plane
Project Building Height Project Number of Stories above grade plane				Feet Stories a	bove grad	le plane

LEGEND			
LIFE SAFETY NOTE: NOT ALL SYMBOLS MAY BE USED			
<b>■</b> ∎ EM	MERGENCY RESCUE/VENTILATION WINDOW OPENING		
<b>***</b>	EXISTING FIRE-RESISTANT-RATED FIRE BARRIER.		

<b>****</b>	EXISTING FIRE-RESISTANT-RATED FIRE BARRIER. NEW PENETRATIONS OR OPENING PROTECTIVES WILL COMPLY WITH 1-HOUR FIRE-RESISTANCE- RATED FIRE BARRIER REQUIREMENTS
<u> </u>	1-HR FIRE-RATED PARTITION
<u> </u>	2-HR FIRE-RATED PARTITION
<u> </u>	3-HR FIRE-RATED PARTITION
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	AREA OF LEVEL 2 ALTERATION
	AREA COVERED BY EXISTING AUTOMATIC SPRINKLER SYSTEM

20111-3008

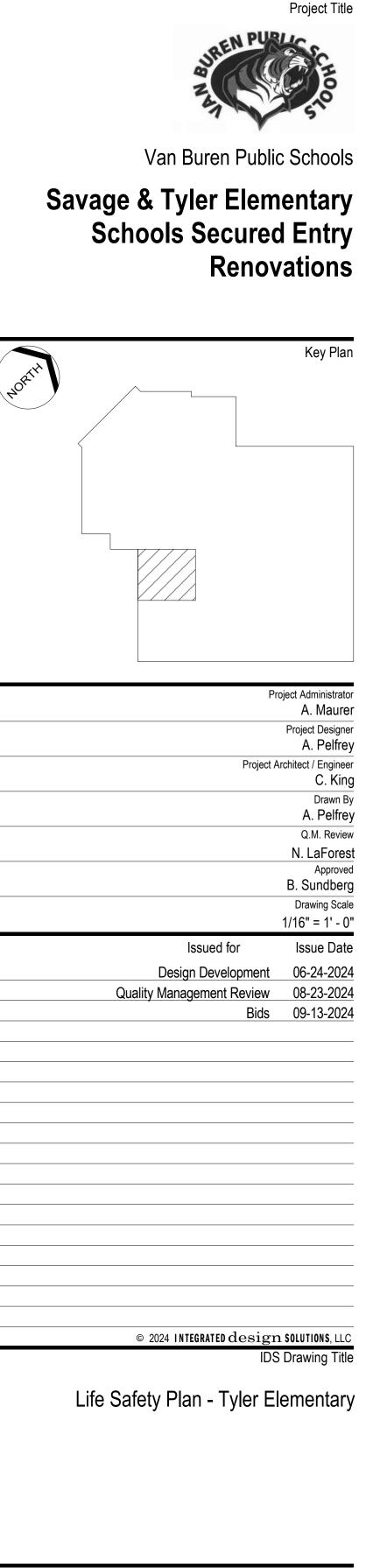


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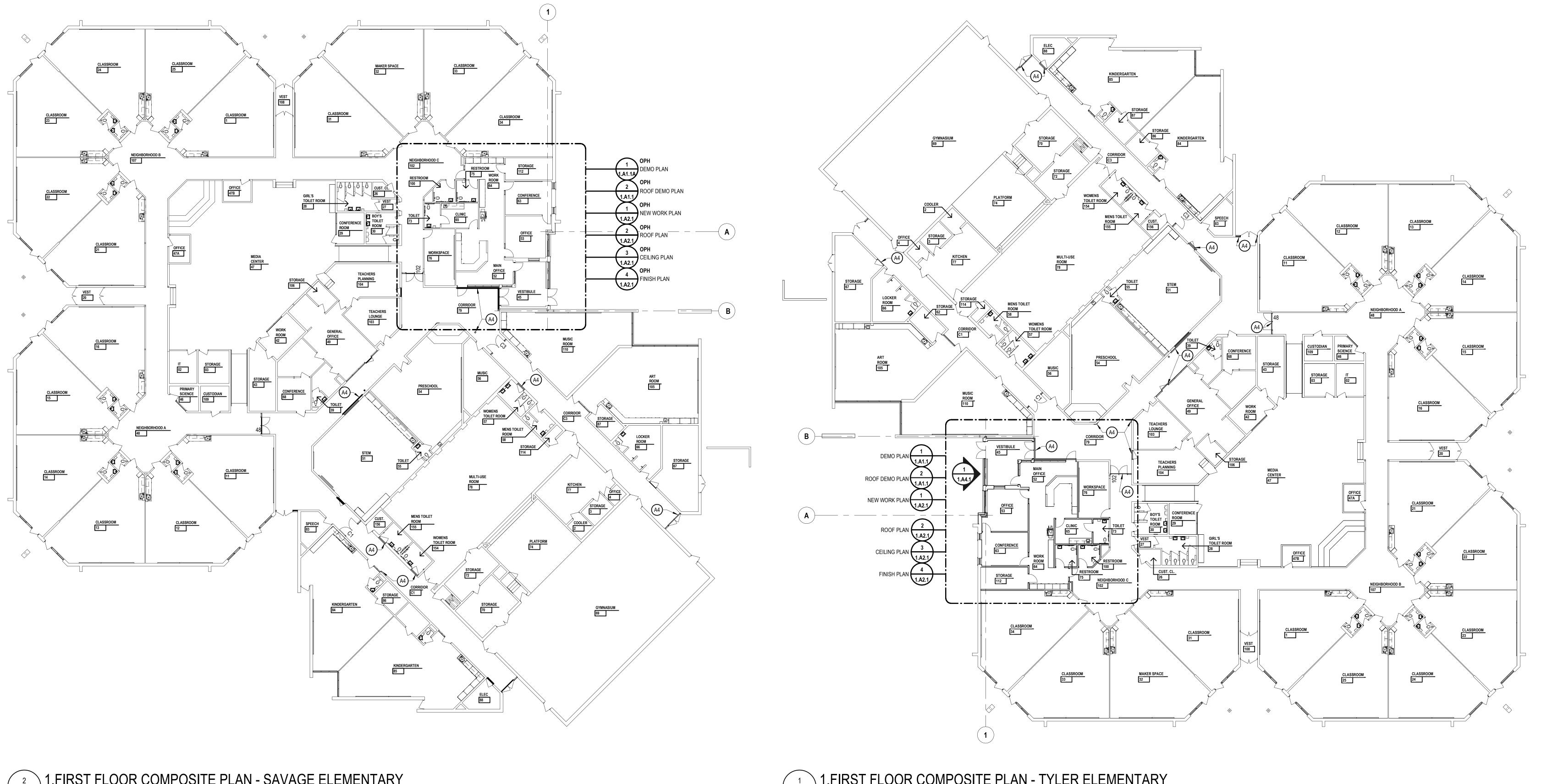
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ī **D**<sup>s</sup> Project Number

Drawing Number





1.FIRST FLOOR COMPOSITE PLAN - TYLER ELEMENTARY 1 A4.1 1/16" = 1'-0"

### GENERAL NOTES NEW WORK PLAN

- A. REFER TO SHEET 1.A9.2 FOR DOOR SCHEDULE AND COLORS.
- B. REFER TO SHEET 1.A9.1 FOR FINISH SCHEDULE AND COLORS.
- C. REFER TO LIFE SAFETY PLANS FOR PARTITION RATINGS.
- D. PARTIAL WALL POCHEING IS SHOWN THROUGHOUT THIS PLAN AND THE TERMINATION OF SAME SHALL NOT BE CONSTRUED TO REPRESENT A CHANGE IN WALL MATERIAL. VERIFY WALL MATERIALS WITH PARTITION TYPES AND SCHEDULES.
- E. PATCH AND/OR REPAIR ALL EXISTING FLOOR, WALL AND OR CEILING FINISHES AS REQUIRED TO MATCH EXISTING OR TO ACCEPT NEW FINISHES AS SCHEDULED AT ALL AREAS AFFECTED BY THE DEMOLITION WORK. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL SCOPE OF WORK.
- F. INFILL ALL OPENINGS IN EXISTING WALLS ABOVE CEILINGS THAT ARE THE RESULT OF MECHANICAL OR ELECTRICAL DEMOLITION. OPENINGS IN MASONRY WALLS SHALL BE FILLED WITH MASONRY OF SIMILAR TYPES AND THICKNESS AS EXISTING. OPENINGS IN OTHER TYPES OF WALL CONSTRUCTION SHALL MATCH EXISTING MATERIALS, FINISHES AND WALL THICKNESS. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR SCOPE OF WORK.
- G. PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINS WHILE KEEPING FLOOR LEVEL AT WALL BASE.
- H. COORDINATE SIZE AND LOCATION OF ALL ACCESS DOORS WITH TRADES REQUIRING SAME. QUANTITIES SHOWN DO NOT NECESSARILY REPRESENT ALL ACCESS DOORS REQUIRED FOR ACCESSIBILITY.
- I. ADDITIONAL TERRAZZO FLOOR PATCHING SCOPE OF WORK IS SHOWN ON SHEET 1.A0.1 FLOOR PLANS.

### **KEYNOTES** NEW WORK FLOOR PLAN

### SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS

### NOTE: NOT ALL KEYNOTES MAY BE USED

- # LEGEND SYMBOL INDICATOR A1 03 3000 PATCH AND REPAIR CONCRETE FLOOR AT LOCATION OF REMOVED WALL OR REMOVED SLAB PORTION. REFER TO STRUCTURAL DETAIL SL-13 PER SHEET 1.S0.3.
- A2 03 3000 CONCRETE SLAB ON GRADE. REFER TO FOUNDATION PLAN PER SHEET 1.S1.1.
- A3 POWER-OPERATED DOOR
- A4 09 6623 TERRAZZO FLOORING AND WALL BASE REPAIR. REFER TO ROOM FINISH SCHEDULE.

ī**D**<sup>s</sup> Project Number

20111-3008

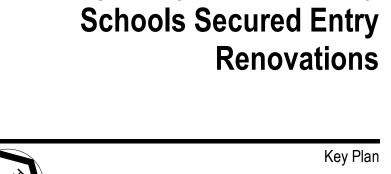
Drawing Number



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First Floor Composite Plan

Project Architect / Engineer
C. King
Drawn By A. Pelfrey
Q.M. Review
N. LaForest
Approved B. Sundberg
Drawing Scale 3/32" = 1' - 0"
Issued for Issue Date
Design Development 06-24-2024
Quality Management Review 08-23-2024
Bids 09-13-2024



Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry

Key Plan

Project Administrator A. Maurer

Project Designer A. Pelfrey

Project Title

www.sda-eng.com

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STRUCTURAL ENGINEER

ann arbor, michigan 48101

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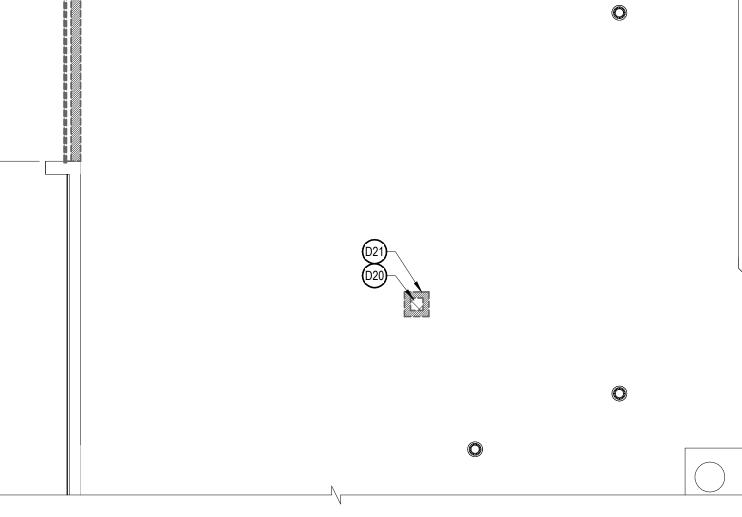
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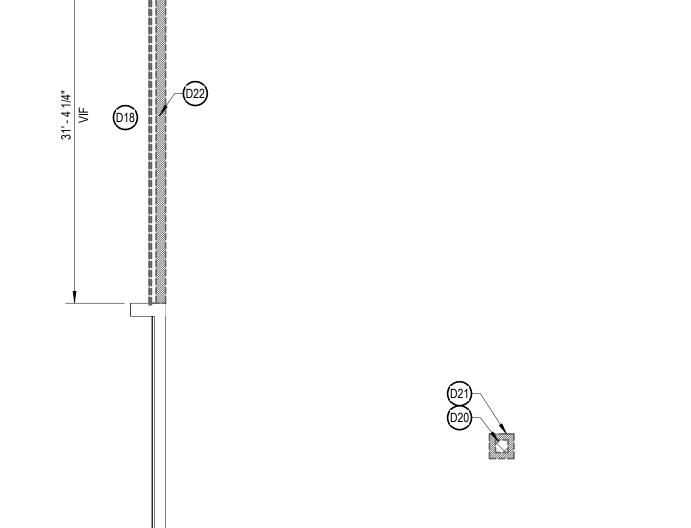
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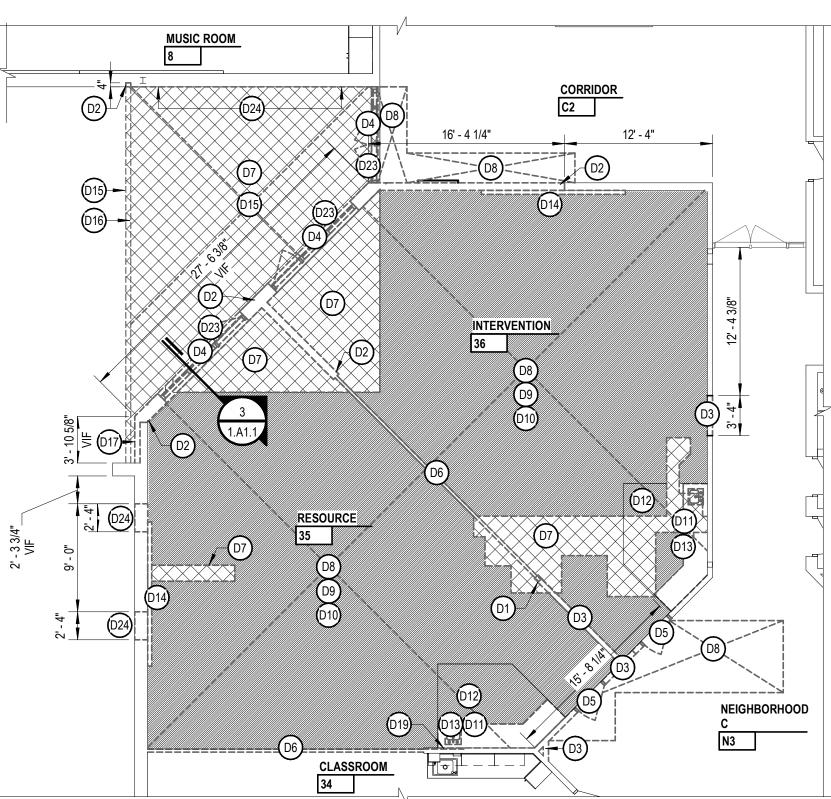






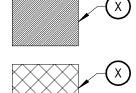


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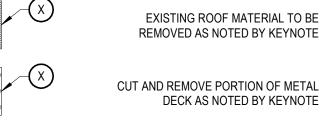




LEGEND
ROOF DEMOLITION PLAN NOTE: NOT ALL SYMBOLS MAY BE USED
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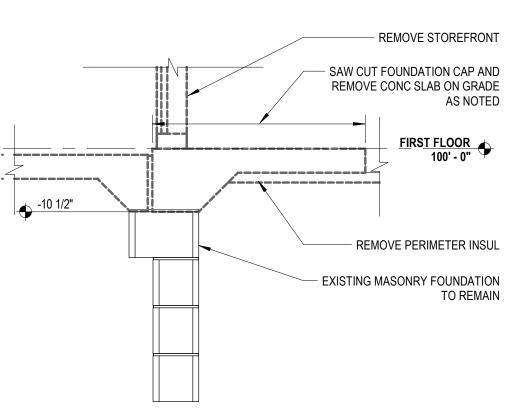
EXISTING TO BE REMOVED

EXISTING TO REMAIN



O





### GENERAL NOTES DEMOLITION PLAN

- A. ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLAN. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL, AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.
- B. CONTRACTOR SHALL PROVIDE TEMPORARY DUSTPROOF PARTITIONS WITH DOORS AT LOCATIONS INDICATED AND/OR AS REQUIRED TO ADEQUATELY SEPARATE OCCUPIED AREAS FROM CONSTRUCTION HAZARDS, NOISE AND/OR DUST. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. COORDINATE ALL LOCATIONS WITH ARCHITECT'S/OWNER'S REPRESENTATIVE.
- C. CONTRACTOR SHALL PROVIDE DUST MATS AT ALL CONSTRUCTION AREA ENTRANCES AND EXIT LOCATIONS. COORDINATE ALL LOCATION'S WITH ARCHITECT'S/OWNER'S REPRESENTATIVES.
- D. CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.
- E. COORDINATE SCOPE AND EXTENT OF DEMOLITION WITH NEW WORK PLANS AND DETAILS.
- F. REFER TO MECHANICAL AND ELECTRICAL DEMOLITION SHEETS FOR ADDITIONAL INFORMATION.

# 

<u>K</u> [	KEYNOTES			
SHAD	DEMOLITION PLAN SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS NOTE: NOT ALL KEYNOTES MAY BE USED			
(#)	LEGEND SYMBOL INDICATOR			
D1	REMOVE COLUMN IN ITS ENTIRETY			
D2	REMOVE PORTION OF MASONRY WALL. COORDINATE WITH NEW WORK PLANS.			
D3	REMOVE PORTION OF GYPSUM BOARD / METAL STUD PARTITION. COORDINATE WITH NEW WORK PLANS.			
D4	REMOVE DOORS, STOREFRONT FRAMING, GLAZING, SILL, SEALANT, ANCHORS, WOOD BLOCKING, AND ASSOCIATED SOFFIT / CEILING ELEMENTS AS REQUIRED FOR INSTALLATION OF NEW WORK.			
D5	REMOVE DOOR, FRAME, AND SILL IN ITS ENTIRETY.			
D6	REMOVE OPERABLE PARTITION WALL AND FRAMING IN ITS ENTIRETY.			
D7	SAW CUT AND REMOVE PORTION OF CONCRETE FLOOR SLAB. COORDINATE WITH NEW WORK AND PLUMBING PLANS.			
D8	REMOVE ACOUSTICAL CEILING TILES AND GRID.			
D9	REMOVE CARPET, BASE AND ADHESIVE DOWN TO TOP OF STRUCTURAL SLAB.			
D10	SALVAGE CLASSROOM PROJECTOR, PROJECTOR SCREEN, AND CEILING SPEAKERS.			
D11	SALVAGE WALL-MOUNTED PAPER TOWEL DISPENSER AND SOAP DISPENSER.			
D12	REMOVE CERAMIC TILE, TILE BASE, MARBLE SILL, AND GROUT DOWN TO TOP OF STRUCTURAL SLAB.			
D13	REMOVE BASE CABINETS, SINK, COUNTERTOP, BACKSPLASH AND/OR WALL MOUNTED CABINETS.			
D14	REMOVE MARKERBOARD / TACKBOARD / WHITEBOARD IN ITS ENTIRETY.			
D15	REMOVE ACRYLIC PLASTER ON METAL LATH AND SUSPENSION SYSTEM IN ITS ENTIRETY - HEAVY BUILDING STRUCTURE TO REMAIN. COORDINATE CONDITION WITH ARCHITECT ONCE EXPOSED.			
D16	REMOVE VENTED DRIP SCREED			
D17	REMOVE EXTERIOR GLAZED FACE BRICK			
D18	SALVAGE METAL PARAPET FLASHING OR METAL COPING CAP AS NEEDED TO COMPLETE SOFFIT/FASCIA REMOVAL.			
D19	REMOVE GYPSUM BOARD WALL AS REQUIRED TO PERFORM PLUMBING WORK.			
D20	REMOVE PORTION OF METAL ROOF DECK OR INSULATING ROOF DECK AS REQUIRED FOR MECHANICAL PENETRATIONS. COORDINATE WITH NEW WORK AND MECHANICAL DRAWINGS.			
D21	REMOVE ROOF SYSTEM (MEMBRANE AND RIGID INSULATION) AS REQUIRED FOR NEW MECHANICAL EQUIPMENT CURB. METAL DECK TO REMAIN UON. COORDINATE WITH NEW WORK AND MECHANICAL DRAWINGS.			
D22	REMOVE PORTION OF ROOF MEMBRANE AS SHOWN. COORDINATE WITH NEW WORK.			
D23	REMOVE SPALLED / DAMAGED CONCRETE AS REQUIRED FOR NEW FINISHES.			
D24	SALVAGE EXISTING BRICK. COORDINATE WITH NEW WORK PLAN DETAIL 1/1.A5.2 AND EXTERIOR ELEVATION ON 1.A4.1			

# LEGEND DEMOLITION PLAN NOTE: NOT ALL SYM

NOTE: NOT ALL SYMBOLS MAY BE USED				
	EXISTING TO BE REMOVED			
	EXISTING TO REMAIN			
	EXISTING CEILING TO BE REMOVED AS NOTED BY KEYNOTE			
	EXISTING FLOOR/FINISH TO BE REMOVED AS NOTED BY KEYNOTE			
	SAWCUT AND REMOVE PORTION OF CONC SLAB AS NOTED BY KEYNOTE			

20111-3008

SAVAGE ELEMENTARY - SIM OPP HAND

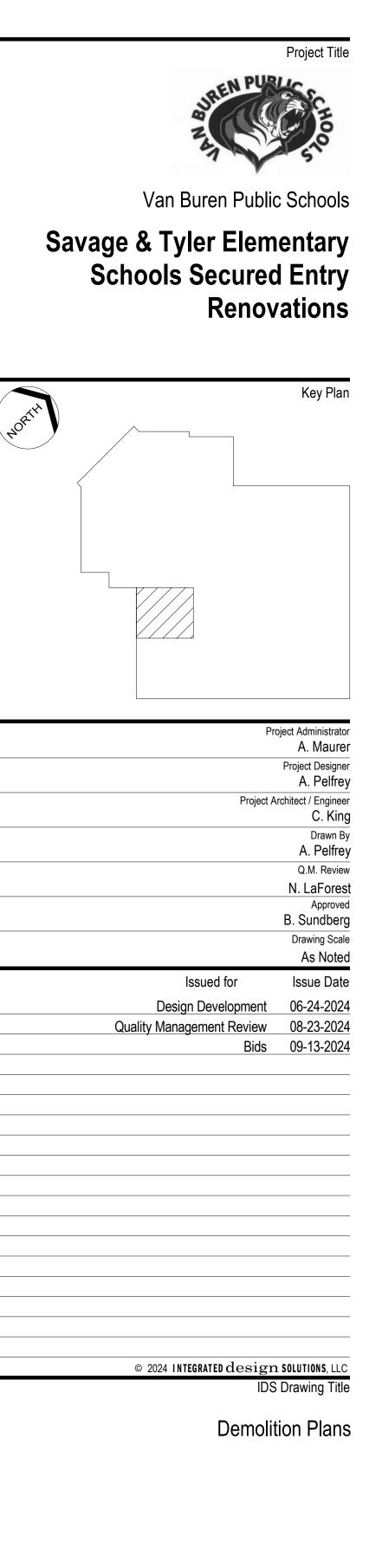


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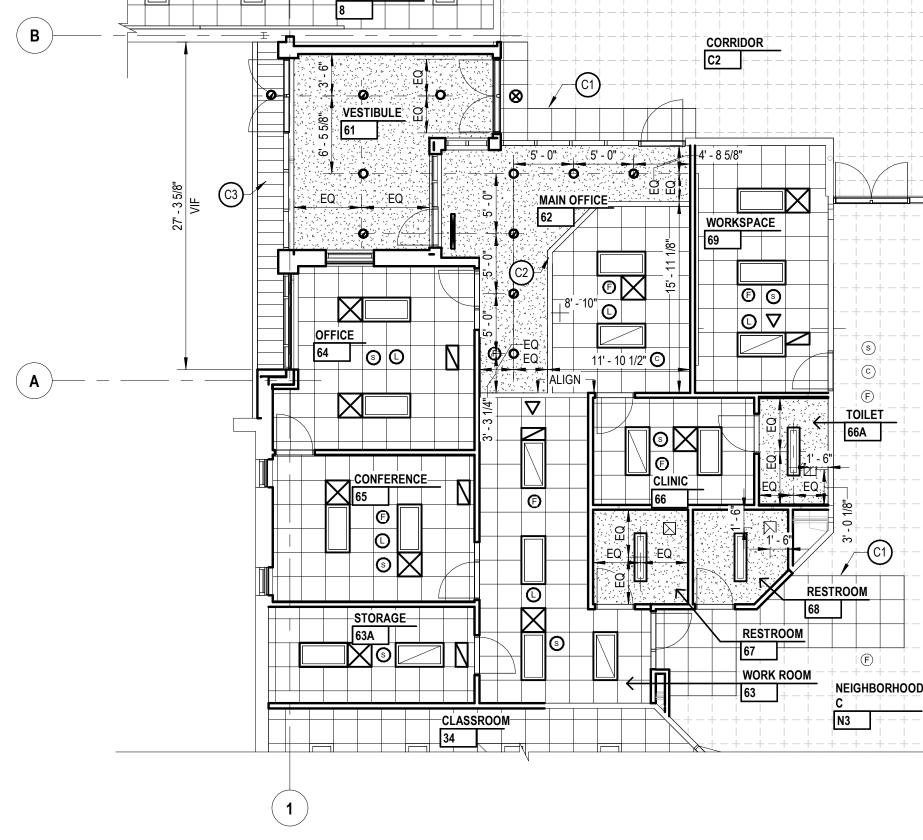
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Drawing Number

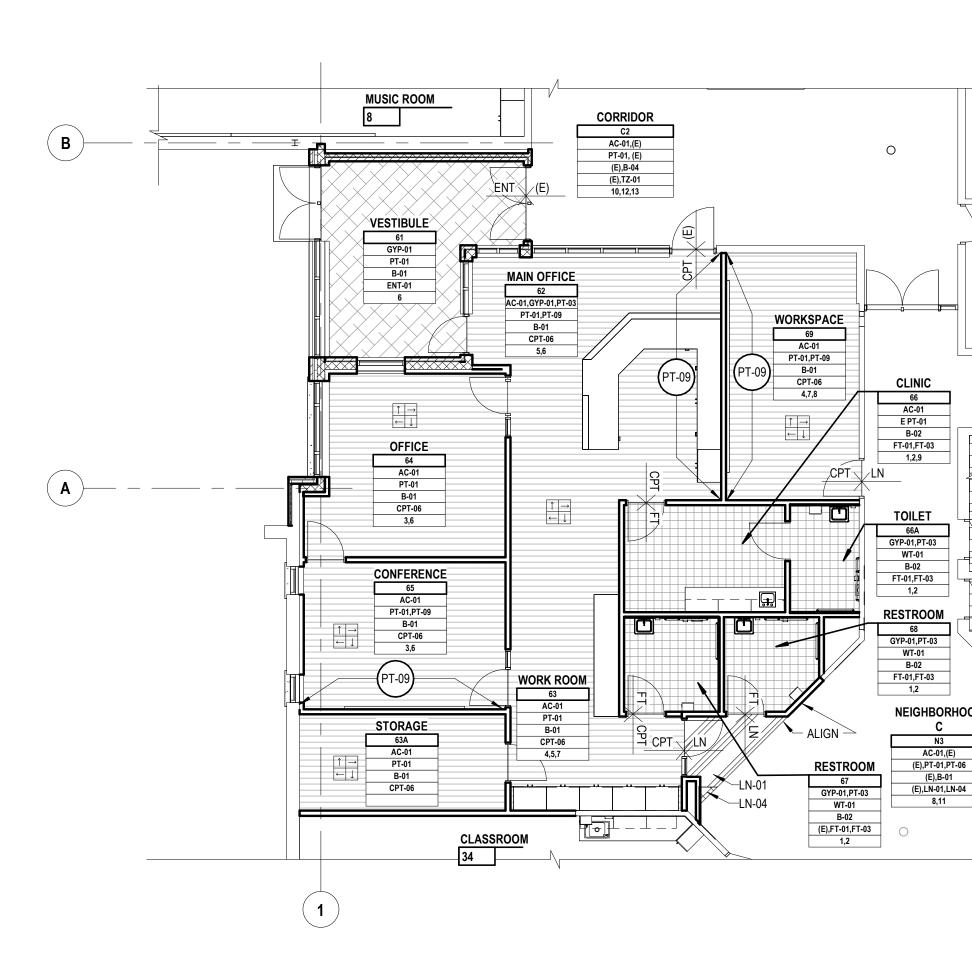
1.A1.1



MUSIC ROOM







# GENERAL NOTES

FINISH PLAN	<b>CAL NOTES</b> ROOM FINISH SCHEDULE AND COLOR CODES FOR MORE
LEGEN	
FINISH PLAN NOTE: NOT ALL	SYMBOLS MAY BE USED
	09 6543 LINOLEUM TILE FLOORING LN-01
	09 6543 LINOLEUM TILE FLOORING LN-04
	09 3000 PORC FLOOR TILE 75% FT-01, 25% FT-03 IN RANDOM INSTALLATION
	09 6813 CARPET TILE ENT-0
	09 6813 CARPET TILE CPT-06
	09 6613 TERRAZZO FLOORING TZ-07
X	FLOOR MATERIAL TRANSITION TAG REFER TO 1.A9.2 FOR TRANSITION/ SILI DETAILS
XX-XX FLOC	R COLOR CODE TAG - REFER TO ROOM FINISH SCHEDULE SHEET 1.A9.
4	FLOORING INSTALLATION DIRECTION
(XX-XX)	ACCENT MATERIAL, REFER TO COLOR CODES
	FLOORING INSTALLATION METHOD - ASHLAF
$\begin{array}{c c} \uparrow & \uparrow \\ \hline \uparrow & \uparrow \end{array}$	FLOORING INSTALLATION METHOD - MONOLITHIC
$ \begin{array}{c} \uparrow \rightarrow \\ \leftarrow \downarrow \end{array} $	FLOORING INSTALLATION METHOD - QUARTER TURN
$ \begin{array}{c} \uparrow \\ \neg \\ \neg \\ \downarrow \\ \downarrow \\ \leftarrow \end{array} $	FLOORING INSTALLATION METHOD - NON-DIRECTIONAL
	FLOORING INSTALLATION METHOD - HERINGBONE
ROOM NAME V ROOM # Ceiling Finish Wall Finish Base Finish	NOTE: FINISHES INDICATED IN ROOM FINISH TAGS ARE GENERAL OVERALL FINISHES FOR ROOM UNLESS OTHERWISE INDICATED BY NOTE REMARK, DETAIL AND/OR ELEVATION
Floor Finish Comments	ROOM SPECIFIC FINISH REMARKS, REFER TO REMARKS LEGEND FOR ADDITIONAL INFORMATION
GENE	RAL NOTES

### <u>OLIVLIALINOTLO</u> REFLECTED CEILING PLAN

- A. CEILING HEIGHT 9'-0" AFF UNLESS OTHERWISE NOTED.
- B. ACOUSTICAL CEILING PANELS AND/OR TILES SHALL BE CENTERED WITHIN THE ROOM OR BORDER UNLESS OTHERWISE NOTED.
- C. REFER TO FLOOR PLANS FOR PARTITION TYPE DESIGNATION.
- D. COORDINATE CEILING SUSPENSION SYSTEMS WITH OTHER CEILING SPACE EQUIPMENT SUPPORTING DEVICES.
- E. UNLESS OTHERWISE NOTED LOCATION OF ITEMS SHOWN IN AREAS WITHOUT FINISH CEILINGS IS APPROXIMATE. COORDINATE EXACT LOCATION BETWEEN TRADES.
- F. COORDINATE SIZE AND LOCATION OF ALL ACCESS DOORS WITH TRADES REQUIRING SAME. QUANTITIES SHOWN DO NOT NECESSARILY REPRESENT ALL ACCESS DOORS REQUIRED FOR ACCESSIBILITY.

### LEGEND

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### REFLECTED CEILING PLAN NOTE: NOT ALL SYMBOLS MAY BE USED

LAY-IN CEILIN

EXISTING LAY-IN CEILING

### GYPSUM BOARD CEILING

ACOUSTIC METAL DECK

RECESSED DOWNLIGHT
RECESSED LINEAR LIGHT FIXTURE
PENDANT LIGHT FIXTURE
PENDANT LINEAR LIGHT FIXTURE
LIGHT FIXTURES
INDUSTRIAL LIGHT FIXTURE
LINEAR RETURN DIFFUSER
LINEAR SUPPLY DIFFUSER
EXHAUST AIR DIFFUSER
RETURN AIR REGISTER/GRILLS
SUPPLY AIR REGISTER/GRILLS
ACCESS PANEL (24X24 UON)
RADIANT CEILING PANEL
SPRINKLER HEAD
SENSORS
FIRE ALARM DEVICES
SPEAKERS
MICROPHONE
EXIT SIGNS
JUNCTION BOX
RECEPTACLES
WIRELESS ACCESS POINT
CAMERA
PROJECTOR

### PROJECTOR FLAT PANEL MONITOR

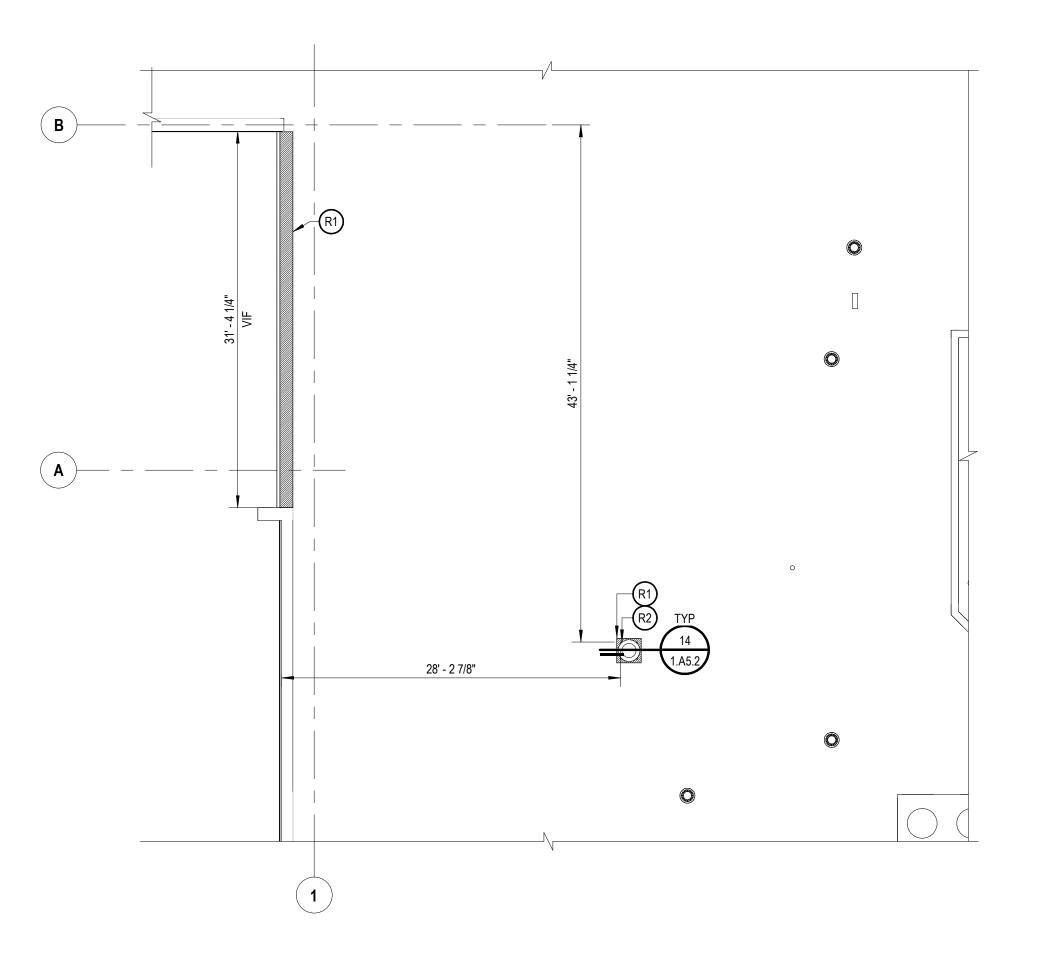
# **KEYNOTES**

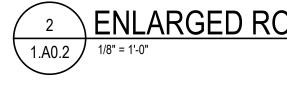
REFLECTED CEILING PLAN SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS NOTE: NOT ALL KEYNOTES MAY BE USED (#) LEGEND SYMBOL INDICATOR

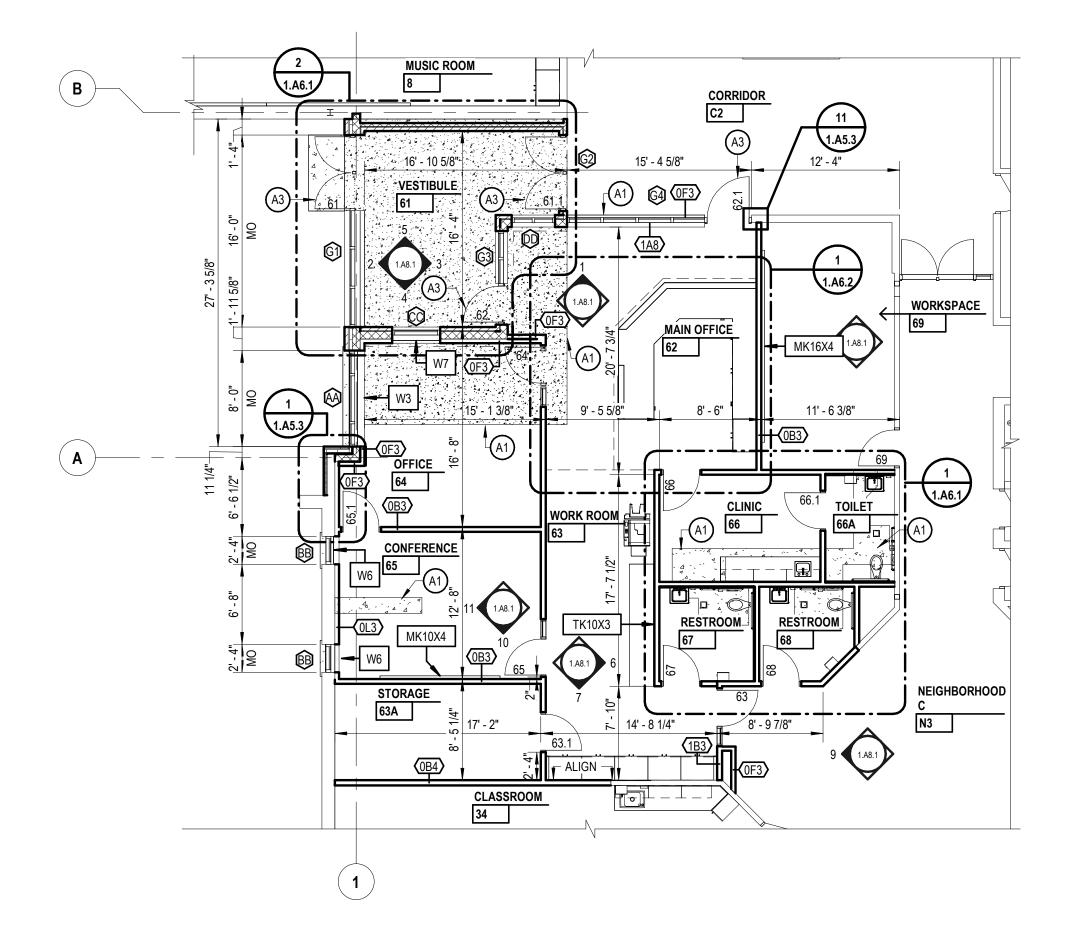
C1 09 5113 PATCH ACOUSTIC LAY-IN CEILING PANEL

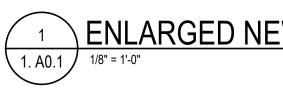
C2 09 2900 GYPSUM BOARD BULK HEAD. REFER TO DETAIL 13/1.A5.1

C3 07 4213 METAL PANEL SOFFIT









# ENLARGED ROOF PLAN - TYLER ELEMENTARY

SAVAGE ELEMENTARY - SIM OPP HAND

# ENLARGED NEW WORK PLAN - TYLER ELEMENTARY

SAVAGE ELEMENTARY - SIM OPP HAND

### GENERAL NOTES ROOF PLAN

- A. REFER TO SHEET 1.A5.1 & 1.A5.2 FOR TYPICAL ROOFING DETAILS. B. COORDINATE SIZE AND LOCATION OF ALL EQUIPMENT SUPPORTS WITH INFORMATION PROVIDED BY THE APPROPRIATE EQUIPMENT MANUFACTURER AND TRADE CONTRACTORS.
- C. REFER TO MECHANICAL AND ELECTRICAL DOCUMENTS FOR ALL PIPES, CURBS, VENTS, DUCTS, CONDUITS, LIGHTNING PROTECTION, AND OTHER FEATURES EXTENDING THROUGH THE ROOF SURFACES WHICH REQUIRE FLASHING AND COORDINATE SIZE AND LOCATION OF SAME.
- D. PROVIDE POSITIVE SLOPE TO ALL ROOF DRAINS.
- E. VERIFY EXACT LOCATIONS OF ROOFING CONTROL JOINTS (IF REQUIRED) WITH ROOFING MANUFACTURER.

LEGEND ROOF PLAN NOTE: NOT ALL SYMBOLS MAY BE USED

SLOPE	ROOF SLOPE INDICATION
•	ROOF SUMP
	OVERFLOW ROOF SUMP
	ROOF HATCH
	ROOF WALKWAY
——— EJ ———	BUILDING EXPANSION JOINT
	TAPERED INSULATION
	EQUIPMENT RAIL
	CURB MOUNTED EQUIPMENT
ΟΟ	STACK
KEYNOTES	

KEYNOIES ROOF PLAN

SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

- R1 07 5300 PATCH SINGLE-PLY ROOFING TO MATCH EXISTING ON RIGID INSULATION ON EXISTING METAL ROOF DECK.
- R2 23 0000 MECHANICAL EQUIPMENT MOUNTED TO ROOF CURB.

# **GENERAL NOTES**

- NEW WORK PLAN A. REFER TO SHEET 1.A9.2 FOR DOOR SCHEDULE AND COLORS.
- B. REFER TO SHEET 1.A9.1 FOR FINISH SCHEDULE AND COLORS.
- C. REFER TO LIFE SAFETY PLANS FOR PARTITION RATINGS.
- D. PARTIAL WALL POCHEING IS SHOWN THROUGHOUT THIS PLAN AND THE TERMINATION OF SAME SHALL NOT BE CONSTRUED TO REPRESENT A CHANGE IN WALL MATERIAL. VERIFY WALL MATERIALS
- WITH PARTITION TYPES AND SCHEDULES. E. PATCH AND/OR REPAIR ALL EXISTING FLOOR, WALL AND OR CEILING FINISHES AS REQUIRED TO MATCH EXISTING OR TO ACCEPT NEW
- FINISHES AS SCHEDULED AT ALL AREAS AFFECTED BY THE DEMOLITION WORK. REFER TO MECHANICAL AND ELECTRICAL
- SHEETS FOR ADDITIONAL SCOPE OF WORK.
- F. INFILL ALL OPENINGS IN EXISTING WALLS ABOVE CEILINGS THAT ARE THE RESULT OF MECHANICAL OR ELECTRICAL DEMOLITION. OPENINGS IN MASONRY WALLS SHALL BE FILLED WITH MASONRY OF SIMILAR TYPES AND THICKNESS AS EXISTING. OPENINGS IN OTHER TYPES OF WALL CONSTRUCTION SHALL MATCH EXISTING MATERIALS, FINISHES AND WALL THICKNESS. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR SCOPE OF WORK.
- G. PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINS WHILE KEEPING FLOOR LEVEL AT WALL BASE.
- H. COORDINATE SIZE AND LOCATION OF ALL ACCESS DOORS WITH TRADES REQUIRING SAME. QUANTITIES SHOWN DO NOT NECESSARILY REPRESENT ALL ACCESS DOORS REQUIRED FOR ACCESSIBILITY.
- ADDITIONAL TERRAZZO FLOOR PATCHING SCOPE OF WORK IS SHOWN ON SHEET 1.A0.1 FLOOR PLANS.

# LEGEND

NEW WORK PLAN NOTE: NOT ALL SYMBOLS MAY BE USED

NOTE: NOT ALL SY	MBOLS MAY BE USED	
	EXISTING CONSTRUCTION	
	NEW CONSTRUCTION	
XXX	PARTITION TYPE - REFER TO PARTITION DETAILS SHEET A9.4	
G	SHALL COMPLY WITH BARRIER FREE REQUIREMENTS	
XXXX	CASEWORK/ MILLWORK TAG	
XXXX	SIGN NUMBER	
XXXX	10 1100 VISUAL DISPLAY SURFACE MK= MARKERBOARD, TK=TACKBOARD XXXX INDICATES BOARD SIZE	
XXXX	12 3553 LABORATORY EQUIPMENT & 11 5313 LABORATORY FUME HOODS	
W1.1	12 2413 ROLLER WINDOW SHADE	
L	CORNER GUARD	
KEYNO	TES	

NETINOTES NEW WORK FLOOR PLAN

- SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
- NOTE: NOT ALL KEYNOTES MAY BE USED
- (#) LEGEND SYMBOL INDICATOR A1 03 3000 PATCH AND REPAIR CONCRETE FLOOR AT LOCATION OF
- REMOVED WALL OR REMOVED SLAB PORTION. REFER TO STRUCTURAL DETAIL SL-13 PER SHEET 1.S0.3.
- A2 03 3000 CONCRETE SLAB ON GRADE. REFER TO FOUNDATION PLAN PER SHEET 1.S1.1.
- A3 POWER-OPERATED DOOR
- A4 09 6623 TERRAZZO FLOORING AND WALL BASE REPAIR. REFER TO ROOM FINISH SCHEDULE.

ī **D**<sup>s</sup> Project Number

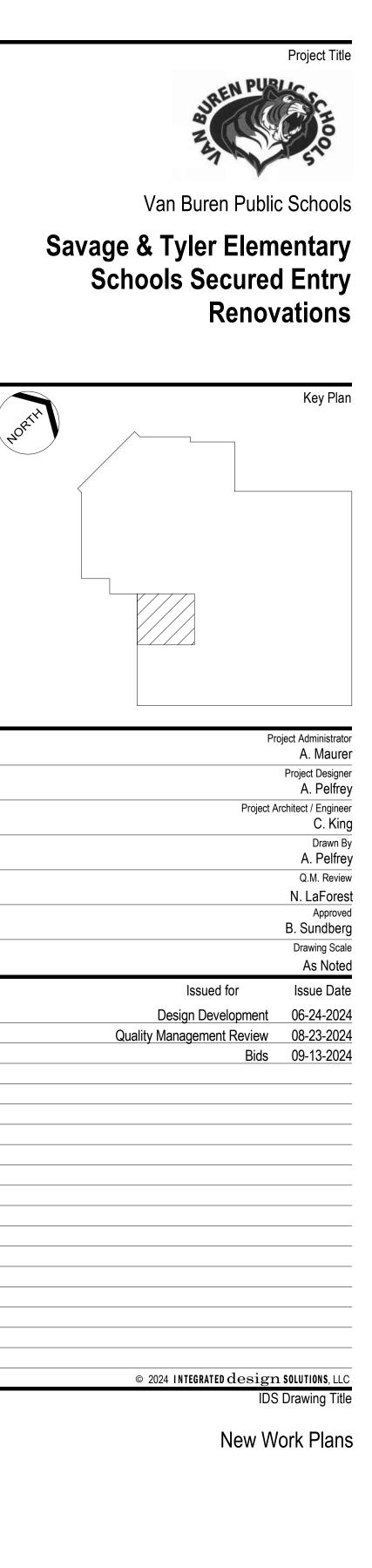


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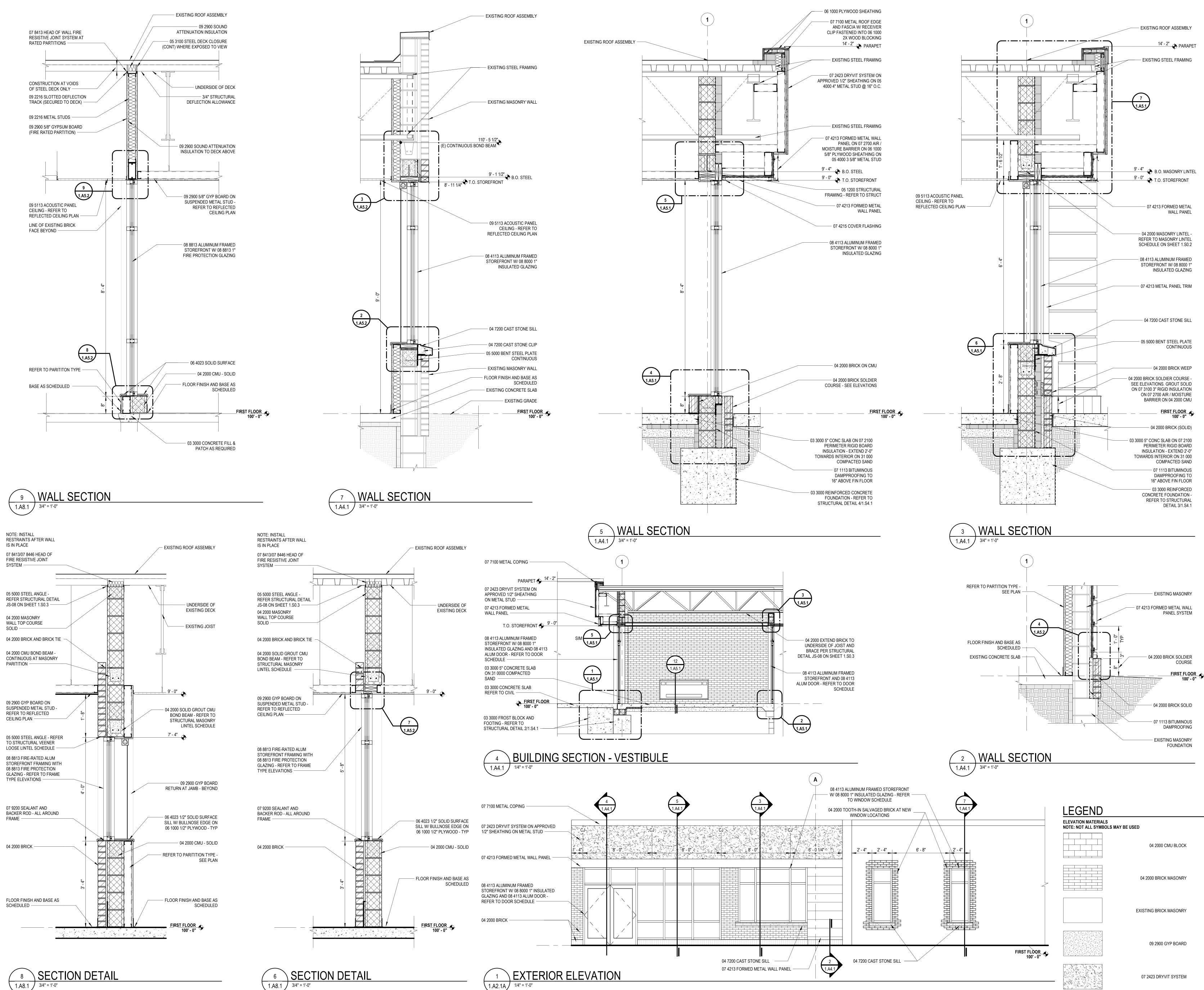
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Drawing Number

1.A2.1

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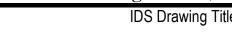
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Drawing Number

**1.A4.1** 

20111-3008

ī**D**<sup>s</sup> Project Number



**Elevations and Sections** 

 $^{\circ}$  2024 INTEGRATED  $ext{design}$  solutions, LL

	A. Pelfrey
	Q.M. Review
	N. LaForest
	Approved
	B. Sundberg
	Drawing Scale
	As Noted
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024

	Pr	oject Administrator
		A. Maurer
		Project Designer
		A. Pelfrey
	Project A	Architect / Engineer
		C. King
		Drawn By
		A. Pelfrey
		Q.M. Review
		N. LaForest
		Approved
		B. Sundberg
		Drawing Scale
		As Noted
	Issued for	Issue Date
	Design Development	06-24-2024
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Key Plan

Renovations



Van Buren Public Schools

Savage & Tyler Elementary

Schools Secured Entry

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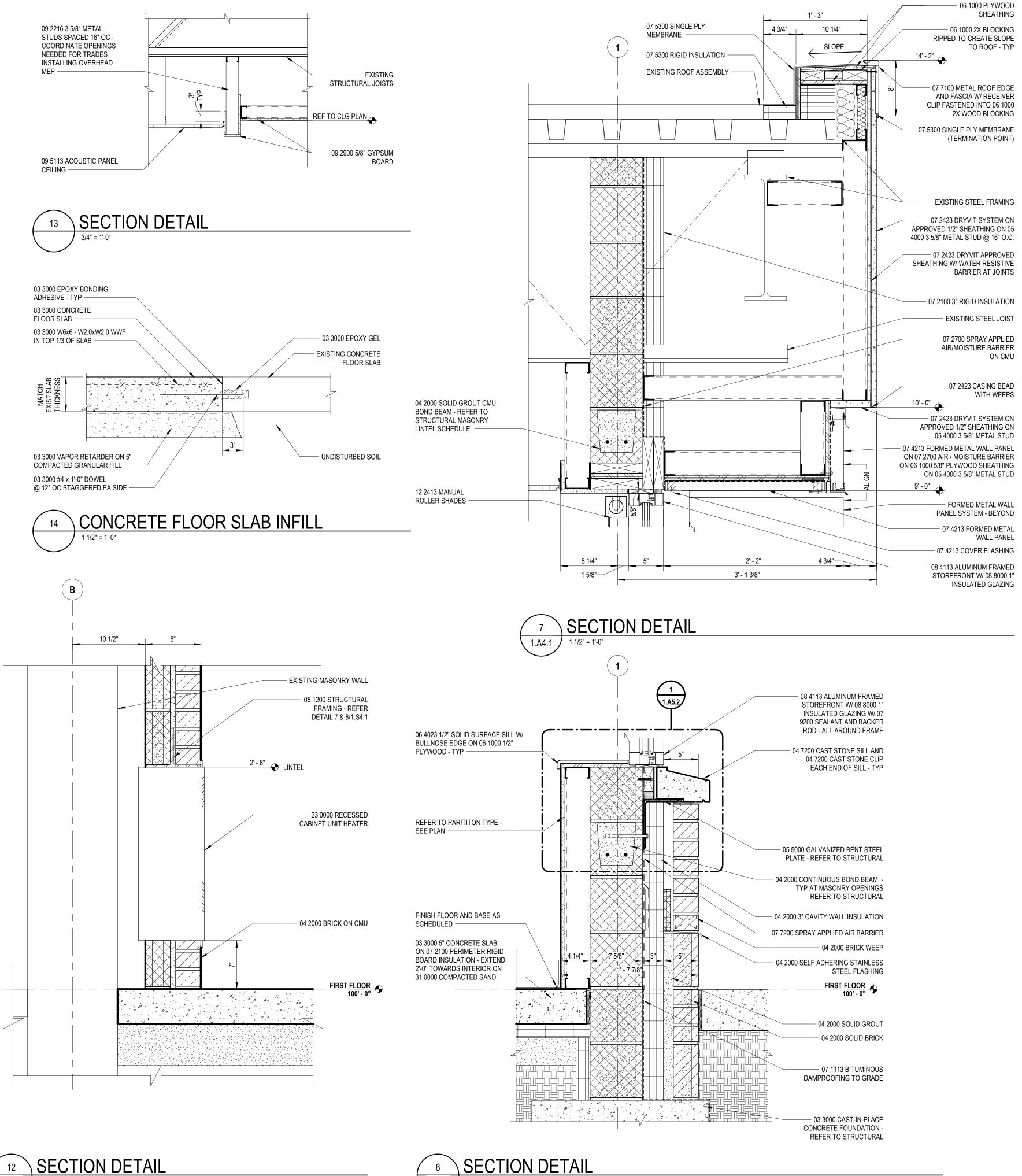
SDI Structures

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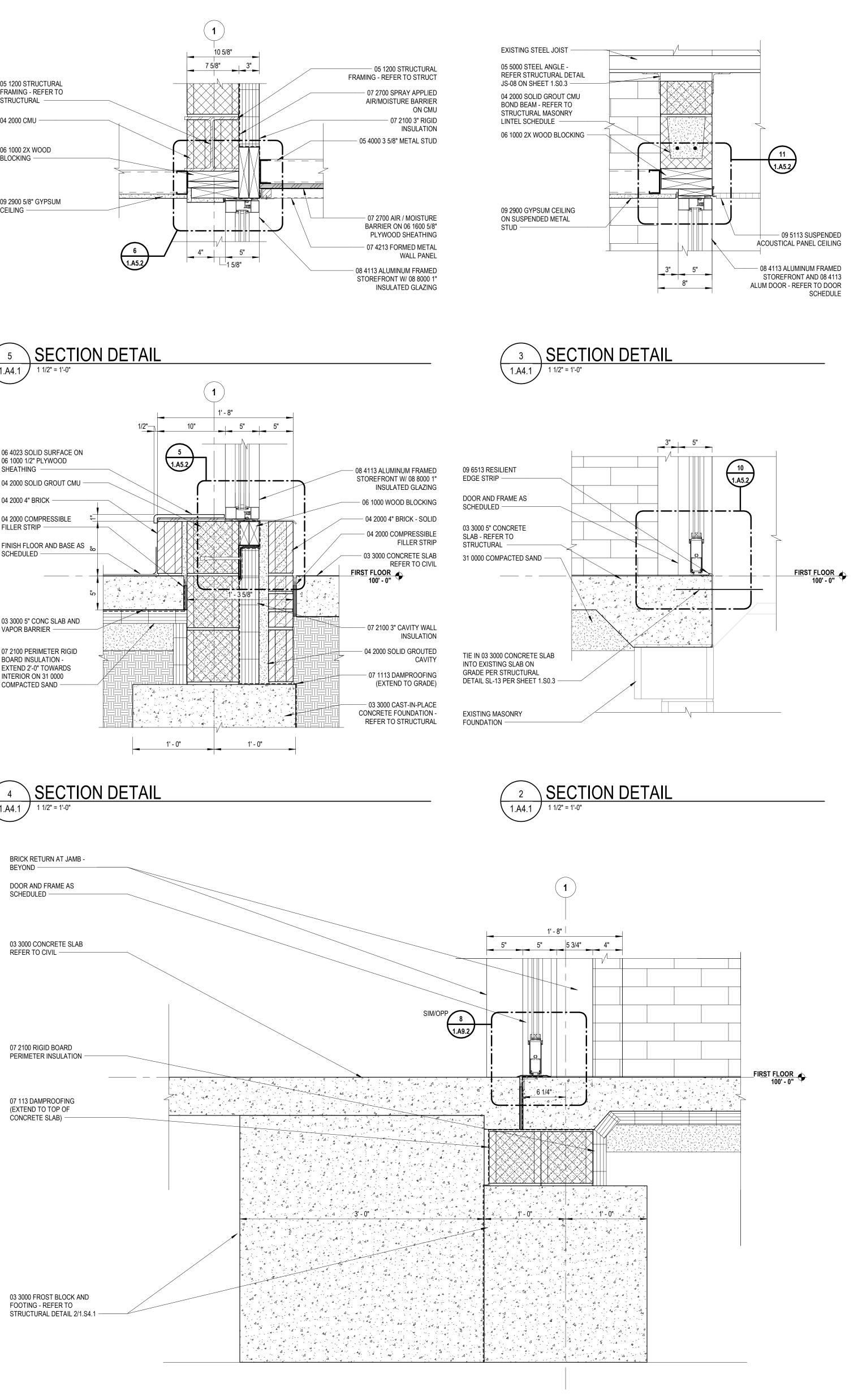
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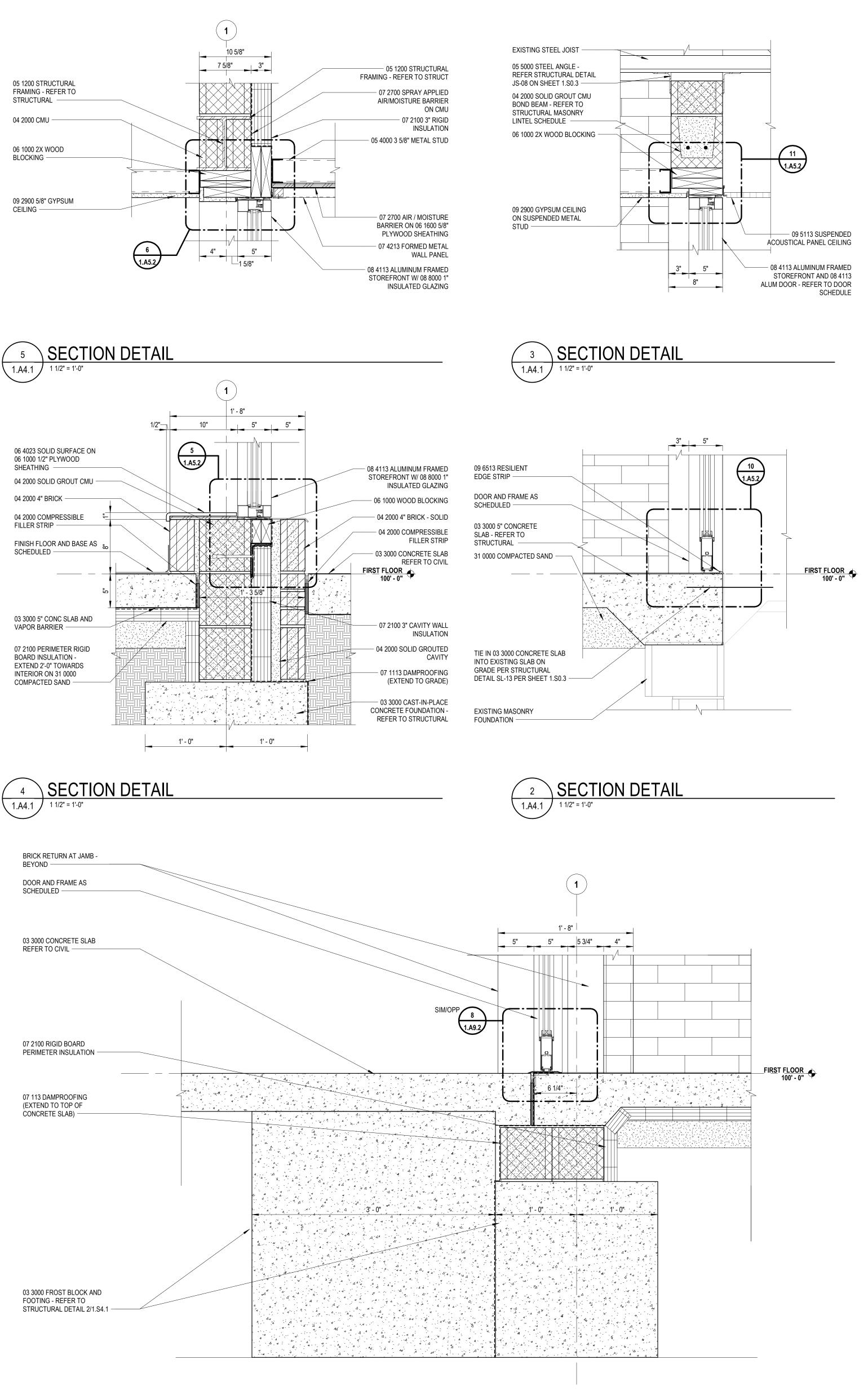
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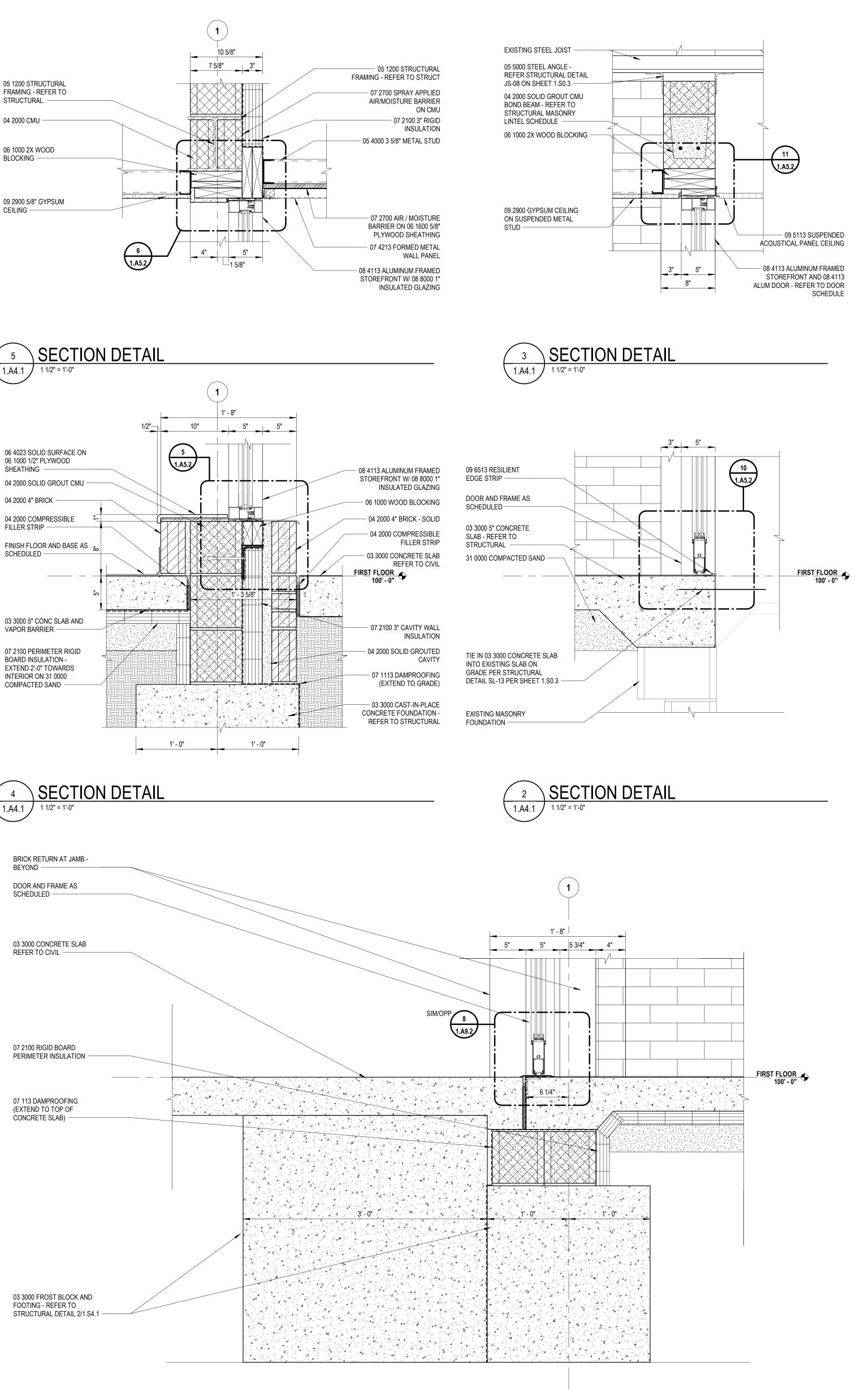
1.A4.1

1 1/2" = 1'-0"







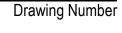




1 1/2" = 1'-0"

1.A4.1 /

ī**D**<sup>s</sup> Project Number



1.A5.1

20111-3008

Sections Details

 $^\circ$  2024 Integrated  $ext{design}$  solutions, LL IDS Drawing Title

	errang
	Drawn By
	A. Pelfrey
	Q.M. Review
	N. LaForest
	Approved
	B. Sundberg
	Drawing Scale
	As Noted
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024

P	roject Administrator A. Maurer
	Project Designer A. Pelfrey
Project /	Architect / Engineer C. King
	Drawn By A. Pelfrey
	Q.M. Review
	N. LaForest
	Approved B. Sundberg
	Drawing Scale
	As Noted
Issued for	Issue Date
Design Development	06-24-2024

Key Plan

Renovations

Van Buren Public Schools

Savage & Tyler Elementary

Schools Secured Entry

Project Title

<u>CIVIL ENGINEER</u> SPALDING DeDECKER 905 south blvd. E 800.598.1600 www.sda-eng.com

1441 west long lake, suite 200 troy, michigan 48098

grand rapids, michigan 49546

5211 cascade road SE, suite 300

248.823.2100 www.ids-michigan.com rochester hills, michigan 48307

STRUCTURAL ENGINEER

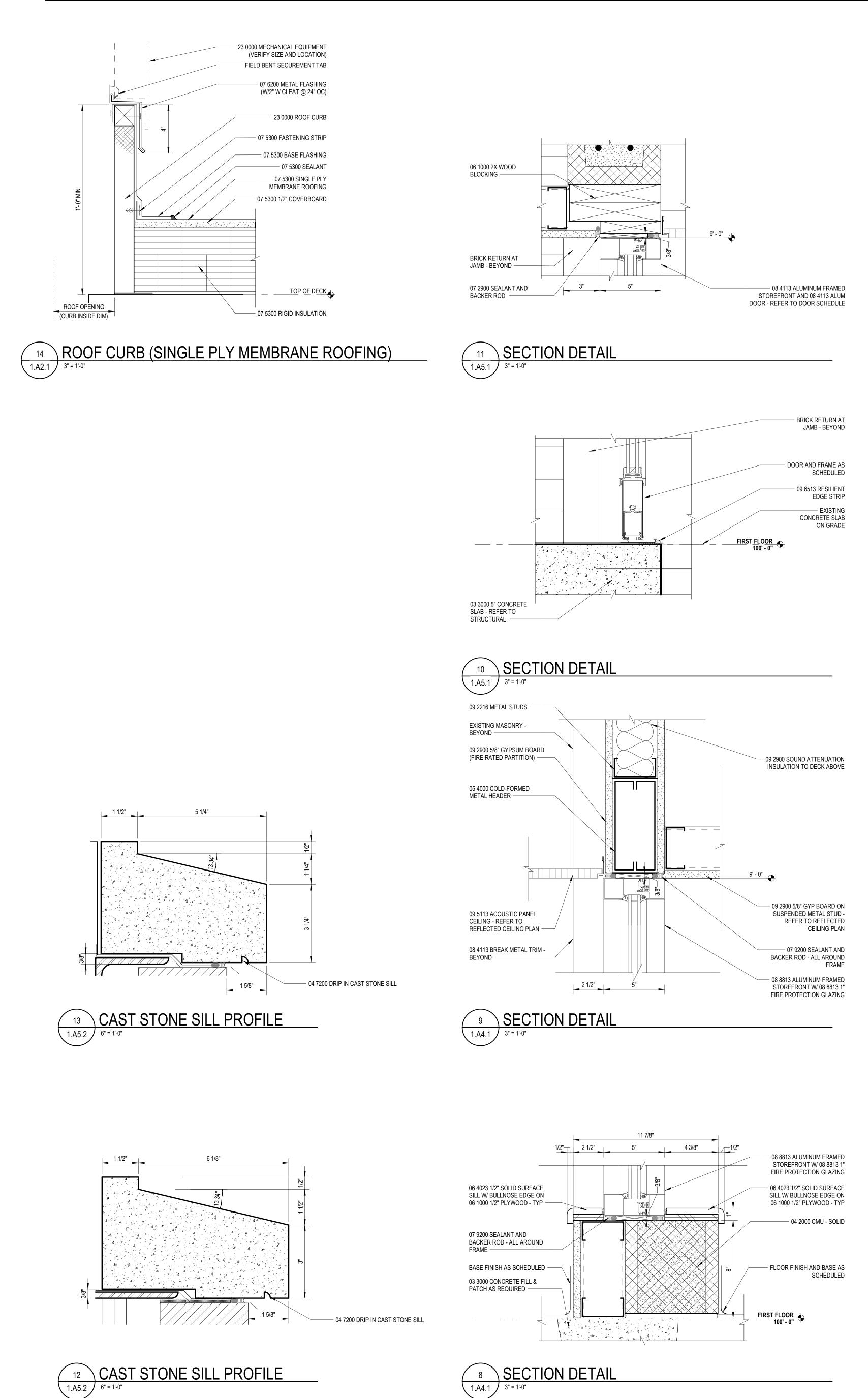
ann arbor, michigan 48101

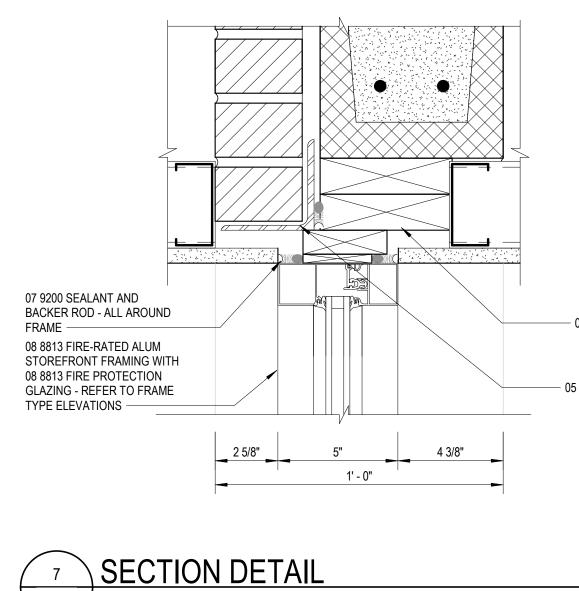
www.sdistructures.com

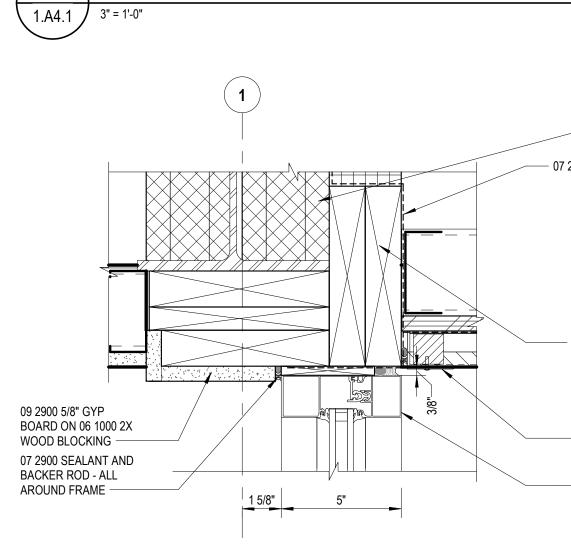
SDI Structures

275 east liberty

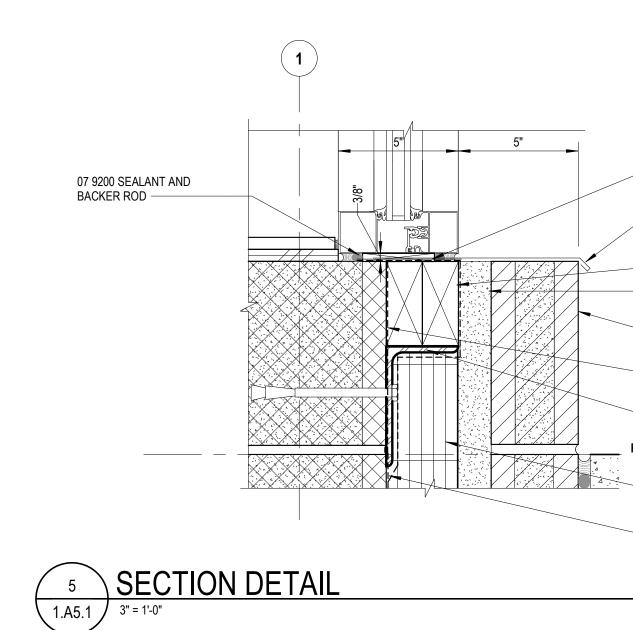
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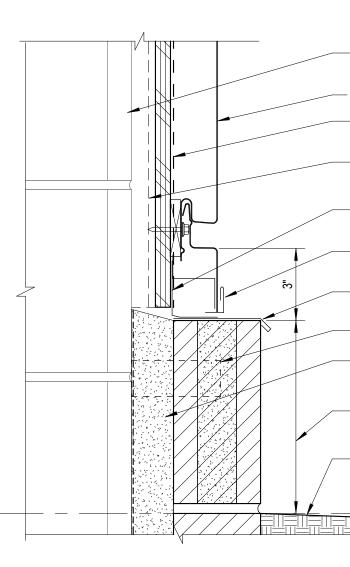




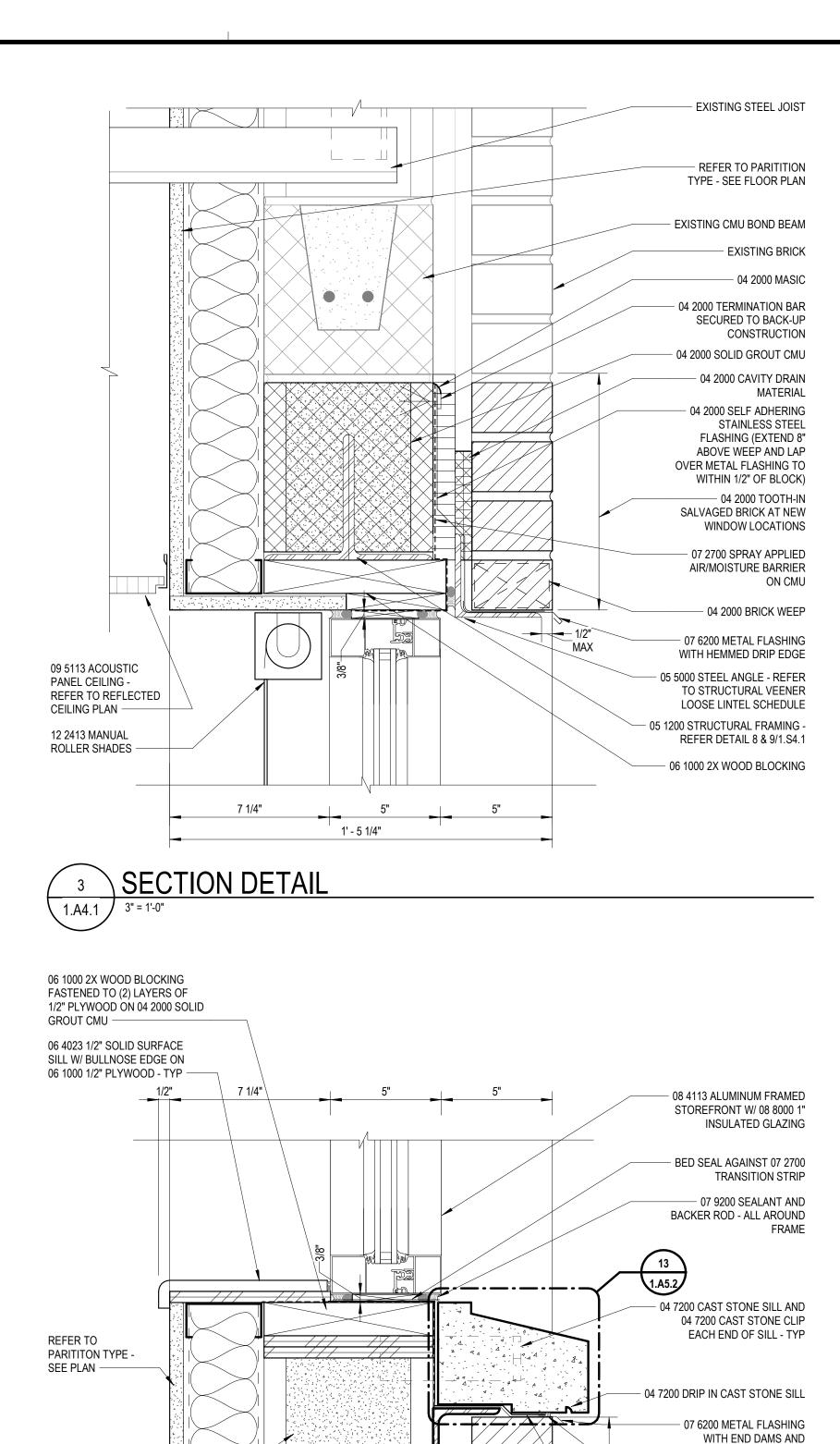


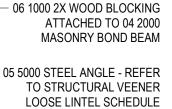
6 `5.1) SECTION DETAIL 3" = 1'-0"











- 04 2000 CMU 

- 06 1000 2X WOOD BLOCKING

- 07 4215 COVER FLASHING 08 4113 ALUMINUM FRAMED
 STOREFRONT W/ 08 8000 1"
 INSULATED GLAZING

BED SEAL AGAINST 07 2700 TRANSITION STRIP
07 6200 METAL FLASHING
06 1000 WOOD BLOCKING
04 2000 SOLID GROUTED CAVITY
04 2000 BRICK SOLDIER COURSE - SOLID
07 7200 SPRAY APPLIED AIR BARRIER
05 5000 GALVANIZED ANGLE - REF TO STRUCTURAL 100' - 0"
07 2100 3" CAVITY WALL INSULATION
07 1113 DAMPROOFING

04 2000 SOLID

GROUT CMU -

05 5000 GALVANIZED

BENT STEEL PLATE -

REFER TO STRUCTURAL

2 SECTION DETAIL 1.A4.1 3" = 1'-0"

(EXTEND TO GRADE)

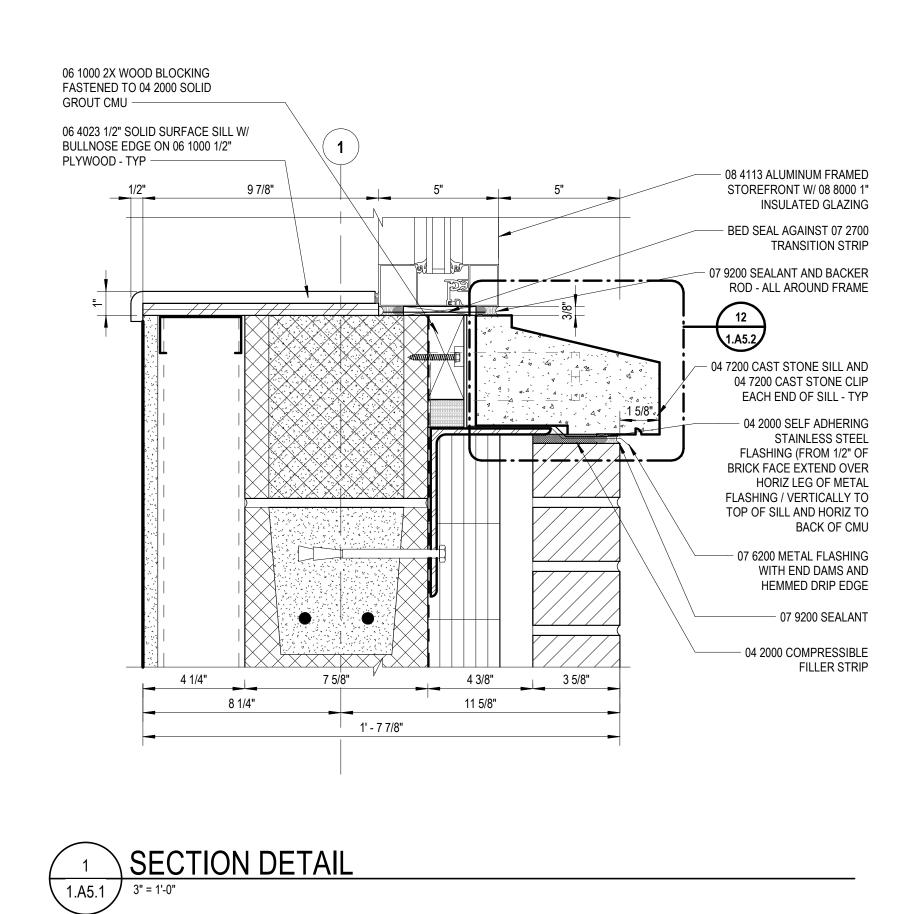
- EXISTING MASONRY 07 4213 FORMED METAL WALL PANEL - 07 2700 AIR / MOISTURE BARRIER 06 1000 5/8" PLYWOOD SHEATHING - 05 4000 7/8" METAL HAT CHANNEL 07 2700 STAINLESS STEEL SELF-

ADHERING FLASHING TAPE - 07 4213 COVER FLASHING 07 6200 METAL FLASHING WITH

DRIP EDGE - 04 4200 MASONRY TIE @ 16" OC 04 2000 GROUT SOLID SLOPE TO WEEP AND TROWEL SMOOTH

> - 04 2000 BRICK SOLDIER COURSE - SOLID - GRADE VARIES

FIRST FLOOR 100' - 0"



# ---------------

HEMMED DRIP EDGE

— 07 9200 SEALANT

— 04 2000 TOOTH-IN

WINDOW LOCATIONS

SALVAGED BRICK AT NEW

- 04 2000 SELF ADHERING STAINLESS STEEL FLASHING (FROM 1/2" OF

BRICK FACE EXTEND OVER HORIZ

VERTICALLY TO TOP OF SILL AND

- 07 2700 AIR/ MOISTURE BARRIER

LEG OF METAL FLASHING /

HORIZ TO BACK OF CMU

ī**D**<sup>s</sup> Project Number



Drawing Number



Section Details

IDS Drawing Title

 $\circ$  2024 Integrated  $ext{design}$  solutions, LL

Project	Architect / Engineer C. King
	Drawn By
	A. Pelfrey
	Q.M. Review
	N. LaForest
	Approved
	B. Sundberg
	Drawing Scale
	As Noted
Issued for	Issue Date
Bids	09-13-2024

Key Plan

Project Administrator

A. Maurer

Project Designer A. Pelfrey

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



rochester hills, michigan 48307 STRUCTURAL ENGINEER SDI Structures

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www.ids-michigan.com

1441 west long lake, suite 200

grand rapids, michigan 49546

5211 cascade road SE, suite 300

troy, michigan 48098

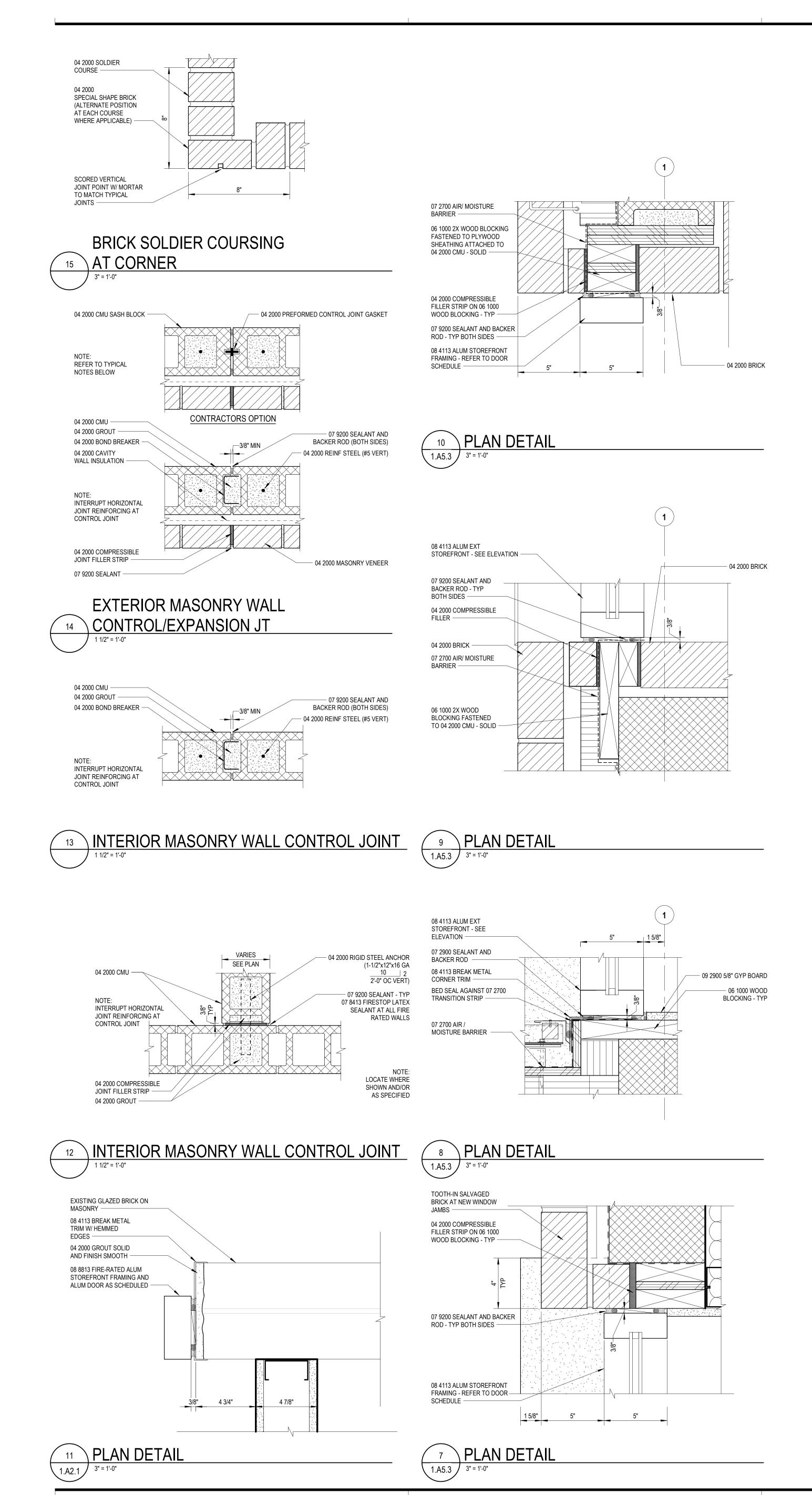
248.823.2100

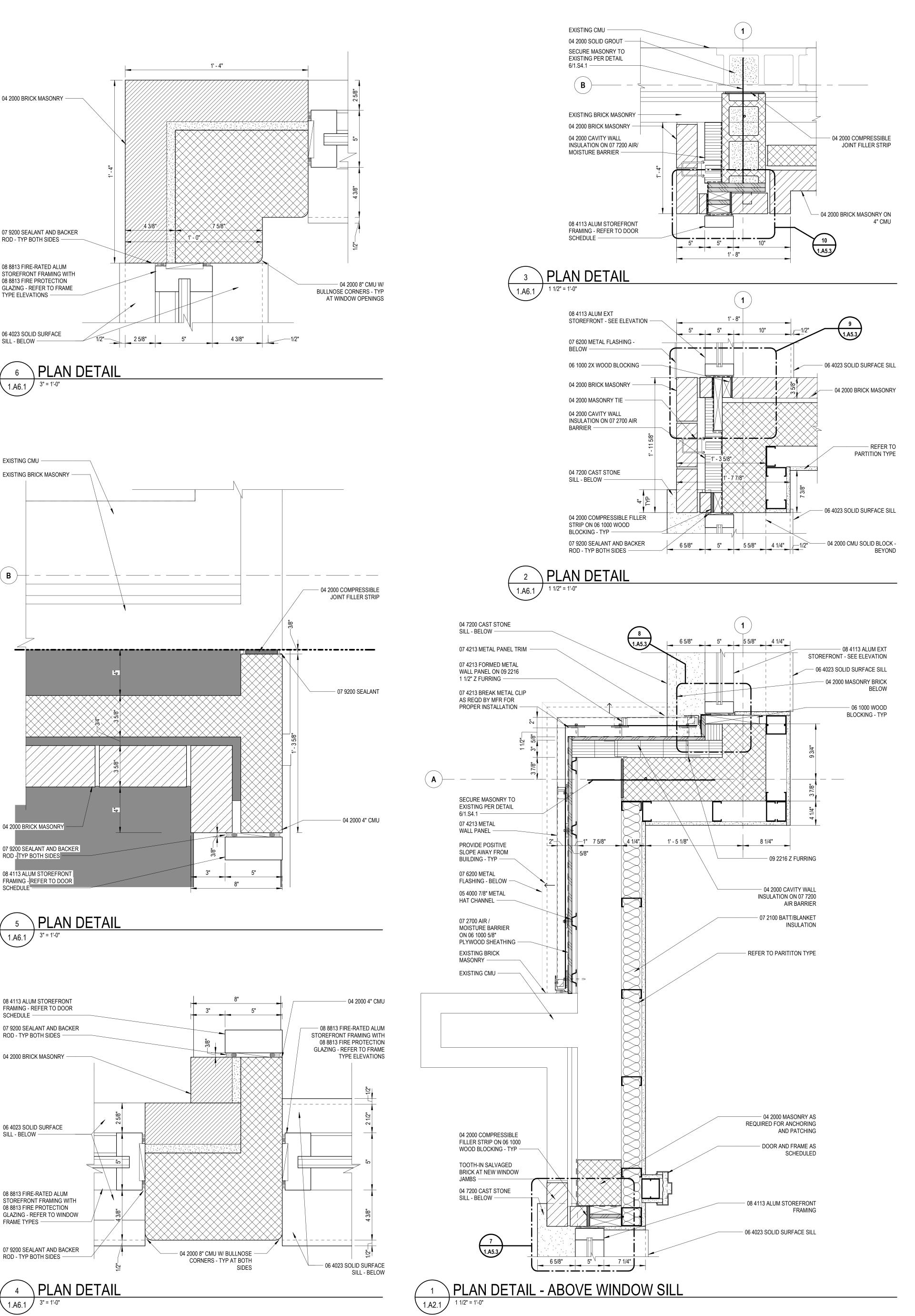
275 east liberty

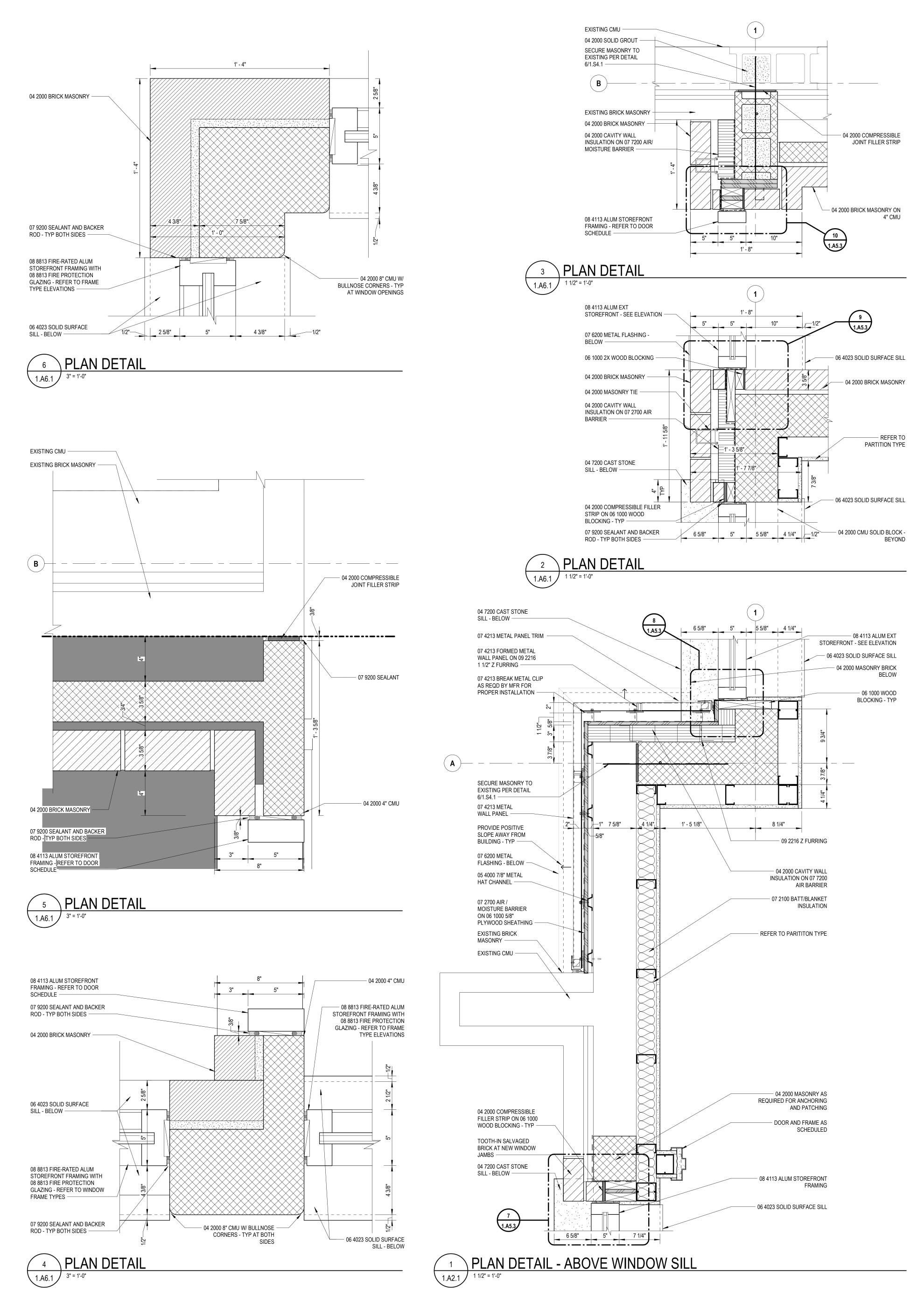
734.213.6091

INTEGRATED design solutions

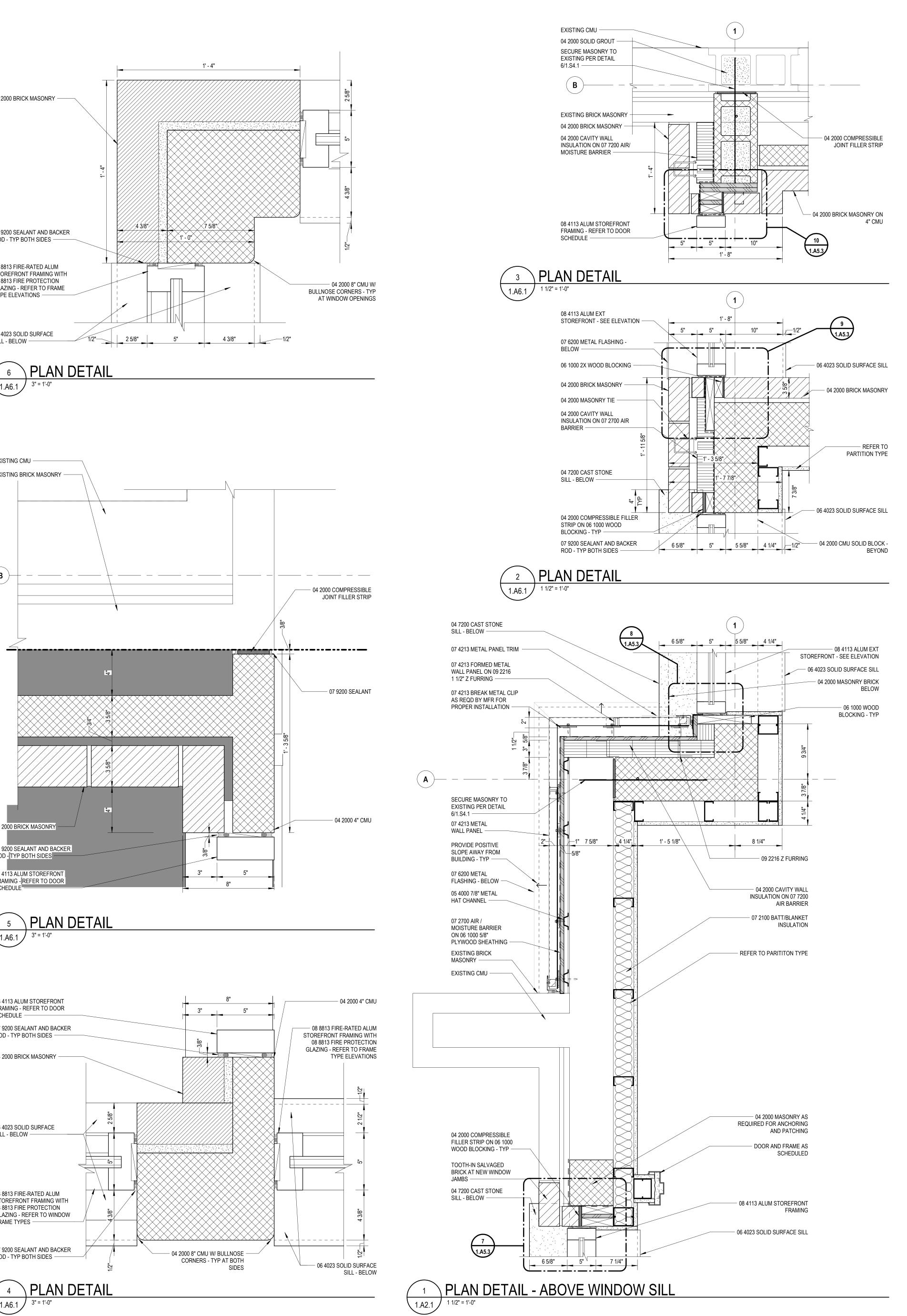
architecture engineering interiors & technology



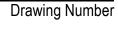








20111-3008





ī**D**<sup>s</sup> Project Number

# Plan Details

 $\circ$  2024 INTEGRATED  $ext{design}$  solutions, LL IDS Drawing Title

A. Pelfrey Q.M. Review N. LaForest Approved B. Sundberg Drawing Scale As Noted Issue Date Issued for Quality Management Review 08-23-2024 Bids 09-13-2024

Key Plan

Project Administrator A. Maurer

Project Architect / Engineer

Project Designer

A. Pelfrey

C. King

Drawn By

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations

Project Title

CIVIL ENGINEER SPALDING DeDECKER 905 south blvd. E 800.598.1600 www.sda-eng.com

STRUCTURAL ENGINEER

ann arbor, michigan 48101

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www.ids-michigan.com rochester hills, michigan 48307

1441 west long lake, suite 200

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grand rapids, michigan 49546

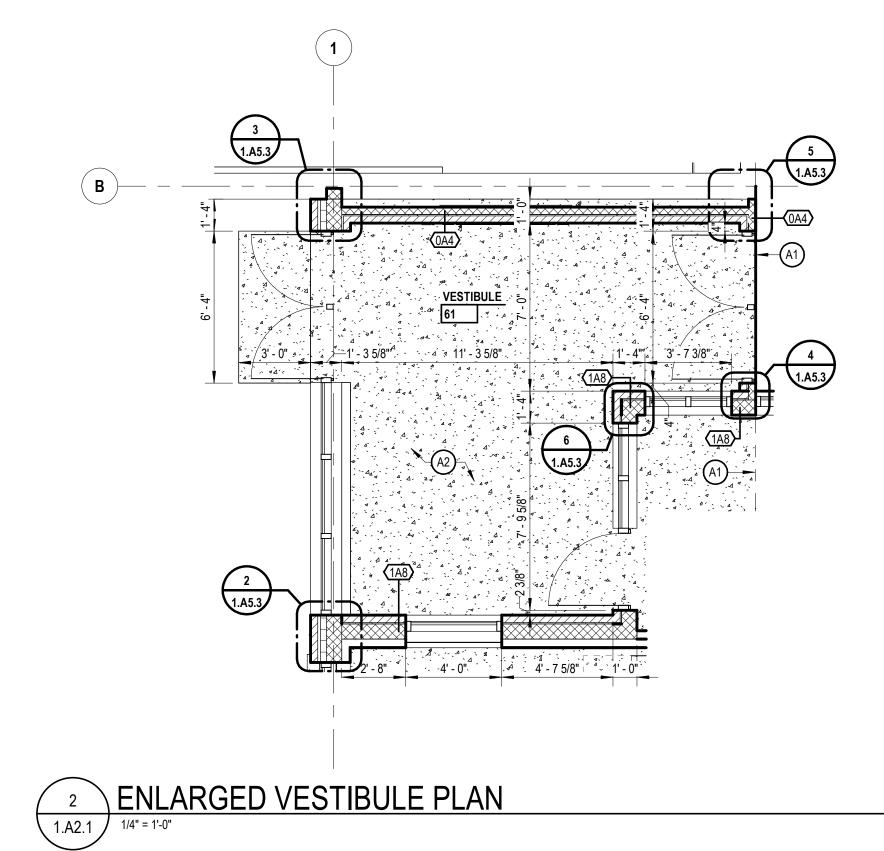
troy, michigan 48098

248.823.2100

SDI Structures

275 east liberty

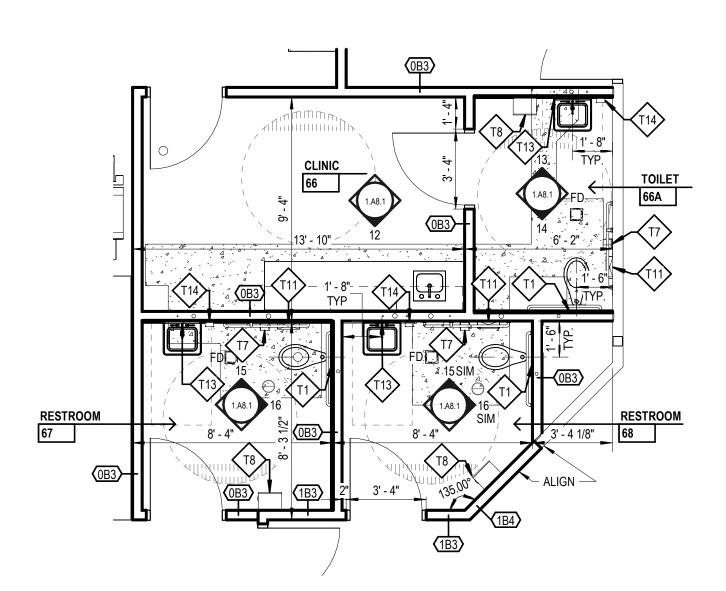
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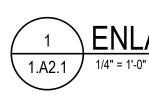


# <u>KEYNOTES</u>

NEW WORK FLOOR PLAN SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS

- NOTE: NOT ALL KEYNOTES MAY BE USED
- # LEGEND SYMBOL INDICATOR
- A1 03 3000 PATCH AND REPAIR CONCRETE FLOOR AT LOCATION OF REMOVED WALL OR REMOVED SLAB PORTION. REFER TO STRUCTURAL DETAIL SL-13 PER SHEET 1.S0.3.
- A2 03 3000 CONCRETE SLAB ON GRADE. REFER TO FOUNDATION PLAN PER SHEET 1.S1.1.
- A3 POWER-OPERATED DOOR
- A4 09 6623 TERRAZZO FLOORING AND WALL BASE REPAIR. REFER TO ROOM FINISH SCHEDULE.





### <u>LEGEND</u> TOILET ACCESSORIES

### SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS NOTE: NOT ALL KEYNOTES MAY BE USED

REFER TO SPECIFICATION SECTION 10 2800 FOR ADDITIONAL INFORMATION ALL TOILET ACCESSORIES ARE CONTRACTOR FURNISHED AND INSTALLED UON (OF/OI): OWNER FURNISHED/OWNER INSTALLED (OF/CI): OWNER FURNISHED/CONTRACTOR INSTALLED REFER TO DRAWING 1.AR.0 FOR TYPICAL MOUNTING HEIGHTS

- ✓ LEGEND SYMBOL INDICATOR
- T1 GRAB BAR SET 1 (1) GRAB BAR TYPE 1, (1) GRAB BAR TYPE 2, (1) GRAB BAR TYPE 3 (CF/CI)
  T7 TOILET PAPER DISPENSER (OF/CI)
- T8 PAPER TOWEL DISPENSER (OF/CI) T11 SANITARY NAPKIN DISPOSAL (OF/CI)
- T13 MIRROR (CF/CI) T14 SOAP DISPENSER (OF/CI)

1 1.A2.1 ENLARGED TOILET ROOM PLANS

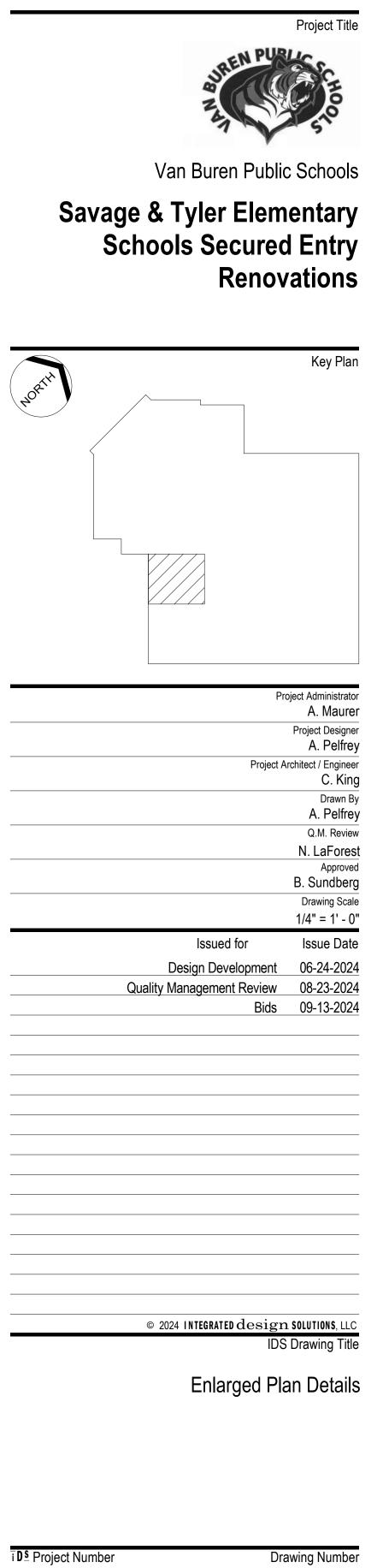


# INTEGRATED design SOLUTIONS architecture engineering interiors & technology 1441 west long lake, suite 200 troy, michigan 48098

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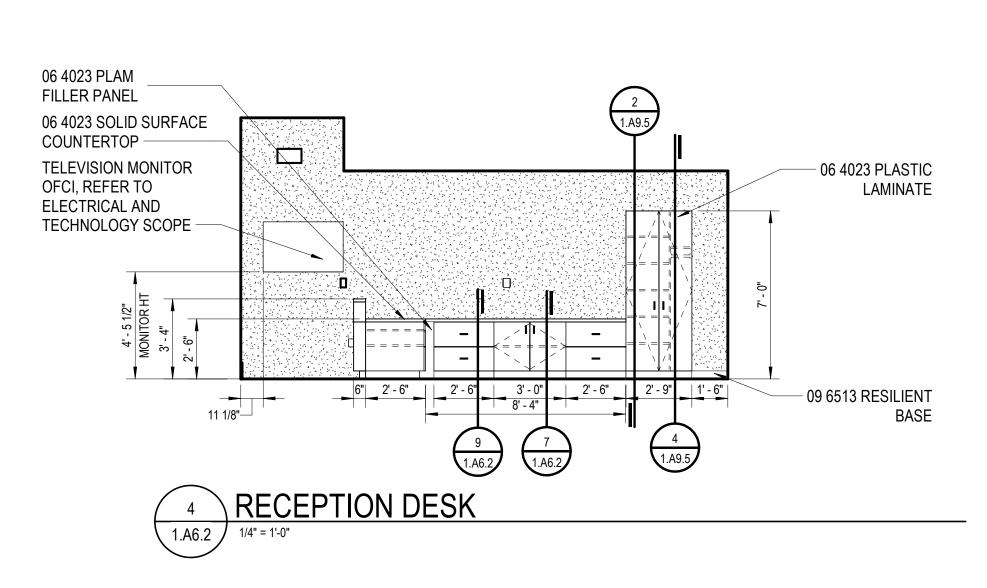
STRUCTURAL ENGINEER SDI Structures 275 east liberty ann arbor, michigan 48101 734.213.6091 www.sdistructures.com

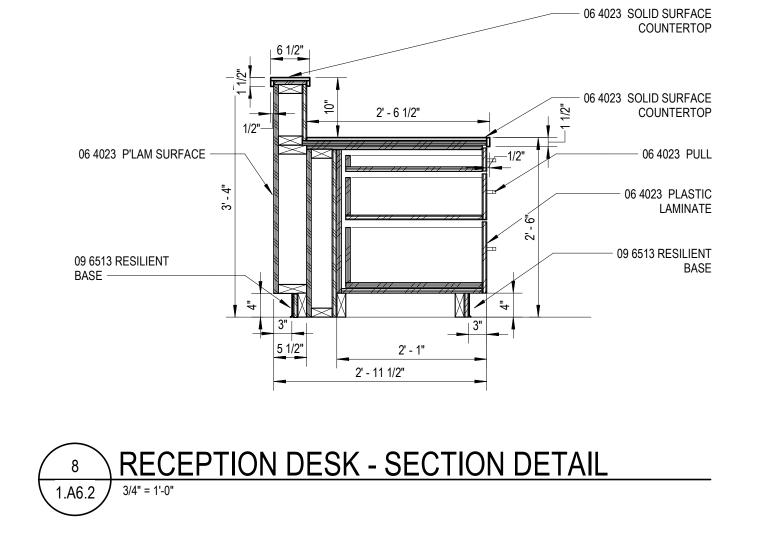


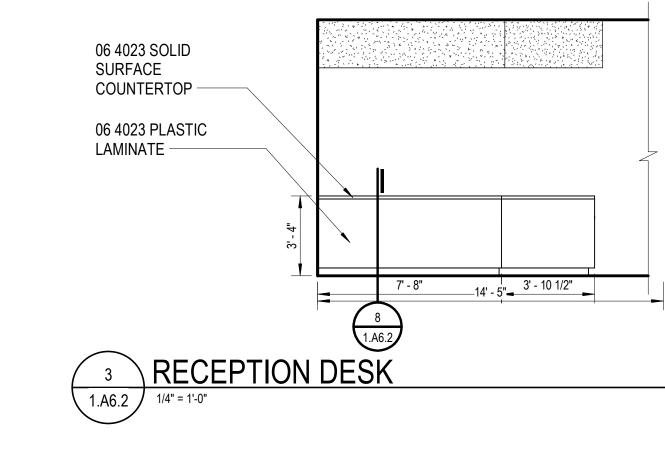
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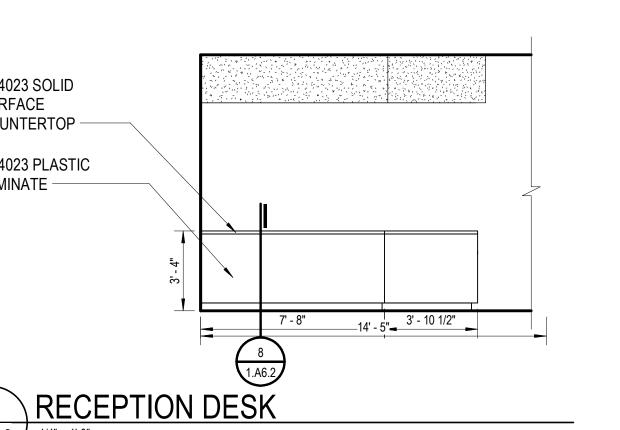
20111-3008



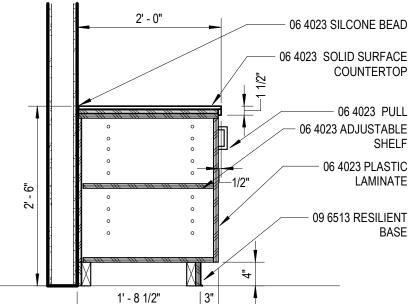


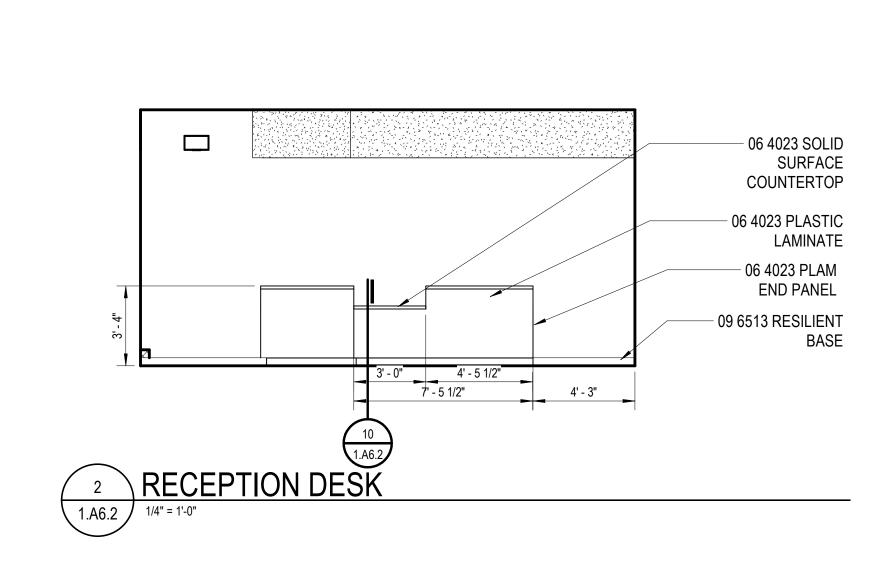




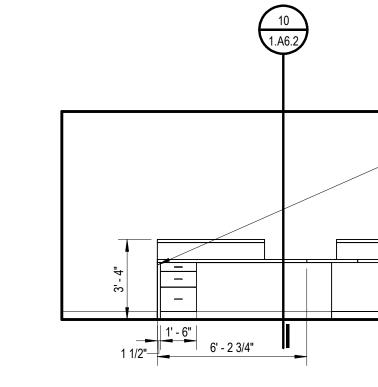




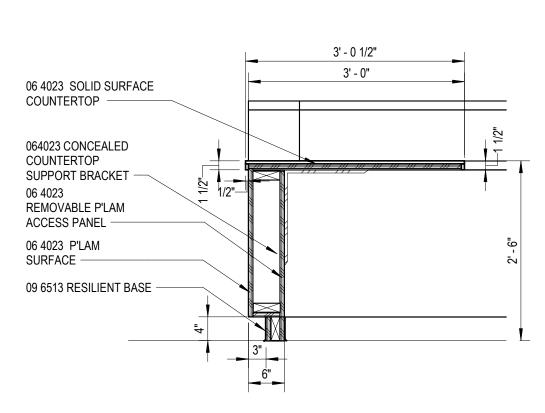


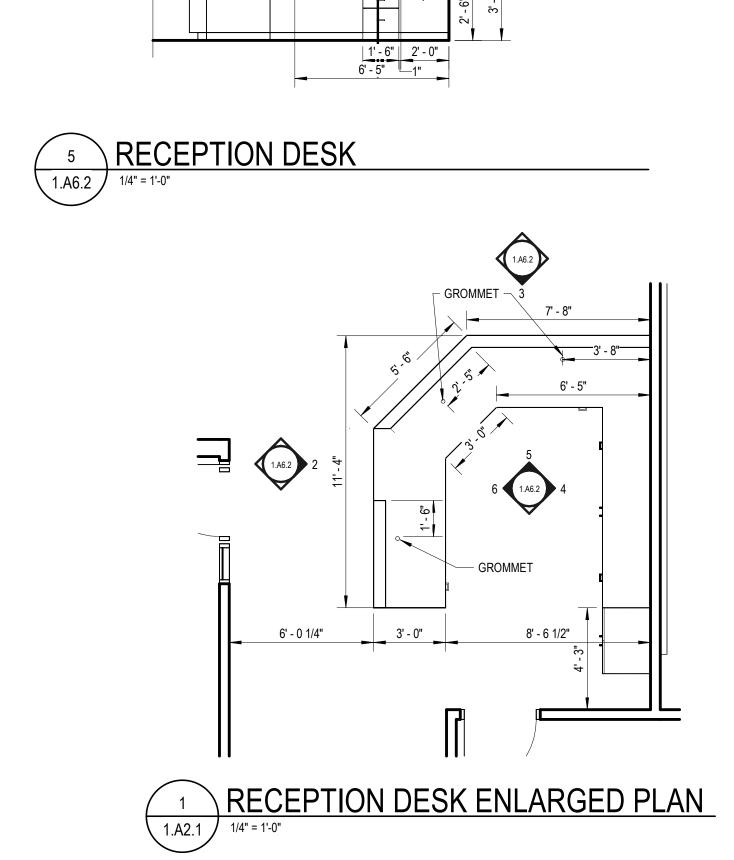






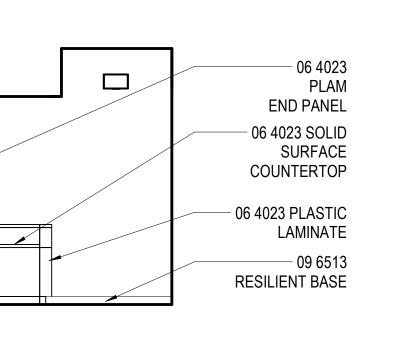


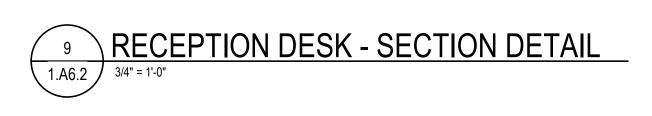




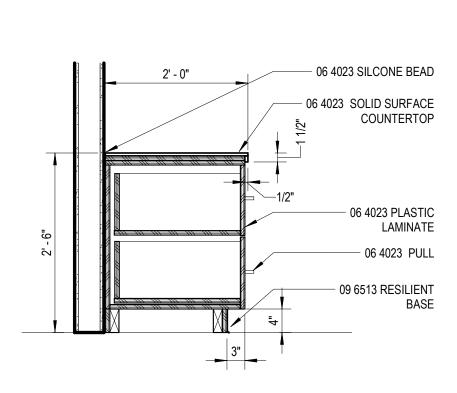
- 06 4023 SOLID SURFACE COUNTERTOP

06 4023 PLASTIC





8 1.A6.2



20111-3008

Drawing Number



IDS Drawing Title

Enlarged Reception Desk Plan

 $\circ$  2024 integrated  $ext{design}$  solutions, LLC

roject Adm A.	ninistrator Maurer
Project	Designer
Α.	Pelfrey
Architect /	-
	C. King
	Drawn By
D.	Sandle
Q.N	M. Review
N. La	aForest
	Approved
B. Su	indberg
Draw	ving Scale
As	s Noted
lssu	ue Date
06-2	24-2024
08-2	23-2024
09-1	13-2024

Key Plan

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations

Project Title

www.sda-eng.com STRUCTURAL ENGINEER

SDI Structures 275 east liberty ann arbor, michigan 48101 734.213.6091

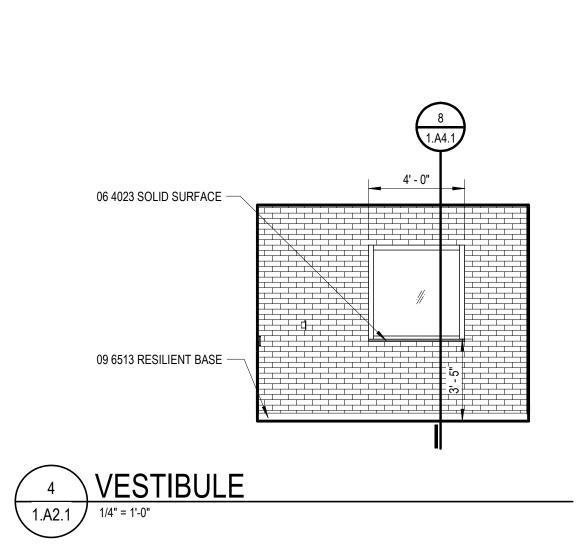
www.sdistructures.com

www.ids-michigan.com CIVIL ENGINEER SPALDING DeDECKER 905 south blvd. E rochester hills, michigan 48307 800.598.1600

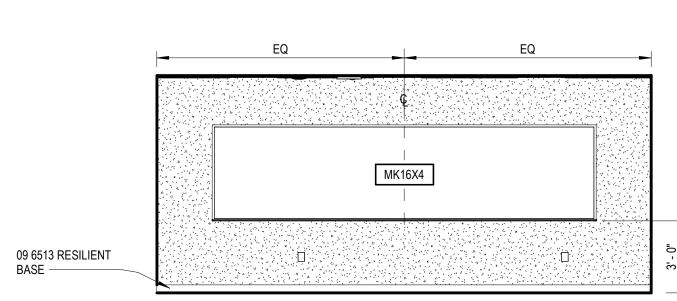
248.823.2100

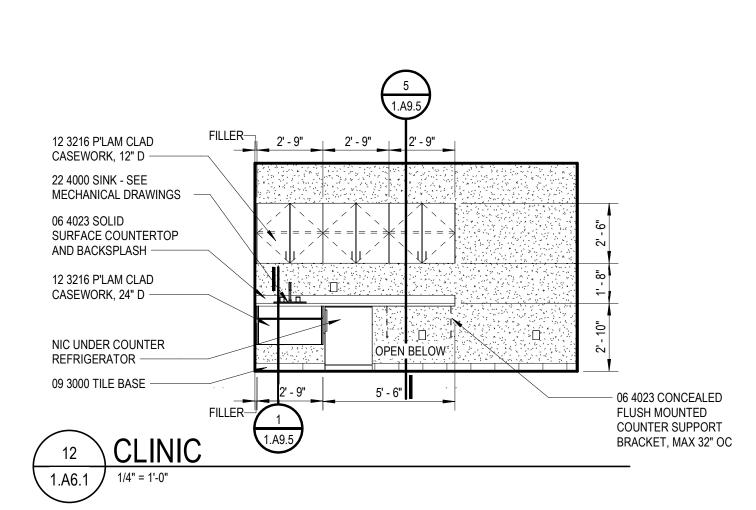
INTEGRATED design SOLUTIONS architecture engineering interiors & technology 1441 west long lake, suite 200 troy, michigan 48098 5211 cascade road SE, suite 300 grand rapids, michigan 49546





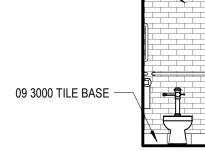


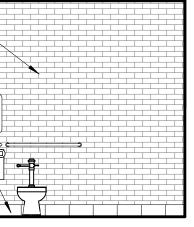


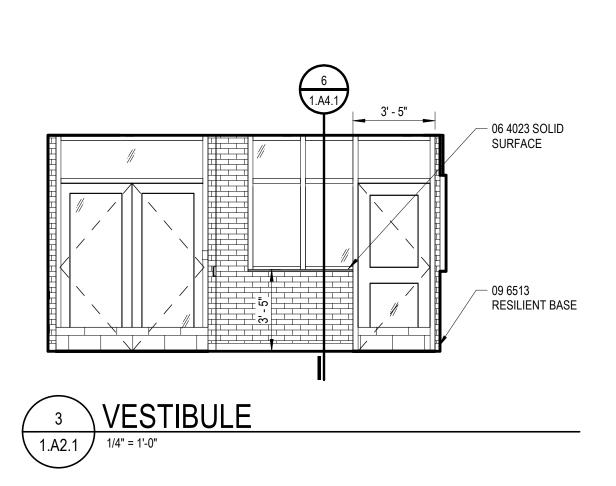


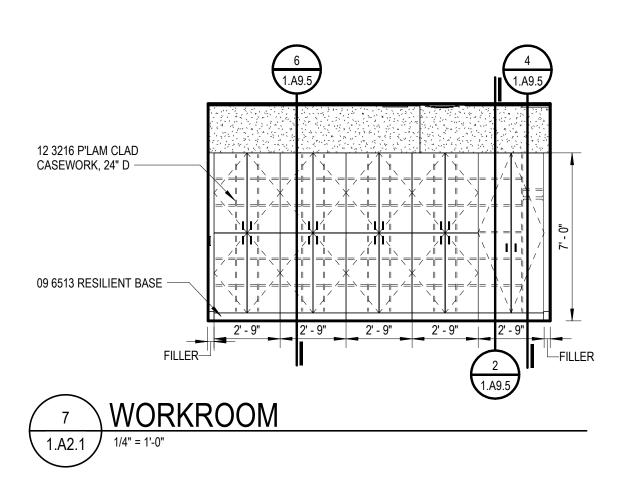


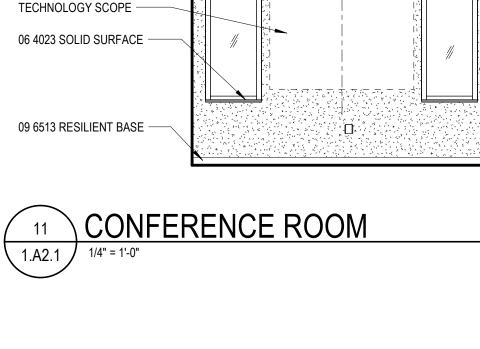
09 3000 WALL TILE -











EQ ···

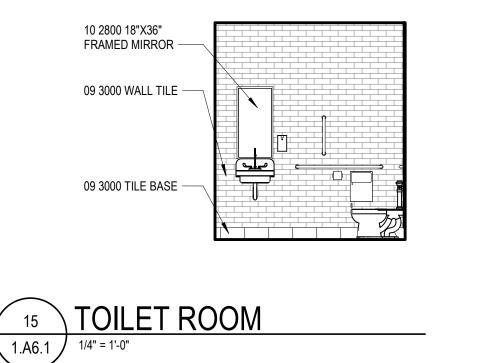
아파, ''한 ''한 ''' 아파, ''

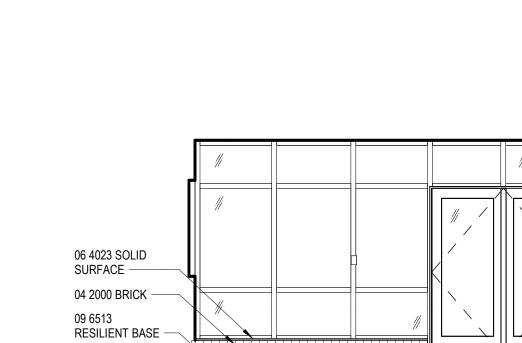
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LINE OF FUTURE TELEVISION MONITOR

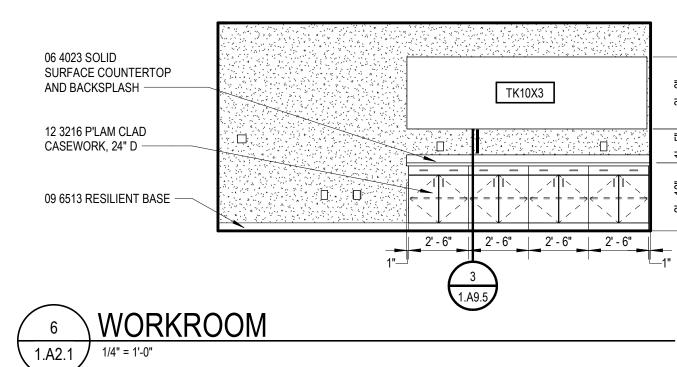
OFCI, REFER TO

ELECTRICAL AND

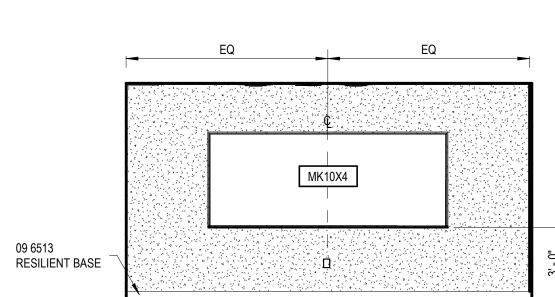


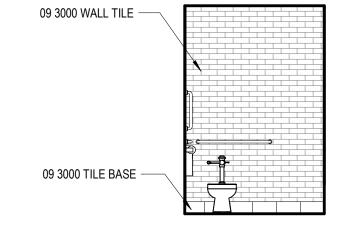


2 VESTIBULE 1.A2.1 1/4" = 1'-0"



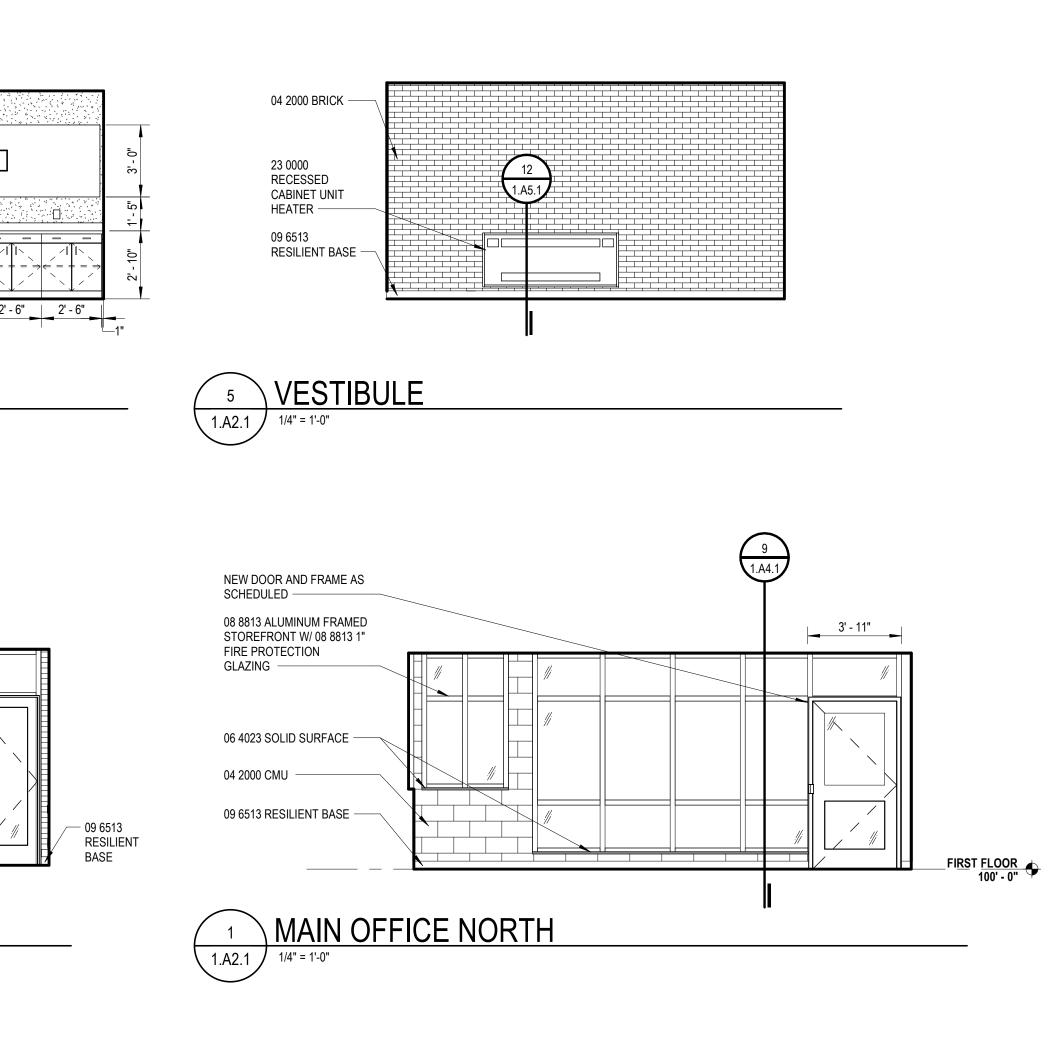


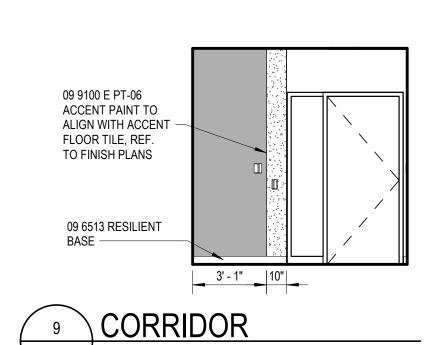




14 CLINIC TOILET

\ 1.A6.1 / 1/4" = 1'-0"





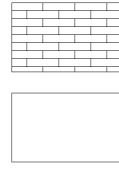
1.A2.1 / 1/4" = 1'-0"

13	CLINIC TOILET	
1.A6.1	/ 1/4" = 1'-0"	

10 2800 18"X36" FRAMED MIRROR -	
09 3000 WALL TILE	
09 3000 TILE BASE -	

# 







04 2000 CMU BLOCK

NOTE: NOT ALL SYMBOLS MAY BE USED

EXISTING BRICK MASONRY

09 2900 GYP BOARD

07 2423 DRYVIT SYSTEM

04 2000 BRICK MASONRY

SPECIALTY EQUIPMENT BY OTHERS REFER TO FF&E OR TECHNOLOGY PACKAGES ACCENT MATERIAL, REFER TO COLOR CODES

10 1100 VISUAL DISPLAY SURFACE MK= MARKERBOARD,

TK=TACKBOARD XXXX INDICATES BOARD SIZE

06 4023 CASEWORK / MILLWORK TAG

L. FURNITURE AND SPECIALTY EQUIPMENT BY OTHERS SHOWN FOR REFERENCE ONLY M. FURNITURE SHOWN AT HALFTONE BY OWNER

I. REFER TO A9.1 ROOM FINISH SCHEDULE FOR COLORS AND FINISHES

J. REFER TO PLANS, SECTIONS AND DETAILS FOR CASEWORK DEPTH.

K. PROVIDE CABINET FILLERS AS NEEDED.

N. PROVIDE PARTITION REINFORCEMENT AT LOCATIONS OF WALL MOUNTED EQUIPMENT. REFER TO DETAIL X/AX.X FOR TYPICAL REQUIREMENTS AT NEW CONSTRUCTION. CONDITIONS MAY VARY

P. COORDINATE LOCATIONS OF ALL REQUIRED UTILITY CONNECTIONS AND/OR REQUIREMENTS WITH THE TRADE PROVIDING THE SAME

**GENERAL NOTES** 

A. ALL DIMENSIONS ARE TO FACE OF GYP BOARD UON.

B. COORDINATE THE INTERFACING OF ALL TRADES WITH RESPECT TO DELIVERY AND INSTALLATION OF ALL FIXTURES AND EQUIPMENT

C. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BEFORE INSTALLATION. CONSULT ARCHITECT WHEN ACTUAL FIELD

CONDITIONS VARY FROM THOSE SHOWN ON CONSTRUCTION

D. COORDINATE LOCATIONS OF ALL REQUIRED UTILITIES WITH THE

TRADE PROVIDING THE SAME. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION.

E. FASTEN ALL TALL CASES TO THE ADJOINING WALL THROUGH THE

F. ALL COUNTERTOPS INSTALLED ALONG A WALL OR EQUIPMENT ARE

H. PROVIDE LOCKS ON ALL CABINET DOORS AND DRAWERS UON. ALL LOCKS SHOULD BE KEYED ALIKE BY ROOM, PROVIDE MASTER

TO HAVE 4" BACKSPLASH AND SIDE SPLASH UON.

G. FINISH ALL EXPOSED ENDS AND BACKS OF FREESTANDING

INTERIOR ELEVATIONS

DOCUMENTS.

BACK OR SIDE OF THE UNIT.

CASEWORK/ MILLWORK.

AT EXISTING PARTITIONS.

LEGEND

XXXX

XXXX

XXXX

(XX-XX)

LEGEND

ELEVATION MATERIALS

INTERIOR ELEVATIONS

O. NOT ALL SIGN LOCATIONS ARE ELEVATED

NOTE: NOT ALL SYMBOLS MAY BE USED

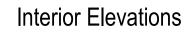
KEYING.

OF MATERIALS

Drawing Number

**1.A8.1** 

ī **D**<sup>s</sup> Project Number 20111-3008



IDS Drawing Title

 $\circ$  2024 Integrated  $ext{design}$  solutions, LL

FIL	
	A. Maurer
	Project Designer
	A. Pelfrey
Project A	rchitect / Engineer
	C. King
	Drawn By
	D. Sandle
	Q.M. Review
	N. LaForest
	Approved
	B. Sundberg
	Drawing Scale
	As Noted
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024

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Key Plan

Project Administrator

Bids 09-13-2024

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



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5211 cascade road SE, suite 300

grand rapids, michigan 49546

troy, michigan 48098

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248.823.2100

			SCHEDULE - COL	OR CODES			
COLOR CODES	PRODUCT / MATERIAL	MANUFACTURER	PRODUCT NAME / NUMBER	COLOR NAME / NUMBER	SIZE	FINISH	NOTES
AC-01	ACOUSTICAL PANEL	USG	ECLIPSE 76575	WHITE	24"X24" SQUARE EDGE		
B-01	RESILIENT BASE	ROPPE	PINNACLE RUBBER COVE BASE 4"	BLACK 100			
B-02	TILE BASE	CROSSVILLE	ARGENT	CLEAN SLATE	6"X12" COVE BASE		
B-04	TERRAZZO			MATCH EXISTING			TERRAZZO BASE REPAIR
CPT-06	CARPET TILE	INTERFACE	DETOURS	STEEL	50CM X 50CM		QUARTER TURN INSTALLATION METHOD
E PT-01	EPOXY PAINT	SHERWIN WILLIAMS		FROSTY WHITE SW6196			
ENT-01	CARPET	MANNINGTON COMMERCIAL	FRIXTION ENTRYWAY SYSTEM, CHARGE	KINETIC	18"X36"		INSTALLATION METHOD ASHLAR
FT-01	FLOOR TILE	CROSSVILLE	ARGENT	CLEAN SLATE	6"X6"	UNPOLISHED	STRAIGHT LAY INSTALLATION
FT-03	FLOOR TILE	CROSSVILLE	ARGENT	ORANGE CRUSH	6"X6"	UNPOLISHED	STRAIGHT LAY INSTALLATION
LN-01	LINOLEUM	FORBO	MCT	EIGER MCT-629	13"X13"	TOPSHIELD PRO	CORRIDOR FIELD
LN-04	LINOLEUM	FORBO	MCT	LAGUNA MCT-3238	13"X13"	TOPSHIELD PRO	ACCENT
PL-01	PLASTIC LAMINATE	WILSONART		NEO WALNUT 7991-38			
PL-03	PLASTIC LAMINATE	WILSONART		WEATHERED CHAIR 8204K-16			
PT-01	PAINT	SHERWIN WILLIAMS		FROSTY WHITE SW6196			FIELD
PT-03	PAINT	SHERWIN WILLIAMS		HIGH REFLECTIVE WHITE SW7757		FLAT	CEILING
PT-06	PAINT	SHERWIN WILLIAMS		JAMACIA BAY SW6781			ACCENT
PT-07	PAINT	SHERWIN WILLIAMS		BLACK MAGIC SW6991			HOLLOW METAL DOORS AND FRAMES
PT-09	PAINT	SHERWIN WILLIAMS		MARIGOLD SW6664			ACCENT
SC-01	SHADE CLOTH	DRAPER MERMET	GREEN SCREEN EVOLVE 3%	NATURAL			
SS-02	SOLID SURFACE MATERIAL	CORIAN		NEUTRAL CONCRETE			
SS-03	SOLID SURFACE MATERIAL	LG HI-MACS		HAZE / M308			WINDOW SILLS
SS-04	SOLID SURFACE MATERIAL	LG HI-MACS		RIPE COTTON G518R			RECEPTION DESK
TK-02	TACKBOARD	MAHARAM	MESSENGER	TANGELO 053			
TZ-01	TERRAZZO						TERRAZZO FLOOR REPAIR
WD-01	WOOD DOORS	VT INDUSTRIES		WHITE OAK		CLEAR	
WT-01	WALL TILE	AMERICAN OLEAN	COLORSTORY	BALANCE 14	3"X6"		1/3RD OFFSET INSTALLATION

# SCHEDULE - WINDOW SHADES

TYPE	LENGTH	WIDTH	HOUSING	MANUFACTURER	MATERIAL	MECHANISM	MOUNTING
W3	6' - 2"	8' - 0"	0"	DRAPER	SC-01	MANUAL- SINGLE ROLLER	INSIDE MOUNT, SMALL HEADBOX
W3: 1							
W6	6' - 2"	2' - 4"	0"	DRAPER	SC-01	MANUAL- SINGLE ROLLER	INSIDE MOUNT, SMALL HEADBOX
W6: 2		1					
W7	4' - 0"	4' - 0"	0"	DRAPER	SC-01	MANUAL- SINGLE ROLLER	INSIDE MOUNT, SMALL HEADBOX
W7: 1							

	SCHEDULE - ROOM FINISH							
NUMBER	NAME	FLOOR	BASE	WALL	CEILING	REMARK		
45	VESTIBULE	ENT-01	B-01	PT-01	GYP-01	6		
52	MAIN OFFICE	CPT-06	B-01	PT-01,PT-09	AC-01,GYP-01,PT-03	5,6		
53	OFFICE	CPT-06	B-01	PT-01	AC-01	3,6		
63	CONFERENCE	CPT-06	B-01	PT-01,PT-09	AC-01	3,6		
64	WORK ROOM	CPT-06	B-01	PT-01	AC-01	4,5,7		
65	CLINIC	FT-01,FT-03	B-02	E PT-01	AC-01	1,2,9		
73	TOILET	FT-01,FT-03	B-02	WT-01	GYP-01,PT-03	1,2		
75	RESTROOM	(E),FT-01,FT-03	B-02	WT-01	GYP-01,PT-03	1,2		
76	WORKSPACE	CPT-06	B-01	PT-01,PT-09	AC-01	4,7,8		
79	CORRIDOR	(E),TZ-01	(E),B-04	PT-01, (E)	AC-01,(E)	10,12,13		
100	RESTROOM	FT-01,FT-03	B-02	WT-01	GYP-01,PT-03	1,2		
102	NEIGHBORHOOD C	(E),LN-01,LN-04	(E),B-01	(E),PT-01,PT-06	AC-01,(E)	8,11		
112	STORAGE	CPT-06	B-01	PT-01	AC-01			
C1	CORRIDOR	(E),TZ-01	(E),B-04	(E)	(E)	8,12,13		
C3	CORRIDOR	(E),TZ-01	(E),B-04	(E)	(E)	8.12,13		

# **ABBREVIATIONS**

ROOM FINISH SCHEDULE	
AC PANEL	ACOUSTICAL PANEL
ACT	ACOUSTICAL CEILING TILE
CC	COLOR CODE
CG	CORNER GUARD
CMU	CONCRETE MASONRY UNIT
CT	
CEM PLAS	CEMENT PLASTER
CONC DEFS	CONCRETE DIRECT APPLIED EXTERIOR FINISH SYSTEM
(E)	EXISTING FINISH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EPT	EPOXY PAINT
E TERR	EPOXY TERRAZZO
ENTR MAT	ENTRY MAT SYSTEM
EXP CONST	EXPOSED CONSTRUCTION
FWC	FABRIC WALL COVERING
GF CMU	GROUND FACE CONCRETE MASONRY UNIT
GL CMU	GLAZED CONCRETE MASONRY UNIT
GYP BD HD/SLR	GYPSUM BOARD HARDENER/ SEALER
IR GYP BD	IMPACT RESISTANT GYPSUM BOARD
LIMEST	LIMESTONE
LINO	LINOLEUM
MCC	MULTI-COLORED COATING
MTL	METAL
MTL PNL	METAL PANEL
P LAM	PLASTIC LAMINATE
PAVER T	PAVER TILE
PLAS	
POL CONC PORC T	POLISHED CONCRETE PORCELAIN TILE
PT	PORCELAIN TILE
QT	QUARRY TILE
RAF	RAISED ACCESS FLOORING
RT	RUBBER TILE
RESIN FLR	RESINOUS FLOORING
RESIL	RESILIENT
SGFT	STRUCTURAL GLAZED FACING TILE
SHT V	SHEET VINYL
SSM	SOLID SURFACE MATERIAL
ST STL	STAINLESS STEEL
STN TC	STAIN TRAFFIC COATING
TERR	TERRAZZO
VCT	VINYL COMPOSITION TILE
VWC	VINYL WALLCOVERING
VEN PLAS	VENEER PLASTER
WD	WOOD

# **GENERAL NOTES**

- ROOM FINISH SCHEDULE
- \* REFER TO ABBREVIATIONS LIST FOR MATERIAL CODE DESCRIPTIONS A. "ROOM NUMBER AND ROOM NAME" CORRESPOND TO THE NUMBER
- AND NAMES INDICATED ON THE SHEETS.
- B. "MATERIAL/FINISH" INDICATE THE SPECIFIC MATERIALS AND FINISHES TO BE USED TO CONSTRUCT AND FINISH THE FLOORS, BASE, WALLS AND CEILINGS.
- C. "CC" INDICATES THE COLOR CODE FOR EACH MATERIAL AND/OR FINISH, REFER TO "COLOR CODES".
- D. "REMARKS" INDICATES ANY SPECIAL REQUIREMENTS FOR THE MATERIAL AND FINISH IN A ROOM SEE "ROOM FINISH SCHEDULE REMARKS".
- E. "CEILING" IS THE MATERIAL AND FINISH AT THE UNDERSIDE OF THE FLOOR OR ROOF ABOVE. "SOFFIT" IS THE MATERIAL AND FINISH AT THE UNDERSIDE OF THE STAIR RUN.
- F. REFER TO 1.A2.1 FOR FLOOR TILE PATTERNS AND MATERIALS.
- G. REFER TO A8 SERIES FOR INTERIOR ELEVATIONS.
- H. "E" PREFIX TO THE "PT" CODE REFER TO EPOXY PAINT MATERIAL (E PT-XX).

# REMARKS

- ROOM FINISH SCHEDULE 1. 75% FT-01, 25% FT-03 IN RANDOM MIXED INSTALLATION
- 2. GROUT AT FLOOR TILE TO BE TEC ACCUCOLOR EFX, COLOR; 934 SLATE GRAY. GROUT AT WALL TILE TO BE TEC ACCUCOLOR EFX, COLOR: 949 SILVERADO. TRANSITION AT CERAMIC FLOOR TILE TO BE MARBLE THRESHOLD. STRAIGHT GRID INSTALLATION.
- 3. ROLLER SHADES SC-01 TO RUN FULL LENGTH OF GLAZING OPENING.
- VIF FOR OPENING SIZE. 4. TACKBOARD MATERIAL TK-02
- 5. PLASTIC LAMINATE PL-03, SOLID SURFACE SS-04
- 6. SOILD SURFACE MATERIAL AT WINDOW SILLS IS SS-03
- 7. TRANSITION AT CARPET TO LINOLEUM OR CARPET TO EXISTING TO BE SCHLUTER RENO U AEU 100 IN SATIN ANODIZED ALUMINUM
- 8. TOUCH UP PAINT REQUIRED. PATCH/REPAIR/PAINT ALL LOCATIONS WHERE WALL MOUNTED ITEMS ARE REMOVED, INCLUDING BUT NOT LIMITED TO CLOCKS, ALARMS, WIREWAYS, ETC. OR WHERE SELECTIVE DEMOLITION OCCURS - COORDINATE EXTENTS WITH DEMO AND NEW WORK.
- 9. PLASTIC LAMINATE PL-01, SOLID SURFACE SS-02
- 10. PT-01 AND B-04 AT NEW WALL
- 11. NEW FLOORING, BASE, AND PAINT OCCURS ONLY IN AREAS WHERE NEW CONSTRUCTION OCCURS
- 12. TZ-01 AND B-04 AT TERRAZZO FLOORING AND WALL BASE REPAIRS; REFER TO 1/1.A0.1 FIRST FLOOR COMPOSITE PLAN - TYLER ELEMENTARY
- 13. TZ-01 AND B-04 AT TERRAZZO FLOORING AND WALL BASE REPAIRS; REFER TO 2/1.A0.1 FIRST FLOOR COMPOSITE PLAN - SAVAGE ELEMENTARY

20111-3008

ī**D**<sup>s</sup> Project Number

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Drawing Number



Room Finish Schedule

IDS Drawing Title

 $\circ$  2024 integrated  $ext{design}$  solutions, LLC

\_\_\_\_\_

	Q.IVI. Review
	N. LaForest
	Approved
	B. Sundberg
	Drawing Scale
	As Noted
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024

Bids 09-13-2024

roject Administrator	Pr
A. Maurer	
Project Designer	
A. Pelfrey	
Architect / Engineer	Project A
C. King	
Drawn By	
D. Sandle	
Q.M. Review	
N. LaForest	
Approved	
B. Sundberg	
Drawing Scale	
As Noted	
Issue Date	Issued for
06-24-2024	Design Development
08-23-2024	Quality Management Review

Key Plan

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



275 east liberty ann arbor, michigan 48101 734.213.6091 www.sdistructures.com

1441 west long lake, suite 200 troy, michigan 48098 5211 cascade road SE, suite 300 grand rapids, michigan 49546 248.823.2100 www.ids-michigan.com CIVIL ENGINEER SPALDING DeDECKER

rochester hills, michigan 48307

STRUCTURAL ENGINEER

905 south blvd. E

800.598.1600 www.sda-eng.com

SDI Structures



### WINDOW TYPES 1/4" = 1'-0"

DOOR AND FRAME

AS SCHEDULED -

09 3000 MORTAR

SETTING BED -

09 3000 CERAMIC TILE

14 SILL DR SCHED 3" = 1'-0"

DOOR STOP -

09 3000 MORTAR

DR SCHED 3" = 1'-0"

SETTING BED -

13

DOOR STOP

09 6543 EDGE STRIP

09 6816 CARPET OR

09 6813 CARPET TILE

12 SILL DR SCHED 3" = 1'-0"

09 3000 TILE AS SCHEDULED

SILL

- 09 3000 MARBLE THRESHOLD (WIDTH OF

- 09 6816 CARPET OR

09 6813 CARPET TILE

TOP OF FLOOR SLAB

SEE NOTES BELOW

DOOR AND FRAME

AS SCHEDULED

09 6543 LINOLEUM

TOP OF FLOOR SLAB

SEE NOTES BELOW

DOOR AND FRAME AS

- EXISTING CONCRETE

TOP OF FLOOR SLAB

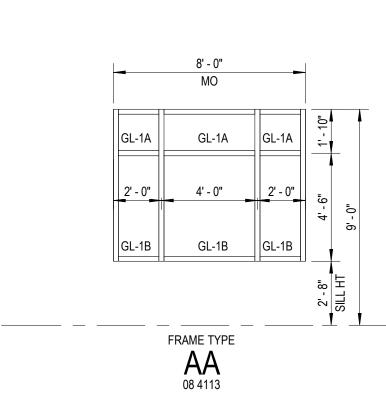
09 6543 LINOLEUM FLOORING

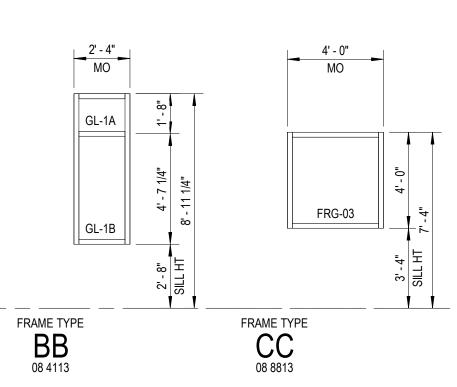
SCHEDULED

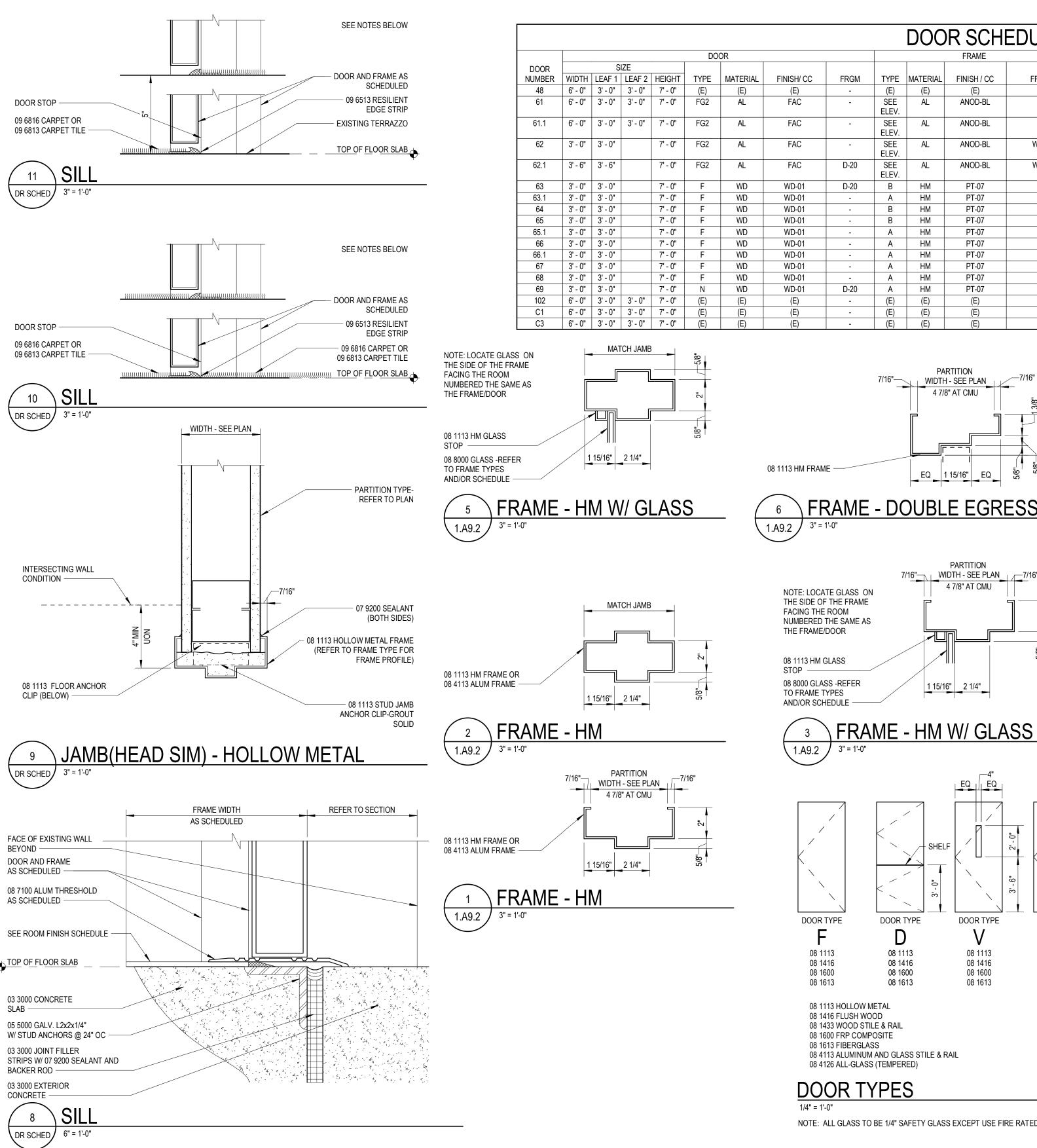
- 09 3000 METAL EDGE STRIP

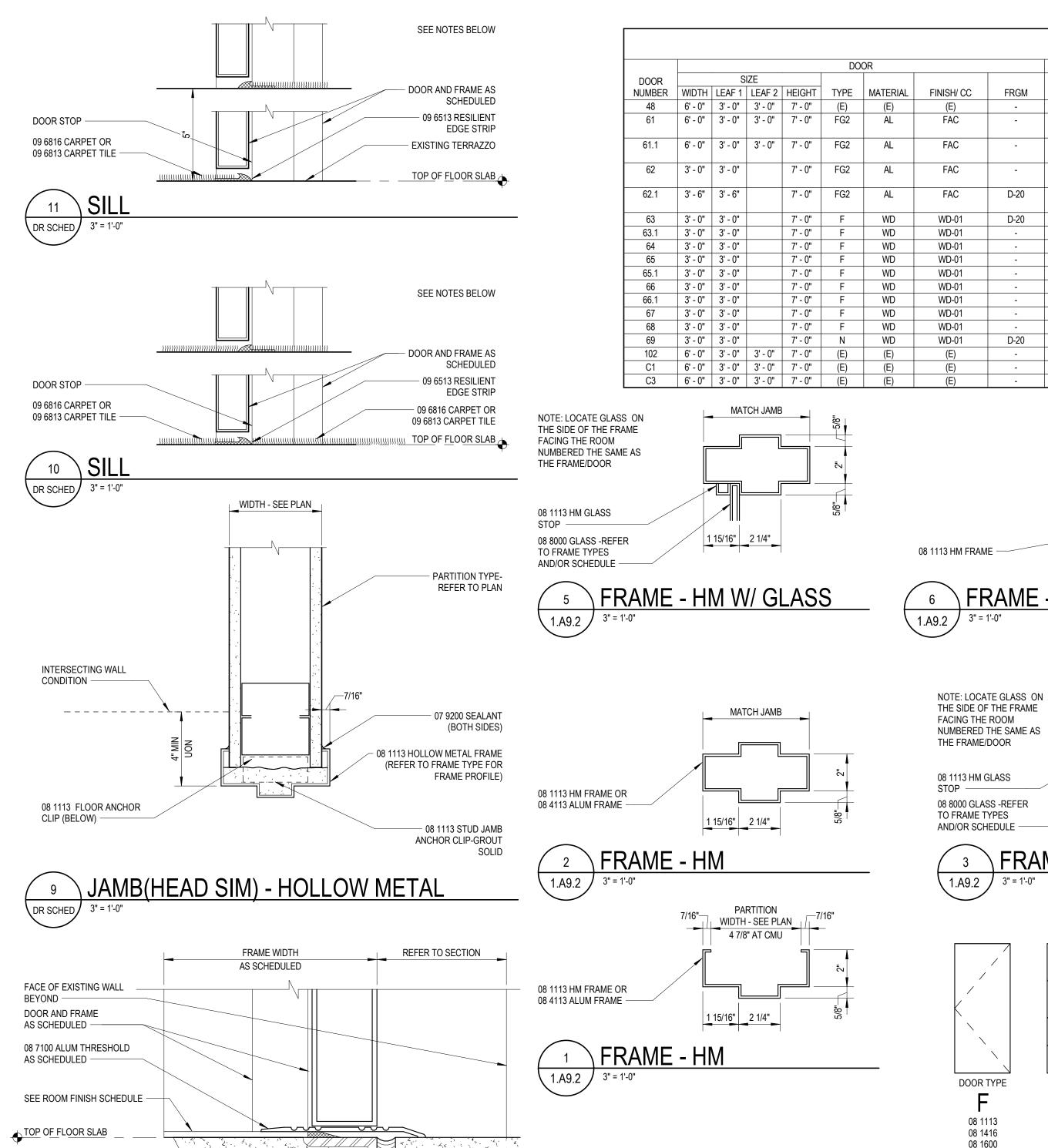
FLOORING

FRAME W/1:2 BEVEL - TYP)











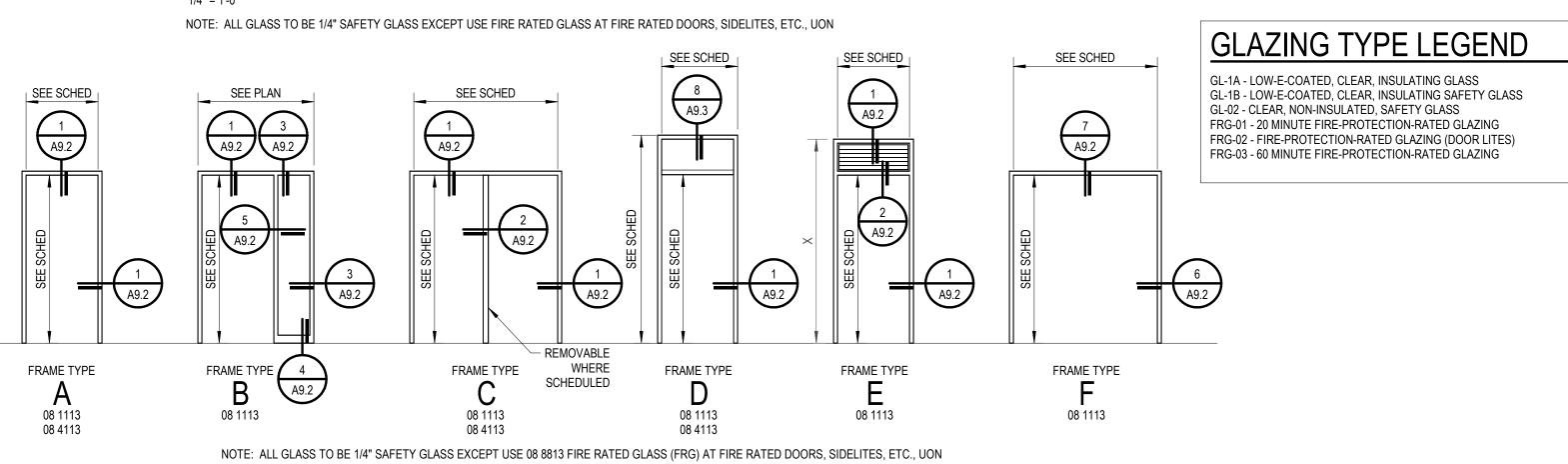
08 1600 08 1613 08 1433 WOOD STILE & RAIL 08 4113 ALUMINUM AND GLASS STILE & RAIL 08 4126 ALL-GLASS (TEMPERED)

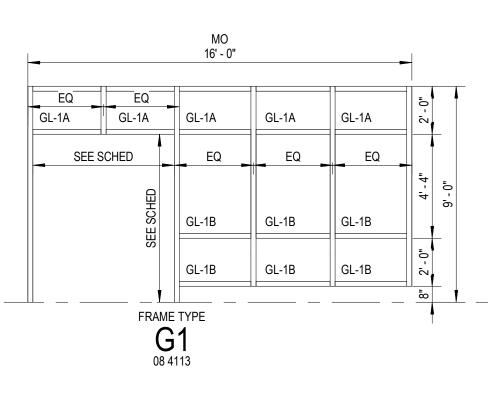
D

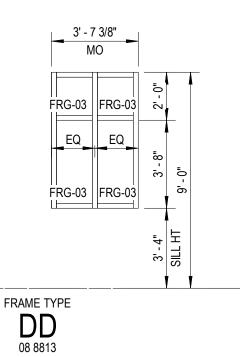
08 1113

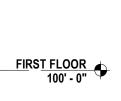
08 1416

# DOOR TYPES







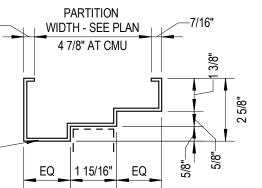


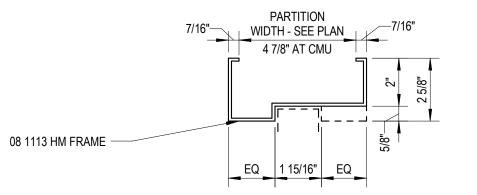


# DOOR SCHEDULE

PARTITION

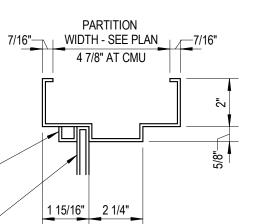
	FRAME				DETAILS			DOOR		
TYPE	MATERIAL	FINISH / CC	FRGM	HEAD	JAMB	SILL	HARDWARE		WALL RATING	REMARKS
(E)	(E)	(E)	-	(E)	(E)	(E)	10.0	-	-	12, 13, 14
SEE ELEV.	AL	ANOD-BL	-	6/1.A5.2	3/1.A5.3	8/1.A9.2	1.5			1, 3
SEE ELEV.	AL	ANOD-BL	-	11/1.A5.2	5/1.A5.3	10/1.A5.2	2.5	-	-	1, 3
SEE ELEV.	AL	ANOD-BL	W-60	7/1.A5.2	SIM 6/1.A5.3	-	2.0	20	60	1, 3
SEE ELEV.	AL	ANOD-BL	W-60	9/1.A5.2	11/1.A5.3	11/1.A9.2	3.0	20	60	1, 3
В	HM	PT-07	Н	9/1.A9.2	9/1.A9.2	12/1.A9.2	4.0	20	60	1
A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	-	5.0			
В	HM	PT-07	-	9/1.A9.2	9/1.A9.2	-	6.0	-	-	
В	HM	PT-07	-	9/1.A9.2	9/1.A9.2	-	8.0	-	-	
A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	-	6.0			
A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	14/1.A9.2	6.0			
Α	HM	PT-07	-	9/1.A9.2	9/1.A9.2	-	7.0	-	-	
A	HM	PT-07	-	9/1.A9.2	9/A9.2	14/1.A9.2	7.01			
A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	13/1.A9.2	7.01	20	60	
A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	12/1.A9.2	6.01	20	60	
(E)	(E)	(E)	-	(E)	(E)	(E)	10.0	-	-	12, 13, 14
(E)	(E)	(E)	-	(E)	(E)	(E)	10.0	-	-	12, 13, 14
(E)	(E)	(E)	-	(E)	(E)	(E)	10.0	-	-	12, 13, 14





FRAME - DOUBLE EGRESS HEAD





EQEQ

DOOR TYPE

08 1113

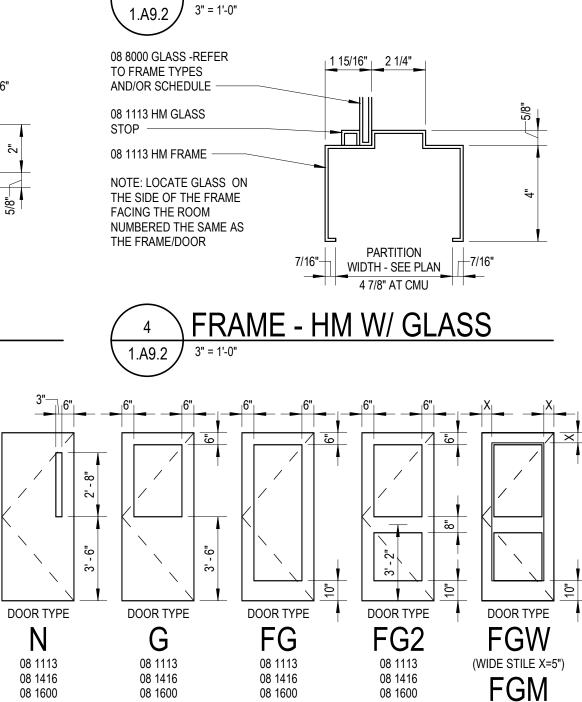
08 1416

08 1600

08 1613

08 1613

08 1613



08 1613

08 1613

(MEDIUM STILE X=4"+/-)

FGN

(NARROW STILE X=2"+/-)

08 4113

# **GENERAL NOTES**

- DOOR SCHEDULE
- A. REFER TO THE DRAWINGS FOR DOOR LOCATIONS B. "DOOR NUMBER" CORRESPONDS TO THE DOOR NUMBER INDICATED ON THE DRAWINGS. NOTE: AT EXISTING WALL OPENINGS, FIELD VERIFY SIZE OF DOORS AND FRAMES.
- C. (DOOR) "SIZE" INDICATES THE NOMINAL WIDTH AND HEIGHT OF THE DOOR IN FEET AND INCHES. ALL DOORS ARE 1 3/4" THICK UNLESS OTHERWISE NOTED.
- "DOOR AND FRAME TYPE/MATL/FINISH" INDICATES THE CODES FOR TYPE (INDICATED ON THE DRAWINGS), MATERIAL AND FINISH.
- . "CC" INDICATES THE COLOR CODE FOR FINISHES OF DOORS AND FRAMES, SEE "SCHEDULE - COLOR CODES".
- . "DETAILS HEAD- JAMB-SILL" INDICATES THE DETAIL NUMBER INDICATED ON THE DRAWINGS.
- G. "HARDWARE SET" INDICATES HARDWARE SET NUMBERS SPECIFIED IN 08 7100 - DOOR HARDWARE.
- "DOOR ASSEMBLY RATING" INDICATES THE MINIMUM FIRE RESISTANCE RATING FOR FIRE DOORS AND/OR SIDELITES
- "WALL RATING" INDICATES THE FIRE RESISTANCE RATING OF THE WALL CONTAINING THE DOOR.
- J. "FRGM" INDICATES FIRE-RATED GLAZING MARKINGS.
- K. "REMARKS" INDICATES ANY SPECIAL REQUIREMENTS FOR A DOOR AND FRAME - SEE "DOOR SCHEDULE - REMARKS".

### REMARKS DOOR SCHEDULE

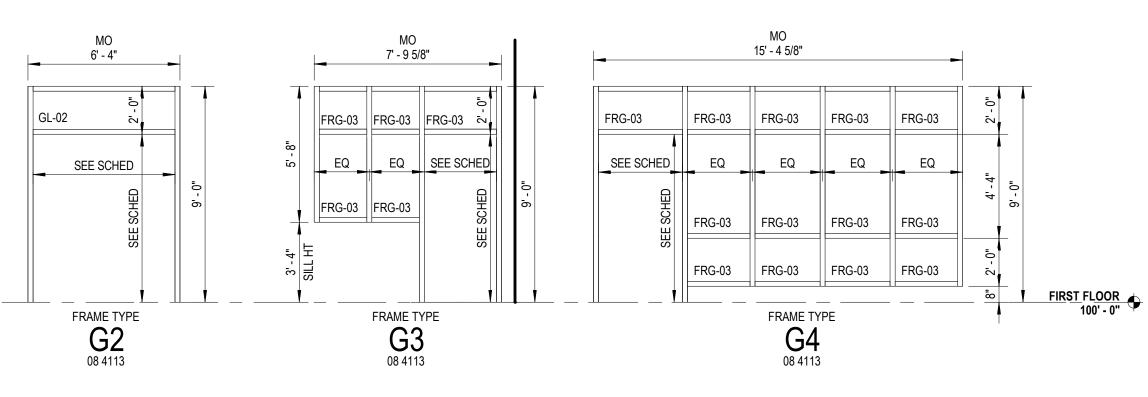
- 1. ACCESS CONTROL SYSTEM
- . REMOVABLE MULLION 3. LOW ENERGY POWER OPERATED DOOR 4. POWER OPERATED DOOR PACKAGE DOOR ASSEMBLY (ALL HARDWARE BY DOOR MANUFACTURER) . HOLLOW METAL ASTRAGAL
- 6. DOOR FRAME TO REMAIN ONLY REPLACE DOOR LEAF AND HARDWARE - PATCH, REPAIR, AND FILL HOLES ON DENTS ON THE EXISTING FRAME. 7. VERIFY DIMENSIONS IN FIELD
- 8. RE-CERTIFY FRAME FOR 20 MINUTE FIRE DOOR ASSEMBLY RATING. 9. 180 DEGREE SWING
- 10. DOOR TO RECEIVE NEW OR SALVAGED DOOR BARRICADE HARDWARE - BY OTHERS
- 11. BATTERY POWERED ELECTRONIC CLASSROOM HARDWARE 12. MAGNETIC HOLD-OPENS
- 13. DOOR AND FRAME EXISTING TO REMAIN 14. DOOR LOCATIONS FOR BOTH BUILDINGS SHOWN ON SHEET 1.A0.1

### FIRE-RATED GLAZING ASSEMBLIES MARKING

- W MEETS WALL ASSEMBLY CRITERIA OH MEETS FIRE WINDOW ASSEMBLY CRITERIA INCLUDING THE HOSE STREAM TEST
- MEETS FIRE DOOR ASSEMBLY CRITERIA MEETS FIRE DOOR ASSEMBLY "HOSE STREAM" TEST MEETS 450 DEG F TEMPERATURE RISE CRITERIA FOR 30 MINUTES NT DOES NOT MEET 450 DEG F TEMPERATURE RISE CRITERIA FOR 30
- MINUTES XX TIME IN MINUTES OF THE FIRE RESISTANCE OR FIRE PROTECTION RATING OF THE GLAZING ASSEMBLY

# ABBREVIATIONS





ī**D**<sup>s</sup> Project Number

\_\_\_\_\_

20111-3008

Drawing Number



IDS Drawing Tit

Door Schedule and Details

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	As Noted
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024

	A. Maurer
	Project Designer
	A. Pelfrey
Project A	rchitect / Engineer
	C. King
	Drawn By
	A. Pelfrey
	Q.M. Review
	N. LaForest
	Approved
	B. Sundberg
	Drawing Scale
	As Noted
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024

Key Plan

Project Administrator

Renovations

Van Buren Public Schools

Savage & Tyler Elementary

Schools Secured Entry

Project Title

STRUCTURAL ENGINEER SDI Structures 275 east liberty

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CIVIL ENGINEER SPALDING DeDECKER 905 south blvd. E rochester hills, michigan 48307 800.598.1600 www.sda-eng.com

INTEGRATED design SOLUTIONS architecture engineering interiors & technology 1441 west long lake, suite 200 troy, michigan 48098 5211 cascade road SE, suite 300 grand rapids, michigan 49546 248.823.2100 www.ids-michigan.com



# PARTITION SERIES 'L'

09 2216 METAL RUNNER CHANNEL (SECURED TO FLOOR) -BASE AS SCHEDULED -09 2900 ACOUSTICAL SEALANT (CONT) -

09 2216 SLOTTED DEFLECTION

CONSTRUCTION AT VOIDS OF STEEL DECK ONLY -

TRACK (SECURED TO DECK) -

07 8413 HEAD OF WALL FIRE

RESISTIVE JOINT SYSTEM AT

RATED PARTITIONS -

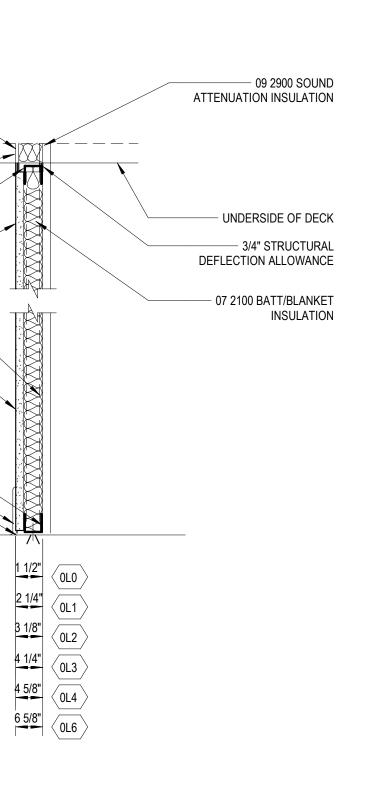
FACE OF WALL CONSTR

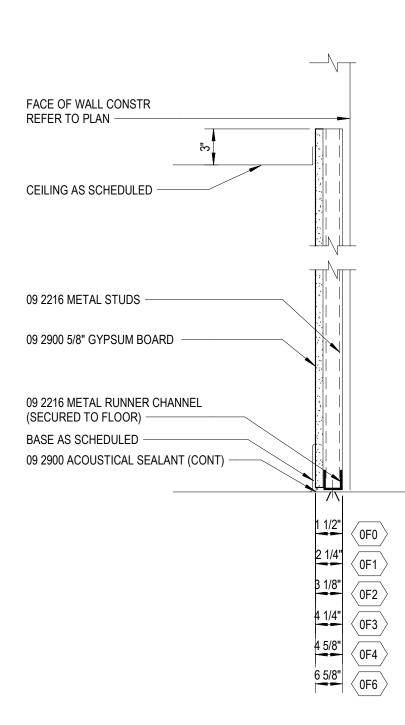
REFER TO PLAN -

09 2216 METAL STUDS -

09 2900 5/8" GYPSUM BOARD

# PARTITION SERIES 'F'





07 8413 HEAD OF WALL FIRE

RESISTIVE JOINT SYSTEM AT

RATED PARTITIONS -

CONSTRUCTION AT VOIDS OF STEEL DECK ONLY -09 2216 SLOTTED DEFLECTION TRACK (SECURED TO DECK) —

09 2216 METAL STUDS -09 2900 5/8" GYPSUM BOARD (2 LAYERS @ 2-HR FIRE RATED PARTITION)

09 2900 ACOUSTICAL SEALANT (CONT BOTH SIDES - OMIT WHEN CARPET RUNS UNDER PARTITION) -

PARTITION SERIES 'B'

# GENERAL NOTES

- INTERIOR PARTITIONS 1. "WALL" AND "PARTITION" ARE USED TO DENOTE EITHER WALLS OR
- PARTITIONS INTERCHANGEABLY.
- 2. REFER TO SHEET AR.0 ARCHITECTURAL REFERENCE INFORMATION FOR ABBREVIATIONS, SYMBOLS, AND GRAPHIC INDICATIONS.
- 3. REFER TO COMPOSITE LIFE SAFETY PLANS FOR PARTITION FIRE RATINGS.
- 4. REFER TO ROOM FINISH SCHEDULE FOR WALL FINISHES AND WALL BASE.

PARTITION TYPE GRAPHIC TAG

ASSEMBLY RATING -S = SMOKE PARTITION

1 = 1-HR FIRE RATED 2 = 2-HR FIRE RATED

0 = NON-RATED

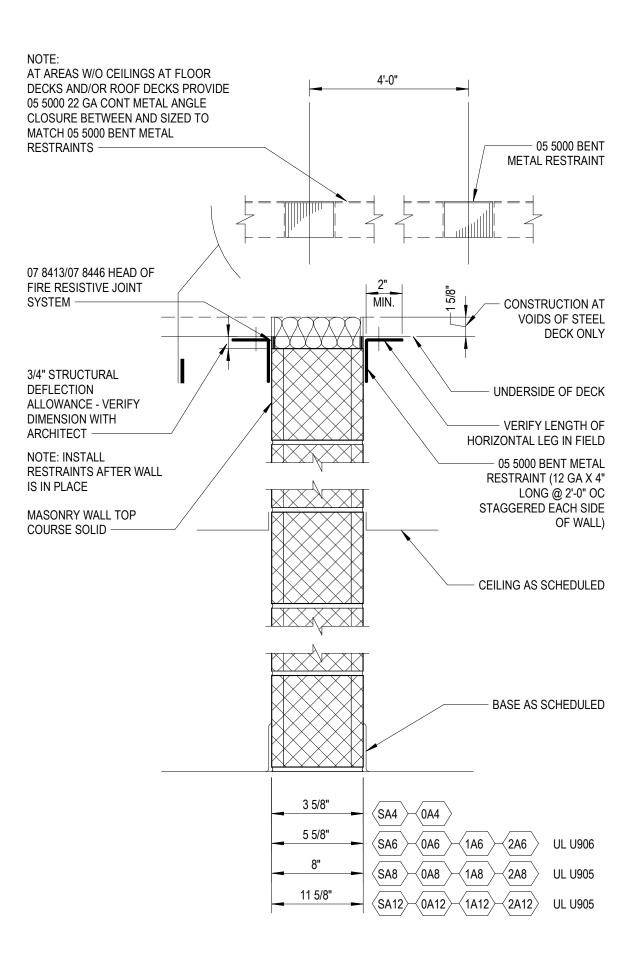


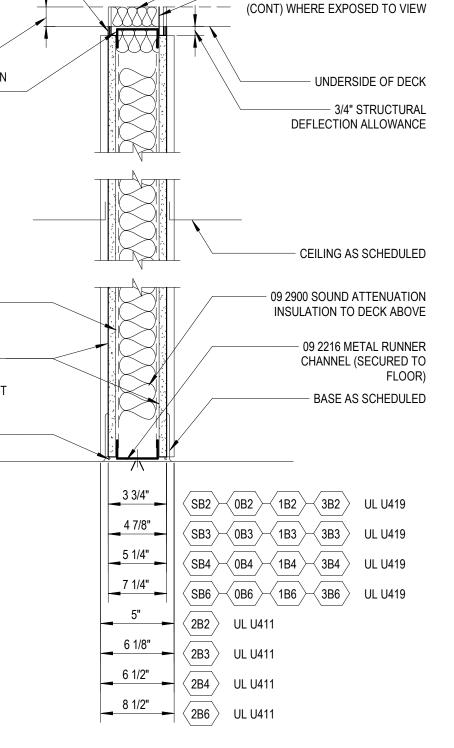
- PARTITION SERIES

- SIZE DESIGNATOR (SEE TABLE BELOW)

MATERIAL	DESIGNATION SIZE	ACTUAL SIZE	SPACING
MASONRY	4 6 8 12	3 5/8 " 5 5/8 " 7 5/8 " 11 5/8 "	N/A
STEEL STUDS	1 2 3 4 6	1 5/8 " 2 1/2 " 3 5/8 " 4" 6"	16" OC
FURRING	0 1 2 3	7/8 " 1 5/8 " 2 1/2 " 3 5/8 "	16" OC
SHAFTWALL C-H STUDS	2 4 6	2 1/2 " 4" 6"	24" OC

- 5. SUBSTITUTE 09 2900 TILE BACKING BOARD AT LOCATIONS TO RECEIVE A TILE WALL FINISH.
- 6. ALL NON-LOAD BEARING METAL WALL FRAMING SHALL BE BASED ON TOTAL STUD HEIGHT. REFER TO SPECIFICATION SECTIONS 05 4000 -COLD-FORMED METAL FRAMING, 09 2116 - GYPSUM BOARD SHAFT WALL ASSEMBLIES AND 09 2216 - NON-STRUCTURAL METAL FRAMING FOR ADDITIONAL REQUIREMENTS.
- 7. WHERE ROOMS WITH DIFFERENT PARTITION REQUIREMENTS ARE ADJACENT, THE PARTITION WITH THE GREATER FIRE-RATING AND/OR STC SHALL BE USED BETWEEN THEM.
- 8. AT INTERSECTIONS OF DIS-SIMILAR PARTITON TYPES, THE HIGHEST RATED PARTITION IS TO RUN THROUGH THE INTERSECTION TO MAINTAIN ENCLOSURE. MAINTAIN RATING OF RATED PARTITION AT INTERSECTION WITH COLUMN ENCLOSURES BY EXTENDING RATED CLOSURE AS REQUIRED.
- 9. FIRE-RATED PARTITIONS SHALL BE CONSTRUCTED ACCORDING TO THE FIRE TEST INDICATED. NO SUBSTITUTIONS OF MATERIALS OR DEVIATIONS FROM CONSTRUCTION ARE ALLOWED. ADDITIONAL LAYERS MAY BE REQUIRED FOR ACOUSTICAL OR OTHER REASONS AND MUST BE EXECUTED AS SHOWN.
- 10. STC RATINGS ARE MINIMUM ACOUSTICAL PERFORMANCE REQUIREMENT. SPECIFIC ACOUSTICAL TESTS ARE GIVEN FOR REFERENCE ONLY. SOUND ATTENUATION BLANKET THICKNESS SHALL BE AS FOLLOWS:
- A. 1 1/2 " FOR PARTITIONS WITH 1 5/8 " AND 2 1/2 " STUDS (INCLUDING SHAFTWALLS).
- B. 3" FOR PARTITIONS WITH 3 5/8 ", 4" OR 6" STUDS. C. 3" FOR SHAFTWALLS WITH 4" OR 6" STUDS UNO. D. AS REQUIRED FOR FIRE RATING.
- 11. DETAILS ARE DIAGRAMMATIC PRECISE REQUIREMENTS OF TESTS ASSEMBLIES SHALL GOVERN.





- 09 2900 SOUND

ATTENUATION INSULATION

- 05 3100 STEEL DECK CLOSURE

# PARTITION SERIES 'A'

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

20111-3008

Drawing Number



Partition Types

IDS Drawing Title

 $\circ$  2024 Integrated  $ext{design}$  solutions, LL

A. Maurer Project Designer
Project Decigner
FIOJECI DESIGNEI
A. Pelfrey
Architect / Engineer
C. King
Drawn By
A. Pelfrey
Q.M. Review
N. LaForest
Approved
B. Sundberg
Drawing Scale
As Noted
Issue Date
06-24-2024
08-23-2024
09-13-2024

Key Plan

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



www.sda-eng.com STRUCTURAL ENGINEER SDI Structures 275 east liberty ann arbor, michigan 48101

www.ids-michigan.com <u>CIVIL ENGINEER</u> SPALDING DeDECKER 905 south blvd. E rochester hills, michigan 48307 800.598.1600

1441 west long lake, suite 200

5211 cascade road SE, suite 300

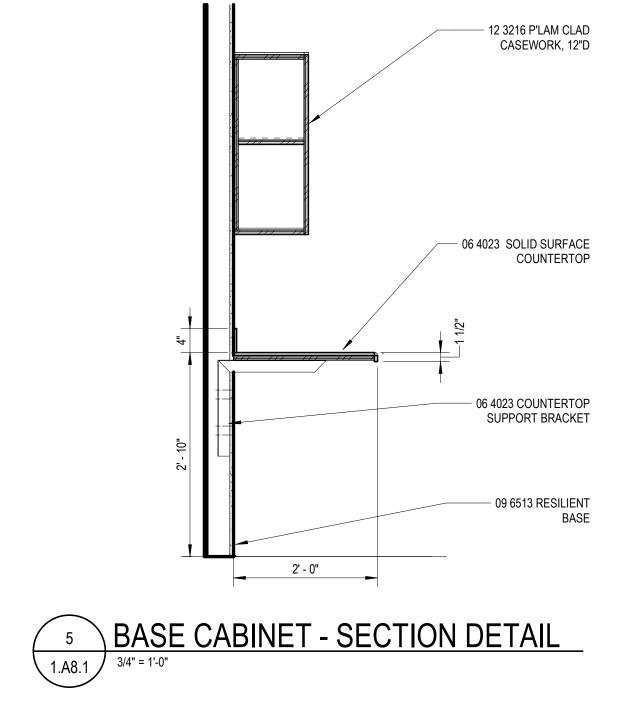
grand rapids, michigan 49546

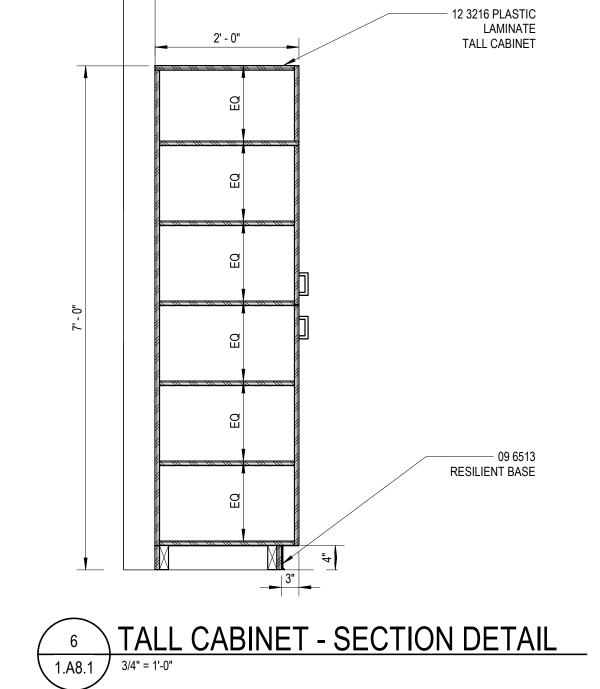
troy, michigan 48098

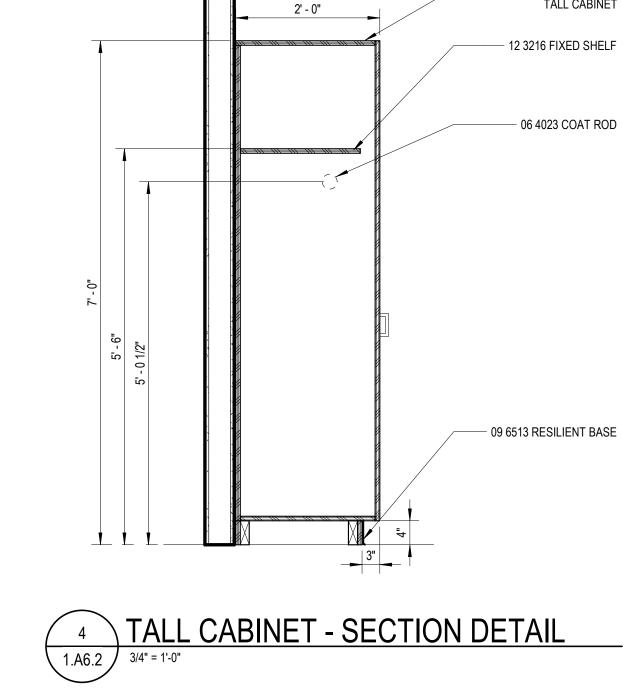
248.823.2100

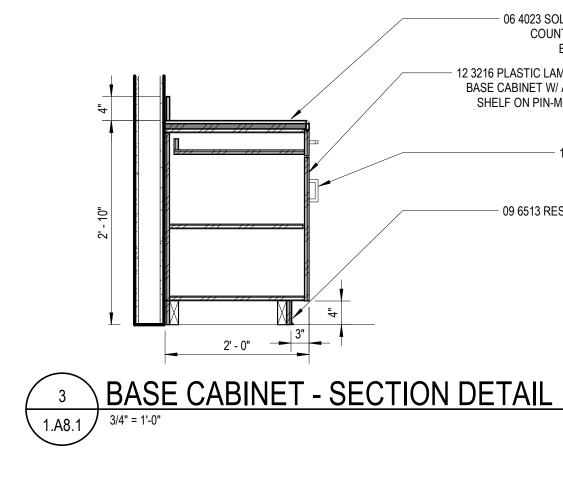
734.213.6091

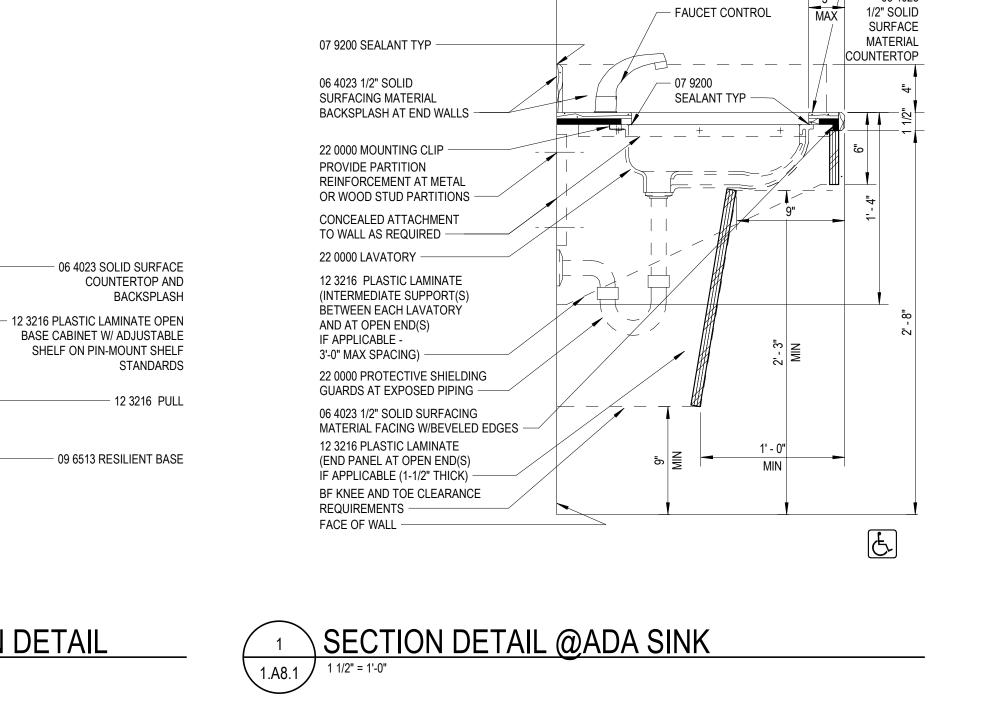
www.sdistructures.com











2' - 0"

- FAUCET CONTROL

— 06 4023

3" (+

MAX

2' - 0" - 12 3216 PLASTIC LAMINATE TALL CABINET = = = = - - = = = - 09 6513 RESILIENT BASE 2 TALL CABINET - SECTION DETAIL 1.A6.2 3/4" = 1'-0"

— 12 3216 PLASTIC LAMINATE TALL CABINET

- 12 3216 FIXED SHELF

— 06 4023 COAT ROD

ī**D** Project Number

Drawing Number

20111-3008



IDS Drawing Title

Interior Sections and Details

 $\circ$  2024 integrated  $ext{design}$  solutions, LLC

	C. King
	Drawn By
	D. Sandle
	Q.M. Review
	N. LaForest
	Approved
	B. Sundberg
	Drawing Scale
	As Noted
Issued for	Issue Date
Issued Ior	Issue Date
Design Development	06-24-2024
Design Development	06-24-2024
Design Development Quality Management Review	06-24-2024 08-23-2024
Design Development Quality Management Review	06-24-2024 08-23-2024

roject Administrator	Pr
A. Maurer	
Project Designer	
A. Pelfrey	
Architect / Engineer	Project A
C. King	
Drawn By	
D. Sandle	
Q.M. Review	
N. LaForest	
Approved	
B. Sundberg	
Drawing Scale	
As Noted	
Issue Date	Issued for
06-24-2024	Design Development
08 33 2024	Ouglity Management Poview

Key Plan

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



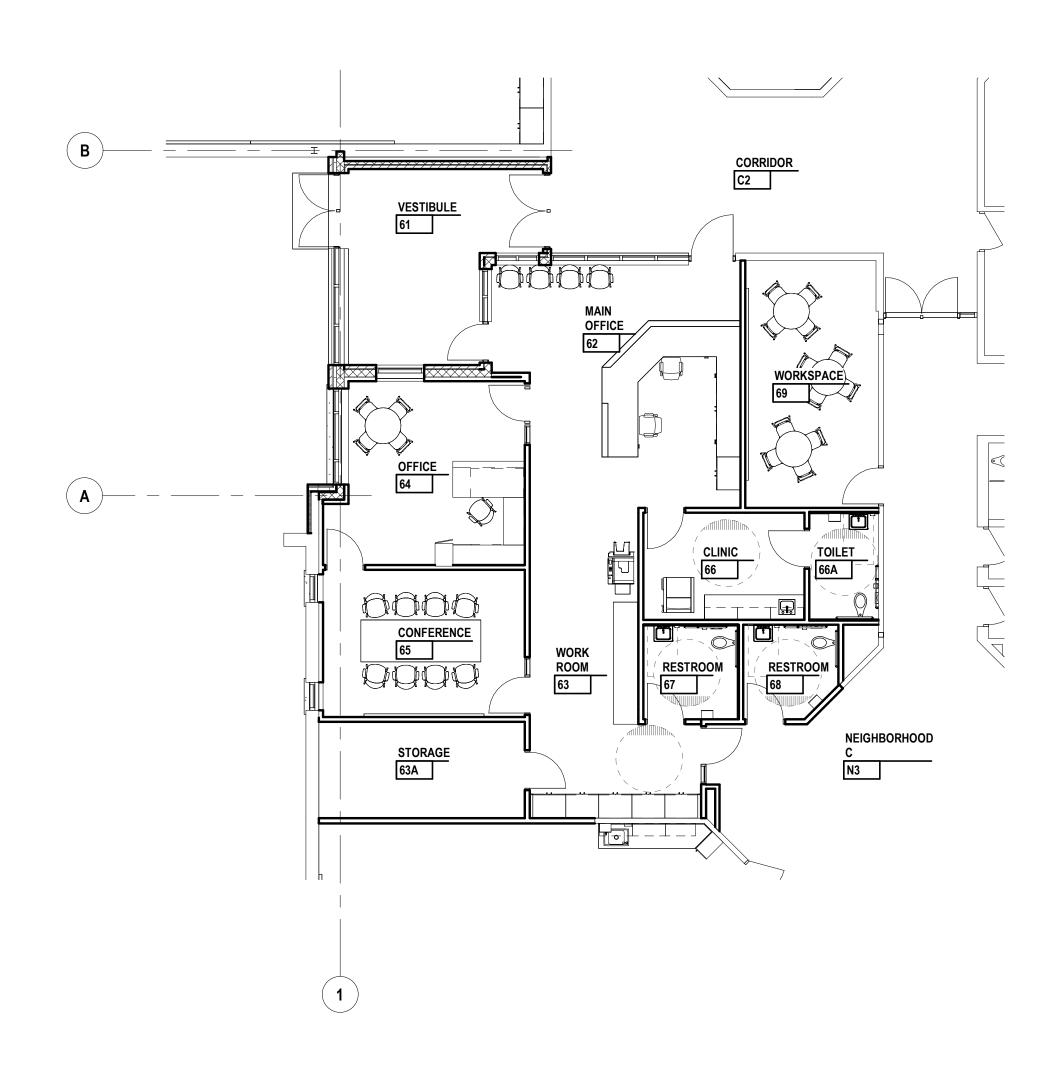
STRUCTURAL ENGINEER SDI Structures 275 east liberty ann arbor, michigan 48101 734.213.6091 www.sdistructures.com

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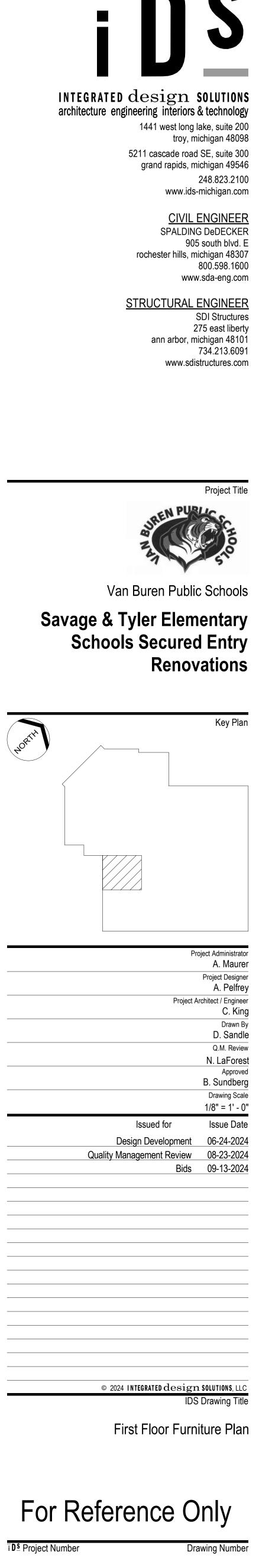
INTEGRATED design SOLUTIONS architecture engineering interiors & technology 1441 west long lake, suite 200 troy, michigan 48098 5211 cascade road SE, suite 300 grand rapids, michigan 49546





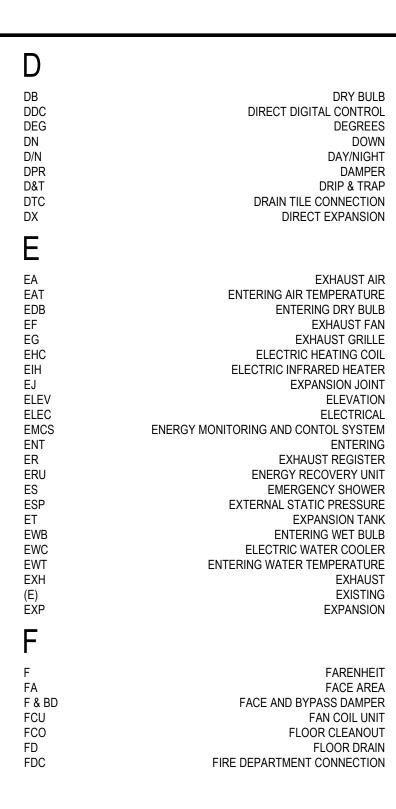
### **GENERAL NOTES** FURNITURE FIXTURE AND EQUIPMENT PLAN

- A. ITEMS SHOWN IN GRAYSCALE ARE FOR REFERENCE ONLY.
- B. COORDINATE THE INTERFACING OF ALL TRADES WITH RESPECT TO DELIVERY AND INSTALLATION OF ALL FURNITURE, FIXTURES AND EQUIPMENT
- C. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BEFORE INSTALLATION. CONSULT ARCHITECT WHEN ACTUAL FIELD CONDITIONS VARY FROM THOSE SHOWN ON CONSTRUCTION DOCUMENTS.
- D. COORDINATE LOCATIONS OF ALL REQUIRED UTILITIES WITH THE TRADE PROVIDING THE SAME. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION.



20111-3008

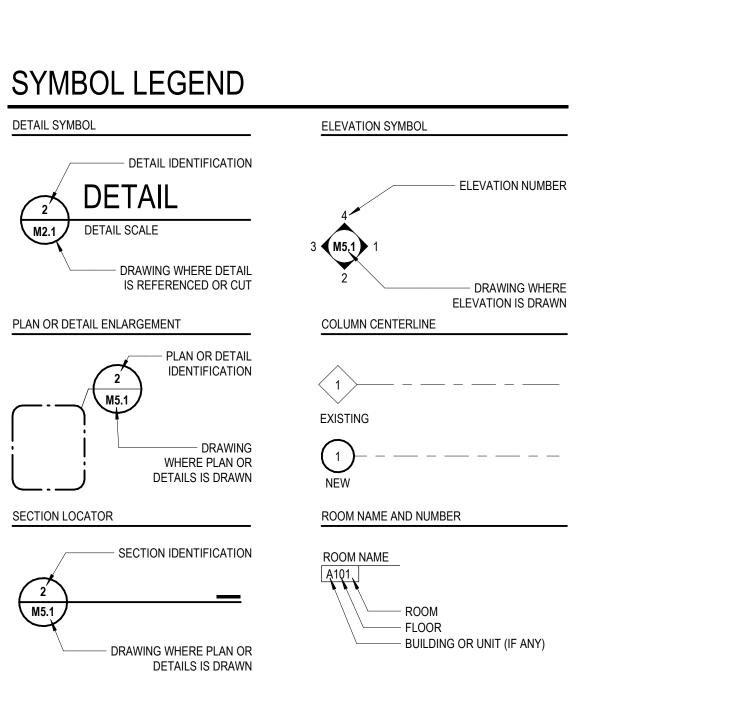
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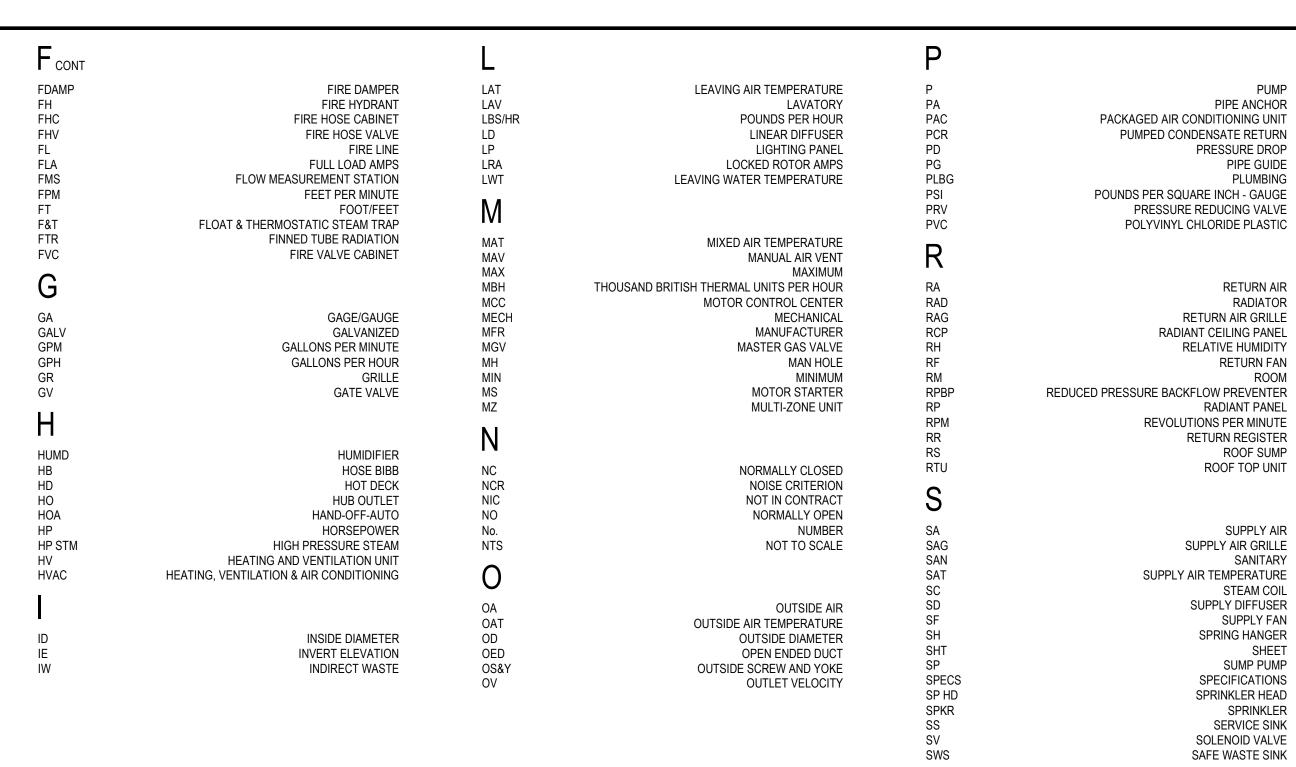


<b></b>	EXPANSION COMPENSATOR/EXPANSION JOINT
	SPRING HANGER
SH SH	FLOOR CLEANOUT
FCO	WALL CLEANOUT
	MANHOLE
MH Ø	
—	
СВ	
•	PENDANT SP HD (FLUSH MOUNTED TYPE)
- <b>\$</b> ₽	SIAMESE CONNECTION
	PRESSURE INDICATOR
φ	TEMPERATURE INDICATOR
φ	THERMOMETER
P	MANUAL AIR VENT
	FLOW MEASURING DEVICE
	FLOW ELEMENT (ORIFICE PLATE)
$\mathbf{\Theta}$	POINT OF NEW CONNECTION
- <del>//////</del> -	TO BE DEMOLISHED AND REMOVED
$\bigcirc$	PLUMBING RISER TAG
MGS	MASTER GAS SHUT-OFF VALVE
PRV	PRESSURE REDUCING STATION
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
— F —	FIRE PROTECTION PIPING
— CW —	DOMESTIC COLD WATER PIPING
— HPCW —	HIGH PRESSURE COLD WATER
— HW —	DOMESTIC HOT WATER PIPING
— HWR —	DOMESTIC HOT WATER RETURN PIPING
	NON-POTABLE WATER PIPING
— DW —	DISTILLED WATER

ABBREVIAT	IONS
A	
AAV AC ACCU AD AE AFF AFT AHU APD AL APPROX ARCH ASR	AIR ADMITTANCE VALVE AIR COMPRESSOR AIR COOLED CONDENSING UNIT ACCESS DOOR AIR EXTRACTOR ABOVE FINISHED FLOOR AIR FLOW TRANSMITTED AIR HANDLING UNIT AIR PRESSURE DROP ACTIVE LENGTH APPROXIMATELY ARCHITECTURAL AUTOMATIC SPRINKLER RISER
В	
BAS BBD BF BFP BHP BP BTU BWV	BUILDING AUTOMATION SYSTEM BOILER BLOWDOWN BARRIER FREE BOILER FEEDWATER PUMP BRAKE HORSEPOWER BACKFLOW PREVENTER BRITISH THERMAL UNIT BACKWATER VALVE
С	
CAP CC CD CFH CFM CI CLG CO COND COND CONN CONT CONT CONT CONT CONT CONT CONT	CAPACITY COILING COIL COLD DECK CUBIC FEET PER HOUR CUBIC FEET PER MINUTE CAST IRON CEILING CLEANOUT CONDENSATE (COOLING) CONNECTION CONTINUATION CONTRACTOR CONVECTOR CENTRAL PROCESSING UNIT CONDENSATE RETURN (STEAM) COOLING TOWER CABINET UNIT HEATER CONTROL VALVE COLD WATER
<u>SYMBOLS</u>	

	FIRE DAMPER	
A	SMOKE DAMPER	
Å	SMOKE DAMPER AND FIRE DAMPER	
பு	VOLUME DAMPER WITH REMOTE OPERATOR	
w	FLEXIBLE DUCT	
	CUH OR CONVECTOR (SURFACE)	
ಆಹಾ	FINNED TUBE RADIATION	
	TERMINAL VOLUME BOX (W/O HEATING COIL)	
	TERMINAL VOLUME BOX (W/ HEATING COIL)	
	FLEXIBLE PIPE CONNECTION	
#" / #"	INDICATES FLAT OVAL DUCT SIZE	
#" x #"	INDICATES RECTANGULAR DUCT SIZE	
#"Ø	INDICATES ROUND DUCT SIZE	
R	ANGLE RELIEF VALVE	
₽	ANGLED STOP CHECK VALVE	
×	BALANCE VALVE	
ų	BUTTERFLY VALVE (SEE SPECIFICATION FOR TYPE)	
X	BALL, GAS, GATE, GLOBE, PLUG VALVE (SEE SPECIFICATION FOR TYPE)	
Ŕ	CHECK VALVE W/ ARROW INDICATING FLOW	
R	CONTROL VALVE	
<u>^</u> X	LINEAR STOP CHECK VALVE	
密	MIXING VALVE	
X	PRESSURE REDUCING VALVE	
送	PRESSURE RELIEF VALVE	
$\bigtriangledown$	STRAINER	
—II	UNION	
<b>—</b> ×—	PIPE ANCHOR	
— <del>—</del> —	PIPE GUIDE	





H

	THERMOSTAT WITH
	TEMPERATURE SENSOR - DUCT MC AVERAGING EL
⊡	TEMPERATURE SENSOR W/ SUN
Ţ─━	TEMPERATURE SENSOR - DUCT MC RIGID EL
⊡⊨⊒	TEMPERATURE SENSOR - IMM TYPE EL
$\mathbf{E}_{sd}$	AREA SMOKE DET
F	DUCT SMOKE DET
F	FIRE STAT - DUCT MC
FZ	FREEZE STAT - DUCT MC
FM	FLOW
AQ -	AQUASTAT (STF
AFS	AIR FLOW S
LPI	LOOP POWER IND
D/N	DAY/NIGHT MAIN AIR
$\oslash$	MANC
CR	CONTROL
CS	CURRENT S
Μ	MOTORIZED DAMPER
<del>8888</del>	DAMPER (PARALLEL
<del>8888</del>	DAMPER (OPPOSED
EP	ELECTRIC - PNEUMATIC
S/S	START STOP (MOTOR CO
R	RELAY (ELEC
ТТ	TWIST
VC	VELOCITY CONTR
	MOTOR DISCONNECT S
$\square$	MOTOR STARTER, W/O HOA S
$\boxtimes$	MOTOR STARTER, W/ HOA S

CONDENSATE DRAIN PIPING (COOLING)
GH PRESSURE CONDENSATE RETURN PIPING
HOT WATER HEATING SUPPLY PIPING
HOT WATER HEATING RETURN PIPING
HEAT PUMP WATER SUPPLY
HEAT PUMP WATER RETURN
HIGH TEMPERATURE HOT WATER SUPPLY PIPING
HIGH TEMPERATURE HOT WATER RETURN PIPING
HEAT RECOVERY RETURN PIPING
HEAT RECOVERY SUPPLY PIPING
LOW PRESSURE STEAM
STEAM PIPING PRESSURE INDICATED
VRF SYSTEM REFRIGERANT PIPING
TEMPERATURE INDICATOR GAUGE TYPE
DIFFERNTIAL PRESSURE GAUGE
HUMIDISTAT (ROOM)
CARBON MONOXIDE SENSOR
HUMIDISTAT
THERMOSTAT
OCCUPANCY SENSOR - CEILING MOUNTED
OCCUPANCY SENSOR - WALL MOUNTED
PHOTOELECTRIC SWITCH - CEILING MOUNTED
PHOTOELECTRIC SWITCH - WALL MOUNTED
STATIC PRESSURE SENSOR
CARBON DIOXIDE SENSOR - DUCT MOUNTED

PROCESS COOLING WATER SUPPLY

PROCESS COOLING WATER RETURN

CARBON DIOXIDE SENSOR - DUCT MOUNTED
HUMIDITY SENSOR - DUCT MOUNTED

REVERSE OSMOSIS WATER	— PCWS —
DEIONIZED WATER SUPPLY	- PCWR -
TEMPERED WATER	- COND -
NATURAL GAS PIPING	- HPCR -
NATURAL GAS PIPING (EMERGENCY POWER SUPPLY)	— HWHS —
NITROUS OXIDE PIPING	— HWHR —
OXYGEN PIPING	— HPWS —
COMPRESSED AIR	— HPWR —
COMPRESSED AIR PIPING PRESSURE INDICATED	- HTHWS -
CARBON DIOXIDE GAS	– HTHWR –
FUEL OIL RETURN	— HRR —
FUEL OIL SUPPLY	— HRS —
SANITARY SEWER	— STM —
PUMPED SANITARY SEWER	- STM( #) -
VENT PIPING	
ACID VENT PIPING	
VACUUM PIPING	
ACID WASTE	$(\exists$
STORM SEWER	$\odot$
OVERFLOW STORM	H
PUMPED STORM WATER	
DRAIN TILE	L
CHILLED WATER SUPPLY PIPING	ΗL
CHILLED WATER RETURN PIPING	99
CONDENSER WATER SUPPLY PIPING	HPC
CONDENSER WATER RETURN PIPING	SP
PUMPED CONDENSATE RETURN PIPING	С
CONDENSATE RETURN PIPING (GRAVITY)	н

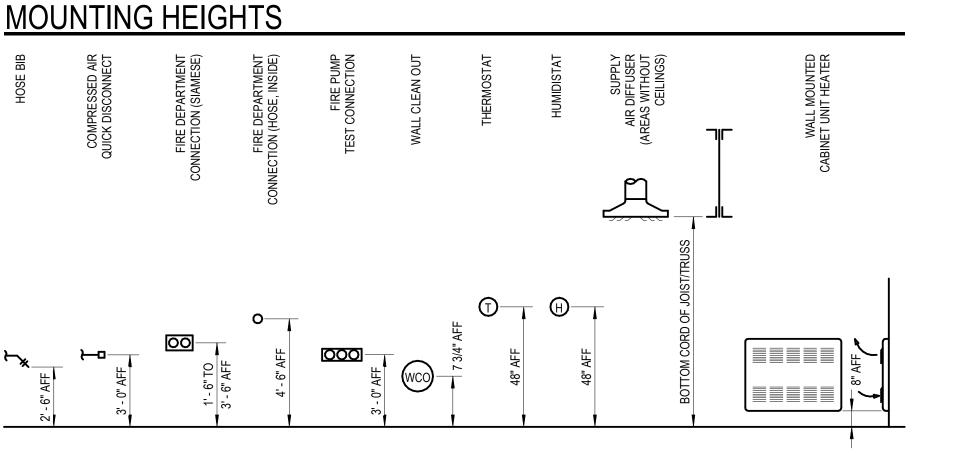
— DI —	DEIONIZED WATER SUPPL
— TW —	TEMPERED WATE
— G —	NATURAL GAS PIPINO
— G(EPS) —	NATURAL GAS PIPINO (EMERGENCY POWER SUPPLY
— NIT-OX —	NITROUS OXIDE PIPINO
— OXY —	OXYGEN PIPINO
— CA —	COMPRESSED AI
— CA( #) —	COMPRESSED AIR PIPINO PRESSURE INDICATEI
— CO2 —	CARBON DIOXIDE GA
—FOR—	FUEL OIL RETURI
—FOS—	FUEL OIL SUPPL
<u> </u>	SANITARY SEWER
— PSAN —	PUMPED SANITARY SEWER
— v —	VENT PIPINO
—AV	ACID VENT PIPING
— VAC —	VACUUM PIPING
— AW —	ACID WAST
ST	STORM SEWER
— OST —	OVERFLOW STORM
— PST —	PUMPED STORM WATER
DT	DRAIN TILI
— CHWS —	CHILLED WATER SUPPLY PIPING
— CHWR —	CHILLED WATER RETURN PIPING
— CWS—	CONDENSER WATER SUPPLY PIPING
— CWR—	CONDENSER WATER RETURN PIPING
PCR	PUMPED CONDENSATE RETURN PIPINO
— CR —	CONDENSATE RETURN PIPING (GRAVITY

— RO —

# GENERAL NOTES

- AND ACTUAL FIELD CONDITIONS.
- 2. COORDINATE ALL WORK WITH APPROPRIATE TRADES.

- 7. DUCT CONNECTED TO EQUIPMENT SHALL EQUAL EQUIPMENT CONNECTION SIZE UNLESS NOTED OTHERWISE.
- 8. MAXIMUM LENGTH ON FLEXIBLE DUCT SHALL BE 5'-0".



## NOTATION METHODS

SUPPLY DIFFUSER, TYPE 'A', 10" NECK, 350 CFM

SIDEWALL SUPPLY REGISTER, TYPE 'A', 350 CFM

FLEXIBLE DUCT CONNECTION (TWO WAY THROW)

SUPPLY DIFFUSER (3-WAY)

RETURN REGISTER, TYPE 'A', 350 CFM

EXHAUST REGISTER, TYPE 'A', 350 CFM

SUPPLY AIR DIFFUSER, TYPE 'A' WITH

BELL MOUTH AIR INLET AREA SHALL

BE EQUAL TO '2' TIMES DUCT AREA

SUPPLY AIR BRANCH CONNECTION

RETURN AIR/EXHAUST AIR BRANCH

SOUND TRAP (ATTENUATOR)

FINNED TUBE RADIATION

CONNECTION WITH VOLUME DAMPER

TYPE 'A', 5'-0" ELEMENT, 5.7 TOTAL MBH

TERMINAL VARIABLE OR CONSTANT VOLUME BOX AHU OR RTU SERVIING THE VAV OR CAV. ROOM NUMBER.

A,B,C, ETC. IF MULTIPLE COILS SERVE THE SAME SPACE

AHU OR RTU SERVIING THE VAV OR CAV. ROOM NUMBER. A,B,C, ETC. IF MULTIPLE COILS SERVE THE SAME SPACE

(NO HEATING COIL, REFER TO EQUIPMENT SCHEDULES)

(HEATING COIL, REFER TO EQUIPMENT SCHEDULES)

TERMINAL VARIABLE OR CONSTANT VOLUME BOX

DUAL DUCT CONSTANT VOLUME MIXING BOX

(REFER TO EQUIPMENT SCHEDULES)

CABINET UNIT HEATER, TYPE 'A'

CONVECTOR, TYPE 'A'

SPIN-IN FITTING WITH VOLUME DAMPER

AIR HANDLING UNIT No. 1

EXHAUST FAN No. 1

SD-A 10" DIA 350 CFM SD-A 10" DIA 350 CFM RR-A 350 CFM

ER-A 350 CFM SD-A 350 CFM

SD-A S 350 CFM

بمحر -≁► \\_\_\_<

EF 1

5' - 0" AL С-С-5.7 МВН 0.6 GPM <u>∖</u> A /CON A

\_\_\_\_\_\_ 2.1100.A

RELAY COII

SYSTEM OR EQUIPMENT GROUND

# MECHANICAL DRAWING INDEX

1.MR.0	Mechanical Reference Information
1.M0.1	First Floor Composite Plan
1.M5.1	Partial Mechanical Plans
1.M5.2	Partial Mechanical Plans
1.M6.1	Details
1.M7.1	Schedules
1.M8.1	Mechanical Systems Controls

# STORM STEAM

TEMPERATURE CONTROL TRENCH DRAIN TURNING VANES TEMPERED WATER TYPICAL

UNIT HEATER UNDERWRITERS LABORATORY URINAL UNIT VENTILATOR

VARIABLE AIR VOLUME VOLUME DAMPER VIBRATION ISOLATOR VARIABLE REFRIGERANT FLOW VENT STACK VENT THROUGH ROOF

WASTE WASTE AND VENT WET BULB WATER CLOSET WALL CLEANOUT WATER GAUGE WALL HYDRANT (FREEZE PROTECTED) WASTE STACK

ST STM тс ΤV ΤW TYP

UH

UR

UV

VAV

VD

VR

VTR

VV

W&V

WB

WC

WCO

WG

WH

WS

 $S_{\text{CONT}}$ 

RETURN AIR RADIATOR RETURN AIR GRILLE RADIANT CEILING PANEL RELATIVE HUMIDITY RETURN FAN ROOM RADIANT PANEL **REVOLUTIONS PER MINUTE** RETURN REGISTER ROOF SUMP ROOF TOP UNIT

SUPPLY AIR

PUMP

PIPE ANCHOR

PIPE GUIDE

PLUMBING

PRESSURE DROP

SUPPLY AIR GRILLE SANITARY SUPPLY AIR TEMPERATURE STEAM COIL SUPPLY DIFFUSER SUPPLY FAN SPRING HANGER SHEET SUMP PUMP SPECIFICATIONS SPRINKLER HEAD SPRINKLER SERVICE SINK SOLENOID VALVE SAFE WASTE SINK

END SWITCH	ES	THERMOSTAT WITH GUARD
FLOW SWITCH - INLINE	FM	RE SENSOR - DUCT MOUNTED AVERAGING ELEMENT
DIFFERENTIAL PRESSURE SWITCH	DPS	TURE SENSOR W/ SUNSHIELD
PRESSURE SWITCH	PS	RE SENSOR - DUCT MOUNTED RIGID ELEMENT
MAIN AIR SUPPLY (MECHANICAL CONTROLS)		RATURE SENSOR - IMMERSION TYPE ELEMENT
PNEUMATIC LINE	t,	AREA SMOKE DETECTOR
SOLENOID VALVE		DUCT SMOKE DETECTOR
PRESSURE GAUGE	P	FIRE STAT - DUCT MOUNTED
VALVE - TWO WAY PNEUMATIC CONTROLLED	<b>殓</b>	REEZE STAT - DUCT MOUNTED
VALVE - THREE WAY PNEUMATIC CONTROLLED	密	FLOW METER
TWO WAY MOTORIZED VALVE	员	AQUASTAT (STRAP ON)
THREE WAY MOTORIZED VALVE	品	AIR FLOW SENSOR
ANALOG INPUT	Al	LOOP POWER INDICATOR
ANALOG OUTPUT	(AO)	DAY/NIGHT MAIN AIR SWITCH
DIGITAL INPUT	D	MANOMETER
DIGITAL OUTPUT	00	CONTROL RELAY
DIFFERENTIAL PRESSURE TRANSMITTER	DPT	CURRENT SWITCH
PRESSURE TRANSMITTER	PT	MOTORIZED DAMPER MOTOR
ELECTRICAL LINE DESIGNATION ON CONTROL DIAGRAMS AND FLOOR PLANS		DAMPER (PARALLEL BLADE)
ELECTRICAL LINE DESIGNATION ON WIRING		DAMPER (OPPOSED BLADE)
DIAGRAMS (VOLTAGE AS NOTED)		ELECTRIC - PNEUMATIC RELAY
SWITCH	00	ART STOP (MOTOR CONTROL)
FUSE		RELAY (ELECTRICAL)
TRANSFORMER	u.u m	TWIST TIMER
THERMAL OVERLOAD	స్త్ర	VELOCITY CONTROLLER
RELAY CONTACT	_i⊢	MOTOR DISCONNECT SWITCH
	$\sim$	

IOTOR DISCONNECT ₹ STARTER, W/O HOA SWITCH OR STARTER, W/ HOA SWITCH

1. VERIFY ALL CONDITIONS IN FIELD BEFORE START OF CONSTRUCTION. NOTIFY ARCHITECT/ENGINEER OF DISCREPANCIES BETWEEN DRAWINGS

3. COORDINATE ANY REQUIRED SHUTDOWN OF SERVICES OR EQUIPMENT WITH OWNER'S REPRESENTATIVE.

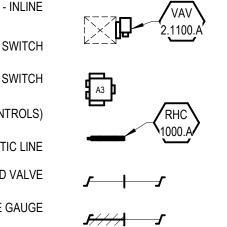
4. PROVIDE ALL MISC. STEEL AND ITEMS REQUIRED FOR THE PROPER INSTALLATION OF ALL PIPE, SHEET METAL AND EQUIPMENT

5. COORDINATE FLOOR, WALL & ROOF PENETRATIONS ETC. WITH ARCHITECTURAL TRADES.

6. INSTALL ALL DUCTWORK AS HIGH AS POSSIBLE IN AREA WITHOUT A CEILING UNLESS INDICATED OTHERWISE.

9. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT DIFFUSER LOCATIONS IN AREAS WITH A CEILING.

10. DO NOT RUN ANY PIPING OR DUCTWORK INTO AN ELECTRICAL ROOM THAT DOES NOT SERVE THAT ROOM.



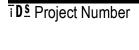
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	(REFER TO EQUIPMENT SCHEDULES)
RHC 1000.A	REHEAT COIL, ROOM NUMBER A,B,C, ETC. IF MULTIPLE COILS SERVE THE SAME SPACE (REFER TO EQUIPMENT SCHEDULES)
<i>ſ</i> <u></u> <i>ſ</i>	POINT WHERE CHANGE IN DUCT SIZE OR PIPE PITCH TAKES PLACE
<u>F///A</u>	POINT WHERE DEMOLITION ENDS/POINT OF NEW CONSTRUCTION

POINT WHERE DEMOLITION ENDS/POINT OF NEW CONSTRUCTION	
NEW MECHANICAL	
EXISTING MECHANICAL	

Drawing Number

1.MR.0



20111-3008

 $^{\circ}$  2024 INTEGRATED  $ext{design}$  solutions, LL

DS Drawing Ti

Mechanical Reference Information

N. Moeggenborg Drawn By Approved Drawing Scale None Issue Date Issued for Design Development 06-24-2024 Quality Management Review 08-23-2024 Bids 09-13-2024

Project Administrato A. Maurer Project Designer N. Moeggenborg Project Architect / Engineer N. Moeggenborg Q.M. Review T. Vercruysse J. Schwartz

THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARD INFORMATION SHOWN ON THIS SHEET.

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



Key Plar

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248.823.2100 www.ids-michigan.com CIVIL ENGINEER SPALDING DeDECKER 905 south blvd. E rochester hills, michigan 48307 800.598.1600

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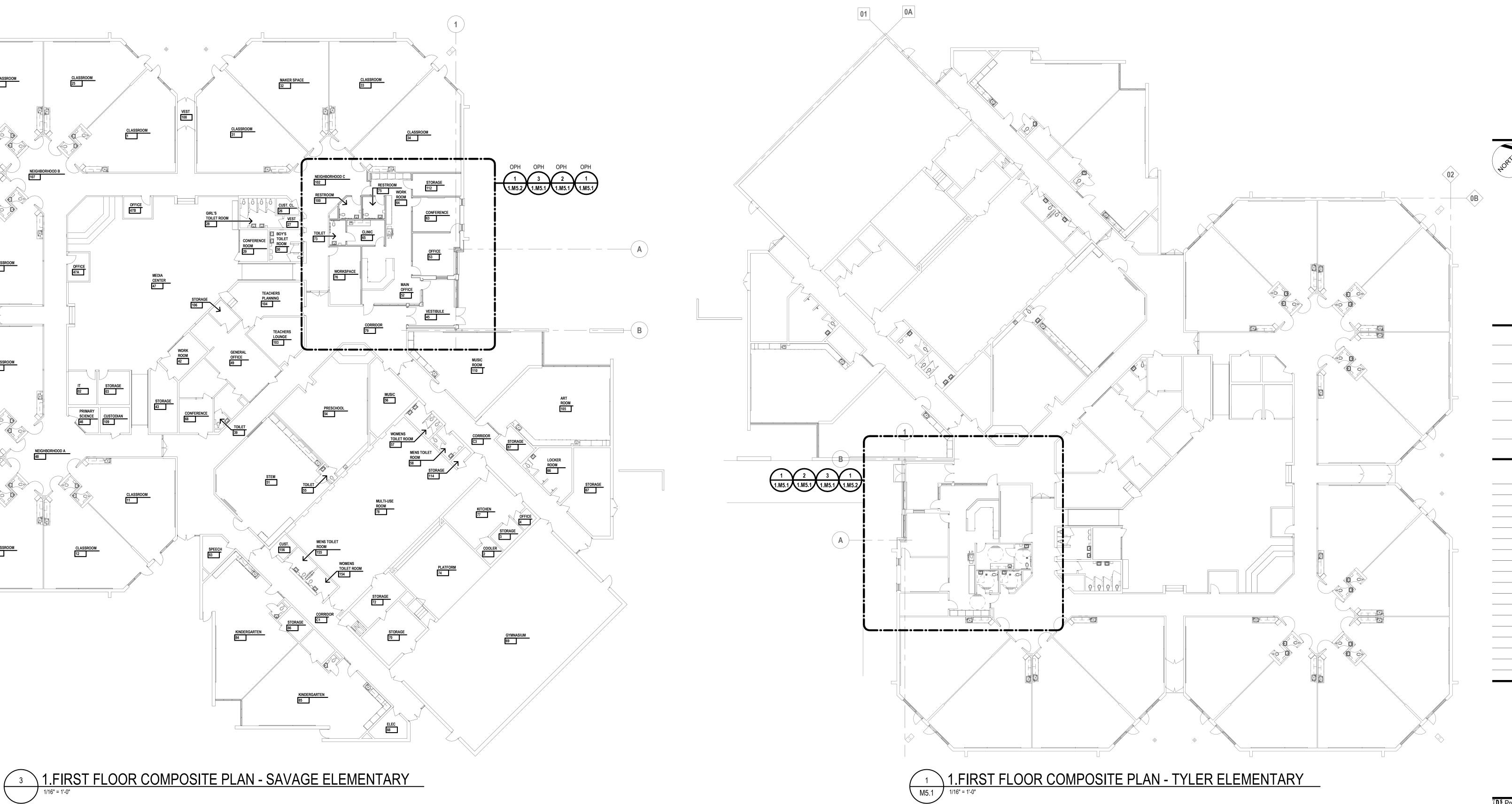
5211 cascade road SE, suite 300

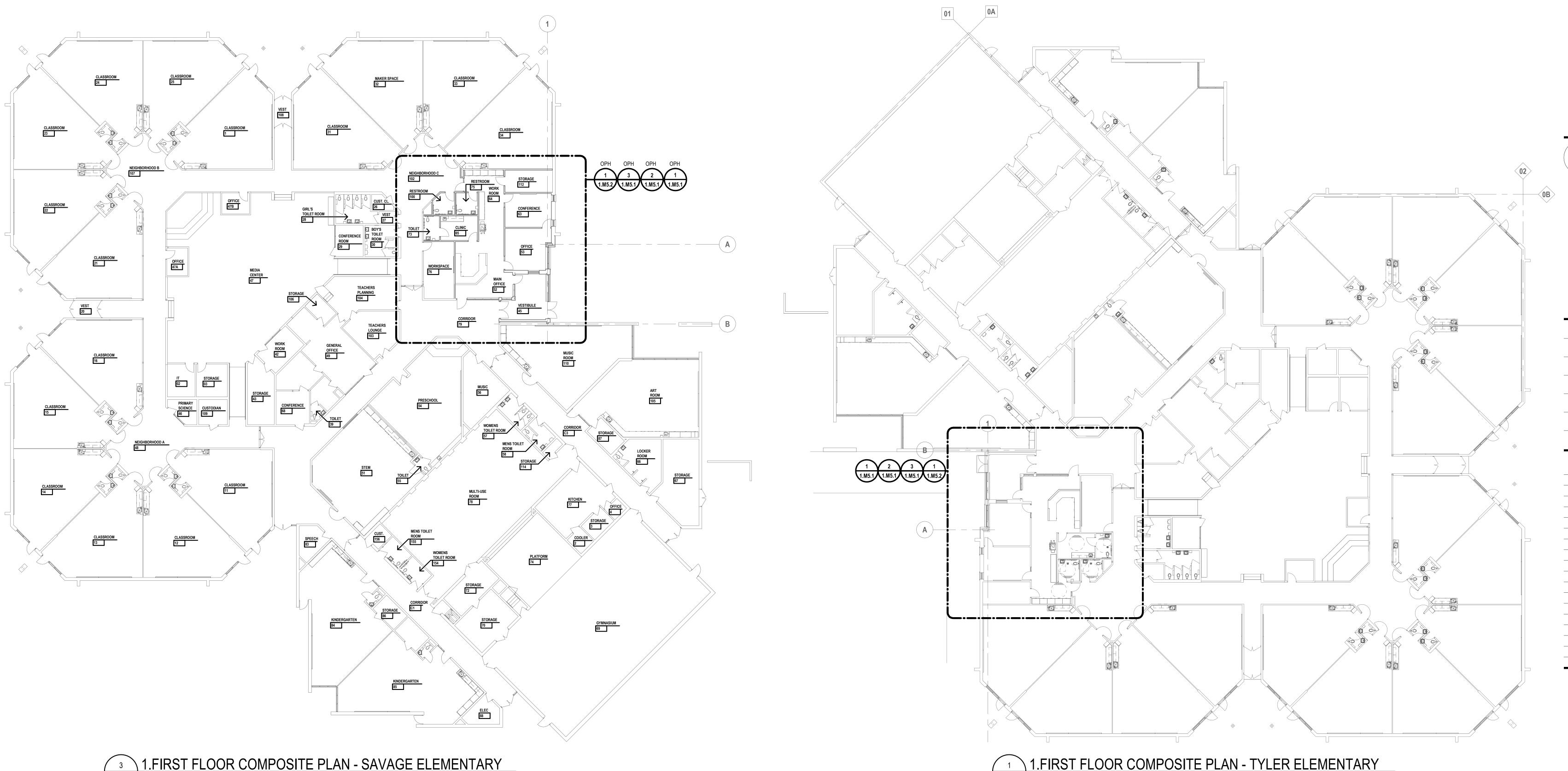
grand rapids, michigan 49546

troy, michigan 48098

INTEGRATED design SOLUTIONS

architecture engineering interiors & technology





# ī**D**≗ Project Number

20111-3008

Drawing Number

**1.M0.1** 

First Floor Composite Plan

IDS Drawing Title

 $^{\circ}$  2024 integrated  $ext{design}$  solutions, LLC

	Project Designer
N.	Moeggenborg
	Architect / Engineer
N	Moeggenborg
	Drawn By
N	Moeggenborg
	Q.M. Review
	T. Vercruysse
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Key Plan

Project Administrator A. Maurer

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



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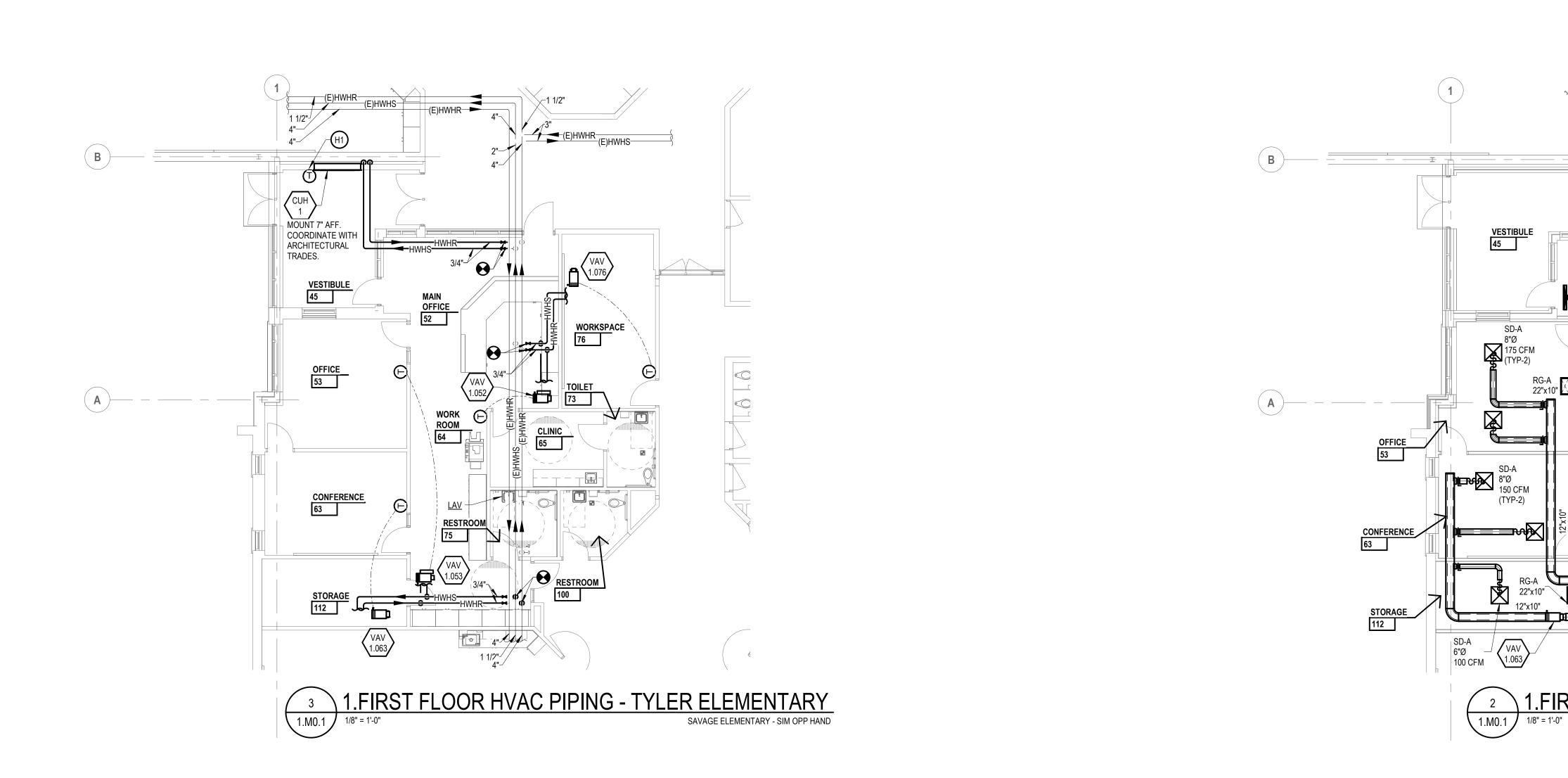
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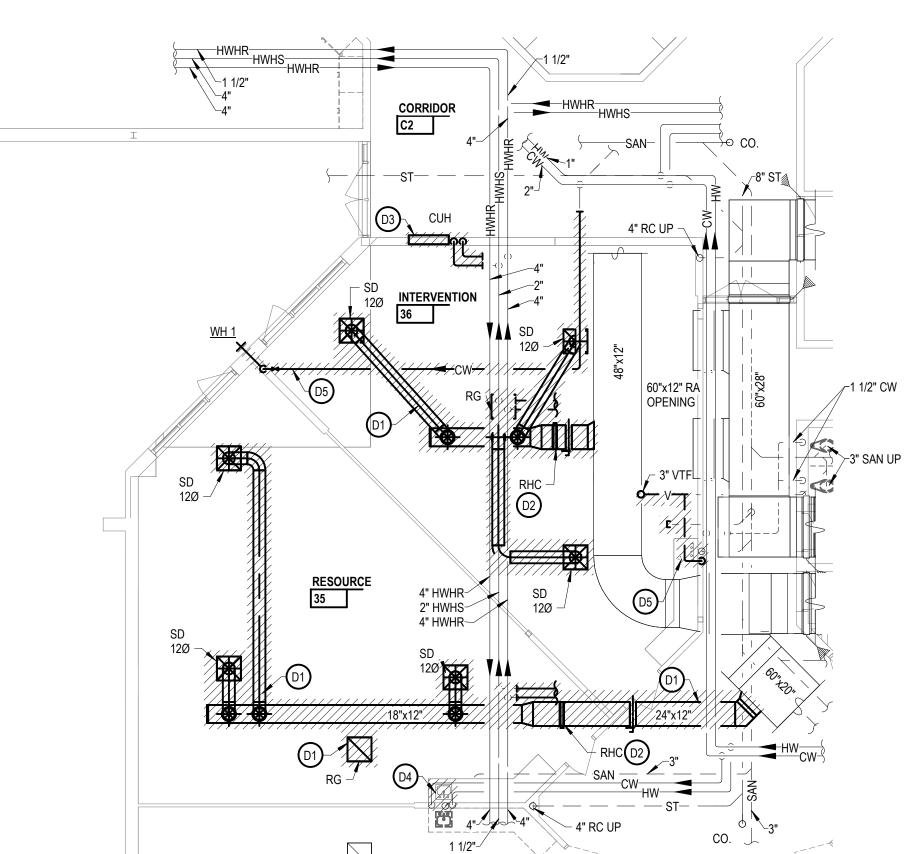
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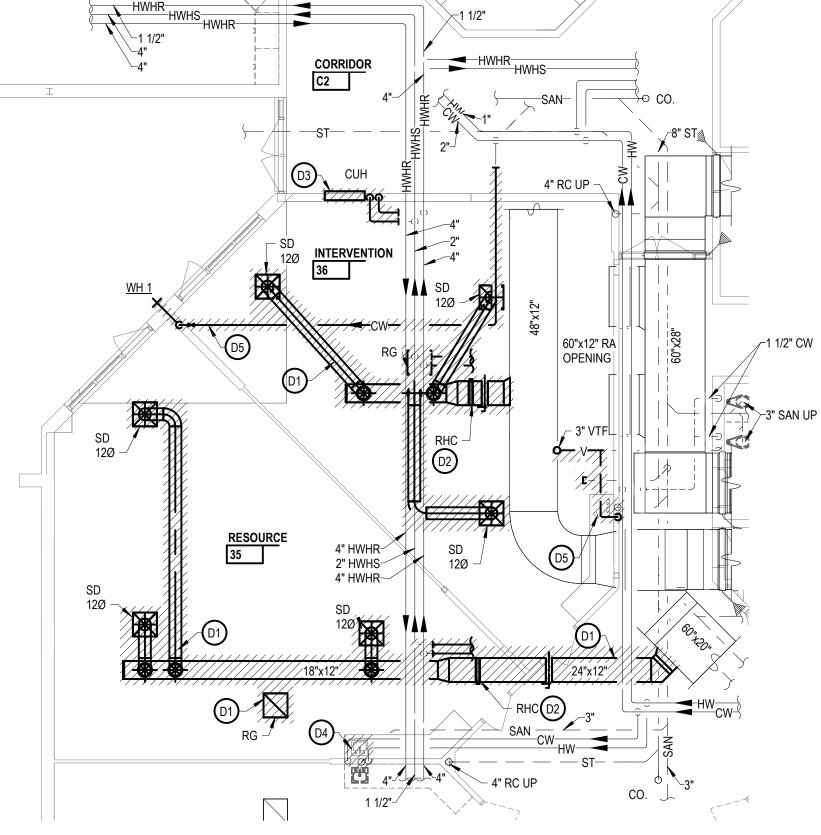
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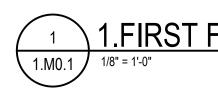
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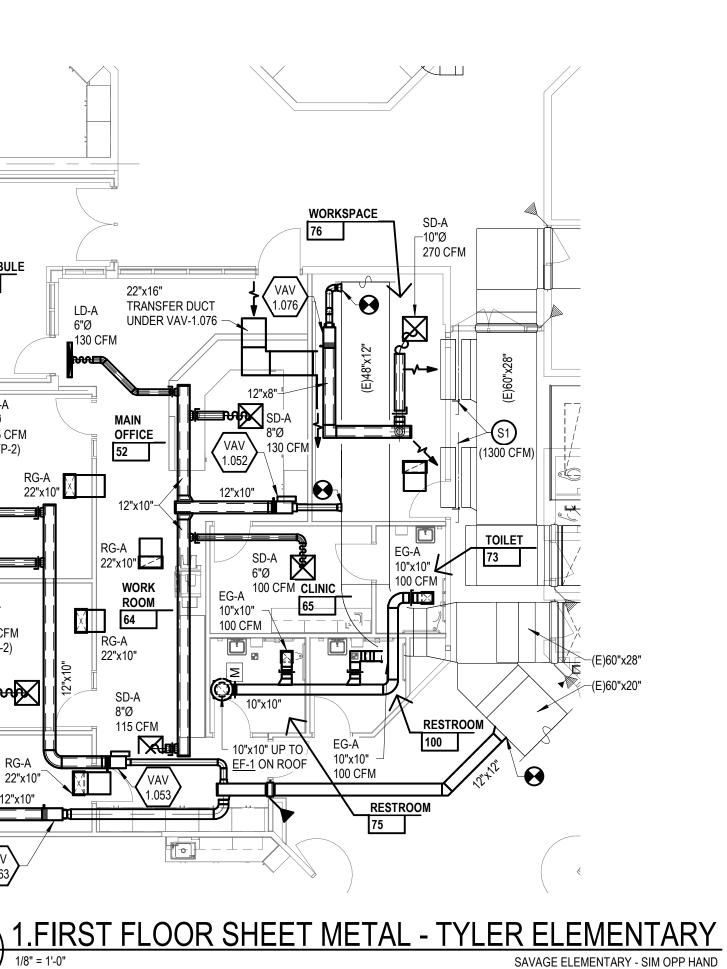
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# KEYNOTES Demolition

- NOTE: NOT ALL KEYNOTES MAY BE USED
- # LEGEND SYMBOL INDICATOR
- D1 REMOVE SUPPLY/RETURN DUCTWORK AND ASSOCIATED GRILLES, REGISTERS, AND DIFFUSERS.
- D2 REMOVE HOT WATER HEATING COIL, ASSOCIATED HEATING HOT WATER SUPPLY AND RETURN PIPING, AND CONTROLS.
- D3 REMOVE CABINET UNIT HEATER AND ASSOCIATED HEATING HOT WATER SUPPLY AND RETURN PIPING.
- D4 REMOVE PLUMBING FIXTURE SANITARY, HOT WATER, AND COLD WATER PIPING.
- D5 REMOVE COLD WATER PIPING AND WALL HYDRANT.

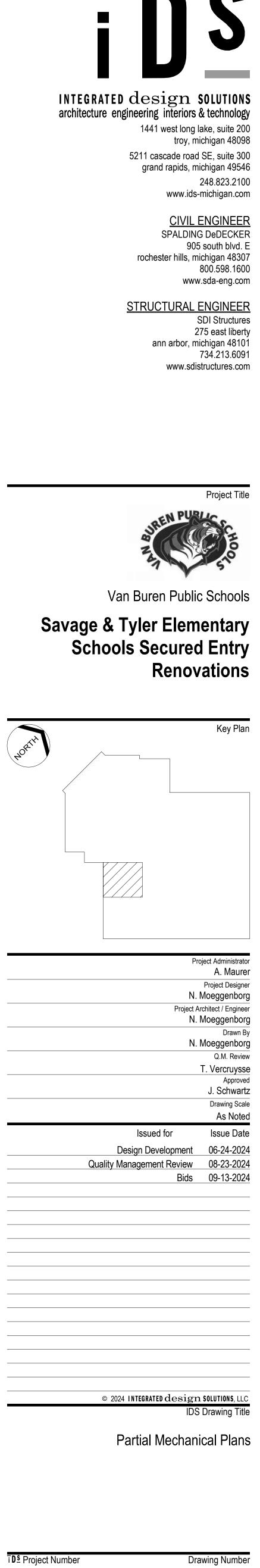
# KEYNOTES SHEET METAL

- NOTE: NOT ALL KEYNOTES MAY BE USED
- (#) LEGEND SYMBOL INDICATOR
- S1 BALANCE TO AIRFLOW INDICATED.

# **KEYNOTES**

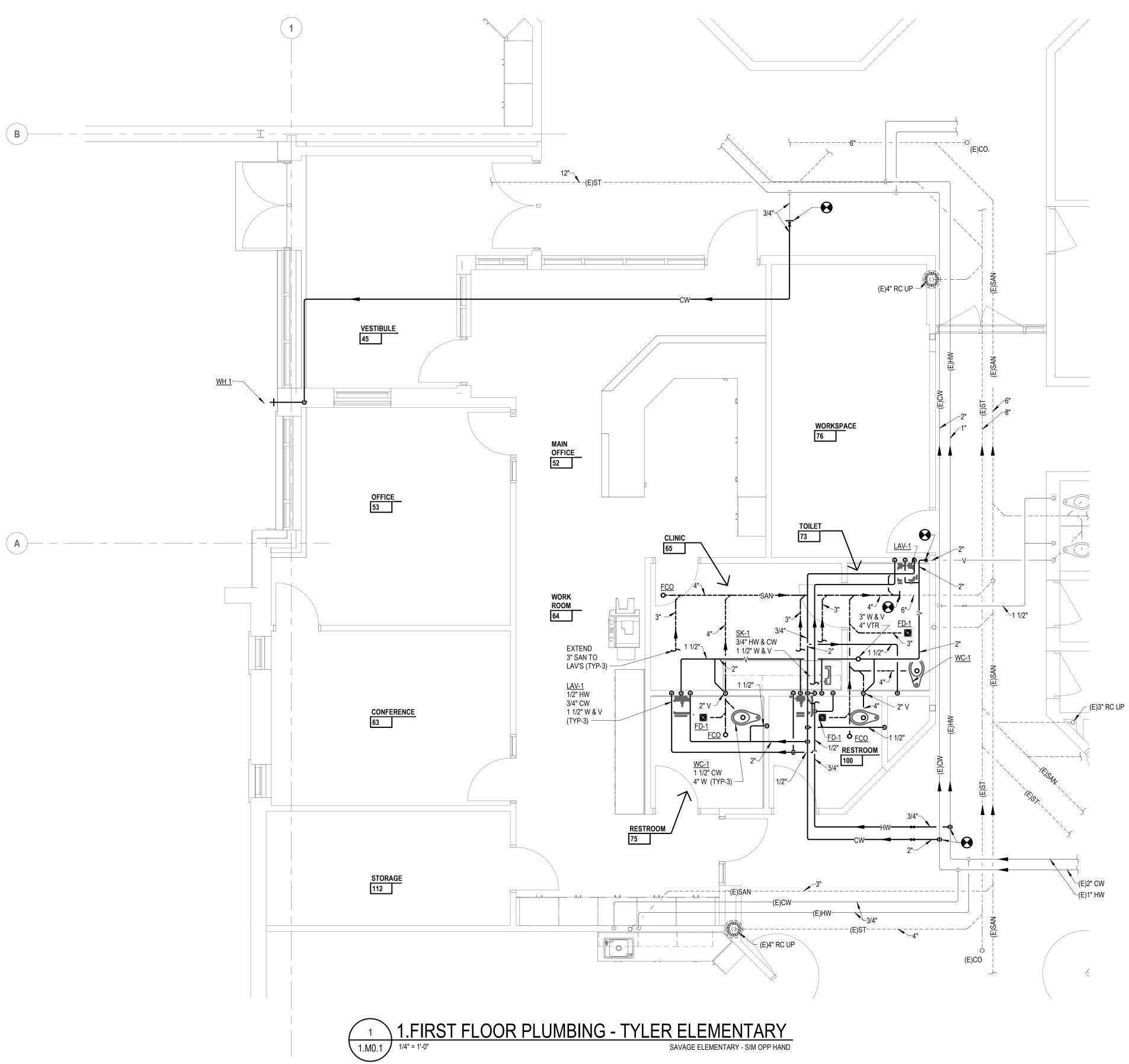
- HVAC PIPING NOTE: NOT ALL KEYNOTES MAY BE USED
- # LEGEND SYMBOL INDICATOR
- H1 FACTORY MOUNTED THERMOSTAT.

**1.FIRST FLOOR MECHANICAL DEMOLITION - TYLER ELEMENTARY** SAVAGE ELEMENTARY - SIM OPP HAND



20111-3008





# KEYNOTES Demolition

- NOTE: NOT ALL KEYNOTES MAY BE USED
- # LEGEND SYMBOL INDICATOR
- D1 REMOVE SUPPLY/RETURN DUCTWORK AND ASSOCIATED GRILLES, REGISTERS, AND DIFFUSERS.
- D2 REMOVE HOT WATER HEATING COIL, ASSOCIATED HEATING HOT WATER SUPPLY AND RETURN PIPING, AND CONTROLS.
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# KEYNOTES SHEET METAL

- NOTE: NOT ALL KEYNOTES MAY BE USED
- (#) LEGEND SYMBOL INDICATOR
- S1 BALANCE TO AIRFLOW INDICATED.

### <u>KEYNOTES</u> HVAC PIPING

- NOTE: NOT ALL KEYNOTES MAY BE USED
- # LEGEND SYMBOL INDICATOR
- H1 FACTORY MOUNTED THERMOSTAT.

ī **D**<sup>s</sup> Project Number



Drawing Number 1.M5.2

Partial Mechanical Plans

IDS Drawing Title

 $\circ$  2024 integrated  $ext{design}$  solutions, LLC

	Project Administrator
	A. Maurer
	Project Designer
	N. Moeggenborg
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	N. Moeggenborg
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	Q.M. Review
	T. Vercruysse
	Approved
	J. Schwartz
	Drawing Scale
	As Noted
Issued for	Issue Date
Bic	ls 09-13-2024

Key Plan

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



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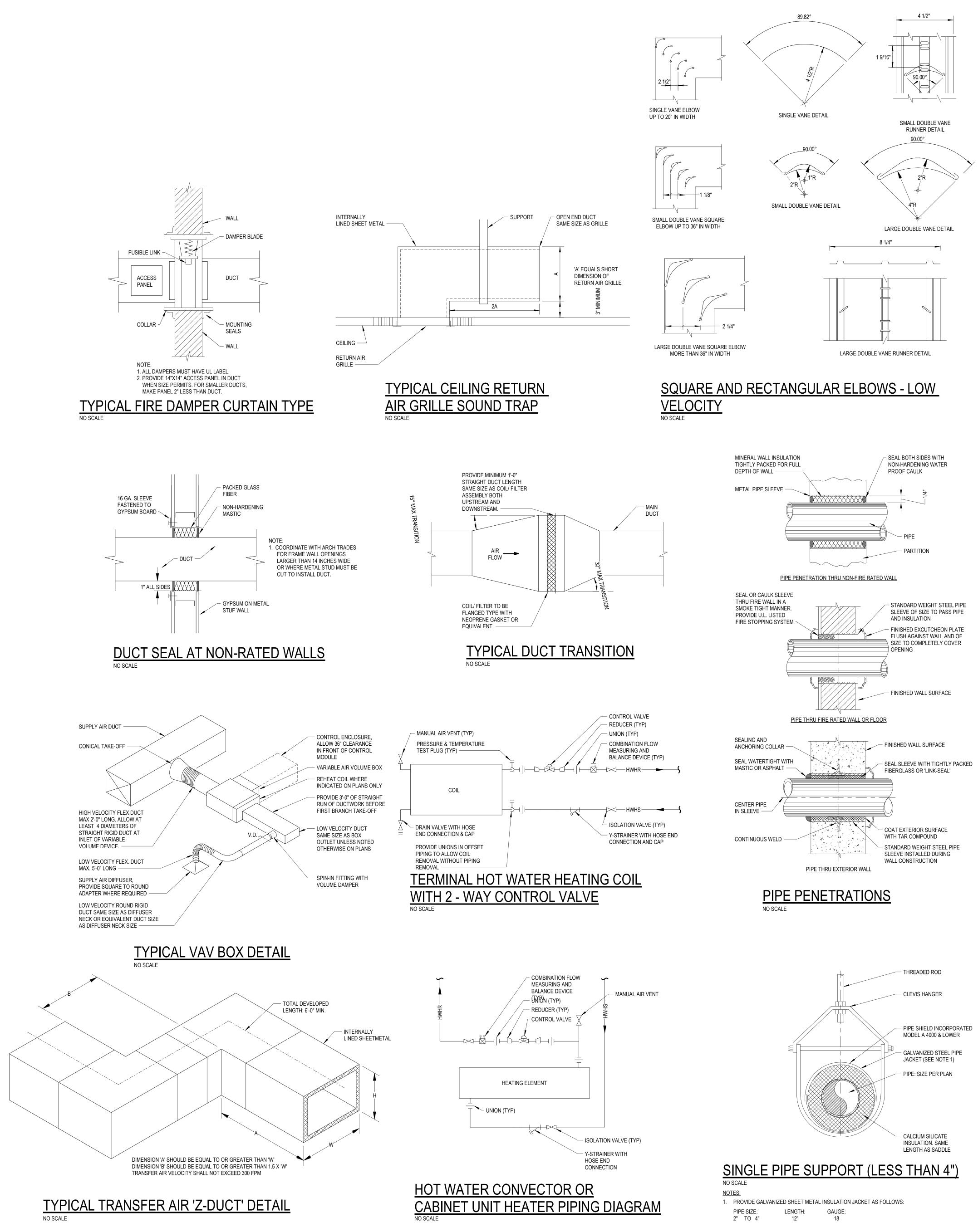
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20111-3008

**i D**<sup>s</sup> Project Number

Drawing Number 1.M6.1

Details

DS Drawing Title

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Project Administrator A. Maurer Project Designer N. Moeggenborg Project Architect / Engineer N. Moeggenborg Drawn By N. Moeggenborg Q.M. Review T. Vercruysse Approved J. Schwartz Drawing Scale As Noted Issue Date Issued for Design Development 06-24-2024 Quality Management Review 08-23-2024 Bids 09-13-2024

Key Plan

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



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	VARIABLE VOLUME TERMINAL WITH TEMPERING COIL SCHEDULE																																		
ROOM				MAX		MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MINI								HOT WATER T	EMPERING COII	-				
MARK	HVAC SYSTEM		COOLING AIRFLOW (CFM)	HEATING AIRFLOW (CFM)	MIN AIRFLOW (CFM)	INLET SIZE	OUTLET DUCT SIZE	MIN SP TO OPER. BOX		FLOW (GPM)	CAPACITY (MBH)	EWT (°F)	LWT (°F)	EAT (°F)	LAT (°F)	MAX PD (FT HD)	COIL RUNOUT (IN.)	"PRICE" MODEL NO.	REMARKS																
VAV - 1.052	1	52	RECEPTION	475	220	120	8"	12"x10"	0.25	27	0.5	7.1	180	150	55	85	3	1/2	SDV																
VAV - 1.053	1	53	PRINCIPAL OFFICE	350	220	70	6"	12"x8"	0.25	25	0.5	7.1	180	152	55	85	3	1/2	SDV																
VAV - 1.063	1	63	CONFERENCE ROOM	400	280	90	8"	12"x10"	0.25	27	0.6	9.1	180	150	55	85	3	1/2	SDV	BOTTOM ACCESS															
VAV - 1.076	1	76	CONFERENCE ROOM	270	90	75	6"	12"x8"	0.25	25	0.5	2.9	180	161	55	85	3	1/2	SDV	BOTTOM ACCESS															

NOTES:

1. MAX NC LEVEL BASED ON 1.5" INLET SP WITH NO ALLOWANCE FOR EXTERNAL ATTENUATION. 2. PROVIDE A 24"x24" CEILING MOUNTED ACCESS DOOR FOR ALL VARIABLE BOXES MOUNTED ABOVE INACCESSIBLE CEILINGS.

FAN SCHEDULE													
	LOCATION	AREA SERVED DESIGN AIRFLOV (CFM)	DECION	EXTERNAL	FAN DATA			MOTOR DATA					
MARK			AIRFLOW	STATIC PRESSURE (IN. WG.)	TYPE	DRIVE	FAN RPM	HP	BHP	RPM	ELECTRICAL V/PH/HZ	"GREENHECK" MODEL No.	REMARKS
EF-1	ROOF	TOILET ROOMS	300	0.5	CENTRIFUGAL	DIRECT	1,675	1/10	0.07	1,725	120/60/1	G-080-VG	

NOTES: 1. PROVIDE ALL FANS WITH FACTORY MOUNTED AND WIRED DISCONNECT.

MARK	HEATING CAPACITY (MBH)	FLUID FLOW (GPM)	EWT (°F)	LWT (°F)
CUH-1	37.5	2.0	180	140

NOTES: 1. PROVIDE WITH FACTORY MOUNTED AND WIRED DISCONNECT.

3. HOT WATER TEMPERING COILS SHALL BE MINIMUM 1-ROW. 4 PERFORMANCE BASED ON WATER UNLESS NOTED OTHERWISE.

HOT WATER CABINET UNIT HEATER SCHEDULE												
EAT LAT	LAT	FAN		FILTER		ENCLOSURE	ELECTRICAL		"STERLING"	REMARKS		
(°F)	(°F)	CFM	HP	RPM	TYPE	AREA (SF)	L x D x H (IN.)	V/PH/Hz	AMPS	MODEL No.	NEWANNO	
65	102	1060	1/10	1050	PERM	2.7	66 x 9-1/2 x 25	120/1/60	1.50	RWI-1130-10		

	GRILLE, REGISTER AND DIFFUSER SCHEDULE													
MARK	CORE STYLE	BORDER FRAME TYPE	MODULE SIZE	FINISH	ACCESSORY	CONSTRUCTION	"PRICE" MODEL No.	REMARKS						
SD-A	LOUVER	NOTE 1	24"x24"	WHITE	NONE	STEEL	SCD							
RG-A	EGG CREATE	NOTE 1	24"x12"	WHITE	NONE	ALUMINUM	80							
EG-A	EGG CREATE	NOTE 1	24"x24"	WHITE	NONE	ALUMINUM	80	PROVIDE REMOTE OPERATED DAMPER						
LD-A	LINEAR SLOT	NOTE 1	48" LONG	WHITE	SDB PLENUM	ALUMINUM	SDS100	2 SLOTS						

NOTES:

1. COORDINATE MOUNTING FRAMES WITH REFLECTED CEILING PLANS.

2. COORDINATE LENGTH OF ALL LINEAR SUPPLIES AND RETURNS WITH ARCHITECTURAL FLOOR PLANS AND REFLECTED CEILING PLANS.

Drawing Number **1.M7.1** 

20111-3008

ī**D**≗ Project Number

Schedules

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\_\_\_\_\_

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A. Maurer Project Designer Designer Project Architect / Engineer N. Moeggenborg Drawn By Author Q.M. Review T. Vercruysse Approved J. Schwartz Drawing Scale None Issue Date Issued for Design Development 06-24-2024 Quality Management Review 08-23-2024 Bids 09-13-2024

Key Plan

Project Administrator A. Maurer

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



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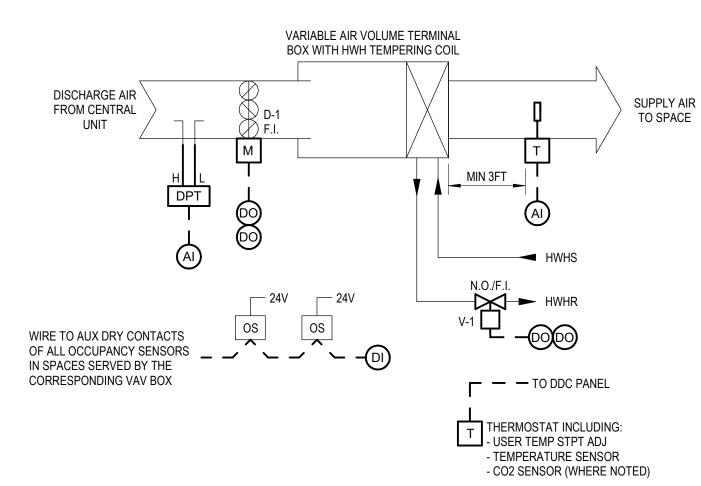
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## VAV TERMINAL WITH HWH TEMPERING COIL CONTROL DIAGRAM

NOTES

1. WHERE APPLICABLE, OCCUPANCY SENSORS TO BE INSTALLED, POWERED, AND CONNECTED TO LIGHTING CONTROLS BY THE ELECTRICAL CONTRACTOR. THE MECHANICAL SYSTEMS CONTROLS CONTRACTOR (MSCC) SHALL CONNECT ALL OCCUPANCY SENSORS IN SPACES SERVED BY THE CORRESPONDING VAV BOX TO THE VAV CONTROLLER SUCH THAT ALL SPACES MUST BE SIMULTANEOUSLY UNOCCUPIED IN ORDER TO INDICATE UNOCCUPIED STATUS IN THE VAV CONTROLLER.

SEQUENCE OF OPERATION

- GENERAL 1. THE OPERATING MODE OF THE TERMINAL UNIT SHALL BE AUTOMATICALLY CYCLED BETWEEN OCCUPIED AND UNOCCUPIED MODE TO MATCH THE OCCUPANCY MODE OF THE ASSOCIATED CENTRAL UNIT.
- 2. WHERE APPLICABLE, WHEN THE TIME SCHEDULE INDICATES OCCUPIED AND CONNECTED OCCUPANCY SENSORS INDICATE THE SPACE IS UNOCCUPIED, THE UNIT SHALL OPERATE IN
- STANDBY MODE. 3. UPON NO DEMAND FOR HEATING OR COOLING, THE DAMPER SHALL CONTROL AIRFLOW TO
- THE MINIMUM AIRFLOW CFM SETPOINT. 4. UPON A RISING DEMAND FOR COOLING, THE DAMPER SHALL CONTROL TOWARDS THE
- MAXIMUM COOLING AIRFLOW CFM SETPOINT. 5. UPON A RISING DEMAND FOR HEATING, FIRST THE HEATING CONTROL VALVE SHALL INCREASE HEATING TOWARDS MAXIMUM. UPON A FURTHER DEMAND FOR HEATING, THE

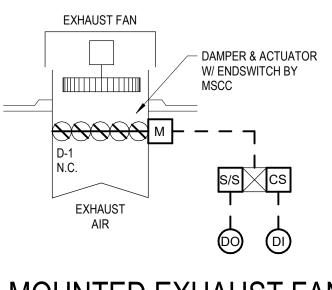
DAMPER SHALL CONTROL AIRFLOW TOWARDS THE MAXIMUM HEATING AIRFLOW CFM SETPOINT.

OCCUPIED MODE OPERATION 1. THE UNIT SHALL CONTROL TO MAINTAIN THE OCCUPIED SPACE TEMPERATURE RANGE (70°F

TO 75°F). LOCAL TEMPERATURE SETPOINT ADJUSTMENT SHALL BE DISABLED. 2. UNITS SERVING PRIVATE OFFICES SHALL PERMIT LOCAL OCCUPIED SPACE TEMPERATURE SETPOINT ADJUSTMENT AND SHALL CONTROL TO MAINTAIN THE SET THERMOSTAT TEMPERATURE SETPOINT.

UNOCCUPIED MODE OPERATION 1. THE UNIT SHALL CONTROL TO MAINTAIN THE UNOCCUPIED SPACE TEMPERATURE RANGE (60° F TO 85°F).

STANDBY MODE OPERATION 1. THE UNIT SHALL CONTROL TO MAINTAIN THE STANDBY SPACE TEMPERATURE RANGE (65°F TO 80°F).



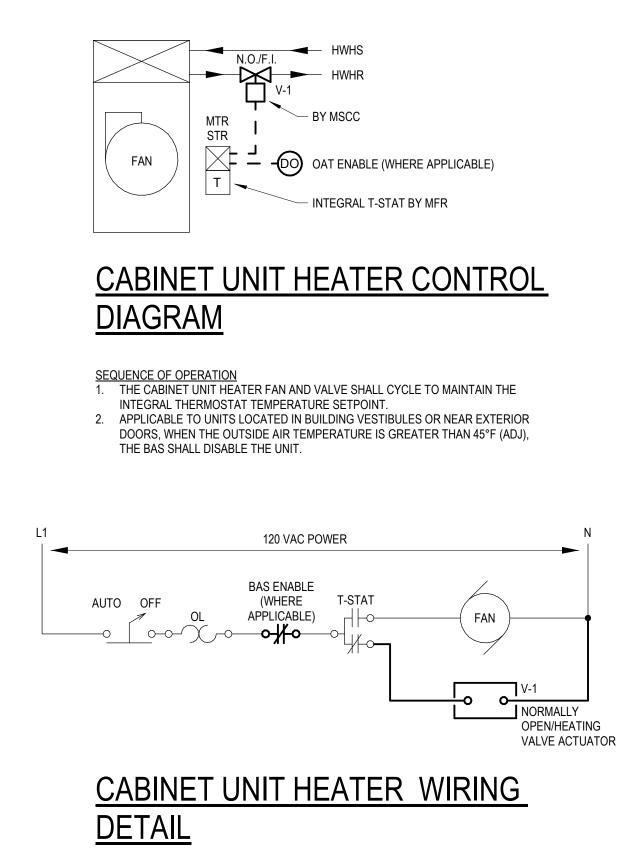
# ROOF MOUNTED EXHAUST FAN CONTROL DIAGRAM

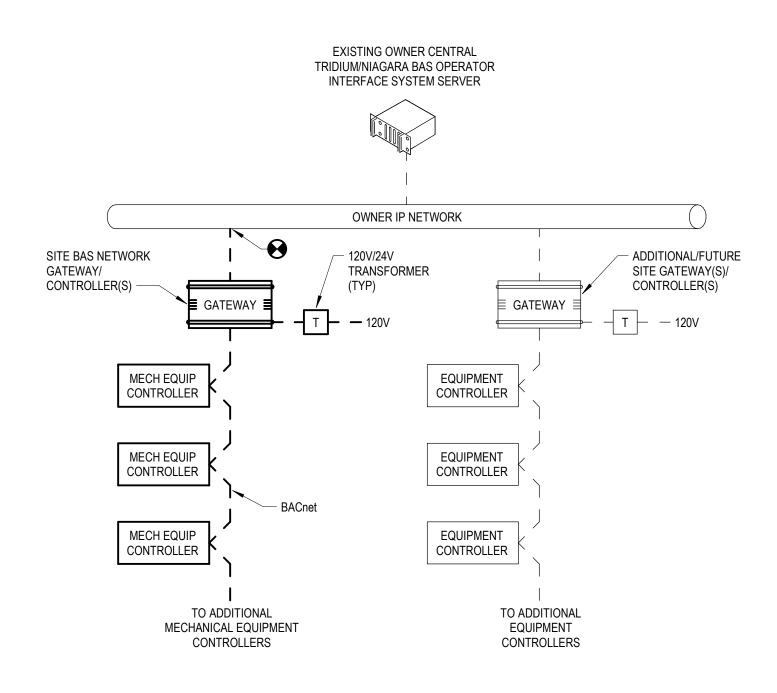
SEQUENCE OF OPERATION 1. THE EF SHALL BE SET TO ACTIVATE AND DEACTIVATE ACCORDING TO THE SET OPERATION TIME SCHEDULE FOR OCCUPIED AND UNOCCUPIED TIME

PERIODS. 2. WHEN THE FAN IS ENABLED, THE ISOLATION DAMPER SHALL OPEN. ONCE THE DAMPER ENDSWITCH VERIFIES THE DAMPER HAS OPENED, THE FAN SHALL START.

L1	SEE EQUIP. SCHEDULE FOR VOLTAGE
	ON OFF OL DDC MTR
-	

TYPICAL SINGLE PHASE EXHAUST FAN WIRING DETAIL





# **BUILDING AUTOMATION SYSTEM NETWORK RISER DIAGRAM**

NOTES 1. THE MECHANICAL SYSTEMS CONTROLS CONTRACTOR (MSCC) SHALL PROVIDE A NEW BUILDING AUTOMATION SYSTEM (BAS) CONTROLLER/GATEWAY 1. THE MECHANICAL SYSTEMS CONTROLS CONTRACTOR (MSCC) SHALL PROVIDE A NEW BUILDING AUTOMATION SYSTEM (BAS) CONTROLLER/GATEWAY 1. THE MECHANICAL SYSTEMS CONTROLS CONTRACTOR (MSCC) SHALL PROVIDE A NEW BUILDING AUTOMATION SYSTEM (BAS) CONTROLLER/GATEWAY DEVICE OR DEVICES, POWER SUPPLIES, AND NEMA 1 ENCLOSURES AS NECESSARY TO INTEGRATE ALL FIELD DEVICES AND DEVICE NETWORKS TO THE OWNER CENTRAL BAS OPERATOR INTERFACE SYSTEM (OIS) SERVER. 2. MSCC SHALL PROVIDE ETHERNET IP DATA CONNECTION(S) AND LOCATE DEVICE(S) AS NECESSARY IN COORDINATION WITH THE ELECTRICAL/TECHNOLOGY CONTRACTOR AND THE OWNER.

**D** Project Number

20111-3008

Drawing Number

1.M8.1



Mechanical Systems Controls

 $\circ$  2024 integrated  $ext{design}$  solutions, LL IDS Drawing Title

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A. Maurer	
Project Designer	
J. Gutzeit	
t Architect / Engineer	Project
N. Moeggenborg	Ν
Drawn By	
J. Gutzeit	
Q.M. Review	
T. Vercruysse	
Approved	
J. Schwartz	
Drawing Scale	
None	
Issue Date	Issued for
t 06-24-2024	Design Development
	Quality Management Review
	Bids
	200

Key Plan

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



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# ABBREVIATIONS

SYMBOL LEGEND

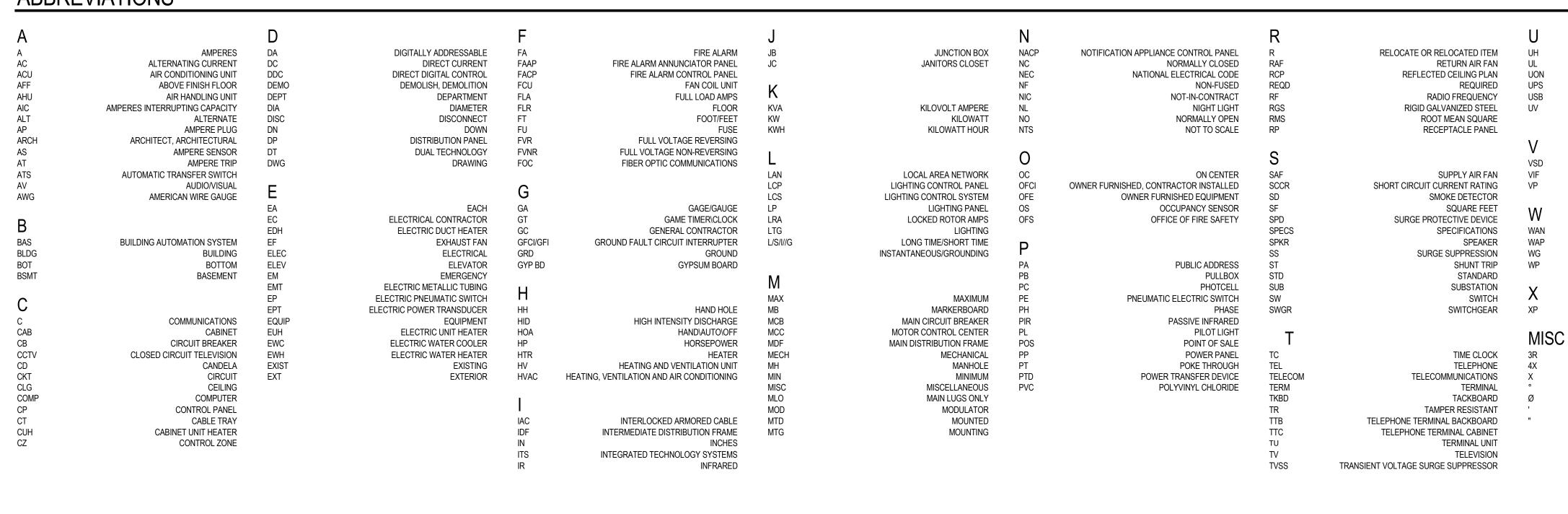
- DETAIL IDENTIFICATION

DETAIL SYMBOL

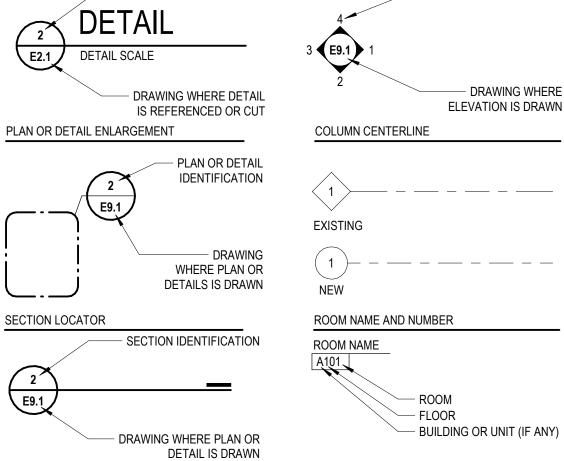
 $\Box$ 

2

E9.1



# MOUNTING HEIGHTS ELEVATION SYMBOL ELEVATION NUMBER - DRAWING WHERE ELEVATION IS DRAWN \_\_\_\_\_



\$<sup>3a</sup>\$

HO<sub>v</sub>

HO.

PTD

-<del>O</del>

 $\bigcirc$ 

D,	FLUSH MOUNTED POWER ONLY FLOOR BOX	LINE VOLTAGE DOUBLE POLE SWITCH
	DUPLEX RECEPTACLE OUTLET MOUNTED	LINE VOLTAGE THREE WAY SWITCH
P	ABOVE COUNTER	LINE VOLTAGE FOUR WAY SWITCH
СВ	DUPLEX RECEPTACLE OUTLET WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER PROTECTION	LINE VOLTAGE KEY OPERATED SWITCH
	DUPLEX RECEPTACLE OUTLET CONNECTED TO	LINE VOLTAGE 'WALL BOX' DIMMER SWITCH
VSD	UPSTREAM GROUND FAULT CIRCUIT INTERRUPTER PROTECTION DEVICE	LINE VOLTAGE LIGHTING OCCUPANCY SENSOR WITH INTEGRAL ON/OFF SWITCH - WALL MOUNTED
\$ <sub>м</sub>	DUPLEX RECEPTACLE OUTLET WITH INTEGRAL SURGE SUPPRESSION	LINE VOLTAGE LIGHTING OCCUPANCY SENSOR WITH INTEGRAL DIMMING - WALL MOUNTED
\$ <sub>⊦</sub> M	DUPLEX RECEPTACLE OUTLET CONNECTED TO UPSTREAM SURGE SUPPRESSION DEVICE DUPLEX RECEPTACLE OUTLET SPLIT WIRED	LINE VOLTAGE LIGHTING OCCUPANCY SENSOR WITH INTEGRAL DUAL ZONE ON/OFF SWITCH - WALL MOUNTED
M_		LINE VOLTAGE SWITCH WITH PILOT LIGHT
*	DUPLEX RECEPTACLE OUTLET WITH ISOLATED GROUND	LINE VOLTAGE SWITCH WITH TIMER
Т		LINE VOLTAGE SINGLE POLE SWITCHES FOR DUAL LEVEL
0	QUAD RECEPTACLE OUTLET MOUNTED ABOVE COUNTER QUAD RECEPTACLE OUTLET WITH ONE (1) INTEGRAL	LIGHTING CONTROL LINE VOLTAGE THREE WAY SWITCHES FOR DUAL LEVEL
×	SURGE SUPPRESSION TYPE RECEPTACLE AND ONE (1) SURGE SUPPRESSION PROTECTED RECEPTACLE	LOW VOLTAGE PUSH BUTTON STATION
	SPECIAL RECEPTACLE AS INDICATED	LV - SINGLE ZONE ON/OFF
	POWER/COMMUNICATIONS POLE	LVD - SINGLE ZONE DIMMING LV2 - 2 ZONE ON/OFF ONLY
	SPECIAL POWER CONNECTION	LV2D - 2 ZONE ON/OFF & DIMMING
ው	CORD DROP	CEILING MTD OCCUPANCY SENSOR
œ	POKE THROUGH ASSEMBLY	WALL MTD LIGHTING OCCUPANCY SENSOR
Ð	LETTERS INDICATE TYPE (TYP)	CEILING MTD LINE VOLTAGE OCCUPANCY SENSOR
e e	JUNCTION BOX - CEILING MOUNTED	WALL MTD LINE VOLTAGE LIGHTING OCCUPANCY SENSOR
đ đ	JUNCTION BOX - WALL MOUNTED	LIGHTING CONTACTOR
C C	PUSHBUTTON STATION - EMERGENCY	TIME SWITCH
DIG	POWER SHUTDOWN	P LIGHTING CONTROL PANEL
6	HORIZONTALLY MOUNTED MULTI-OUTLET RACEWAY	PHOTOELECTRIC SWITCH\PHOTOCELL - CEILING MOUNTED
	VERTICALLY MOUNTED MULTI-OUTLET RACEWAY	PHOTOELECTRIC SWITCH\PHOTOCELL - WALL MOUNTED
н©	BUS DUCT	EMERGENCY POWER TRANSFER DEVICE
. C	EQUIPMENT MOUNTING BACKBOARD	x LIGHTING CONTROL PRESET STATION OR TOUCHSCREEN
н®	208/120V PANELBOARD	
нØ	480/277V PANELBOARD	<u>POWER</u>
н©	DISTRIBUTION OR POWER PANELBOARD	SINGLE RECEPTACLE OUTLET
BC	SINGLE PHASE MOTOR	DUPLEX RECEPTACLE OUTLET
	THREE PHASE MOTOR	DUPLEX RECEPTACLE OUTLET FLUSH MOUNTED IN CEILING
	MAGNETIC MOTOR STARTER	

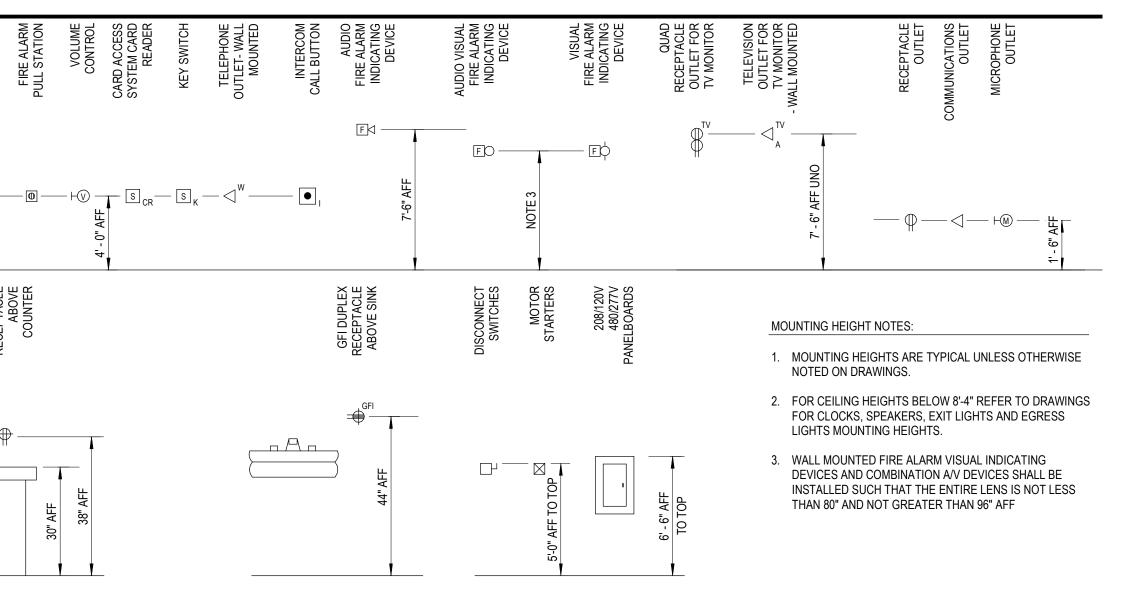
_	<b>-</b>	DUPLEX RECEPTACLE OUTLET
Ξ	<b>e</b>	DUPLEX RECEPTACLE OUTLET FLUSH MOUNTED IN CEILING
,	-C GFI	DEAD-FRONT GROUND FAULT CIRCUIT INTERRUPTER (PROTECTION OF DOWNSTREAM CONNECTED DEVICES)
	Ф <sup>GFI</sup>	ABOVE COUNTER DEAD-FRONT GROUND FAULT CIRCUIT INTERRUPTER (PROTECTION OF DOWNSTREAM CONNECTED DEVICES)

XX NL	LIGHTING FIXTURE; RECESSED OR SURFACE MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT
• • <sup>XX</sup>	LIGHTING FIXTURE; PENDANT MOUNTED
• XX	LIGHTING FIXTURE; PENDANT MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT
<b>⊢−−−−I</b> <sup>XX</sup>	STRIP LIGHTING FIXTURE
XX NL	STRIP LIGHTING FIXTURE ON NIGHT LIGHT OR EMERGENCY CIRCUIT
×× <b>ô</b> ××	LIGHTING FIXTURE; RECESSED AIMABLE OR WALL WASH
<sup>xx</sup> <b>o □</b> <sup>xx</sup>	LIGHTING FIXTURE; RECESSED OR PENDANT MTD
	LIGHTING FIXTURE; RECESSED OR PENDANT MTD ON NIGHT LIGHT OR EMERGENCY CIRCUIT
¤××	LIGHTING FIXTURE; SURFACE MOUNTED
×××	LIGHTING FIXTURE; SURFACE MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT
$\nabla \nabla \nabla$	TRACK LIGHTING
<sup>xx</sup> ♀ ₽ <sup>xx</sup>	LIGHTING FIXTURE; WALL MOUNTED
	LIGHTING FIXTURE; WALL MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT
XX	LIGHTING FIXTURE; UNDERCABINET MOUNTED
×× ► — —	LIGHTING FIXTURE; COVE MOUNTED
<b>8</b>	EXIT LIGHTING FIXTURE SINGLE OR DOUBLE FACE WITH DIRECTIONAL ARROWS - CEILING OR PENDANT MOUNTED
⊦⊗	WALL MOUNTED EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS
	CEILING MOUNTED SELF-CONTAINED EMERGENCY LIGHTING UNIT
	WALL MOUNTED SELF-CONTAINED EMERGENCY LIGHTING UNIT
	POLE MOUNTED AREA LIGHTING FIXTURE; QUANTITY OF LUMINARIES AS INDICATED
¤	SITE LIGHTING; BOLLARD
¥	POST TOP POLE MOUNTED AREA LIGHTING FIXTURE
$\overset{\times\times}{\sim}$	SITE LIGHTING FIXTURE; ADJUSTABLE FLOOD
\$	LINE VOLTAGE SINGLE POLE SWITCH

SYMBOLS (LETTERS (X) INDICATES TYPE, TYPICAL)

<u>LIGHTING</u>

LIGHTING FIXTURE; RECESSED OR SURFACE MOUNTED



NURSE CALL DUTY STATE	N <sub>DS</sub>	CEILING MOUNTED HORN SPEAKER	Ð
NURSE CALL EMERGENCY STATI		SECURITY SYSTEM CARD READER	s <sub>CR</sub>
NURSE CALL MASTER STATI	N <sub>MS</sub>	SECURITY SYSTEM DOOR CONTACT	s <sub>c</sub>
NURSE CALL POWER SUPF	N <sub>PS</sub>	SECURITY SYSTEM ELECTRIC STRIKE	S <sub>ES</sub>
NURSE CALL STAFF STATI	N <sub>SS</sub>	SECURITY SYSTEM ELECTRIFIED HARDWARE	s <sub>eh</sub>
NURSE CALL WALL MOUNTED DOME LIG	Ъ	SECURITY SYSTEM LOCKDOWN READER\BUTTON	S <sub>LD</sub>
NURSE CALL CEILING MOUNTED DOME LIG	₽°	SECURITY SYSTEM KEY SWITCH	sĸ
IURSE CALL WALL MOUNTED DOME LIGHT WITH CO	► ►	SECURITY SYSTEM MOTION DETECTOR	s <sub>MD</sub>
BL NURSE CALL CEILING MOUNTED DOME LIGHT W	<b>↓</b> C	CEILING MOUNTED SECURITY CAMERA	Õ
CODE BL	<b>V</b> c	WALL MOUNTED SECURITY CAMERA	ю
WALL MOUNTED COMMUNICATIONS OUTL	$\mathbf{A}_{\mathbf{x}}$	FIRE ALARM PULL STATION	Ē
ABOVE COUNTER COMMUNICATIONS OUTL	⋪	WALL MOUNTED A/V FIRE ALARM INDICATING DEVICE	ĒD
CEILING MOUNTED COMMUNICATIONS OUTL	$\mathbf{A}_{\mathrm{C/X}}$	CEILING MOUNTED A/V FIRE ALARM INDICATING DEVICE	© <sub>AV</sub>
COMMUNICATIONS FLOORB	$\mathbf{\nabla}_{X}$	WALL MOUNTED VISUAL FIRE ALARM INDICATING DEVICE	Е¢-
MULTI-SYSTEM FLOORB	₽▽	CEILING MOUNTED VISUAL FIRE ALARM INDICATING DEVICE	<del>С</del>
NETWORK INTERCOM STATI		WALL MOUNTED AUDIO FIRE ALARM INDICATING DEVICE	€v Ed
INTERCOM CALL BUTTON WITH PRIVA		CEILING MOUNTED AUDIO FIRE ALARM INDICATING DEVICE	© <sub>A</sub>
ONE-LINE			● <sub>A</sub>
	$\bigcirc$	WALL MOUNTED VISUAL EMERGENCY MASS NOTIFICATION INDICATING DEVICE	E¢-
	A	CEILING MOUNTED VISUAL EMERGENCY MASS NOTIFICATION	©, (
ANALOG ENERGY USAGE MET		INDICATING DEVICE	-
	MM	WALL MOUNTED AREA SMOKE DETECTOR	F <sub>sd</sub>
KIRK KEY INTERLO	K	CEILING MOUNTED AREA SMOKE DETECTOR	$oldsymbol{\mathbb{B}}_{ ext{SD}}$
CIRCUIT BREAK	óò	CEILING MOUNTED COMBINATION AREA SMOKE\CO	$\mathbf{E}_{\mathrm{CD}}$
SWIT	0 0	DETECTOR CEILING MOUNTED TEMPERATURE DETECTOR	© <sub>TD</sub>
FU		DUCT SMOKE DETECTOR	E DD
TRANSFORM	Ĩ	WALL MOUNTED MAGNETIC DOOR HOLDER/RELEASE	E DR
TRANSFER SWIT		WATER FLOW SWITCH	E <sub>WF</sub>
THERMAL OVERLO	• <b>~</b> ~•	TAMPER SWITCH	E TS
CONTAC		FIRE FIGHTER TELEPHONE JACK	TS V
INDICATES WIRE SIZE AND CONDUIT S	XXXNG	FIRE ALARM CONTROL PANEL	
DRAWOUT CIRCUIT BREAK	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	FIRE SUPPRESSION SYSTEM CONTROL PANEL	FSCP
AIR-MAG / VACUUM CIRCUIT BREAK	<b>‹</b> ←□→	FIRE ALARM REMOTE ANNUNCIATOR PANEL	FAAP
		SINGLE BED STATION - NURSE CALL	
ENGINE GENERAT		DOUBLE BED STATION - NURSE CALL	
SYSTEM OR EQUIPMENT GROU	Ť	BATHROOM STATION - NURSE CALL	N <sub>2B</sub>
			N <sub>BB</sub>
		BATHROOM STATION PULL CORD - NURSE CALL	N <sub>BC</sub>
		CODE BLUE PUSHBUTTON - NURSE CALL	∎ <sub>CB</sub>

NON-FUSED DISCONNECT -SW

E∎

COMBINATION MAGNETIC MOTOR STARTER & FUSED

DISCONNECT SWITCH - SWITCH SIZE / FUSE SIZE

**X4**30/30A

- FUSED DISCONNEC -SWITCH SIZE/FU ENCLOSED CIRCUIT B
- VARIABLE SPEE
- MAGNETIC CONT MANUAL MOTOR S
- HORSEPOWER RATED
- PACKAGED EQUIPMENT WITH INTE MOUNTED PREWIRED CONTROL
- FURNISHED AS INTEGRAL EQUIPMENT, OR AS IND TRANSF
- GRO
- LIGHTNING PROTECTION AIR TE GROUND BUS BAR AS IND

## **AUXILIARY SYSTEMS**

- CEILING MOUNTED SINGLE FACED CEILING MOUNTED DOUBLE FACED
- WALL MOUNTED SINGLE FACED
- WALL MOUNTED DOUBLE FACED COMBINATION WALL MOUNTED SPEAKER
- CEILING MOUNTED COMBINATION SPEAKER WALL MOUNTED DIGITAL
  - CEILING MOUNTED S
  - CEILING MOUNTED SPEAKER C
  - WALL MOUNTED S
  - CEILING MOUNTED MICROPHONE WALL MOUNTED MICROPHONE
  - WALL MOUNTED AUXILIARY
  - WALL MOUNTED VOLUME C
    - WALL MOUNTE
  - WALL MOUNTED WALL MOUNTED HORN S

# ELECTRICAL DRAWING INDEX

1.ER. 0 Electrical Reference Information 1.E0. 1 First Floor Composite Plan

- 1.E4. 1 Enlarged Plans
- 1.E5. 1 One Line Diagram

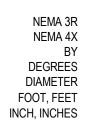
1.E6. 1 Panelboard Schedules, Lighting fixture Schedule, Details and Fire Alarm Diagram 1.E7.1 Details

### UNIT HEATER UNDERWRITERS LABORATORIES, INC. UNLESS OTHERWISE NOTED UNINTERRUPTIBLE POWER SUPPLY UNIVERSAL SERIAL BUS ULTRAVIOLET

VARIABLE SPEED DRIVE VERIFY IN FIELD VAPOR PROOF

WIDE AREA NETWORK WIRELESS ACCESS POINT WIRE GUARD WEATHER PROOF

EXPLOSION PROOF



# **PROJECT GENERAL NOTES**

- 1. ALL ITEMS SHOWN HATCHED SHALL BE DISCONNECTED AND REMOVED. LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN. HEAVY LINE WEIGHT INDICATES NEW.
- 2. ITEMS DENOTED BY THE LETTER "R" INDICATE EXISTING EQUIPMENT TO BE RELOCATED. THESE ITEMS SHALL BE DISCONNECTED, REMOVED AND STORED FOR REINSTALLATION IN NEW LOCATIONS AS INDICATED ON NEW WORK PLANS.
- 3. WHERE APPLICABLE AND NOT SPECIFICALLY INDICATED OTHERWISE, EXISTING IN PLACE CONDUITS, JUNCTION BOXES, PULL BOXES AND HANGERS MAY BE REUSED FOR NEW WORK PROVIDING THAT THE INSTALLATION IS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE EXISTING CONDUITS DO NOT INTERFERE WITH DEMOLITION OR NEW WORK OF ANY TRADES.
- 4. WHERE CONDUITS ARE ROUTED CONCEALED IN WALL CAVITIES FOR ELECTRICAL EQUIPMENT INDICATED TO BE REMOVED, ABANDON THE CONDUIT CONCEALED IN THE WALL CAVITY. REMOVE THE CONDUIT EXITING THE WALL CAVITY INTO THE CEILING SPACE BEYOND THE FIRST FITTING OR JUNCTION BOX. REMOVE ALL SURFACE MOUNTED OUTLET BOXES ASSOCIATED WITH THE CONDUIT SYSTEM. ABANDON ALL FLUSH MOUNTED OUTLET BOXES ASSOCIATED WITH THE CONDUIT SYSTEM IN PLACE AND PROVIDE NEW BLANK COVER PLATES.
- 5. WHERE CONDUITS ARE ROUTED UNDERGROUND FOR ELECTRICAL EQUIPMENT INDICATED TO BE REMOVED. REMOVE INDICATED EQUIPMENT AND WIRING BACK TO SOURCE. CUT CONDUIT BELOW FINISHED FLOOR AND REMOVE, PATCH FLOOR.
- 6. DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT AS INDICATED INCLUDING HANGERS. PULL BOXES. JUNCTION BOXES, CONDUIT AND WIRING FROM THE POWER SOURCE TO THE UTILIZATION EQUIPMENT.
- 7. WHERE REMOVAL OF CONDUIT AND WIRING AFFECTS THE OPERATION OF "UPSTREAM" AND/OR "DOWNSTREAM" UTILIZATION EQUIPMENT WHICH WAS NOT INDICATED TO BE REMOVED, PROVIDE ADDITIONAL CONDUIT AND WIRING TO RESTORE THE "UPSTREAM" AND "DOWNSTREAM" UTILIZATION EQUIPMENT TO ITS NORMAL OPERATION.
- 8. FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND SUPERVISION REQUIRED TO COMPLETE ALL DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT AS SPECIFIED OR INDICATED. DISCONNECT, REMOVE AND RELOCATE ALL ITEMS AS REQUIRED TO FACILITATE THE NEW CONSTRUCTION. COORDINATE THE DEMOLITION REQUIREMENTS WITH ALL OTHER TRADES AND THE NEW WORK PLANS.
- 9. NEW FIRE ALARM DEVICES SHALL BE COMPATABLE WITH EXISTING FIRE ALARM SYSTEM. EXISTING FIRE ALARM SYSTEM IS MANUFACTURED BY NATIONAL TIME AND SIGNAL. COORDINATE ALL SYSTEMS REQUIREMENTS WITH MANUFACTURER.
- 10. PROVIDE A DEDICATED NEUTRAL CONDUCTOR WITHIN THE RACEWAY, ALONG WITH THE PHASE CONDUCTORS FOR ALL FEEDERS AND BRANCH CIRCUITS.
- 11. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITHIN THE RACEWAY, ALONG WITH THE PHASE CONDUCTORS FOR ALL FEEDERS AND BRANCH CIRCUITS.
- 12. ALL 120 VOLT, 20 AMPERE BRANCH CIRCUITS EXCEEDING 100'-0" IN LENGTH SHALL BE INSTALLED USING #10 AWG CONDUCTORS UNLESS OTHERWISE NOTED.
- 13. PROVIDE #10 AWG WIRING (MINIMUM) FOR ALL LIGHTING BRANCH CIRCUITS SERVING EXTERIOR BUILDING MOUNTED LIGHTING FIXTURES.
- 14. ALL ELECTRICAL DEVICES AND ASSOCIATED OUTLET BOXES SHALL BE FLUSH MOUNTED UNLESS NOTED OTHERWISE. ALL CONDUIT AND WIRING SHALL BE CONCEALED. SURFACE METAL RACEWAY SHALL BE PERMITTED ONLY WHERE NOTED.
- 15. MOUNTING HEIGHT OF RECESSED JUNCTION OR OUTLET BOXES IN BLOCK OR BRICK MAY BE ADJUSTED TO THE NEAREST HORIZONTAL COURSING. COVER PLATE TO CONCEAL GROUTLINE.
- 16. ALL WORK AND EQUIPMENT SHALL CONFORM TO THE NEC. THE MEANS AND METHODS USED BY THIS CONTRACTOR SHALL CONFORM TO NEC SECTION 110.3.
- 17. FIRE ALARM SHOP DRAWINGS SHALL BE SUBMITTED TO THE FIRE MARSHAL FOR APPROVAL PRIOR TO SUBMITTING FOR ENGINEER APPROVAL.
- 18. ALL UNUSED LIGHTING FIXTURES TO BE RETURN TO OWNER

### <u>MISC</u>

CONNECTION CONDUIT IN OR BELOW FLOOR SLAB OR BELOW GRADE RACEWAY TURNED UP RACEWAY TURNED DOWN

EXOTHERMIC WELD OR BRAZED

SEAL-OFF - CONDUIT SEAL CABLE TRAY

UNDERFLOOR DUCT - POWER UNDERFLOOR HEADER DUCT - POWER

UNDERFLOOR DUCT - COMM UNDERFLOOR HEADER DUCT - COMM

### <u>SITE</u>

FLUSH IN-GRADE HAND HOLE UNDERGROUND ELECTRICAL UNDERGROUND COMMUNICATIONS UNDERGROUND FIBER OPTIC COMMUNICATIONS UNDERGROUND LIGHTING EMERGENCY "CODE BLUE" BOLLARD

\_\_\_\_0 ATION ----• LIGHT —<u>×</u>— LIGHT - CODE BLUE t with — P e blue DUTLET -HP-DUTLET -C-DUTLET -HC-ORBOX ORBOX TATION НН, RIVACY — E — —c— METER —F0— METER — L — METER СВ RLOCK

-----

\_\_\_\_

\_\_\_\_\_

20111-3008

Drawing Number



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IDS Drawing Title
Electrical Reference Information

Project Administrator A. Maurer	
Project Designer	
T. Morgan	
Project Architect / Engineer	
T. Morgan	
Drawn By	
T. Morgan	
Q.M. Review	
T. Carron	
Approved	
T. Carron	
Drawing Scale	
No Scale	
Issued for Issue Date	
Design Development 06-24-2024	
Quality Management Review 08-23-2024	
Bids 09-13-2024	

THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARDS INFORMATION SHOWN ON THIS SHEET

Key Plan

Van Buren Public Schools **Savage & Tyler Elementary** Schools Secured Entry Renovations



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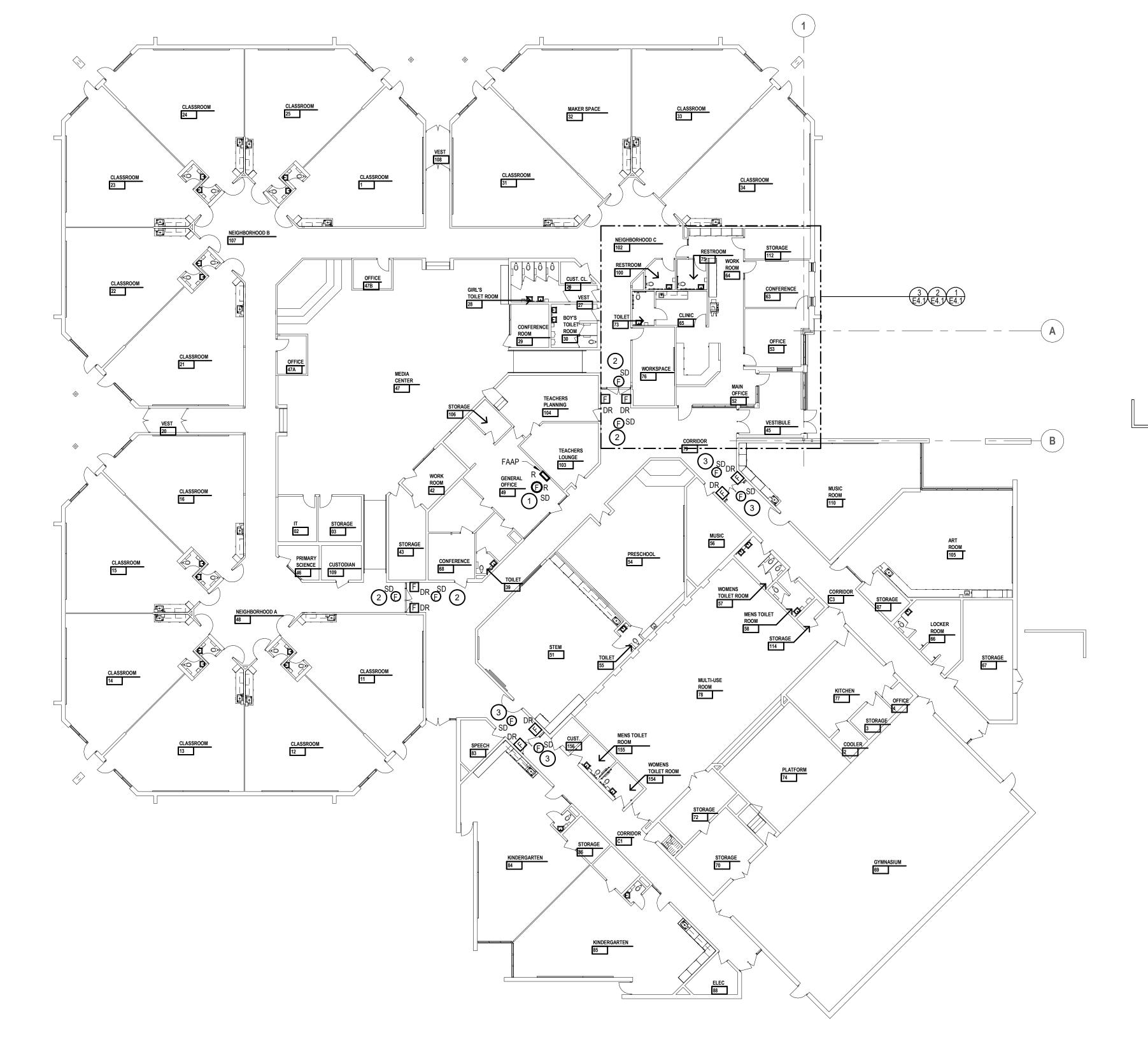
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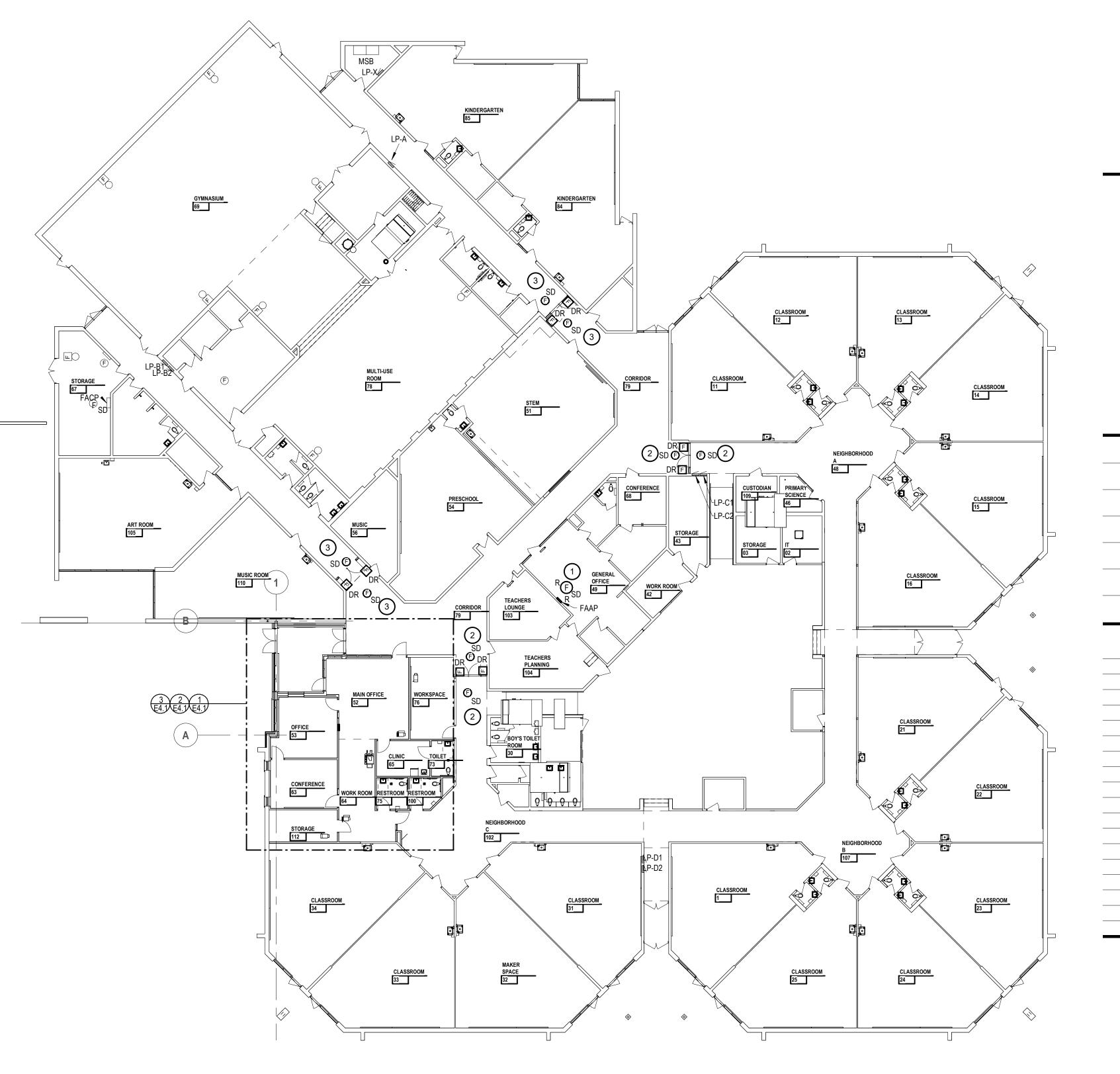
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# KEY NOTES

- 1 RELOCATE FIRE ALARM ANNUNCIATOR PANEL AND CEILING MOUNTED SMOKE DETECTOR FROM GENERAL OFFICE 49 TO NEW SECURED ENTRY MAIN OFFICE 62.
- 2 DOORS HELD OPEN BY ELECTRIFIED HOLD OPEN DEVICES. WIRING TO HOLD OPEN DEVICES SHALL BE #12 AWG. ALL WIRING BELOW CEILING PROVIDED IN SURFACED MOUNTED WIREMOLD. CONNECT NEW FIRE ALARM MODULE TO EXISTING FIRE ALARM SYSTEM. COORDINATE WITH ARCHITECTURAL DOOR HARDWARE SCHEDULE PRIOR TO ROUGH IN. REFER TO DETAIL 6 ON DRAWING 1.E7.1 FOR ADDITIONAL INFORMATION.
- 3 DOOR HELD OPEN BY ELECTRIFIED HOLD OPEN DEVICES. WIRING TO HOLD OPEN DEVICES SHALL BE #12 AWG. CONNECT NEW DEVICES TO EXISTING FIRE ALARM SYSTEM. COORDINATE WITH ARCHITECTURAL DOOR HARDWARE SCHEDULE PRIOR TO ROUGH IN. REFER TO DETAIL 6 ON DRAWING 1.E7.1 FOR ADDITIONAL INFORMATION.

1.FIRST FLOOR COMPOSITE PLAN - TYLER ELEMENTARY 1/16" = 1'-0"

1

ī**D**s Project Number

20111-3008

Drawing Number

1.E0. 1

First Floor Composite Plan

IDS Drawing Title

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Project Architect / Engineer T. Morgan Drawn By T. Morgan Q.M. Review T. Carron Approved T. Carron Drawing Scale As Noted Issue Date Issued for Design Development 06-24-2024 Quality Management Review08-23-2024Bids09-13-2024

Key Plar

Project Administrator A. Maurer

Project Designer T. Morgan

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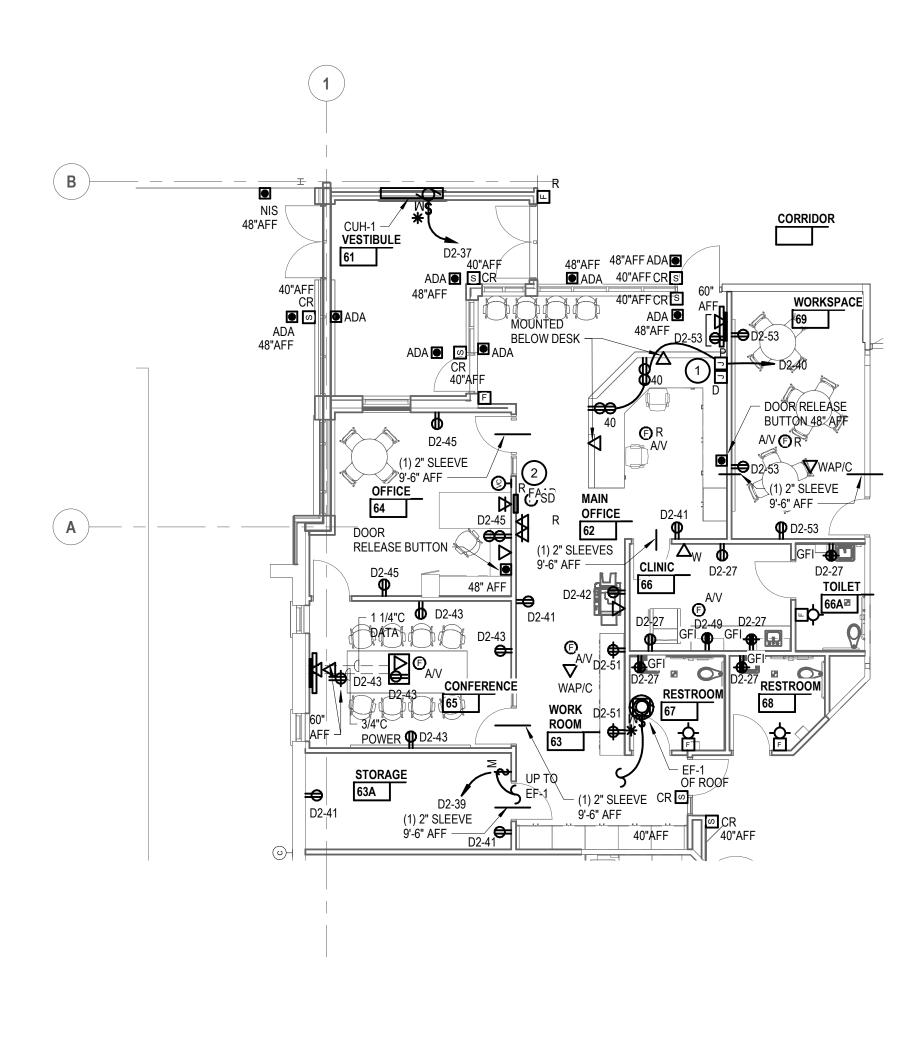


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# 3 NEW WORK POWER & AUXILIARY SYSTEMS PLAN 1/8" = 1'-0" SAVAGE ELEMENTARY - SIM OPP HAND







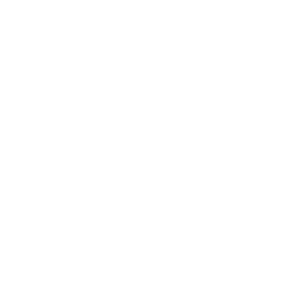


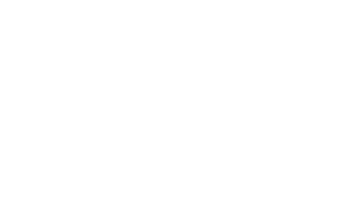




**A** 

2









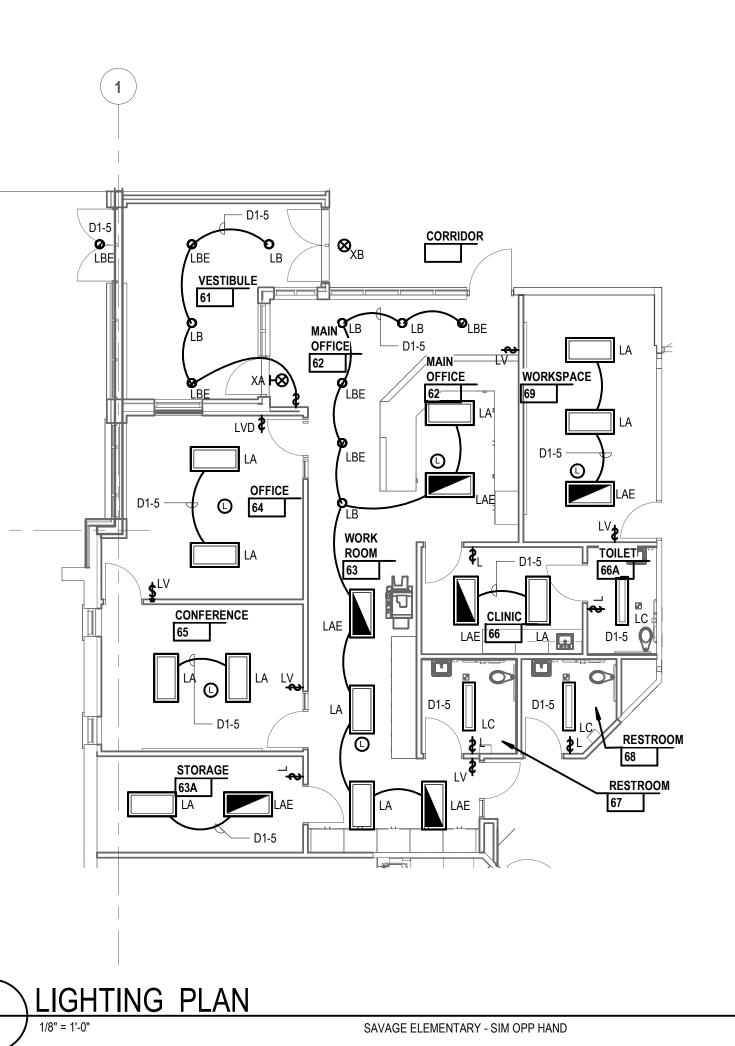


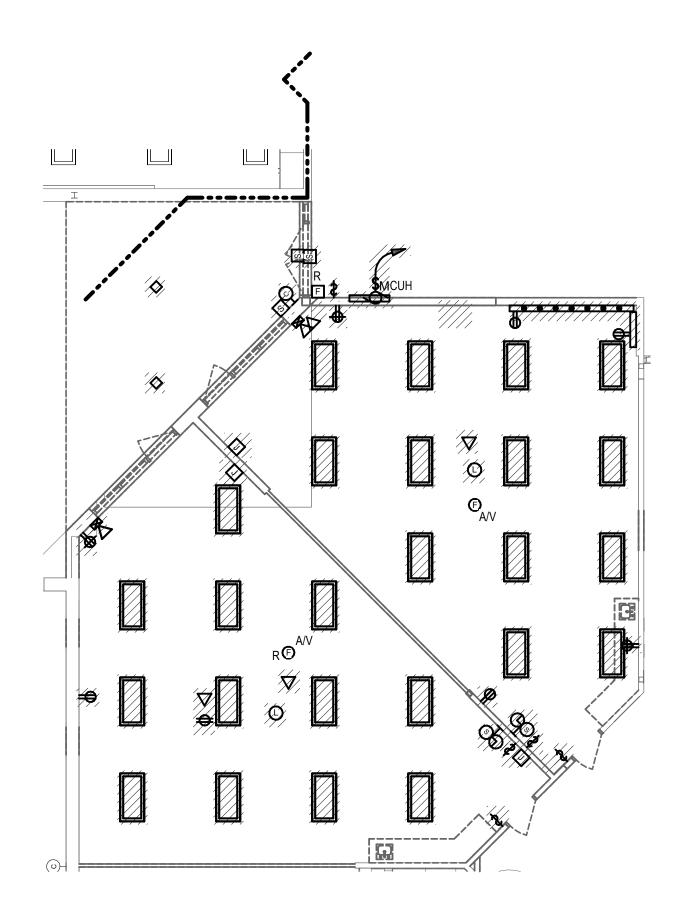
# KEY NOTES

- 1 PROVIDE JUNCTION BOX IN WALL AT 18" AFF FOR ROUTING POWER BRANCH WIRING TO OUTLETS AND DATA CABLING WITH PULL STRINGS .
- 2 RELOCATE EXISTING FIRE ALARM ANNUCATOR PANEL FROM EXISTING MAIN OFFICE TO NEW SECURED ENTRY ADDITION.

F

F





DEMOLITION PLAN 1/8" = 1'-0" SAVAGE ELEMENTARY - SIM OPP HAND

20111-3008

Drawing Number 1.E4. 1

ī**D**≗ Project Number

# Enlarged Plans

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Key Plan

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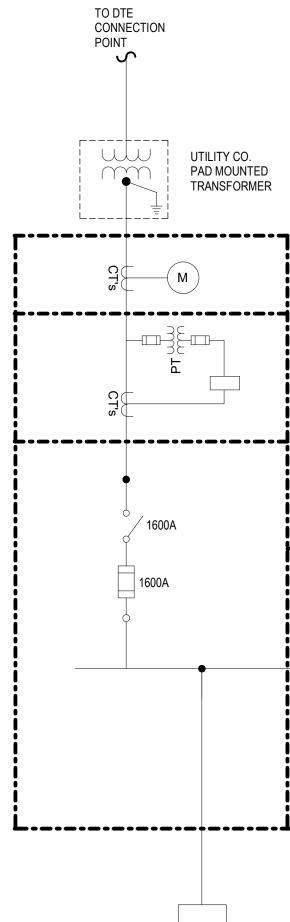
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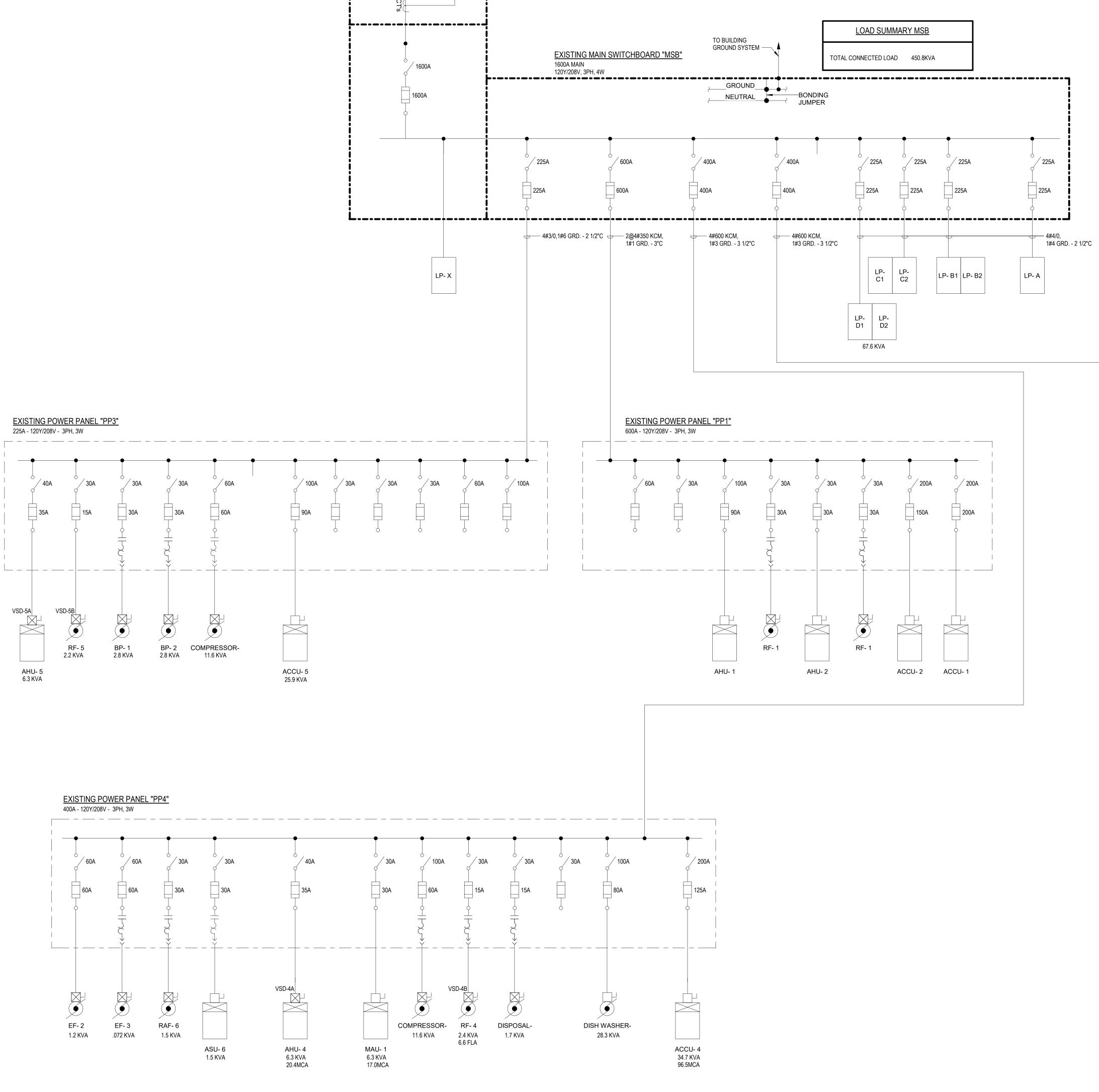
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			CONDUIT A					
		COPPER CONDUCTORS						
			3 PHASE, 3 WIRE WITH GROUND		3 PHASE, 4 WIRE WITH GROUND			
		TAG	FILL	TAG	FILL			
		20G	3#12,1#12 GRD 3/4"C	20NG	4#12,1#12 GRD 3/4"C			
	(7)	30G	3#10,1#10 GRD 3/4"C	30NG	4#10,1#10 GRD 3/4"C			
	ATING	40G	3#8,1#10 GRD - 3/4"C	40NG	4#8,1#10 GRD - 1"C			
	GREE C R/ (NOTE 5)	55G	3#6,1#10 GRD 1"C	55NG	4#6,1#10 GRD 1 1/4"C			
:	60 DEGREE C RATING (NOTE 5)	70G	3#4,1#8 GRD 1 1/4"C	70NG	4#4,1#8 GRD 1 1/4"C			
(NOTE 4)	0 DE	85G	3#3, 1#8 GRD 1 1/4"C	85NG	4#3, 1#8 GRD 1 1/4"C			
	Q	95G	3#2,1#8 GRD 1 1/4"C	95NG	4#2,1#8 GRD 1 1/2"C			
-		110G	3#1,1#6 GRD 1 1/2"C	110NG	4#1,1#6 GRD 2"C			
		150G	3#1/0,1#6 GRD 1 1/2"C	150NG	4#1/0,1#6 GRD 2"C			
		175G	3#2/0,1#6 GRD 2"C	175NG	4#2/0,1#6 GRD 2"C			
		200G	3#3/0,1#6 GRD 2"C	200NG	4#3/0,1#6 GRD 2 1/2"C			
		230G	3#4/0,1#4 GRD 2"C	230NG	4#4/0,1#4 GRD 2 1/2"C			
		255G	3#250 KCM,1#4 GRD 2"C	255NG	4#250 KCM,1#4 GRD 2 1/2"C			
	JEGREE C RATING (NOTE 5)	285G	3#300 KCM,1#4 GRD - 2 1/2"C	285NG	4#300 KCM,1#4 GRD - 3"C			
		310G	3#350 KCM,1#3 GRD 2 1/2"C	310NG	4#350 KCM,1#3 GRD 3"C			
		380G	3#500 KCM,1#3 GRD 3"C	380NG	4#500 KCM,1#3 GRD 3 1/2"C			
		420G	3#600 KCM,1#3 GRD 3"C	420NG	4#600 KCM,1#3 GRD 3 1/2"C			
NMH		510G	2@[3#250 KCM, 1#2 GRD 2 1/2"C]	510NG	2@[4#250 KCM, 1#2 GRD 2 1/2"C]			
- <del>(</del>		620G	2@[3#350 KCM, 1#1 GRD 2 1/2"C]	620NG	2@[4#350 KCM, 1#1 GRD 3"C]			
THHN (NOTE 4)	75 DEG	760G	2@[3#500 KCM,1#1/0 GRD 3"C]	760NG	2@[4#500 KCM,1#1/0 GRD 3 1/2"C]			
N N		800G	2@[3#600KCM, 1#1/0 GRD-3"C]	800NG	2@[4#600KCM, 1#1/0 GRD-3 1/2"C]			
) )		1000G	3@[3#500 KCM,1#2/0 GRD 3"C]	1000NG	3@[4#500 KCM,1#2/0 GRD 3 1/2"C]			
		1200G	3@[3#600 KCM,1#3/0 GRD 3"C]	1200NG	3@[4#600 KCM,1#3/0 GRD 3 1/2"C]			
		1600G	4@[3#600 KCM,1#4/0 GRD 3"C]	1600NG	4@[4#600 KCM,1#4/0 GRD 3 1/2"C]			
		2000G	5@[3#600 KCM,1#250 KCM GRD 3 1/2"C]	2000NG	5@[4#600 KCM,1#250 KCM GRD 3 1/2"C			

1. GROUND WIRES SHOWN IN CONDUIT AND WIRE SCHEDULE ARE EQUIPMENT GROUNDING CONDUCTORS SIZED PER NEC 250-122.

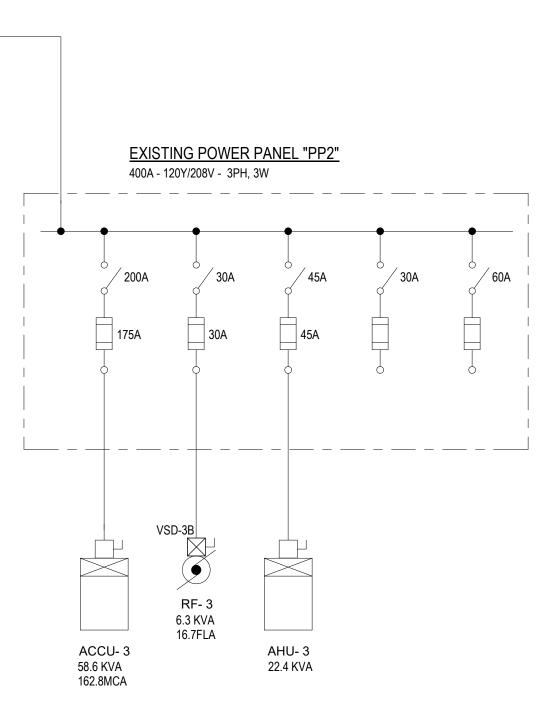
2. GROUNDING ELECTRODE CONDUCTORS FOR SERVICE ENTRANCE AND FOR TRANSFORMER NEUTRALS SHALL BE SIZED PER TABLE 250.66.

3. MAIN BONDING JUMPER AND SYSTEM BONDING JUMPER FOR MAIN SERVICE AND SEPARATELY DERIVED SYSTEMS SHALL BE SIZED PER NEC 250.28(D) AND TABLE 250.102(C)(1).

NOTES:

4. CONDUIT FILL BASED CONDUCTOR INSULATION TYPE AS INDICATED AND SHALL BE USED FOR RMC, FMC, EMT AND PVC SCHEDULE 40 ONLY.

ALL OTHER CONDUITS SHALL BE SIZED PER NEC CHAPTER 9 ANNEX C. 5. CONDUCTOR AMPACITY IS BASED ON TEMPERATURE RATING INDICATED AND NEC TABLE 310.15(B)(16).





1.E5. 1

One Line Diagram

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For Reference Only

-----\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ Quality Management Review 08-23-2024 Bids 09-13-2024

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	Drawn By
	T. Morgan
	Q.M. Review
	T. Carron
	Approved
	T. Carron
	Drawing Scale
	No Scale
Issued for	Issue Date
Design Developmer	nt 06-24-2024
Quality Management Review	N 08-23-2024

Key Plan

Van Buren Public Schools

Renovations

Savage & Tyler Elementary

Schools Secured Entry

Project Title

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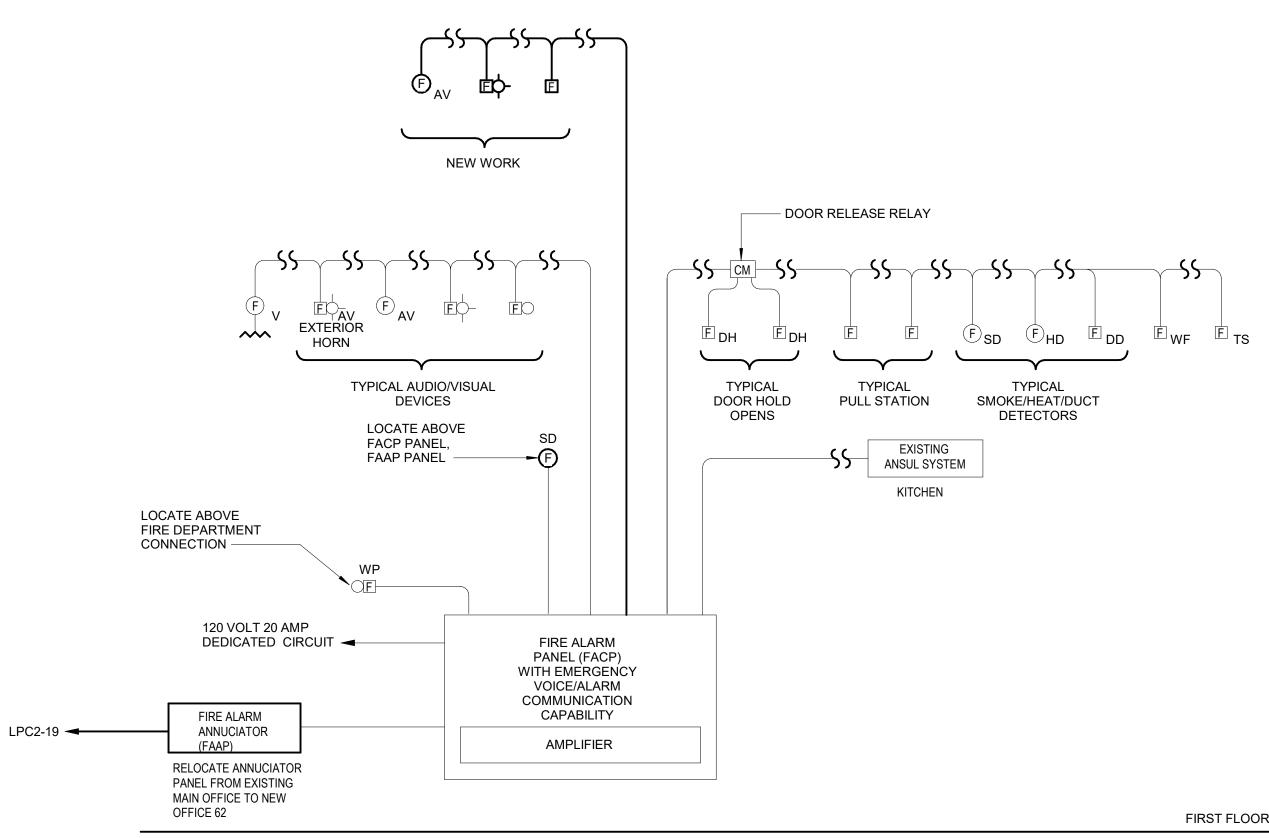
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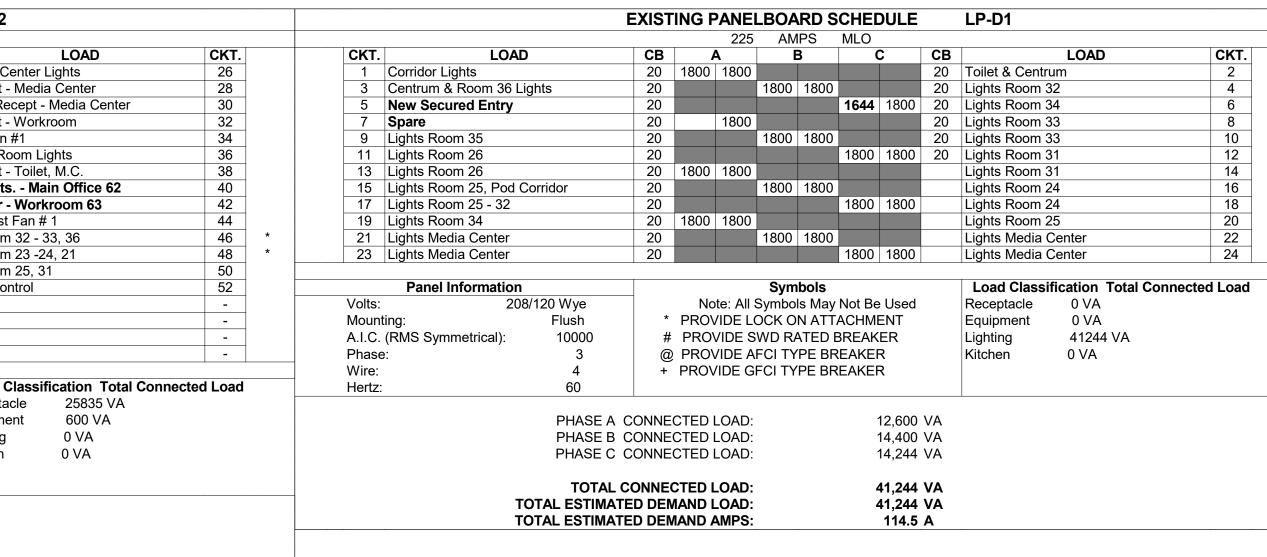
					F	PANE	LBOA	RD S	CHE	DULE		LP-D2
						225	AM	IPS	MLO			
	CKT.	LOAD		СВ		Α	I	3		C	СВ	
	25	Lights - Kitchenette		20	960	1800					20	Media Ce
+	27	ReceptsRm 66,67,68	8, 66A	20			1080	900			20	Recept -
+	29	Recept - Room 34, 35		20					720	540	20	Floor Rec
+	31	Recept - Room 32,33		20	900	360					20	Recept -
+	33	Recept - Room 26, 31		20			900	667			20	Ref Fan #
+	35	Recept - Room 34, 25		20					900	960	20	Mech Roo
	37	New CUH-1		20	180	540					20	Recept -
	39	New EF-1		20			420	720			20	Recepts.
	41	<b>Recepts. Secured Ent</b>	ry	20					720	1200	20	Copier -
	43	Recepts Conference	65	20	1080	1587					20	Exhaust F
	45	Recepts Office 64		20			720	1587			30	VAV Rm
	47	Upper Pod Computers		20					1440	1587	30	VAV Rm
	49	Refrig Clinic 66		20	1200	1587					30	VAV Rm
	51	Recepts Workroom	63	20			360	100			15	VAV Con
	53	Recepts - Workroom 6	69, Monitor	20					720			Space
	-	Space										Space
	-	Space										Space
	-	Space										Space
		Panel Information					Svm	bols				Load Cl
	Volts:		/277 Wye	Note: All Symbols May Not Be Used							Receptac	
	Mounting: Flush				* PROVIDE LOCK ON ATTACHMENT							Equipmer
		(RMS Symmetrical):	14000	# PROVIDE SWD RATED BREAKER							Lighting	
	Phase	,	3	@ PROVIDE AFCI TYPE BREAKER							Kitchen	
	Wire:		4	+ PROVIDE GFCI TYPE BREAKER						T (TOHOT		
	Hertz: 60											
			PHASE A (	CONNE	CTED					10,194	VA	
				CONNECTED LOAD: 7,454 VA								
	PHASE C C									8,787		
			TOTAL C		CTED I	LOAD:				26,435	VA	
		тс	OTAL ESTIMATI	ED DEN	IAND I	LOAD:				18,518	VA	
		тс	<b>DTAL ESTIMATE</b>	ED DEN	AND A	AMPS:				22.3	Α	



NOTES:

- 1. ELECTRICAL CONTRACTOR SHALL VERIFY ALL REQUIRED WIRE SIZES AND QUANTITIES WITH THE FIRE ALARM SYSTEM MANUFACTURER. ALL WIRING SHALL BE COLOR CODED AND CLEARLY TAGGED.
- 2. ALL WIRING INSULATION SHALL BE TYPE AS APPROVED PER THE FIRE ALARM CODE REQUIREMENTS.
- 3. SCHEMATIC DIAGRAM INDICATES GENERAL LAYOUT & INTENT OF SYSTEM DESIGN. REFER TO POWER & AUXILLIARY SYSTEMS PLANS FOR EXACT QUANTITIES AND LOCATIONS OF DEVICES.
- 4. PROVIDE AND INSTALL STAINLESS COVERPLATE OVER UNUSED BACK BOXES LEFT FROM DEMOLISH FIRE ALARM SYSTEM DEVICES.
- 5. PROVIDE POLYCARBONATE COVER OVER ALL PULL STATIONS.
- 6. PROVIDE SURFACE WIREMOLD FOR ALL WALL MOUNTED FIRE ALARM DEVICES.

# FIRE ALARM DIAGRAM SECURED ENTRY



FIRST FLOOR

# LIGHTING FIXTURE SCHEDULE

LA	DESCRIPTION:	2' x 4' RECESSED LED BACK-LIT FLAT PANEL WITH: 4800 NOMINAL LUMEN PACKAGE, 3" MAXIMUM THICKNESS, POST-PAINTED GALVANIZED STEEL HOUSING, WHITE PAINTED ALUMINUM OR 20 GA. STEEL FRAME CONSTRUCTION, FACTORY INSTALLED DIE-FORMED DRIVER BOX ACCESSIBLE ABOVE, 0.125" THICK (MIN) PMMA OPAL FORSTED LENS, 100 LPW MIN EFFICACY, INTEGRAL SURGE PROTECTION, DRIVER DISCONNECT, L70 PROJECTED LIFE OF >90K HOURS AT 25 DEGREES CELCIUS AMBIENT TEMPERATURE, 120 VOLTAGE REPLACEABLE POWER SUPPLY WITH FLICKER FREE 10% MINIMUM DIMMING, T-BAR CLIPS FOR INSTALLATION IN A LAY-IN CEILING, DLC LISTED AND UL DAMP LOCATION LISTING.
	MANUFACTURER:	ACUITY: SPX SERIES
	SOURCE: INPUT WATTS:	MINIMUM 80 CRI, 3500K CCT, 4800 LUMENS 43
LAE	DESCRIPTION:	SAME AS TYPE "LA", EXCEPT PROVIDE INTEGRAL EMERGENCY BATTERY RATED FOR 1541 LUMENS AT 10-14 W PROVIDING CONTINUOUS RATED LIGHT OUTPUT FOR 90 MINUTES.
	MANUFACTURER:	ACUITY: SPX SERIES
	SOURCE: INPUT WATTS:	MINIMUM 80 CRI, 3500K CCT 43
LB	DESCRIPTION:	4" (NOMINAL) ROUND APERTURE, RECESSED COMMERCIAL GRADE OPEN LED DOWNLIGHT LUMINAIRE WITH: 7-1/2" MAXIMUM HOUSING DEPTH, SELF-FLANGED MATTE DIFFUSE REFLECTOR WITH WHITE PAINTED FLANGE, GENERAL DISTRIBUTION, REGRESSED LENS, ACCOMMODATIONS FOR CEILING THICKNESS TO 1-1/2", LEDS AND POWER SUPPLY SERVICEABLE FROM BELOW, 0-10V FLICKER FREE DIMMABLE (TO 1%), ELECTRONIC POWER SUPPLY WIRED FOR DIMMING, OVERLOAD AND SHORT CIRCUIT PROTECTION, INTEGRAL DRIVER DISCONNECT, ENERGY STAR CERTIFIED, UL LISTING FOR DAMP LOCATIONS: MVOLT VOLT OPERATION.
	MANUFACTURER:	ACUITY: LDN4 SERIES
	SOURCE: MAX INPUT WATTS:	MIN 80 CRI, 2000 DELIVERED LUMENS, 3500K CCT 26
LBE	DESCRIPTION:	SAME AS TYPE LB, EXCEPT; INCLUDE REMOTE EMERGENCY BATTERY PACK RATED FOR 2400 LUMENS PROVIDING CONSTANT ILLUMINATION FOR 90 MINUTES.
	MANUFACTURER:	ACUITY: LDN4 SERIES
	SOURCE: MAX INPUT WATTS:	MIN 80 CRI, 2000 DELIVERED LUMENS, 3500K CCT 26
LC	DESCRIPTION:	SAME AS TYPE "LA" EXCEPT 1' X 4'; MOUNTED IN GYMSUM CEILING
	MANUFACTURER:	ACUITY: SPX SERIES
	SOURCE:	MINIMUM 80 CRI, 4800 DELIVERED LUMENS, 3500K CCT
	MAX INPUT WATTS:	39 WATTS MAXIMUM
ХА	DESCRIPTION:	SINGLE FACE, UNIVERSAL WALL MOUNT LED EMERGENCY EXIT LUMINAIRE WITH: DIE-CAST ALUMINUM FRAME, BACK PLATE AND MOUNTING CANOPY, WHITE DIE-CAST ALUMINUM (HOUSING), DIE-CAST ALUMINUM WHITE FACE; RED STENCIL STYLE LETTERS; DIRECTIONAL ARROWS AS INDICATED ON PLAN; LED LAMPS WITH DIFFUSE POLYCARBONATE LENS;SEALED MAINTENANCE FREE NICKEL CADMIUM BATTERY; LOW VOLTAGE DISCONNECT; SOLID STATE/FULLY AUTOMATIC AND CURRENT LIMITED CHARTER; BOTTOM MOUNTED TEST-SWITCH/PILOT LIGHT; BROWNOUT PROTECTION, FILTERED POWER SUPPLY TO PROTECT LED'S FROM SURGES, AND FULL SELF-DIAGNOSTICS, DUAL 120/277 VOLT NORMAL OPERATION AND UL LISTED. PROVIDE WIRE GUARD WHERE INDICATED ON PLANS
	MANUFACTURER:	LITHONIA: LE SERIES
	SOURCE: INPUT WATTS:	FURNISHED WITH FIXTURE 1.2W (SINGLE)
ХВ	DESCRIPTION:	SINGLE FACE, UNIVERSAL CEILING MOUNT LED EMERGENCY EXIT LUMINAIRE WITH: DIE-CAST ALUMINUM FRAME, BACK PLATE AND MOUNTING CANOPY, WHITE DIE-CAST ALUMINUM (HOUSING), DIE-CAST ALUMINUM WHITE FACE; RED STENCIL STYLE LETTERS; DIRECTIONAL ARROWS AS INDICATED ON PLAN; LED LAMPS WITH DIFFUSE POLYCARBONATE LENS;SEALED MAINTENANCE FREE NICKEL CADMIUM BATTERY; LOW VOLTAGE DISCONNECT; SOLID STATE/FULLY AUTOMATIC AND CURRENT LIMITED CHARTER; BOTTOM MOUNTED TEST-SWITCH/PILOT LIGHT; BROWNOUT PROTECTION, FILTERED POWER SUPPLY TO PROTECT LED'S FROM SURGES, AND FULL SELF-DIAGNOSTICS, DUAL 120/277 VOLT NORMAL OPERATION AND UL LISTED.
	MANUFACTURER:	LITHONIA: LE SERIES
	SOURCE: INPUT WATTS:	FURNISHED WITH FIXTURE 1.2W (SINGLE)

CKT. 2 4 14

20111-3008

Drawing Number

**1.E6.** 1

Panelboard Schedules, Lighting fixture Schedule, Details and Fire Alarm Diagram

 $\circ$  2024 integrated  $ext{design}$  solutions, LLC IDS Drawing Title

	Project Designer
	T. Morgan
Project	Architect / Engineer
	T. Morgan
	Drawn By
	T. Morgan
	Q.M. Review
	T. Carron
	Approved
	T. Carron
	Drawing Scale
	No Scale
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024

Key Plan

Project Administrator A. Maurer

Van Buren Public Schools Savage & Tyler Elementary Schools Secured Entry Renovations



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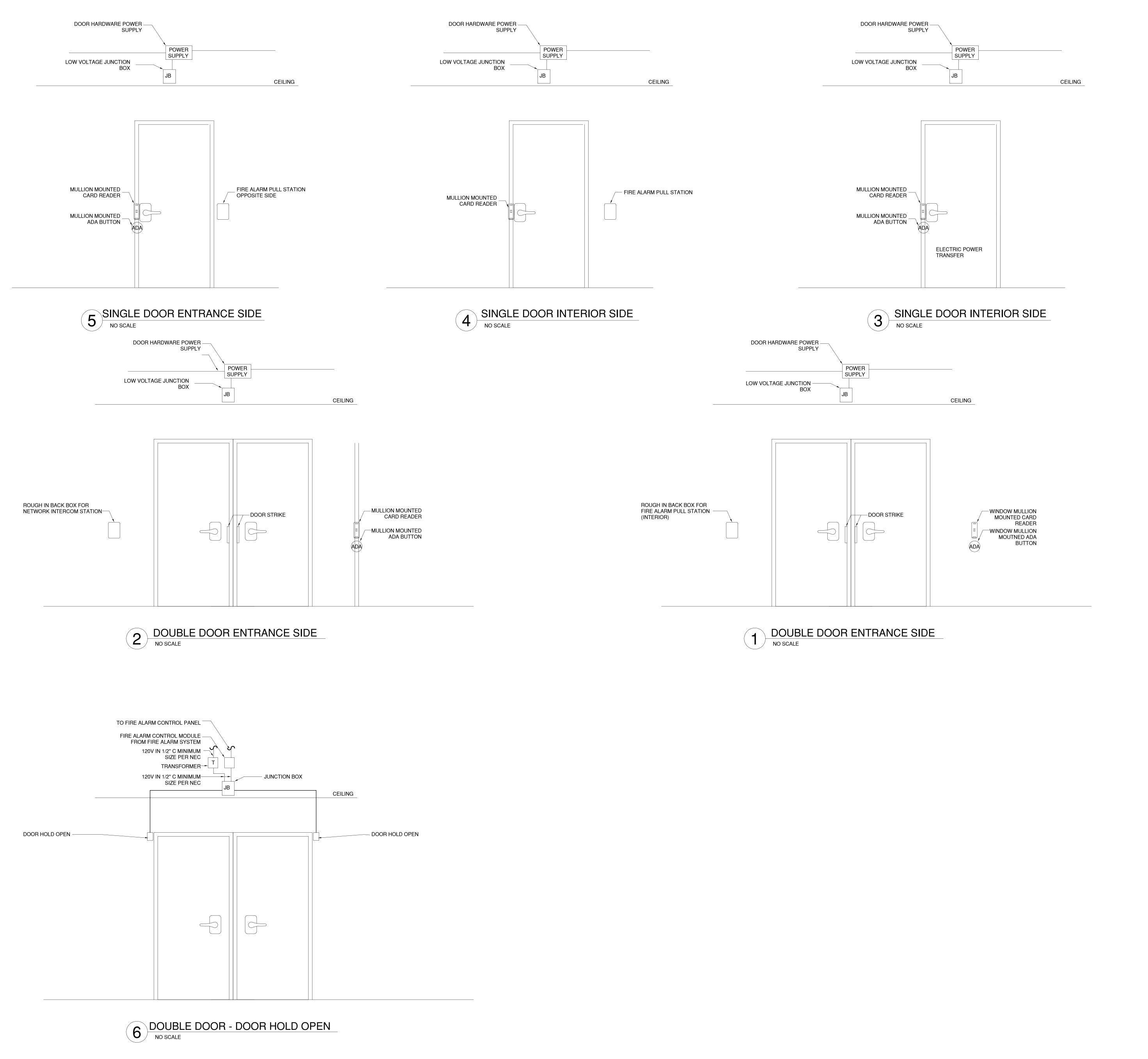
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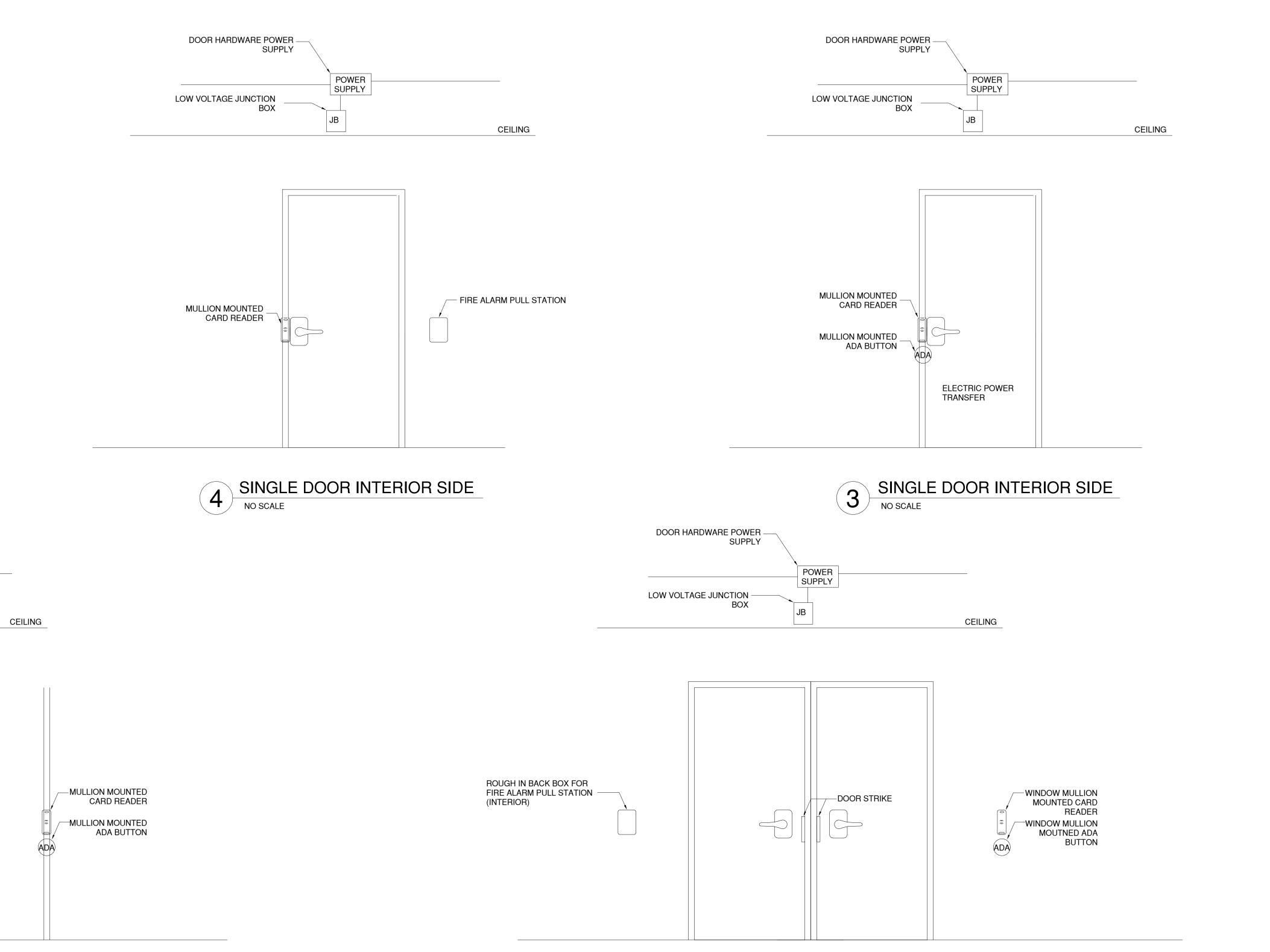
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Drawing Number 1.E7.1

Details

IDS Drawing Title

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	Drawing Scale
	No Scale
Issued for	Issue Date
Bids	09-13-2024

Key Plan

Project Administrator

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