

# IDEA PUBLIC SCHOOLS OWASSA Academy and College Prep- PHASE II

No.	REVISIONS	BY

GMS ARCHITECTS  
1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA  
IDEA COLLEGE PREP PHASE II

IDEA Public Schools



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers  
Date: June 13, 2019  
Scale: As Noted  
Project Architect: David A. Montreal, AIA  
Drawn By: J. Alvarado  
Job No: IDEA PHASE II  
Sheet: COVER

COVER



## IDEA PUBLIC SCHOOLS BOARD OF DIRECTORS 2018

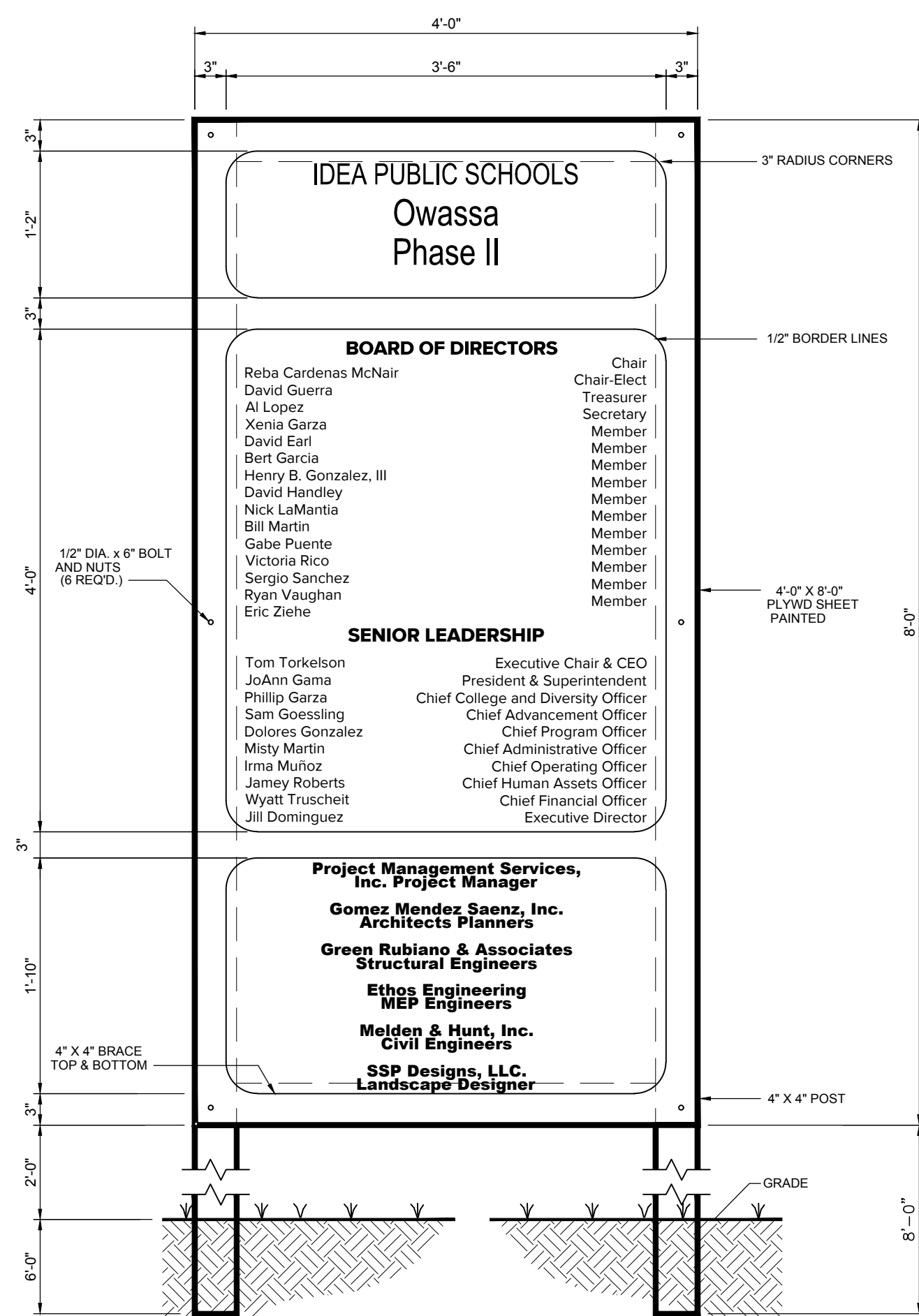
Reba Cardenas McNair  
David Guerra  
Al Lopez  
Xenia Garza  
David Earl  
Bert Garcia  
Henry B. Gonzalez, III  
David Handley  
Nick LaMantia  
Bill Martin  
Gabe Puente  
Victoria Rico  
Sergio Sanchez  
Ryan Vaughan  
Eric Ziehe

Chair  
Chair-Elect  
Treasurer  
Secretary  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member

## SENIOR LEADERSHIP

Tom Torkelson  
JoAnn Gama  
Phillip Garza  
Sam Goessling  
Dolores Gonzalez  
Misty Martin  
Irma Muñoz  
Jamey Roberts  
Wyatt Truscheit  
Jill Dominguez

Executive Chair & CEO  
President & Superintendent  
Chief College and Diversity Officer  
Chief Advancement Officer  
Chief Program Officer  
Chief Administrative Officer  
Chief Operating Officer  
Chief Human Assets Officer  
Chief Financial Officer  
Executive Director



01 PROJECT SIGN  
NOT TO SCALE

## D R A W I N G I N D E X

CIVIL DRAWINGS	LANDSCAPE DRAWINGS:	ARCHITECTURAL DRAWINGS:	STRUCTURAL DRAWINGS:	MEP DRAWINGS	ELECTRICAL:	PLUMBING:
C1 GENERAL NOTES	L-1.01 IRRIGATION PLAN	ADA-1 TDLR GUIDELINES FOR ACCESSIBILITY	A3.00 DOOR & WINDOW SCHEDULES	S1.1 GENERAL STRUCTURAL NOTES	E2.01 ELECTRICAL SYMBOL LEGEND	P2.01 1st FLOOR PLUMBING PLAN
C2 EXISTING CONDITION	L-1.02 IRRIGATION PLAN	ADA-2 TDLR GUIDELINES FOR ACCESSIBILITY	A3.01 TOILET ENLARGEMENTS / ELEVATIONS	S1.2 GENERAL STRUCTURAL NOTES	E2.02 AND ABBREVIATION	P2.02 1st FLOOR WASTE AND VENT PLAN
C3 DEMOLITION PLAN	L-1.03 IRRIGATION PLAN	A3.02 PLAN DETAILS	A3.02 SCIENCE LAB ENLARGEMENT/CASE WORK	S1.3 GENERAL STRUCTURAL DETAILS	E3.01 1st FLOOR LIGHTING PLAN	P2.03 2nd FLOOR PLUMBING PLAN
C4 DIMENSION PLAN	L-1.04 IRRIGATION DETAILS	D1.01 DEMOLITION SITE PLAN	A3.03 CASEWORK ELEVATIONS	S2.1 FOUNDATION PLAN	E3.02 2nd FLOOR LIGHTING PLAN	P2.04 DEMOLITION PLAN
C5 UTILITY DETAILS	L-2.01 LANDSCAPE PLAN	A1.01 OVERALL SITE PLAN	A3.04 STAIR PLAN, SECTION AND DETAILS	S2.1C CONTROL JOINT PLAN	E3.03 CANOPY LIGHTING PLAN	P3.01 PLUMBING ROOF PLAN
C6 GRADING PLAN	L-2.02 LANDSCAPE PLAN	A1.02 SITE PLAN, CANOPY PLAN, SITE ENLARGEMENTS, SITE DETAILS	A3.05 STAIR PLAN, SECTION AND DETAILS	S2.2 FOUNDATION DETAILS	E3.04 2ND FLOOR LIGHTING AND ELECTRICAL PHASE I RENOVATIONS	P4.01 PLUMBING SCHEDULES AND DETAILS
C7 DRAINAGE PLAN	L-3.01 LANDSCAPE SCHEDULES & DETAILS			S2.3 FOUNDATION RENOVATION PLAN	E4.01 1st FLOOR ELECTRICAL PLAN	P4.02 PLUMBING DETAILS
C8 EROSION & SEDIMENT CONTROL WATER DETAILS		CODE CODE REVIEW	A4.00 WALL SECTIONS	S3.1 SECOND FLOOR FRAMING PLAN	E4.02 2nd FLOOR ELECTRICAL PLAN	
C9 WATER DETAILS		D1.01 DEMOLITION PLAN	A4.01 WALL SECTIONS	S3.2 ROOF FRAMING PLAN	E4.03 1st FLOOR PHASE I INTERCOM UPGRADE PLAN	
C10 SANITARY SEWER DETAILS		A2.00 OVERALL FLOOR PLAN	A4.02 WALL SECTIONS	S3.3 BRACE PROFILES	E4.04 1st FLOOR PHASE I INTERCOM UPGRADE PLAN	
C11 STORM SEWER AND SITE DETAILS		A2.01 1ST FLOOR DIMENSION PLAN	A4.03 WALL SECTIONS	S3.4 STAIR FRAMING PLAN	E4.05 2nd FLOOR PHASE I INTERCOM UPGRADE PLAN	
		A2.02 2ND FLOOR DIMENSION PLAN	A4.04 WALL SECTIONS	S4.1 FRAMING DETAILS	E4.06 2nd FLOOR PHASE I INTERCOM UPGRADE PLAN	
		A2.03 1ST & 2ND FLOOR FIXTURE PLAN	A4.05 INTERIOR PARTITIONS	S4.2 FRAMING DETAILS	E5.01 ELECTRICAL ROOF PLAN	
		A2.04 1ST & 2ND FLOOR REFLECTIVE CEILING PLAN	A4.06 WALL SECTIONS	S4.3 FRAMING DETAILS	E6.01 ELECTRICAL SCHEDULES	
		A2.05 VCT PATTERN / ACCENT WALL PAINT	A4.07 WALL SECTIONS	S4.4 FRAMING DETAILS	E6.02 LIGHTING IMAGES	
		A2.06 ROOF PLAN	A5.01 BUILDING ELEVATIONS		E7.01 ELECTRICAL RISER DIAGRAM	
		A2.07 ROOFING DETAILS			E8.01 ELECTRICAL PANEL SCHEDULES	
		A2.08 PHASE I DEMOLITION & IMPROVEMENTS			E8.02 SPORTS LIGHTING DETAILS	
					E9.01 ELECTRICAL DETAILS	
					E9.02 ELECTRICAL DETAILS	

**LANDSCAPE**  
SSP LANDSCAPE DESIGN  
802 EAST WASHINGTON BROWNSVILLE, TEXAS 78520  
(956) 547-9788 FAX: (956) 547-9977

**CIVIL ENGINEERS**  
MELDEN & HUNT, INC  
115 W. MCINTYRE EDINBURG, TX 78541  
(956) 381-0981 OFFICE (956) 381-1839 FAX

**MECHANICAL ENGINEERS**  
ETHOS ENGINEERING - M.E.P.  
119 VAN BUREN, SUITE 101 HARLINGEN, TEXAS 78550  
(956) 230-3435 FAX: (956) 720-0830

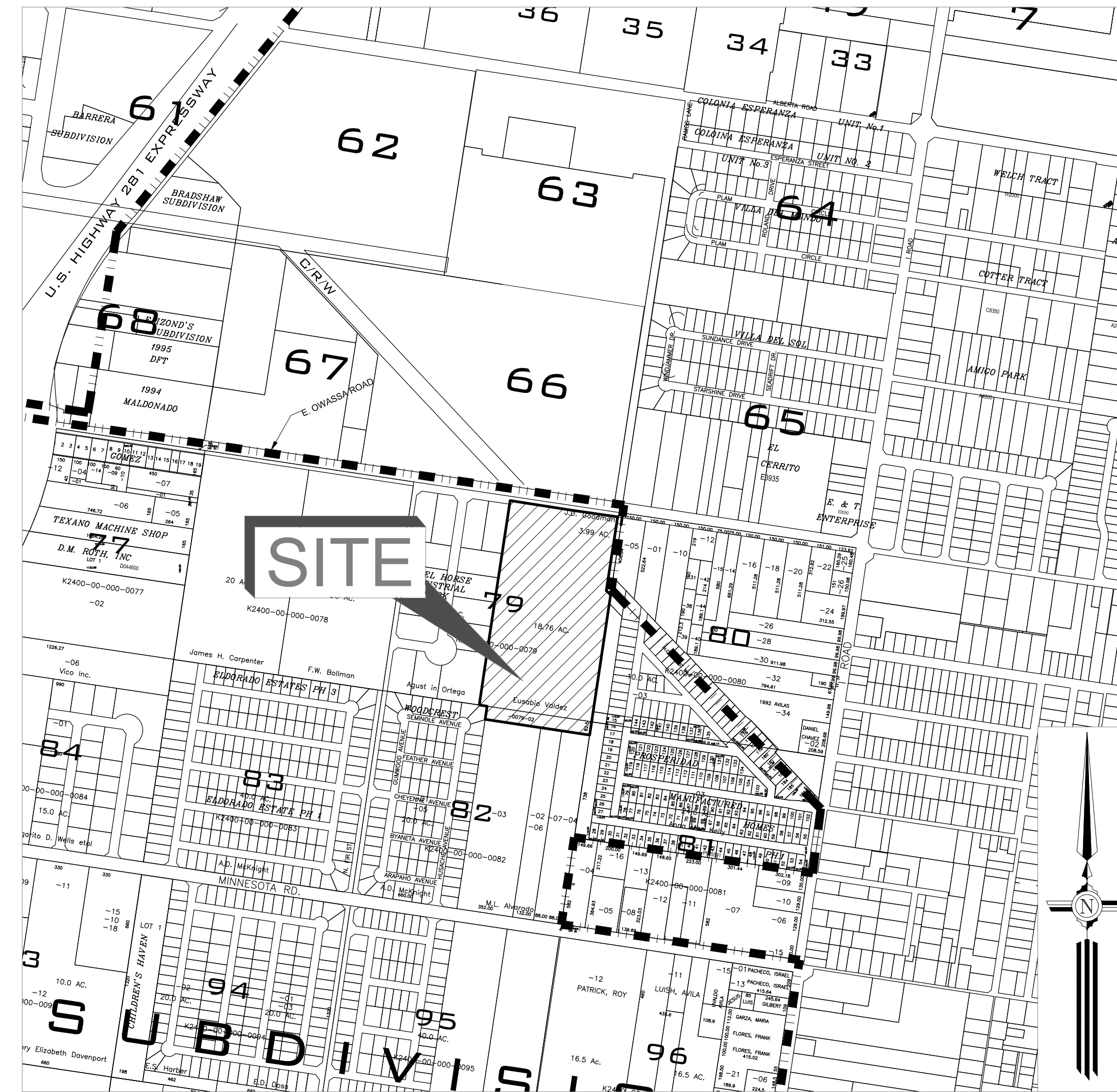
**STRUCTURAL ENGINEERS**  
GREEN RUBIANO & ASSOCIATES  
1220W. HARRISON HARLINGEN, TX 78550  
PH. (956) 428-4461 FAX (956) 428-0281

**ARCHITECTS**  
GOMEZ MENDEZ SAENZ, INC.  
1150 PAREDES LINE RD. BROWNSVILLE, TX. 78521  
PH. (956) 546-0110 FAX. (956) 546-0196

# IDEA - OWASSA ACADEMY AND COLLEGE PREP PHASE II

PHARR, TEXAS  
HIDALGO COUNTY

1. THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING TYPE AND LOCATION OF UNDERGROUND UTILITIES AND ELECTRICAL UTILITIES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE LOCATIONS AND SIZES HAVE BEEN TAKEN FROM FIELD WORK AND EXISTING RECORDS AND THE BEST AS-BUILT INFORMATION AVAILABLE; HOWEVER, IT IS EXPECTED THAT THERE MAY BE SOME DISCREPANCIES IN THE LOCATIONS, QUALITIES AND SIZES SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT TYPE, SIZE AND LOCATION OF ALL UTILITIES AFFECTED BY THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL ARRANGE FOR THE REPAIR AND RESTORATION OF CONTRACTOR DAMAGED UTILITIES. THE COST OF ANY REPAIR OR REPLACEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CURRENT LINE SPOTTING TOLL FREE NUMBER AND COORDINATE WITH ALL THE UTILITY COMPANIES FOR ACTUAL LOCATING AND UNCOVERING OF EXISTING LINES PRIOR TO EXCAVATION OPERATIONS.
2. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY UNREPORTED OBSTACLES THAT MAY IMPEDE OR PREVENT THE PROPER CONSTRUCTION OF THIS PROJECT.
3. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPLICABLE STATE STATUTES AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (OSHA). COPIES OF THE O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. AT 611 EAST 6TH STREET, ROOM 303, AUSTIN, TEXAS.
4. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A SAFE, NEAT AND WORKMAN LIKE MANNER AT ALL TIMES. JOB SAFETY SHALL NOT BE COMPROMISED. ANY UNSAFE OR UNATTRACTIVE NUISANCE SHALL BE REMOVED OR OTHERWISE TAKEN CARE OF BY THE CONTRACTOR WHEN DIRECTED BY THE OWNER OR PROJECT ENGINEER.
5. EXCAVATIONS, TRENCHES AND OTHER HAZARDOUS AREAS SHALL BE ADEQUATELY PROTECTED BY BARRICADES, FENCING, LIGHTS AND/OR OTHER PROTECTIVE DEVICES AT ALL TIMES.
6. CONSTRUCTION OF THIS PROJECT WILL BE SUBJECT TO INSPECTIONS AND TESTING AS DEEMED NECESSARY OR APPROPRIATE BY THE ENGINEER AND/OR THE CITY OF PHARR. THE CONTRACTOR SHALL FURNISH INCIDENTAL LABOR AND EQUIPMENT TO ALLOW THE TESTING PERSONAL ACCESS TO THE WORK AND WILL COOPERATE FULLY WITH THE PERSONS CONDUCTING THE TESTING AND INSPECTION PROGRAM.
7. A PART OF THE WORK THAT IS NECESSARY OR REQUIRED TO MAKE EACH SYSTEM OR INSTALLATION SATISFACTORY AND OPERABLE FOR ITS INTENDED PURPOSE, EVEN THOUGH IT IS NOT SPECIFICALLY INCLUDED IN THE SPECIFICATIONS OR DRAWINGS, SHALL BE PERFORMED AS INCIDENTAL WORK AS IF IT WERE DESCRIBED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS.
8. THE DRAWINGS DO NOT ALWAYS INDICATE ALL VERTICAL BENDS AND TRANSITIONS. WHEN NECESSARY, MAKE VERTICAL TRANSITIONS BY A DEFLECTION AT THE JOINTS OR THE INSTALLATION OF FITTINGS. DO NOT DEFLECT PIPE JOINTS MORE THAN 80% OF THE MANUFACTURERS RECOMMENDATION.
9. ALL PIPING MUST BE INSTALLED WITH A MINIMUM OF 36-INCHES OF COVER UNLESS OTHERWISE NOTED ON THE PLANS.
10. ALL EXCAVATION FOR THIS PROJECT SHALL BE UNCLASSIFIED.
11. ALL UTILITIES WHICH ARE TO REMAIN AND WHICH ARE DAMAGED OR REMOVED WILL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
12. PIPE SHALL BE BACKFILLED WITH JOINTS EXPOSED FOR TESTING, BEFORE NEW JOINTS ARE COVERED. PRESSURE LINES ARE TO BE HYDROSTATICALLY TESTED AT NOT LESS THAN 150 PSIG FOR A PERIOD OF TWO HOURS. THE OWNER SHALL OBSERVE AND APPROVE OR REJECT THE TEST. REPAIRS, IF REQUIRED, SHALL BE MADE AND THE LINE SHALL BE RETESTED UNTIL APPROVED. TEST SHALL NOT BEGIN UNTIL THRUST BLOCKS HAVE AGED A MINIMUM OF 24 HOURS.
13. AS SOON AS PRACTICAL, ALL PORTIONS OF EXCAVATIONS NOT OCCUPIED BY THE PERMANENT STRUCTURE SHALL BE BACKFILLED.
14. WHERE WATER LINE INTERSECTS SANITARY SEWER SYSTEM MAINS AT LESS THAN 9.0 FEET SEPARATION, THE CONTRACTOR SHALL INSTALL A 20 FOOT SECTION OF C-900 PVC PRESSURE PIPE CENTERED ON THE POINT OF INTERSECTION.
15. CONTRACTOR SHALL REMOVE AND REINSTALL ALL SIGNS, MAILBOXES, FENCES, CULVERTS AND OTHER ITEMS IN WAY OF THE WORK.
16. CONTRACTOR SHALL REPAIR ALL OPEN CUTS OF PAVED AREAS BACK TO BETTER THAN "AS-IS" CONDITION WITH LIKE MATERIALS.
17. PROVIDE INTERIM DRAINAGE DURING CONSTRUCTION AS REQUIRED. USE PUMPS, TEMPORARY DITCHES, ETC. TO MAINTAIN A WELL DRAINED SITE FREE OF STANDING WATER AND WATER SOFTENED SOILS.
18. ANCHOR ALL UNDERGROUND PRESSURE PIPING AS NECESSARY TO PREVENT MOVEMENT UNDER PRESSURE TEST AND SERVICES.
19. ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A-165, GRADE 60 ALL BARS SHALL CONFORM TO ASTM SPECIFICATION A-305.
20. ALL CONCRETE AND FORM WORK SHALL CONFORM TO CURRENT ACI CODE REQUIREMENTS.
21. THE CONTRACTOR SHALL EXERCISE EXTRA CARE TO PREVENT DAMAGE TO ALL OTHER STRUCTURES IN THE AREA INCLUDING BUILDINGS, FENCES, ROADS, PIPELINES, UTILITIES, ETC., WHETHER PUBLICLY OR PRIVATELY OWNED.
22. UNTIL ACCEPTANCE BY THE ENGINEER OF ANY OR ALL OF THE CONSTRUCTION, AS PROVIDED FOR IN THE PLANS AND SPECIFICATIONS, AND ACCEPTANCE BY THE PROPER UTILITY PROVIDER, IT SHALL BE UNDER THE CHARGE AND CARE OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE EVERY NECESSARY PRECAUTION AGAINST TO ANY PART OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD, AT HIS OWN EXPENSE, OF ALL THE DAMAGE TO ANY PORTION OF THE WORK BEFORE ITS ACCEPTANCE.
23. NO OPEN TRENCHES OR EXCAVATION SHALL BE LEFT OPEN OVERNIGHT.
24. ALL WATERLINE TAPS AND WATER METERS SHALL BE INSTALLED BY CONTRACTOR. COORDINATE WITH THE CITY OF PHARR BEFORE COMMENCING ANY UTILITY WORK.
25. COORDINATE ALL UTILITY WORK WITH THE PLUMBING PLANS BEFORE COMMENCING ANY UTILITY WORK. REFER TO PLUMBING PLANS FOR CONTINUATION.
26. COORDINATE WITH GRADING PLANS FOR WATER LINE, STORM AND SANITARY SEWER LINES INSTALLATION.
27. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INCLUDING THOSE FROM THE CITY OF PHARR, PRIOR TO START OF CONSTRUCTION.
28. THE TOP ELEVATIONS OF MANHOLES AND CLEANOUTS CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISHED PAVEMENT GRADE. THE TOP ELEVATIONS OF MANHOLES AND CLEANOUTS CONSTRUCTED IN GRASSED AREAS SHALL BE SIX INCHES ABOVE FINISHED GRADE (UNLESS OTHERWISE NOTED ON PLANS).
29. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING TO VERIFY EXISTING CONDITIONS.
30. REFER TO GEOTECH REPORT BEFORE INSTALLATION OF DRIVES AND PARKING AREAS.
31. BOTH SITE AND BUILDING CONTRACTORS TO VERIFY EXISTING SITE ELEVATIONS PRIOR TO POURING CONCRETE TO VERIFY ACCESSIBILITY.
32. PERMIT NEEDED FROM CITY OF PHARR BUILDING DEPARTMENT AND PRE-CONSTRUCTION CONFERENCE NEEDED WITH CITY OF PHARR.
33. CONTRACTOR TO LEAVE OPENINGS IN CURB AT SIDEWALK RAMP LOCATIONS.
34. CONSULT WITH PROPERTY OWNER BEFORE RELOCATING EXISTING FENCES THAT MIGHT BE IN THE WAY OF THE CONSTRUCTION AREA AND/OR CONSTRUCTION PLANS.



LOCATION MAP

SCALE: 1" = 600'

-2019-

**BENCHMARK:**  
CITY OF PHARR BENCHMARK: BM #62  
LOCATED CLOSE TO SOUTHWEST INTERSECTION OF  
E. OWASSA ROAD AND N. VETERANS BOULEVARD ("I" ROAD)  
NORTHING: 16614974.217 EASTING: 1093872.455  
ELEVATION: 103.12

## INDEX

SHEET No.	DESCRIPTION
1.	COVER SHEET
2.	EXISTING CONDITIONS
3.	DEMOLITION PLAN
4.	DIMENSIONAL CONTROL SITE PLAN
5.	UTILITY PLAN
6.	GRADING PLAN
7.	DRAINAGE PLAN
8.	EROSION CONTROL PLAN AND DETAILS
9.	WATER DETAILS
10.	SANITARY SEWER DETAILS
11.	STORM SEWER AND SITE DETAILS

**M** MELDEN & HUNT INC.  
CONSULTANTS • ENGINEERS • SURVEYORS  
115 W. MCINTYRE - EDINBURG, TX 78541  
PH: (956) 381-0981 - FAX: (956) 381-1839  
ESTABLISHED 1947 - www.meldenandhunt.com



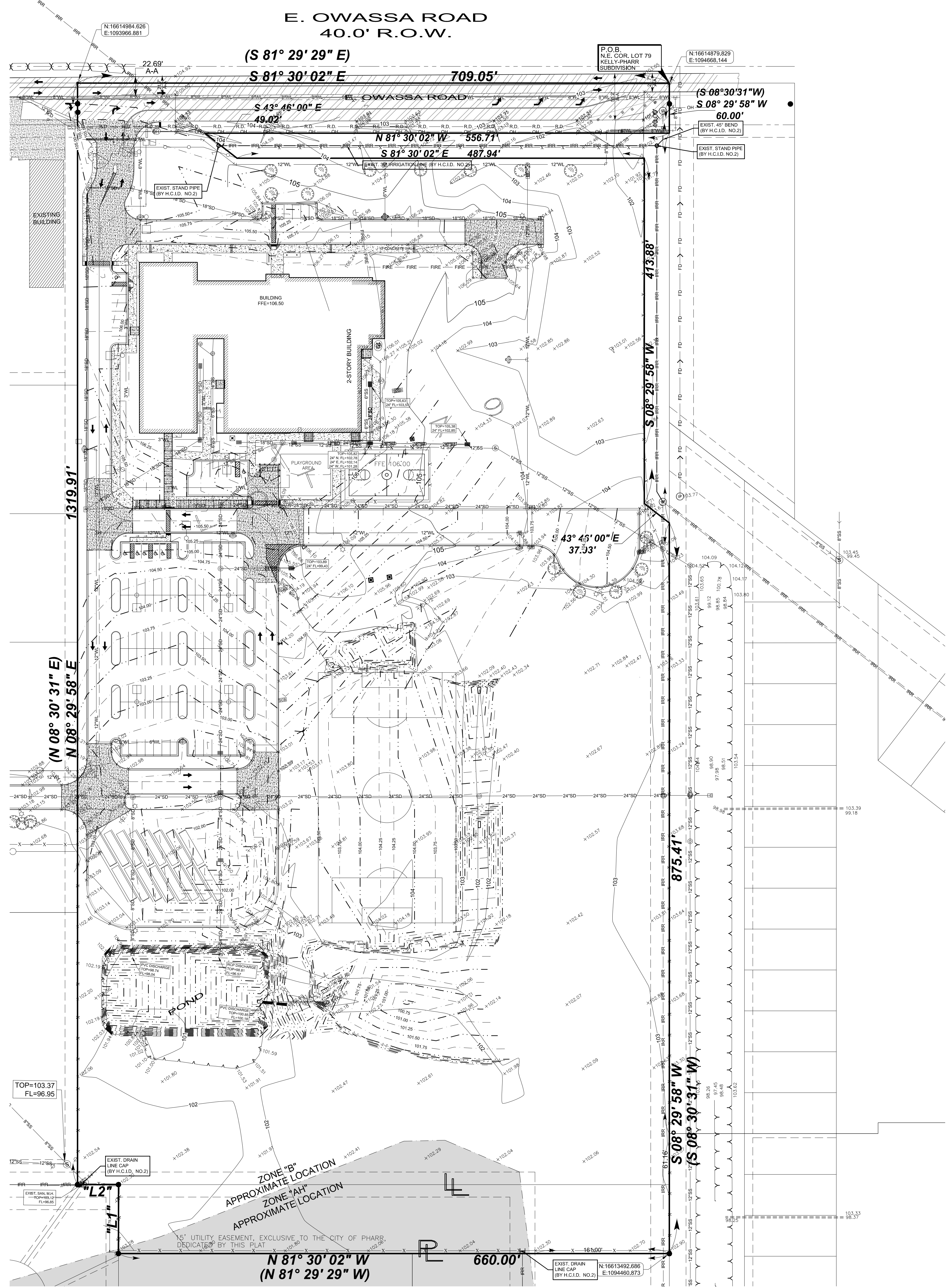
ALTERATION OF A SEALED DOCUMENT  
WITHOUT PROPER NOTIFICATION  
TO THE RESPONSIBLE ENGINEER  
IS AN OFFENSE UNDER THE  
TEXAS ENGINEERING PRACTICE LAW

Kelley A. Heller-Vela  
KELLEY A. HELLER-VELA, P.E.

DATE

SHEET C1 OF 11

JOB NUMBER 18183.04

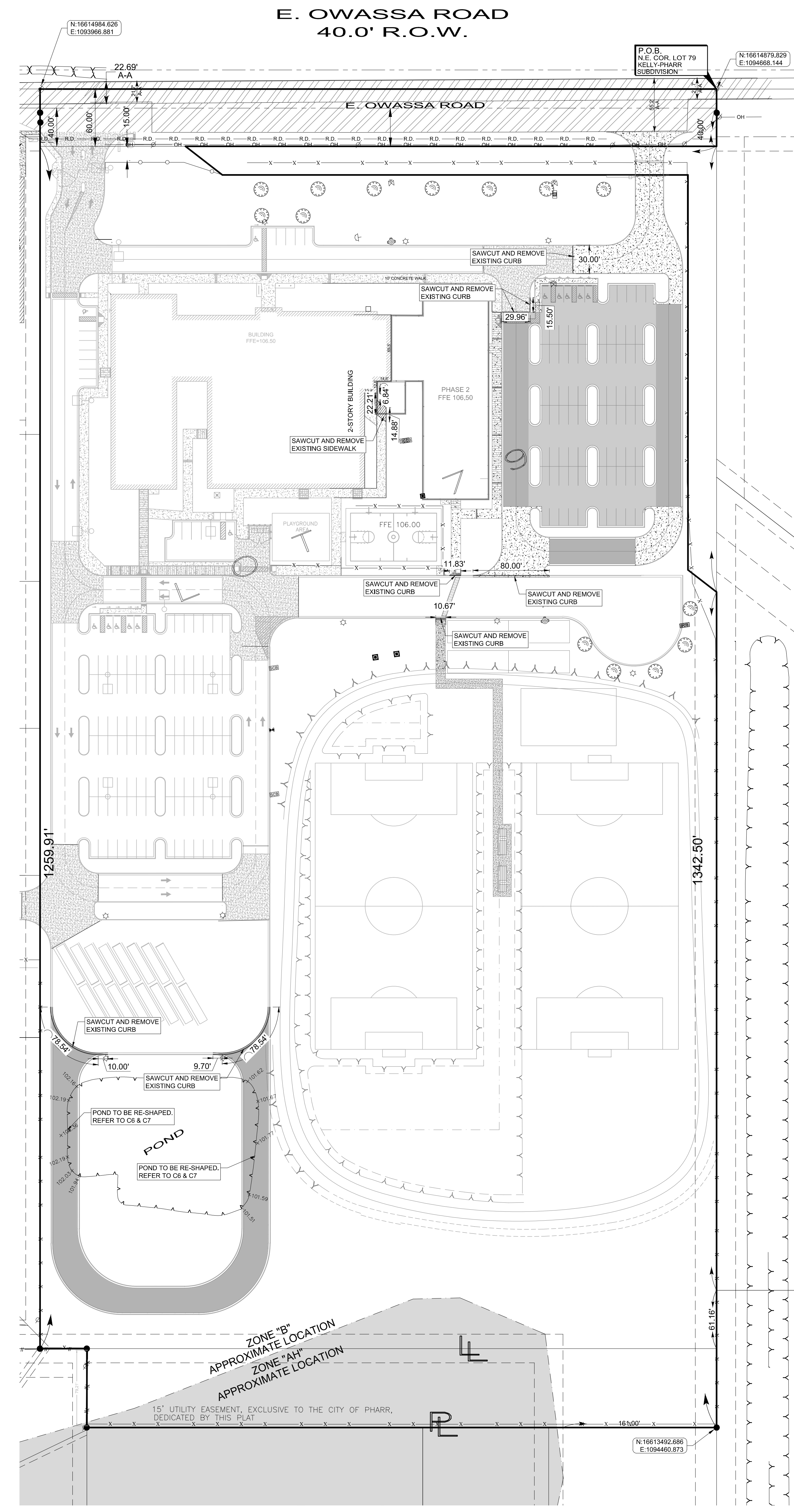


- LEGEND**
- FOUND NO. 4 REBAR
  - FOUND PK NAIL
  - SET NO. 4 REBAR WITH PLASTIC CAP STAMPED MELDEN & HUNT
  - SET NAIL
  - POWER POLE
  - TELEPHONE PEDESTAL
  - FIRE HYDRANT
  - WATER VALVE MARKER
  - SANITARY SEWER MANHOLE
  - IRRIGATION STAND PIPE (SIZE AS NOTED)
  - HOG WIRE FENCE
  - WOOD FENCE
  - SS — SANITARY SEWER LINE
  - OH — OVERHEAD POWER LINE
  - R.D. — ROAD DITCH
  - ASPHALT AREA
  - CONCRETE AREA
  - CALICHE DRIVEWAY
  - FLOOD "ZONE AH"
  - A.A. — EDGE OF ASPHALT TO EDGE OF ASPHALT
  - R.O.W. — RIGHT OF WAY
  - H.C.M.R. — HIDALGO COUNTY MAP RECORDS
  - H.C.D.R. — HIDALGO COUNTY DEED RECORDS
  - H.C.O.R. — HIDALGO COUNTY OFFICIAL RECORDS
  - N.E. COR. — NORTHEAST CORNER
  - H.C.I.D. — HIDALGO COUNTY IRRIGATION DISTRICT
  - N.A.W.S.C. — NORTH ALAMO WATER SUPPLY CORPORATION
  - INDUS. — INDUSTRIAL
  - P.O.B. — POINT OF BEGINNING
  - Sq. Ft. — SQUARE FEET
  - INSTR. NO. — INSTRUMENT NUMBER
  - DOC. NO. — DOCUMENT NUMBER
  - G.W.D. — GENERAL WARRANTY DEED
  - S.W.D. — SPECIAL WARRANTY DEED
  - W.D. — WARRANTY DEED
  - (-)- — RECORDED PLAT CALLS
  - LOT LINE
  - PROPERTY LINE

JOB No. 18183.04	
REVISION	DATE
BY	DATE
MELDEN & HUNT, INC. CONSULTANTS ENGINEERS & SURVEYORS 1150 PARADES LINE RD. BROWNSVILLE, TX 77826 PH: 361.833.7963 FAX: 361.833.7963 WWW.MELDENANDHUNT.COM	
ENG. TECH. S.A.	AS NOTED
PROJECT ENG. & SURV.	
PROJECT NO. 18183.04	
1. RELEASE DATE: 02/11/19	
2. RELEASE DATE:	
3. RELEASE DATE:	
SCALE:	
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY KELLEY A. HELLER-VELA, P.E. 97421 <i>Kelley A. Heller-Vela</i>	
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW	
EXISTING CONDITIONS	
SHEET C2 OF 11	

IDEA-OWASSA  
 COLLEGE PREP PHASE II  
 Public Schools

© Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers  
 Date: June 13, 2019  
 Scale: As Noted  
 Project Architect: David Monreal, AIA  
 Drawn By: J. Alvarado  
 Job No.: IDEA PHASE II  
 Sheet:



- SCALE: 1"=60'
- LEGEND**
- FOUND NO. 4 REBAR
  - FOUND PN NAIL
  - SET NO. 4 REBAR WITH PLASTIC CAP STAMPED MELDEN & HUNT
  - SET NAIL
  - POWER POLE
  - TELEPHONE PEDESTAL
  - HOG WIRE FENCE
  - OH — OH — OVERHEAD POWER LINE
  - R.D. — R.D. — ROAD DITCH
  - WOOD FENCE
  - DITCH LINE
  - ▨ EXISTING ASPHALT AREA
  - ▨ EXISTING CONCRETE AREA
  - ▨ PROPOSED CONCRETE AREA
  - ▨ PROPOSED FLEXIBLE PAVEMENT SYSTEM DI-2
  - ▨ PROPOSED ALTERNATE FLEXIBLE PAVEMENT SYSTEM DI-2
  - ▨ FLOOD 'ZONE AH'
- R.O.W. - RIGHT OF WAY  
N.E. COR. - NORTHEAST CORNER  
P.O.B. - POINT OF BEGINNING  
L.F. - LOT LINE  
P.P.L. - PROPERTY LINE

ENG. TECH. S.A.  
PROJECT ENG. & ARCH.  
PROJECT: 1006, PG. 25-30  
1. RELEASE DATE: 02/21/19  
2. RELEASE DATE:  
3. RELEASE DATE:  
SCALE: AS NOTED

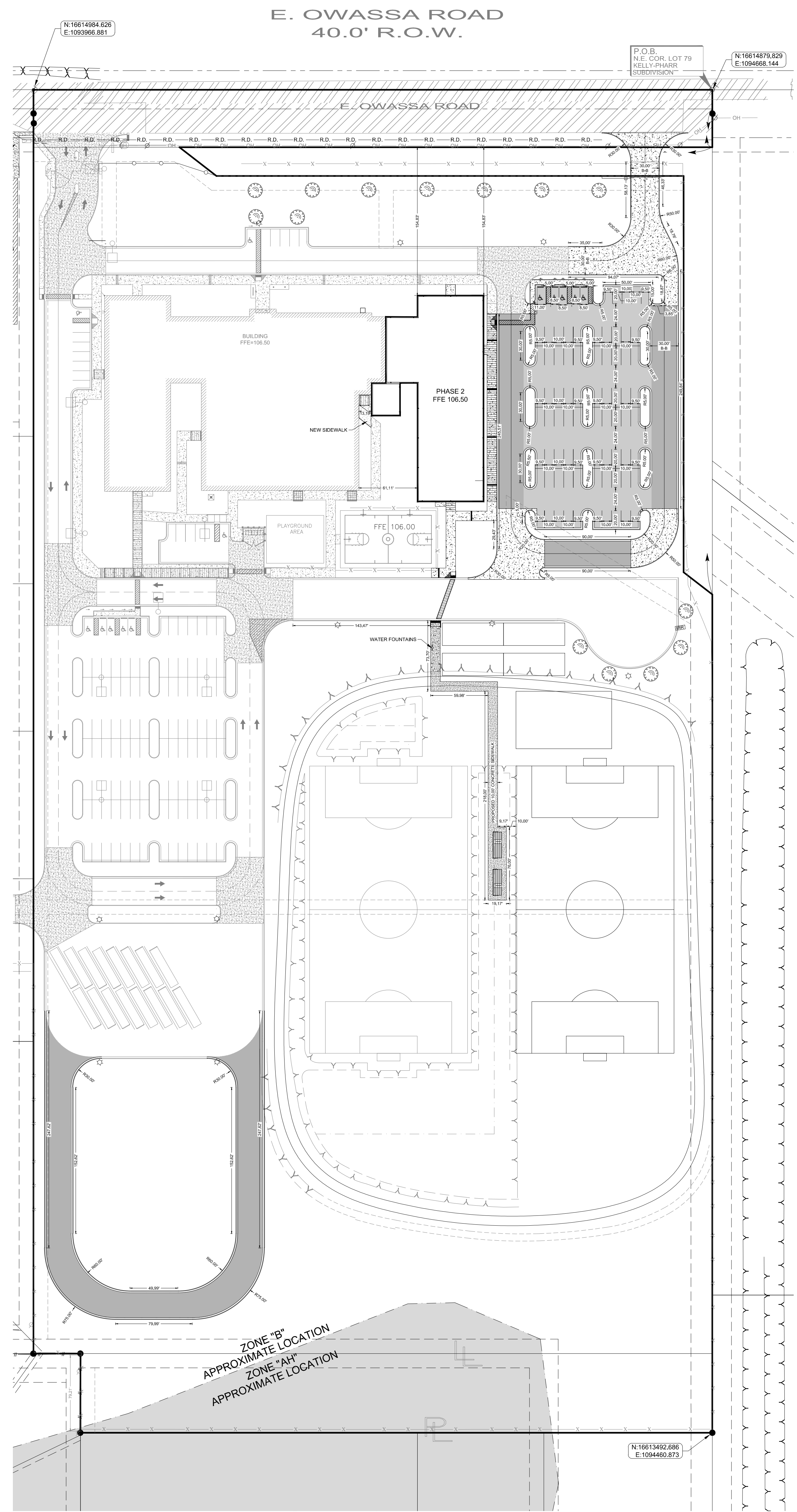
MELDEN & HUNT, INC.  
TEXAS REGISTRATION F-1435

KELLEY A. HELLER-VELA, P.E. 97421

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

**DEMOLITION PLAN**

IDEA-OWASSA  
IDEA COLLEGE PREP PHASE II  
Public Schools



E. OWASSA ROAD  
40.0' R.O.W.

ZONE "B" APPROXIMATE LOCATION  
ZONE "A" APPROXIMATE LOCATION

- SCALE: 1" = 60'
- LEGEND**
- FOUND NO. 4 REBAR
  - FOUND PN NAIL
  - SET NO. 4 REBAR WITH PLASTIC CAP STAMPED MELDEN & HUNT
  - SET NAIL
  - POWER POLE
  - TELEPHONE PEDESTAL
  - || HOG WIRE FENCE
  - OH — OVERHEAD POWER LINE
  - RD — ROAD DITCH
  - W — WOOD FENCE
  - Y — DITCH LINE
  - ▨ EXISTING ASPHALT AREA
  - ▨ EXISTING CONCRETE AREA
  - ▨ PROPOSED CONCRETE AREA
  - ▨ PROPOSED FLEXIBLE PAVEMENT SYSTEM D1-2
  - ▨ PROPOSED ALTERNATE FLEXIBLE PAVEMENT SYSTEM D1-2
  - ▨ FLOOD "ZONE A"
- R.O.W. - RIGHT OF WAY  
N.E. COR. - NORTHEAST CORNER  
P.O.B. - POINT OF BEGINNING  
L.L. - LOT LINE  
P.L. - PROPERTY LINE

Job No. 18183.04

BY: MELDEN & HUNT, INC.  
DATE: \_\_\_\_\_

REVISION: \_\_\_\_\_

ENG. TECH. S.A.  
PROJECT ENG. & ARCH.  
PROJECT NO. 188, PG. 25-30  
1. RELEASE DATE: 02/11/19  
2. RELEASE DATE:  
3. RELEASE DATE:  
SCALE: AS NOTED

MELDEN & HUNT, INC.  
CONSULTANTS ENGINEERS & SURVEYORS  
115 W. WASHINGTON - EDINBURG, TEXAS 78541  
P.O. BOX 1001 - WYOMING, TEXAS 79783  
ESTABLISHED 1947 - www.meldenandhunt.com

**THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY**  
KELLEY A. HELLER-VELA, P.E. 97421  
*Kelley Heller-Vela*

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW.

STATE OF TEXAS  
KELLEY A. HELLER-VELA  
LICENSED PROFESSIONAL ENGINEER  
1942

1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

GMS ARCHITECTS

NO. REVISIONS BY

**DIMENSIONAL CONTROL SITE PLAN**

**IDEA-OWASSA  
IDEA COLLEGE PREP PHASE II**  
Public Schools

© Copyright 2019 Gomez Mendez Saez Inc. Architects-Planners Interior Designers  
Date: June 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: J. Alvarado  
Job No.: IDEA PHASE II  
Sheet: SHEET C4 OF 11

File Name: 18183.04



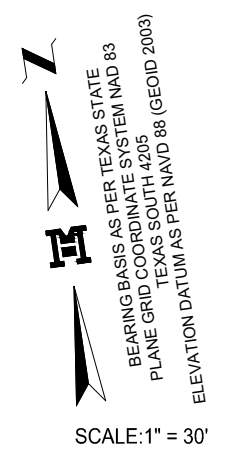
1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

# IDEA-OWASSA COLLEGE PREP PHASE II

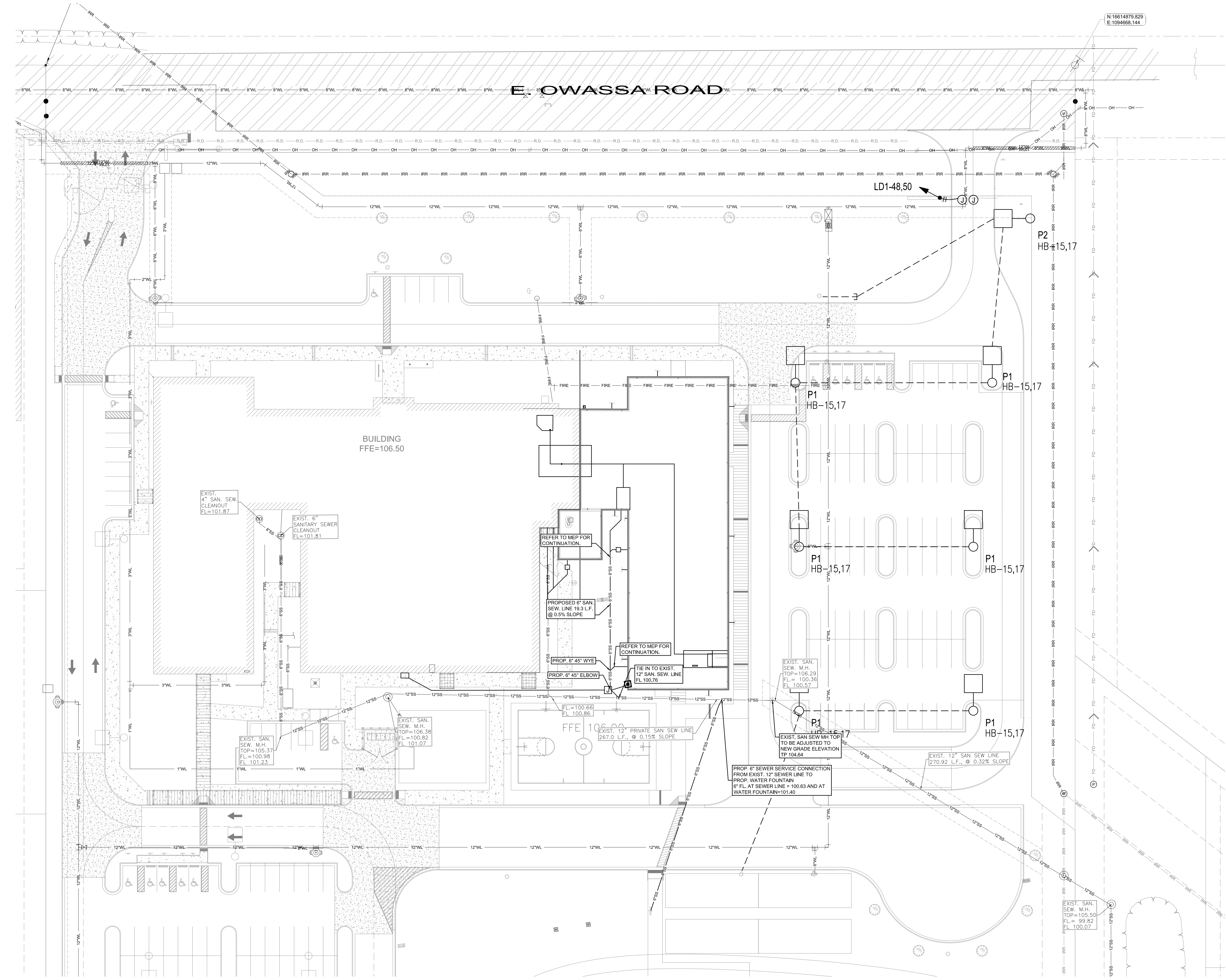


© Copyright 2019  
Gomez Mendez Saez Inc.  
Architects-Planners  
Interior Designers  
Date: June 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: J. Alvarado  
Job No: IDEA PHASE II  
Sheet:

- LEGEND**
- FOUND No.4 REBAR
  - FOUND PK NAIL
  - SET No.4 REBAR WITH PLASTIC CAP STAMPED MELDEN & HUNT
  - SET NAIL
  - POWER POLE
  - LIGHT POLE
  - TELEPHONE PEDESTAL
  - FIRE HYDRANT
  - WATER VALVE MARKER
  - SANITARY SEWER MANHOLE
  - IRRIGATION STAND PIPE (SIZE AS NOTED)
  - HOG WIRE FENCE
  - WOOD FENCE
  - SS SS SANITARY SEWER LINE
  - W W WATER LINE
  - OH OH OVERHEAD POWER LINE
  - RD RD ROAD DITCH
  - EXISTING ASPHALT AREA
  - EXISTING CONCRETE AREA



\* FIRELINE TO BE SIZED AND INSTALLED BY LICENSED FIRE SPRINKLER DESIGNER.  
\* CLEANOUTS OR MANHOLES REQUIRED AT ALL BENDS IN SANITARY SEWER LINES.  
\* SEWER LINE NEEDS TO BE PVC SDR 26, PER CITY OF PHARR STANDARDS.

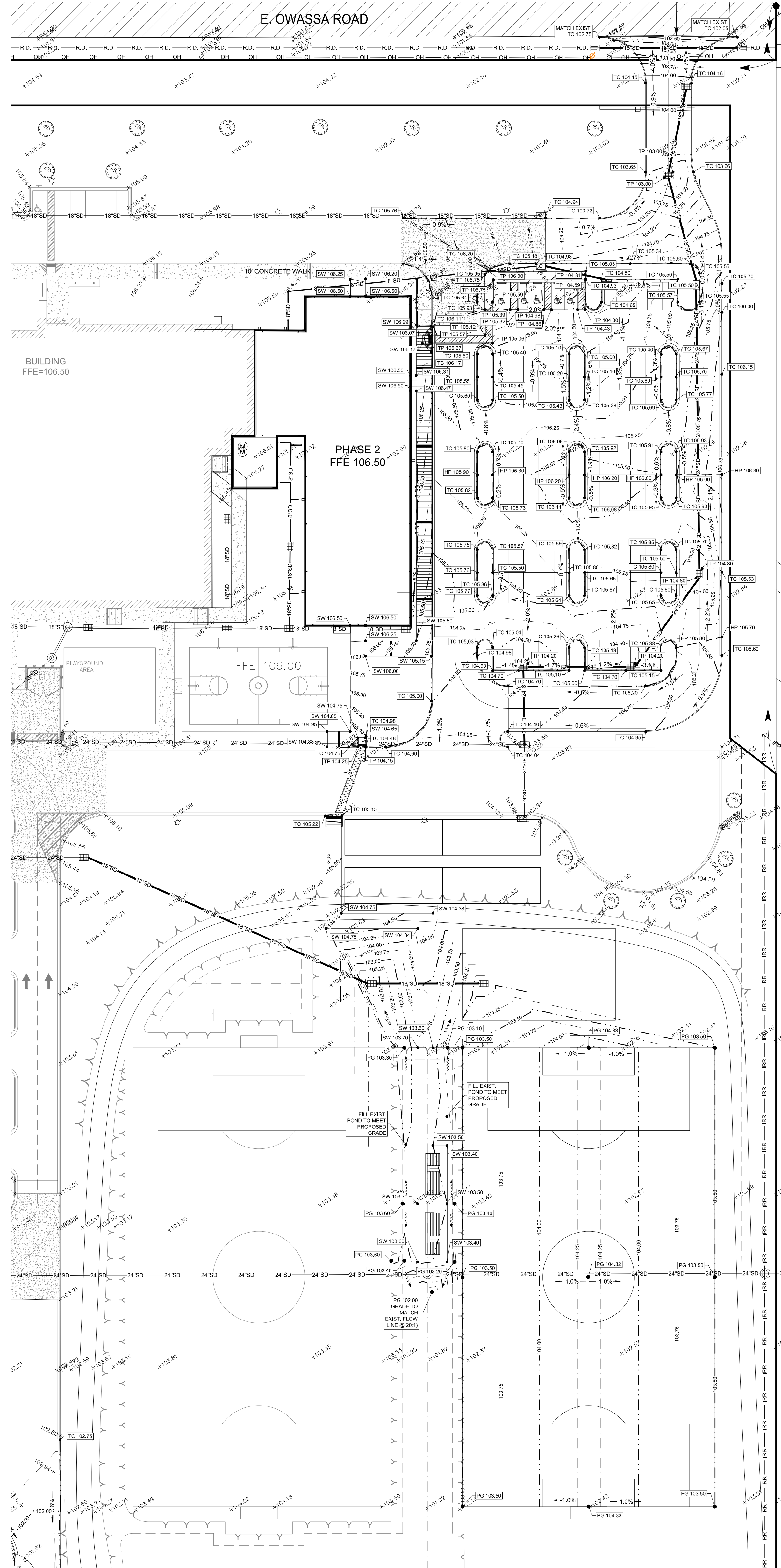


ENG. TECH. S.A.  
PROJECT ENG. K.A.H.V.  
PROJECT: 1066, PG. 25-30  
1. RELEASE DATE: 02/11/19  
2. RELEASE DATE:  
3. RELEASE DATE:  
SCALE: AS NOTED

MELDEN & HUNT, INC.  
TEXAS REGISTRATION F-1435

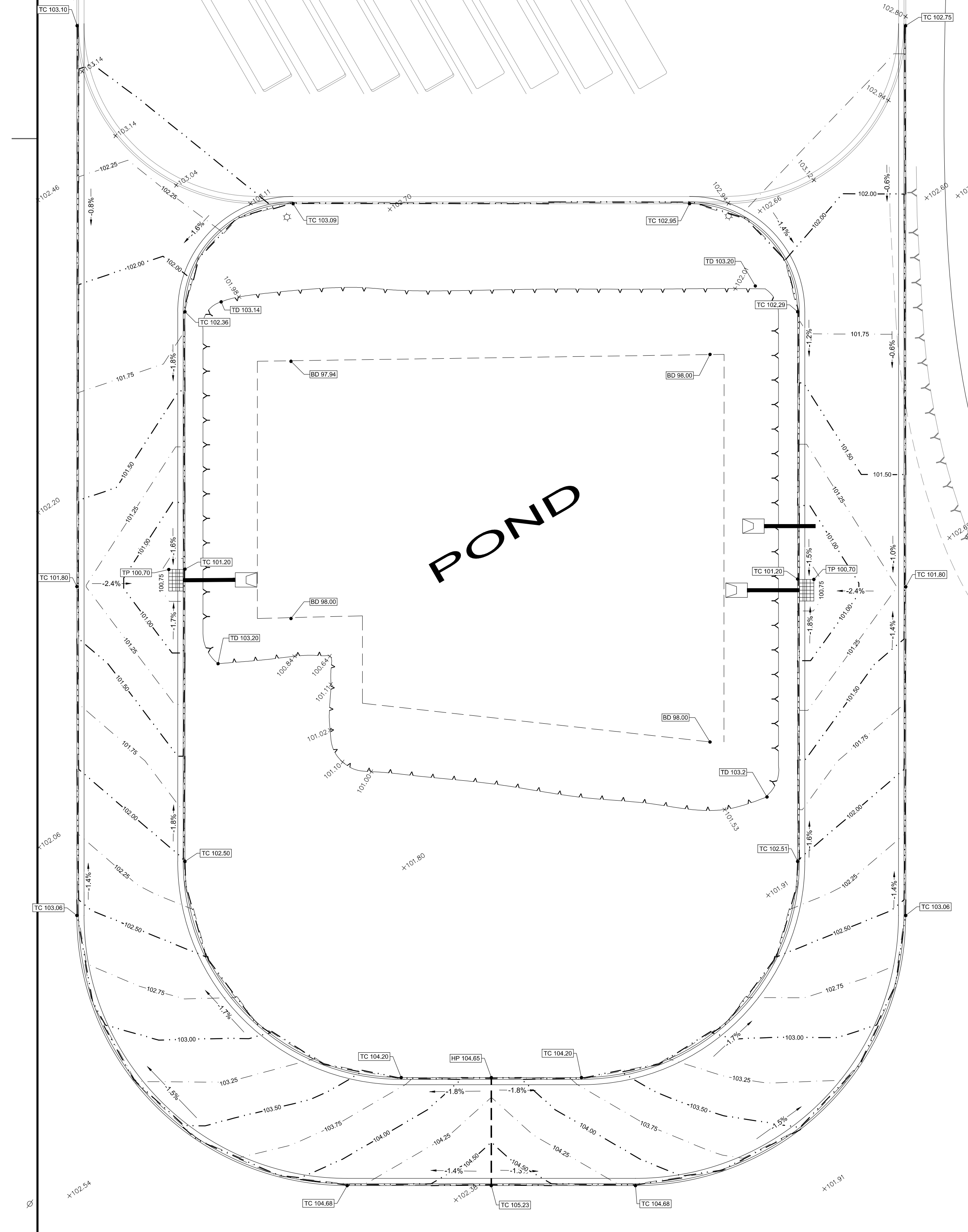
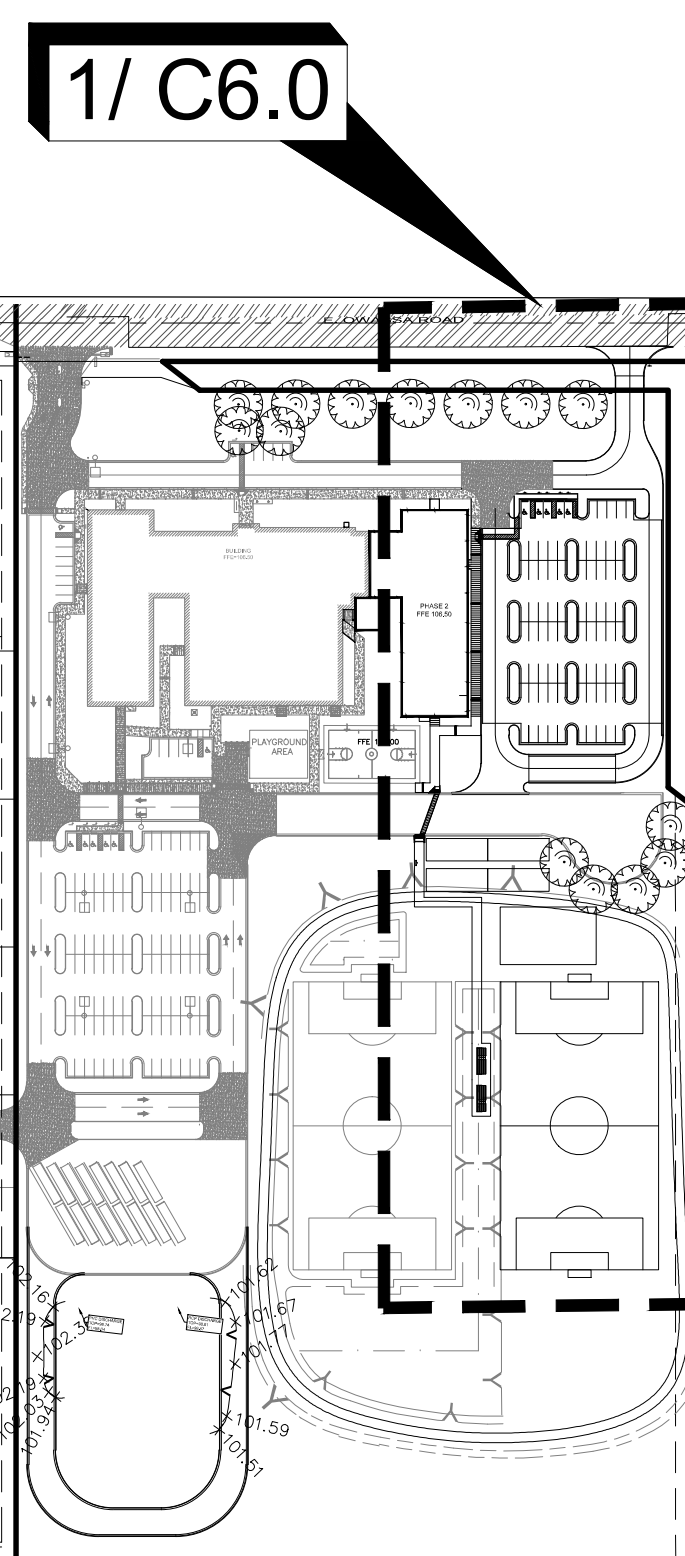
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY  
KELLEY A. HELLER-VELA, P.E. 97421

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW



EAST GRADING PLAN - PHASE II

SCALE: 1" = 20'

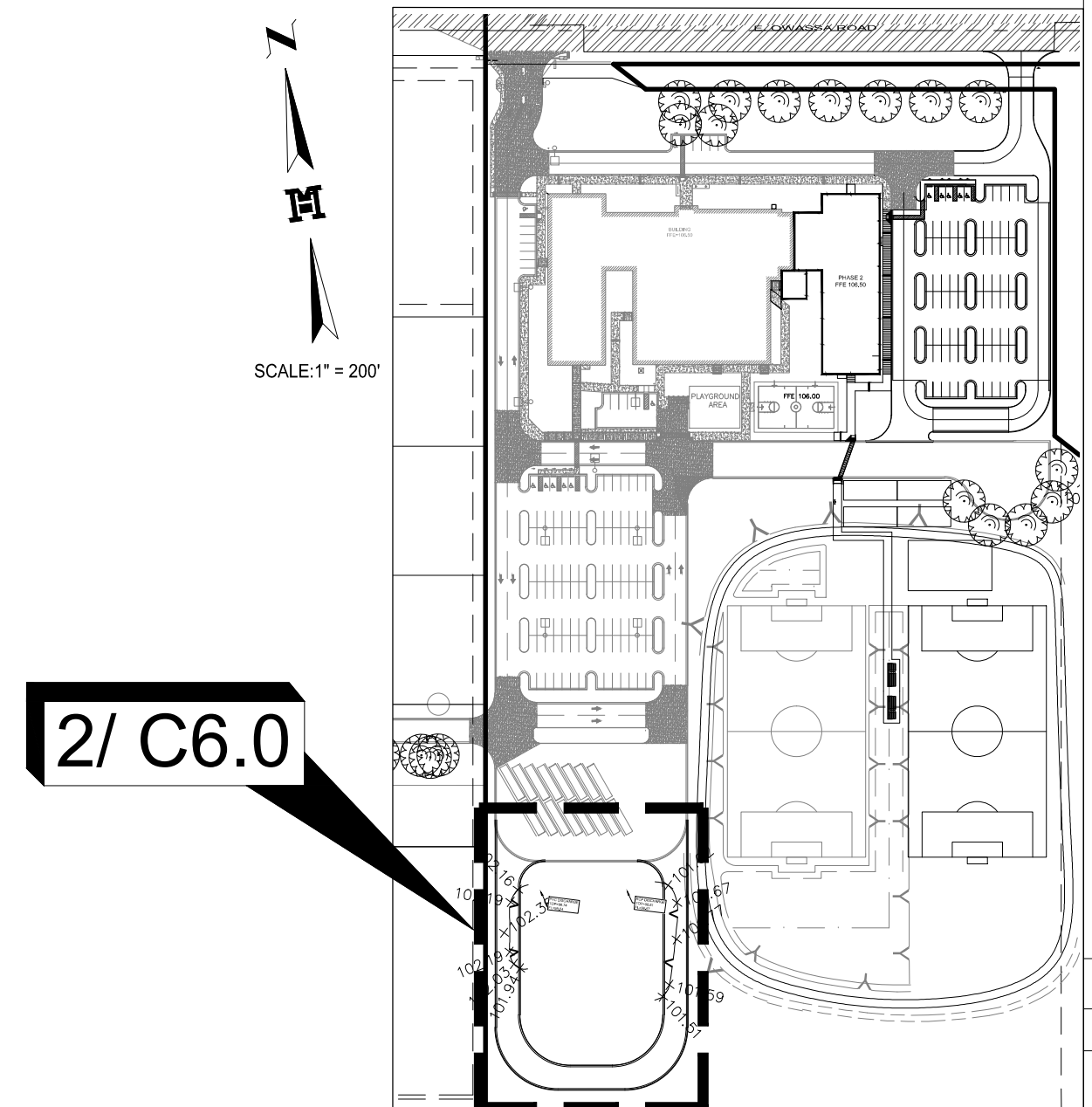


SOUTH DRIVE GRADING PLAN - PHASE II

SCALE: 1" = 20'

**LEGEND**

	PROP. TY-"A" INLET
	PROP. TY-"CC" INLET
	PROP. DISCHARGE STRUCTURE
	PROP. GROUND
	PROP. TOP OF CURB ELEVATION
	PROP. TOP OF PAVEMENT ELEVATION
	PROP. SIDEWALK ELEVATION
	PROP. HIGH POINT ELEVATION
	PROP. TOP OF DITCH ELEVATION
	PROP. BOTTOM OF DITCH ELEVATION



2/ C6.0

SCALE: 1" = 20'

JOB No. **18183.04**

BY **MELDEN & HUNT, INC.**

DATE: \_\_\_\_\_

REVISION: \_\_\_\_\_

PROJECT: IDEA COLLEGE PREP PHASE II

1. RELEASE DATE: 02/11/19

2. RELEASE DATE: \_\_\_\_\_

3. RELEASE DATE: \_\_\_\_\_

SCALE: AS NOTED

MELDEN & HUNT, INC.  
TEXAS REGISTRATION F-1435

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY **KELLEY A. HELLER-VELA, P.E. 97421**

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

No.	REVISIONS	BY

GMS ARCHITECTS

1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

**IDEA COLLEGE PREP PHASE II**

Public Schools

**GRADING PLAN**

© Copyright 2019 Gomez Mendez Saenz Inc. Architects-Planners Interior Designers

Date: June 13, 2019

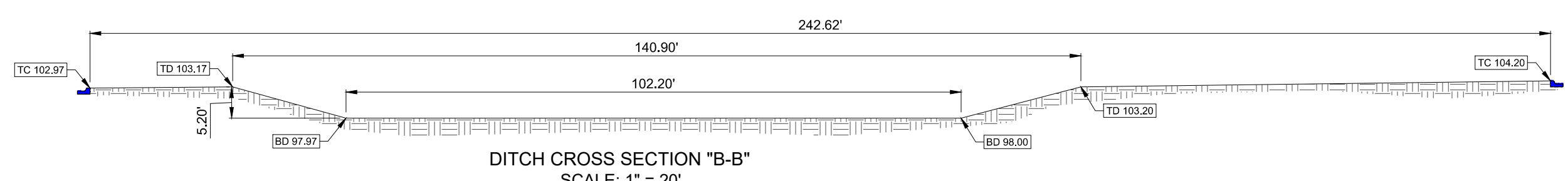
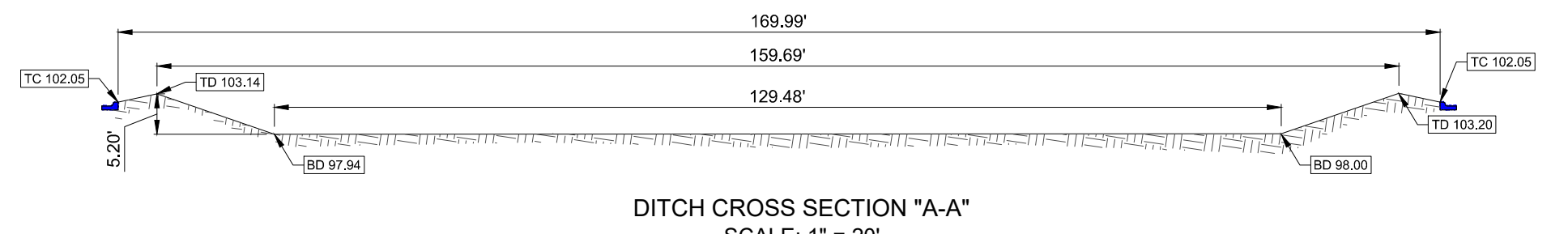
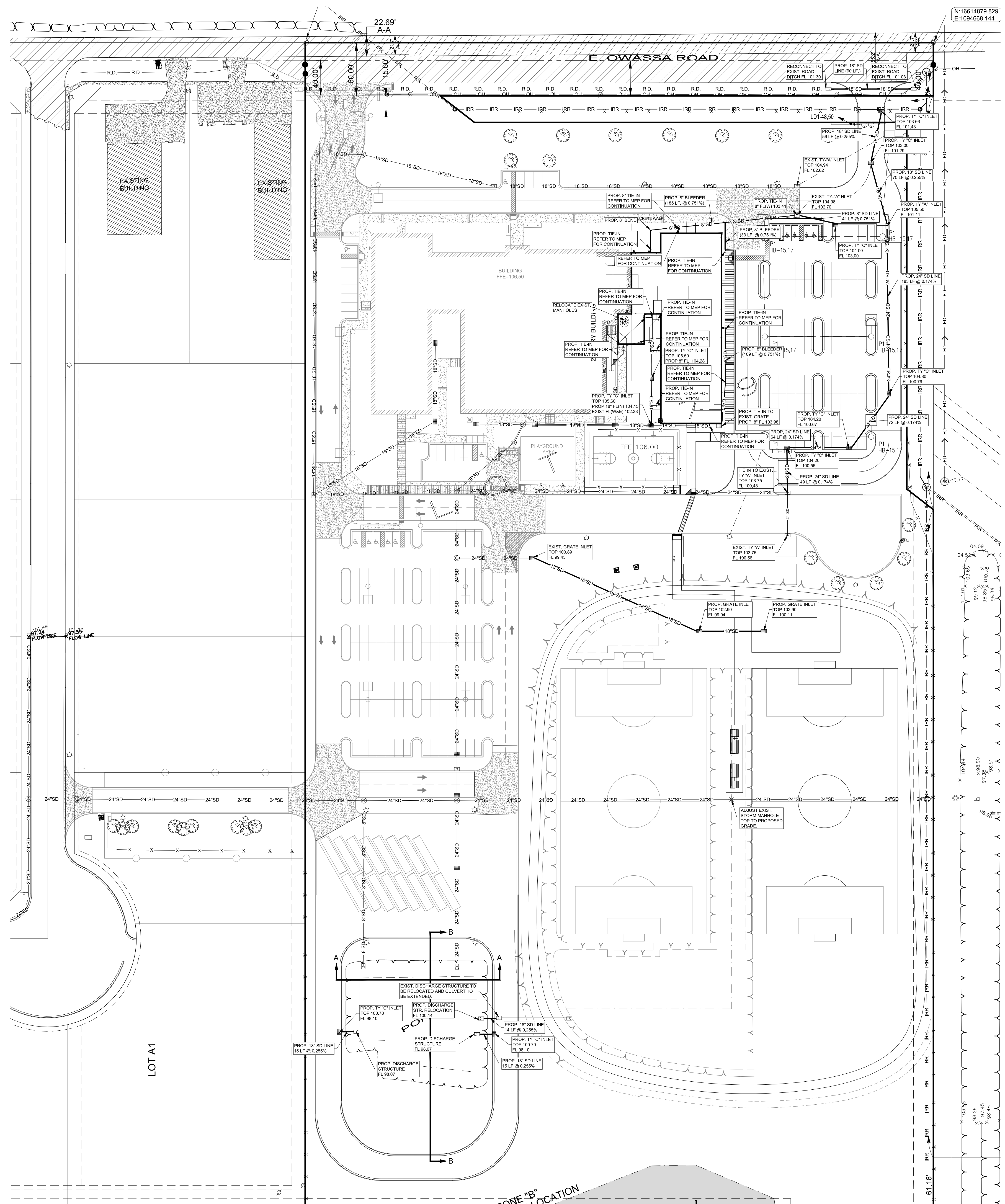
Scale: As Noted

Project Architect: David Monreal, AIA

Drawn By: J. Alvarado

Job No: IDEA PHASE II

Sheet: SHEET C6 OF 11

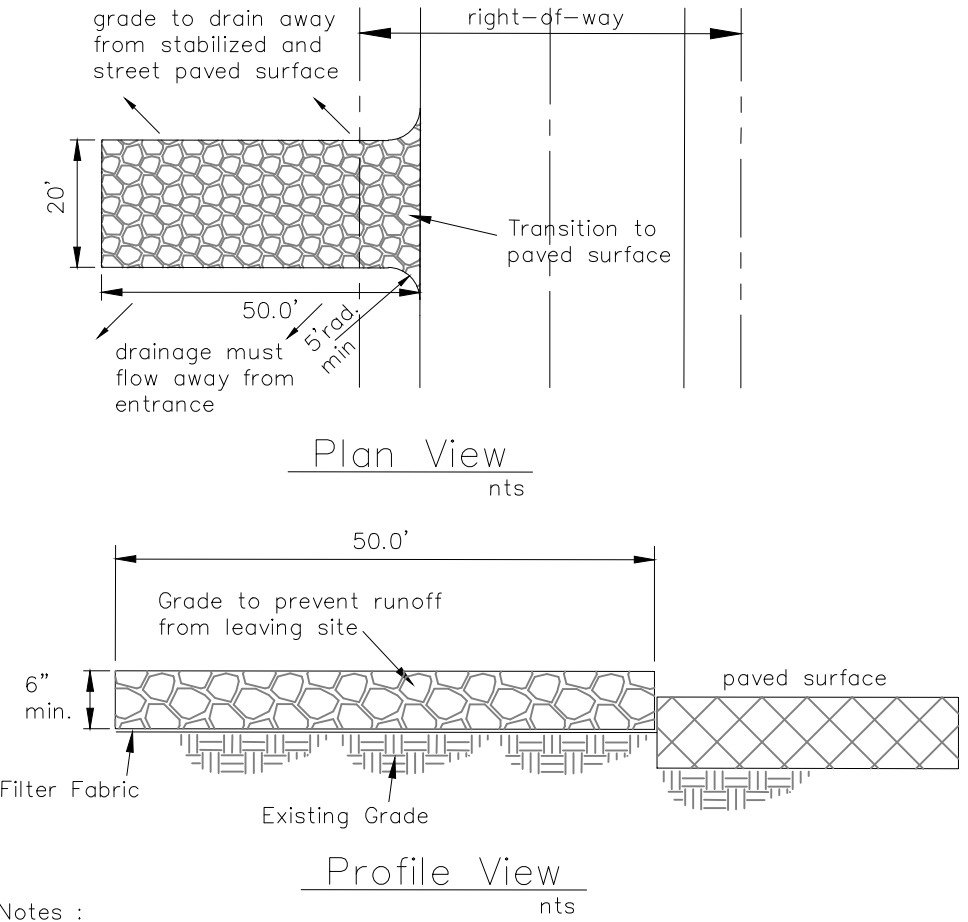
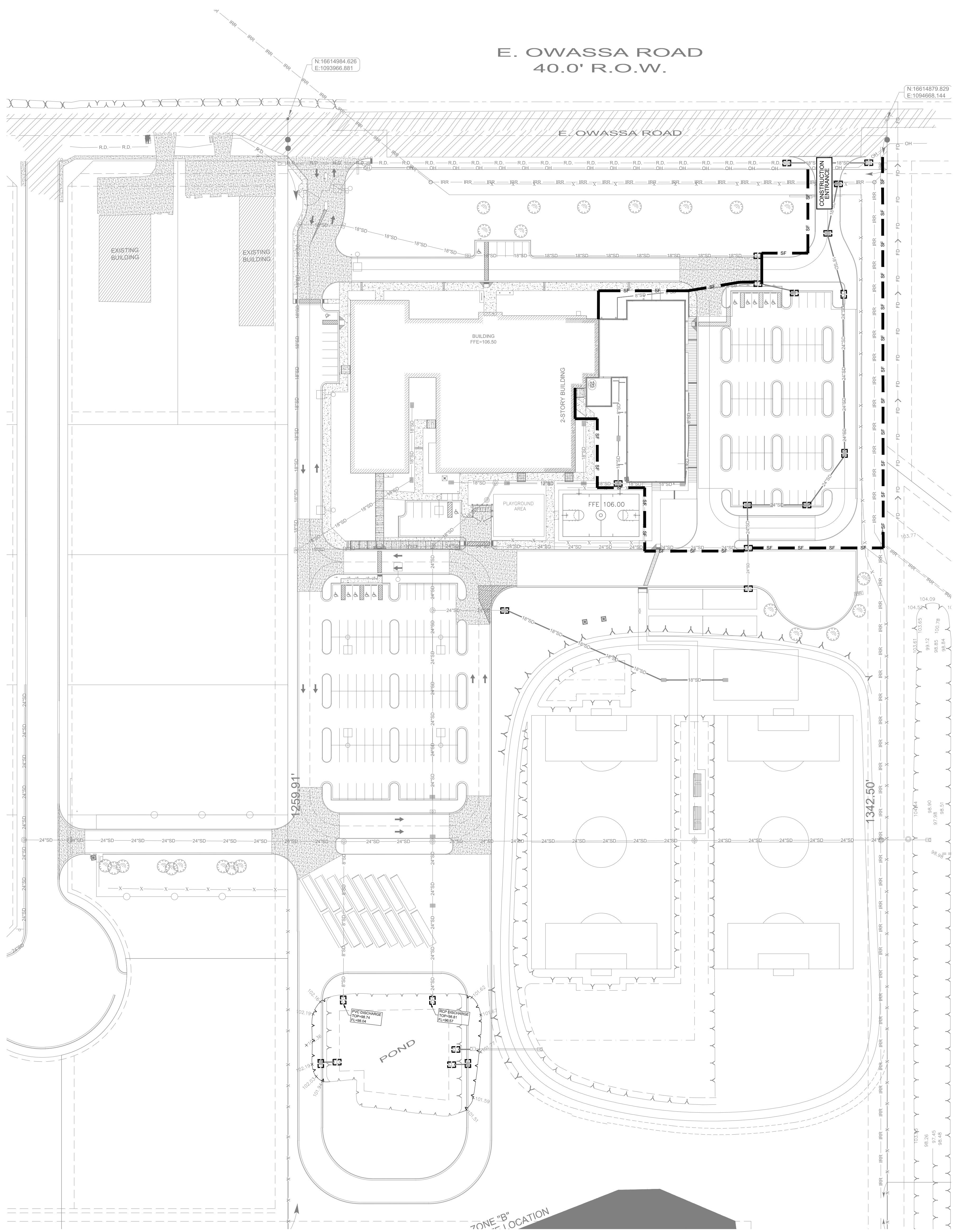


- SCALE: 1" = 60'
- LEGEND**
- FOUND NO. 4 REBAR
  - FOUND PK NAIL
  - SET NO. 4 REBAR WITH PLASTIC CAP STAMPED MELDEN & HUNT
  - SET NAIL
  - POWER POLE
  - TELEPHONE PEDESTAL
  - HOOD WIRE FENCE
  - OVERHEAD POWER LINE
  - ROAD DITCH
  - WOOD FENCE
  - DITCH LINE
  - EXISTING ASPHALT AREA
  - EXISTING CONCRETE AREA
  - FLOOD "ZONE A"

- LEGEND**
- TY-"A" INLET
  - TY-"CC" INLET
  - DISCHARGE STRUCTURE

JOB No. 18183.04		No. REVISIONS BY	
DATE	BY		
MELDEN & HUNT, INC.		CONSULTANTS ENGINEERS SURVEYORS	
1415 W. UNIVERSITY BLVD., SUITE 100, DALLAS, TEXAS 75243		PH: (214) 343-1088 FAX: (214) 343-7969	
ESTABLISHED 1947 - www.meldenandhunt.com		www.meldenandhunt.com	
ENG. TECH. S.A.	PROJECT ENG. & ARCH.	DATE	AS NOTED
	PROJECT: 1006, PG. 25-30	1. RELEASE DATE: 02/11/19	
		2. RELEASE DATE:	
		3. RELEASE DATE:	
		SCALE:	
MELDEN & HUNT, INC. TEXAS REGISTRATION F-1435			
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY KELLEY A. HELLER-VELA, P.E. 97421			
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW			
<b>IDEA COLLEGE PREP PHASE II</b> Public Schools			
<b>DRAINAGE PLAN</b>			
© Copyright 2019 Gomez Mendez Saenz Inc. Architects-Planners Interior Designers		Date: June 13, 2019	
Project Architect: As Noted		Drawn By: J. Alvarado	
Sheet: IDEA PHASE II		File Name: 18183.04	
SHEET C7 OF 11			





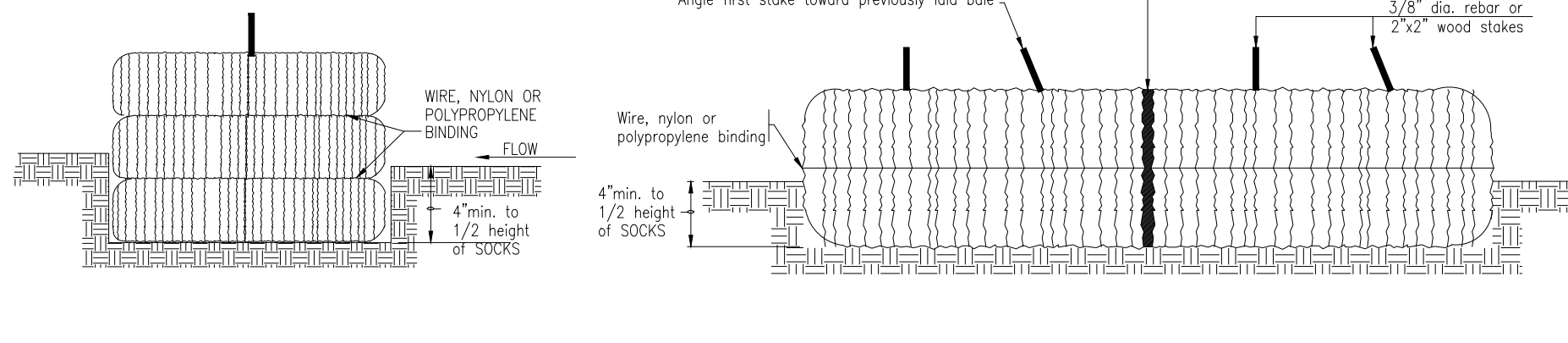
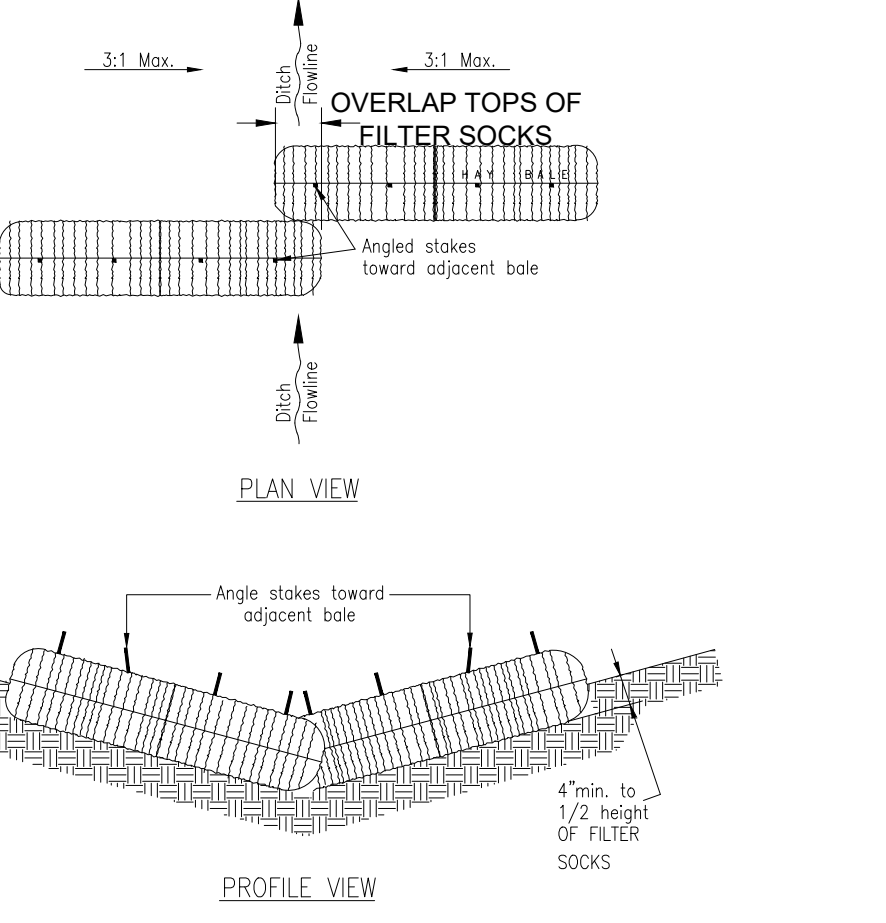
**STABILIZED CONSTRUCTION ENTRANCE**  
N.T.S.

Notes:

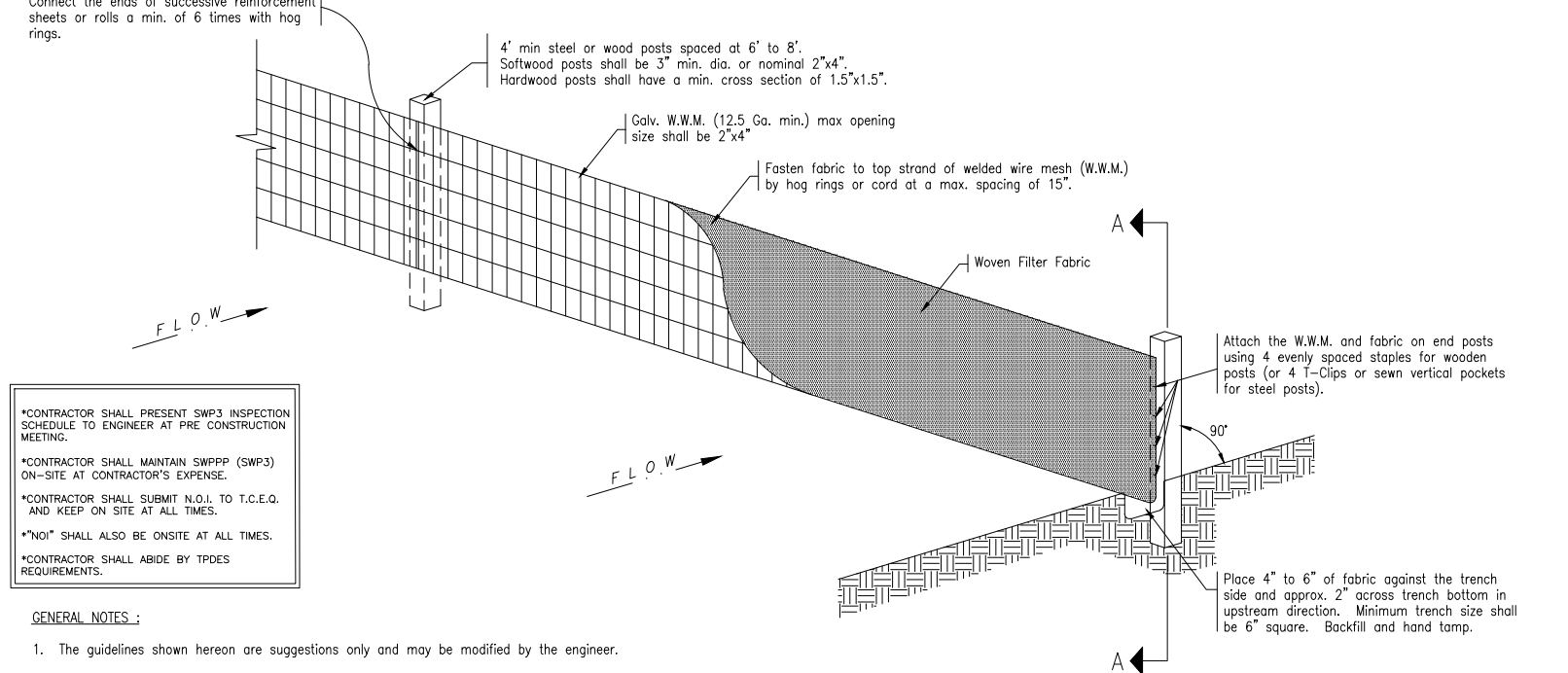
- Construction entrance(s) shall be located at the time of pre-construction meeting.
- Stone shall be 4 to 8 inch diameter crushed rock or acceptable crushed Portland Cement Concrete.
- When necessary, vehicles shall be cleaned to remove sediment prior to entrance onto a public roadway. When washing is required, it shall be done on an area stabilized with crushed stone with drainage flowing away from both the street and the stabilized entrance. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved methods.
- The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto paved surfaces. This may require periodic top dressing with additional stone as conditions demand. All sediment spilled, dropped, washed or tracked onto paved surfaces, must be removed immediately.
- The entrance must be properly graded or incorporate a drainage swale to prevent runoff from leaving the construction site.

**GENERAL NOTES:**

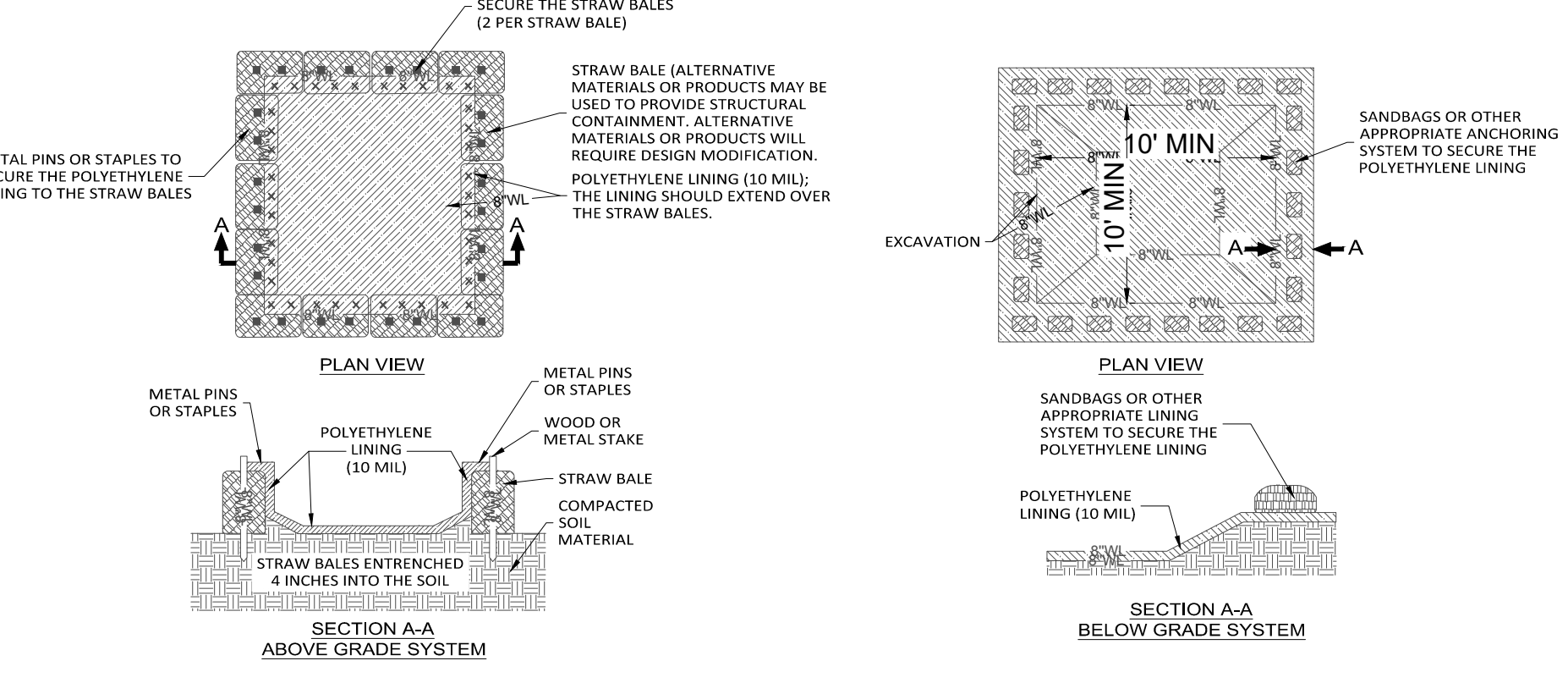
- Filter socks shall be a minimum of 8" diameter.
- Filter shall be bound by either wire mesh or polypropylene string, the filter socks shall be composed entirely of vegetable matter.
- Filter socks shall be embedded in the soil a minimum of 4" and where possible height of the hay sock.
- Filter socks shall be placed in a row with ends tightly abutting the adjacent socks, the socks shall be placed with bindings parallel to the ground.
- Filter socks shall be securely anchored in place with 3/8" dia. rebar or 2x2" wood stakes, driven through the filter socks. The first stake shall be angled towards the previously laid sock to force the hay socks together.
- The guidelines shown herein are suggestion only and may be modified by the engineer.
- No hay bales are allowed.



**BALED HAY FOR EROSION CONTROL**  
N.T.S.



**TEMPORARY SEDIMENTARY CONTROL FENCE**  
N.T.S.



**CONCRETE WASHOUT**  
N.T.S.

SCALE: 1" = 60'

LEGEND	
	TY-'A' INLET
	TY-'CC' INLET
	DISCHARGE STRUCTURE
	BALE HAY
	SILT FENCE

**Job No. 18183.04**

BY: **MELDEN & HUNT, INC.**  
DATE: \_\_\_\_\_  
PROJECT: **IDEA-OWASSA COLLEGE PREP PHASE II**

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ENG. TECH. S.A. \_\_\_\_\_  
PROJECT ENG. & ARCH. \_\_\_\_\_  
PROJECT NO. 1086 PG. 28-30  
1. RELEASE DATE: 02/17/19  
2. RELEASE DATE: \_\_\_\_\_  
3. RELEASE DATE: \_\_\_\_\_  
SCALE: AS NOTED

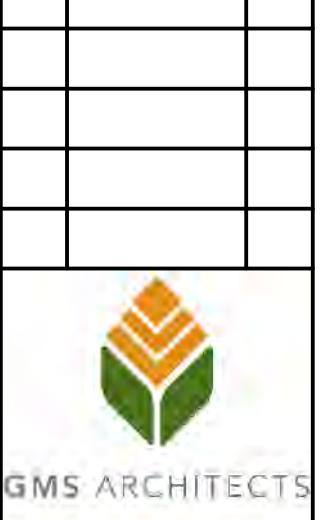
MELDEN & HUNT, INC.  
TEXAS REGISTRATION F-1435  
KELLY A. HELLER-VEILA, P.E. 97421  
KELLY A. HELLER-VEILA, P.E. 97421

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

**IDEA-OWASSA COLLEGE PREP PHASE II**  
Public Schools

**EROSION CONTROL PLAN AND DETAILS**

© Copyright 2019 Gomez-Mendez-Saenz Inc. Architects-Planners Interior Designers  
Date: June 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: J. Alvarado  
Job No.: IDEA PHASE II  
Sheet: SHEET C8 OF 11

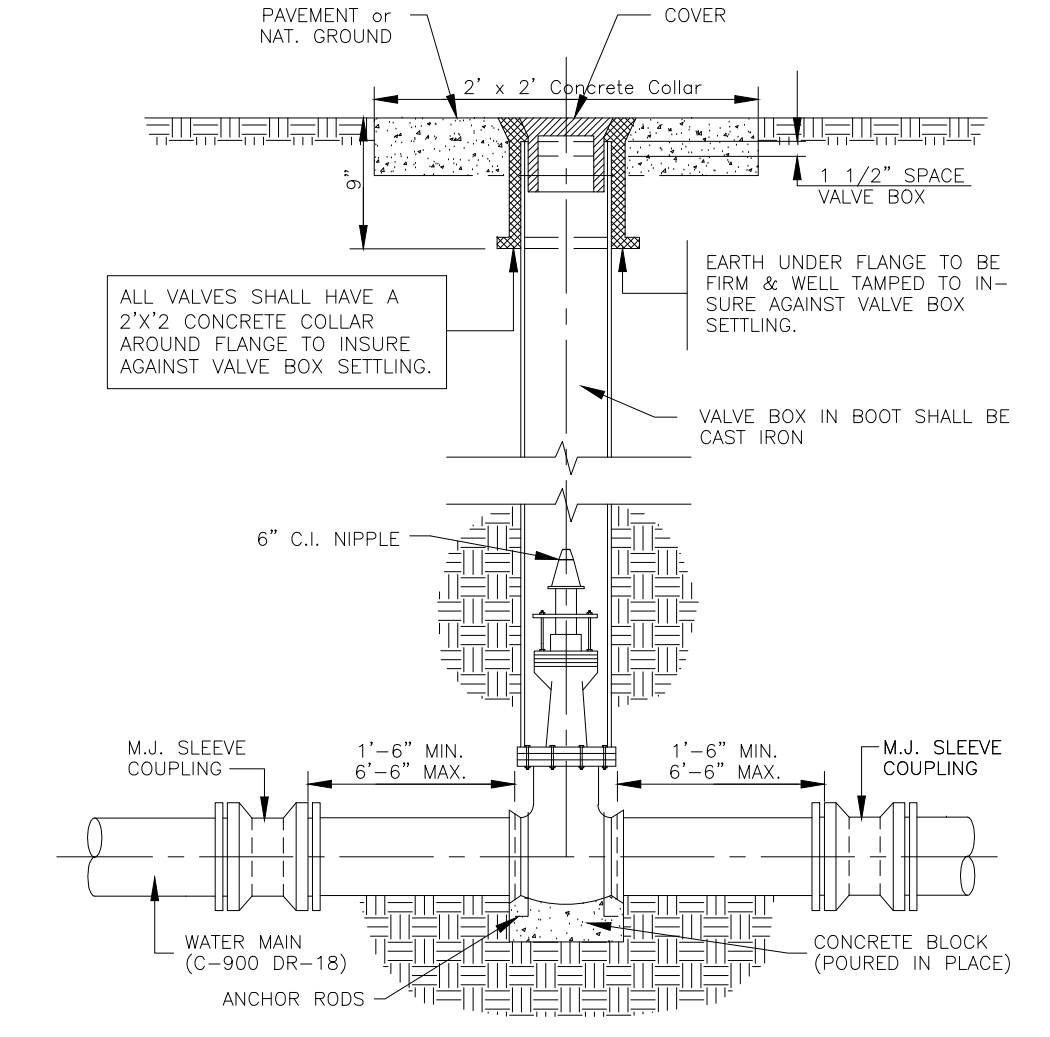


1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

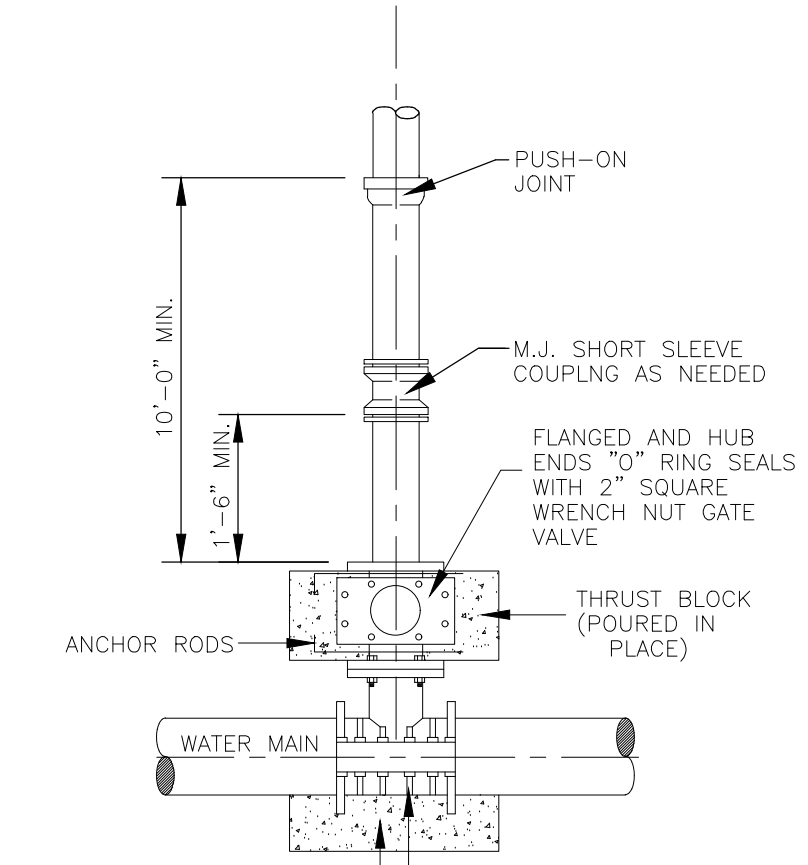
IDEA-OWASSA COLLEGE PREP PHASE II



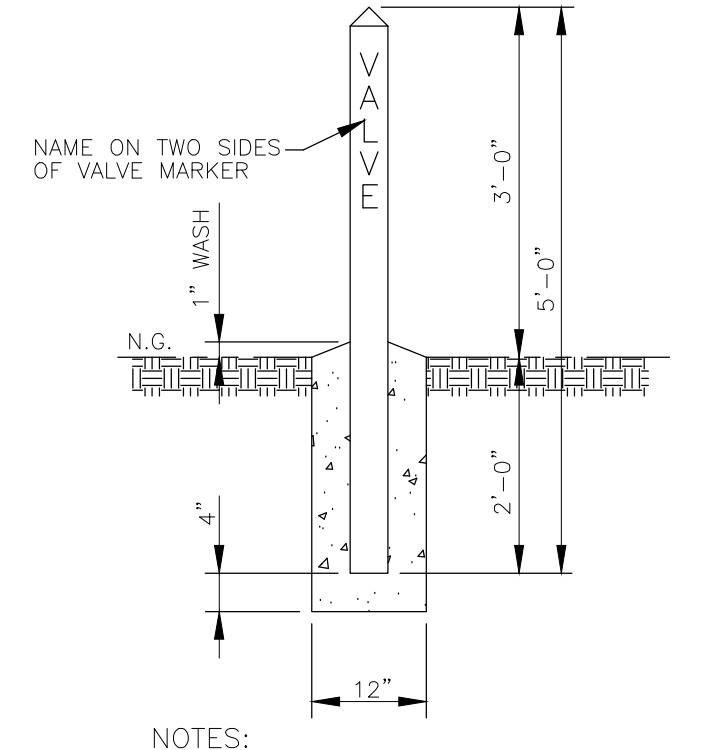
© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers  
Date: June 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: J. Alvarado  
Job No: IDEA PHASE II  
Sheet: C9 OF 11



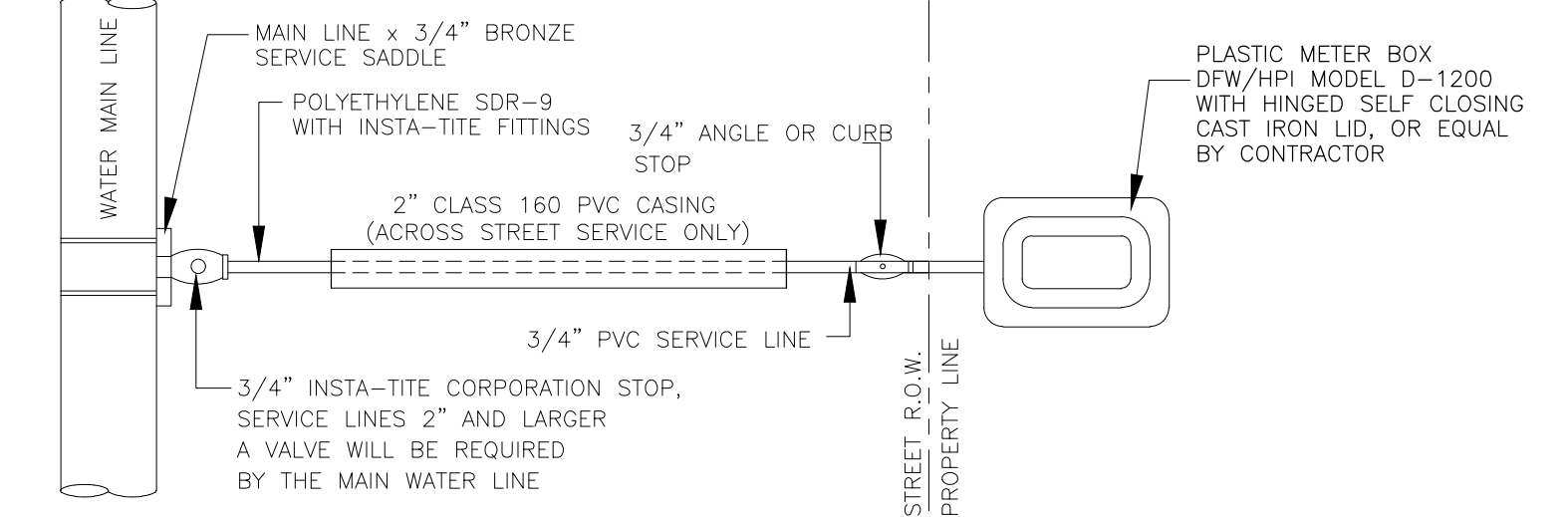
TYPICAL VALVE and VALVE BOX INSTALLATION  
N.T.S.



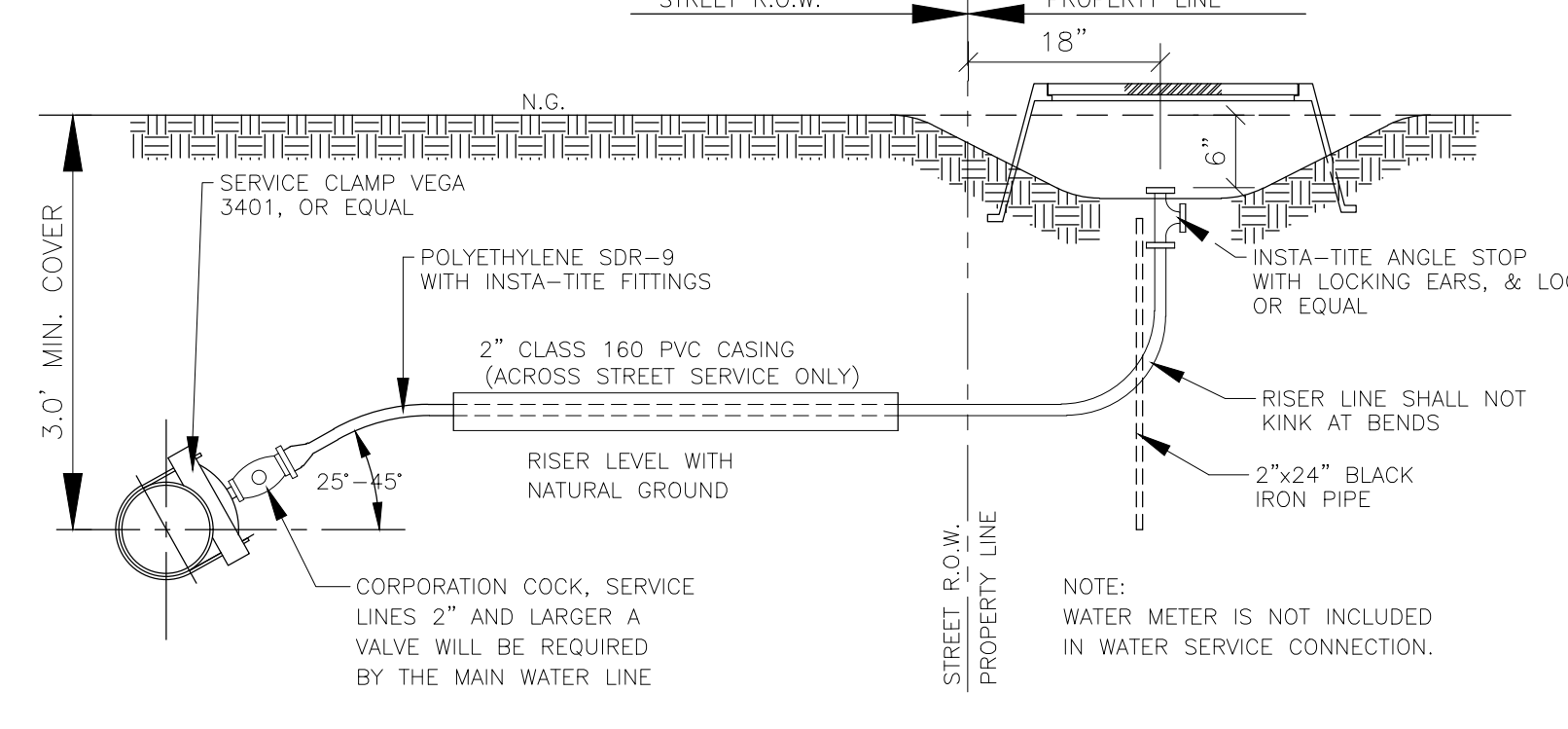
TAPPING SLEEVE and VALVE INSTALLATION  
N.T.S.



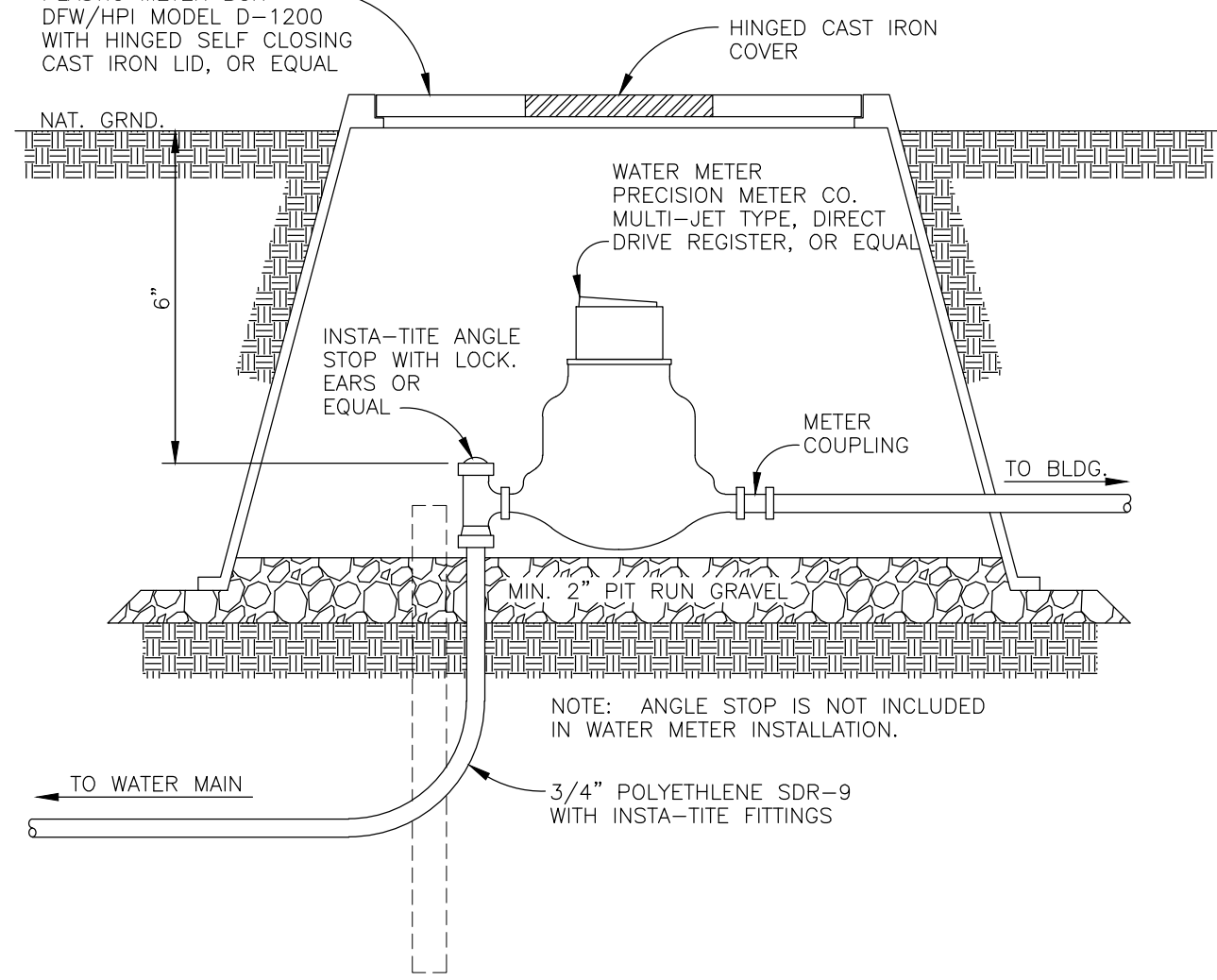
VALVE MARKER DETAIL  
N.T.S.



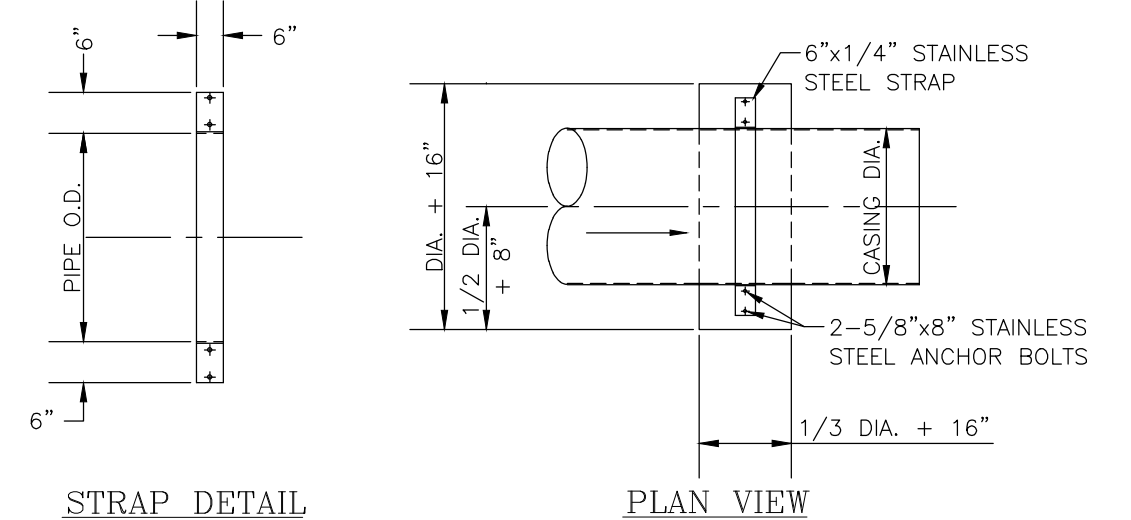
SINGLE WATER SERVICE CONNECTION  
N.T.S.



TYPICAL WATER SERVICE CONNECTION ELEVATION  
N.T.S.

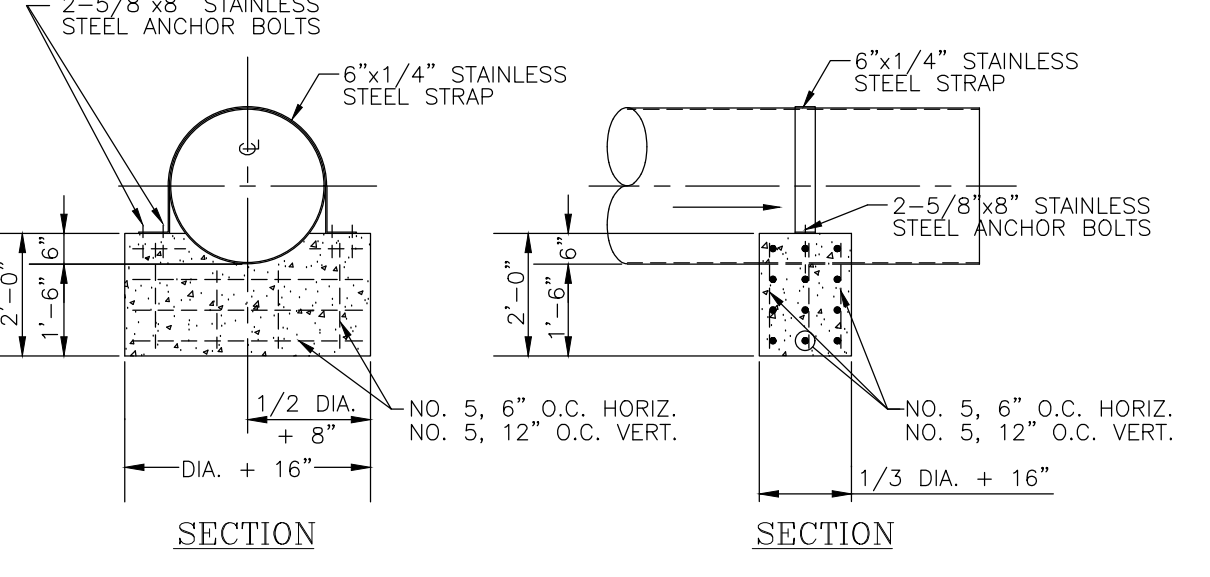


TYPICAL WATER METER INSTALLATION  
N.T.S.

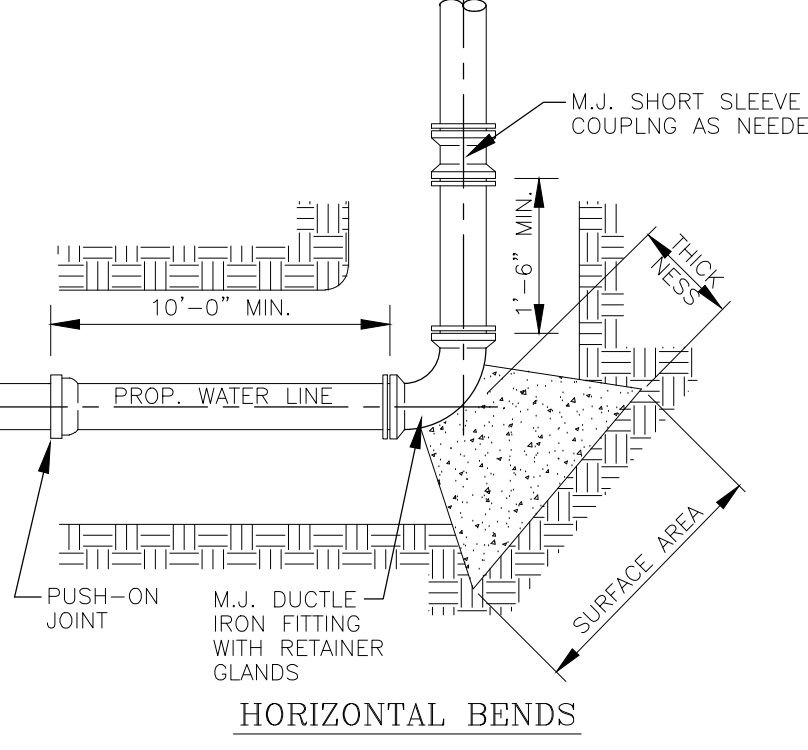


STRAP DETAIL

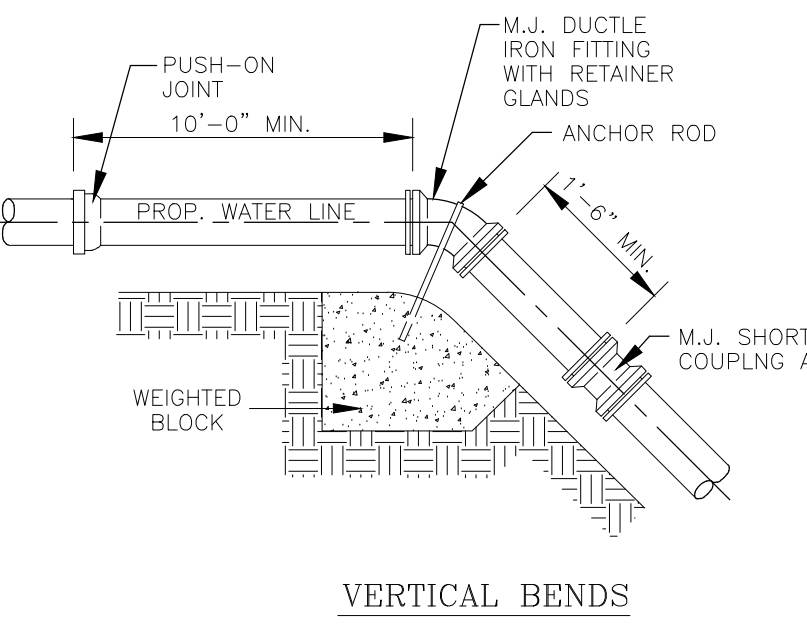
PLAN VIEW



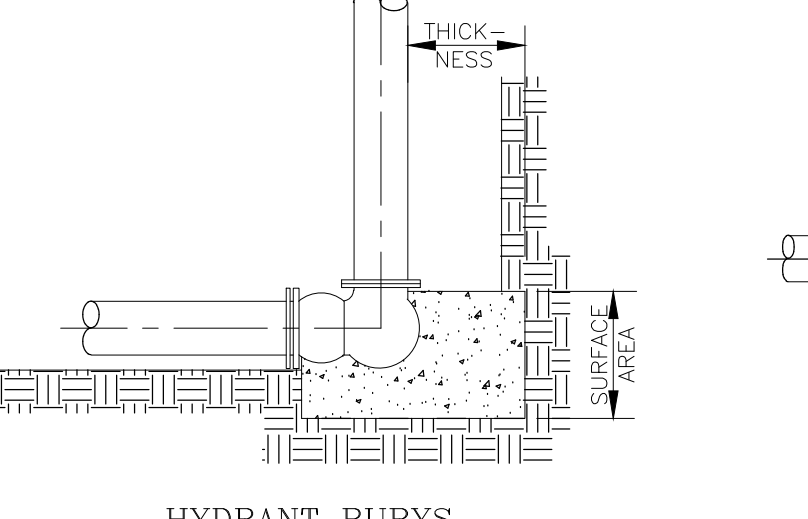
PROPOSED MUD SILLS DETAILS  
N.T.S.



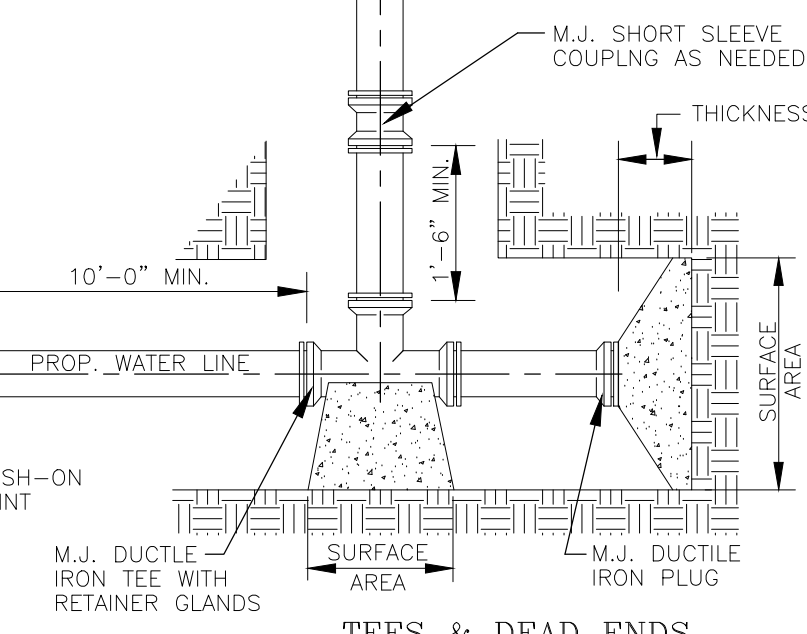
HORIZONTAL BENDS



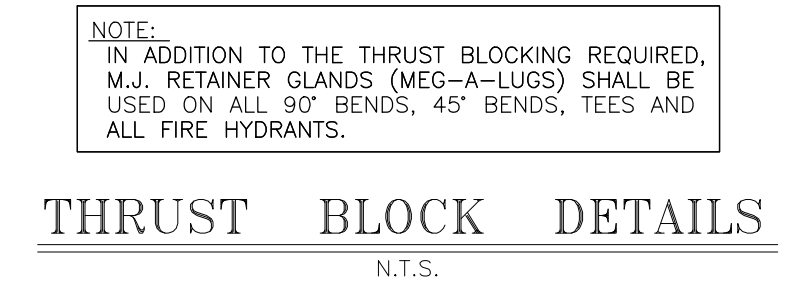
VERTICAL BENDS



HYDRANT BURYS



TEES & DEAD ENDS

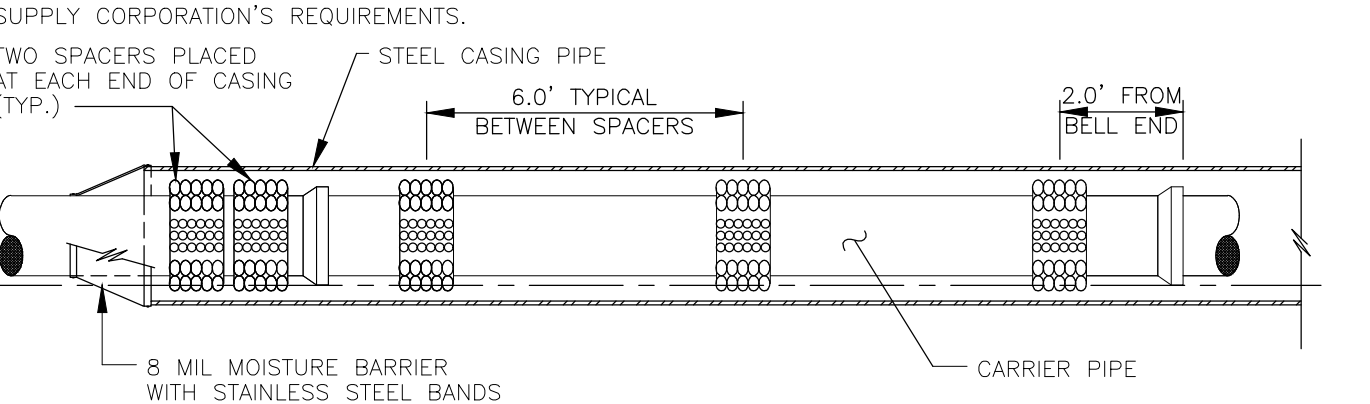


THRUST BLOCK DETAILS  
N.T.S.

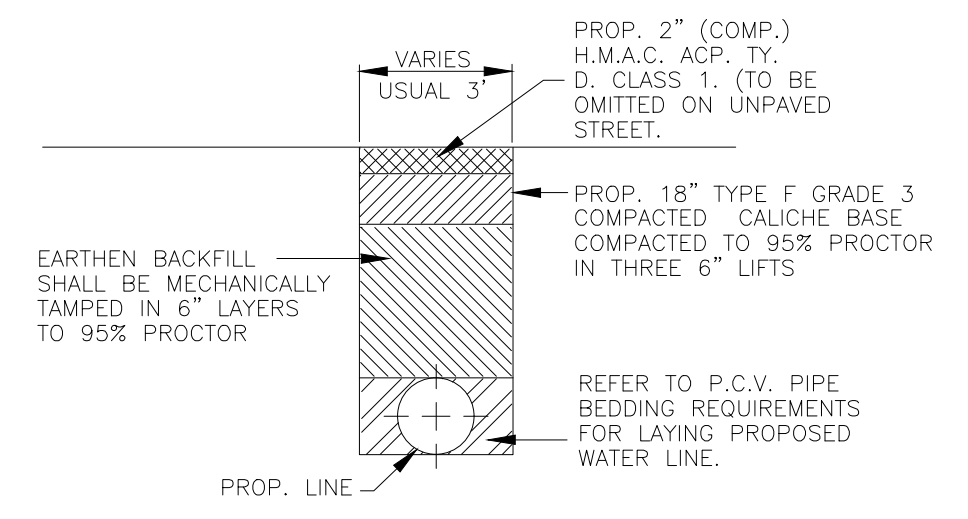
DIAMETER OF PIPE INCHES	HORIZONTAL BEND SURFACE SIZE OF SQ. FT.		THICKNESS INCHES	WEIGHT AT VERTICAL BENDS - lbs.
	22 1/2 BENDS	6 OR LESS		
8	2 1/4 x 21	3 1/8 x 27	8	1,700
10	3 1/8 x 26	4 1/4 x 32	12	3,000
12	4 1/4 x 31	5 1/8 x 37	14	4,500
14	5 1/4 x 36	6 1/2 x 42	18	6,500
16	6 1/4 x 41	7 1/2 x 47	24	9,000
18	7 1/4 x 46	8 1/2 x 52	24	11,500
20	8 1/4 x 51	9 1/2 x 57	24	14,000
22	9 1/4 x 56	10 1/2 x 62	24	16,500
24	10 1/4 x 61	11 1/2 x 67	24	19,000
26	11 1/4 x 66	12 1/2 x 72	24	21,500
28	12 1/4 x 71	13 1/2 x 77	24	24,000
30	13 1/4 x 76	14 1/2 x 82	24	26,500
32	14 1/4 x 81	15 1/2 x 87	24	29,000
34	15 1/4 x 86	16 1/2 x 92	24	31,500
36	16 1/4 x 91	17 1/2 x 97	24	34,000
38	17 1/4 x 96	18 1/2 x 102	24	36,500
40	18 1/4 x 101	19 1/2 x 107	24	39,000
42	19 1/4 x 106	20 1/2 x 112	24	41,500
44	20 1/4 x 111	21 1/2 x 117	24	44,000
46	21 1/4 x 116	22 1/2 x 122	24	46,500
48	22 1/4 x 121	23 1/2 x 127	24	49,000
50	23 1/4 x 126	24 1/2 x 132	24	51,500

- GENERAL NOTES :
- ALL VALVES SHOWN ARE MINIMUM FOR A HYDROSTATIC PRESSURE OF 150 P.S.I. AND A SOIL RESISTANCE OF 2,000 LBS./SQ.FT WITH PIPELINE HAVING A MINIMUM OF 30\"/>
  - THE CONTRACTOR SHALL CONSIDER REDUCTIONS OF THRUST BLOCK SURFACE AREA UPON SUBMITAL OF APPROVED SOIL RESISTANT TEST RESULTS GREATER THAN 2000 LBS./SQ.FT.
  - THE LOCATION OF THRUST BLOCKS DEPENDS UPON THE DIRECTION OF THRUST AND TYPE OF FITTINGS.
  - PRESSURE TEST MUST BE FOR A MINIMUM OF FOUR (4) HOURS AND COMPLY WITH TEXAS INSTRUCTION 1942-A, APPENDIX A.

PIPE CASING SIZE	CARRIER PIPE SIZE
12\"/>	4\"/>
16\"/>	8\"/>
18\"/>	10\"/>
20\"/>	12\"/>
24\"/>	14\"/>
26\"/>	16\"/>
32\"/>	18\"/>
36\"/>	20\"/>
40\"/>	24\"/>



BORING and CASING DETAIL  
N.T.S.



PAVED and UNPAVED STREET BACKFILL DETAIL  
N.T.S.

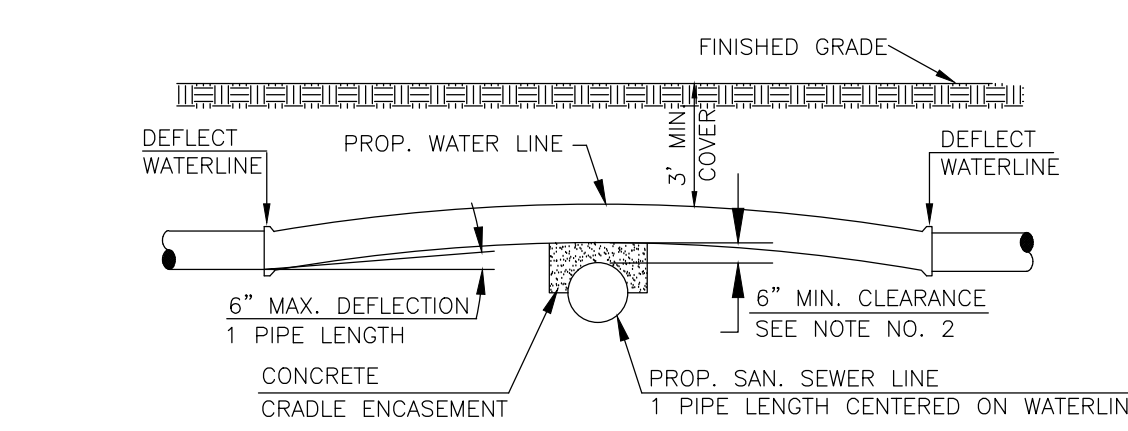


ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

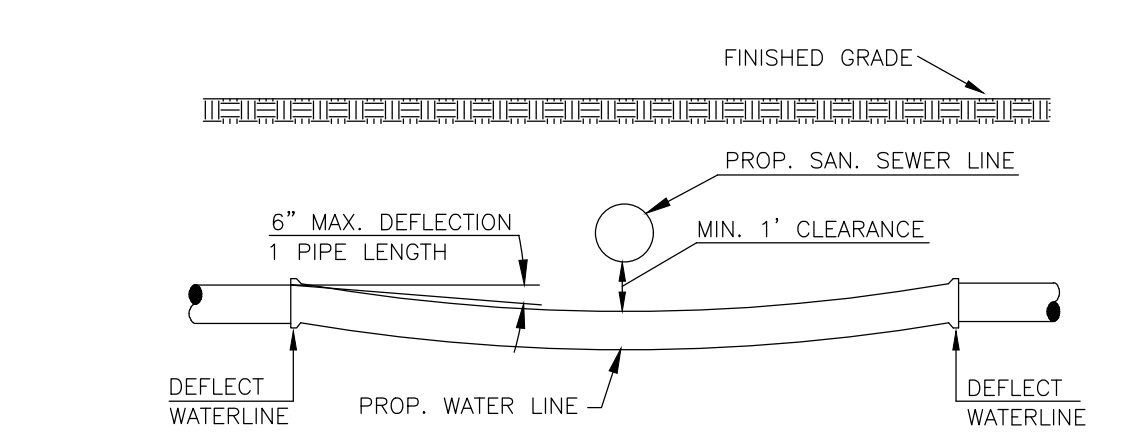
**NOTES AS PER TEXAS DEPT. OF HEALTH MANUAL**

- A. WATER LINE/NEW SEWER LINE SEPARATION**  
 WHEN NEW SANITARY SEWERS ARE INSTALLED, THEY SHALL BE INSTALLED NO CLOSER TO WATERLINES THAN NINE FEET IN ALL DIRECTIONS. SEWERS THAT PARALLEL WATERLINES MUST BE INSTALLED IN SEPARATE TRENCHES, WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE FOLLOWING GUIDELINES WILL APPLY:
- WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING FOR BOTH THE PIPE AND JOINTS OF 150 PSI. THE VERTICAL SEPARATION SHALL BE A MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.
  - WHERE A SANITARY SEWER CROSSES A WATERLINE AND THE SEWER IS CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, AN ABSOLUTE MINIMUM DISTANCE OF 6 INCHES BETWEEN OUTSIDE DIAMETERS SHALL BE MAINTAINED. IN ADDITION THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.
  - WHERE A SEWER CROSSES UNDER A WATERLINE AND THE SEWER IS CONSTRUCTED OF ABS TRUSS PIPE, SIMILAR SEMI-RIGID PLASTIC COMPOSITE PIPE, CLAY PIPE OR CONCRETE PIPE WITH GASKETED JOINTS, A MINIMUM TWO FOOT SEPARATION DISTANCE SHALL BE MAINTAINED. THE INITIAL BACKFILL SHALL BE CONCRETE STABILIZED SAND (TWO OR MORE BAGS OF CEMENT PER CUBIC YARD OF SAND) FOR ALL SECTIONS OF SEWER WITHIN NINE FEET OF WATERLINE. THIS INITIAL BACKFILL SHALL BE FROM ONE QUARTER DIAMETER BELOW THE CENTERLINE OF THE PIPE TO ONE PIPE DIAMETER (BUT NOT LESS THAN 12 INCHES) ABOVE TOP OF PIPE.
  - WHERE A SEWER CROSSES OVER A WATERLINE ALL PORTIONS OF THE SEWER WITHIN NINE FEET OF THE WATERLINE SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC PIPE WITH A PRESSURE RATING OF AT LEAST 150 PSI USING APPROPRIATE ADAPTERS. IN LIEU OF THIS PROCEDURE THE NEW CONVEYANCE MAY BE ENCASED IN A JOINT OF 150 PSI PRESSURE CLASS PIPE AT LEAST FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT 5 FEET INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINKLING WITH WASHED SAND. THE ENCASEMENT PIPE SHOULD BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEAL.

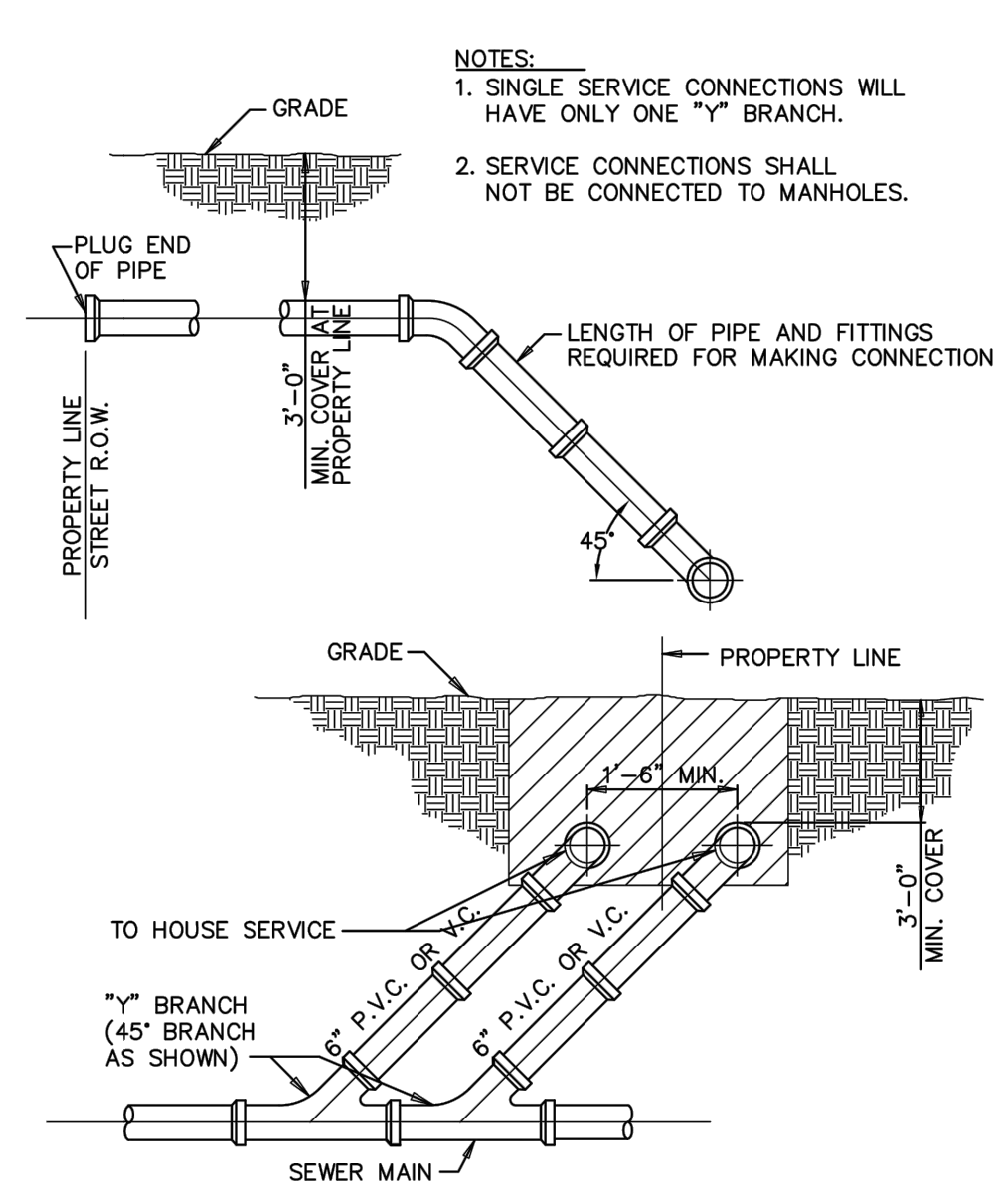
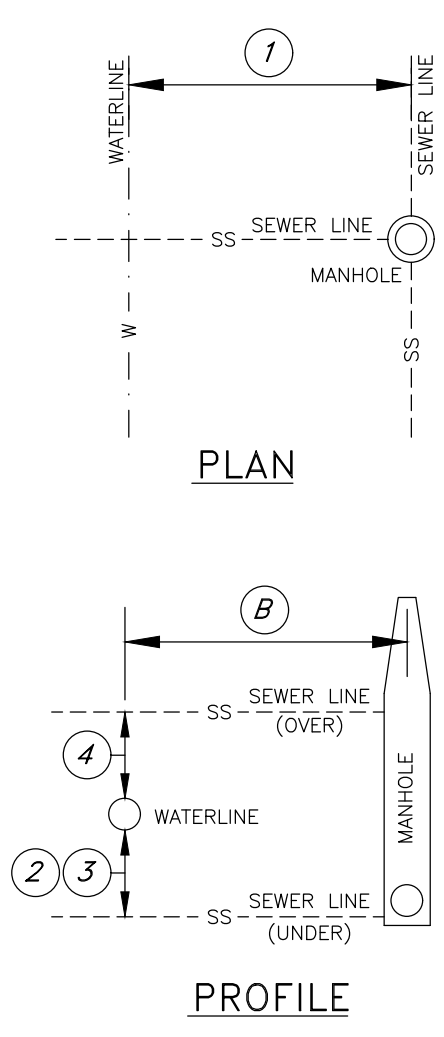
**B. WATER LINE/MANHOLE SEPARATION**  
 UNLESS SANITARY SEWER MANHOLES AND THE CONNECTING SEWER CAN BE MADE WATERTIGHT AND TESTED FOR LEAKAGE, THEY MUST BE INSTALLED SO AS TO PROVIDE A MINIMUM OF NINE FEET OF HORIZONTAL CLEARANCE FROM AN EXISTING OR PROPOSED WATERLINE. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, A CARRIER PIPE AS DESCRIBED IN SUBSECTION A.(4) OF THIS SECTION MAY BE USED WHERE APPROPRIATE.



**WATERLINE CROSSING OVER SANITARY SEWER**

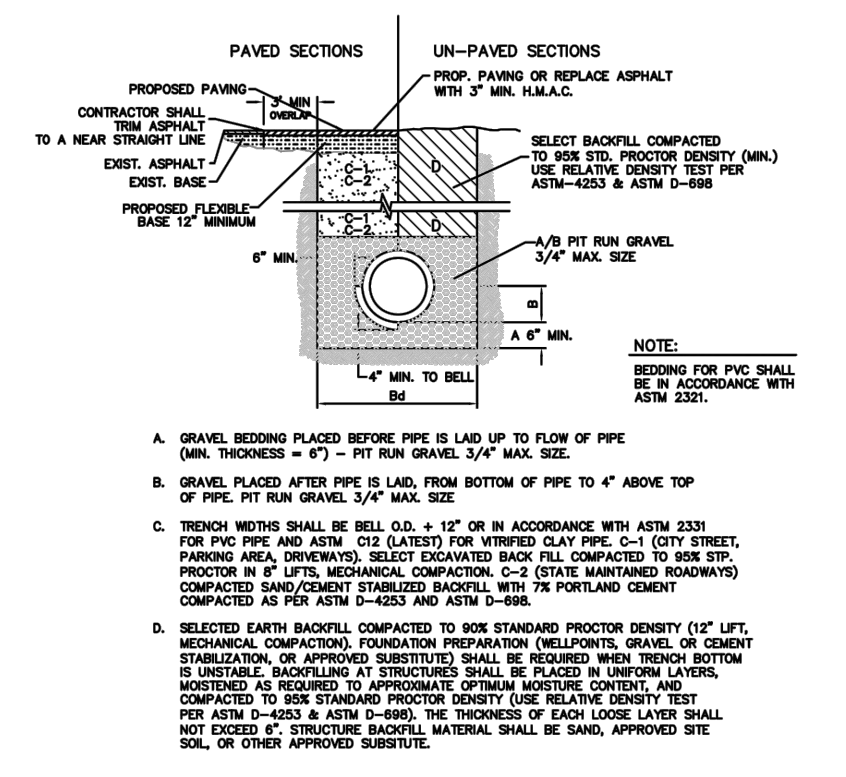


**WATERLINE CROSSING UNDER SANITARY SEWER**



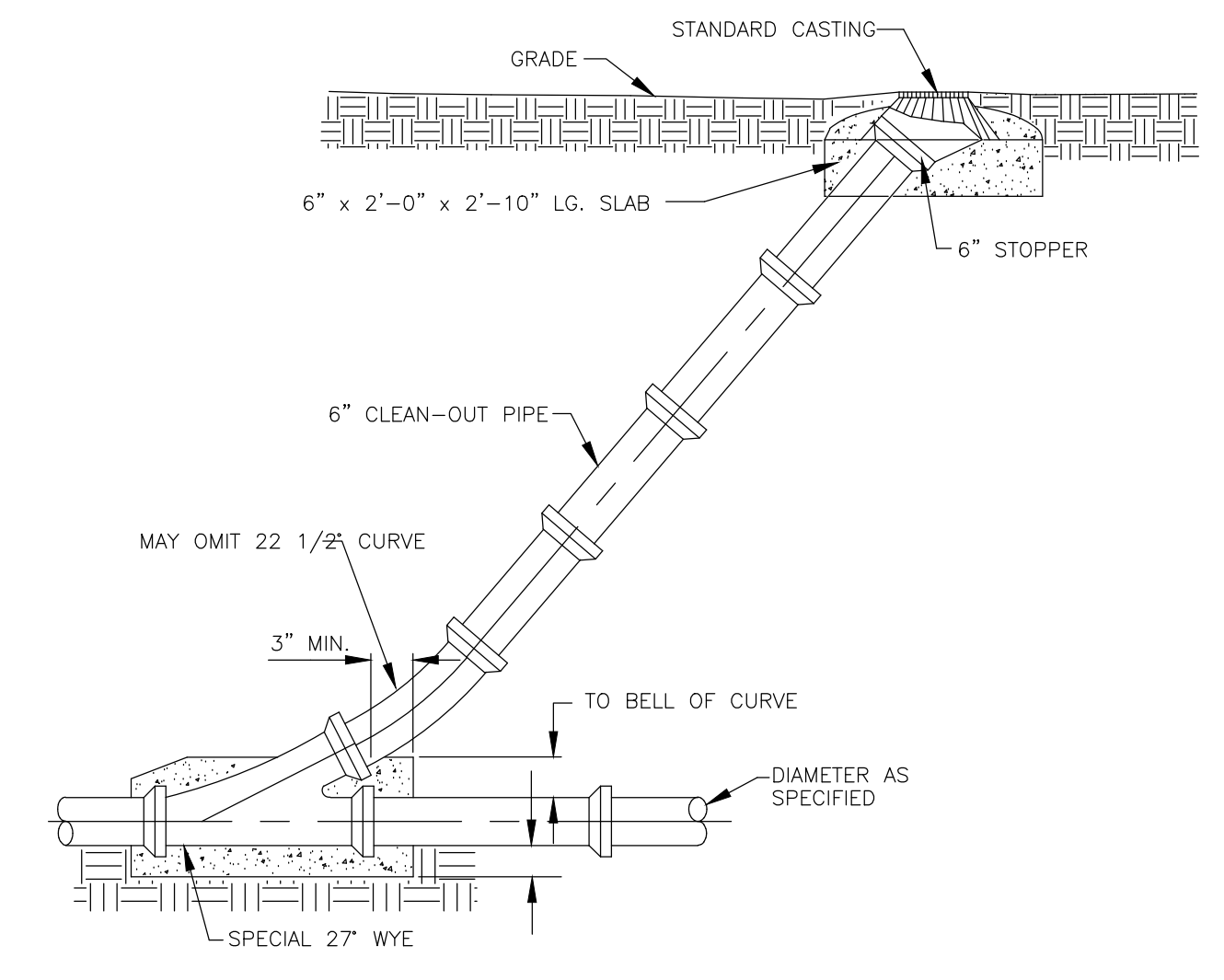
**SANITARY SEWER SERVICE CONNECTION**

N.T.S.



**TRENCH BEDDING CIRCULAR PIPE (SANITARY SEWER)**

N.T.S.



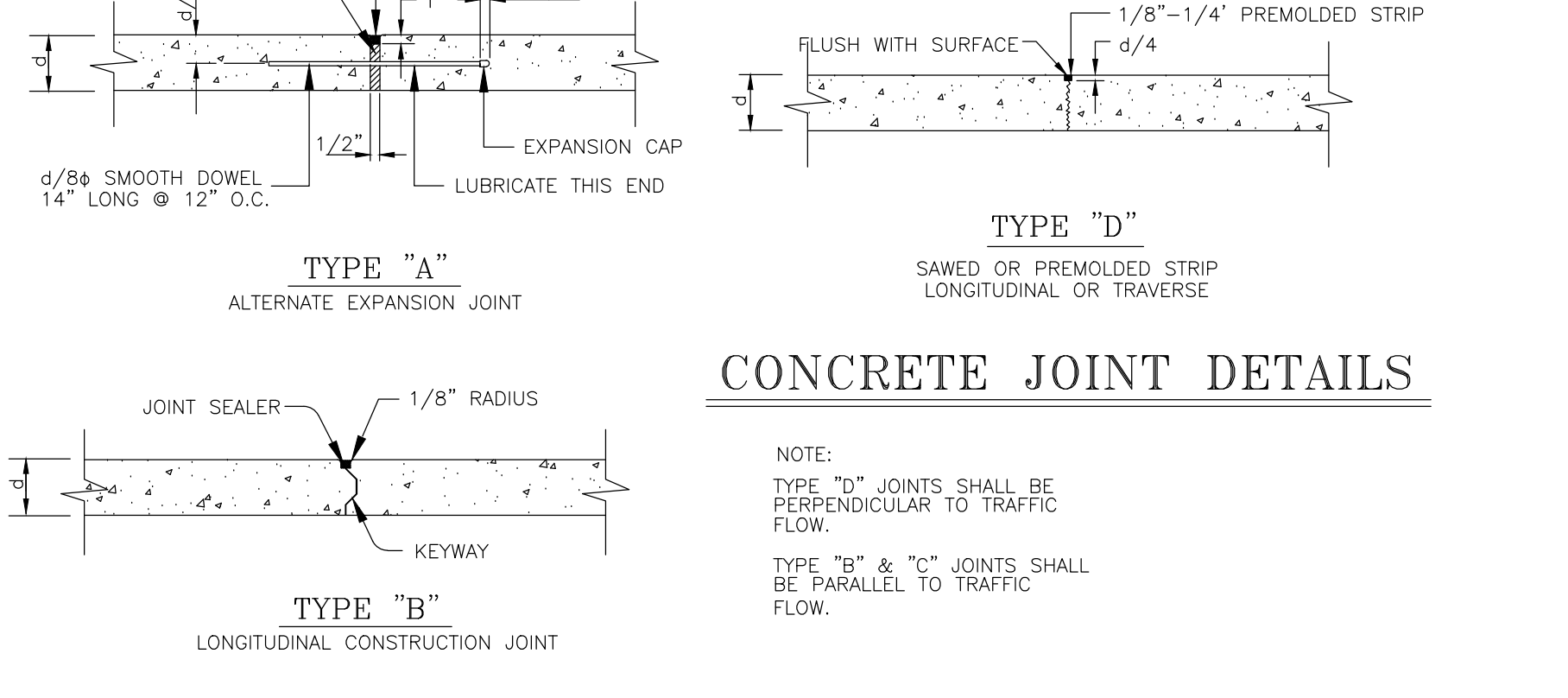
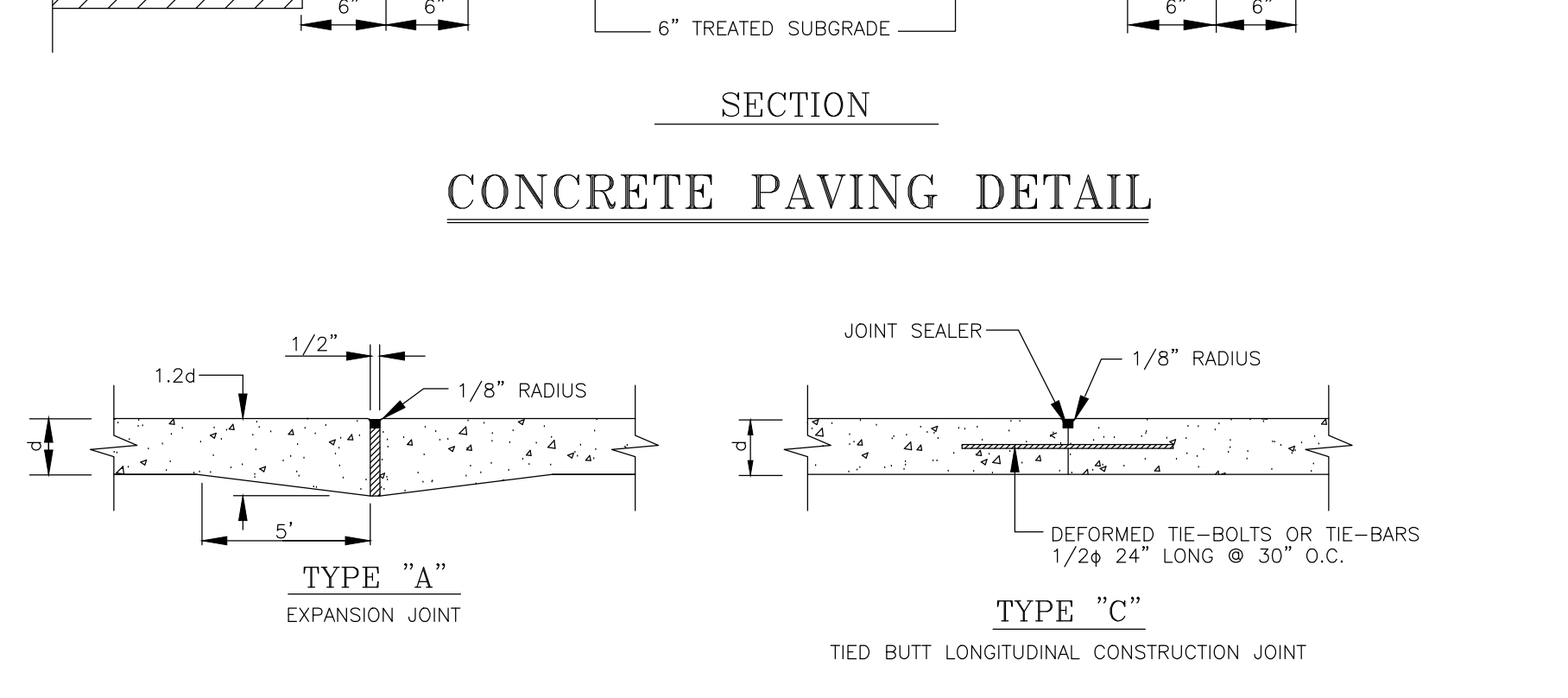
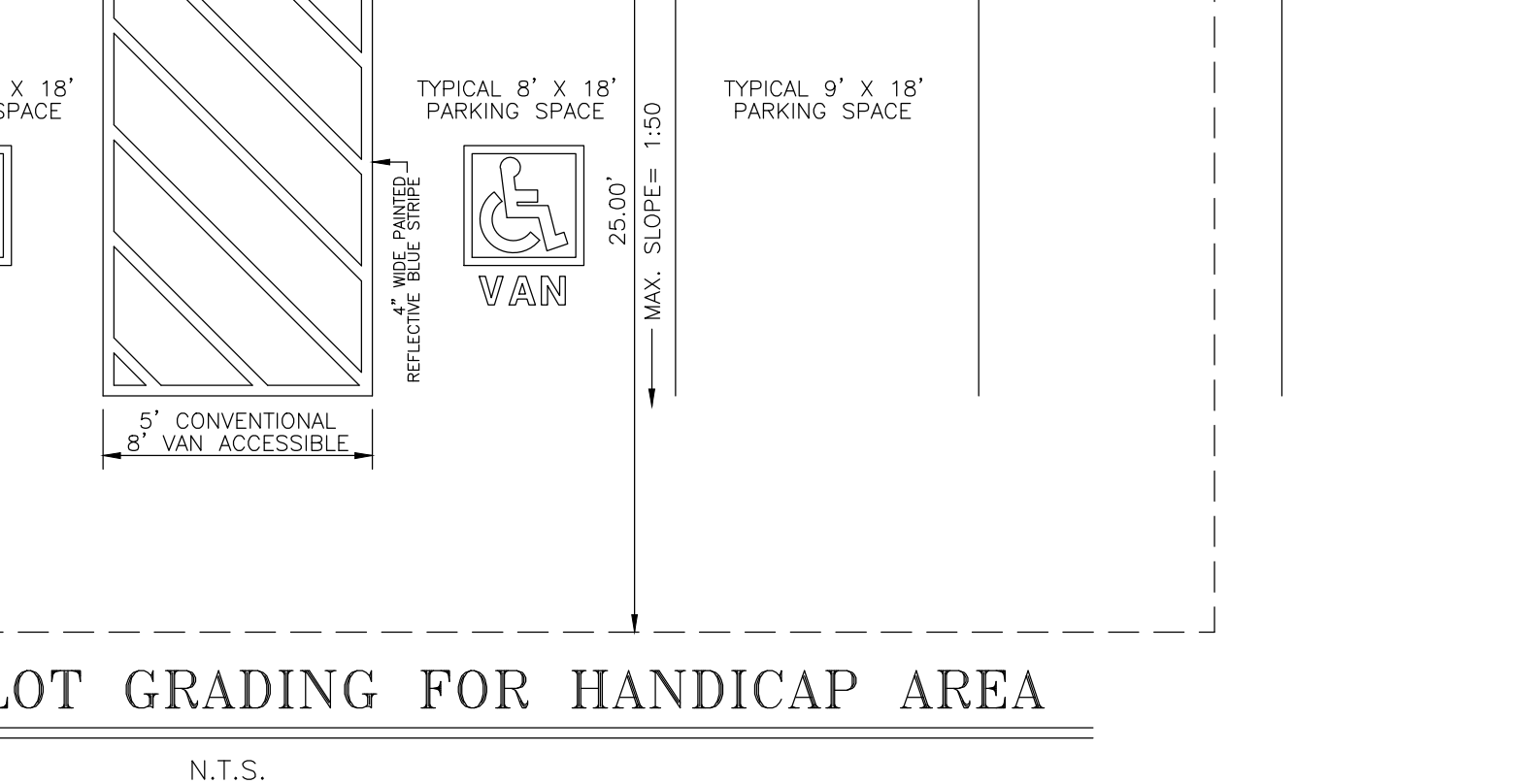
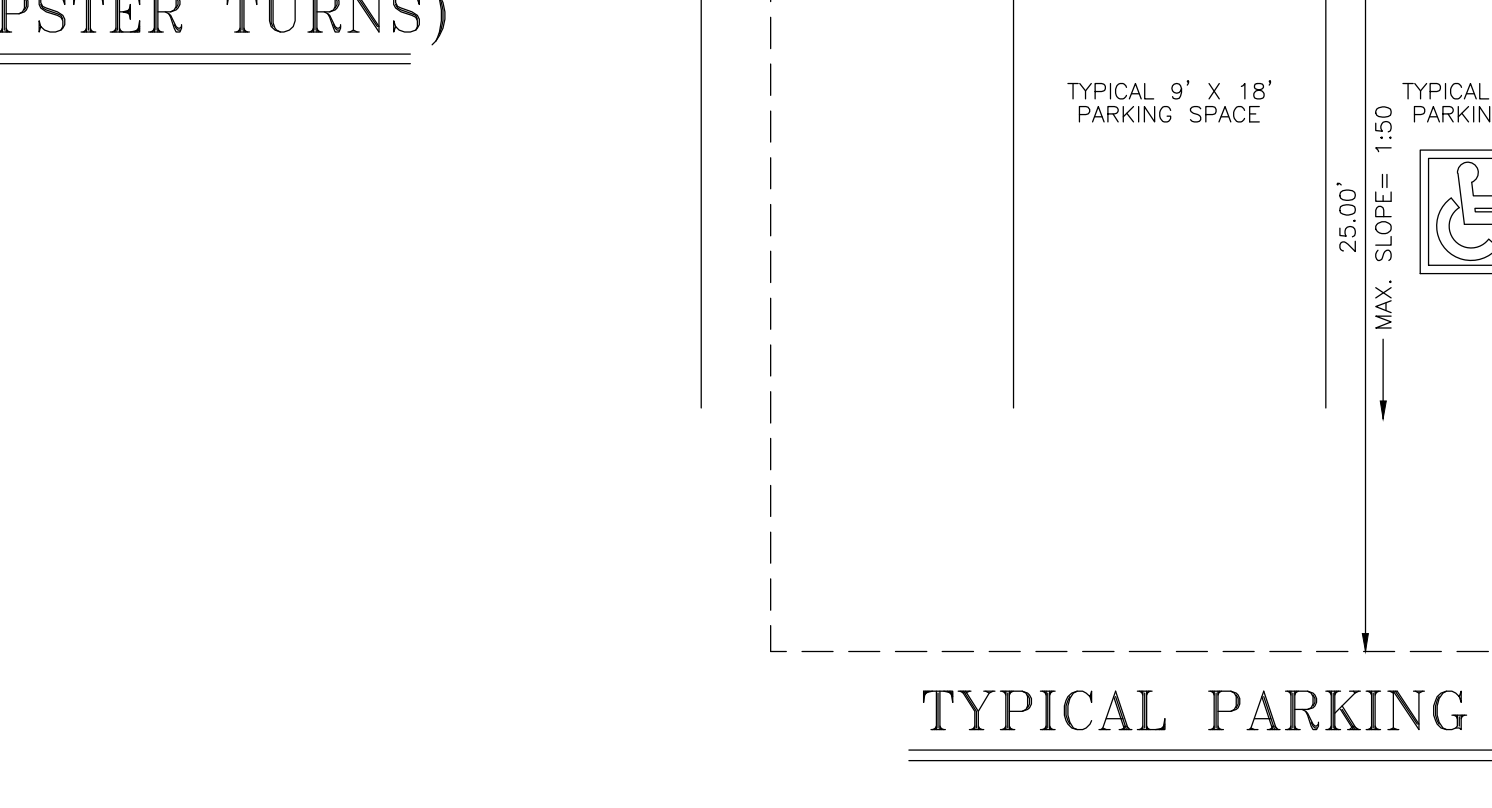
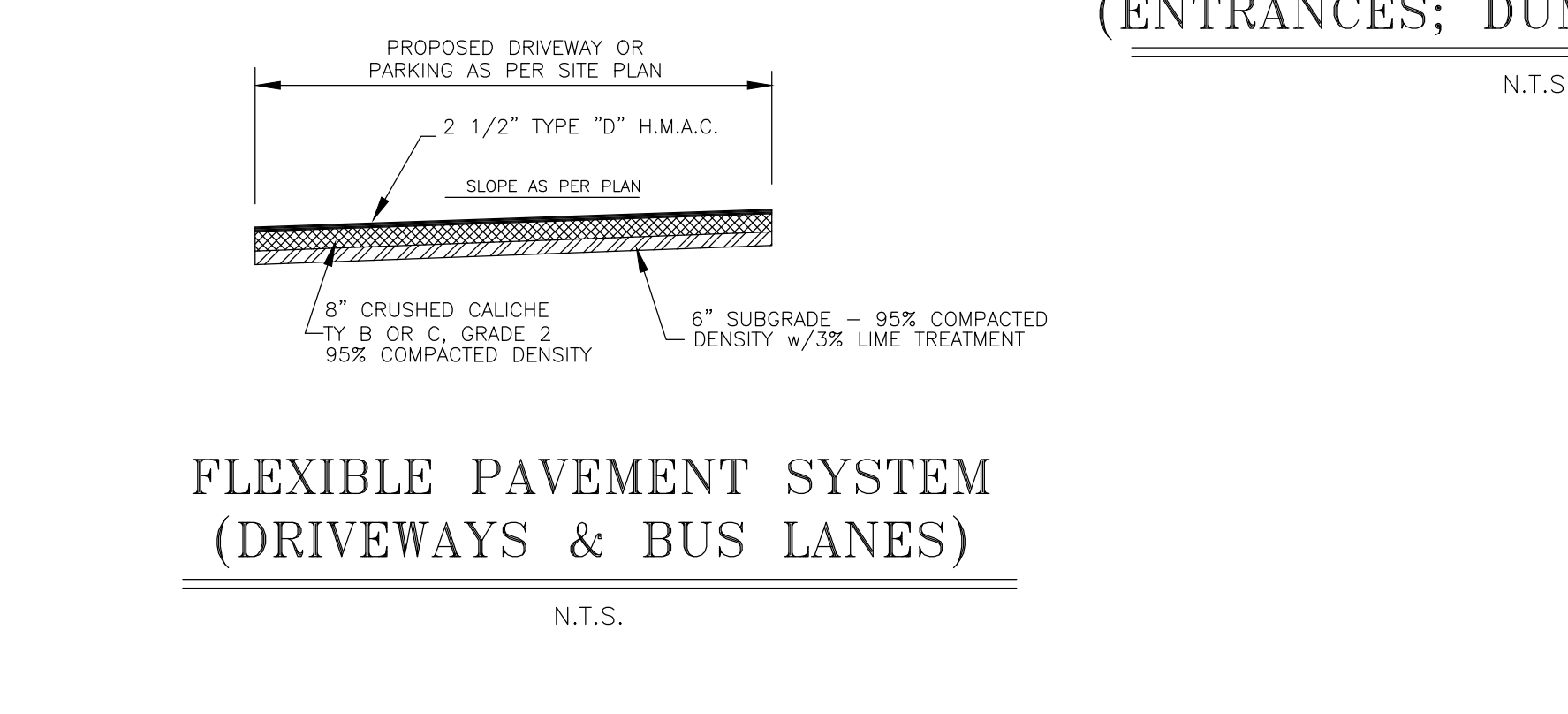
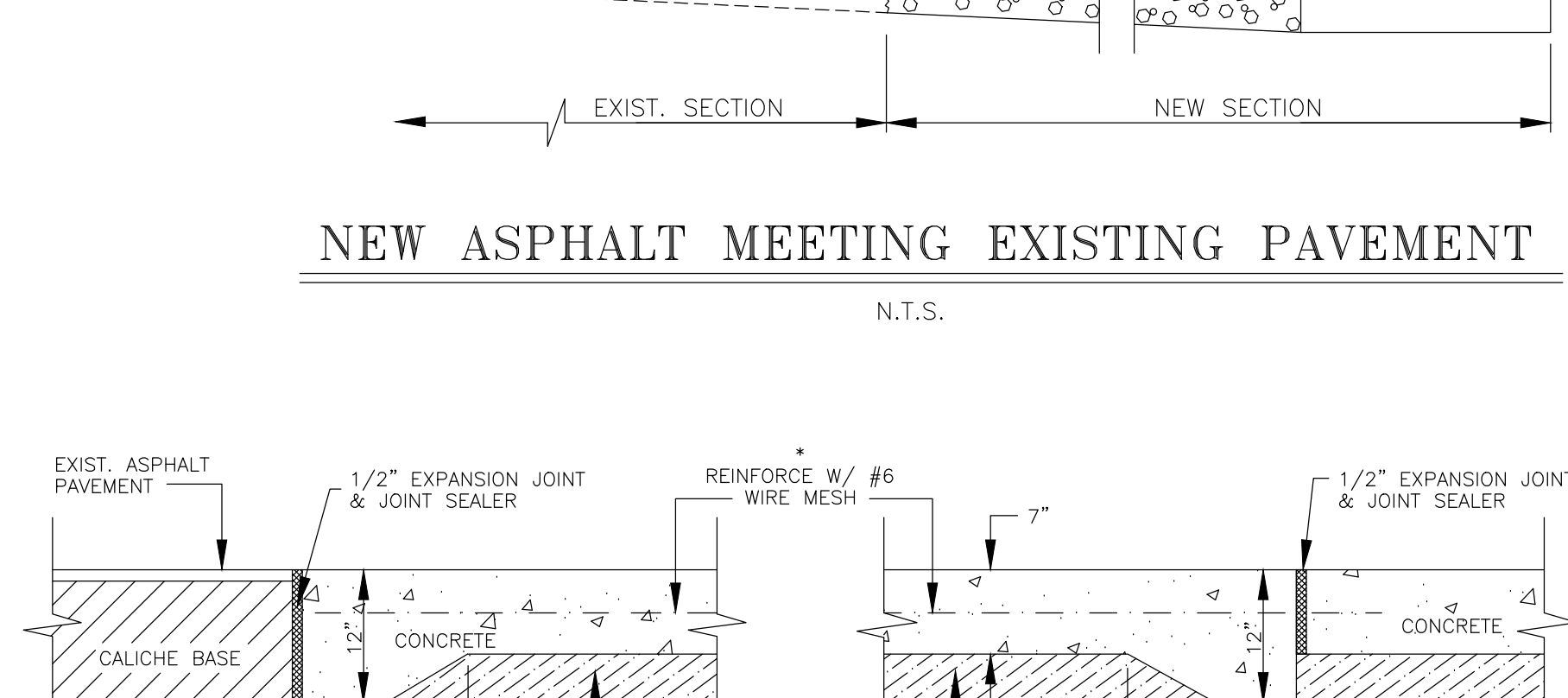
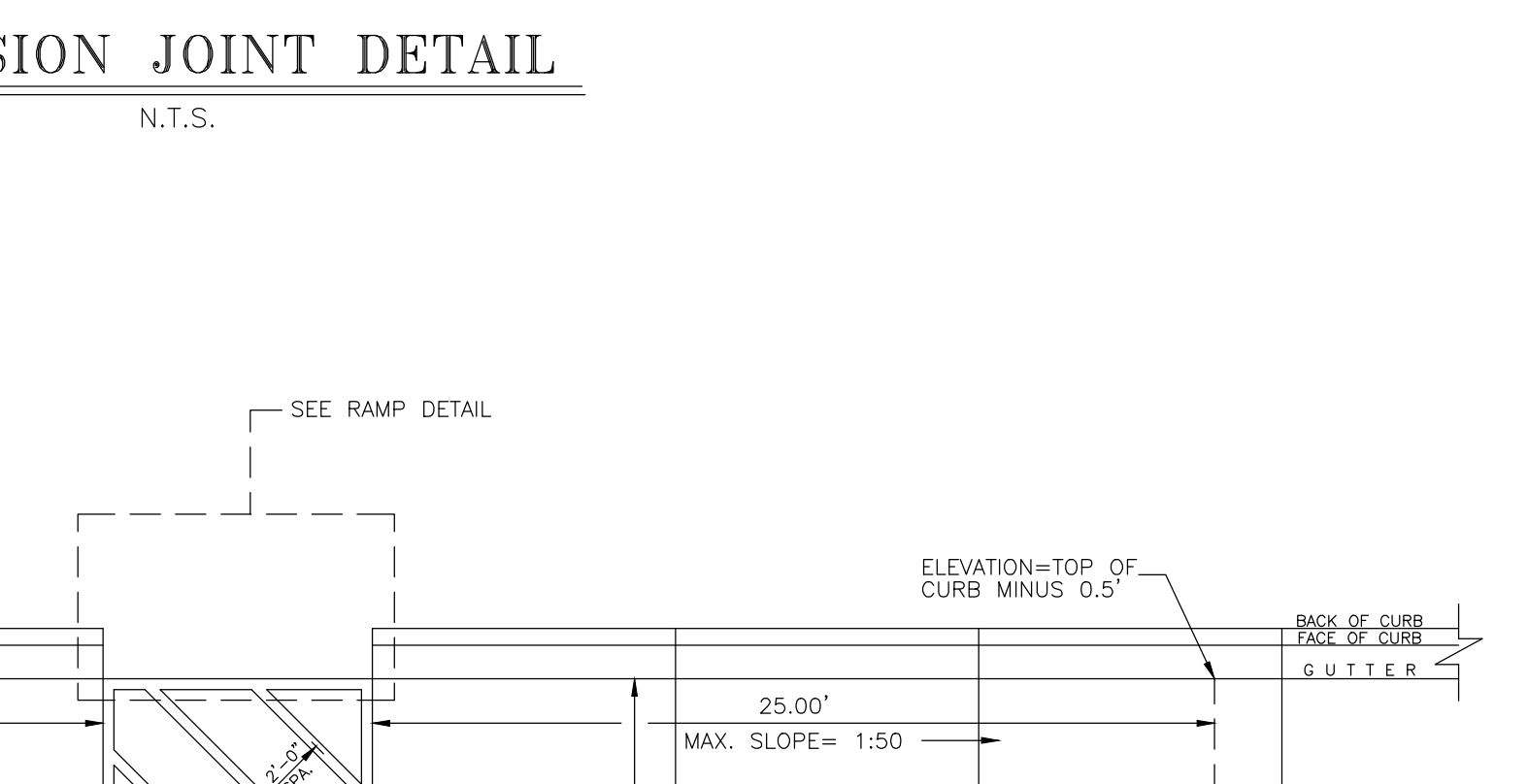
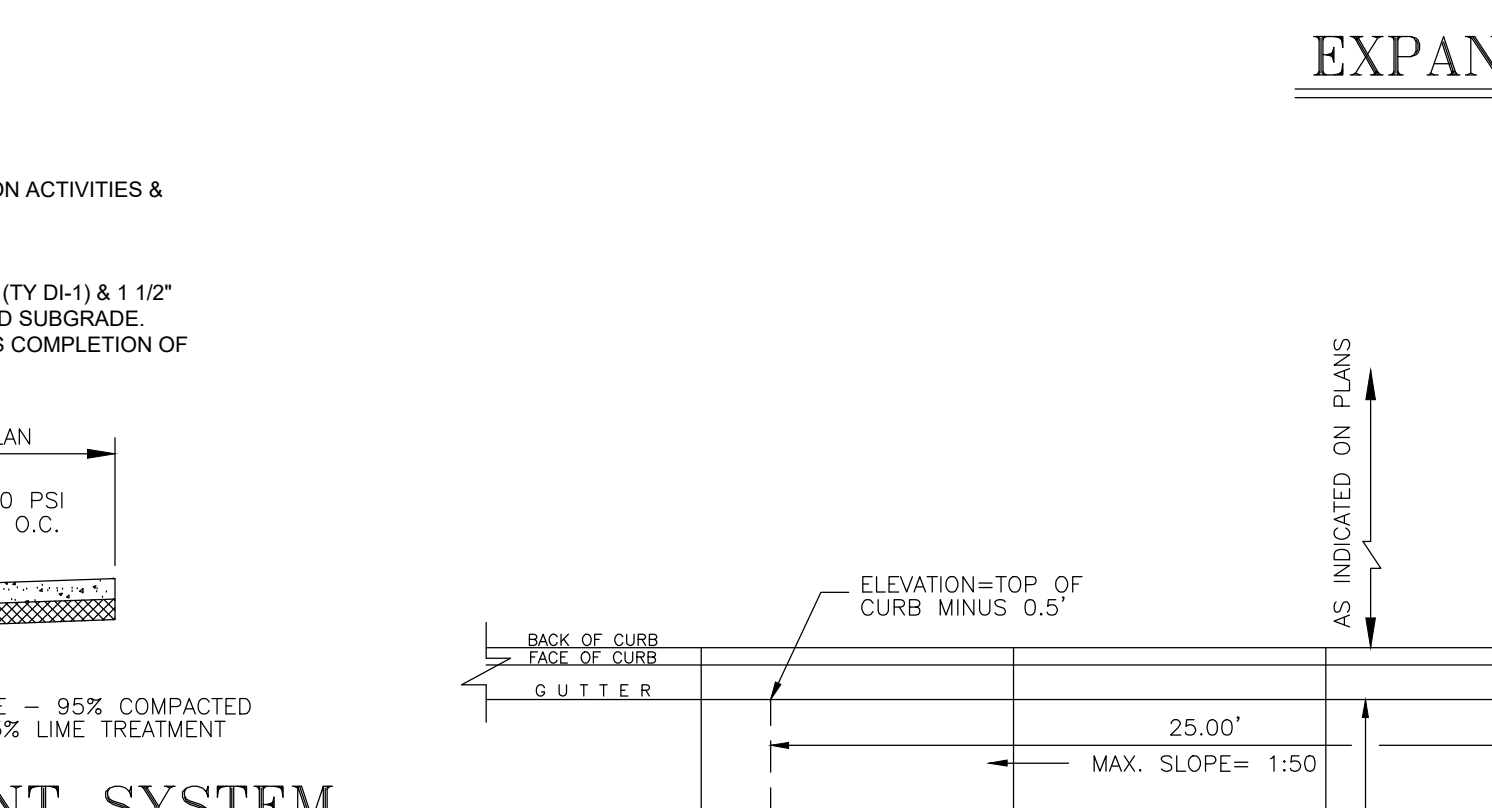
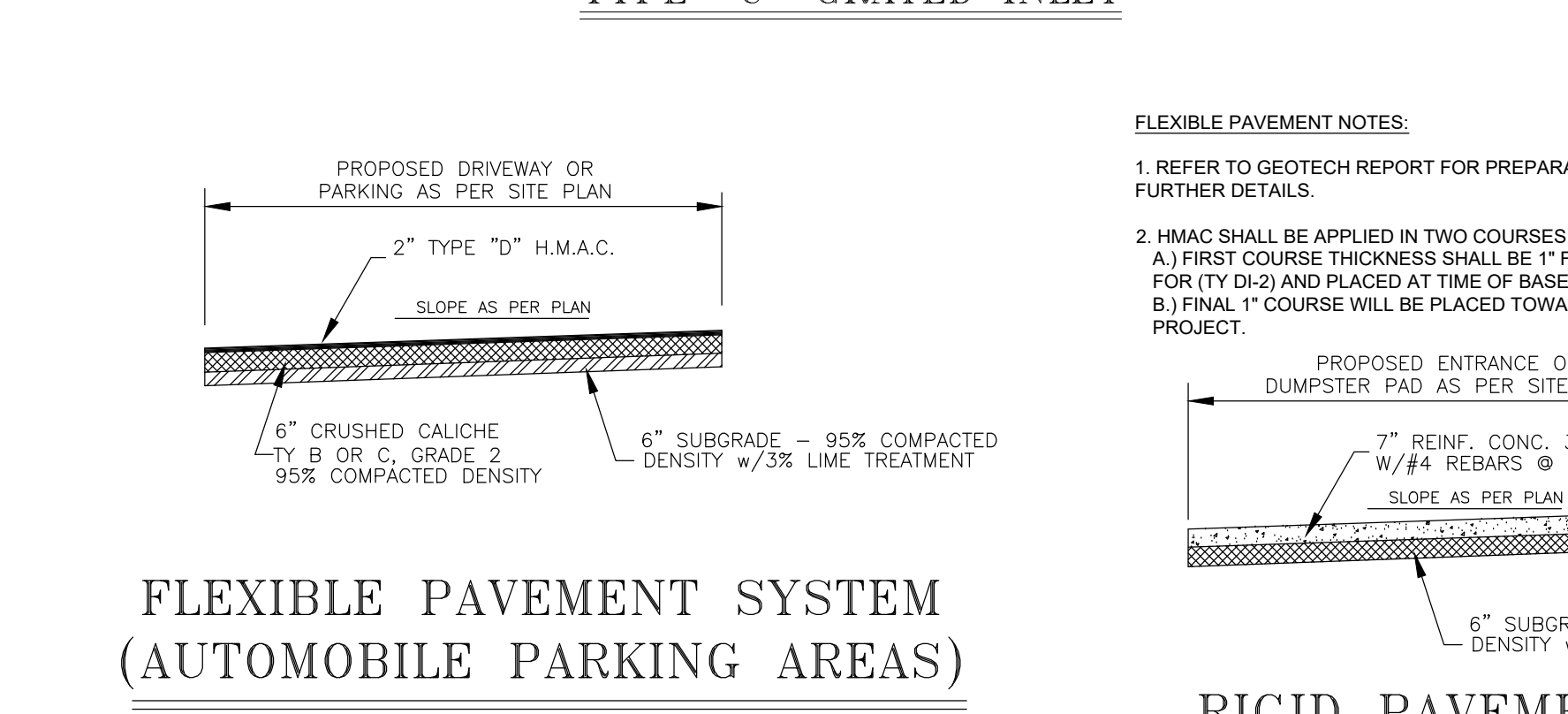
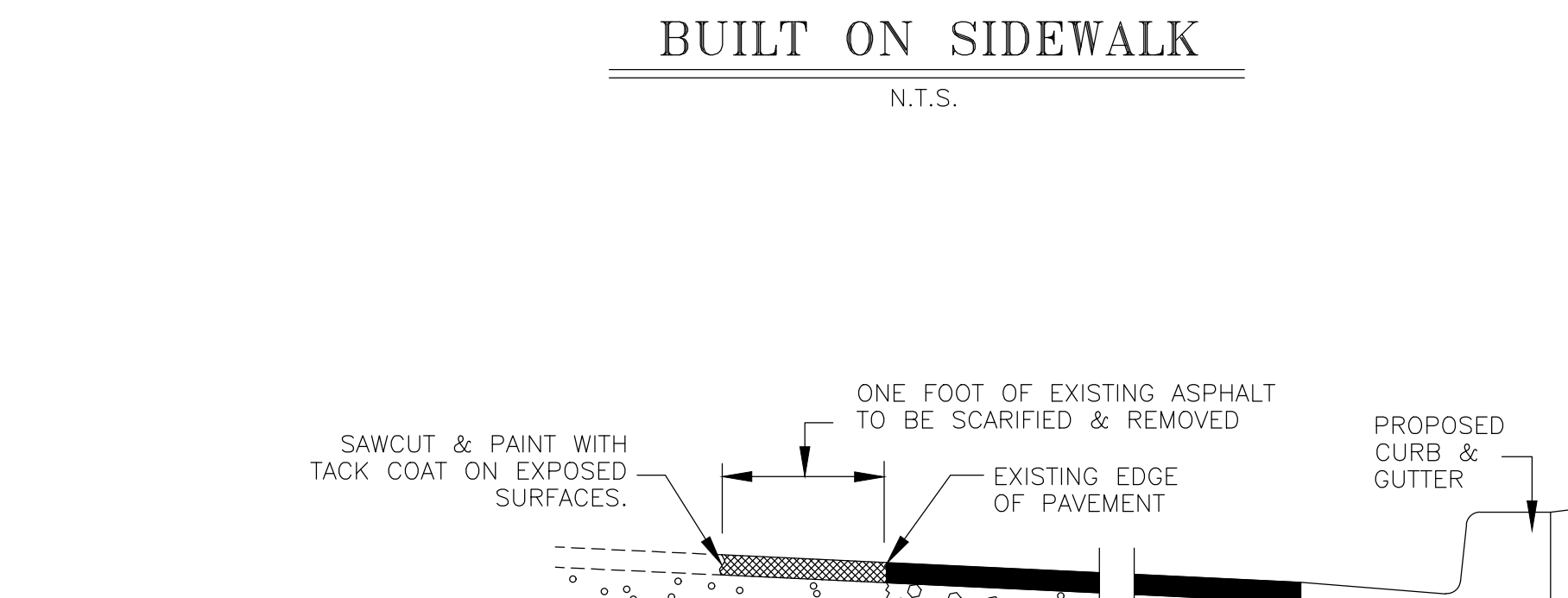
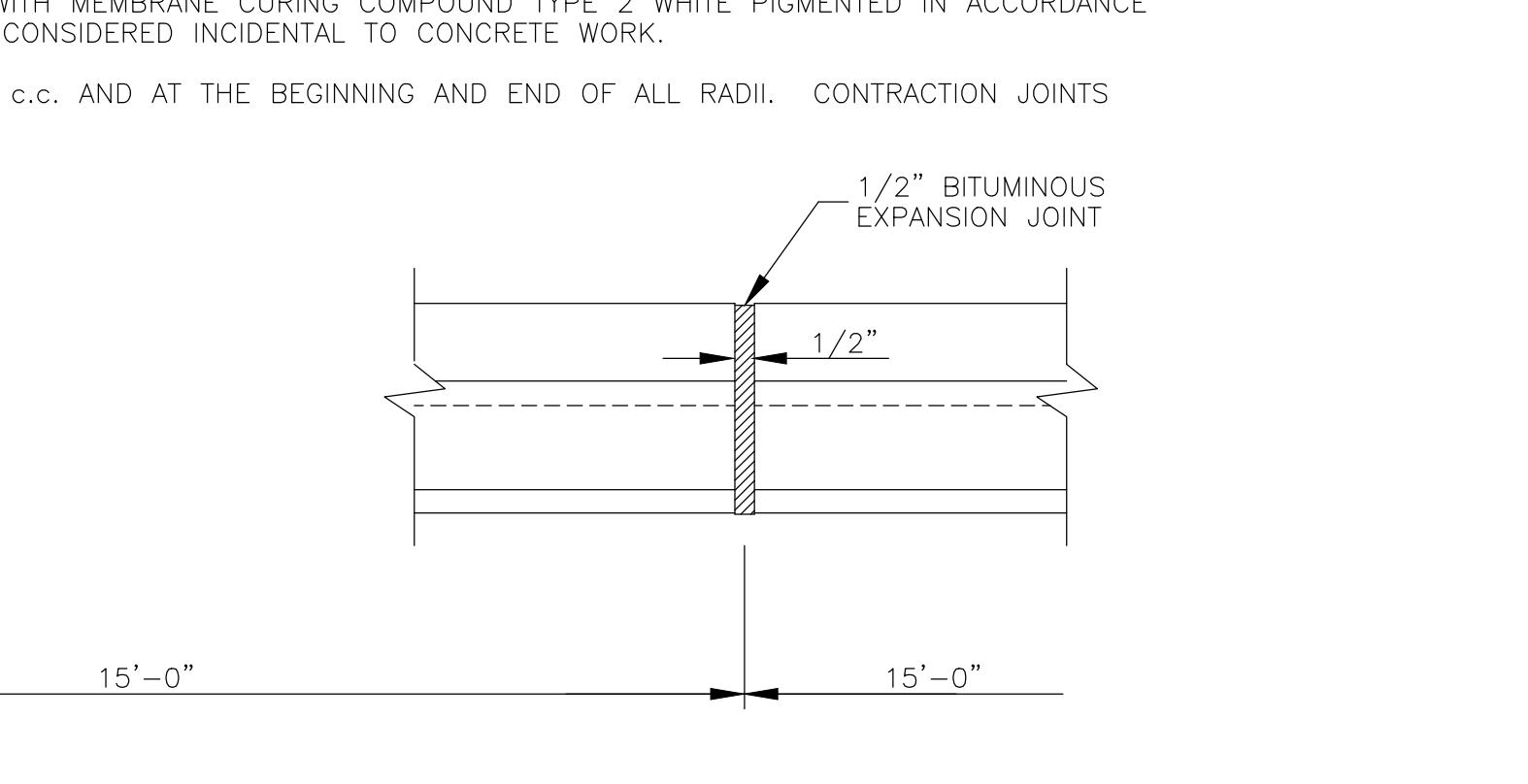
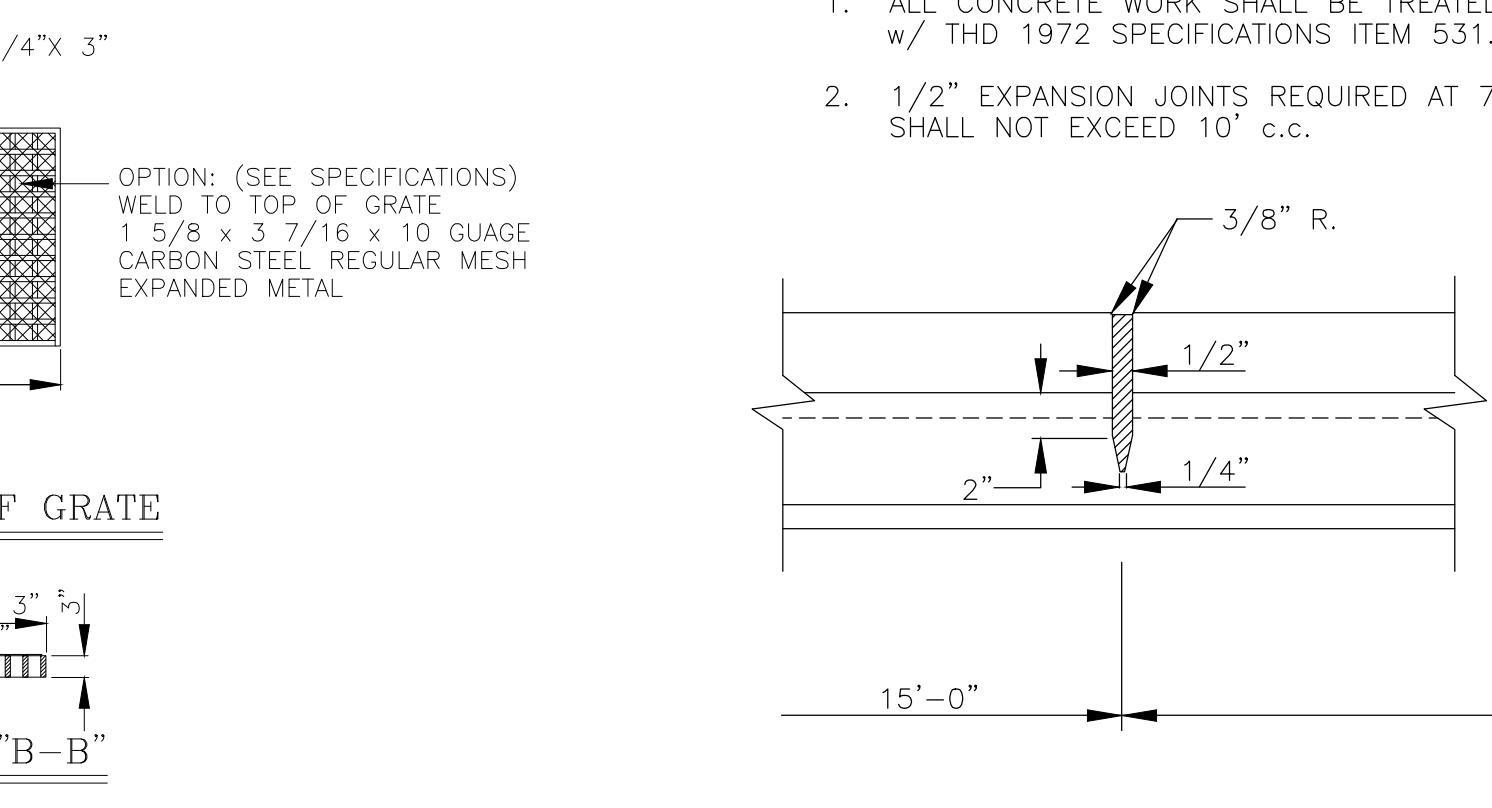
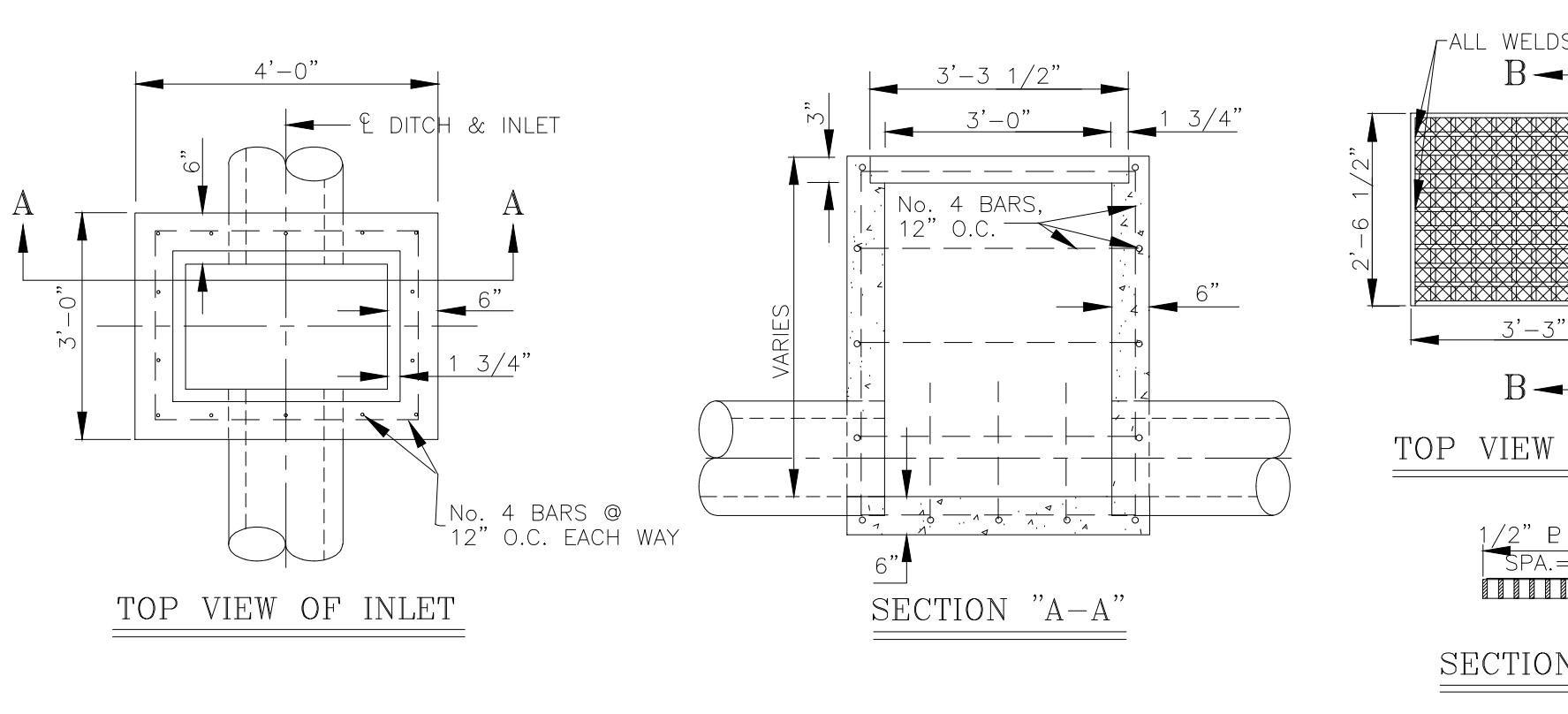
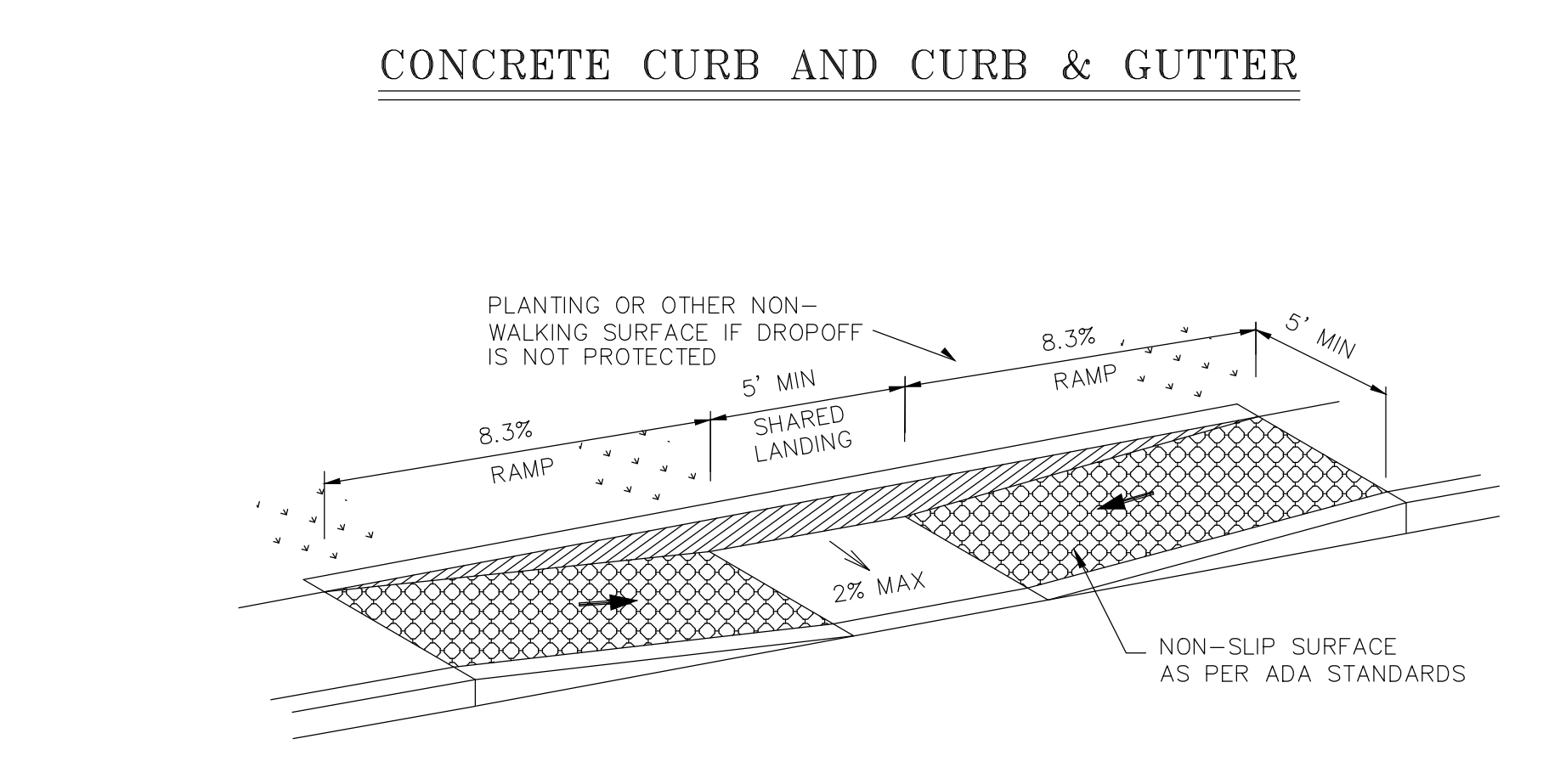
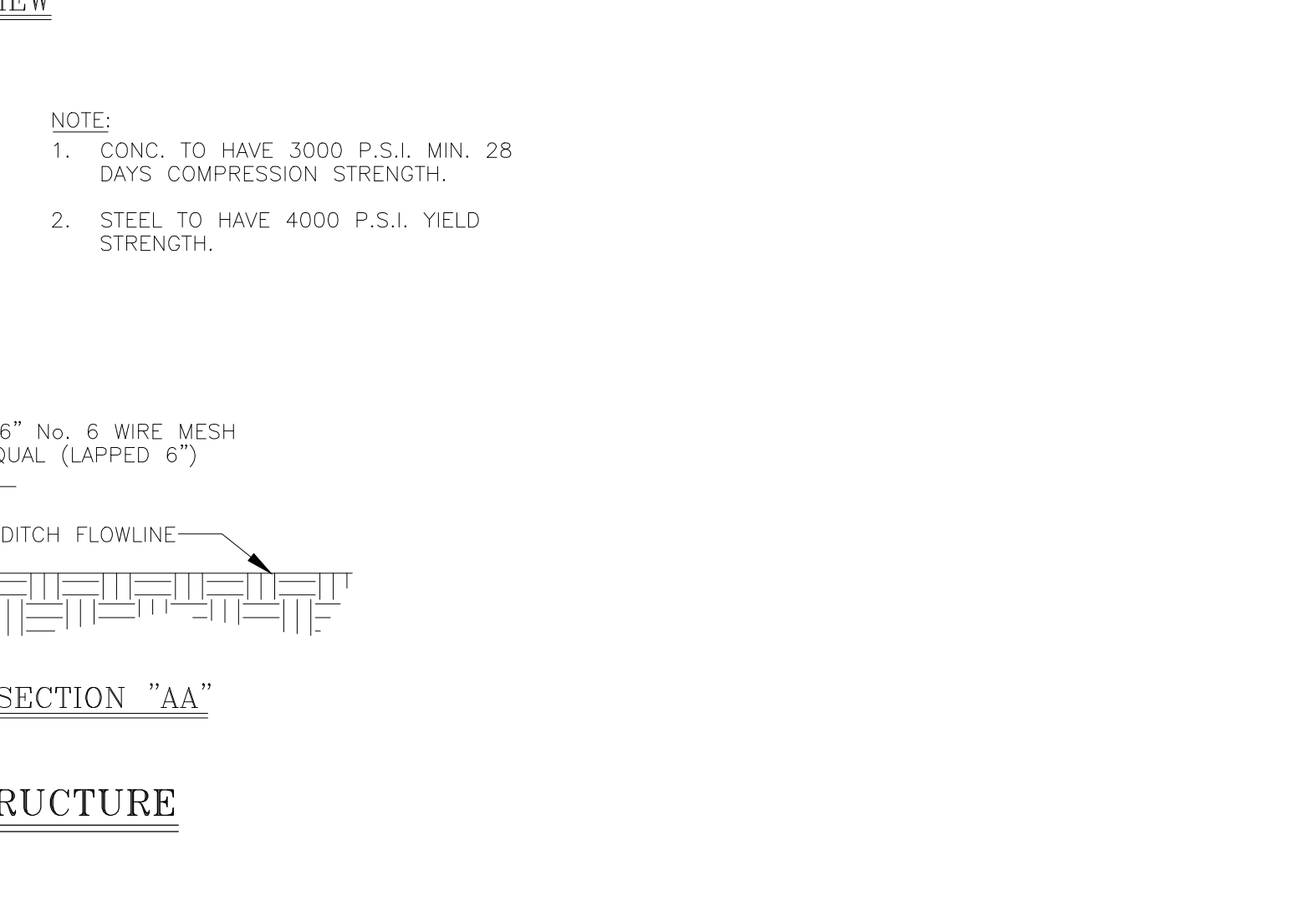
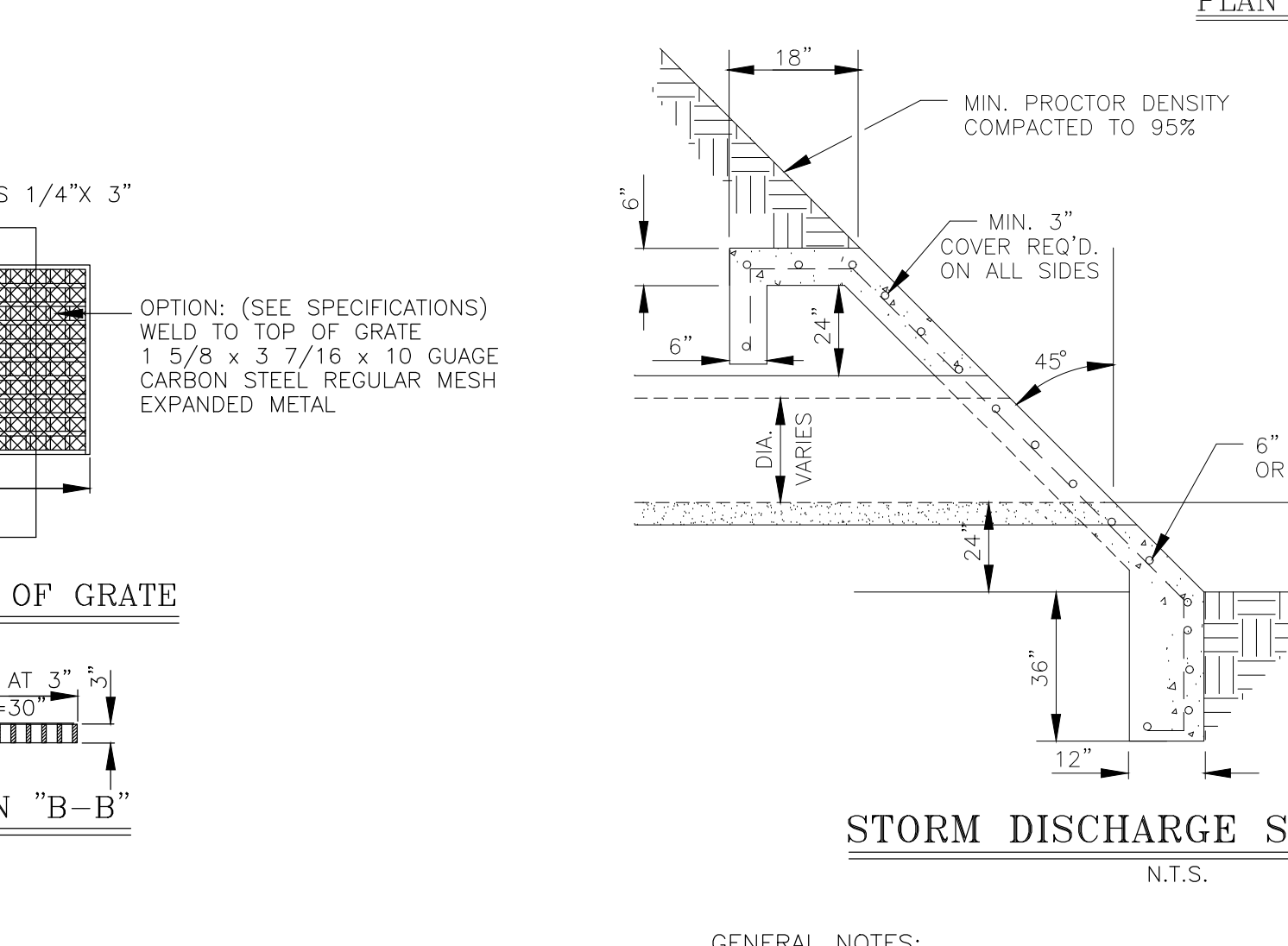
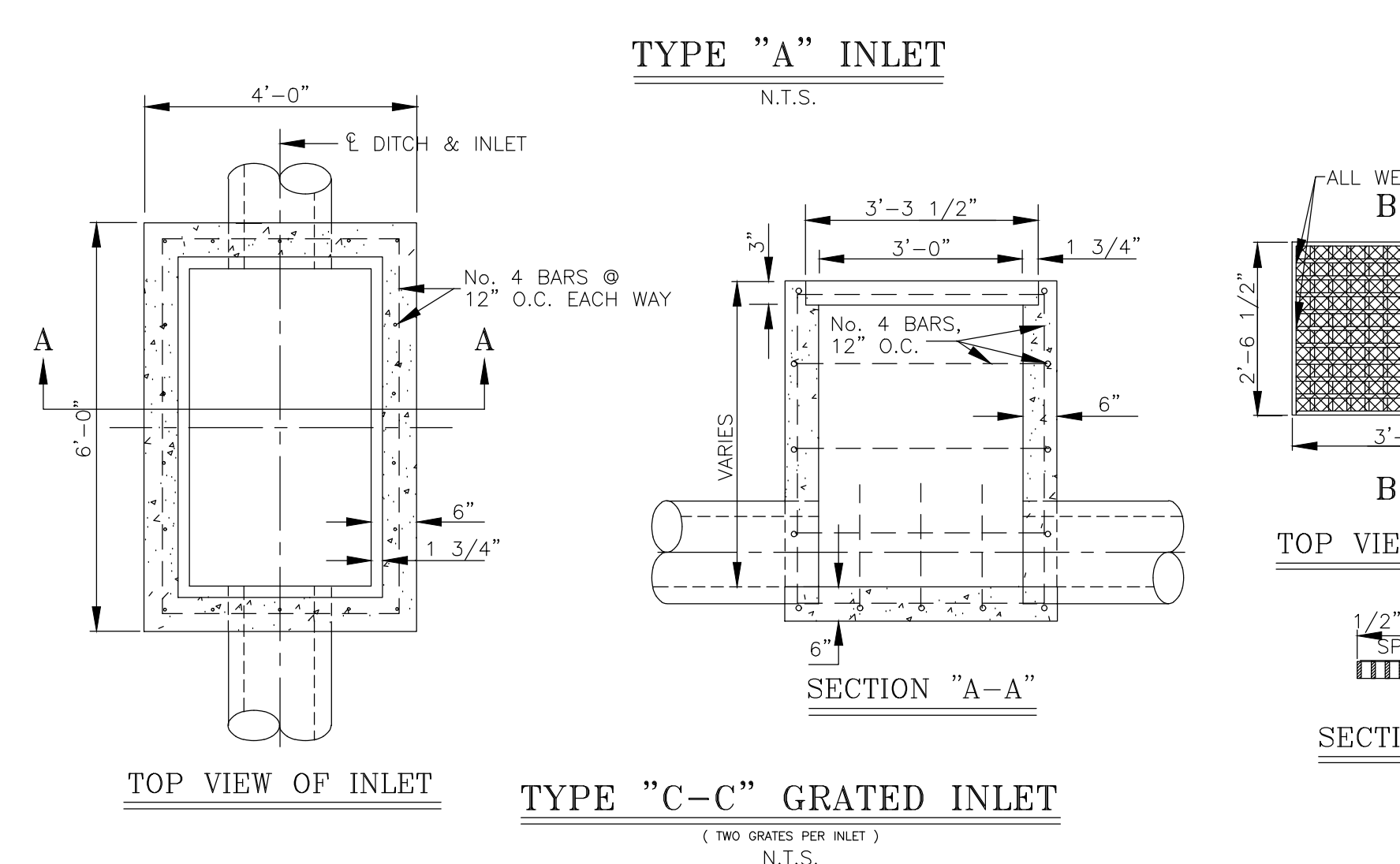
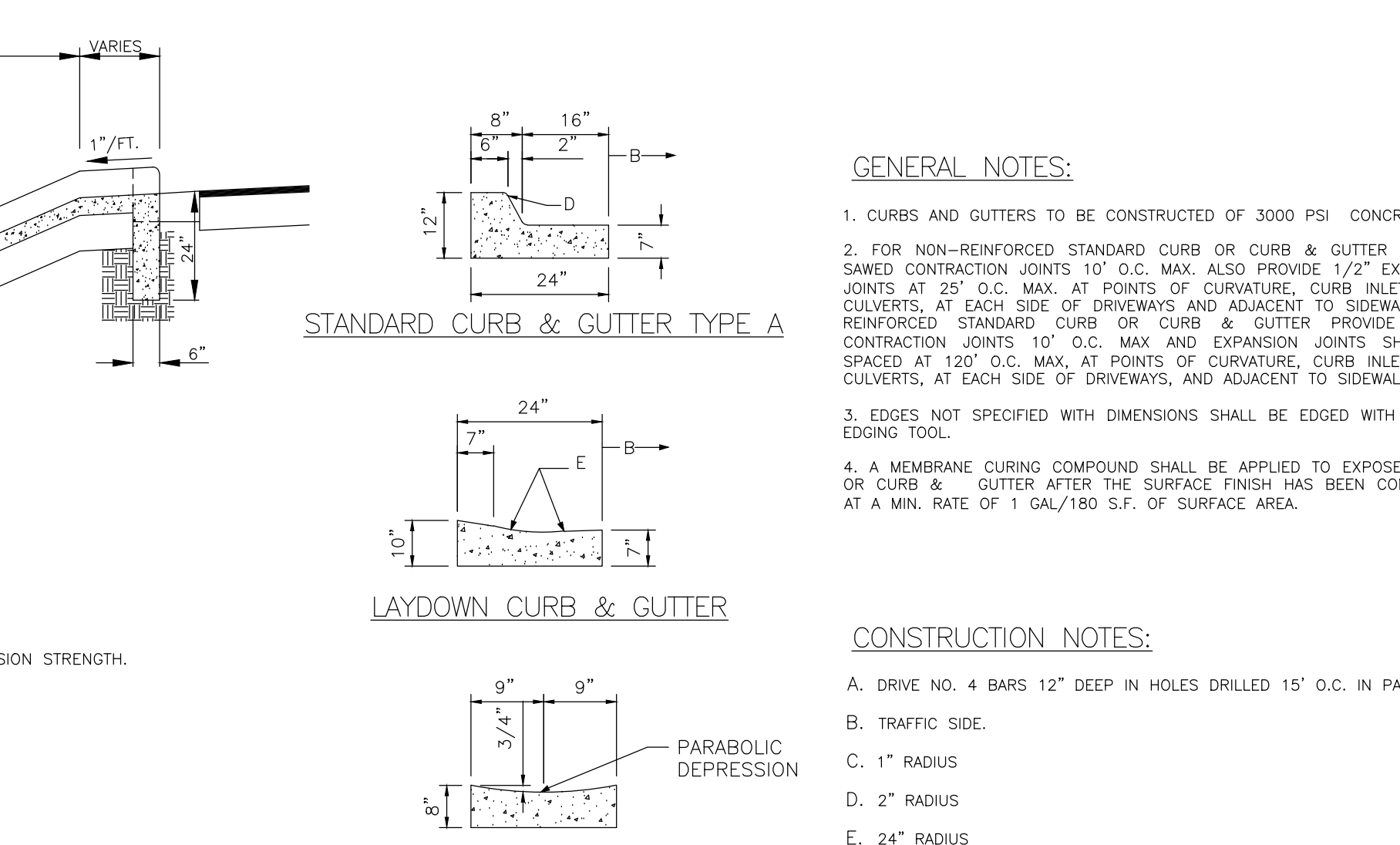
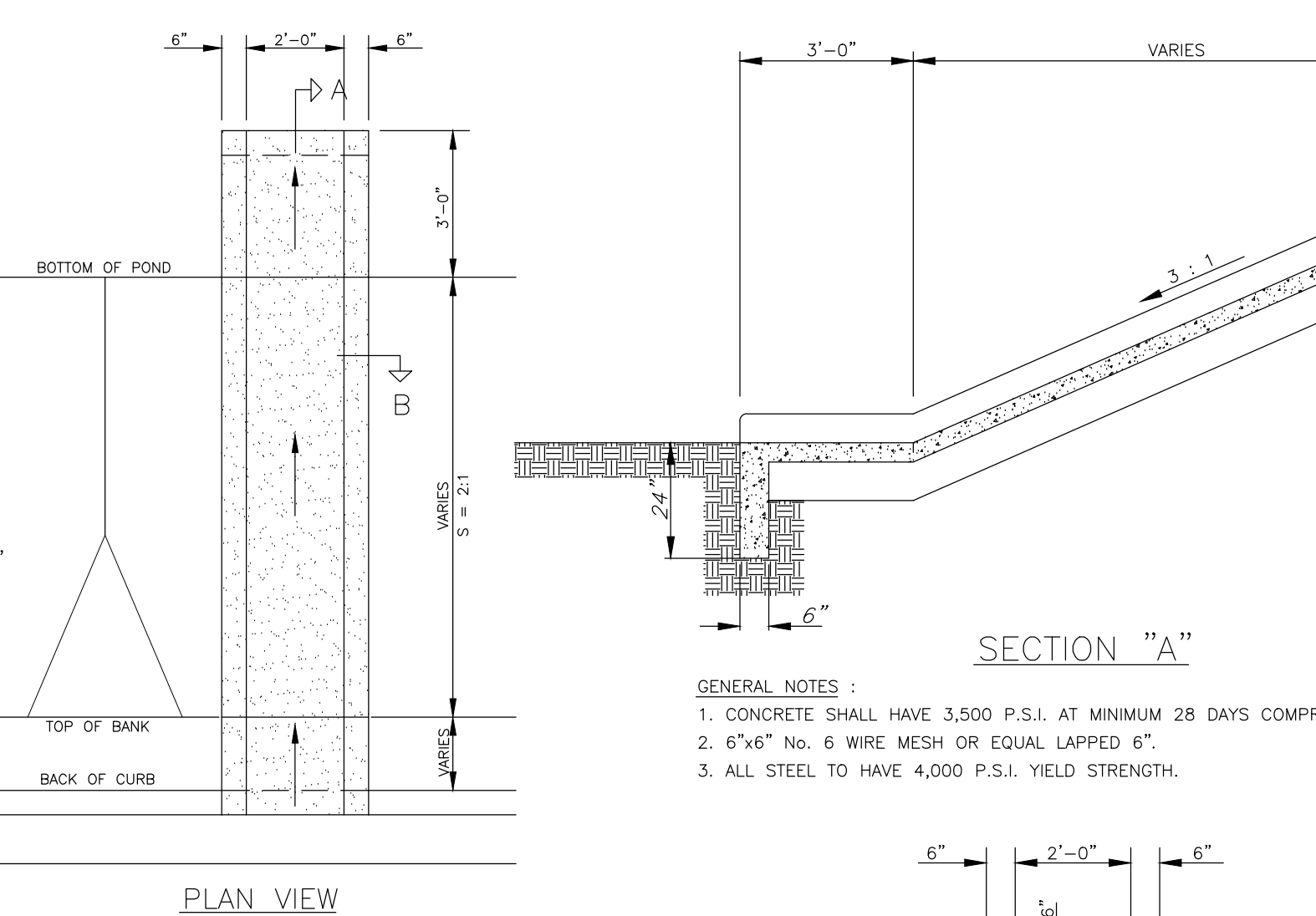
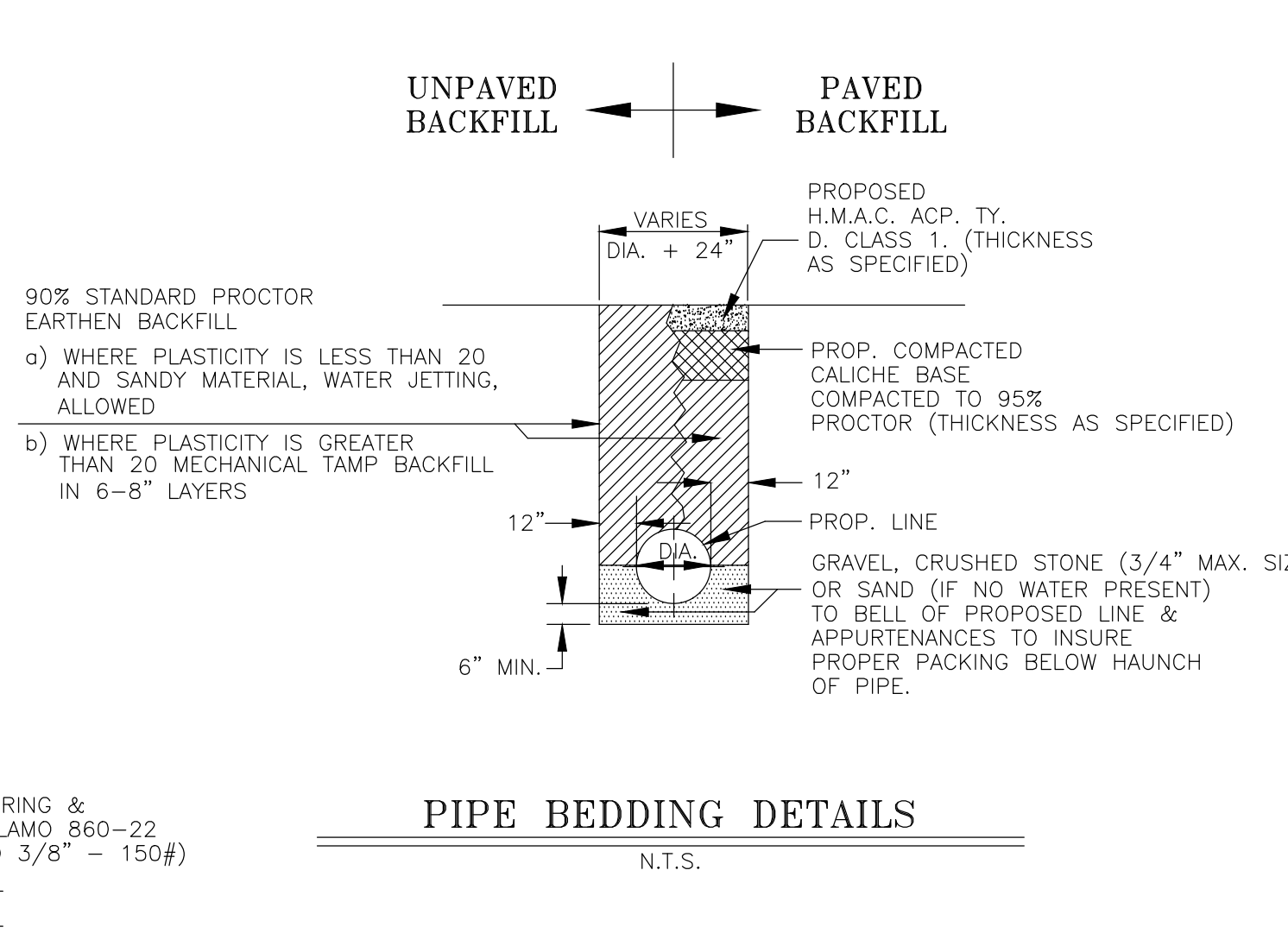
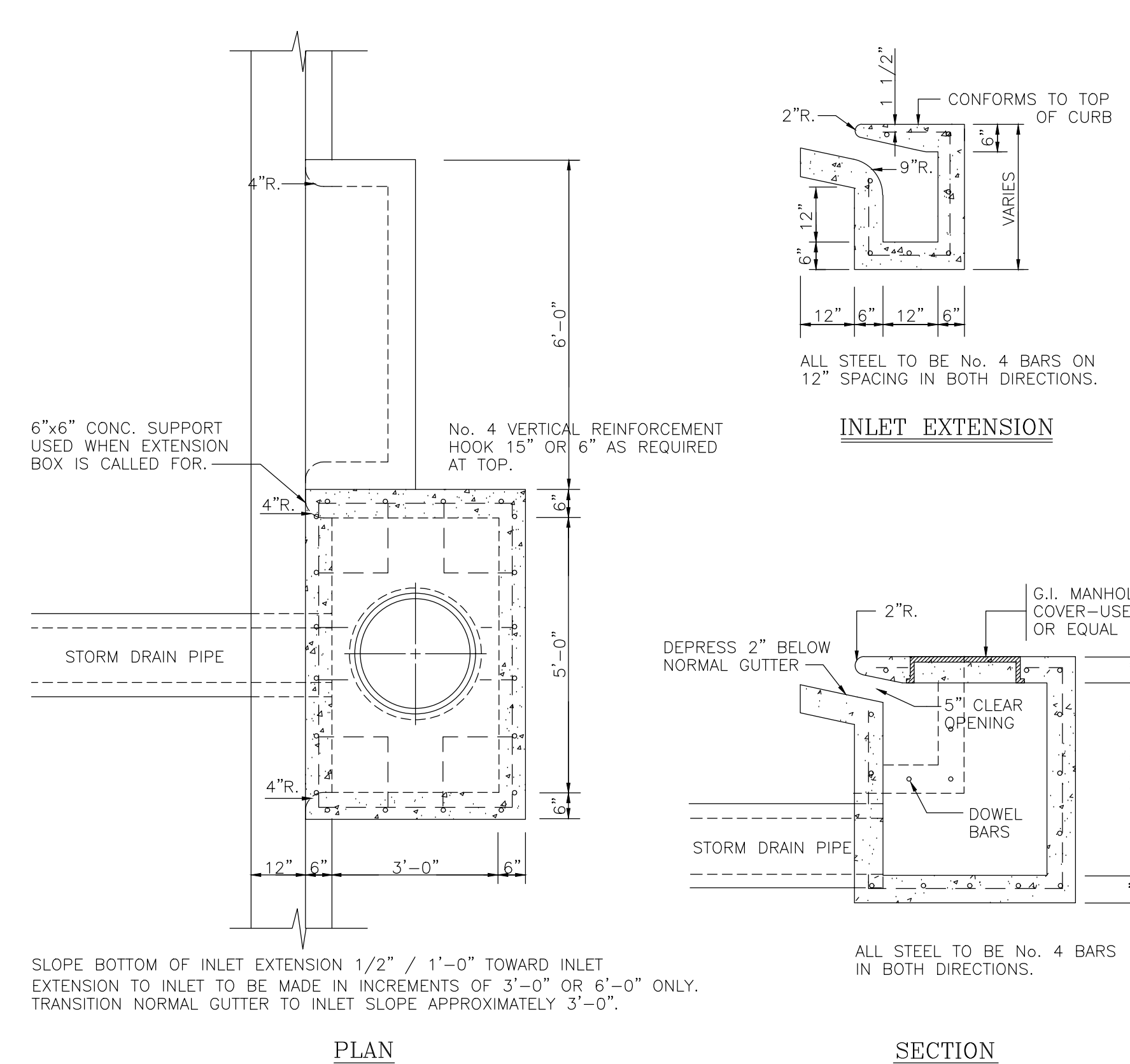
**STANDARD CLEANOUT**

N.T.S.

NOTE : SANITARY SEWER TO BE INSTALLED PER CITY OF PHARR CONSTRUCTION STANDARDS MANUAL.

**SANITARY SEWER DETAILS**

**IDEA-OWASSA COLLEGE PREP PHASE II**



EAST OWASSA ROAD

IRRIGATION LEGEND

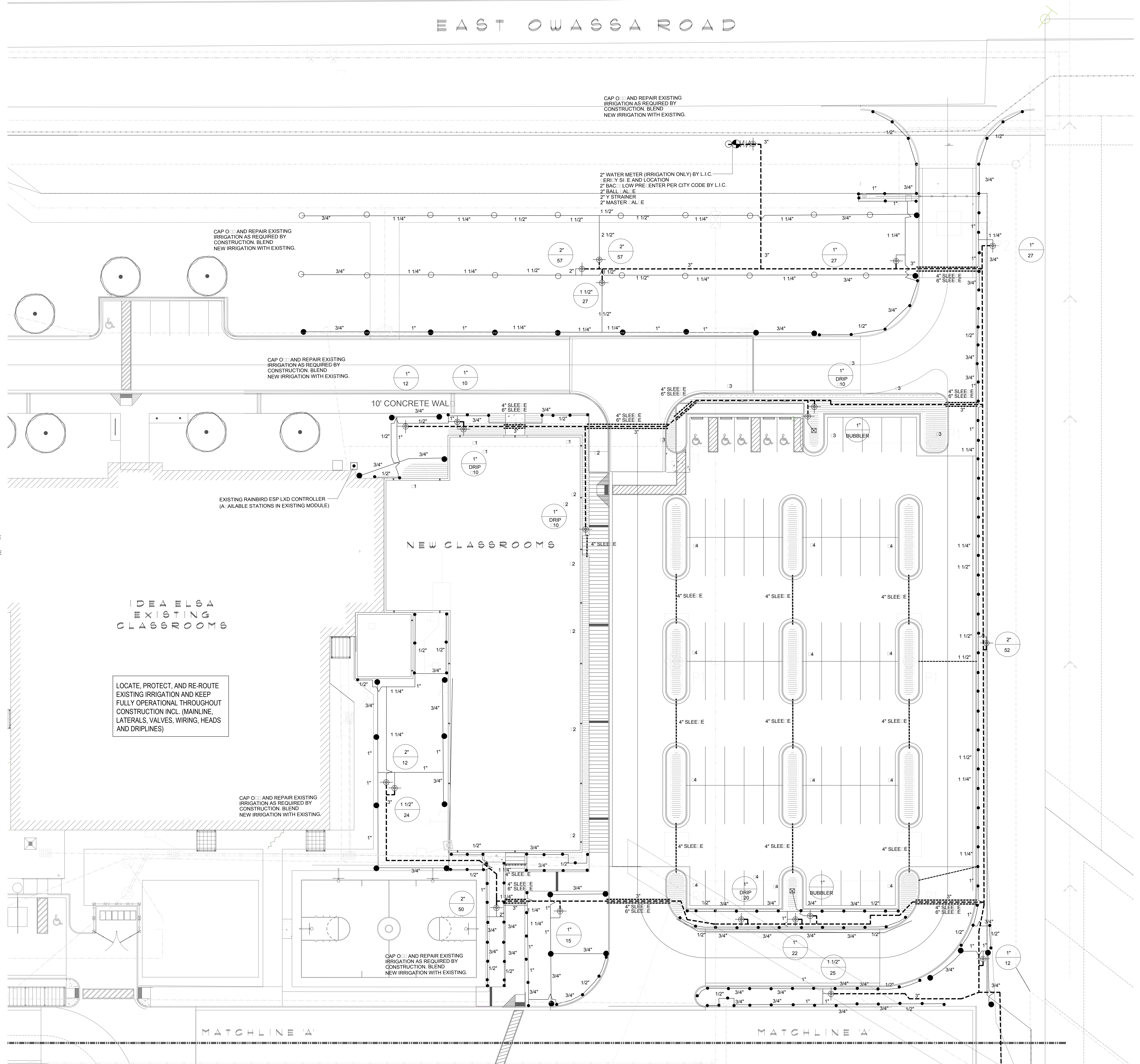
- RAINBIRD R-100 SERIES ROTARY NOZZLE
  - ⊗ RAINBIRD 1404 BUBBLER HEAD
  - RAINBIRD 5000 PC - ROTORS
  - RAINBIRD 5000 O-C - ROTORS
  - ▲ RAINBIRD QUICK COUPLER (33-DLRC)  
 QUICK COUPLERS SHALL BE CONNECTED TO MAINLINE  
 ADD ONE LINE THAT ACTIVATES MASTER VALVE  
 AND ACTIVATES THE QUICK COUPLERS, LABEL ON  
 COLORED ZONING DIAGRAM
  - ⊕ RAINBIRD PEB SERIES ELECTRIC VALVE
  - CONTROLLER (EXISTING ESP-LXD WITH AVAILABLE  
 STATIONS IN EXISTING MODULE)
  - ⊖ ISOLATION VALVE
  - WATER METER (AS SCHEDULED)
  - ⊖ BACKFLOW PREVENTER (AS SCHEDULED)
  - CLASS 200 P.C. LATERAL PIPING
  - - - CLASS 200 P.C. MAINLINE
  - - - SCH. 40 P.C. SLEEVING (AS SCHEDULED)
  - VALVE SILE
  - GPM
- RAINBIRD DRIPLINE X'S  
 (18" LATERAL SPACING, 12" EMITTER SPACING)  
 X'S SERIES TIE DOWN STAPLES (TDS-050) @ 36" O.C. & TWO ON EACH  
 TEE/ELBOW P.C. LATERAL PIPING SCHEDULED AS REQUIRED  
 RAINBIRD DRIP CONTROL ONE FIT XC-100-PRB-COM (EACH DRIP ONE)  
 1" BALL VALVE WITH REGULATED PRESSURE AND 200 MESH FILTRATION  
 (1) DRIP SYSTEM OPERATION INDICATOR (OPERIND) PER IRRIGATION ZONE  
 ALL VALVE BOXES SHALL BE RAINBIRD B-STD OR APPROVED EQUAL  
 ALL VALVE BOXES SHALL HAVE FILTER FABRIC AND 4" O.D. GRAVEL AT BASE  
 INSTALL ALL EQUIPMENT ACCORDING TO  
 MANUFACTURERS SPECIFICATIONS

**NOTE:**  
 Irrigation Contractor to coordinate with Landscape Contractor on  
 layout of all beds. Adjust drip line location per installed edging.

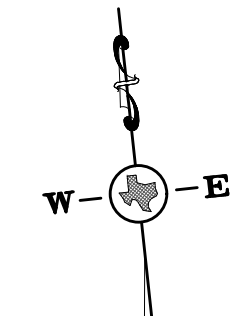
**BUBBLER PIPING CHART**

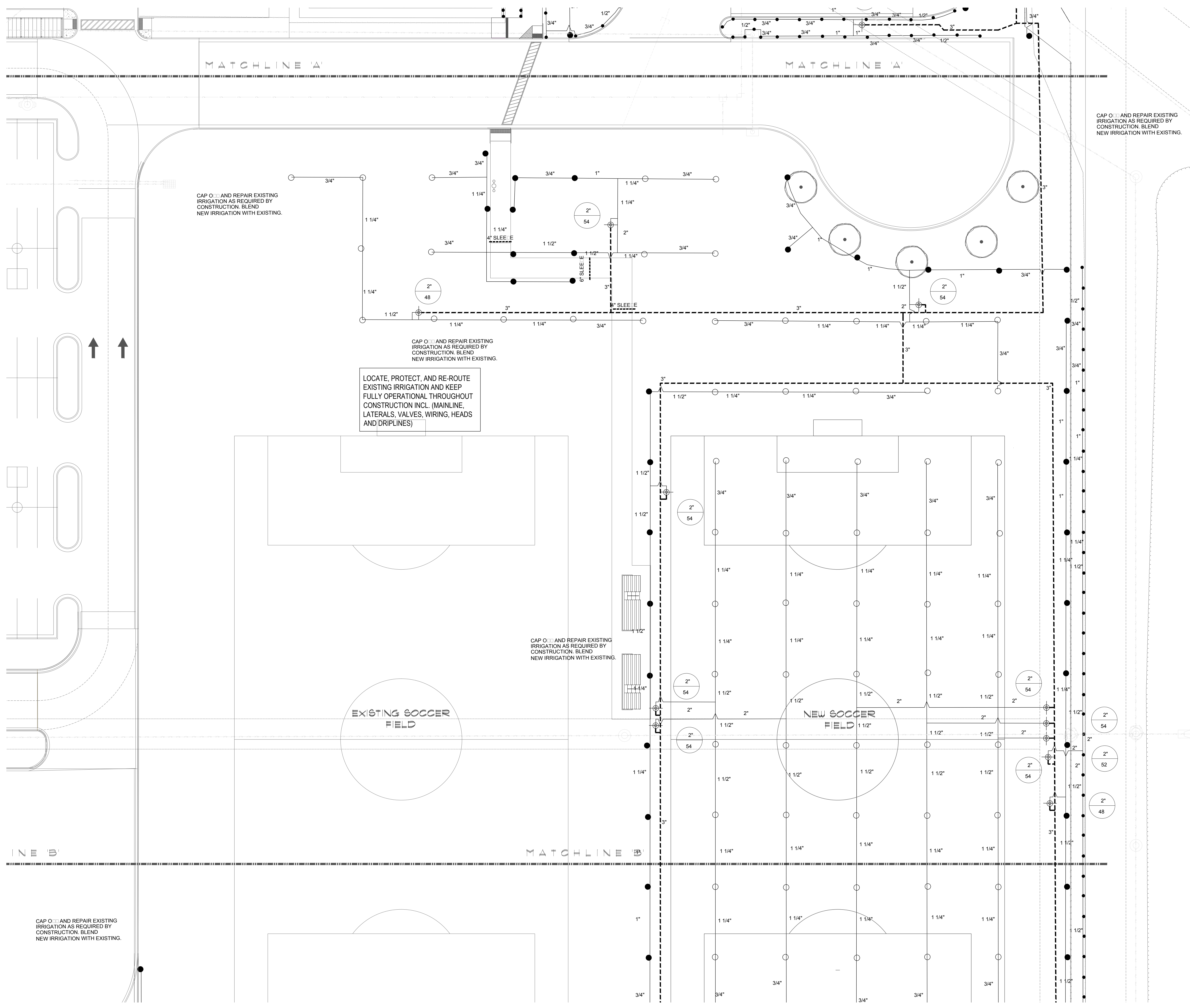
NUMBER OF BUBBLERS	SLEEVE SIZE OF PIPE
1 - 5	1/2"
6 - 10	3/4"
11 - 20	1"
21 - 30	1 1/4"
31 - 40	1 1/2"

- SLEEVING NOTES:**
- Irrigation Contractor shall supply and install sleeves and conduits at twenty-four (24) inches below finish grade of the top of pavement. Bore as required.
  - Irrigation Contractor shall extend sleeves one (1) foot beyond edge of all pavement.
  - Irrigation Contractor shall cap pipe ends using P.C. caps.
  - All sleeves shall be Schedule 40 P.C. pipe.



1 IRRIGATION PLAN  
 SCALE: 1" = 20' - 0"





**IRRIGATION LEGEND**

- RAINBIRD R-1AN SERIES ROTARY NOZZLE
- ⊗ RAINBIRD 1404 BUBBLER HEAD
- RAINBIRD 5000 PC - ROTORS
- RAINBIRD 5000 LC - ROTORS
- ▲ RAINBIRD QUICK COUPLER (33-DLRC)  
 QUICK COUPLERS SHALL BE CONNECTED TO MAINLINE ADD ONE ONE THAT ACTIVATES MASTER VALVE AND ACTIVATES THE QUICK COUPLERS, LABEL ON COLORED ZONING DIAGRAM
- ⊕ RAINBIRD PEB SERIES ELECTRIC VALVE
- CONTROLLER (EXISTING ESP-LXD WITH AVAILABLE STATIONS IN EXISTING MODULE)
- ⊖ ISOLATION VALVE
- WATER METER (AS SHOWN)
- ⊕ BACKFLOW PREVENTER (AS SHOWN)
- CLASS 200 P.C LATERAL PIPING
- - - CLASS 200 P.C MAINLINE
- - - SCH. 40 P.C SLEEVING (AS SHOWN)
- VALVE SIZE  
 ○ GPM
- RAINBIRD DRIPLINE X-3  
 (18" LATERAL SPACING, 12" EMITTER SPACING)  
 X-3 SERIES TIE DOWN STAPLES (TDS-050) @ 36" O.C. & TWO ON EACH TEE/ELBOW P.C LATERAL PIPING SHOWN AS REQUIRED
- RAINBIRD DRIP CONTROL (ONE FIT XC-100-PRB-COM (EACH DRIP LINE) 1" BALL VALVE WITH REGULATED PRESSURE AND 200 MESH FILTRATION)
- (1) DRIP SYSTEM OPERATION INDICATOR (OPERIND) PER IRRIGATION ZONE
- ALL VALVE BOXES SHALL BE RAINBIRD B-STD OR APPROVED EQUAL
- ALL VALVE BOXES SHALL HAVE FILTER FABRIC AND 4" O.D. GRAVEL AT BASE
- INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS

**NOTE:**

Irrigation Contractor to coordinate with Landscape Contractor on layout of all beds. Adjust drip line location per installed edging.

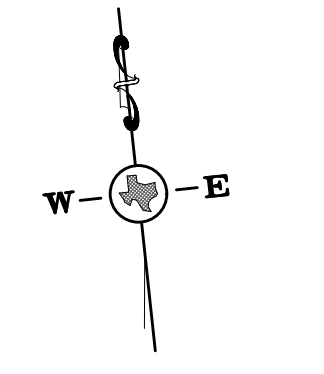
**BUBBLER PIPING CHART**

NUMBER OF BUBBLERS	SLEEVE PIPE
1 - 5	1/2"
6 - 10	3/4"
11 - 20	1"
21 - 30	1 1/4"
31 - 40	1 1/2"

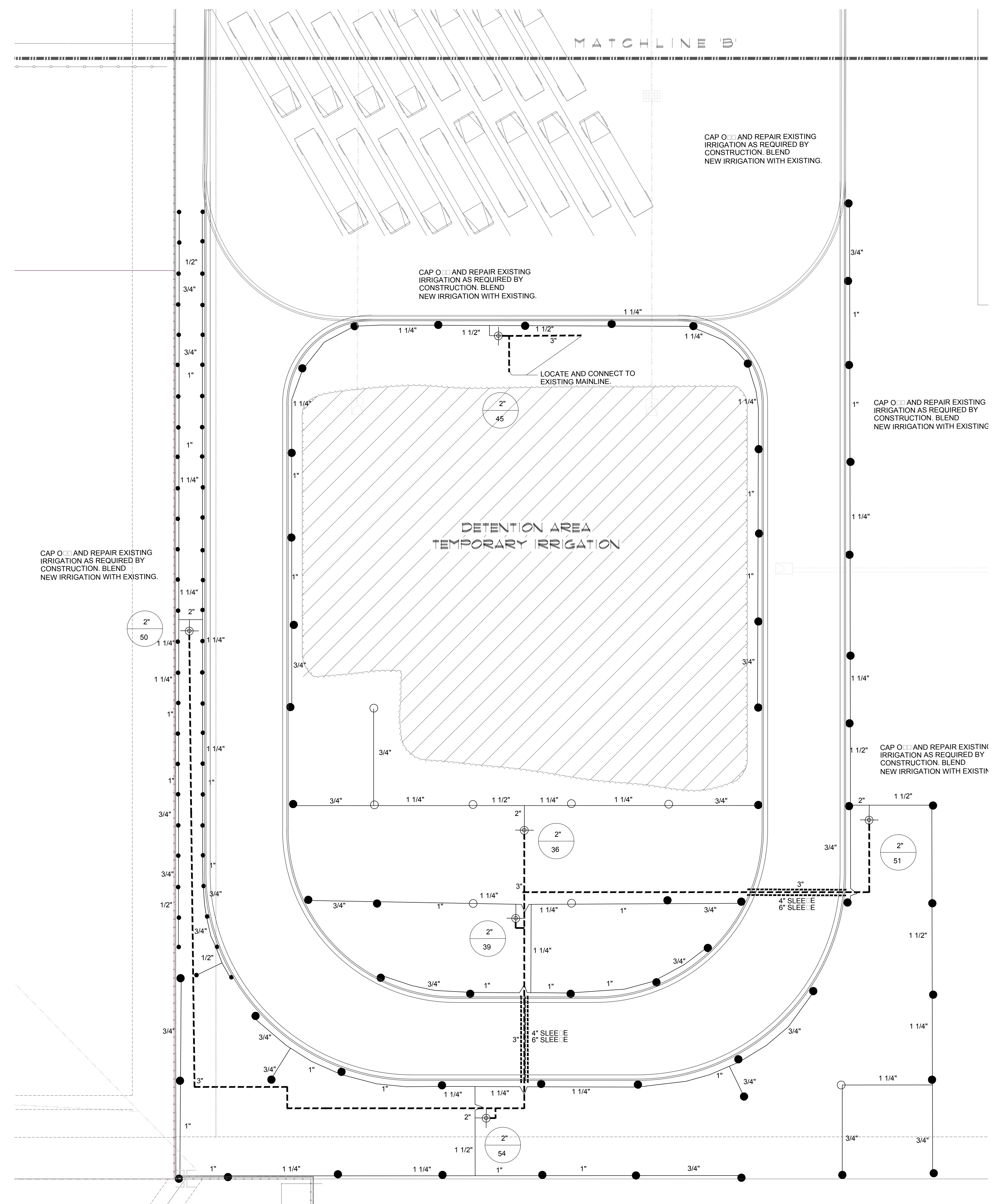
**SLEEVING NOTES:**

1. Irrigation Contractor shall supply and install sleeves and conduits at twenty-four (24") inches below finish grade of the top of pavement. Bore as required.
2. Irrigation Contractor shall extend sleeves one (1') foot beyond edge of all pavement.
3. Irrigation Contractor shall cap pipe ends using P.C caps.
4. All sleeves shall be Schedule 40 P.C pipe.

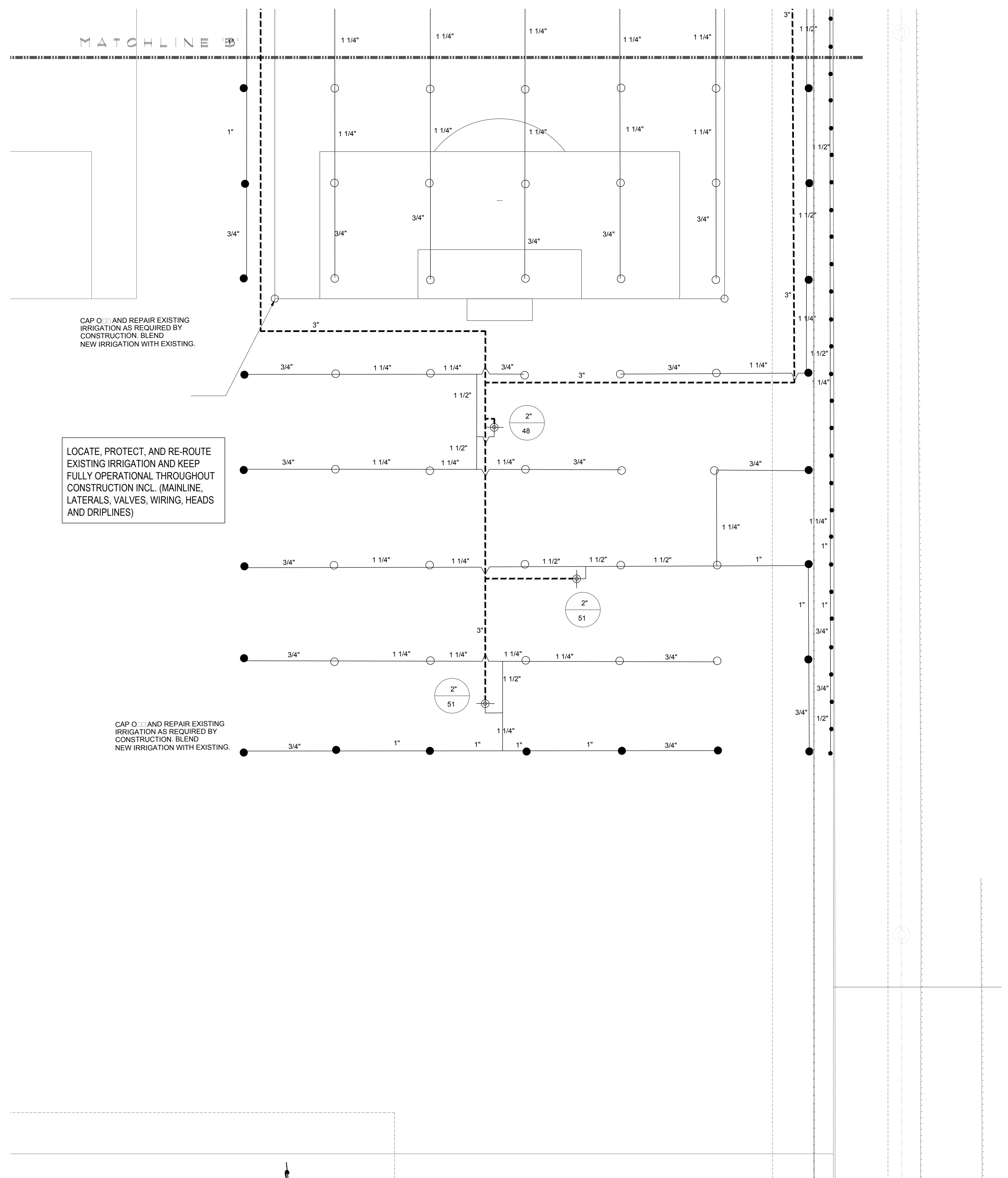
**1 IRRIGATION PLAN**  
 SCALE: 1"=20'-0"



380 E. WASHINGTON ST.  
 BROWNSVILLE, TX 77802  
 TEL: (956) 541-4388  
 FAX: (956) 541-9877  
 www.sspdesign.com



**1 IRRIGATION PLAN**  
 SCALE: 1"=20'-0"



**2 IRRIGATION PLAN**  
 SCALE: 1"=20'-0"

**IRRIGATION LEGEND**

- RAINBIRD ROTARY SERIES ROTARY NOZZLE
- ⊗ RAINBIRD 1404 BUBBLER HEAD
- RAINBIRD 5000 PC - ROTORS
- RAINBIRD 5000 IC - ROTORS
- ▲ RAINBIRD QUICK COUPLER (AL-IE) (33-DLRC) QUICK COUPLERS SHALL BE CONNECTED TO MAINLINE ADD ONE LINE THAT ACTIVATES MASTER VALVE AND ACTIVATES THE QUICK COUPLERS, LABEL ON COLORED WIRING DIAGRAM
- ⊕ RAINBIRD PEB SERIES ELECTRIC VALVE
- CONTROLLER (EXISTING ESP-LXD WITH AVAILABLE STATIONS IN EXISTING MODULE) ISOLATION VALVE
- WATER METER (AS SH-ED)
- ⊕ BACKFLOW PREVENTER (AS SH-ED)
- CLASS 200 P.C LATERAL PIPING
- - - CLASS 200 P.C MAINLINE
- - - - SCH. 40 P.C SLEEVING (AS SH-ED)
- VALVE SILE
- GPM

- DRIPLINE (BED)
- DRIPLINE (LAWN)
- TEMP. IRRIGATION
- RAINBIRD DRIPLINE X-S (18" LATERAL SPACING, 12" EMITER SPACING)
- X: SERIES TIE DOWN STAPLES (TDS-050) 36" O.C. & TWO ON EACH TEE/ELBOW P.C LATERAL PIPING SIZED AS REQUIRED
- RAINBIRD DRIP CONTROL ONE (IT XC)-100-PRB-COM (EACH DRIP - ONE)
- 1" BALL VALVE WITH REGULATED PRESSURE AND 200 MESH FILTRATION
- (1) DRIP SYSTEM OPERATION INDICATOR (OPERIND) PER IRRIGATION - ONE
- ALL VALVE BOXES SHALL BE RAINBIRD B-STD OR APPROVED EQUAL
- ALL VALVE BOXES SHALL HAVE FILTER FABRIC AND 4" O.D. GRAVEL AT BASE
- INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS

**NOTE:**

Irrigation Contractor to coordinate with Landscape Contractor on layout of all beds. Adjust drip line location per installed edging.

**SLEEVING NOTES:**

1. Irrigation Contractor shall supply and install sleeves and conduits at twenty-four (24") inches below finish grade of the top of pavement. Bore as required.
2. Irrigation Contractor shall extend sleeves one (1') foot beyond edge of all pavement.
3. Irrigation Contractor shall cap pipe ends using P.C caps.
4. All sleeves shall be Schedule 40 P.C pipe.

**BUBBLER PIPING CHART**

NUMBER OF BUBBLERS	SLEEVE PIPE
1 - 5	1/2"
6 - 10	3/4"
11 - 20	1"
21 - 30	1 1/4"
31 - 40	1 1/2"



### IRRIGATION LEGEND

- RAINBIRD RAINBIRD SERIES ROTARY NOZZLE
- ⊠ RAINBIRD 1404 BUBBLER HEAD
- RAINBIRD 5000 PC - ROTORS
- RAINBIRD 5000 RC - ROTORS
- ISOLATION VALVE
- ▲ RAINBIRD QUICK COUPLER (33-DLRC) QUICK COUPLERS SHALL BE CONNECTED TO MAINLINE ADD ONE THAT ACTUATES MASTER VALVE AND ACTUATES THE QUICK COUPLERS. LABEL ON COLORED ZONING DIAGRAM - LOCATED ALONG MAINLINE 200' SPACING RAINBIRD PEB SERIES ELECTRIC VALVE
- CONTROLLER (EXISTING ESP-LXD WITH AVAILABLE STATIONS IN EXISTING MODULE)
- WATER METER (AS SHOWN)
- BACKFLOW PREVENTER (AS SHOWN)
- CLASS 200 P.C. LATERAL PIPING
- CLASS 200 P.C. MAINLINE
- SCH. 40 P.C. SLEEVING (AS SHOWN)
- VALVE SIZE
- GPM

- DRIPLINE (BED)**
- RAINBIRD DRIP XFS-P (30" THICKNESS) SUBSURFACE DRIPLINE WITH COPPER SHIELD (18" LATERAL SPACING, 12" EMITTER SPACING) ALL DRIPLINE TO BE BURIED 2" DEPTH MIN. 6" SOIL STAPLE (TDS-050 BEND) @ 36" O.C. & TWO ON EACH TEE/ELBOW
  - PVC LATERAL PIPING SIZED AS REQUIRED
  - RAINBIRD DRIP CONTROL ZONE KIT XCZ-100-PRB-R-COM (EACH DRIP ZONE)
  - 1" BALL VALVE WITH REGULATED PRESSURE AND 200 MESH FILTRATION (75 MICRON SS)
  - INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS OR APPROVED EQUAL.
- DRIPLINE (LAWN)**
- RAINBIRD DRIP XFS-P (30" THICKNESS) SUBSURFACE DRIPLINE WITH COPPER SHIELD (18" LATERAL SPACING, 12" EMITTER SPACING) ALL DRIPLINE TO BE BURIED 2" DEPTH MIN. 6" SOIL STAPLE (TDS-050 BEND) @ 36" O.C. & TWO ON EACH TEE/ELBOW
  - PVC LATERAL PIPING SIZED AS REQUIRED
  - RAINBIRD DRIP CONTROL ZONE KIT XCZ-100-PRB-R-COM (EACH DRIP ZONE)
  - 1" BALL VALVE WITH REGULATED PRESSURE AND 200 MESH FILTRATION (75 MICRON SS)
  - INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS OR APPROVED EQUAL.

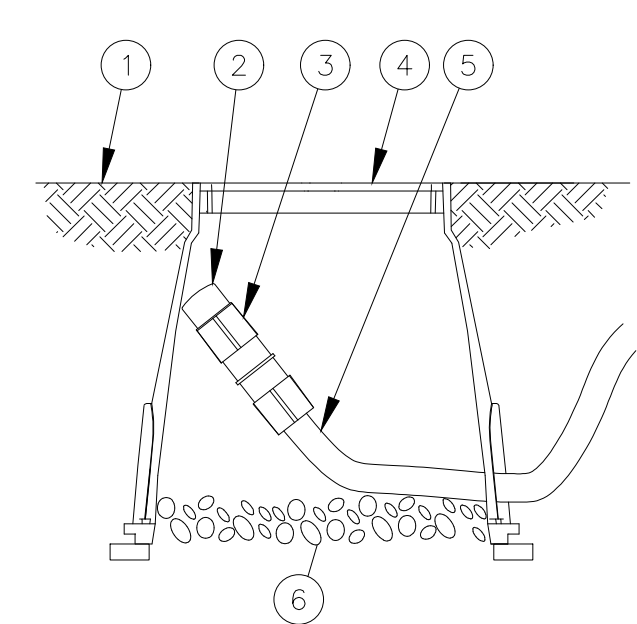
(1) DRIP SYSTEM OPERATION INDICATOR (OPERING) PER IRRIGATION ZONE

DESIGN PRESSURE 60 PSI  
 ELECTRICAL SPLICES AT EACH VALVE AND CONTROLLER ONLY.

IRRIGATION IN TEXAS IS REGULATED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ), MC-178/ P.O. BOX 13087, AUSTIN, TX 78711-3087. TCEQ'S WEBSITE IS: WWW.TCEQ.STATE.TX.US

**BUBBLER PIPING CHART**

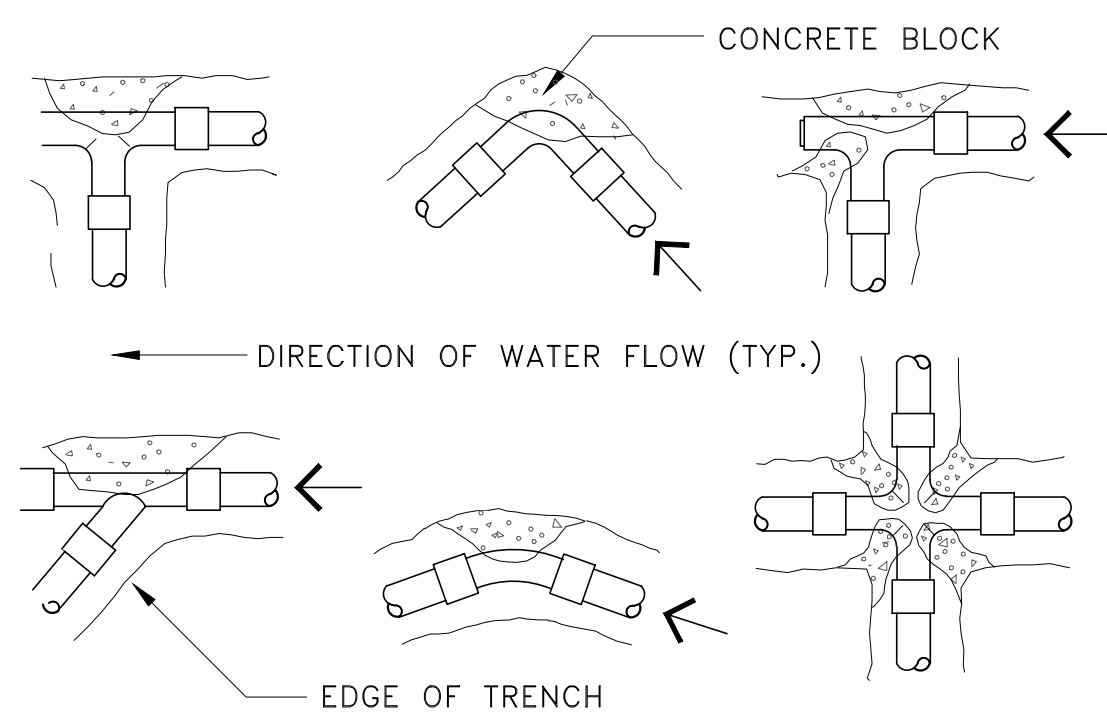
NUMBER OF BUBBLERS	PIPE SIZE
1 - 5	3/2"
6 - 10	3/4"
11 - 20	1"
21 - 30	1 1/4"
31 - 40	1 1/2"



- 1 FINISH GRADE
- 2 FLUSH CAP FOR EASY FIT CORVERSION FITTINGS: POTABLE: RAIN BIRD MDCFCAP NON-POTABLE: RAIN BIRD MDCFCAP
- 3 EASY FIT COUPLING: RAIN BIRD MDCFCOUP
- 4 SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
- 5 SUB-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFS DRIPLINE NON-POTABLE: XFS P DRIPLINE
- 6 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL WITH FILTER FABRIC AT BASE

NOTE:  
 1. ALLOW A MINIMUM OF 6-INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

### 1 DRIPLINE NOT TO SCALE



THRUST BLOCK BEARING AREA (SQ. FT.)

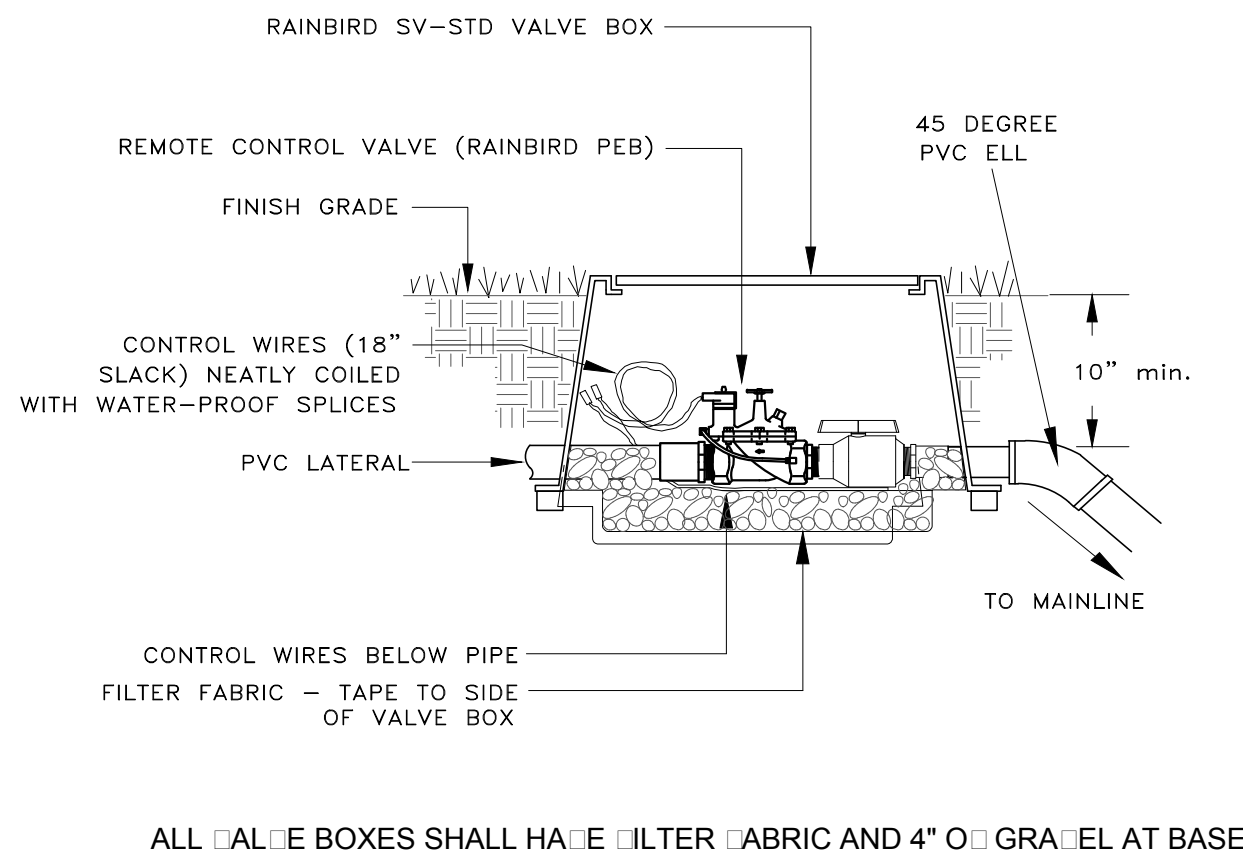
PIPE SIZE	1 1/4"	2 1/2"	3"	4"
TEES/ELLS	1.00	1.00	1.25	3.62
90 BENDS	1.00	1.25	2.00	4.5
45 BENDS	1.00	1.00	1.00	2.4

NOTE:  
 INSTALL THRUST BLOCK AT ALL MAINLINE BENDS, TEES OR ELLS AS SHOWN BELOW. THRUST BLOCKS SHALL BE MINIMUM OF (1) CU. FT. RED-MIX CONCRETE OR 2500 PSI 28 DAY CONCRETE.

### 2 THRUST BLOCK DETAIL NOT TO SCALE

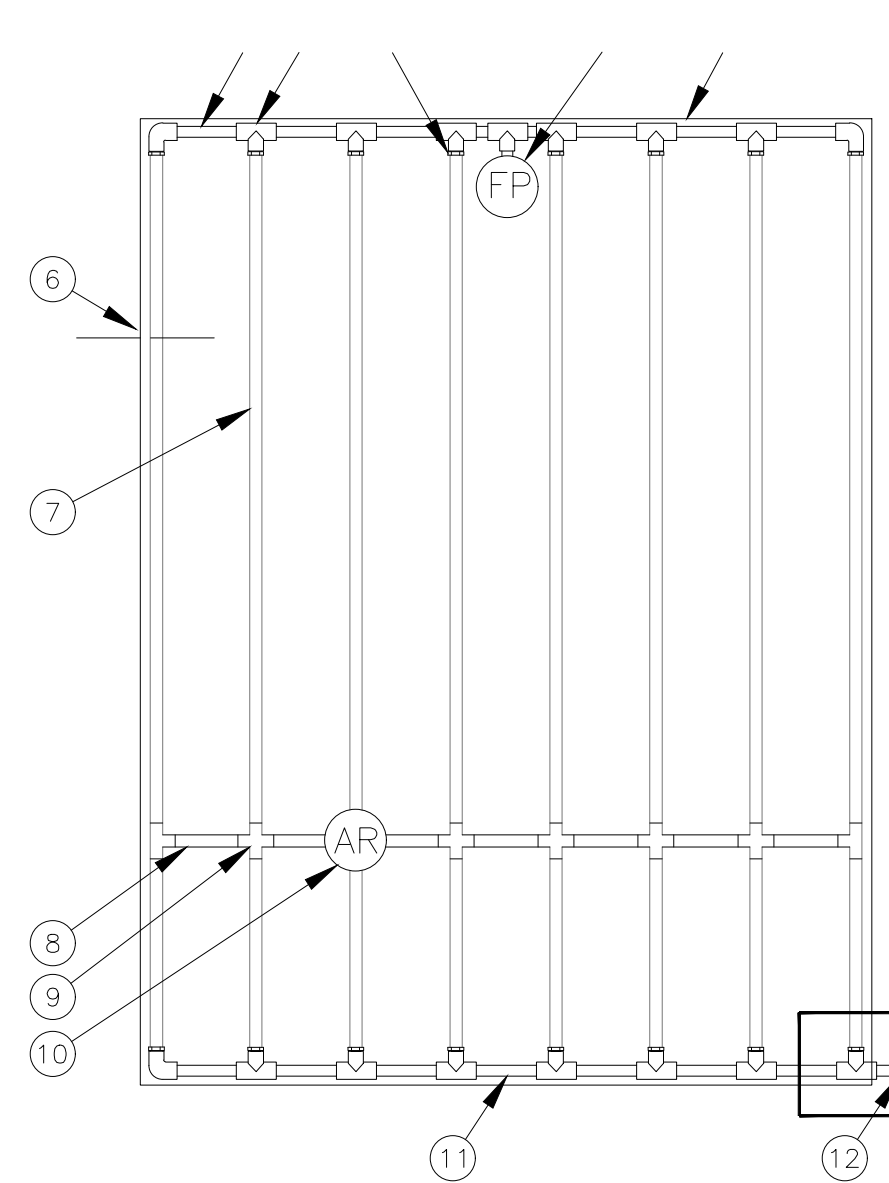
### IRRIGATION NOTES

1. All equipment numbers reference Rainbird equipment catalog unless otherwise indicated.
2. LAWN SPRAY HEADS are RAIN installed as per detail.
3. SHRUB SPRAY HEADS are RAIN installed as per detail.
4. ELECTRIC CONTROL VALVES shall be PEB installed as per detail shown. Size valves as shown on plans. Valves shall be installed in valve boxes large enough to permit manual operation, removal of solenoid and/or valve cover without any earth excavation. (Refer to Specifications)
5. AUTOMATIC CONTROLLER shall be installed at location shown. Power (120V) shall be located in a junction box within five feet (5') of controller location. Power supply and junction box to be provided by General Contractor.
6. All 24 volt valve wiring is to be U-14 single conductor. All wire splices are to be permanent and waterproof. (Refer to Specifications)
7. SLEEVES shall be supplied and installed by Irrigation Contractor. Sleeve material shall be Schedule 40. Bore under existing pavement as required. Sizes as indicated on plans.
8. Ten days prior to start of construction, contractor shall verify static water pressure. If static pressure is less than 50 PSI, do not start work until notified to do so by SSP Design.
9. All mainline and lateral piping shall have a minimum of 12 inches of cover. All piping under paving shall have a minimum of 18 inches of cover. (Refer to Specifications).
10. The irrigation contractor shall coordinate installation of the system with the landscape contractor so that all plant material will be watered in accordance with the intent of the plans and specifications.
11. The irrigation contractor shall select the proper arc and radius for each nozzle to insure 100% and proper coverage of all lawn areas and plant material. All nozzles in parking lots and planting beds shall be low angle to minimize overspray on pavement surfaces. No water will be allowed to spray on building.
12. The irrigation contractor shall warranty all system components for a period of one year plus 20 days. (Refer to Specifications).
13. See specifications for further instructions and project requirements. Contractor shall follow specification section 328000 - Site Irrigation for any discrepancies between plans and specifications.



ALL VALVE BOXES SHALL HAVE FILTER FABRIC AND 4" O.D. GRAVEL AT BASE

### 3 REMOTE CONTROL VALVE NOT TO SCALE

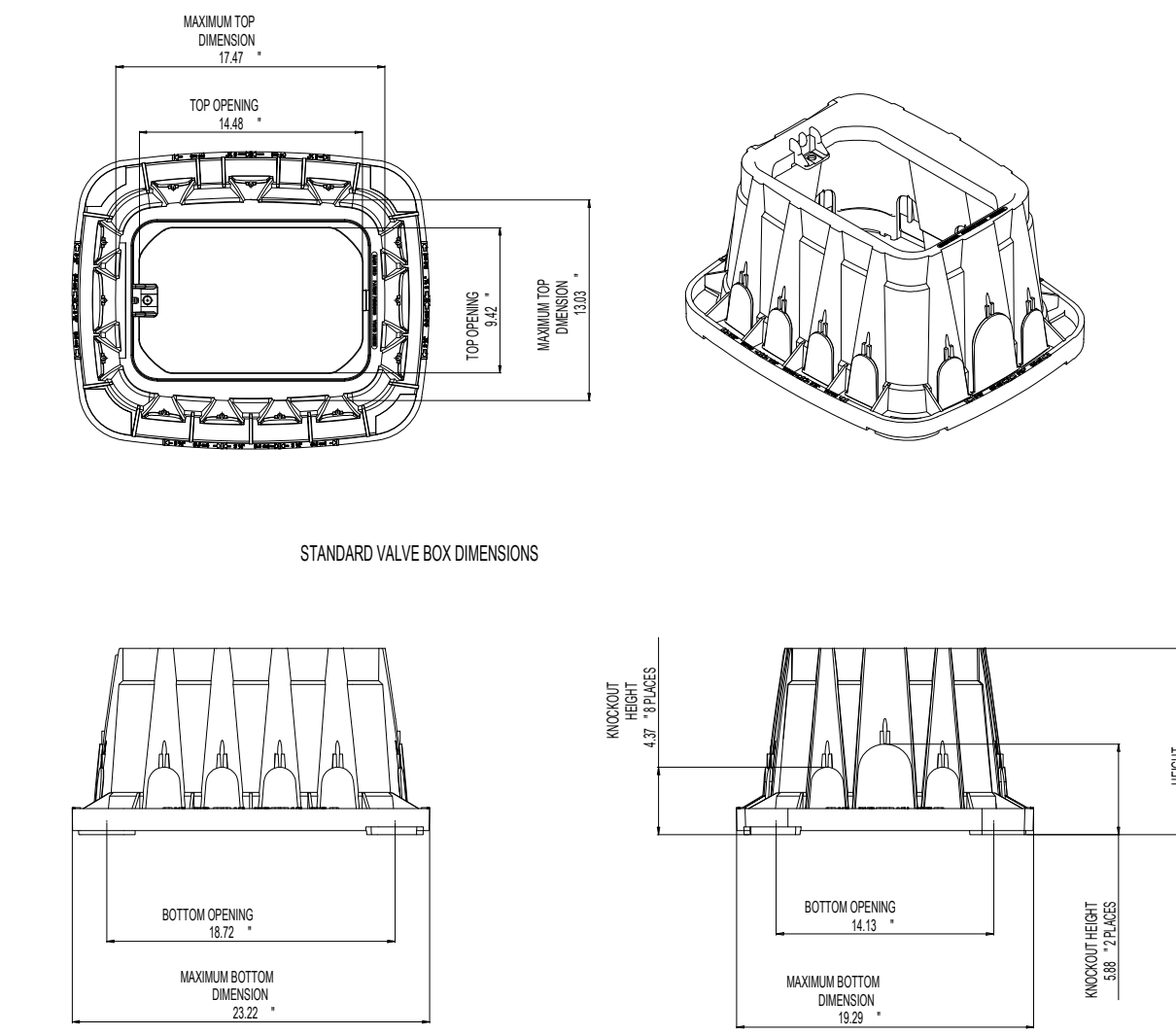


- NOTES:  
 1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE RAIN BIRD XFS DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.  
 2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.  
 3. AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.  
 4. BURY DRIPLINE MIN. 1" BELOW SOIL LEVEL THAN ADD 2" MULCH.  
 5. WHEN USING 1/2" INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLARVS BE INSTALLED ON EACH FITTING

**X FS Dripline Maximum Lateral Lengths (feet)**

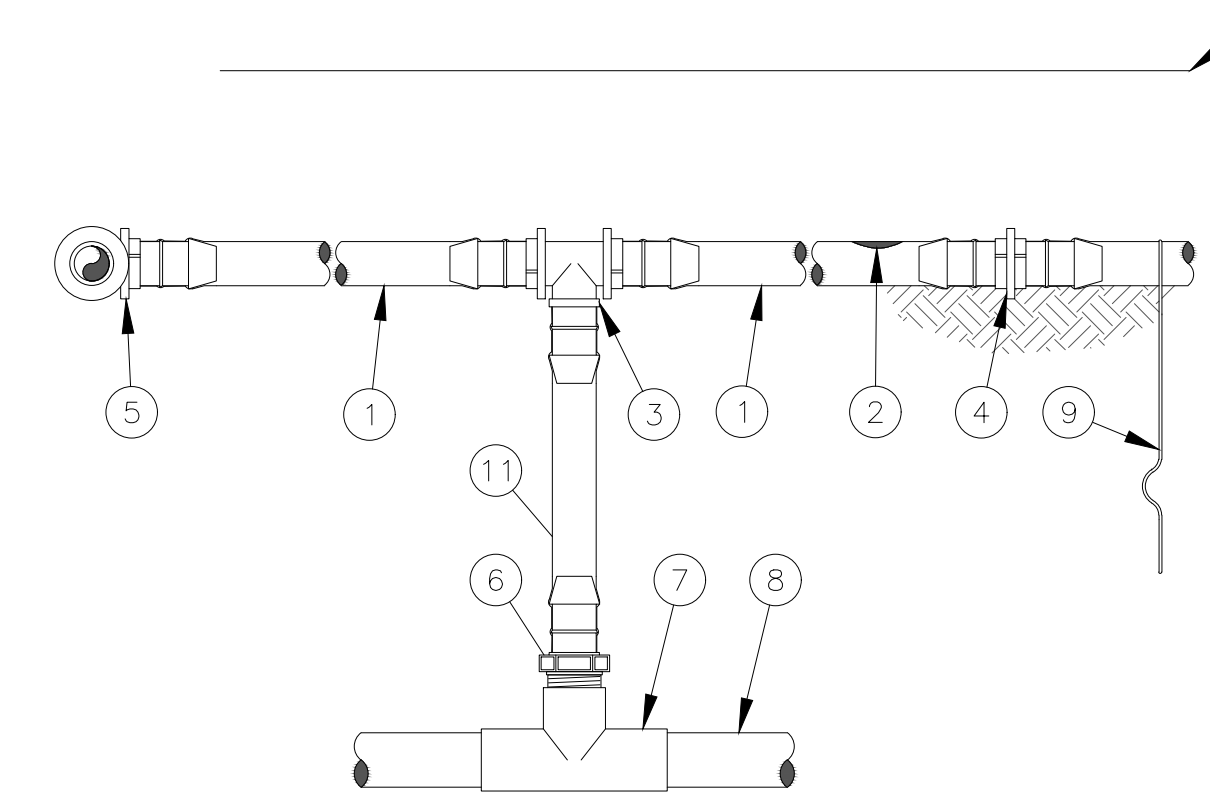
Inlet Pressure psi	12" Spacing		18" Spacing		24" Spacing	
	Nominal Flow (GPH)	Nominal Flow (GPH)	Nominal Flow (GPH)	Nominal Flow (GPH)	Nominal Flow (GPH)	Nominal Flow (GPH)
15	255	194	357	273	448	343
20	291	220	408	313	514	394
30	350	266	494	378	622	478
40	396	302	560	428	705	541
50	434	333	614	470	775	594

### 4 XFS SUB-SURFACE DRIPLINE END FEED LAYOUT INST. N.T.S.



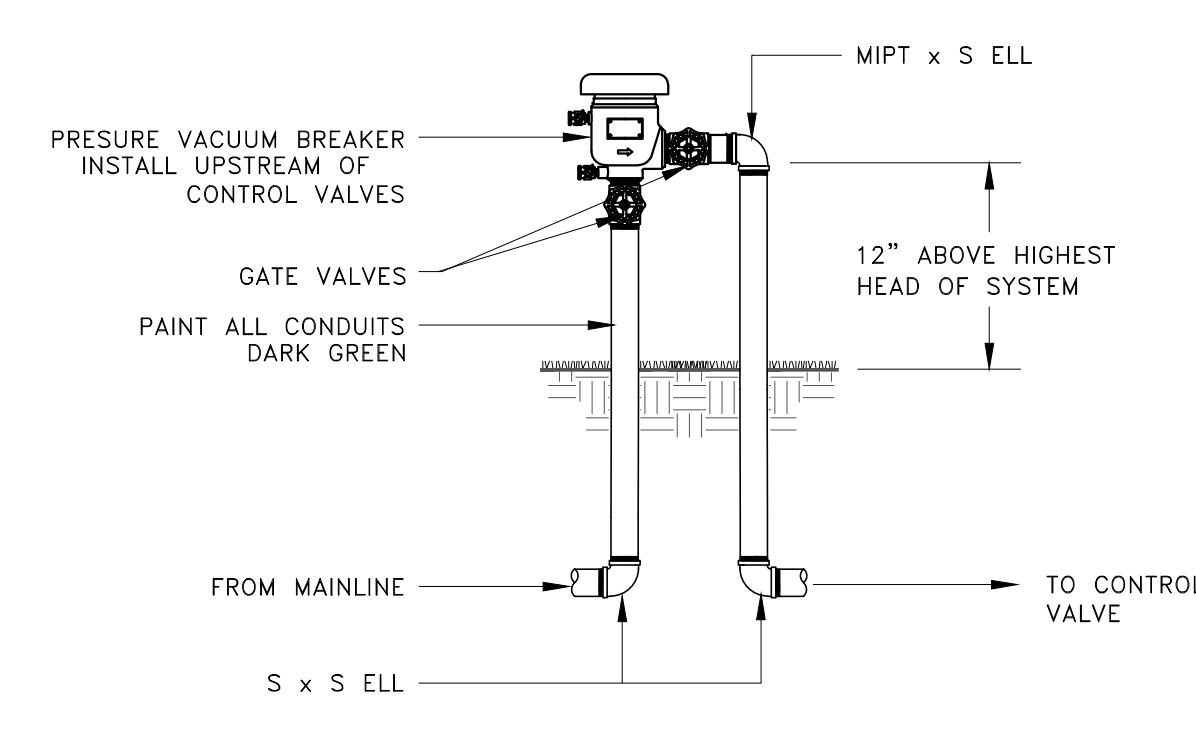
ALL VALVE BOXES SHALL BE RAINBIRD VB-STD OR APPROVED EQUAL  
 ALL VALVE BOXES SHALL HAVE FILTER FABRIC AND 4" O.D. GRAVEL AT BASE

### 5 VALVE BOX (VB-STD) NOT TO SCALE

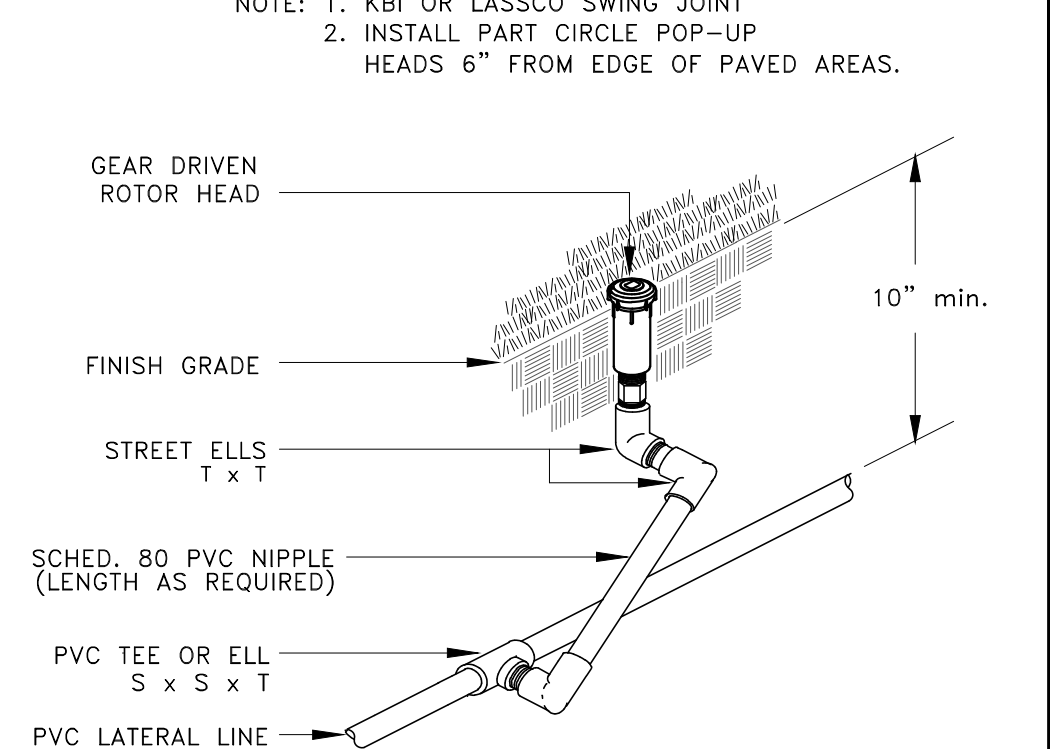


- NOTES:  
 1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.  
 2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.  
 3. SAVE YOUR HANDS. USE THE RAIN BIRD FITTINGS-TOOL XF INSERTION TOOL FOR FITTING ASSEMBLY.

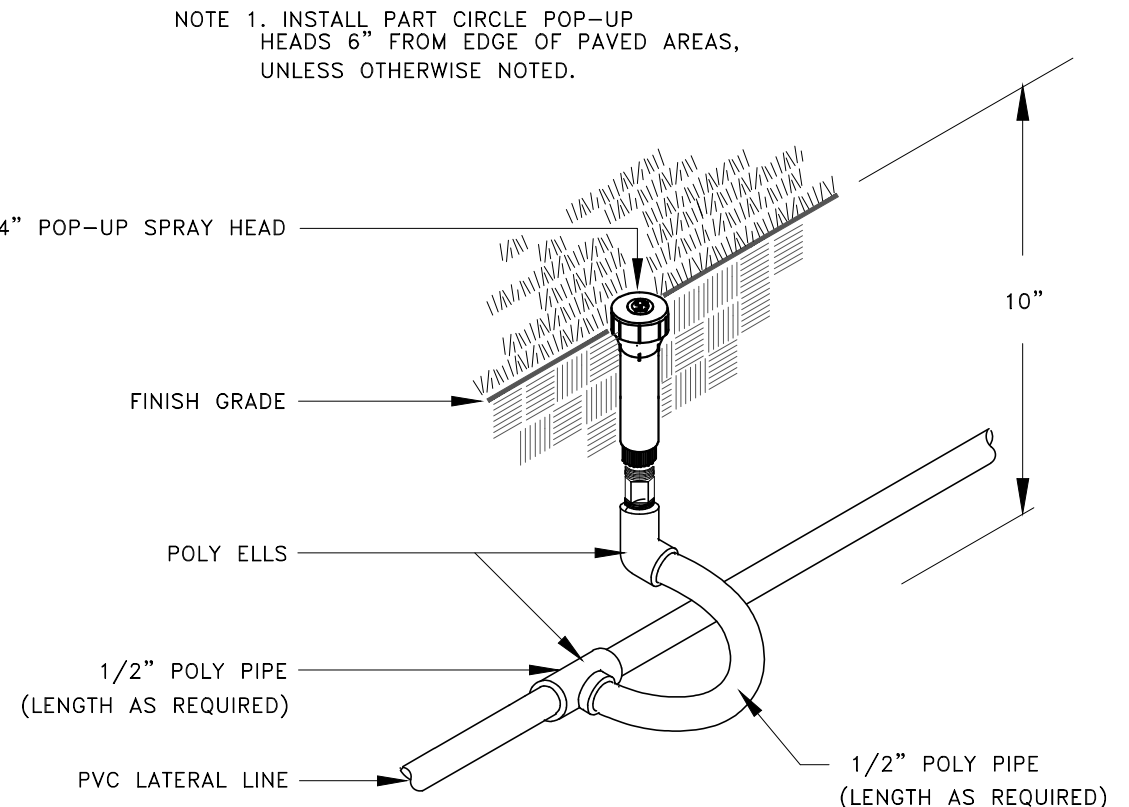
### 6 IRRIGATION SYSTEMS SUB-HEADER INST. N.T.S.



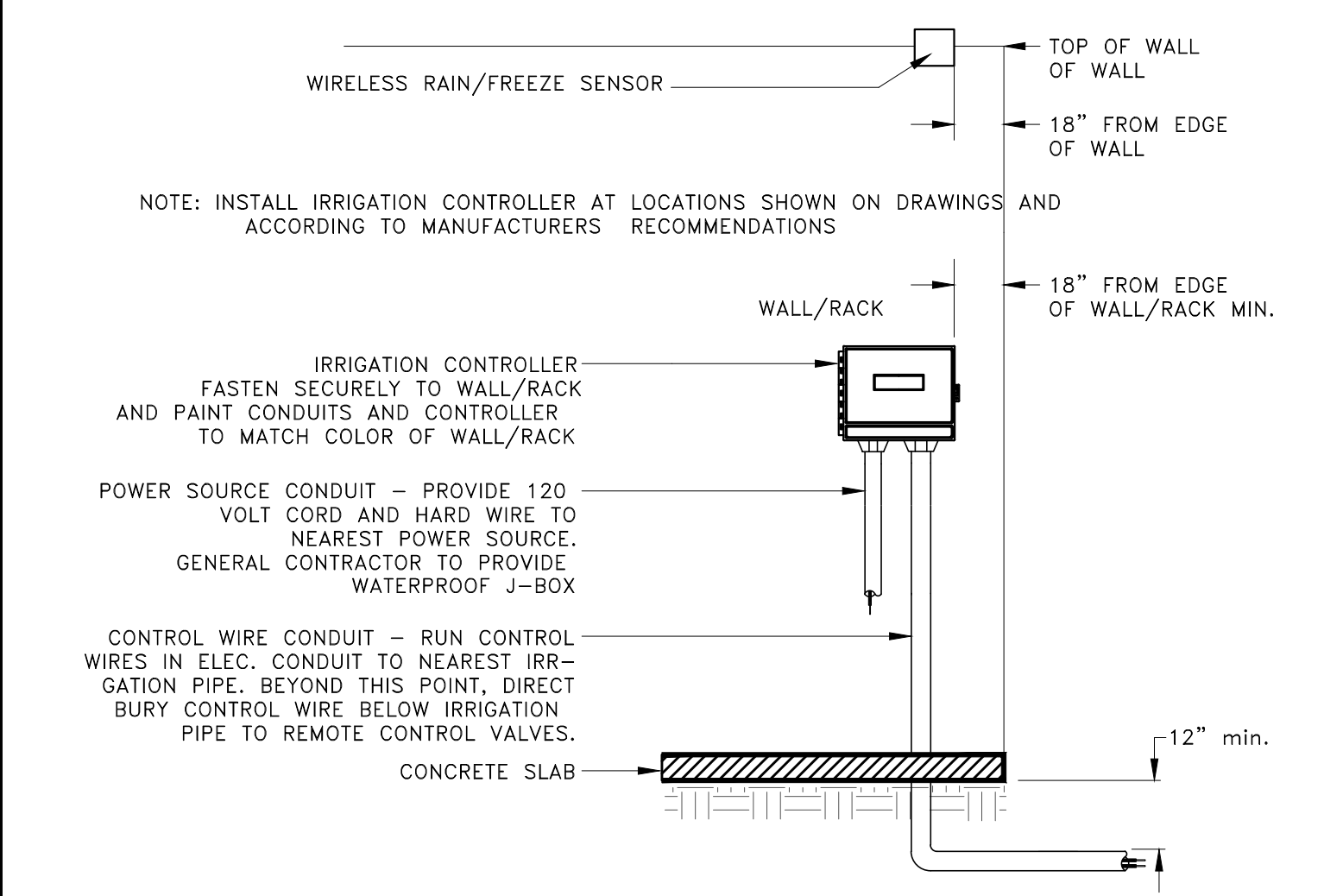
### 7 PRESSURE VACUUM BREAKER NOT TO SCALE



### 8 ROTOR POP-UP NOT TO SCALE



### 9 LAWN POP-UP HEAD NOT TO SCALE

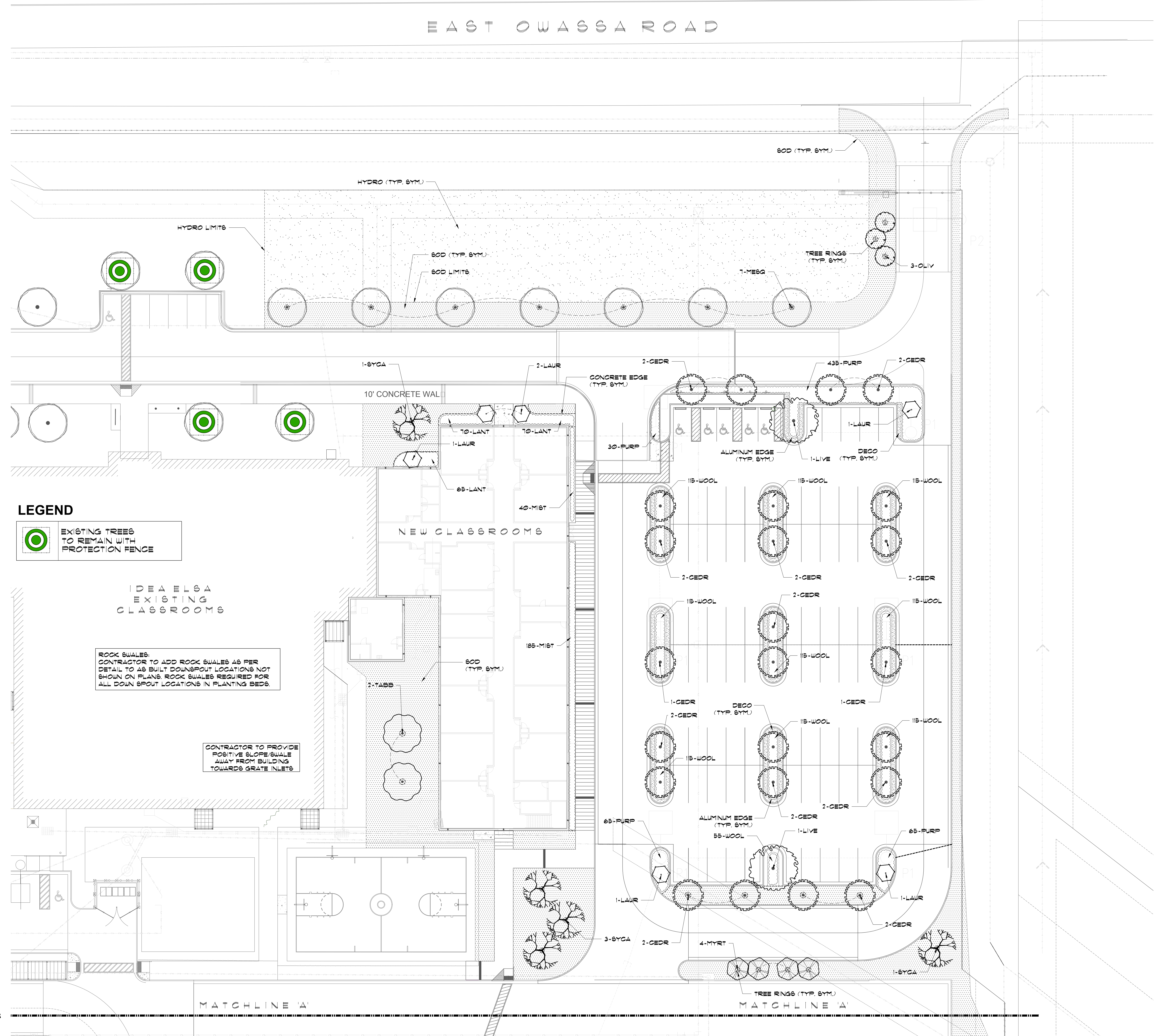


### 10 WALL/RACK MOUNTED CONTROLLER NOT TO SCALE





EAST OWASSA ROAD



**LEGEND**

EXISTING TREES TO REMAIN WITH PROTECTION FENCE

IDEA ELSA  
EXISTING  
CLASSROOMS

ROCK SWALES:  
CONTRACTOR TO ADD ROCK SWALES AS PER  
DETAIL TO AS BUILT DOWNSPOUT LOCATIONS NOT  
SHOWN ON PLANS. ROCK SWALES REQUIRED FOR  
ALL DOWN SPOUT LOCATIONS IN PLANTING BEDS.

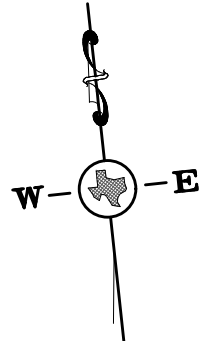
CONTRACTOR TO PROVIDE  
POSITIVE SLOPE/SWALE  
AWAY FROM BUILDING  
TOWARDS GRATE INLETS

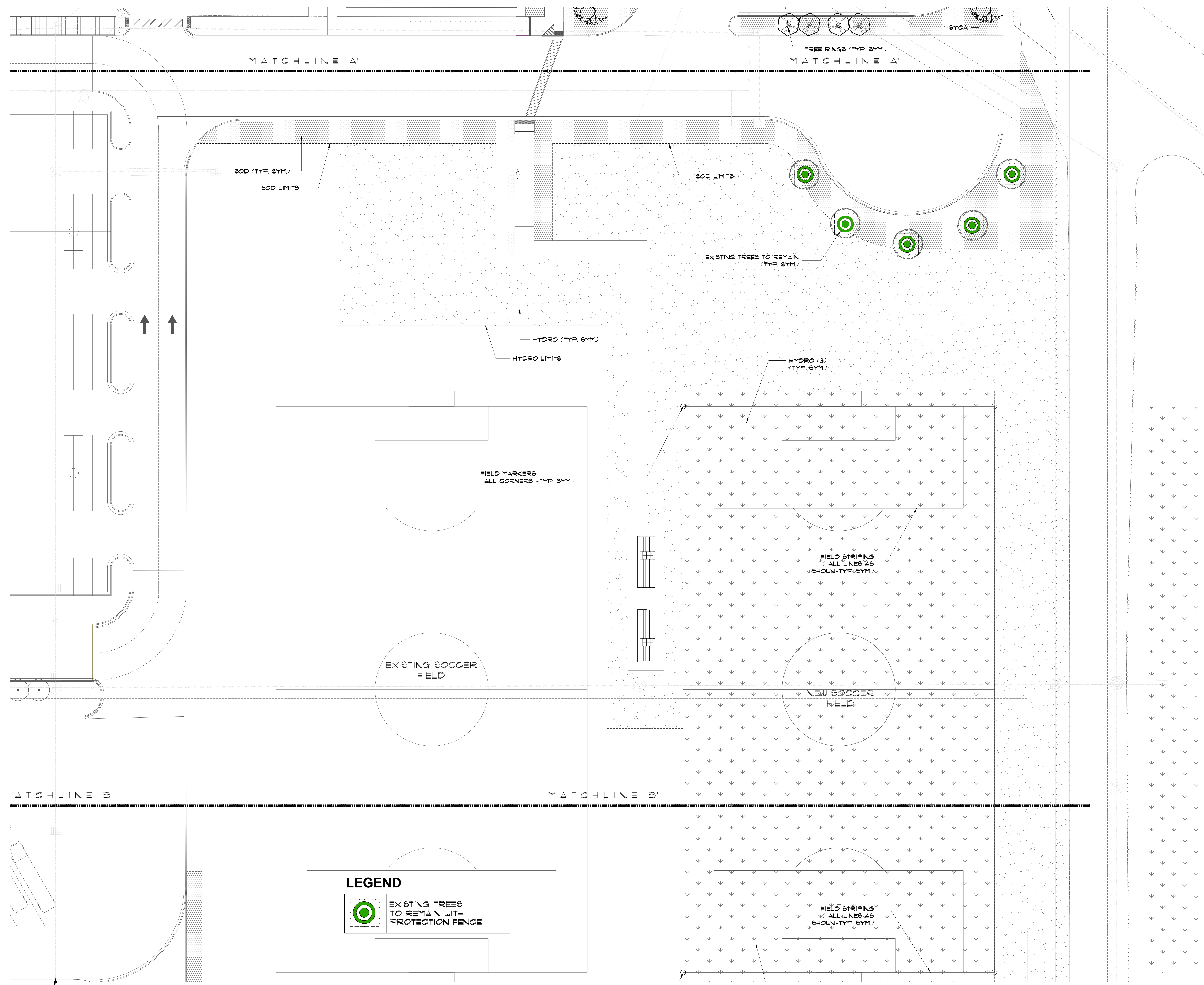
NEW CLASSROOMS

MATCHLINE 'A'

MATCHLINE 'A'

**1** LANDSCAPE PLAN  
SCALE: 1"=20'-0"



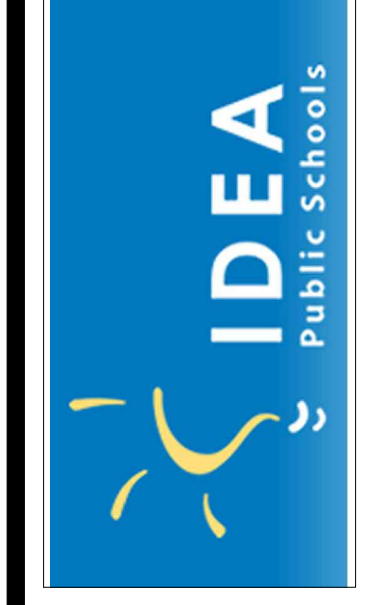


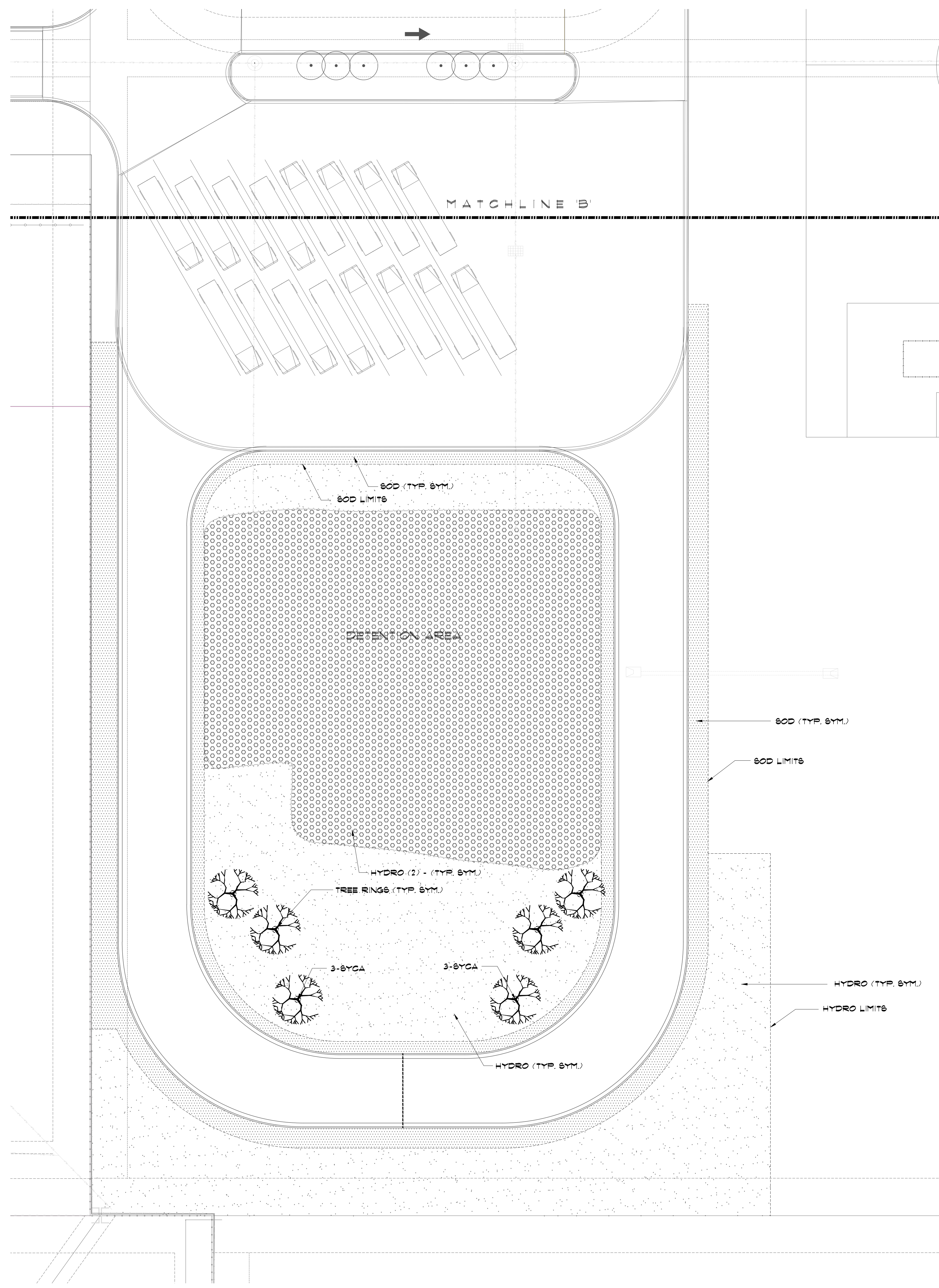
**LEGEND**

EXISTING TREES TO REMAIN WITH PROTECTION FENCE

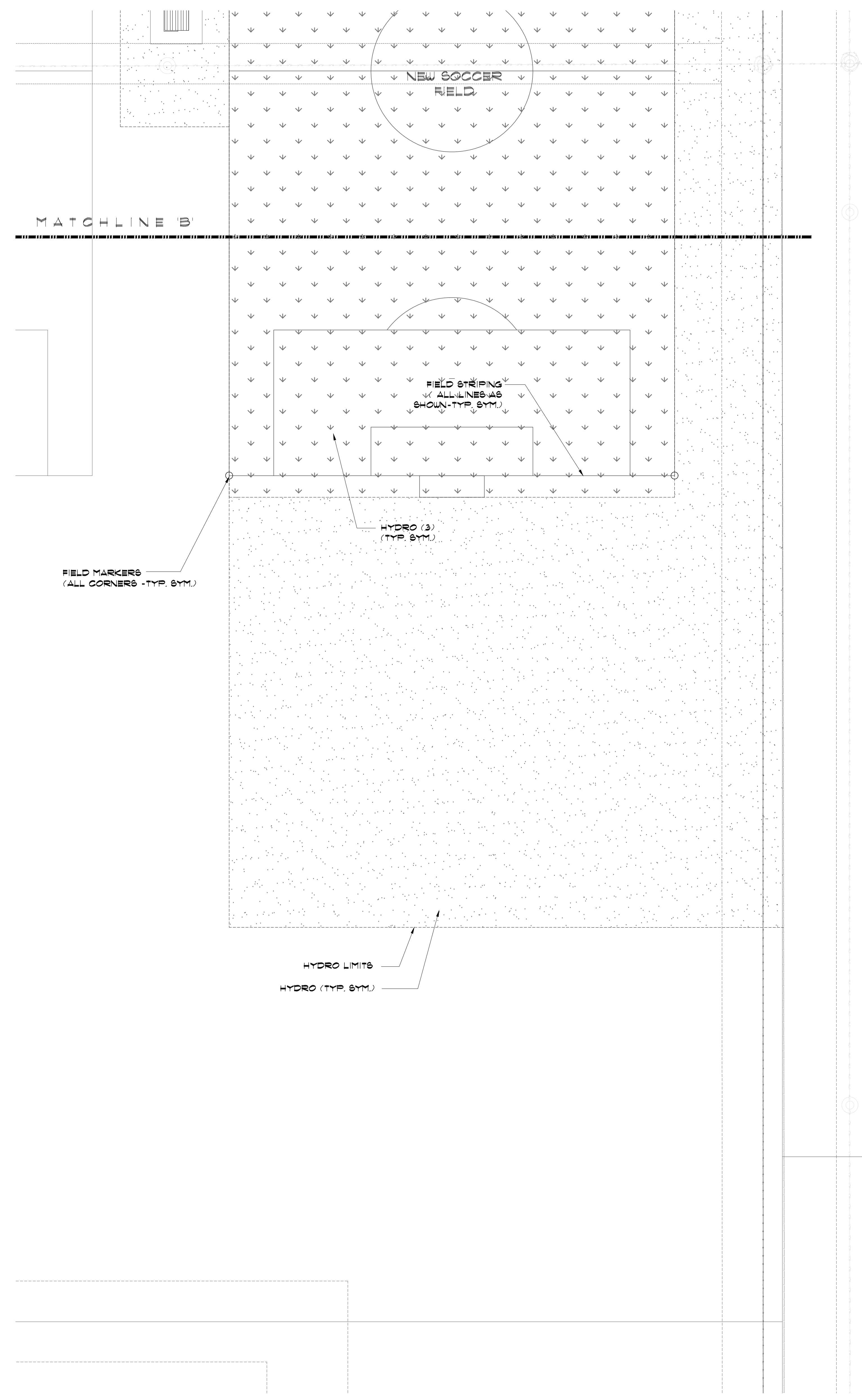
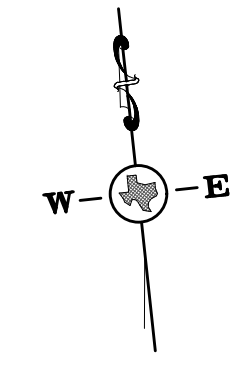
**1** LANDSCAPE PLAN  
 SCALE: 1"=20'-0"

IDEA-OWASSA  
 COLLEGE PREP PHASE II

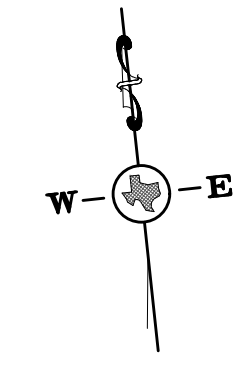




**1** LANDSCAPE PLAN  
SCALE: 1"=20'-0"



**2** LANDSCAPE PLAN  
SCALE: 1"=20'-0"



### PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	SPACING	QTY
TREES						
CEDR	ULMUS CRASSIFOLIA	CEDAR ELM (CONT. GROWN)	24" BOX	2-3" CAL. 10' H X 6' W	A.B.	24
LAUR	SOPIHORA BEGNANDIFLORA	MOUNTAIN LAUREL (CONT. GREN)	24" BOX	MULTI-TRUNK - 6' HT	A.B.	6
LIVE	QUERCUS VIRGINIANA	LIVE OAK	24" BOX	3-4" CAL. 15' HT X 8' W	A.B.	2
MEGQ	PROSOPIA GLANDULOSA	HONEY MESQUITE	B/B	3" CAL. - 10' H X 6' W	A.B.	7
MYRT	LAGERSTROEMIA X. NATCHEZ	NATCHEZ GRAPE MYRTLE	30 GAL	10' H X 6' W, MULTI	A.B.	4
OLIV	CORDIA BOISSIERI	WILD OLIVE	B/B	2-3" CAL.	A.B.	3
BYCA	PLATANUS MEXICANA	MEXICAN SYCAMORE	B/B	3" CAL. - 10' H X 6' W	A.B.	11
TABB	TABEBUIA IMPETIGINOSA	PURPLE TRUMPET TREE	30 GAL	2-3" CAL. 10' H X 5' W	A.B.	2
SHRUBS						
MIST	EUPATORIUM BETONICIFOLIUM	PADRE ISLAND MIST FLOWER	1 GAL	12"HT-BUSHY	18" O.C.	235
GROUND COVERS						
LANT	LANTANA CAMARA	RED SPREAD LANTANA	1 GAL	18" O.C.		210
PURP	LANTANA MONTEVIDENSIS	PURPLE TRAILING LANTANA	1 GAL	12"HT-BUSHY	18" O.C.	530
WOOL	STEMODIA LANATA	WOOLLY STEMODIA	1 GAL	12"HT-BUSHY	12" O.C.	1020
GRASS						
BOD	CYNODON DACTYLON	#1 CERTIFIED 418' HYBRID BERMUDA BOD				4800 B.Y.
HYDR0	CYNODON DACTYLON	COMMON BERMUDA HYDROMULCH				133200 B.Y.
HYDR0(1)	CYNODON DACTYLON	COMMON BERMUDA HYDROMULCH WITH TACKIFIER				10985 B.Y.

NOTE: CONTAINER GROWN MATERIAL SHALL BE GLEN FLORA FARMS OR APPROVED EQUAL.

### MATERIAL SCHEDULE

DESCRIPTION	NOTES	QUANTITY
PREMIUM COMPOST	2" LAYER PREMIUM COMPOST (EARTHWISE ORGANICS MIX)	28 C.Y.
SCREENED TOP SOIL	8" FOR ALL PLANTING BEDS	121 C.Y.
MULCH (HARDWOOD)	2" MIN. FOR ALL PLANTING BEDS AND WATERING BASINS (TEXAS NATIVES HARDWOOD)	468 (2 OF BAGS)
HERBICIDE	ALL PLANTING BED AREAS AS SPECIFIED	5200 B.F.
FERTILIZER	ALL PLANT MATERIAL PER DETAILS	5200 B.F.
PLANTING TABLETS	PER DETAILS / AS SPECIFIED	-
PRE-EMERGENT	ALL PLANTING BED AREAS AS SPECIFIED	-
QUITING / STAKING	ALL TREES/PALMS PER DETAILS	-
FIELD STRIPING	SHERWIN-WILLIAMS 'SHERSTRIP' FIELD STRIPING AS PER PLANS	-
FIELD MARKERS	PIONEER ATHLETICS 'FLEEFIX' FIELD MARKER AS PER PLANS	4
DECO	4" DEPTH COMPACTED DECOMPOSED GRANITE (1/4" MINUS FINES) PER PLANS/DETAILS	1780 B.F.
ALUMINUM EDGE	5" BLACK ANODIZED ALUMINUM EDGE 'DREAMSCAPE' PER PLANS/DETAIL	815 L.F.
CONCRETE EDGE	6" X 4" EXTRUDED COLORED CONCRETE EDGING 'TEXAS BUFF' COLOR PER PLANS/DETAILS	145 L.F.
TREE RINGS	(36" DIA) 4x6" EXTRUDED CONCRETE EDGING PER PLANS/DETAILS	26
ROCK SWALE	18" WIDE WASHED GRAVEL (1" - 1 1/2") SWALE PER DETAILS AT RAIN GUTTER LOCATIONS	-
TREE TRIM/PRIANE	TREE TRIMMING/PRUNING BY ISA CERTIFIED ARBORIST	-
TREE PROTECTION	TREE PROTECTION FENCING AS PER PLANS/DETAILS	-
IRRIGATION SYSTEM	COMPLETE AUTOMATIC IRRIGATION SYSTEM/ADJUSTMENTS BY LICENSED CONTR.	-

NOTE: CONTRACTORS MUST REVIEW TECHNICAL SPECIFICATIONS FOR ADDITIONAL PRODUCT INFORMATION AND PROJECT REQUIREMENTS.

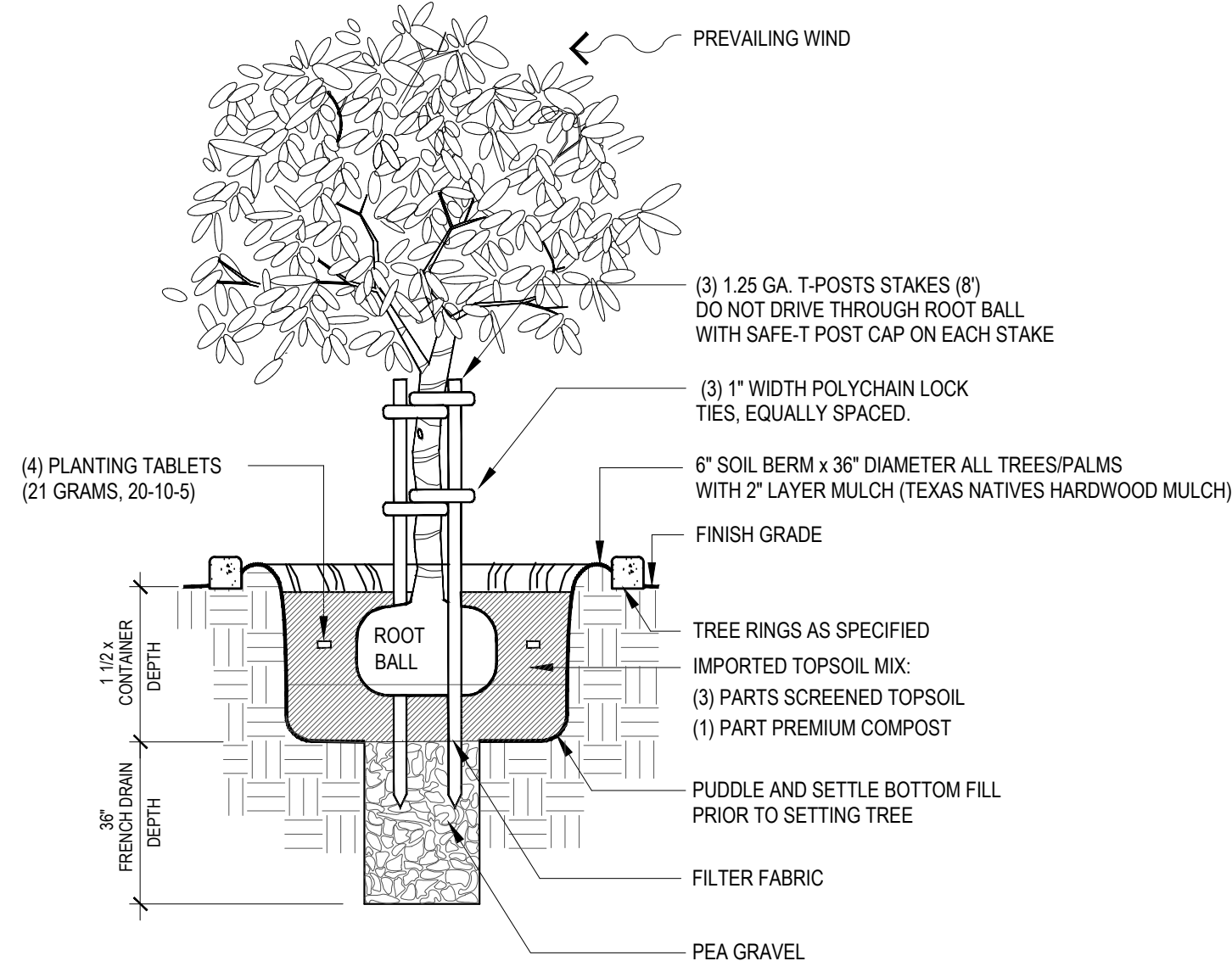
### MATERIAL SCHEDULE - SOCCER FIELD

DESCRIPTION	NOTES	QUANTITY
HERBICIDE	ALL LANDSCAPE AREAS / ROUNDUP OR APPROVED EQUAL	51200 B.F.
CLEAR/GRUB/SITE PREP	CLEAR ALL DEBRIS FROM TOP LAYER OF EXISTING SITE (BY SITE CONTRACTOR)	51200 B.F.
GRADING	GRADING & LASER LEVELING OF ALL SITE PER PLANS	51200 B.F.
SCREENED TOP SOIL	SCREENED TOPSOIL FOR SOCCER FIELDS (85% OF 4" MIX - ADD TO FINISHED GRADES PER CIVIL PLANS)	241 C.Y.
SAND*	MASONRY SAND FOR SOCCER FIELDS (50% OF 4" MIX - ADD TO FINISHED GRADES PER CIVIL PLANS)	353 C.Y.
COMPOST**	PREMIUM COMPOST (8 KIDS COMPOST MIX (8% OF 4" MIX - ADD TO FINISHED GRADES PER CIVIL PLANS)	106 C.Y.
HYDR0 (3)	'PAN-AM' HYBRID BERMUDA HYDROMULCH	51200 B.F.
MAINTENANCE	90 DAY MAINTENANCE OF FIELDS WITH REEL MOWERS & FERTILIZATION	1

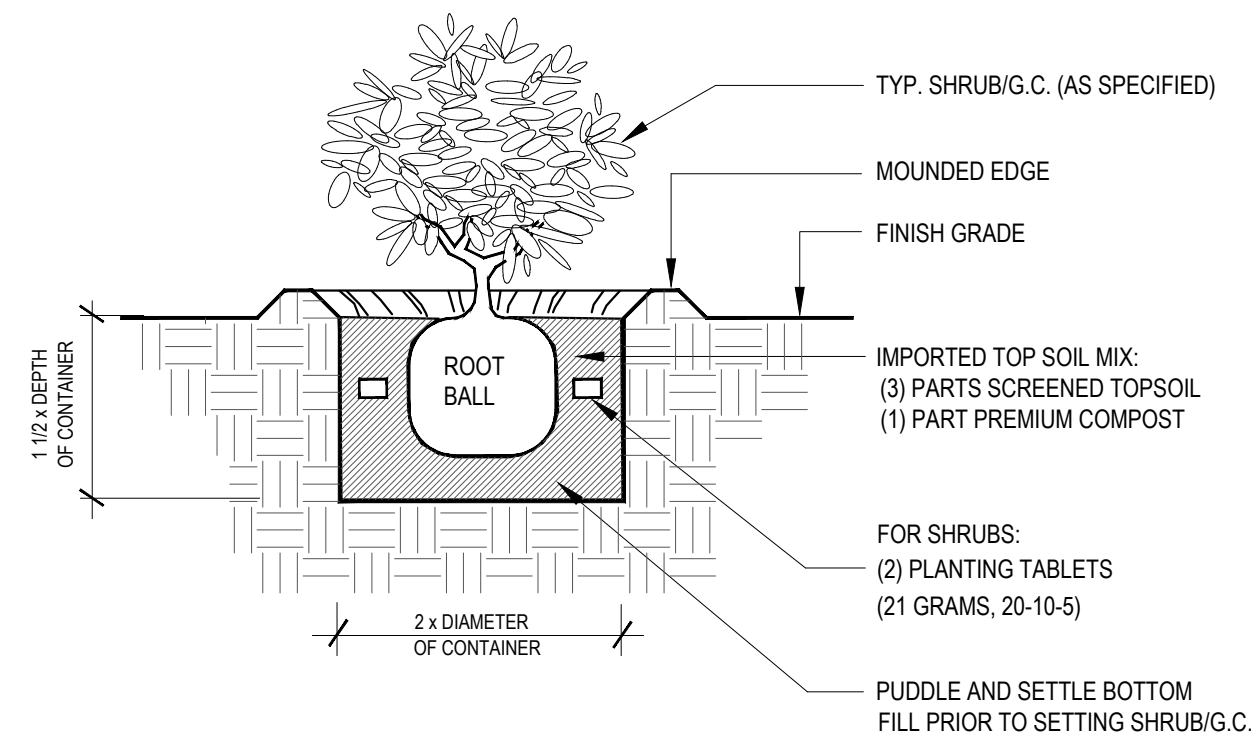
\* MASONRY SAND - URIGHT MATERIALS PLANT 3 (361) 381-0283  
 \*\* NINE KIDS COMPOST (361) 432-4883 OR CITY OF McALLEN COMPOST (956) 681-4020

### LANDSCAPE CONSTRUCTION NOTES

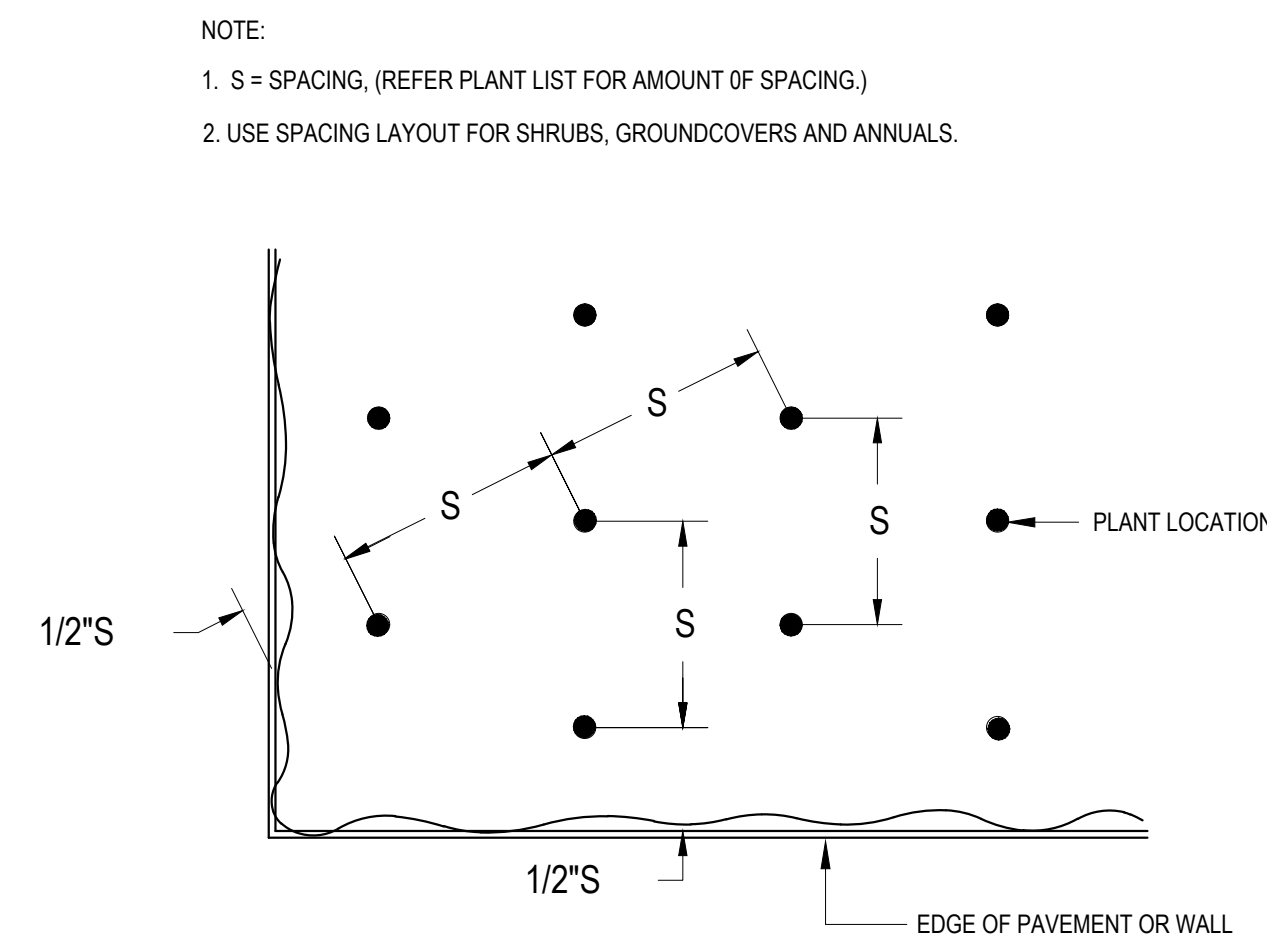
- WORK UNDER THIS CONTRACT INCLUDES SITE REVIEW AND COORDINATION WITH EXISTING CONDITIONS. SITE CLEANUP, EXCAVATION, BED PREP, TILLING, EDGING, TREE/PALM, SPORTS FIELD, LASER GRADING, DECOMPOSED GRANITE, COLORED CONCRETE, PLANTING, STAKING, MAINTENANCE AND GUARANTEE.
- LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES AND DIMENSIONS PRIOR TO BIDDING. QUANTITIES SHOWN IN SCHEDULE ARE FOR CONVENIENCE ONLY.
- NOTIFY 66P DESIGN PRIOR TO BID OF ANY DISCREPANCIES IN DRAWINGS/DETAILS OR INSUFFICIENT QUANTITIES DUE TO DIFFERENCES IN PLAN AND ACTUAL FIELD CONDITIONS.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES. SPOTTING OF ALL UTILITIES IS REQUIRED.
- NOTIFY AND MEET WITH 66P DESIGN PRIOR TO ANY CONSTRUCTION FOR VERIFICATION/INTERPRETATION OF PLANS.
- LANDSCAPE CONTRACTOR SHALL VERIFY ALL PROPERTY BOUNDARIES AND LIMITS OF WORK WITH GENERAL CONTRACTOR/CIVIL ENGINEER. DO NOT BEGIN LANDSCAPE CONSTRUCTION UNTIL ALL BOUNDARIES, EASEMENTS AND RIGHTS-OF-WAY HAVE BEEN VERIFIED IN THE FIELD.
- LANDSCAPE CONTRACTOR SHALL STAKE OUT ALL BEDS, TREES, PALM LOCATIONS PRIOR TO INSTALLATION FOR APPROVAL BY 66P DESIGN.
- LANDSCAPE CONTRACTOR TO COORDINATE WITH 66P DESIGN TO ENSURE PROPER PLACEMENT OF PLANT MATERIAL AND IRRIGATION EQUIPMENT.
- LANDSCAPE CONTRACTOR TO INSTALL EXTRUDED CONCRETE EDGING AS SHOWN ON PLANS.
- LANDSCAPE CONTRACTOR TO SUPPLY/INSTALL 36" DIA. TREE RINGS AS SHOWN ON PLANS/DETAILS.
- NOTIFY 66P DESIGN PRIOR TO PLANTING OPERATIONS FOR APPROVAL OF ALL PLANT MATERIAL ON SITE. ANY PLANT MATERIAL NOT APPROVED BY 66P DESIGN WILL BE SUBJECT TO REJECTION.
- IRRIGATION CONTRACTOR SHALL SUPPLY AND INSTALL COMPLETE AUTOMATIC IRRIGATION SYSTEM MAINLINE SLEEVES, LATERALS AND POP-UP HEADS AND ADJUSTMENTS TO COVER ALL LANDSCAPE AREAS AS PER PLANS/DETAILS. IRRIGATION SYSTEM SHALL BE INSTALLED BY A TEXAS LICENSED CONTRACTOR.
- LANDSCAPE CONTRACTOR SHALL REMOVE ALL EXISTING GRASS/WEEDS BY HERBICIDING PRIOR TO BED PREP AND SOIL REPLACEMENT.
- LANDSCAPE CONTRACTOR SHALL REMOVE 12" OR EXIST'G SOIL WITHIN ALL BED AREAS AND REPLACE WITH IMPORTED TOP SOIL/PREMIUM COMPOST MIX.
- LANDSCAPE CONTRACTOR SHALL CONSTRUCT 6"x36" WATERING BASINS AROUND ALL TREES/PALMS WITH A MIN. 2" LAYER OF CYPRUS MULCH.
- LANDSCAPE CONTRACTOR SHALL LOOSEN / GRADE ALL LAWN AREAS PRIOR TO HYDRO-MULCHING/SODDING TO ENSURE PROPER DRAINAGE AND UNIFORM SURFACE.
- LANDSCAPE CONTRACTOR SHALL REMOVE ALL EXISTING GRASS AND WEEDS BY HERBICIDING, DISKING, FLOATING AND LIGHT GRADING OF ENTIRE PROJECT AREA PRIOR TO SODDING/HYDROMULCHING.
- LANDSCAPE CONTRACTOR SHALL ESTABLISH AND MAINTAIN ALL PLANT MATERIAL FOR 90 DAYS AFTER SUBSTANTIAL COMPLETION AND SHALL GUARANTEE ALL TREES/PALMS FOR A PERIOD OF ONE YEAR.
- IRRIGATION CONTRACTOR SHALL GUARANTEE ALL SYSTEM COMPONENTS FOR A PERIOD OF ONE YEAR.
- SEE SPECIFICATIONS FOR FURTHER INSTRUCTIONS/REQUIREMENTS.



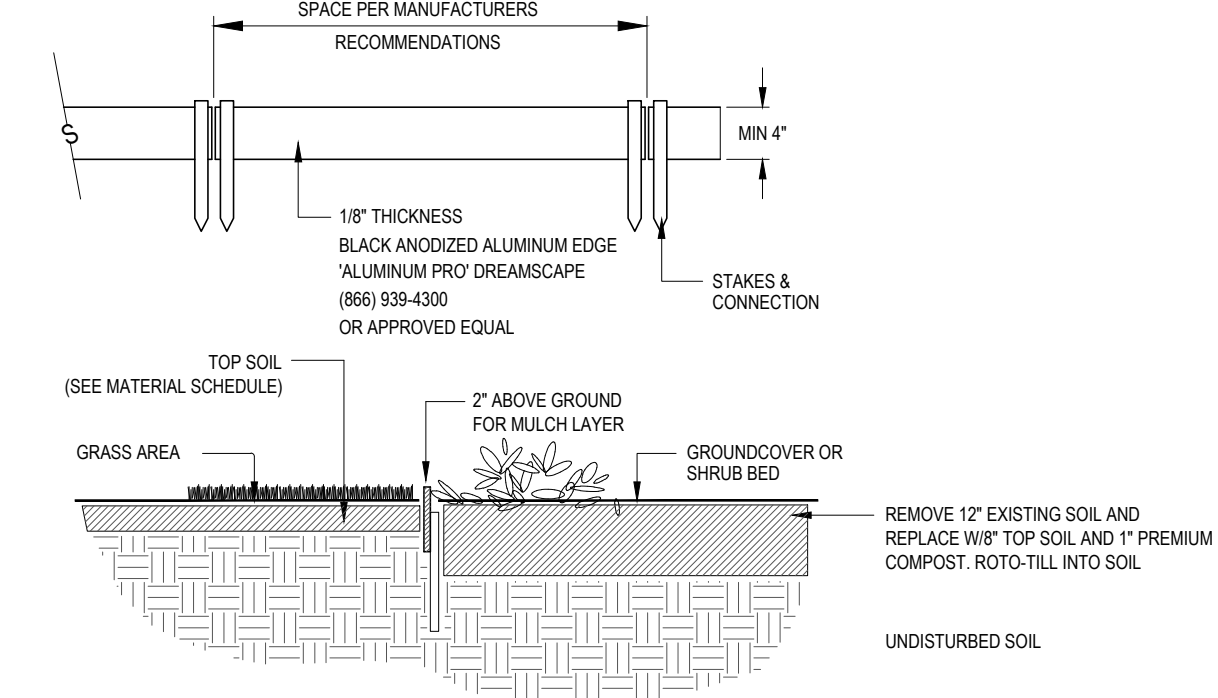
**1 TREE PLANTING DETAIL**  
NOT TO SCALE



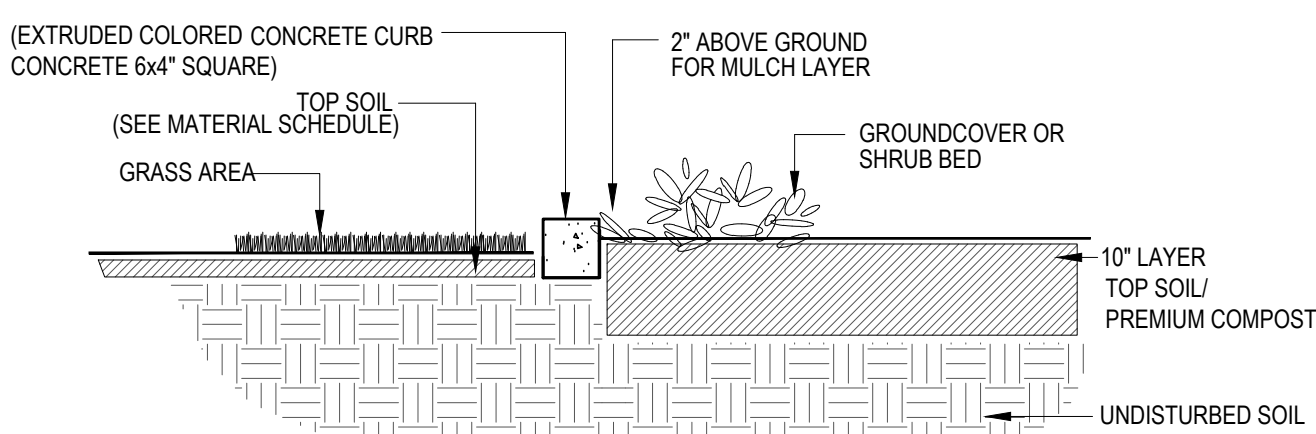
**2 SHRUB/G.C. PLANTING DETAIL**  
NOT TO SCALE



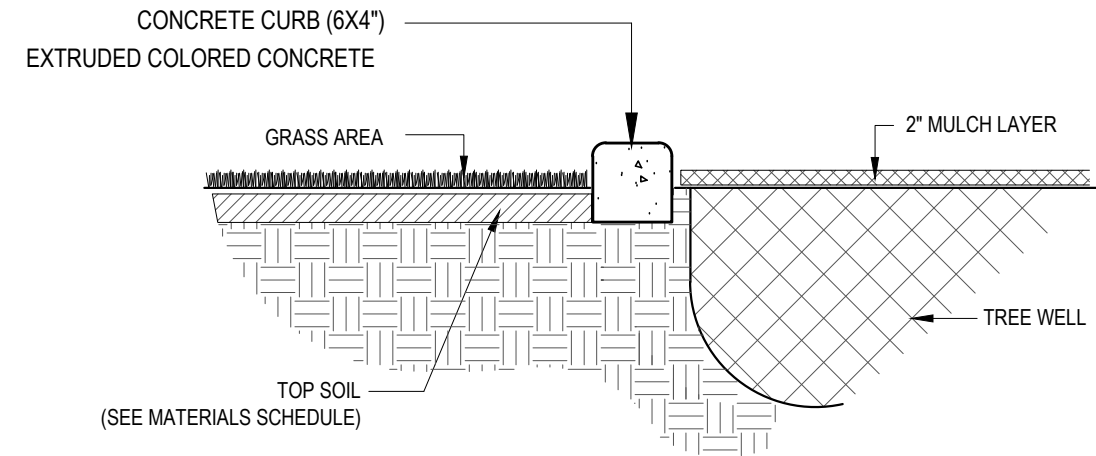
**3 TRIANGULAR PLANT SPACING DIAGRAM**  
NOT TO SCALE



**4 ALUMINUM EDGE DETAIL**  
NOT TO SCALE

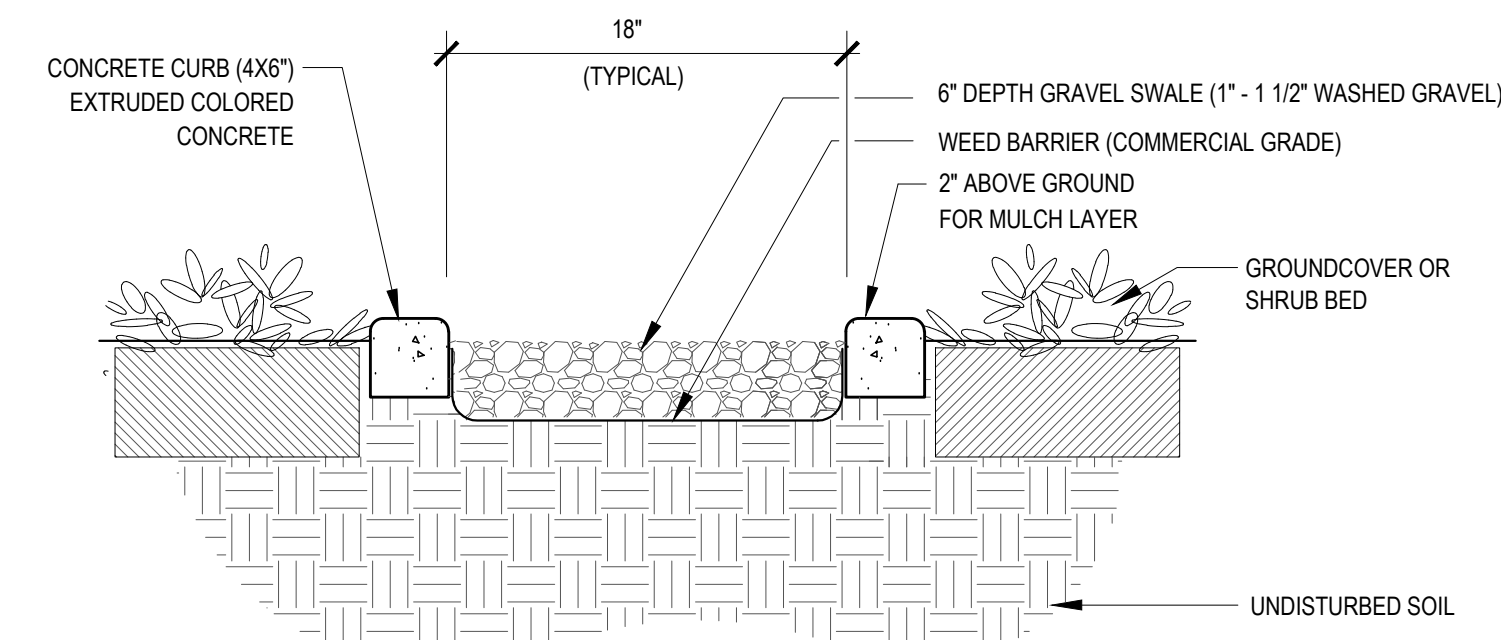


**5 CONCRETE EDGE DETAIL**  
NOT TO SCALE



**6 TREE RING DETAIL**  
NOT TO SCALE

- NOTES:
- CONCRETE CURBING TO HAVE 1 1/2" DEEP CONTRACTION JOINTS @ 5'-0" SPACING.
  - CONCRETE CURBING TO HAVE TAPERED DRAINAGE POINTS AT 10' O.C.
  - 2500-3000 PSI COMPRESSIVE STRENGTH, 400 PSI FLEXURAL STRENGTH.
  - USE HALF-INCH POLYPROPYLENE FIBER REINFORCEMENT.
  - NATURAL FINISH AND TEXAS BUFF COLOR.
  - EQUAL TO CURB APPEAL EDGING (956-867-8350).



- NOTES:
- CONCRETE CURBING TO HAVE 1 1/2" DEEP CONTRACTION JOINTS @ 5'-0" SPACING.
  - CONCRETE CURBING TO HAVE TAPERED DRAINAGE POINTS AT 10' O.C.
  - 2500-3000 PSI COMPRESSIVE STRENGTH, 400 PSI FLEXURAL STRENGTH.
  - USE HALF-INCH POLYPROPYLENE FIBER REINFORCEMENT.
  - NATURAL FINISH AND TEXAS BUFF COLOR.
  - EQUAL TO CURB APPEAL EDGING (956-867-8350).

**7 ROCK SWALE DETAIL**  
NOT TO SCALE

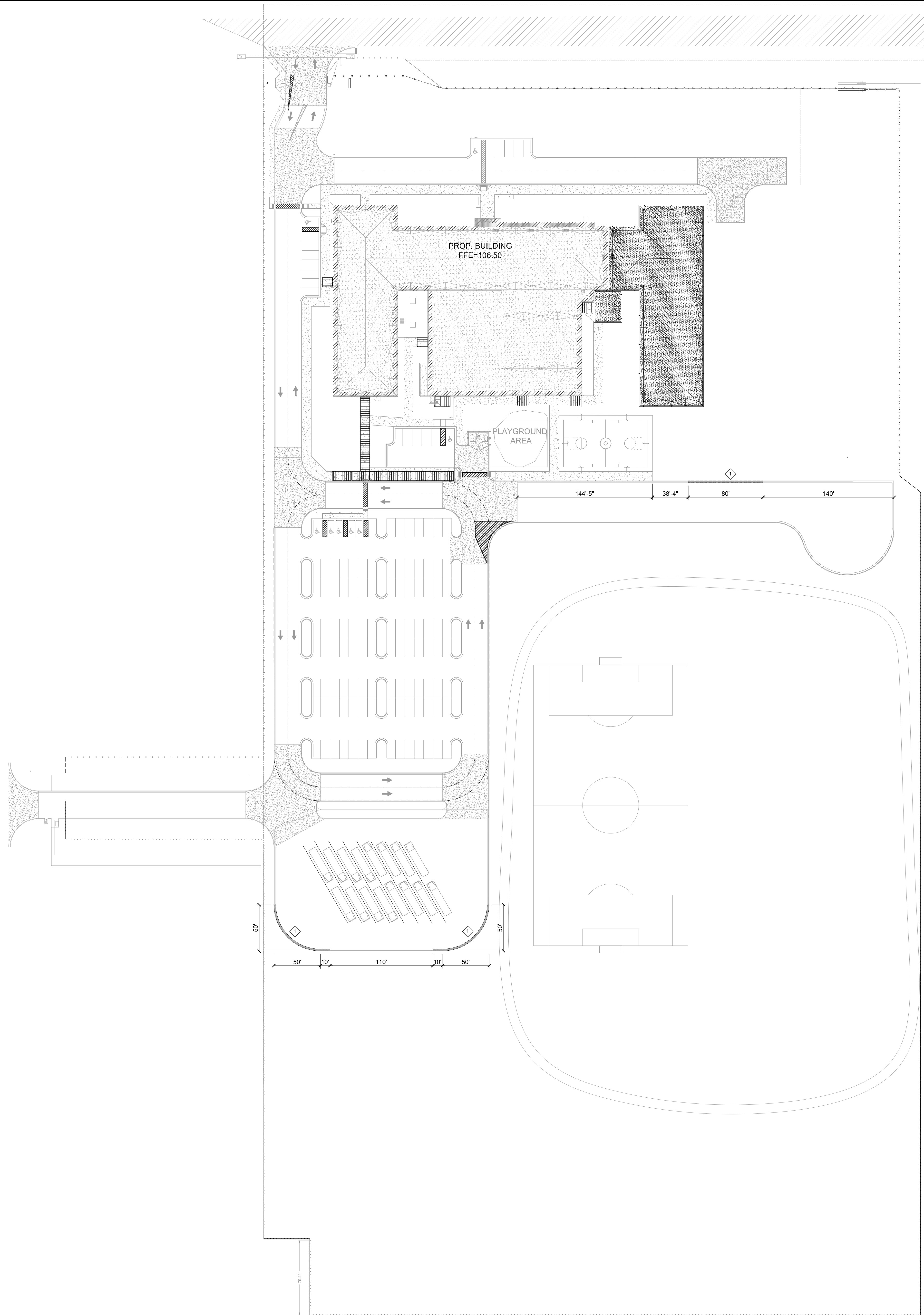
### SPORTS FIELD NOTES

- APPLY HERBICIDE/ROUNDUP TO ENTIRE FIELD AREA UNTIL ALL VEGETATED MATTER IS BRADICATED
- CLEAR AND GRUB (REMOVE ALL DEBRIS) FROM FIELD AREA
- RIP/TILL SOIL WITH AN AGRICULTURAL CULTIVATOR TO A DEPTH OF 3' ON FIELD
- ROUGH GRADE FIELDS TO PREPARE FOR SAND/TOPSOIL/COMPOST
- APPLY SAND/TOPSOIL/COMPOST MIX TO AND FINE GRADE TO FINISHED ELEVATIONS
- CONTRACTOR TO GRADE FIELD WITH SPECIFIED GROUND SLOPES UTILIZING FULLY AUTOMATED COMPUTERIZED DUAL GPS SYSTEM WITH LASER AUGMENTATION TO ACHIEVE GRADES WITHIN 1/4" TOLERANCE FIELD MUST DRAIN SMOOTHLY WITH NO BIRD BATHS OR LOW SPOTS
- INSTALL IRRIGATION PER PLANS/SPECB. THOROUGHLY WATER IN WITH MULTIPLE WATERINGS
- FIELD DRAINAGE WILL BE TESTED AND REVIEWED BY 66P PRIOR TO BOD OR HYDROMULCH.
- INSTALL BOD ROLLS OR HYDROMULCH AS PER PLANS AND SPECIFICATIONS
- ROLL FIELDS WITH 2 TON MECHANICAL ROLLER/VIBRATOR. TOP DRESS WITH CLEAN SAND ALL LOW SPOTS OR DIVOTS
- MONITOR WATERING FOR CONTINOUS MOISTURE ON HYDROMULCH UNTIL FULL GERMINATION.
- COMMENCE MOWING USING A REEL TYPE MOWER ONLY. MOWING SHALL BE AT LEAST ONCE PER WEEK AND MUST BE REVIEWED, CHECKED AND APPROVED BY 66P ON OR ABOUT 45 DAYS AFTER INSTALLATION/GERMINATION. FERTILIZE WITH HJ 25-0-0 WITH WOLTRAX OR APPROVED EQUAL AT MANUFACTURERS RATES







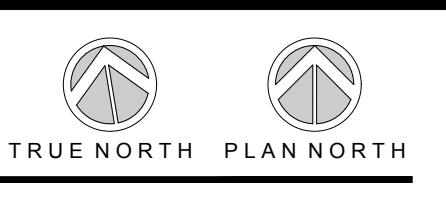


**01 DEMOLITION SITE PLAN PHASE II**

SCALE: 1/4"=1'-0"  
REFER TO SHEET A1.01 FOR OVERALL SITE PLAN.

**KEYED DEMOLITION NOTES:**  
 1. SAW CUT AND DEMOLISH CONCRETE CURBS AND GUTTER TO ACCOMMODATE NEW DRIVES.

**GENERAL NOTES:**  
 GENERAL CONTRACTOR TO TAKE CARE NOT TO DAMAGE EXTERIOR WALL OR VARIOUS SURFACES OUTSIDE THE LIMITS OF WORK AND SHALL PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES TO REMAIN IN PLACE. SHOULD ANY DAMAGE BE CAUSED BY THE CONSTRUCTION PROCESS OUTSIDE OF REMOVAL & SITE CLEARING AREA, THE GENERAL CONTRACTOR IS TO BE RESPONSIBLE TO REPAIR OR REPLACE DAMAGED AREAS AT NO COST TO THE OWNER.



No.	REVISIONS	BY

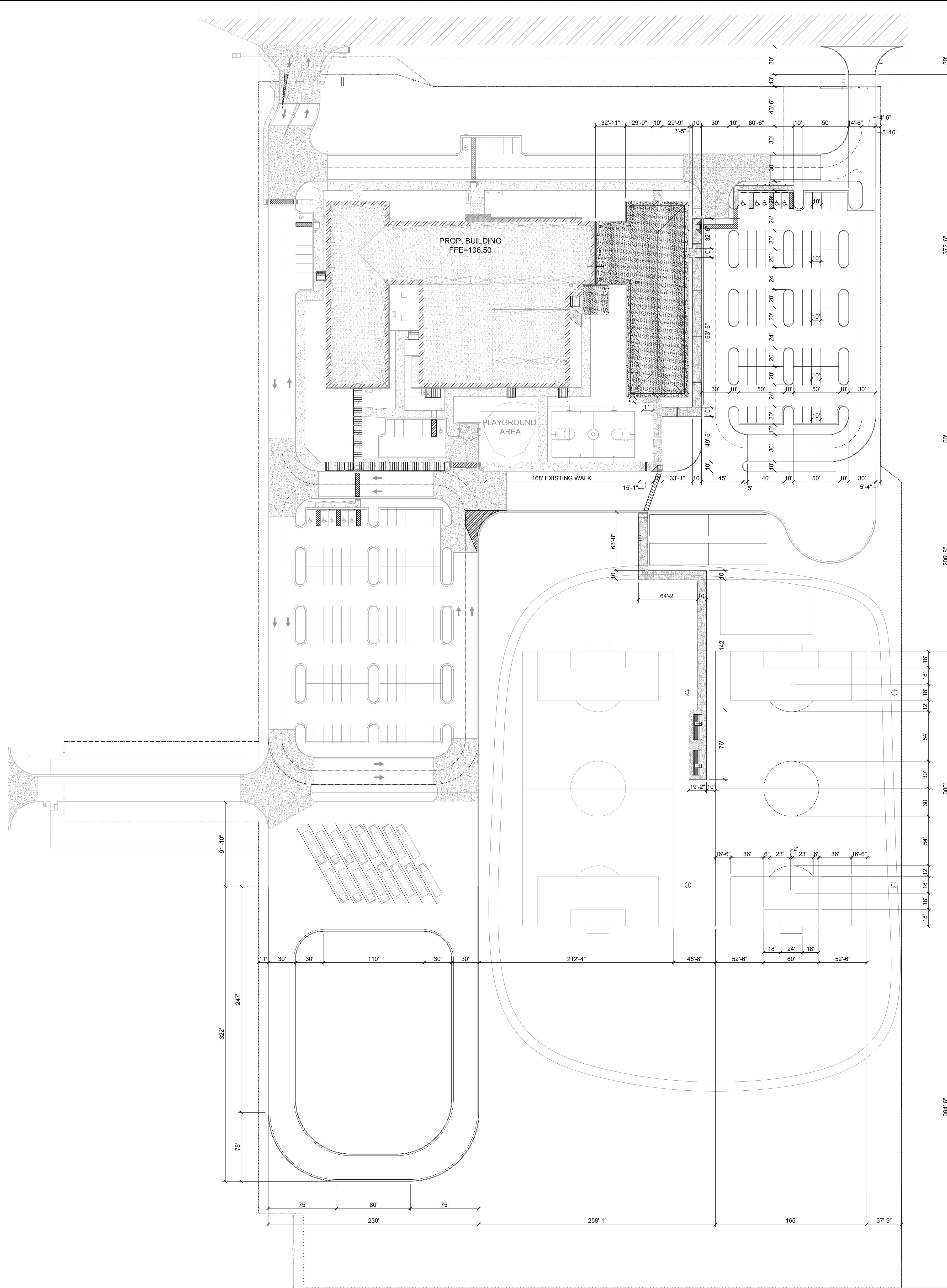
**GMS ARCHITECTS**  
 1150 Paredes Line Rd.  
 Brownsville, TX 78526  
 (956) 546-0110  
 fax (956) 546-0196

**IDEA-OWASSA**  
**IDEA COLLEGE PREP PHASE II**  
 Public Schools



© Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers  
 Date: March 21, 2019  
 Scale: As Noted  
 Project Architect: David A. Montreal, AIA  
 Drawn By: J. Alvarado  
 Job No: IDEA PHASE II  
 Sheet:

**D1.01**




# 01 OVERALL SITE PLAN PHASE I

SCALE - 1/8"=1'-0"

**SITE NOTES:**

- 1) FINISH GRADE TO BE 6" BELOW FINISH FLOOR ELEVATION SLOPE AWAY FROM ALL IMPROVEMENTS AT A RATE OF 1/4" PER FOOT FOR THE FIRST 10'-0", THEN AT A RATE OF 1/8" PER FOOT FOR THE NEXT 20'-0"
- 2) SIDE WALK SLOPE IS NOT TO EXCEED 1:20 WITH A CROSS SLOPE OF 1:50 AT ANY INSTANCE.
- 3) REFER TO CIVIL, LANDSCAPE AND MECHANICAL DRAWINGS FOR ADDITIONAL WORK TO BE PERFORMED UNDER THIS CONTRACT.
- 4) PLAY FIELDS, TRAFFIC STRIPPING & TRAFFIC SIGNS NOT SHOWN FOR CLARITY. REFER TO ARCHITECTURAL SHEETS A1.09 THRU A1.13 FOR NOTATION AND REQUIREMENTS
- 5) AT ALL ENTRIES OF NEW BUILDINGS WARP CONCRETE SIDEWALKS SO AS TO PROVIDE A FLAT SURFACE WITH FINISHED FLOOR

No.	REVISIONS	BY

  
GMS ARCHITECTS

1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

## IDEA-OWASSA COLLEGE PREP PHASE II



© Copyright 2019  
Comez Mendez Saez Inc.  
Architects-Planners  
Interior Designers

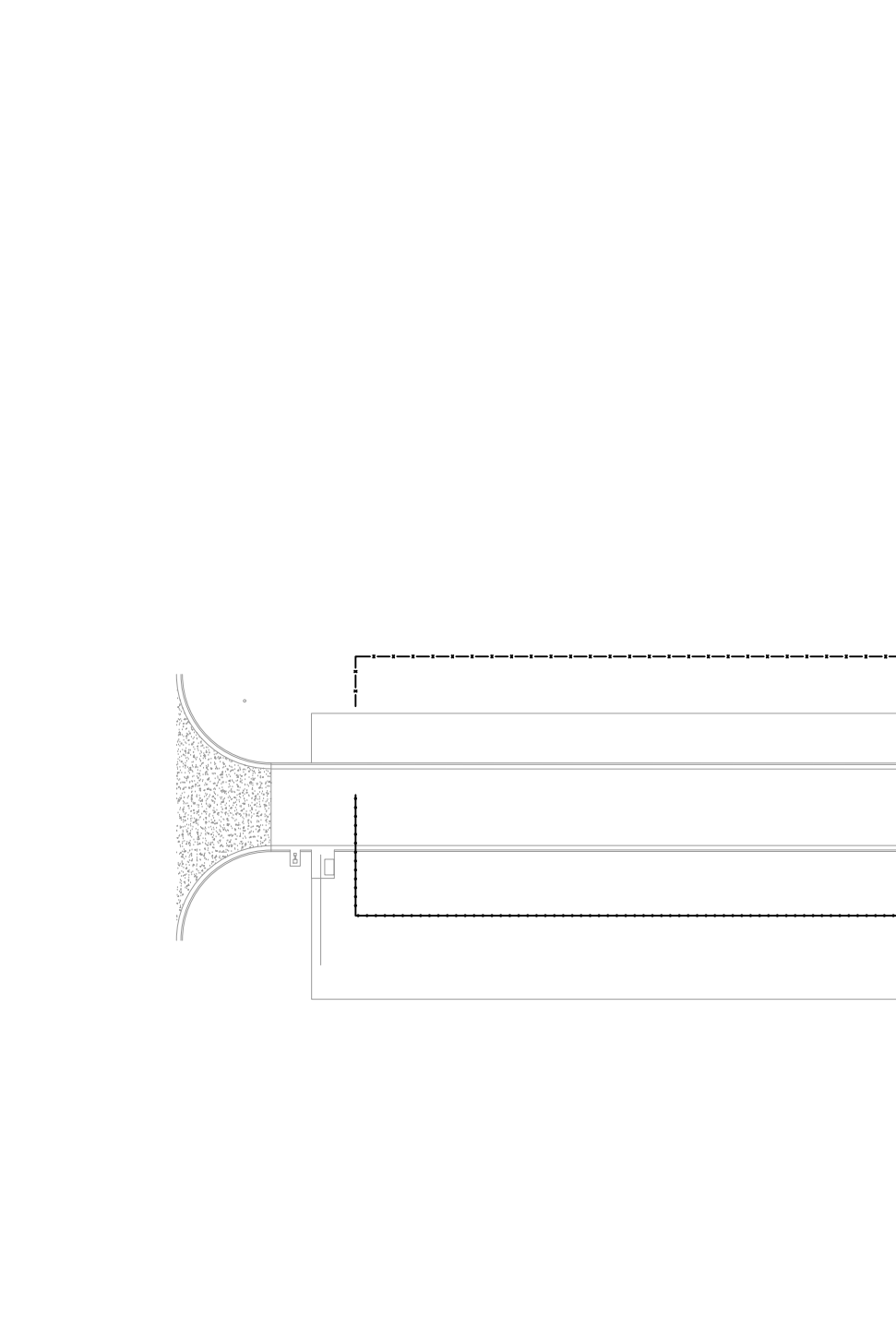
Date: March 21, 2019  
Scale: As Noted  
Project Architect: David A. Montreal, AIA  
Drawn By: J. Alvarado  
Job No.: IDEA PHASE II  
Sheet:



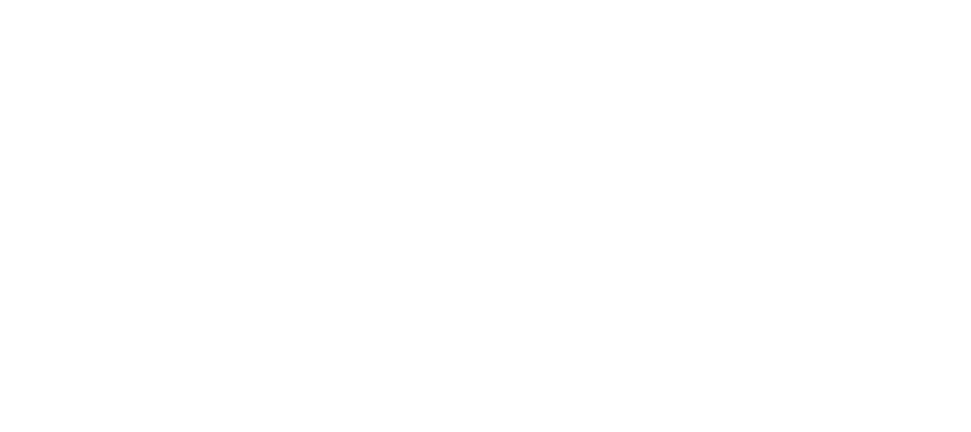
**01 SITE PLAN IMPROVEMENTS**  
SCALE : 1/8"=1'-0"

- KEYED NOTES**
- 1 10'-0" WIDE CONCRETE WALK REFER TO DTL'S 01.02.03.04A1.03
  - 2 5'-0" WIDE CONCRETE WALK REFER TO DTL'S 01.02.03.04A1.03
  - 3 10'-0" WIDE PREFINISHED METAL WALKWAY CANOPIES. REFER TO 06A1.02
  - 4 METAL TRENCH COVERS. REFER TO DTL. 03A1.03 (1'-0" WIDE)
  - 5 ACCESSIBLE CURB RAMPS WITH DETECTABLE WARNING STRIPS. REFER TO 03.04A1.02
  - 6 TRAFFIC STRIPING FOR PEDESTRIAN CROSSWALKS, LOADING ZONE AND TRAFFIC CONTROL.
  - 7 HANDICAP PARKING SPACES WITH POLE MOUNTED HANDICAP SIGN. REFER TO 10A1.03.
  - 8 ASPHALT PAVING WITH CONCRETE CURB AND GUTTER. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
  - 9 CONCRETE PAVING WITH CONCRETE CURB AND GUTTER. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
  - 10 7'-0" HIGH ALUMINUM FENCING AS SPECIFIED. REFER TO 06A1.03
  - 11 ALUMINUM EXT SLIDING GATE AS SPECIFIED, WITH STEEL ANGLE GUIDE SET IN 12" WIDE CONCRETE APRON. REFER TO 11.16.17A1.03
  - 12 PEDESTAL MOUNTED KEYPAD CONTROL AS SPECIFIED.
  - 13 PEDESTAL MOUNTED CALL SWITCH AS SPECIFIED.
  - 14 MOTORIZED GATE OPERATORS AS SPECIFIED.
  - 15 POLE MOUNTED TRAFFIC SIGN - "STOP SIGN" REFER TO 10A1.03.
  - 16 COMPETITION SOCCER FIELD WITH PAINTED STRIPPING AND TRAIL CHASER PLASTIC WHISKERS MARKING ALL CORNERS (GOALS AS SPECIFIED).
  - 17 EXTERIOR DRINKING FOUNTAIN AS SPECIFIED. REFER TO MECHANICAL.
  - 18 CONCRETE WHEEL STOP. REF. 12A1.03
  - 19 (4) 6' BENCHES MODEL #86PERFSM BY T.F. HARPER & ASSOCIATES LP PROVIDED AND LOCATED BY OWNER INSTALLED BY CONTRACTOR. LOCATIONS AT LATER DATE
  - 20 (5) 32 GALLON MODEL #TESPREF BY T.F. HARPER & ASSOCIATES LP PROVIDED AND LOCATED BY OWNER INSTALLED BY CONTRACTOR. LOCATIONS AT LATER DATE
  - 21 PROVIDE (2) 27" X 5 ROW PICKET GUARD RAIL ALUMINUM BLEACHERS. FASTEN TO CONCRETE FOUNDATION. MODEL # BGS-122 BY BELSON OUTDOORS 1-800-323-3664 WWW.BELSON.COM
  - 22 EXISTING SOCCER FIELD TO BE RE-STRIPED
  - 23 SOCCER FIELD LIGHTING REFER TO MEP DRAWINGS FOR ADDITIONAL REQUIREMENTS.

**02 SITE PLAN ENLARGEMENT**  
SCALE : 1/8"=1'-0"



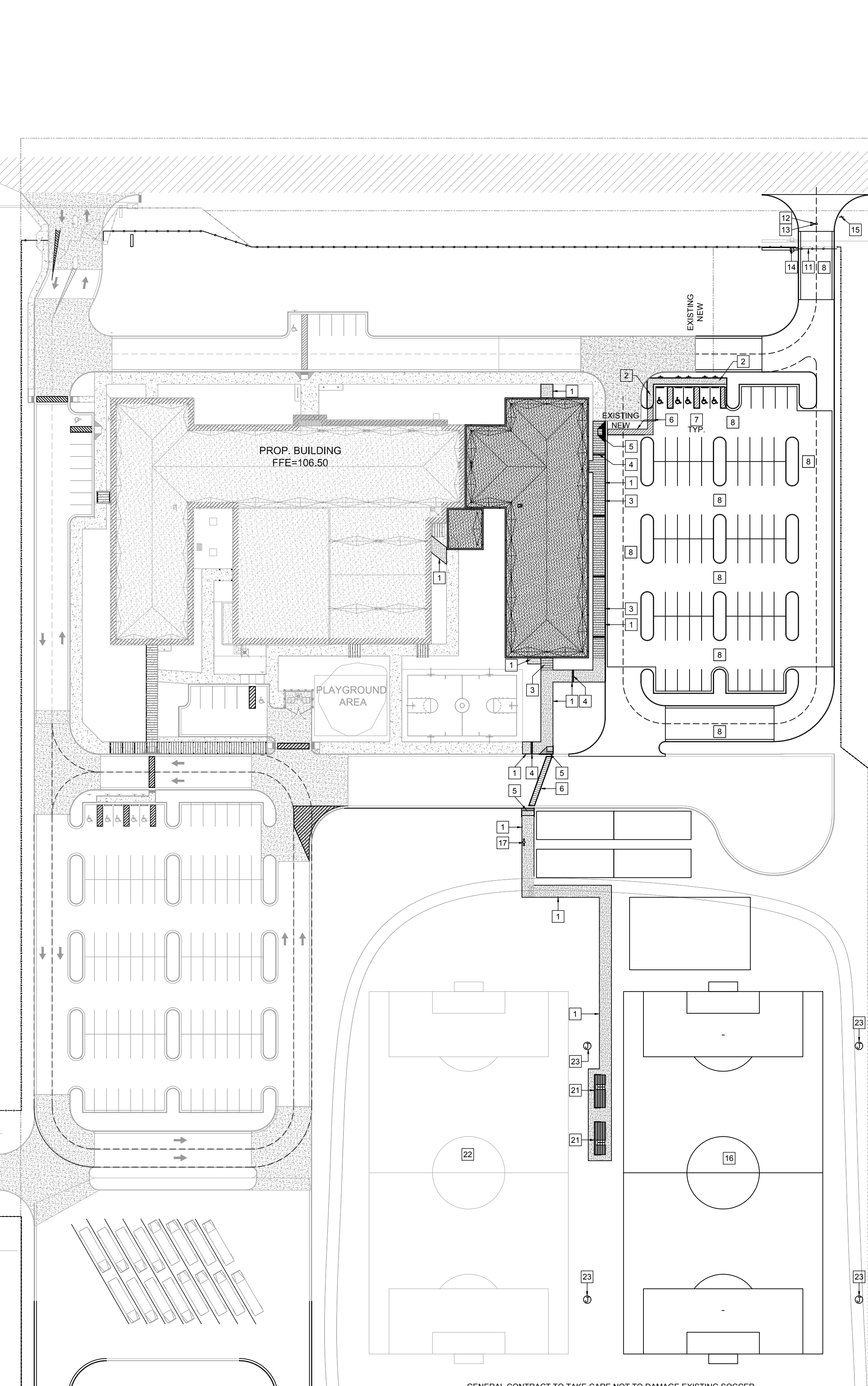
**03 SITE PLAN ENLARGEMENT**  
SCALE : 1/8"=1'-0"



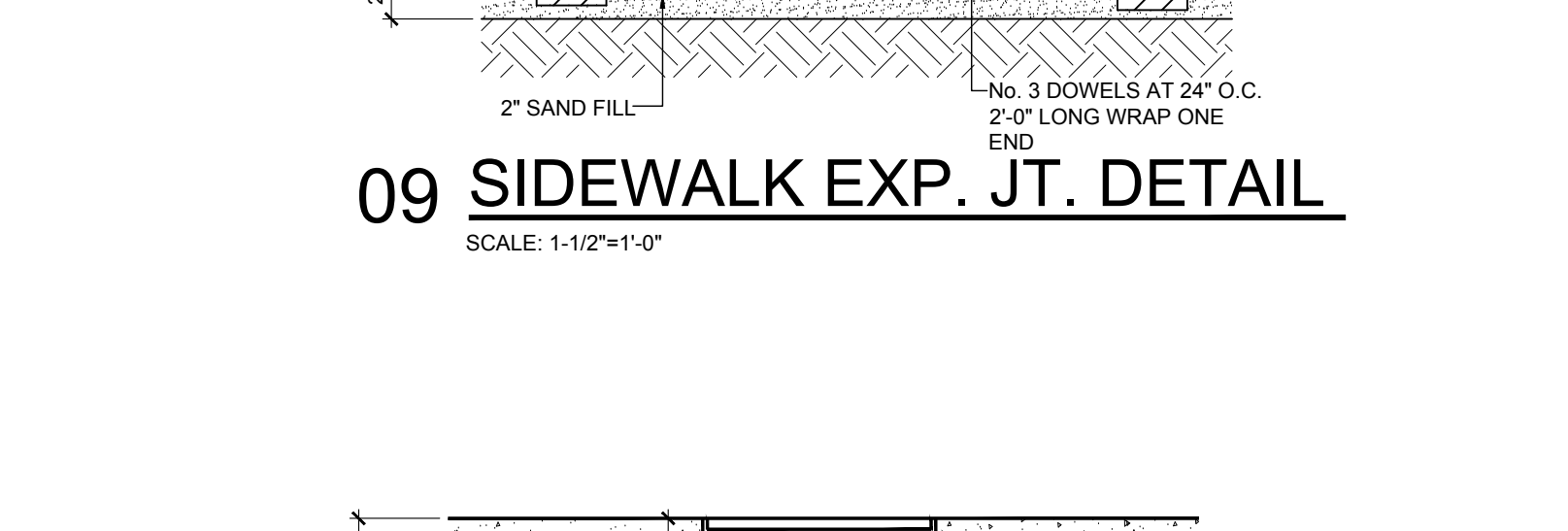
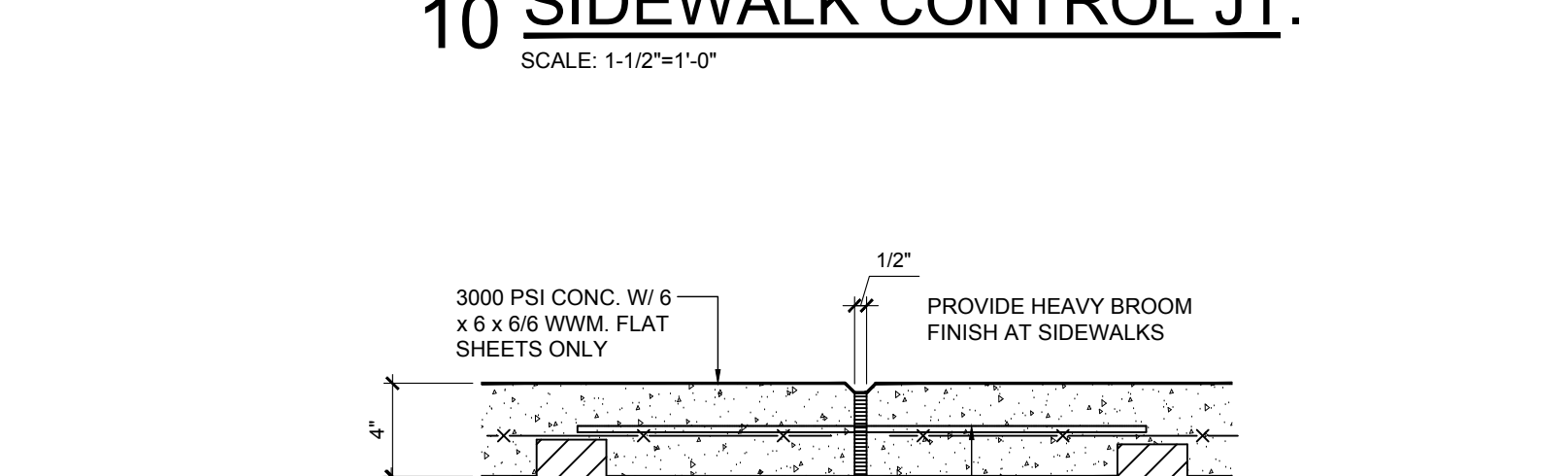
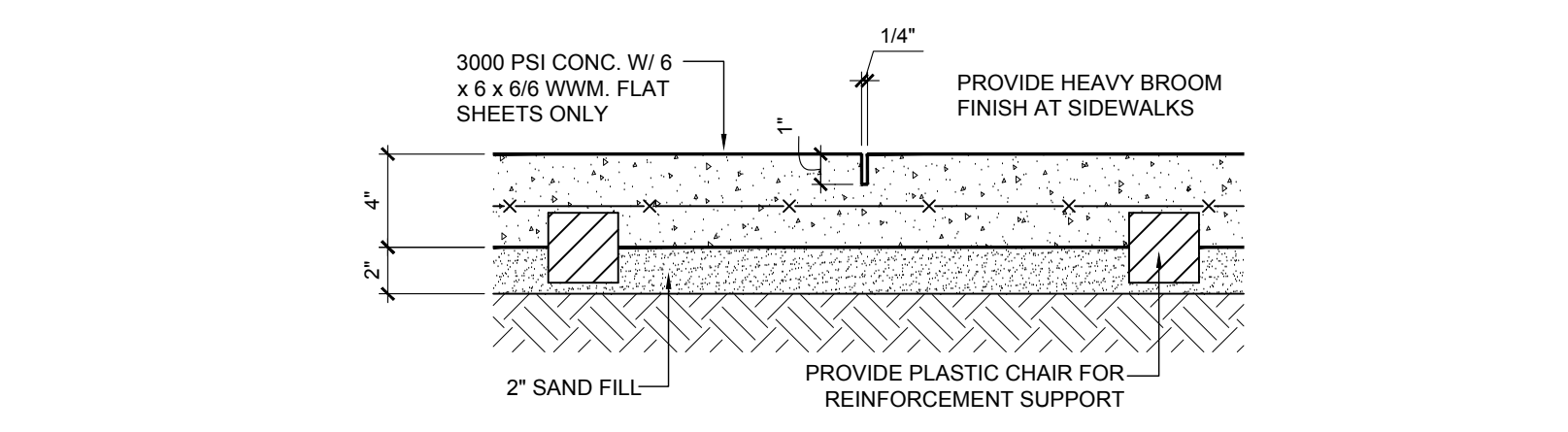
**04 SITE PLAN ENLARGEMENT**  
SCALE : 1/8"=1'-0"



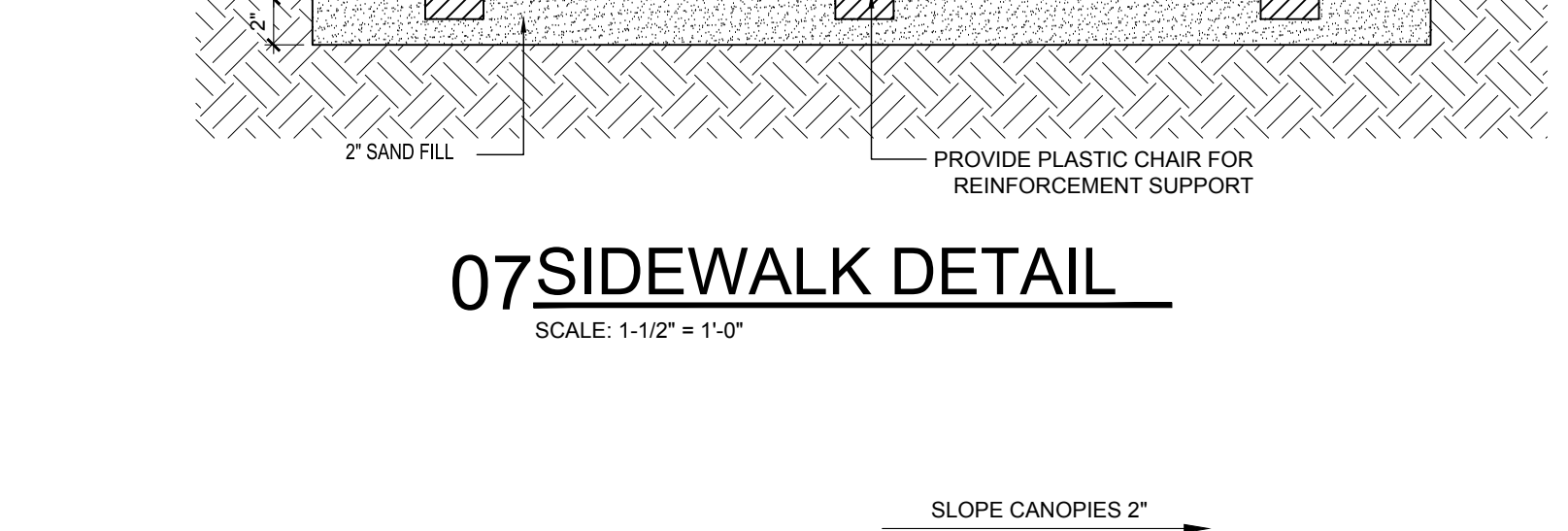
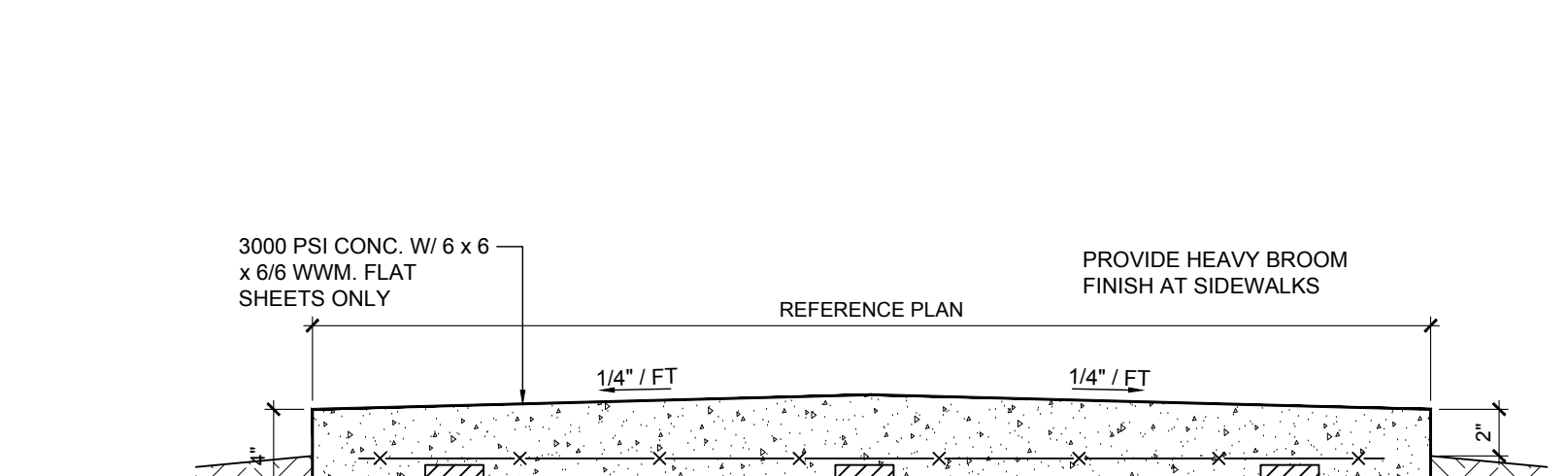
**05 CANOPY PLAN ENLARGEMENT**  
SCALE : 1/4"=3'-0"



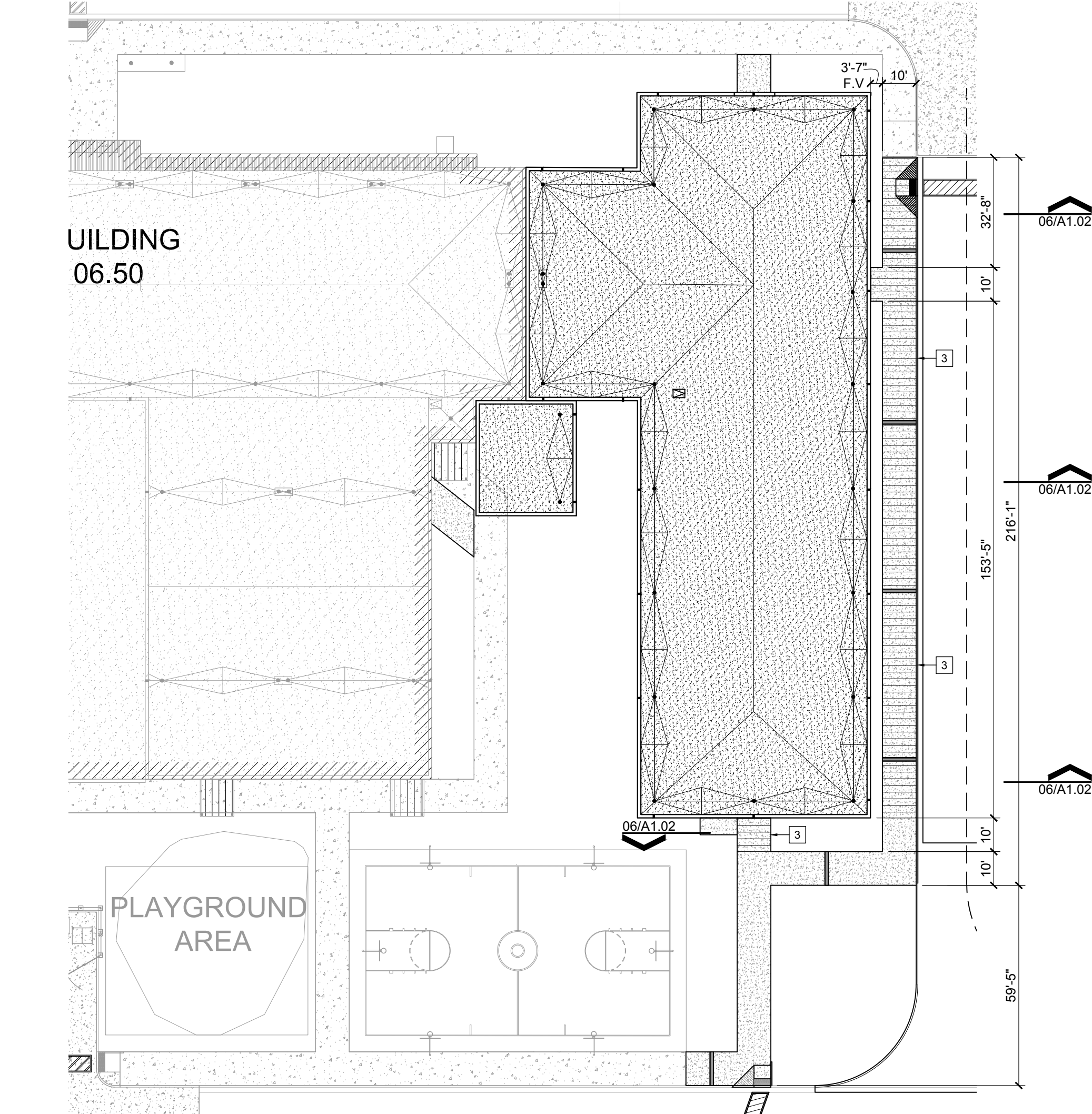
GENERAL CONTRACTOR TO TAKE CARE NOT TO DAMAGE EXISTING SOCCER FIELD OR VARIOUS ELEMENTS OUTSIDE THE LIMITS OF WORK AND SHALL PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES TO REMAIN IN PLACE. SHOULD ANY DAMAGE BE CAUSED BY THE CONSTRUCTION PROCESS OUTSIDE OF REMOVAL & SITE CLEARING AREA, THE GENERAL CONTRACTOR IS TO BE RESPONSIBLE TO REPAIR OR REPLACE DAMAGED AREAS AT NO COST TO THE OWNER.



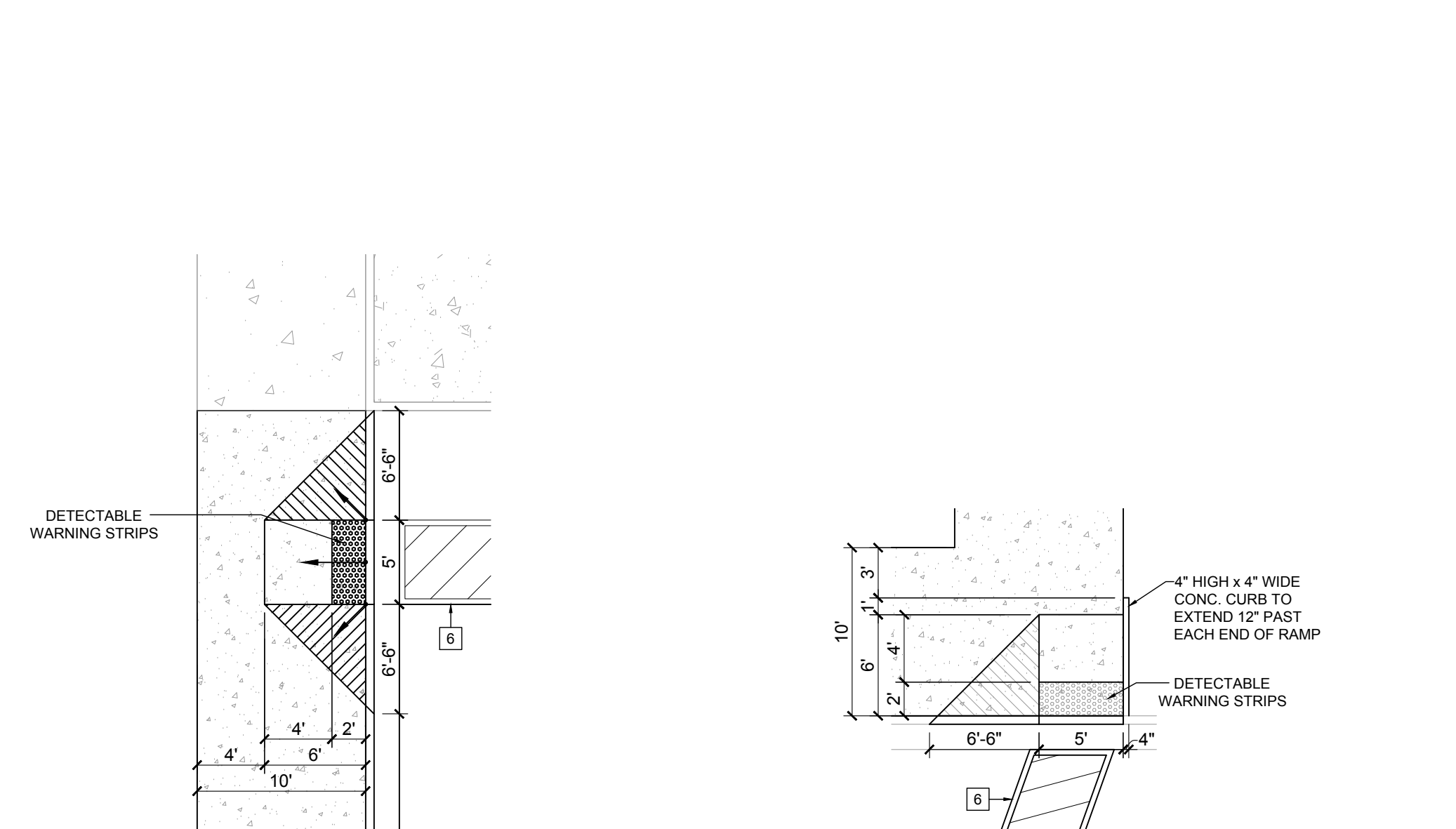
- 1) CONTRACTOR TO VERIFY ALL BUILDING ROOF DRAINS & DOWN SPOUTS THAT WILL SPILL ONTO A SIDEWALK AND PROVIDE A TRENCH GUTTER AT THAT LOCATION TO ALLOW FOR RAIN WATER TO DRAIN THRU GUTTER AND NOT OVER SIDEWALK (WHICH COULD CAUSE A TRIPPING HAZARD). CONTRACTOR TO VERIFY TRENCH GUTTERS NEEDED PRIOR TO ANY POURING OF SIDEWALKS AROUND PERIMETER OF BUILDING. TYPICAL AT ALL BUILDINGS.
- 2) REFER TO CIVIL DRAWINGS FOR ALL OTHER LOCATIONS OF TRENCH GUTTERS.



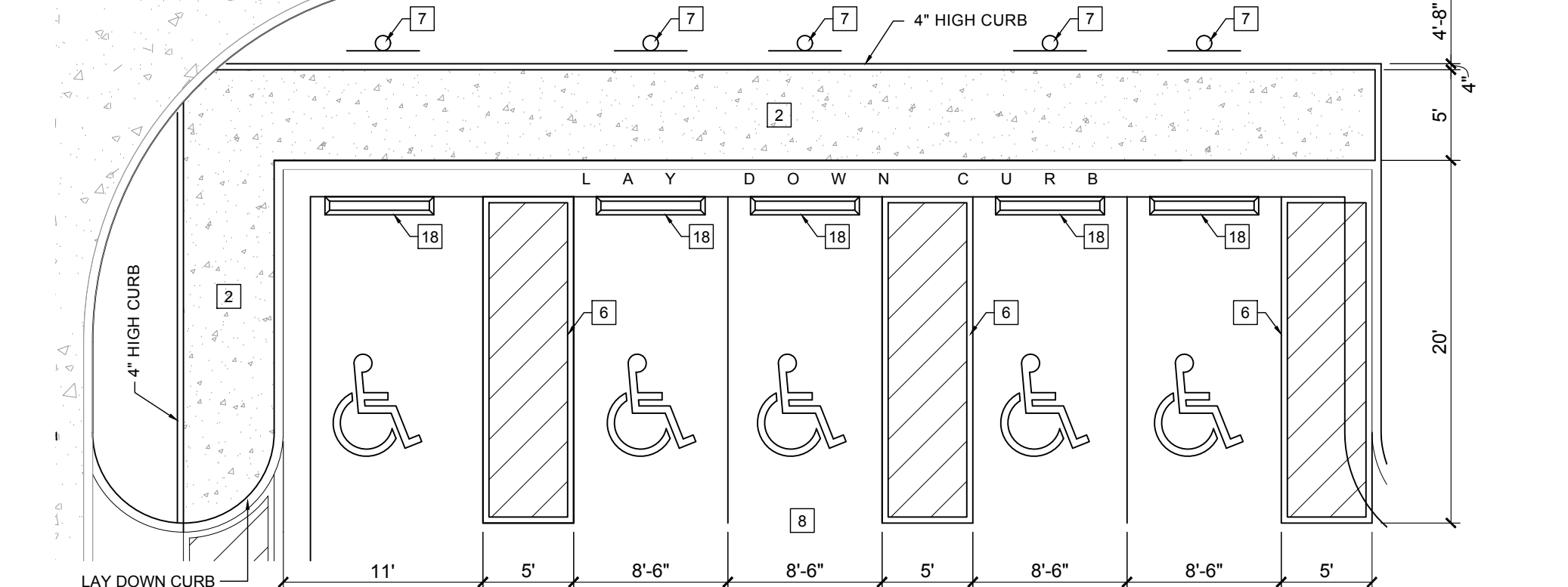
- NOTES:
1. COLUMNS SHALL BE 6" X 6" X 3/16 H.D. GALV. TUBES SET IN 12" SQUARE BY 30" DEEP FOOTINGS. USE PROVIDE 3000 P.S.I. CONCRETE AT FOOTINGS
  2. PURLIN TO BE 8" X 3-1/2" X 14 GA. CEE PURLIN AND 8" X 2-1/2" CEE BRACE H.D. GALV.
  3. ROOF PANELS SHALL BE EQUAL TO MBCI 22 GA. CLASSIC SERIES 12" WIDE P16 ROOF PANELS.
  4. TRIMS AND FLASHING TO BE 26 GA. KYNAR 500 FINISH.
  5. PROVIDE CONTINUOUS METAL FLASHING AND REGLET TERMINATION AT DOOR OPENINGS.
  6. NO VISIBLE MARKINGS ON ANY COMPONENTS, PROVIDE REMOVABLE LABELS.



**05 CANOPY PLAN ENLARGEMENT**  
SCALE : 1/4"=3'-0"



**03 SITE PLAN ENLARGEMENT**  
SCALE : 1/8"=1'-0"



**02 SITE PLAN ENLARGEMENT**  
SCALE : 1/8"=1'-0"



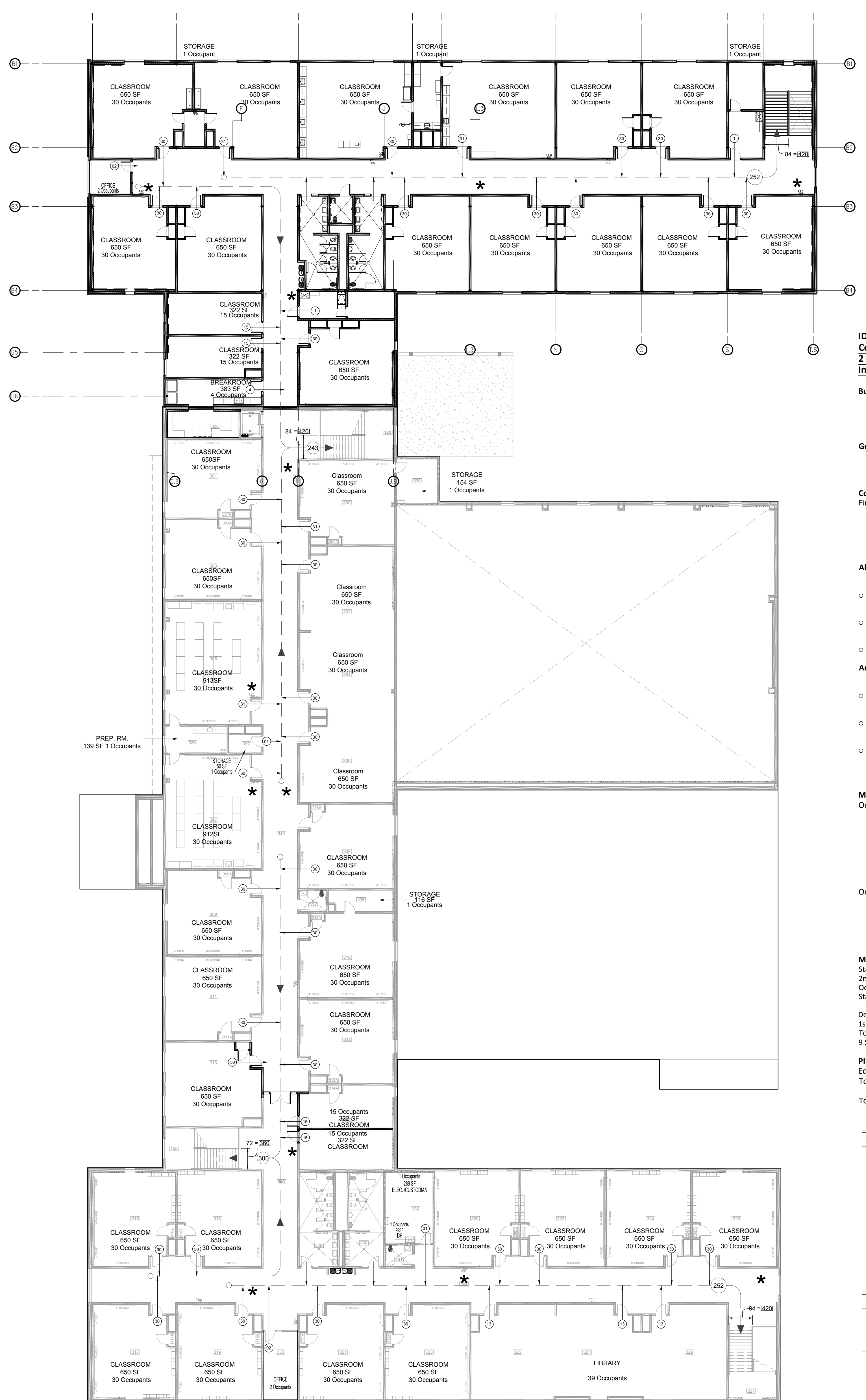
1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA  
COLLEGE PREP PHASE II  
Public Schools



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: March 21, 2019  
Scale: As Noted  
Project Architect: David A. Monreal, AIA  
Drawn By: J. Alvarado  
Job No.: IDEA PHASE II  
Sheet:



02 SECOND FLOOR  
OVERALL FLOOR PLAN  
SCALE: 1/16" = 1'-0"

IDEA Public Schools - Owassa Campus  
Code Analysis  
2 Story Educational campus  
International Building Code (IBC) 2015 Edition

- Building Use and Occupancy Classification**
- Educational Use - (E)
  - Assembly - (A)
  - Business - (B)
- General Area - Square Footages**
- 1st Floor - 49,181 SF
  - 2nd Floor - 29,865 SF
  - Total Building Square Footage - 79,046 SF

- Construction Type for this building will be Type II-B**
- Fire Resistance Requirements - Type II-B**
- Structural Frame supporting floor/roof
  - Exterior non-load bearing walls
  - Interior non-load bearing walls
  - Floor construction
  - Roof construction

- Allowable Building Heights and Areas - Table 503**
- Type II-B - Education Occupancy Sprinklered
    - 14,500 SF per story
    - 55 feet max - 2 story max
  - Type II-B - Assembly Occupancy Sprinklered
    - 9,500 SF per story
    - 55 feet max - 2 story max
  - Type II-B - Business Occupancy Sprinklered
    - 23,000 SF per story
    - 55 feet max - 3 story max

- Area and Frontage Increase - Section 506 (Equation 5-1 and Equation 5-2)**
- Educational Occupancy (Type II-B)
    - $14,500 + [14,500 \times .75] = 14,500 \times 2$
    - $54,375 \text{ SF per story}$
  - Assembly Occupancy (Type II-B)
    - $9,500 + [9,500 \times .75] = 9,500 \times 2$
    - $35,250 \text{ SF per story}$
  - Business Occupancy (Type II-B)
    - $23,000 + [23,000 \times .75] = 23,000 \times 2$
    - $86,250 \text{ SF per story}$

**Maximum Floor Area Allowances per Occupant - Table 1004.1.2**

Occupant Load - 1st Floor Classroom Wings / Admin Offices

Classrooms	494 persons
Storage	9 persons
Office	26 persons
Gymnasium	475 persons
Cafeteria	512 persons
Kitchen	9 persons
<b>Total</b>	<b>1,525 persons</b>

Occupant Load - 2nd Floor Classroom Wings

Classrooms	746 persons
Library	39 persons
Office	5 persons
Staff	2 persons
<b>Total</b>	<b>792 persons</b>

**Means of Egress Sizing - Section 1005**

Stairway Width - Section 1005.3.1 (Exception)

2nd Floor Egress

Occupancy	792 x 2 = 158.4 required
Stairways provided	= 240.0 provided

Door Egress Width - Section 1005.3.2 (Exception)

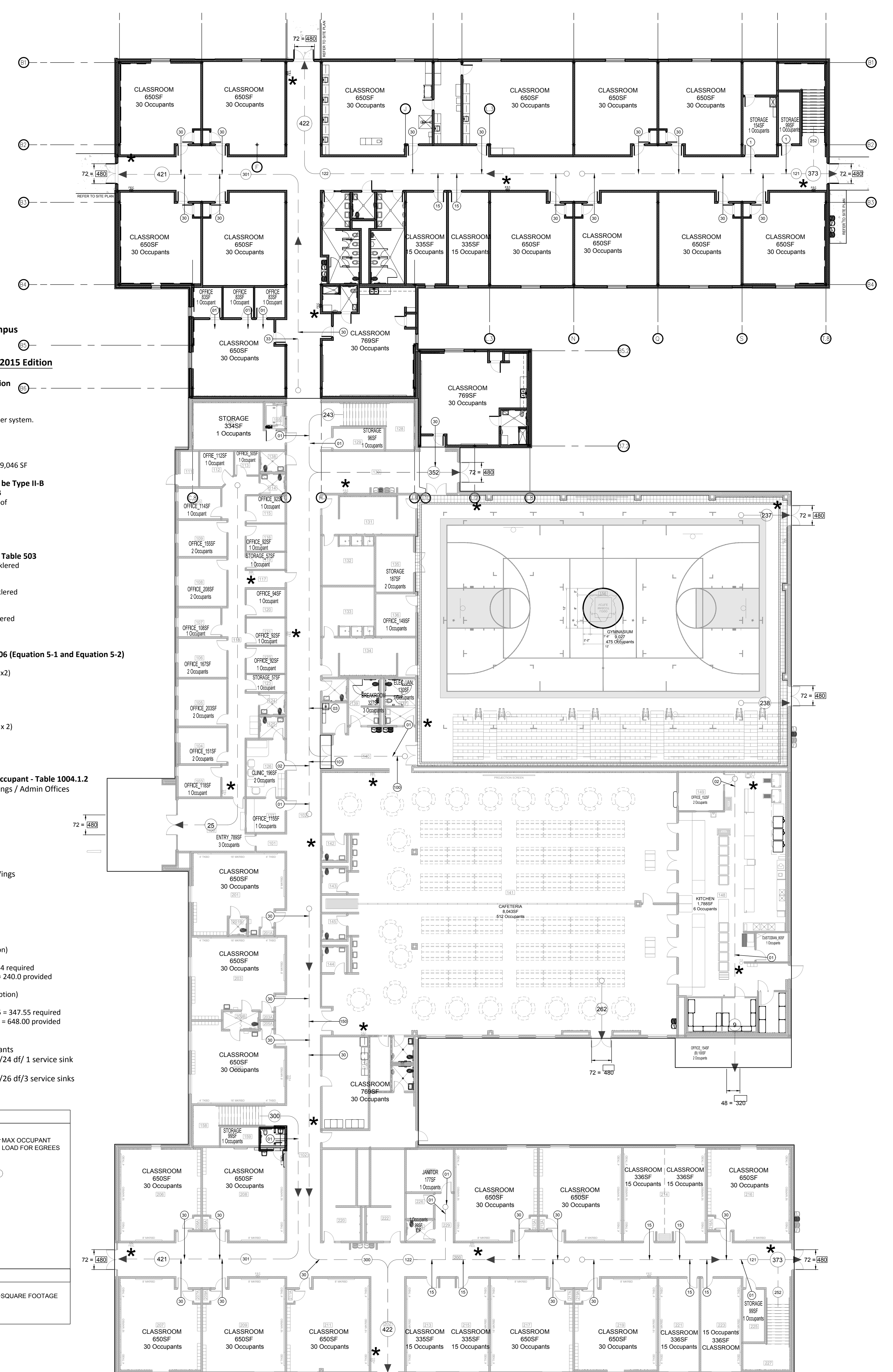
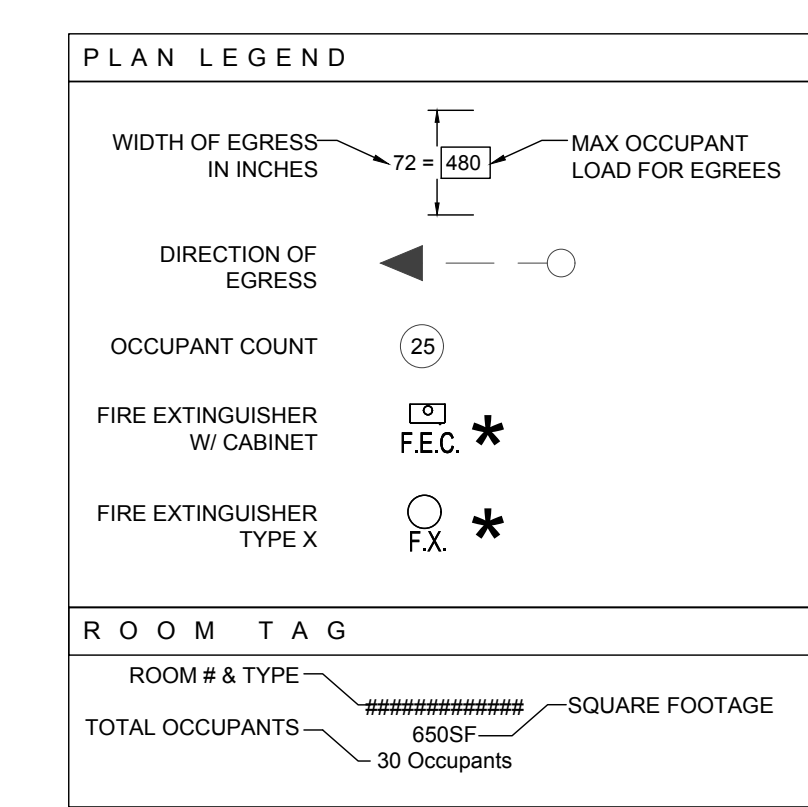
1st Floor Egress

Total Occupancy	2,317 x .15 = 347.55 required
9 Sets of Double Doors (6'-0" Wide)	= 648.00 provided

**Plumbing Fixtures - Table 2902.1**

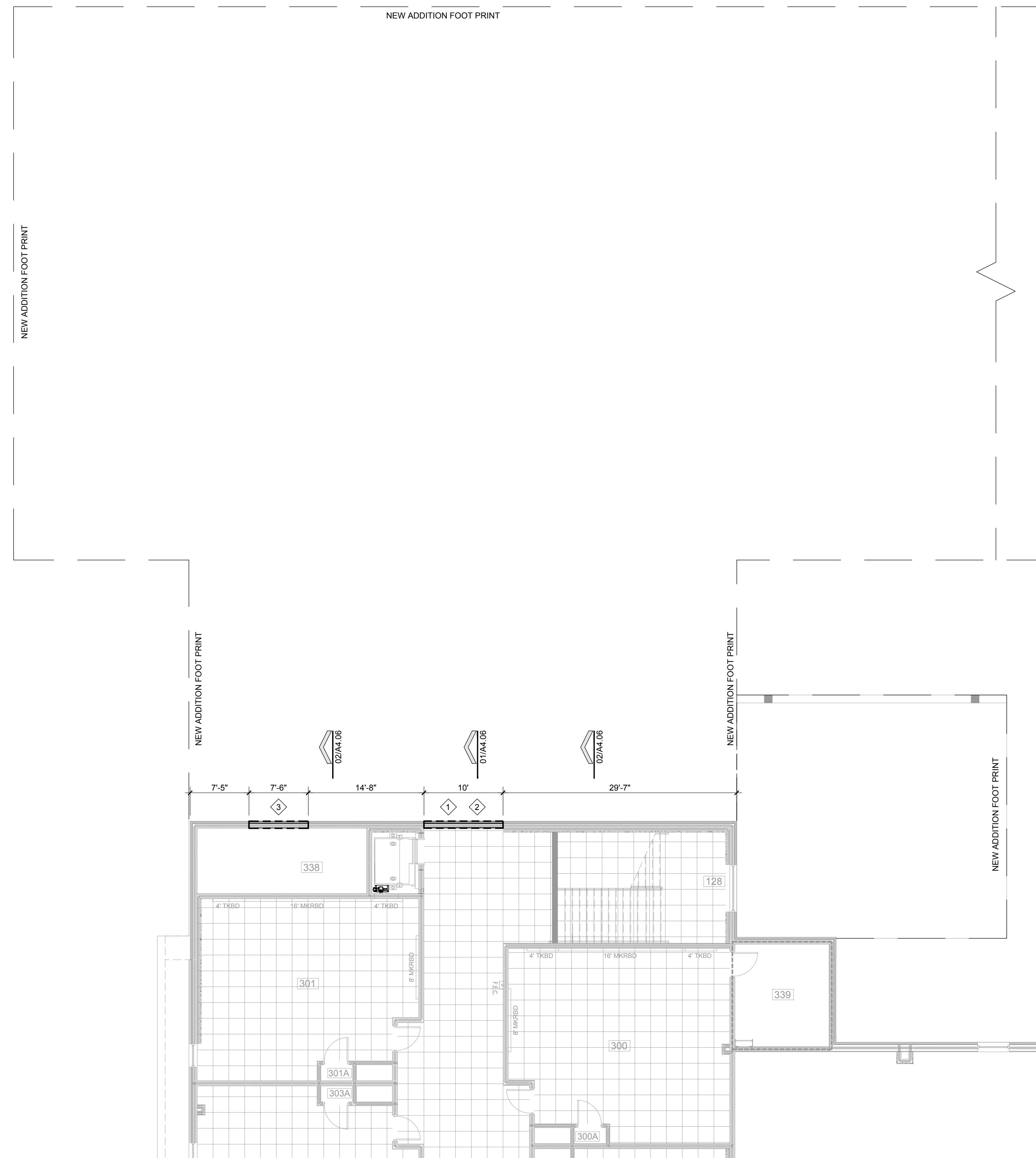
Educational Occupancy 2,317 Occupants

Total Fixtures required	47 wc/47 lav/24 df/ 1 service sink
Total Fixtures provided	47 wc/47 lav/26 df/3 service sinks

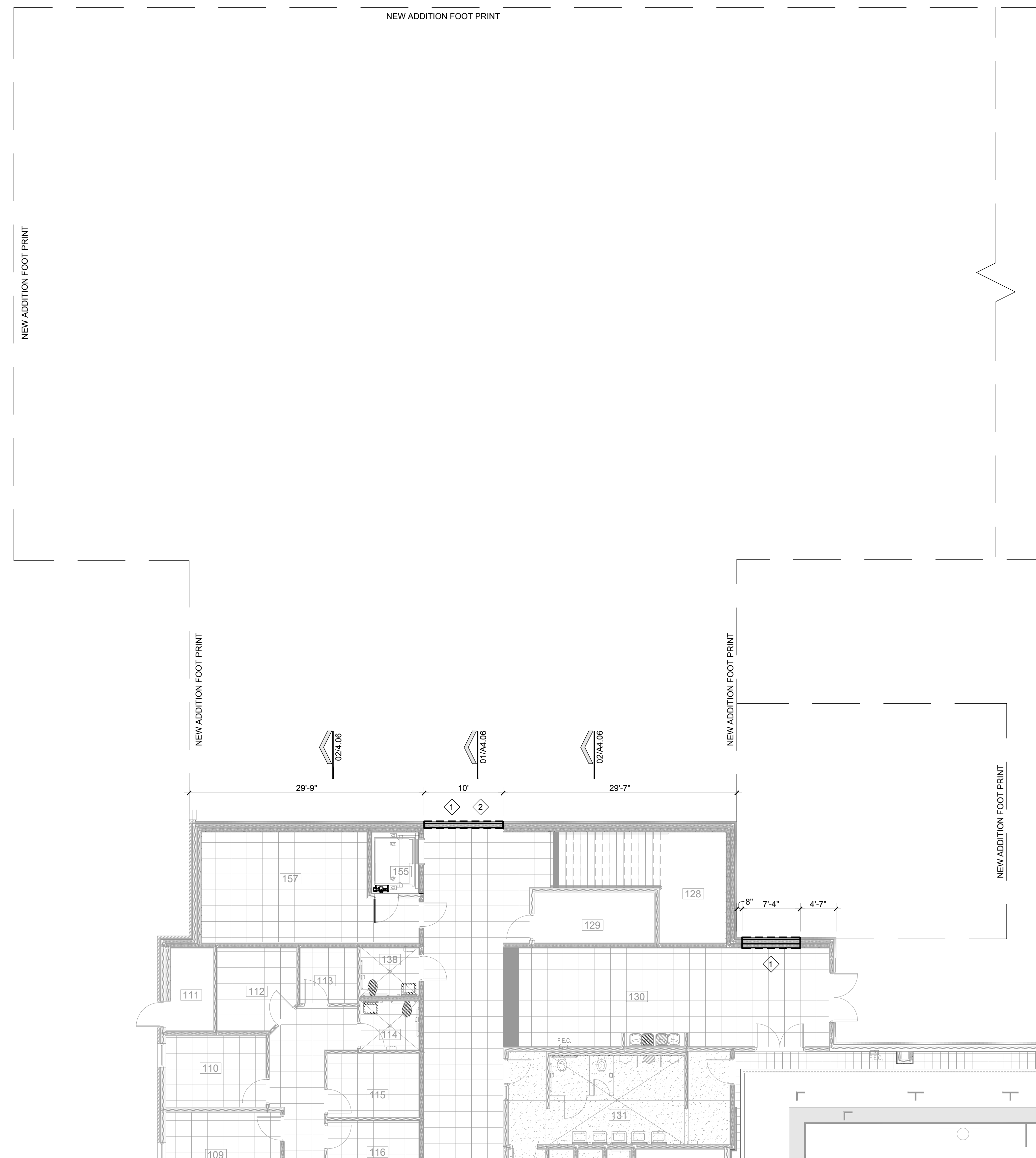


01 FIRST FLOOR  
OVERALL FLOOR PLAN  
SCALE: 1/16" = 1'-0"

EGRESS PLAN CODE



**2ND FLOOR**  
**02 DEMOLITION PLAN**  
 SCALE: 1/8" = 1'-0"  
 PLAN NORTH



**1ST FLOOR**  
**01 DEMOLITION PLAN**  
 SCALE: 1/8" = 1'-0"  
 PLAN NORTH

**LEGEND**

--- INDICATES ITEMS TO BE DEMOLISHED AS SHOWN REF. DEMOLITION NOTES

**KEYED DEMOLITION NOTES:**

- ① DEMOLISH EXISTING WALL. SAW CUT AS REQUIRED
- ② REMOVE EXISTING CEILING GRID TILES AS NEEDED TO ACCOMMODATE NEW FURR DOWN. REFER TO DETAIL 03/A2.04
- ③ PROVIDE NEW CASSED OPENING IN METAL STUD PARTITION.

**GENERAL DEMOLITION NOTES:**


GENERAL CONTRACTOR TO TAKE CARE NOT TO DAMAGE EXISTING FOUNDATION, STRUCTURAL STEEL BEAMS / COLUMNS, SURROUNDING BUILDINGS AND VARIOUS SURFACES OUTSIDE OF DEMOLITION AREA. SHOULD ANY DAMAGE OCCUR OUTSIDE OF DEMOLITION AREA, THE GENERAL CONTRACTOR WILL BE RESPONSIBLE TO REPAIR OR REPLACE DAMAGED ITEMS.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING DEBRIS & MATERIAL AWAY FROM SITE ACCORDING TO LOCAL & STATE REGULATIONS.

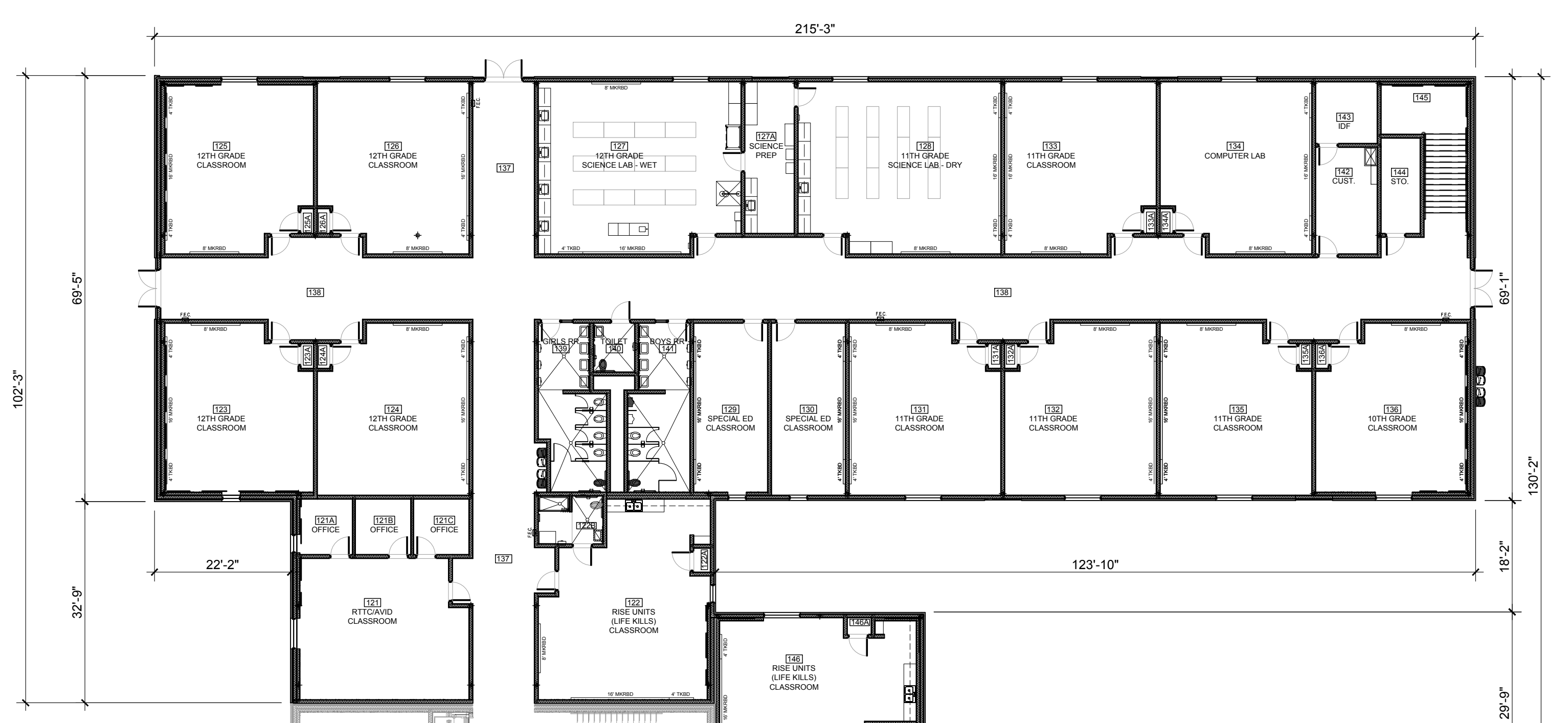
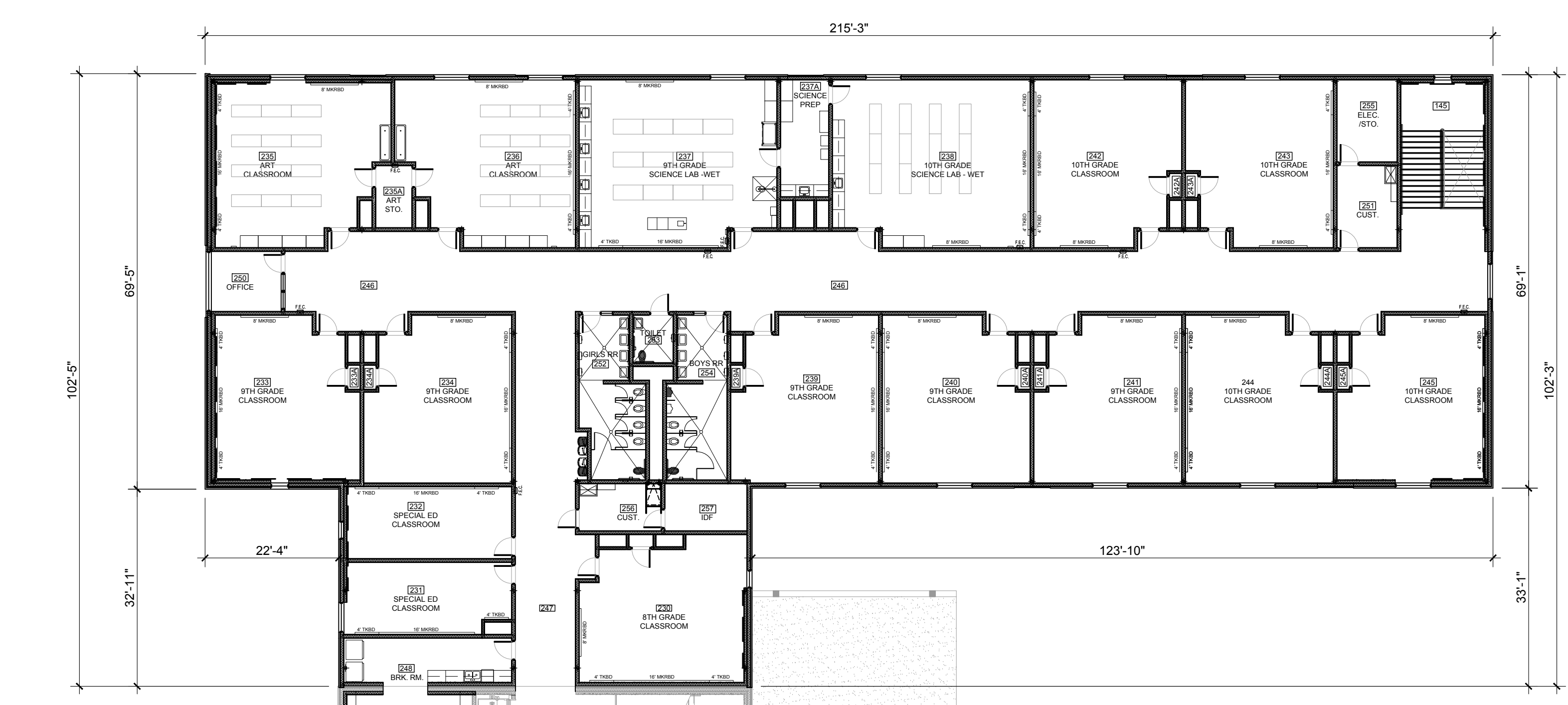
PATCH TO MATCH ALL FINISHES DISTURBED BY THE DEMOLITION AND IMPROVEMENTS.

REFER TO STRUCTURAL AND MEP DOCUMENTS FOR ADDITIONAL WORK TO BE PREFORMED IN THIS AREA.

**IDEA-OWASSA**  
**IDEA COLLEGE PREP PHASE II**  
 Public Schools

  
 © Copyright 2019  
 Gomez Mendez Suarez, Inc.  
 Architects-Planners  
 Interior Designers

Date:	March 21, 2019
Scale:	As Noted
Project Architect:	David A. Montreal, AIA
Drawn By:	J. Alvarado
Job No.:	IDEA PHASE II
Sheet:	D1.01



PHASE II CONSTRUCTION  
 EXISTING PHASE I

PHASE I RENOVATION  
 REFER TO SHEET A2.08

PHASE I RENOVATION  
 REFER TO SHEET A2.08  
 ALTERNATE #4

  
 PLAN NORTH  
**02 SECOND FLOOR OVERALL FLOOR PLAN**  
 SCALE: 1/16" = 1'-0"  
 17,168 SQ. FT.

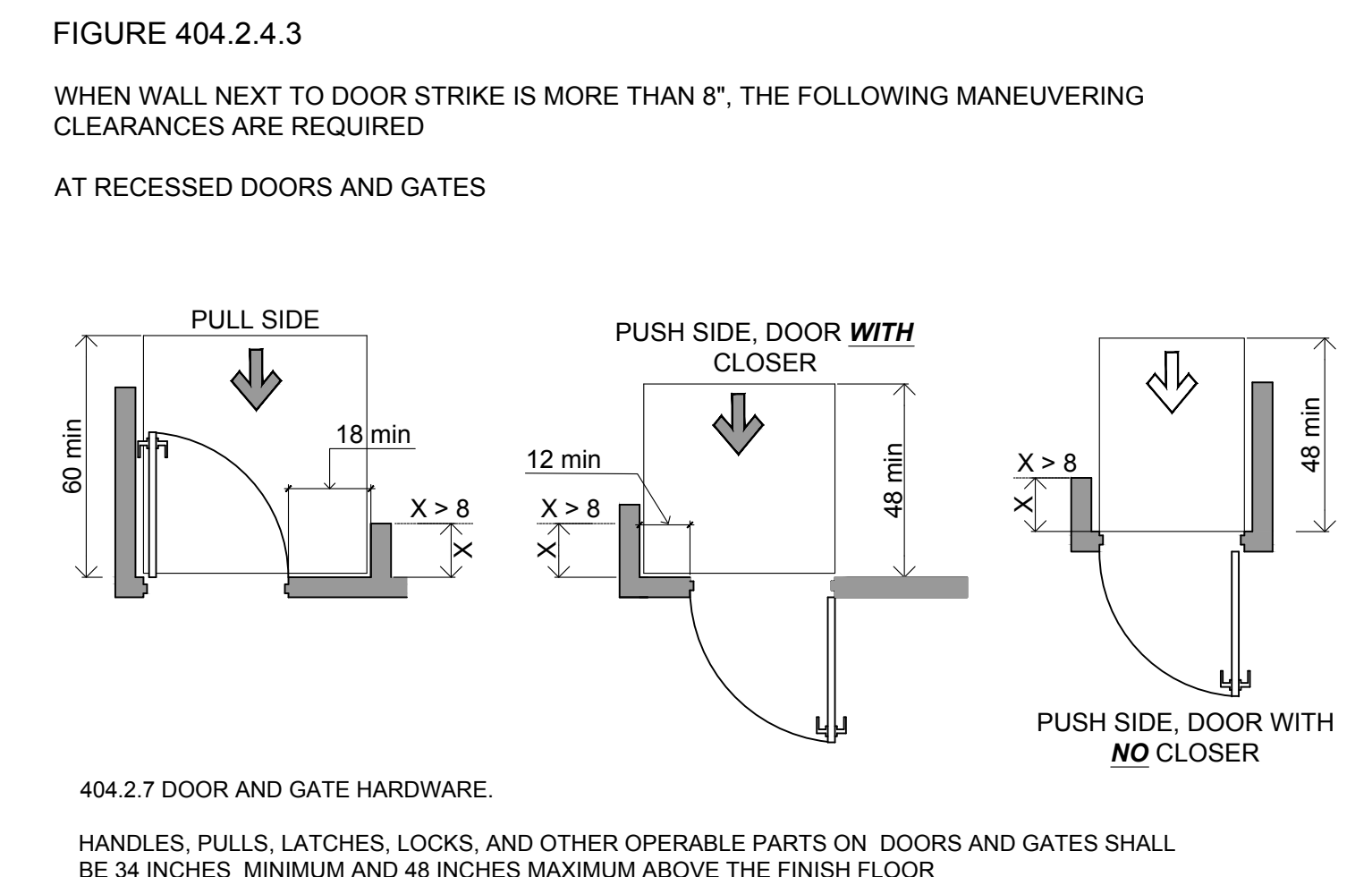
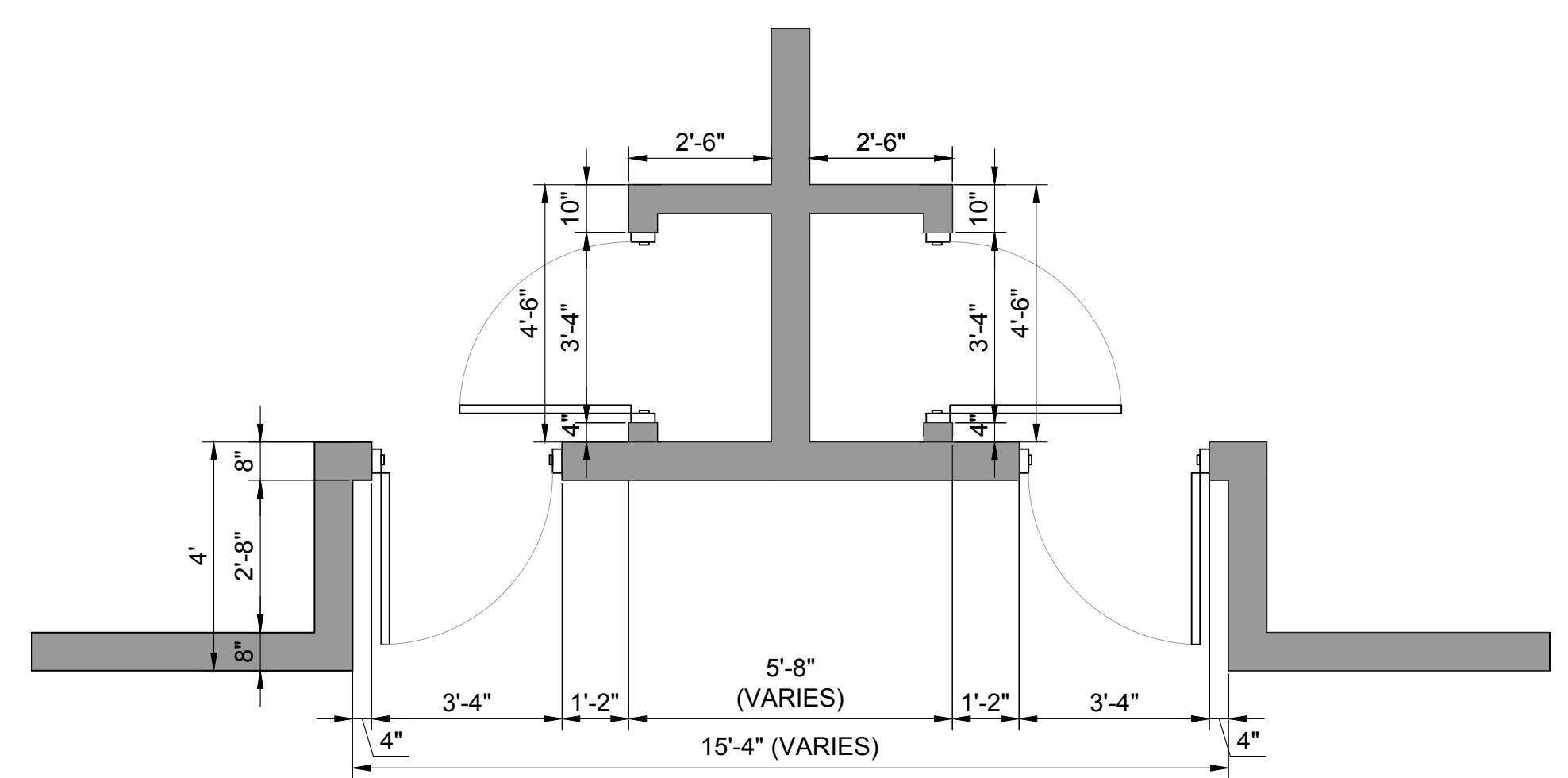
  
 PLAN NORTH  
**01 FIRST FLOOR OVERALL FLOOR PLAN**  
 SCALE: 1/16" = 1'-0"  
 17,168 SQ. FT.

LEGEND

- FINISH LEGEND:
- CONC. SEALED CONCRETE
  - C.T. CERAMIC TILE
  - GB/PD GYPSUM BOARD PAINTED
  - PTD. PAINTED
  - RUBBER RUBBER BASE
  - V.C.T. VINYL COMPOSITE TILE
  - R.T. RADIAL TILE
  - Q.T. QUARRY TILE
  - WD. WOOD
  - EXP/PTD EXPOSED PAINTED
  - SUS/GYP SUSPENDED 1/2" MOISTURE RESISTANT GYP BOARD - PAINTED
  - S.A.C. SUSPENDED ACOUSTICAL CEILING REFERENCE SPECIFICATIONS FOR TYPES

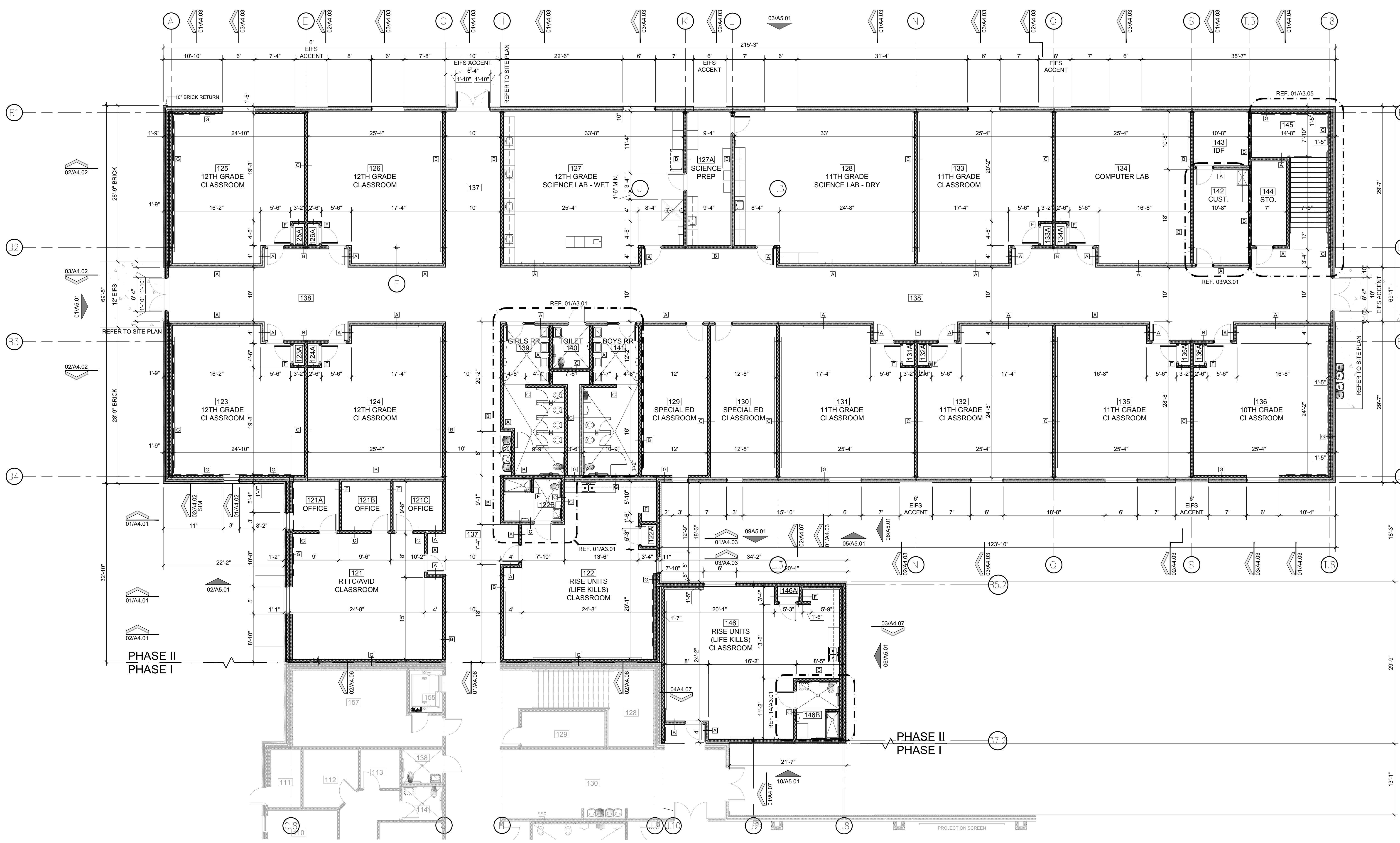
- WALL HATCH LEGEND:
- 1 HR INDICATES THAT THIS WALL SHALL BE FIRE RATED AND SHALL BE EXTENDED TO UNDERSIDE OF ROOF DECK.
  - INDICATES METAL STUD W/ GYP/BRD WALL AS REQUIRED REFERENCE INTERIOR PARTITION SECTIONS

ROOM	ROOM NAME	BASE	FLR.	WALLS				CLG.	CLG HEIGHTS	REMARKS
				N	S	E	W			
121	RTTC/AVID CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
121A	COUNSELORS OFFICE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-4"	
121B	COUNSELORS OFFICE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-4"	
121C	COUNSELORS OFFICE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-4"	
122	RISE UNIT (LIFE SKILLS) CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
122A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
122B	TOILET	C.T.	C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC III	6'-0"	6'-0" C.T. WAINSCOT
123	12TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
123A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
124	12TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
124A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
125	12TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
125A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
125B	12TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
126A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
127	12TH GRADE SCIENCE LAB - WET	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
127A	SCIENCE PREP ROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-4"	
128	11TH GRADE SCIENCE LAB - DRY	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
129	SPECIAL ED CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
130	SPECIAL ED CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
131	11TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
131A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
132	11TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
132A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
133	11TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
133A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
134	COMPUTER LAB	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
134A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
135	11TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
135A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
136	10TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
136A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-0"	
137	CORRIDOR	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC II	10'-4"	
138	CORRIDOR	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC II	10'-4"	
139	GIRLS TOILETS	C.T.	C.T.	GB/PD	GB/PD	GB/PD	SUS/GYP	9'-0"	6'-0" C.T. WAINSCOT	
140	STAFF TOILET	C.T.	C.T.	GB/PD	GB/PD	GB/PD	SAC III	9'-0"	6'-0" C.T. WAINSCOT	
141	BOYS TOILETS	C.T.	C.T.	GB/PD	GB/PD	GB/PD	SUS/GYP	9'-0"	6'-0" C.T. WAINSCOT	
142	CUSTODIAN	CONC.	CONC.	GB/PD	GB/PD	GB/PD	EXP/PTD	9'-0"	4'-0" C.T. WAINSCOT @ MOP SINK	
143	IDF	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC IV	9'-4"	
144	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	EXP/PTD	9'-8"		
145	STAIRWELL	RUBBER	R.T.	GB/PD	GB/PD	GB/PD	GB/PD	CLG @ 2ND LVL	R.T. TREADS	
146	RISE UNIT (LIFE SKILLS) CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	



02 FLOOR PLAN ENLARGEMENT  
NOT TO SCALE

03 ADA DETAILS  
NOT TO SCALE



- 1ST FLOOR  
01 FLOOR PLAN  
SCALE: 1/8" = 1'-0"  
PLAN NORTH
- GENERAL NOTES:
- REFERENCE SERIES A4.05 FOR TYPICAL INTERIOR WALL SECTIONS NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION.
  - PROVIDE DRYWALL CONTROL JOINTS AT ALL STRUCTURAL STEEL COLUMN CONDITIONS AND WALL OPENINGS. REFER TO SHEET A4.05
  - PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS
  - REFERENCE FIXTURE PLANS SHEET FOR FIXTURE, ACCESSORY REQUIREMENTS AND FLOOR TILE PATTERN LAYOUT
  - TYPICAL CORRIDOR WALLS TO BE EXTENDED TO UNDERSIDE OF DECK
  - REFERENCE SHEET A3.01 FOR TOILET ENLARGEMENTS
  - PROVIDE HORIZONTAL MINI BLINDS AT ALL EXTERIOR WINDOWS TYPICAL. (EXCEPTION HALLWAYS AND STAIRWELLS WINDOWS.)
  - ALL EXPOSED DRYWALL CORNERS TO RECEIVE PLASTIC CORNER GUARDS, AS SPECIFIED.
  - ALL EXPOSED COLUMNS ARE TO BE FURRED WITH METAL STUDS AND DRYWALL. REFER TO SHEET A3.02 FOR DETAILS.
  - PROVIDE DOUBLE 6" METAL STUD PARTITION AT ALL STRUCTURAL BRACING LOCATIONS. REFER TO 15/A3.02 FOR DETAILS AND STRUCTURAL FOR LOCATIONS.
  - REFERENCE A3.02 FOR TYPICAL PLAN DETAILS
  - PROVIDE MTL. STUD BLOCKING FOR ALL WALL MOUNTED BOARDS & ACCESSORIES.
  - PROVIDE WOOD BLOCKING AT ALL CABINETS, PROJECTOR & RAILING LOCATIONS.
  - PROVIDE SCHULTER HEROI SHOWER PANS AT ALL LOCATIONS RECEIVING CERAMIC AND QUARRY TILE FLOORING.

### LEGEND

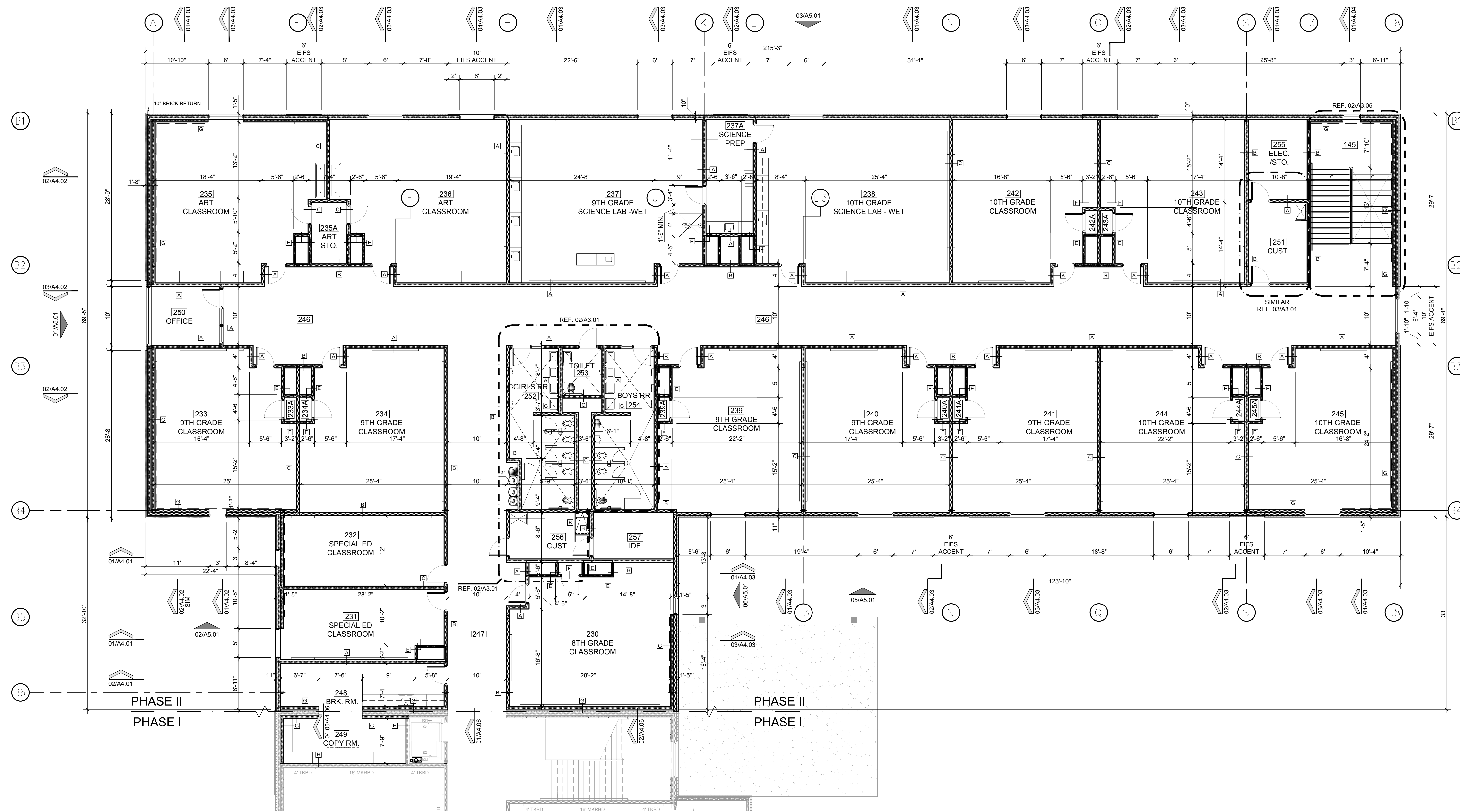
#### FINISH LEGEND:

- CONC. SEALED CONCRETE
- C.T. CERAMIC TILE
- GB/PD GYPSUM BOARD PAINTED
- PTD. PAINTED
- RUBBER RUBBER BASE
- V.C.T. VINYL COMPOSITE TILE
- R.T. RADIAL TILE
- Q.T. QUARRY TILE
- WD. WOOD
- EXP/PD EXPOSED PAINTED
- SUS/GYP SUSPENDED 1/2" MOISTURE RESISTANT GYP BOARD - PAINTED
- S.A.C. SUSPENDED ACOUSTICAL CEILING REFERRED SPECIFICATIONS FOR TYPES

#### WALL HATCH LEGEND:

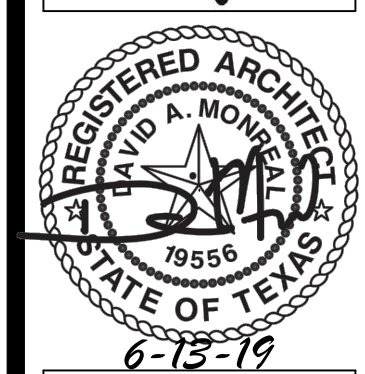
- 1 HR [HATCH] INDICATES THAT THIS WALL SHALL BE FIRE RATED AND SHALL BE EXTENDED TO UNDERSIDE OF ROOF DECK.
- [HATCH] INDICATES METAL STUD W/ GYP BRD WALL AS REQUIRED. REFERENCE INTERIOR PARTITION SECTIONS

ROOM	ROOM NAME	BASE	FLR.	WALLS				CLG.	CLG. HEIGHTS	REMARKS
				N	S	E	W			
230	8TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
230A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
231	SPECIAL ED CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
232	SPECIAL ED CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
233	9TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
233A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
234	9TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
234A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
235	ART CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
235A	ART STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
236	ART CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
237	9TH GRADE SCIENCE LAB - WET	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
237A	SCIENCE PREP ROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
238	10TH GRADE SCIENCE LAB - WET	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
239	9TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
239A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
240	9TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
240A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
241	9TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
241A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
242	10TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
242A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
243	10TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
243A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
244	10TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
244A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
245	10TH GRADE CLASSROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
245A	STORAGE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
246	CORRIDOR	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC II	10'-4"	
247	CORRIDOR	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC II	10'-4"	
248	BREAKROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
249	COPY ROOM	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC I	9'-8"	
250	OFFICE	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC II	9'-8"	CLG ABOVE CURTAIN WALL
251	CUSTODIAN	RUBBER	CONC.	GB/PD	GB/PD	GB/PD	GB/PD	EXP/PD		4'-0" C.T. WAINSCOT @ MOP SINK
252	GIRLS TOILETS	C.T.	C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SUS/GYP	9'-0"	6'-0" C.T. WAINSCOT
253	TOILET	C.T.	C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
254	BOYS TOILETS	C.T.	C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SUS/GYP	9'-0"	6'-0" C.T. WAINSCOT
255	ELECTRICAL/STORAGE	RUBBER	CONC.	GB/PD	GB/PD	GB/PD	GB/PD	EXP/PD		
256	CUSTODIAN	RUBBER	CONC.	GB/PD	GB/PD	GB/PD	GB/PD	EXP/PD		4'-0" C.T. WAINSCOT @ MOP SINK
257	IDF	RUBBER	V.C.T.	GB/PD	GB/PD	GB/PD	GB/PD	SAC IV	9'-4"	
145	STAIRWELL	RUBBER	RT	GB/PD	GB/PD	GB/PD	GB/PD	SAC II	10'-4"	RADIAL TILE TREADS



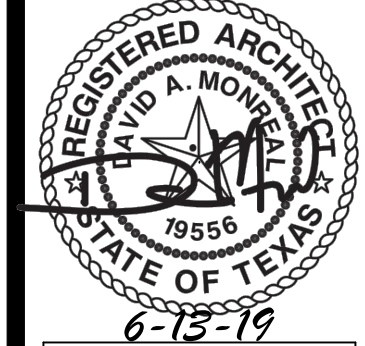
- ### 2ND FLOOR PLAN
- 01 SCALE: 1/8" = 1'-0"
- PLAN NORTH
- GENERAL NOTES:
- REFERENCE SERIES A4.07 FOR TYPICAL INTERIOR WALL SECTIONS NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION [A]-[E]
  - PROVIDE DRYWALL CONTROL JOINTS AT ALL STRUCTURAL STEEL COLUMN CONDITIONS AND WALL OPENINGS, REFER TO SHEET A4.05
  - PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS
  - REFERENCE FIXTURE PLANS SHEET FOR FIXTURE, ACCESSORY REQUIREMENTS AND FLOOR TILE PATTERN LAYOUT
  - TYPICAL CORRIDOR WALLS TO BE EXTENDED TO UNDERSIDE OF DECK
  - REFERENCE SHEET A3.01 FOR TOILET ENLARGEMENTS
  - PROVIDE HORIZONTAL MINI BLINDS AT ALL EXTERIOR WINDOWS TYPICAL (EXCEPTION HALLWAYS AND STAIRWELLS WINDOWS.)
  - ALL EXPOSED DRYWALL CORNERS TO RECEIVE PLASTIC CORNER GUARDS, AS SPECIFIED.
  - ALL EXPOSED COLUMNS ARE TO BE FURRED WITH METAL STUDS AND DRYWALL. REFER TO SHEET A3.02 FOR DETAILS.
  - PROVIDE DOUBLE 6" METAL STUD PARTITION AT ALL STRUCTURAL BRACING LOCATIONS. REFER TO 15/A3.02 FOR DETAILS AND STRUCTURAL FOR LOCATIONS.
  - REFERENCE A3.02 FOR TYPICAL PLAN DETAILS
  - PROVIDE MTL. STUD BLOCKING FOR ALL WALL MOUNTED BOARDS & ACCESSORIES.
  - PROVIDE WOOD BLOCKING AT ALL CABINETS, PROJECTOR & RAILING LOCATIONS.
  - PROVIDE SCHULTER KERDI SHOWER PANS AT ALL LOCATIONS RECEIVING CERAMIC AND QUARRY TILE FLOORING.

**IDEA-OWASSA**  
**IDEA COLLEGE PREP PHASE II**  
 Public Schools



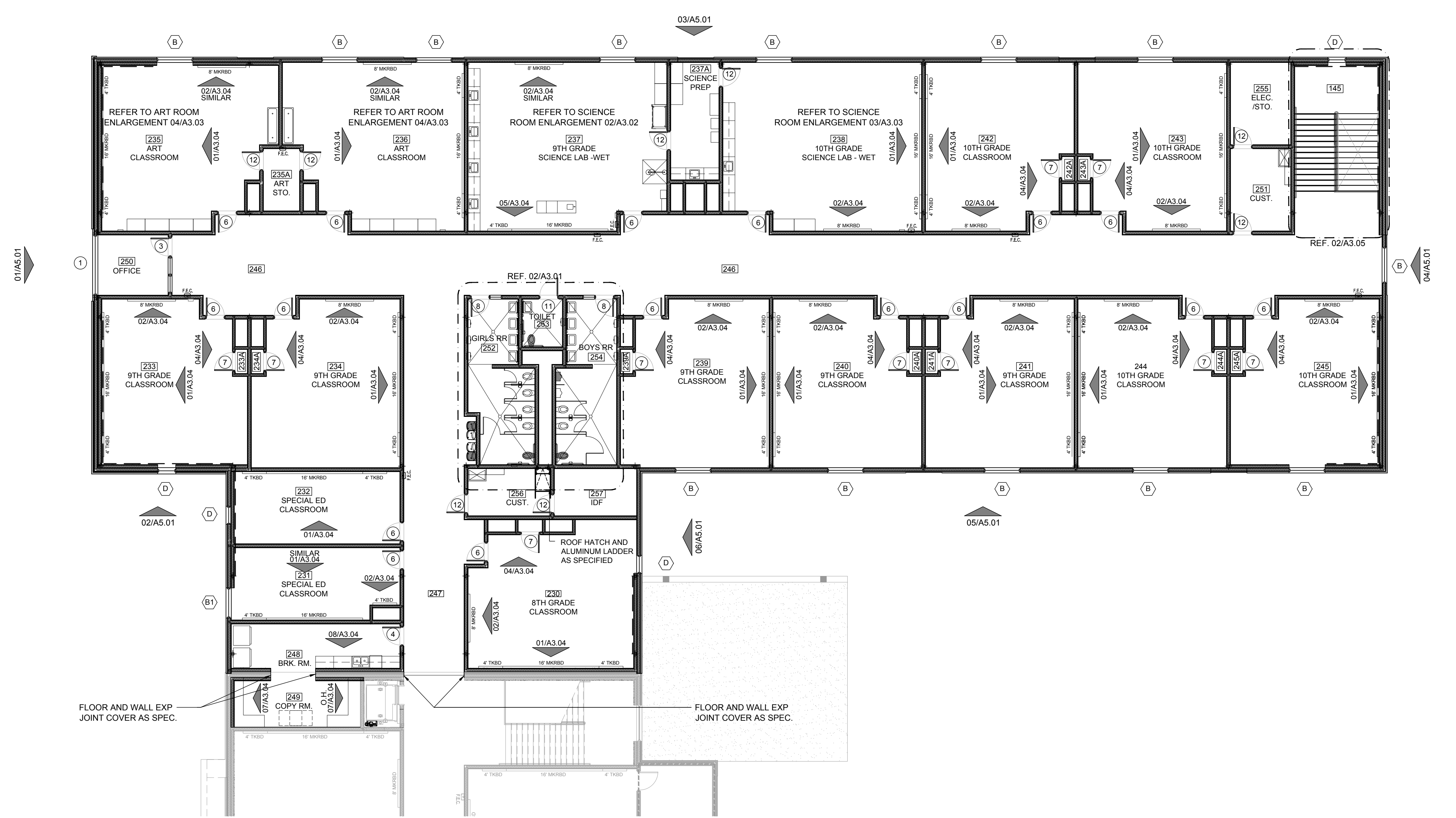
© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: March 21, 2019  
Scale: As Noted  
Project Architect: David A. Montreal, AIA  
Drawn By: J. Alvarado  
Job No.: IDEA PHASE II  
Sheet: A2.02



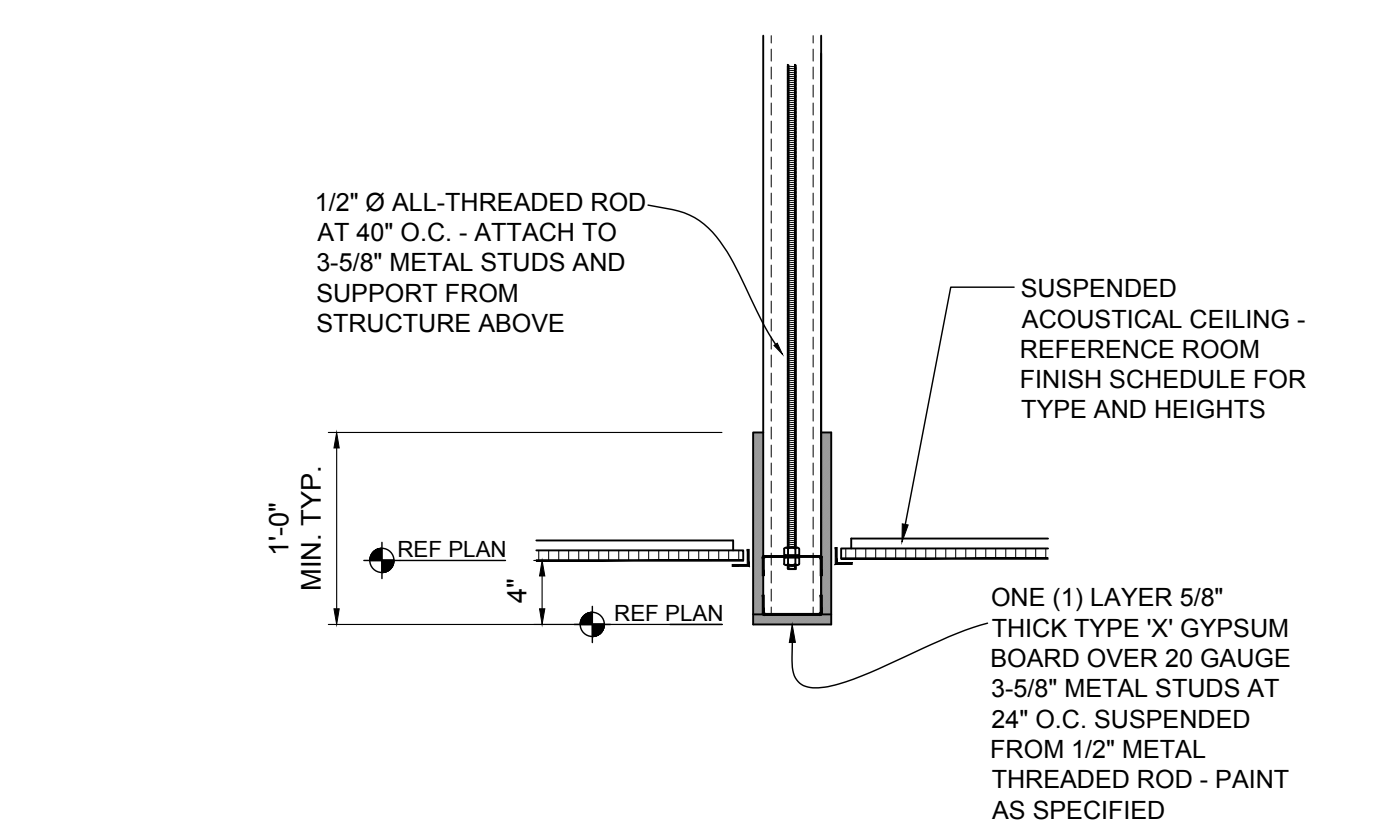
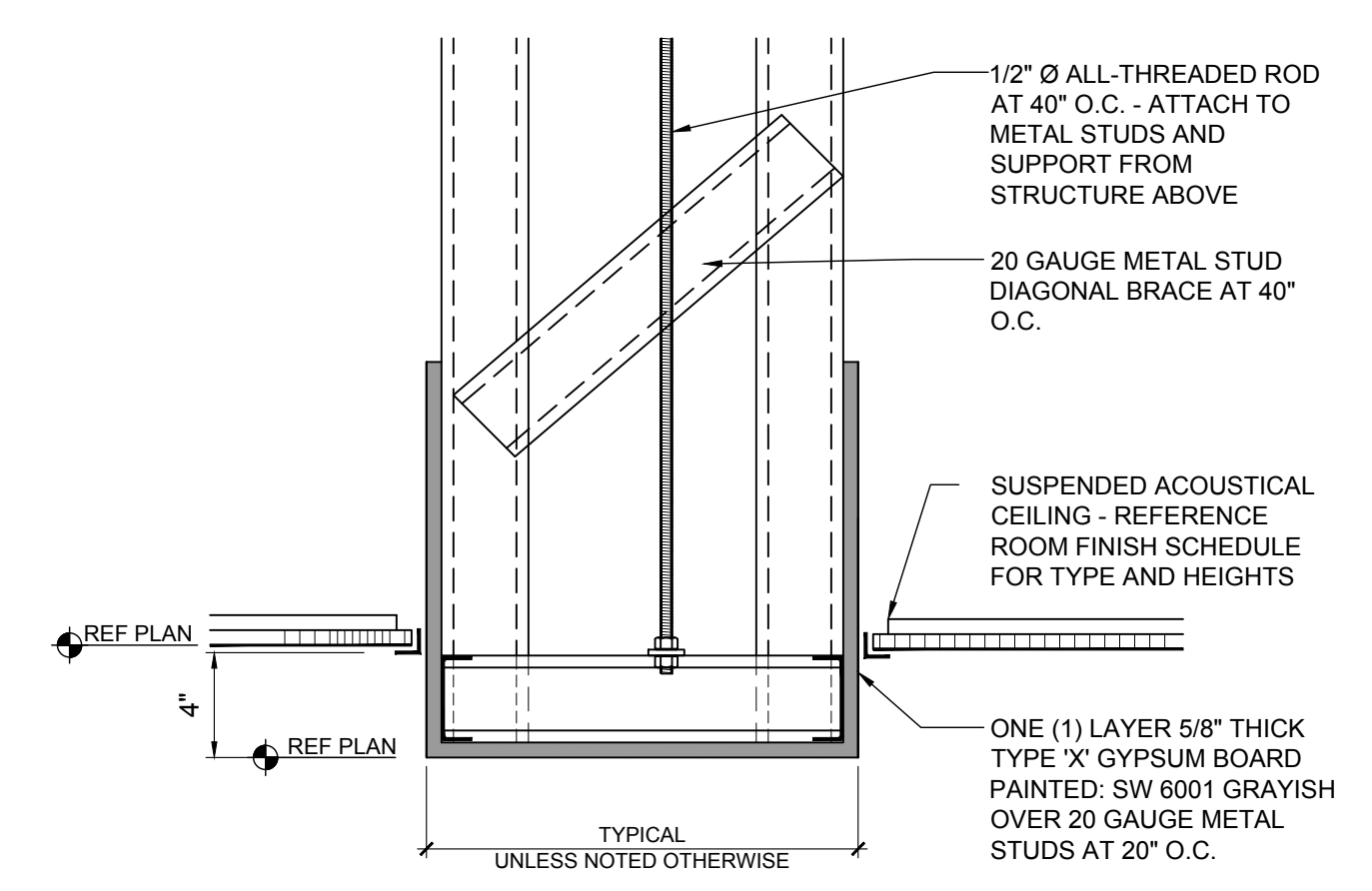
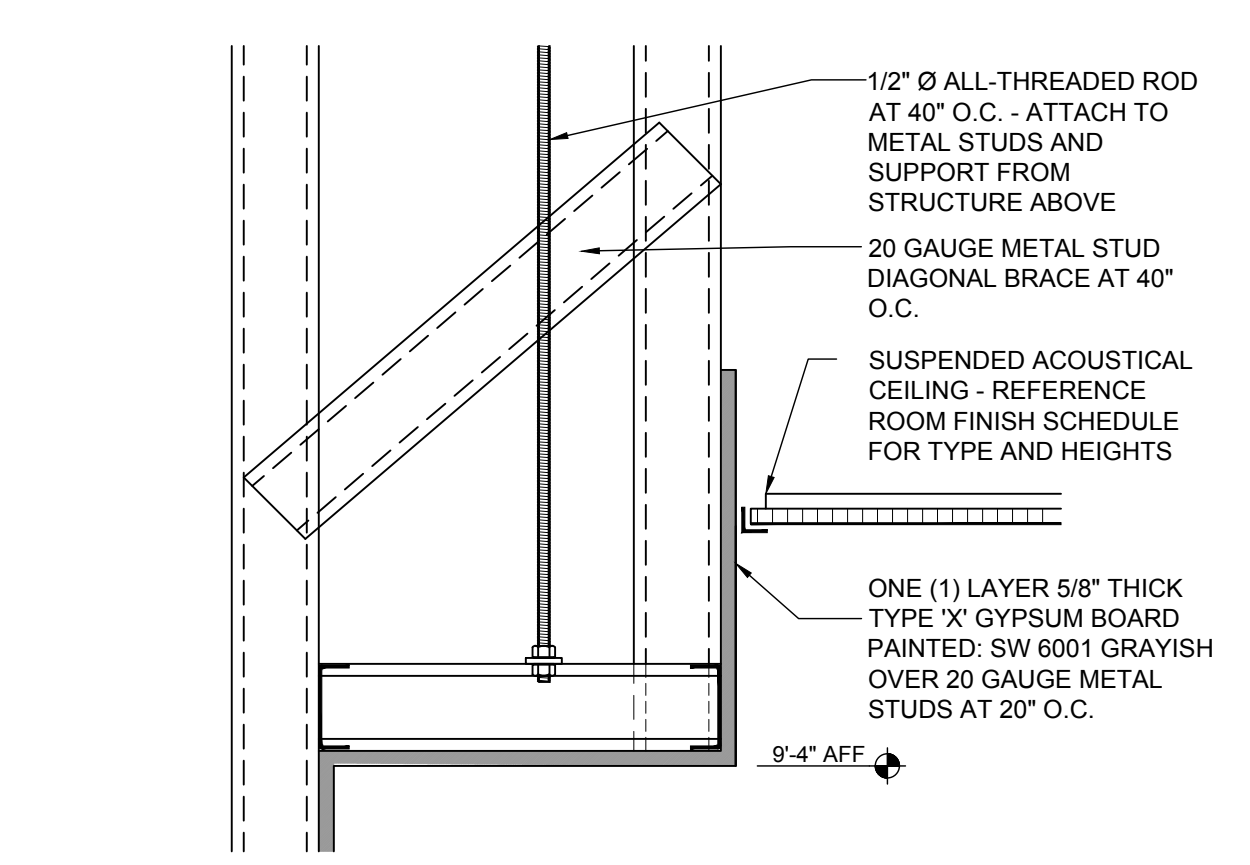
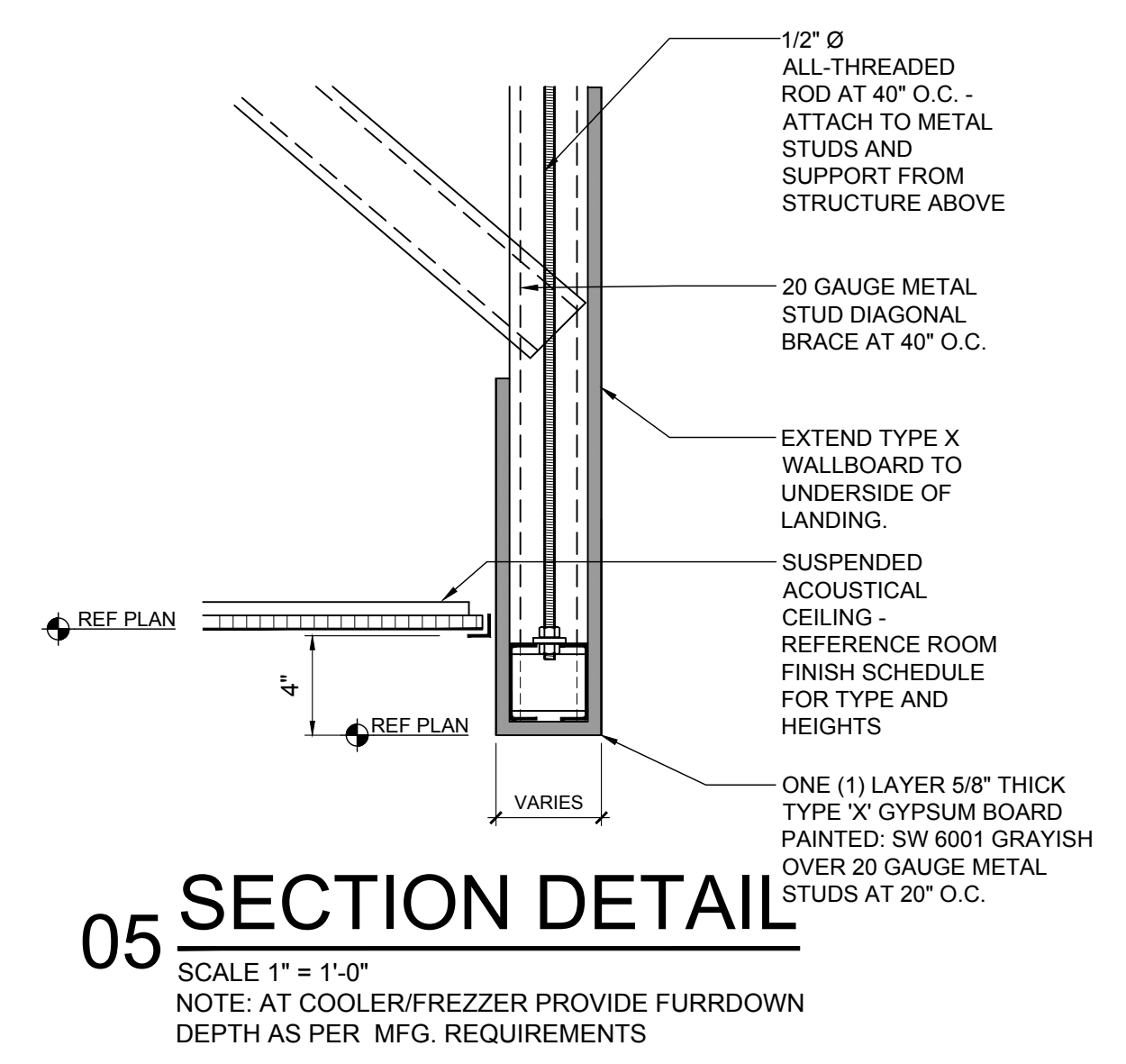
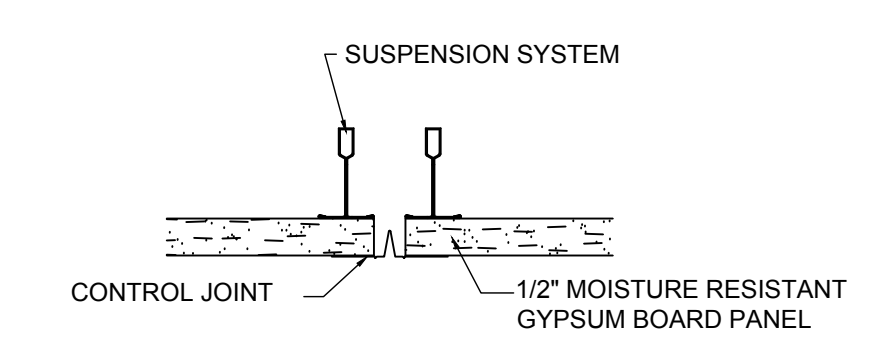
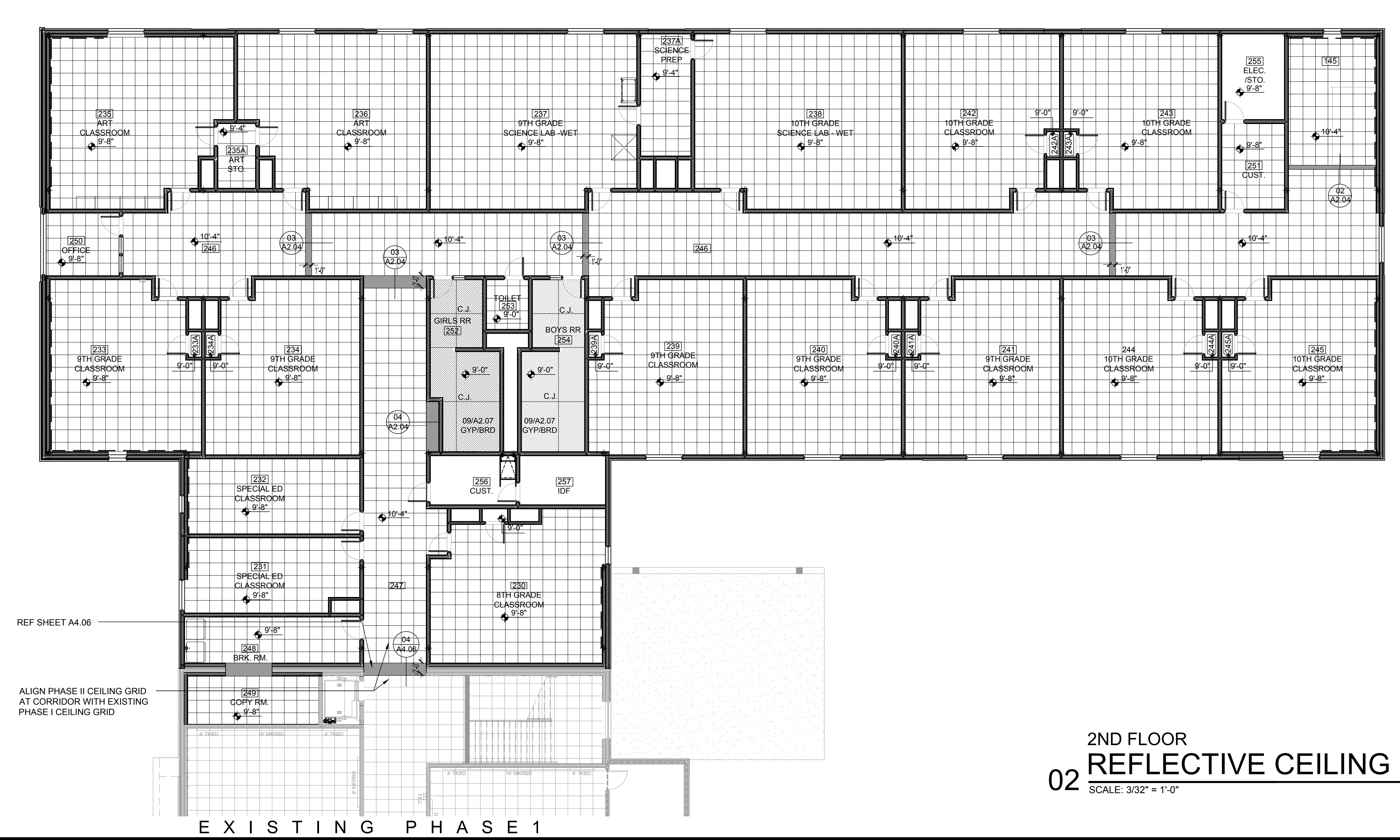
1ST FLOOR  
**01 FIXTURE PLAN**  
 SCALE: 3/32" = 1'-0"  
 PLAN NORTH

- GENERAL NOTES:
- 1.) GENERAL CONTRACTOR TO CONTACT ARCHITECTS OFFICE IF ANY FLOOR TILE DESIGN IS UNCLEAR REGARDING SIZE, COLOR, OR LOCATION
  - 2.) PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS
  - 3.) REFERENCE ROOM FINISH SCHEDULE ON SHEET A2.01 FOR ROOM FINISH INFORMATION
  - 4.) PROVIDE FOR UP TO THREE VCT COLORS IN CORRIDORS AND WAITING.
  - 5.) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES




2ND FLOOR  
**01 FIXTURE PLAN**  
 SCALE: 3/32" = 1'-0"  
 PLAN NORTH

- GENERAL NOTES:
- 1.) GENERAL CONTRACTOR TO CONTACT ARCHITECTS OFFICE IF ANY FLOOR TILE DESIGN IS UNCLEAR REGARDING SIZE, COLOR, OR LOCATION
  - 2.) PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS
  - 3.) REFERENCE ROOM FINISH SCHEDULE ON SHEET A2.01 FOR ROOM FINISH INFORMATION
  - 4.) PROVIDE FOR UP TO THREE VCT COLORS IN CORRIDORS AND WAITING.
  - 5.) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES



IDEA-OWASSA  
IDEA COLLEGE PREP PHASE II  
Public Schools

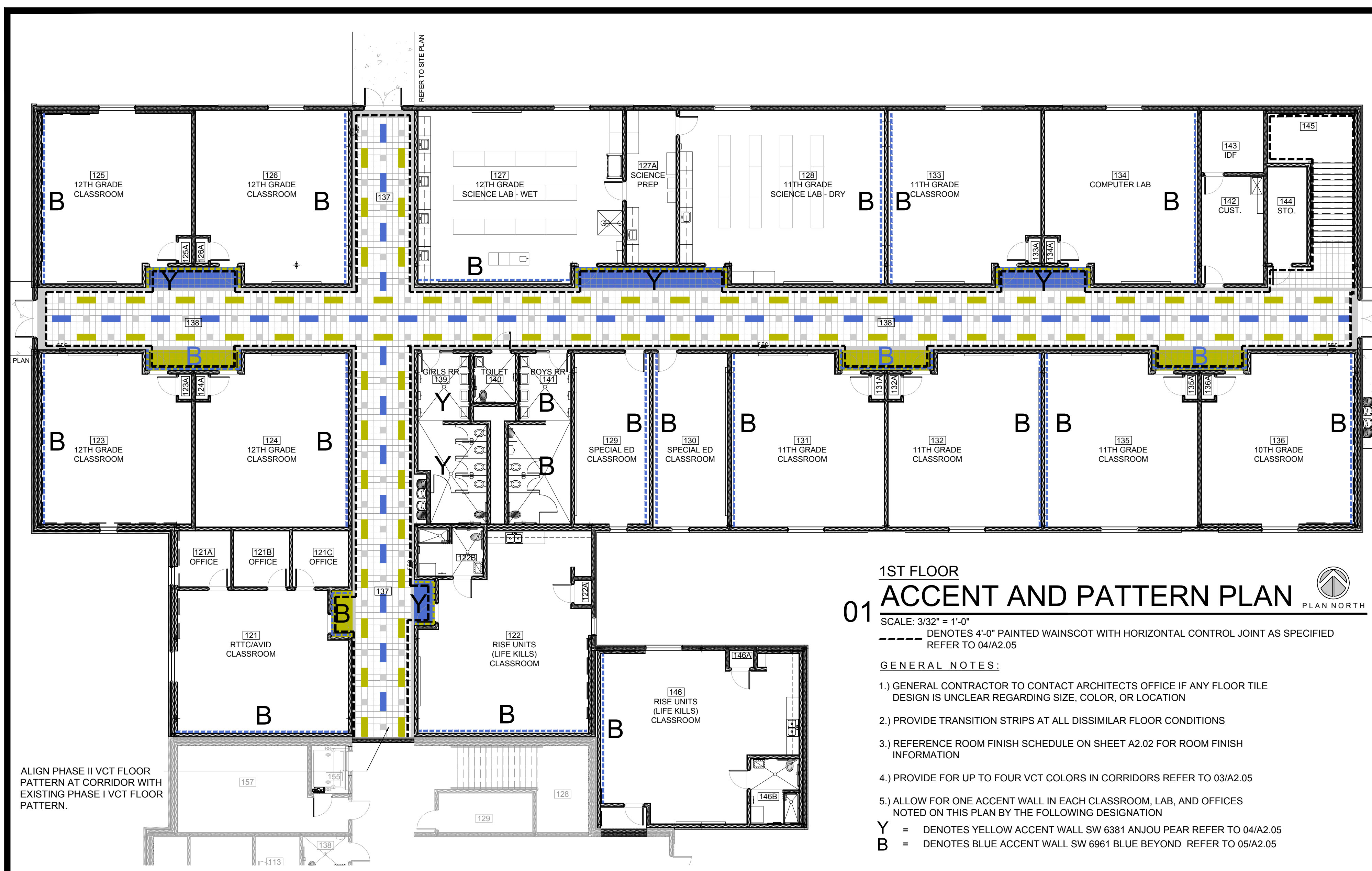


© Copyright 2019  
Gomez-Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date:	March 21, 2019
Scale:	As Noted
Project Architect:	David A. Monreal, AIA
Drawn By:	J. Alvarado
Job No.:	IDEA PHASE II
Sheet:	A2.04

Jun 13, 2019 - 1:30pm;C:\Users\GMS\Station7\apddata\local\temp\AcPublish\1324\IDEA P2 2018 Plan-Ldwg



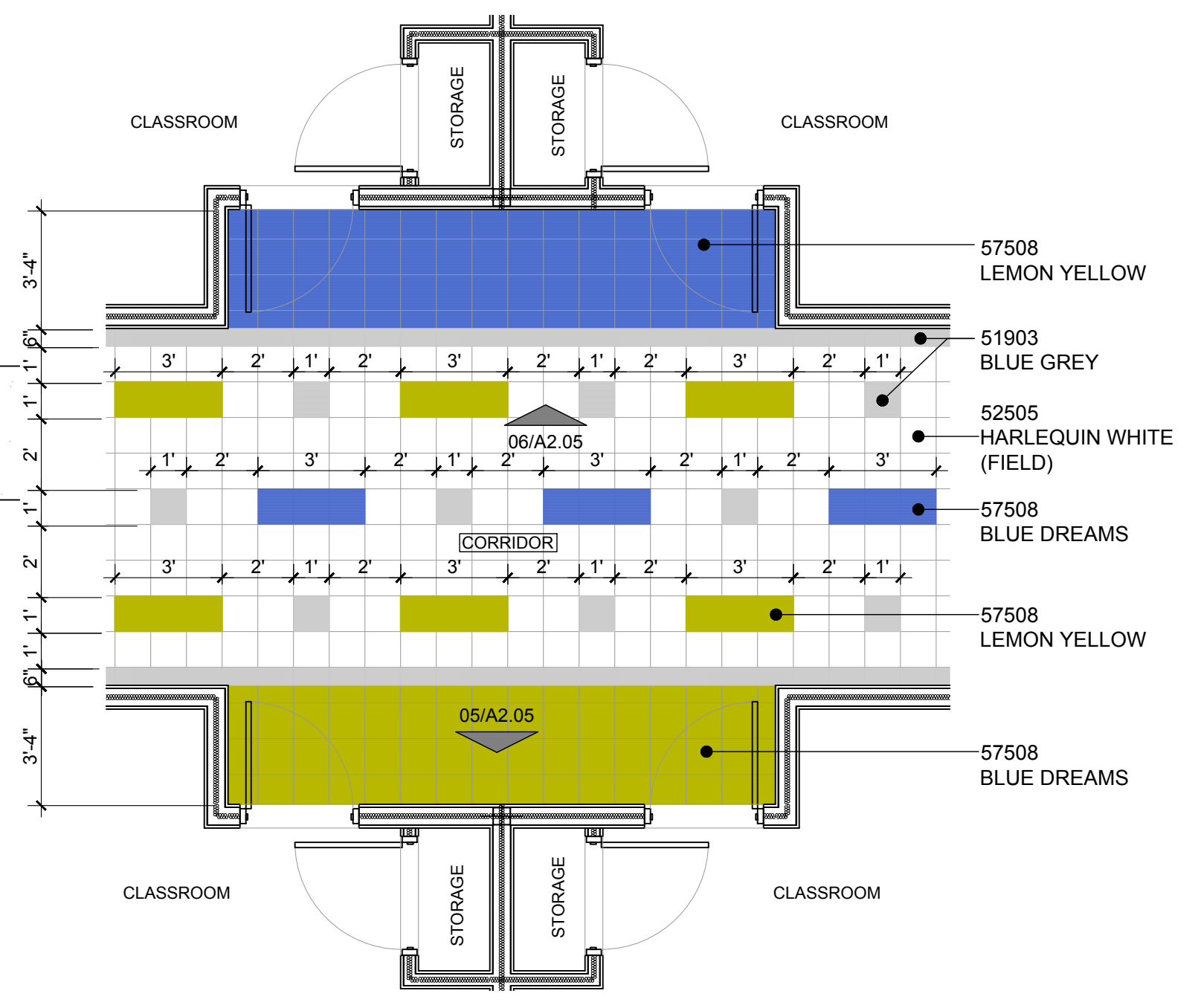


**01 1ST FLOOR ACCENT AND PATTERN PLAN**  
 SCALE: 3/32" = 1'-0"  
 --- DENOTES 4'-0" PAINTED WAINSCOT WITH HORIZONTAL CONTROL JOINT AS SPECIFIED REFER TO 04/A2.05

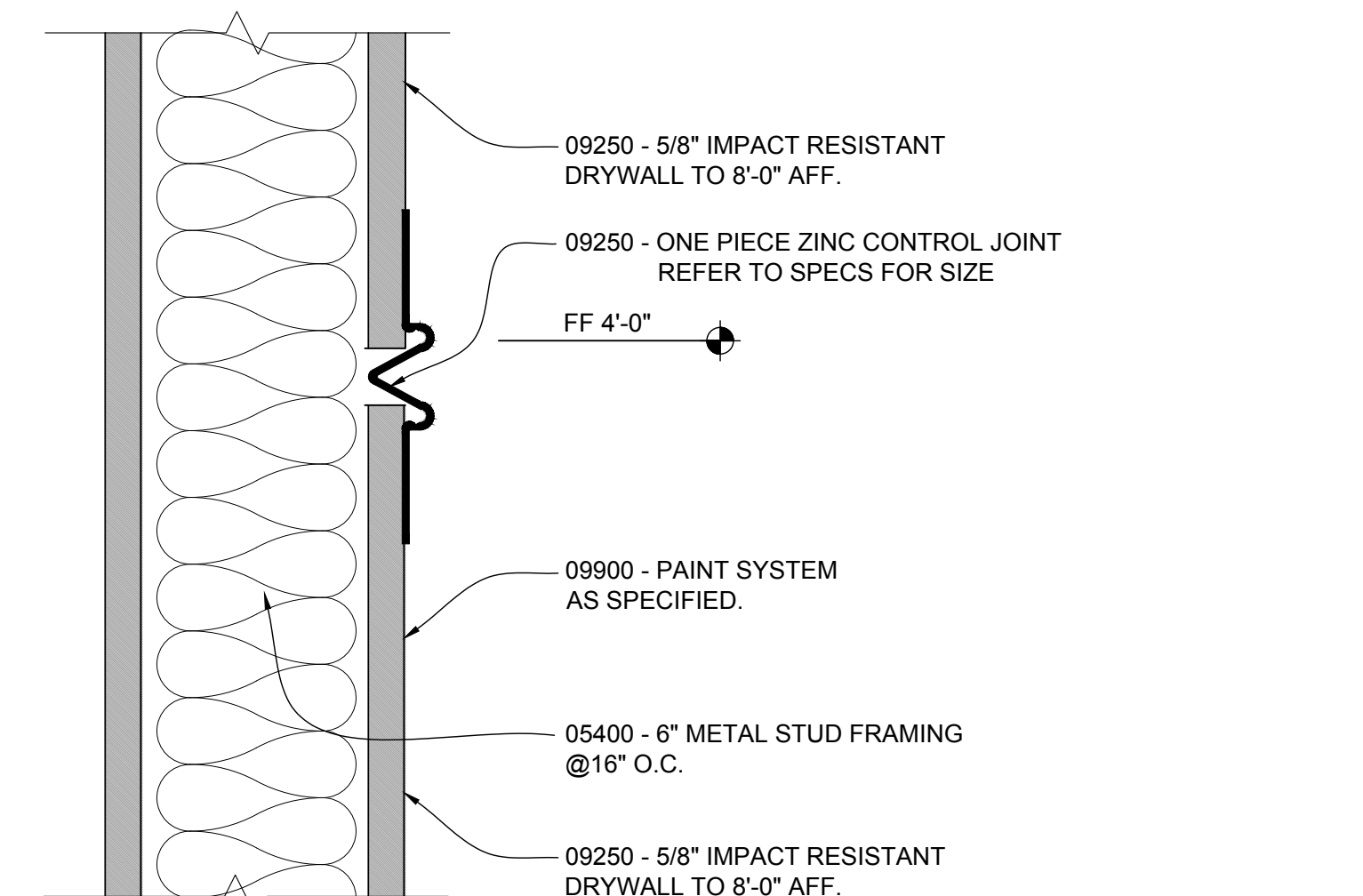
**GENERAL NOTES:**

- 1) GENERAL CONTRACTOR TO CONTACT ARCHITECTS OFFICE IF ANY FLOOR TILE DESIGN IS UNCLEAR REGARDING SIZE, COLOR, OR LOCATION
- 2) PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS
- 3) REFERENCE ROOM FINISH SCHEDULE ON SHEET A2.02 FOR ROOM FINISH INFORMATION
- 4) PROVIDE FOR UP TO FOUR VCT COLORS IN CORRIDORS REFER TO 03/A2.05
- 5) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION

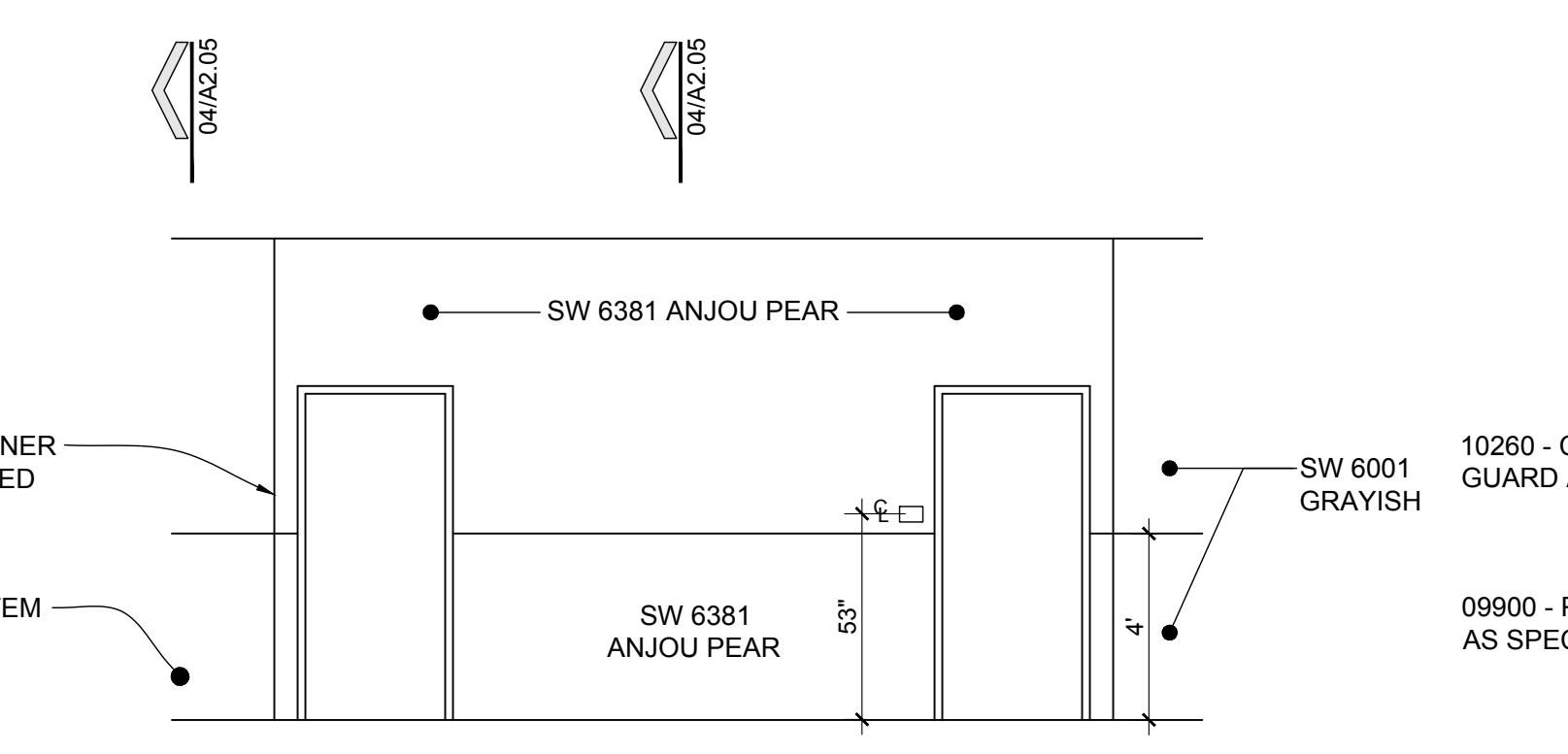
Y = DENOTES YELLOW ACCENT WALL SW 6381 ANJOU PEAR REFER TO 04/A2.05  
 B = DENOTES BLUE ACCENT WALL SW 6961 BLUE BEYOND REFER TO 05/A2.05



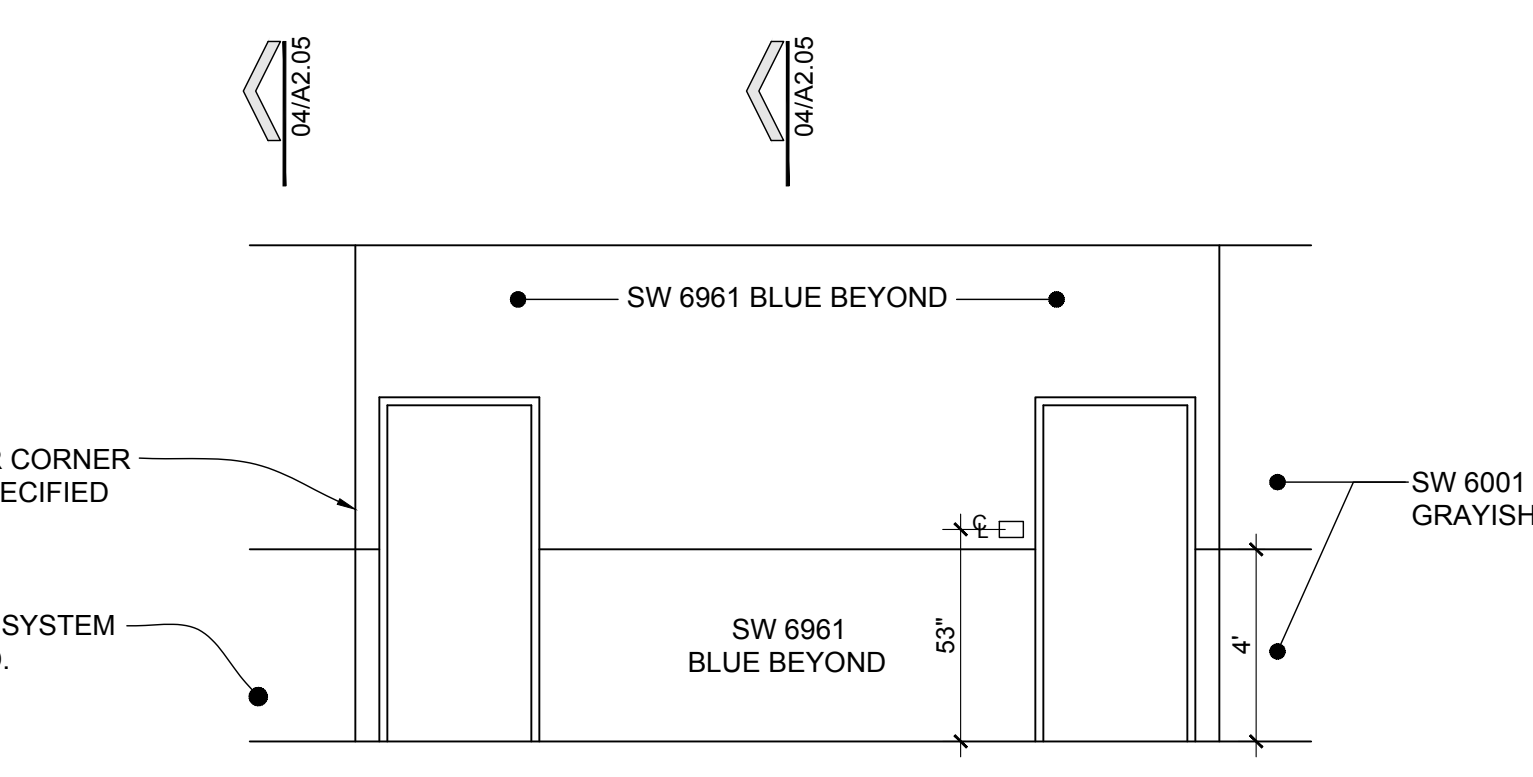
**03 TYPICAL VCT PATTERN**  
 SCALE: 1/4" = 1'-0"



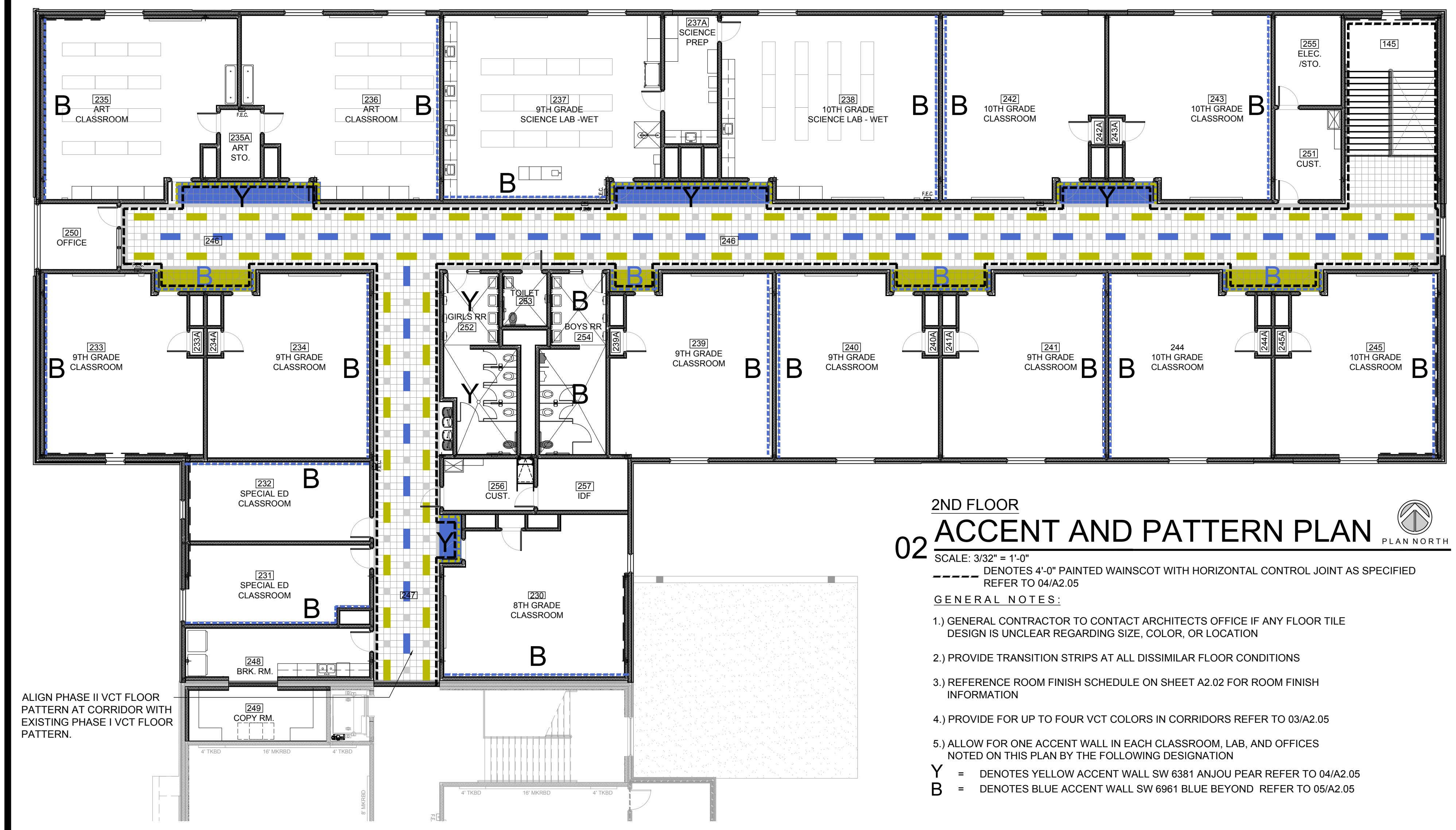
**04 DUROPLEX TERMINATION DETAIL**  
 NOT TO SCALE



**05 TYPICAL WALL ELEVATION**  
 SCALE: 1/4" = 1'-0"



**06 TYPICAL WALL ELEVATION**  
 SCALE: 1/4" = 1'-0"

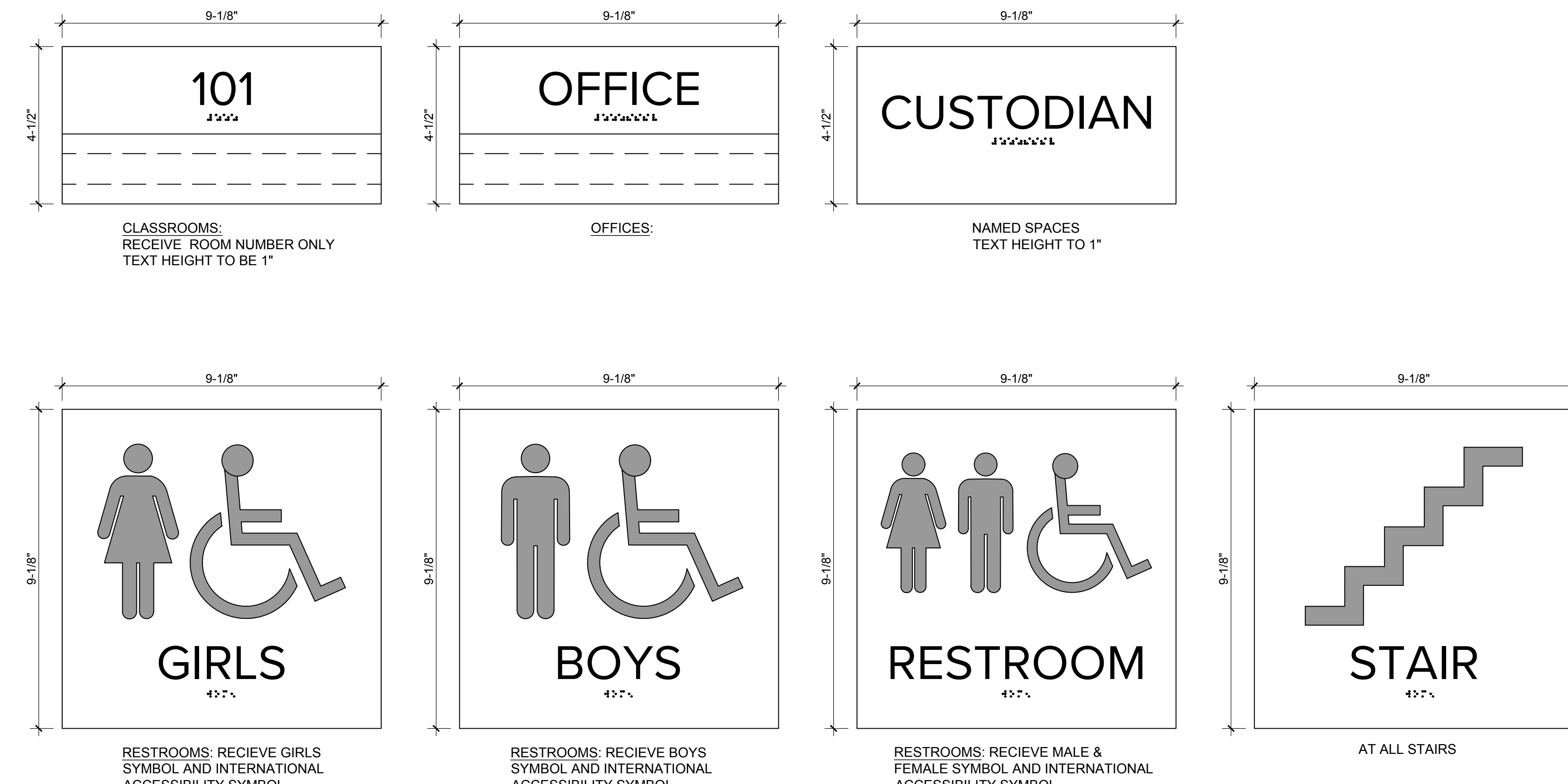


**02 2ND FLOOR ACCENT AND PATTERN PLAN**  
 SCALE: 3/32" = 1'-0"  
 --- DENOTES 4'-0" PAINTED WAINSCOT WITH HORIZONTAL CONTROL JOINT AS SPECIFIED REFER TO 04/A2.05

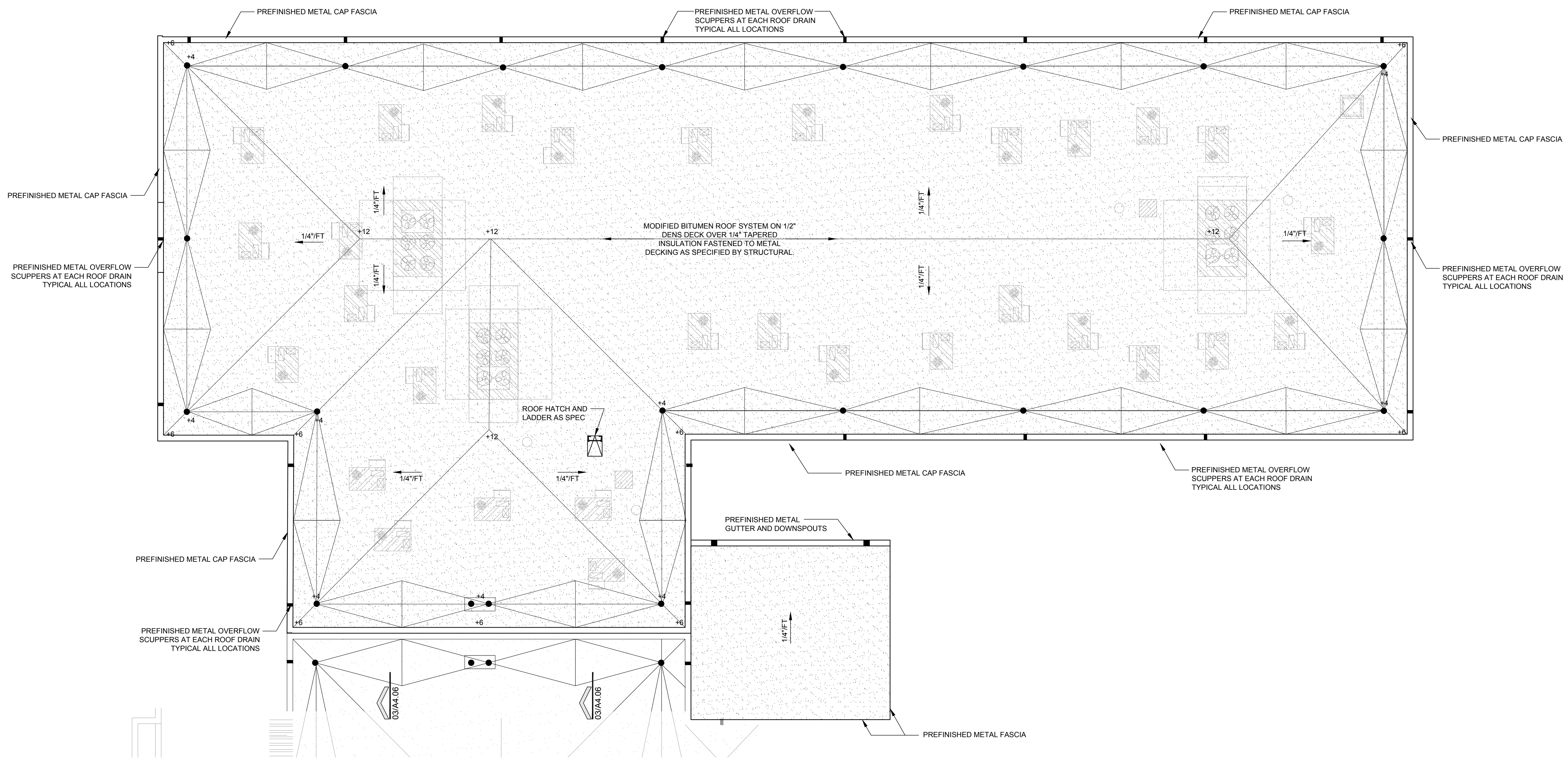
**GENERAL NOTES:**

- 1) GENERAL CONTRACTOR TO CONTACT ARCHITECTS OFFICE IF ANY FLOOR TILE DESIGN IS UNCLEAR REGARDING SIZE, COLOR, OR LOCATION
- 2) PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS
- 3) REFERENCE ROOM FINISH SCHEDULE ON SHEET A2.02 FOR ROOM FINISH INFORMATION
- 4) PROVIDE FOR UP TO FOUR VCT COLORS IN CORRIDORS REFER TO 03/A2.05
- 5) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION

Y = DENOTES YELLOW ACCENT WALL SW 6381 ANJOU PEAR REFER TO 04/A2.05  
 B = DENOTES BLUE ACCENT WALL SW 6961 BLUE BEYOND REFER TO 05/A2.05



**07 ROOM SIGNAGE TEMPLATE**  
 NOT TO SCALE



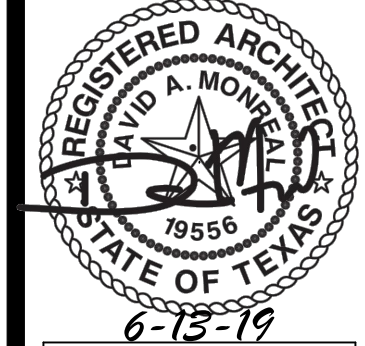
# 01 ROOF PLAN

SCALE: 3/32" = 1'-0"



- GENERAL ROOF NOTES:**
- 1) ALL PENETRATIONS SHALL BE COORDINATED WITH MECHANICAL / ELECTRICAL SUBCONTRACTOR AND SHALL BE PERFORMED BY THE ROOFING CONTRACTOR
  - 2) PROVIDE WALKWAY SYSTEM AT ALL ROOF TOP EQUIPMENT
  - 3) PROVIDE POSITIVE DRAINAGE IN AND AROUND ALL ROOF TOP EQUIPMENT SO AS TO DRAIN INTO AREA ROOF DRAINS
  - 4) PROVIDE POSITIVE DRAINAGE TOWARDS DRAINS BY USE OF CRICKETS
  - 5) PROVIDE PRE-MANUFACTURED CONCRETE SPLASH BLOCKS AT EACH ROOF DOWN SPOUT LOCATION AND OR AT EACH ROOF DRAIN NOZZLE OUTLET. SECURE SPLASH BLOCKS TO EITHER GROUND OR BUILDING
  - 6) REFER TO WALL SECTIONS ( 4.00 SERIES ) FOR ADDITIONAL ROOF NOTES
  - 7) COORDINATE ALL DOWN SPOUT LOCATIONS SO AS TO ASSURE THAT NO DOWN SPOUTS ARE LOCATED OVER DOOR / WINDOW OPENINGS OR OTHER KEY BUILDING ELEMENTS
  - 8) CONTRACTOR TO PROVIDE AND COORDINATE ALL PIPING & ACCESSORIES WITH MEP ENGINEERS PRIOR TO COMMENCING ANY ROOF DRAINAGE PIPING
  - 9) REFER TO MEP AND STRUCTURAL DRAWINGS ALL GAS PIPING, ROUTUNG, SUPPORTS & ACCESSORIES.

IDEA-OWASSA  
 COLLEGE PREP PHASE II  
 Public Schools

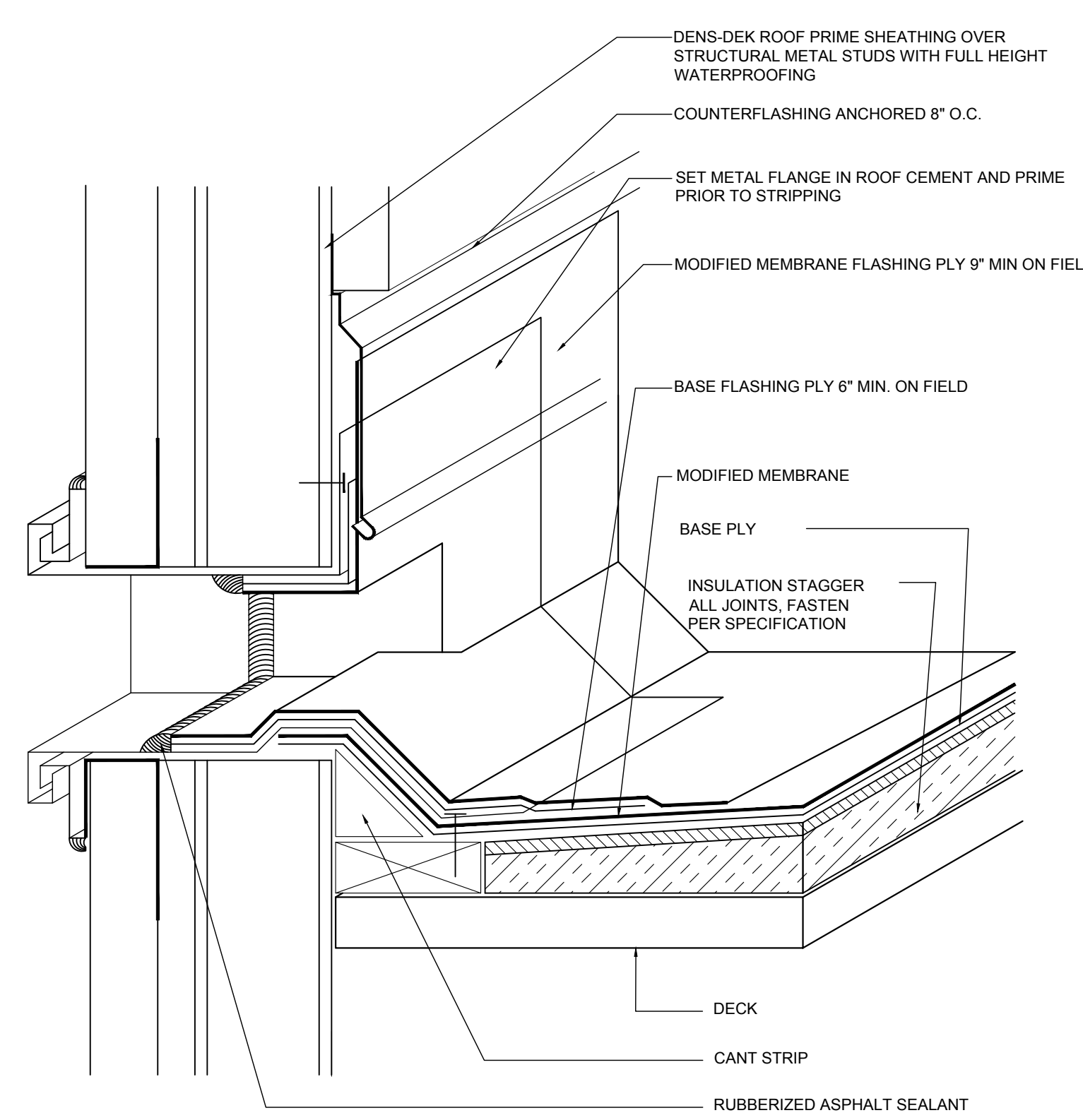


© Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers

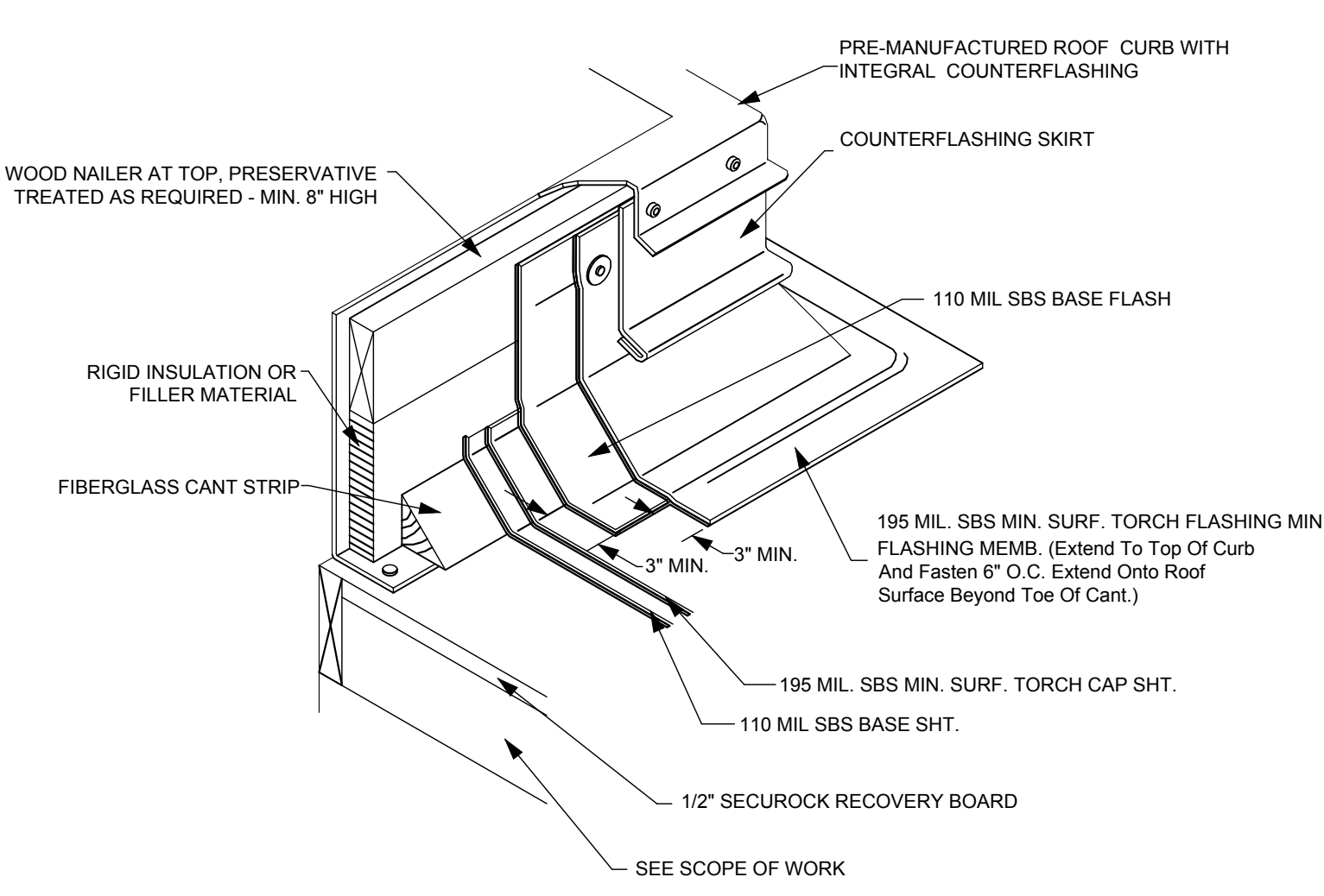
Date: March 21, 2019  
 Scale: As Noted  
 Project Architect: David A. Monreal, AIA  
 Drawn By: J. Alvarado  
 Job No: IDEA PHASE II  
 Sheet:

No.	REVISIONS	BY

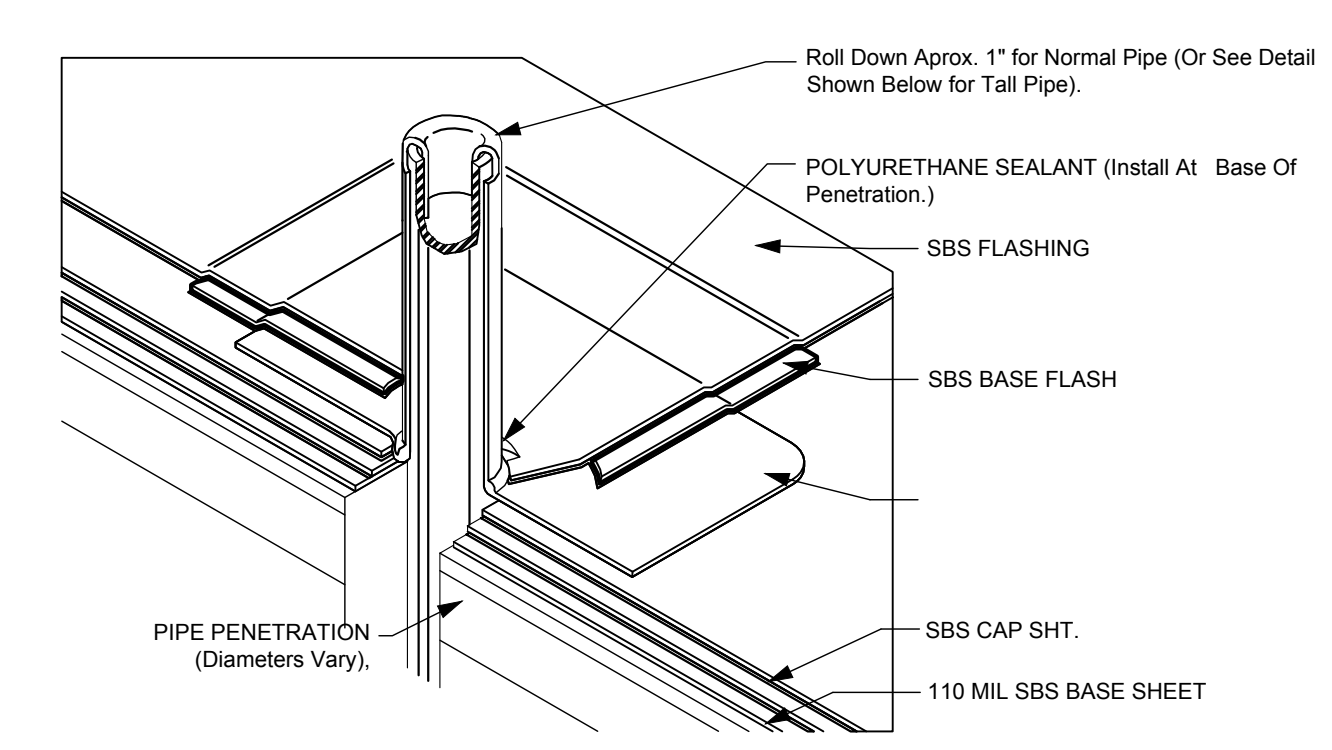
GMS ARCHITECTS  
 1150 Paredes Line Rd.  
 Brownsville, TX 78526  
 (956) 546-0110  
 fax (956) 546-0196



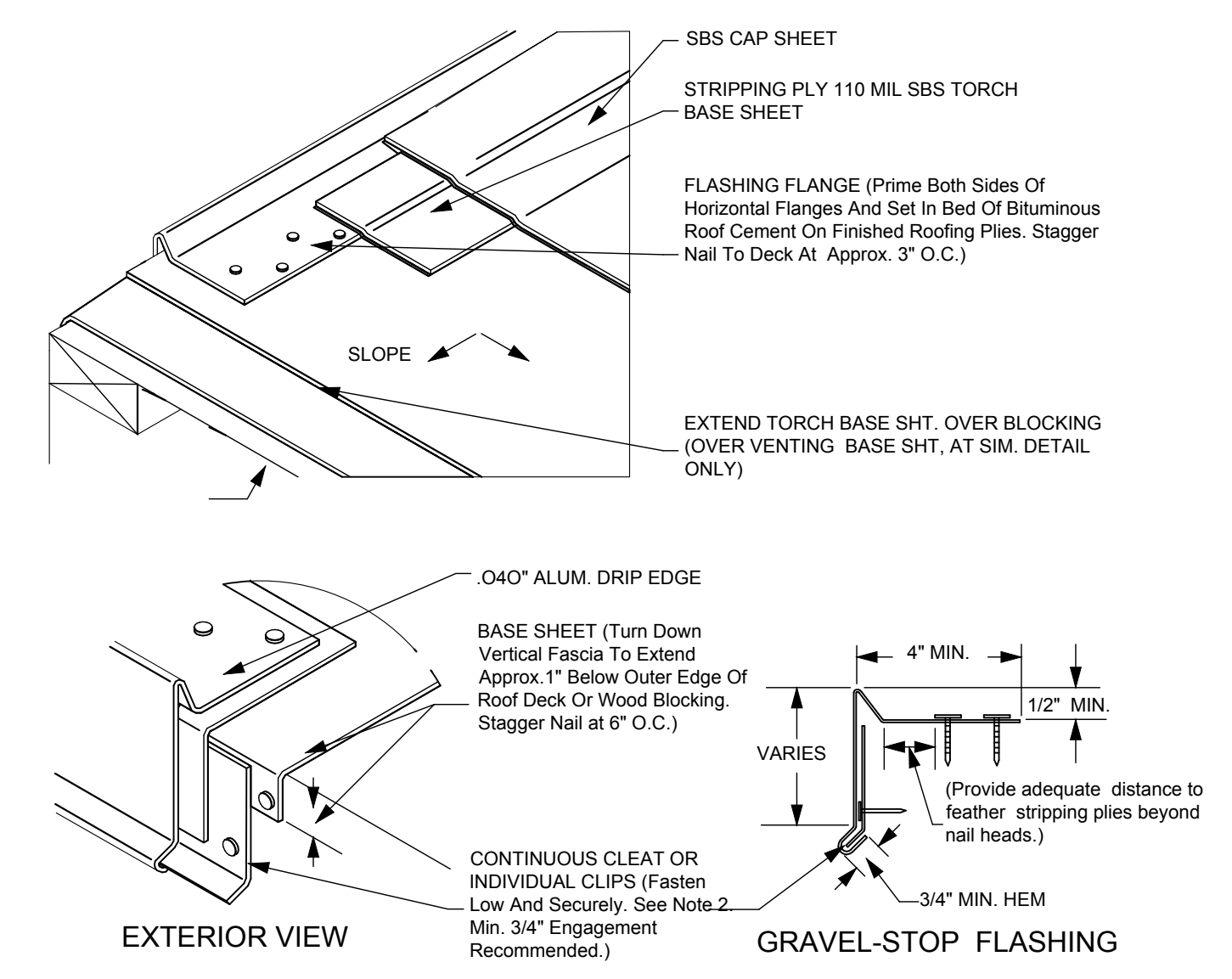
**01 SCUPPER DETAIL**  
 NOT TO SCALE  
 PROVIDE AT EACH ROOF DRAIN LOCATION, TYPICAL



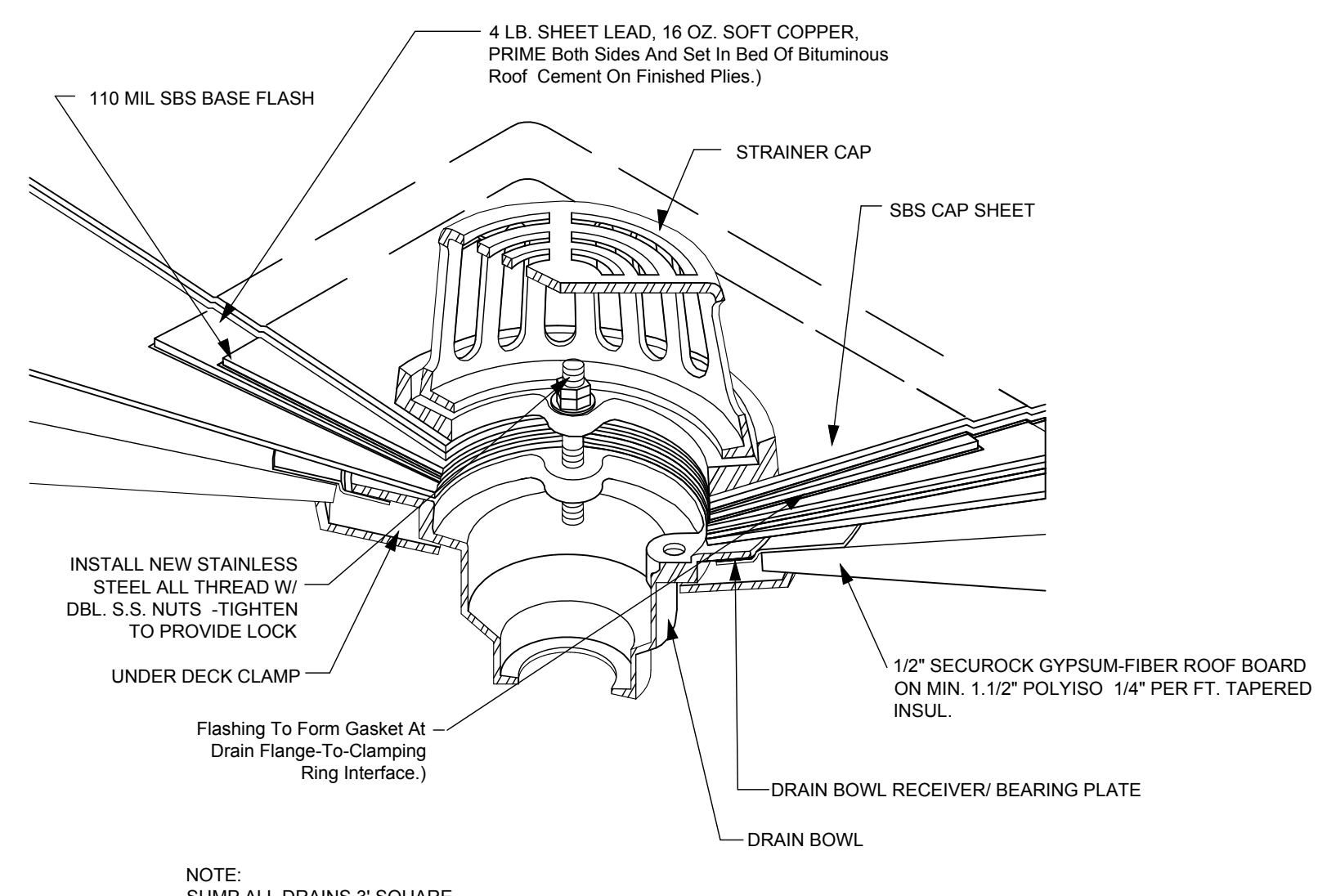
**02 TYP. A/C CURB DETAIL**  
 NOT TO SCALE



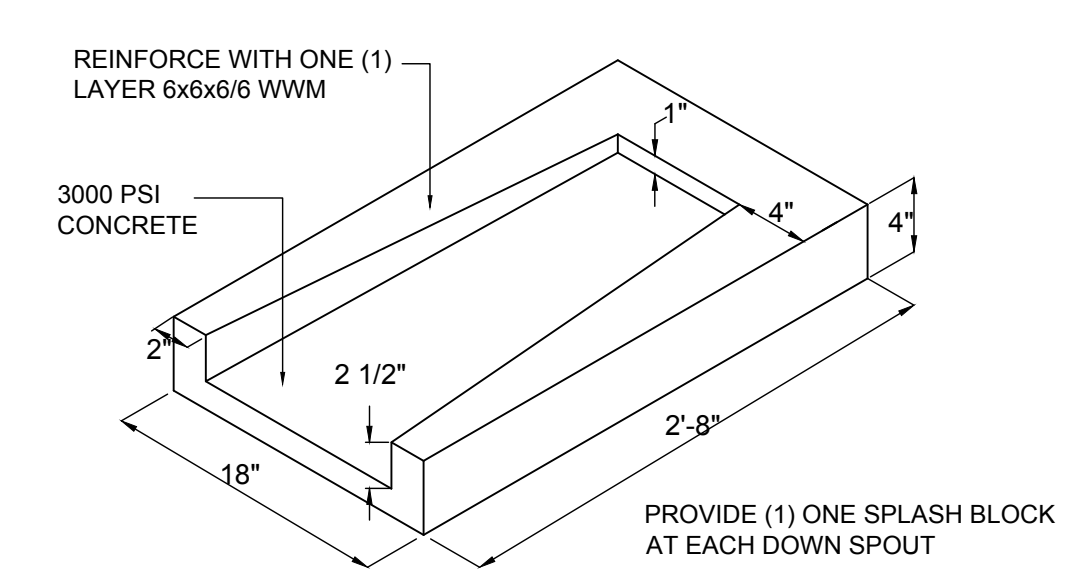
**03 TYP. VENT PIPE DETAIL**  
 NOT TO SCALE



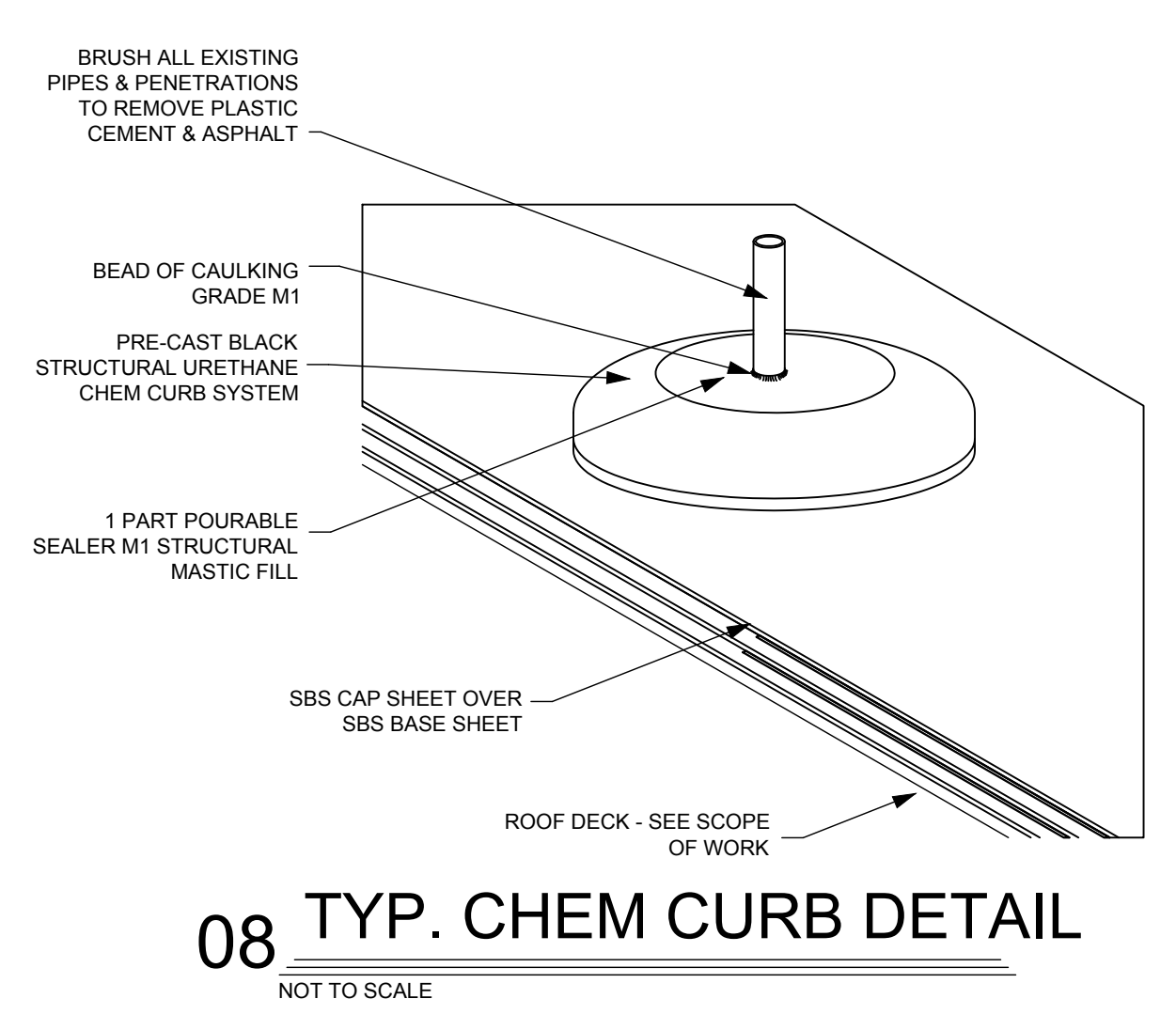
**04 EDGE DETAIL**  
 NOT TO SCALE



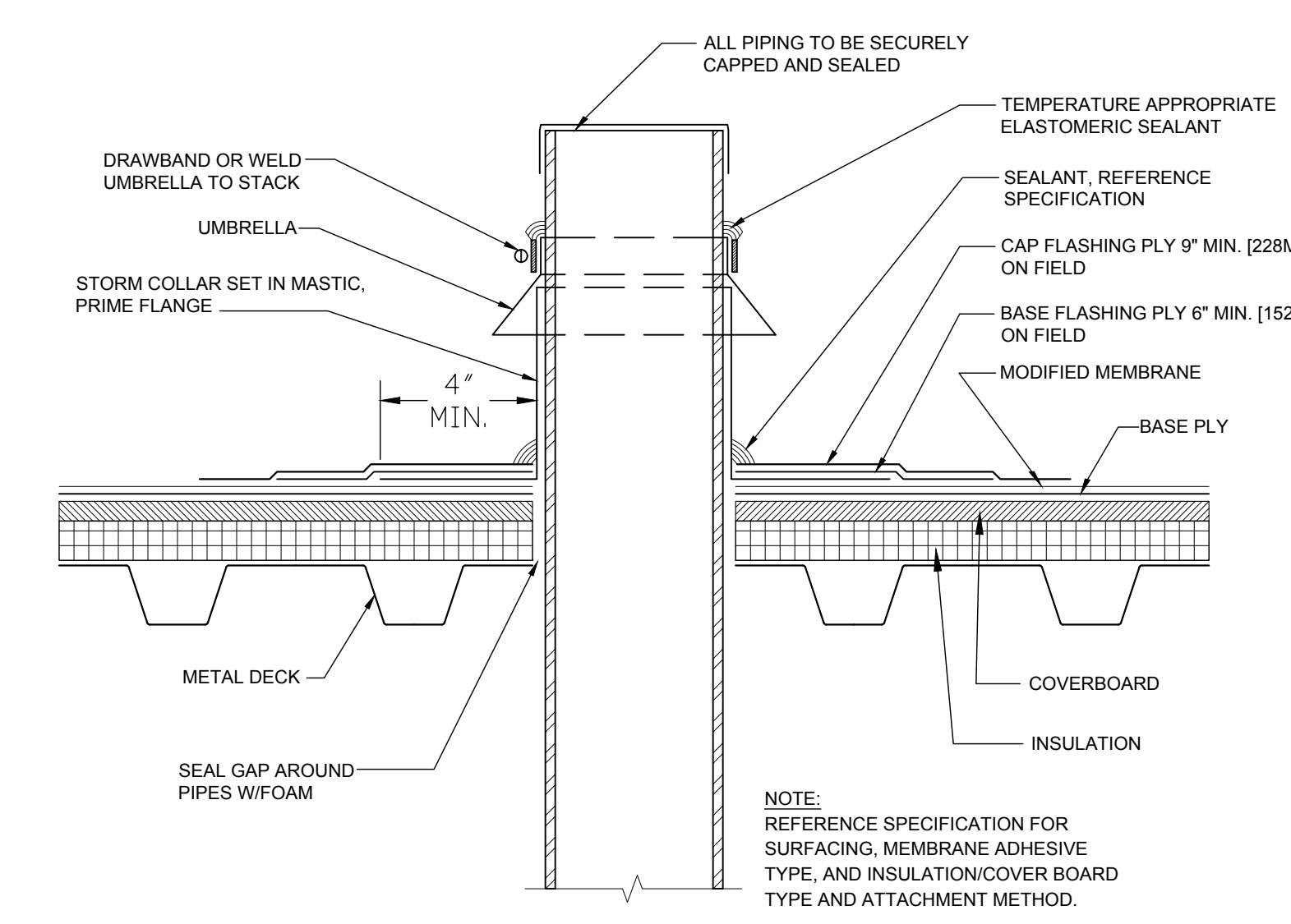
**05 TYP. ROOF DRAIN DETAIL**  
 NOT TO SCALE



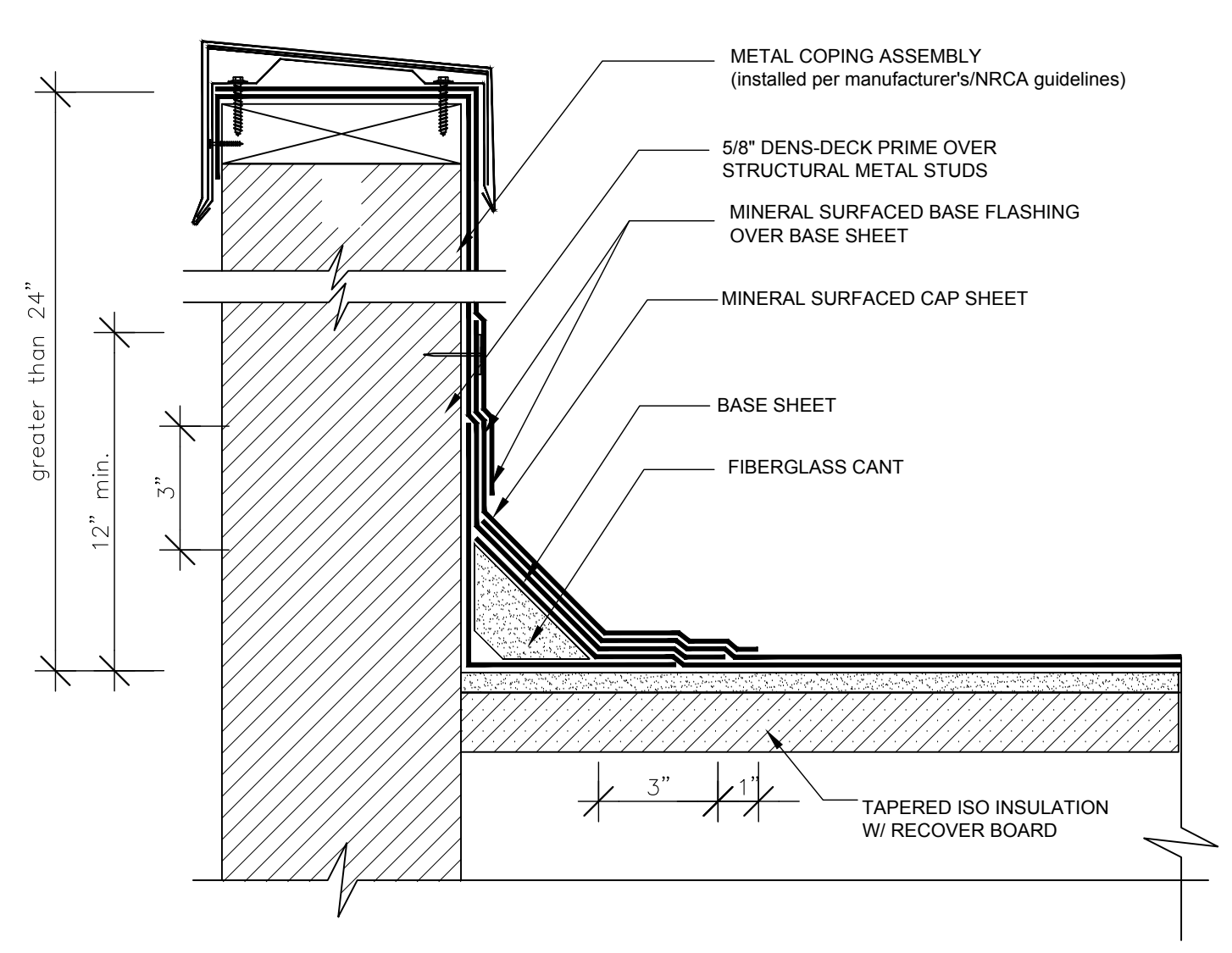
**06 SPLASH BLOCK DTL**  
 SCALE 1-1/2\"/>



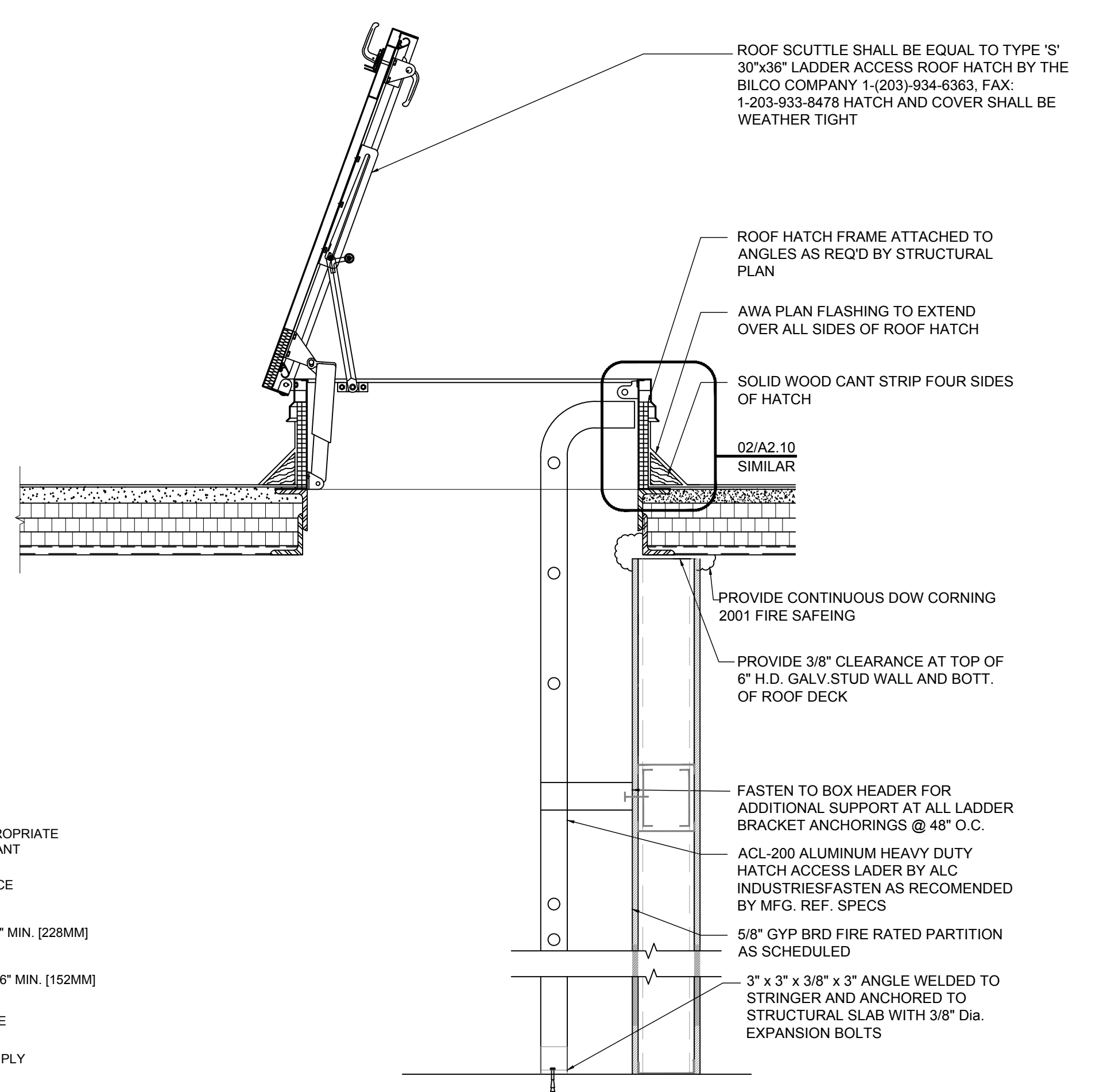
**08 TYP. CHEM CURB DETAIL**  
 NOT TO SCALE



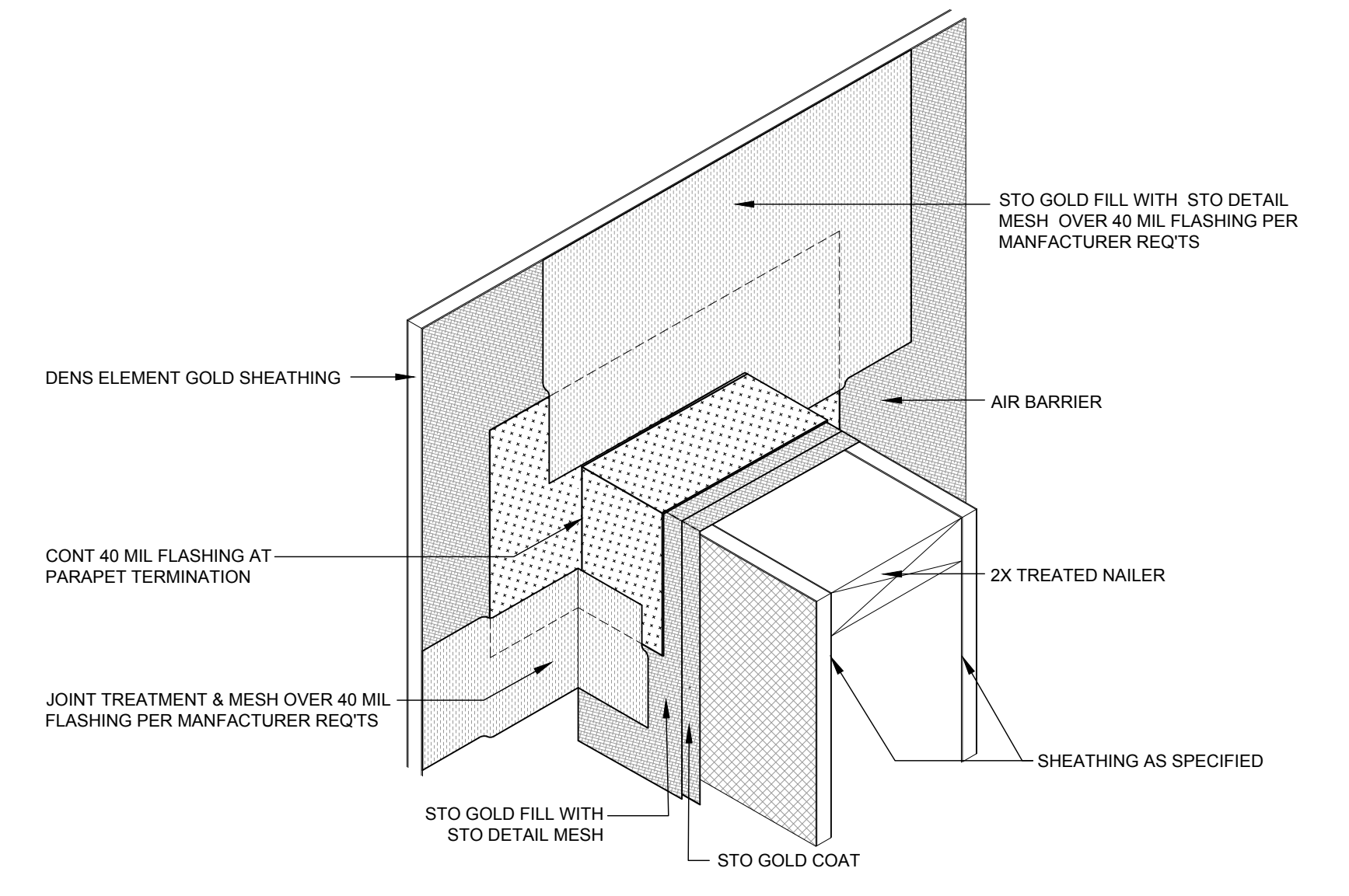
**09 PIPE SUPPORT FLASHING DETAIL**  
 NOT TO SCALE



**10 PARAPET DETAIL**  
 NOT TO SCALE



**11 HATCH & LADDER DETAIL**  
 NOT TO SCALE



**12 PARAPET TERMINATION ISO**  
 SCALE: NONE

IDEA-OWASSA  
 COLLEGE PREP PHASE II  
 Public Schools

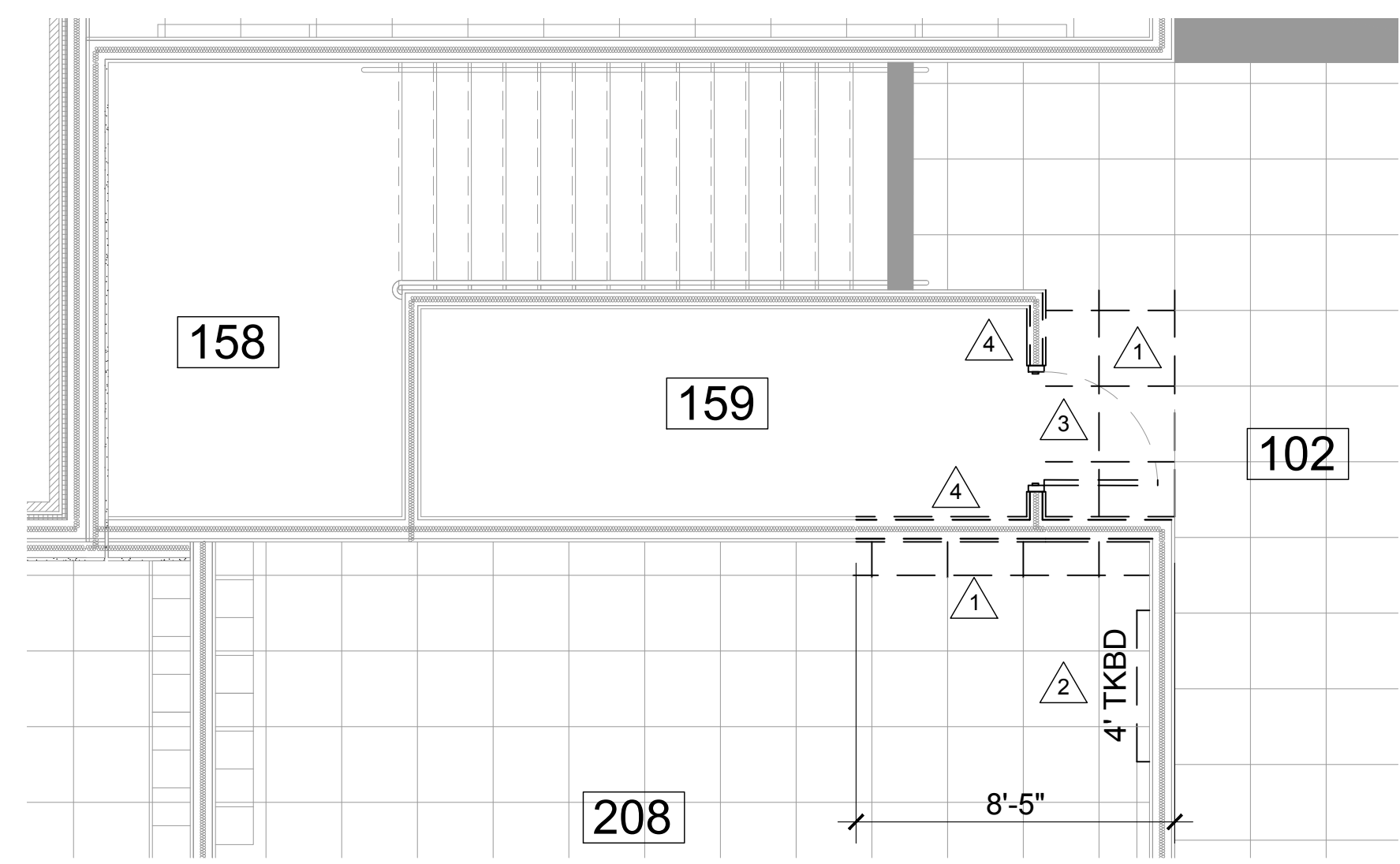


© Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers  
 Date: March 21, 2019  
 Scale: As Noted  
 Project Architect: David A. Monreal, AIA  
 Drawn By: J. Alvarado  
 Job No: IDEA PHASE II  
 Sheet: A2.07

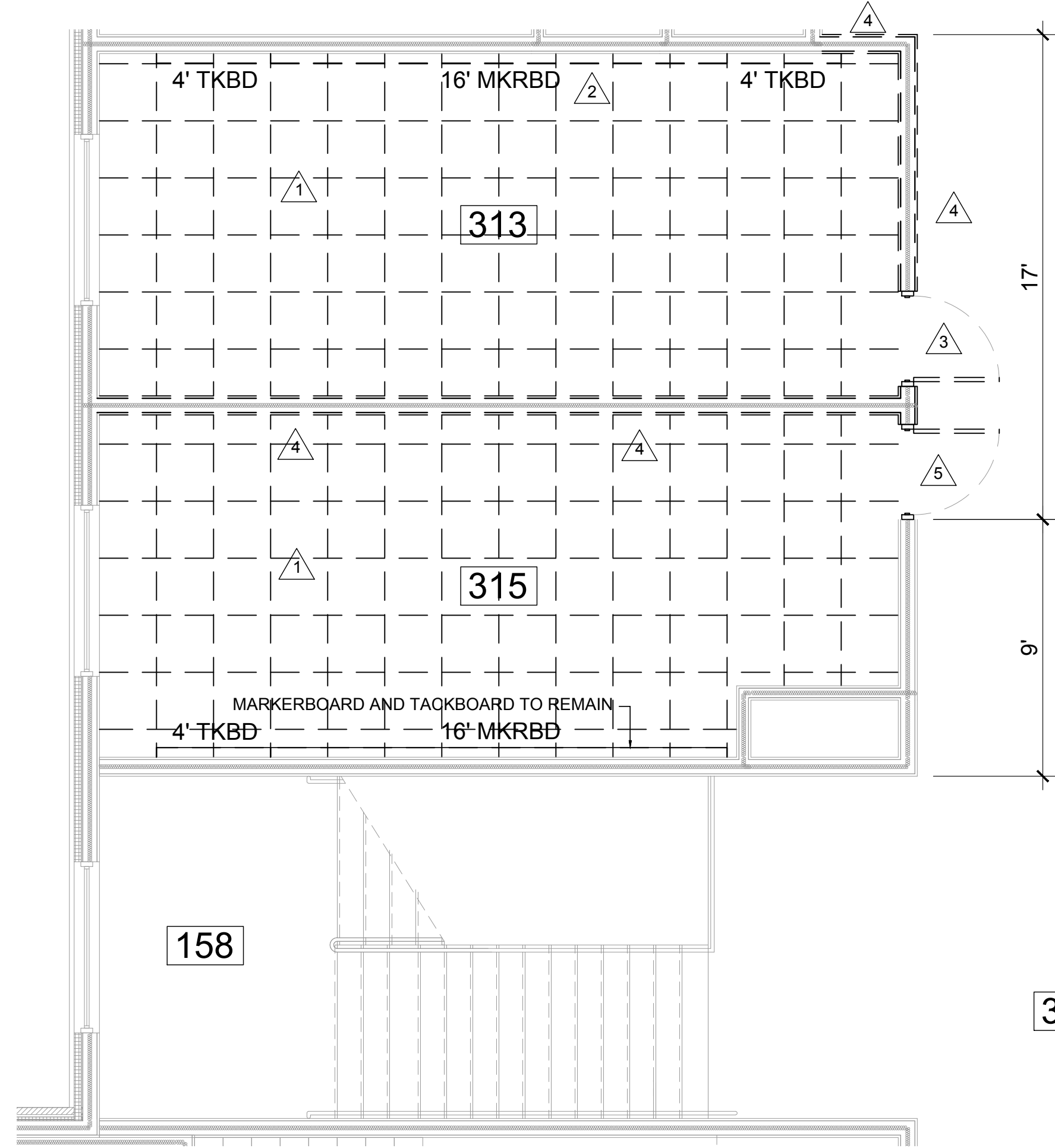
### PHASE I 01 DEMOLITION PLAN

SCALE: 1/4" = 1'-0"

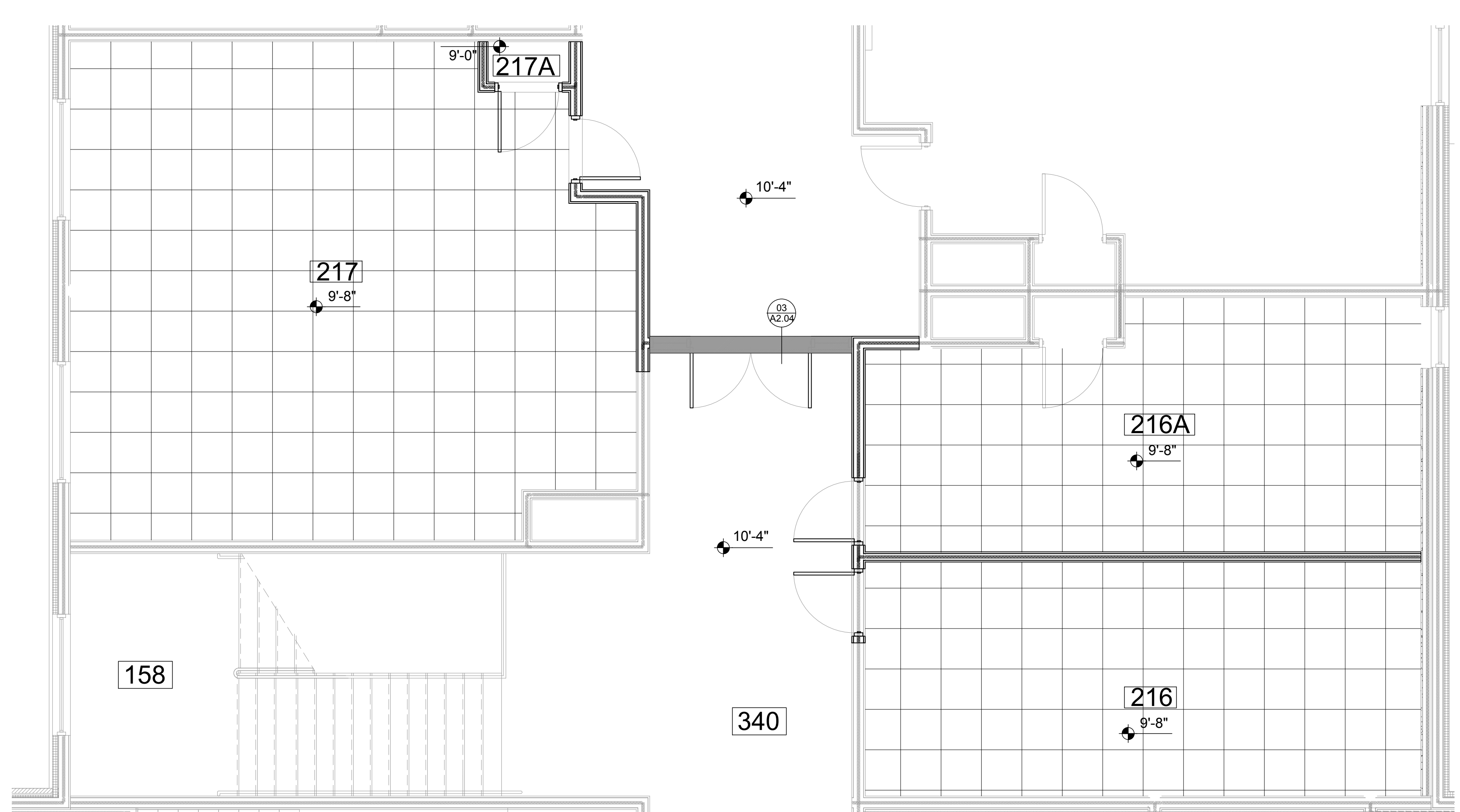
**GENERAL NOTES:**  
1.) REFER TO SHEET A2.00 FOR PHASE I OVERALL FLOOR PLAN.  
2.) PATCH TO MATCH ALL FLOOR, WALL AND CEILING FINISHES TO MATCH EXISTING. MAKE ADJUSTMENT TO CORRIDOR PATTERN AND CLASSROOM TILE TO CORRESPOND TO WALL MODIFICATIONS.  
3.) REMOVE EXISTING SUSPENDED ACOUSTICAL CEILING TILES AND GRID. SECURE AND PROTECT EXISTING ELECTRICAL AND MECHANICAL FIXTURES TO BE REINSTALLED.  
4.) REMOVE AND RELOCATE EXISTING MARKERBOARDS AND TACKBOARDS. REFER TO FLOOR PLAN FOR NEW LOCATIONS.  
5.) REMOVE AND RELOCATE EXISTING WOOD DOORS AND HM FRAMES. REFER TO FLOOR PLAN FOR NEW LOCATIONS. PROVIDE NEW WALL OPENINGS WHERE DOORS AND FRAMES ARE TO BE RELOCATED.  
6.) REMOVE EXISTING METAL STUD AND DRYWALL PARTITIONS.  
7.) REMOVE AND DISCARD WOOD DOOR AND METAL FRAME - EXISTING HARDWARE TO BE GIVEN BACK TO OWNER.



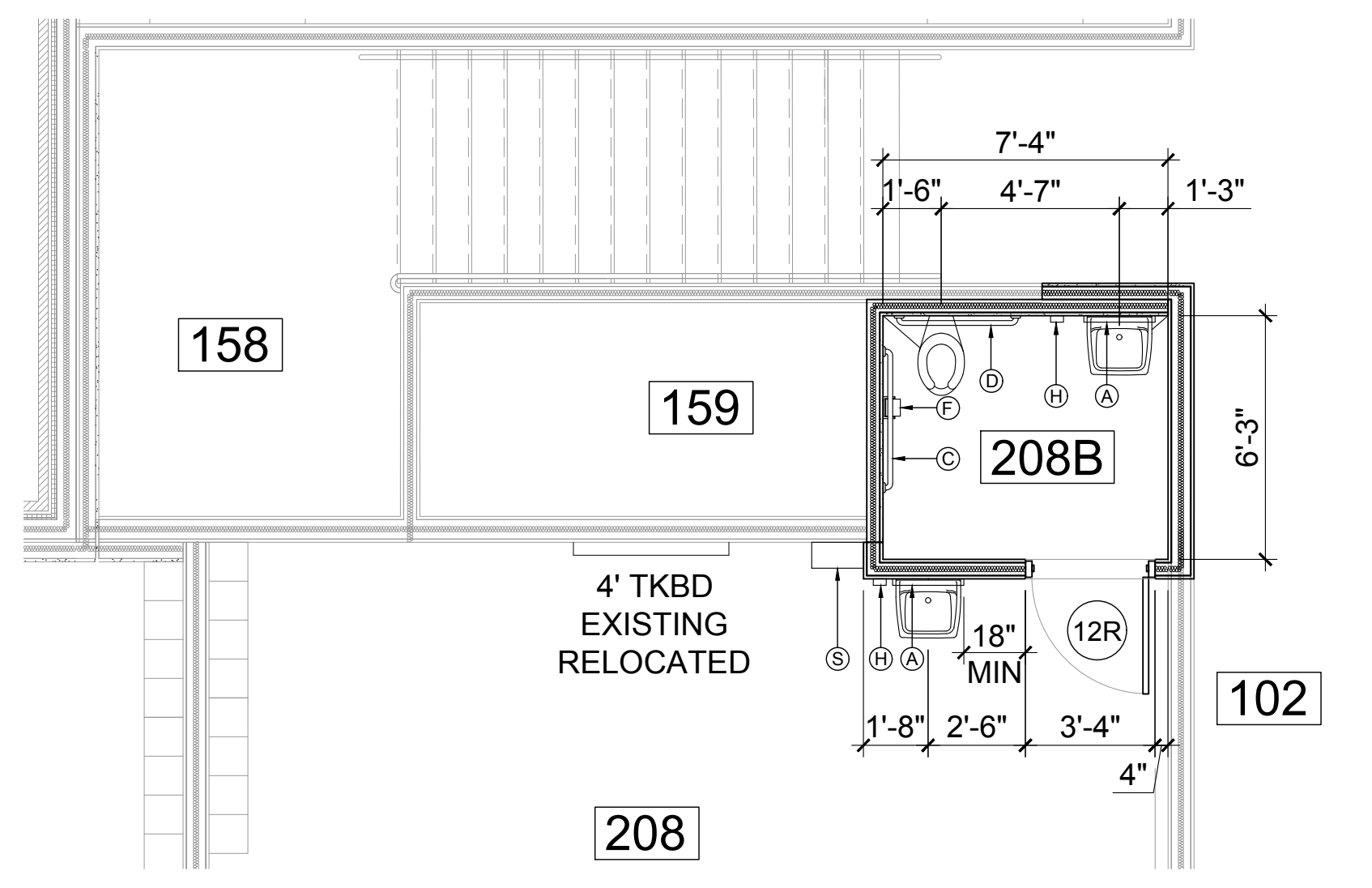
**1ST FLOOR DEMOLITION PLAN**  
SCALE: 1/4" = 1'-0" ALTERNATE #4



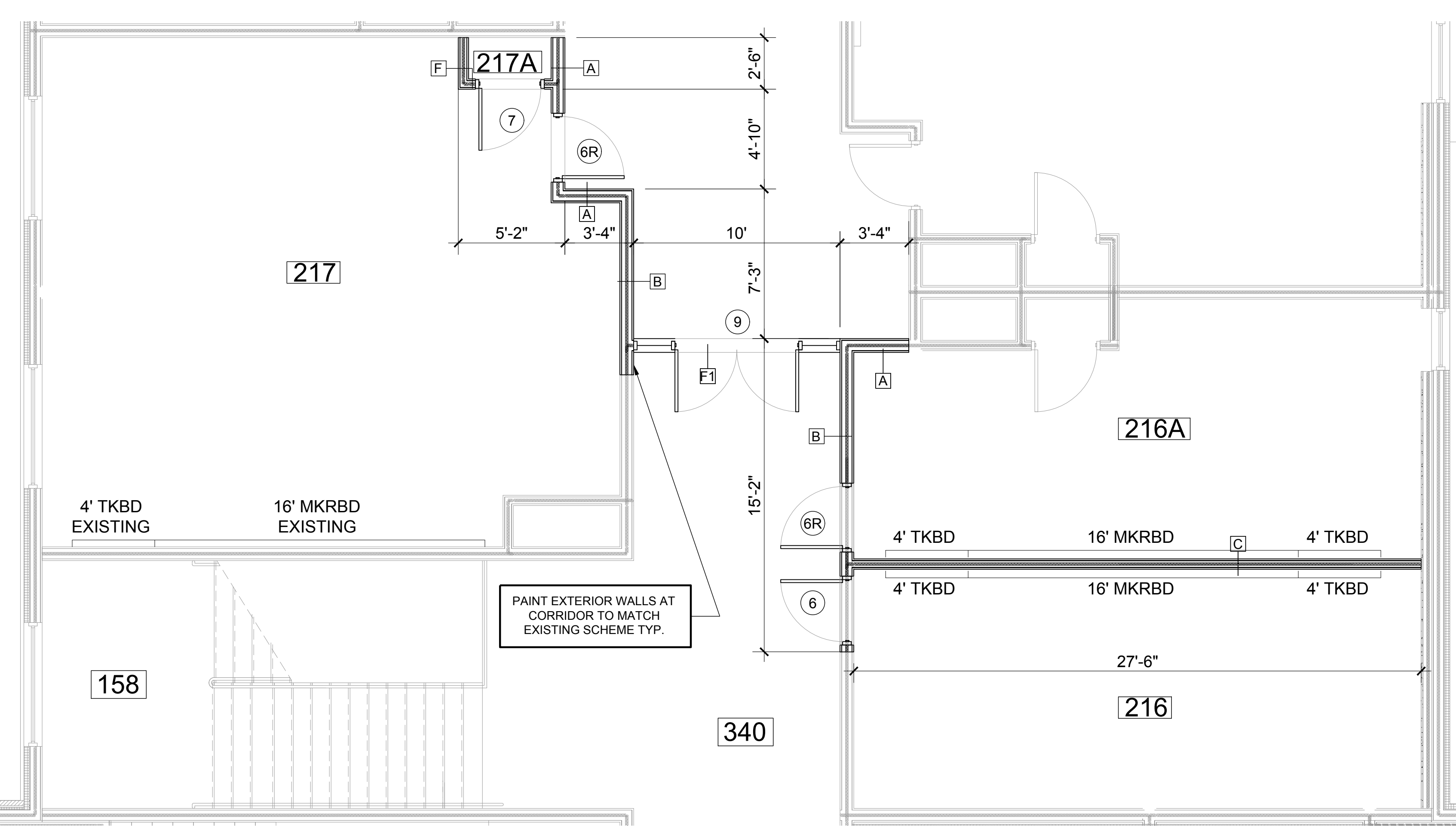
**2ND FLOOR DEMOLITION PLAN**  
SCALE: 1/4" = 1'-0"



**03 2ND FLOOR CEILING PLAN**  
SCALE: 1/4" = 1'-0"



**1ST FLOOR PLAN**  
SCALE: 1/4" = 1'-0" ALTERNATE #4



**2ND FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

**NOTE:**  
ALL GYPSUM BOARD TO BE PAINTED WHETHER NOTED OR NOT

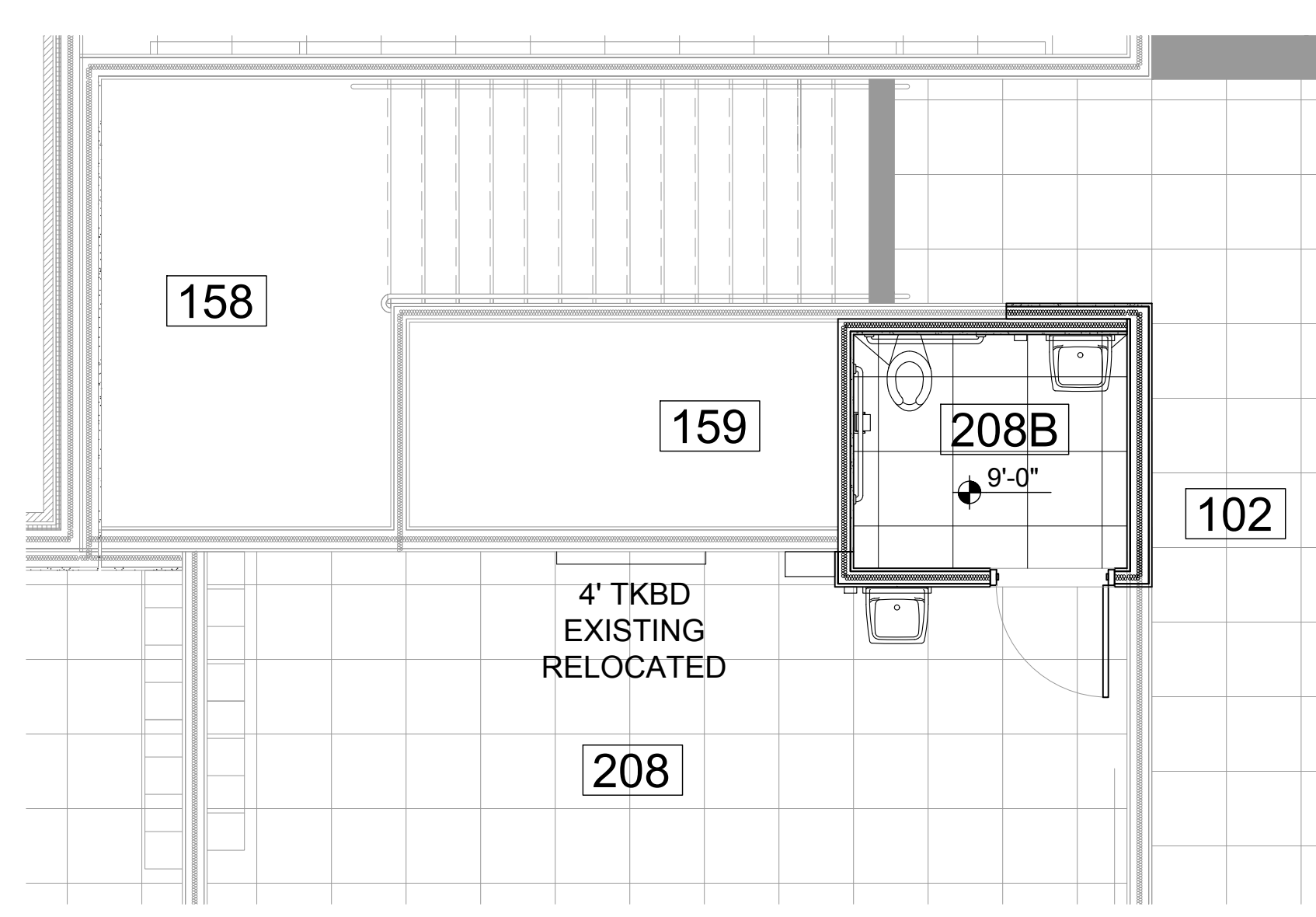
ROOM	ROOM NAME	BASE	FLR.	N	S	E	W	CLG. HEIGHTS	REMARKS
216	CLASSROOM	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I 9'-8"	
216A	CLASSROOM	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I 9'-8"	
217	CLASSROOM	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I 9'-8"	
217A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I 9'-8"	
243	CORRIDOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II 10'-4"	
208B	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II 9'-0"	6'-0" C.T. WAINSCOT REF. 06.07/A3.01

**FINISH LEGEND:**

CONC. SEALED CONCRETE  
C.T. CERAMIC TILE  
GB/PTD GYPSUM BOARD PAINTED  
PTD. PAINTED  
RUBBER RUBBER BASE  
V.C.T. VINYL COMPOSITE TILE  
R.T. RADIAL TILE  
Q.T. QUARRY TILE  
WD. WOOD  
EXPIPTD EXPOSED PAINTED  
SUSGYPT SUSPENDED 1/2" MOISTURE RESISTANT GYP BOARD - PAINTED  
S.A.C. SUSPENDED ACOUSTICAL CEILING REFERENCE SPECIFICATIONS FOR TYPES

**WALL HATCH LEGEND:**

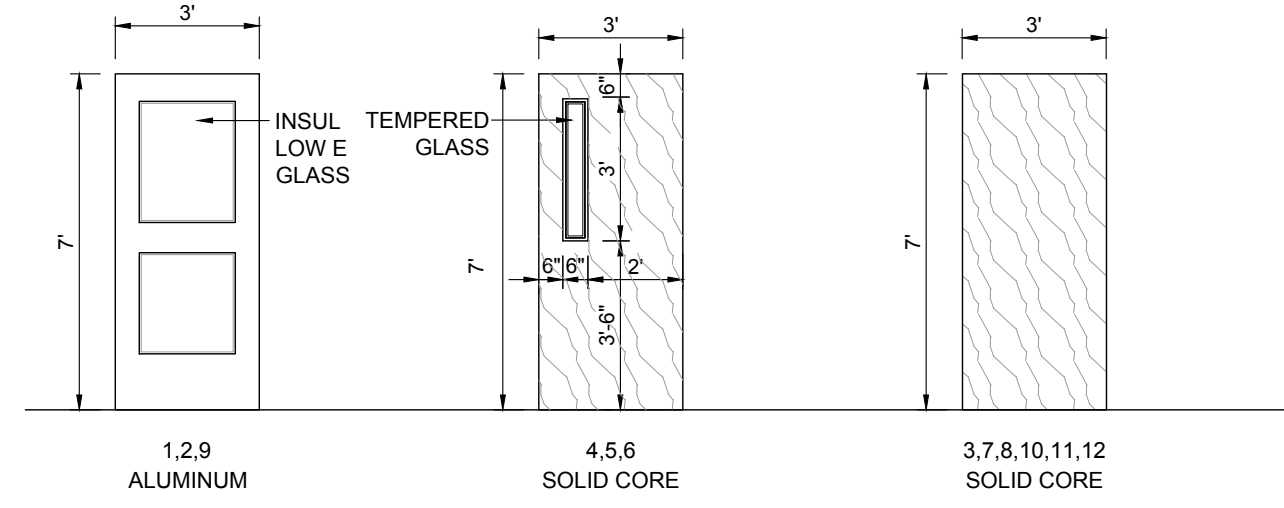
1 HR. INDICATES THAT THIS WALL SHALL BE FIRE RATED AND SHALL BE EXTENDED TO UNDERSIDE OF ROOF DECK.  
INDICATES METAL STUD W/ GYP/BRD WALL AS REQUIRED. REFERENCE INTERIOR PARTITION SECTIONS



**04 1ST FLOOR CEILING PLAN**  
SCALE: 1/4" = 1'-0" ALTERNATE #4

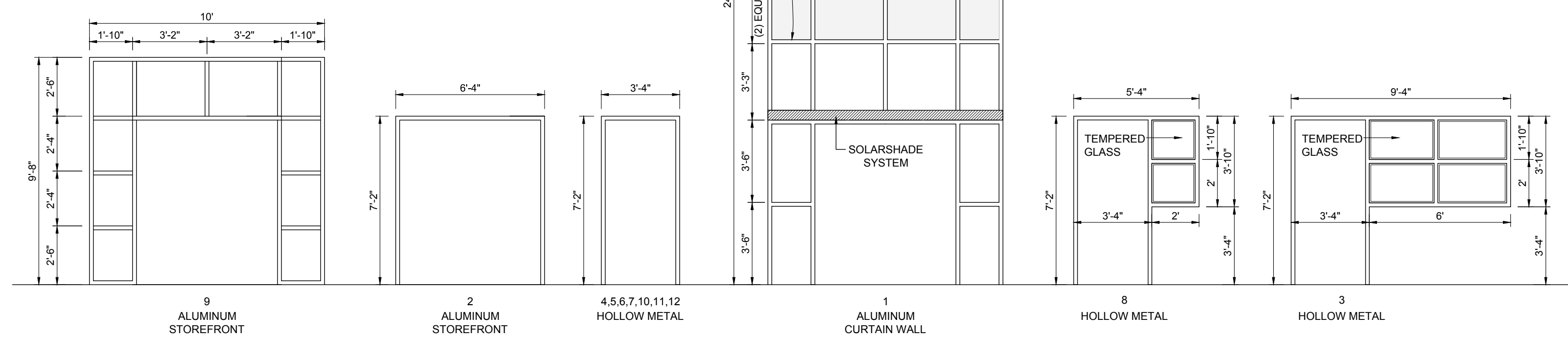
DOOR NO.	DOOR				FRAME				HDWR	DETAIL			REMARKS
	MATL.	W	H	T	MATL.	W	H	T		JAMB	HEAD	SILL	
1	ALUM.	PR-3'-0"	7'-0"	1-3/4"	ALUM.	10'-0"	24'-8"	VERIFY	11/A3.02	12/A3.02	01/A3.02		
2	ALUM.	PR-3'-0"	7'-0"	1-3/4"	ALUM.	6'-4"	7'-2"	VERIFY	11/A3.02	12/A3.02	01/A3.02		
3	S.C.	3'-0"	7'-0"	1-3/4"	H.M.	9'-4"	7'-2"	VERIFY	09/A3.02	08/A3.02			
4	S.C.	3'-0"	7'-0"	1-3/4"	H.M.	3'-4"	7'-2"	VERIFY	09/A3.02	08/A3.02			
5	S.C.	3'-0"	7'-0"	1-3/4"	H.M.	3'-4"	7'-2"	VERIFY	09/A3.02	08/A3.02			
6	S.C.	3'-0"	7'-0"	1-3/4"	H.M.	3'-4"	7'-2"	VERIFY	09/A3.02	08/A3.02			
7	S.C.	3'-0"	7'-0"	1-3/4"	H.M.	3'-4"	7'-2"	VERIFY	09/A3.02	08/A3.02			
8	S.C.	3'-0"	7'-0"	1-3/4"	H.M.	3'-4"	7'-2"	VERIFY	09/A3.02	08/A3.02			
9	ALUM.	PR-3'-0"	7'-0"	1-3/4"	ALUM.	10'-0"	9'-8"	VERIFY	11/A3.02	12/A3.02	01/A3.02	SHEET A2.08	
10	S.C.	3'-0"	7'-0"	1-3/4"	H.M.	3'-4"	7'-2"	VERIFY	09/A3.02	08/A3.02			
11	S.C.	3'-0"	7'-0"	1-3/4"	H.M.	3'-4"	7'-2"	VERIFY	09/A3.02	08/A3.02			
12	S.C.	3'-0"	7'-0"	1-3/4"	H.M.	3'-4"	7'-2"	VERIFY	09/A3.02	08/A3.02			

NOTE: PROVIDE LABELED DOORS AND HARDWARE AT ALL FIRE RATED PARTITIONS  
 NOTE: ALL EXTERIOR HOLLOW METAL DOORS & FRAMES TO BE HOT DIPPED GALV. TYP.  
 NOTE: ALL GIVEN DIMENSIONS OF DOOR LITES ARE VISIBLE GLASS AREA - ACTUAL LIGHT OPENING TO VARY BY MANUFACTURER'S REQUIREMENTS  
 NOTE: REFER TO FIXTURE PLANS FOR CORRESPONDING DOOR HARDWARE SETS  
 NOTE: ALL GLAZING SHALL BE 1/4" WIRE GLASS UNO  
 NOTE: PROVIDE CYLINDERS OF ALL LOCKSETS TO BE KEVED TO EXISTING GRANDMASTER SYSTEM  
 NOTE: CONTRACTOR MUST PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS BETWEEN ROOMS AT DOOR SILLS



### DOOR ELEVATIONS

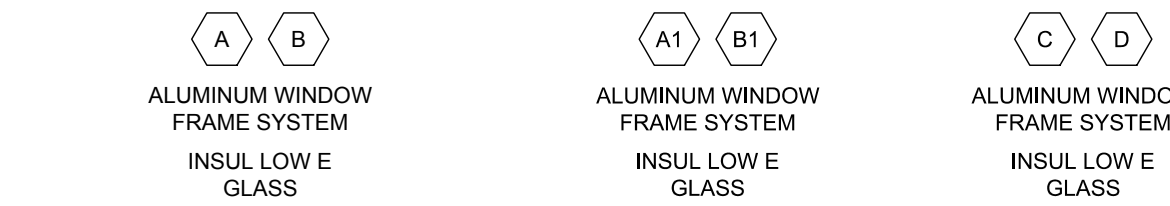
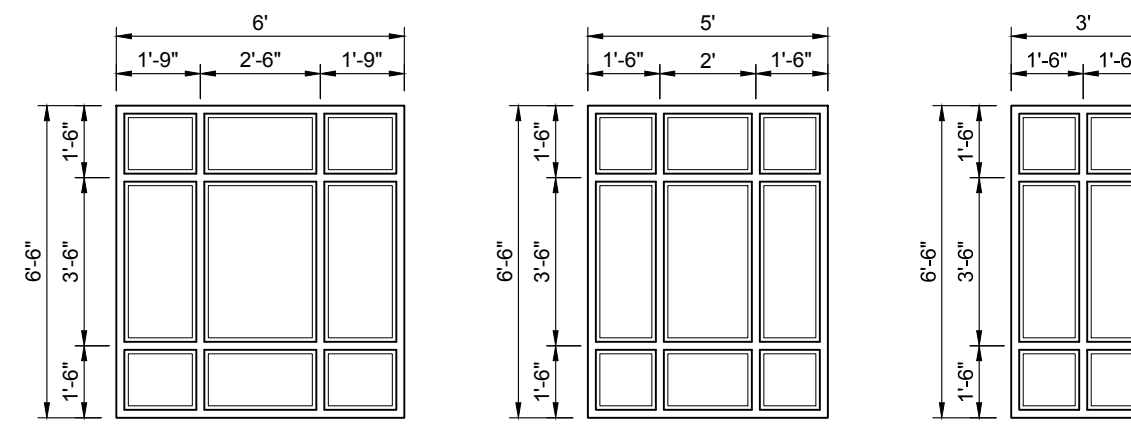
SCALE 1/4" = 1'-0"  
 NOTE: 1. ALL EXTERIOR DOORS TO BE HOT DIPPED GALVANIZED REGARDLESS WHETHER NOTED OR NOT NOTED (DOES NOT APPLY FOR ALUMINIUM DOORS)  
 2. ALL EXTERIOR DOORS TO MEET HURRICANE AND HIGH IMPACT RESISTANCE REQUIREMENTS WHETHER NOTED OR NOT NOTED



### DOOR FRAME ELEVATIONS

SCALE 1/4" = 1'-0"  
 NOTE: ALL EXTERIOR DOOR FRAMES TO BE GALVANIZED REGARDLESS WHETHER NOTE OR NOT NOTED (DOES NOT APPLY FOR ALUMINIUM FRAMES)

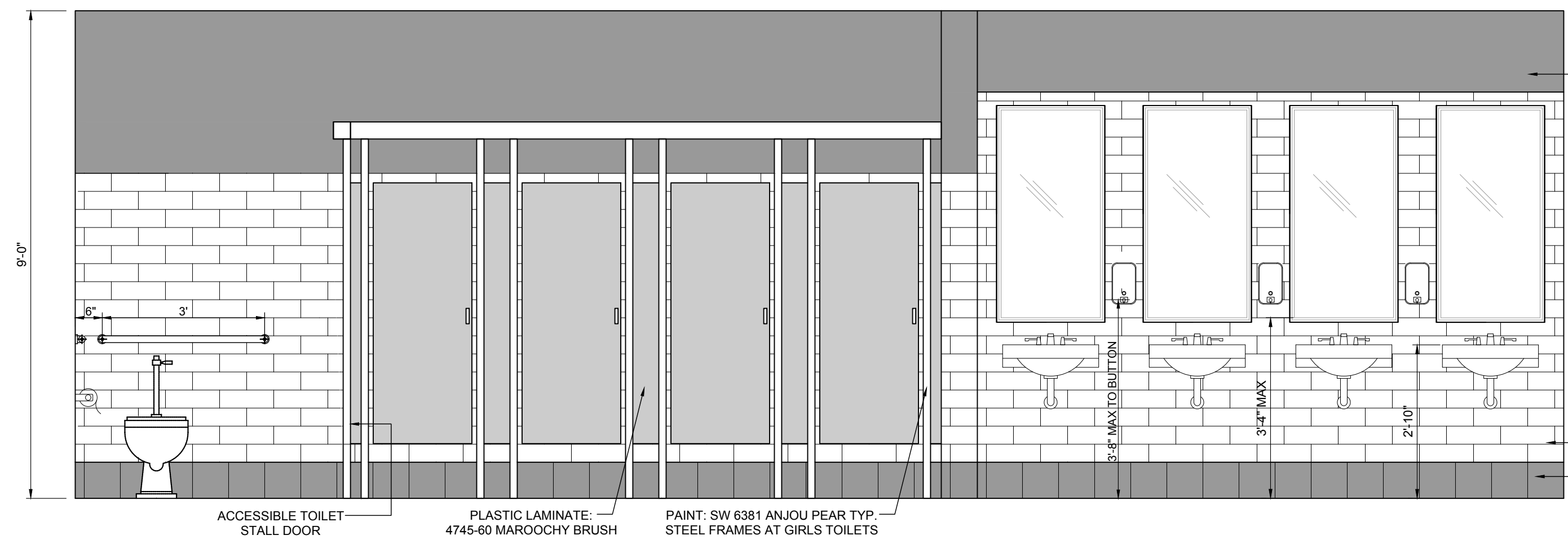
WDW NO.	MATL.	SIZE		ELEVATION		GLASS	DETAIL			REMARKS
		W	H	HEAD	SILL		JAMB	HEAD	SILL	
A	ALUM	6'-0"	6'-6"	9'-0"	2'-6"	LOW-E INSUL	02/A3.02	03/A3.02	04/A3.02	REF. TO DTLS A,B,10,11,12/A3.02 AT EIFS ELEVATION
B	ALUM	6'-0"	6'-6"	23'-8"	17'-2"	LOW-E INSUL	10/A3.02	12/A3.02	11/A3.02	REF. TO DTLS 02,03,04/A3.02 AT BRICK ELEVATION
A1	ALUM	5'-0"	6'-6"	9'-0"	2'-6"	LOW-E INSUL	02/A3.02	03/A3.02	04/A3.02	REF. TO DTLS A,B,10,11,12/A3.02 AT EIFS ELEVATION
B1	ALUM	5'-0"	6'-6"	23'-8"	17'-2"	LOW-E INSUL	10/A3.02	12/A3.02	11/A3.02	REF. TO DTLS 02,03,04/A3.02 AT BRICK ELEVATION
C	ALUM	3'-0"	6'-6"	9'-0"	2'-6"	LOW-E INSUL	02/A3.02	03/A3.02	04/A3.02	REF. TO DTLS A,B,10,11,12/A3.02 AT EIFS ELEVATION
D	ALUM	3'-0"	6'-6"	23'-8"	17'-2"	LOW-E INSUL	02/A3.02	03/A3.02	04/A3.02	REF. TO DTLS A,B,10,11,12/A3.02 AT EIFS ELEVATION



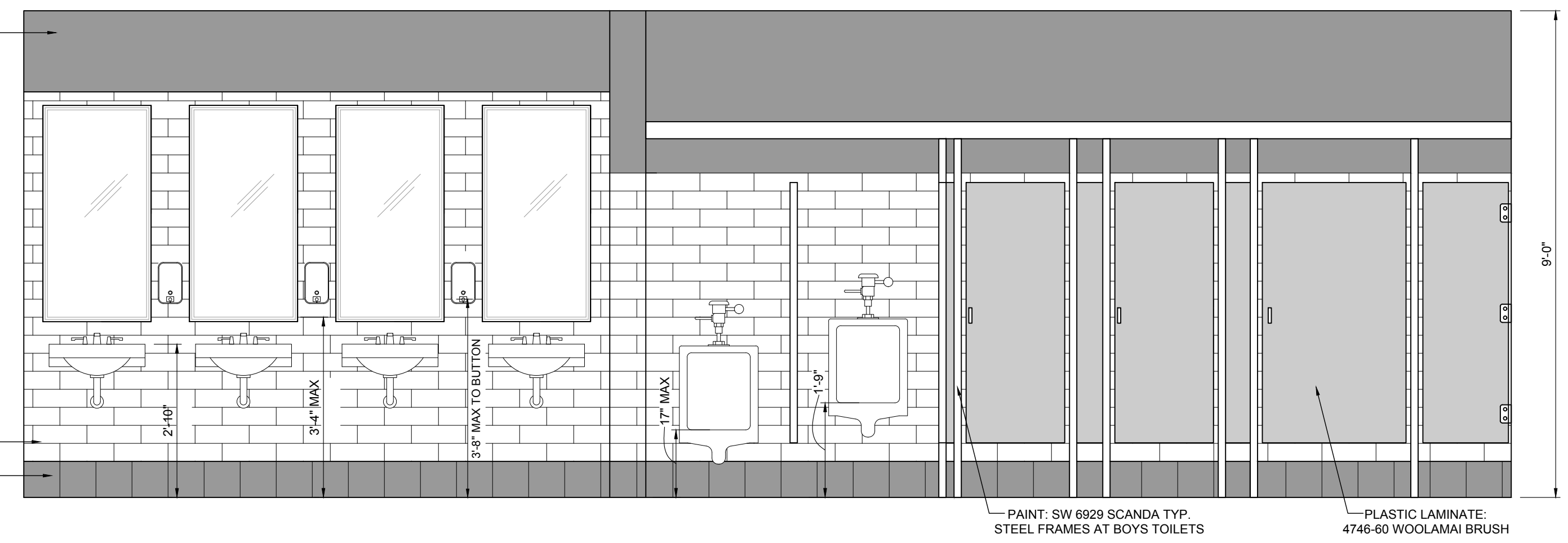
### WINDOW ELEVATIONS

SCALE 1/4" = 1'-0"

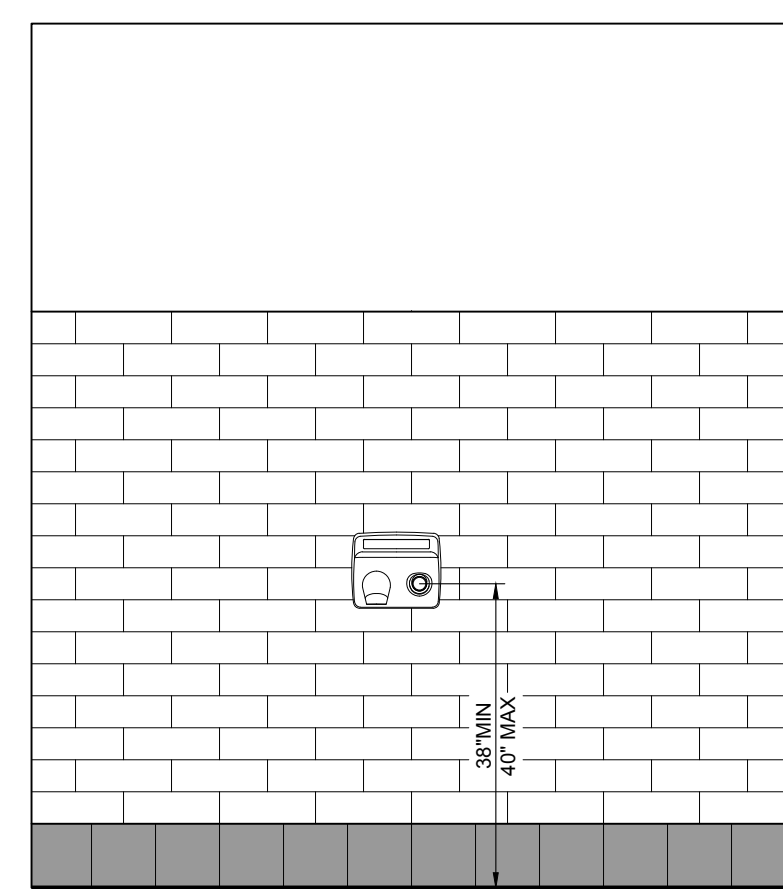




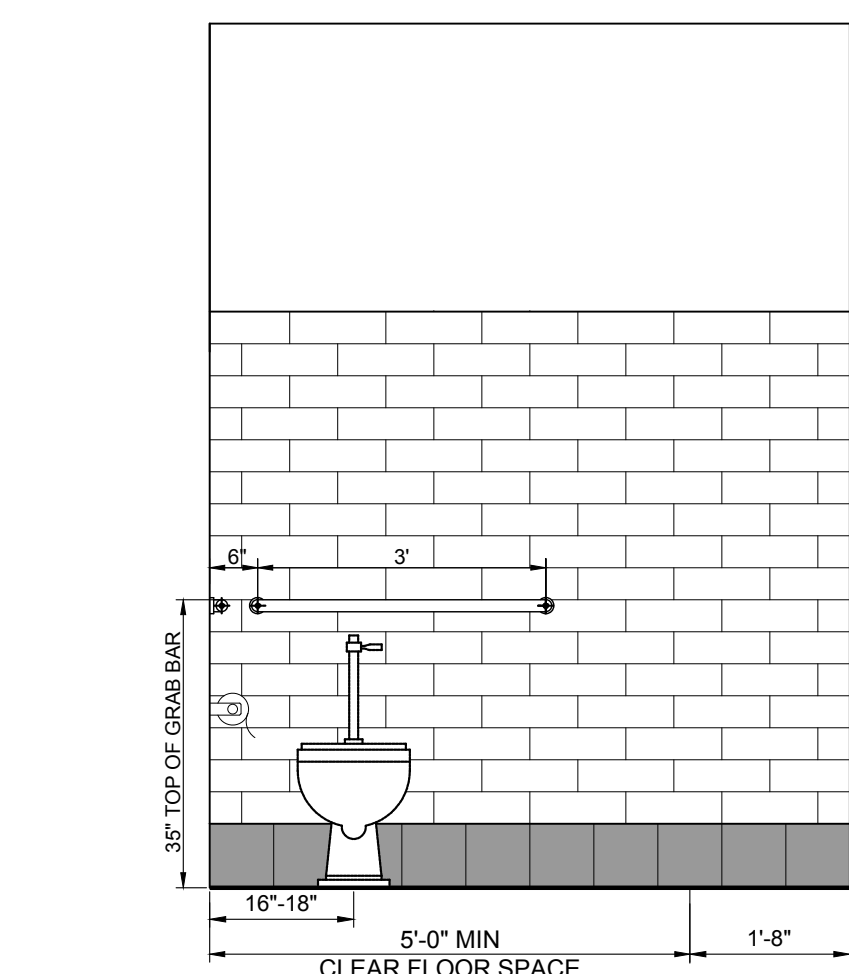
**13 GIRLS TOILET ELEVATION**  
 SCALE: 1/4" = 1'-0"



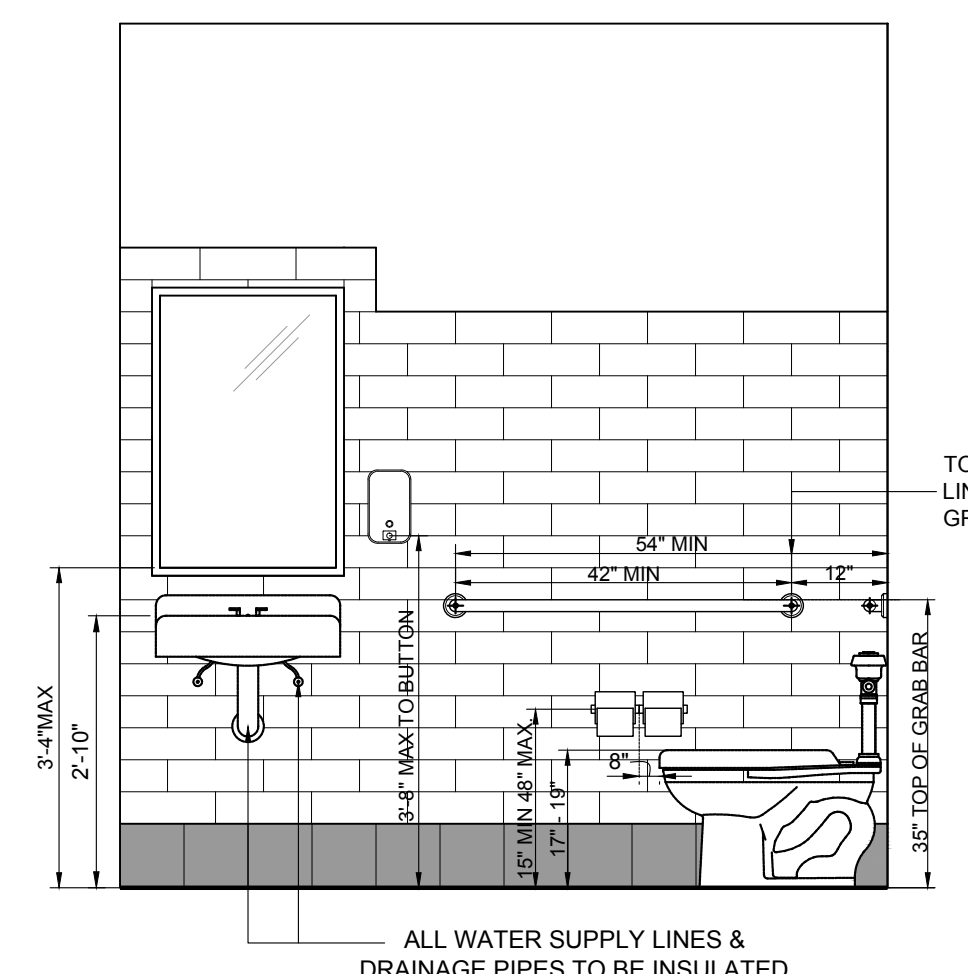
**12 BOYS TOILET ELEVATION**  
 SCALE: 1/4" = 1'-0"



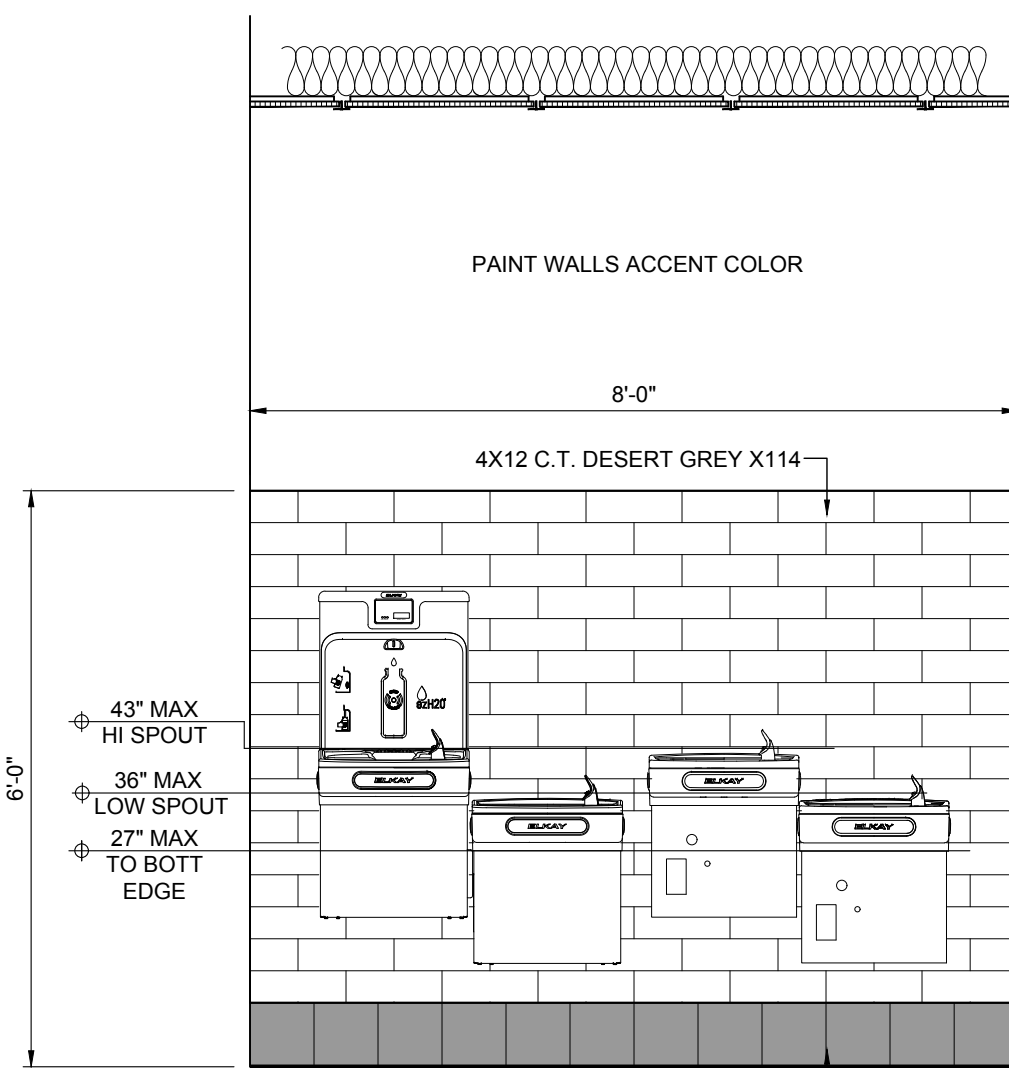
**11 TOILET ELEVATION**  
 SCALE: 1/2" = 1'-0"



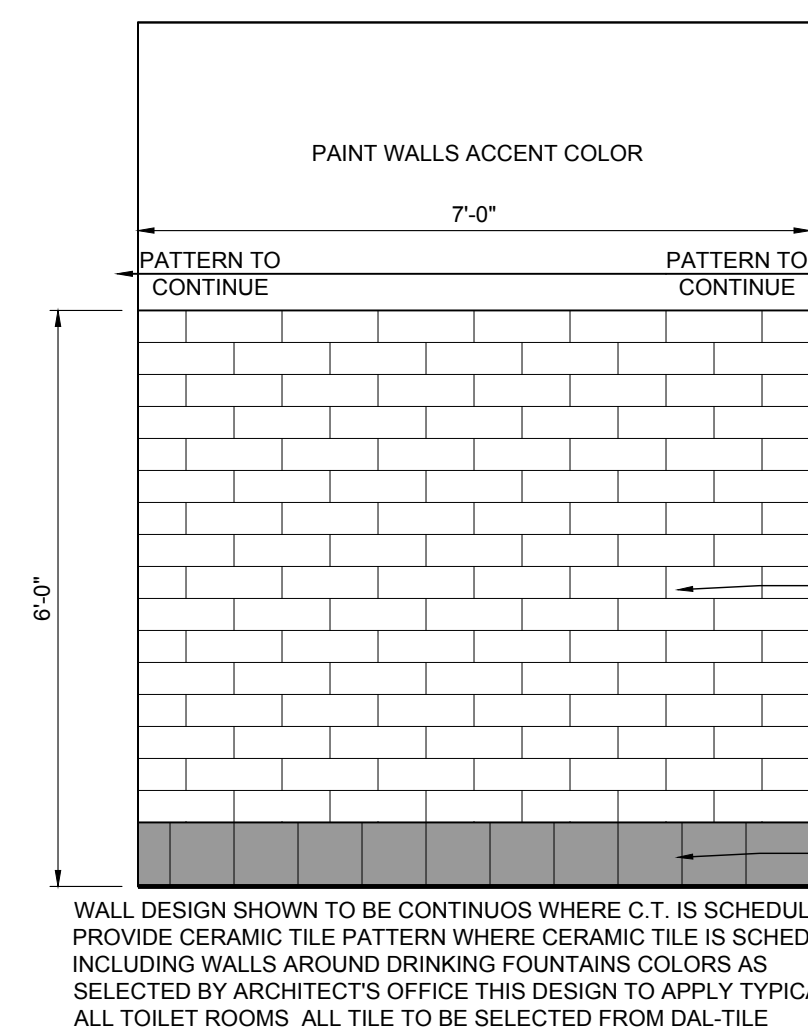
**10 TOILET ELEVATION**  
 SCALE: 1/2" = 1'-0"



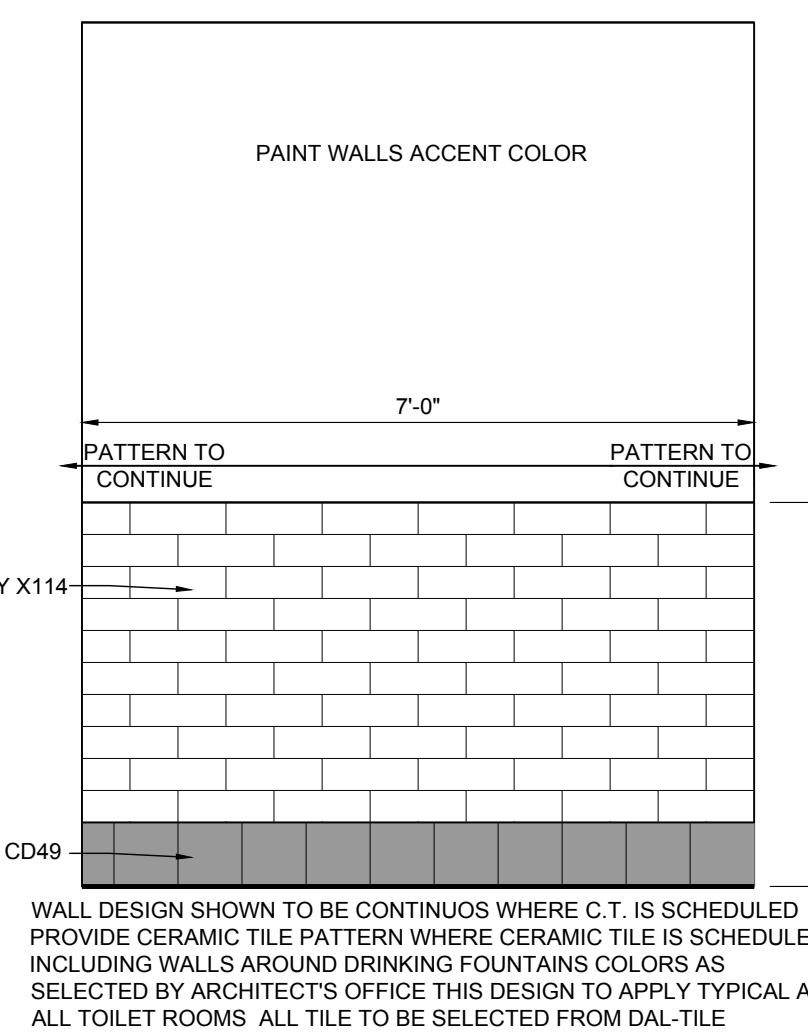
**10 TOILET ELEVATION**  
 SCALE: 1/2" = 1'-0"



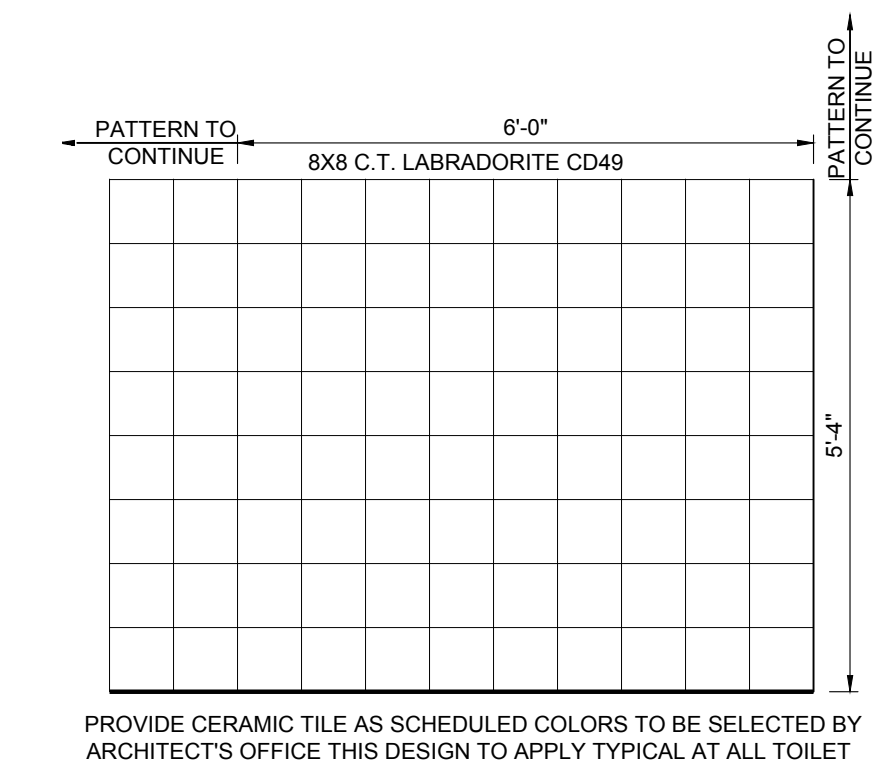
**09 WALL C.T. @ D.F.'s**  
 SCALE: 1/2" = 1'-0"



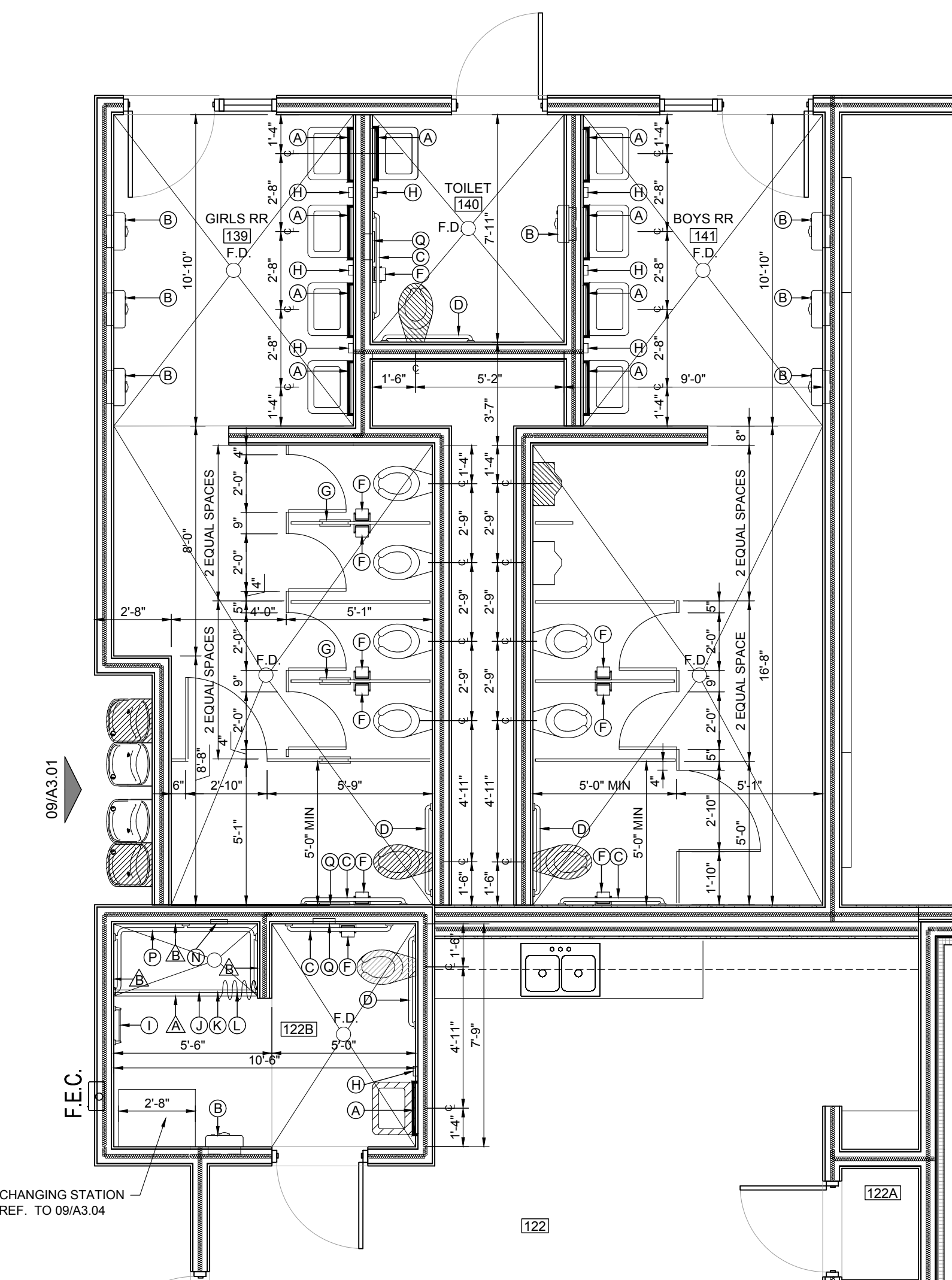
**08 WALL C.T. DESIGN**  
 SCALE: 1/2" = 1'-0"



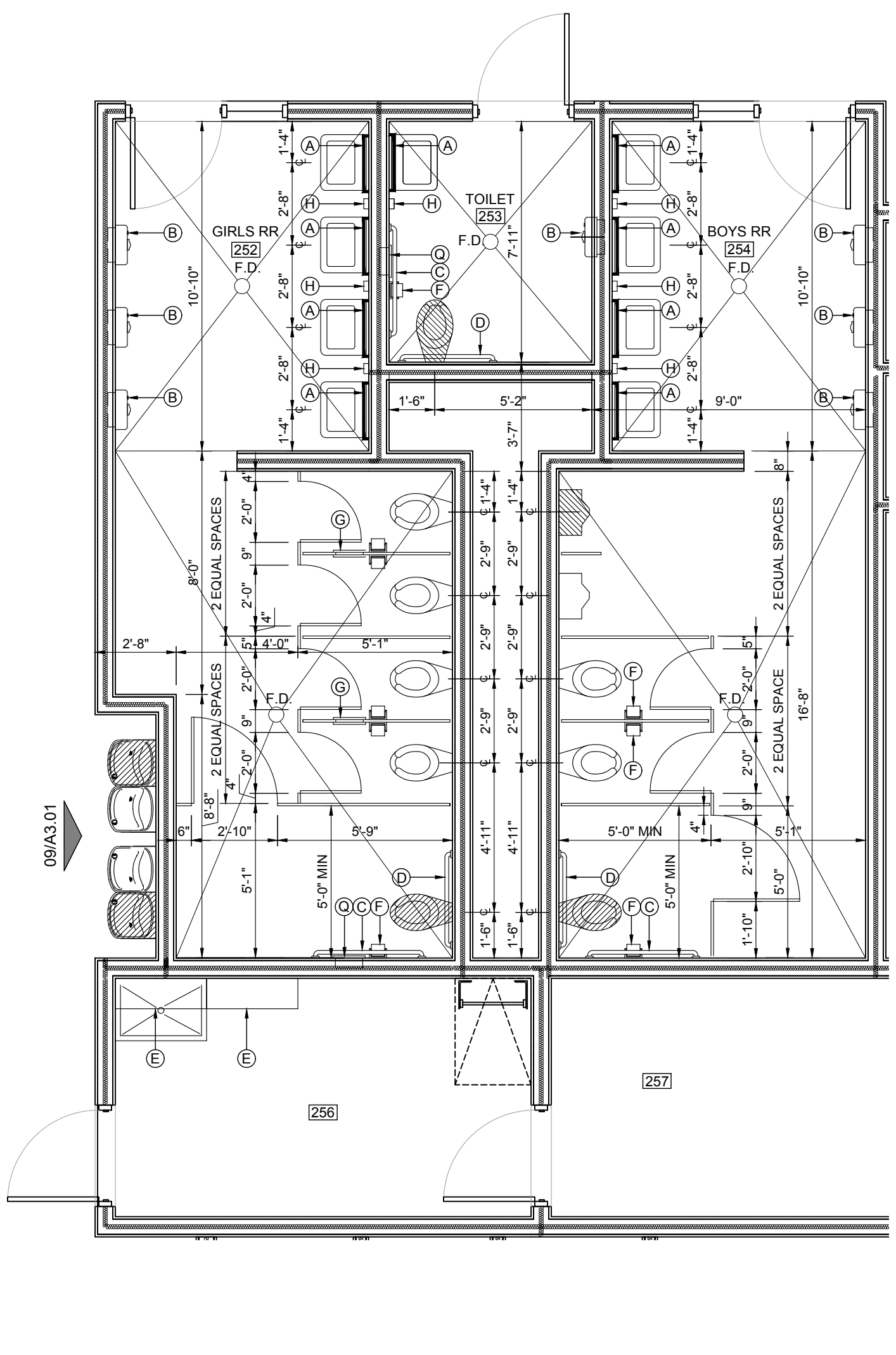
**07 WALL C.T. DESIGN**  
 SCALE: 1/2" = 1'-0"



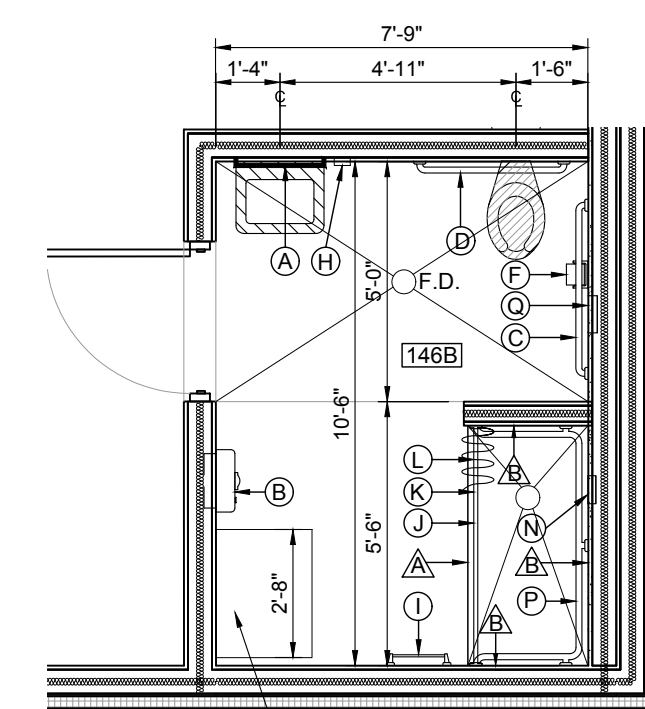
**06 FLOOR C.T. DESIGN**  
 SCALE: 1/2" = 1'-0"



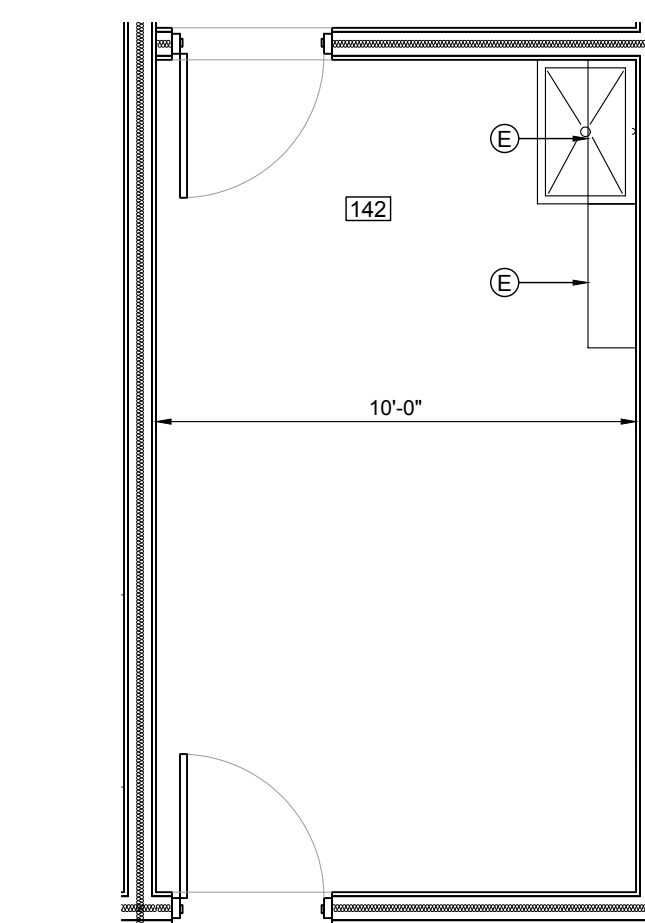
**01 TOILET PLAN**  
 SCALE: 1/4" = 1'-0"



**02 TOILET PLAN**  
 SCALE: 1/4" = 1'-0"



**14 TOILET PLAN**  
 SCALE: 1/4" = 1'-0"



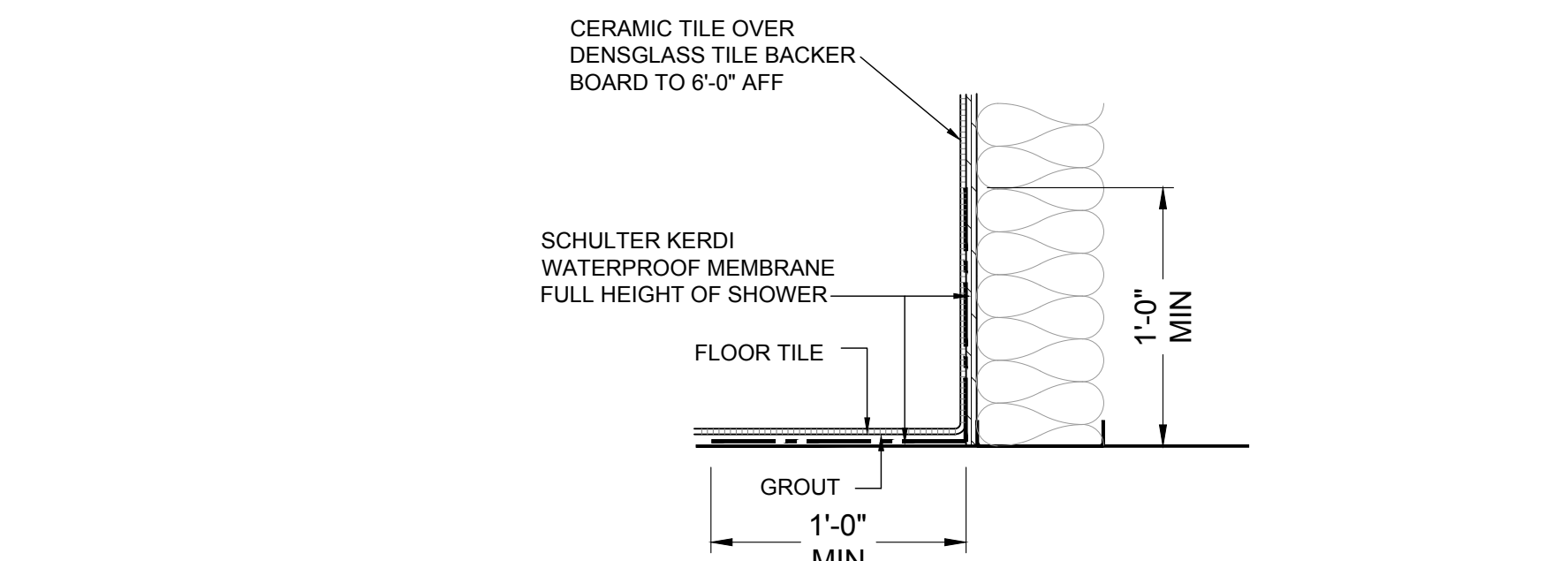
**03 MOP SINK PLAN**  
 SCALE: 1/4" = 1'-0"  
 SIMILAR AT CUSTODIAN ROOM 251

**GENERAL NOTES - TOILETS**

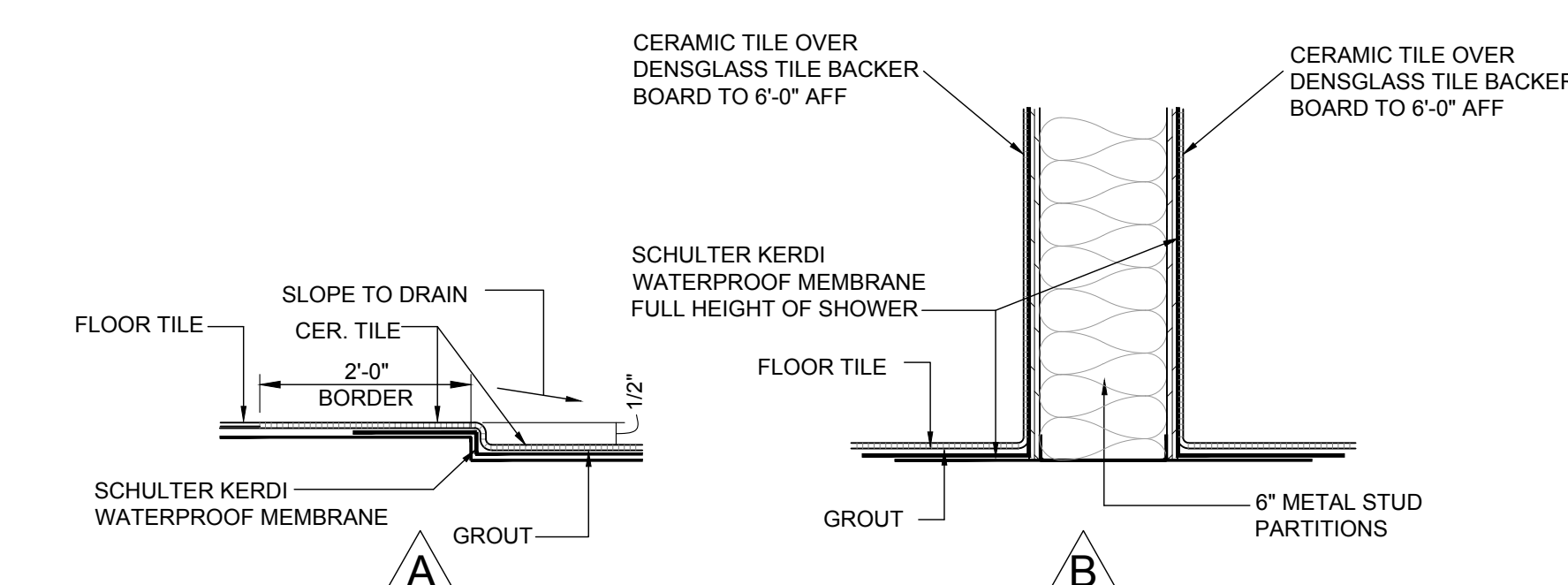
- PROVIDE CERAMIC TILE WAINSCOT BEHIND ALL MIRRORS, INCLUDING HANDICAP MIRRORS WHICH EXTEND BEYOND TILE WAINSCOT.
- PROVIDE TILE BORDER AROUND ALL ELECTRICAL OUTLETS WHICH EXTEND BEYOND TILE WAINSCOT.
- CONTRACTOR TO INSTALL OWNER PROVIDED SURFACE MOUNTED PAPER TOWEL, SOAP AND TOILET TISSUE DISPENSERS.
- PROVIDE SCHULTER KERDI MEMBRANE WATERPROOFING AT ALL TOILETS ROOMS AND SHOWERS AS SPECIFIED. (SECTION 07115)

**ACCESSORY LEGEND**

No.	NAME
(A)	33 CHANNEL FRAME MIRROR
(B)	HOT AIR DRYER (REFER TO M.E.P.)
(C)	42" LONG GRAB BAR
(D)	36" LONG GRAB BAR
(E)	MOP AND BROOM HOLDER
(F)	TOILET TISSUE DISPENSER (Provided by owner installed by contractor)
(G)	PARTITION MOUNTED SANITARY NAPKIN DISPOSAL
(H)	LIQUID SOAP DISPENSER (Provided by owner installed by contractor)
(I)	TOWEL BAR 16"
(J)	SHOWER CURTAIN MOD # 204-2
(K)	SHOWER ROD MOD # B-8047
(L)	SHOWER HOOKS MOD # 204-1
(M)	SHOWER SEAT
(N)	SOAP DISH
(O)	CONTINUOUS GRAB BAR MOD # B-8006 SERIES
(P)	WALL MOUNTED SANITARY NAPKIN DISPOSAL
(R)	TOWEL HOOK
	PAPER TOWEL DISPENSER (Provided by owner installed by contractor)
	ALL MODEL NUMBERS SHOWN ARE FROM BOBRICK WASHROOM ACCESSORIES



**05 TOILET WALL BASE DTL**  
 SCALE: 1-1/2" = 1'-0"

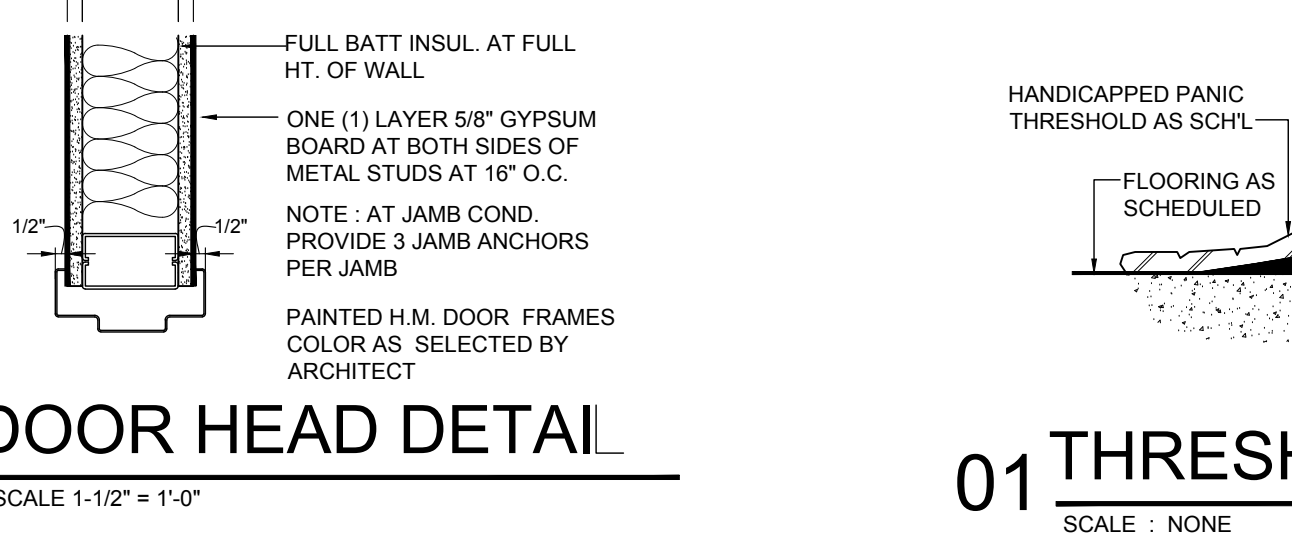
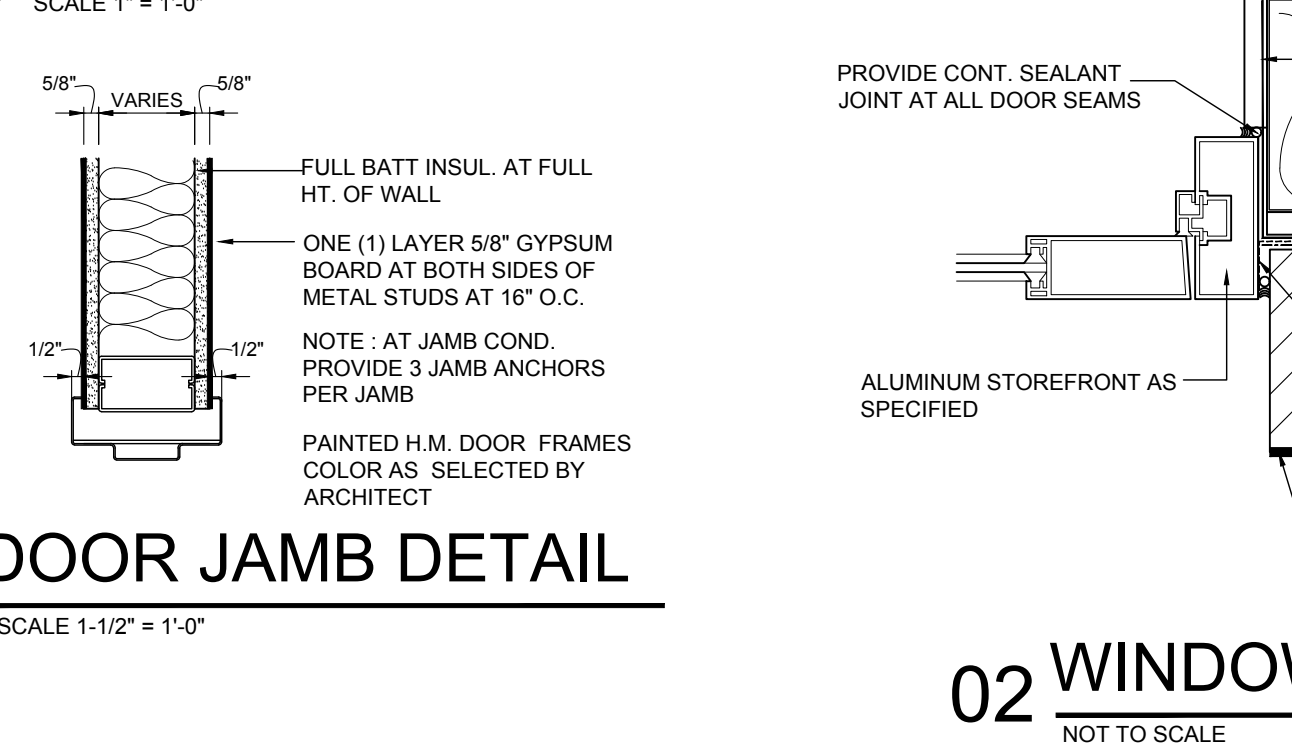
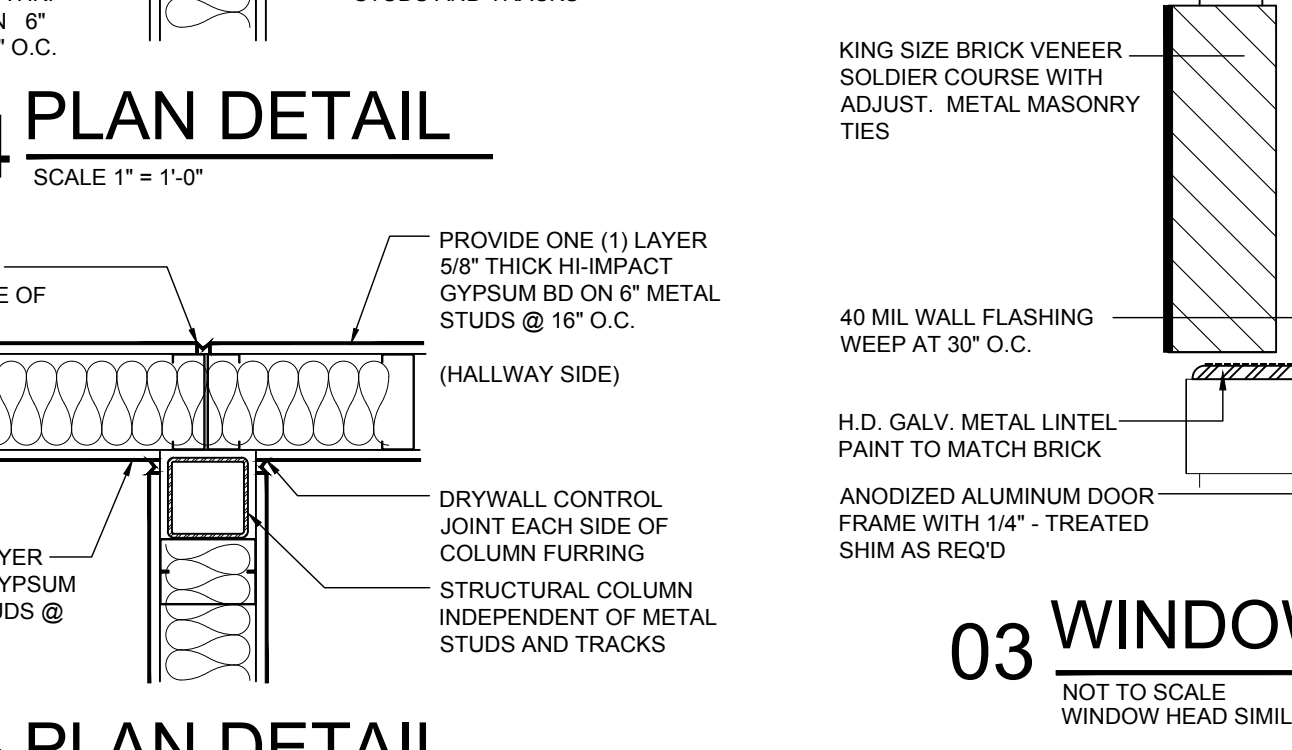
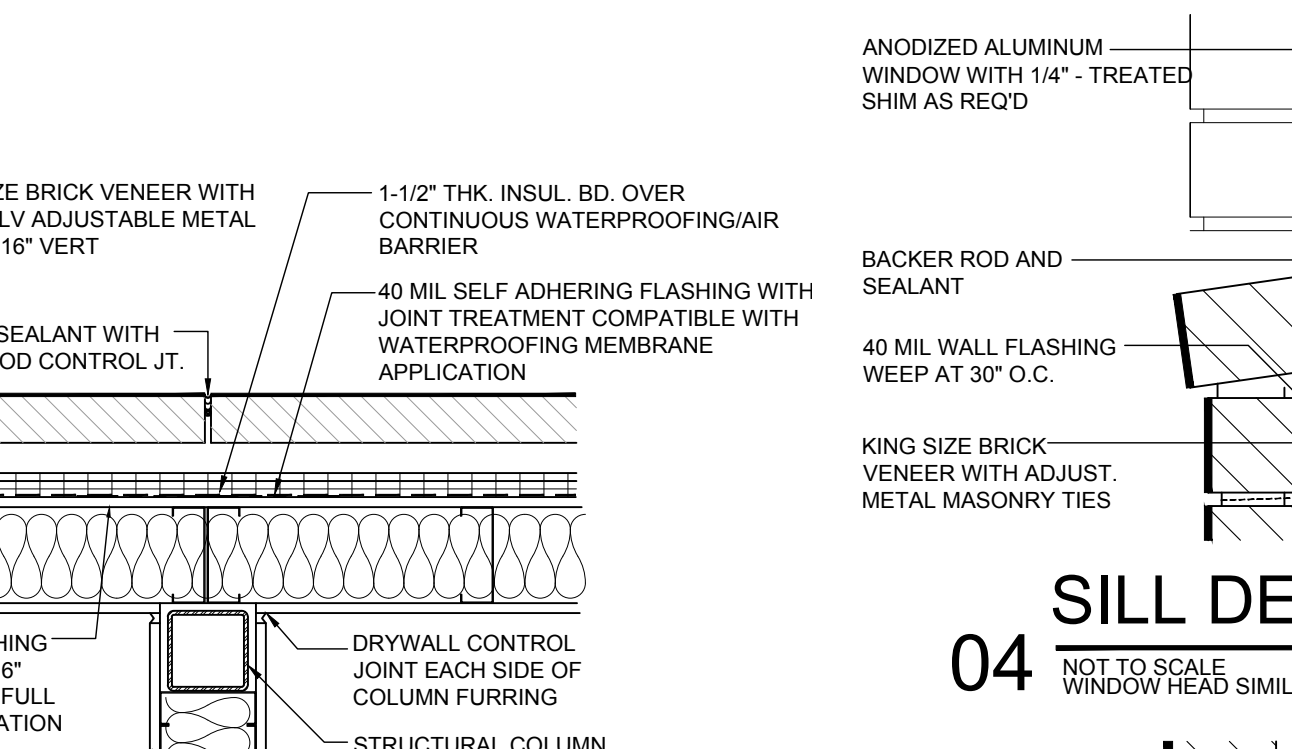
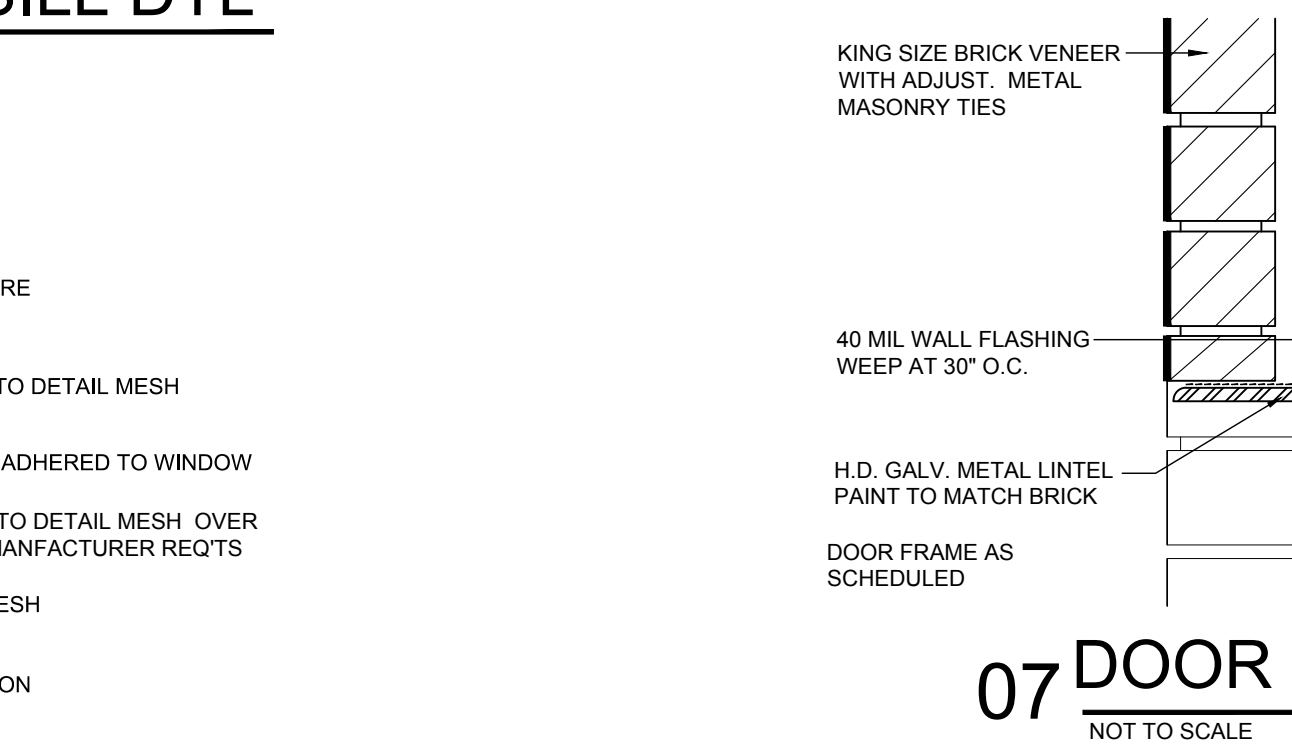
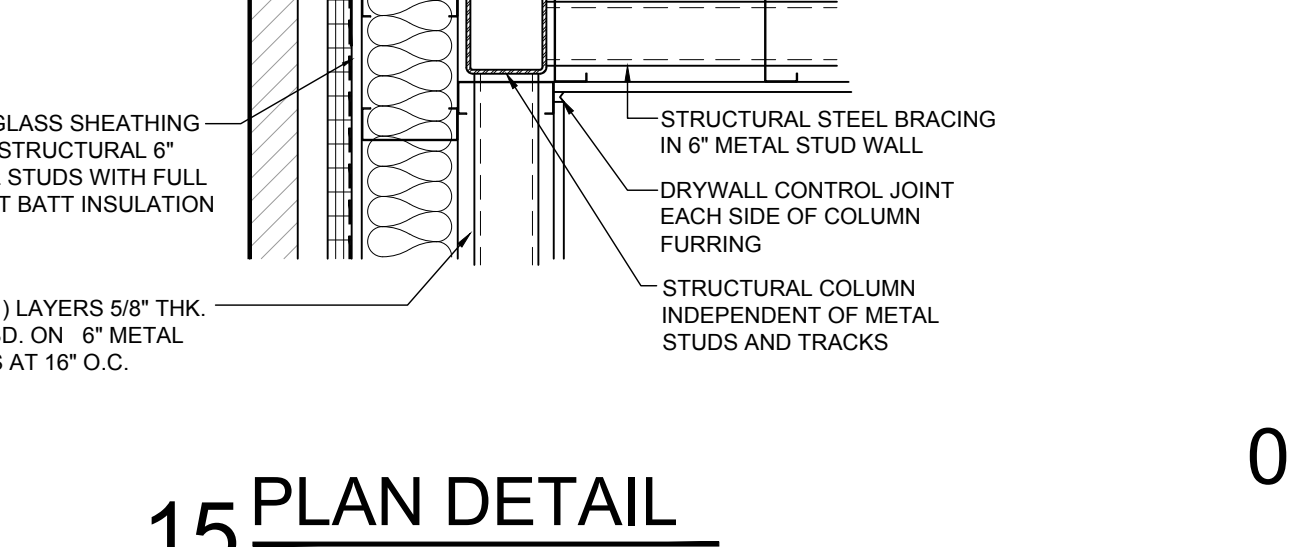
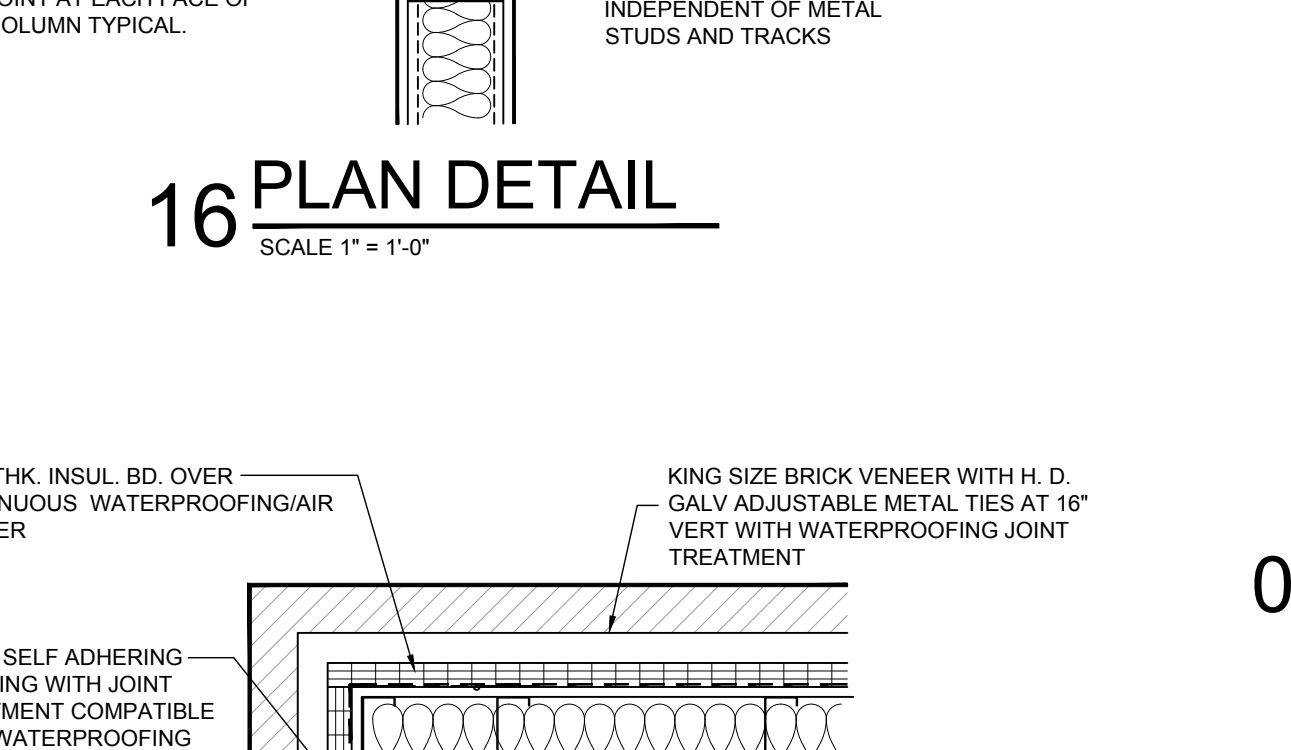
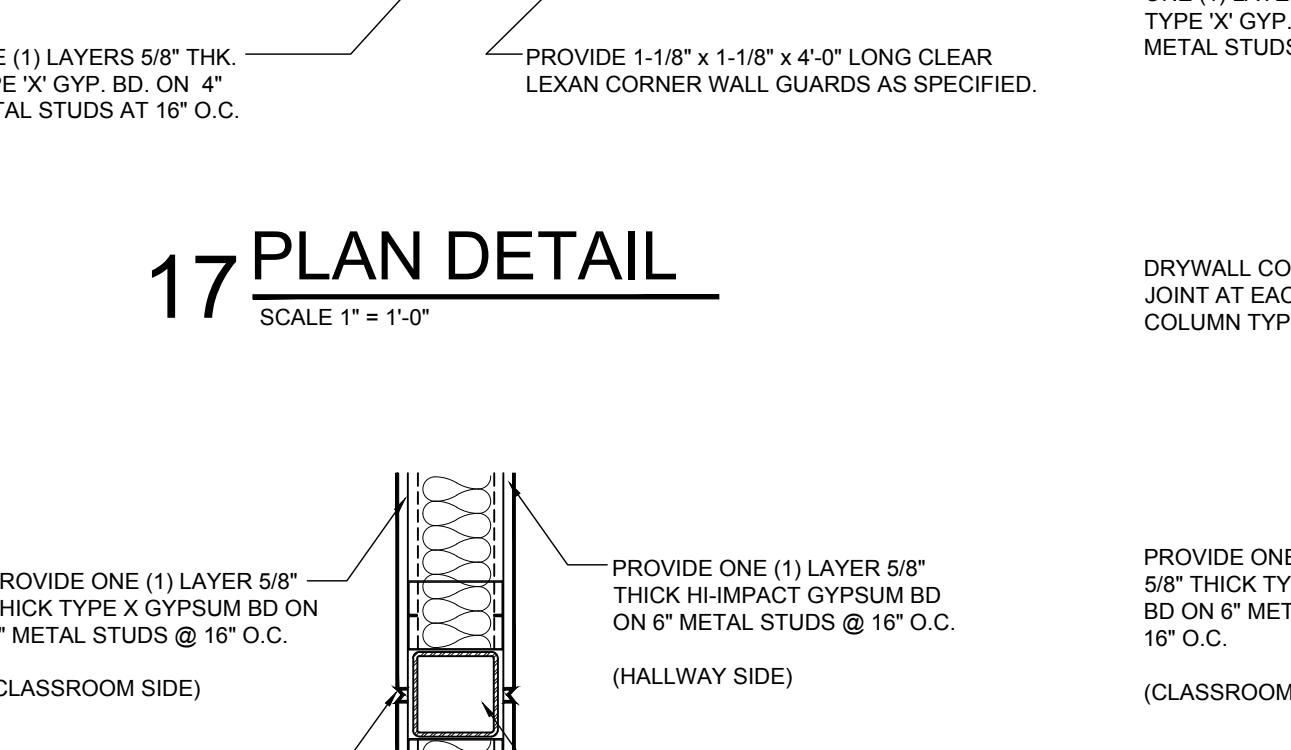
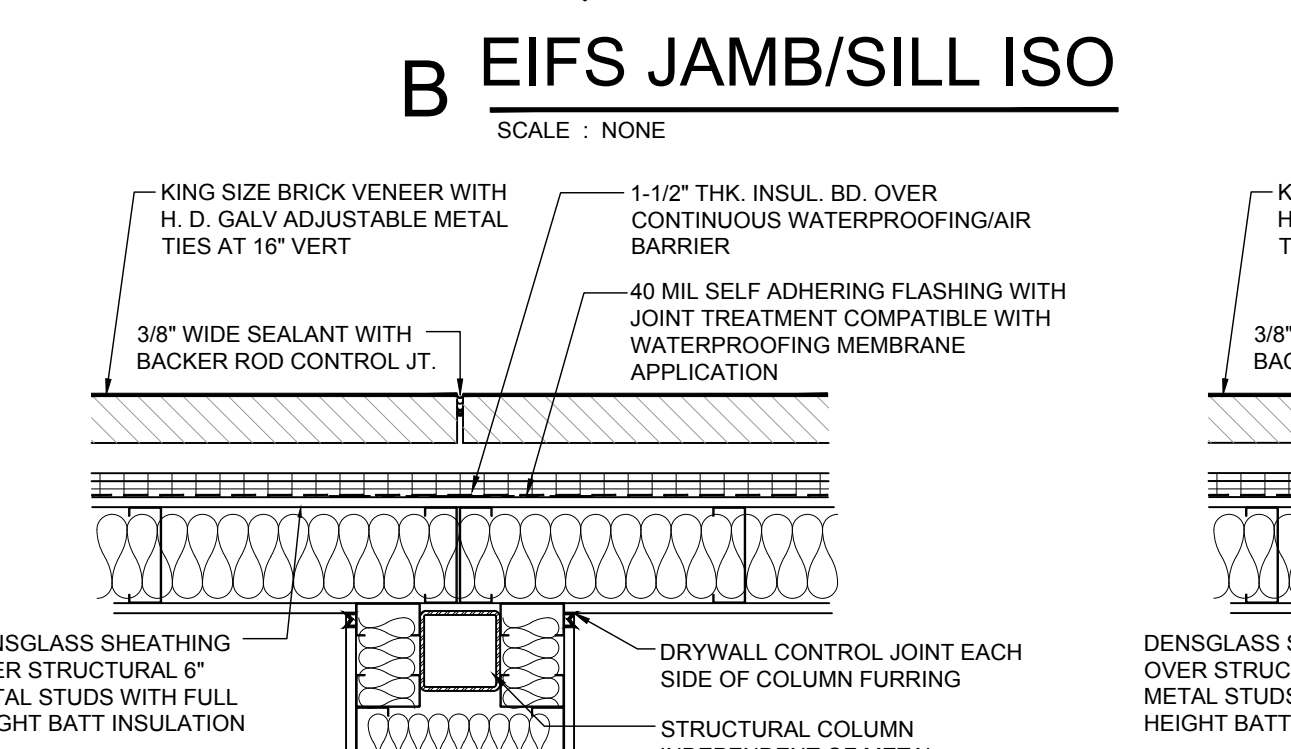
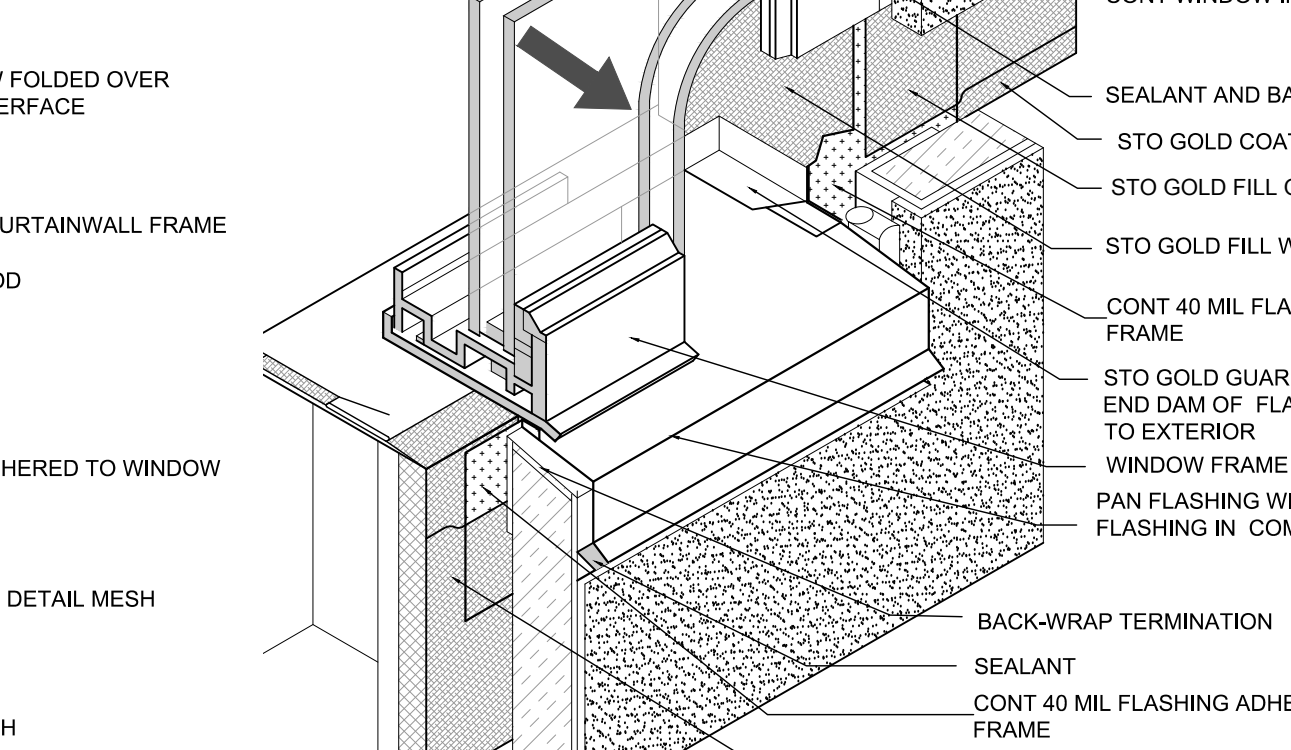
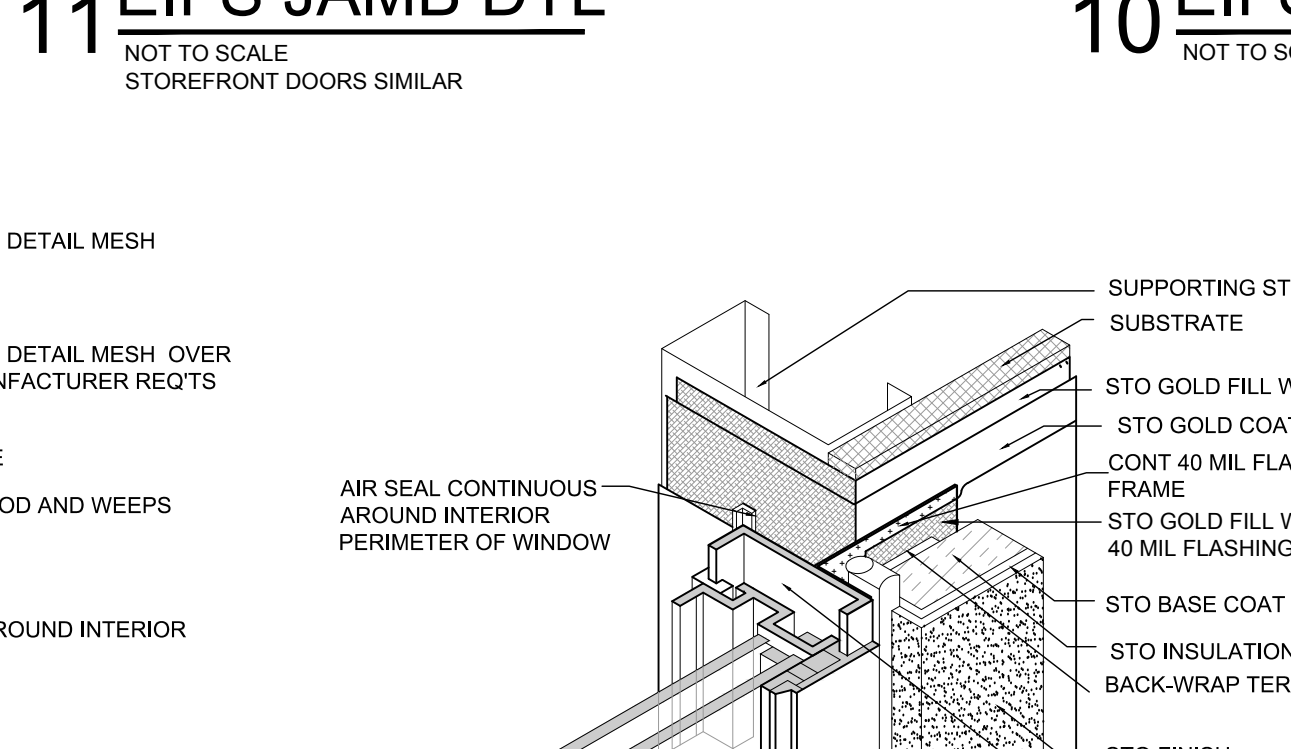
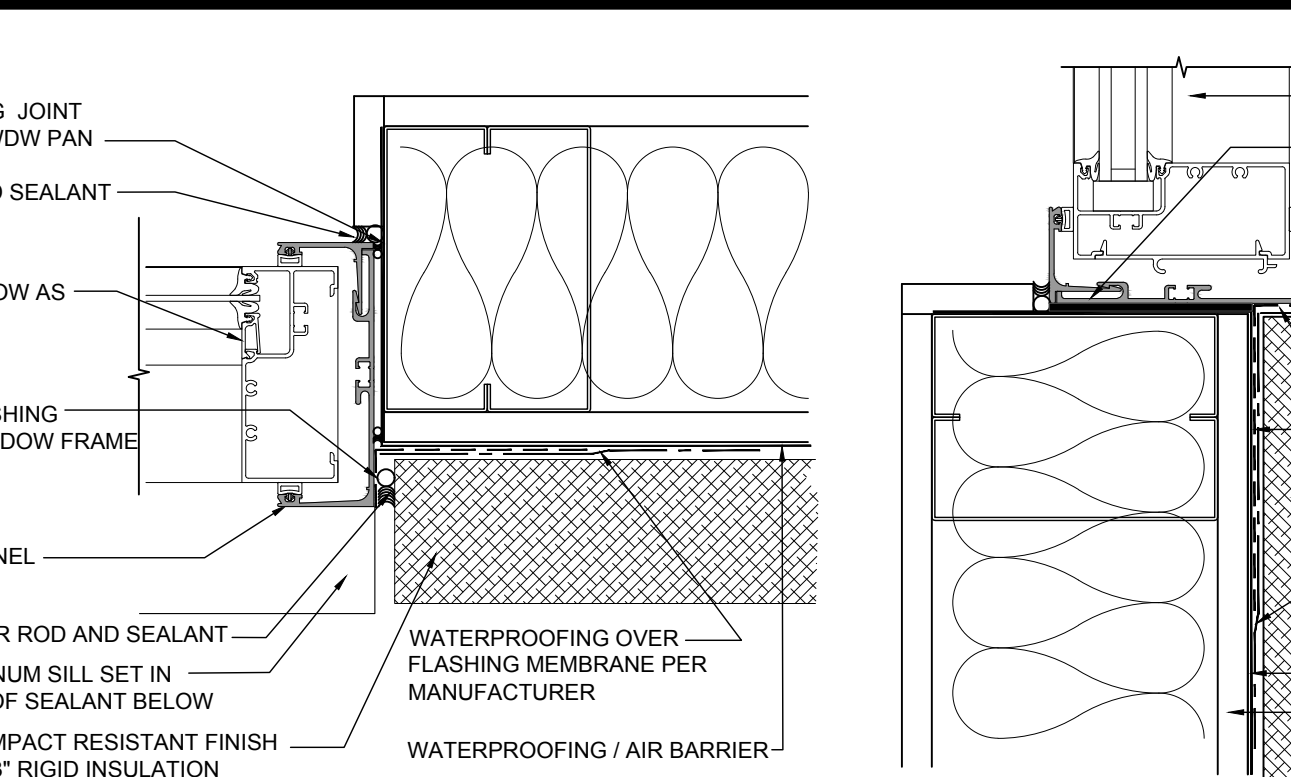
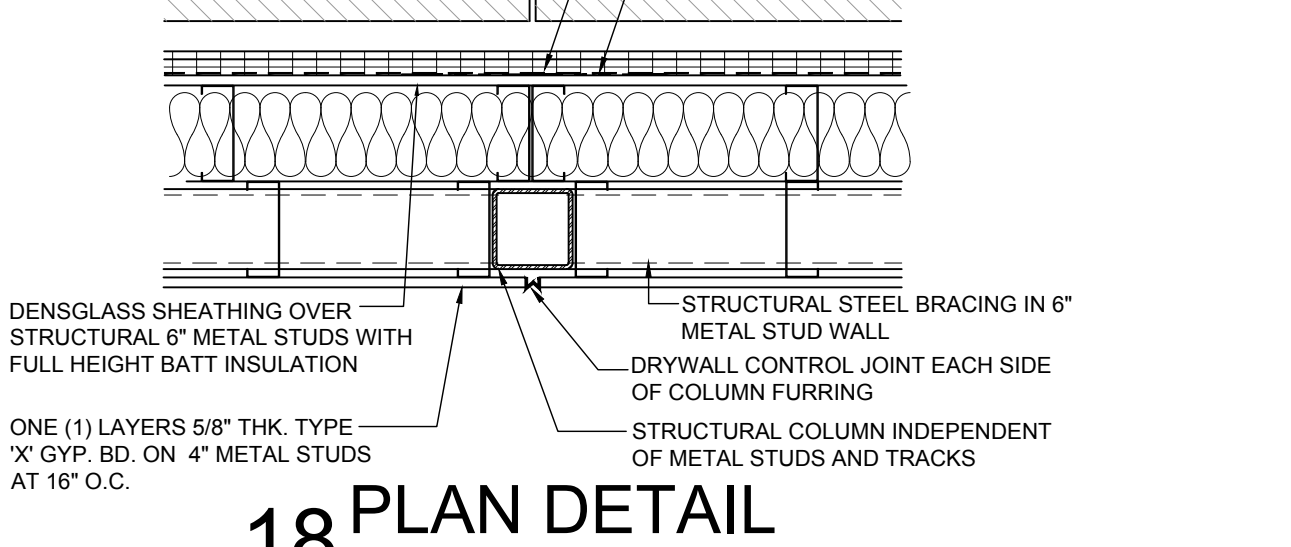
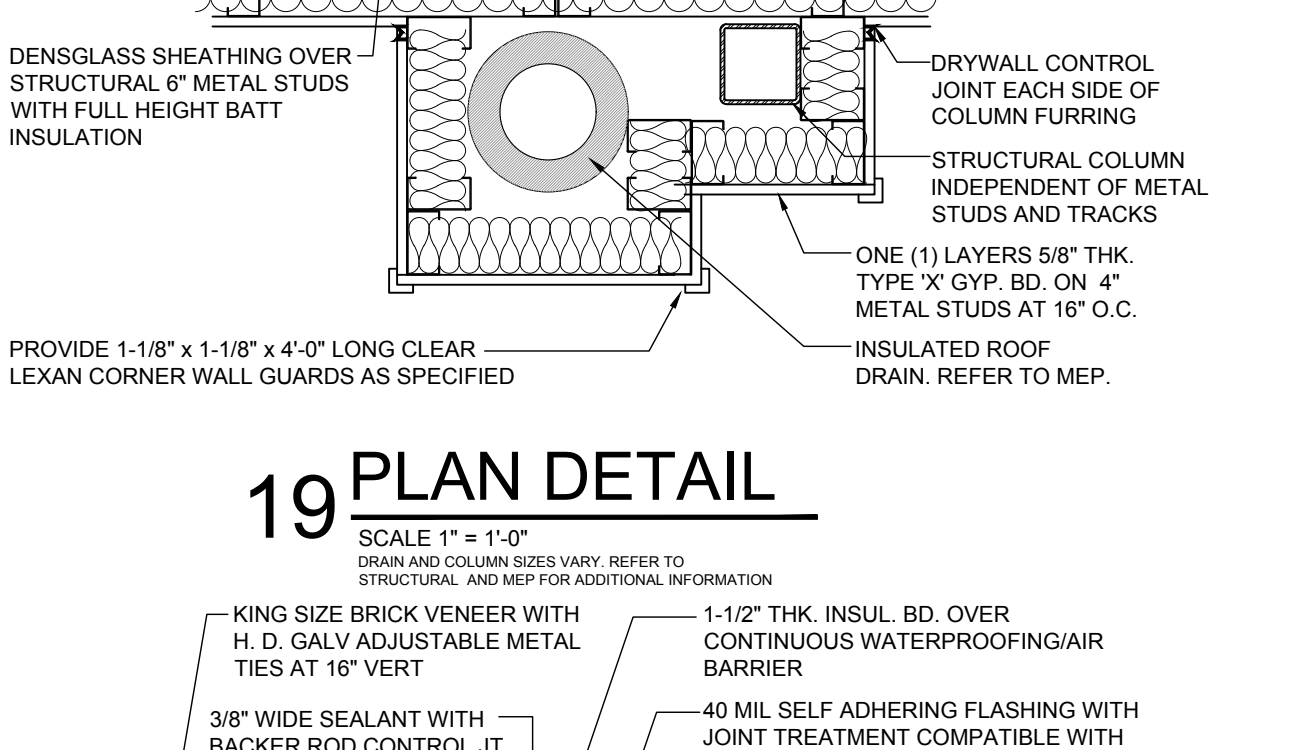
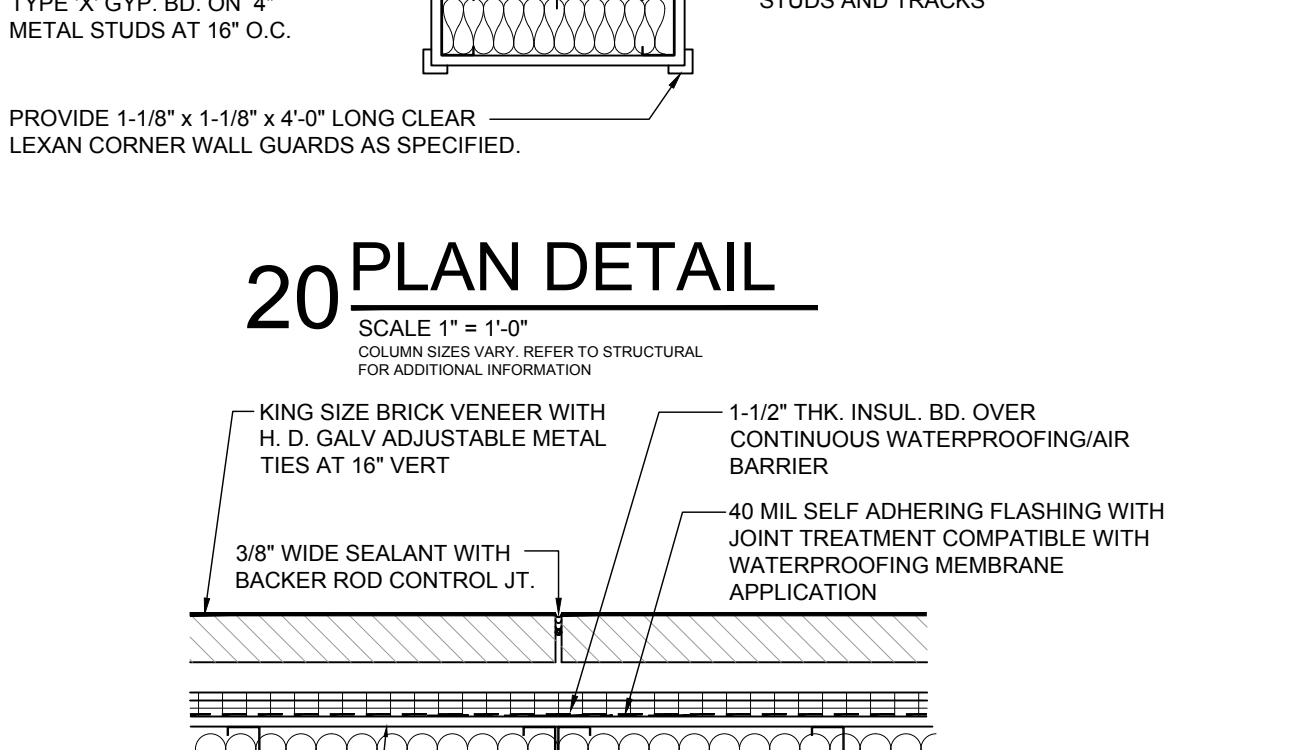
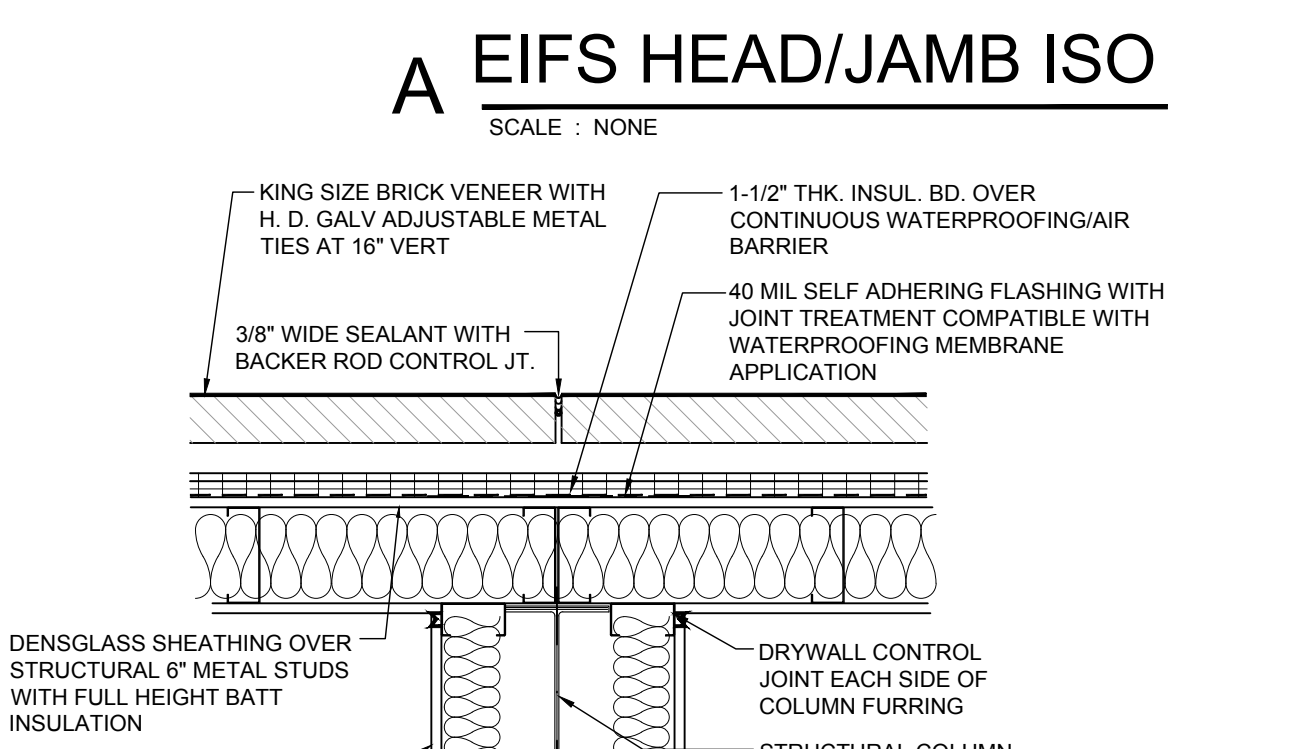
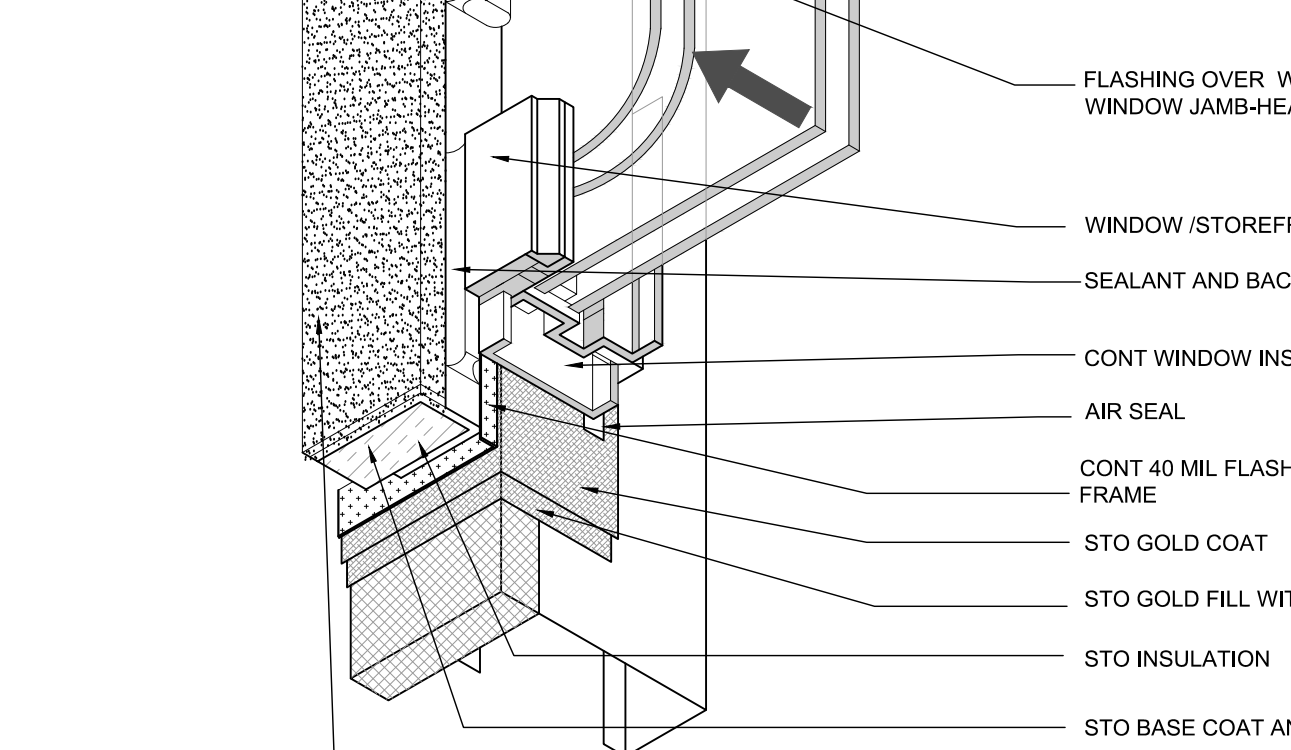
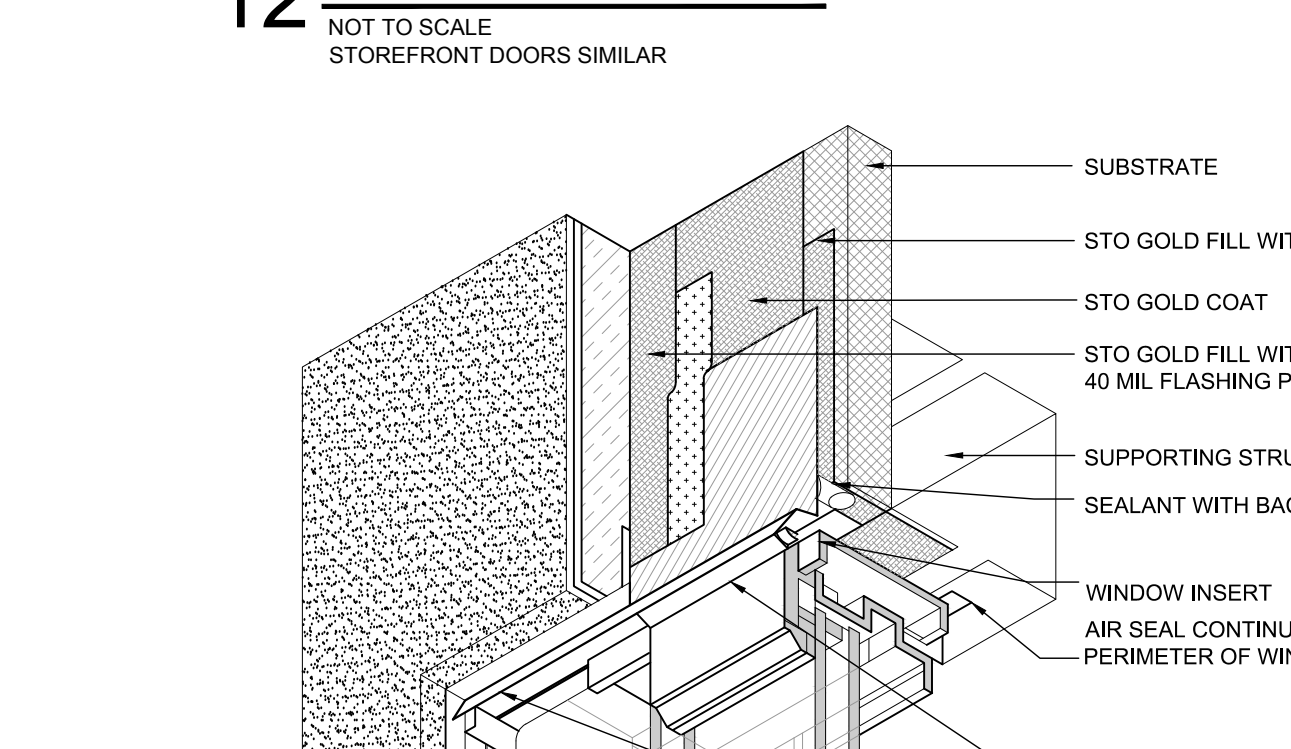
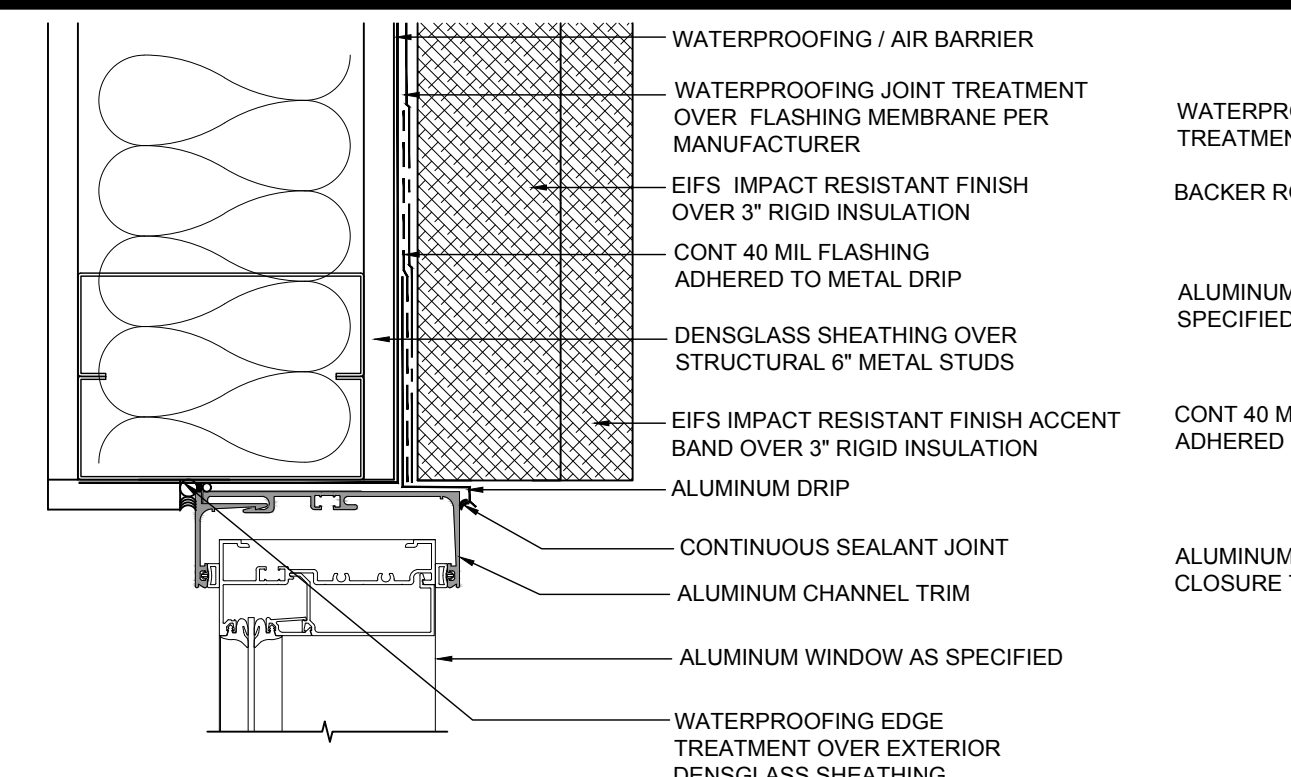
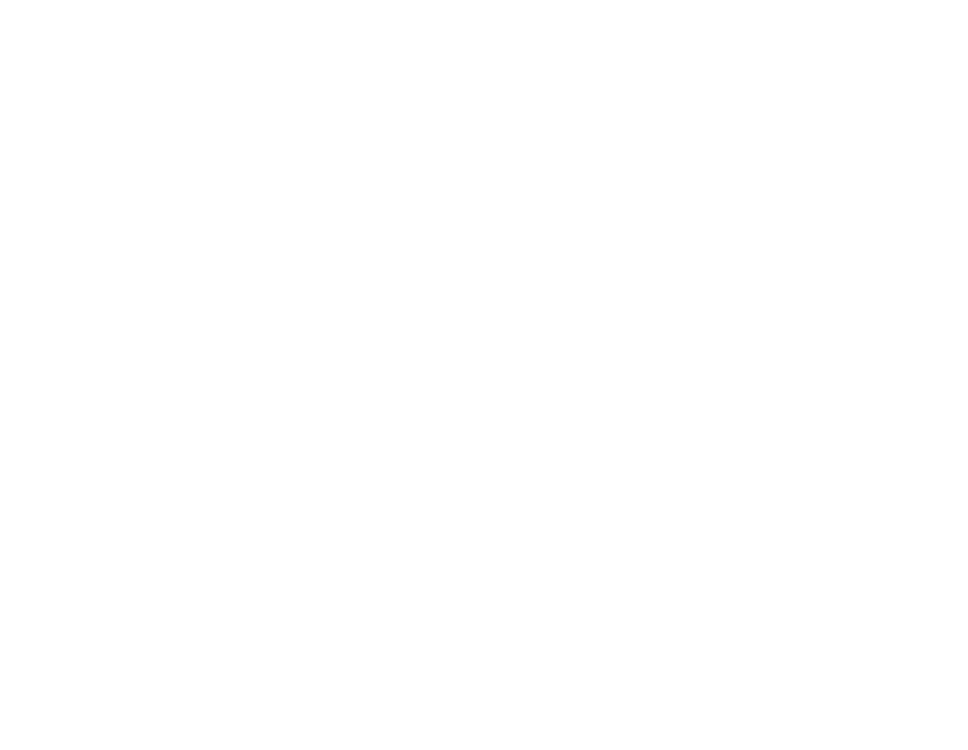
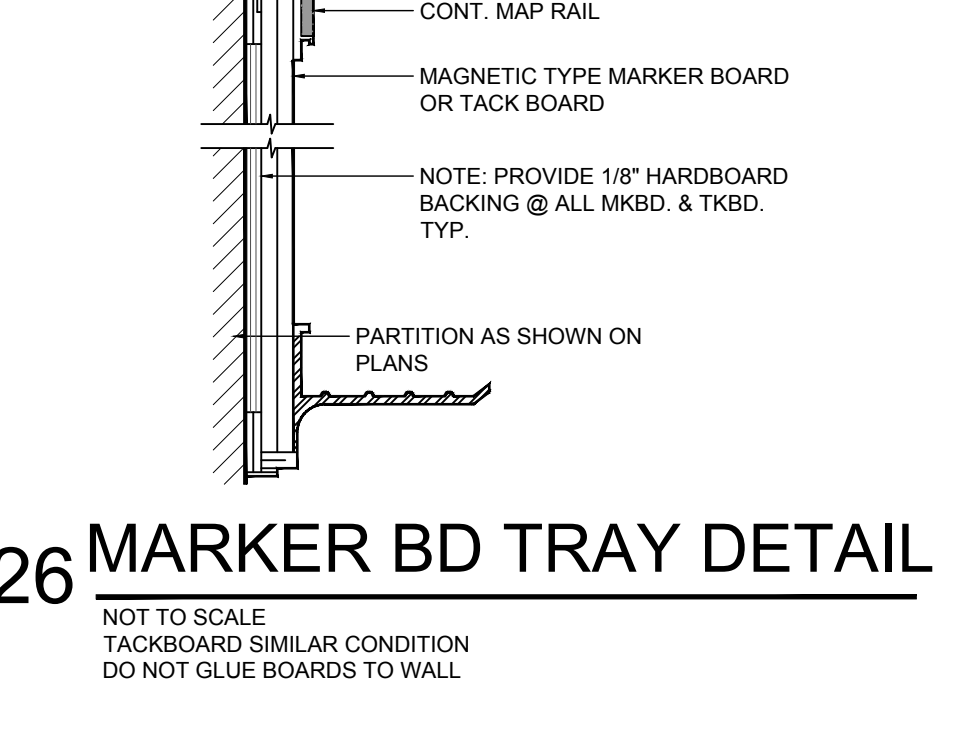
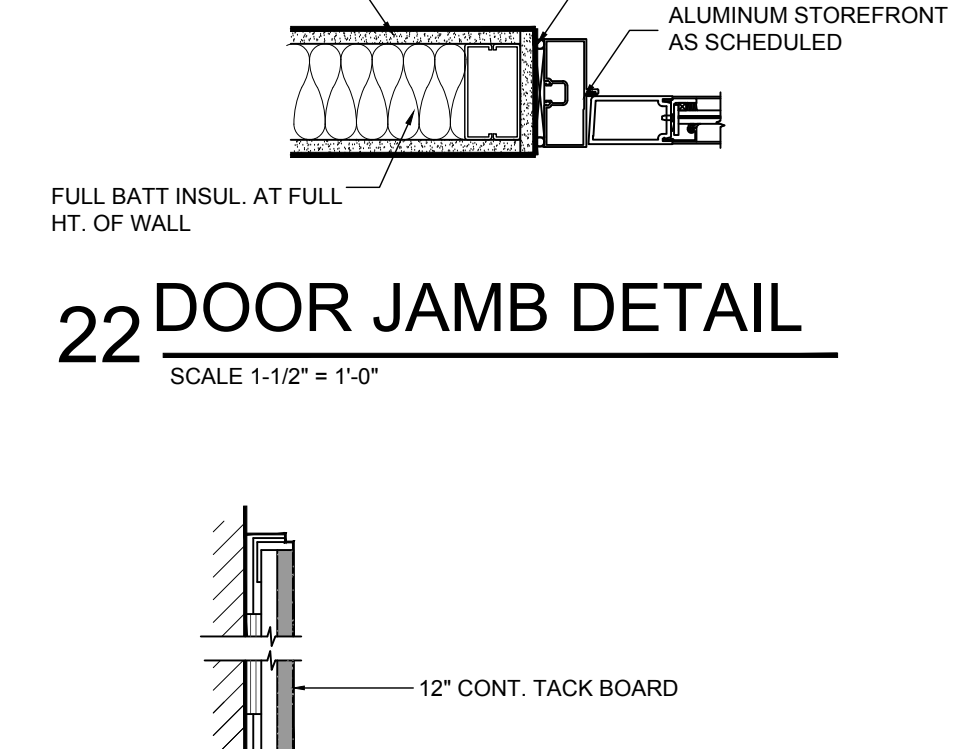
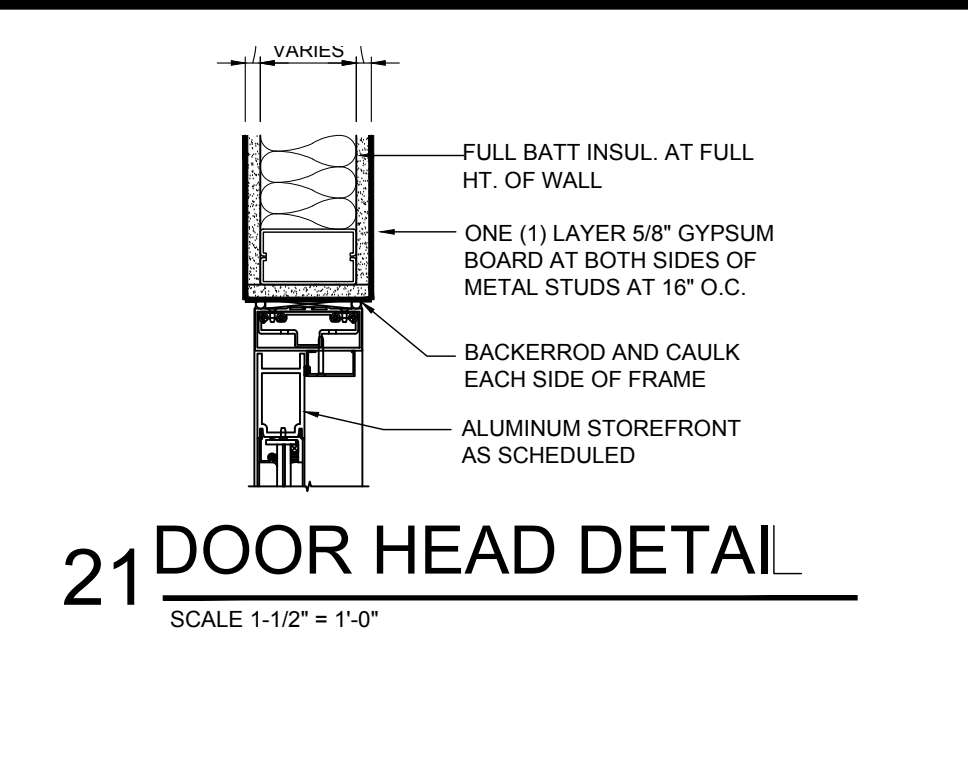
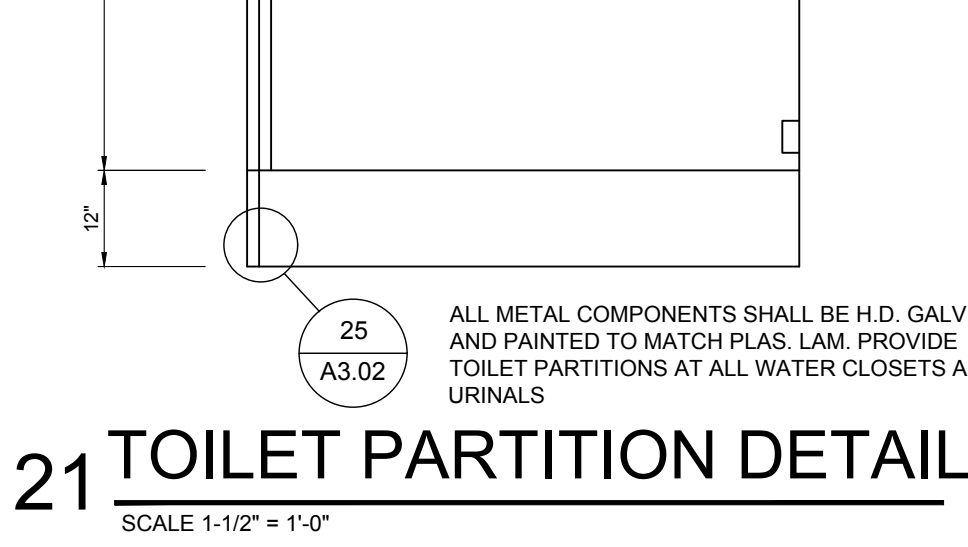
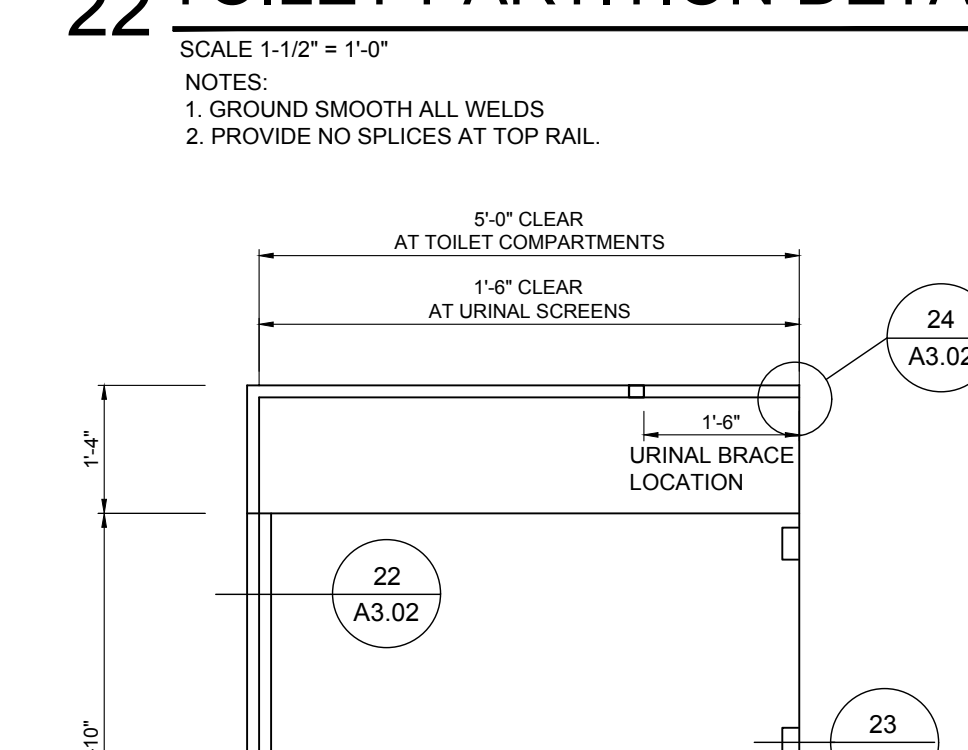
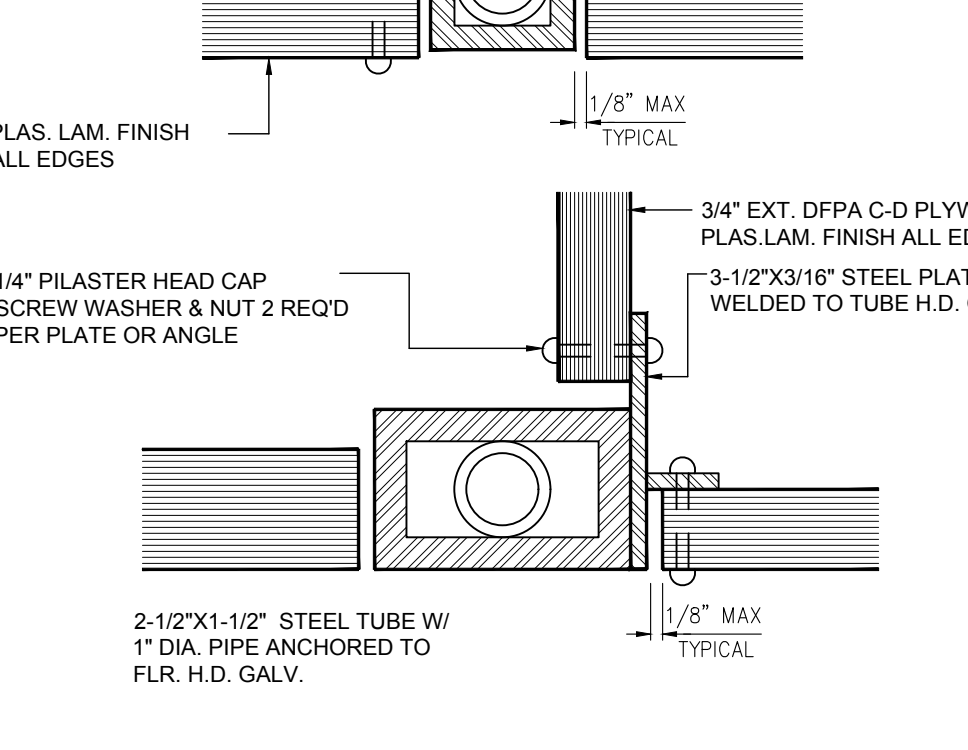
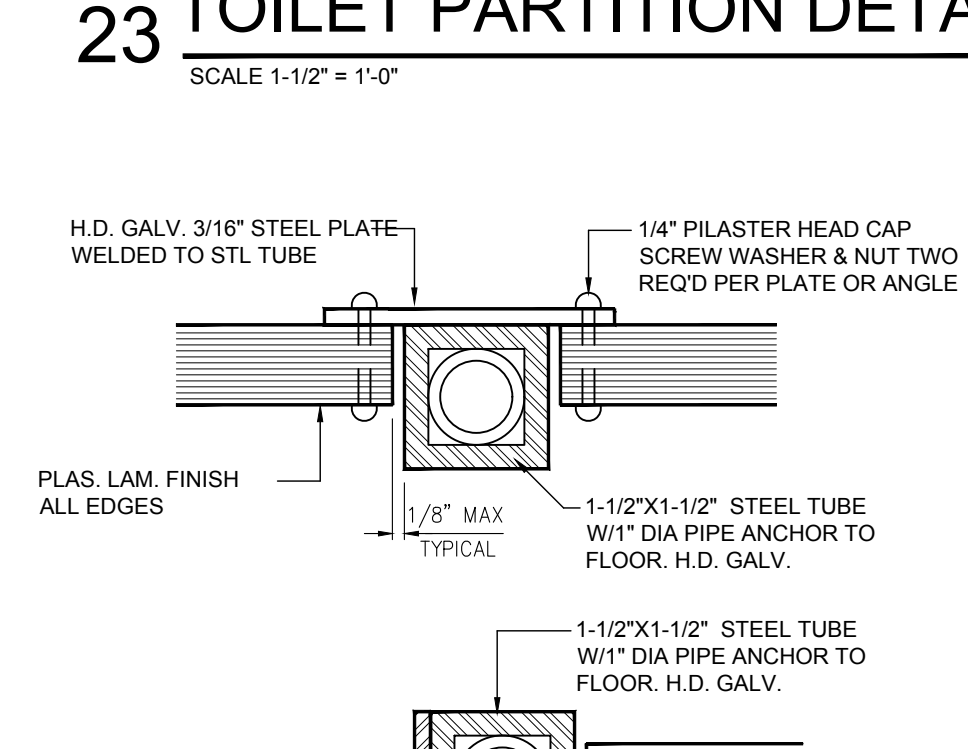
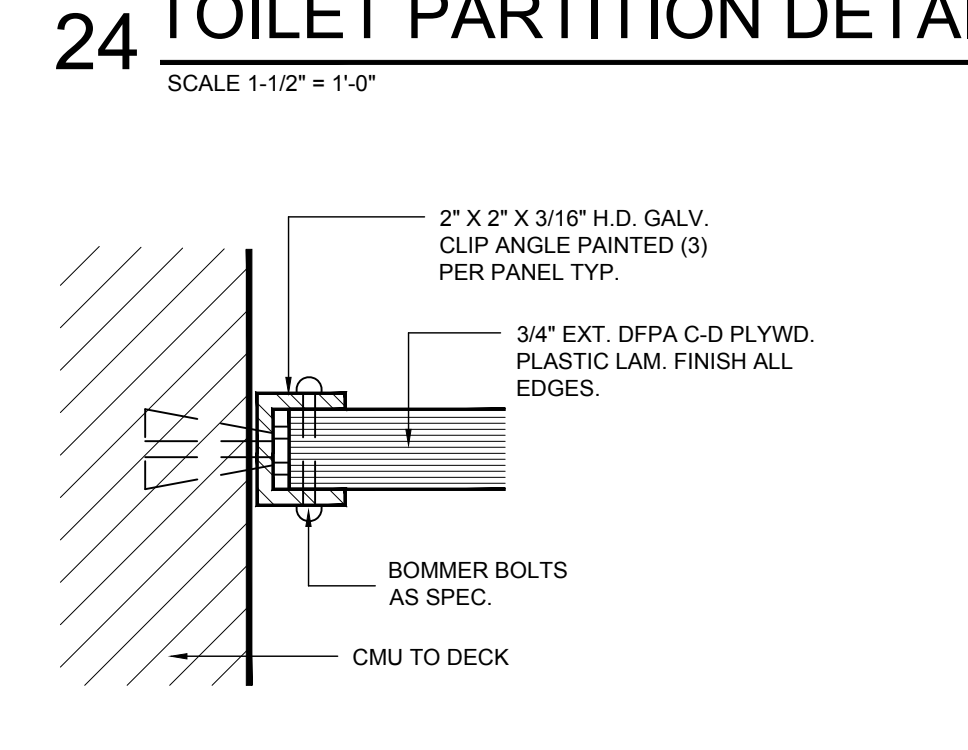
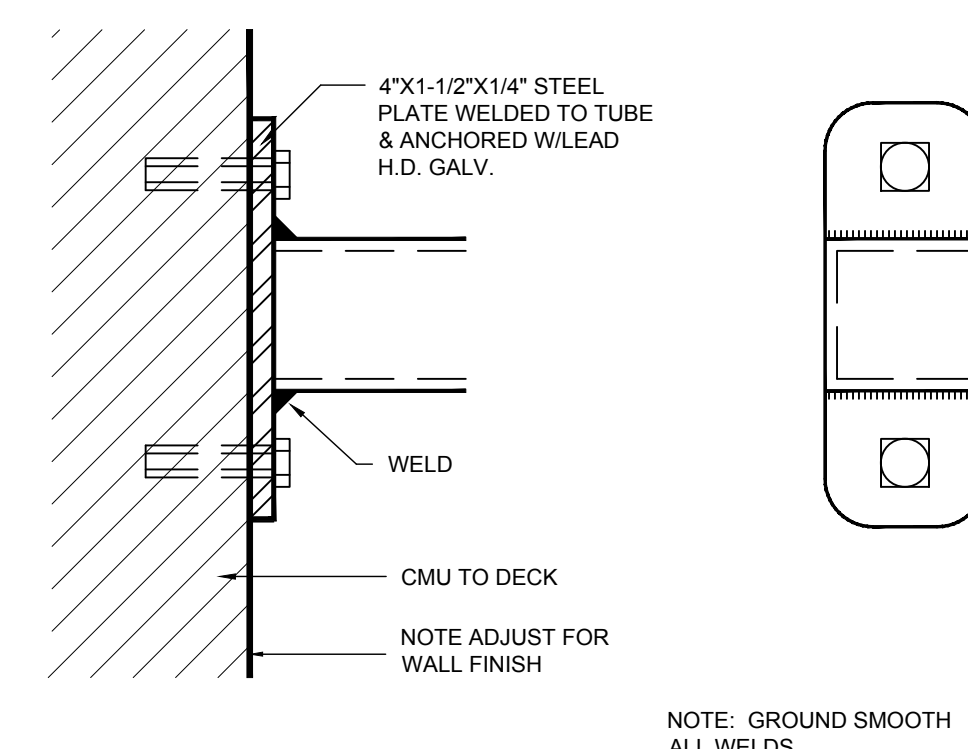
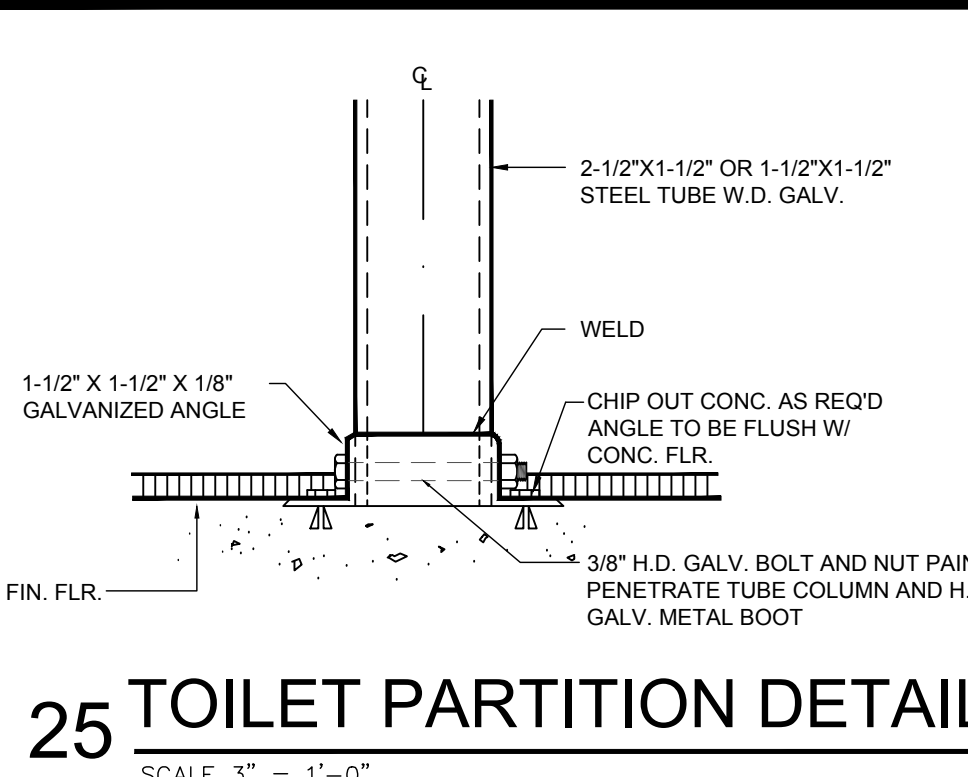


**04 SHOWER PAN DTLs**  
 SCALE: 1-1/2" = 1'-0"

ALL SHOWER AREAS TO RECEIVE SCHULTER KERDI SHOWER PAN

No.	REVISIONS	BY

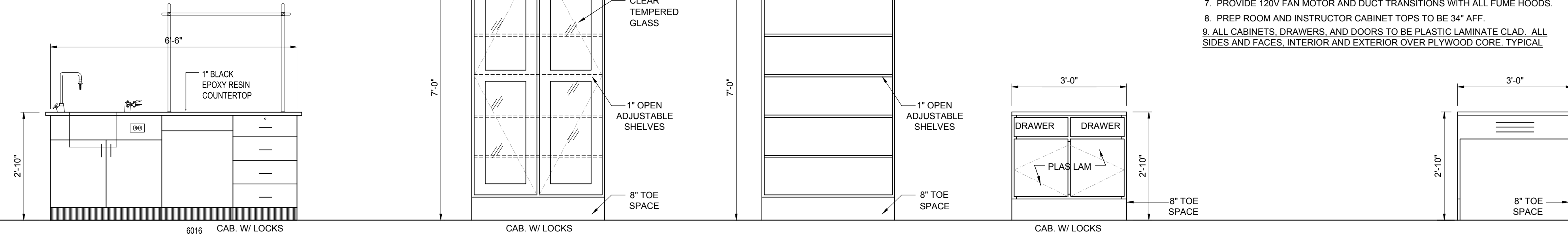
GMS ARCHITECTS  
 1150 Paredes Line Rd.  
 Brownsville, TX 78526  
 (956) 546-0110  
 fax (956) 546-0196



**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  
**Public Schools**  
 REGISTERED ARCHITECT  
 STATE OF TEXAS  
 19856  
 0-13-19  
 © Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers  
 Date: March 21, 2019  
 Scale: As Noted  
 Project Architect: J. Alvarado  
 Drawn by: David A. Montalvo, AIA  
 Job No.: IDEA PHASE II  
 Sheet: **A3.02**

**CASE WORK  
CABINET ELEVATION**

SCALE: 1/2" = 1'-0"



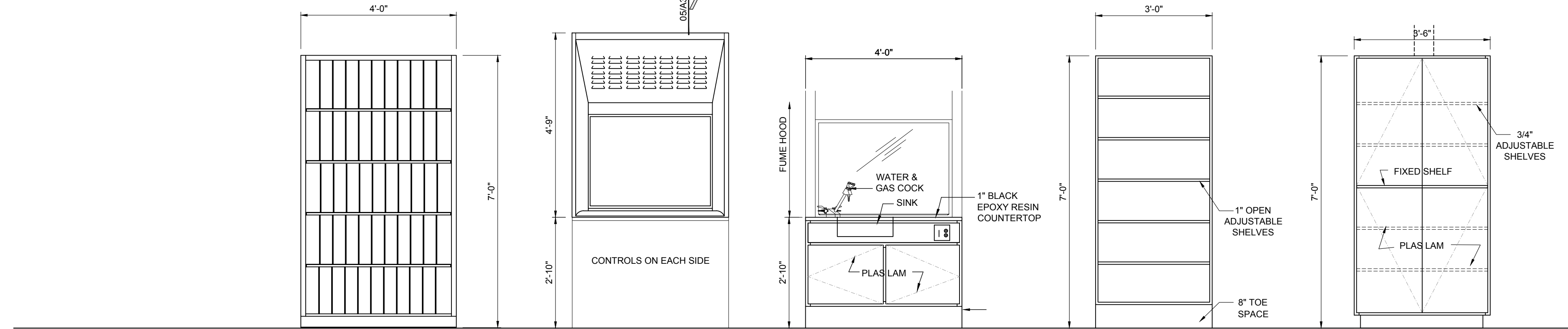
ITEM A - ELEVATION

ITEM B - ELEVATION

ITEM C - ELEVATION

ITEM D - ELEVATION

ITEM F - ELEVATION



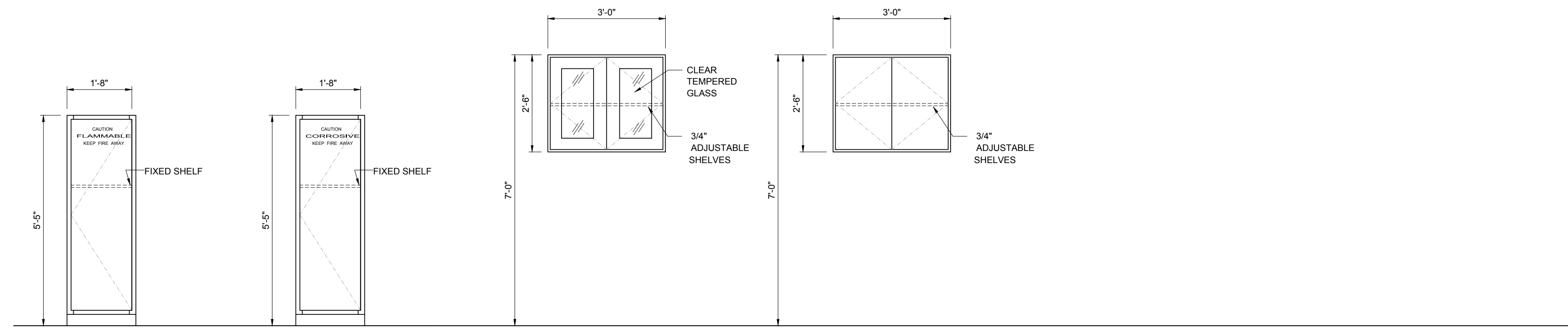
ITEM H - ELEVATION

ITEM I - ELEVATION  
REFER TO 06/A3.03

ITEM J - ELEVATION  
REFER TO 06/A3.03

ITEM K - ELEVATION

ITEM M - ELEVATION



ITEM N - ELEVATION

ITEM O - ELEVATION

ITEM S - ELEVATION

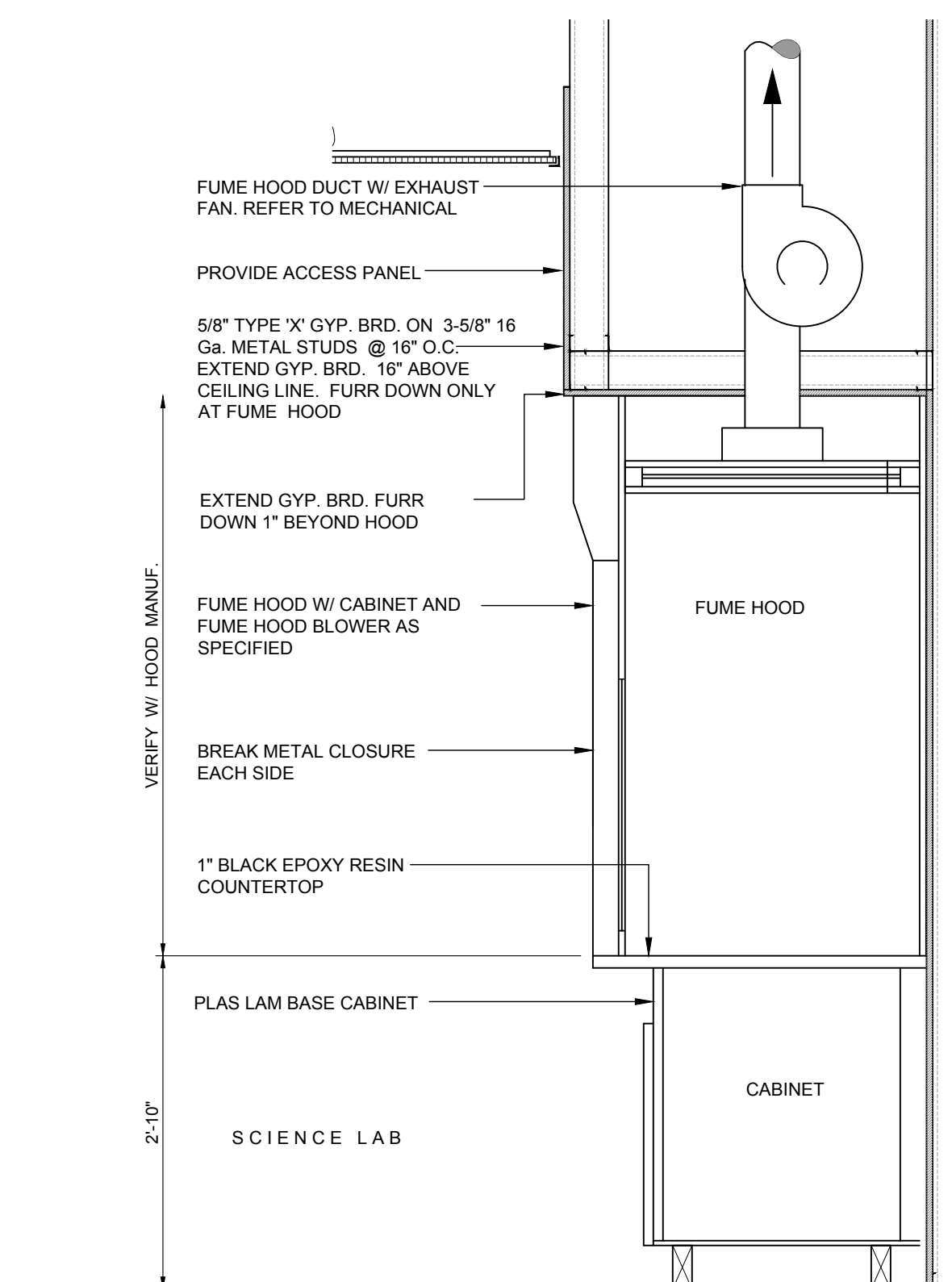
ITEM T - ELEVATION

**NOTES:**

1. 3/4" HEIGHT FOR ALL STUDENT BASE CABINETS INCLUDES 1" BLACK EPOXY RESIN TOP - ACTUAL UNIT HEIGHT SHALL BE 33".
1. 3/4" HEIGHT FOR ALL INSTRUCTOR BASE CABINETS INCLUDES 1" BLACK EPOXY RESIN TOP - ACTUAL UNIT HEIGHT SHALL BE 33".
3. MODIFY KNEESPACE LEGS TO BE FLUSH W/ CABINETS.
4. ALL CHEMISTRY TOPS TO BE 1" BLACK EPOXY RESIN TOP
5. ALL CABINETS, DRAWERS, AND DOORS TO RECEIVE LOCKS AS SPEC.
6. PROVIDE GYPBD FURRDOWNS WITH ACCESS PANELS AT ALL FUME CABINETS TYPICAL.
7. PROVIDE 120V FAN MOTOR AND DUCT TRANSITIONS WITH ALL FUME HOODS.
8. PREP ROOM AND INSTRUCTOR CABINET TOPS TO BE 3/4" AFF.
9. ALL CABINETS, DRAWERS, AND DOORS TO BE PLASTIC LAMINATE CLAD. ALL SIDES AND FACES, INTERIOR AND EXTERIOR OVER FLYWOOD CORE TYPICAL.

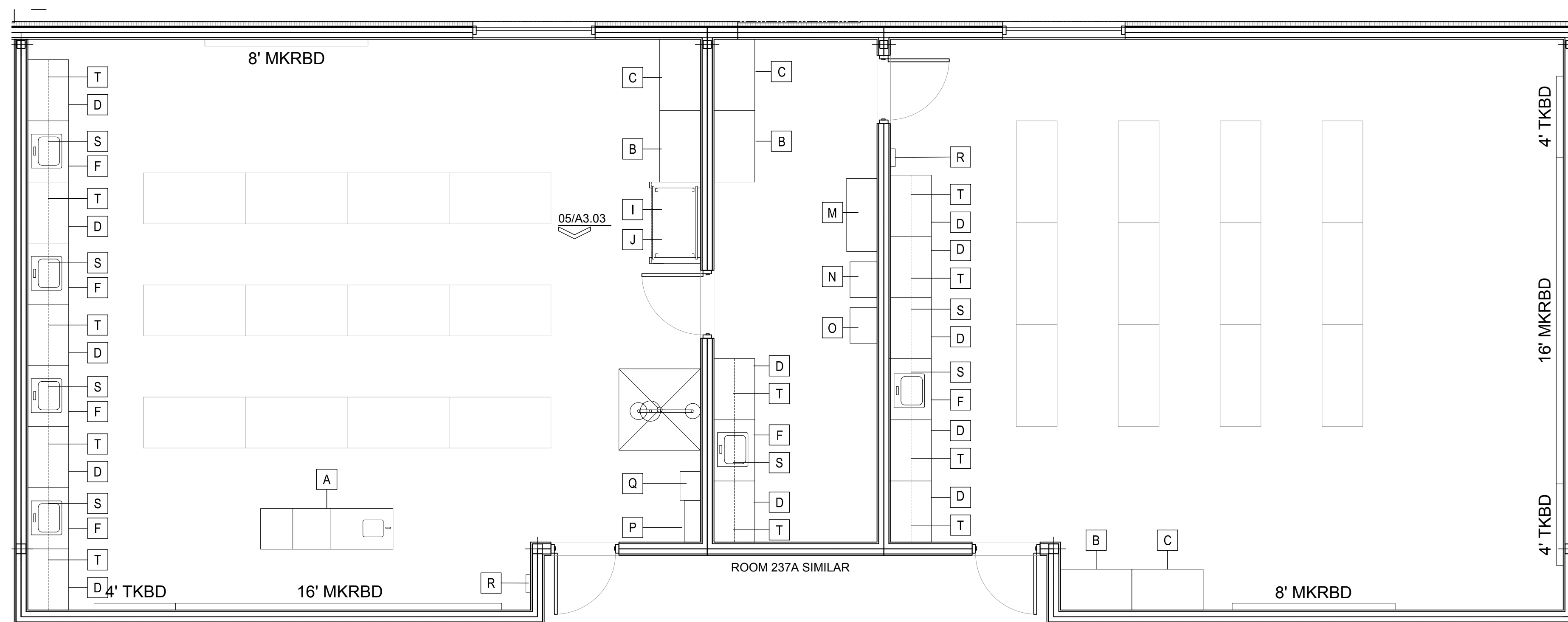
**CABINET SCHEDULE**

NO.	DESCRIPTION	H X D X L	MODEL NO.	REMARKS
A	INSTRUCTORS DESK			INSTRUCTORS TABLE
B	TALL BOOKCASE	84 X 22 X 42		W/ 1" ADJUSTABLE SHELVES
C	TALL BOOKCASE	84 X 22 X 42		W/ 1" ADJUSTABLE SHELVES
D	BASE CABINET	33 X 24 X 36		COUNTER TOP AT 34" A.F.F.
E				COUNTER TOP AT 34" A.F.F.
F	SINK BASE CABINET	33 X 24 X 36		COUNTER TOP AT 34" A.F.F.
G	CUPBOARD STORAGE			
H	ART CABINET	84 X 24 X 48		
I	FUME HOOD	57 X 30 X 48	EH-211-48	AIR MASTER SYSTEM MILLINIUM PROBABLY 2 BUSES SUBSTITUE
J	BASE CABINET	34 X 30 X 48		FUME HOOD BASE CABINET
K	TALL BOOKCASE	84 X 22 X 36		W/ 1" ADJUSTABLE SHELVES
L	BASE CABINET	34 X 24 X 48		
M	FUME CABINET	84 X 22 X 48	5690	W/ 1" SHELVES AND EXHAUST SERVICE
N	FLAMMABLE CABINET	62 X 15 X 20	1923	EAGLE MANUFACTURING
O	CORROSION CABINET	62 X 15 X 20	CRA-1923	EAGLE MANUFACTURING
P	SAFETY GOGGLES CASE	VERIFY W/ MANUF.	6784	
Q	FIRE BLANKET CASE	VERIFY W/ MANUF.	9960	
R	FIRST AID CASE	VERIFY W/ MANUF.	9962	
S	CUPBOARD STORAGE	30 X 12 X 36		
T	CUPBOARD STORAGE	30 X 12 X 36		
U				
V				



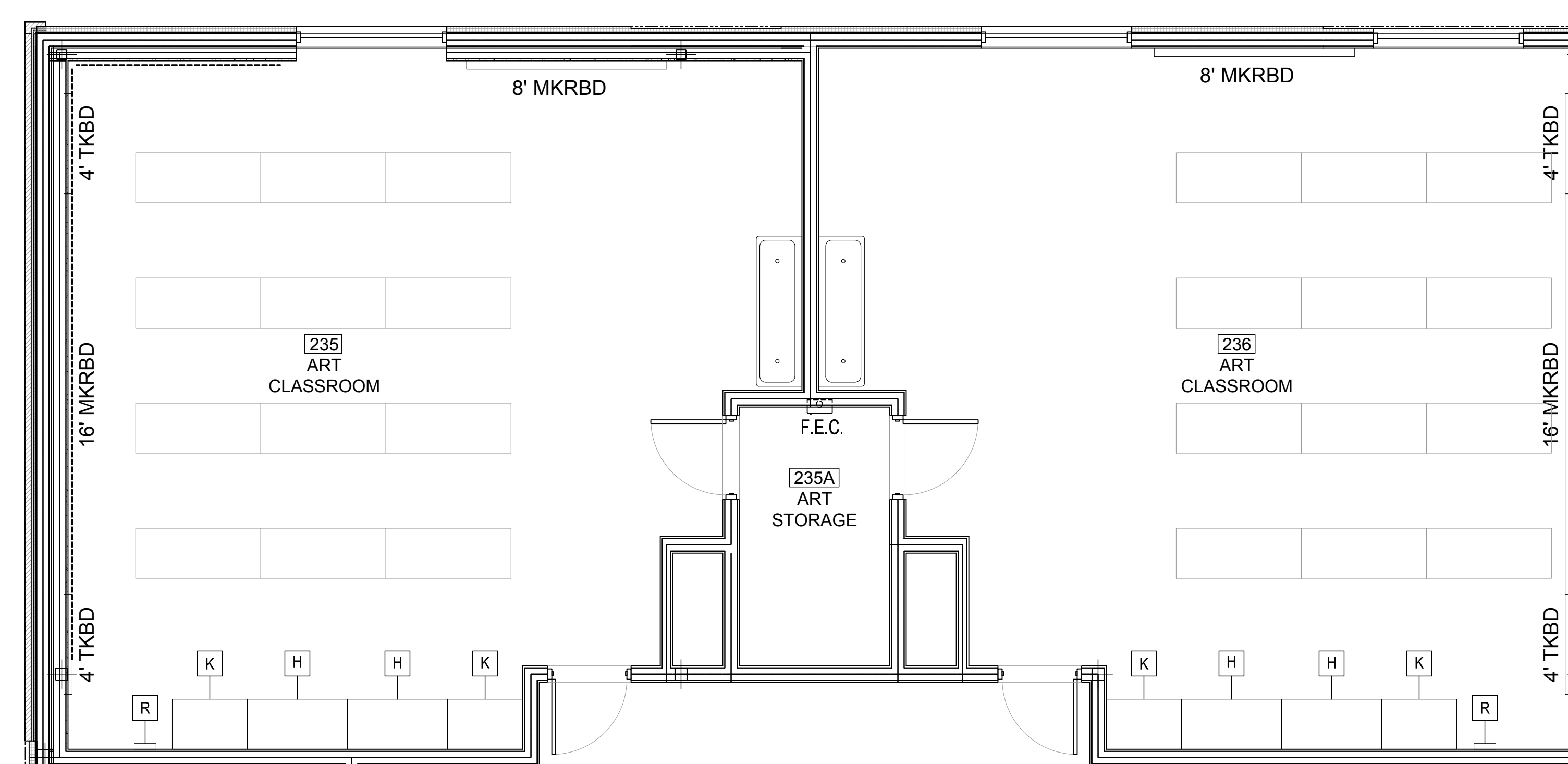
**05 FUME HOOD SECTION**

SCALE: 1/4" = 1'-0"



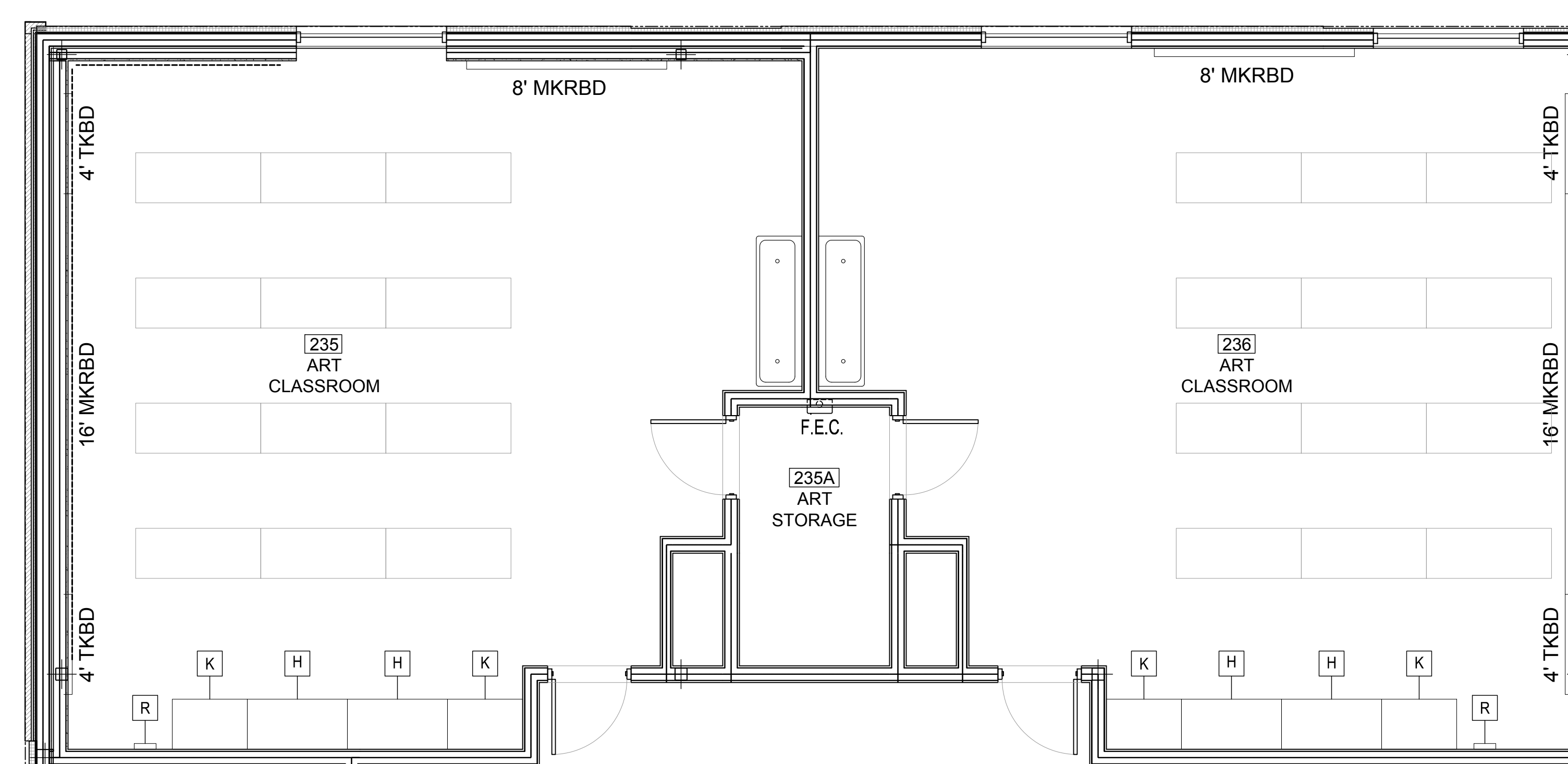
**02 CHEMISTRY CLASSROOM LAYOUT**

SCALE: 1/4" = 1'-0"  
ROOM 237 SIMILAR



**03 PHYSICS CLASSROOM LAYOUT**

SCALE: 1/4" = 1'-0"  
ROOM 238 SIMILAR



**04 ART CLASSROOM LAYOUT**

SCALE: 1/4" = 1'-0"

No. REVISIONS BY

GMS ARCHITECTS  
1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

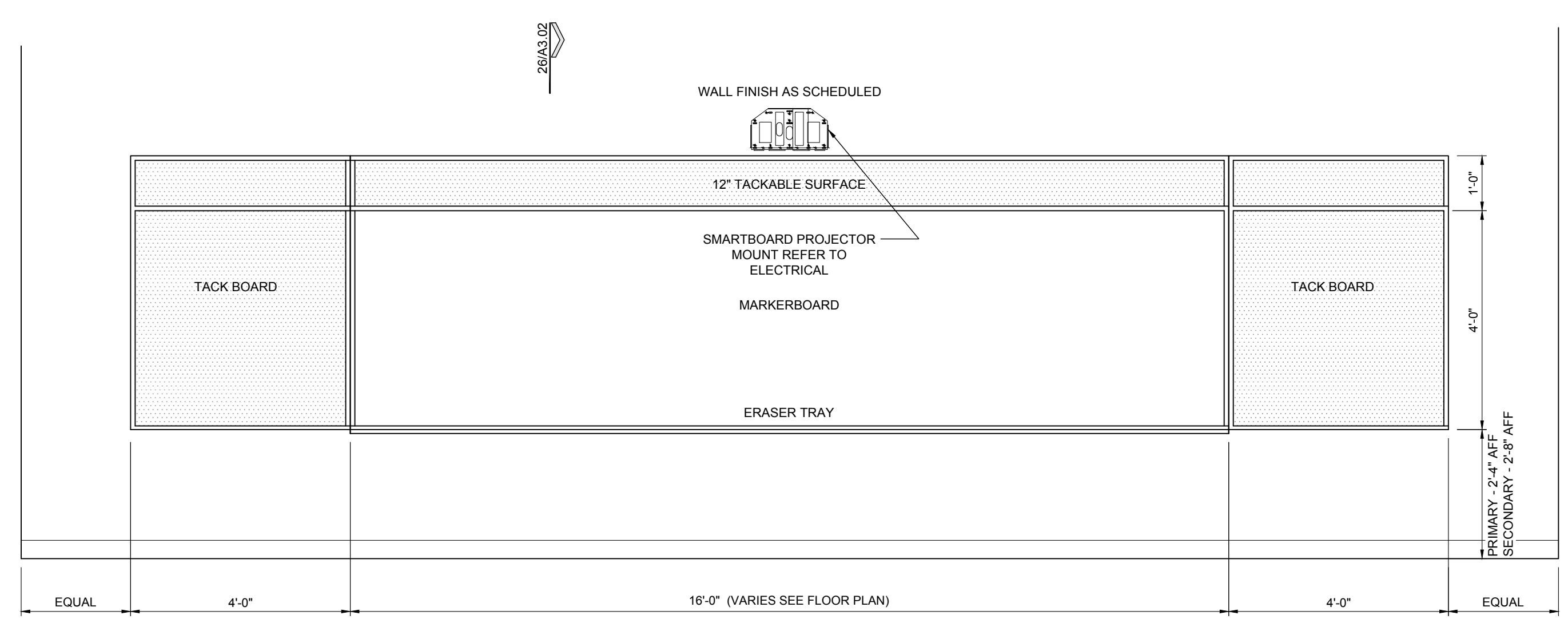
**IDEA-OWASSA  
COLLEGE PREP PHASE II**

**IDEA** Public Schools

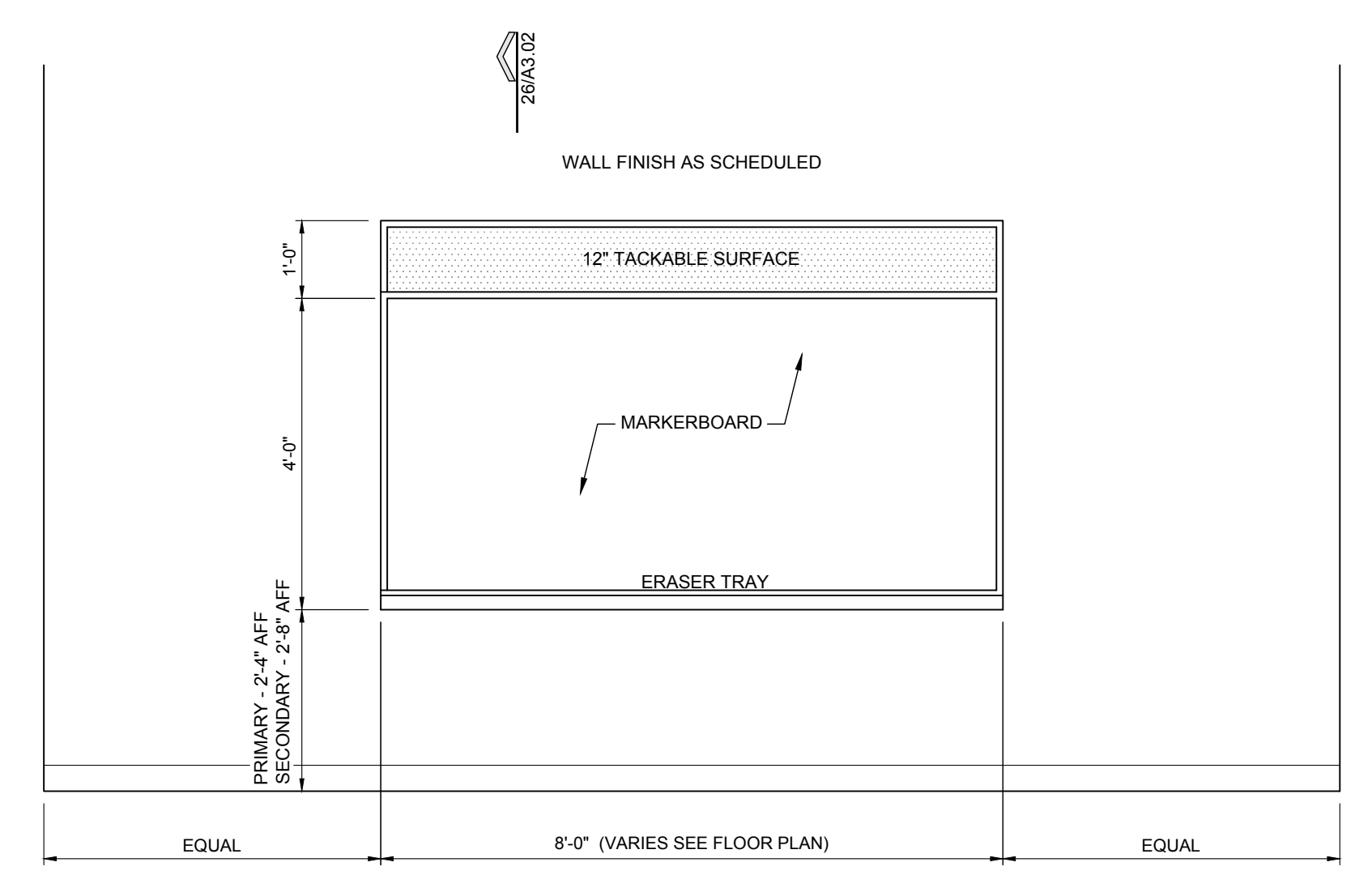
© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers  
Date: March 21, 2019  
Scale: As Noted  
Project Architect: David A. Monreal, AIA  
Drawn By: J. Alvarado  
Job No: IDEA PHASE II  
Sheet: A3.03

**A3.03**

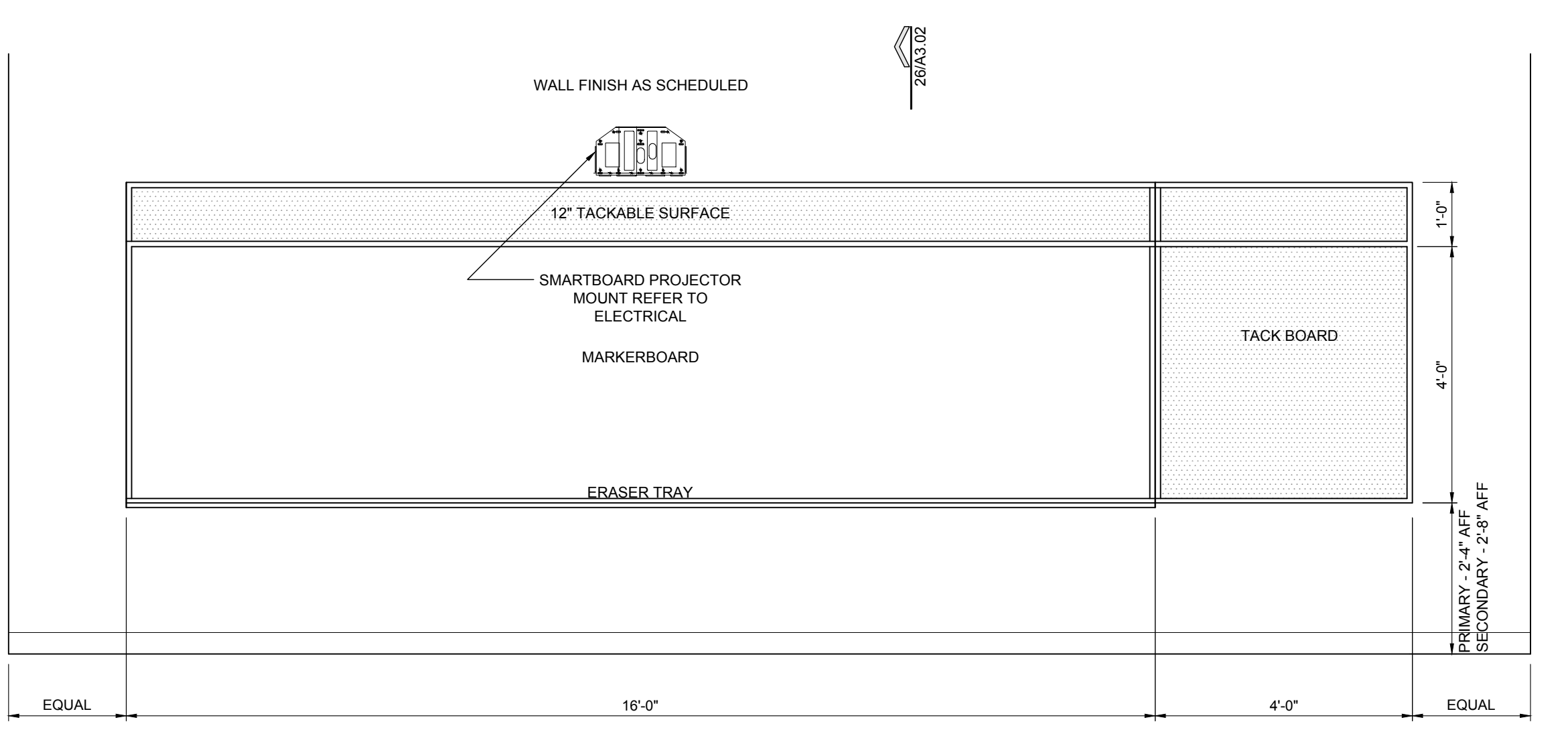




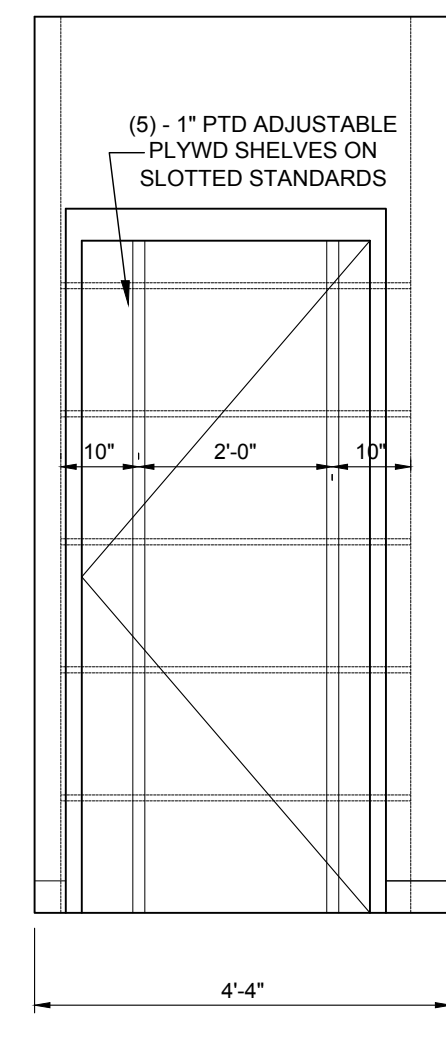
**01 TYPICAL CLASSROOM ELEVATION**  
SCALE 1/2" = 1'-0"  
PROVIDE WOOD BLOCKING BEHIND PROJECTOR LOCATION



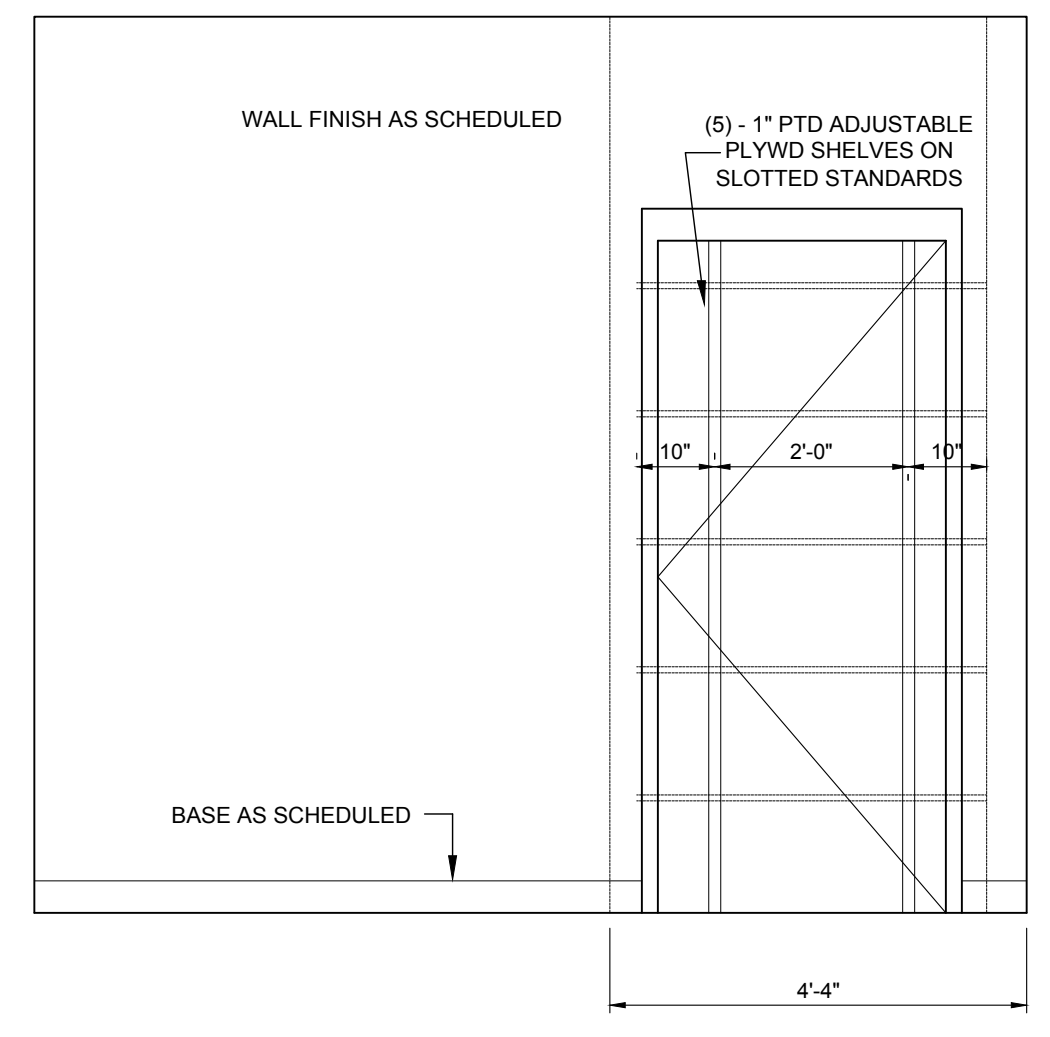
**02 TYPICAL CLASSROOM ELEVATION**  
SCALE 1/2" = 1'-0"



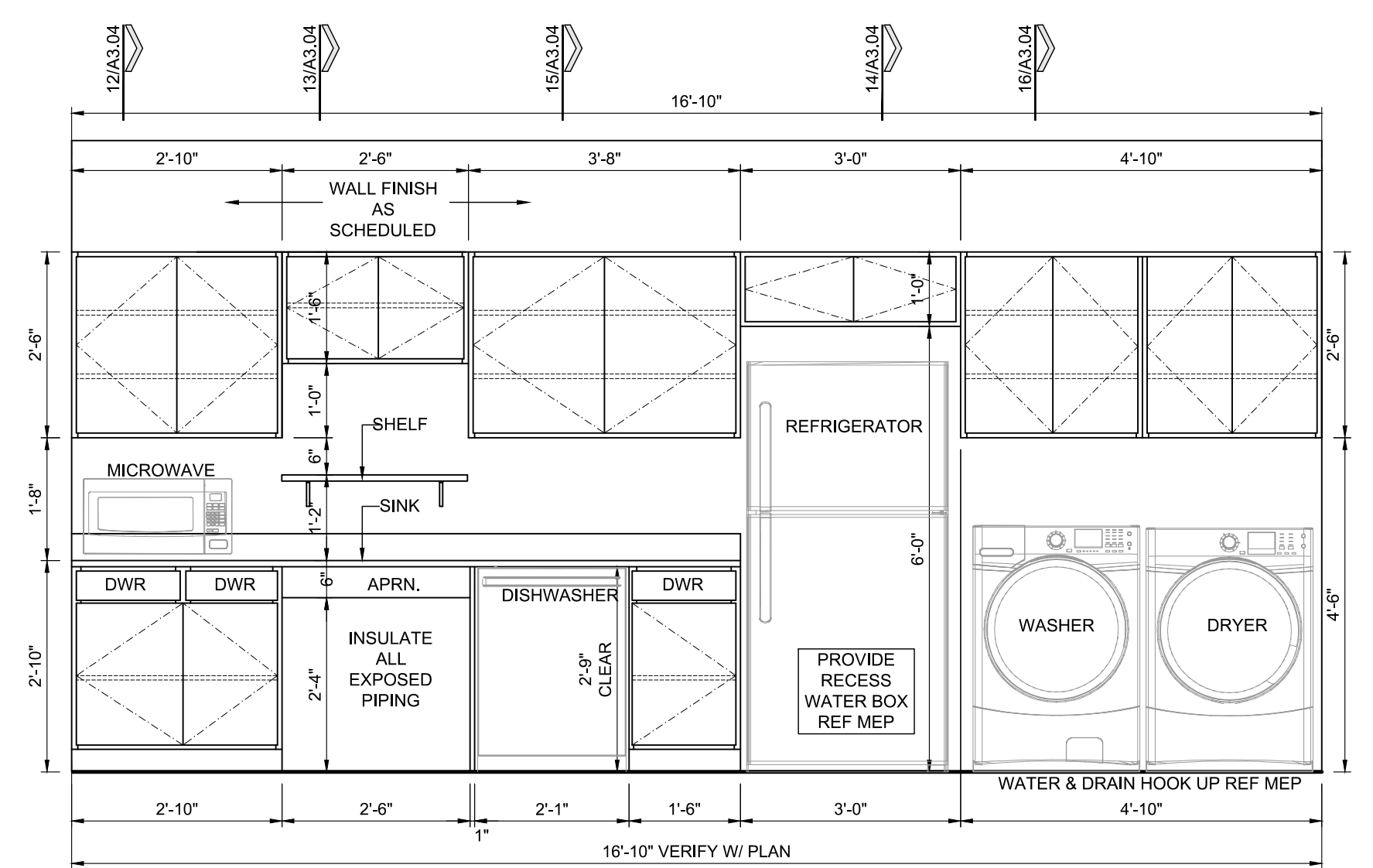
**05 TYPICAL CLASSROOM ELEVATION**  
SCALE 1/2" = 1'-0"  
PROVIDE WOOD BLOCKING BEHIND PROJECTOR LOCATION



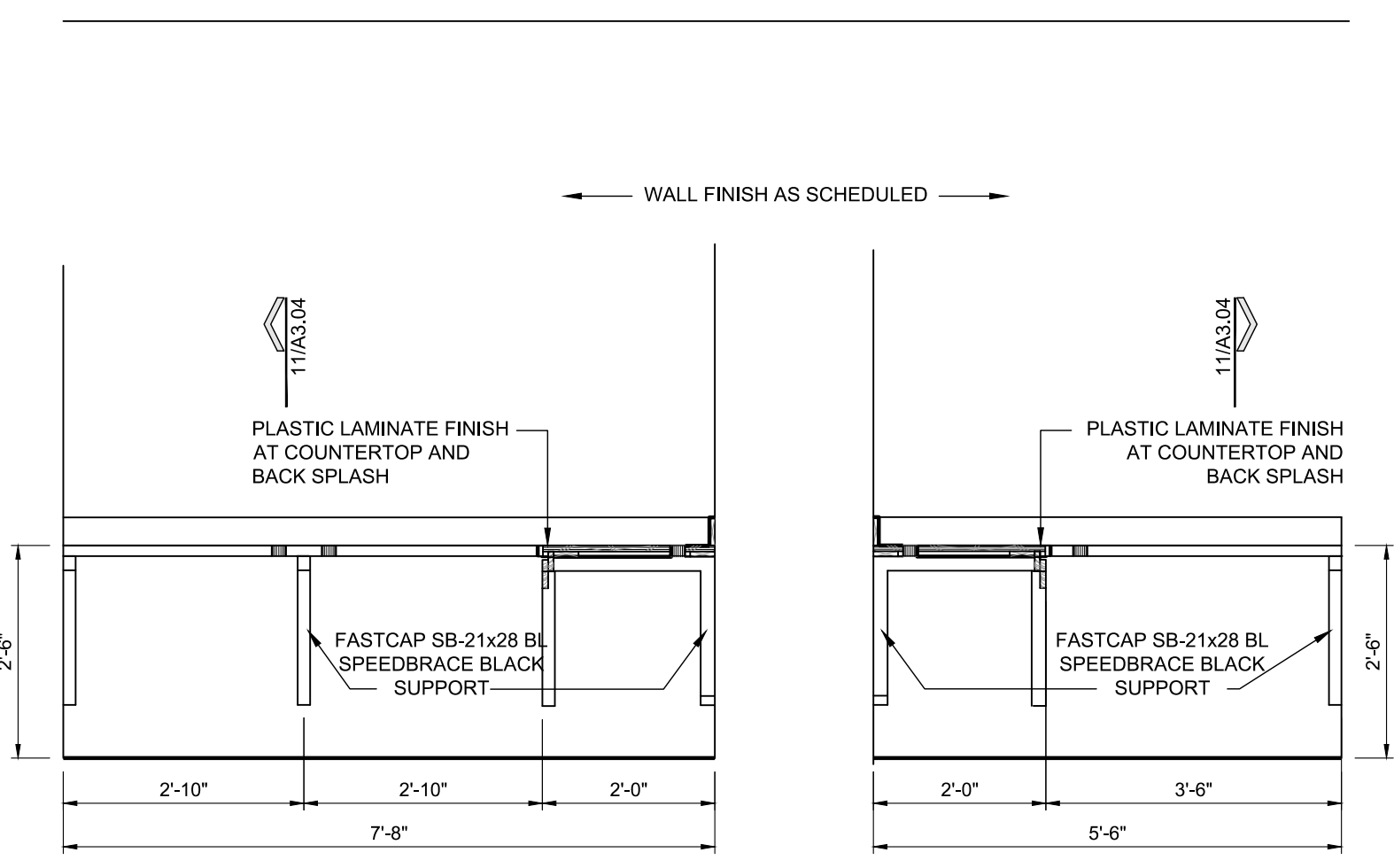
**03 TYPICAL CLASSROOM ELEVATION**  
SCALE 1/2" = 1'-0"



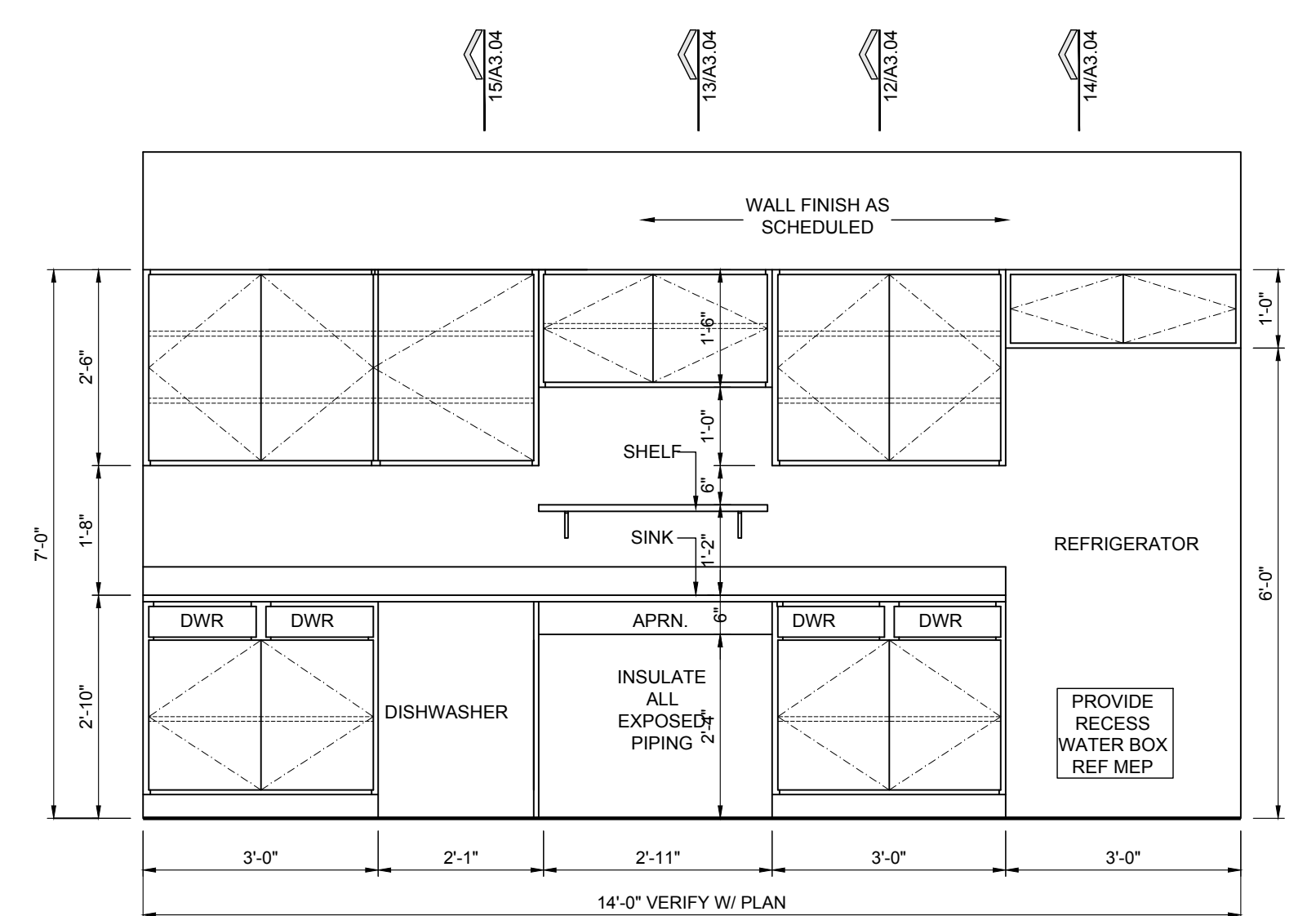
**04 TYPICAL CLASSROOM ELEVATION**  
SCALE 1/2" = 1'-0"



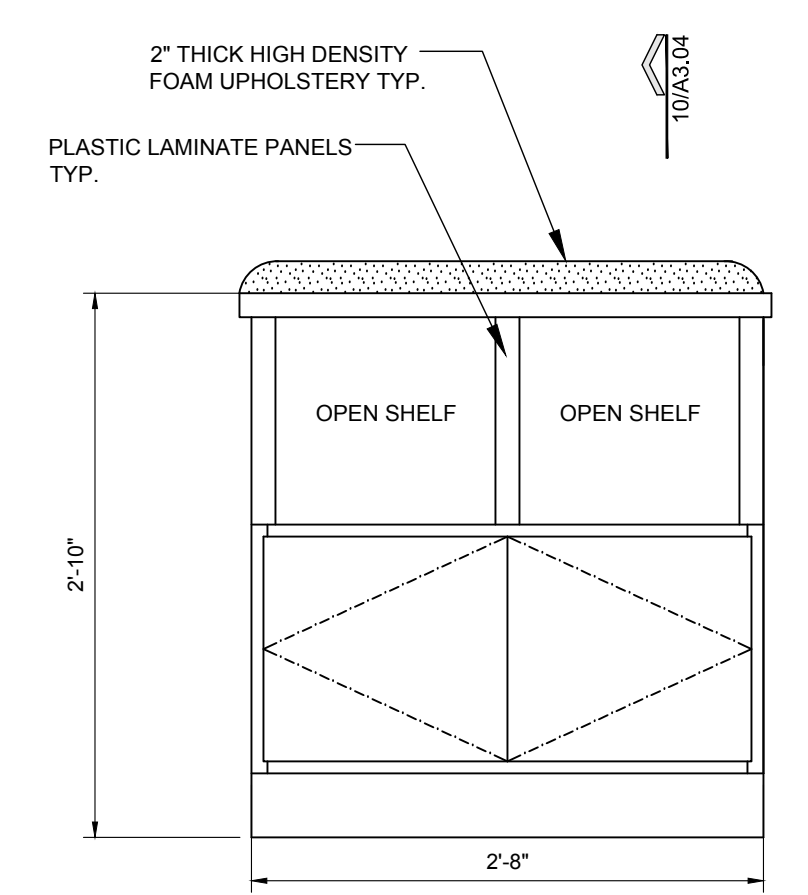
**06 CABINET ELEVATION**  
SCALE 1/2" = 1'-0"  
SIMILAR OPPOSITE HAND



**07 TYPICAL CLASSROOM ELEVATION**  
SCALE 1/2" = 1'-0"

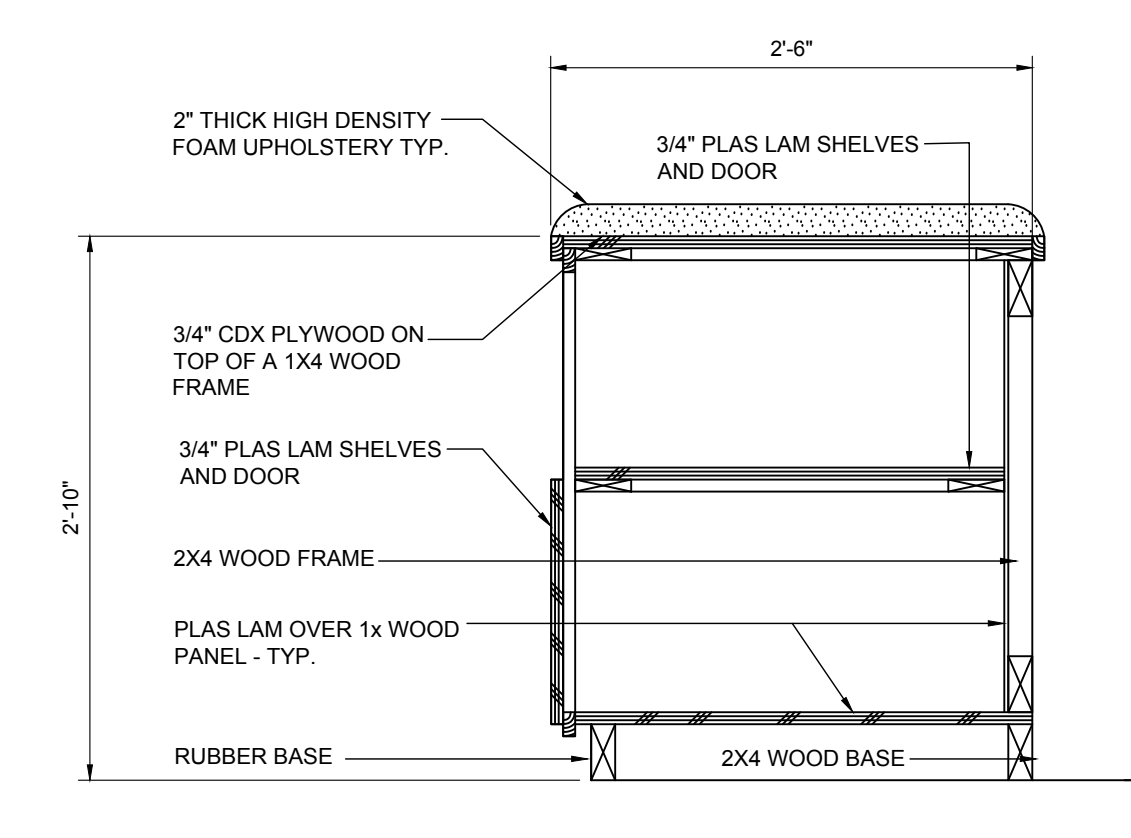


**08 CABINET ELEVATION**  
SCALE 1/2" = 1'-0"

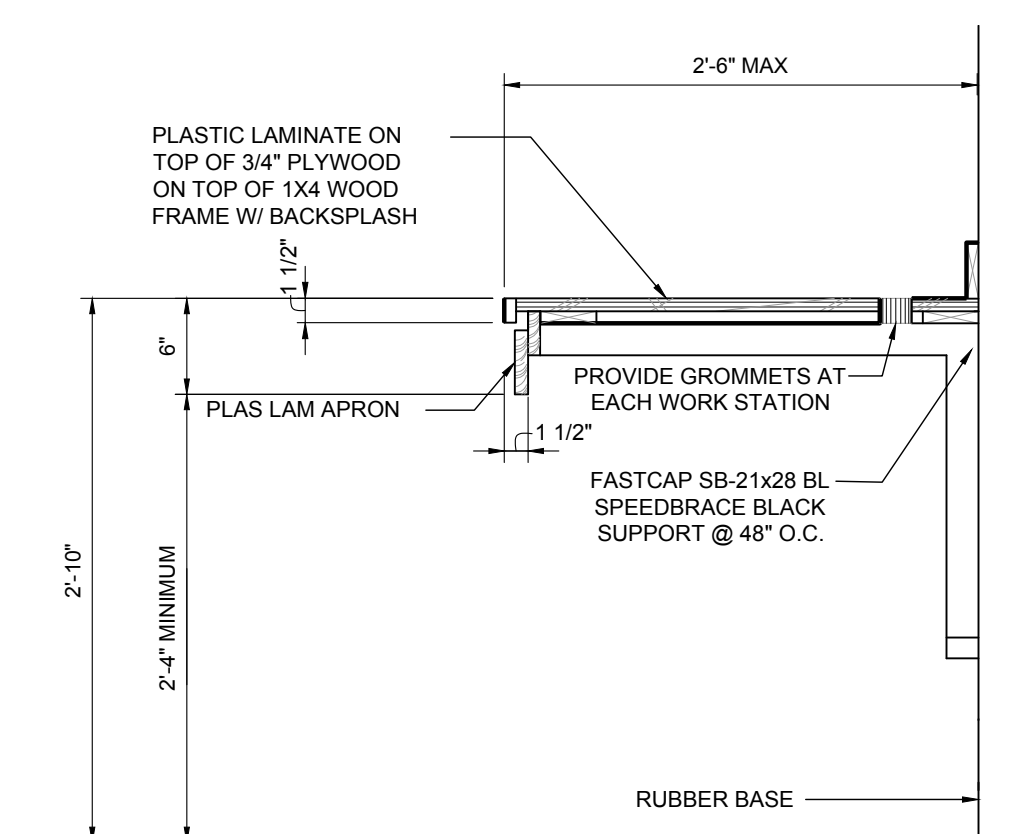


**09 CABINET SECTION**  
SCALE 1" = 1'-0"  
\* PROVIDE CYLINDER LOCKS AT CABINET DRAWERS AND DOORS  
\* EACH CUSHIONED BENCH TO BE RATED UP TO 450 LBS.

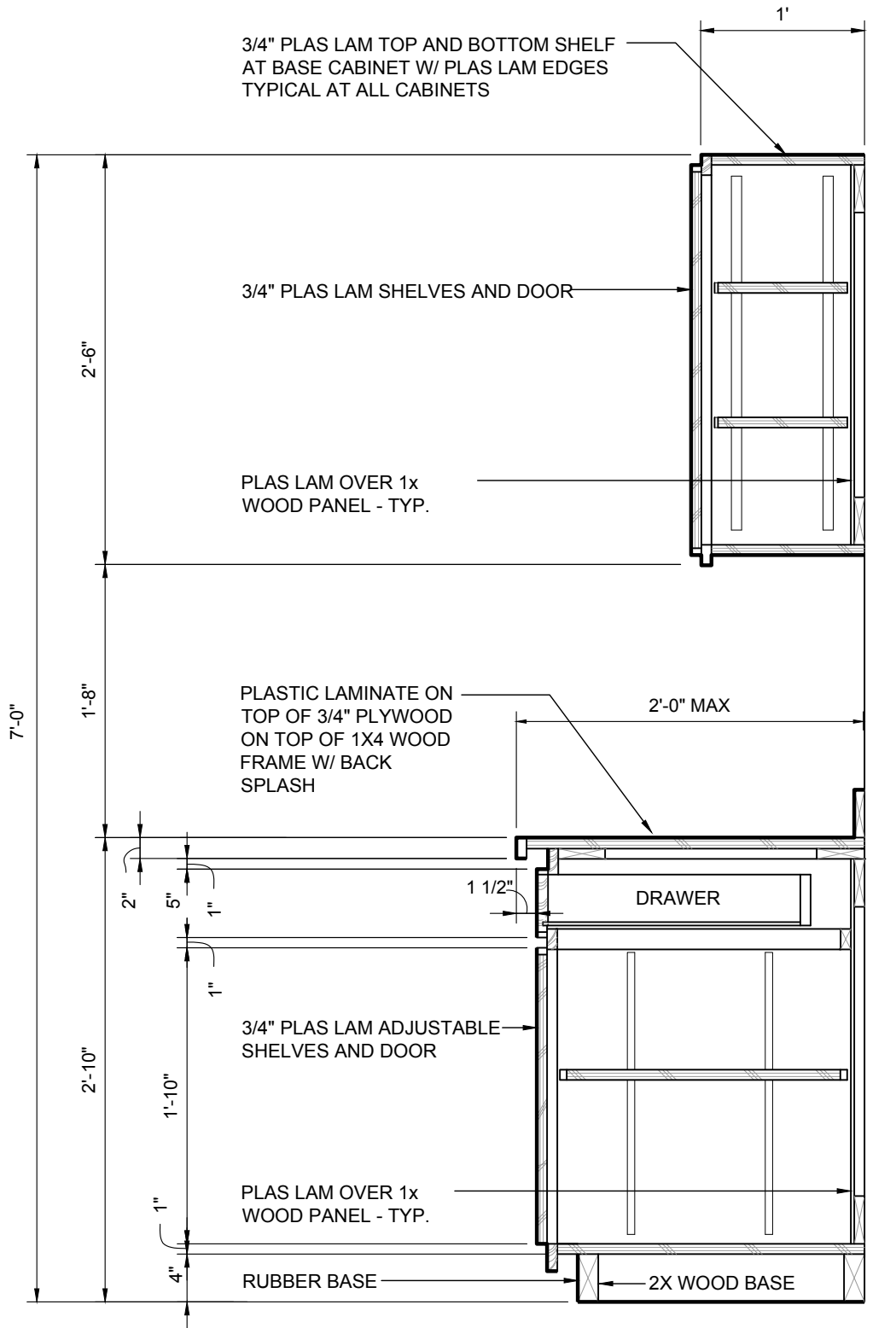
ALL MILLWORK FACES, DOORS AND SHELVES TO HAVE PLYWOOD CORES



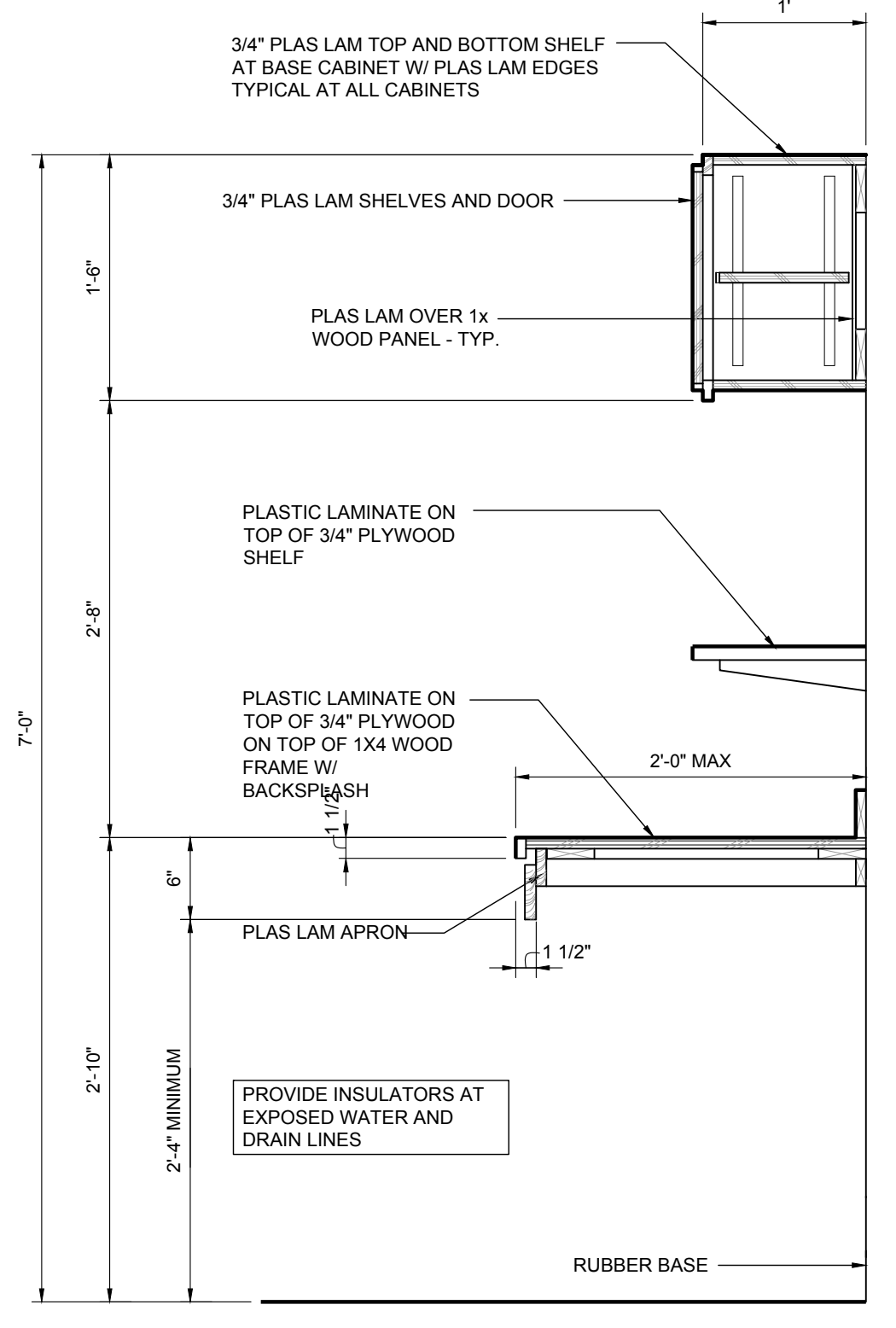
**10 CABINET SECTION**  
SCALE 1" = 1'-0"



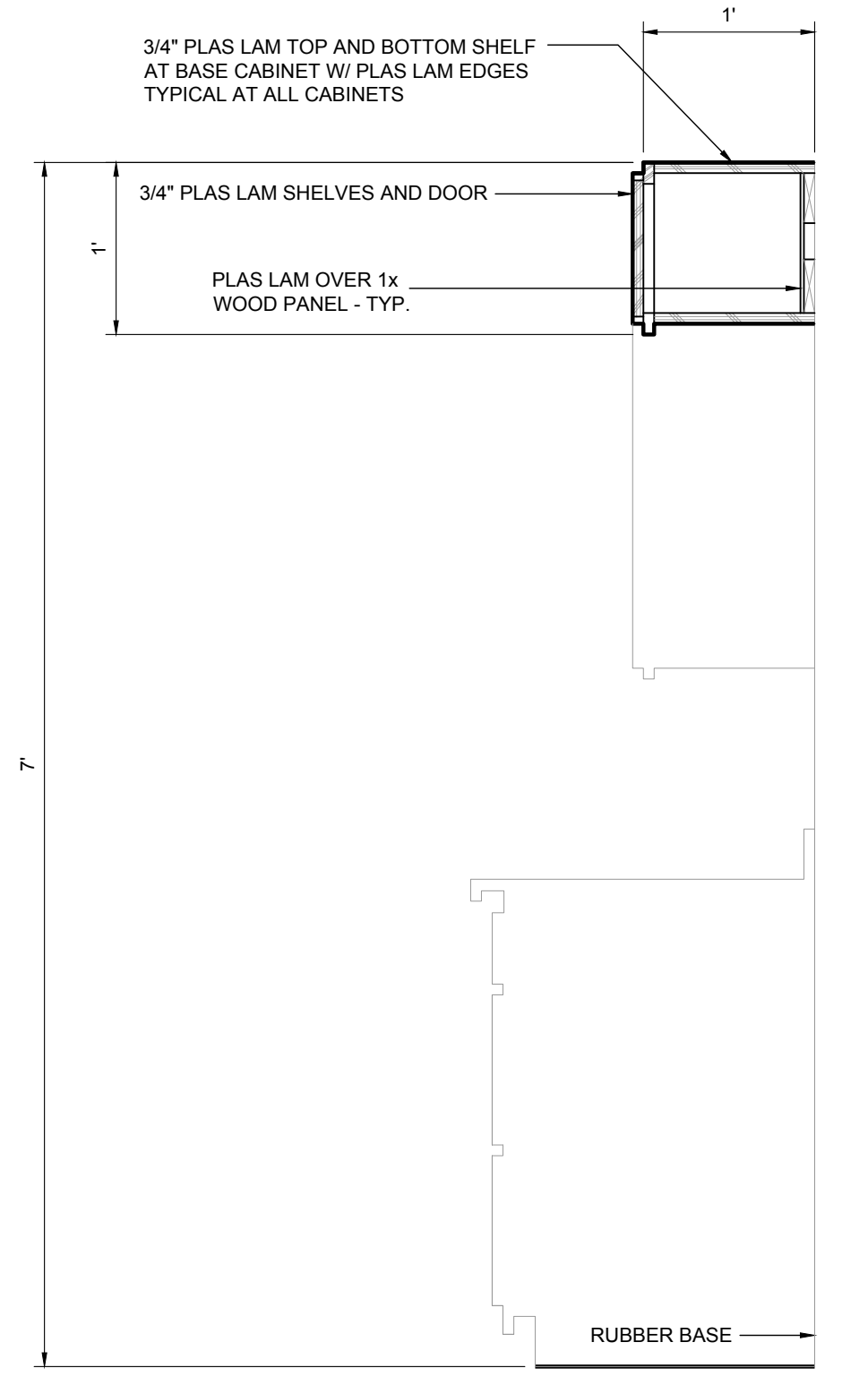
**11 CABINET SECTION**  
SCALE 1" = 1'-0"



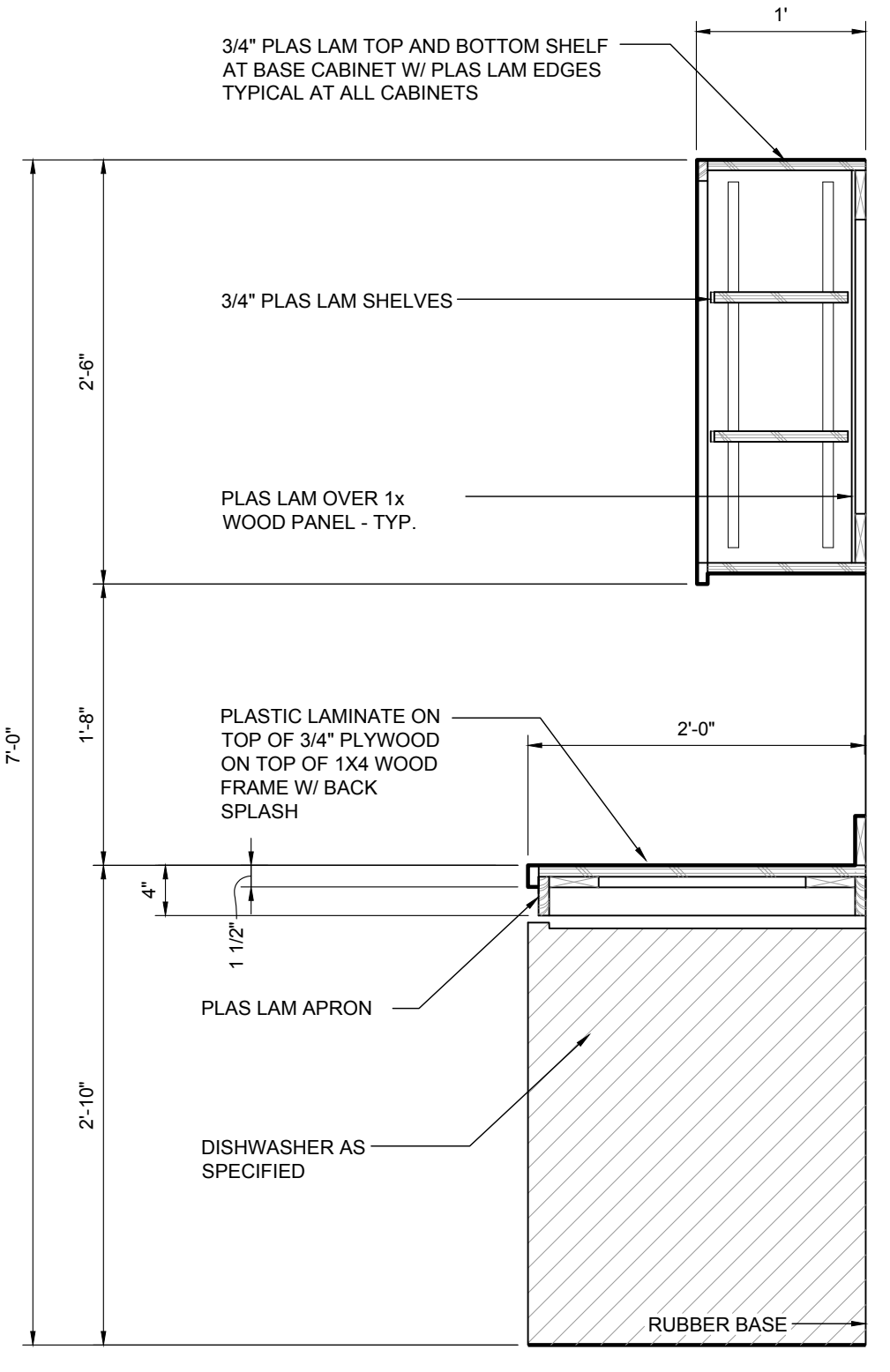
**12 CABINET SECTION**  
SCALE 1" = 1'-0"



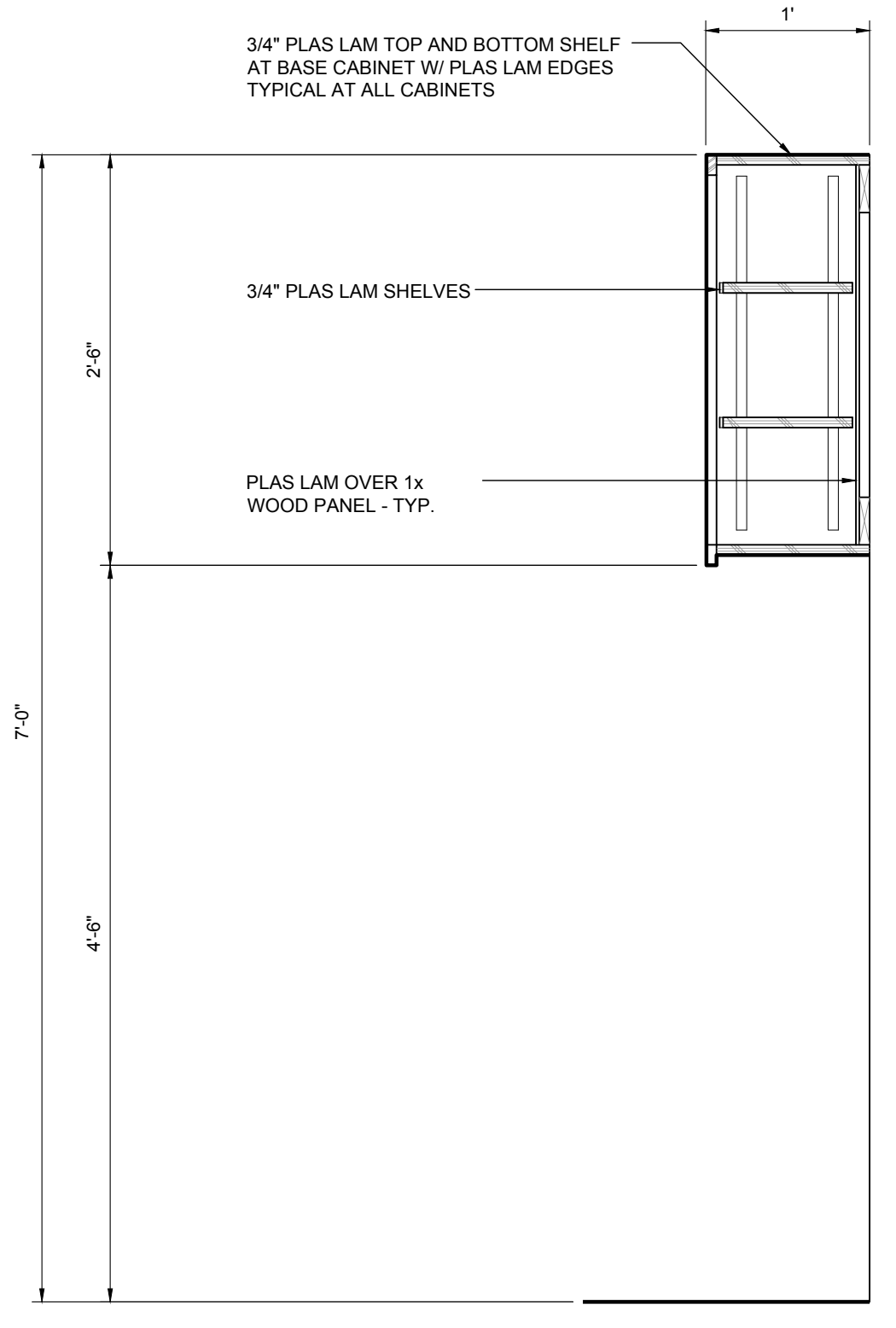
**13 CABINET SECTION**  
SCALE 1" = 1'-0"



**14 CABINET SECTION**  
SCALE 1" = 1'-0"

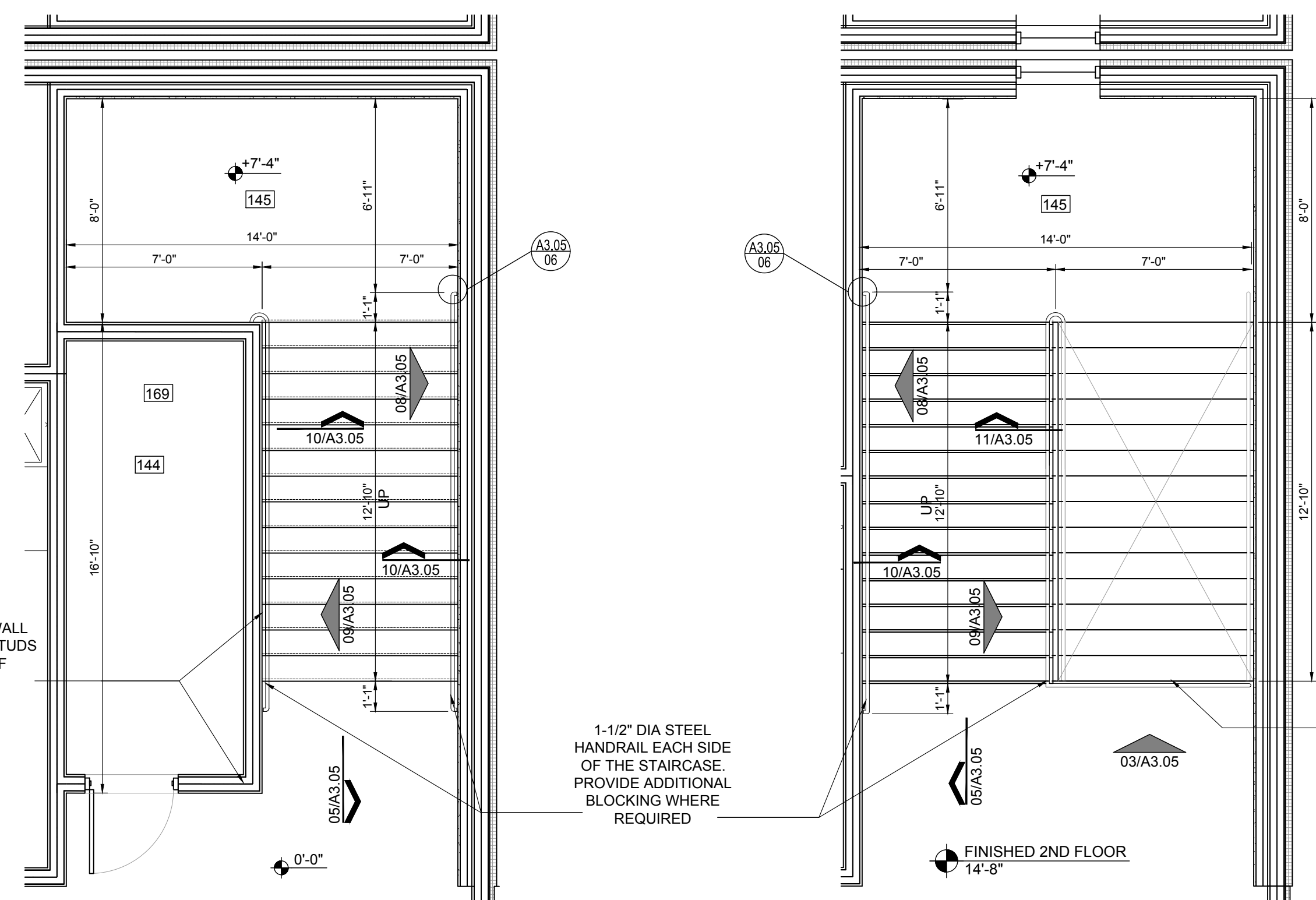


**15 CABINET SECTION**  
SCALE 1" = 1'-0"



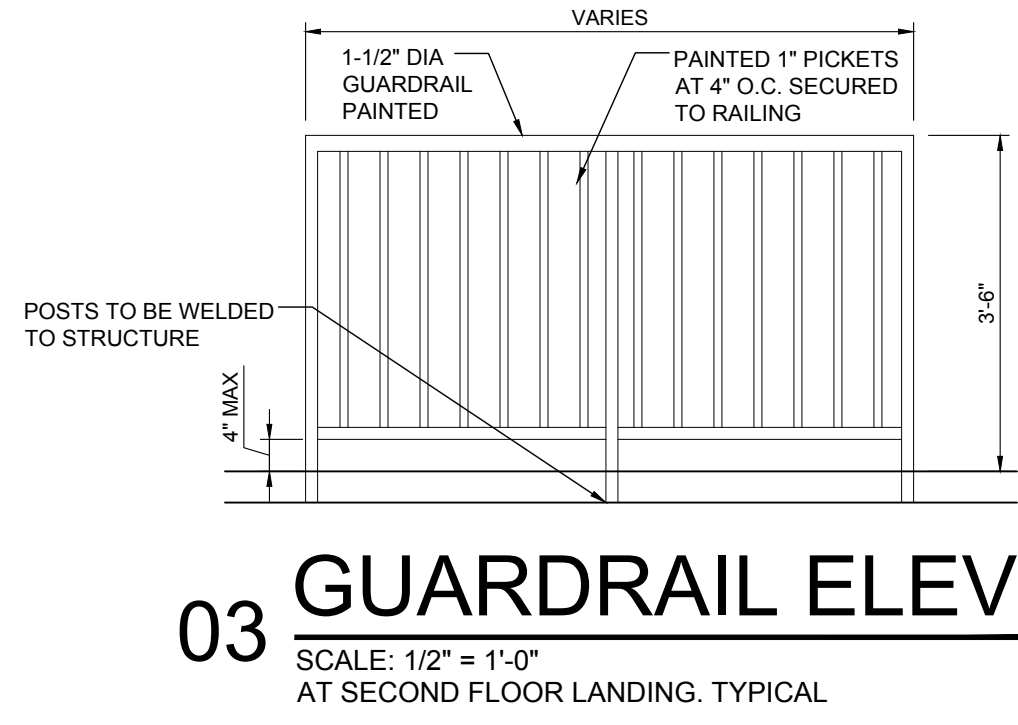
**16 CABINET SECTION**  
SCALE 1" = 1'-0"



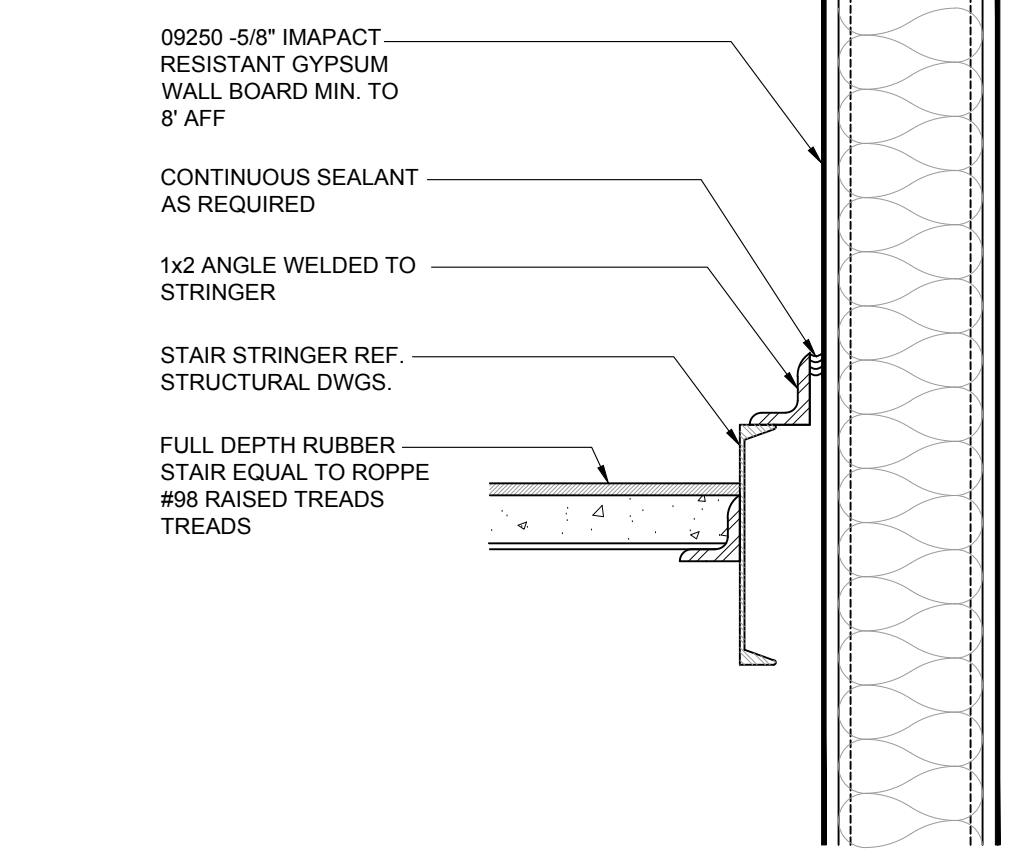


01 SOUTH - 1ST FLOOR STAIRWELL PLAN  
SCALE: 1/4" = 1'-0"

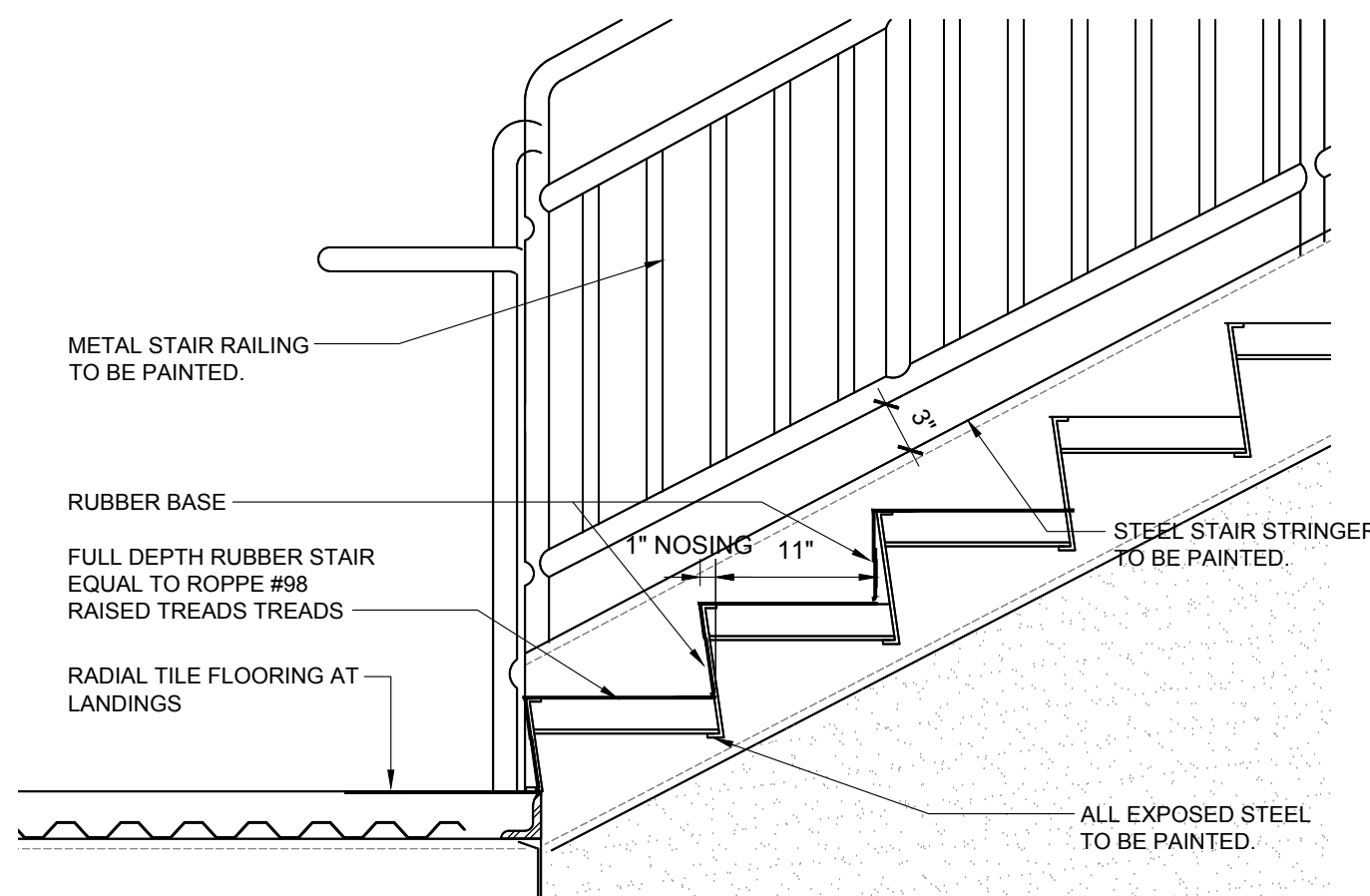
02 SOUTH - 2ND FLOOR STAIRWELL PLAN  
SCALE: 1/4" = 1'-0"



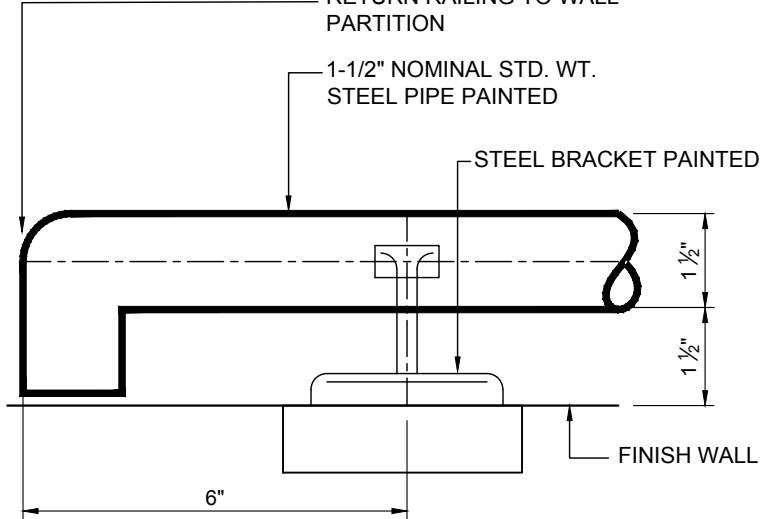
03 GUARDRAIL ELEV.  
SCALE: 1/2" = 1'-0"  
AT SECOND FLOOR LANDING, TYPICAL



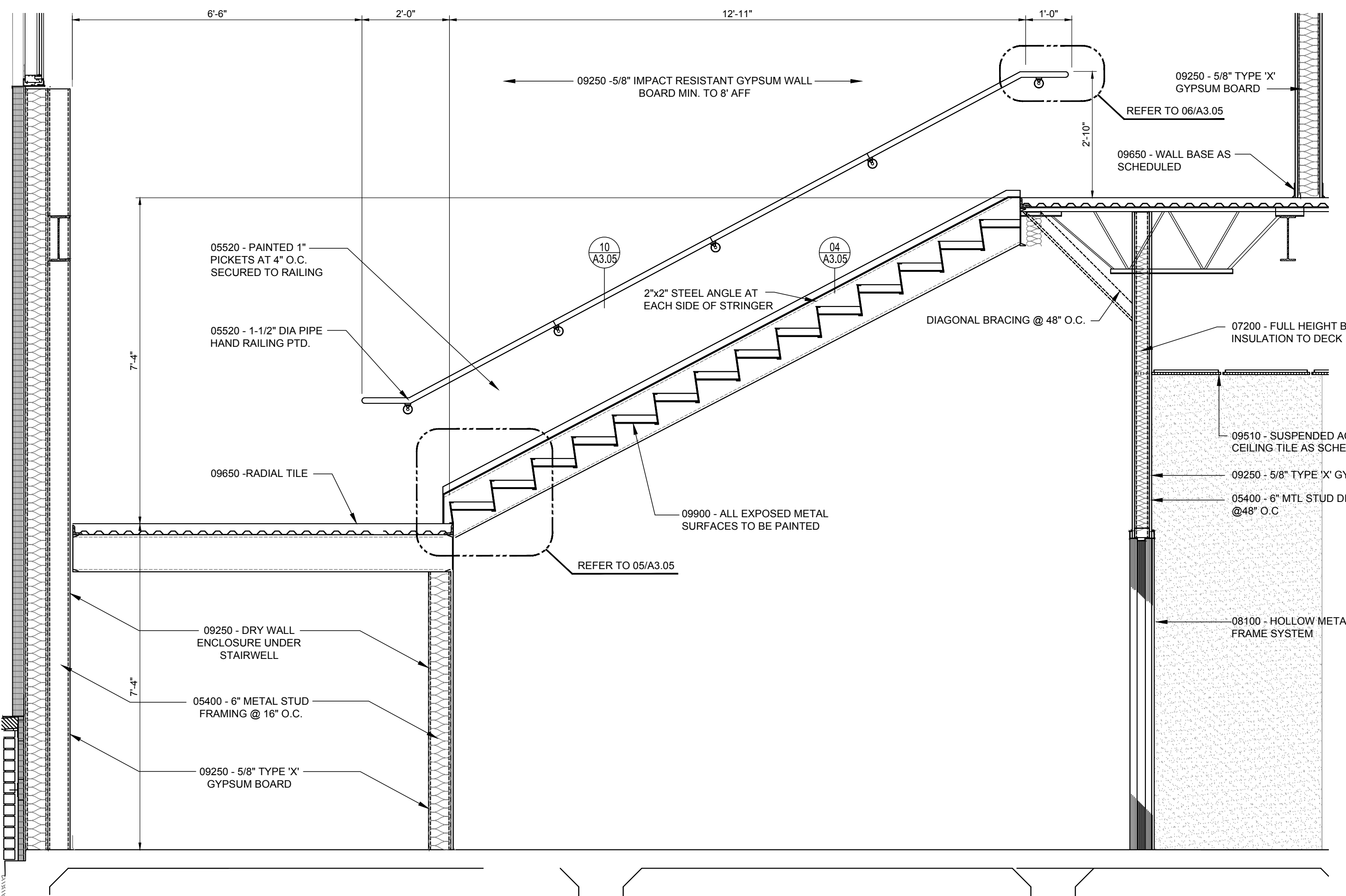
04 JOINT AT WALL  
SCALE: 1-1/2" = 1'-0"  
TYPICAL AT BOTH SIDES OF STAIRS



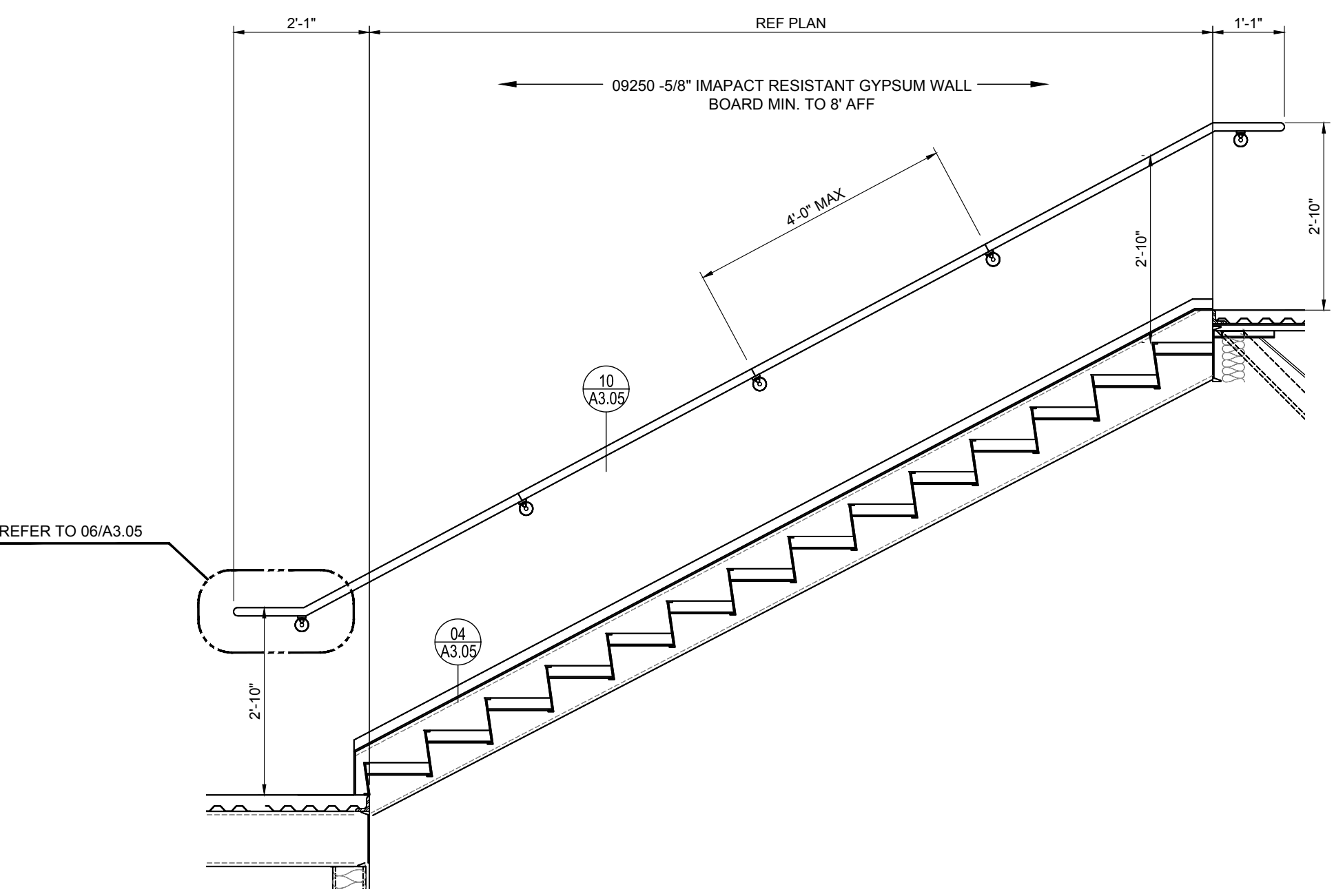
05 STAIRTREAD SECTION  
SCALE: 1" = 1'-0"



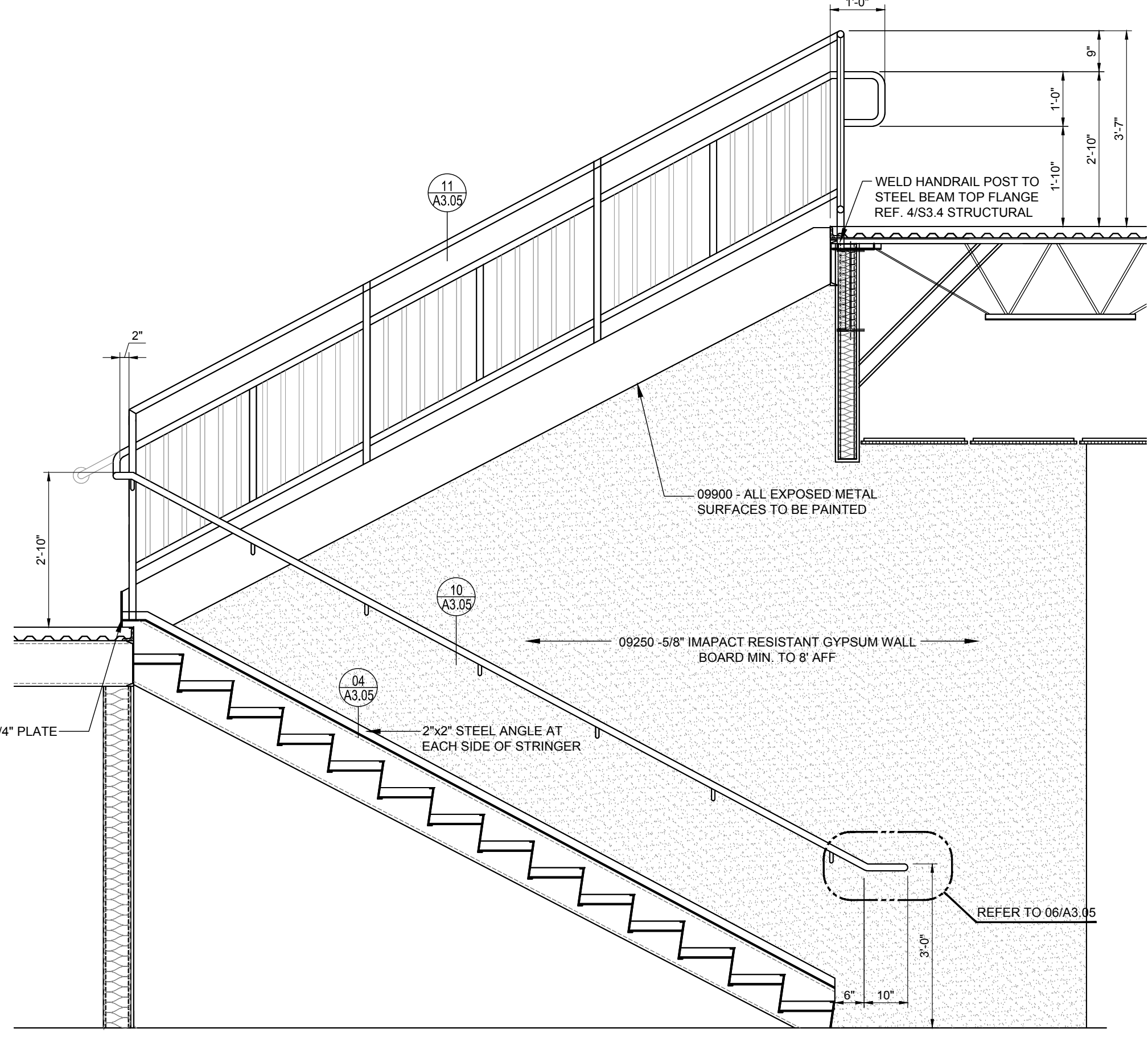
06 HANDRAIL DETAIL  
SCALE: 3" = 1'-0"



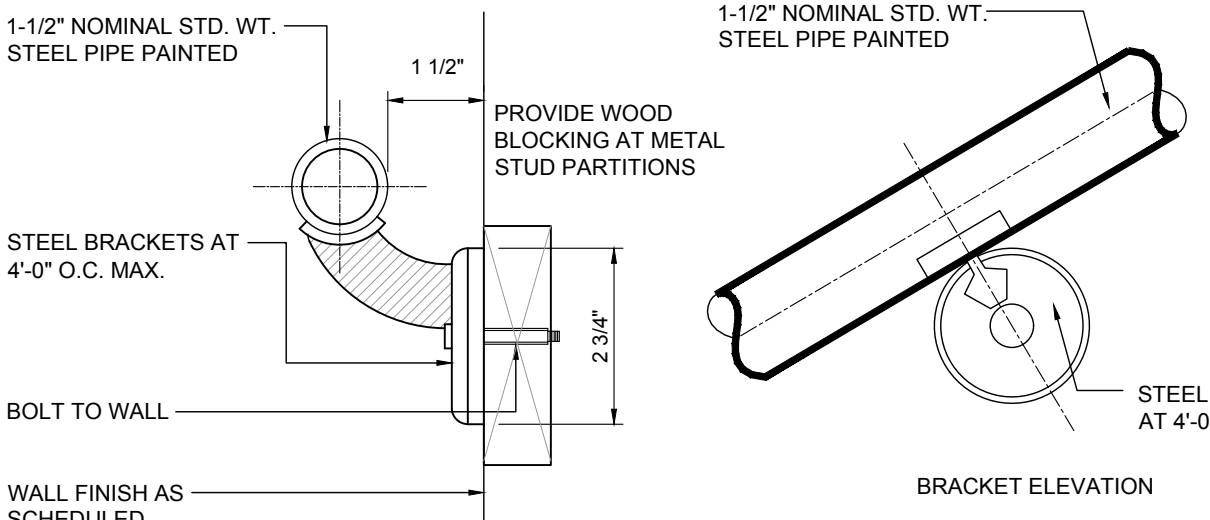
07 STAIRWELL SECTION  
SCALE: 1/2" = 1'-0"



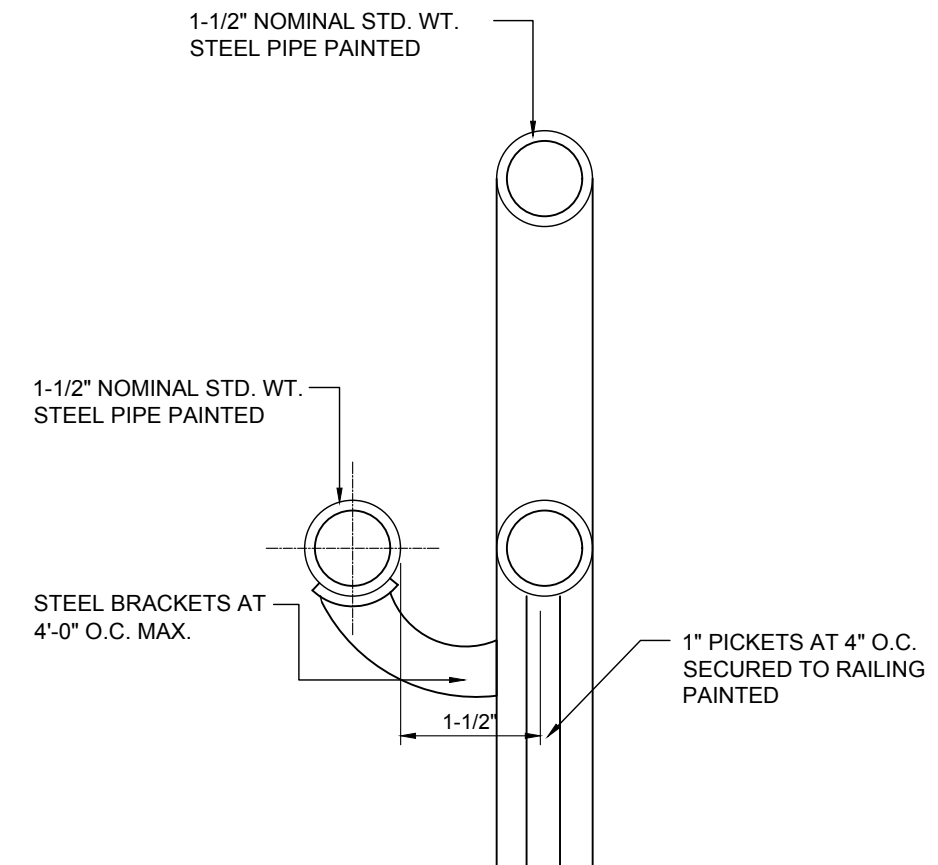
08 HANDRAIL ELEVATION  
SCALE: 1/2" = 1'-0"



09 HANDRAIL / GUARD ELEVATION  
SCALE: 1/2" = 1'-0"

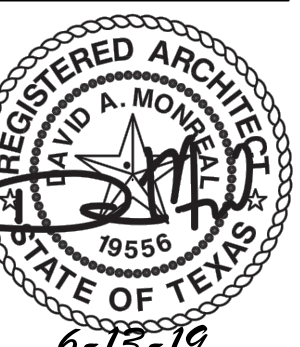


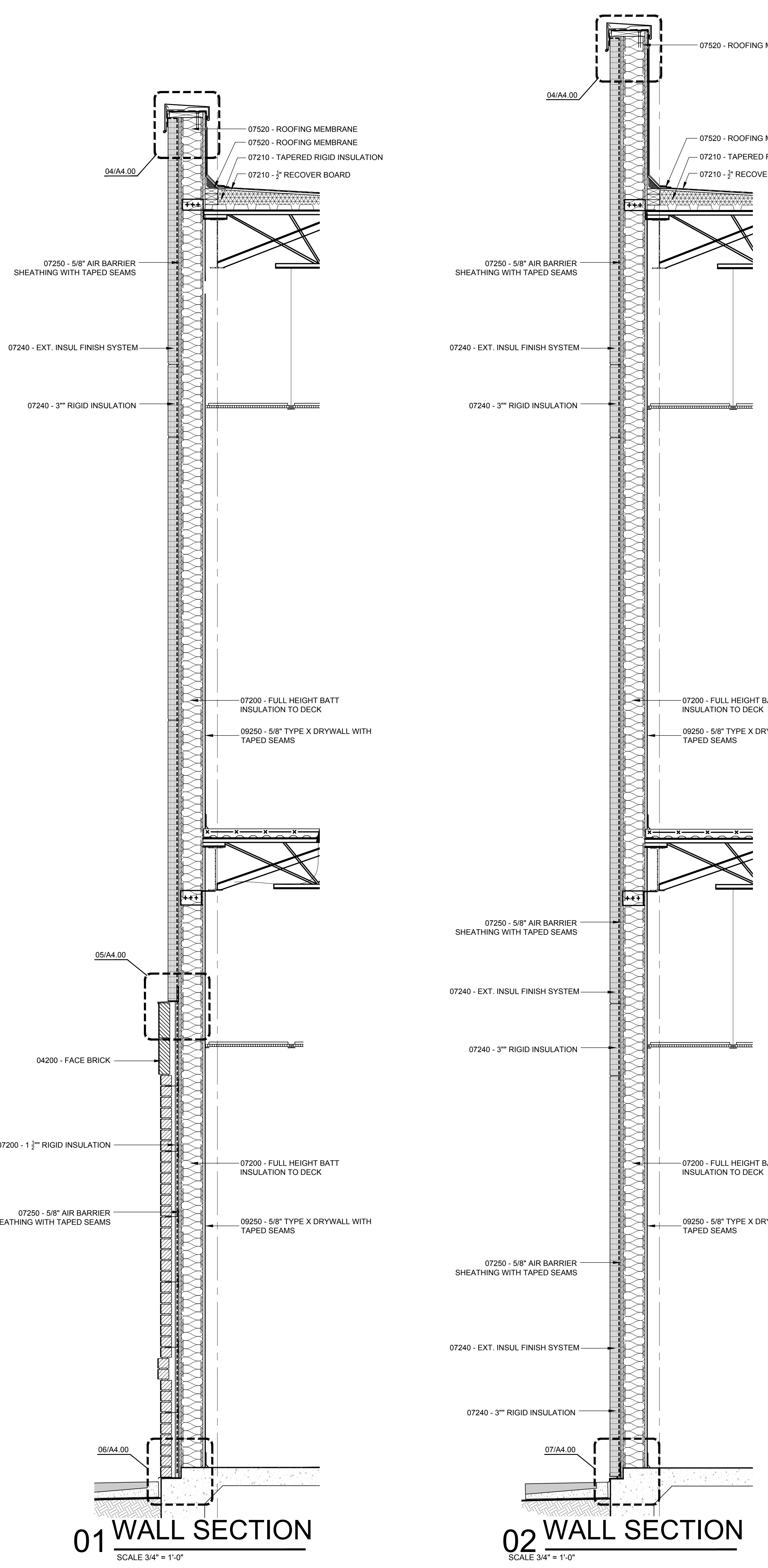
10 HANDRAIL DETAIL  
SCALE: 3" = 1'-0"



11 GUARDRAIL DETAIL  
SCALE: 3" = 1'-0"

IDEA-OWASSA COLLEGE PREP PHASE II  
 Public Schools





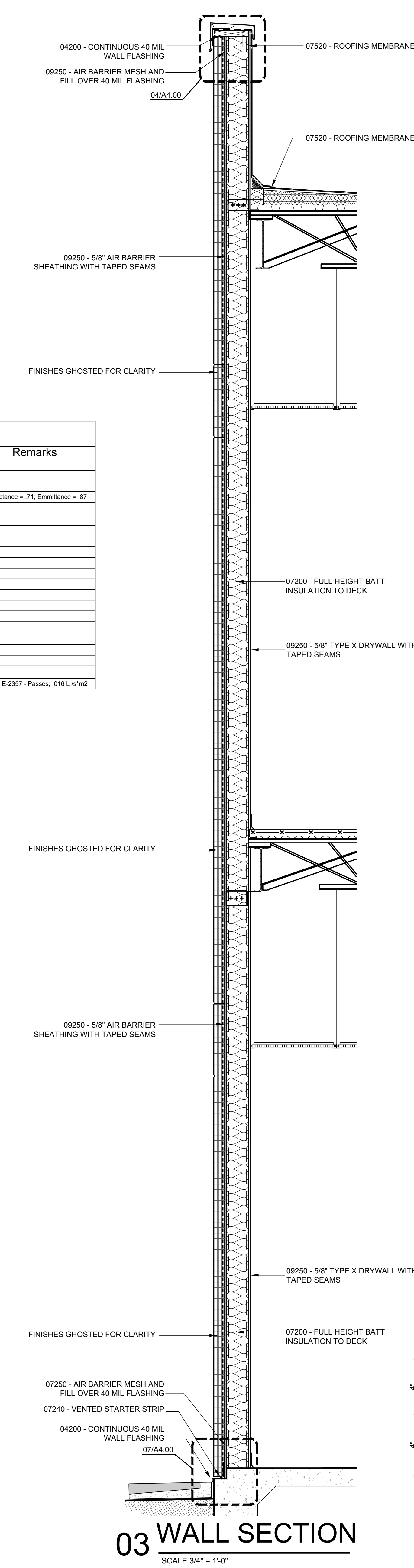
01 WALL SECTION  
SCALE 3/4" = 1'-0"

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

IECC COMPONENT WALL SECTIONS

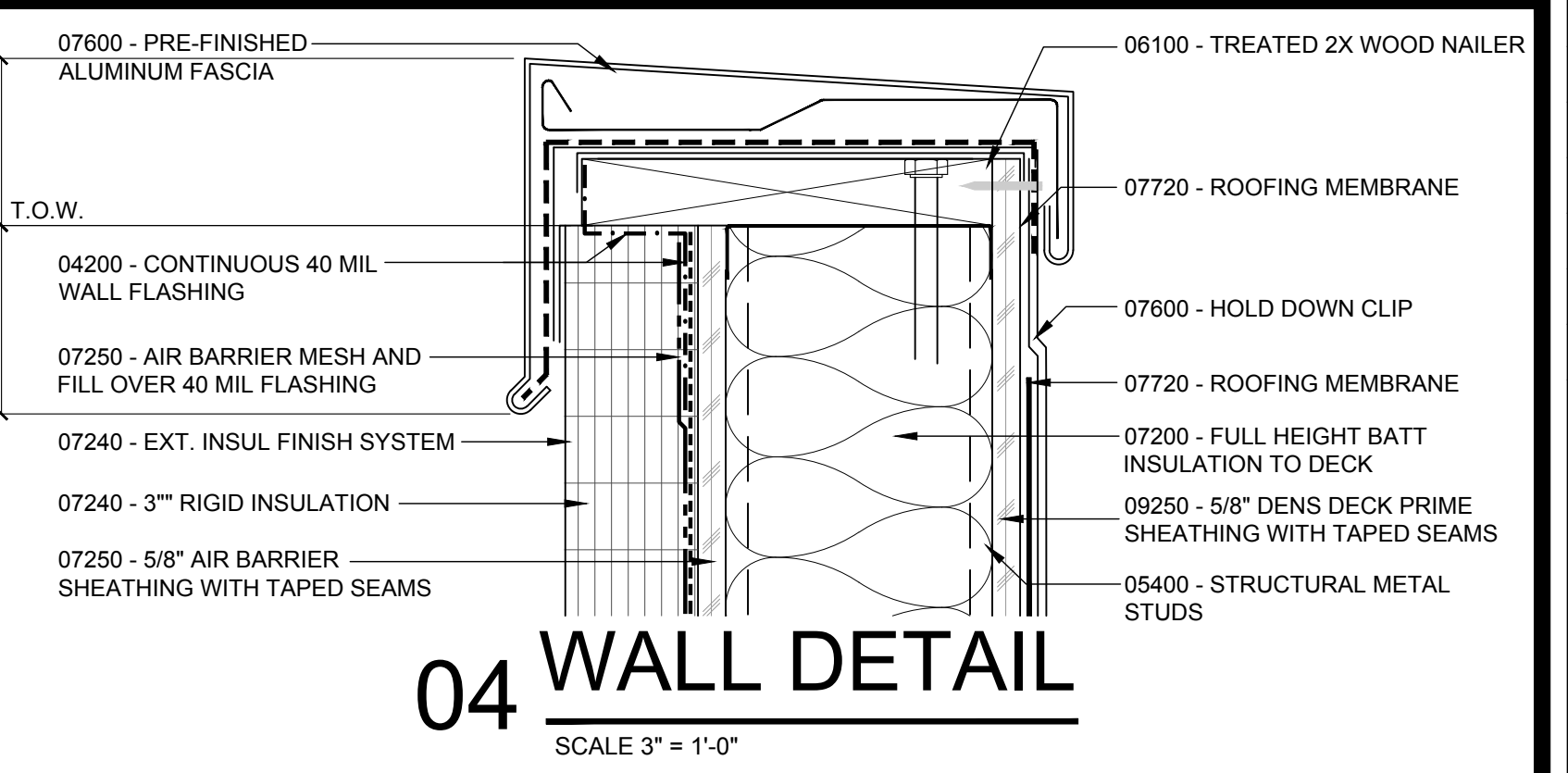
**IECC Component Schedule - Prescriptive**

Component Name	Design Material	Thermal Value	Remarks
<b>Roof</b>			
07210	Tapered Rigid Insulation - Average	Jones Manville - Enrigy 3	Average R-Value = 34.2
07210	1/2" Recover Board	GP DensDeck Prime	R-Value = .56
07520	Modified Bitumen Cap Sheet	Firestone Premium FR Ultra White	Reflectance = .71; Emittance = .87
<b>Wall</b>			
09250	5/8" Type X Drywall	GP 5/8" Type X Drywall	R-Value = .48    A: 0.48    B: 0.48    C: 0.48
07200	6" Batt Insulation	Owens Corning	R-Value = 19    19    19    19
09250	5/8" Gyp Sheathing	GP Dens Glass Gold	R-Value = .56    0.56    0.56    0.56
07200	1.5 Rigid Insulation	Owens Corning Foamular CW	R-Value = 7.5    7.5    7.5
04200	1" Airspace	1" Airspace	R-Value = 1    1
04200	3" King Size Face Brick	Acme Brick	R-Value = .33    0.33
07240	3" Rigid Insulation - EIFS	ICSA-Like EPS	R-Value = 14.4    14.4
07410	Metal Wall Panel	MBCI P8U Wall Panel	R-Value = .61    0.61
<b>Doors / Windows</b>			
08410	Aluminum Sidelight w/ Insulated Glazing	YKK Series YES w/ Solarban 70XL	U-Factor = 0.32 / SHGC = .25
08320	Aluminum Window w/ Insulated Glazing	YKK Series YES w/ Solarban 70XL	U-Factor = 0.32 / SHGC = .25
<b>Air Barrier</b>			
07240	Fluid Applied Vapor Permeable Air Barrier	STO Corp. - StoGuard Gold Coat	ASTM E-2387 - Passes .016 L / s/m <sup>2</sup>

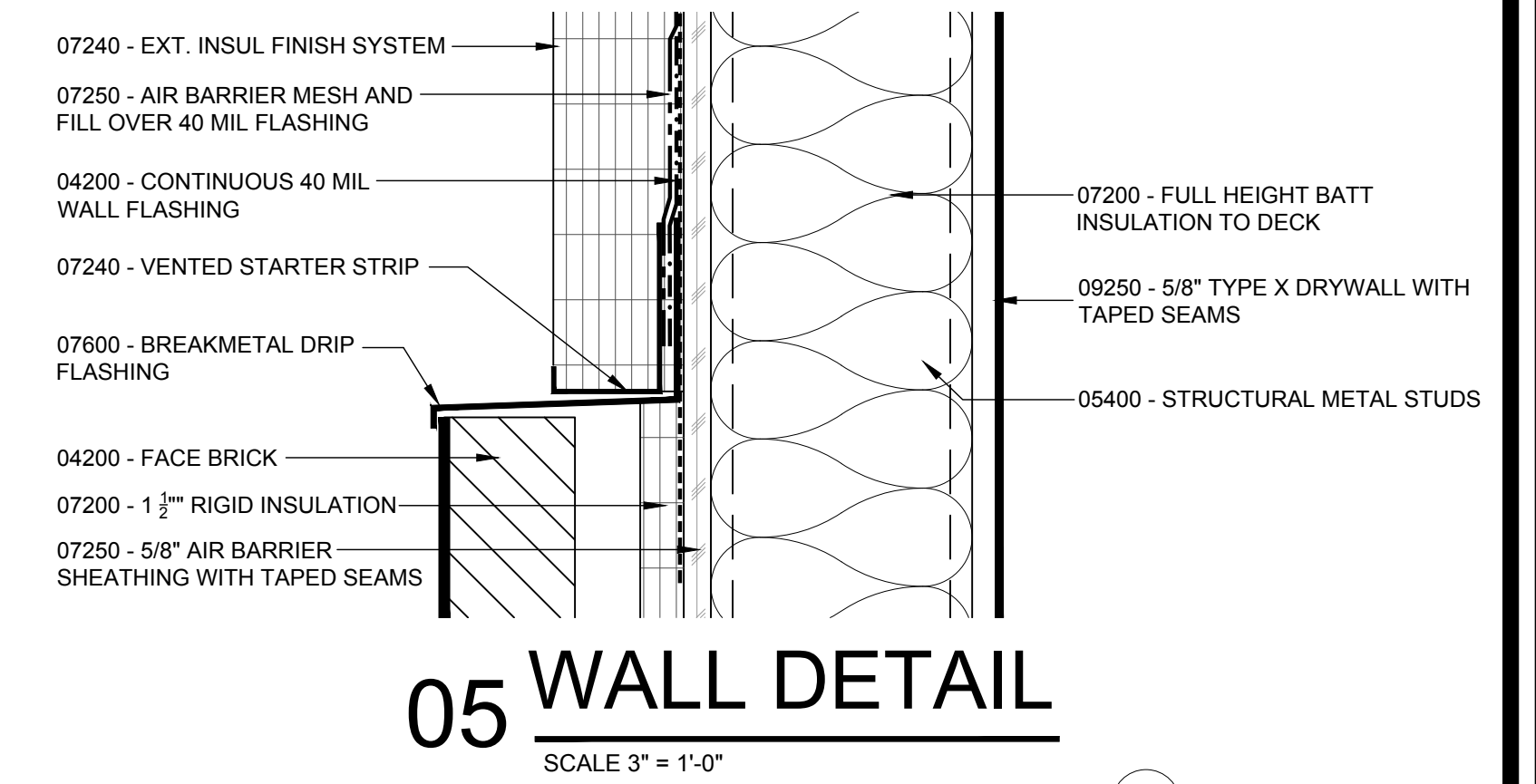


03 WALL SECTION  
SCALE 3/4" = 1'-0"

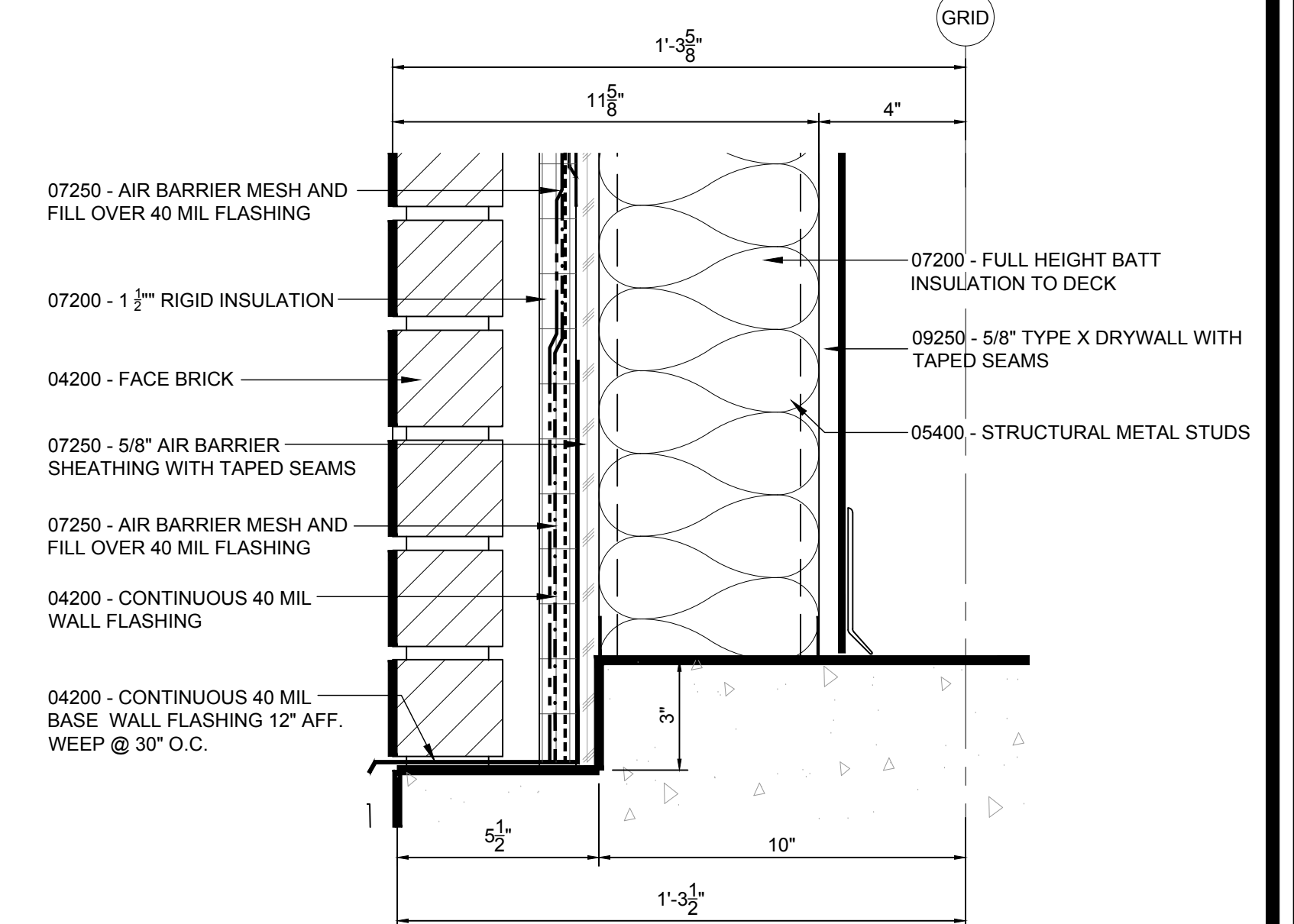
THERMAL BARRIER SECTION



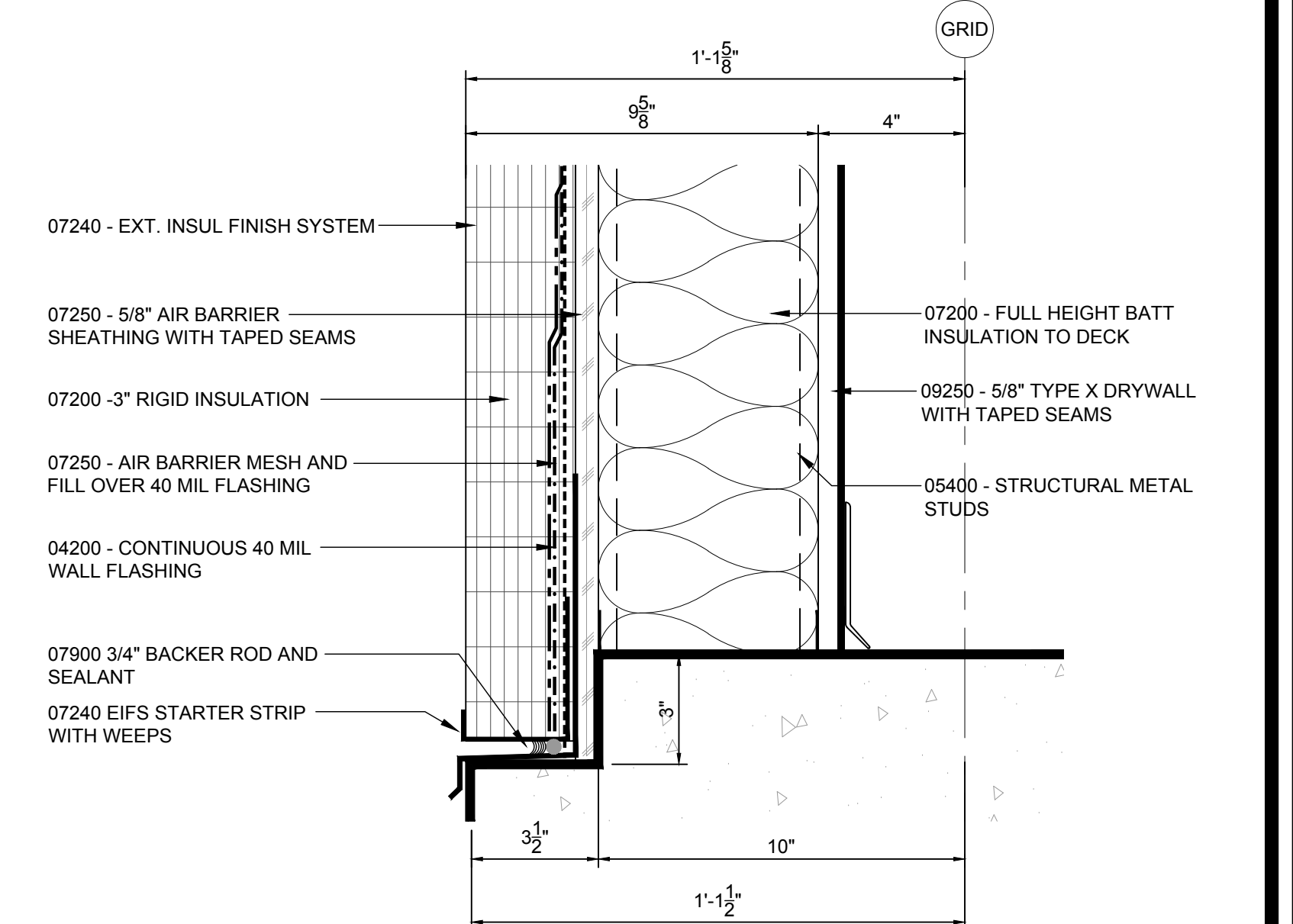
04 WALL DETAIL  
SCALE 3" = 1'-0"



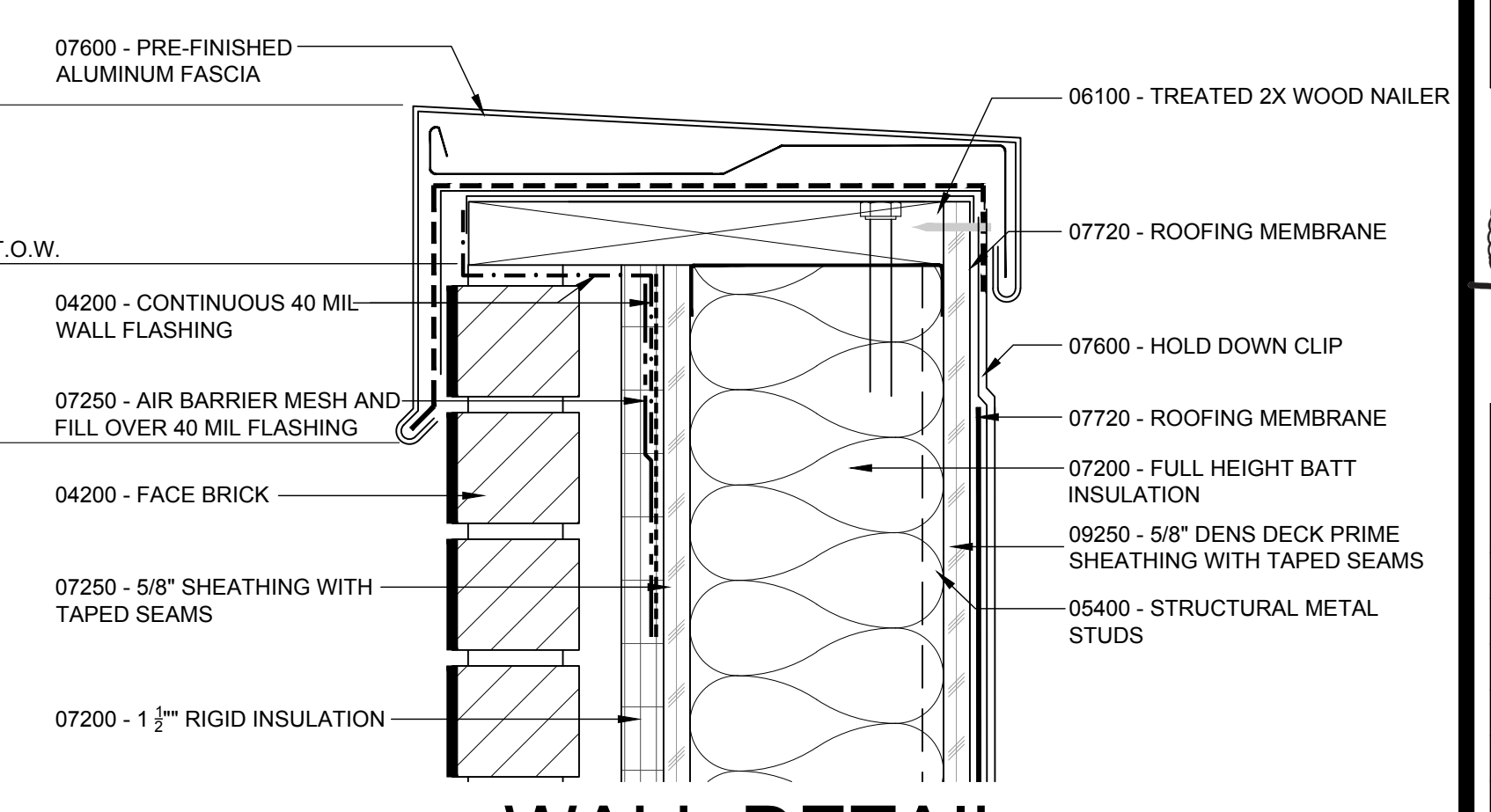
05 WALL DETAIL  
SCALE 3" = 1'-0"



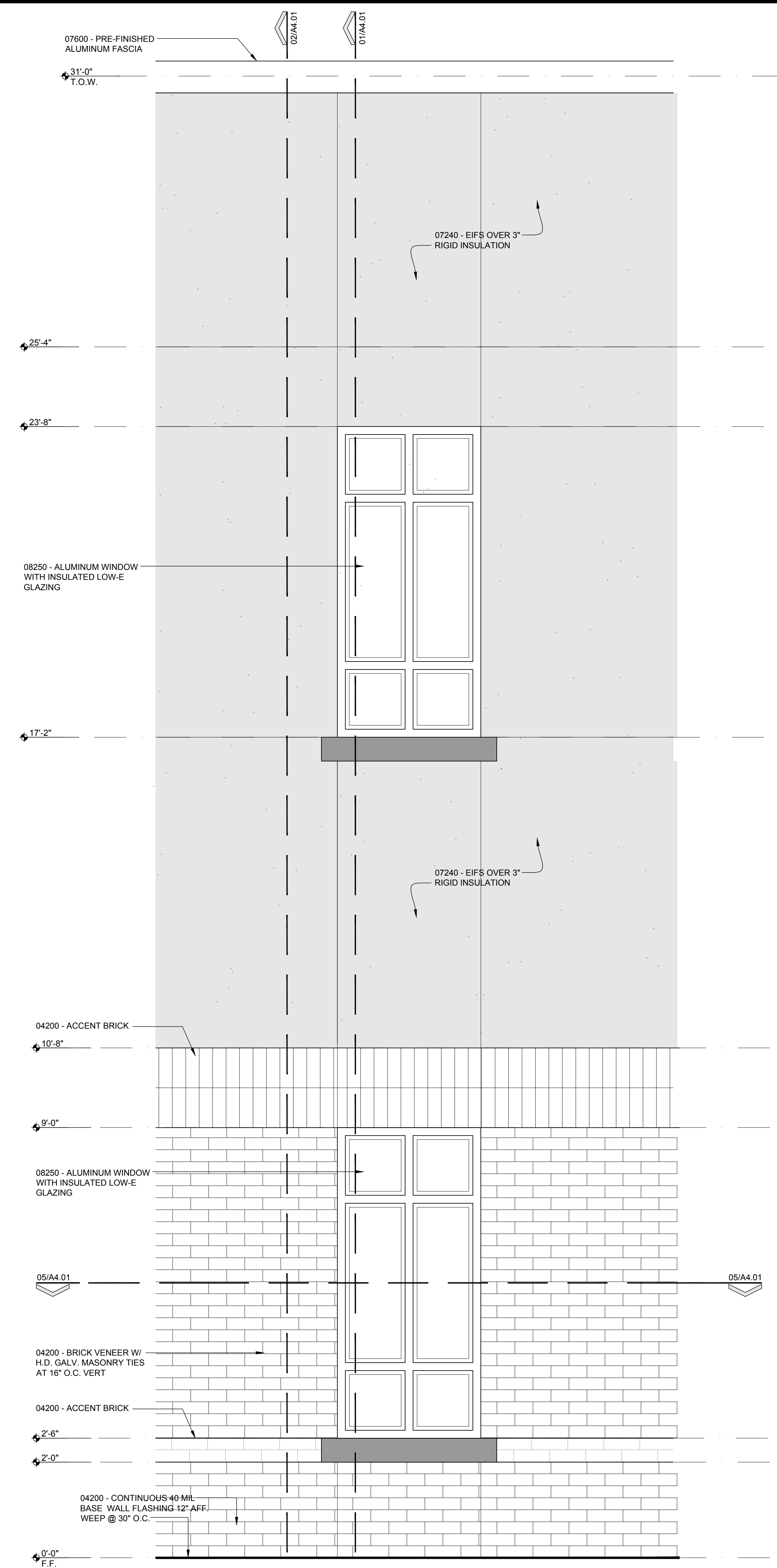
06 WALL DETAIL  
SCALE 3" = 1'-0"



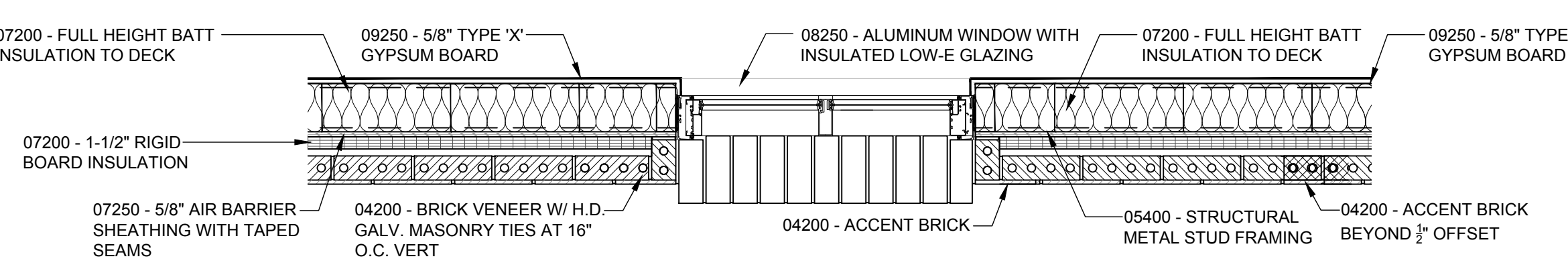
07 WALL DETAIL  
SCALE 3" = 1'-0"



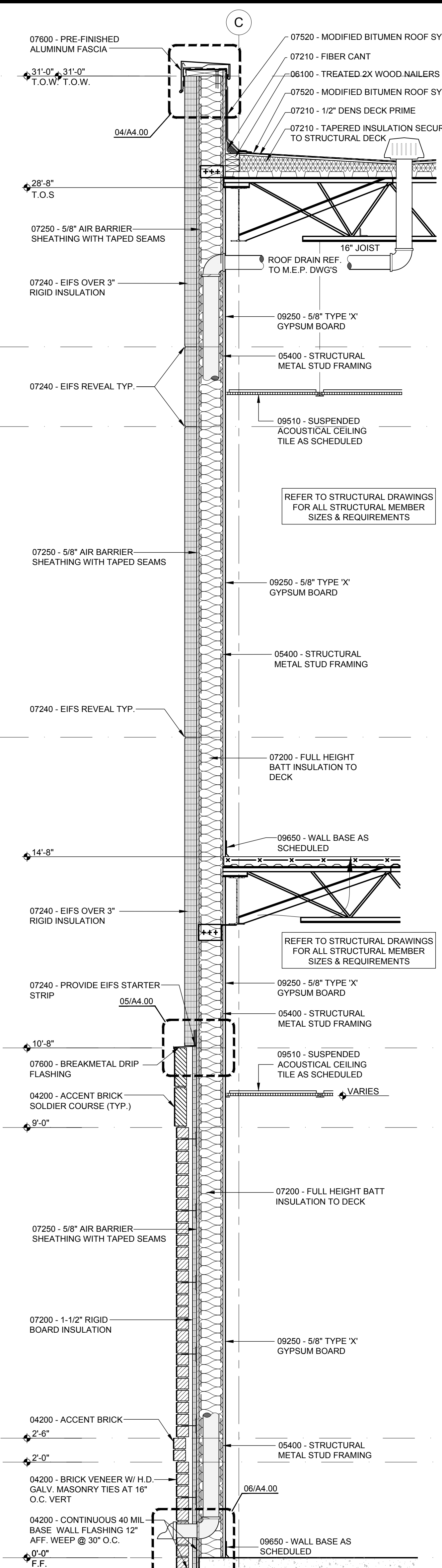
08 WALL DETAIL  
SCALE 3" = 1'-0"



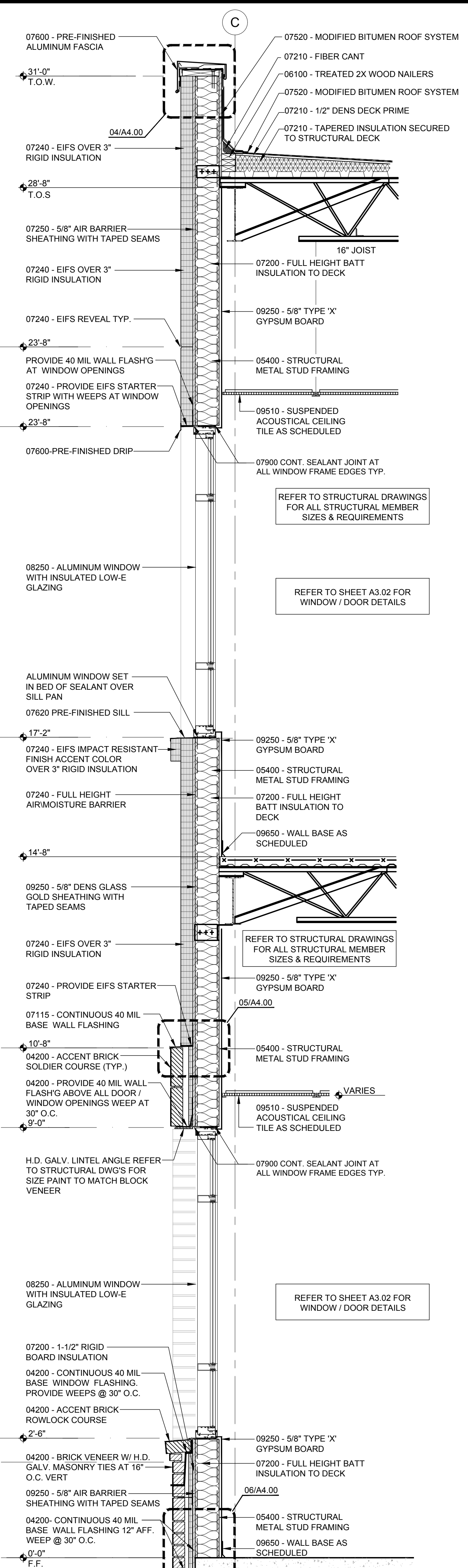
**04 PARTIAL ELEVATION**  
 SCALE 3/4" = 1'-0"



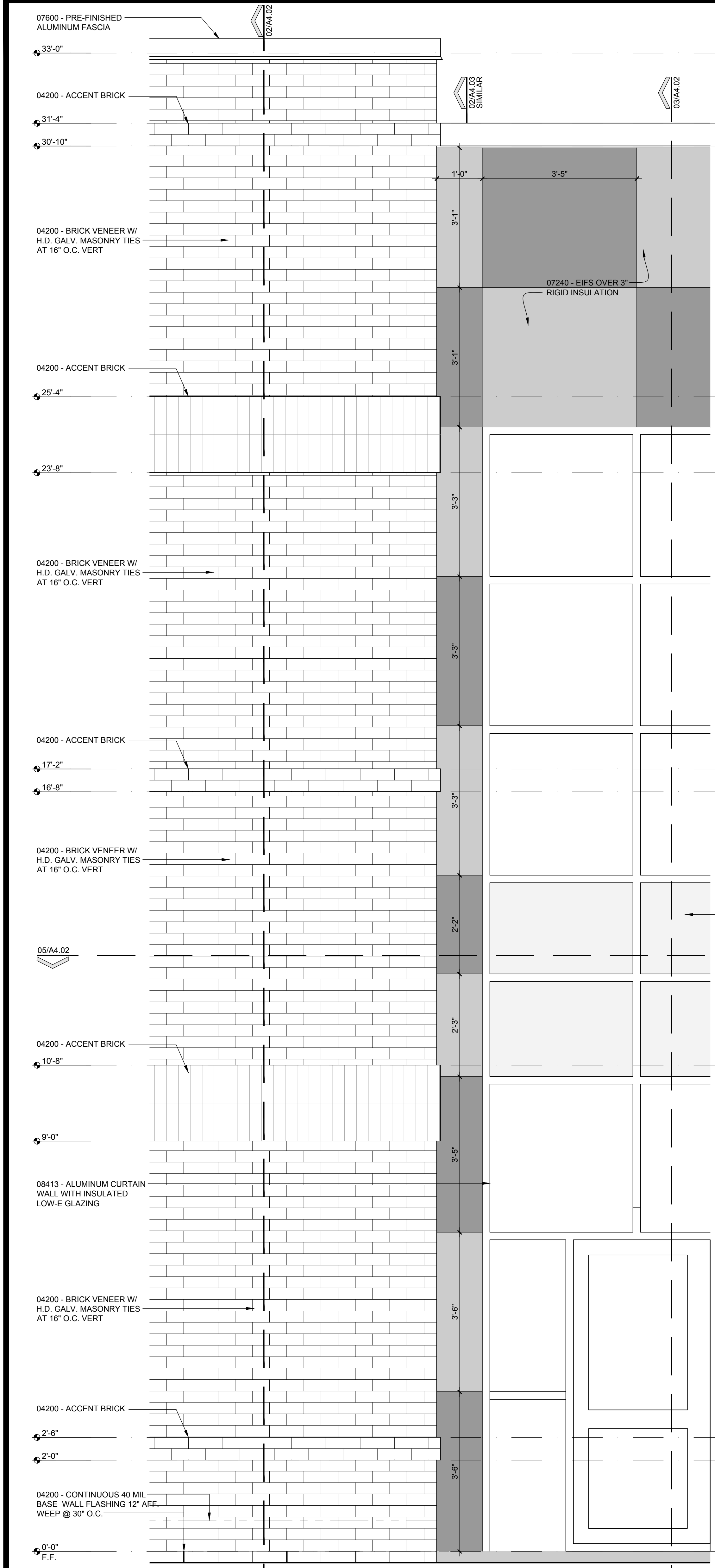
**05 SECTION DETAIL**  
 SCALE 3/4" = 1'-0"



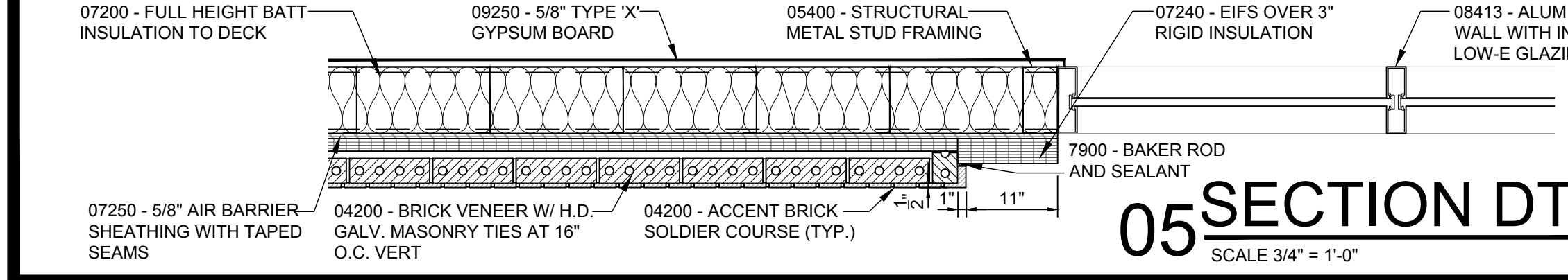
**02 WALL SECTION**  
 SCALE 3/4" = 1'-0"



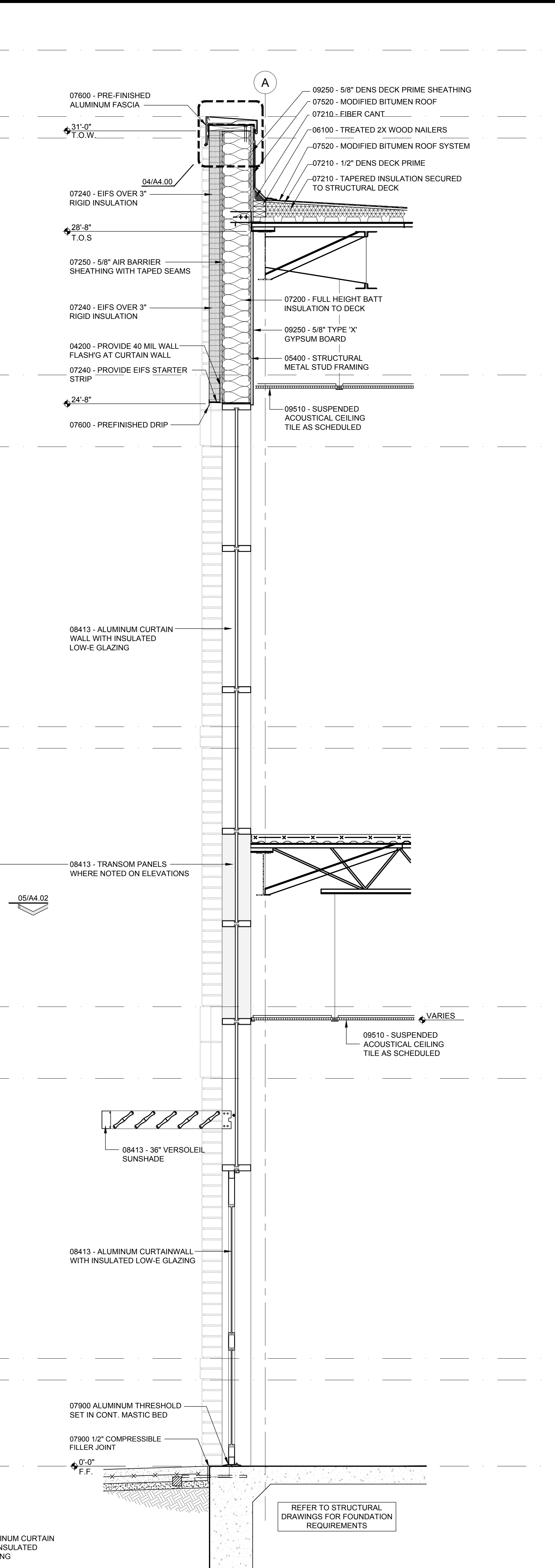
**01 WALL SECTION**  
 SCALE 3/4" = 1'-0"



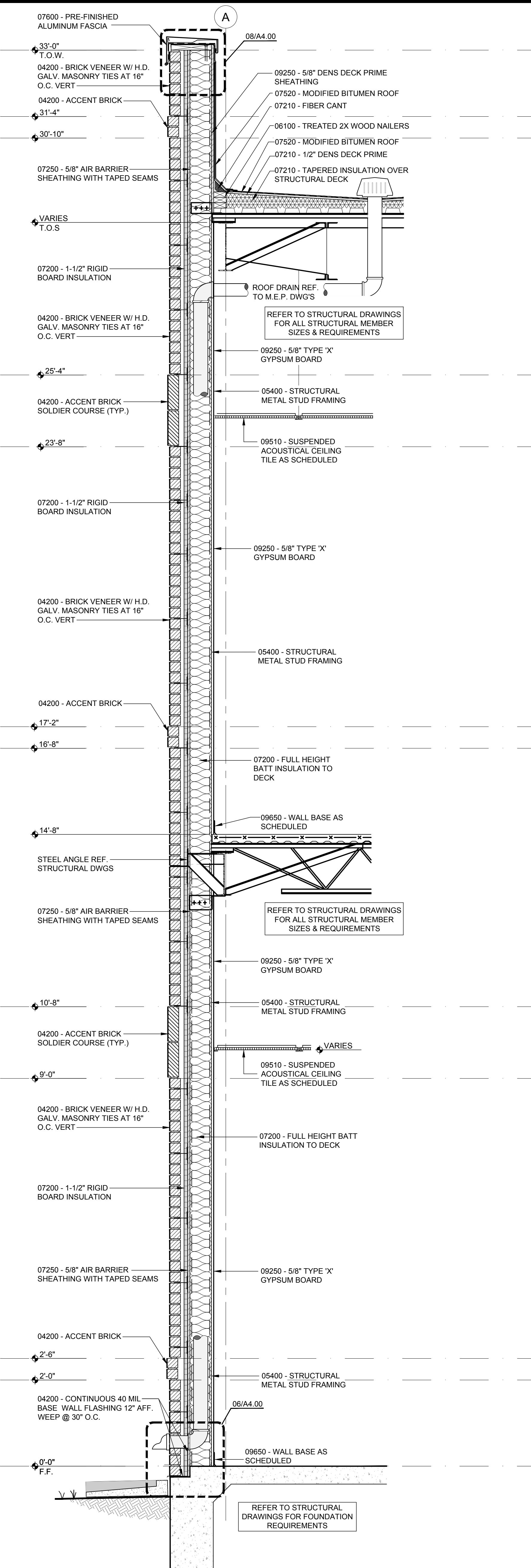
**04 PARTIAL ELEVATION**  
SCALE 3/4" = 1'-0"



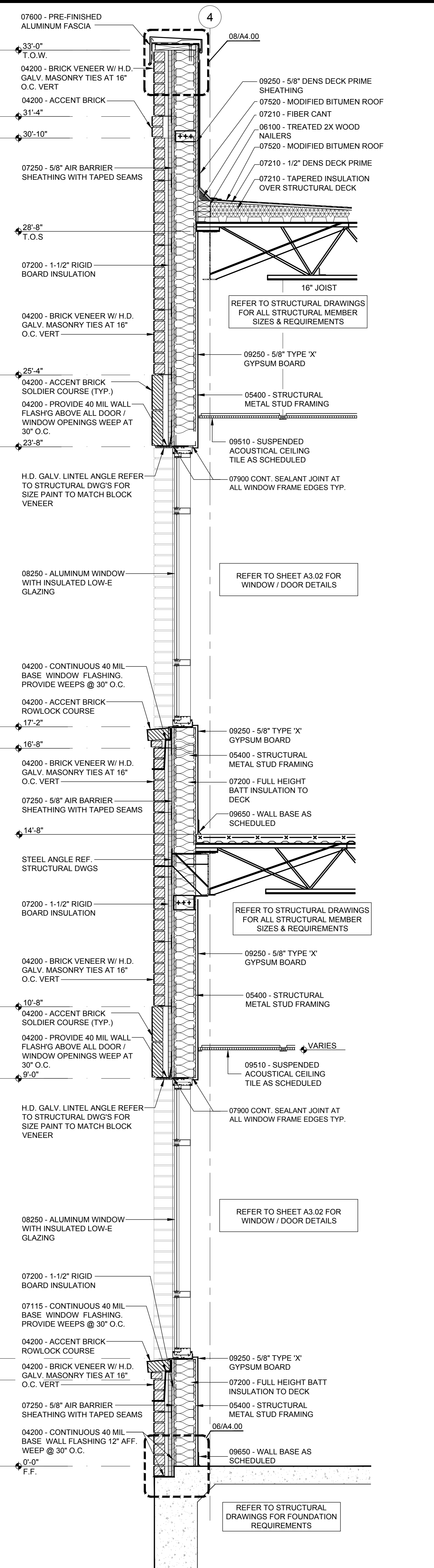
**05 SECTION DTL**  
SCALE 3/4" = 1'-0"



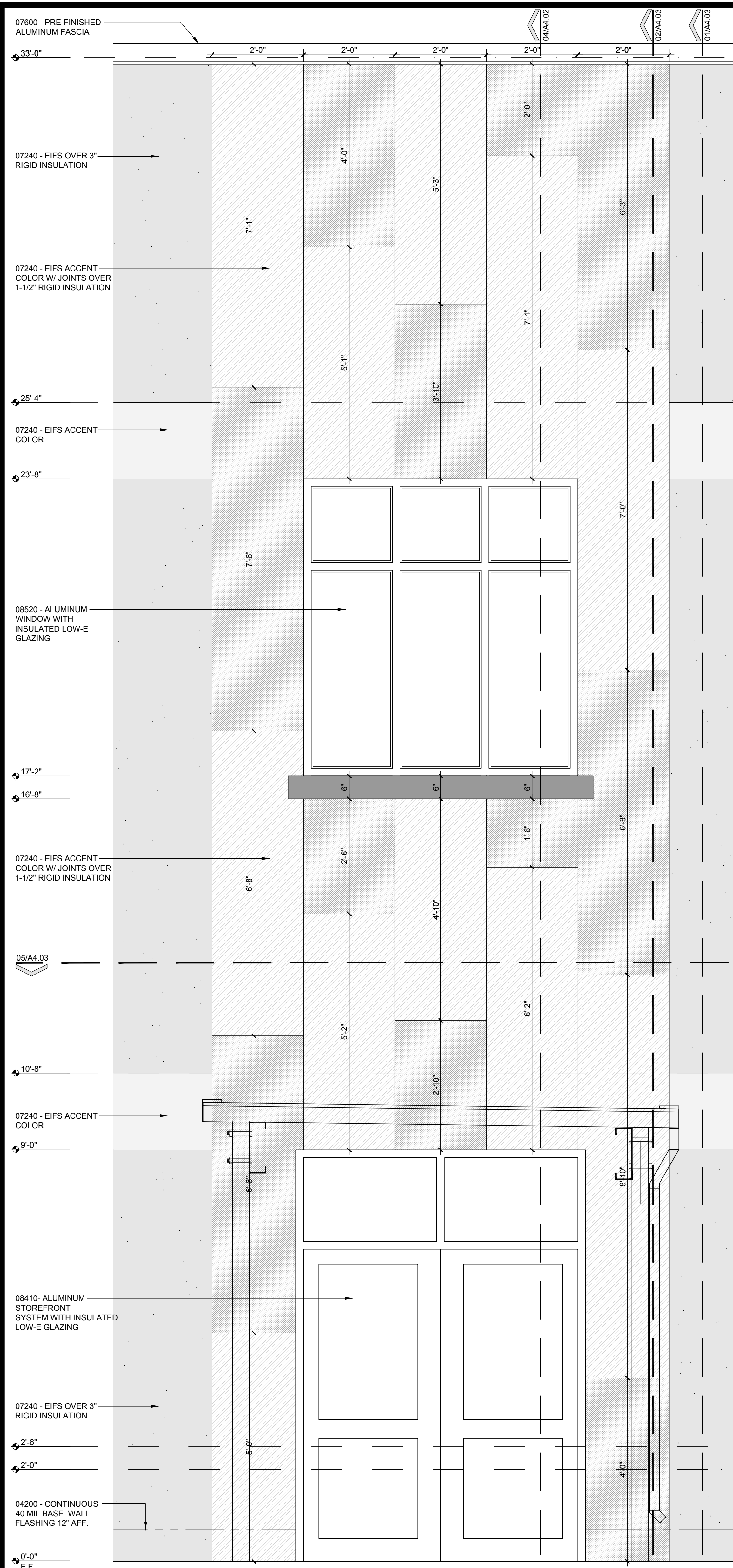
**03 WALL SECTION**  
SCALE 3/4" = 1'-0"



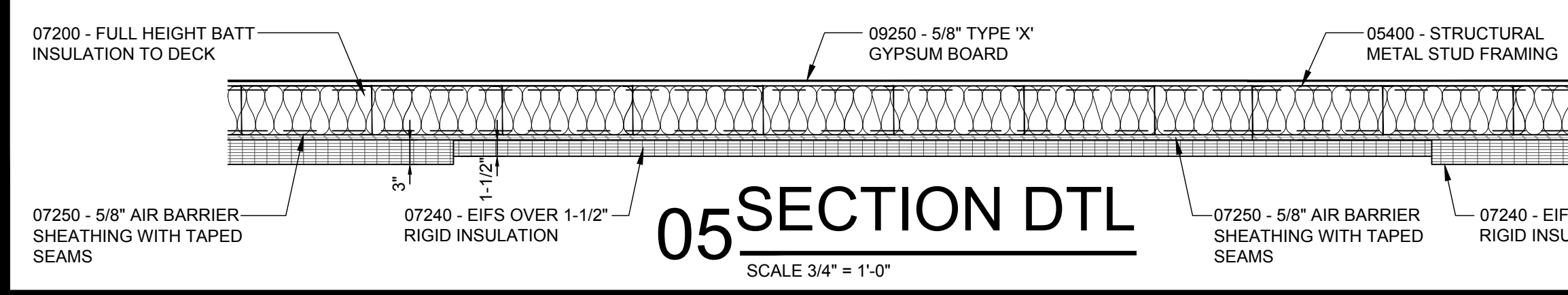
**02 WALL SECTION**  
SCALE 3/4" = 1'-0"



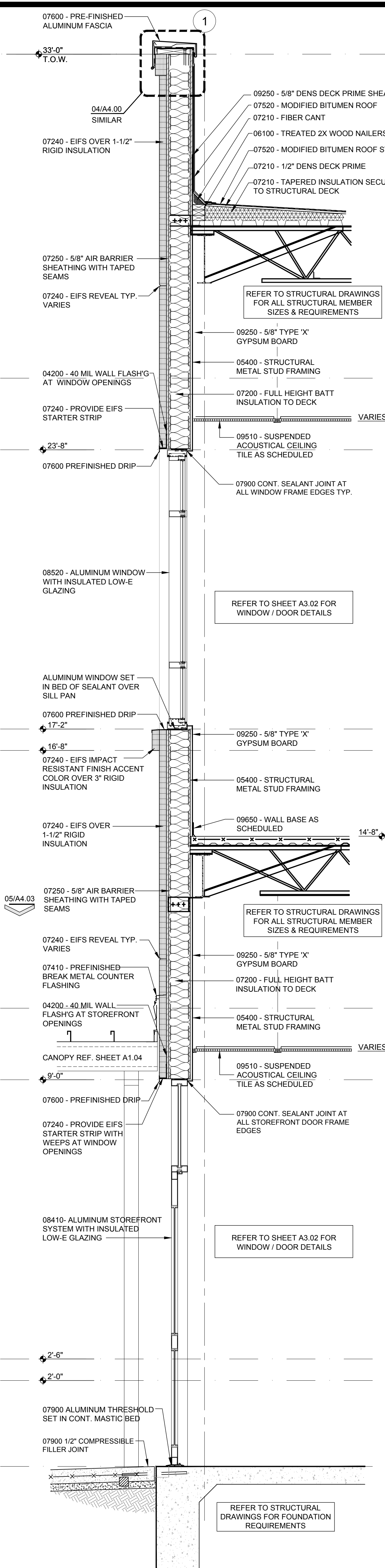
**01 WALL SECTION**  
SCALE 3/4" = 1'-0"



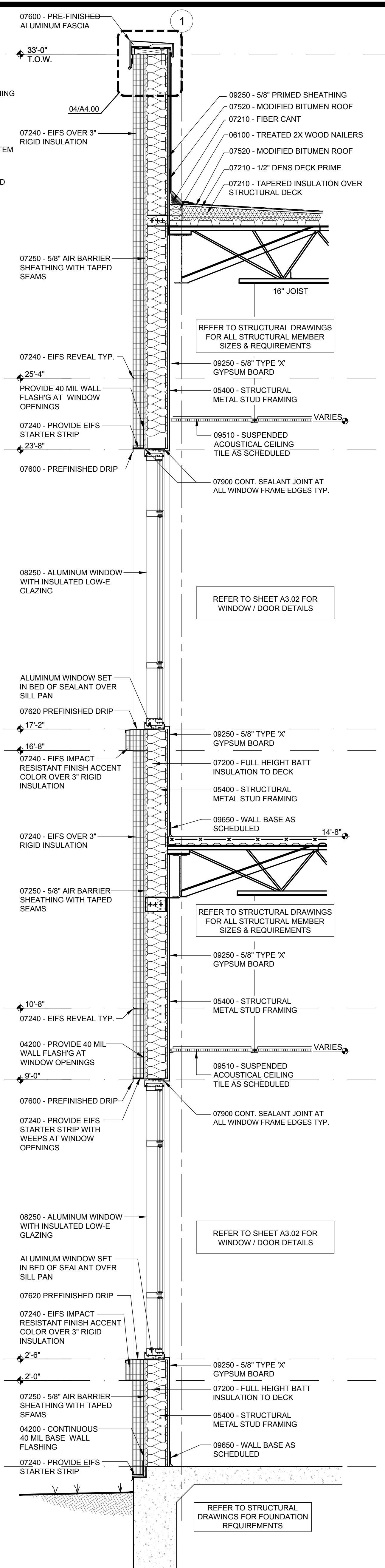
**06 PARTIAL ELEVATION**  
SCALE 3/4" = 1'-0"



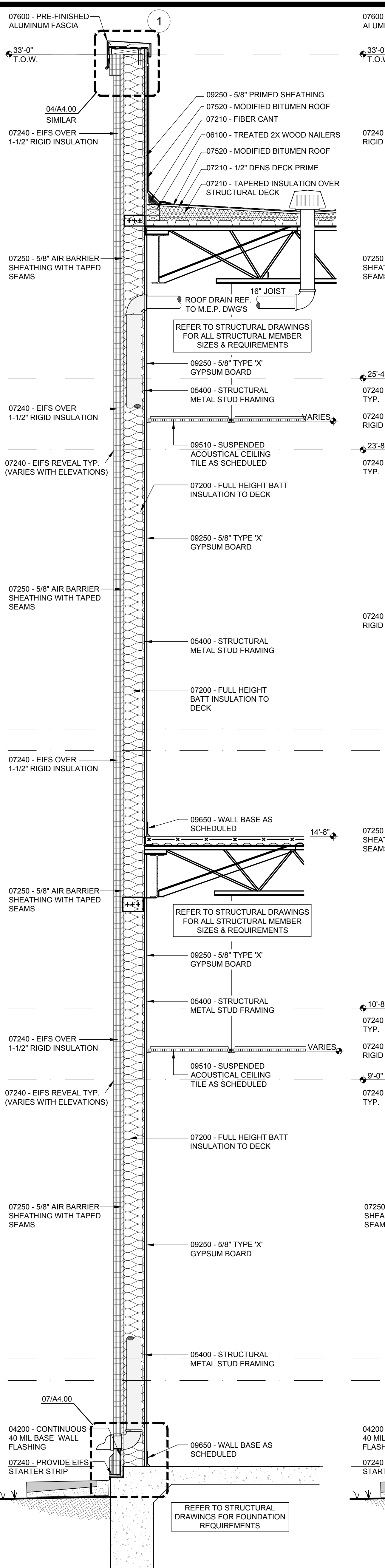
**05 SECTION DTL**  
SCALE 3/4" = 1'-0"



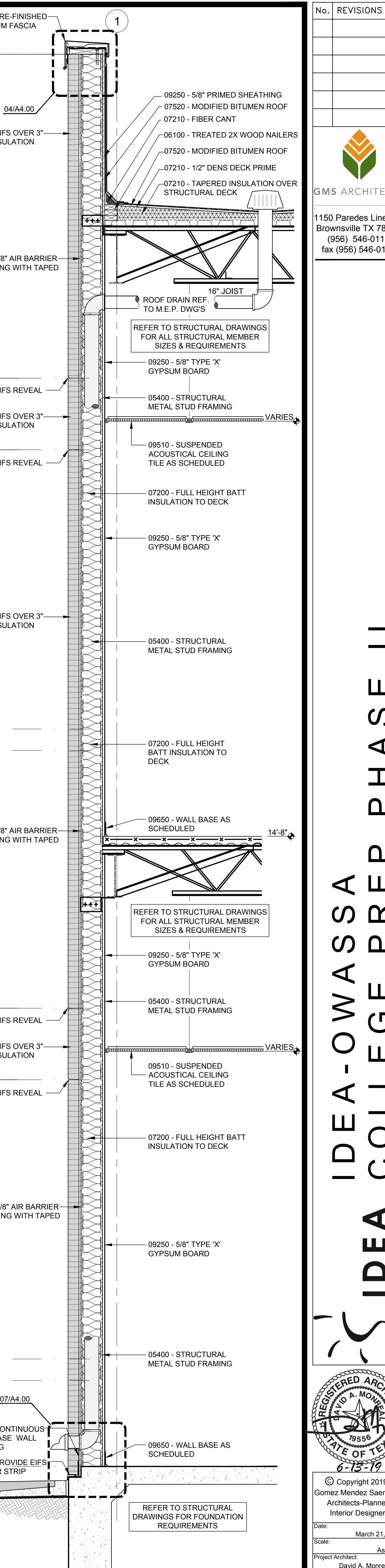
**04 WALL SECTION**  
SCALE 3/4" = 1'-0"



**03 WALL SECTION**  
SCALE 3/4" = 1'-0"



**02 WALL SECTION**  
SCALE 3/4" = 1'-0"



**01 WALL SECTION**  
SCALE 3/4" = 1'-0"

No.	REVISIONS	BY

**GMS ARCHITECTS**  
1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

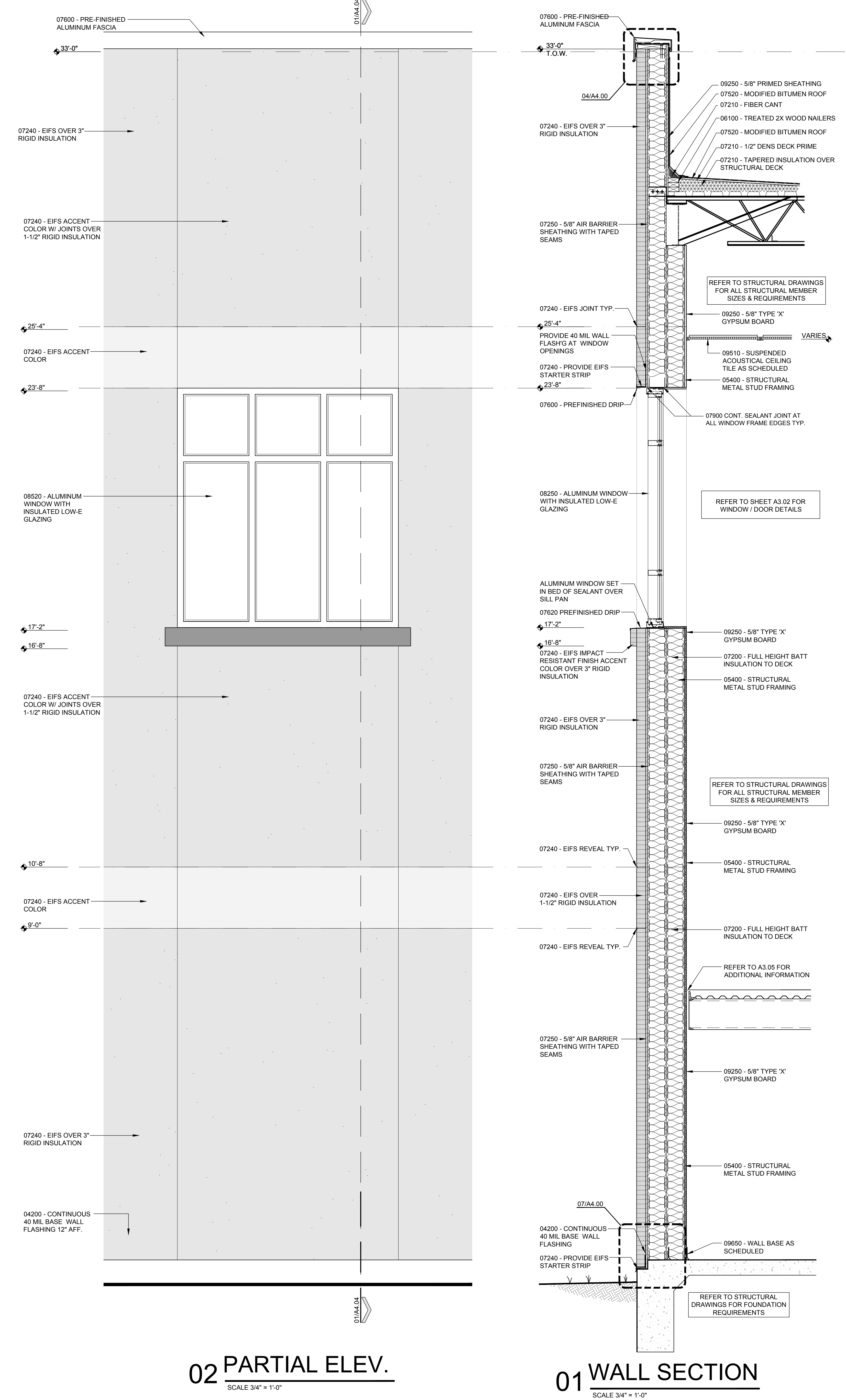
**IDEA OWASSA**  
**IDEA COLLEGE PREP PHASE II**  
Public Schools

REGISTERED ARCHITECT  
STATE OF TEXAS  
07-13-19

© Copyright 2019  
Comez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

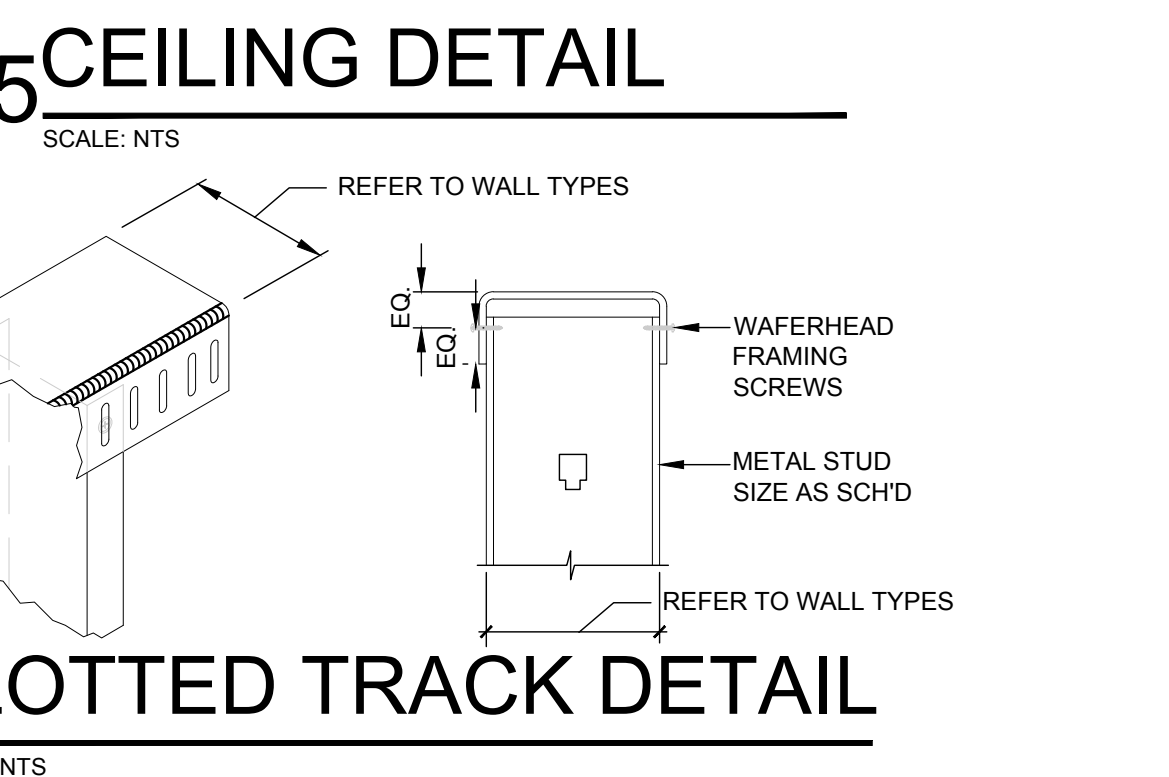
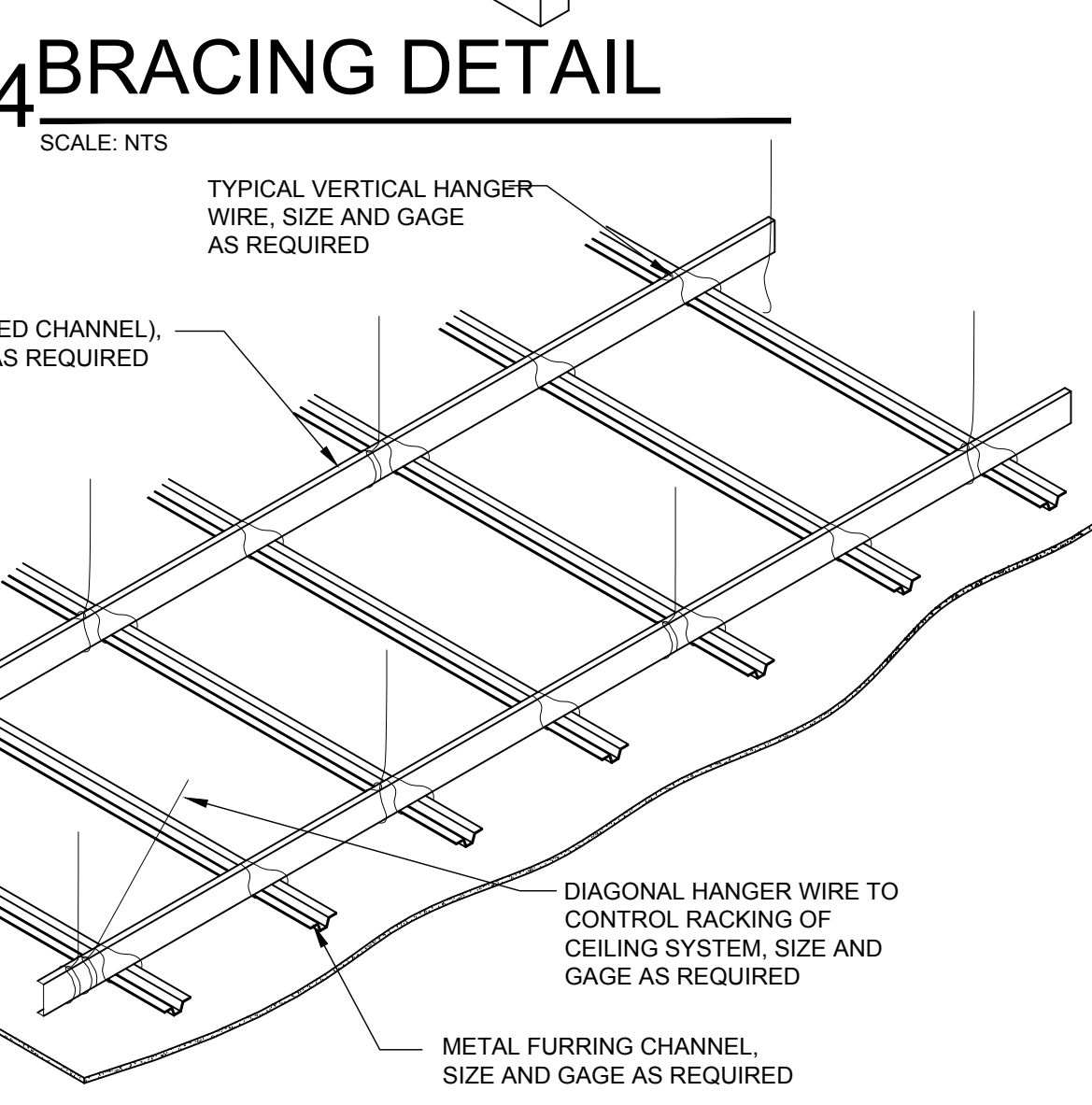
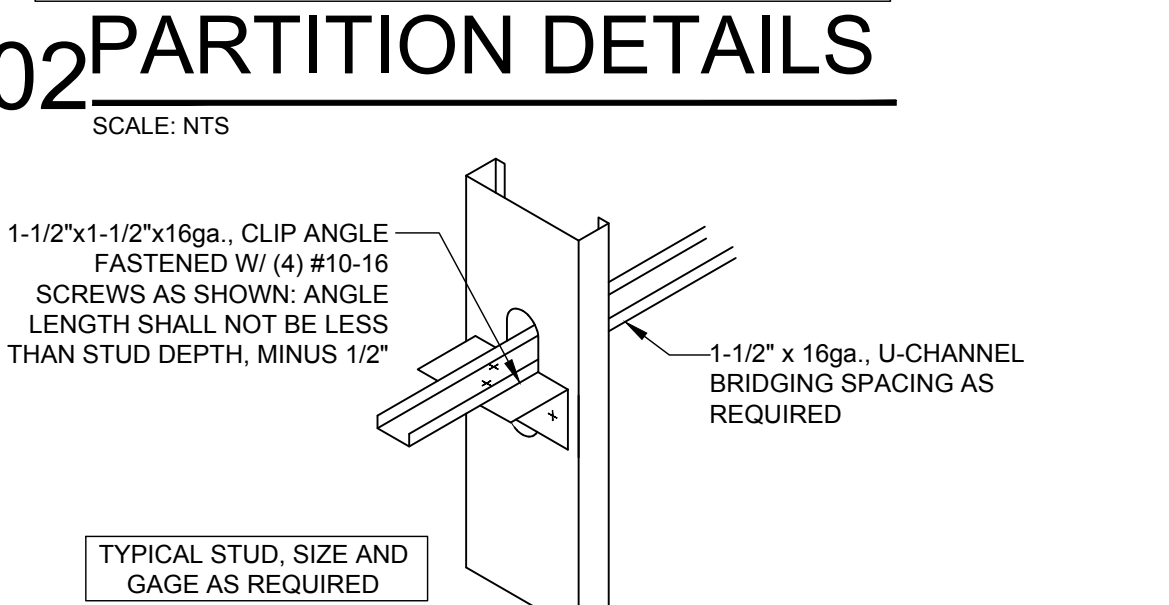
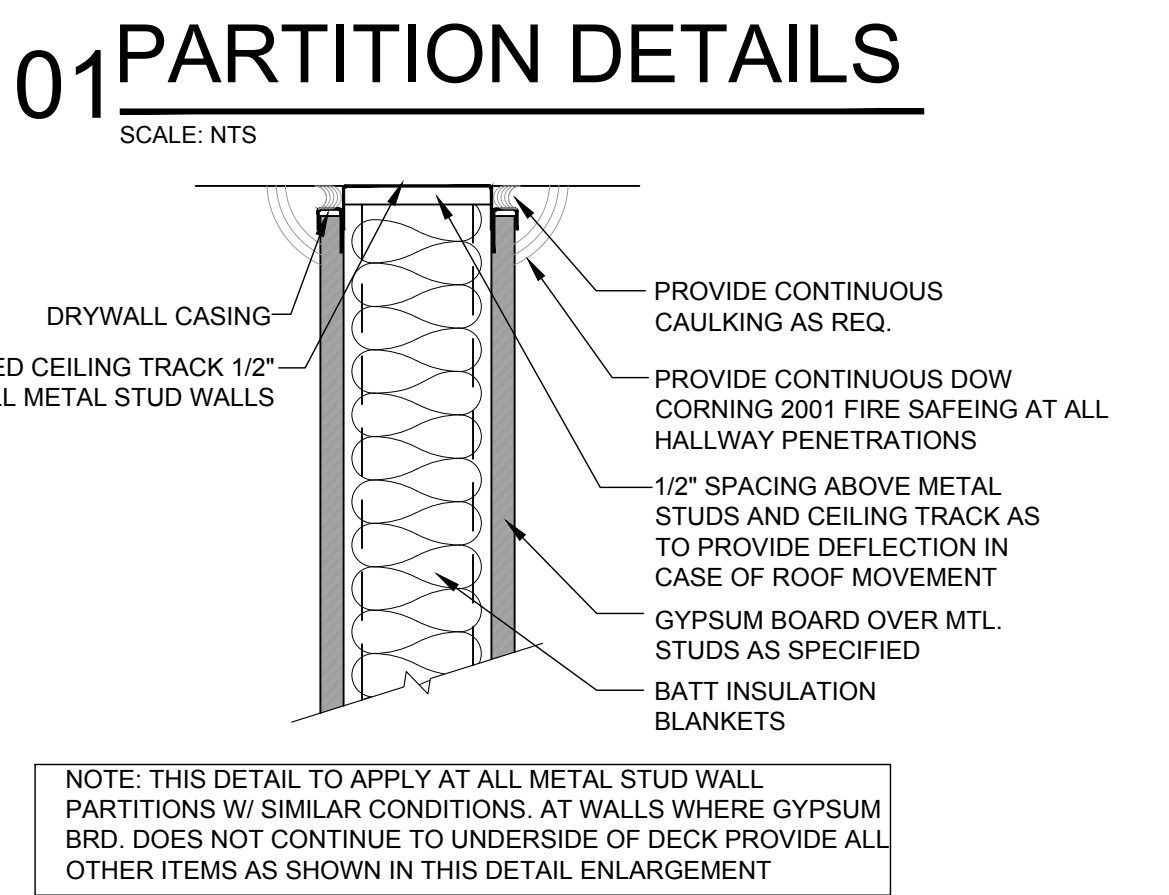
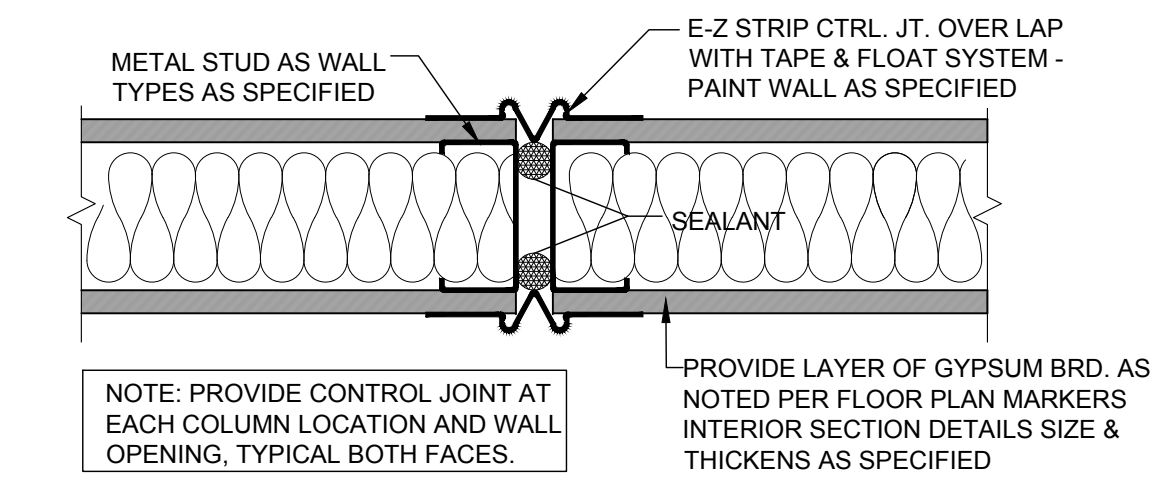
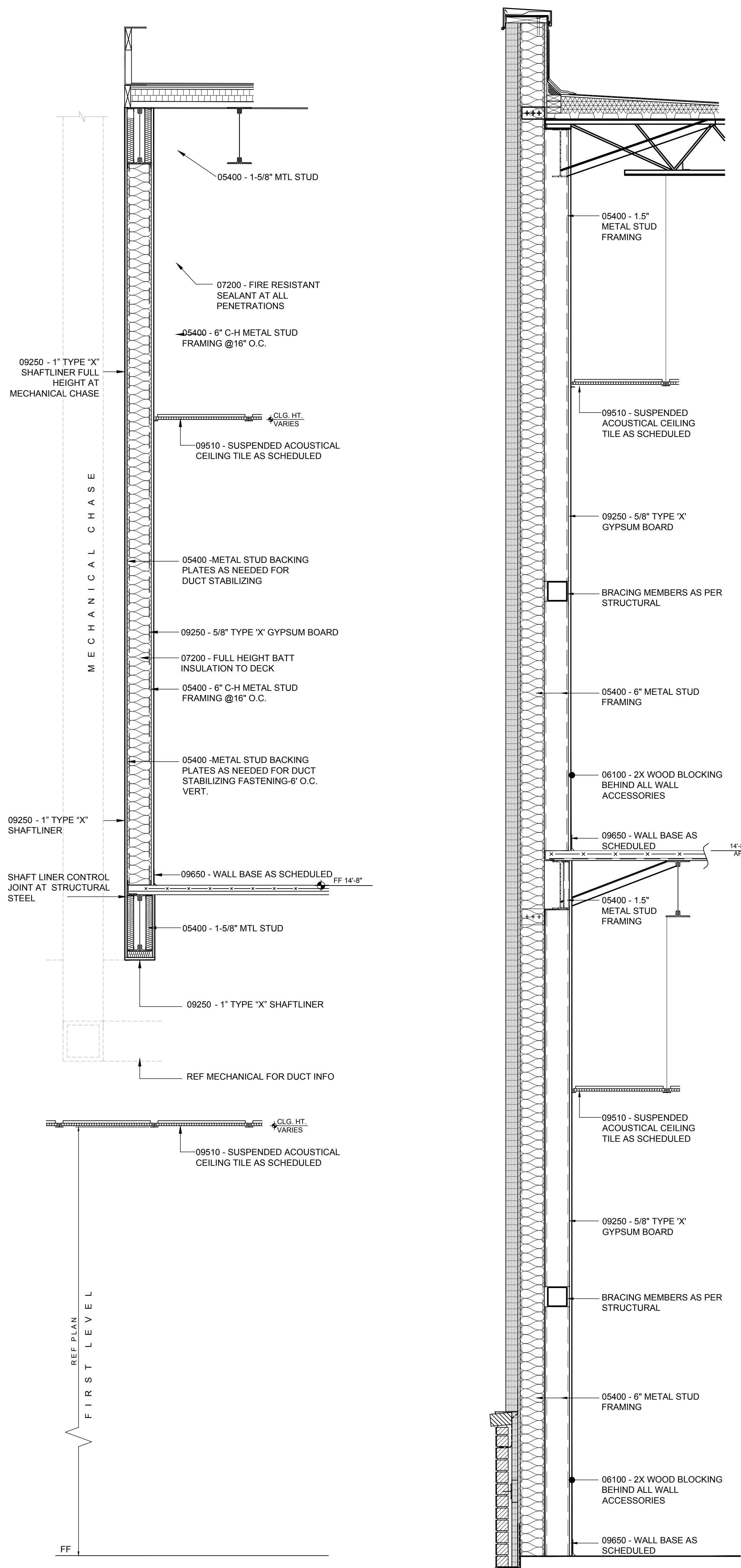
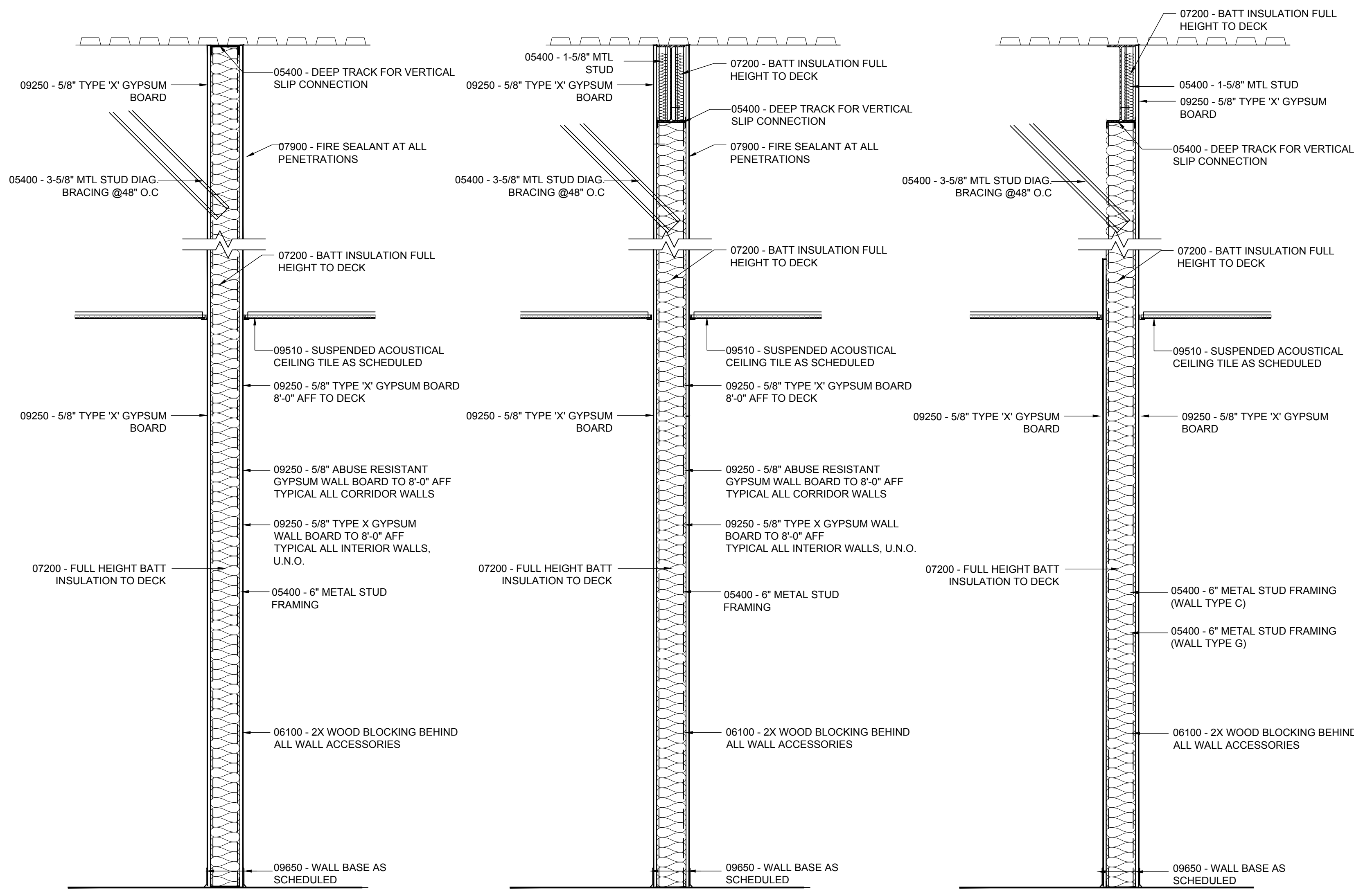
Date: March 21, 2019  
Scale: As Noted  
Project Architect: As Noted  
Drawn By: David A. Montreal, AIA  
Job No.: J. Alvarado  
Sheet: IDEA PHASE II

**A4.03**



### PARTITION TYPES GENERAL NOTES

- REFER TO FLOOR PLANS FOR LOCATION OF PARTITION TYPES.
- REFER TO SCHEDULES & DETAILS FOR FINISHES.
- REFER TO STRUCTURAL FOR METAL STUD FRAMING DESIGN REQUIREMENTS.
- ALL GYPSUM WALLBOARD SHALL BE 5/8", TYPE "X", UNLESS NOTED OTHERWISE.
- PROVIDE MOISTURE RESISTANT GYPSUM WALLBOARD AT TOILET/SHOWER WALLS AND THROUGHOUT KITCHEN, UNLESS NOTED OTHERWISE.
- PROVIDE CEMENT TILE BACKER BOARD BEHIND ALL WALL TILE WAINSCOTS, IN LIEU OF M.R. WALLBOARD.
- PROVIDE HI-IMPACT GYPSUM WALLBOARD AT ALL INTERIOR HALLWAYS, CORRIDORS, ETC., UNLESS NOTED OTHERWISE. PROVIDE HI-IMPACT BOARD TO A HEIGHT OF 8'-0" AFF AND THEN CONTINUE THE REMAINDER OF THE WALL WITH TYPE "X" WALLBOARD TO DECK.
- APPROPRIATE SUBMITTAL INFORMATION MUST BE PROVIDED TO SUBSTANTIATE THAT THE MATERIALS AND ASSEMBLY USED BY THE CONTRACTOR HAVE BEEN TESTED BY A RECOGNIZED TESTING AGENCY TO MEET THE FIRE RESISTANCE RATING SCHEDULED ON THESE PARTITION TYPES. SEE SPECIFICATION SECTION 06250.
- REVIEW PLANS AND PROVIDE BACKING AND BRACING IN PARTITIONS AS REQUIRED FOR CASEWORK, WALL MOUNTED BOARDS, VERTICAL DUCT WORK AND ANY EQUIPMENT ETC. IF WOOD BLOCKING IS REQUIRED PROVIDE FIRE RETARDANT TREATED WOOD BLOCKING.
- SOUND ATTENUATION BLANKETS SHALL EXTEND FULL HEIGHT OF PARTITIONS TO DECK.
- ALL DOOR/WINDOW JAMBS & HEADERS IN MTL. STUD WALLS SHALL BE DOUBLE STUDDED.
- PROVIDE WALLBOARD CONTROL JOINTS AT EACH COLUMN LOCATION AND WALL OPENINGS, TYPICAL BOTH FACES. PROVIDE CONTROL JOINTS AT WALL MIDPOINTS IN CONTINUOUS WALL LENGTHS OVER 30'-0".
- ALL EXPOSED OUTSIDE CORNERS TO RECEIVE CORNER GUARDS AS SPECIFIED.
- ALTHOUGH ALL INTERIOR PARTITIONS ON THIS SHEET ARE DRAWN TO SIMILAR HEIGHT IT IS RESPONSIBILITY OF THE CONTRACTOR TO RESEARCH ALL INTERIOR PARTITION WALL HEIGHTS FROM FINISHED FLOOR TO UNDERSIDE OF ROOF DECK.
- PROVIDE WOOD BLOCKING AT ALL PROJECTOR, HANDRAIL, GRAB BAR AND CABINET LOCATIONS. 12" WIDE, 16 GAUGE STRAP SUPPORTS ARE ACCEPTABLE AT ALL OTHER BLOCKING LOCATIONS.



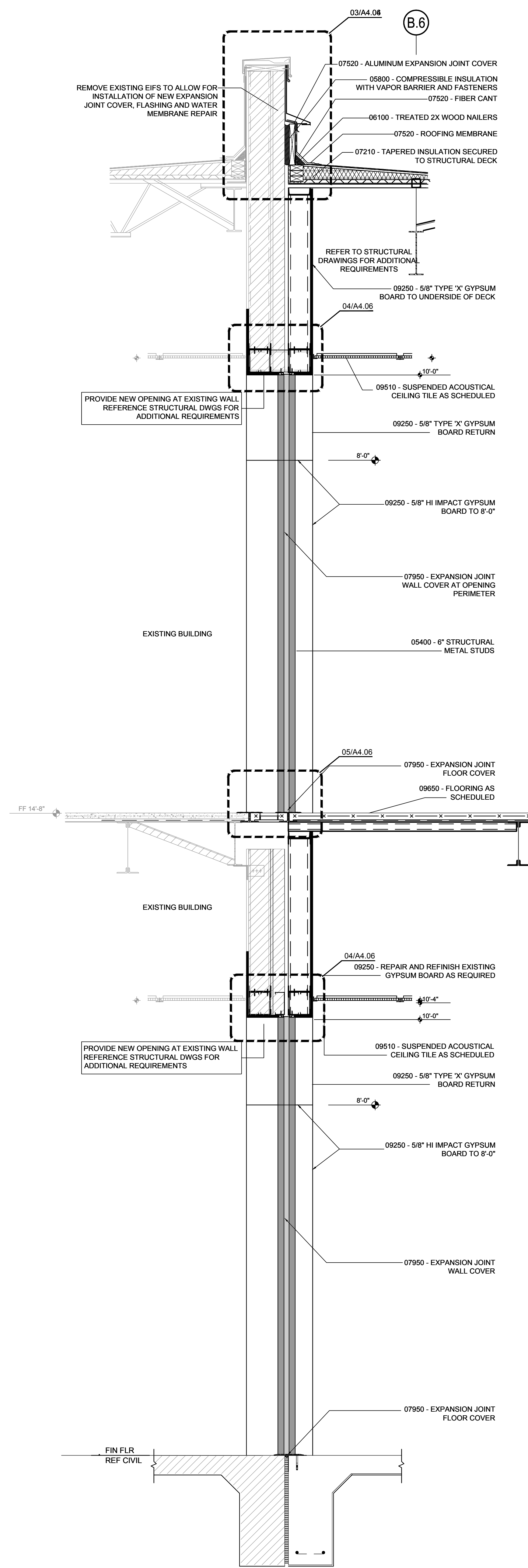
IDEA-OWASSA  
 COLLEGE PREP  
 PHASE II  
 Public Schools



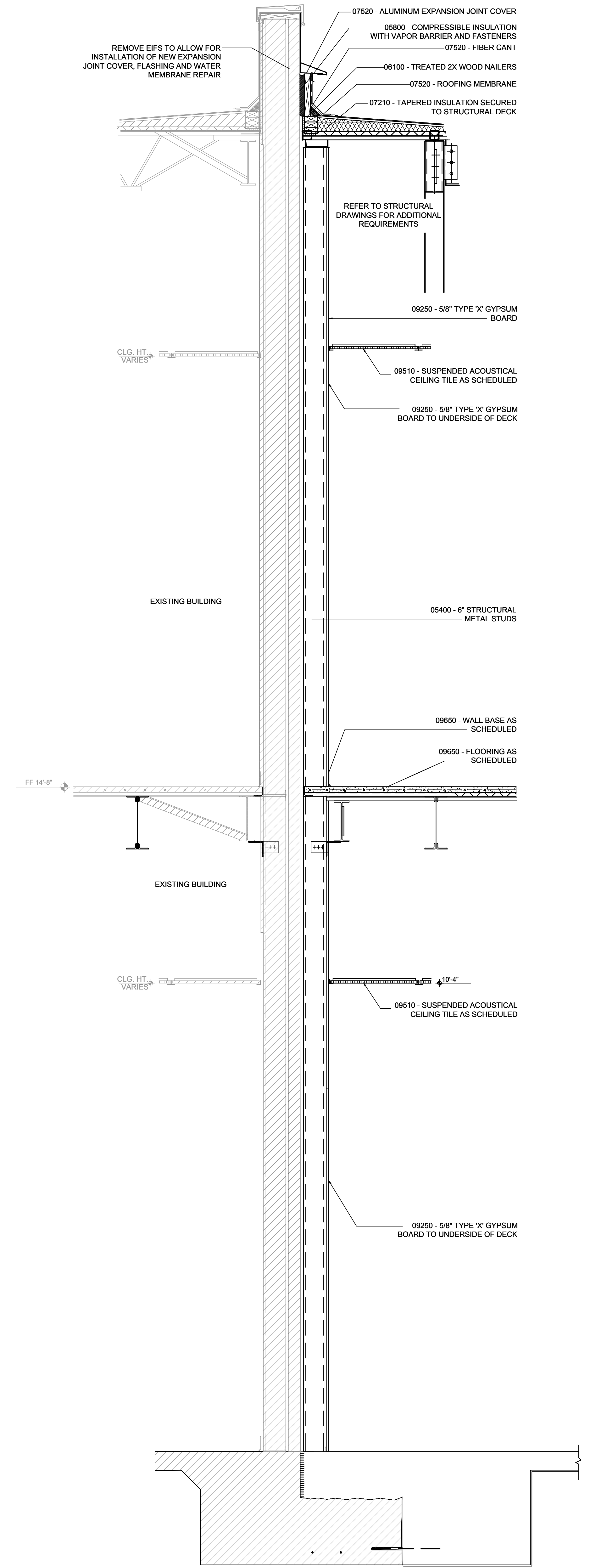
© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: March 21, 2019  
Scale: As Noted  
Project Architect: David A. Monreal, AIA  
Drawn By: J. Alvarado  
Job No.: IDEA PHASE II  
Sheet: A4.05

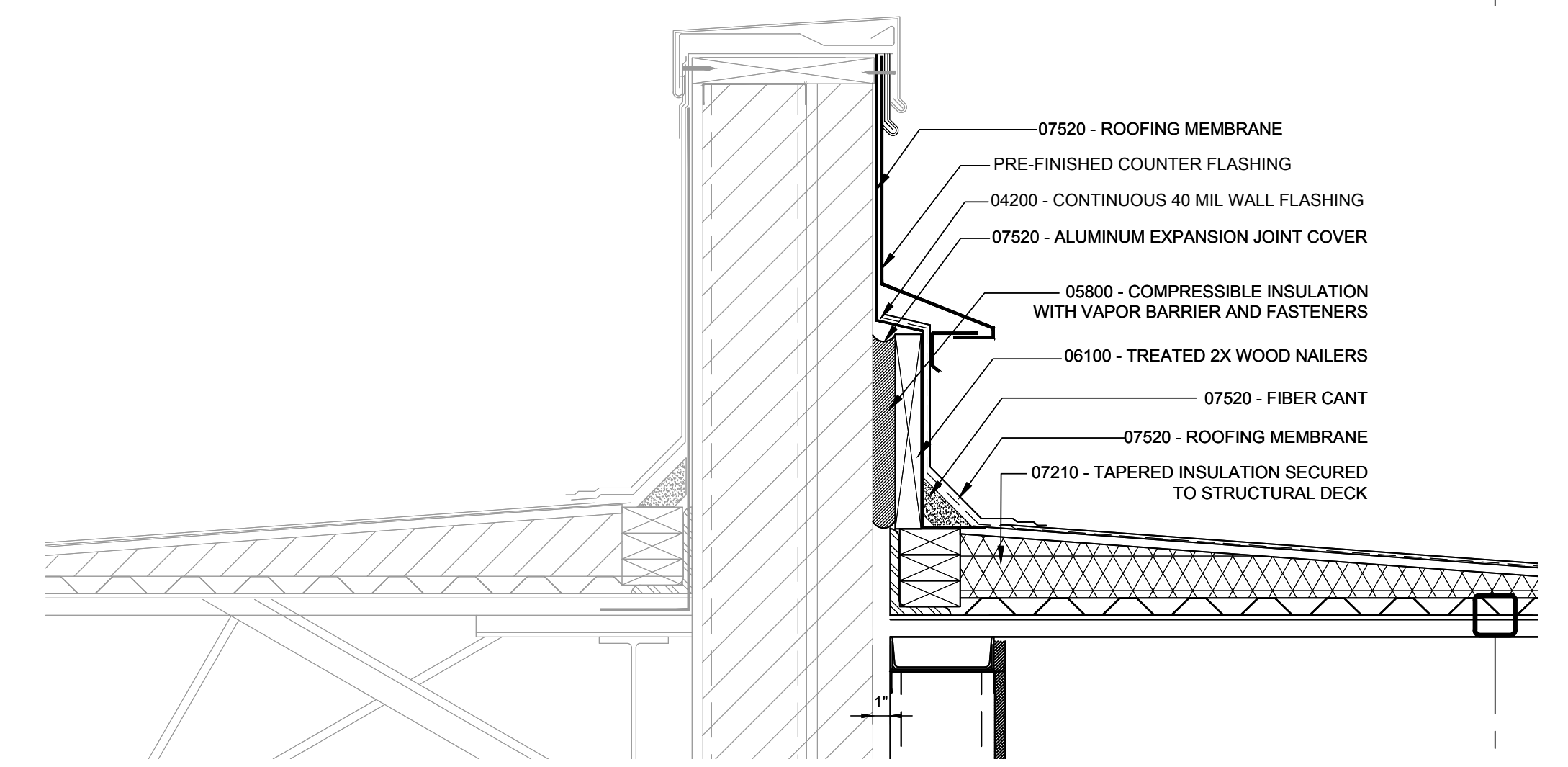




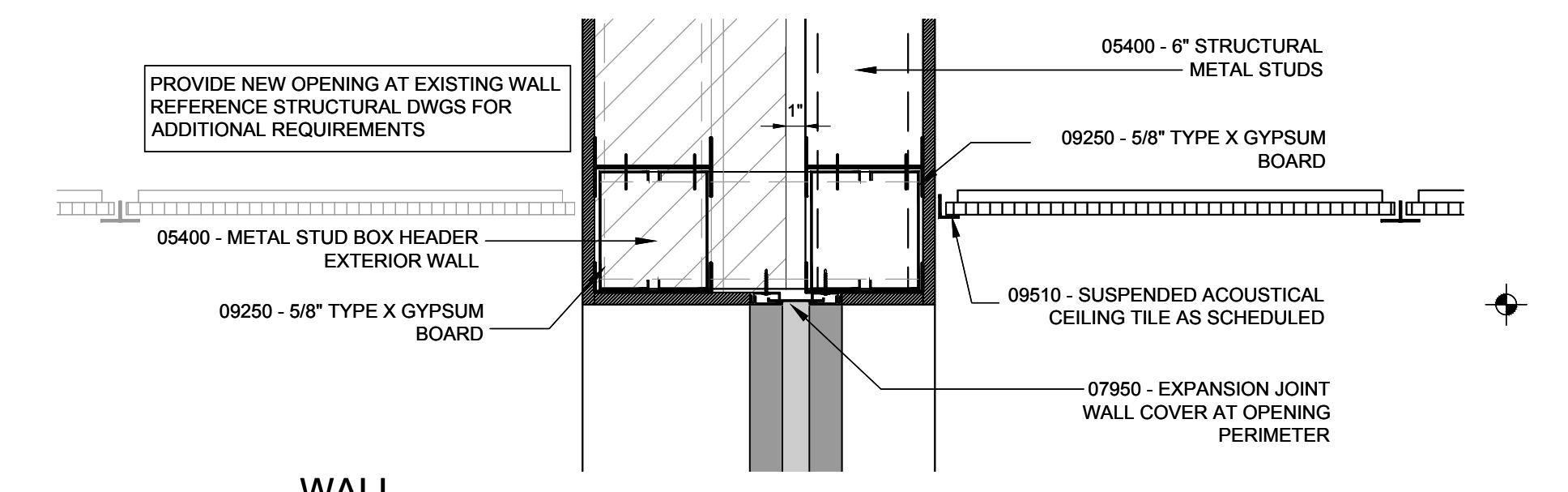
**01 WALL SECTION**  
SCALE 3/4" = 1'-0"



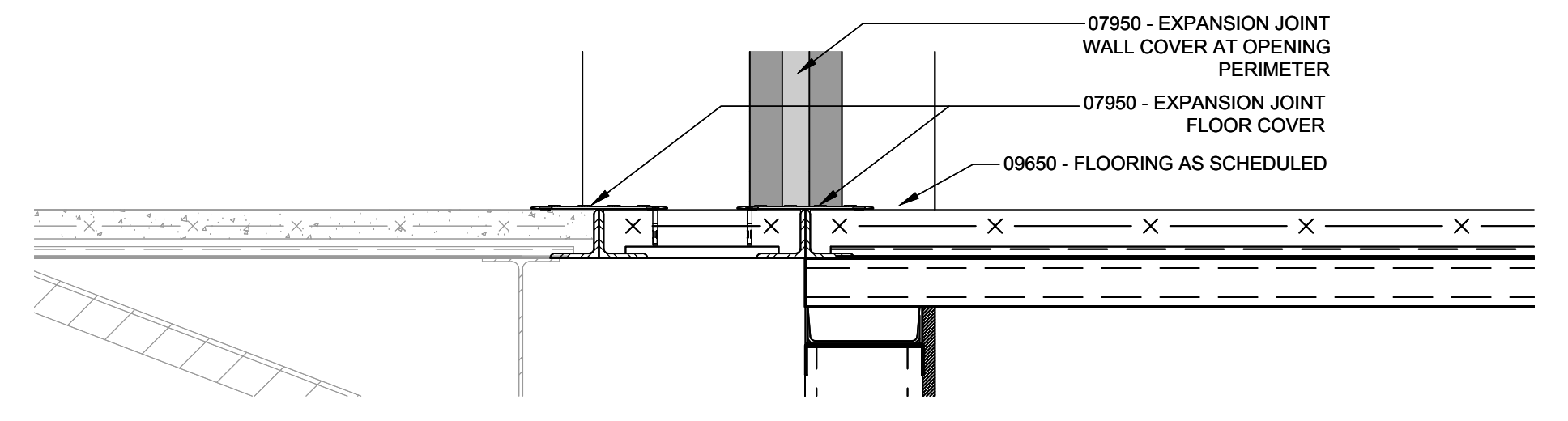
**02 WALL SECTION**  
SCALE 3/4" = 1'-0"



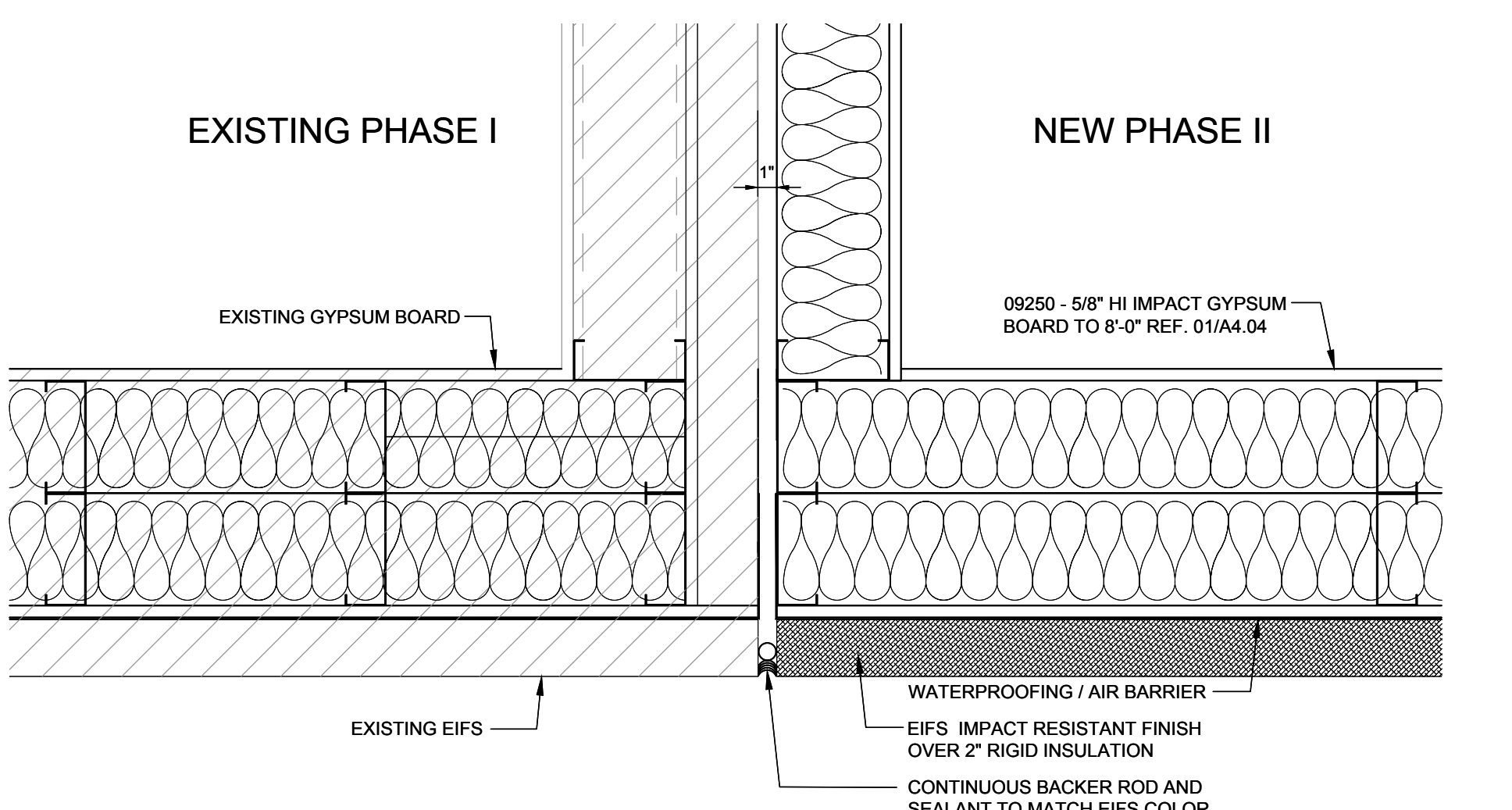
**03 ROOF EXPANSION JOINT DTL**  
SCALE 1-1/2" = 1'-0"



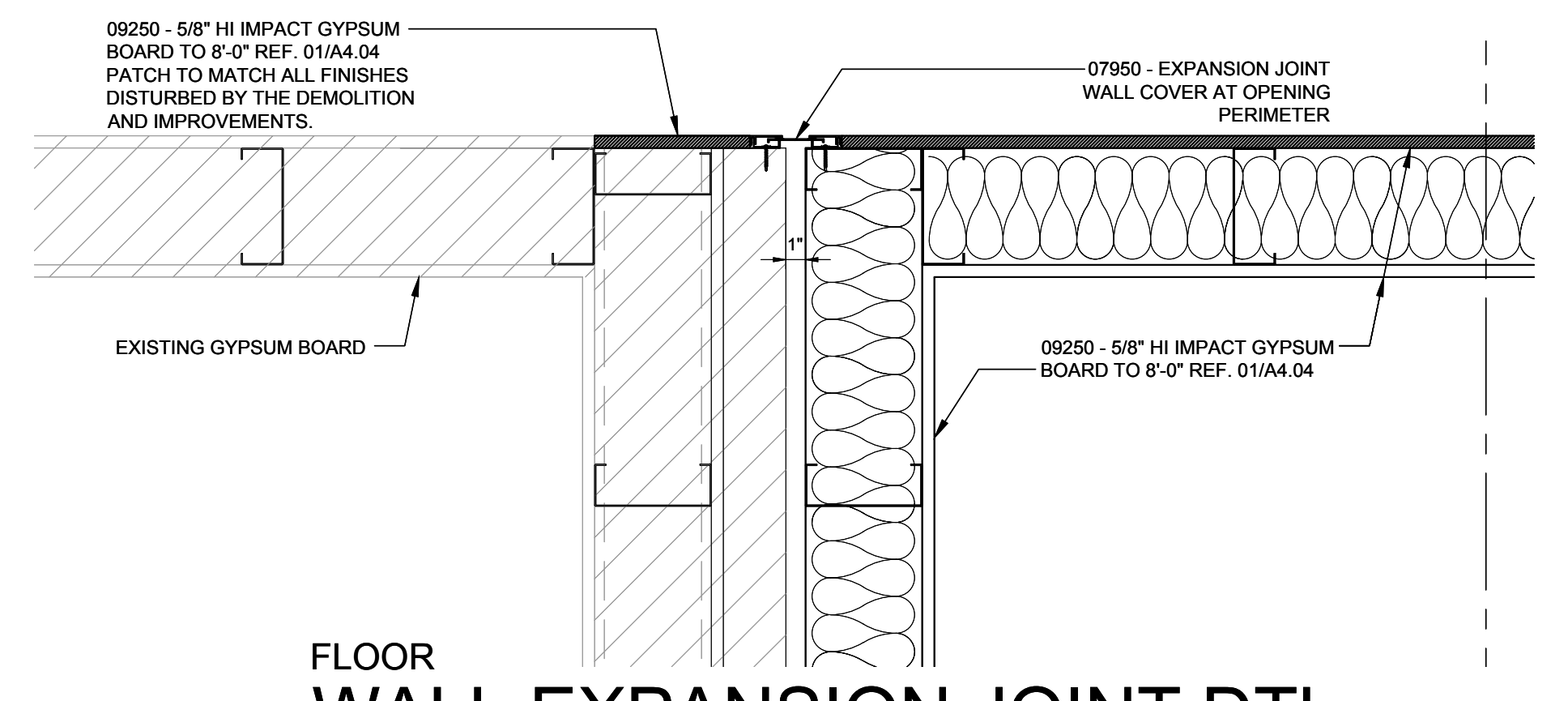
**04 WALL EXPANSION JOINT DTL**  
SCALE 1-1/2" = 1'-0"



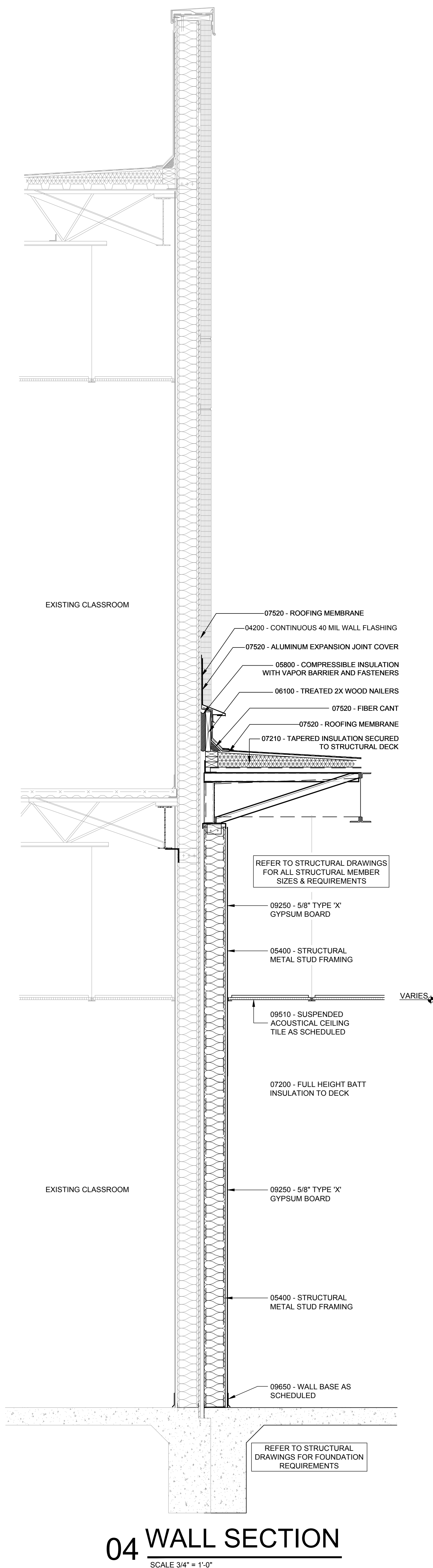
**05 FLOOR EXPANSION JOINT DTL**



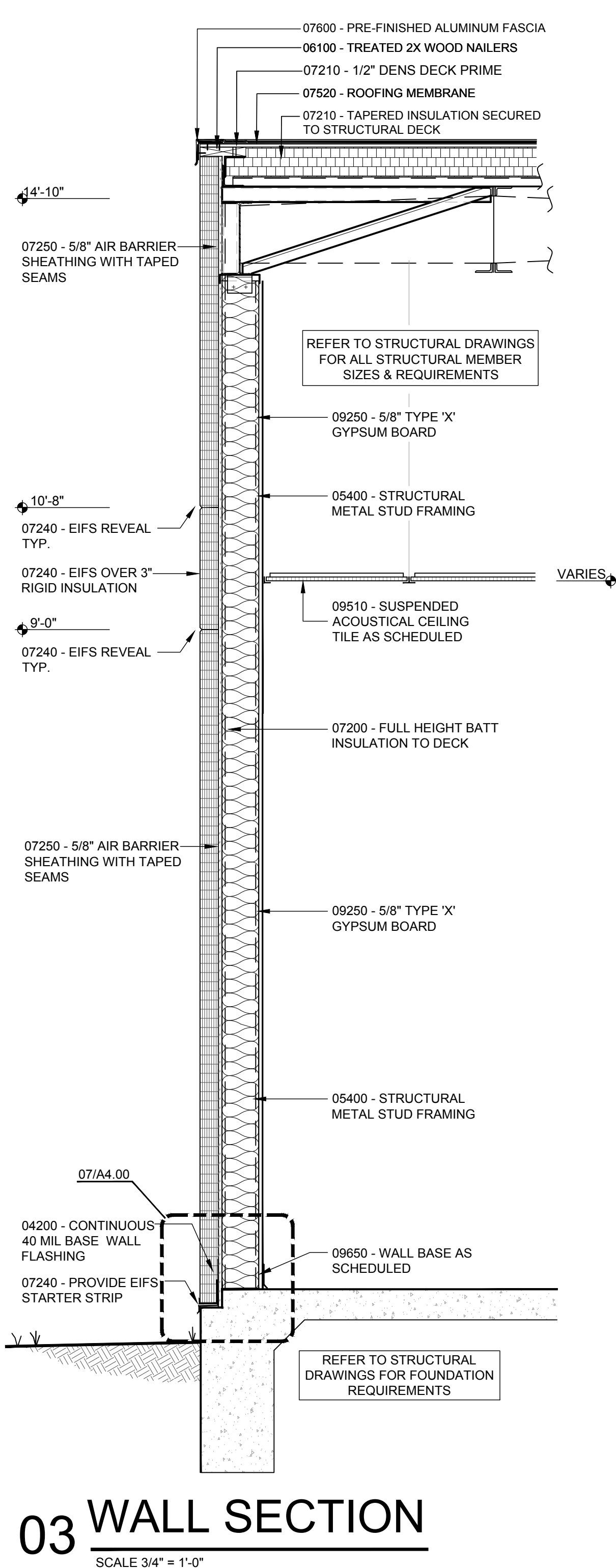
**06 EXPANSION JOINT DTL**  
SCALE 1-1/2" = 1'-0"



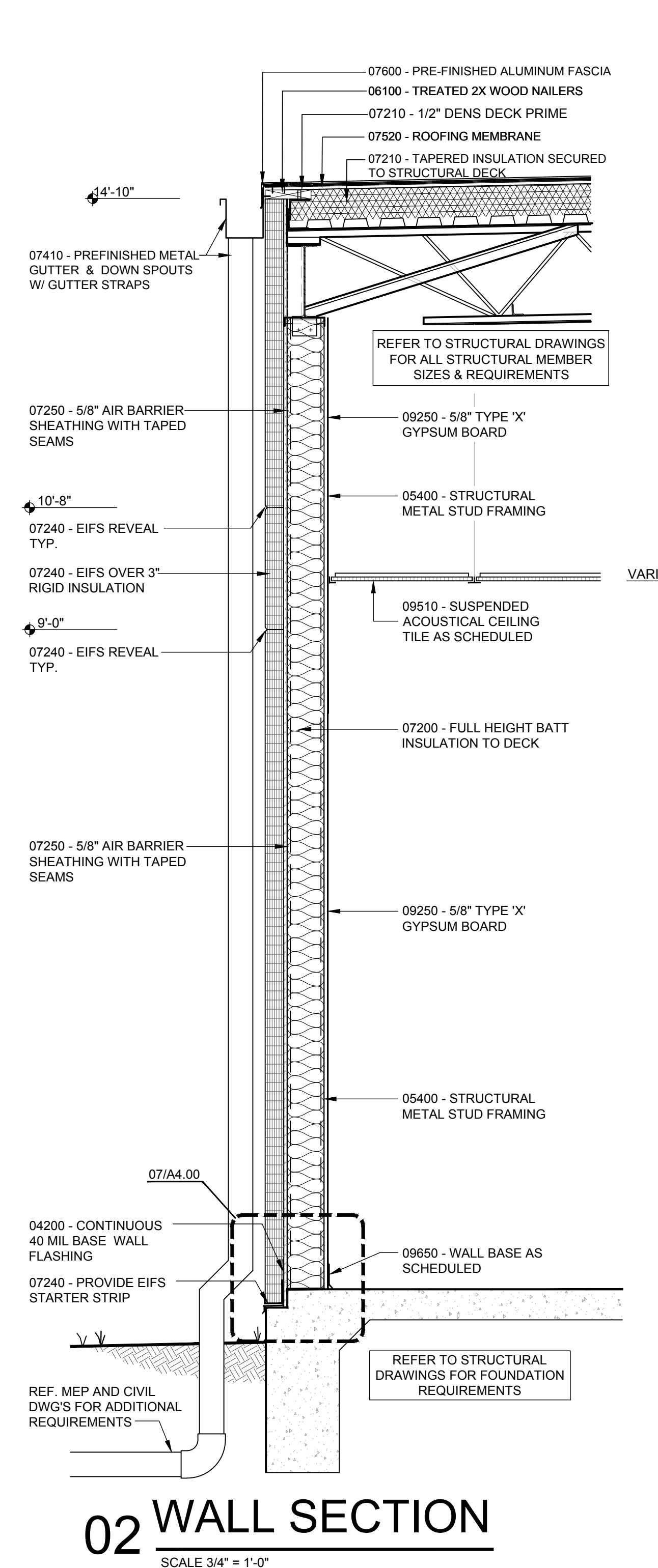
**07 FLOOR WALL EXPANSION JOINT DTL**  
SCALE 1-1/2" = 1'-0"



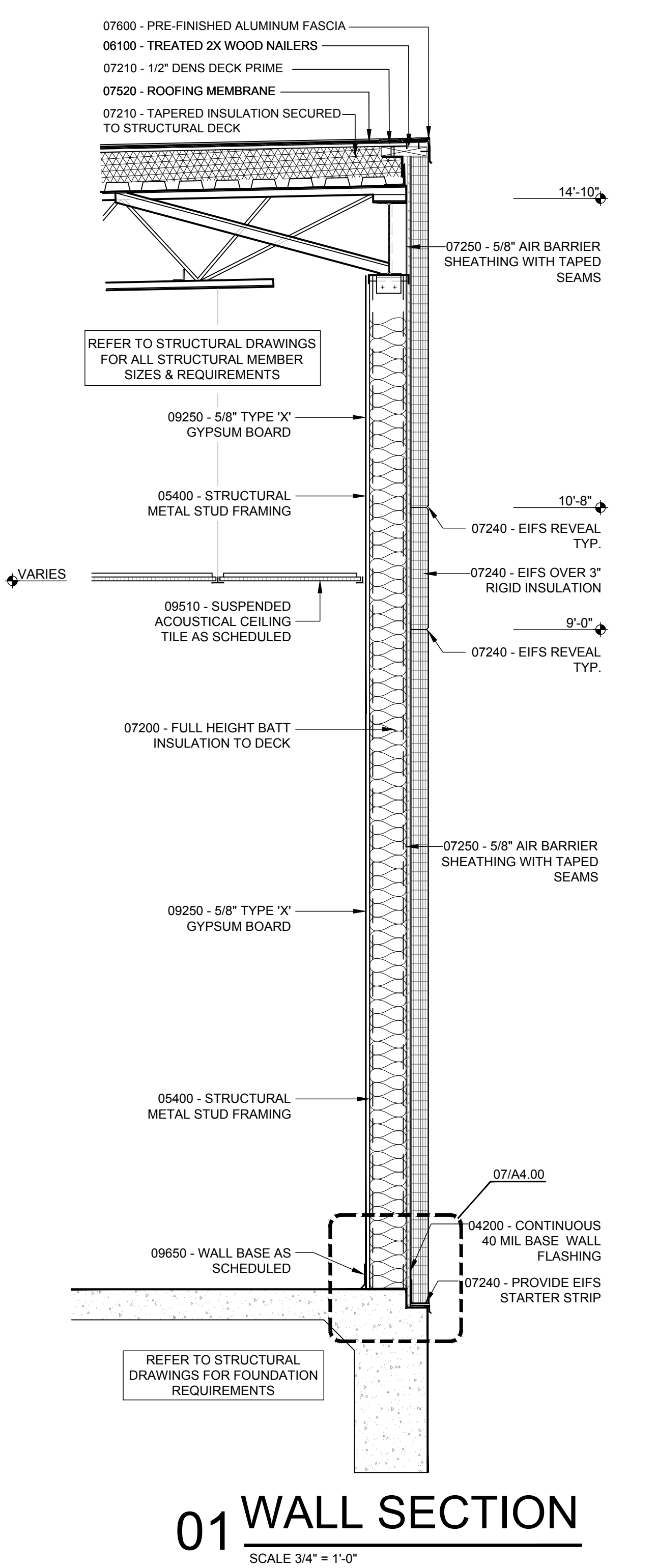
**04 WALL SECTION**  
SCALE 3/4" = 1'-0"



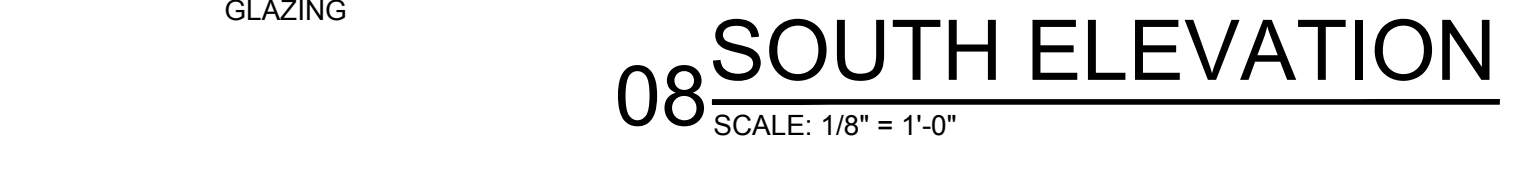
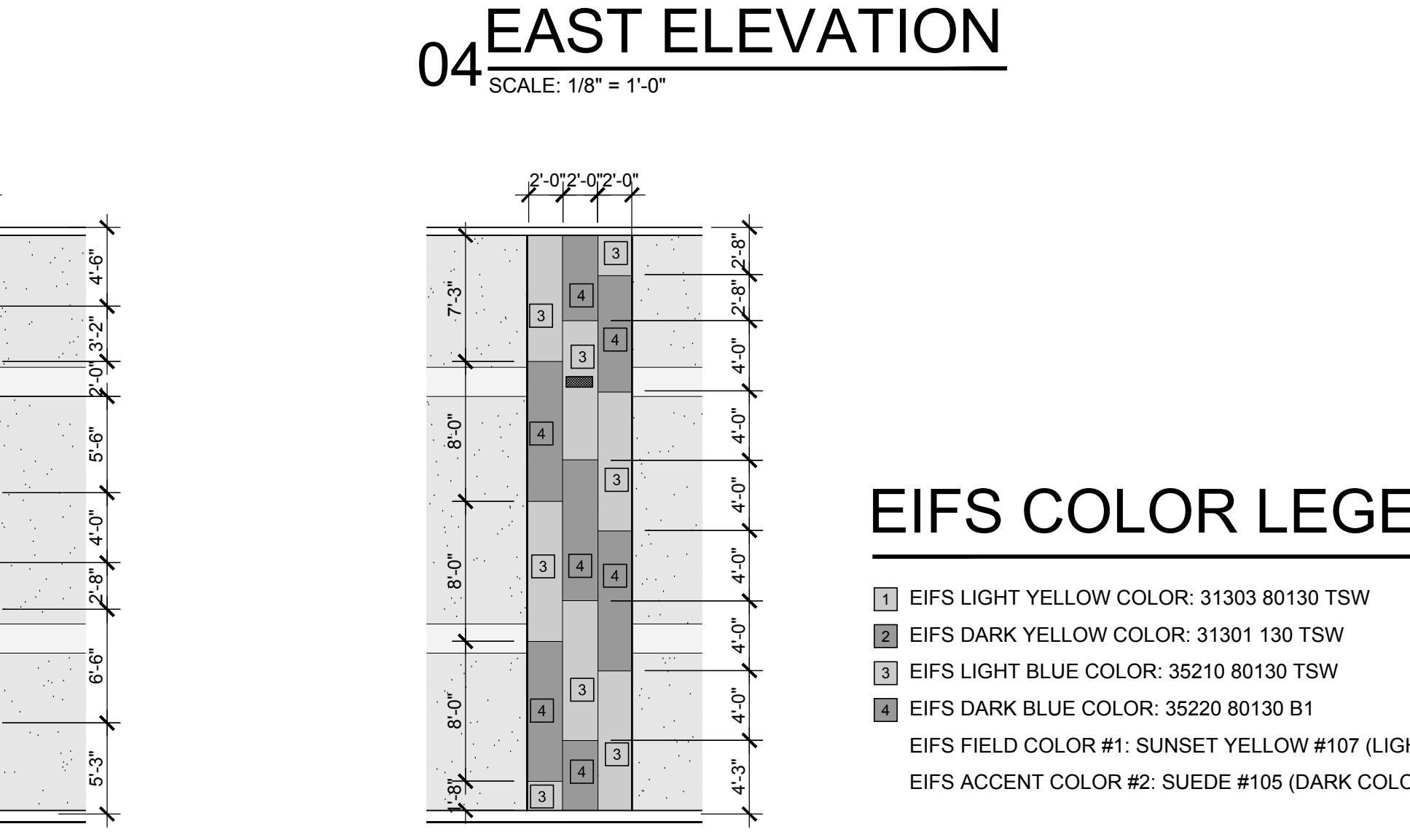
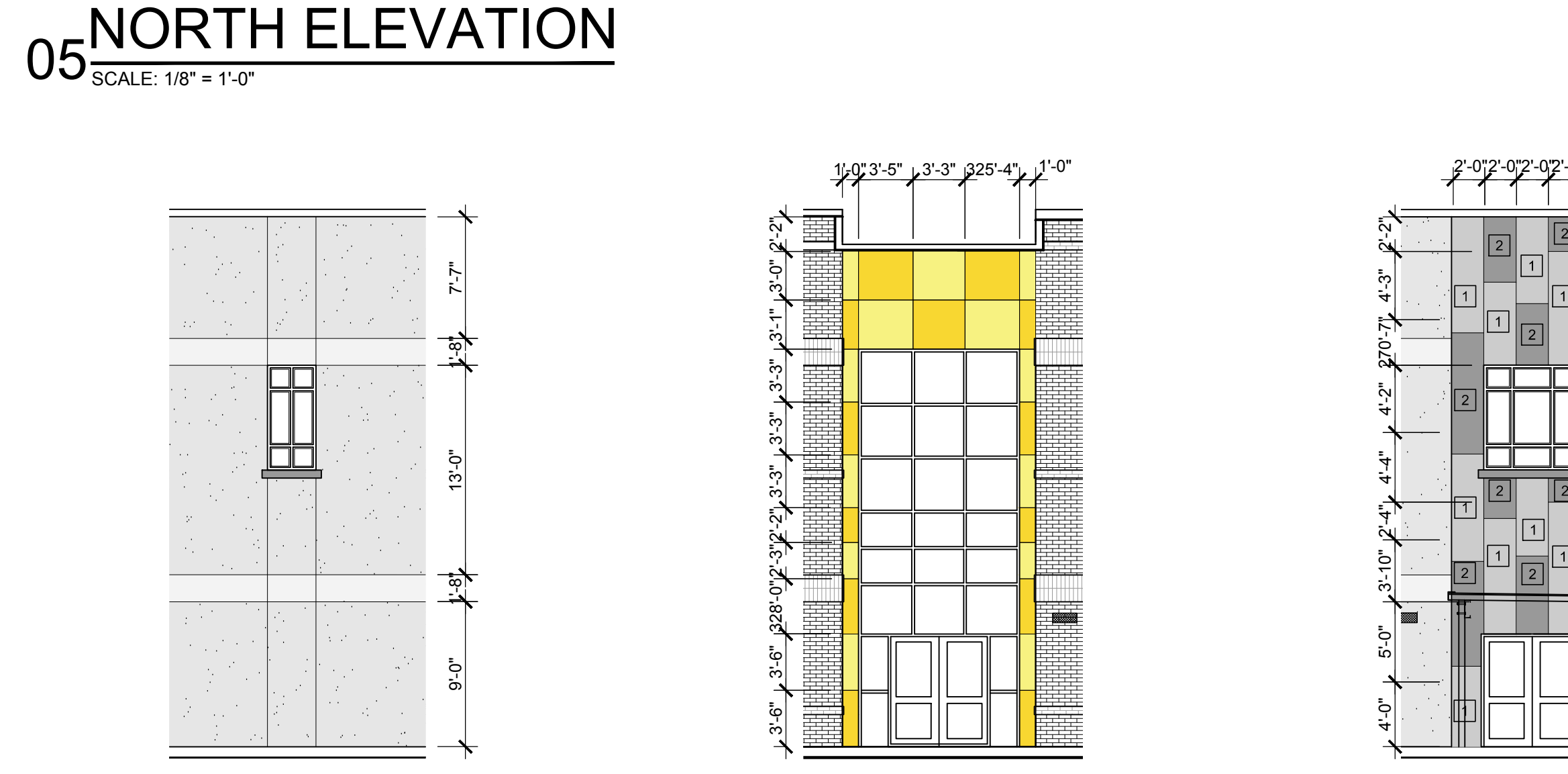
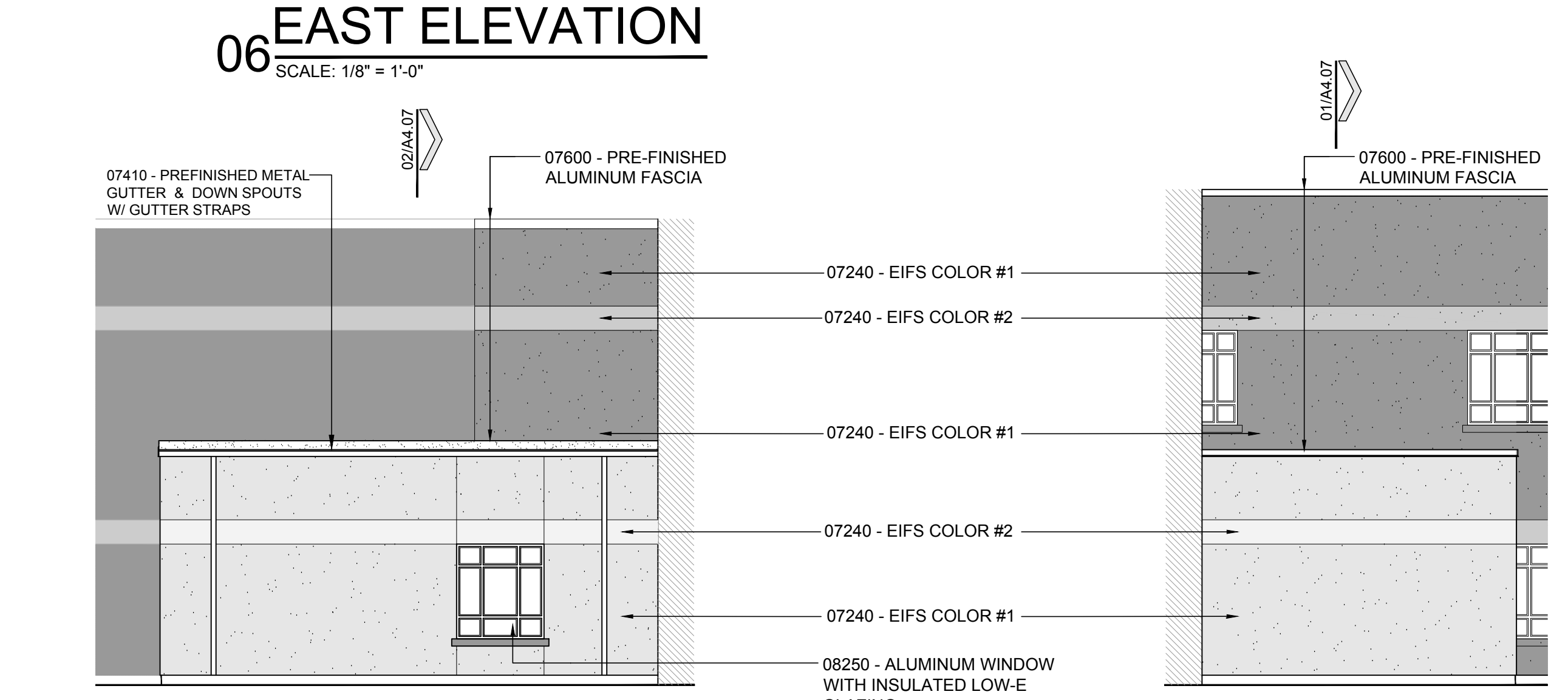
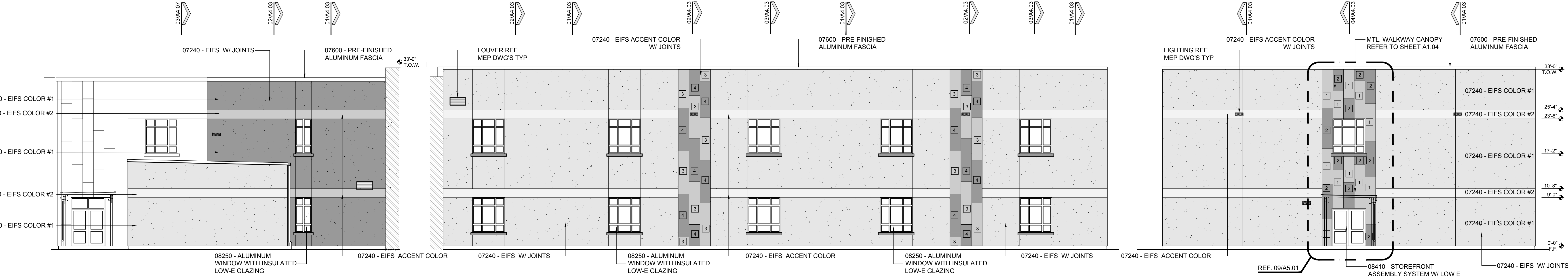
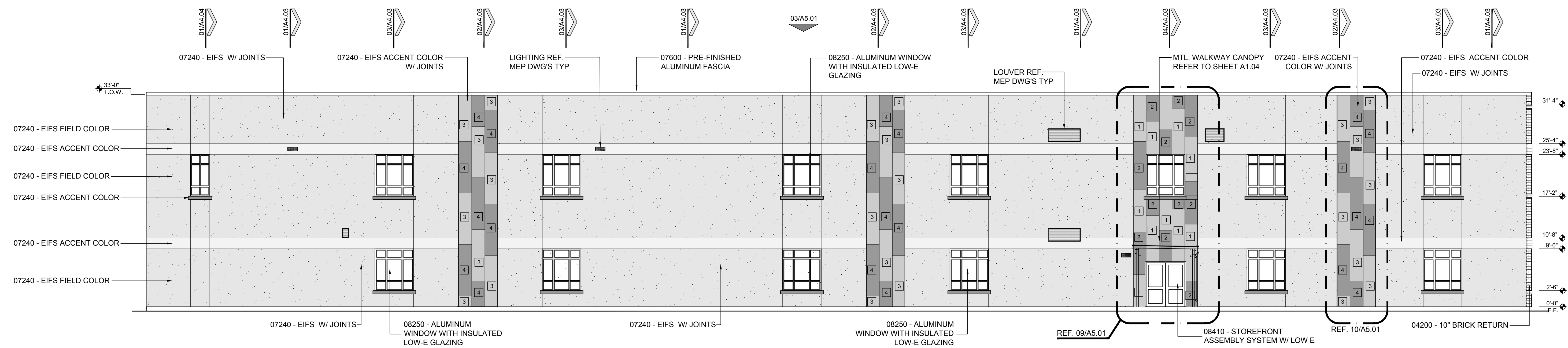
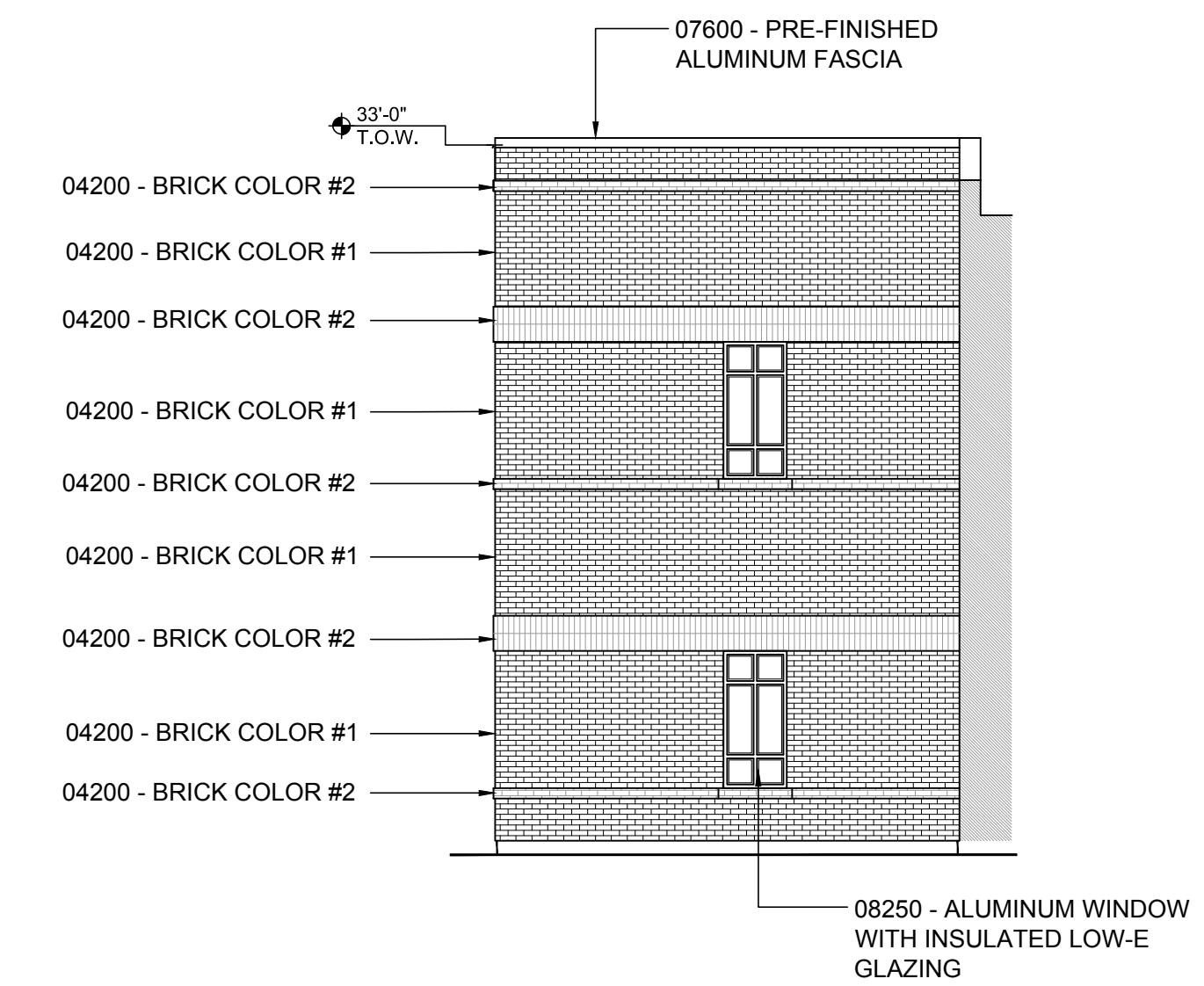
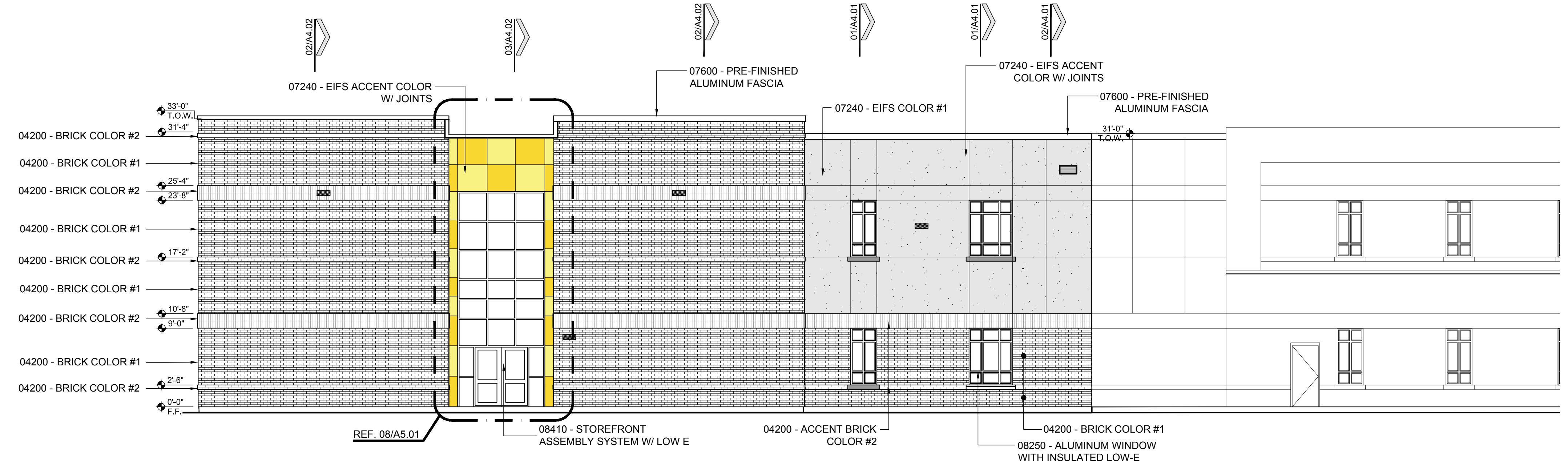
**03 WALL SECTION**  
SCALE 3/4" = 1'-0"



**02 WALL SECTION**  
SCALE 3/4" = 1'-0"



**01 WALL SECTION**  
SCALE 3/4" = 1'-0"



**EIFS COLOR LEGEND**

1	EIFS LIGHT YELLOW COLOR: 31303 80130 TSW
2	EIFS DARK YELLOW COLOR: 31301 130 TSW
3	EIFS LIGHT BLUE COLOR: 35210 80130 TSW
4	EIFS DARK BLUE COLOR: 35220 80130 B1
EIFS FIELD COLOR #1:	SUNSET YELLOW #107 (LIGHT COLOR)
EIFS ACCENT COLOR #2:	SUEDE #105 (DARK COLOR)

**IDEA-OWASSA**  
**IDEA COLLEGE PREP PHASE II**  
 Public Schools



# GENERAL STRUCTURAL NOTES

## SPECIAL INSPECTIONS

SPECIAL INSPECTIONS INDEPENDENT OF THE CONTRACTOR, THE ARCHITECT, OR THE ENGINEER, SHALL BE PROVIDED BY A SPECIAL INSPECTOR EMPLOYED BY THE OWNER ACCORDING TO CHAPTER 17 OF THE IBC 2012. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS. THE SPECIAL INSPECTOR SHALL SEND WRITTEN REPORTS TO THE OWNER, THE ARCHITECT, THE ENGINEER AND THE CONTRACTOR. THE REPORTS SHALL INDICATE IF WORK INSPECTED WAS DONE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE SPECIAL INSPECTOR SHALL BRING THE DISCREPANCIES TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING THAT THE SPECIAL INSPECTION WORK WAS, TO THE BEST OF THEIR KNOWLEDGE, IN OR NOT IN CONFORMANCE WITH THE DRAWINGS, SPECIFICATIONS AND APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC 2012.

CONTINUOUS OR PERIODIC SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING WORK:

### REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
VERIFY SOILS BELOW SHALLOW FOUNDATIONS ARE SUITABLE TO ACHIEVE THE BEARING CAPACITY FOR WHICH THEY WERE DESIGNED		X
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		X
PERFORM CLASSIFICATION AND TESTING OF COMPACTED SELECT FILL MATERIALS		X
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF SELECT FILL	X	
PRIOR TO PLACEMENT OF COMPACTED SELECT FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		X

### REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT		X
INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE	X	
VERIFY USE OF REQUIRED DESIGN MIX		X
PERFORM SLUMP AND AIR CONTENT TEST, AND DETERMINE THE TEMPERATURE OF THE CONCRETE AT THE TIME OF SAMPLING FRESH CONCRETE FOR MAKING SPECIMENS FOR STRENGTH TESTS PER ACI 318	X	
INSPECTION OF CONCRETE AND SHOTORETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	
INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		X
INSPECTION OF PRESTRESSED CONCRETE APPLICATION OF PRESTRESSING FORCES AND GROUTING OF BONDED PRESTRESSING TENDONS	X	
VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS		X
ERECTION OF PRECAST CONCRETE MEMBERS		X
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		X

### REQUIRED VERIFICATION AND INSPECTION OF ANCHORS

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
CAST-IN-PLACE, POST-INSTALLED, MECHANICAL AND EPOXY SET ANCHORS.		
AS APPLICABLE, THE INSPECTION PROGRAM SHALL VERIFY THE ANCHOR TYPE, EMBEDMENT, TIGHTENING TORQUE, DIMENSIONS, HOLE DEPTH & DIAMETER AND CLEANOUT, EPOXY MIXING AND PLACEMENT PROCEDURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE CURRENT ICC-ES EVALUATION REPORT		
FREQUENCY OF INSPECTION SHALL BE IN ACCORDANCE WITH THE CURRENT ICC-ES EVALUATION REPORT, OR PER THE SPECIAL INSPECTION REQUIREMENTS OF THE ANCHOR SUBSTRATE AND ORIENTATION, WHICHEVER IS MORE STRINGENT		

### REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION

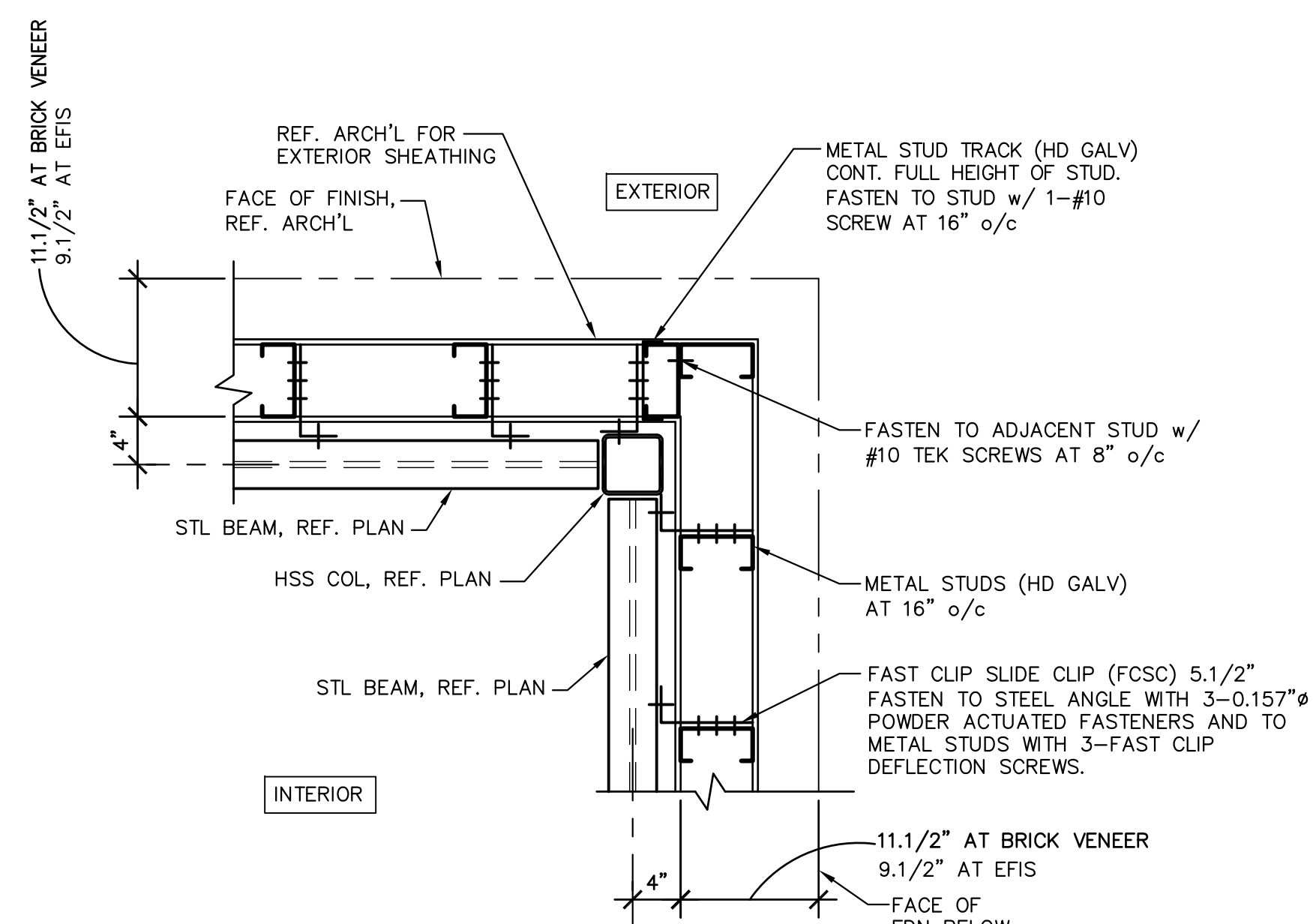
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS		X
INSPECTION OF HIGH STRENGTH BOLTING		X
INSPECTION OF WELDING:		
COMPLETE AND PARTIAL PENETRATION GROOVE WELDS	X	
MULTIPASS FILLET WELDS	X	
SINGLE-PASS FILLET WELDS		X
FLOOR AND ROOF DECK WELDS		X
INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS		X

### REQUIRED VERIFICATION AND INSPECTION OF COLD-FORMED LIGHTWEIGHT STEEL FRAME CONSTRUCTION (EXTERIOR METAL STUDS)

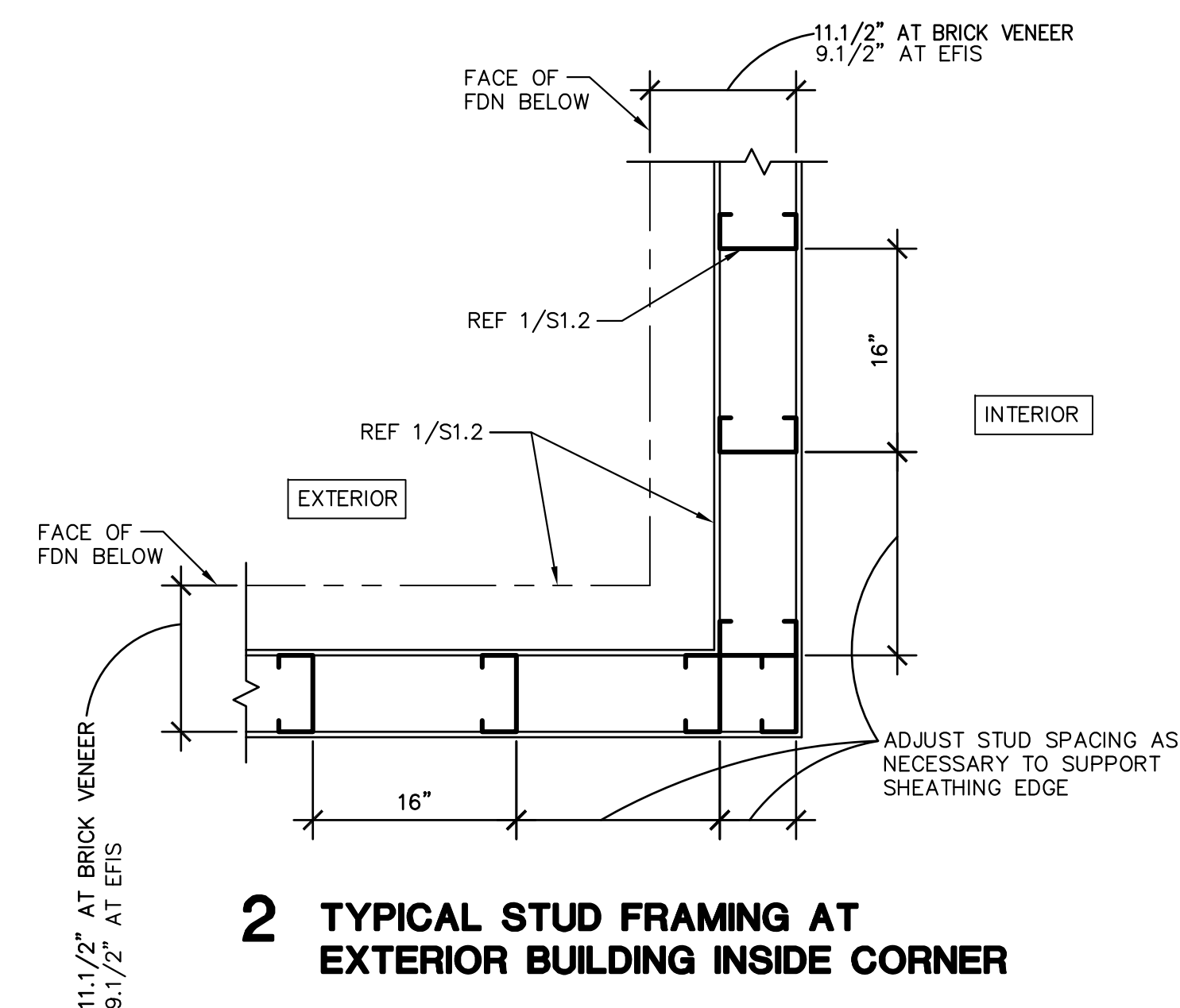
VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
MATERIAL VERIFICATION OF COLD-FORMED LIGHTWEIGHT FRAMING MEMBERS AND ACCESSORIES		X
TYPE, SIZE AND GAGE OF FRAMING MEMBERS AND ACCESSORIES (AS PER SHOP DRAWINGS)		X
SPACING OF FRAMING MEMBERS, BRACING, BLOCKING, AND BRIDGING (AS PER SHOP DRAWINGS)		X
INSPECTION OF WELDING, TYPE, LENGTH, SPACING (AS PER SHOP DRAWINGS)		X
INSPECTION OF FASTENER ATTACHMENT: BOLTING, ANCHORING, AND OTHER FASTENING OF COMPONENTS.		X

### REQUIRED VERIFICATION AND INSPECTIONS OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS

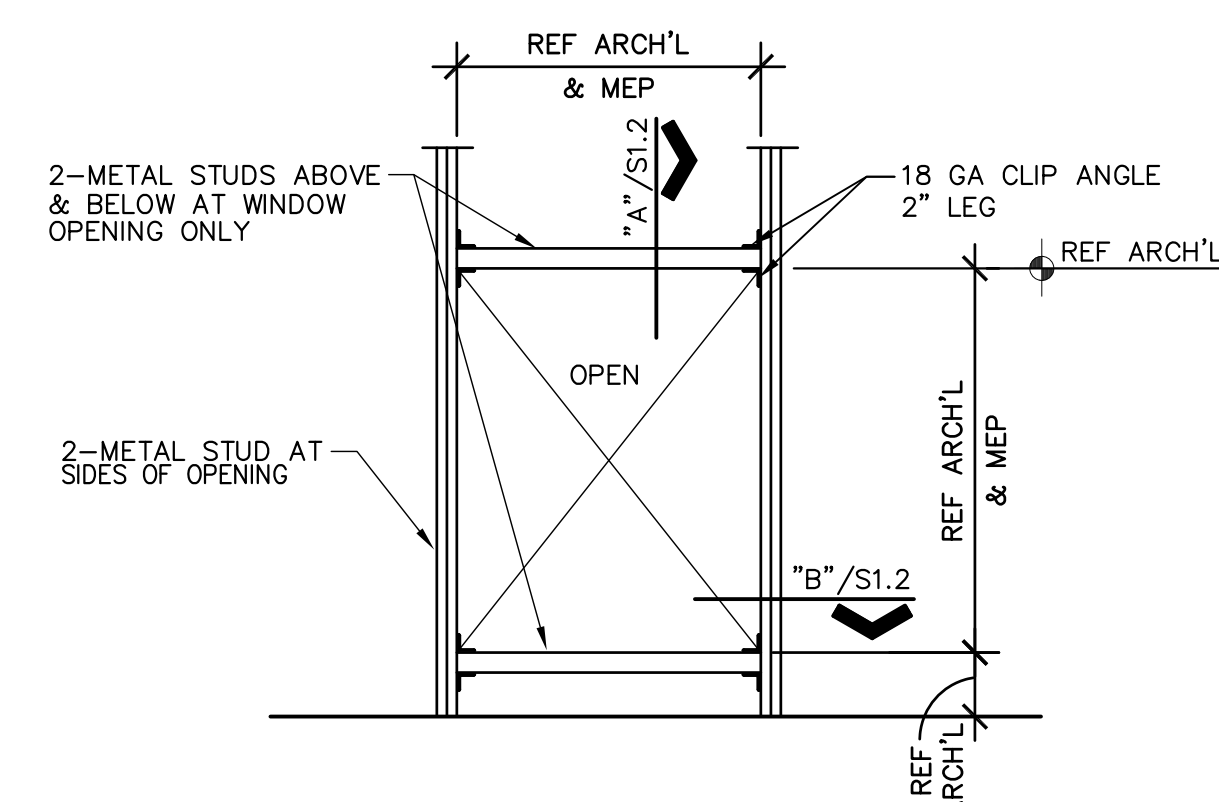
VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
INSPECT THE INSTALLATION OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS		X
INSPECT WELDED OR BOLTED END CONNECTIONS		X
INSPECT HORIZONTAL OR DIAGONAL STANDARD BRIDGING AND BRIDGING THAT DIFFERS FROM SJI SPECIFICATIONS		X



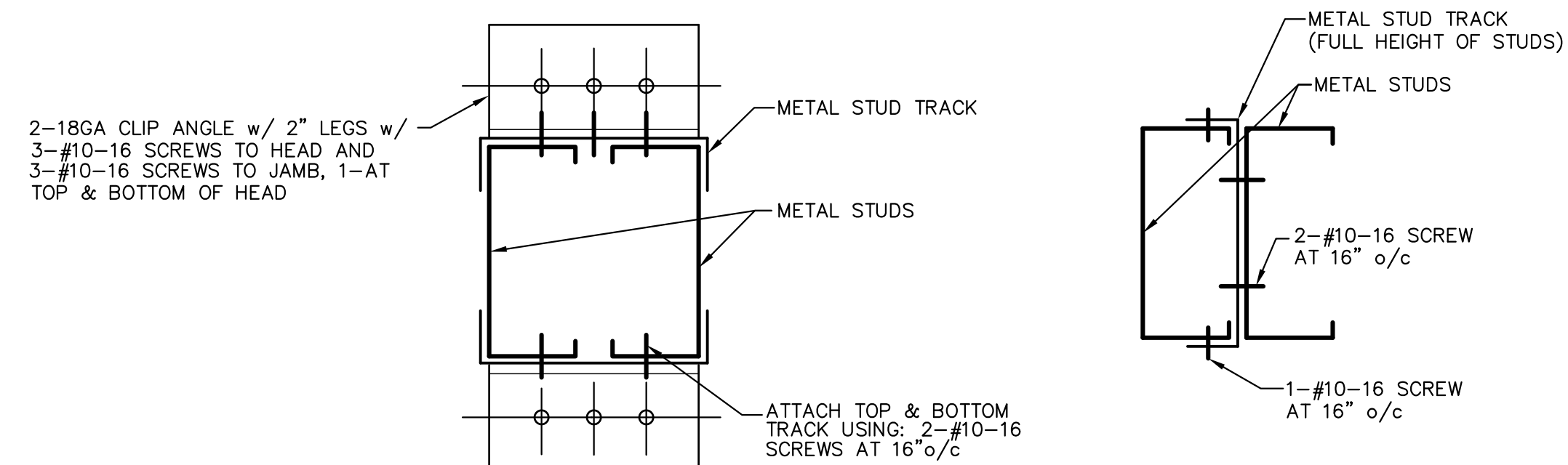
1 TYPICAL STUD FRAMING AT EXTERIOR BUILDING OUTSIDE CORNER



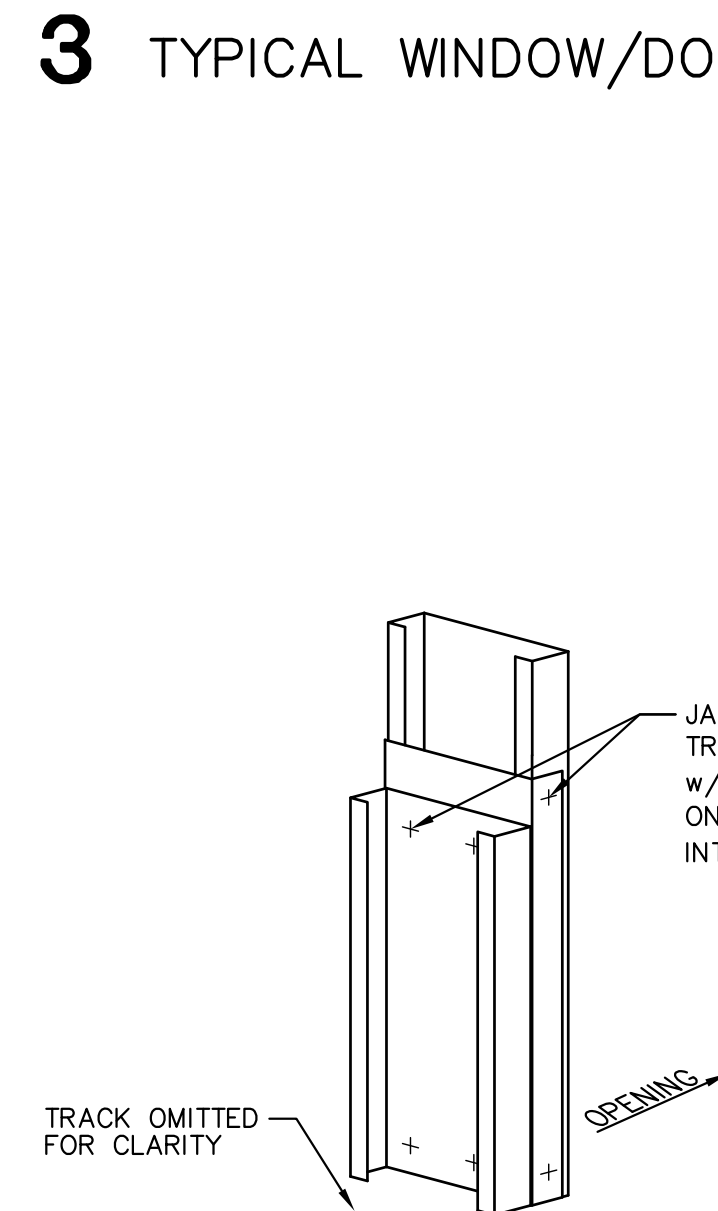
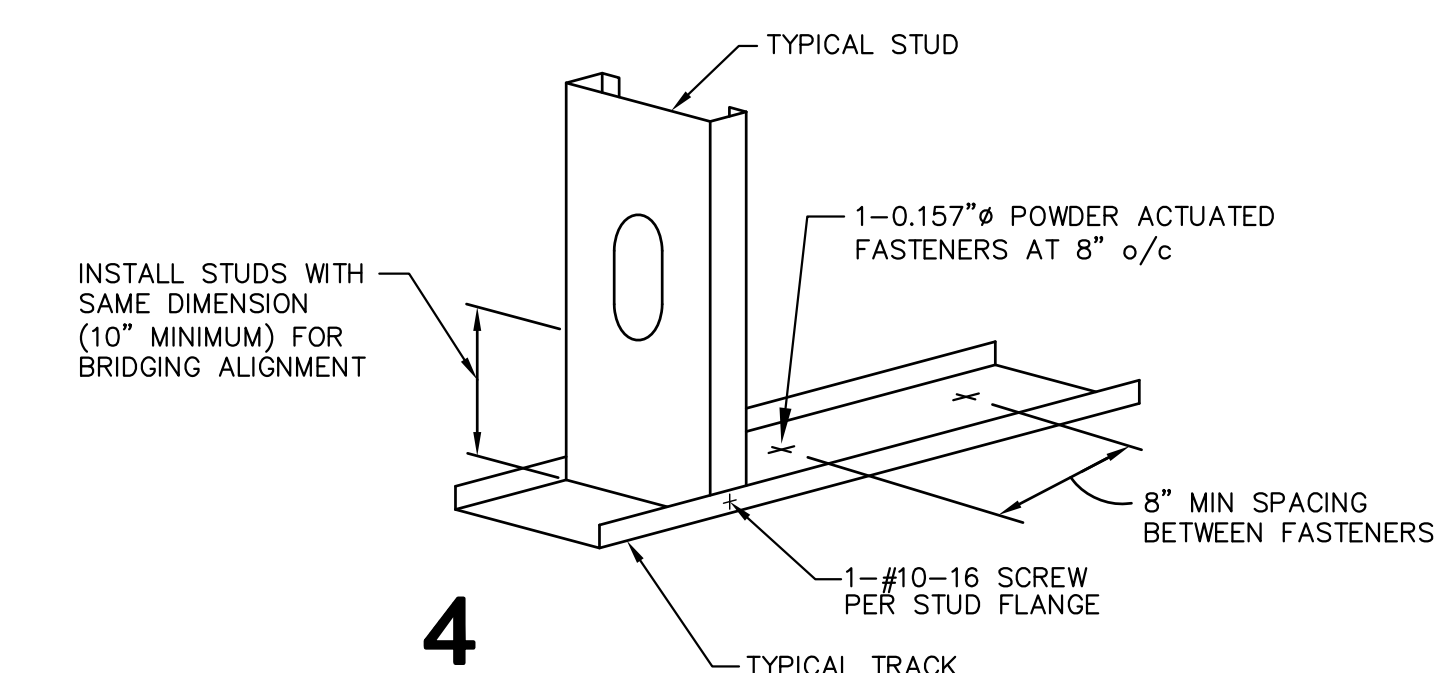
2 TYPICAL STUD FRAMING AT EXTERIOR BUILDING INSIDE CORNER



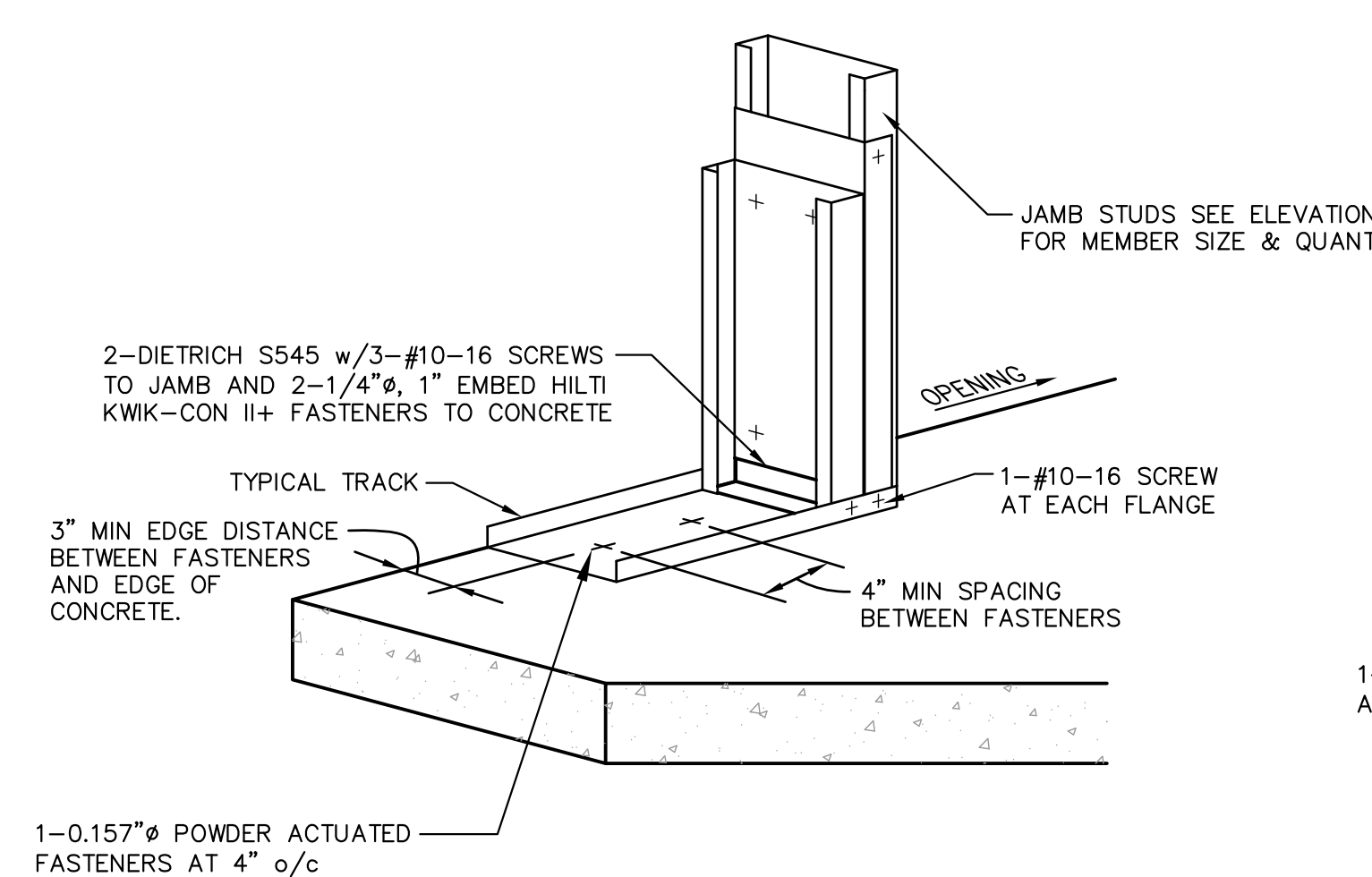
3 TYPICAL WINDOW/DOOR/LOUVER OPENING



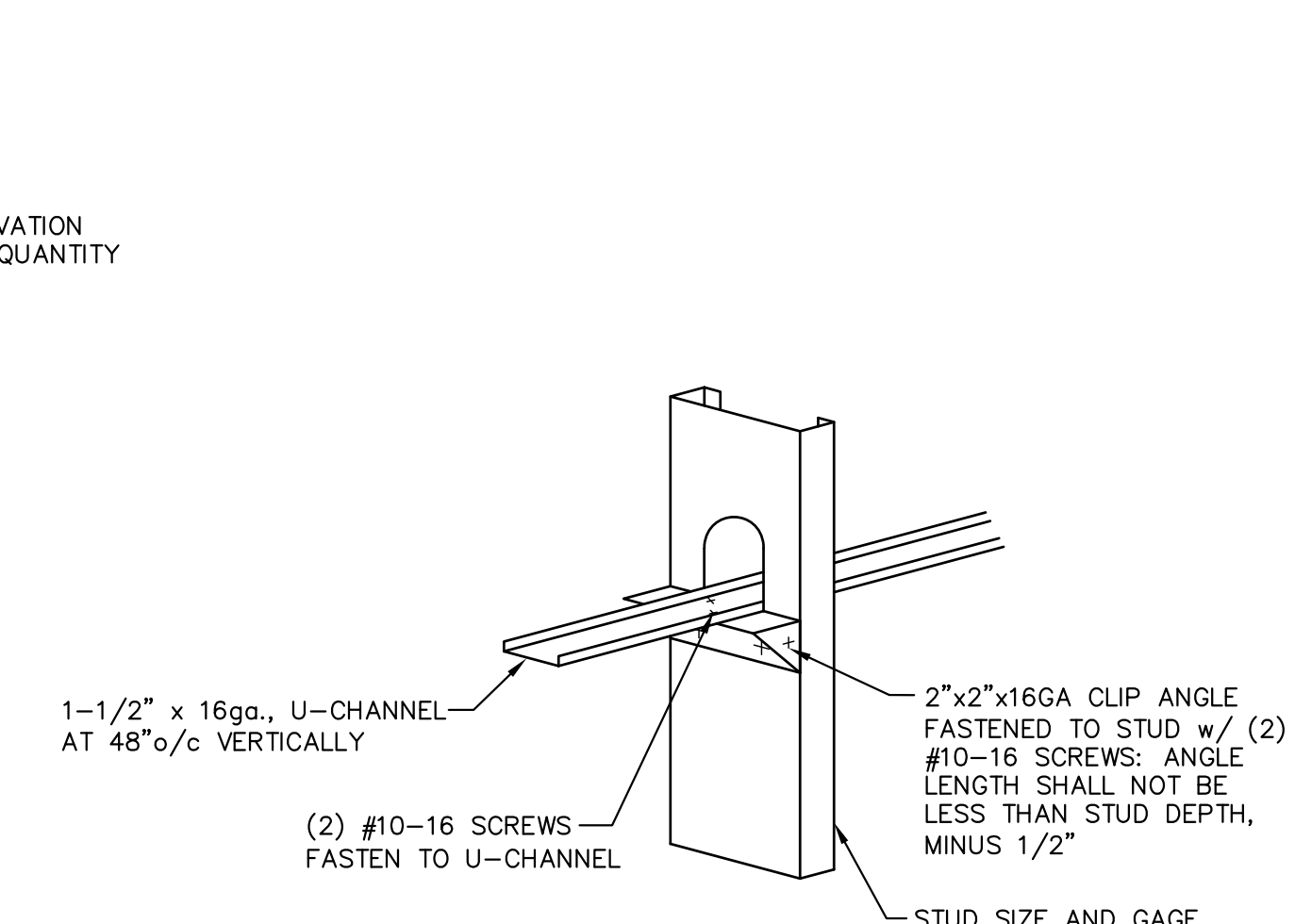
4



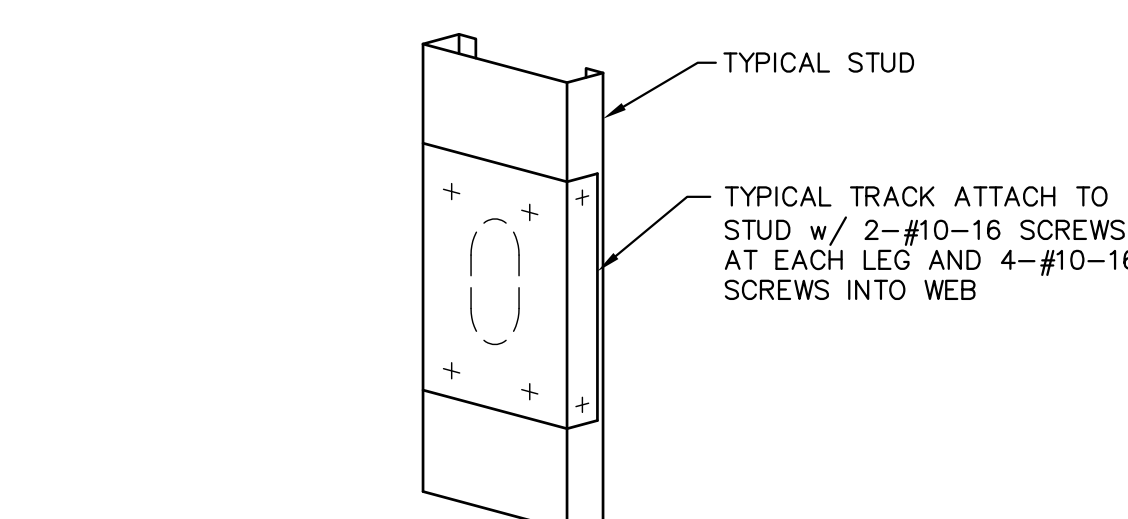
5



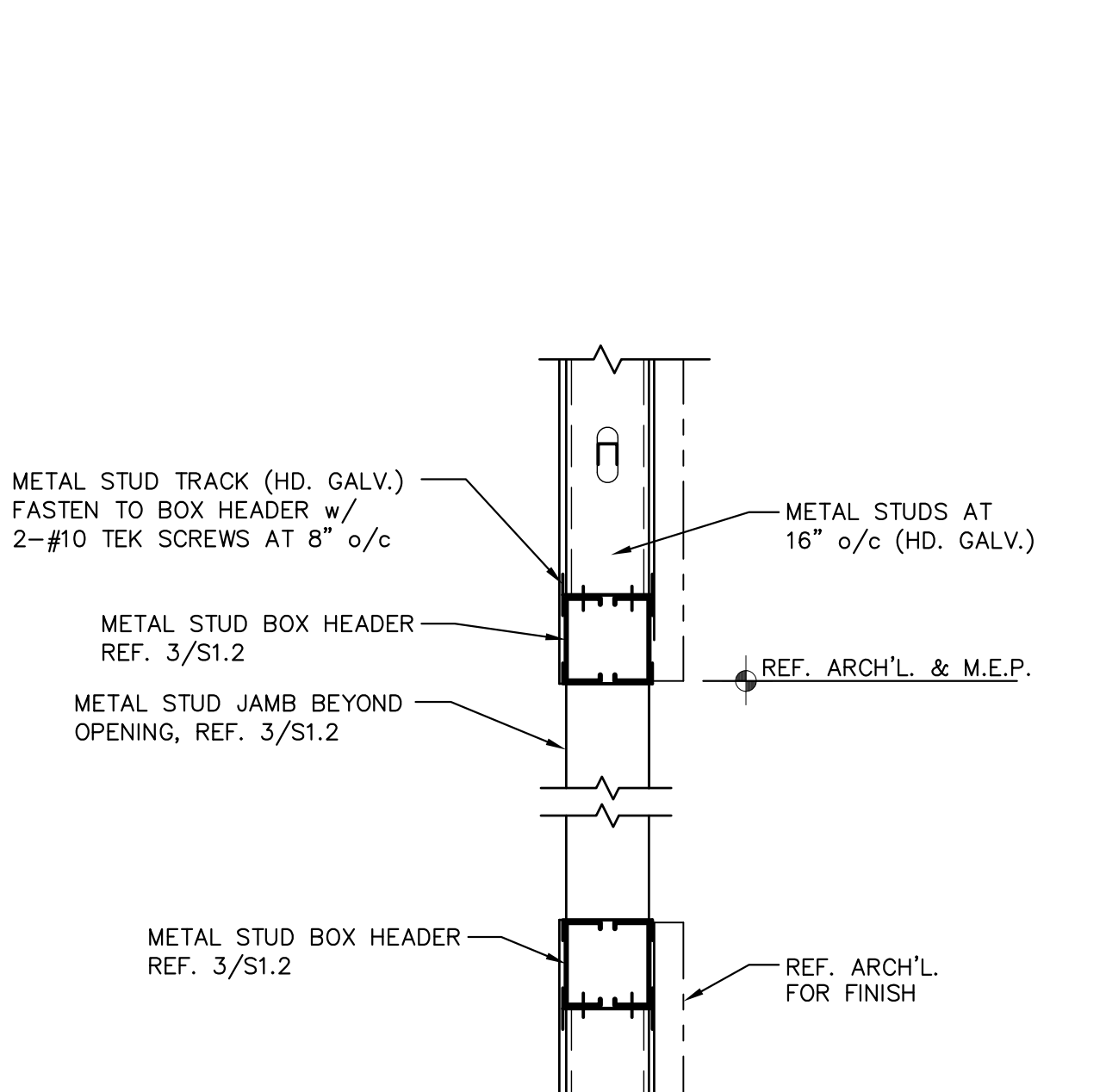
6



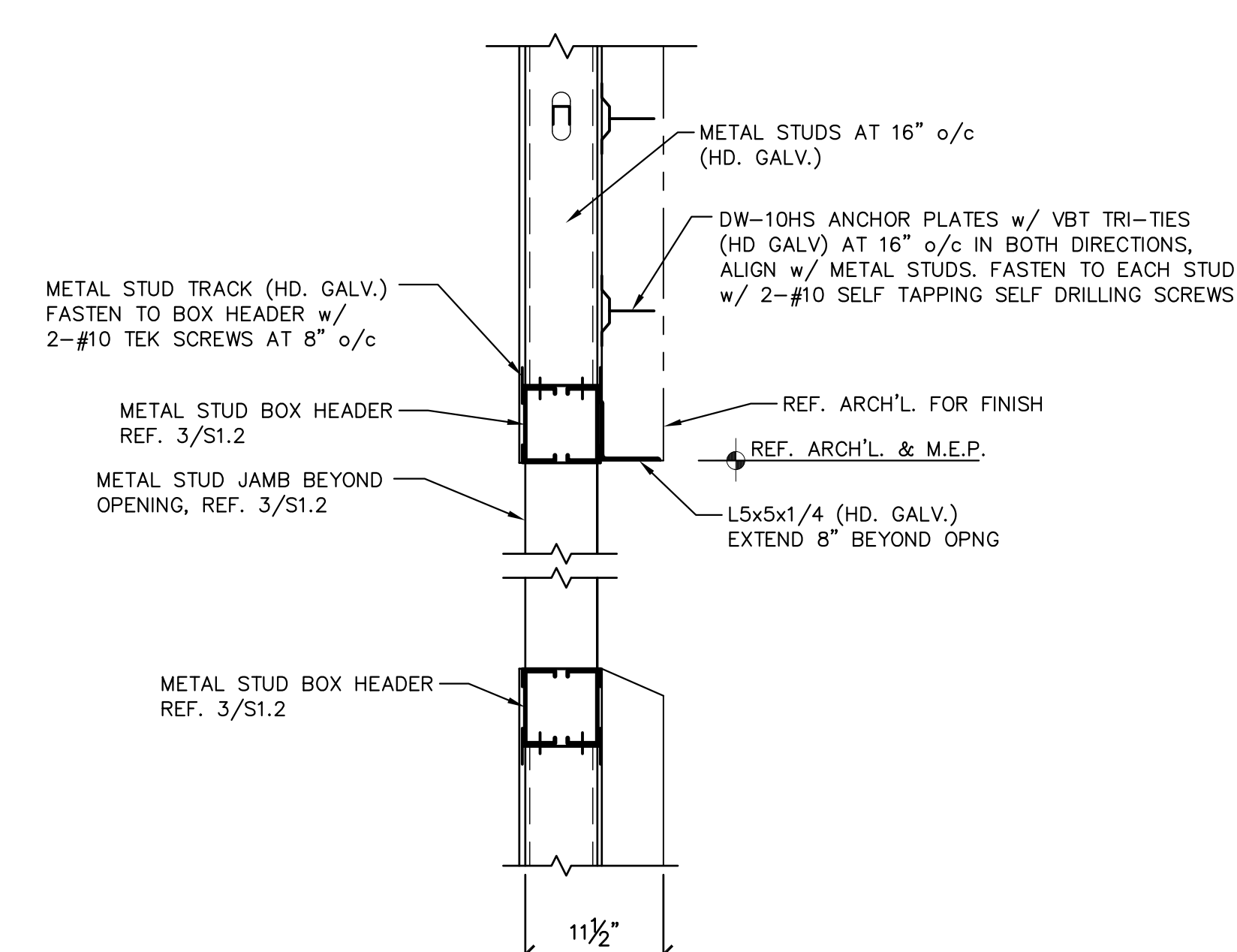
7 METAL STUD BRIDGING



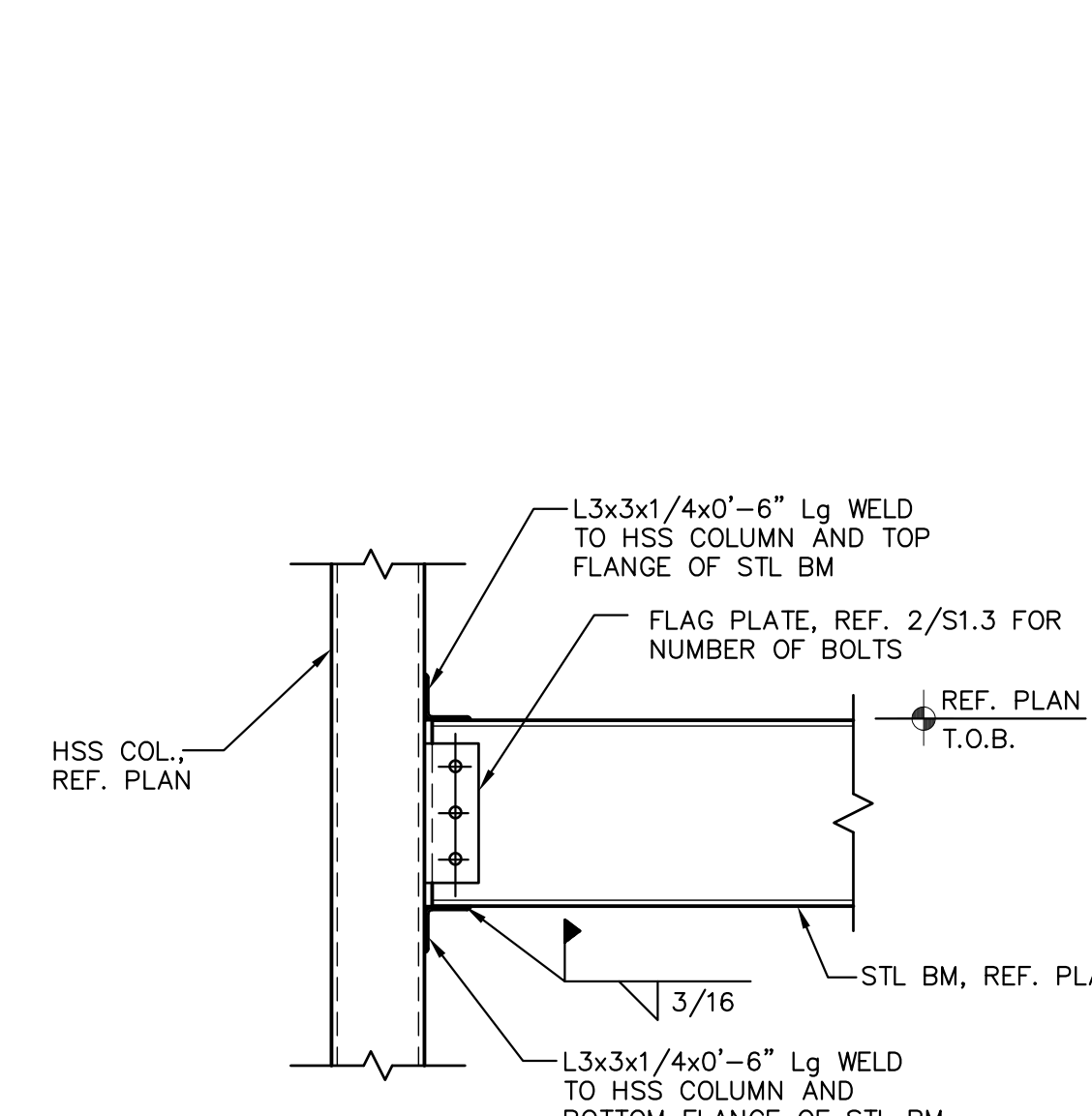
8 TYPICAL PUNCH-OUT REINFORCEMENT DETAIL



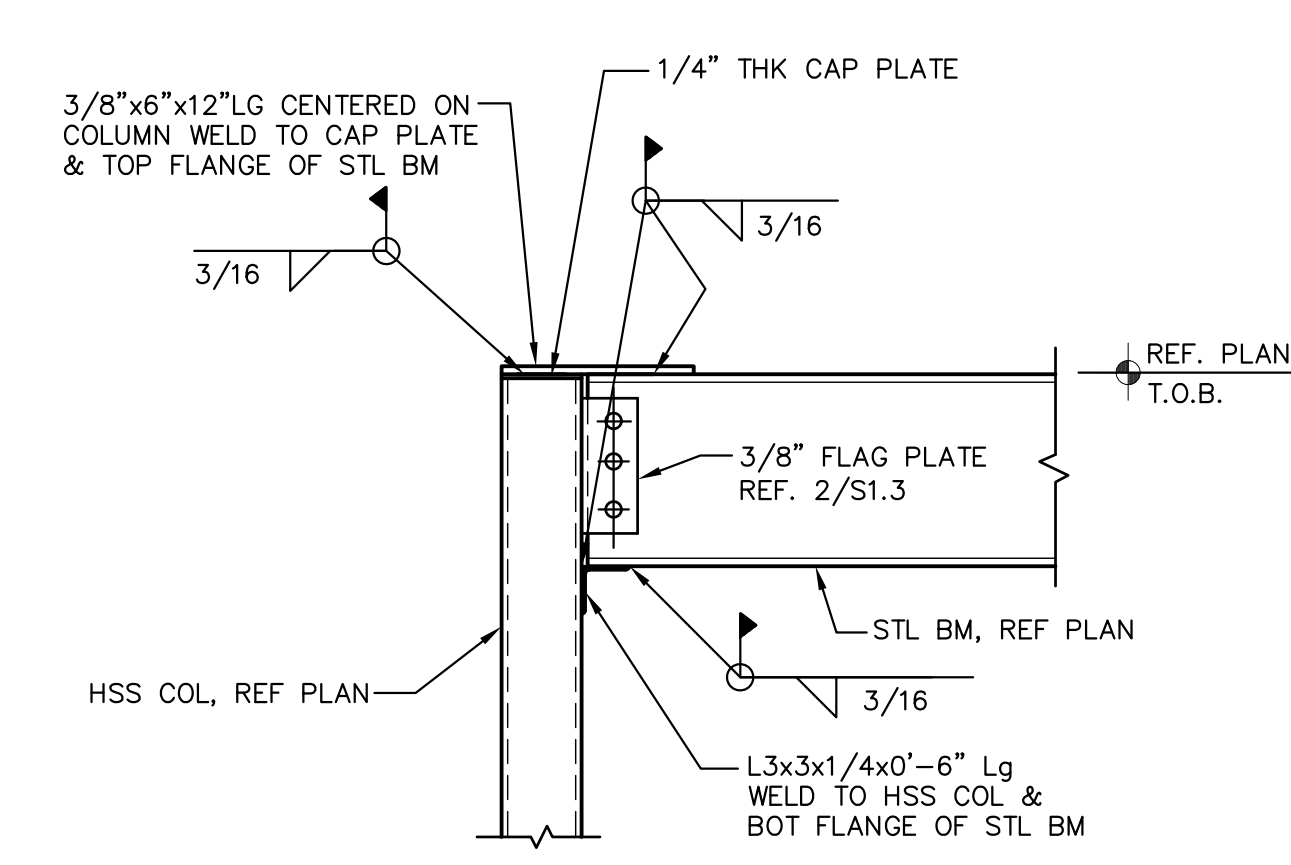
9 TYPICAL WINDOW/DOOR/LOUVER OPENING HEADER AND SILL DETAIL



10 TYPICAL WINDOW/DOOR/LOUVER OPENING HEADER AND SILL DETAIL WITH BRICK VENEER



11 TYP WF BEAM-TO-HSS COLUMN MOMENT CONNECTION



12 TYP WF BEAM-TO-HSS COLUMN MOMENT CONNECTION DETAIL AT TOP OF COLUMN

No.	REVISIONS	BY



GMS ARCHITECTS  
 1150 Paredes Line Rd.  
 Brownsville, TX 78526  
 (956) 546-0110  
 fax (956) 546-0196

IDEA-OWASSA COLLEGE PREP PHASE II

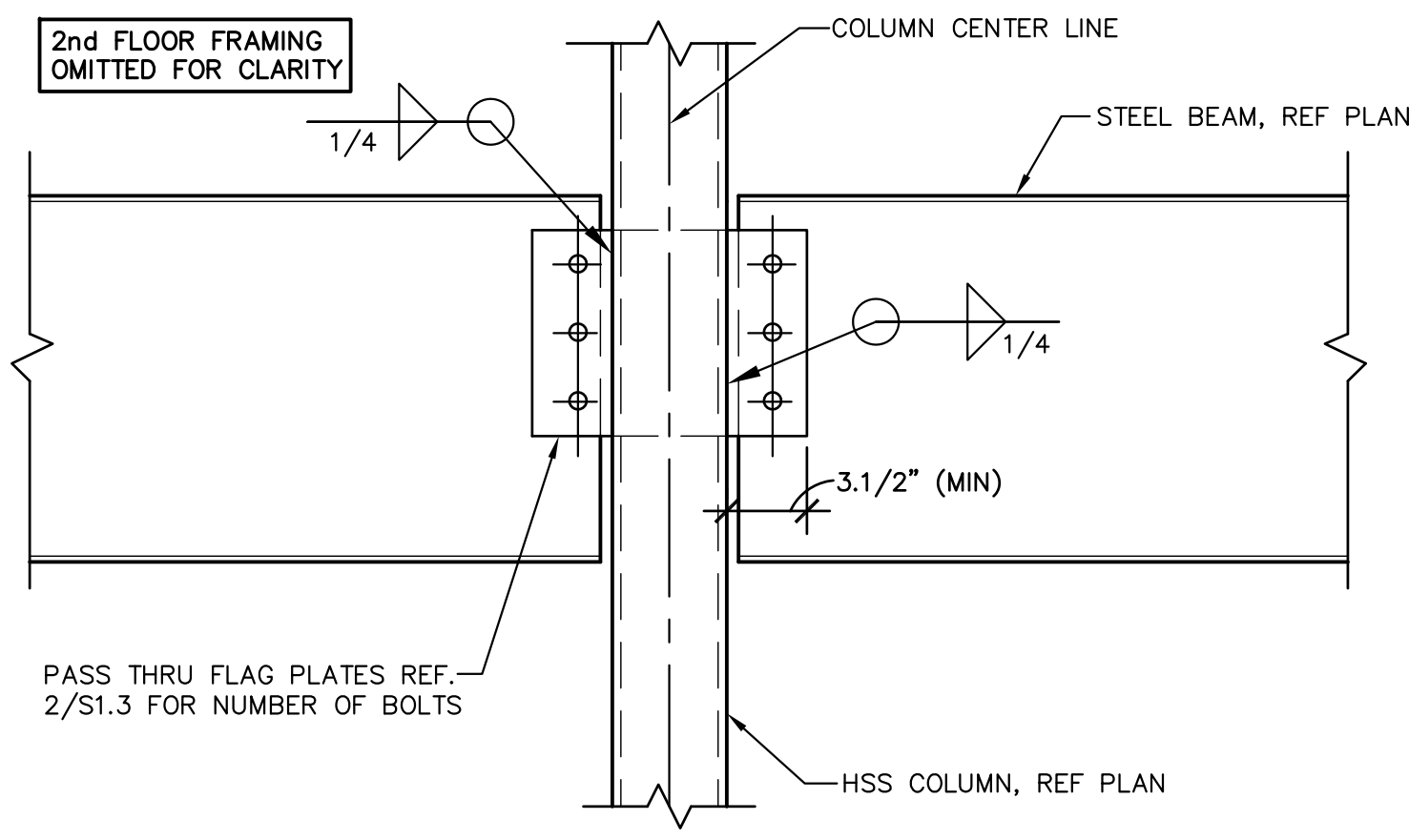
IDEA COLLEGE PREP PHASE II  
 Public Schools



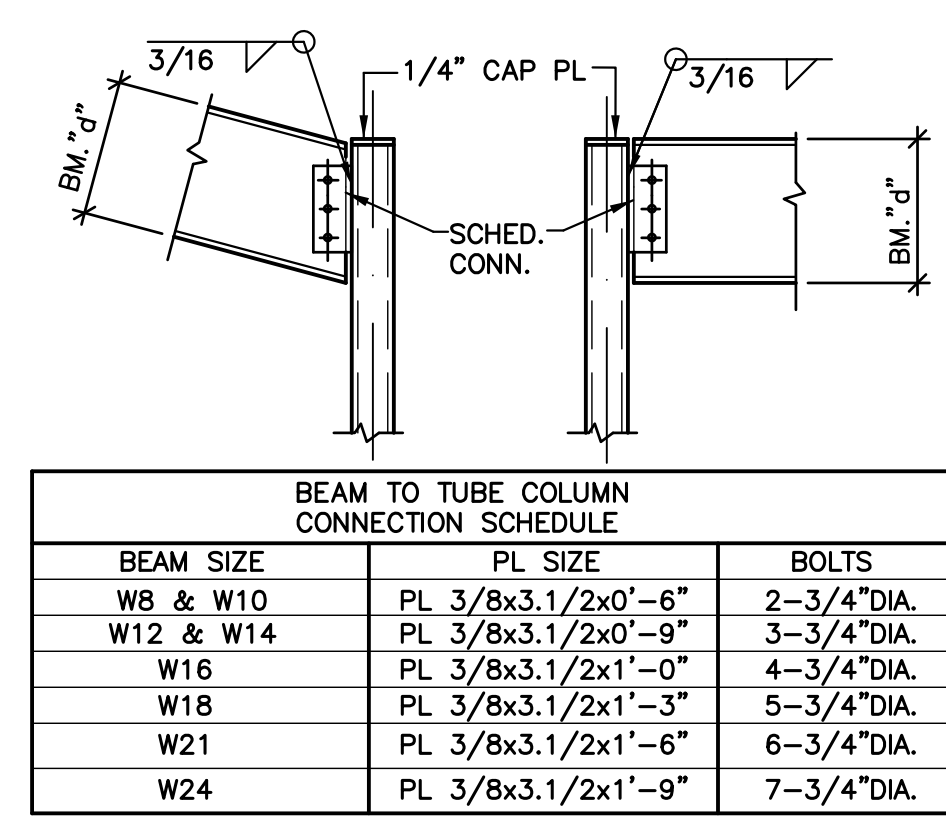
© Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers

Date: JUNE 13, 2019  
 Scale: As Shown  
 DRAWN BY: AV, JH, IG  
 CHECKED BY: JS  
 Job No: 192-519  
 Sheet:

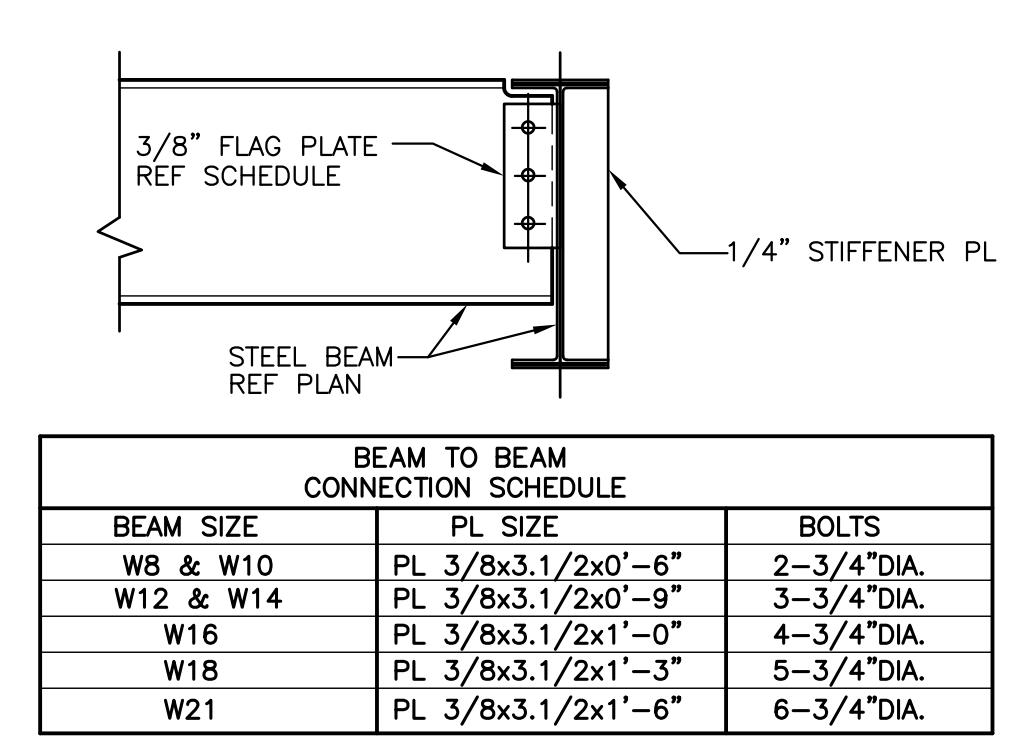
**S13**



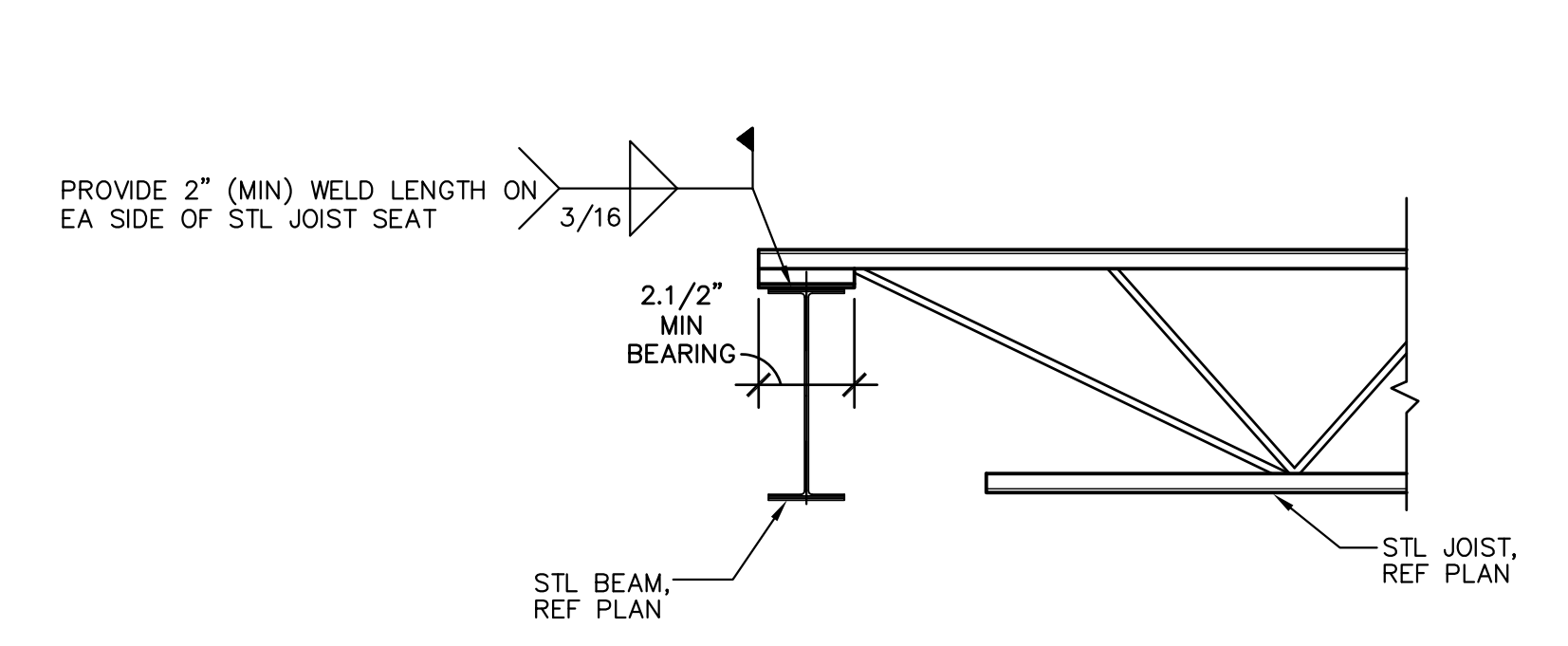
**1** 2nd FLOOR PASS THRU FLAG PLATE DETAIL



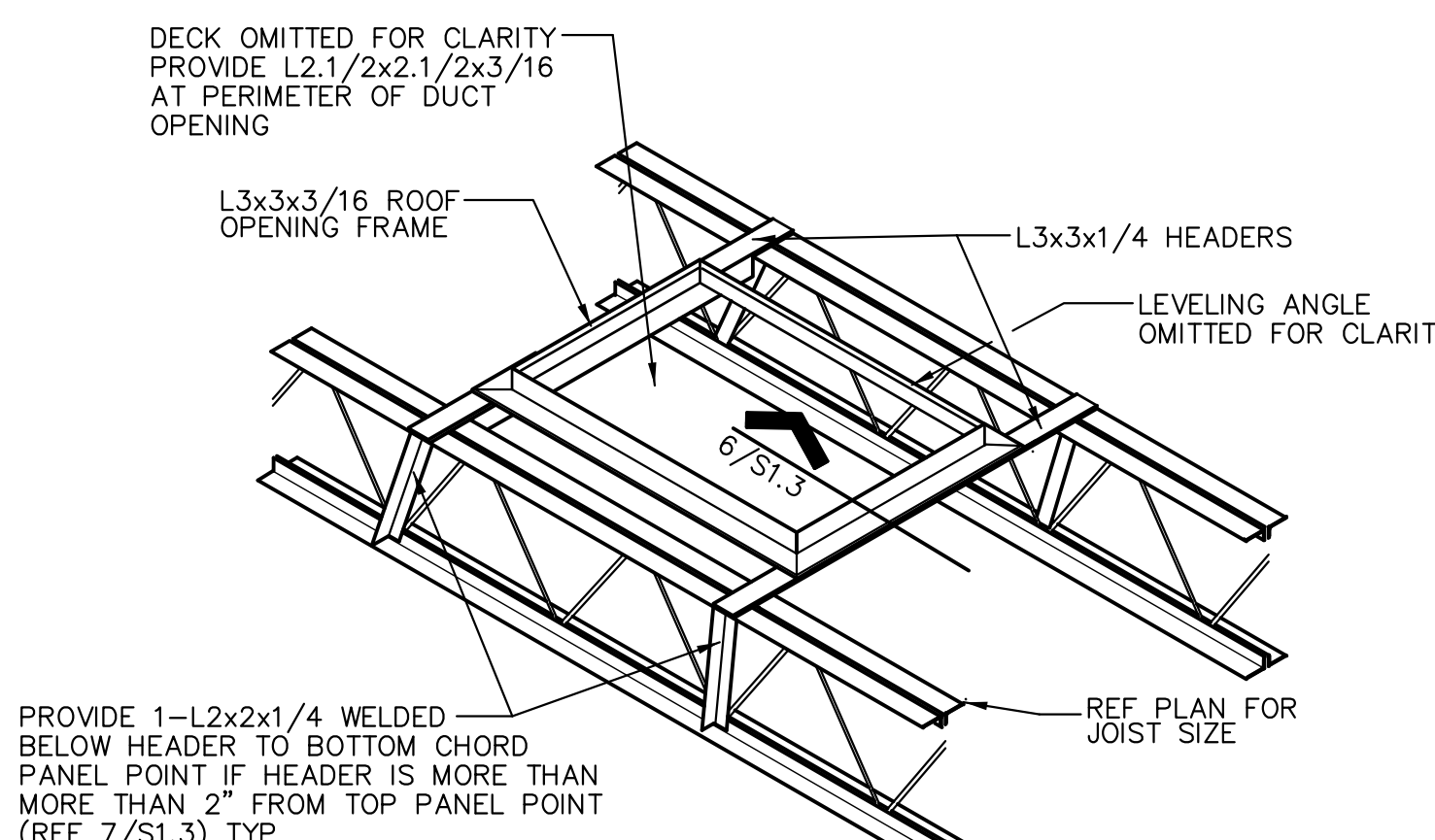
**2**



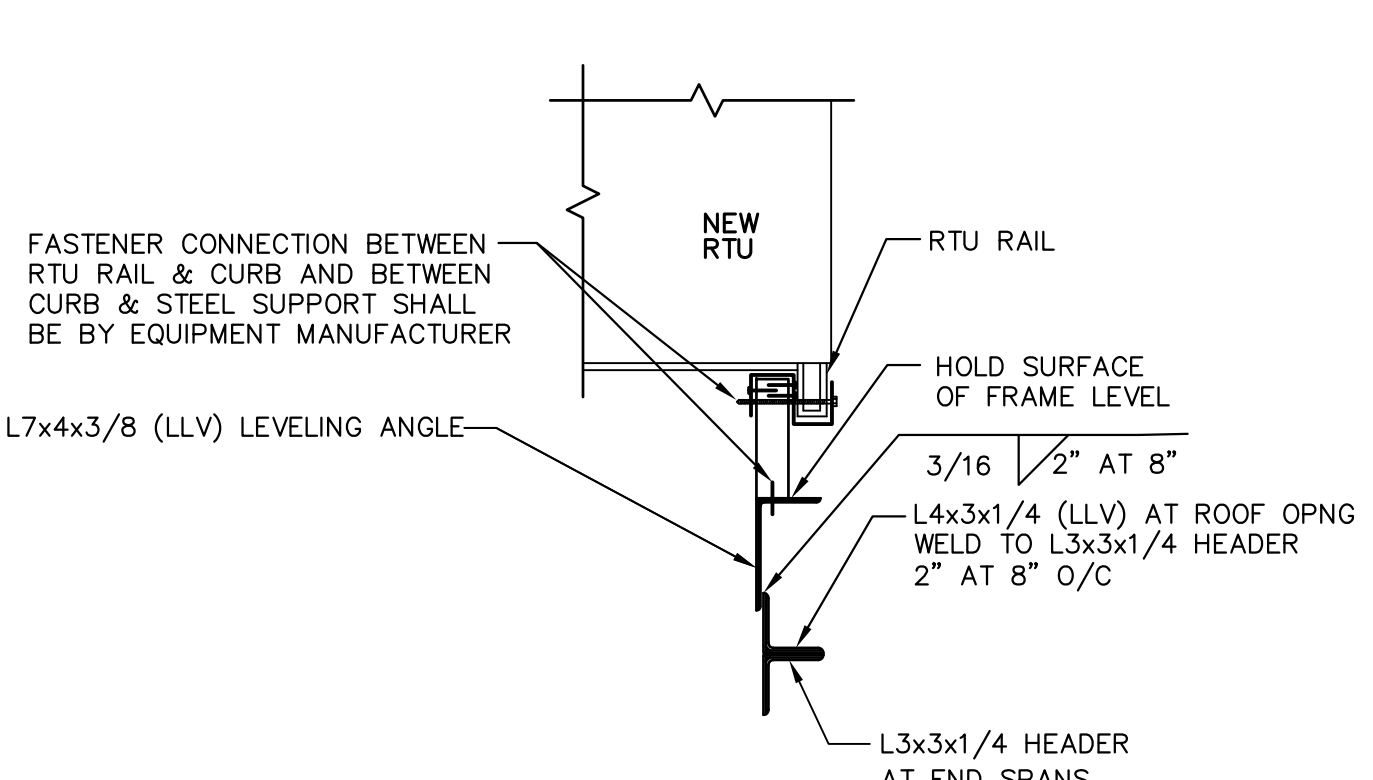
**3** TYPICAL BEAM TO BEAM CONNECTION



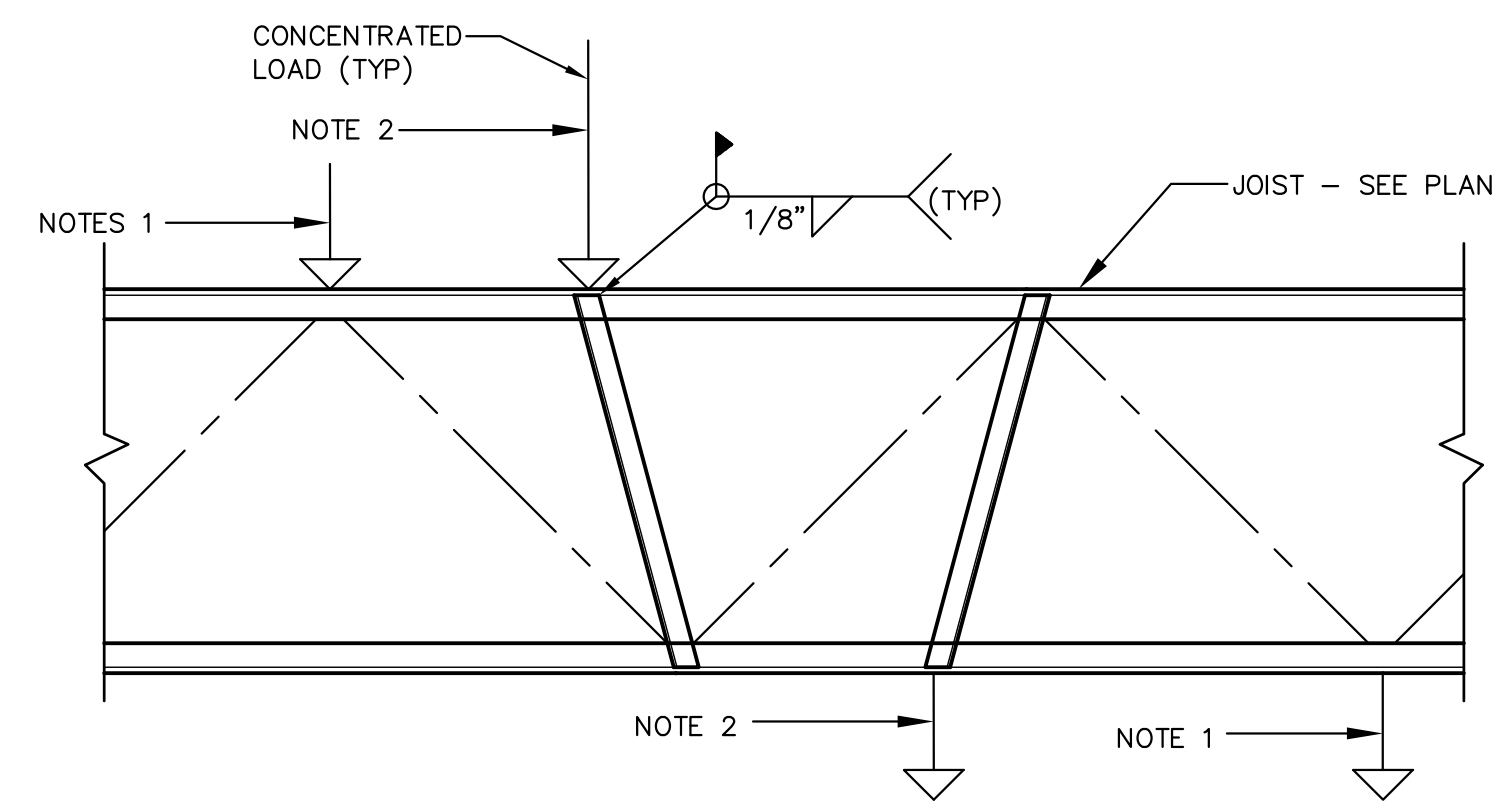
**4** TYPICAL WELD LENGTH ON STL JOIST TO STL BEAM/STL PLATE CONNECTION



**5** ROOF OPENING FRAME DETAIL

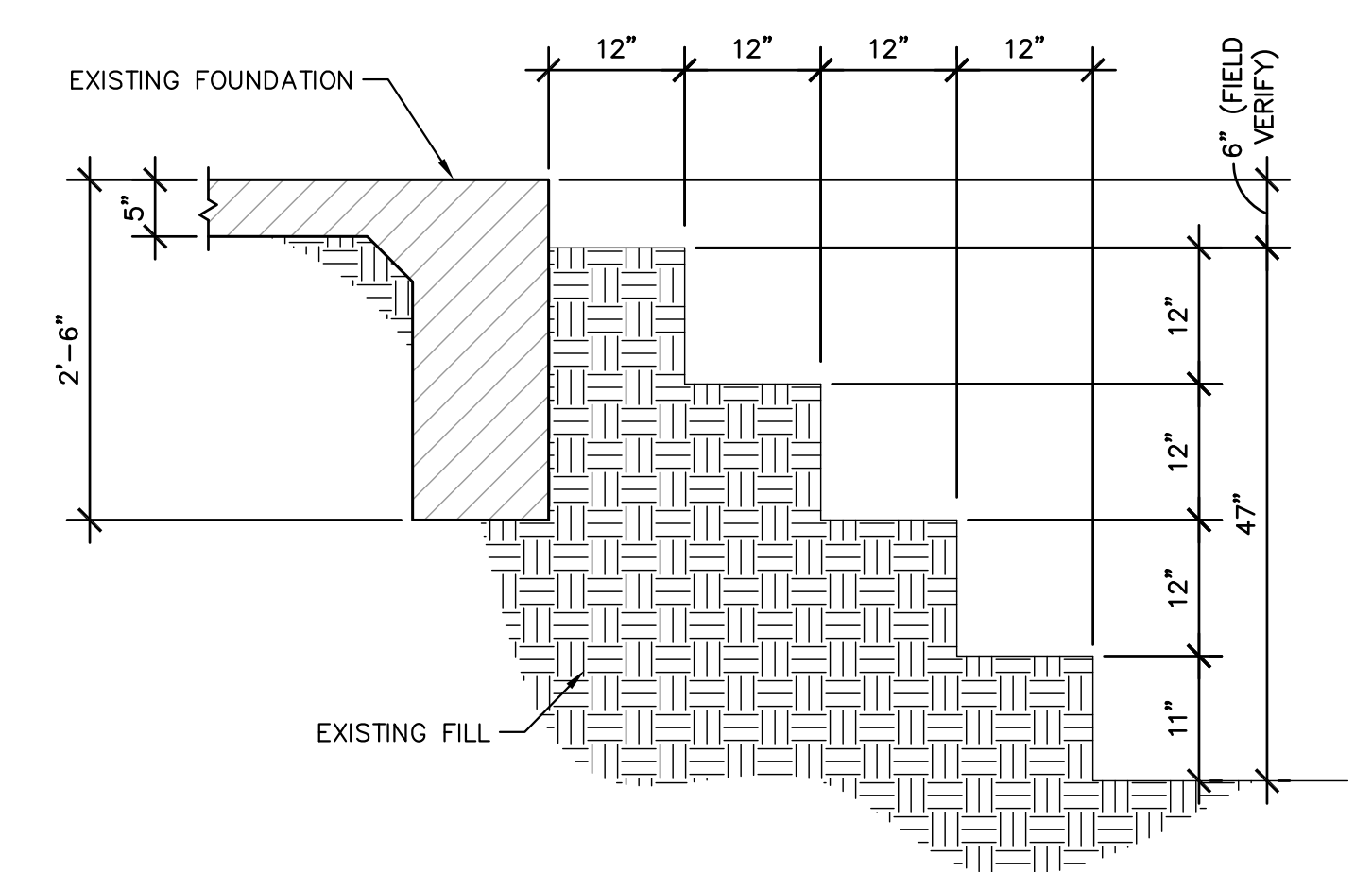


**6** ROOF OPENING FRAME DETAIL (TYPICAL)

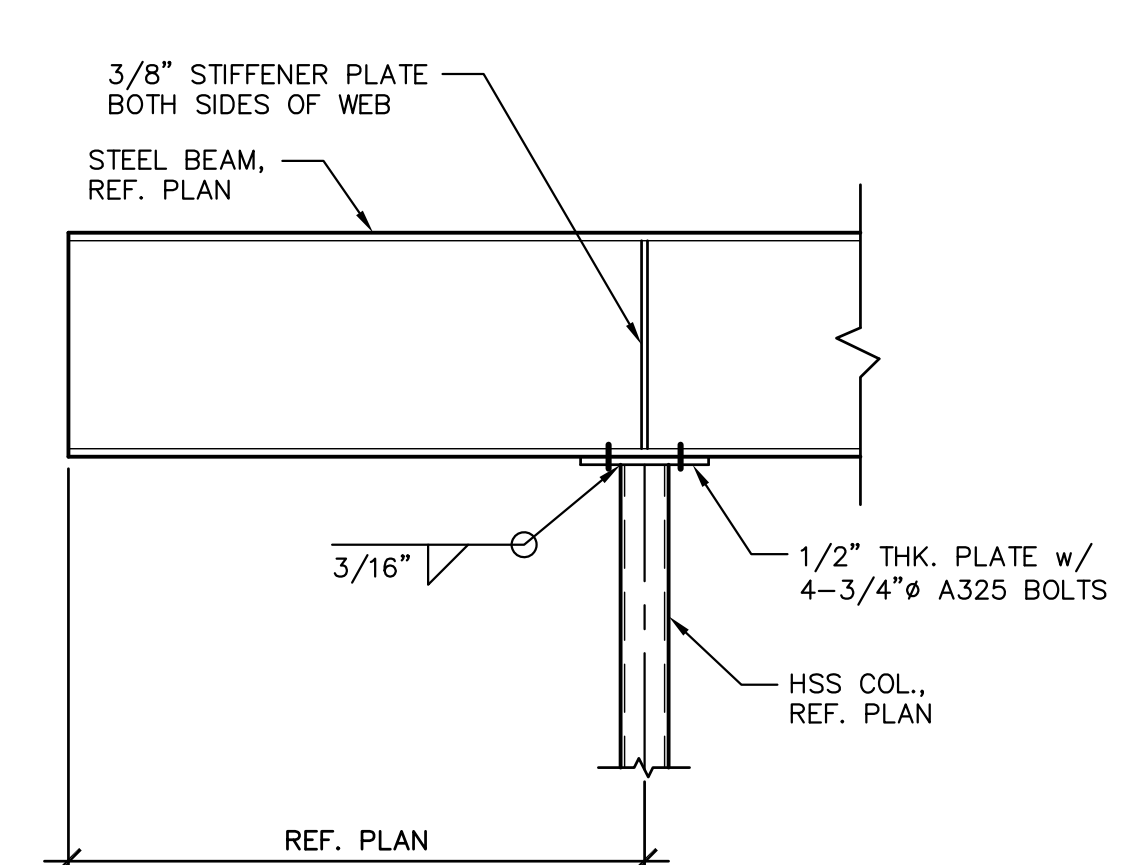


**7** TYP. CONCENTRATED LOAD DETAIL

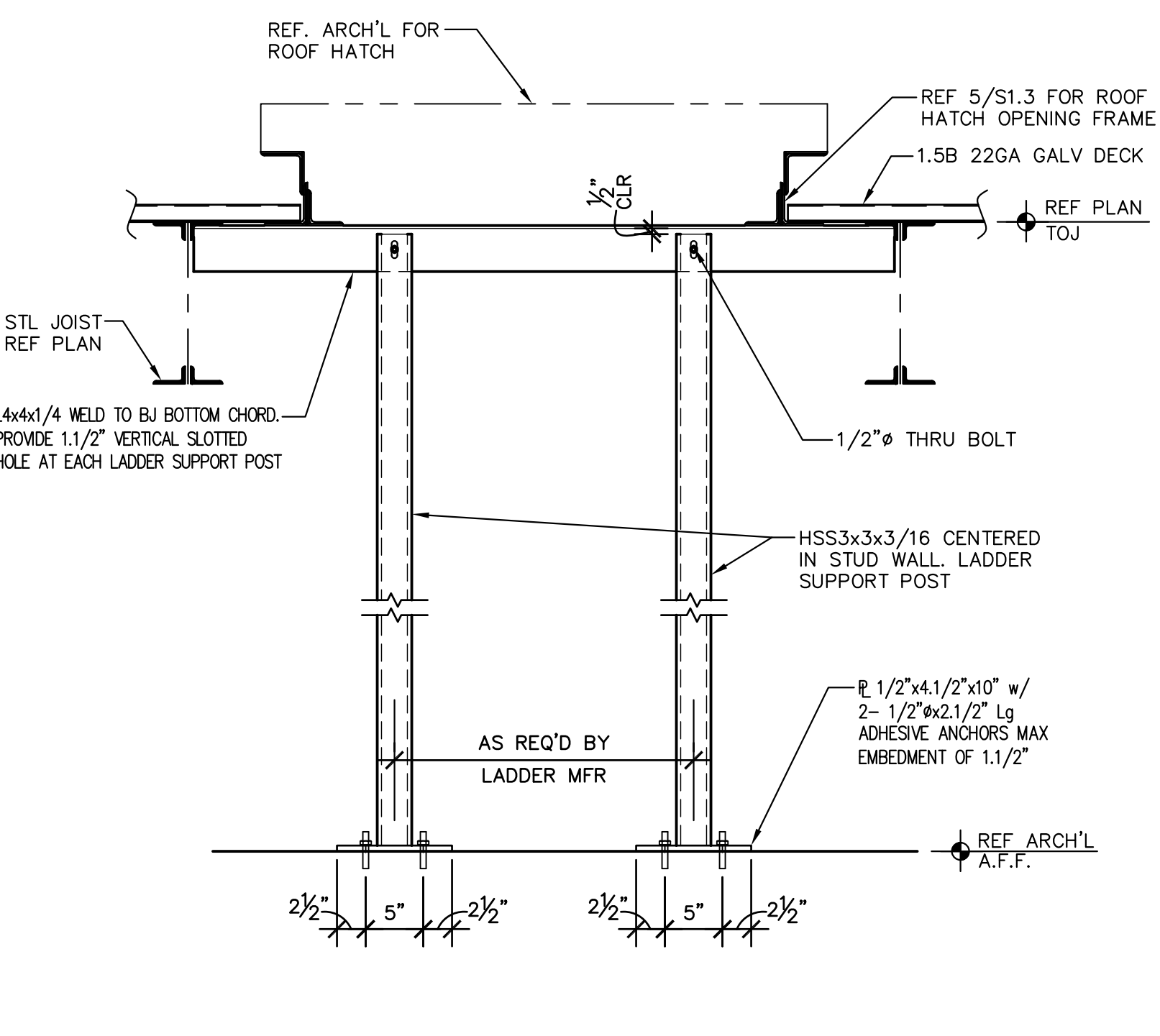
- NOTES:
1. CONCENTRATED LOAD LOCATED AT JOIST PANEL POINT LOCATION - NO ADDITIONAL ANGLES REQUIRED.
  2. CONCENTRATED LOAD (100 LBS. OR HEAVIER) NOT LOCATED AT JOIST PANEL POINT LOCATION - PROVIDE L2x2x1/4 TO PANEL POINT AS SHOWN.



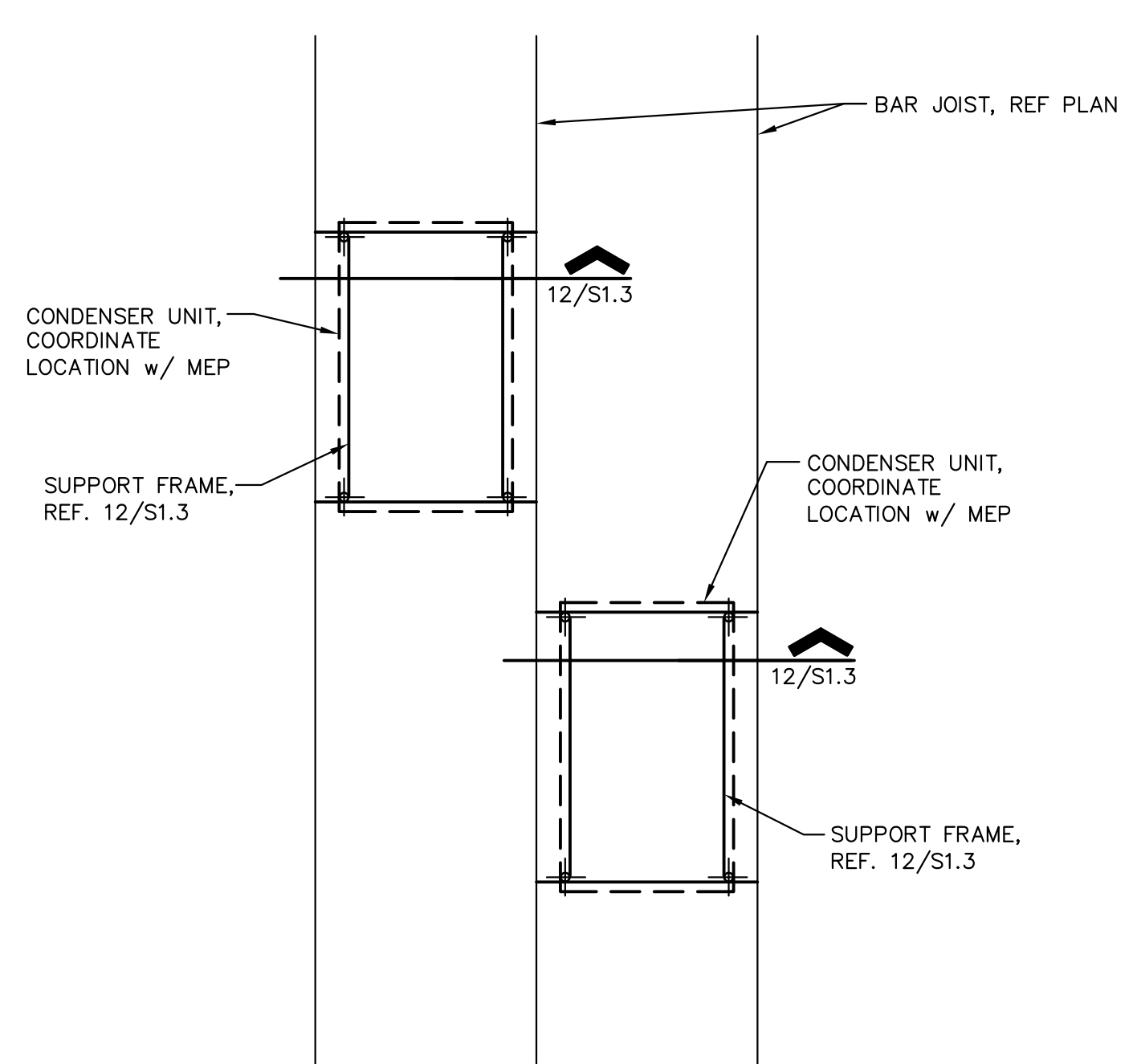
**8** TYPICAL SITE EXCAVATION DETAIL UP AGAINST EXISTING PERIMETER GRADE BEAM OF PHASE 1



**9** TYPICAL BEAM CANTILEVER DETAIL

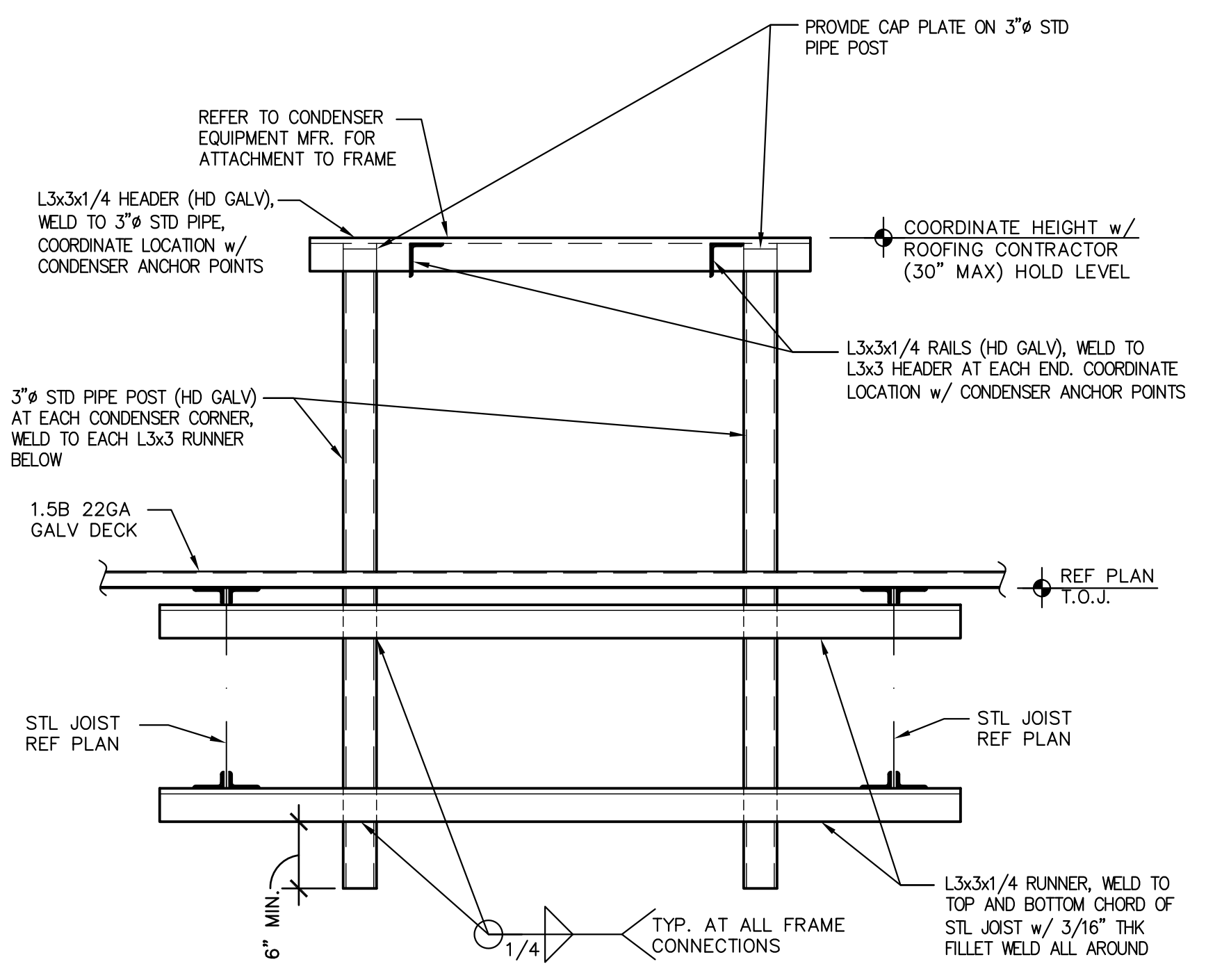


**10** TYPICAL ROOF HATCH LADDER SUPPORT FRAMING



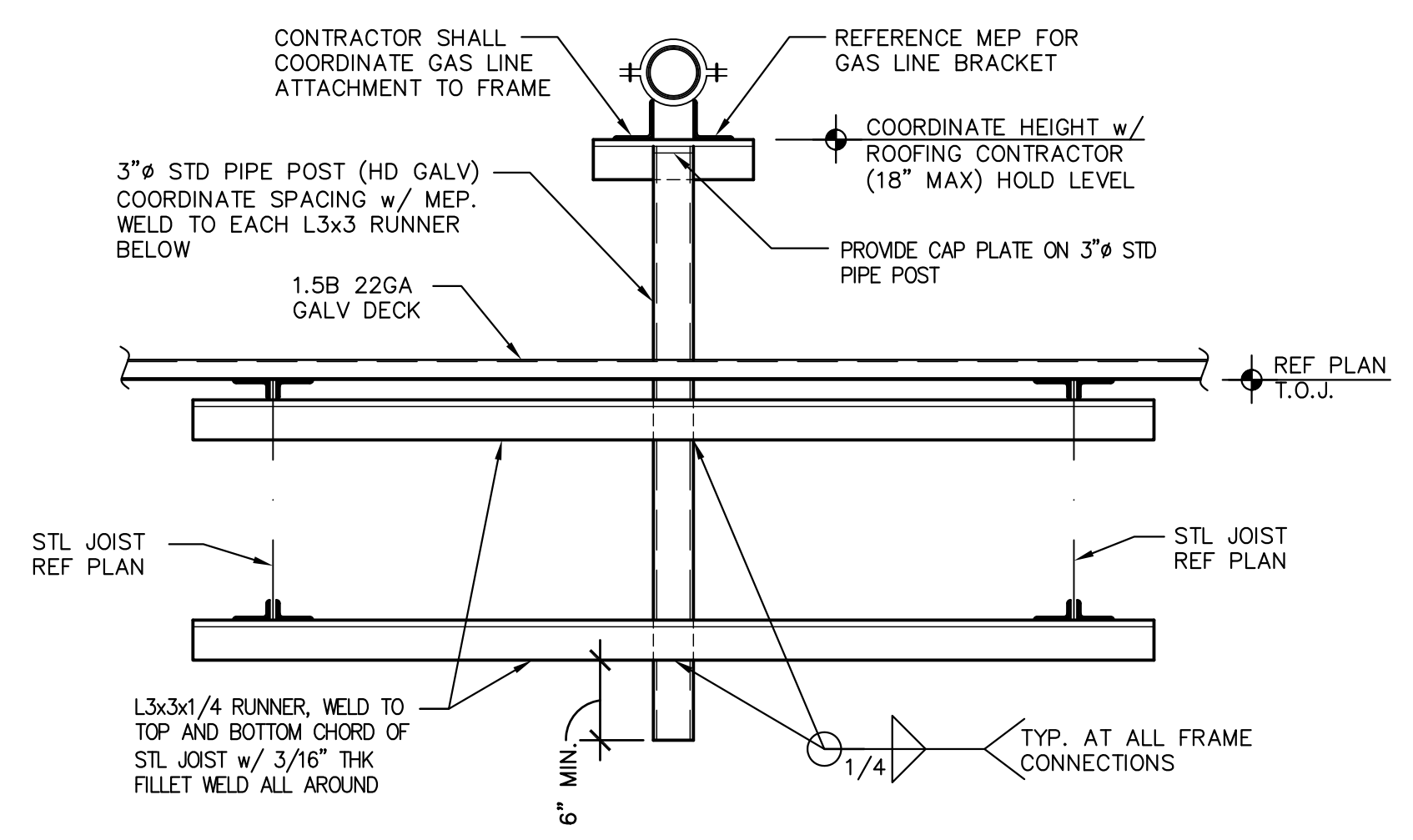
**11** TYPICAL ROOF MOUNTED CONDENSER SUPPORT FRAMING PLAN

- NOTES:
1. COORDINATE LOCATION AND ORIENTATION WITH MEP AND ARCHITECTURAL.
- 1/4" = 1'-0"



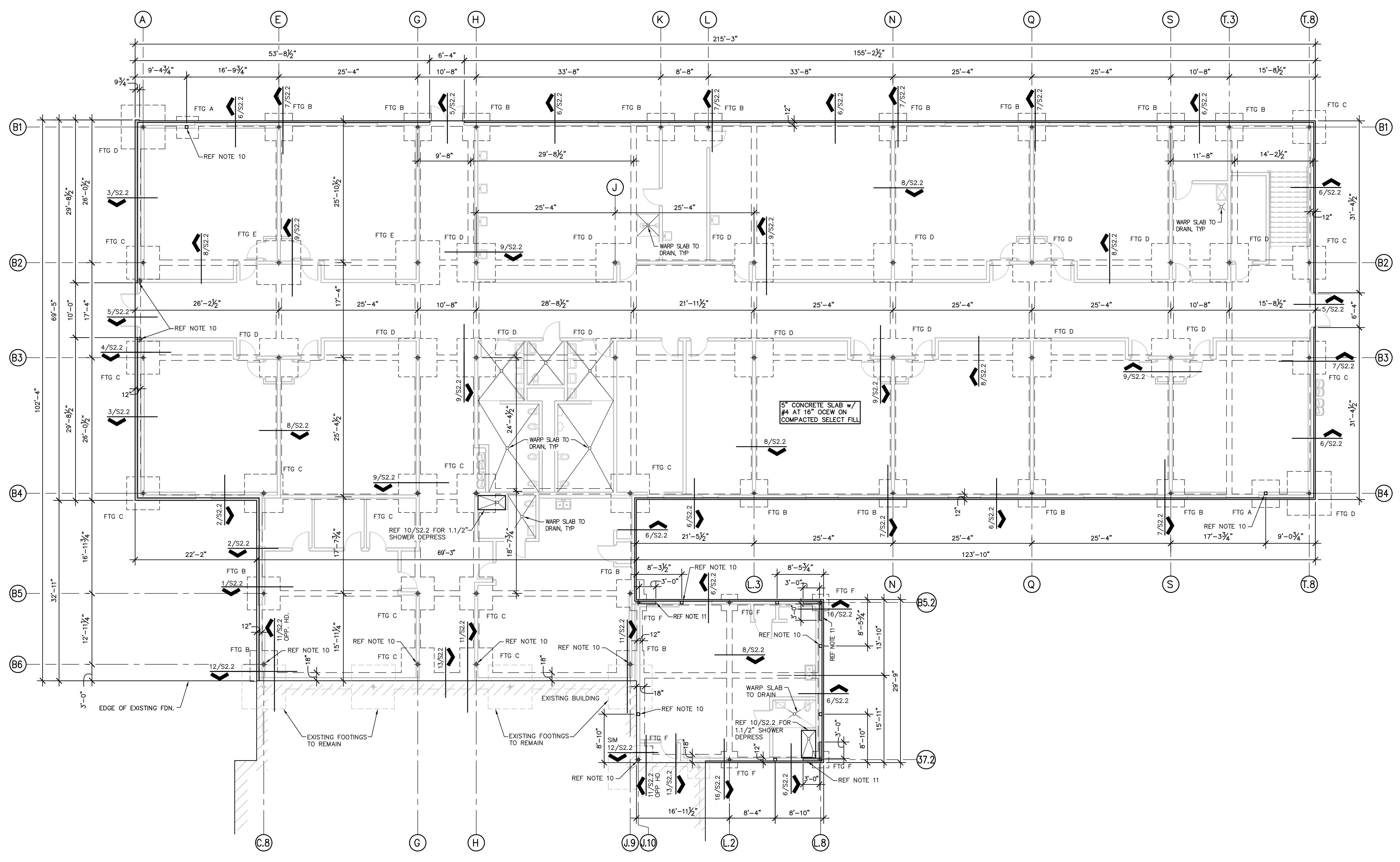
**12**

- NOTE:
1. COORDINATE LOCATION OF SUPPORT FRAME WITH MEP & EQUIPMENT MANUFACTURER.
  2. REFERENCE 11/S1.3 FOR TYPICAL CONDENSER UNIT SUPPORT FRAMING PLAN.



**13** TYPICAL ROOF MOUNTED GAS PIPE SUPPORT



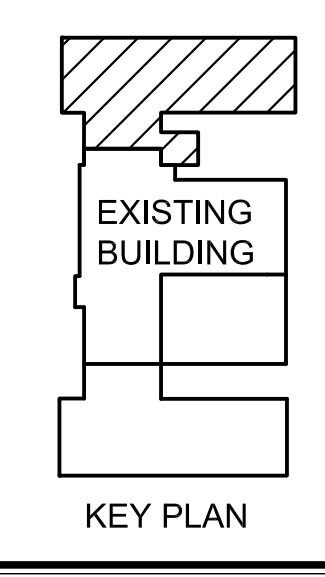


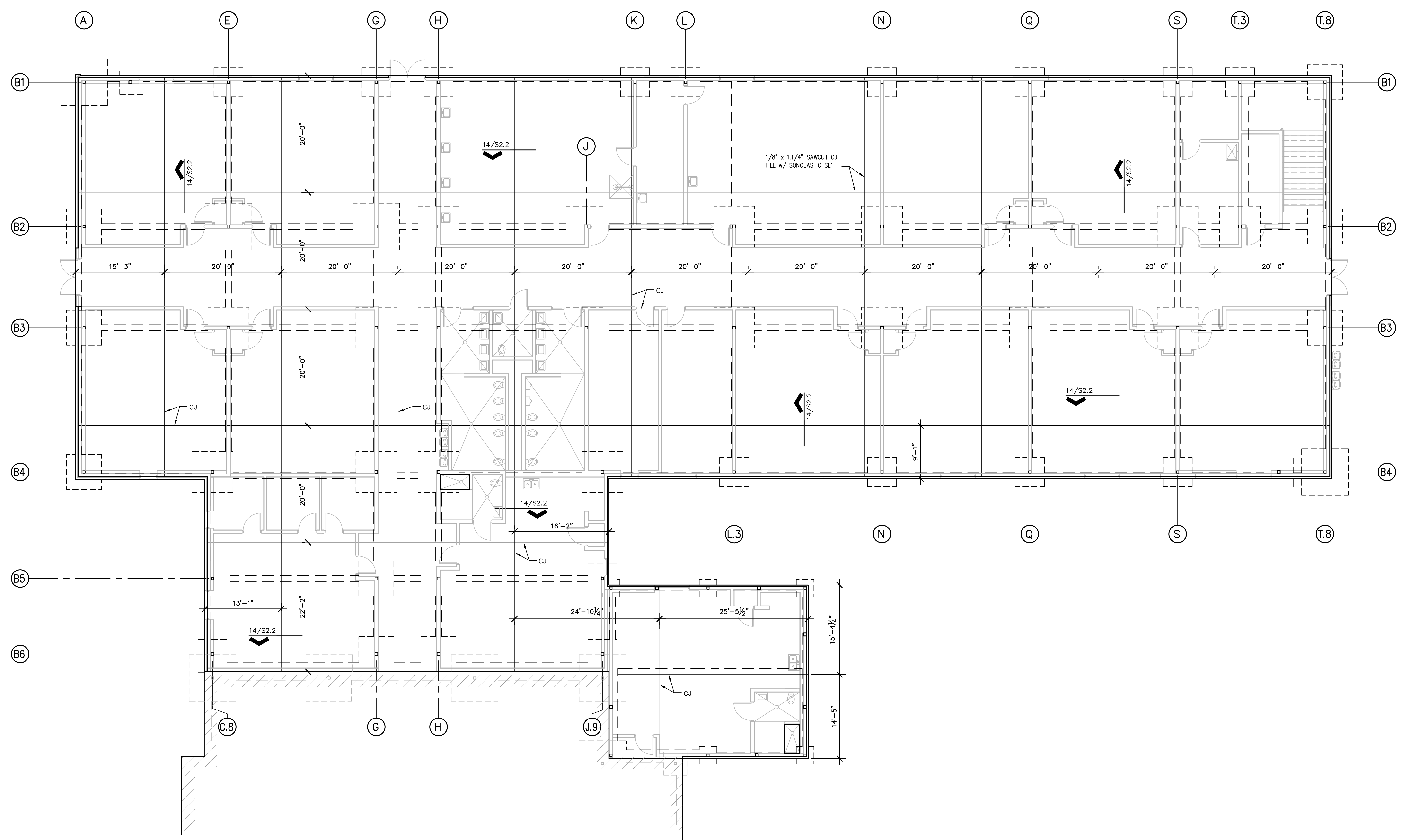
**1 FOUNDATION PLAN**  
 1/8" = 1'-0"  
 PLAN NORTH

- NOTES:
1. REFERENCE ROOF FRAMING PLAN FOR COLUMN ANCHOR BOLT/ BASEPLATE LOCATIONS. FOUNDATION PLAN DIMENSIONS GENERALLY DENOTE GRADE BEAM CENTERLINE AND OUTSIDE FACE OF CONCRETE.
  2. ALL CONDUIT GREATER THAN 1" IN DIAMETER SHALL BE RECESSED TO PROVIDE 1.1/2" CLEAR DISTANCE BETWEEN SLAB REBAR & CONDUIT.
  3. MAINTAIN 2" MINIMUM CLEAR DISTANCE BETWEEN ALL CONDUIT IN SLAB.
  4. A SINGLE CONDUIT (MAX 3" O.D.) MAY BE PLACED WITHIN THE BEAM CASE. ALL CONDUIT IN BEAM CASES TO BE TIED TO STIRRUPS MINIMUM OF 4" FROM HORIZONTAL BARS.
  5. CRACK CONTROL JOINTS ARE NOTED ON THE PLANS. CONTRACTOR TO COORDINATE CHANGES WITH THE ENGINEER PRIOR TO FORMING FOUNDATION.
  6. PLUMBING LINES SHALL NOT BE PLACED IN BOTTOM OF GRADE BEAM TRENCHES.
  7. PLUMBING LINES PASSING THROUGH GRADE BEAMS SHALL BE SLEEVED. BEAMS SHALL BE DEEPENED AND BENT REBAR PROVIDED IF LOCATION OF DRAIN LINES REQUIRES CUTTING BOTTOM BARS. REFERENCE 16/S2.2.
  8. ALL JOINTS TO BE CLEANED AND FILLED W/ SONOLASTIC SL1 (SONNEBORN). REFERENCE DETAIL 15/S2.2.
  9. REFERENCE 1/S2.1C FOR CONTROL JOINT PLAN.
  10. PLACE BASEPLATES AT INDICATED LOCATIONS FOR COLUMNS, WIND COLUMNS, AND DIAGONAL BRACES FLUSH W/ FINISH FLOOR.
  11. [Symbol] INDICATES 600S162-43 AT 12" o/c AT BUILDING CORNERS.

FOOTING SCHEDULE		
MARK	SIZE	REINFORCEMENT
FTG A	4'-0" x 4'-0"	#5 AT 12" O.C.E.W.
FTG B	5'-0" x 5'-0"	#5 AT 12" O.C.E.W.
FTG C	6'-0" x 6'-0"	#5 AT 12" O.C.E.W.
FTG D	7'-0" x 7'-0"	#5 AT 12" O.C.E.W.
FTG E	8'-0" x 8'-0"	#5 AT 12" O.C.E.W.
FTG F	3'-0" x 3'-0"	#5 AT 12" O.C.E.W.

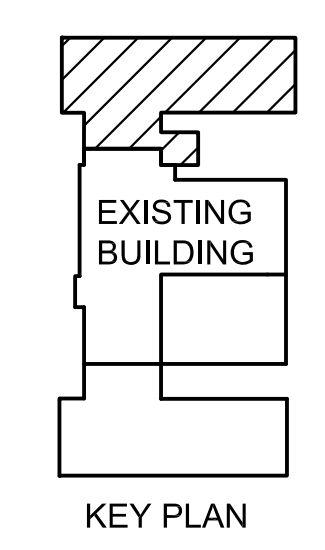
BASEPLATE SCHEDULE		
COLUMN	PLATE SIZE	ANCHORS
HSS5 x 5	3/4" x 9" x 9"	4-3/4" DIA x 8" WHS
HSS6 x 6	1" x 10" x 10"	4-3/4" DIA x 8" WHS





**1 CONTROL JOINT PLAN**  
 1/8" = 1'-0"  
 PLAN NORTH

- NOTES:
1. CRACK CONTROL JOINTS ARE NOTED ON THE PLANS. CONTRACTOR TO COORDINATE CHANGES WITH THE ENGINEER PRIOR TO FORMING FOUNDATION.
  2. ALL JOINTS TO BE CLEANED AND FILLED w/ SONOLASTIC SL1 (SONNEBORN).
  3. REFERENCE 1/S2.1 FOR ADDITIONAL FOUNDATION NOTES AND REFERENCES.



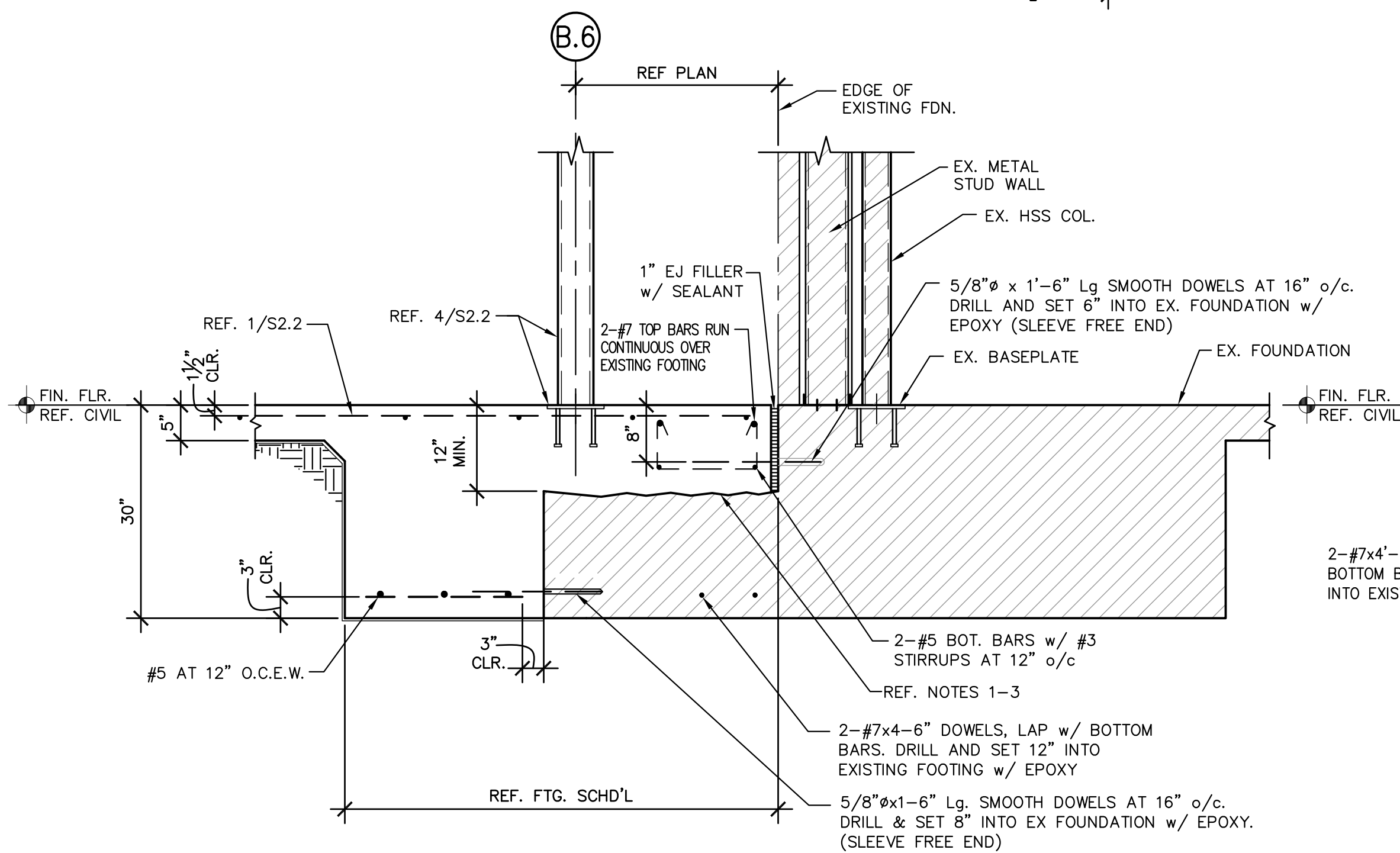
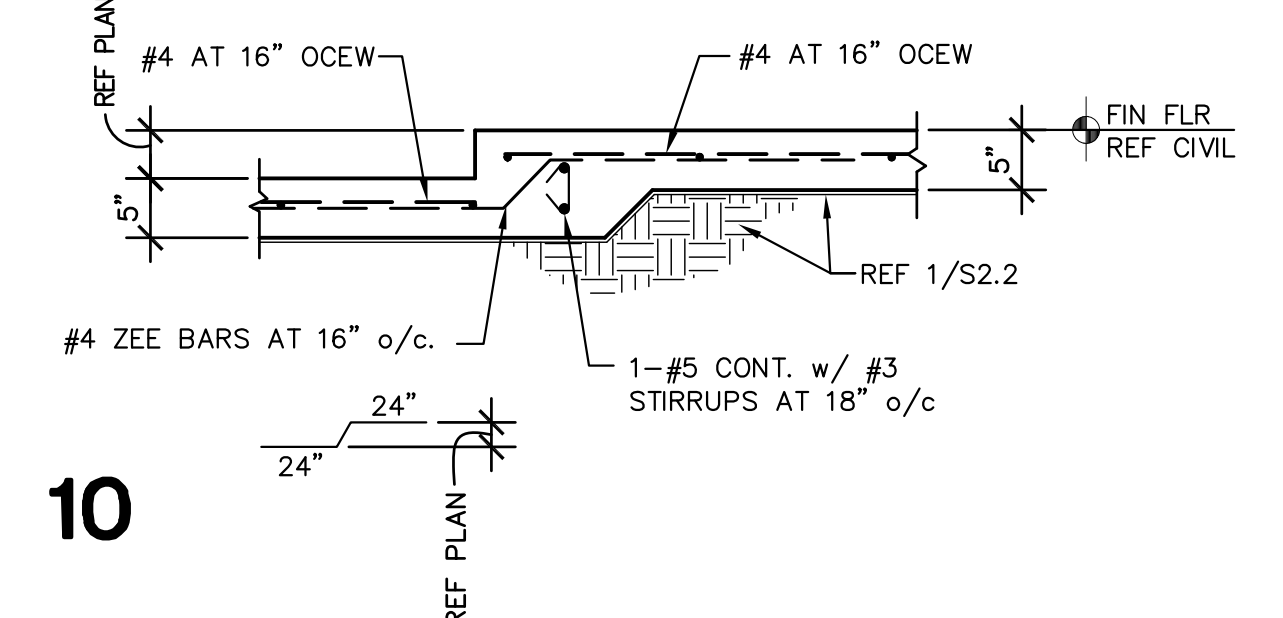
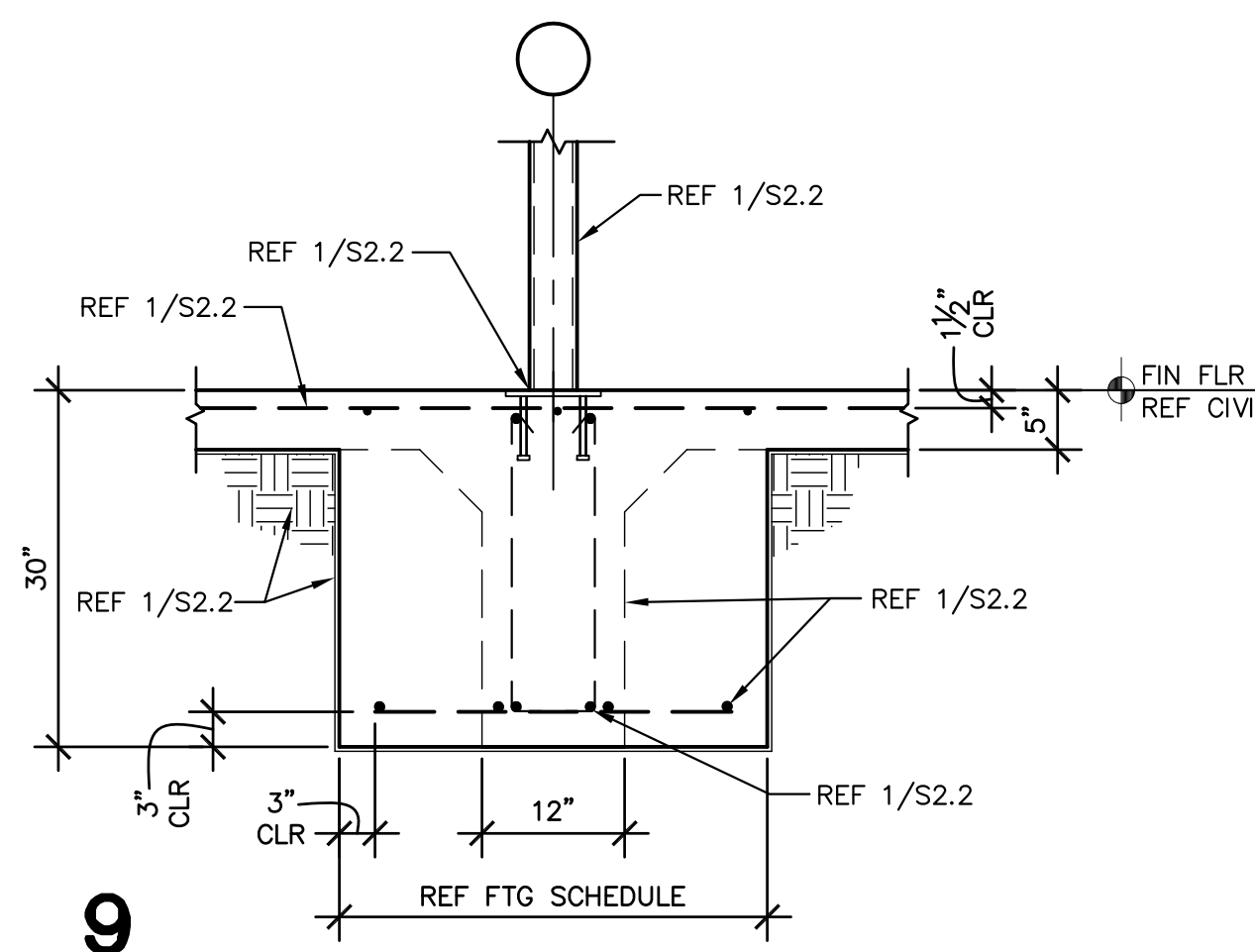
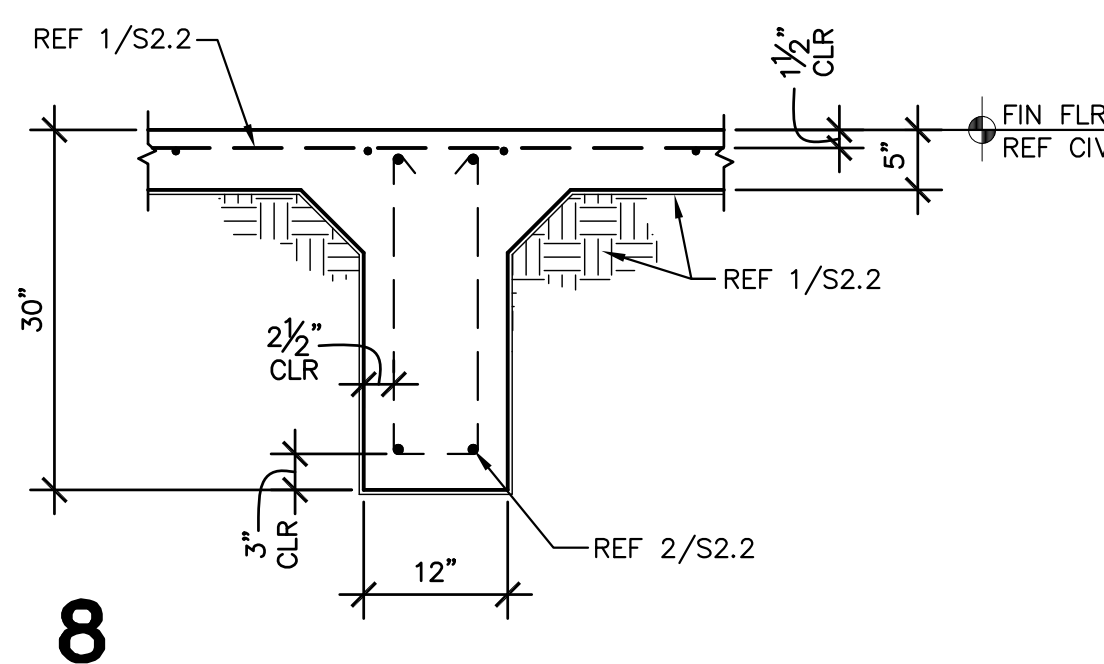
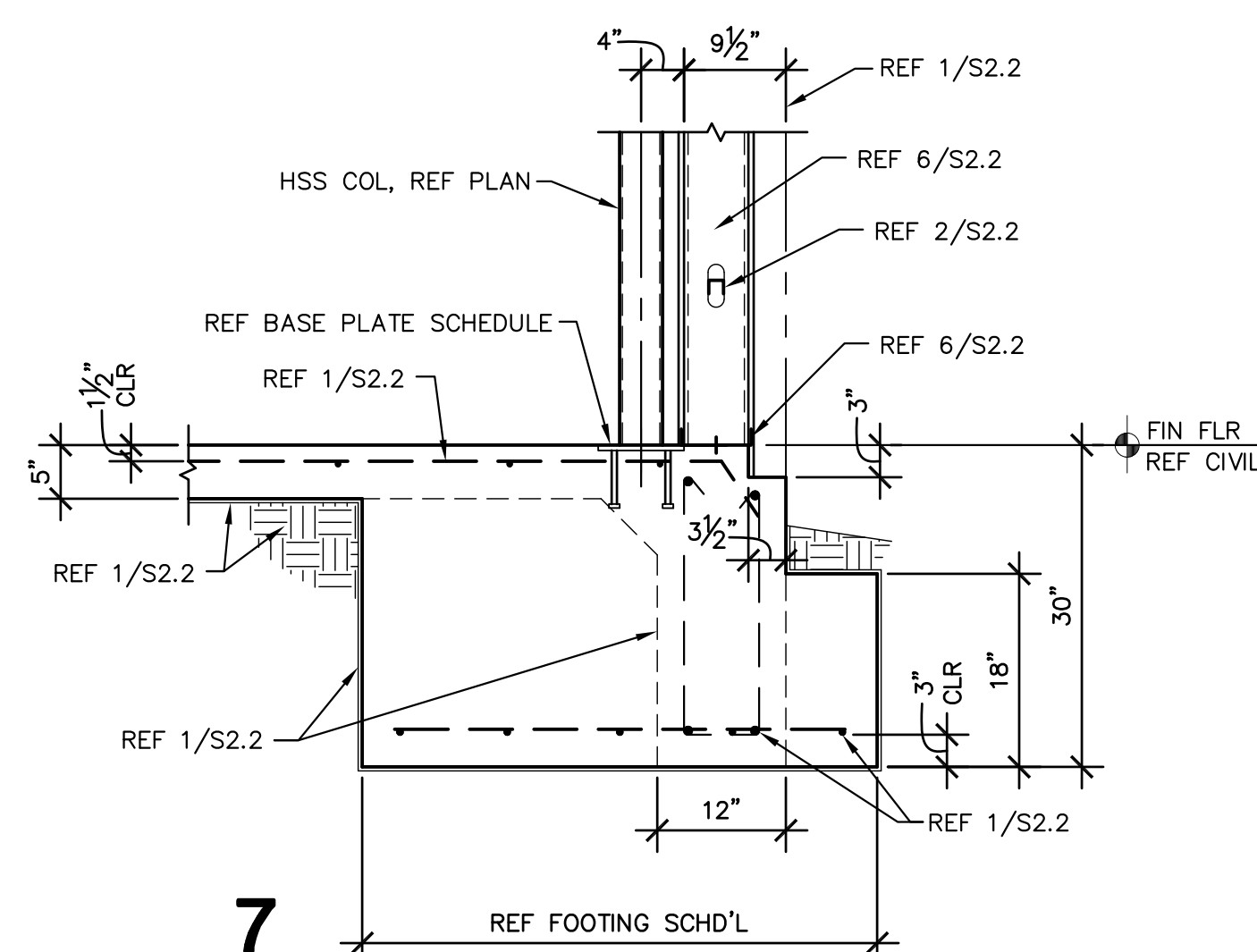
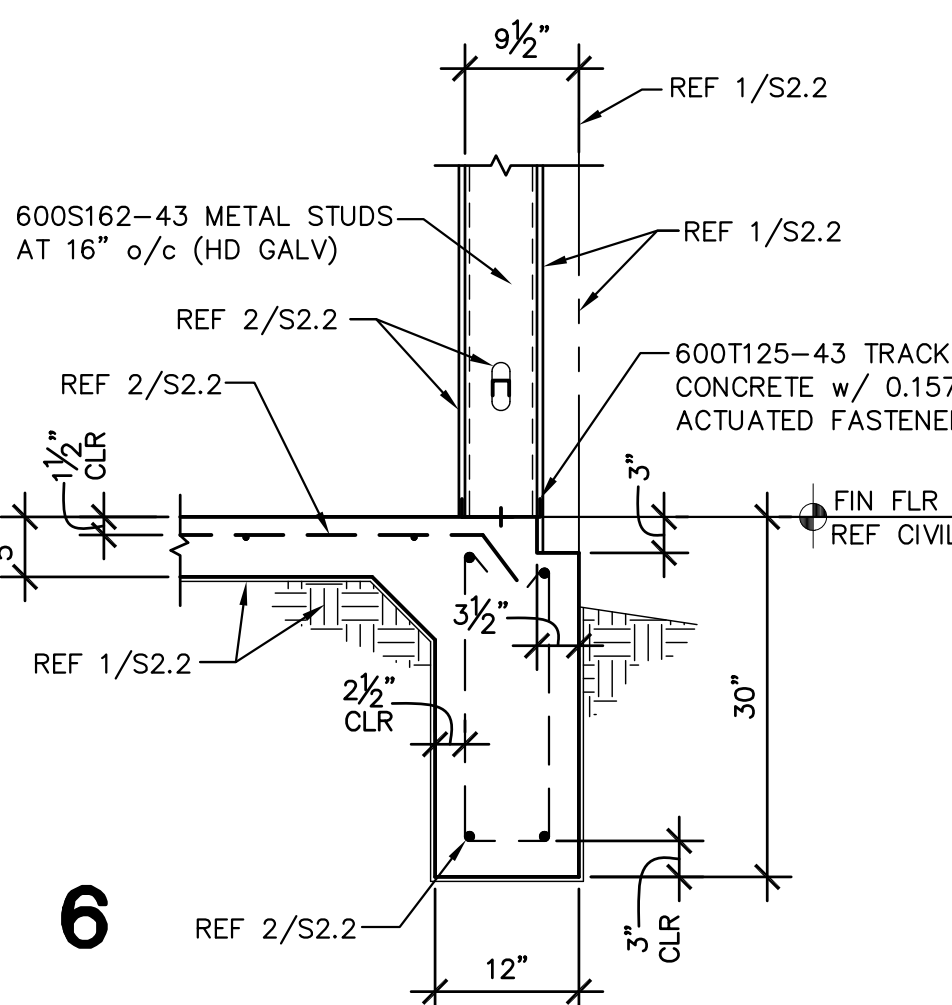
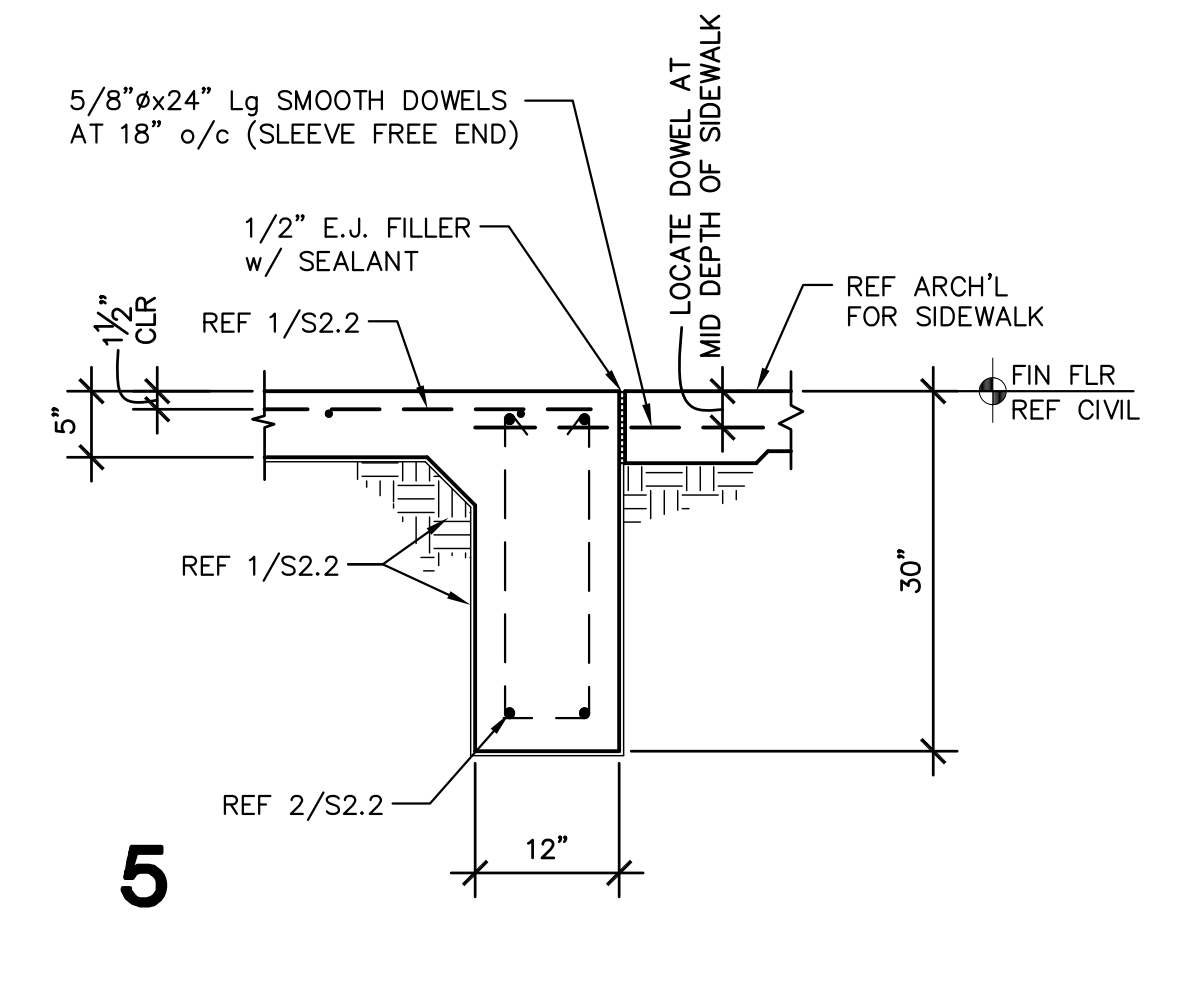
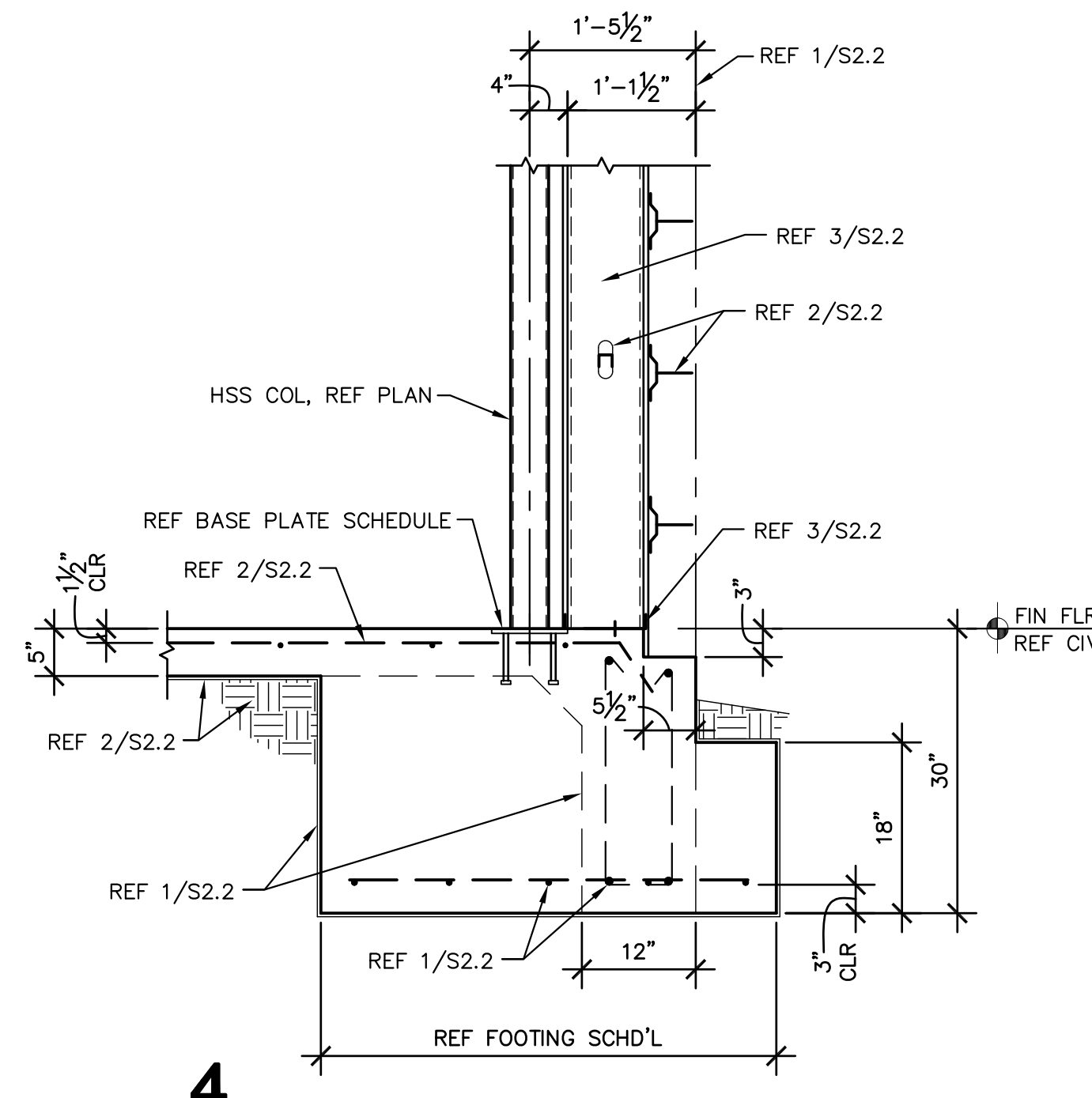
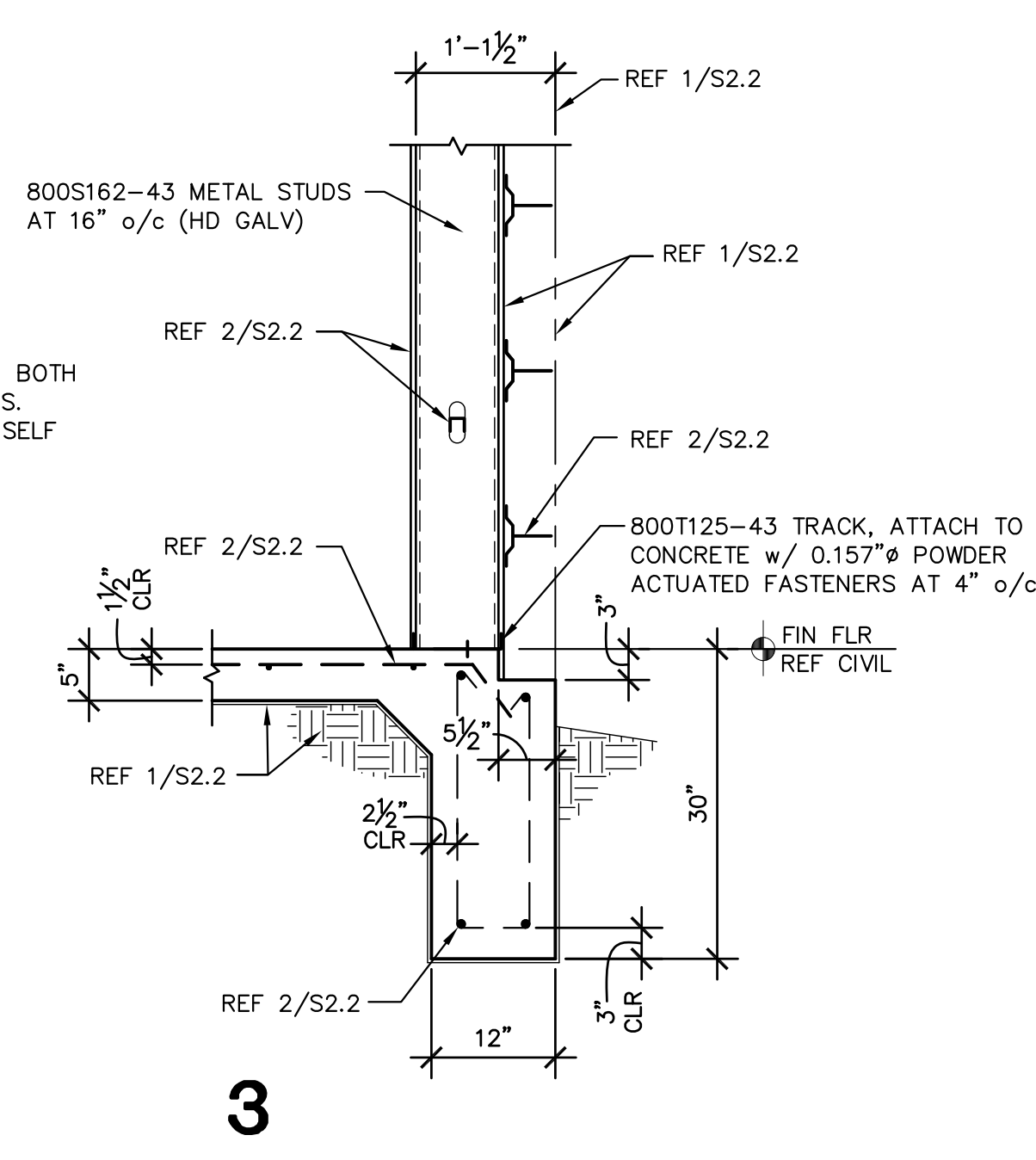
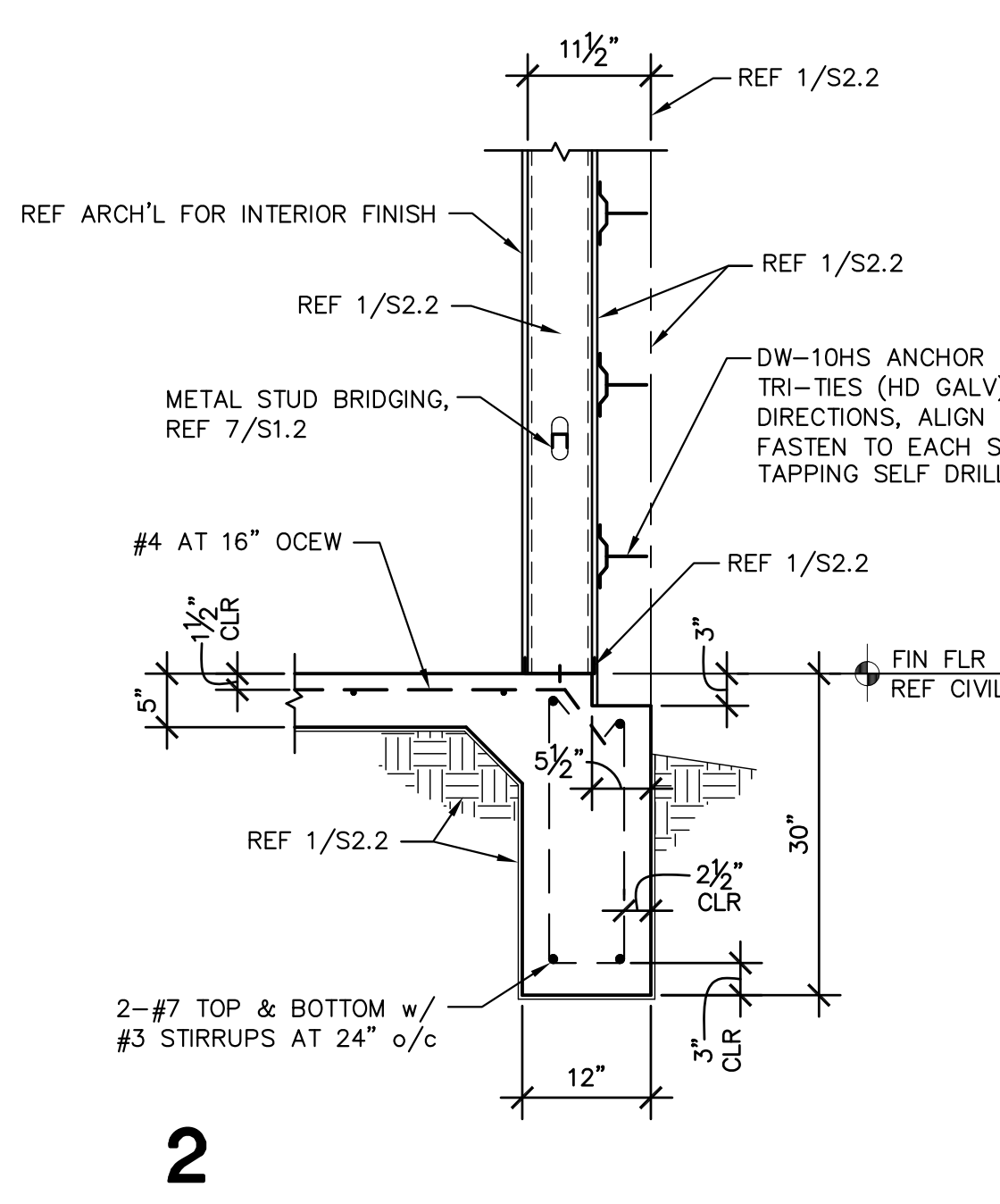
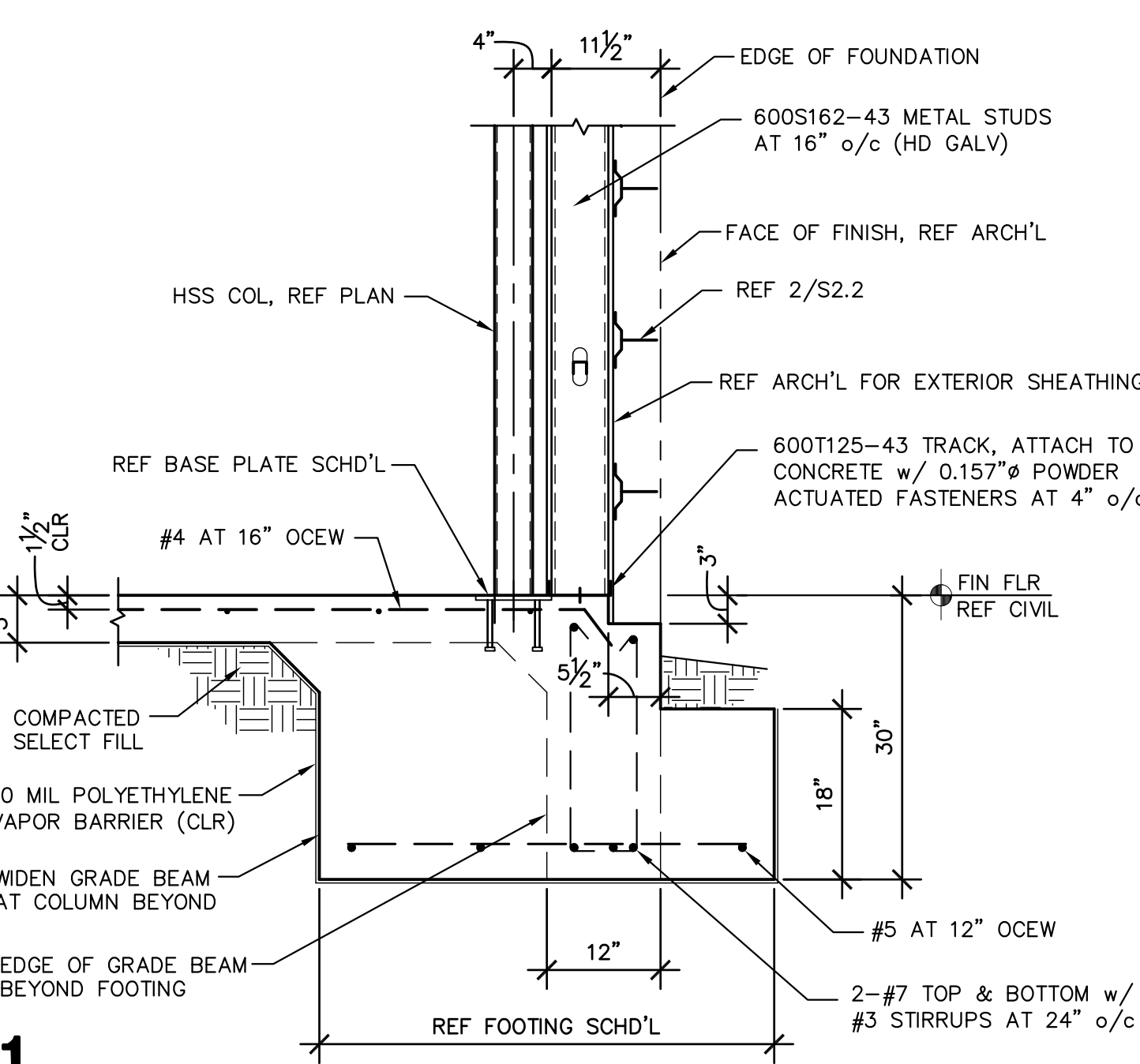
  
**GREEN, RUBIANO & ASSOCIATES**  
 CONSULTING STRUCTURAL ENGINEERS  
 1320 WEST WINDSOR  
 HOUSTON, TEXAS 77051  
 (281) 416-1100  
 FIRM REGISTRATION # F-1416

**IDEA-OWASSA**  
**IDEA COLLEGE PREP PHASE II**  
 Public Schools

  
 © Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers  
 Date: JUNE 13, 2019  
 Scale: As Shown  
 DRAWN BY: AV, JH, IG  
 CHECKED BY: JS  
 Job No: 192-519  
 Sheet:

**S2.1C**

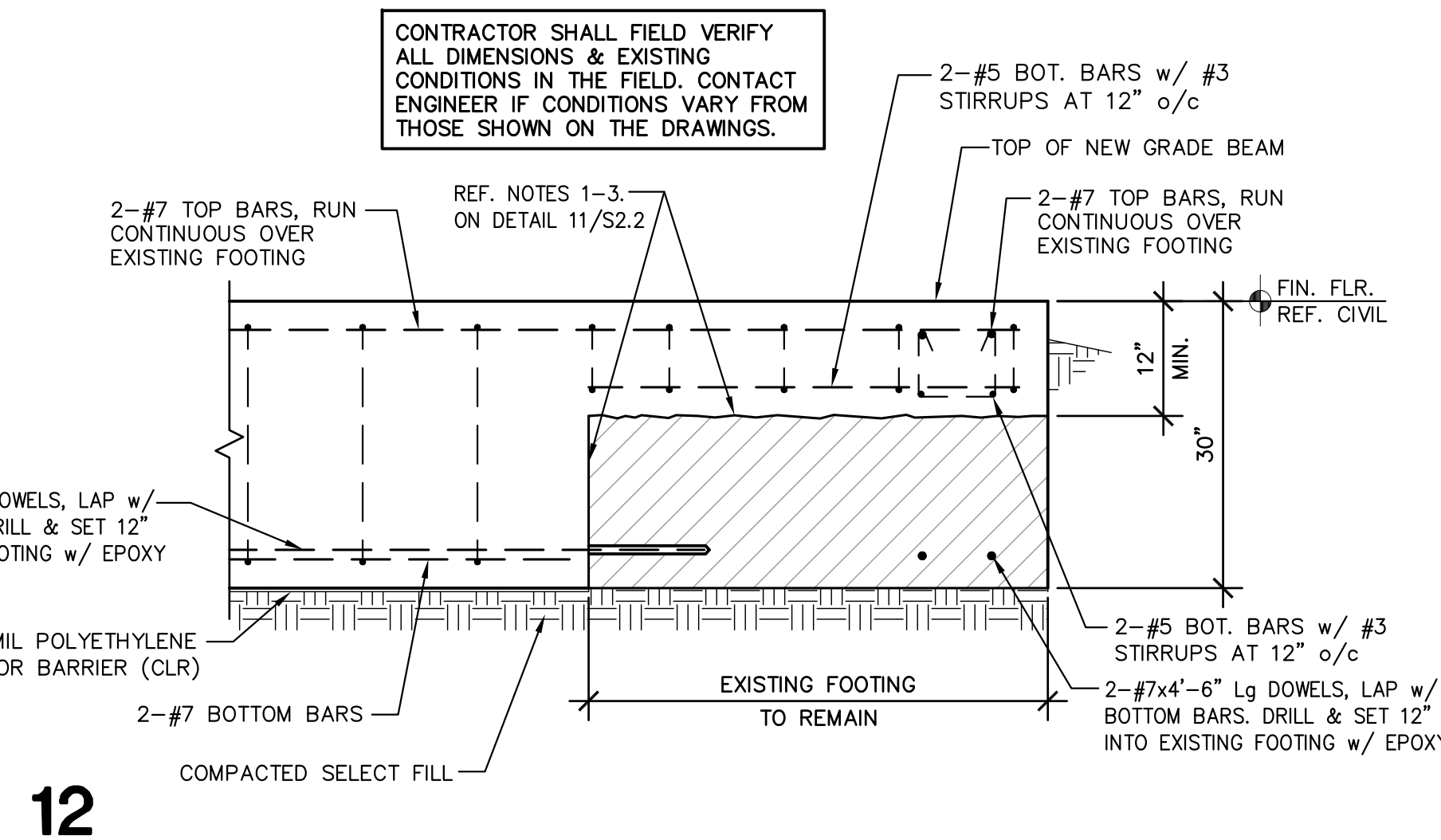




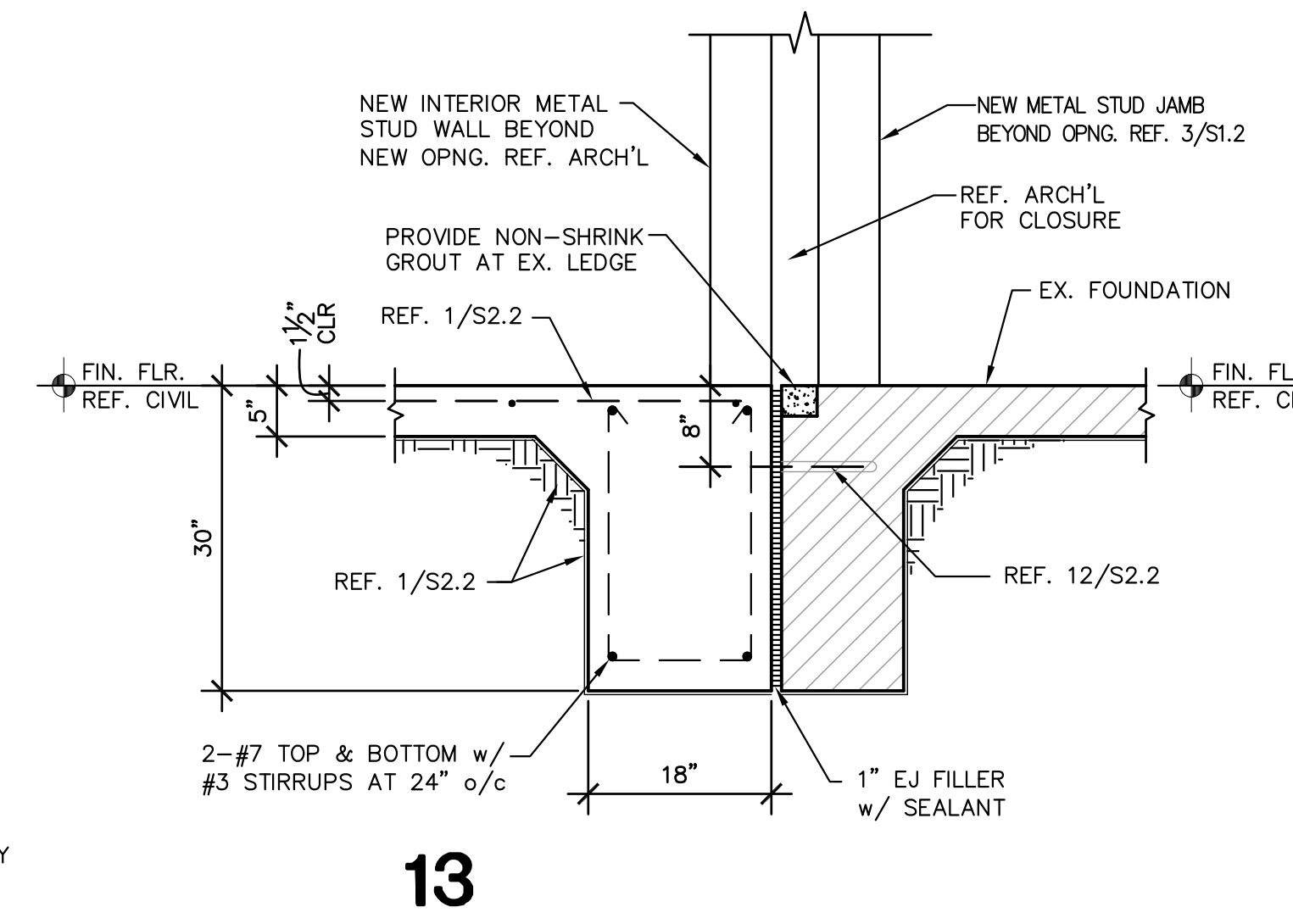
NOTES:

- SCARIFY SURFACE OF EXISTING CONCRETE TO PROVIDE 1/8" DEEP GROOVED SURFACE.
- CHIP AND REMOVE EXISTING CONCRETE AS REQUIRED TO PROVIDE 3" CLEARANCE AROUND NEW REINFORCEMENT.
- SURFACE SHALL BE CLEANED OF DIRT AND LOOSE CONCRETE PRIOR TO POURING NEW CONCRETE.

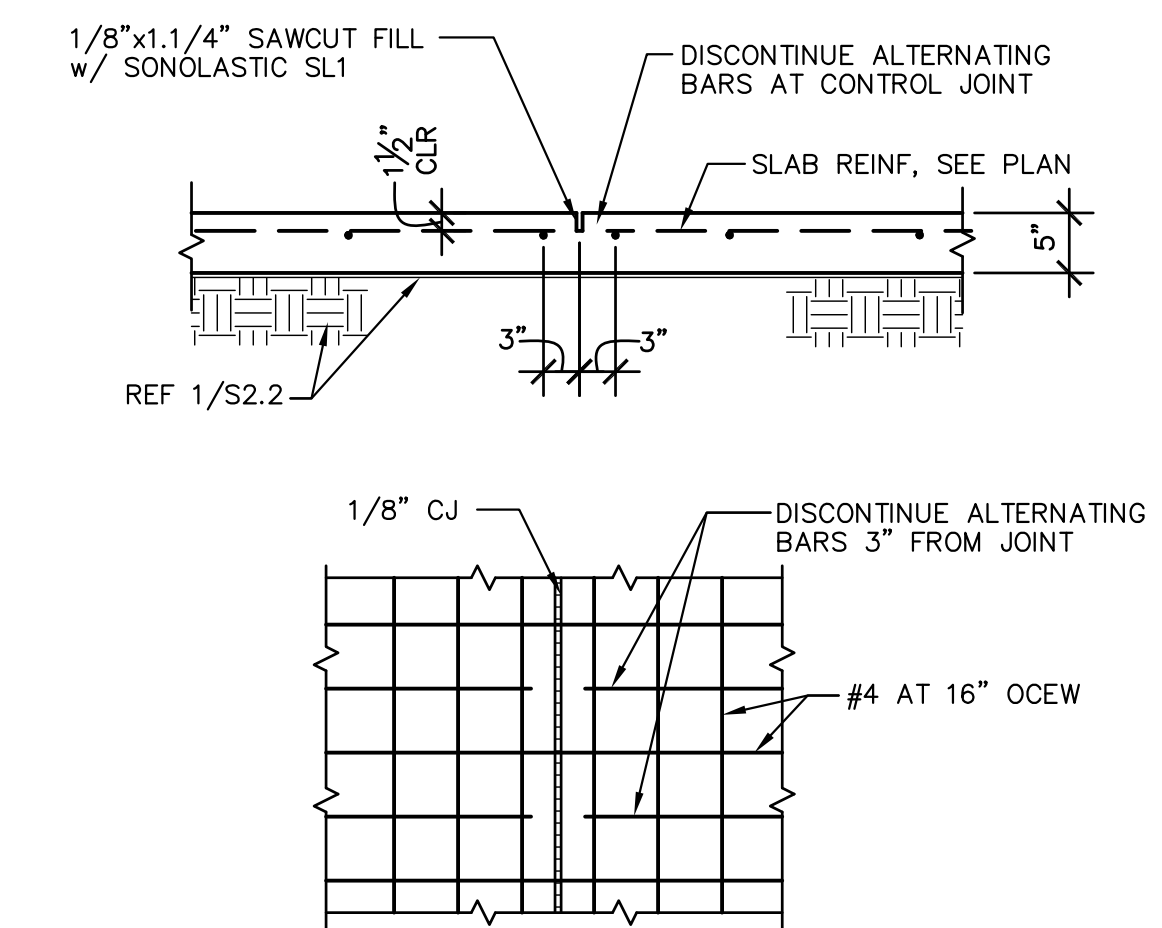
**11**



**12**

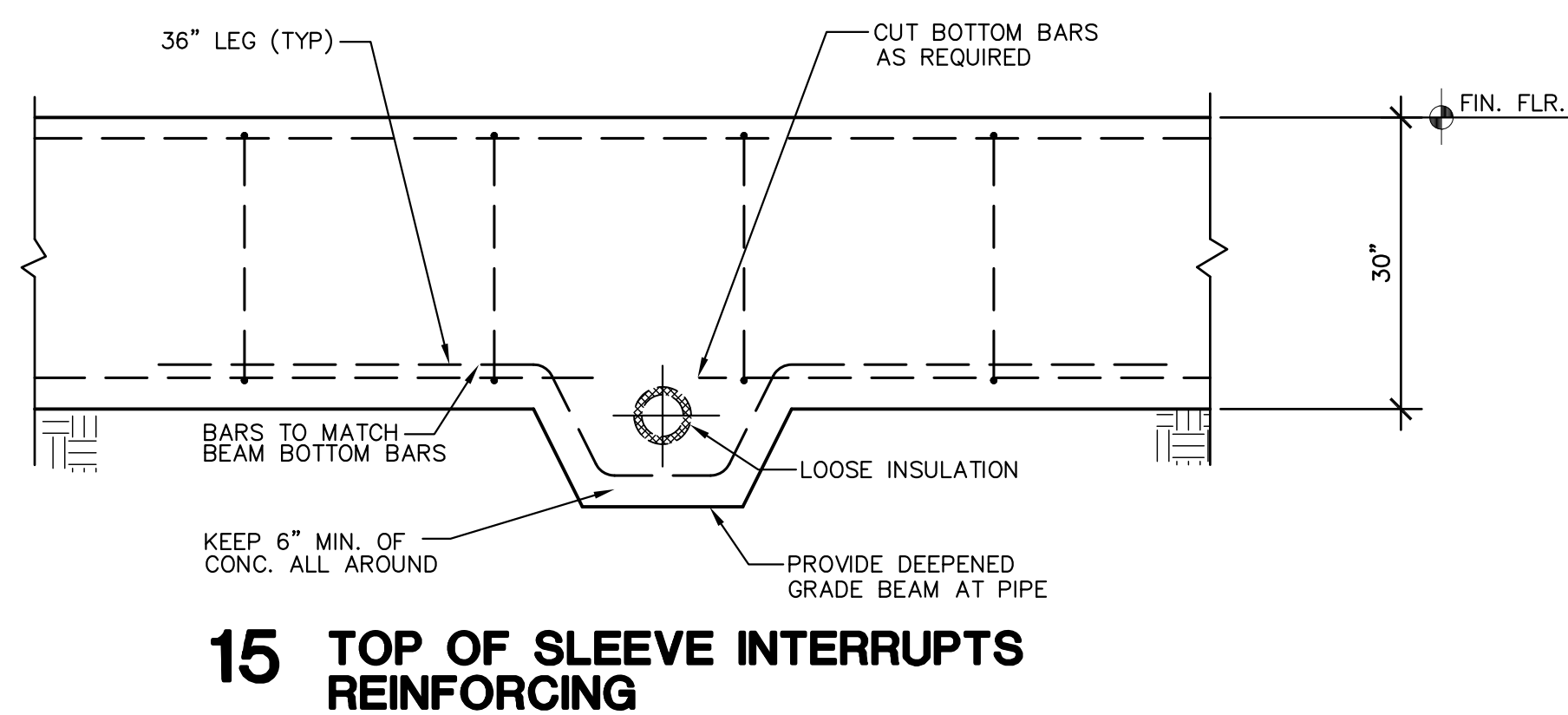


**13**

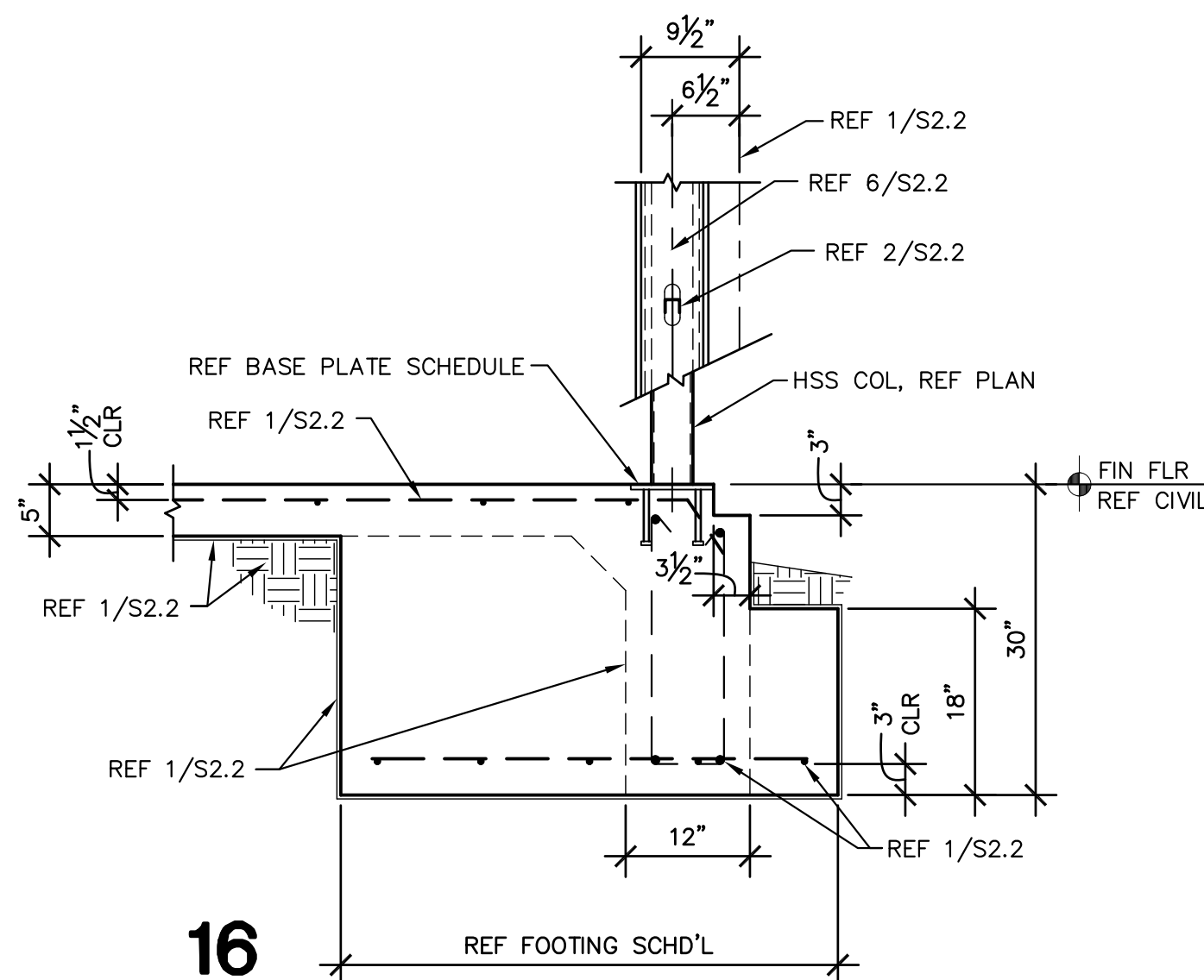


**14 CONTROL JOINT**

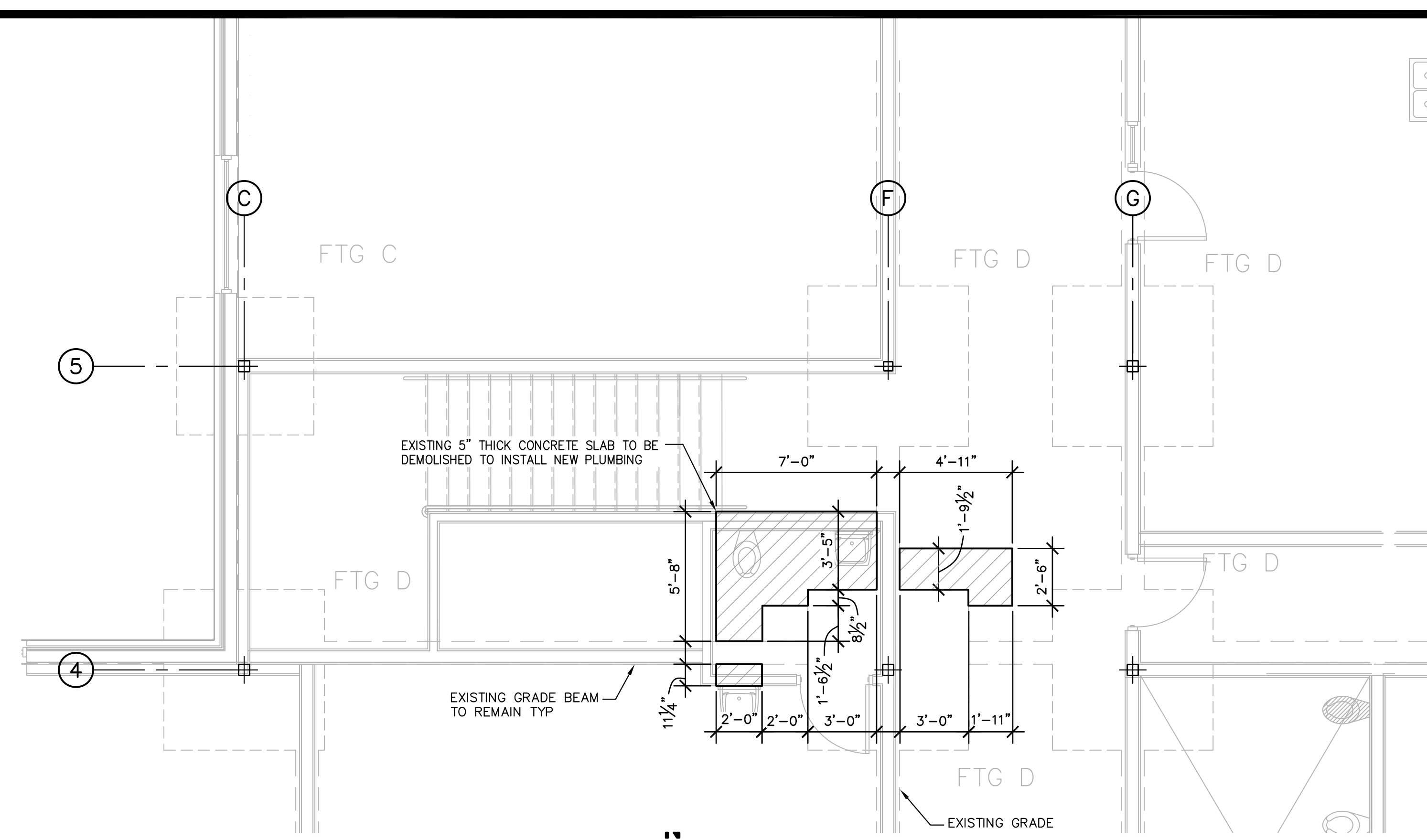
NOTE: ALL JOINTS ARE TO BE CLEANED AND FILLED WITH SONOLASTIC SL1 (SONNEBORN).



**15 TOP OF SLEEVE INTERRUPTS REINFORCING**

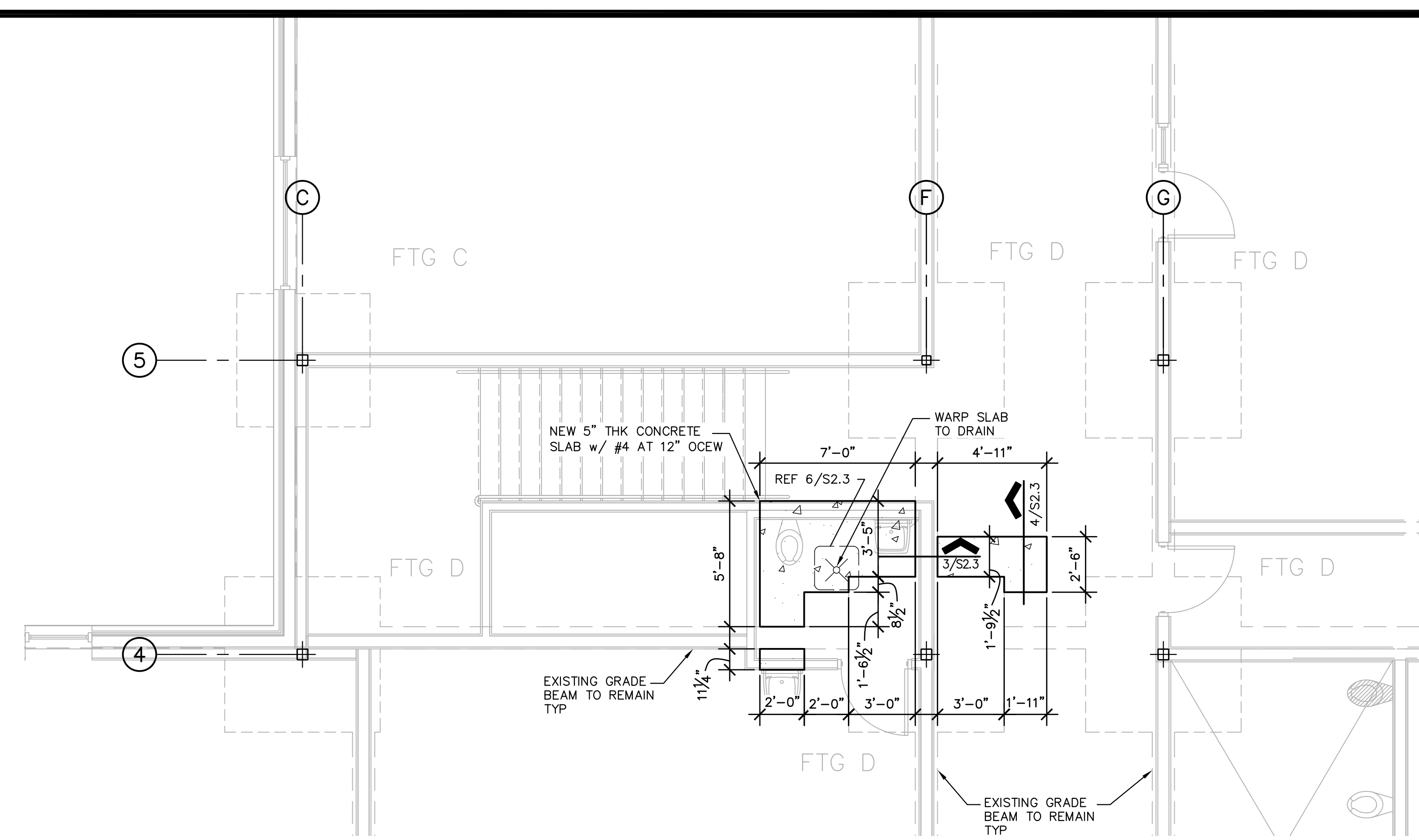


**16**



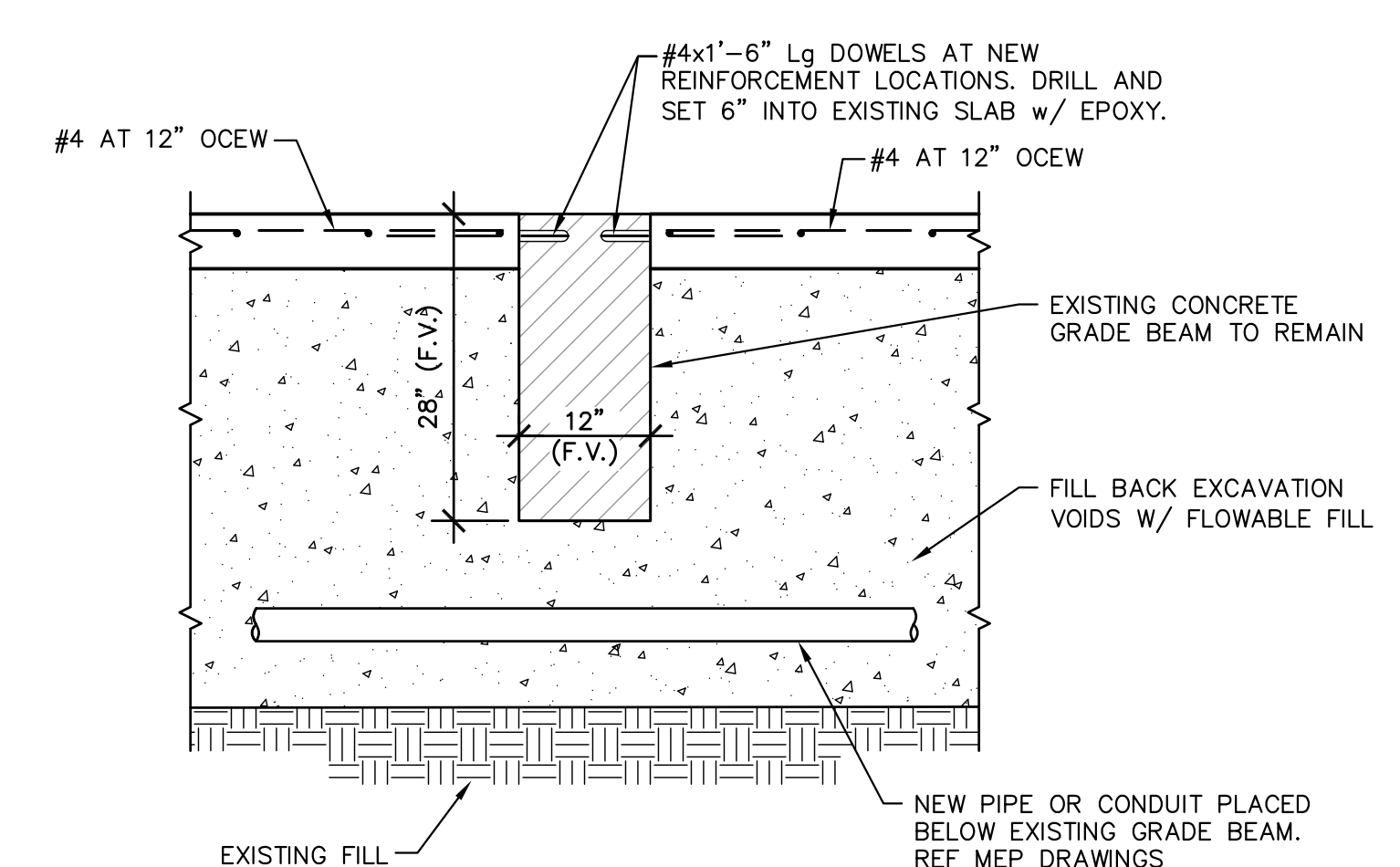
**1 FOUNDATION DEMO PLAN**  
 1/4" = 1'-0"  
 PLAN NORTH

- NOTES:
- INDICATES LOCATIONS WHERE EXISTING 5" THICK SLAB (FIELD VERIFY & COORDINATE WITH MEP) WILL BE DEMOLISHED TO INSTALL NEW PLUMBING. CONTRACTOR SHALL COORDINATE ADDITIONAL LOCATIONS OF SLAB OPENINGS WITH UNDER-SLAB UTILITY DRAWINGS, REFERENCE ARCHITECTURAL AND M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.
  - REFER TO ARCHITECTURAL AND M.E.P. FOR ADDITIONAL DEMOLITION SCOPE.
  - EXISTING SLAB SHALL BE SAW CUT ALONG PERIMETER OF SLAB DEMOLITION AREAS. CONTRACTOR SHALL CUT A MINIMUM OF 1.1/2" DEEP CUT INTO EXISTING SLAB. CONTRACTOR SHALL USE APPROPRIATE SIZE DEMOLITION EQUIPMENT AND TOOLS TO AVOID EXCESSIVE VIBRATIONS IN EXISTING STRUCTURE.
  - CONTRACTOR SHALL INCLUDE ALL NECESSARY LABOR, EQUIPMENT, TOOLS, AND SUPERVISION TO DEMOLISH EXISTING CONCRETE TO EXPOSE UNDER SLAB SUBGRADE. CONCRETE THICKNESS MAY VARY.



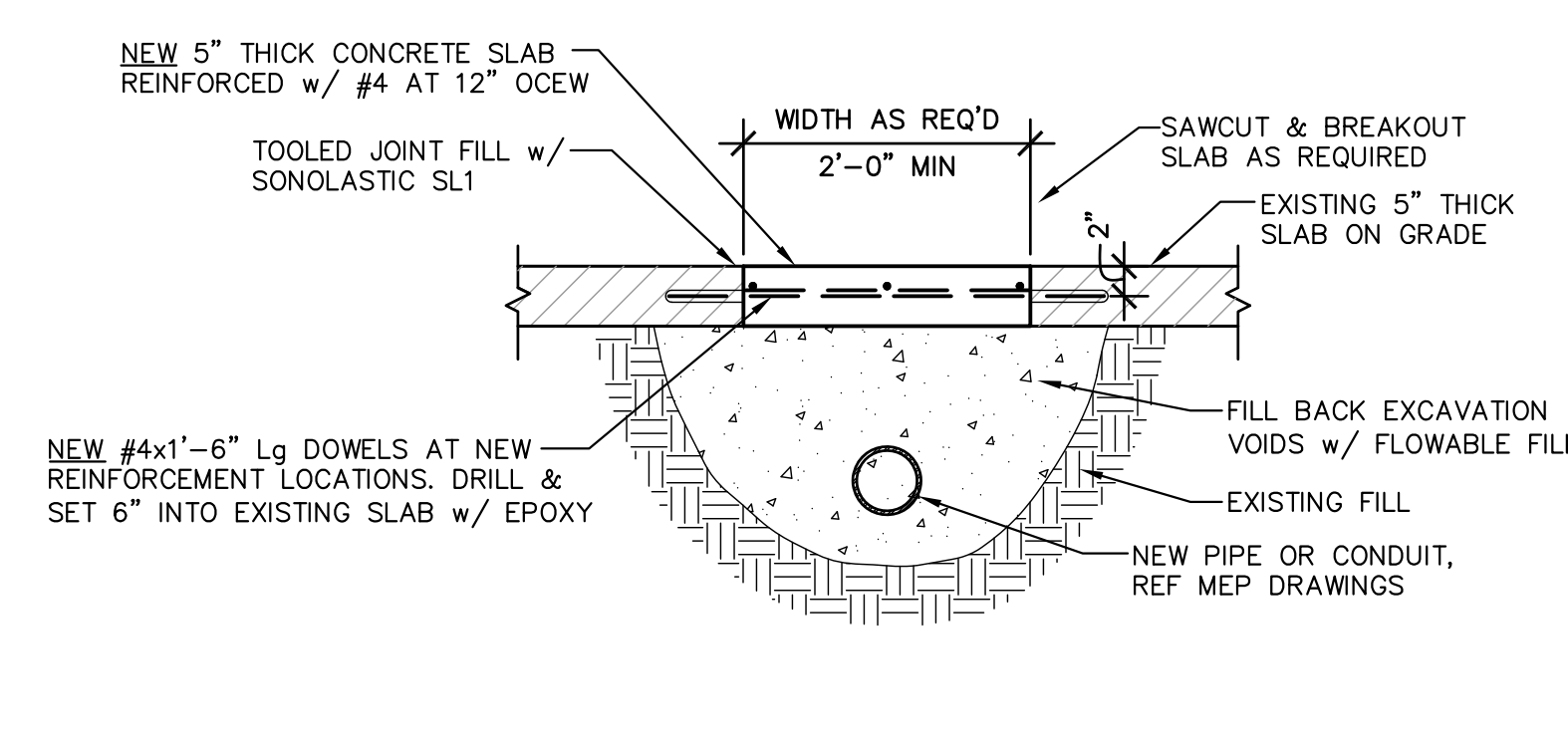
**2 FOUNDATION RENOVATION PLAN**  
 1/4" = 1'-0"

- NOTES:
- INDICATES LIMIT OF NEW 5" THICK SLAB ON GRADE FOUNDATION SLAB.
  - ALL CONDUIT GREATER THAN 1.1/2" IN DIAMETER SHALL BE RECESSED TO PROVIDE 1.1/2" CLEAR DISTANCE BETWEEN SLAB REBAR & CONDUIT.
  - MAINTAIN 2" MINIMUM CLEAR DISTANCE BETWEEN ALL CONDUIT IN SLAB.



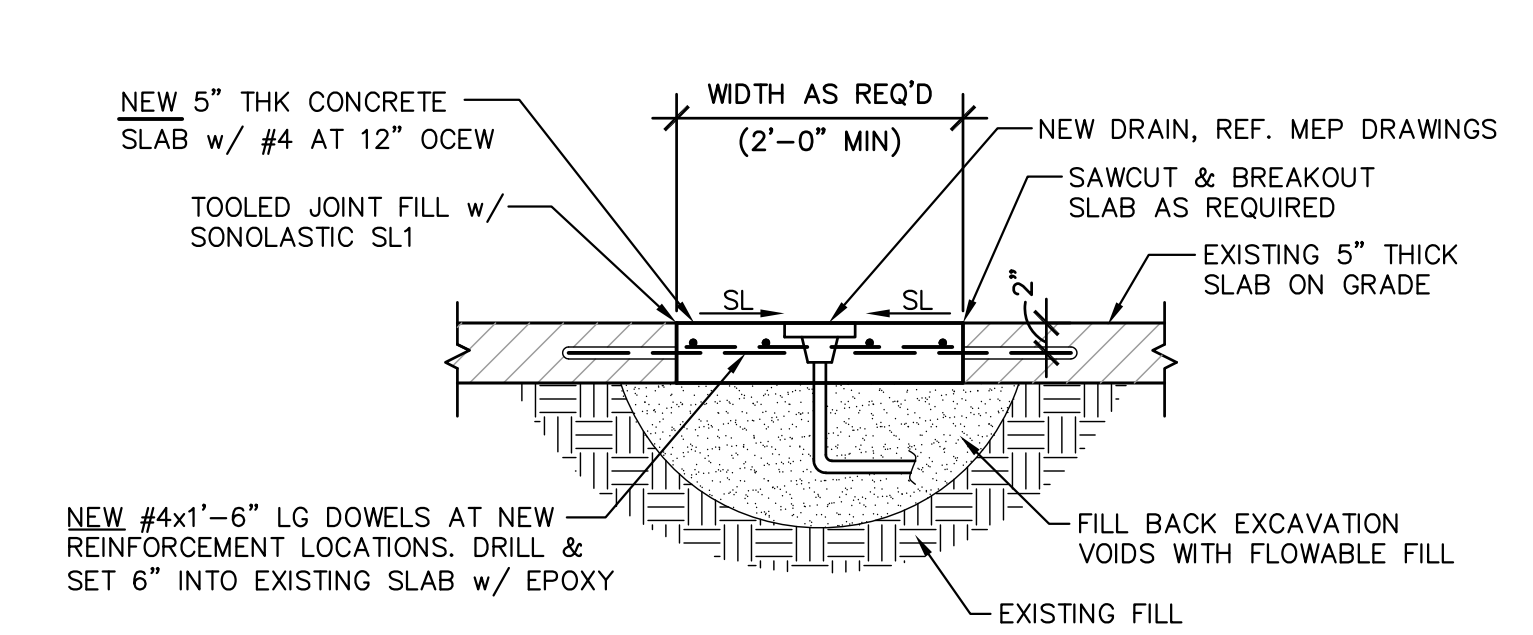
**3 NEW PLUMBING LINES RUN BELOW EXISTING GRADE BEAM**

- NOTES:
- CONTRACTOR TO COORDINATE LOCATIONS OF INTERIOR GRADE BEAMS IN THE FIELD.
  - PROVIDE CONTROLLED LOW STRENGTH MATERIAL (CLSM), ALSO KNOWN AS FLOWABLE FILL, CONSISTING OF PORTLAND CEMENT, FLY ASH, SAND AND POTABLE WATER. THE FLOWABLE FILL SHALL OBTAIN A COMPRESSIVE STRENGTH BETWEEN 100 PSI AND 200 PSI AT 28 DAYS IN ACCORDANCE WITH ASTM D-4832 WITH A 12" SLUMP, 0.95 MAXIMUM WATER CEMENT RATIO, NO COARSE AGGREGATE, AND MAXIMUM 20% AIR BY VOLUME. THE MIX SHALL BE PUMPABLE USING A STANDARD GROUT PUMP WITHOUT MIXTURE SEGREGATION. THE FLOWABLE FILL SHALL BE PROVIDED BY A READY MIX CONCRETE SUPPLIER, DELIVERED TO THE PROJECT SITE USING A ROTATION DRUM TRUCK. THE MIX DESIGN PROPERTIES WILL NEED TO BE VERIFIED BY A MATERIALS TESTING LABORATORY.

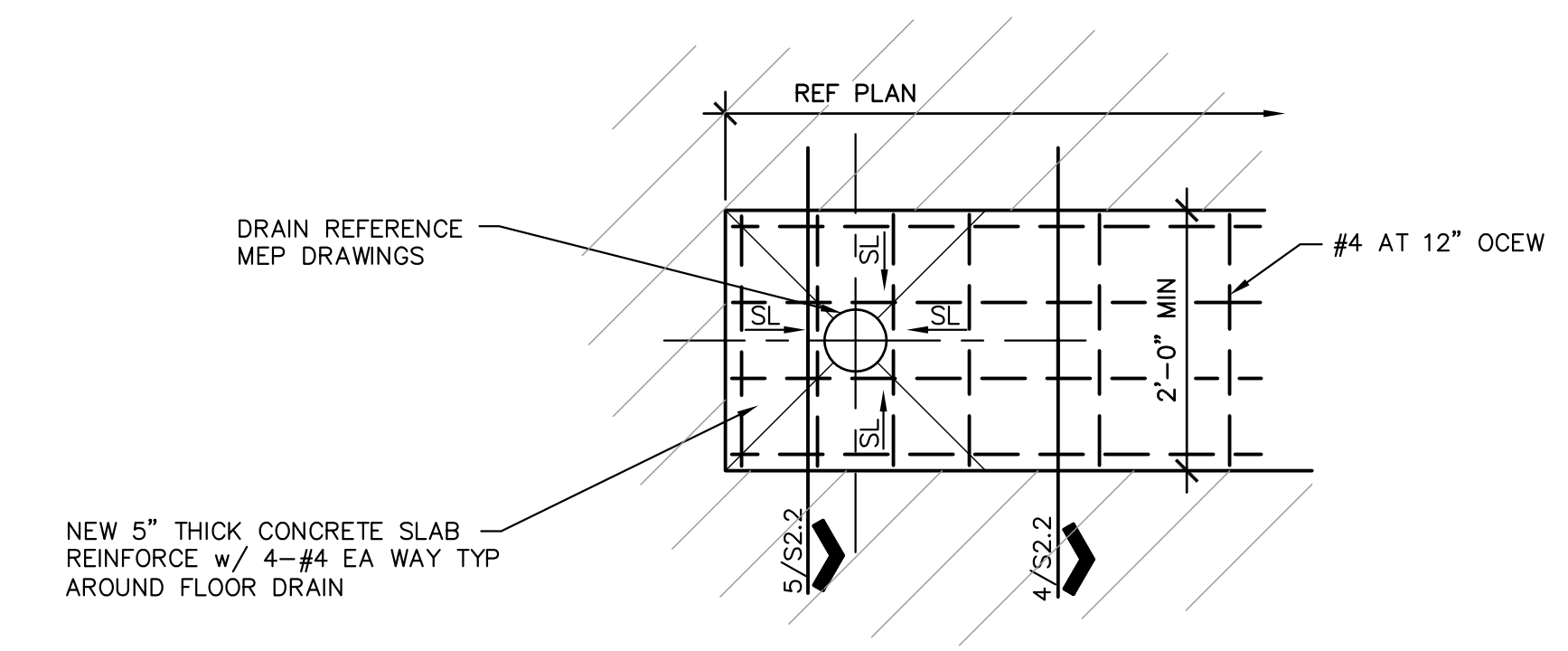


**4 TYPICAL UTILITY TRENCH DETAIL**

- NOTES:
- COORDINATE UTILITY TRENCH LOCATION WITH MEP DRAWINGS.
  - REF NOTE 2 ON 3/S2.1 FOR CONTROLLED LOW STRENGTH MATERIAL NOTE.

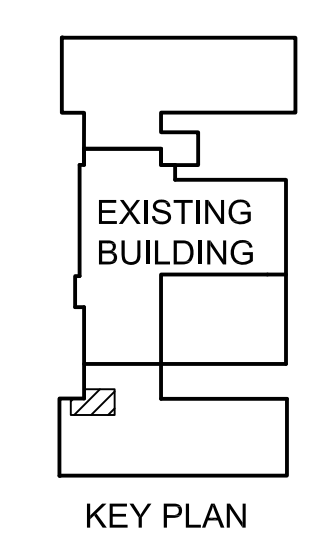



**5**

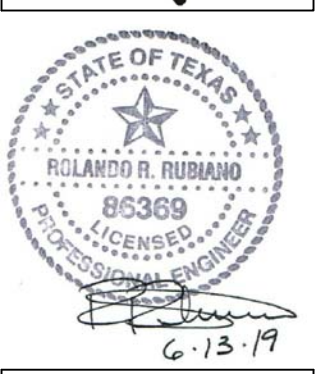


**6 TYPICAL DRAIN DETAIL**

- NOTES:
- COORDINATE LOCATION W/ MEP DRAWINGS.



  
**GREEN, RUBIANO & ASSOCIATES**  
 CONSULTING STRUCTURAL ENGINEERS  
 1320 WEST WINDSOR  
 HOUSTON, TEXAS 77051  
 (281) 416-1100  
 FAX (281) 416-1101  
 WWW.GRA-ARCH.COM

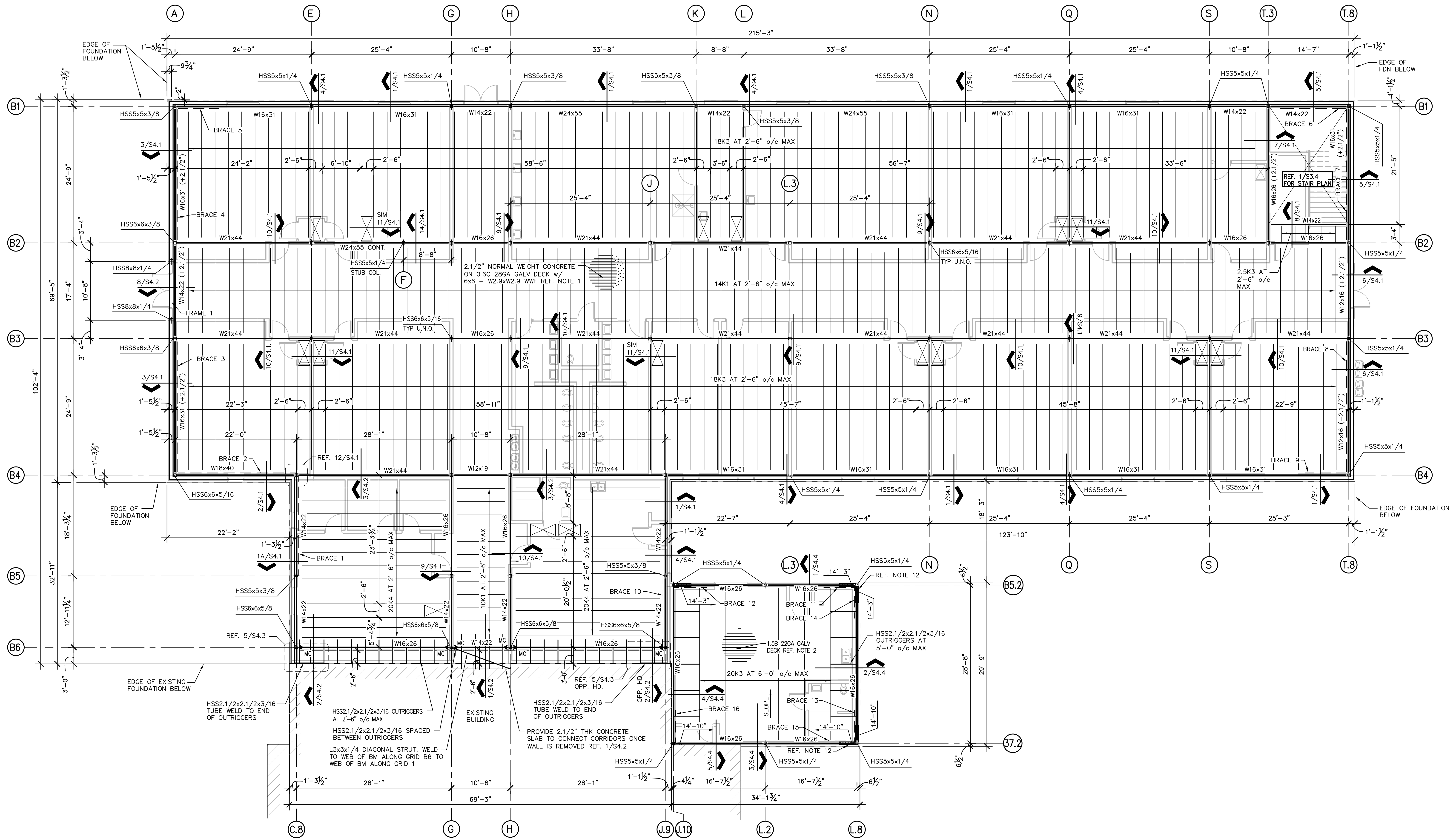


© Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers  
 Date: JUNE 13, 2019  
 Scale: As Shown  
 DRAWN BY: AV, JH, IG  
 CHECKED BY: JS  
 Job No: 192-519  
 Sheet:



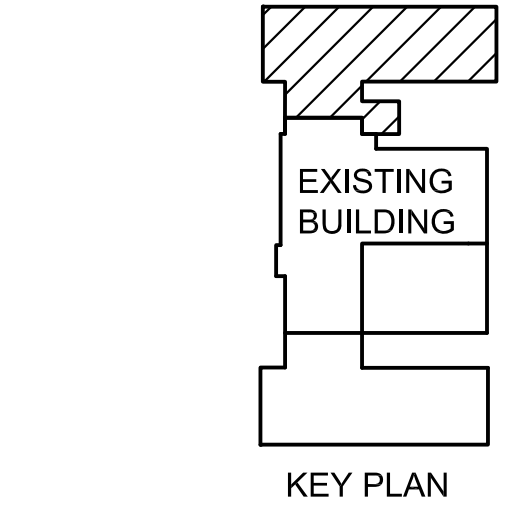
© Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers

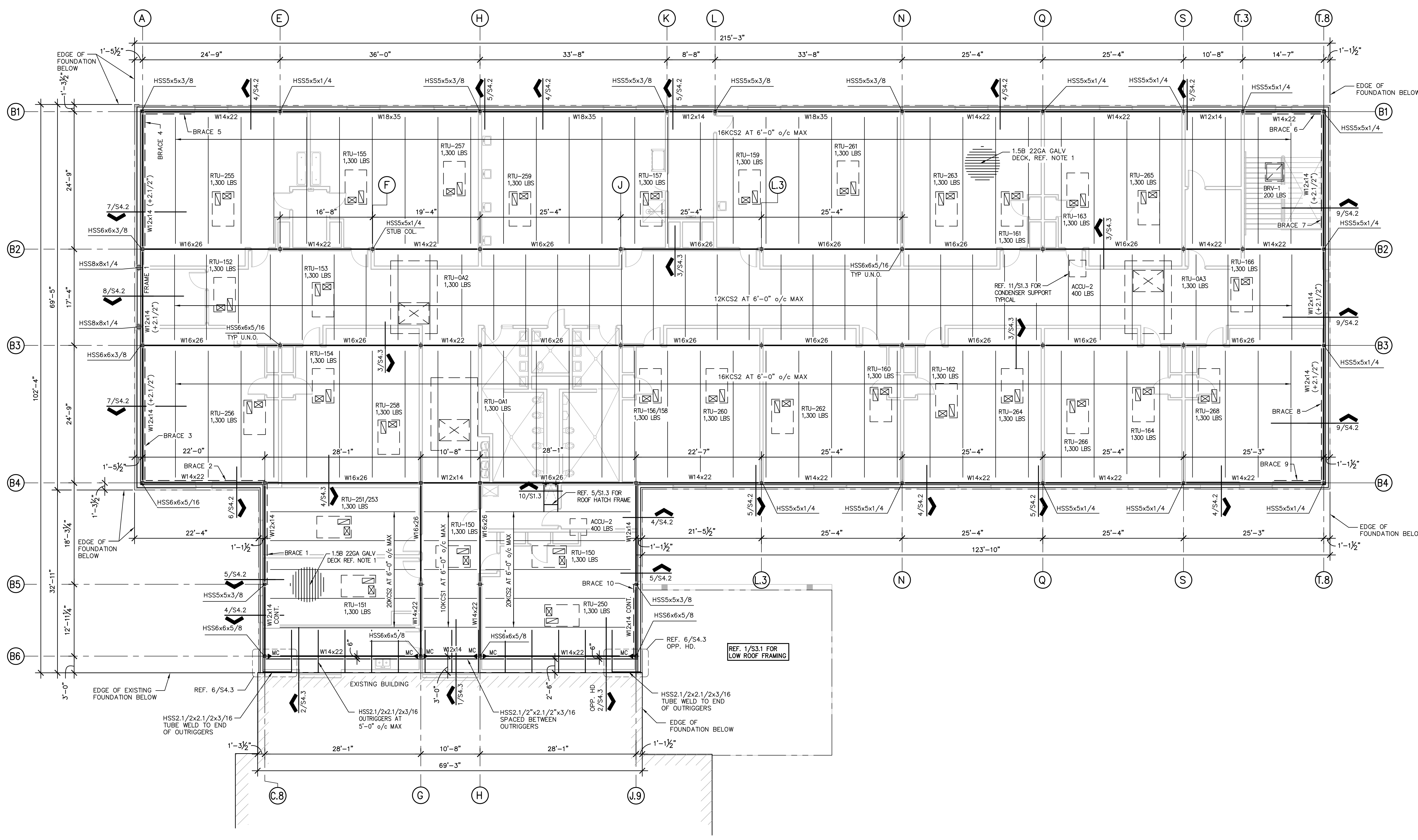
Date: JUNE 13, 2019  
 Scale: As Shown  
 DRAWN BY: AV, J.J. IG  
 CHECKED BY: JS  
 Job No: 192-510  
 Sheet:



**1 SECOND FLOOR FRAMING PLAN**  
 1/8" = 1'-0"  
 PLAN NORTH

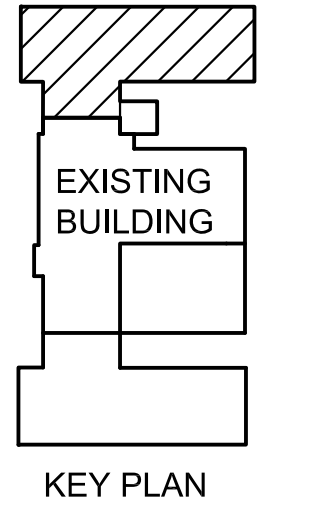
- NOTES:
- FLOOR DECK SHALL BE 0.6C 28GA GALV. DECK BY VULCRAFT OR APPROVED EQUAL. (I=0.012 IN<sup>4</sup>/FT; S<sub>p</sub>=0.035 IN<sup>3</sup>/FT; S<sub>x</sub>=0.036 IN<sup>3</sup>/FT; F<sub>y</sub>=60KSI). ATTACH DECK TO SUPPORTERS USING 5/8" PUDDLE WELDS ON 30/4 PATTERN AND 2-#10 TEK SIDE LAP FASTENERS, WELD WASHER REQUIRED.
  - ROOF DECK SHALL BE 1.5B 22GA GALV. DECK BY VULCRAFT OR APPROVED EQUAL. (I<sub>p</sub>=0.195 IN<sup>4</sup>/FT; I<sub>n</sub>=0.183 IN<sup>4</sup>/FT; S<sub>p</sub>=0.156 IN<sup>3</sup>/FT; S<sub>n</sub>=0.192 IN<sup>3</sup>/FT; F<sub>y</sub>=33KSI). ATTACH DECK TO SUPPORTERS USING 5/8" PUDDLE WELDS ON A 36/5 PATTERN AND 7-#10 TEK SCREW SIDE LAP FASTENERS.
  - TOP OF BEAM SHALL BE 14'-3" UNLESS NOTED OTHERWISE.
  - ALL STEEL BEAM TO COLUMN CONNECTIONS AT SECOND FLOOR SHALL BE THRU PLATE CONNECTION, REFERENCE DETAIL 1/S1.3.
  - REFERENCE 1/S3.3 FOR BRACE PROFILES.
  - FLOOR PENETRATIONS THROUGH SECOND FLOOR ARE BASED ON M.E.P. & ARCHITECTURAL DRAWINGS. CONTRACTOR SHOULD CONTACT ENGINEER IF THERE IS A CONFLICT BETWEEN FLOOR PENETRATIONS & FRAMING.
  - ALL COLUMNS SHALL BE HSS6x6x5/16 UNLESS NOTED OTHERWISE.
  - REFERENCE 9 & 10/S1.2 FOR TYPICAL LOUVER OPENING DETAIL AT 1<sup>st</sup> FLOOR. COORDINATE LOCATIONS AND HEIGHTS WITH M.E.P. AND ARCHITECTURAL.
  - EXTERIOR METAL STUDS 600S162-43 ARE SPACED AT 16" o/c MAXIMUM AND ADDITIONALLY AS REQUIRED AT EDGE OF EXTERIOR SHEATHING UNLESS NOTED OTHERWISE.
  - REFERENCE 1/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR OUTSIDE BUILDING CORNER AND 2/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR INSIDE BUILDING CORNER.
  - MC DENOTES A MOMENT CONNECTION REFERENCE DETAIL 11/S1.2.
  - INDICATES 600S162-43 AT 12" o/c AT BUILDING CORNERS.



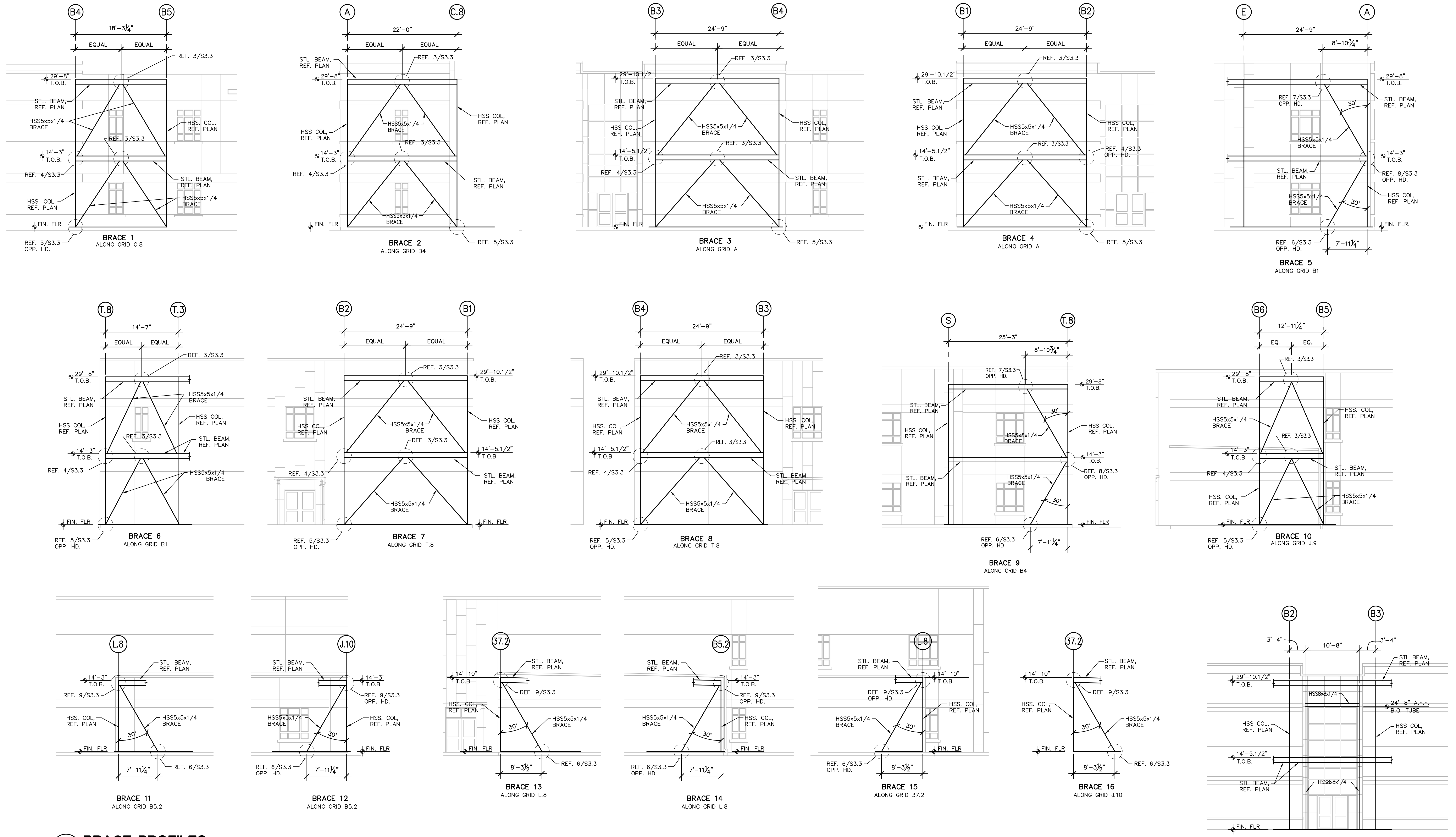


**1 ROOF FRAMING PLAN**  
1/8" = 1'-0"  
PLAN NORTH

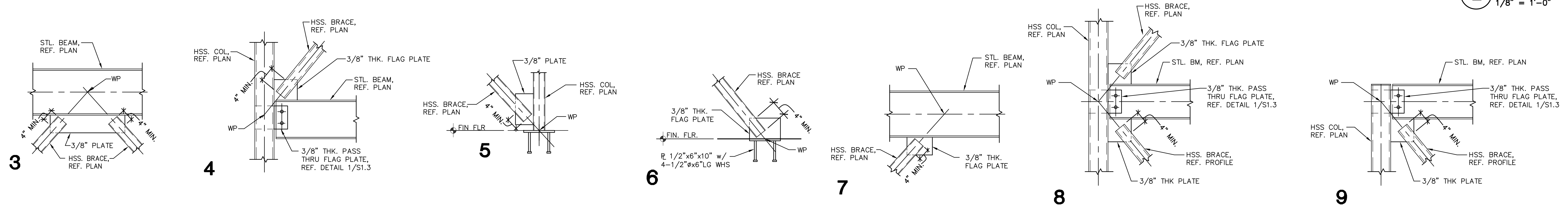
- NOTES:
1. ROOF DECK SHALL BE 1.5B 22GA GALV. DECK BY VULCRAFT OR APPROVED EQUAL. (Ip=0.155 IN<sup>4</sup>/FT; In=0.183 IN<sup>2</sup>/FT; Sp=0.186 IN<sup>2</sup>/FT; Sn=0.192 IN<sup>2</sup>/FT; Fy=33KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON A 36/5 PATTERN AND 7-#10 TEK SCREW SIDE LAP FASTENERS.
  2. ALL COLUMNS SHALL BE HSS6x5/16 UNLESS NOTED OTHERWISE.
  3. TOP OF BEAMS SHALL BE 29'-8" UNLESS NOTED OTHERWISE.
  4. REFERENCE 1/S3.3 FOR BRACE PROFILES.
  5. REFERENCE 5/S1.3 FOR ROOF HATCH & RTU FRAME DETAILS.
  6. REFERENCE 9 & 10/S1.2 FOR TYPICAL LOUVER OPENING DETAIL AT 2nd FLOOR. COORDINATE LOCATIONS AND HEIGHTS WITH MEP AND ARCHITECTURAL.
  7. EXTERIOR METAL STUDS 600S162-43 ARE SPACED AT 16" o/c MAXIMUM AND ADDITIONALLY AS REQUIRED AT EDGE OF EXTERIOR SHEATHING UNLESS NOTED OTHERWISE.
  8. REFERENCE 1/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR OUTSIDE BUILDING CORNER AND 2/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR INSIDE BUILDING CORNER.
  9. ► MC DENOTES A MOMENT CONNECTION REFERENCE DETAIL 12/S1.2.



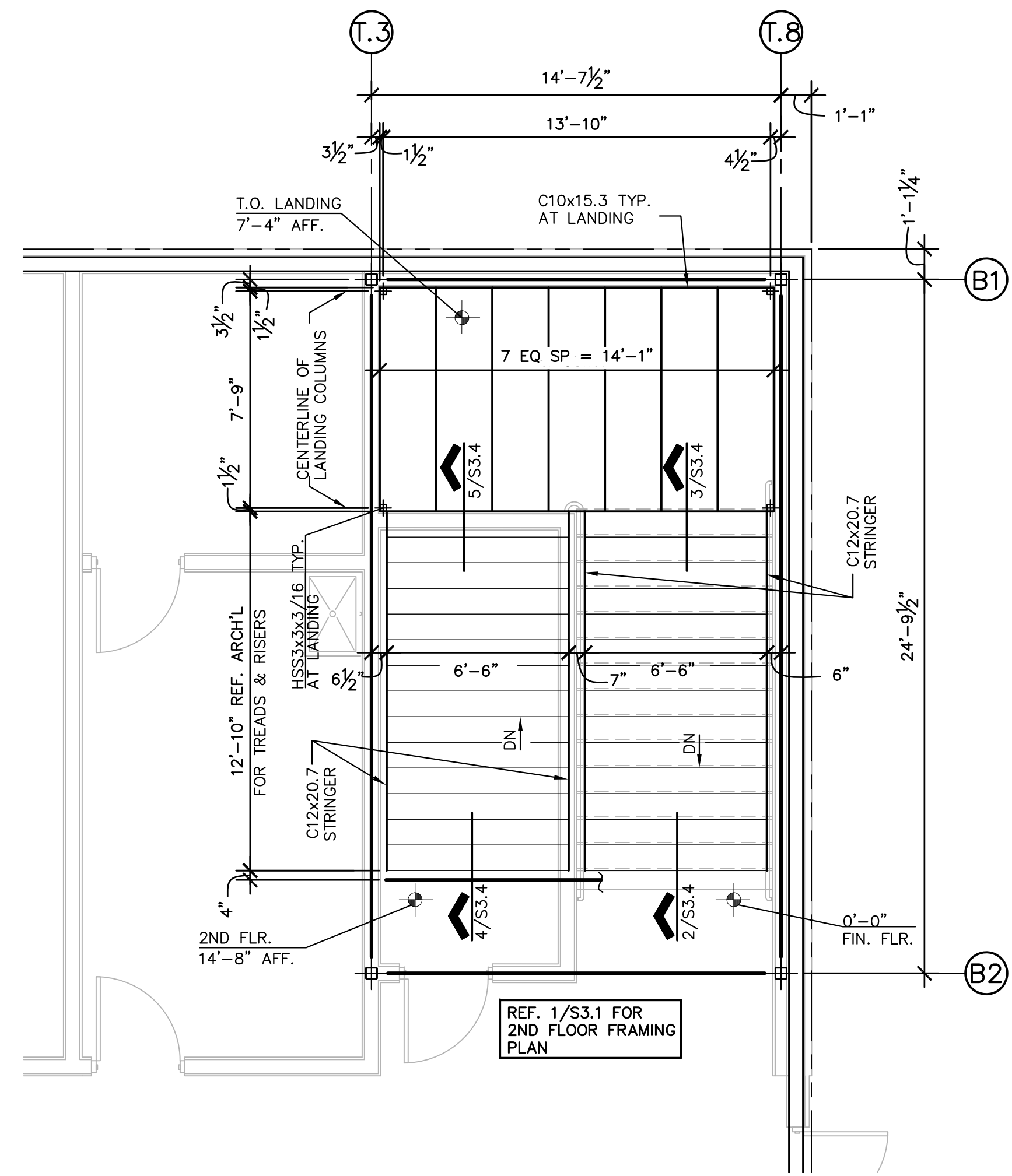
KEY PLAN



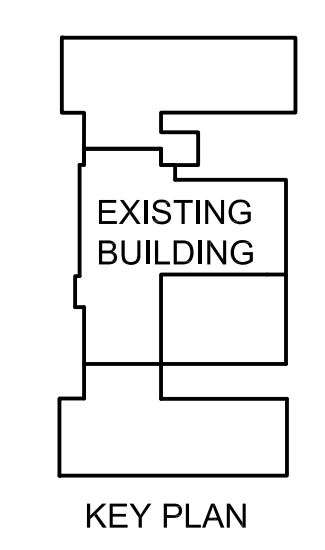
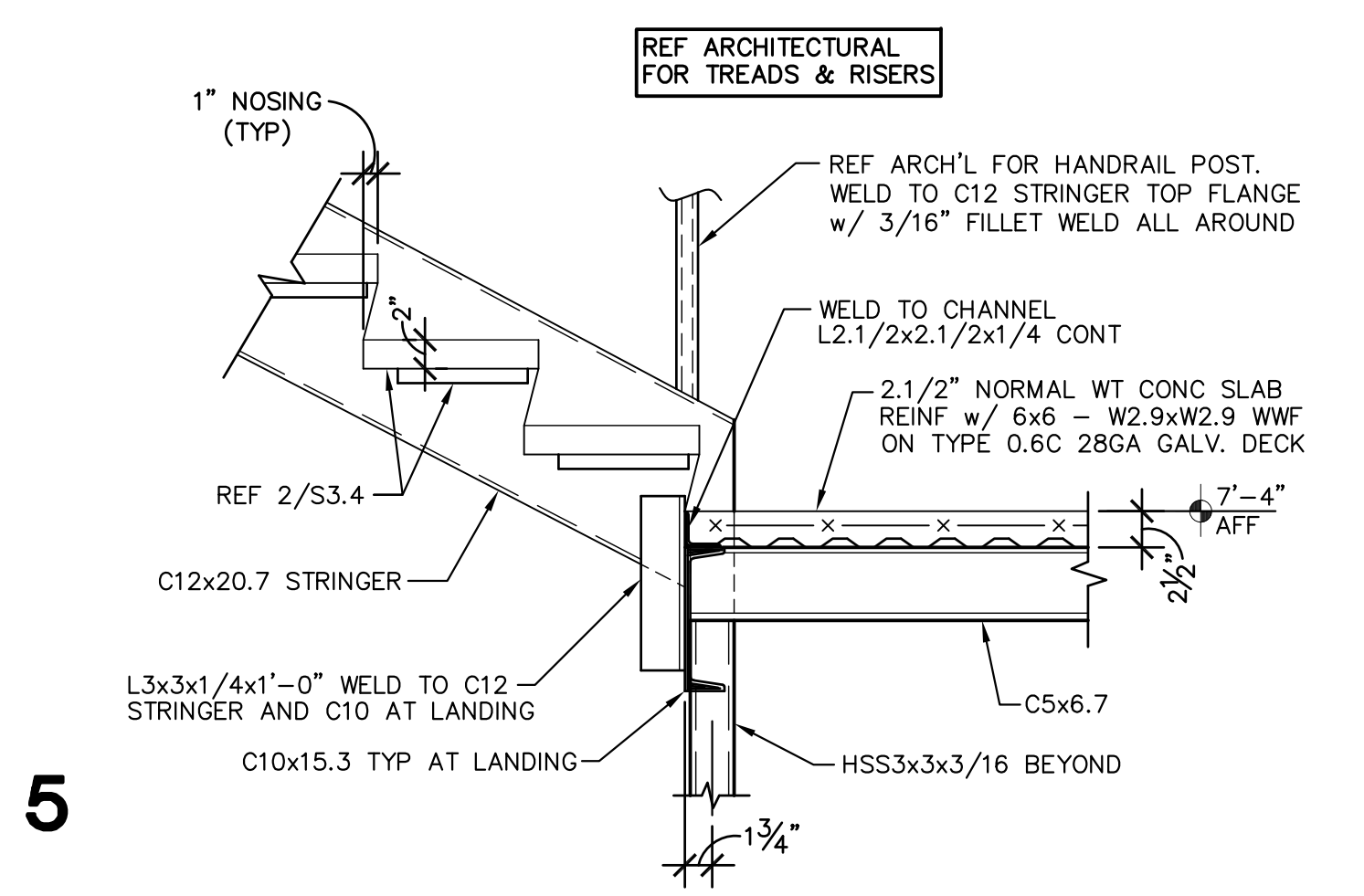
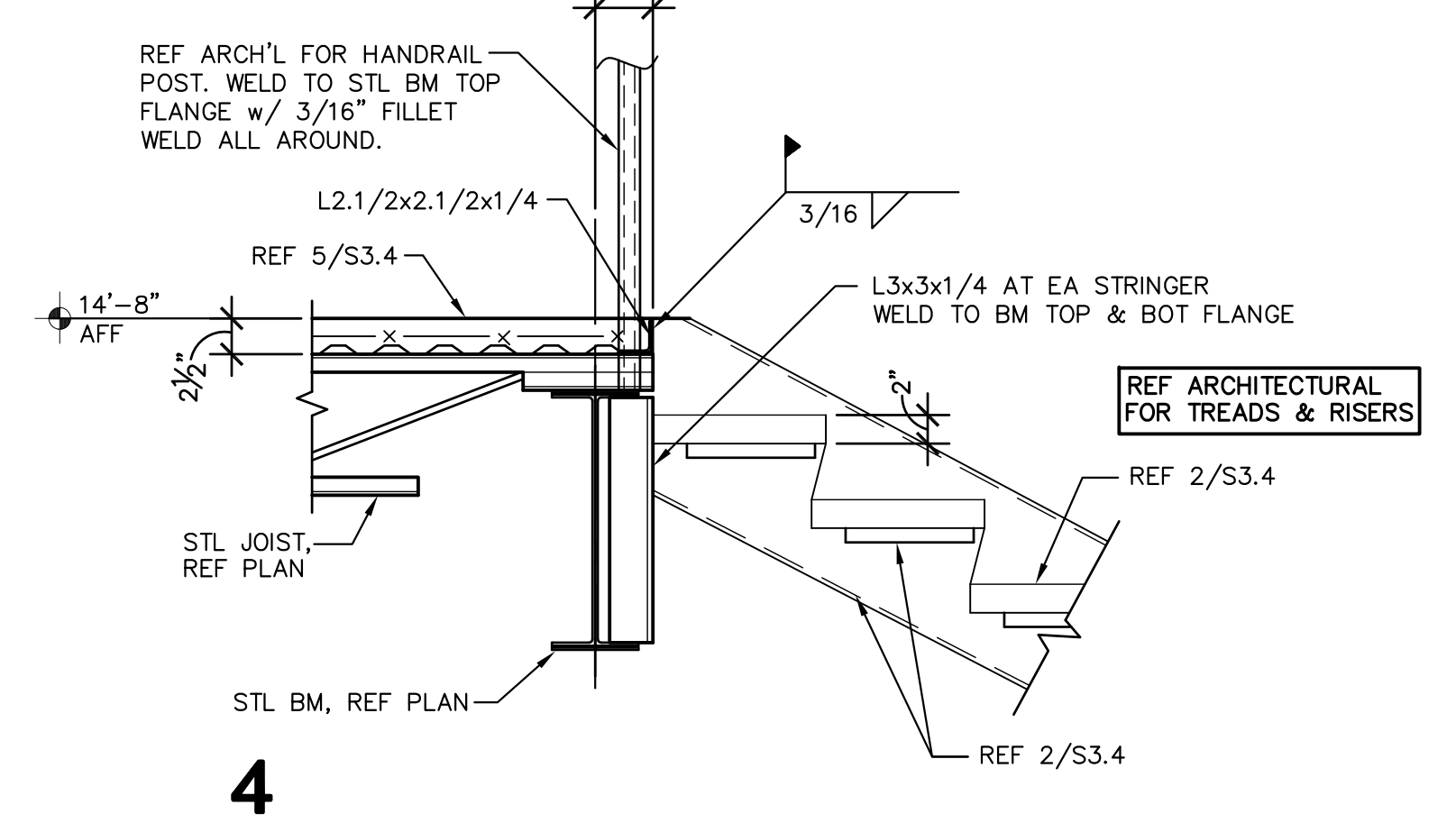
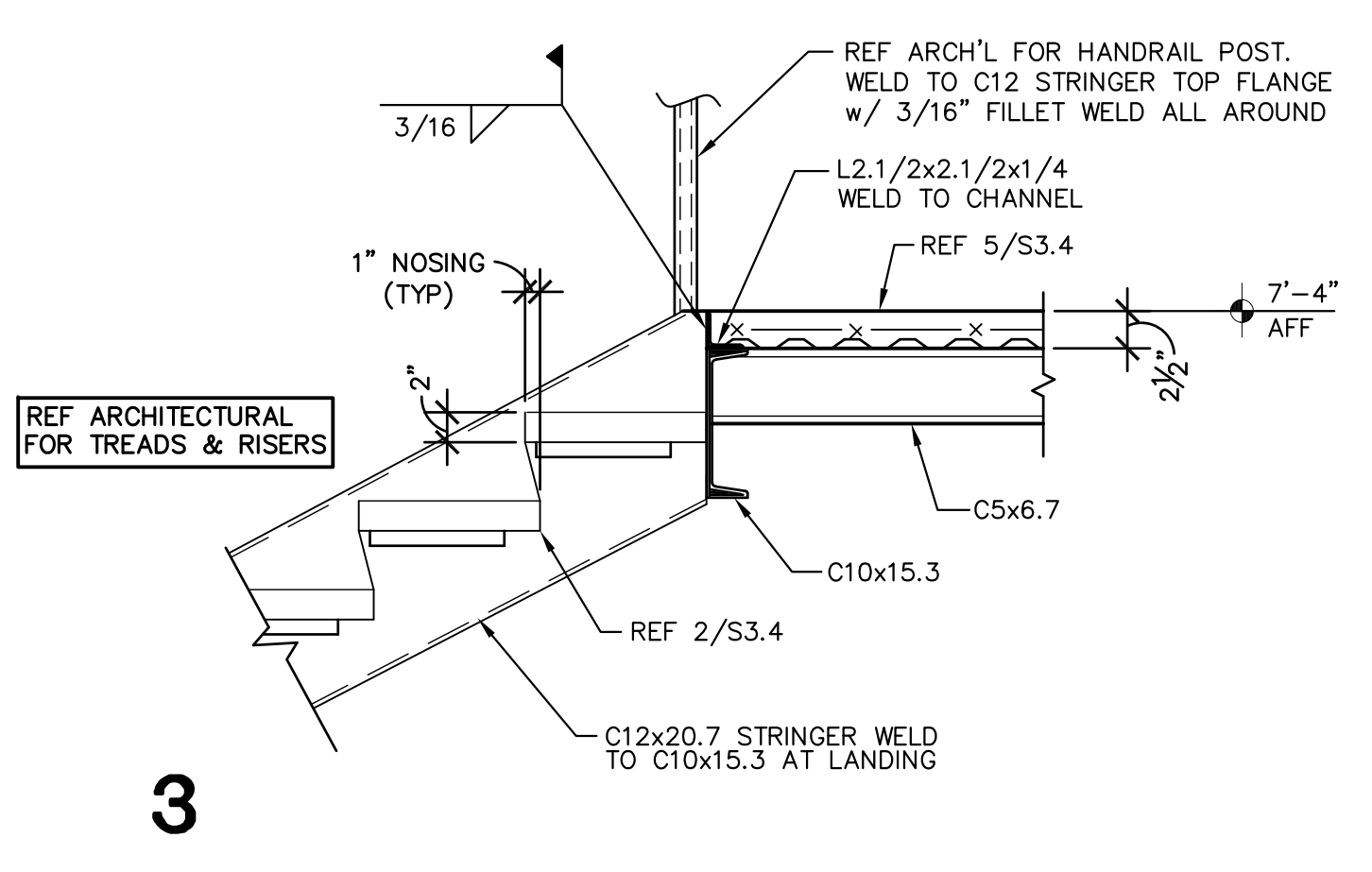
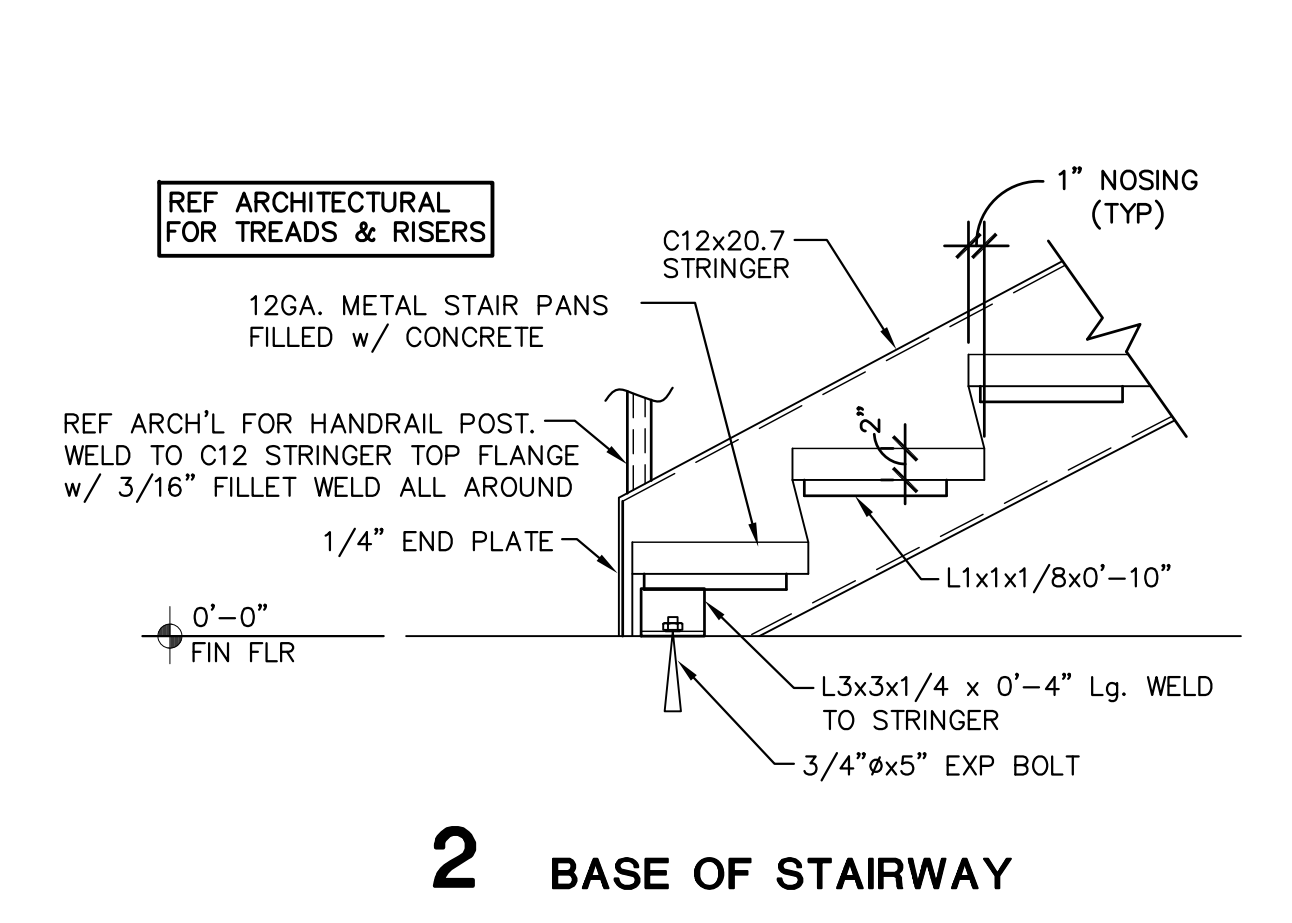
**1 BRACE PROFILES**  
 1/8" = 1'-0"



**2 FRAME PROFILE**  
 1/8" = 1'-0"



**1 STAIR FRAMING PLAN**  
 1/4" = 1'-0"  
 NOTES:  
 1. FLOOR DECK SHALL BE 0.60 28GA GALV DECK BY VULCRAFT OR APPROVED EQUAL (I=0.012 IN<sup>2</sup>/FT; S<sub>y</sub>=0.035 IN<sup>2</sup>/FT; S<sub>x</sub>=0.036 IN<sup>2</sup>/FT; F<sub>y</sub>=60KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON 30/4 PATTERN WELDING WASHERS REQUIRED, AND 2-#10 TEK SCREW SIDE LAP FASTENERS.





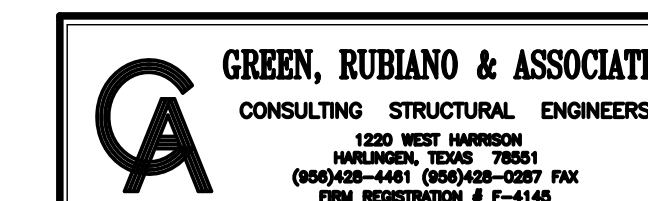
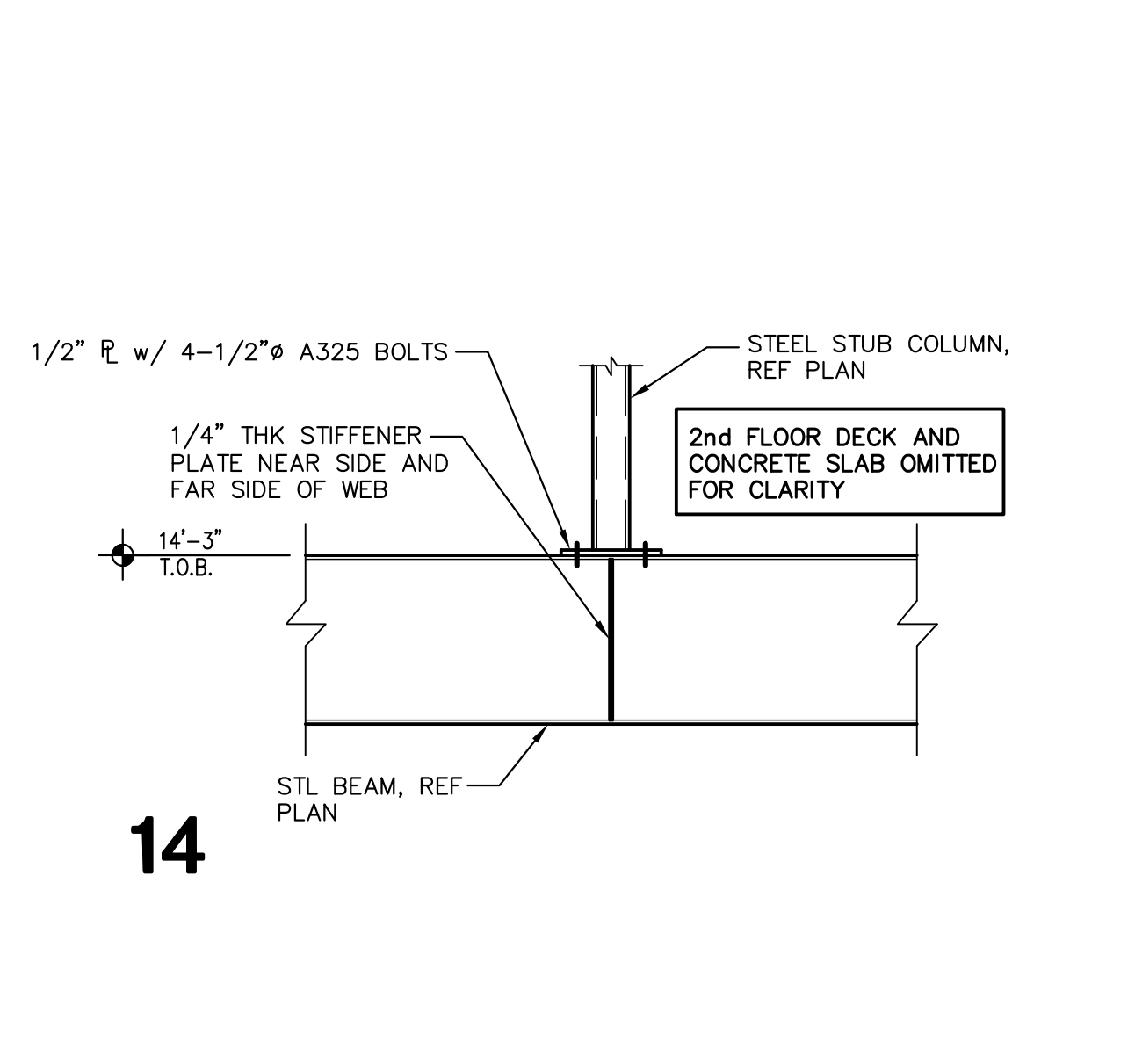
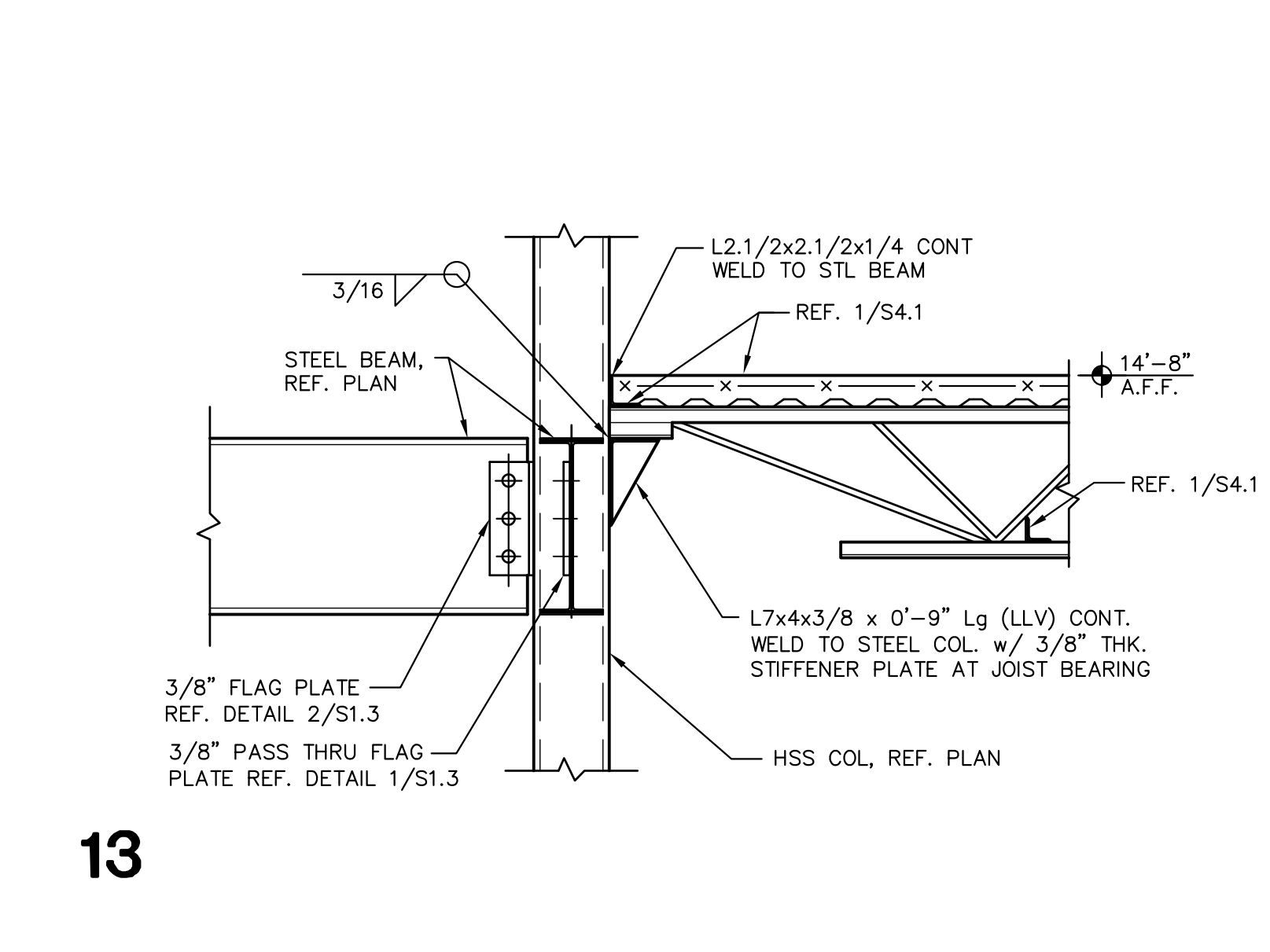
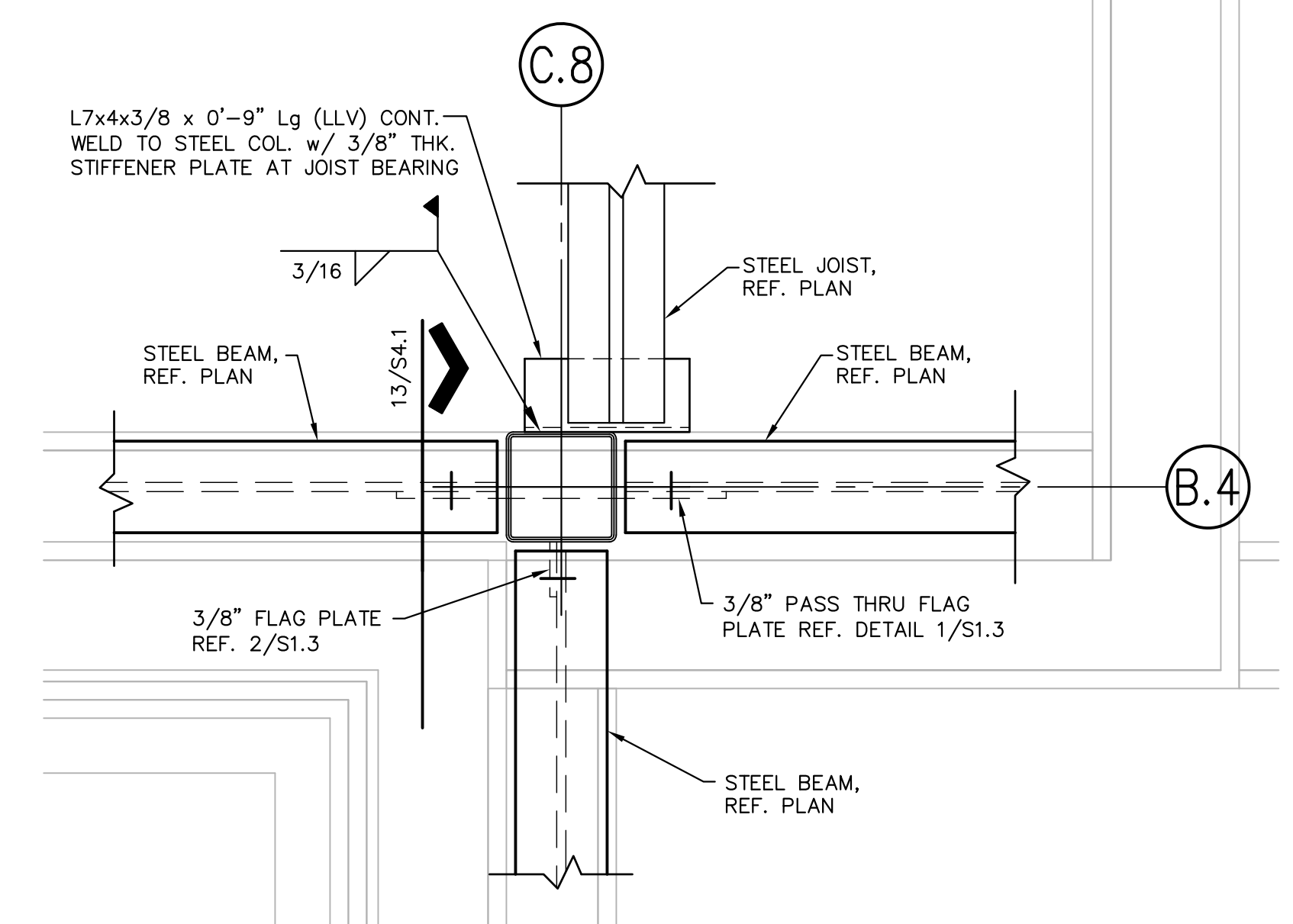
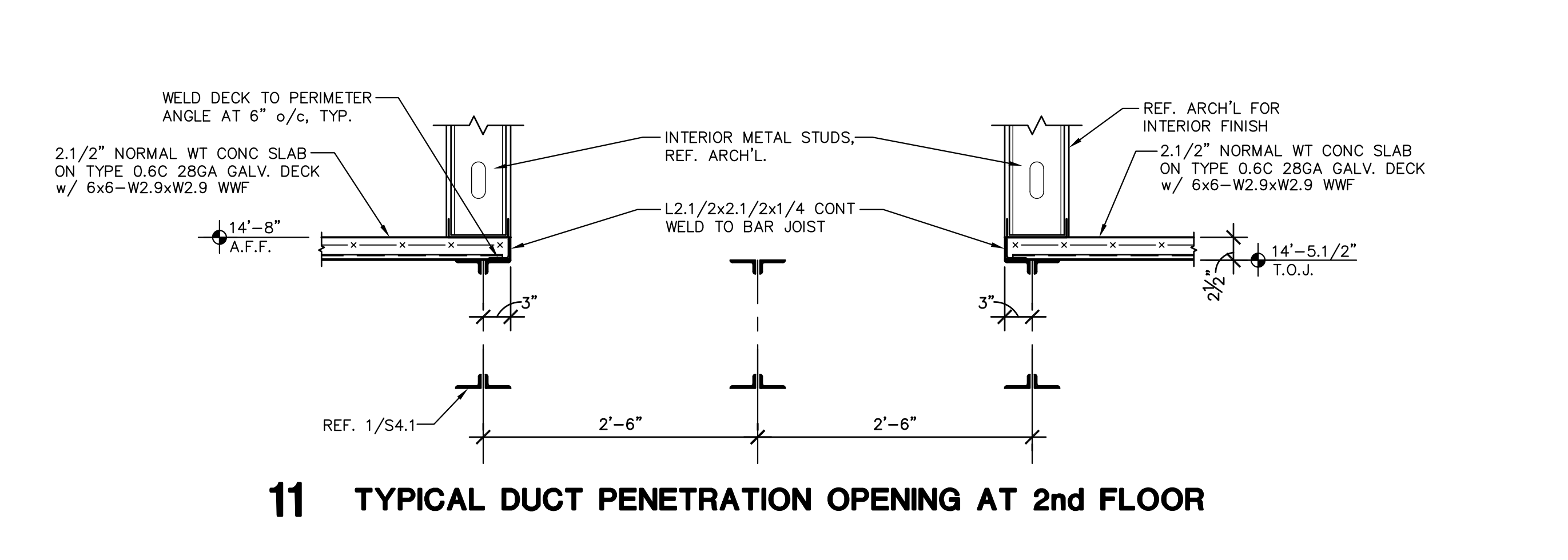
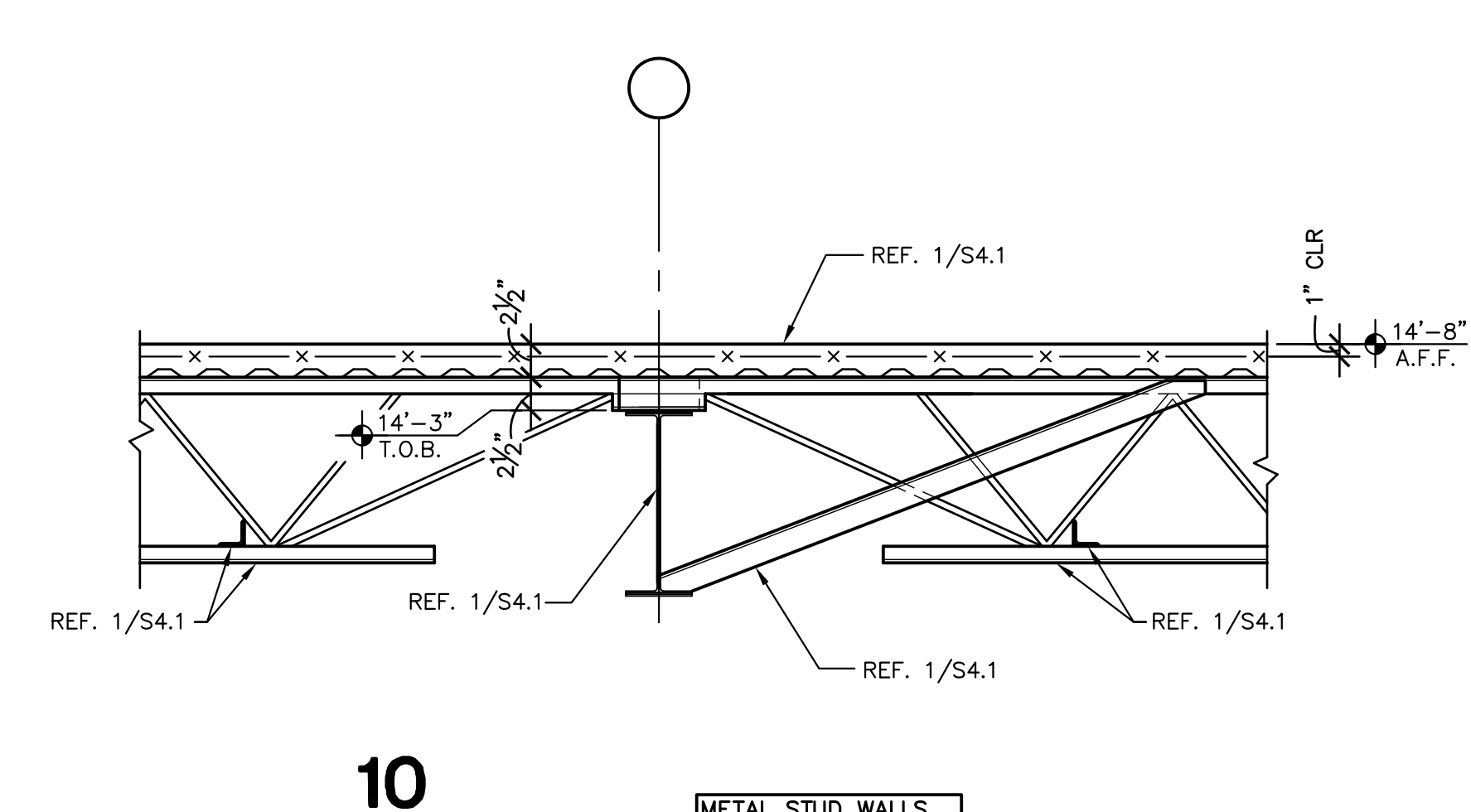
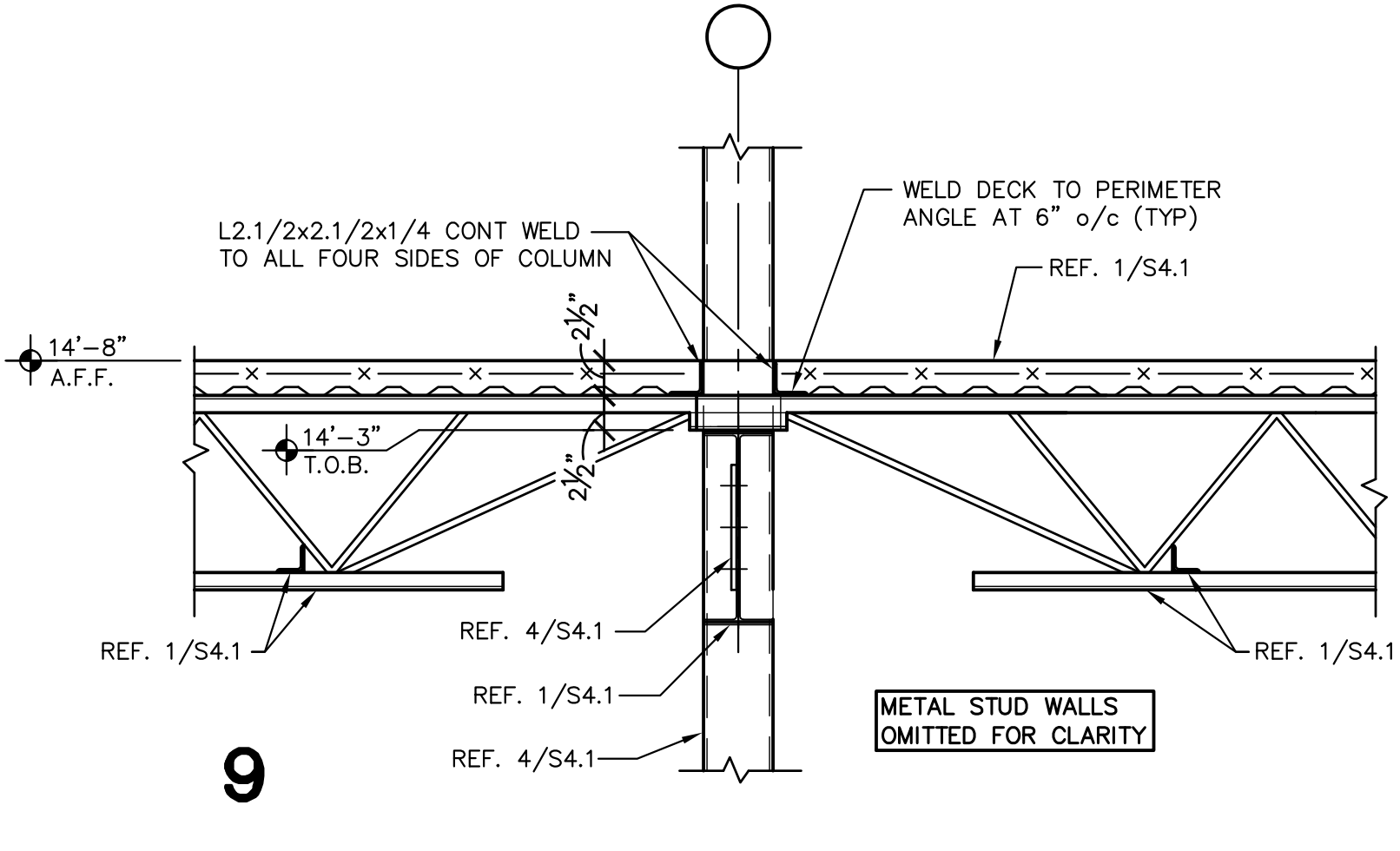
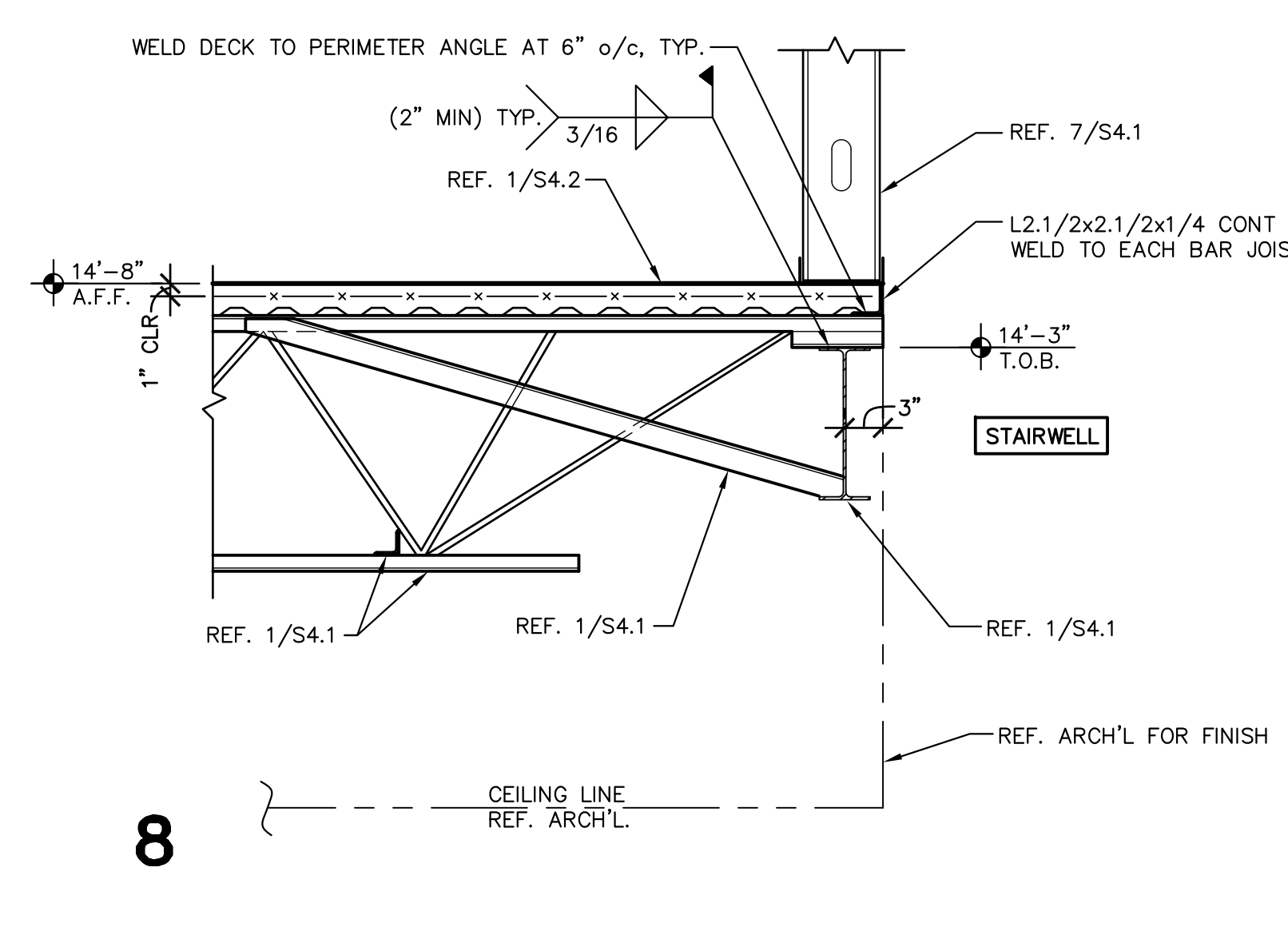
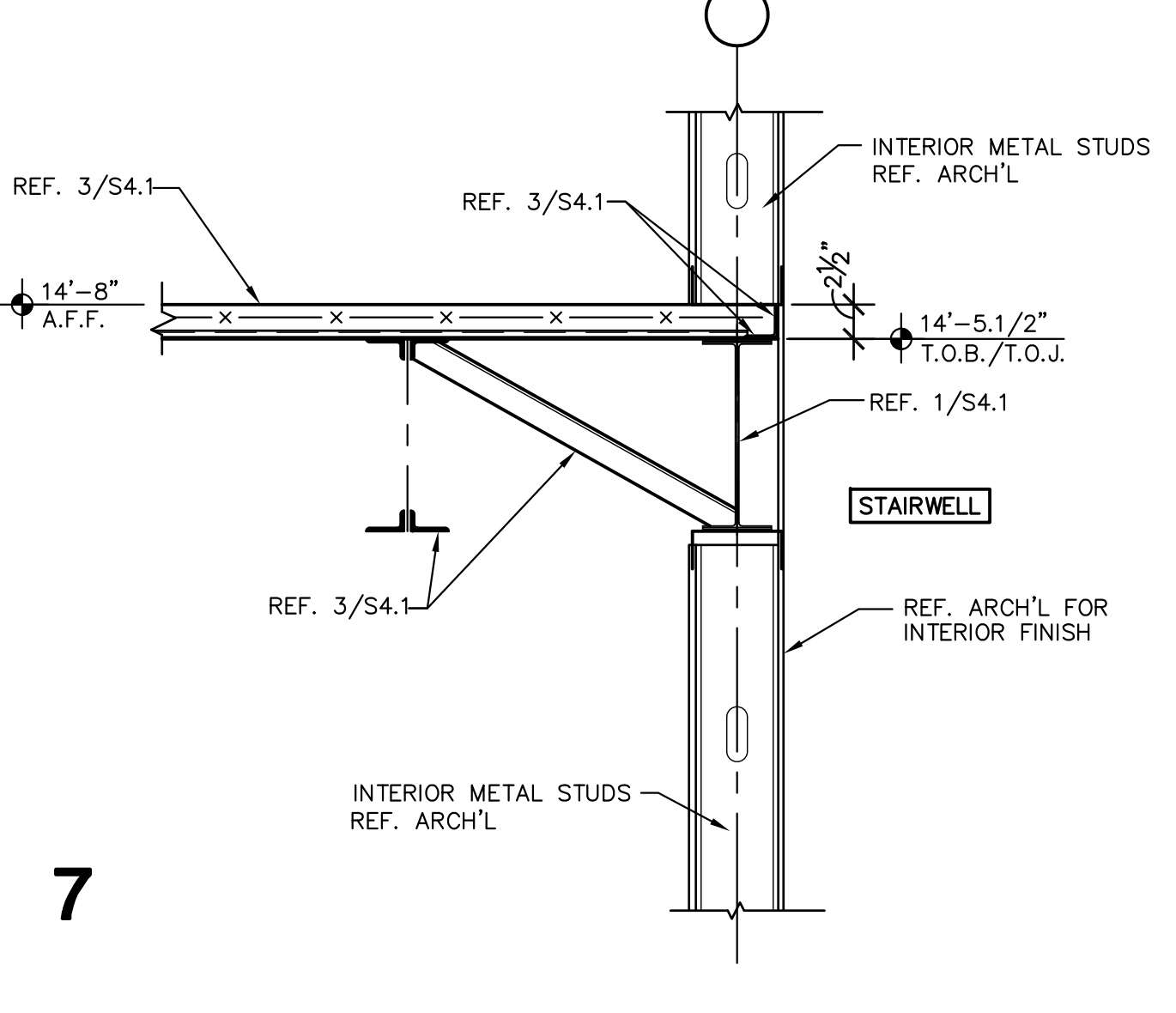
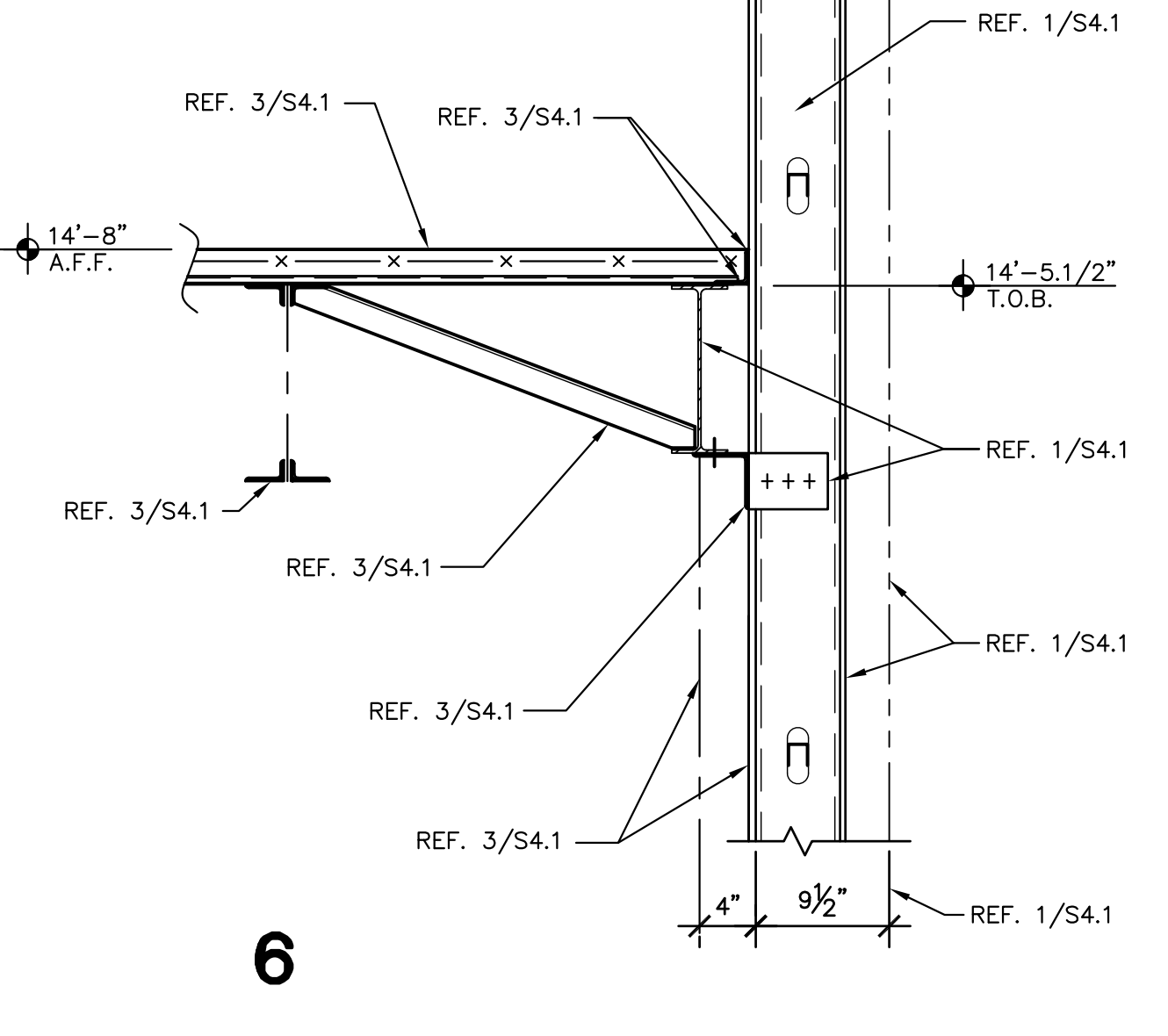
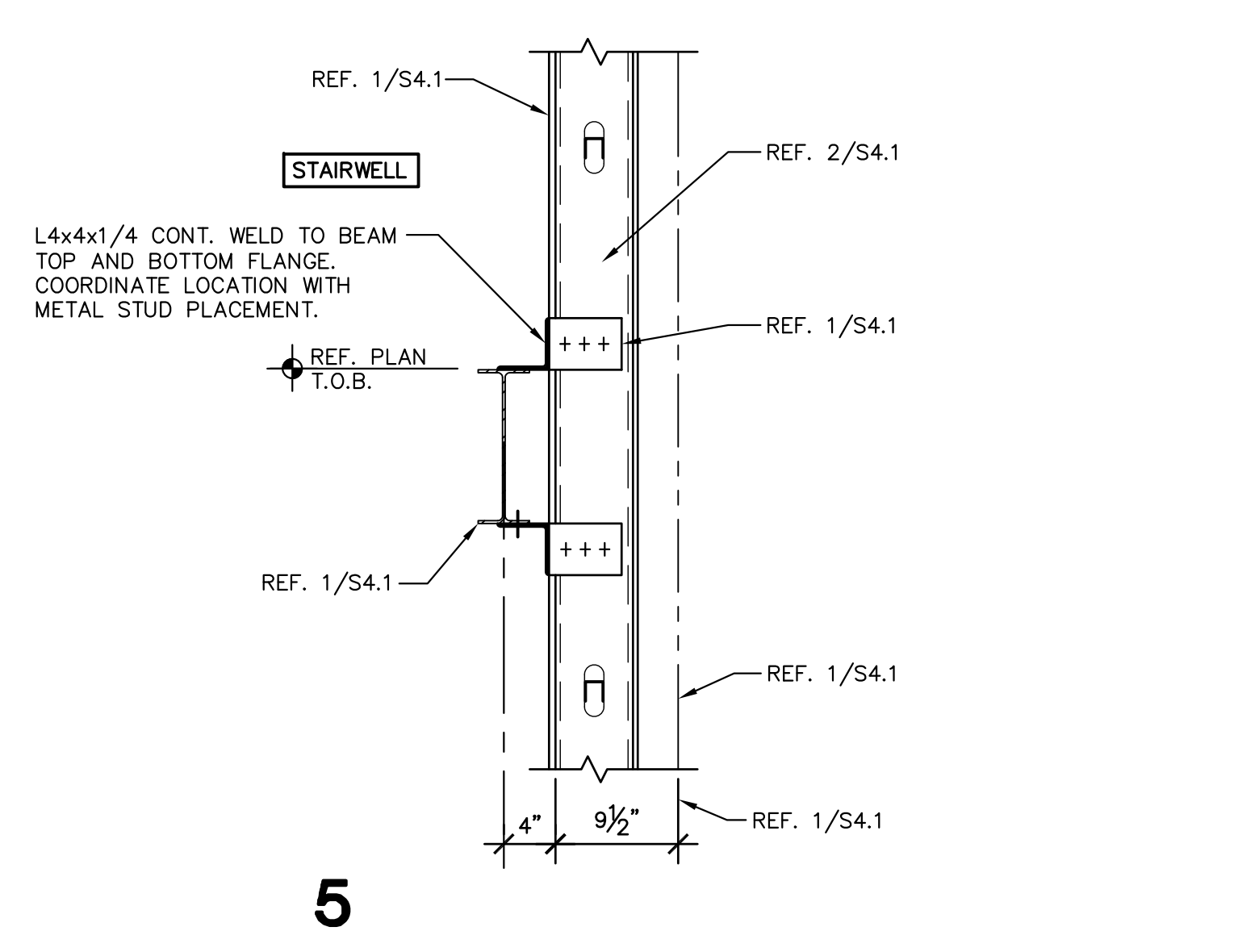
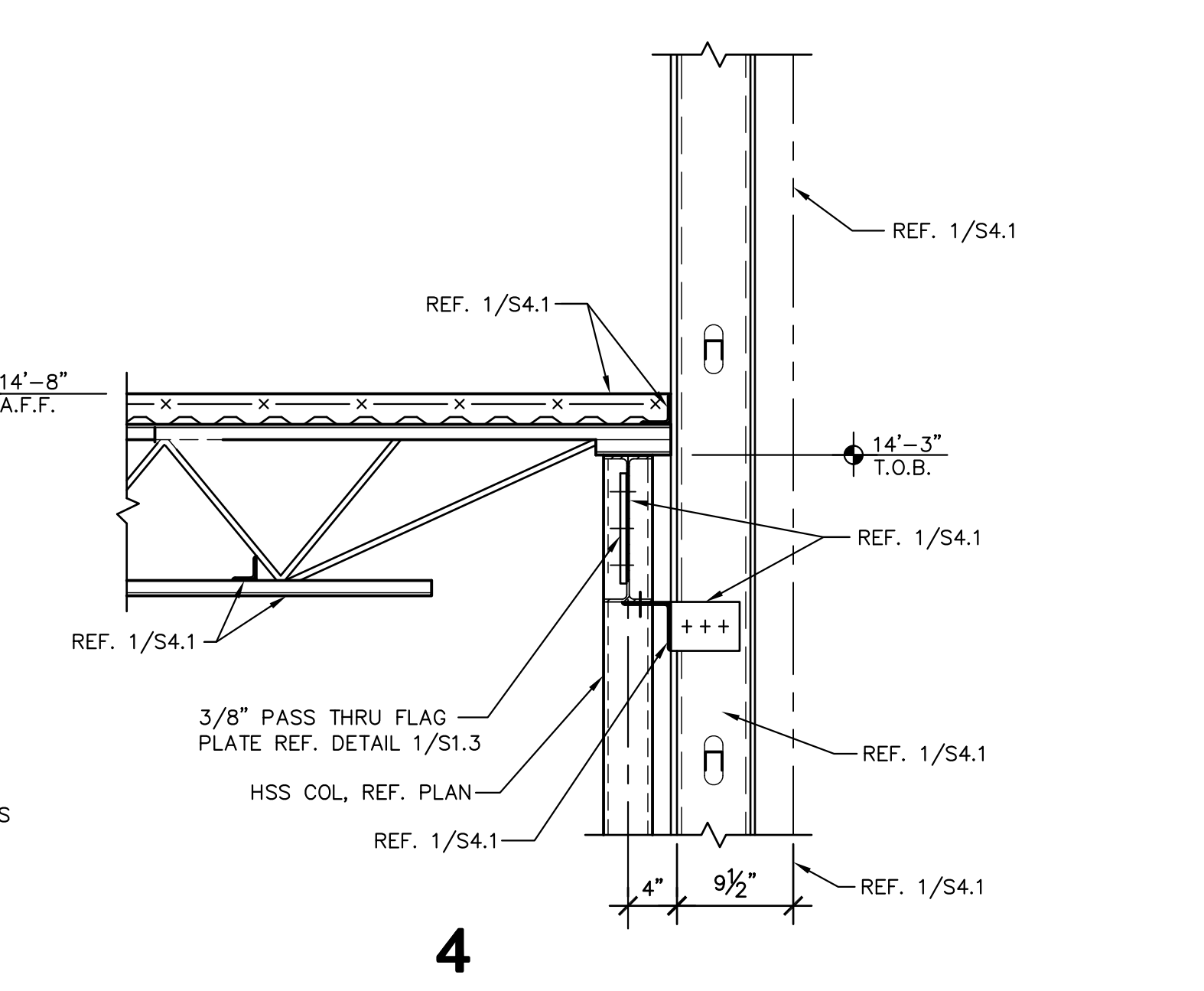
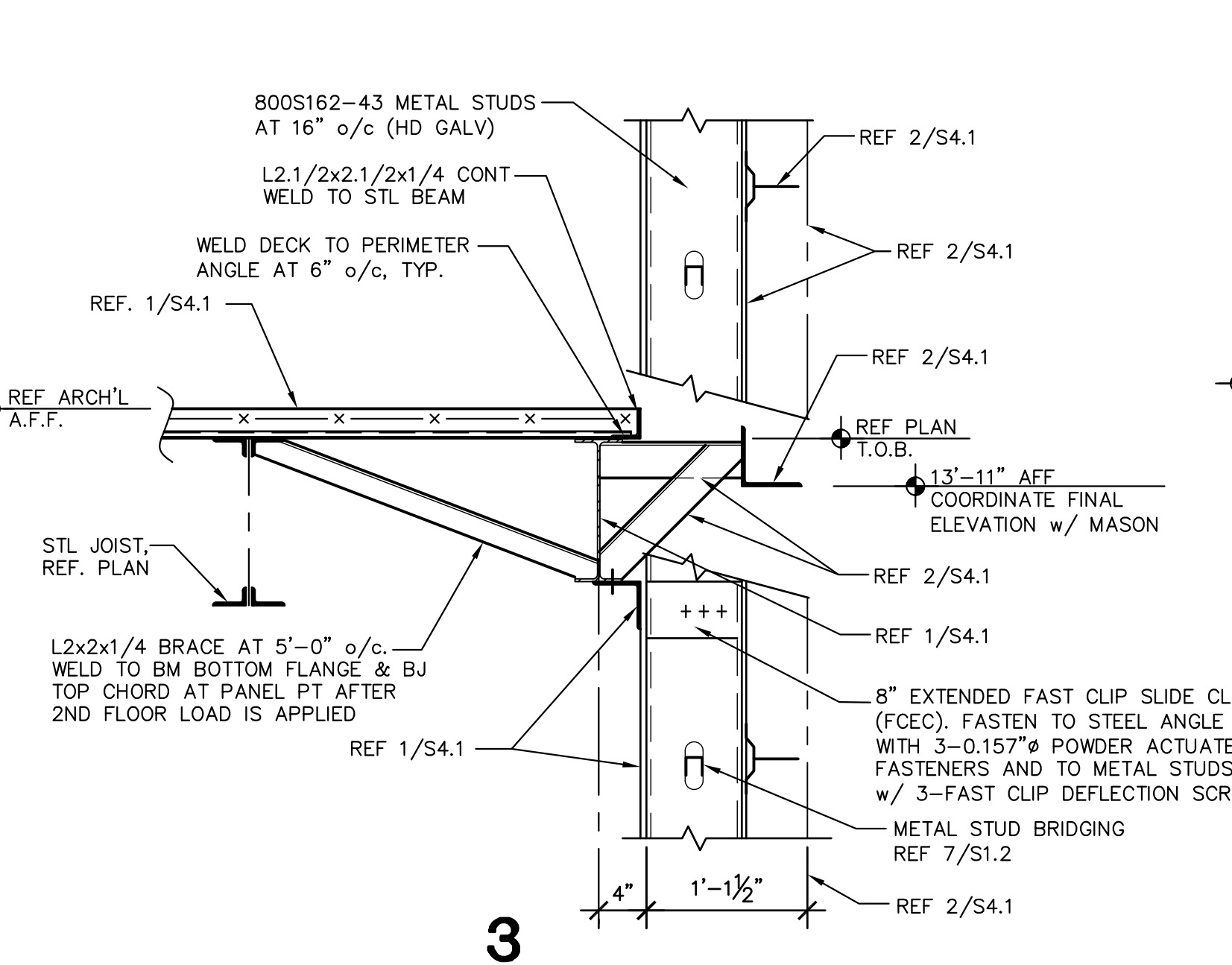
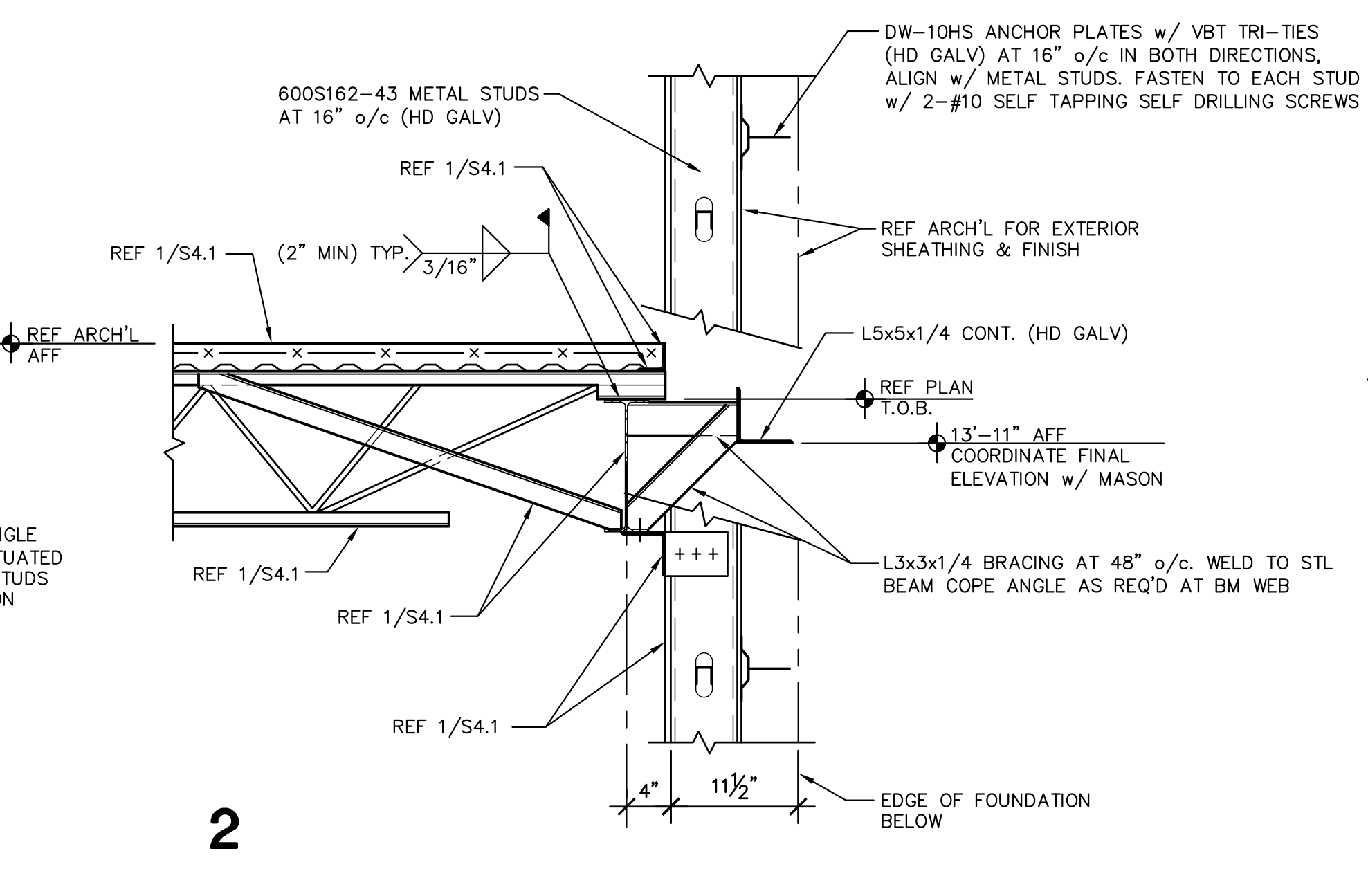
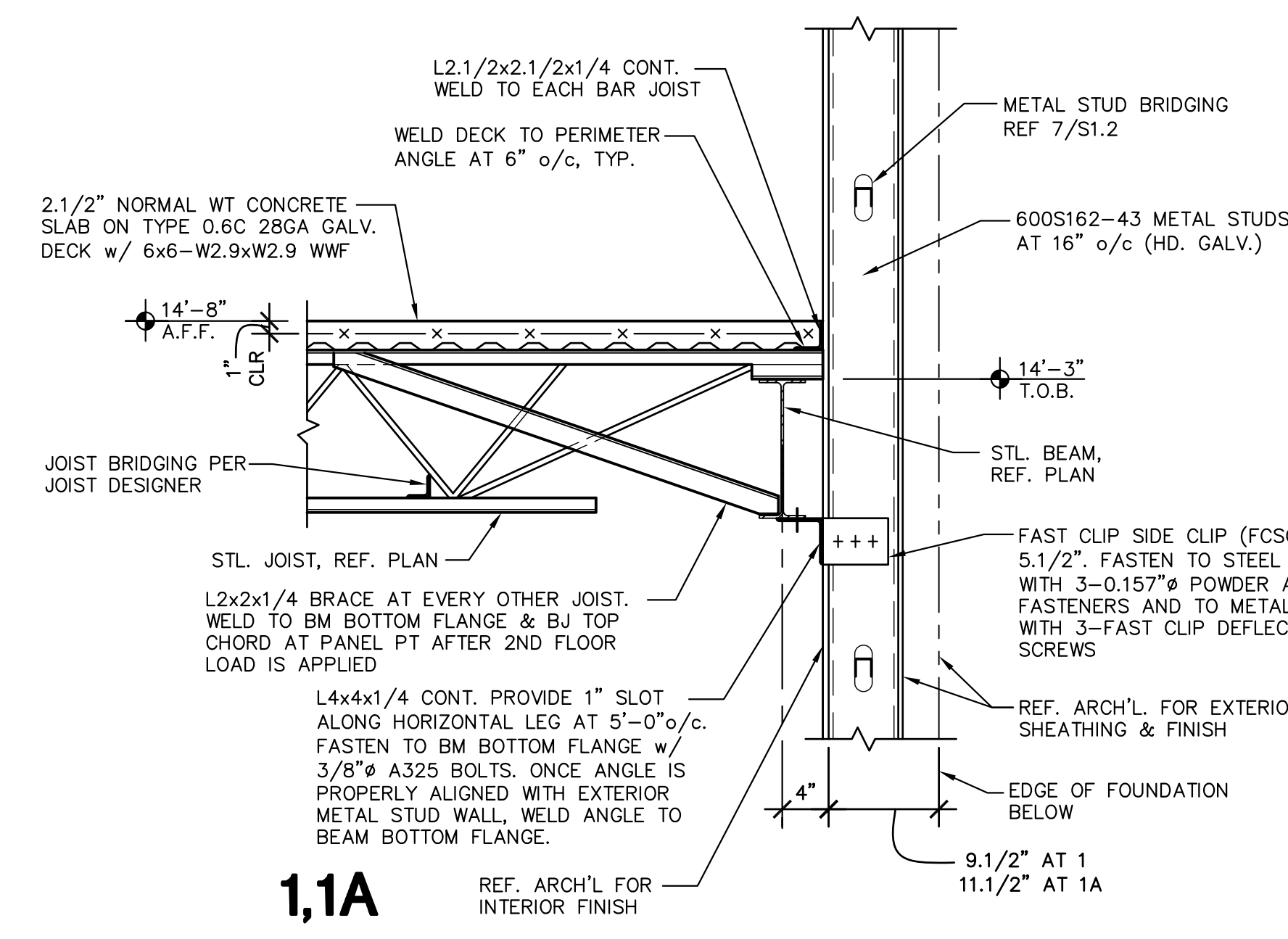
GMS ARCHITECTS  
1150 Paredes Lane Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA COLLEGE PREP PHASE II



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers  
Date: JUNE 13, 2019  
Scale: As Shown  
DRAWN BY: AV, JH, JG  
CHECKED BY: JS  
Job No. 192-510  
Sheet

S4.1



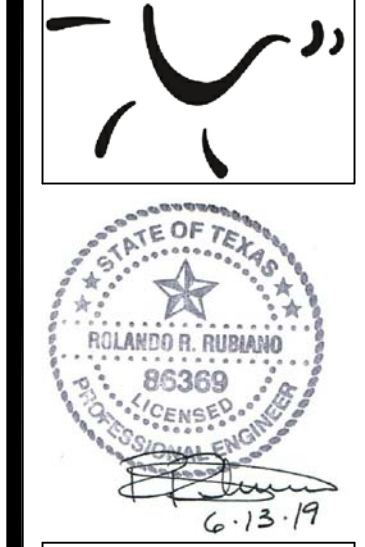
GREEN, RUBIANO & ASSOCIATES  
CONSULTING STRUCTURAL ENGINEERS  
1520 WEST MEMPHIS  
HOUSTON, TEXAS 77055  
COMMERCIAL - RESIDENTIAL - INDUSTRIAL  
PHONE 281-529-0577 FAX  
FIRM REGISTRATION # 4-148

COPYRIGHT 2019 BY GREEN, RUBIANO & ASSOCIATES

No.	REVISIONS	BY

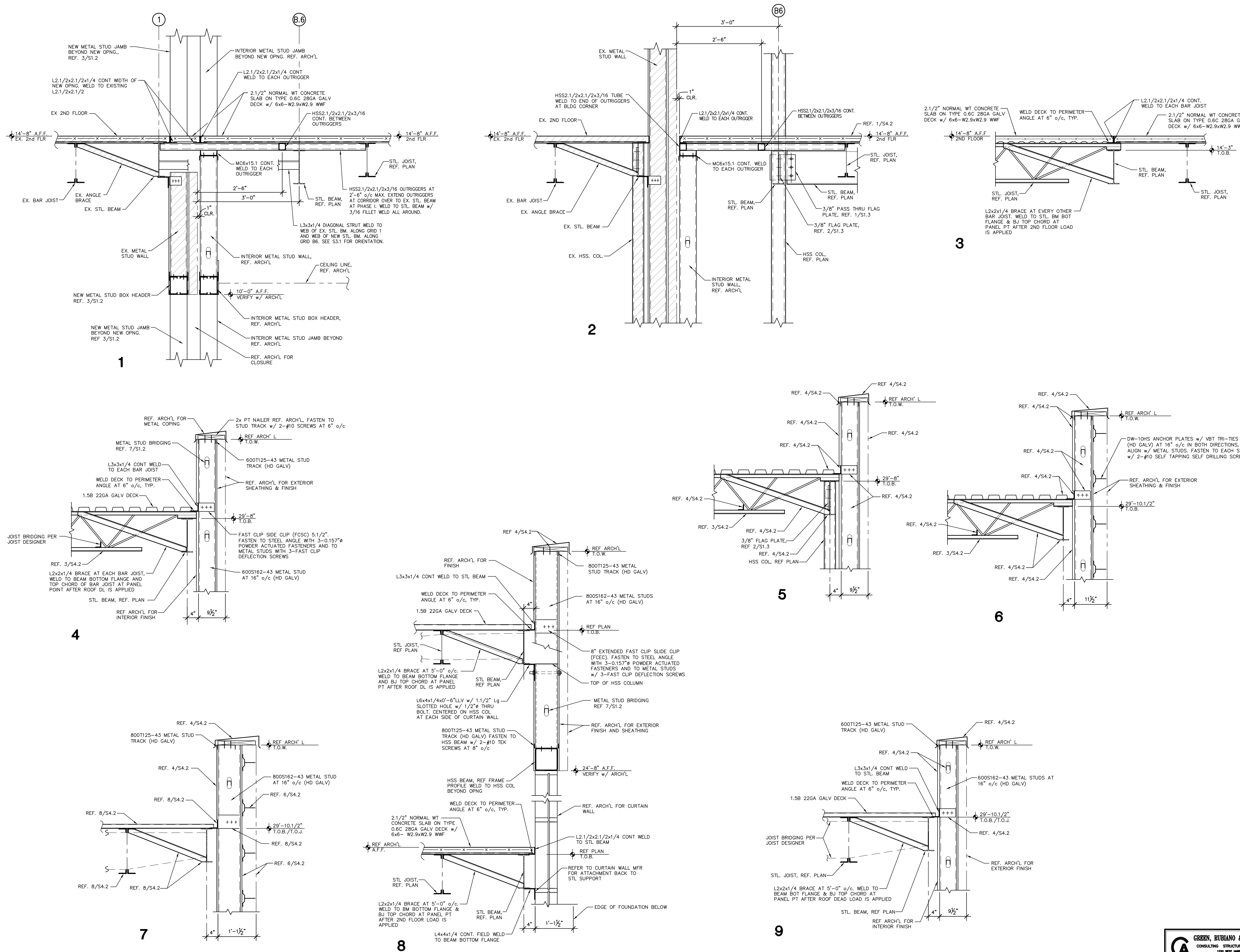
GMS ARCHITECTS  
1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA  
IDEA COLLEGE PREP PHASE II  
Public Schools



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers  
Date: JUNE 13, 2019  
Scale: As Shown  
DRAWN BY: AV, J.J. IG  
CHECKED BY: JS  
Job No: 192-510  
Sheet: S4.2

**GREEN, RUBIANO & ASSOCIATES**  
CONSULTING STRUCTURAL ENGINEERS  
1300 WEST WINDYWOOD  
HOUSTON, TEXAS 77055  
OFFICE: (281) 510-9550 • CELL: (281) 510-9551  
FAX: (281) 510-9552 • WWW: GRAS.ENG



1

2

3

4

5

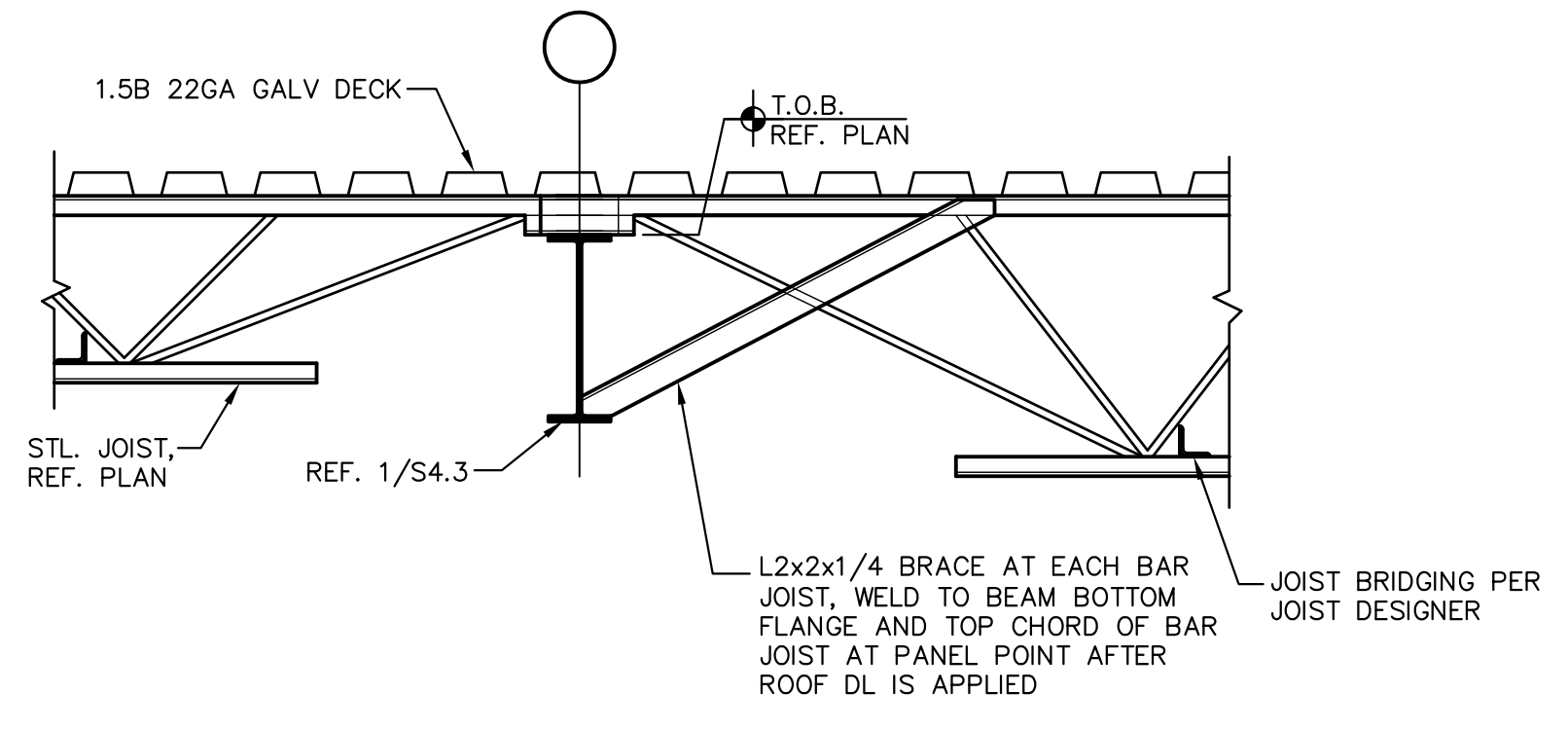
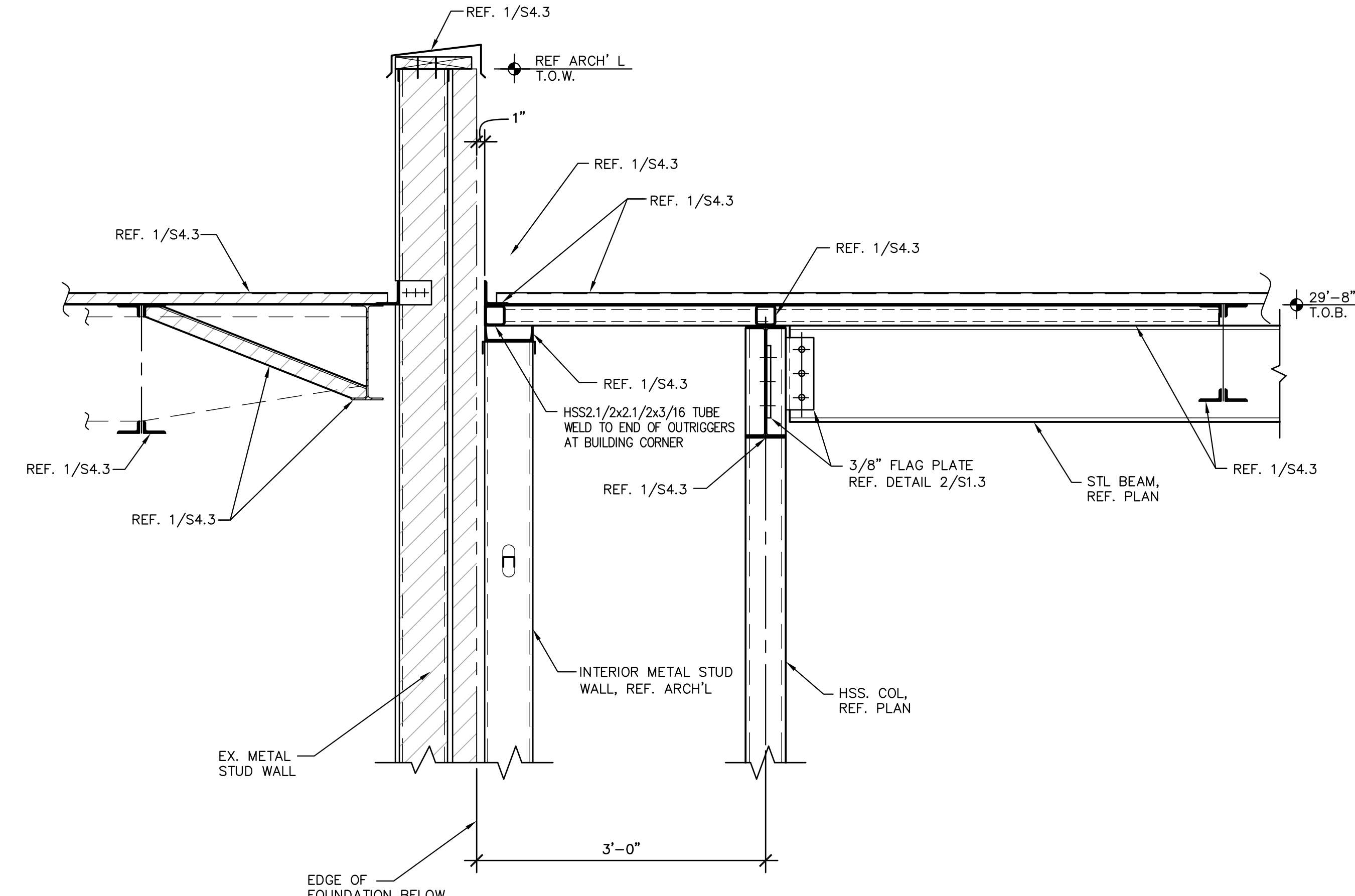
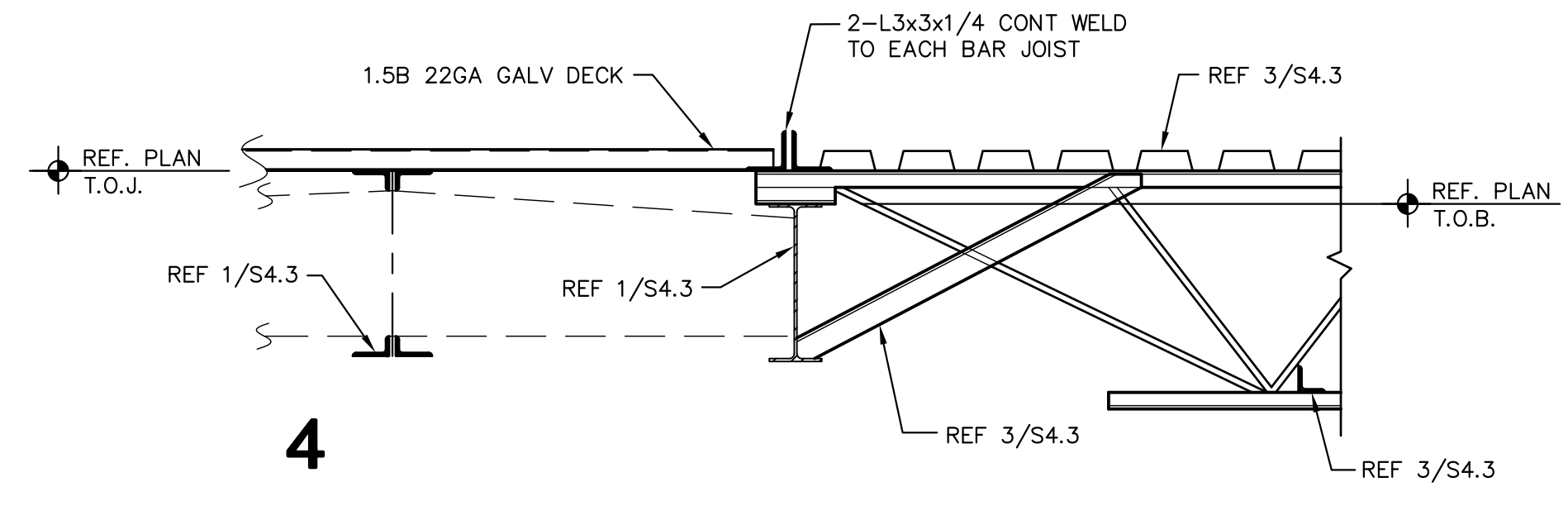
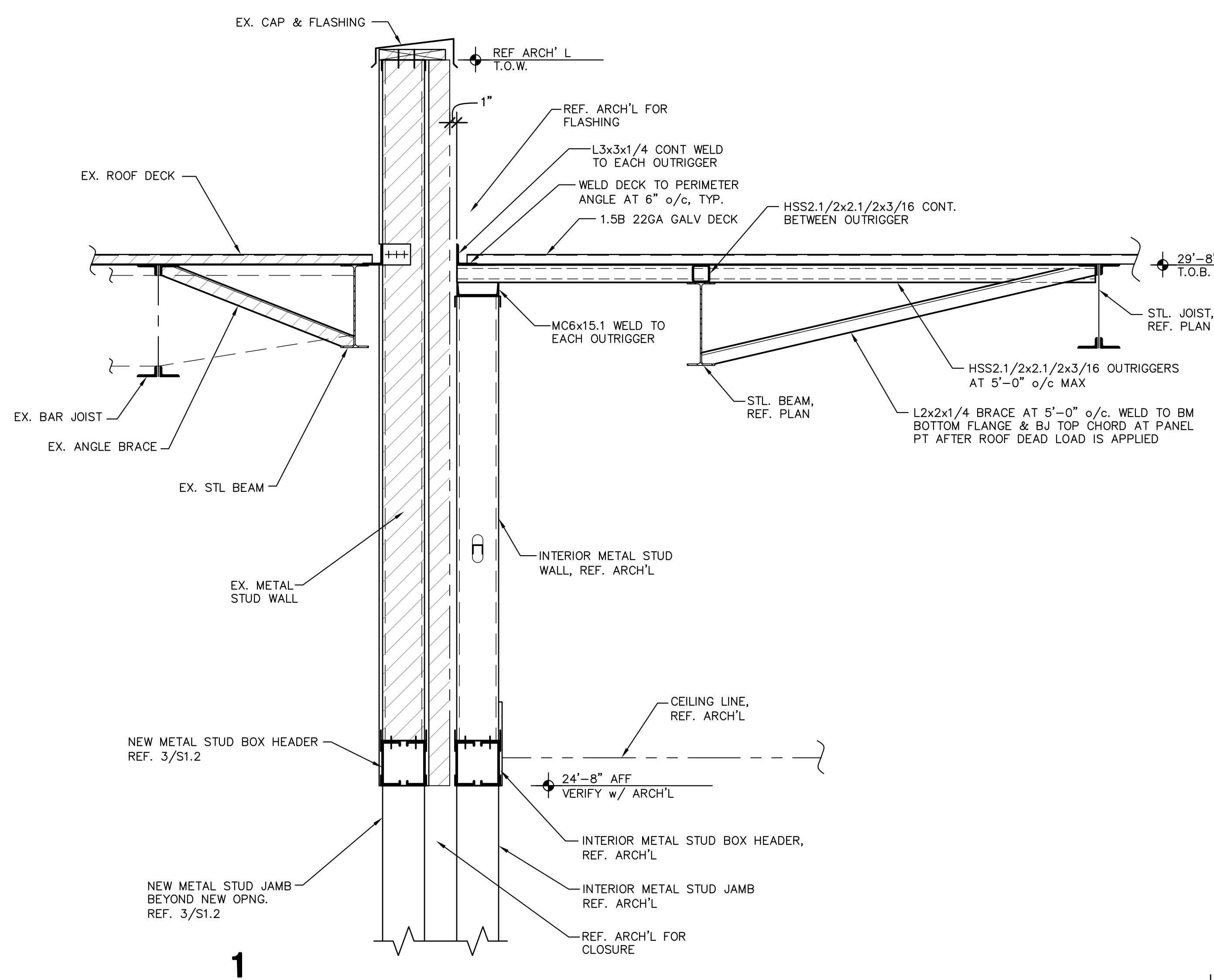
6

7

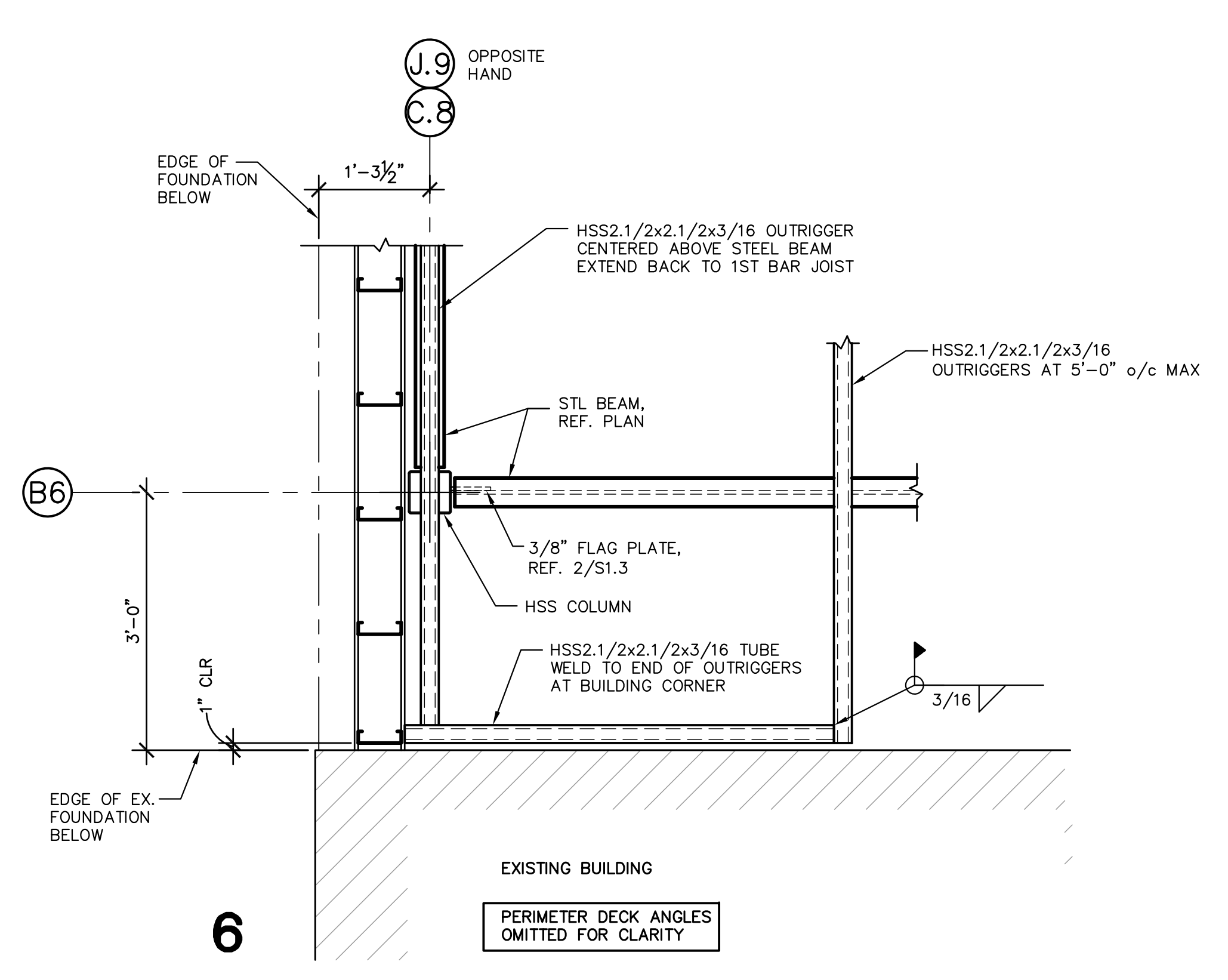
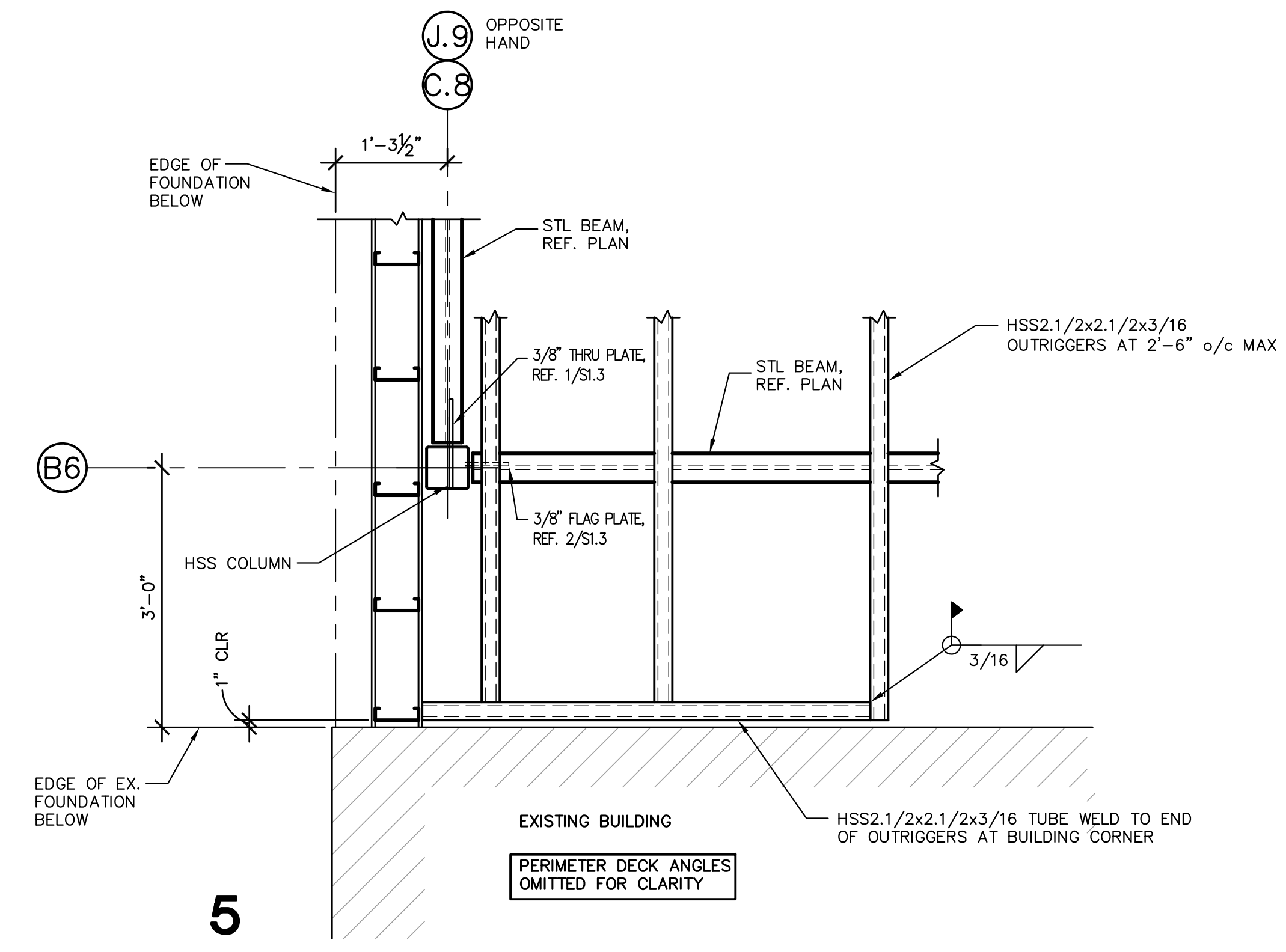
8

9

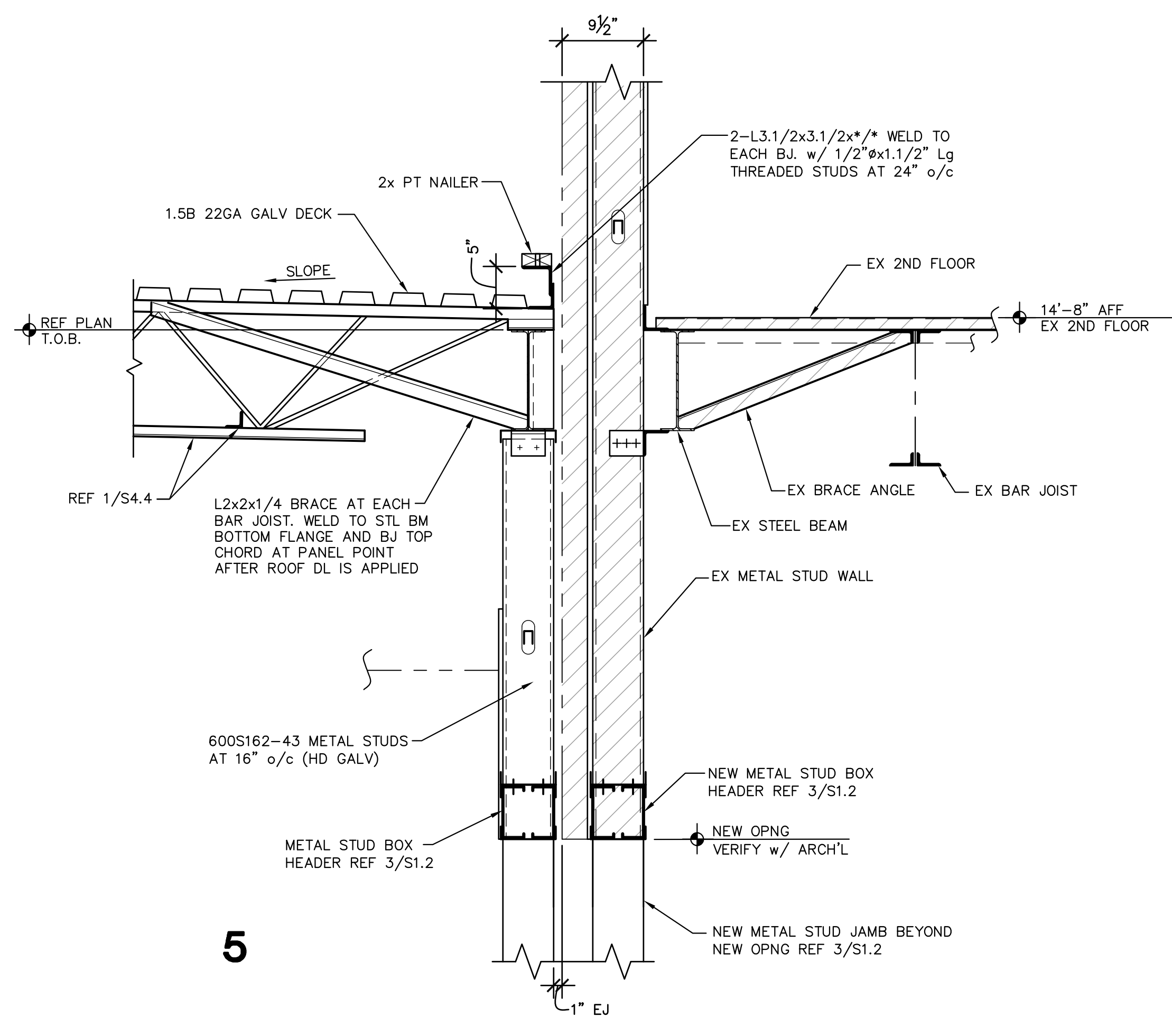
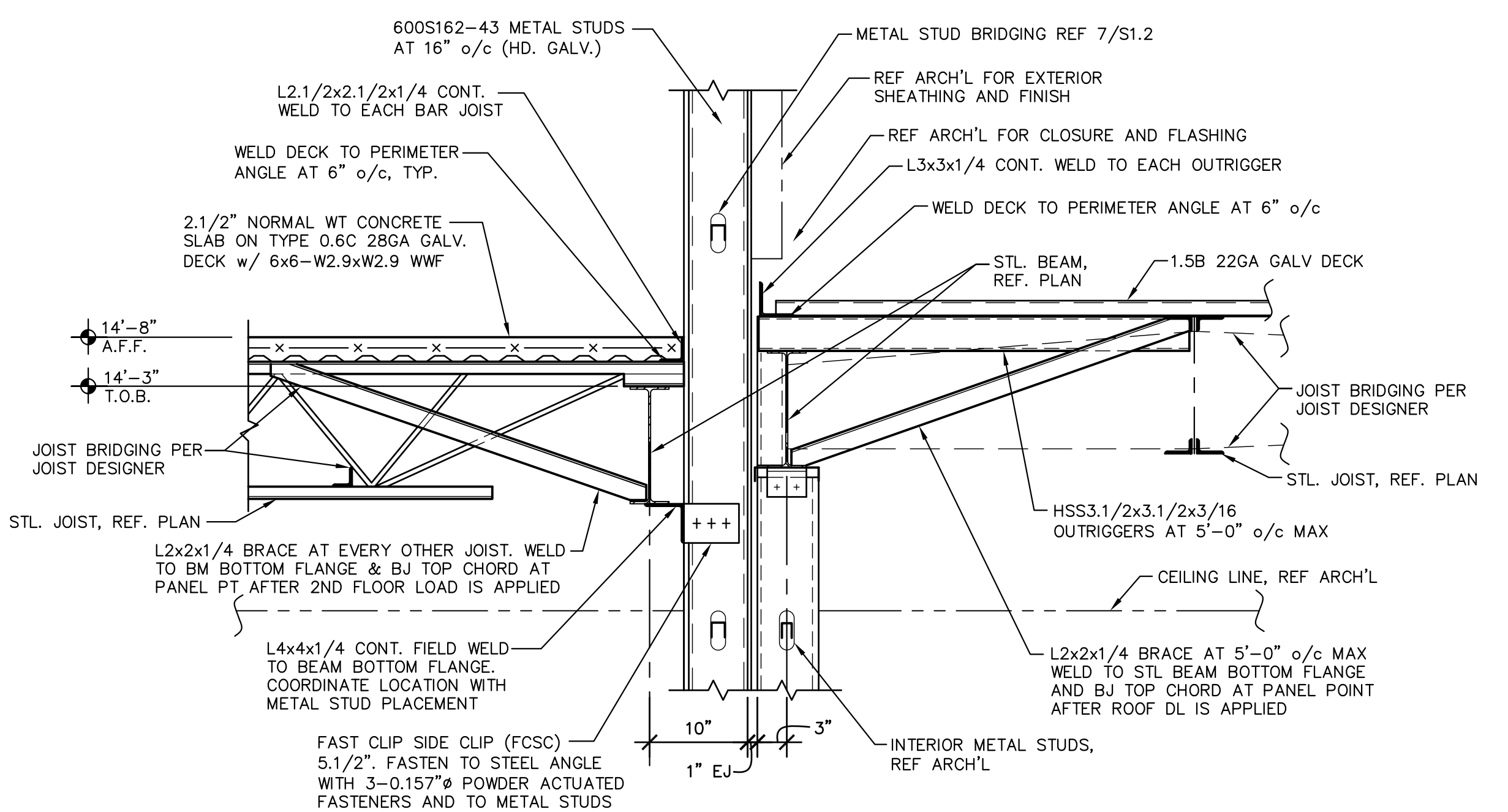
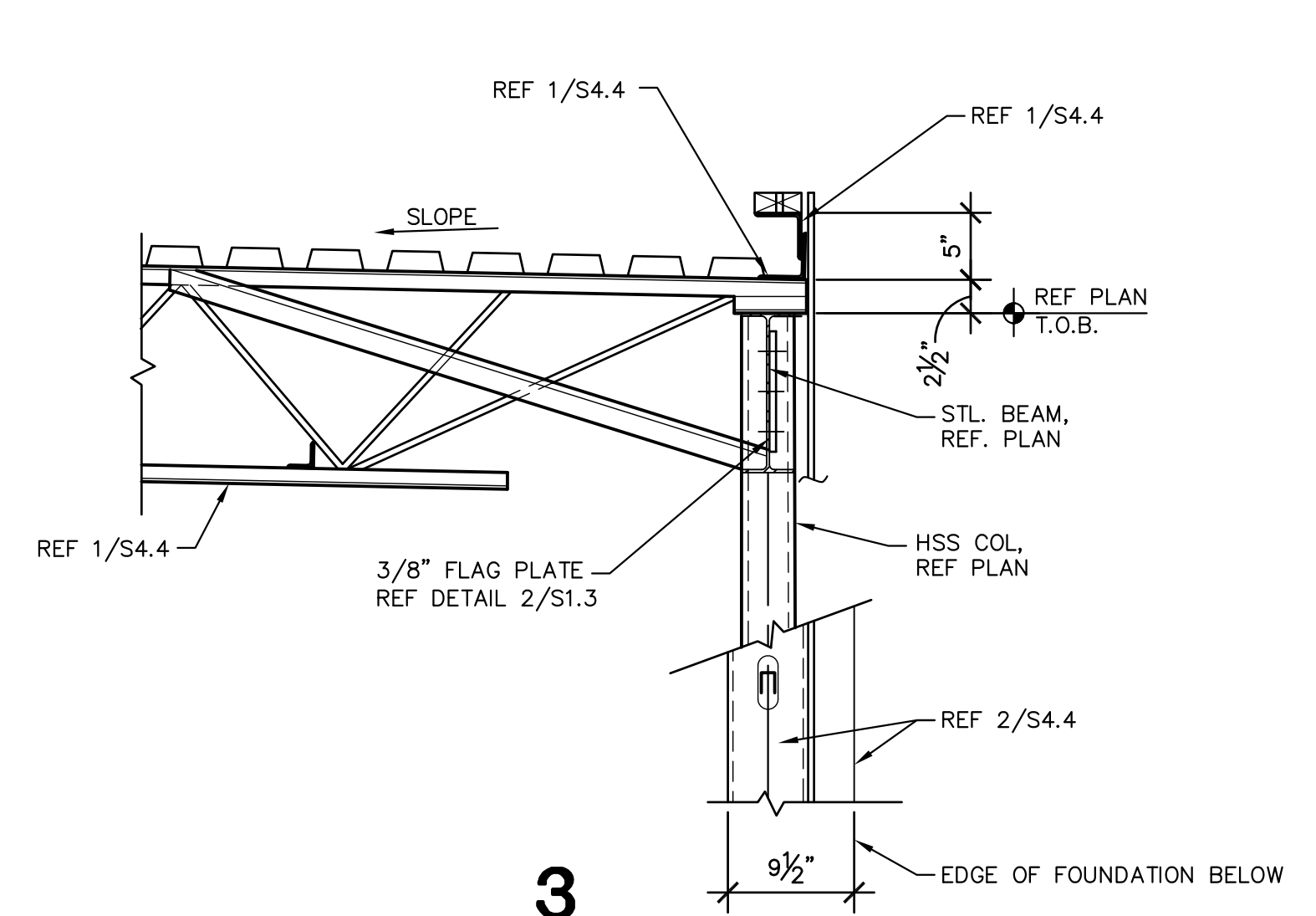
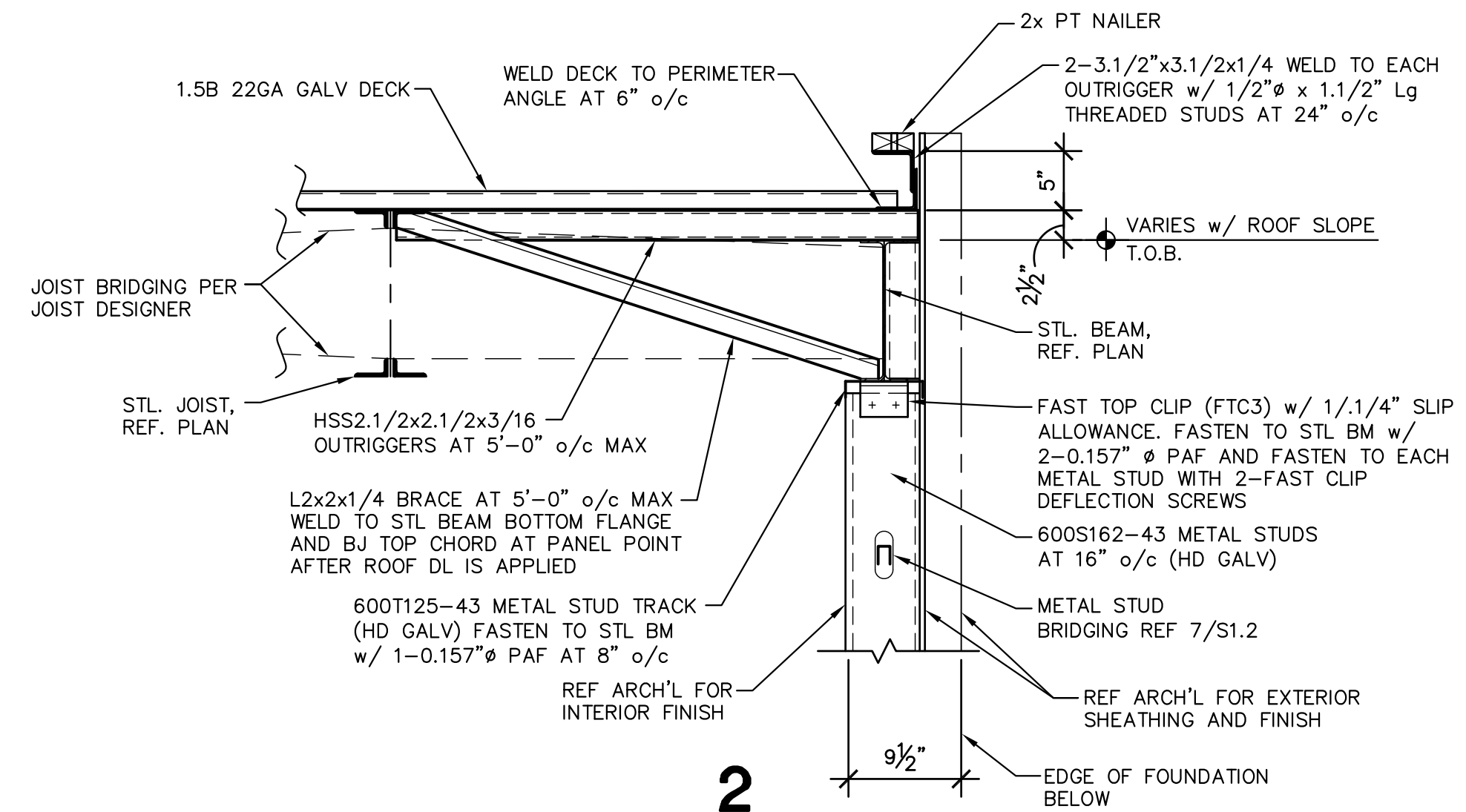
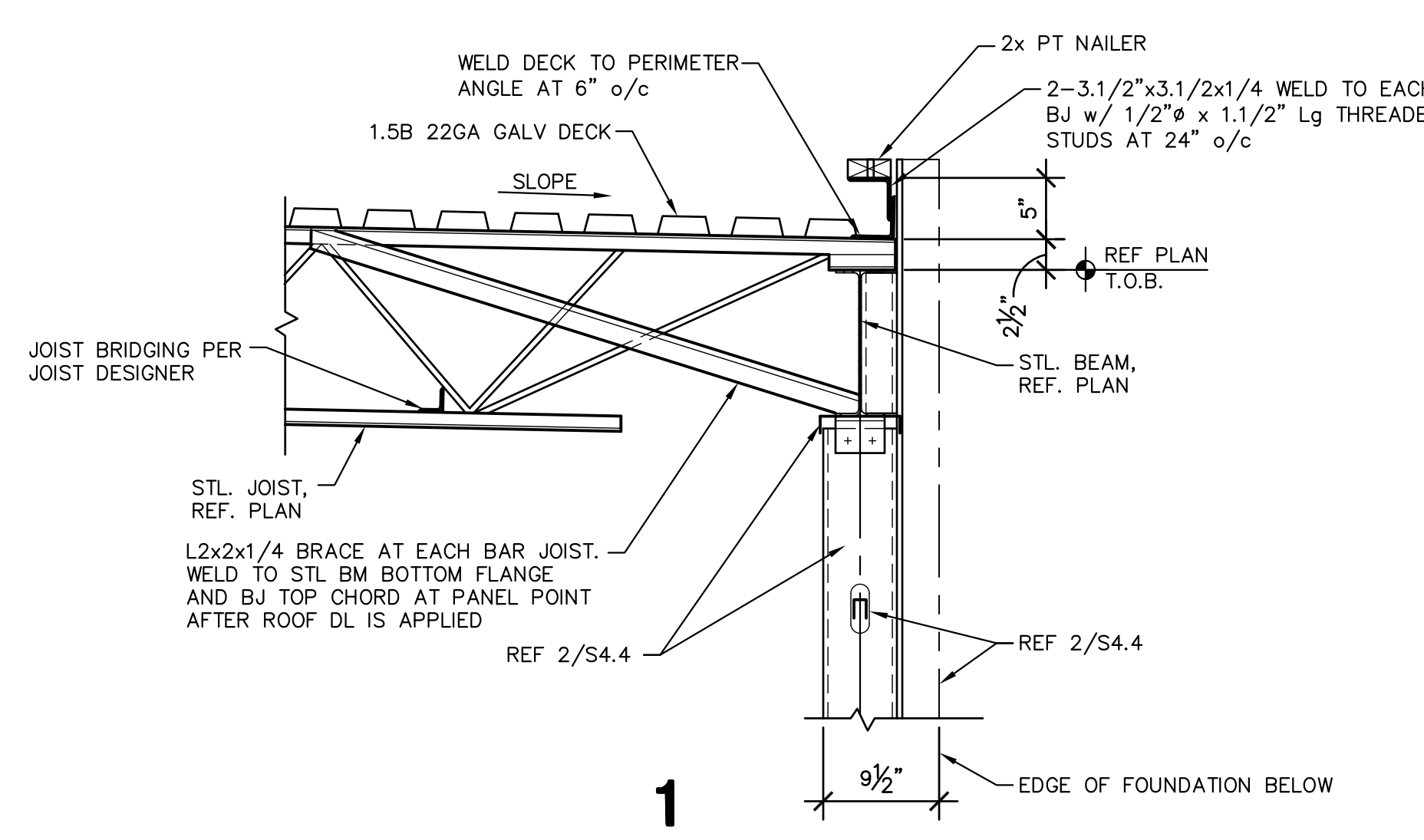




**3** TYPICAL INTERIOR BEAM  
 NOTE: REFER TO PLAN NOTES FOR ROOF DECK ATTACHMENT.



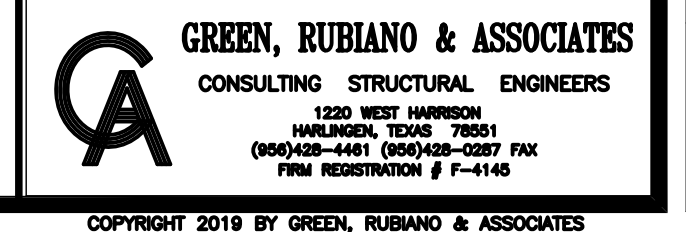
**IDEA-OWASSA**  
**IDEA COLLEGE PREP PHASE II**  
 Public Schools



IDEA-OWASSA  
COLLEGE PREP PHASE II  
Public Schools



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers  
Date: JUNE 13, 2019  
Scale: As Shown  
DRAWN BY: AV, JH, IG  
CHECKED BY: JS  
Job No.: 192-510  
Sheet: S4.4



GREEN, RUBIANO & ASSOCIATES  
CONSULTING STRUCTURAL ENGINEERS  
1520 WEST WINDYWOOD  
HOUSTON, TEXAS 77051  
OFFICE: (713) 860-0207  
FAX: (713) 860-0208

**GENERAL NOTES:**

- COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.
- FIELD VERIFY PROJECT SITE EXISTING CONDITIONS AND ELEVATIONS PRIOR TO BEGINNING ANY WORK.
- COORDINATE ELECTRICAL AND PLUMBING WITH GENERAL CONSTRUCTION.
- PHASING AND SEQUENCE OF CONSTRUCTION SHALL BE PER ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
- FIELD VERIFY/SPOT CHECK LOCATIONS AND EXISTING CONDITIONS OF EXISTING PLUMBING, AND ELECTRICAL. IT IS THE INTENT OF THESE PLANS TO PROVIDE A COMPLETE AND WORKABLE SYSTEMS. SHOULD BIDDER FIND OMISSIONS OR DISCREPANCIES IN THE PLANS, BIDDER SHALL NOTIFY THE ENGINEER PRIOR TO THE BID DATE AND A WRITTEN CLARIFICATION WILL BE ISSUED.
- DAMAGED ITEMS SHALL BE REPAIRED AT NO ADDITIONAL COST TO OWNER. CONTRACTORS ARE REQUIRED TO SEARCH AND INVESTIGATE FOR EXISTING UTILITIES BEFORE EXCAVATING.
- ALL MATERIALS AND LABOR, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT, WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEM SHALL BE FURNISHED BY THIS CONTRACTOR. INCLUDE ALL COSTS OF CHANGES, IF/AS REQUIRED IN BID PROPOSAL.
- PROVIDE J-BOXES (POLYMER CONCRETE) AS REQUIRED FOR PULL WIRING.
- ELECTRICAL WIRING SHALL NOT BE SPLICED BELOW GRADE.
- PERFORM ALL WORK PER LATEST VERSION OF NATIONAL ELECTRICAL CODE, AND APPLICABLE LOCAL CODES AND ORDINANCES, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
- CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
- NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
- COORDINATE ALL WORK WITH OTHER TRADES. COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
- SEAL AROUND ELECTRICAL RACEWAYS AT ALL WALLS, A/C ROOMS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
- TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING PHASE.
- CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
- MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
- AFFIX ID TAGS TO ALL DIVISION 26 EQUIPMENT.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL AND PLUMBING CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
- FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
- ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
- EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
- WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.
- SLEEVE ALL EXTERIOR WALL PENETRATIONS.
- CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.

**FIRE SUPPRESSION KEYED NOTES:**

- PROVIDE FIRE SUPPRESSION SYSTEM FOR NEW ADDITION. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- EXISTING FIRE RISER ROOM AT THIS LOCATION.
- EXTEND EXISTING FIRE SPRINKLER SYSTEM TO SERVE NEW BUILDING ADDITION.
- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND MODIFY EXISTING SYSTEM AS REQUIRED TO SERVE NEW BUILDING. DISRUPTION OF ADMINISTRATION AREA SHALL BE MINIMIZED OR AVOIDED ALL TOGETHER. REMOVE AND REPLACE CEILING TILES AS NECESSARY TO ACCOMMODATE NEW PIPING. COORDINATE WITH GENERAL CONTRACTOR.

**ELECTRICAL KEYED NOTES:**

- EXISTING POLE LIGHT - TYPICAL.
- APPROXIMATE LOCATION OF EXISTING SWITCHBOARD.
- EXISTING (2)-4" RACEWAYS. FIELD VERIFY EXACT LOCATION.
- EXISTING 36"x36" POWER "ELECTRICAL" POLYMER CONCRETE PULL BOX. FIELD VERIFY EXACT LOCATION.
- PROVIDE NEW FEEDER TO NEW PANELBOARD - SEE RISER DIAGRAM AND FEEDER SCHEDULE.
- APPROXIMATE LOCATION OF EXISTING MDF ROOM.
- APPROXIMATE LOCATION OF EXISTING FIRE ALARM CONTROL PANEL.
- APPROXIMATE LOCATION OF EXISTING INTRUSION DETECTION SYSTEM CONTROL PANEL.
- APPROXIMATE LOCATION OF EXISTING INTERCOM AND PROGRAM EQUIPMENT.
- EXISTING (4)-4" COMMUNICATIONS RACEWAYS ABOVE CEILING. FIELD VERIFY EXACT LOCATION.
- PROVIDE 4" RACEWAY WITH PULLWIRE (FIBER OPTIC CABLE). ROUTE ABOVE ACCESSIBLE CEILING SPACE. TERMINATE AT SECOND FLOOR IDF WIREWAY.
- PROVIDE 4" RACEWAY WITH PULLWIRE (FIBER OPTIC CABLE). ROUTE ABOVE ACCESSIBLE CEILING SPACE. PROVIDE TO EACH IDF ROOM 1ST AND SECOND FLOOR. SEE DETAIL.
- PROVIDE POLE LIGHTS AS SCHEDULED. SEE DETAIL.
- CONNECT ELECTRIC PUMP/DRIVE UNIT, BRANCH CIRCUIT: 2" - 2#4 & #6 (289A.14). PROVIDE 3/4" X 1/8" COPPER CLAD GROUND ROD WITHIN 3'-0" OF GATE OPERATOR. COORDINATE EXACT LOCATION OF COMPONENTS WITH ARCHITECT PRIOR TO ANY ROUGH-IN. GATE CONTRACTOR SHALL PROVIDE ALL INTERNAL WIRING INCLUDING SAFETY LOOPS & PHOTO EYES. SEE DETAIL ON SHEET E9.02.
- APPROXIMATE LOCATION OF EXISTING LIGHTING CONTROL PANEL AND PANELBOARD. CONNECT NEW LIGHTING VIA AN EXISTING 20A/277V SPARE RELAY AND CIRCUIT BREAKER.
- CONNECT SPORTS LIGHTING POLE AND SWITCH VIA SPORTS LIGHTING CONTROLS CABINET - TYPICAL.
- PROVIDE SPECIAL SYSTEMS RACEWAY. REFER TO SPORTS FIELDS FEEDER SCHEDULE.
- DIMENSIONS SHOWN ARE PERPENDICULAR TO CENTERLINE OF FIELD IN BOTH DIRECTIONS PASSING THROUGH CENTER POINT - TYPICAL. DO NOT TRENCH WITHIN THE FOOTPRINT OF THE EXISTING FIELD.
- PROVIDE NEW 36"x36" TIER 22 RATED POLYMER CONCRETE PULL BOX WITH "COMMUNICATIONS" COVER LOGO - SEE DETAIL.
- BORE UNDER EXISTING DRIVE/SIDEWALK.
- PROVIDE THE FOLLOWING:  
 1-2" RACEWAY WITH PULLWIRE - (INTERCOM)  
 1-3" RACEWAY WITH PULLWIRE - (DATA)

**PLUMBING KEYED NOTES:**

- CONNECT NEW 3" DOMESTIC COLD WATER PIPING INTO EXISTING 3" COLD WATER PIPING AND NEW 2" DOMESTIC HOT WATER PIPING INTO 2" HOT WATER PIPING INSIDE THE BUILDING AT THESE APPROXIMATE LOCATIONS. SEE PLUMBING DRAWINGS FOR MORE INFORMATION.
- 4" SANITARY SEWER LINE. SEE PLUMBING PLAN FOR MORE DETAILS AND CIVIL DRAWINGS FOR CONNECTION AND CONTINUATION.
- SPLASH BLOCK STORM SEWER DISCHARGING AT THIS APPROXIMATE LOCATION. REFER TO PLUMBING PLAN FOR MORE INFORMATION.
- ACID DILUTION TANK AT THIS APPROXIMATE LOCATION. REFER TO PLUMBING PLAN FOR MORE INFORMATION AND CIVIL PLAN FOR CONNECTION AND CONTINUATION.
- 4" SANITARY SEWER LINE. PROVIDE TWO WAY YARD CLEANOUT (NOT SHOWN FOR CLARITY). SEE PLUMBING PLAN FOR MORE DETAILS AND CIVIL DRAWING FOR CONNECTION AND CONTINUATION.
- CONNECT PRIMARY STORM SEWER PIPING DISCHARGING AT THIS APPROXIMATE LOCATION TO STORM DRAIN SYSTEM. REFER TO PLUMBING PLAN FOR MORE DETAILS AND CIVIL DRAWINGS FOR CONNECTION AND CONTINUATION.
- PROVIDE 3" UNDERGROUND SANITARY SEWER LINE AND YARD CLEANOUTS TO SERVE DRINKING FOUNTAIN. CONNECT TO SANITARY SEWER. FIELD VERIFY EXACT LOCATION AT THIS APPROXIMATE LOCATION. SEE CIVIL DRAWING FOR CONNECTION AND CONTINUATION. COORDINATE WITH UTILITY CONTRACTOR.
- PROVIDE 3/4" COLD WATER LINE TO SERVE DRINKING FOUNTAIN. CONNECT TO WATER DISTRIBUTION SYSTEM AND FIELD VERIFY EXACT LOCATION AT THIS APPROXIMATE LOCATION. SEE CIVIL DRAWING FOR CONNECTION AND CONTINUATION. COORDINATE WITH UTILITY CONTRACTOR.
- PROVIDE PEDESTAL TYPE DRINKING FOUNTAIN (DF-1) WITH BOTTLE FILLING STATION AT SOCCER FIELDS MODEL NUMBER FLAY OUT OUTDOOR FC258/14438B7M OR APPROVED EQUAL. COORDINATE COLOR OF PEDESTAL WITH OWNER AND ARCHITECT. SERVE PEDESTAL TYPE DRINKING FOUNTAIN WITH 3/4" WATER LINE WHERE SHOWN. PROVIDE TRANSITION FITTINGS AS NECESSARY. PRIOR TO INSTALLATION, COORDINATE EXACT LOCATION OF PEDESTAL WITH OWNER. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR TO AVOID CONFLICT WITH CURBS AND SIDEWALKS.
- PROVIDE LINE SIZE VALVE IN QUARTZITE BOX.

**KEYED NOTES:**

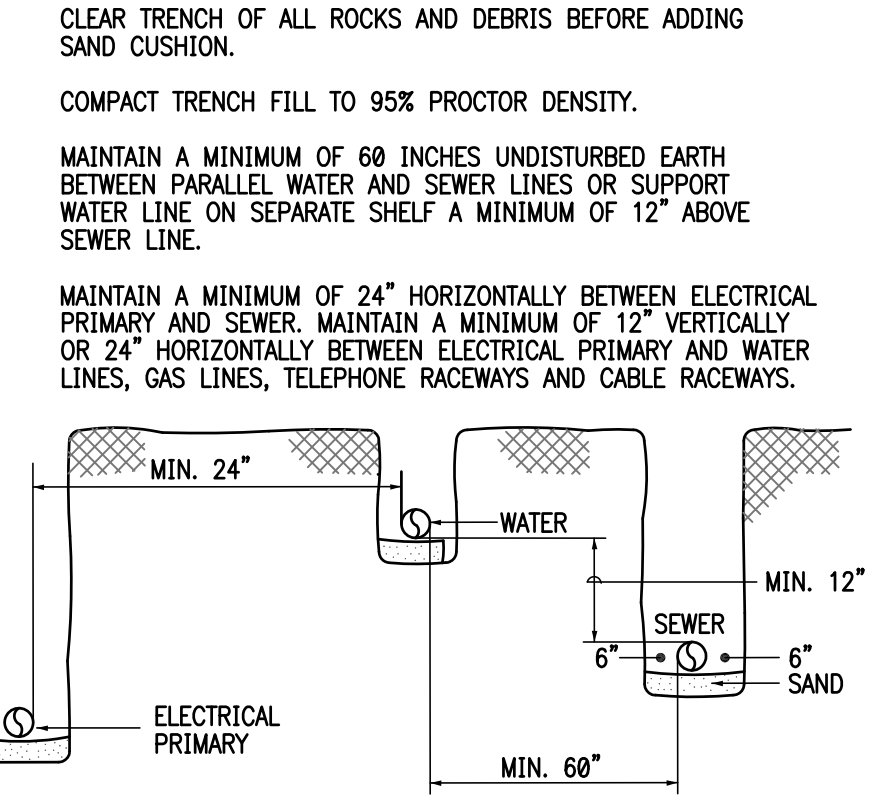
- LIGHTING POLE - SEE SCHEDULE.
- HANDHOLE COVER.
- DOUBLE NUTS FOR ADJUSTMENT OF POLE VERTICAL ALIGNMENT.
- ANCHOR BOLTS AS REQUIRED BY POLE MANUFACTURER FURNISHING POLE (MAX. 24" DIAM. BOLT CIRCLE).
- 1/2" PVC - #86.
- CONNECTOR.
- 3/4" X 1/8" COPPER CLAD GROUND ROD.
- CONDUIT 36" BELOW GRADE.
- GRADE LINE OR PARKING LOT SURFACE.

GRID SUMMARY	
Name:	Soccer
Size:	300' x 160'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

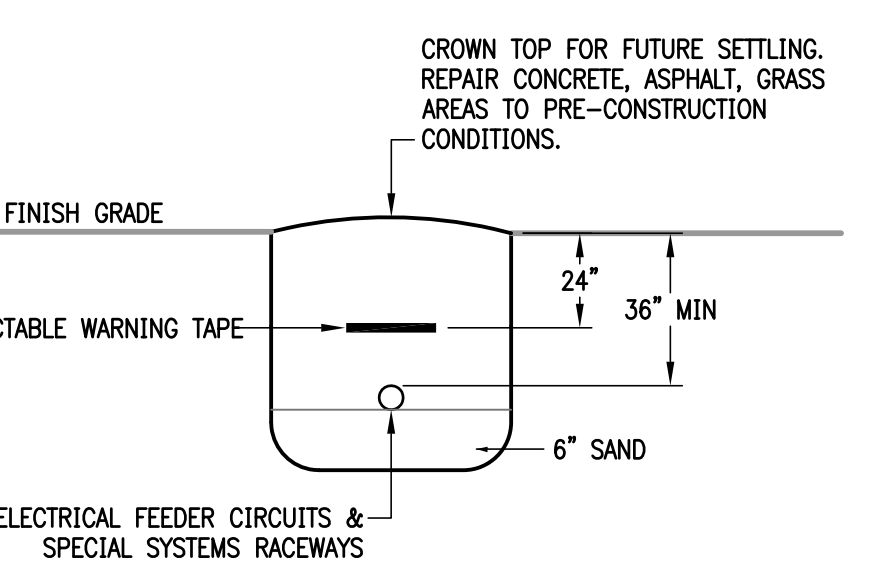
  

ILLUMINATION SUMMARY	
Maintained Horizontal Footcandles:	Entire Grid
Guaranteed Average:	30
Max/Min Ratio:	2.5:1
No. of Fixtures:	60
Luminaire Information:	Color / CRI: 5700K - 75 CRI
No. of Luminaire:	16

NOTE: COORDINATE WITH GENERAL CONTRACTOR.



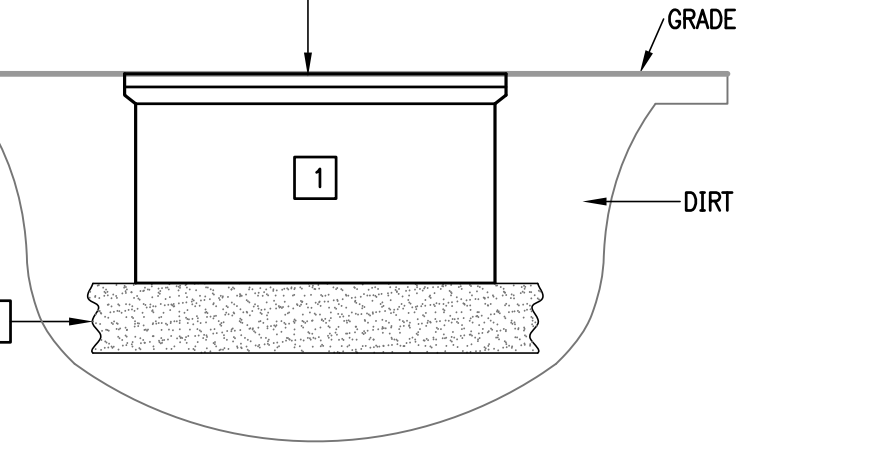
**03 TRENCHING DETAIL**  
 SCALE: NONE



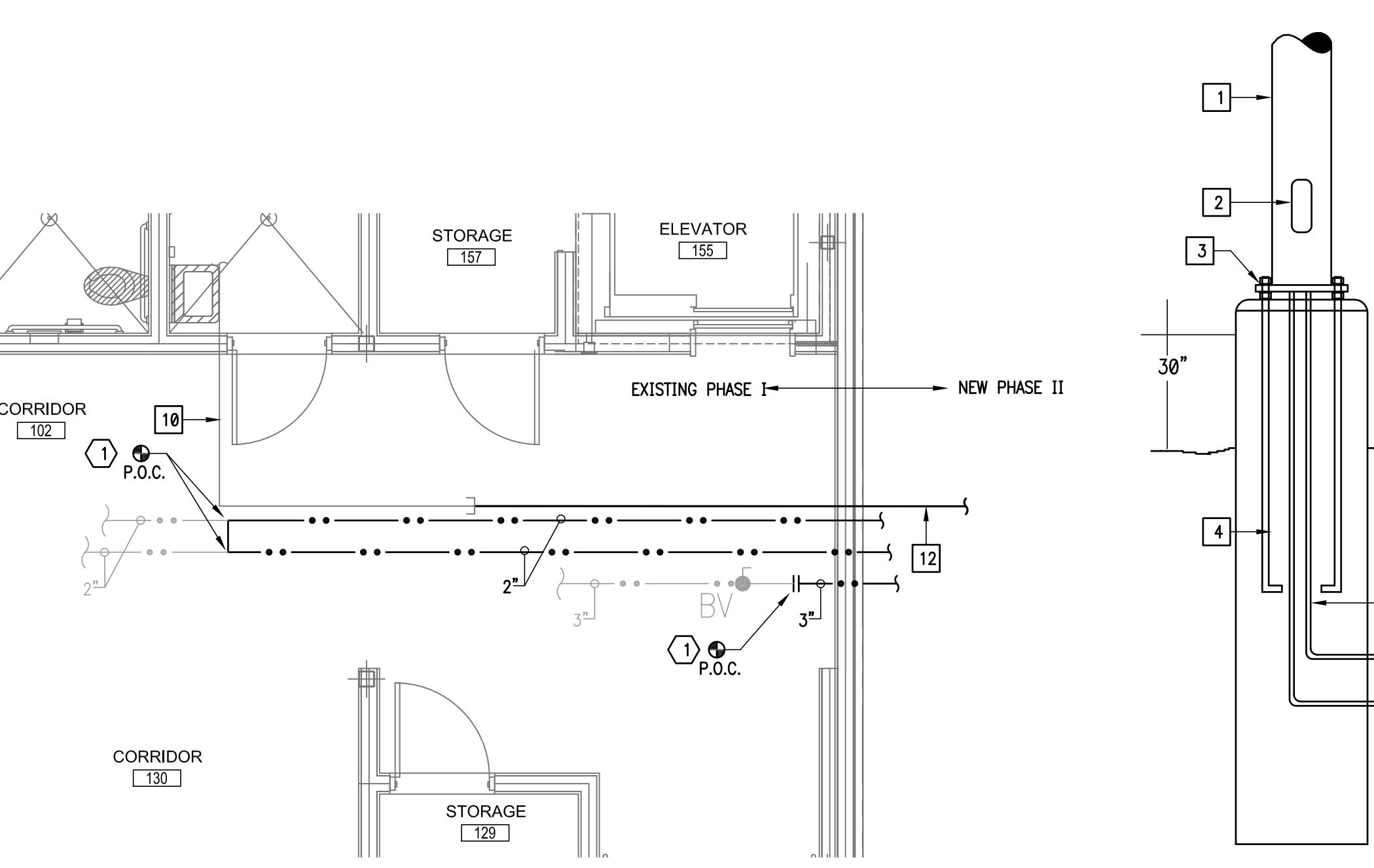
**04 BURIAL DETAIL FOR ELECTRICAL RACEWAYS**  
 SCALE: NONE

**KEYED NOTES:**

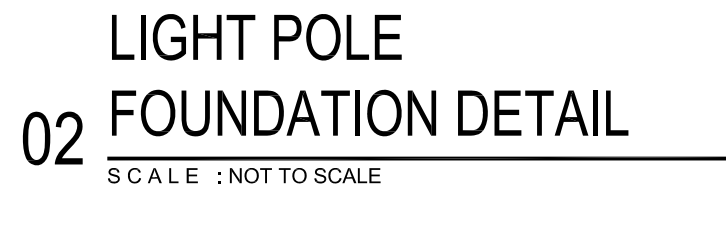
- PROVIDE POLYMER CONCRETE PULL BOX TIER 22 RATED. COMPLYING WITH ANSI/SCTE 77 AND NEC 314.36.
- PROVIDE 8" OF GRAVEL OR CRUSHED ROCK.
- PROVIDE ONE PIECE LOCKING COVER WITH LOGO TIER 22 RATED. INSTALL COVER LEVEL WITH GRADE.



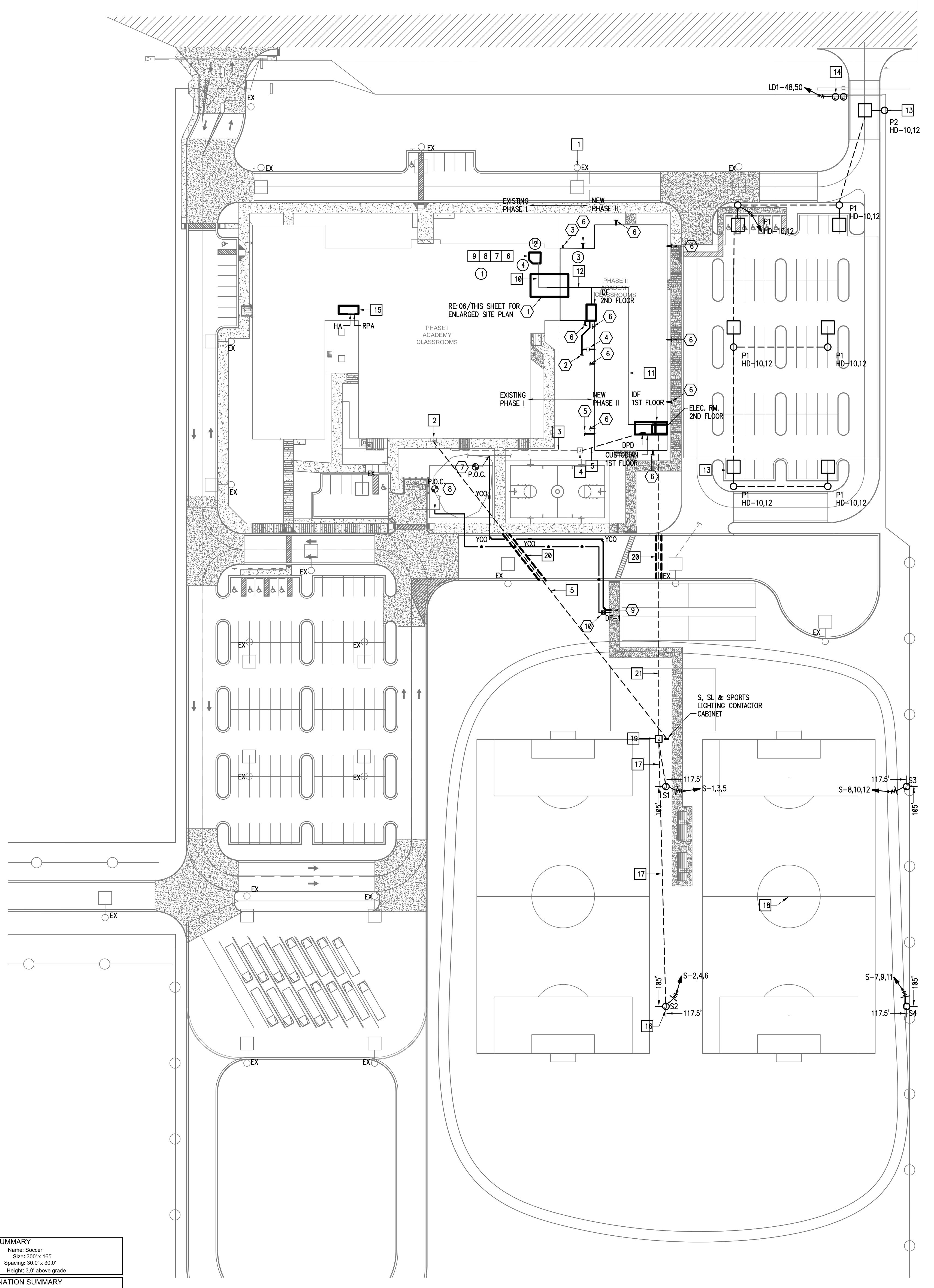
**05 POLYMER CONCRETE PULLBOX DETAIL**  
 SCALE: NONE



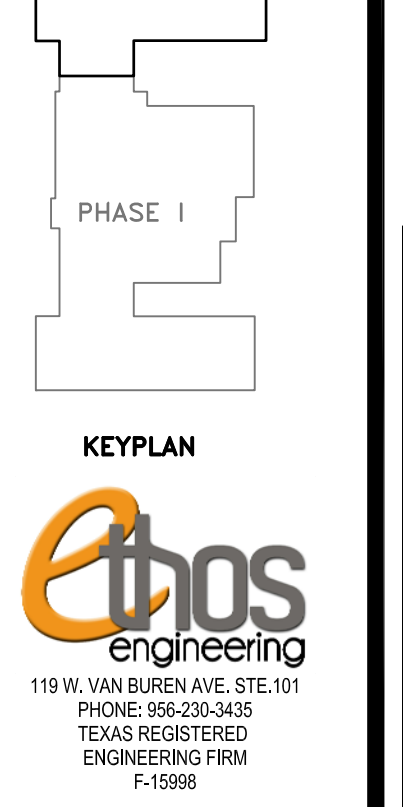
**06 PARTIAL ENLARGED M.E.P. SITE PLAN**  
 SCALE: 1/4" = 1'-0"



**07 LIGHT POLE FOUNDATION DETAIL**  
 SCALE: 1" = 1'-0"



**01 M.E.P. SITE PLAN**  
 SCALE: 1" = 50'-0"



No.	REVISIONS	BY



1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

### CODES & ORDINANCES:

- GENERAL:
  - UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS, PERFORM ALL WORK PER APPLICABLE VERSION OF INTERNATIONAL BUILDING CODES, AND LOCAL CODES AND ORDINANCES.
  - PRIOR TO SUBMITTING PROPOSAL, NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
- PERMITS:
  - CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
  - CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
- APPROVALS AND INSPECTIONS:
  - OBTAIN APPROVAL FROM CITY FIRE DEPARTMENT AND BUILDING AND SAFETY DEPARTMENT PRIOR TO INSTALLATION OF ANY FIRE RELATED ITEMS.
  - COORDINATE PRESSURE TESTS, INSPECTIONS AND APPROVAL FOR ALL SYSTEMS WITH PERMITTING OFFICER, OWNER AND ENGINEER.

### GENERAL NOTES:

- CONTRACT RELATED:
  - COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.
  - WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.
  - CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REBURSED FOR SUCH CHANGE.
- TEST & BALANCE:
  - TEST & BALANCE SHALL BE PERFORMED UNDER GENERAL CONTRACTOR, SEPARATE FROM MECHANICAL CONTRACT. DURING BIDDING, CONTRACTOR SHALL SUBMIT A COPY OF EVIDENCE THAT TAB AGENT MEETS THE QUALIFICATIONS SPECIFIED UNDER DIV. 23 SECTION 230593 TO PRIME CONTRACTOR.
  - TEST & BALANCE TO COORDINATE MINIMUM AND MAXIMUM OUTSIDE AIR DAMPER SETTINGS WITH DDC CONTROLS AND ENGINEER. PROVIDE TIME ALLOTMENT FOR MULTIPLE DAMPER SETTINGS IN SOME CASES.
  - CONTRACTOR SHALL COORDINATE TAB ACTIVITIES WITH TAB CONTRACTOR.

### COORDINATION:

- GENERAL:
  - CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND MECHANICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
  - IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR. COORDINATE MECHANICAL WITH OTHER TRADES SUCH AS PLUMBING, ELECTRICAL AND STRUCTURAL WORK. COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
  - TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.
  - PROVIDE COORDINATION DRAWINGS OF REFLECTED CEILING PLAN AND SECTION ABOVE CEILING SHOWING WORK OF ALL AFFECTED TRADES. DO NOT PROCEED WITH FABRICATION WORK UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED BY A/E.
- SITE:
  - TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.
- ARCHITECTURAL AND STRUCTURAL:
  - REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS OF CONSTRUCTION, INCLUDING BEAMS, FLOOR AND WALL PENETRATIONS, CHASES, AND REFLECTED CEILING PLANS. VERIFY OPENING SIZES WITH EQUIPMENT FURNISHED.
  - SLEEVE ALL EXTERIOR WALL AND GRADE BEAM PENETRATIONS. GRADE BEAM PENETRATIONS SHALL BE MADE WITHIN MIDDLE 1/3 OF VERTICAL SPAN OF BEAM.
  - SEAL AROUND DUCTS AND PIPING AT ALL WALLS, A/C ROOMS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING, RE: SPECS. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
- SPATIAL COORDINATION:
  - COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
  - SPACES ABOVE CEILING ARE CONGESTED. DESIGN INTENT IS THAT UTILITIES BE INSTALLED TIGHT AGAINST CEILING STRUCTURE TO EXTENT POSSIBLE, WHILE RETAINING ADEQUATE MAINTENANCE ACCESS PER CODES.
  - IN CASE OF CONFLICTS, ITEMS SHALL BE ARRANGED ACCORDING TO THE FOLLOWING PRIORITIES: LIGHTING, FIRE PROTECTION, HVAC. PROVIDE OFFSETS/RISES/DROPS REQUIRED TO RESOLVE CONFLICTS WITH OTHER UTILITIES, AND TO ACCOMMODATE ALL UTILITIES ABOVE CEILINGS.
  - IN GENERAL, REROUTE SMALLER DUCTS/PIPES THROUGH JOISTS TO RESOLVE CONFLICTS WITH LARGER. PERFORM REROUTING IN MOST EFFICIENT MANNER POSSIBLE, AND IN ACCORDANCE WITH INDUSTRY STANDARDS.
  - PROVIDE COORDINATION DRAWINGS OF REFLECTED CEILING PLAN AND SECTION ABOVE CEILING SHOWING WORK OF ALL AFFECTED TRADES. DO NOT PROCEED WITH FABRICATION WORK UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED BY A/E.
  - IN GENERAL, ROUTE DUCTS/PIPES IN MOST EFFICIENT MANNER POSSIBLE, AND IN ACCORDANCE WITH INDUSTRY STANDARDS.
  - SEE ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL PANELS TO AVOID DUCTWORK AND PIPING RUNNING OVER THESE AREAS. COORDINATE WITH ELECTRICAL CONTRACTOR.
  - LOCATE AIR DEVICES AS SHOWN. COORDINATE WITH OTHER TRADES TO AVOID CONFLICT AND ADJUST LOCATION IF NEEDED WITHOUT COMPROMISING AIR DEVICES PERFORMANCE.
- CONTROLS:
  - REFER TO SPECIFICATIONS FOR CONTROL COMPONENTS AND DEVICES TO BE COORDINATED WITH MECHANICAL WORK.
  - CONTROLS CONTRACTOR SHALL PROVIDE BUILDING AUTOMATION SYSTEM (BAS) THAT CONTROLS EQUIPMENT SHOWN ON DRAWINGS. CONTROLS CONTRACTOR IS RESPONSIBLE FOR INSTALLING LOW VOLTAGE POWER AND COMMUNICATIONS. REFERENCE SPECIFICATIONS FOR CONTROL COMPONENTS AND SEQUENCING TO BE COORDINATED W/ MECH. WORK.
  - DRAWINGS SHOW GENERAL LOCATION OF DDC SENSORS (T, RH, AND CO2). UNLESS NOTED OTHERWISE, INSTALL SENSORS AT 48" ABOVE FINISHED FLOOR. WIRING SHALL BE IN CONCEALED WALLS. IN CASE OF CONFLICTS WITH FURNITURE, WINDOWS, ETC., COORDINATE EXACT LOCATION WITH ARCHITECT AND ENGINEER.

### EQUIPMENT:

- EQUIPMENT INSPECTION:
  - FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
  - ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY EQUIPMENT CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
  - EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
- EQUIPMENT ACCESS:
  - FOR EQUIPMENT WHICH MAY REQUIRE PERIODIC SERVICING AND WHICH IS LOCATED ABOVE A SUSPENDED CEILING, CONTRACTOR IS TO PROVIDE A MARKER ON CEILING GRID WHICH CLEARLY INDICATES WHICH CEILING TILE IS TO BE REMOVED TO MOST CONVENIENT ACCESS EQUIPMENT SIDE NEEDING SERVICING. THE MARKER IS TO BE ROUND DOT OF HEAVY DUTY COLORED PAPER, WITH DIRECTION INDICATION, WITH ADHESIVE BACKING. OBTAIN OWNER APPROVAL FOR COLOR, SIZE, AND TYPE PRIOR TO INSTALLATION.
  - PROVIDE MANUFACTURER RECOMMENDED AND CODE ENFORCED CLEARANCES AROUND EQUIPMENT. MAINTAIN 36" CLEAR IN FRONT OF VAV BOX CONTROLLER, ELECTRIC HEATERS, ETC.
  - INSTALL ALL VALVES, CONTROLS, DAMPERS, FANS, ETC. IN ACCESSIBLE LOCATIONS. PROVIDE ADEQUATELY SIZED ACCESS DOORS WHERE REQUIRED.
- EQUIPMENT INSTALLATION:
  - PROVIDE SPRING HANGER TYPE VIBRATION ISOLATORS TO SUPPORT SUSPENDED AHUS, FANS AND OTHER POWERED VIBRATING EQUIPMENT. PROVIDE FLEXIBLE DUCT CONNECTORS.
  - FOR ALL AIR CONDITIONING UNITS WHICH ARE LOCATED ABOVE SUSPENDED CEILINGS, OR ABOVE HARDWOOD FLOORS, OR OTHER BUILDING SURFACES / MATERIALS WHICH COULD BE DAMAGED BY LEAKING WATER, PROVIDE A SECONDARY DRAIN PAN BENEATH THE UNIT, WITH EITHER: A) A SEPARATE CONDENSATE DRAIN LINE, COPPER, INSULATED WITH 1/2" ARMALLEX, AND PIPED TO A SUITABLE DISPOSAL POINT (SUCH AS TO A LAVATORY DRAIN TAILPIECE, FLOOR DRAIN, ETC.; DO NOT TERMINATE SECONDARY DRAIN PIPE THROUGH A SUSPENDED CEILING WHERE IT WILL DRIP INTO A SINK OR LAVATORY (UNLESS APPROVED BY ENGINEER); OR B) A FLOAT SWITCH OR MOISTURE SENSING SWITCH, LOCATED IN SECONDARY DRAIN PAN, AND ELECTRICALLY INTERLOCKED WITH UNIT FAN TO TURN UNIT OFF WHEN MOISTURE IS SENSED.
  - COMPLETELY WEATHERPROOF ALL EQUIPMENT, DUCTS, PIPES AND OTHER DEVICES AND MATERIALS INSTALLED OUTSIDE THE BUILDING, IN PARKING AREA, OR OTHERWISE EXPOSED TO WEATHER. AS A MINIMUM, WEATHERPROOFING SHALL INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING: JACKETING FOR ALL PIPING INSULATION, VALVES AND ACCESSORIES RATED FOR OUTDOOR SERVICE, ELECTRICAL ENCLOSURES NEMA 4X-SS. PROVIDE ELECTRICAL HEAT TRACING FOR UTILITIES SUSCEPTIBLE TO FREEZING.
  - AFFIX ID TAGS TO ALL MECHANICAL EQUIPMENT PER SPECIFICATIONS.
- EQUIPMENT INSULATION:
  - INSULATE ALL SURFACES THAT ARE CAPABLE OF BECOMING COLD AND COLLECTING CONDENSATE. THIS INCLUDES SUPPLY DIFFUSERS AND CONNECTING DUCTWORK / TRANSITION PIECES.
- PLUMBING:
  - PROVIDE CODE RECOMMENDED CLEARANCE OR MINIMUM 10" BETWEEN EXHAUST FANS DISCHARGES, PLUMBING VENTS AND AIR INTAKES. COORDINATE LOCATIONS WITH PLUMBING CONTRACTOR.
  - PROVIDE INSULATED AND TRAPPED COPPER CONDENSATE DRAIN LINES FROM ALL AIR CONDITIONING EQUIPMENT AND TERMINATE TO NEAREST FLOOR DRAIN OR OTHER APPROVED RECEPICLES. COORDINATE DRAINS WITH PLUMBING.
- ELECTRICAL:
  - CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ELECTRICAL CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
  - DUE TO VARIATIONS IN EQUIPMENT CHARACTERISTICS BY DIFFERENT EQUIPMENT SUPPLIERS, MECHANICAL EQUIPMENT ULTIMATELY PROVIDED MAY DIFFER IN HORSEPOWER OR AMPERAGE REQUIREMENTS FROM THAT SPECIFIED IN THESE DRAWINGS. COORDINATE WITH GENERAL CONTRACTOR PRIOR TO BIDDING, AND PRIOR TO SUBMITTALS AND ORDERING EQUIPMENT, TO ENSURE THAT EQUIPMENT ELECTRICAL REQUIREMENTS ARE CONVEYED TO ELECTRICAL CONTRACTOR. IT IS SOLELY CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPATIBILITY ISSUES ARE COORDINATED.

### CONTROLS:

- CONTRACTOR SHALL COOPERATE AND COORDINATE WORK ACTIVITIES WITH DDC CONTROLS CONTRACTOR TO ENSURE SMOOTH TROUBLE-FREE INSTALLATION.
- WHERE NOT SPECIFICALLY INDICATED ON PLANS, DDC CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL RELAYS AND CONTACTORS, POWER TO DDC PANELS, AND OTHER CONTROL ELEMENTS. ALTHOUGH DDC CONTRACTOR MAY COORDINATE WITH OTHER TRADES TO PROVIDE MISCELLANEOUS ELECTRICAL WORK, THE FINAL RESPONSIBILITY FOR ACHIEVEMENT OF CONTROL SEQUENCES LIES WITH DDC CONTRACTOR.
- ON THE GRAPHIC PAGES FOR ALL EQUIPMENT AND/OR MONITORED DEVICES (SUCH AS SENSORS, METERS, DAMPERS, ETC.) GIVE A CLEAR, GRAPHICAL INDICATION AS TO WHETHER EQUIPMENT OR DEVICE HAS BEEN PLACED IN MANUAL OPERATION, OVERRIDING AUTOMATIC OPERATION. (FOR EXAMPLE, PLACE AN "M" NEXT TO EQUIPMENT HAS BEEN PLACED IN MANUAL OPERATION.)
- REFER TO OPERATING SEQUENCE IN SPECIFICATIONS FOR ALARMS AND SEQUENCES REQUIRED.
- PROVIDE FULL COLOR GRAPHICS OF NEW SYSTEMS.
- INTERCONNECT NEW CONTROLS WITH OWNER'S EXISTING COS.
- PROVIDE WEB-SERVER. SEE SPECIFICATIONS.
- RECOMMENDED DIVISION OF RESPONSIBILITIES BETWEEN SUB-CONTRACTORS IS AS FOLLOWS:
  - WITH OWNER COORDINATE ETHERNET CONNECTION FOR DDC SYSTEM.
  - WITH ELECTRICAL SUB CONTRACTOR, CONTROL CONTRACTOR COORDINATES 120V POWER WIRING AND CONDUIT TO NEW CONTROLLERS (AND CIRCUIT BREAKERS, IF NO SPARES EXIST).
  - CONTROLS CONTRACTOR SUPPLIES DAMPERS, ETC. TO MECHANICAL CONTRACTOR FOR INSTALLATION. COORDINATE OUTSIDE AND RETURN AIR DAMPERS WITH AHU MANUFACTURER.
  - CONTROLS CONTRACTOR IS RESPONSIBLE FOR:
    - DAMPER ACTUATORS
    - GATEWAY INTERFACES AND ALL RELATED ACCESSORIES FOR FULL COMMUNICATION BETWEEN EQUIPMENT AND DDC SYSTEM
    - ADJUSTABLE RANGE/FLAT PLATE THERMOSTATS, RH, CO2 SENSING DEVICES
    - EQUIPMENT CONTROLLERS, SOFTWARE, PROGRAMMING.
    - ALL NETWORK CONTROL PANELS, DDC CONTROLLERS, SOFTWARE, AND PROGRAMMING.
    - WIRING AND CONDUIT FOR CONTROL AND MONITORING DEVICES
    - CONTROL RELAYS
    - SHOP DRAWINGS PER SPECIFICATIONS
    - SYSTEM CHECK OUT, OWNER TRAINING, DDC SYSTEM WARRANTY WORK

### DUCTWORK:

- DUCTWORK GENERAL:
  - DRAWINGS ARE DIAGRAMMATIC IN NATURE. FOR CLARITY SAKE, MOST DUCT OFFSETS/RISES/DROPS ARE NOT SHOWN. WHERE DUCTS PENETRATE WALLS, INSTALL THEM PERPENDICULAR TO WALL.
  - RECTANGULAR AND ROUND DUCTWORK SHALL BE GALVANIZED STEEL. SIZES SHOWN ARE INSIDE CLEAR DIMENSION, UNLESS NOTED OTHERWISE.
  - VERIFY BOTTOM OF DUCT ELEVATION AND COORDINATE WITH OTHER TRADES.
  - CONSTRUCT AND LEAKAGE TEST ALL DUCTWORK BASED ON SPECIFICATIONS AND SMACNA REQUIREMENTS, WHICHEVER IS MORE STRINGENT. COORDINATE PRESSURE GLASSES WITH EQUIPMENT SCHEDULES.
  - FLEXIBLE DUCTS MAXIMUM LENGTH SHALL NOT EXCEED 6 FEET. USE OF FLEXIBLE DUCTWORK IS LIMITED TO AREAS WITH AN ACCESSIBLE SUSPENDED CEILING. PINCHED DUCT WILL HAVE TO BE REPLACED.
  - IN AREAS WHERE DUCT CONFLICTS CANNOT BE AVOIDED, ROUTE SMALLER DUCTS THROUGH ROO JOISTS.
  - LOCATE AIR DEVICES AS SHOWN. COORDINATE WITH ELECTRICAL, IF NEEDED. RELOCATE DIFFUSER TO ADJACENT TILE.
- DUCTWORK INSULATION:
  - WRAP ALL OUTSIDE AIR, SUPPLY AND RETURN DUCTWORK UNLESS NOTED OTHERWISE.
  - IN ADDITION, FOR ACOUSTICAL PERFORMANCE INTERNALLY LINE FIRST 10' OF SUPPLY AND LAST 10' OF RETURN DUCTWORK.
  - PROVIDE ACOUSTICAL LINING FOR ALL TRANSFER DUCTS AND RETURN AIR ELBOWS.
  - INSULATION ON DUCT SHOULD TO BE PROPERLY TAPED AND MASTICS MUST BE APPLIED ON SEAMS AND JOINTS AND AT ENDS ADJACENT TO DUCT FLANGES AND FITTINGS. FOR DUCT SIDES WITH DIMENSIONS LARGER THAN 18 INCHES, APPLY ADDITIONAL PINS AND CLIPS TO HOLD INSULATION TIGHTLY AGAINST SURFACE AT CROSS BRACING.
  - INSULATE ALL EXHAUST DUCTWORK 10 FEET FROM EXTERIOR OPENING.
- DUCT FITTINGS:
  - WHERE RECTANGULAR TEE FITTINGS ARE SHOWN, PROVIDE FITTING WITH ADJUSTABLE DIVIDER SHEET AND TURNING VANES.
  - WHERE RECTANGULAR MAN AND BRANCH CONNECTIONS ARE SHOWN, PROVIDE EXTRACTOR VANES. NOT APPLICABLE TO DUCTWORK DOWNSTREAM OF VAV BOXES.
  - PROVIDE TURNING VANES IN ALL ELBOWS PER SPECS.
- DAMPERS:
  - IN AN ACCESSIBLE LOCATION, PROVIDE MANUAL-TYPE VOLUME BALANCING DUCT DAMPERS IN ALL SUPPLY, RETURN AND EXHAUST DUCT BRANCHES TO INDIVIDUAL GRILLES, REGISTERS AND DIFFUSERS (GRD). TO MINIMIZE NOISE INSTALL DAMPERS CLOSER TO THE BRANCH CONNECTION THAN TO THE GRD. IN DUCTWORK, PROVIDE ACCESS DOORS TO ALL DAMPERS.
  - ABOVE INACCESSIBLE CEILINGS AND IN CASE DUCT CONFIGURATION DOES NOT ALLOW FOR INSTALLATION OF DAMPER IN DUCTWORK, PROVIDE REMOTE MANUAL DAMPER BY YOUNG REGULATOR OR EQUAL. (CABLE OPERATED SYSTEM) WITH ENGINEER'S PERMISSION CONTRACTOR MAY PROVIDE VOLUME DAMPER THAT IS INTEGRAL TO GRD.
  - PROVIDE BALANCING DAMPERS ON ALL EXHAUST GRILLES TO ACHIEVE DESIRED AIRFLOW.
  - PROVIDE DYNAMIC FIRE DAMPERS (RUSKIN DIB20, TYPE B OR EQUAL) IN ACCORDANCE WITH CODE REQUIREMENT, IN ALL PENETRATIONS OF FIRE RATED WALLS, OCCUPANCY SEPARATION WALLS, BARRIERS AND PARTITIONS, AND EXIT CORRIDORS. REFER TO ARCHITECTURAL PLANS FOR RATED WALLS. PROVIDE ACCESS DOORS AS PER CODE REQUIREMENTS. EQUAL TO RUSKIN A8H-22 FOR RECTANGULAR DUCT, ACUDOR RD FOR ROUND DUCT. WHERE GRILLE ACCESS IS INDICATED, ADDITIONAL DUCT ACCESS DOOR IS NOT REQUIRED. WHERE THE CEILING IS FIRE RATED PROVIDE FIRE RATED AIR DEVICES FOR TRANSFER & RETURN AIR GRILLES AND SUPPLY AIR DIFFUSERS AS PER CODE REQUIREMENTS. REFER TO ARCHITECTURAL PLANS FOR RATED CEILINGS.
  - PROVIDE ACCESS DOORS (NOT SHOWN IN DRAWINGS) FOR INSPECTION OF DUCT MOUNTED EQUIPMENT SUCH AS FIRE/SMOKE DAMPERS, MANUAL BALANCING DAMPERS AND TURNING VANES. IN AREAS WITH HARD CEILING COORDINATE ACCESS DOOR LOCATIONS AND CEILING ACCESS PANELS WITH OTHER TRADES.

### INSULATION:

- FIBERGLASS INSULATION MAY NOT BE USED ON ANY COLD PIPING SURFACES; ONLY CLOSED CELL INSULATION IS ACCEPTABLE.
- PROVIDE INSULATION ON ALL SURFACES CAPABLE OF CREATING CONDENSATION.

### ABBREVIATIONS

A	AMPS	EXT.	ENTERING	NO	NORMALLY OPEN
ACCU	AIR COOLED CONDENSING UNIT	EXT.	EXTERNAL OR EXTERIOR	NTS	NOT TO SCALE
ACT	ACTUATOR	FCU	FAN COIL UNIT	OA	OUTSIDE AIR
AF	ABOVE FINISHED FLOOR	FD	FIRE DAMPER	PH	PHASE
AHU	AIR HANDLING UNIT	FM	FLOW METER	RA	RETURN AIR
B.	BOTTOM	FS	FLOW SWITCH	RAG/RG	RETURN AIR GRILLE
BAS	BUILDING AUTOMATION SYSTEM	FPI	FINS PER INCH	RD	ROOF DRAIN
BOP	BOTTOM OF PIPE	G.	GROUND	RM.	ROOM
BOTT.	BOTTOM	GA.	GAGE	RPZ	REDUCED PRESSURE ZONE
C.	CONDUIT OR COMMON	GALV.	GALVANIZED	SA	SUPPLY AIR
CHR	CHILLED WATER RETURN	GPM	GALLONS PER MINUTE	SD	SUPPLY AIR DIFFUSER
CHS	CHILLED WATER SUPPLY	GRND.	GROUND	SS	STAINLESS STEEL
CHW	CHILLED WATER	HB	HOSE BIBB	SZ	SINGLE ZONE
CHWP	CHILLED WATER PUMP	HP	HORSEPOWER	TAB	TESTING & BALANCING
CR	CONDENSER WATER RETURN	HS	HUMIDITY SENSOR	T.O.L.	TOP OF LOUVER
CS	CONDENSER WATER SUPPLY	HVAC	HEATING, VENTILATION, & AIR CONDITIONING	TS	TEMPERATURE SENSOR
CLG.	CEILING COOLING	LVG.	LEAVING	TSTAT	THERMOSTAT
COMB.	COMBINATION			UG	UNDERGROUND
CONC.	CONCRETE	MECH	MECHANICAL	UNO	UNLESS OTHERWISE NOTED
COND.	CONDUIT	MOT. STRTR.	MOTOR STARTER	V	VOLTS
CT	COOLING TOWER	MS	MOTOR STARTER	VAV	VARIABLE AIR VOLUME
CW.	COPPER	MZ	MULTI-ZONE	VFD	VARIABLE FREQUENCY DRIVE
CU	CITY WATER	NC	NORMALLY CLOSED	W	WIRE
DDC	DIRECT DIGITAL CONTROLS				
DMPR.	DAMPER				
DISC.	DISCONNECT				
EXG/EG	EXHAUST AIR GRILLE				
EMS	ENERGY MANAGEMENT SYSTEM				

### MECHANICAL SYMBOLS LEGEND

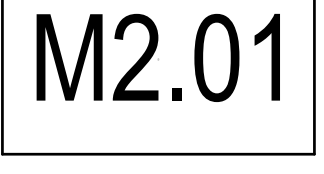
	DUCT SIZE: FIRST FIGURE IS SIDE SHOWN		THERMOSTAT
	BELOW DUCT SIZE: FIRST FIGURE IS SIDE SHOWN		SPACE HUMIDITY SENSOR
	DIRECTION OF FLOW-RETURN		DUCT HUMIDITY SENSOR
	DIRECTION OF FLOW-SUPPLY		SPACE CARBON DIOXIDE SENSOR
	FIRE DAMPER		STATIC PRESSURE SENSOR
	FLEXIBLE DUCT		DUCT CARBON DIOXIDE SENSOR
	EXHAUST AIR GRILLE		CHILLED WATER RETURN
	RETURN AIR/TRANSFER AIR GRILLE		CHILLED WATER SUPPLY
	SUPPLY AIR DIFFUSER		CONDENSATE PIPING
	SIDE TAP WITH DAMPER		BUTTERFLY VALVE
	BACKDRAFT DAMPER		MANUAL VALVE
	AUTO-FLOW REGULATOR		AUTOMATIC VALVE
	DRAIN VALVE		CHECK VALVE
	BALL VALVE		PRESSURE GAUGE & COCK
			TEMPERATURE SENSOR
			THERMOMETER WELL

IDEA-OWASSA COLLEGE PREP PHASE II



© Copyright 2019  
Gomez Mendez-Santiz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet:



No.	REVISIONS	BY

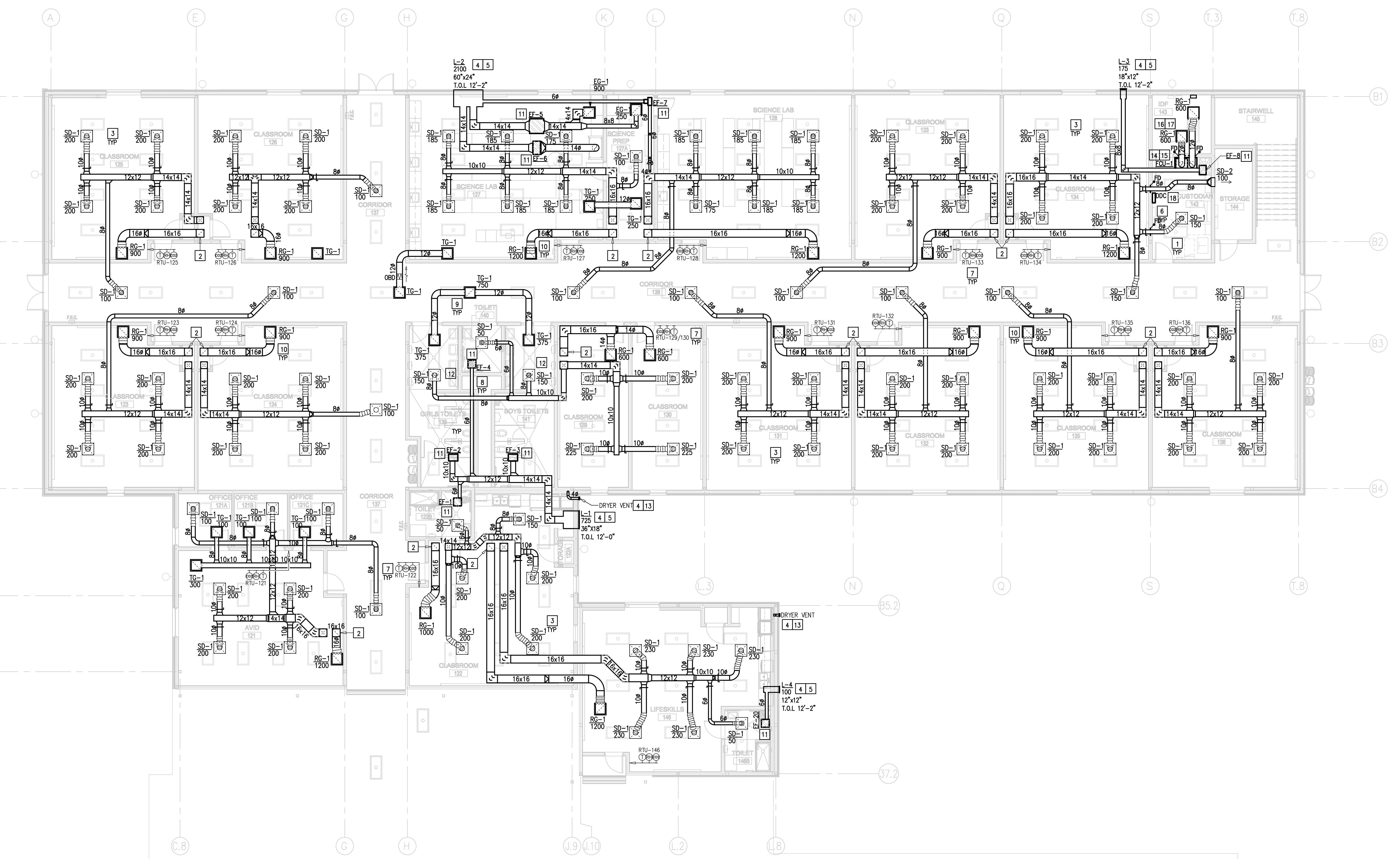
**GMS ARCHITECTS**  
1150 Paredes Line Rd.  
Brownsville, TX 78526  
(956) 546-0110  
fax (956) 546-0196

### GENERAL NOTES:

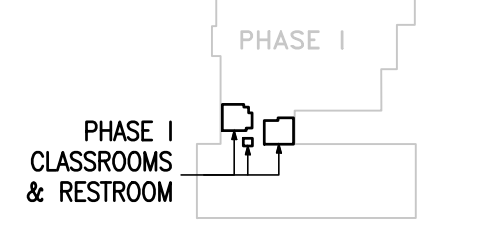
1. PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.

### KEYED NOTES:

- 1 CODE AND WORKING CLEARANCE FOR ELECTRICAL PANELS. DO NOT ROUTE DUCT OR PIPING DIRECTLY ABOVE ELECTRICAL EQUIPMENT FOOTPRINT. SEE ELECTRICAL PLANS FOR EXACT LOCATION. (TYPICAL)
- 2 DUCTWORK UP TO SECOND FLOOR IN CHASE. REFER TO SECOND FLOOR MECHANICAL FLOOR PLAN FOR CONTINUATION.
- 3 DUCTWORK ROUTING SHOWN IS DIAGNOSTIC IN NATURE. FIELD-VERIFY STRUCTURE AND SPACE AVAILABILITY PRIOR TO SUBMITTING SHOP DRAWINGS. COORDINATE WITH ARCHITECT AND ENGINEER IN CASE OF CONFLICTS. (TYPICAL)
- 4 SLEEVE ALL WALL PENETRATIONS PER SPECIFICATIONS. SEAL AROUND DUCTS & PIPING AT ALL WALLS, AC ROOMS AND WALL LOUVER PENETRATIONS WITH FIRE-PROOF CAULKING. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE TO PROVIDE A FINISH LOOK. (TYPICAL)
- 5 PROVIDE LOUVER AS SCHEDULED. COORDINATE FINAL FINISH, SIZE AND LOCATION WITH ARCHITECT PRIOR TO ORDERING. (TYPICAL)
- 6 PROVIDE 1-1/2 HOUR RATING, DYNAMIC FIRE DAMPER EQUAL TO RUSKIN DIBD2 AND DUCT ACCESS DOOR EQUAL TO RUSKIN ADH-22 FOR RECTANGULAR DUCT, ACUDOR RD FOR ROUND DUCT. PROVIDE FIRE DAMPER AT WALL PENETRATIONS AS SHOWN. ACCESS PANEL SHALL BE IN CEILING SPACE. (TYPICAL)
- 7 PROVIDE THERMOSTAT, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. COORDINATE WITH ARCHITECT AND OWNER TO MEET ALL SENSORS REQUIREMENTS. PROVIDE CLEAR LOCKING COVER FOR ALL SENSORS. (TYPICAL)
- 8 PROVIDE ROUND SPIRAL LOCK-SEAM DUCT. LONGITUDINAL SEAM TYPE IS NOT ACCEPTABLE. (TYPICAL)
- 9 PROVIDE ACoustICAL LINING FOR TRANSFER DUCT. SEE SPECIFICATIONS. (TYPICAL)
- 10 PROVIDE FABRICATED RETURN AIR PLENUM BOX ABOVE RETURN GRILLE. INSTALL ACoustICAL LINING IN PLENUM BOX. CONNECT WITH FLEX DUCT TO MAIN RETURN TRUNK DUCT WHERE SHOWN ON DRAWING AND INSTALL BALANCING DAMPER WHERE INDICATED. FOR AREAS WHERE FLEX DUCT IS NOT SHOWN, PROVIDE ACoustICAL LINING FOR CONNECTION TO MAIN RETURN TRUNK DUCT. SEE DETAIL SHEET. (TYPICAL)
- 11 PROVIDE EXHAUST FAN AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- 12 PROVIDE ROUND NECK OPPOSED BLADE BALANCING DAMPER TITUS MODEL AG-75 OR APPROVED EQUAL FOR VOLUME CONTROL IN ROUND NECK DIFFUSER. DAMPER SHALL BE OPERABLE THRU THE FACE OF THE DIFFUSER. TYPICAL ON SQUARE DIFFUSERS LOCATED IN HARD CEILING AREAS.
- 13 PROVIDE 4"Ø SHEET METAL VENT PIPE FOR DRYER AND TERMINATE TO OUTSIDE THROUGH WALL WITH HOOD AS RECOMMENDED BY DRYER MANUFACTURER. INSTALL AS PER CODE REQUIREMENTS AND DRYER MANUFACTURER'S INSTRUCTIONS. COORDINATE MODEL NUMBER FOR WALL CAP WITH DRYER MANUFACTURER.
- 14 PROVIDE FAN COIL UNIT AS SCHEDULED. PROVIDE WATER LEVEL DETECTION DEVICE THAT WILL SHUT-OFF THE FCU PRIOR TO OVERFLOW. AUXILIARY DRAIN SYSTEM SHALL BE AS PER IMC-2009 SECTION 507.2.3. SEE DETAIL SHEET. ROUTE COPPER CONDENSATE LINE TO PLUMBING RECEPTACLE AND INSULATE PER SPECIFICATIONS. DROP REFRIGERANT LINES NEXT TO UNIT TO AVOID INTERFERENCE WITH MAINTENANCE ACCESS. POSITION UNIT TO ALLOW REQUIRED CLEARANCES.
- 15 PROVIDE FCU PLATFORM USING 3" X 3" X 1/4" GALVANIZED STEEL ANGLE IRON WITH WELDED JOINTS. PROVIDE 1" THICK MOISTURE RESISTANT GRADE PLYWOOD AND BOLT TO BRACKET WITH 1/4" GALVANIZED BOLTS. COORDINATE PLATFORM SIZE ON SITE. SET UNIT ON 1/2" NEOPRENE PAD ON PLATFORM. PLATFORM TO BE USED AS A RETURN AIR PLENUM. BOLT MOISTURE RESISTANT PLYWOOD AROUND THE FRAMING TO CREATE AN AIRTIGHT PLENUM BOX.
- 16 PROVIDE PLENUM BOX ON TOP OF AIR DEVICE FOR SIDE FLEX CONNECTION. REMOVE PATTERN DIFFUSER AND ENSURE S/A DEVICE DROPS AIR IN FRONT OF RACKS. COORDINATE EXACT LOCATION WITH OWNER AND ENGINEER PRIOR INSTALLATION. RG-1 TO BE USED AS SUPPLY AIR DEVICE.
- 17 PRIOR TO INSTALLATION OF FCU AND RELATED DUCTWORK, COORDINATE LOCATION OF COMMUNICATION AND DATA EQUIPMENT TO ENSURE RACKS ARE POSITIONED IN A PROPER MANNER CLEARLY IDENTIFYING THE COLD AND HOT ISLES. SUPPLY AIR DEVICES SHALL THROW AIR IN FRONT OF RACKS AND RETURN AIR DEVICES SHALL BE LOCATED ON BACK SIDE OF RACKS. DOCUMENT COORDINATION WITH OWNER, IT DEPARTMENT, AND ARCHITECT/ENGINEER PRIOR INSTALLATION.
- 18 REFER TO SPECIFICATION FOR DDC CONTROLS AND SEQUENCES OF OPERATION.



1ST FLOOR  
**01 MECHANICAL FLOOR PLAN**  
SCALE: 1/8" = 1'-0"



**ETHOS engineering**  
119 W. VAN BUREN AVE. STE 101  
PHONE: 956-210-3435  
TEXAS REGISTERED ENGINEERING FIRM  
F-15998

IDEA-OWASSA  
COLLEGE PREP PHASE II  
Public Schools



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

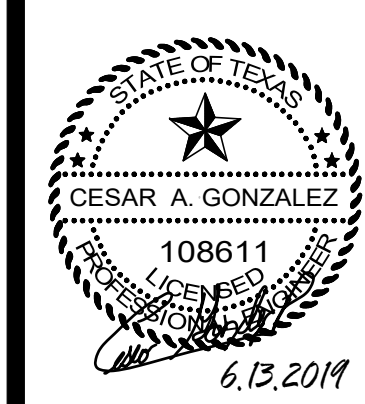
Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet:

**M3.01**



1150 Paredes Line Rd.  
Brownsville, TX 78526  
(956) 546-0110  
fax (956) 546-0196

**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  
 Public Schools



6.12.2019  
 © Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers

Date: JUNE 13, 2019  
 Scale: As Noted  
 Project Architect: David Monreal, AIA  
 Drawn By: ETHOS  
 Job No: IDEA OWASSA II  
 Sheet:

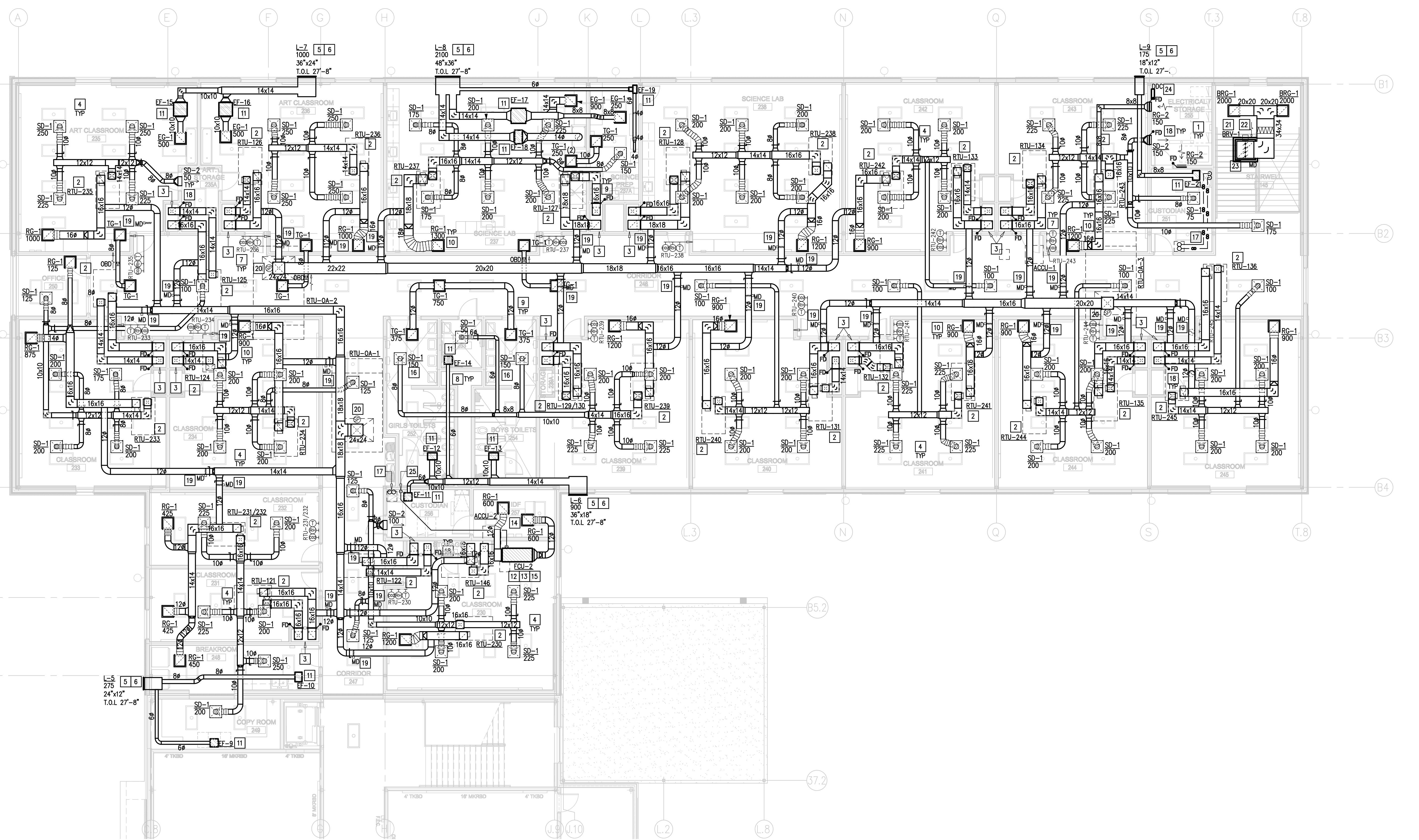
**M3.02**

**GENERAL NOTES:**

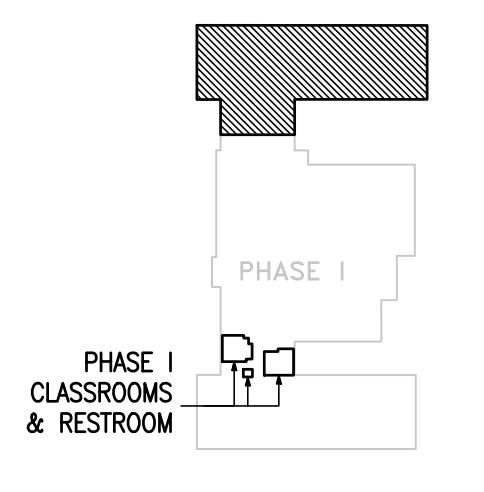
1. PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.

**KEYED NOTES:**

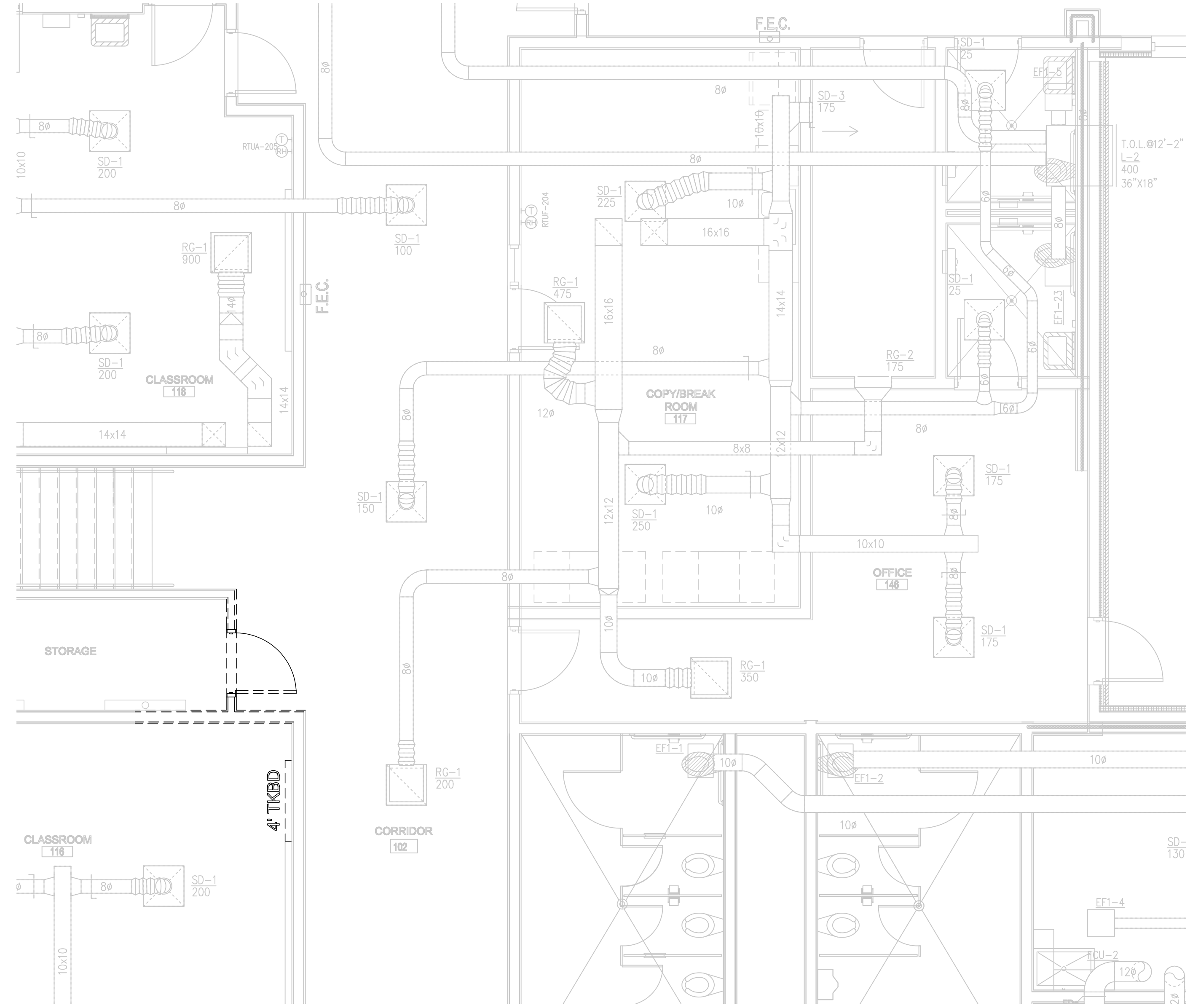
1. CODE AND WORKING CLEARANCE FOR ELECTRICAL PANELS. DO NOT ROUTE DUCT OR PIPING DIRECTLY ABOVE ELECTRICAL EQUIPMENT FOOTPRINT. SEE ELECTRICAL PLANS FOR EXACT LOCATION. (TYPICAL)
2. PROVIDE RTU ON ROOF CURB AS SCHEDULED. REFER TO MECHANICAL ROOF PLAN FOR MORE INFORMATION.
3. DUCTWORK DOWN TO FIRST FLOOR. REFER TO FIRST FLOOR MECHANICAL PLAN FOR CONTINUATION.
4. DUCTWORK ROUTING SHOWN IS DIAGNOSTIC IN NATURE. FIELD-VERIFY STRUCTURE AND SPACE AVAILABILITY PRIOR TO SUBMITTING SHOP DRAWINGS. COORDINATE WITH ARCHITECT AND ENGINEER IN CASE OF CONFLICTS. (TYPICAL)
5. SLEEVE ALL WALL PENETRATIONS PER SPECIFICATIONS. SEAL AROUND DUCTS & PIPING AT ALL WALLS, AC ROOMS AND WALL LOUVER PENETRATIONS WITH FIRE-PROOF CALKING. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE TO PROVIDE A FINISH LOOK. (TYPICAL)
6. PROVIDE LOUVER AS SCHEDULED. COORDINATE FINAL FINISH, SIZE AND LOCATION WITH ARCHITECT PRIOR TO ORDERING. (TYPICAL)
7. PROVIDE THERMOSTAT, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. COORDINATE WITH ARCHITECT AND OWNER TO MEET ADA REQUIREMENTS. PROVIDE CLEAR LOCKING COVER FOR ALL SENSORS. (TYPICAL)
8. PROVIDE ROUND SPIRAL LOCK-SEAM DUCT. LONGITUDINAL SEAM TYPE IS NOT ACCEPTABLE. (TYPICAL)
9. PROVIDE ACOUSTICAL LINING FOR TRANSFER DUCT. SEE SPECIFICATIONS. (TYPICAL)
10. PROVIDE FABRICATED RETURN AIR PLENUM BOX ABOVE RETURN GRILLE. INSTALL ACOUSTICAL LINING IN PLENUM BOX. CONNECT WITH FLEX DUCT TO MAIN RETURN TRUNK DUCT WHERE SHOWN ON DRAWING AND INSTALL BALANCING DAMPER WHERE INDICATED. FOR AREAS WHERE FLEX DUCT IS NOT SHOWN, PROVIDE ACOUSTICAL LINING FOR CONNECTION TO MAIN RETURN TRUNK DUCT. SEE DETAIL SHEET. (TYPICAL)
11. PROVIDE EXHAUST FAN AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
12. PROVIDE FAN COIL UNIT AS SCHEDULED. PROVIDE WATER LEVEL DETECTION DEVICE THAT WILL SHUT-OFF THE FCU PRIOR TO OVERFLOW. AUXILIARY DRAIN SYSTEM SHALL BE AS PER IMC-2009 SECTION 307.2.3. SEE DETAIL SHEET. ROUTE COPPER CONDENSATE LINE TO PLUMBING RECEPTACLE AND INSULATE PER SPECIFICATIONS. DROP REFRIGERANT LINES NEXT TO UNIT TO AVOID INTERFERENCE WITH MAINTENANCE ACCESS. POSITION UNIT TO ALLOW REQUIRED CLEARANCES.
13. SUSPEND FCU USING SPRING VIBRATION ISOLATORS AS PER MANUFACTURER'S RECOMMENDATIONS. POSITION UNIT TO ALLOW REQUIRED CLEARANCES. PROVIDE AUXILIARY DRAIN PAN WITH FLOAT SWITCH TO DISABLE FAN WHEN MOISTURE IS DETECTED. PROVIDE INSULATED COPPER CONDENSATE PIPING AND TERMINATE AT MOP SINK IN THE SECOND FLOOR CUSTODIAN ROOM.
14. PROVIDE PLENUM BOX ON TOP OF AIR DEVICE FOR SIDE FLEX CONNECTION. REMOVE PATTERN DIFFUSER AND ENSURE 5/8" DEVICE DROPS AIR IN FRONT OF RACKS. COORDINATE EXACT LOCATION WITH OWNER AND ENGINEER PRIOR TO INSTALLATION. RG-1 TO BE USED AS SUPPLY AIR DEVICE.
15. PRIOR TO INSTALLATION OF FCU AND RELATED DUCTWORK, COORDINATE LOCATION OF COMMUNICATION AND DATA EQUIPMENT TO ENSURE RACKS ARE POSITIONED IN A PROPER MANNER CLEARLY IDENTIFYING THE COLD AND HOT ISLES. SUPPLY AIR DEVICES SHALL THROW AIR IN FRONT OF RACKS AND RETURN AIR DEVICES SHALL BE LOCATED ON BACK SIDE OF RACKS. DOCUMENT COORDINATION WITH OWNER, I.T. DEPARTMENT, AND ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
16. PROVIDE ROUND NECK OPPOSED BLADE BALANCING DAMPER TITUS MODEL AG-75 OR APPROVED EQUAL FOR VOLUME CONTROL IN ROUND NECK DIFFUSER. DAMPER SHALL BE OPERABLE THRU THE FACE OF THE DIFFUSER. TYPICAL ON SQUARE DIFFUSERS LOCATED IN HARD CEILING AREAS.
17. ROUTE CONDENSATE PIPING DOWN FROM ROOF AT THIS APPROXIMATE LOCATION. SECURE PIPING TO WALL AND ROUTE TO MOP SINK.
18. PROVIDE 1-1/2 HOUR RATING, DYNAMIC FIRE DAMPER EQUAL TO RUSKIN DIB2 AND DUCT ACCESS DOOR EQUAL TO RUSKIN ADH-22 FOR RECTANGULAR DUCT, ACCORD RD FOR ROUND DUCT. PROVIDE FIRE DAMPER AT WALL PENETRATIONS AS SHOWN. ACCESS PANEL SHALL BE IN CEILING SPACE. (TYPICAL)
19. PROVIDE MOTORIZED DUCT MOUNTED OUTSIDE AIR DAMPER AND ACTUATOR WITH CO2 SENSOR AS PER SPECIFICATIONS TO ACHIEVE DEMAND CONTROLLED VENTILATION SEQUENCE. REFER TO DDC CONTROLS SEQUENCES FOR MORE INFORMATION. CONTROLS CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY POWER, CONDUITS AND WIRING FOR A COMPLETE AND FUNCTIONAL DDC SYSTEM.
20. PROVIDE DUCT MOUNTED STATIC PRESSURE SENSOR DOWNSTREAM THE DOAS ROOFTOP UNIT SUPPLY AIR DUCTWORK AND INTEGRATE WITH THE VAV OPERATION OF THE DOAS. COORDINATE WITH CONTROLS CONTRACTOR.
21. ROUTE DUCT UP TO BAROMETRIC RELIEF VENT ON ROOF.
22. PROVIDE DUCT MOUNTED BAROMETRIC RELIEF DAMPER EQUAL TO GREENHECK MODEL BR-10 (HORIZONTAL MOUNT) OR GREENHECK MODEL BR-30 VERTICAL MOUNT.
23. PROVIDE MOTORIZED DAMPER WITH STEP DOWN TRANSFORMER. INTERLOCK DAMPER OPERATION WITH DEDICATED OUTSIDE AIR UNITS.
24. REFER TO SPECIFICATION FOR DDC CONTROLS AND SEQUENCES OF OPERATION.
25. SECURE PIPING TO WALL AND DISCHARGE CONDENSATE PIPING INTO MOP SINK. REFER TO PLUMBING PLANS FOR EXACT LOCATION OF MOP SINK.



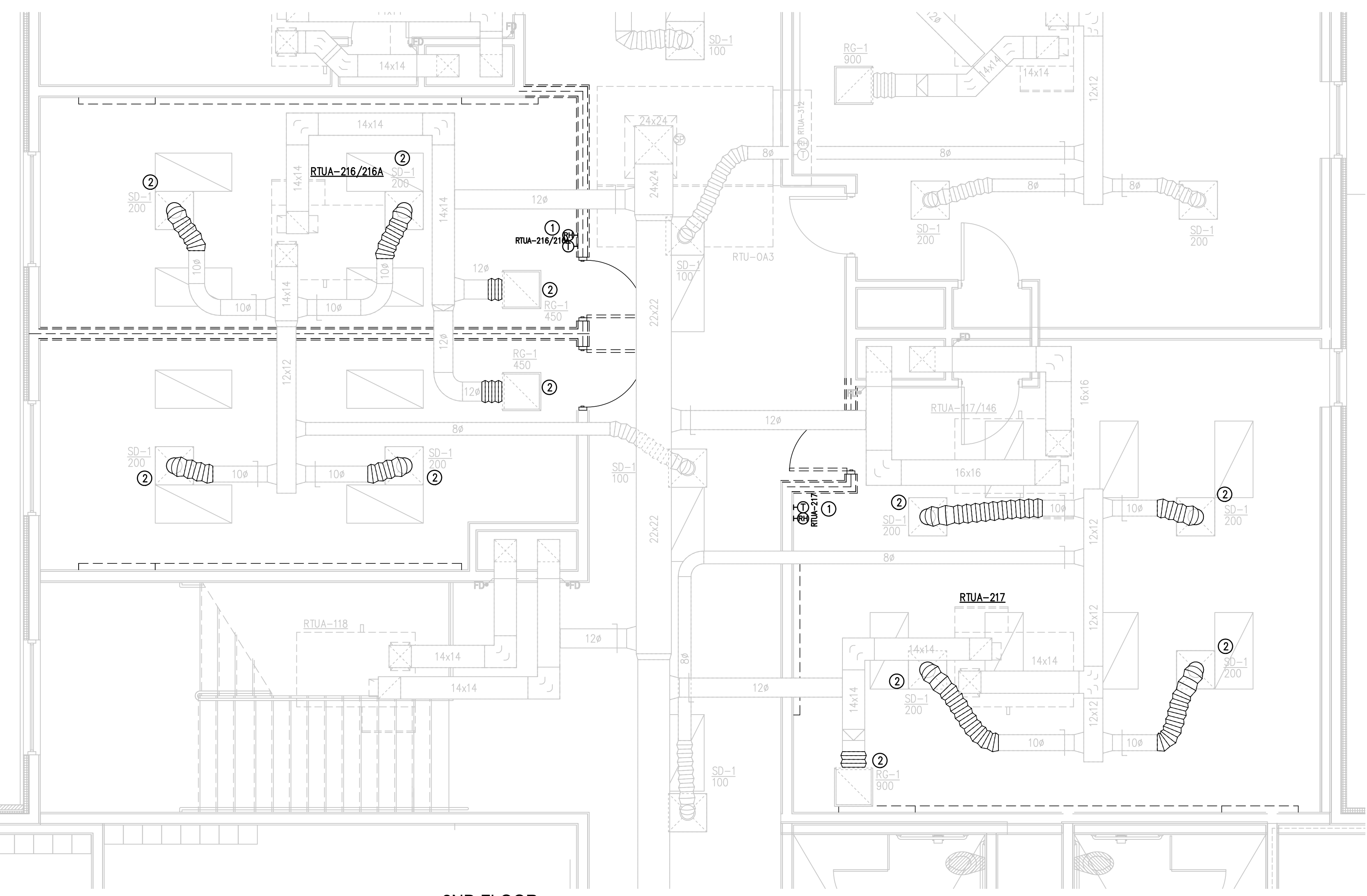
2ND FLOOR  
**01 MECHANICAL FLOOR PLAN**  
 SCALE: 1/8" = 1'-0"  
 NORTH



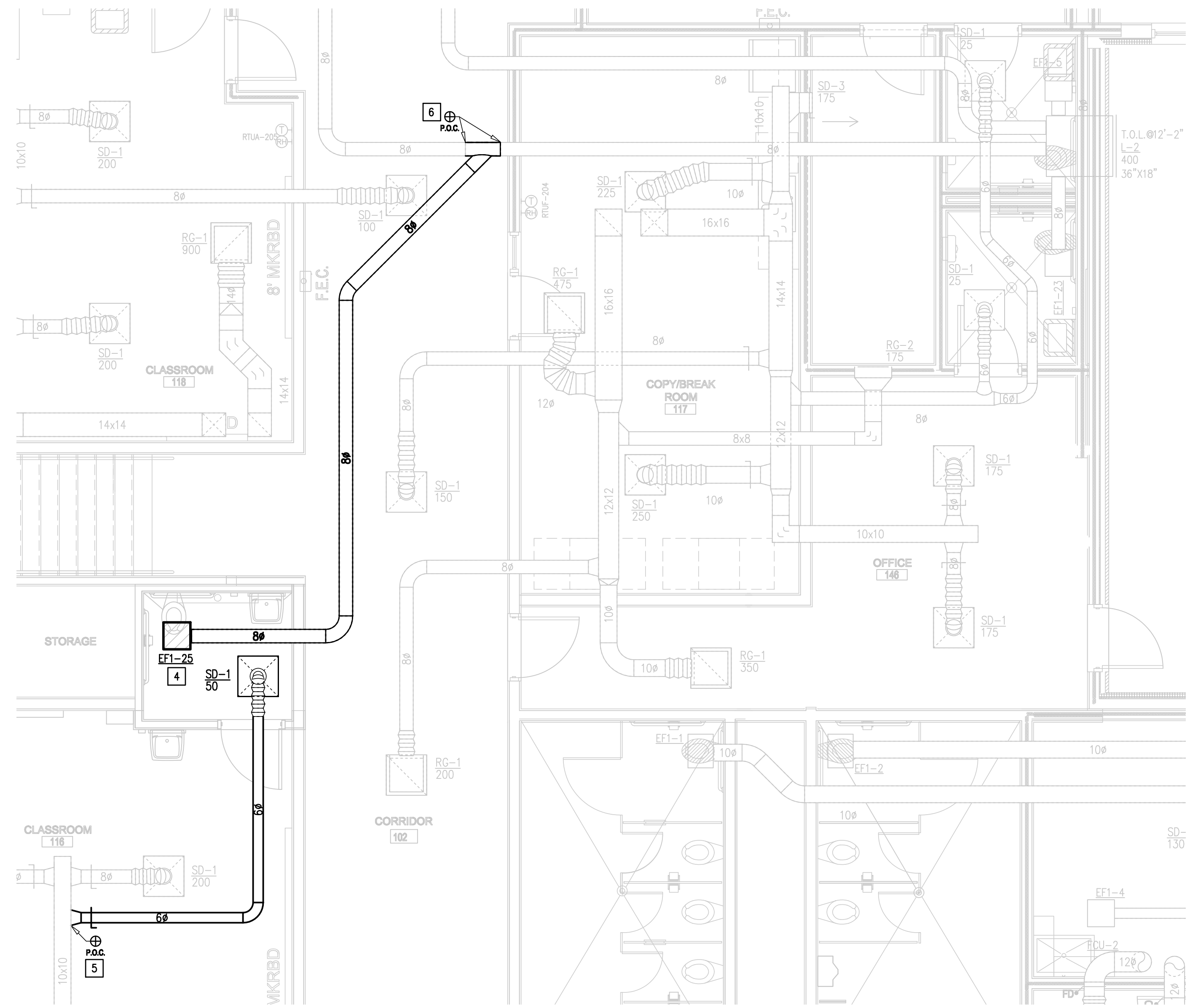
119 W. VAN BUREN AVE. STE 101  
 PHONE: 956-230-3435  
 TEXAS REGISTERED  
 ENGINEERING FIRM  
 F-15988



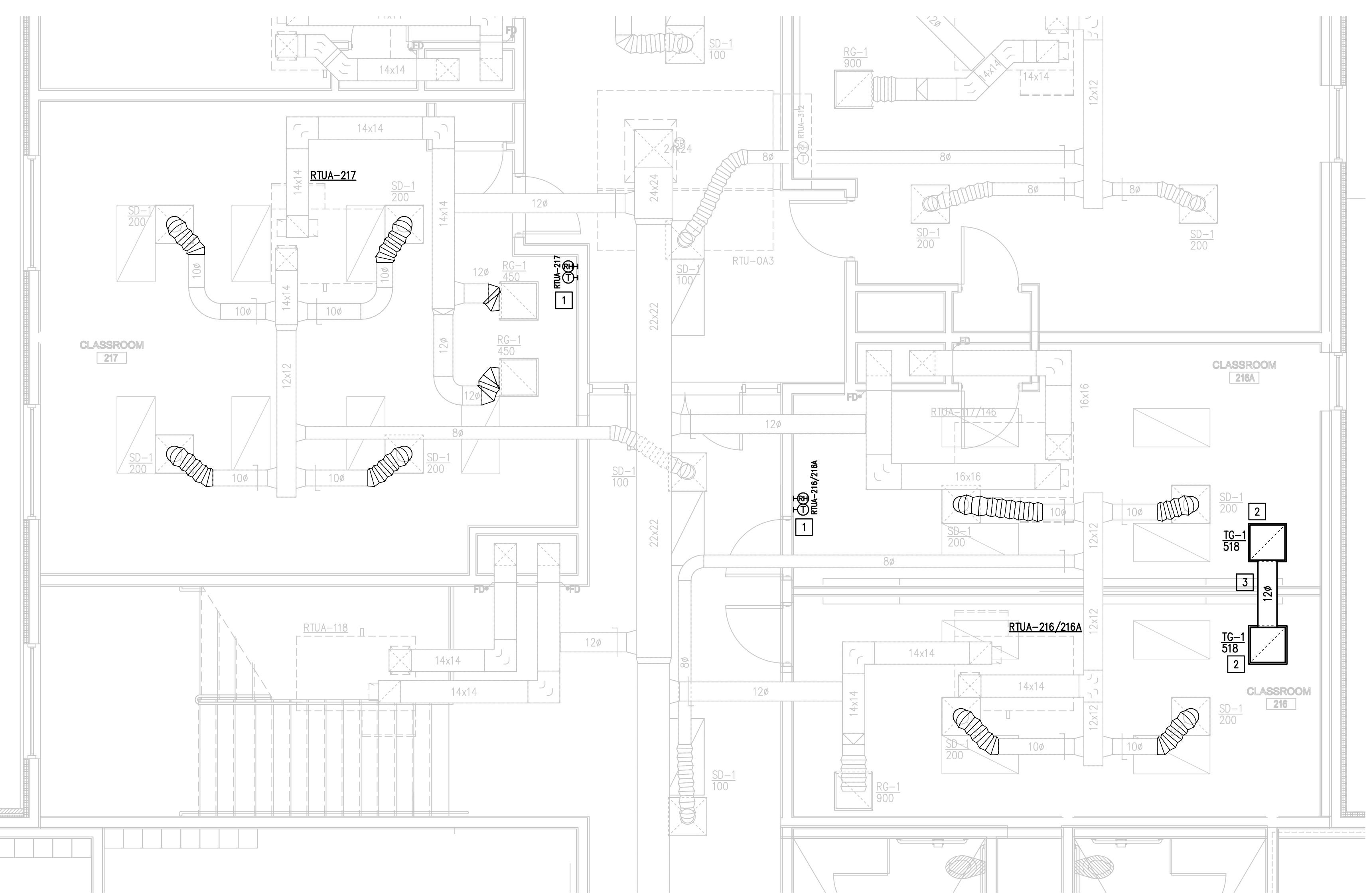
03 ALTERNATE NO. 4 - 1ST FLOOR  
DEMOLITION FLOOR PLAN  
SCALE: 1/4" = 1'-0"  
PLAN NORTH



01 2ND FLOOR  
DEMOLITION FLOOR PLAN  
SCALE: 1/4" = 1'-0"  
PLAN NORTH



04 ALTERNATE NO. 4 - 1ST FLOOR  
MECHANICAL PLAN  
SCALE: 1/4" = 1'-0"  
PLAN NORTH



02 2ND FLOOR  
MECHANICAL PLAN  
SCALE: 1/4" = 1'-0"  
PLAN NORTH

**GENERAL NOTES:**

- PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.
- OWNER MAY WISH TO KEEP DEMOLISHED EQUIPMENT AND MATERIALS. COORDINATE WITH OWNER, AND DISPOSE OF EQUIPMENT AND MATERIALS THAT OWNER DOES NOT RETAIN.
- WHERE THE REMOVAL OF EQUIPMENT RENDERS EQUIPMENT DOWNSTREAM INOPERABLE, SERVICES SHALL BE EXTENDED TO DOWNSTREAM EQUIPMENT SO THAT THE EQUIPMENT IS LEFT IN OPERATING CONDITION.

**DEMOLITION KEYED NOTES:**

- RETAIN AND RELOCATE EXISTING THERMOSTAT AND RH SENSOR. REFER TO NEW PLAN FOR NEW LOCATION.
- RETAIN AND RELOCATE EXISTING AIR DEVICE. EXTEND FLEX DUCT AS NECESSARY. REFER TO NEW PLAN FOR NEW LOCATION.

**MECHANICAL KEYED NOTES:**

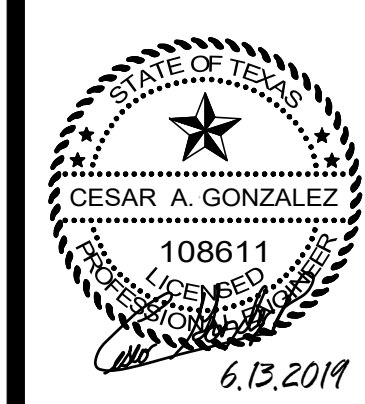
- EXISTING RELOCATED THERMOSTAT AND RH SENSORS WHERE INDICATED. INSTALL 48" A.F.F. COORDINATE WITH ARCHITECT AND OWNER TO MEET ADA REQUIREMENTS. PROVIDE CLEAR LOCKING COVER FOR ALL SENSORS. (TYPICAL)
- PROVIDE FABRICATED PLENUM BOX ABOVE TRANSFER GRILLE FOR SIDE CONNECTION. INSTALL ACOUSTICAL LINING IN PLENUM BOX.
- PROVIDE ACOUSTICAL LINING FOR TRANSFER DUCT. SEE SPECIFICATIONS. (TYPICAL)
- PROVIDE EXHAUST FAN AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- CONNECT NEW 6" SUPPLY AIR DUCT INTO EXISTING 10X10 DUCT AT THIS APPROXIMATE LOCATION.
- CONNECT NEW 8" EXHAUST AIR DUCT INTO EXISTING 8" DUCT AT THIS APPROXIMATE LOCATION.

LEGEND	
	EXISTING UNIT TO BE DEMOLISHED
	EXISTING UNIT TO REMAIN
	NEW UNIT
	EXISTING DUCTWORK TO REMAIN
	EXISTING DUCTWORK TO BE DEMOLISHED
	NEW DUCTWORK
	T-STAT TO REMAIN
	T-STAT TO BE DEMOLISHED
	NEW T-STAT



1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

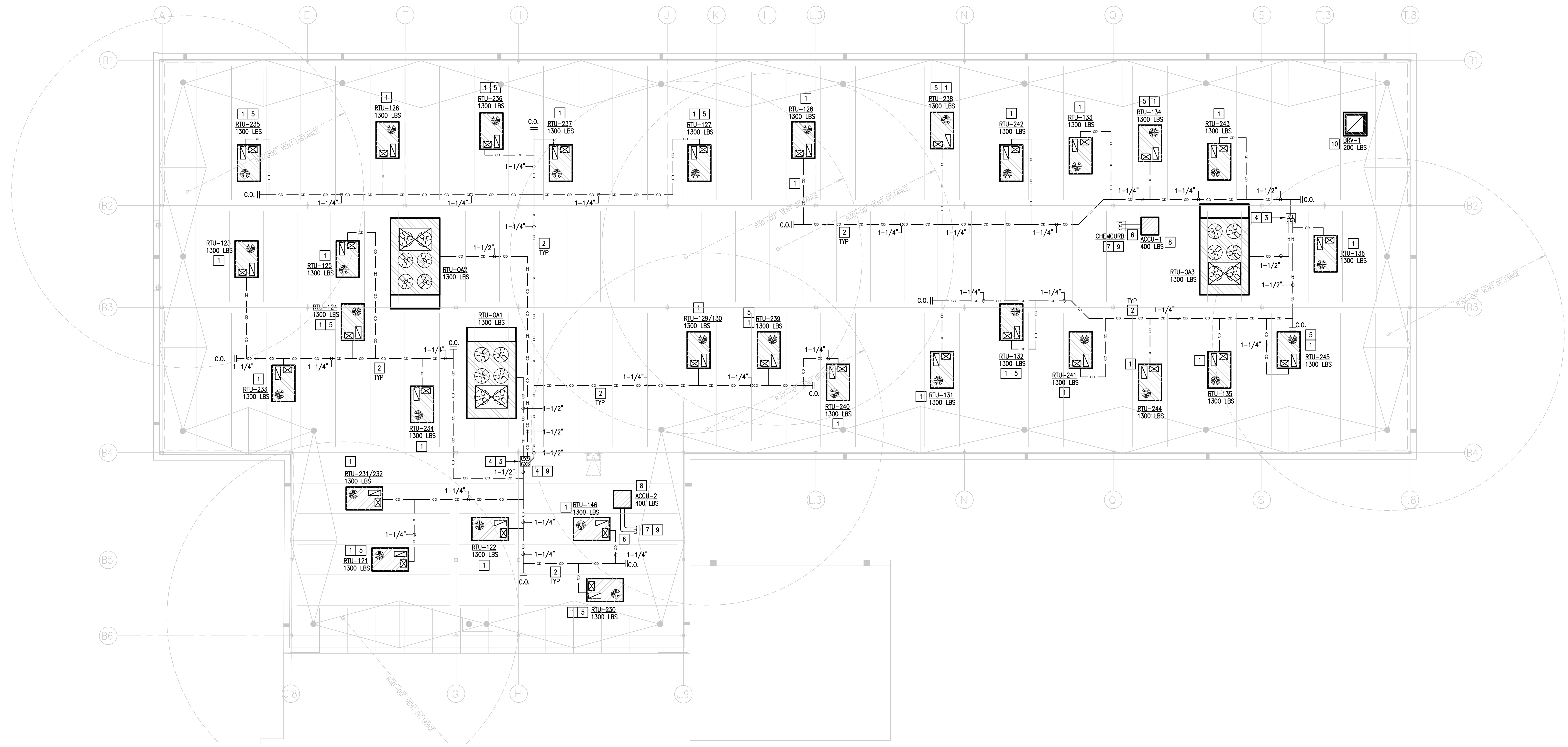
**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  
 Public Schools



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet:

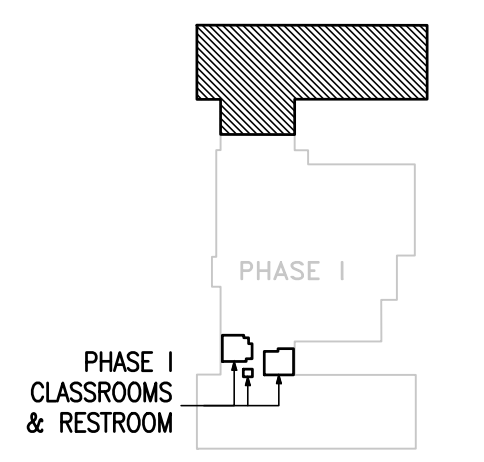
**M4.01**



**01 MECHANICAL ROOF PLAN**  
SCALE: 1/8" = 1'-0"  
PLAN NORTH

**KEYED NOTES:**

- 1 PROVIDE RTU ON ROOF CURB AS SCHEDULED. ORIENT RTUS TO OPTIMIZE DUCTWORK. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. PROVIDE COPPER CONDENSATE DRAIN LINES WITH P-TRAPS, AND EXTEND TO NEAREST CONDENSATE DRAIN RECEPTOR. SUPPORT PIPING IN PIPING SUPPORTS AS DETAILED. PROVIDE ROOF CURB TO INSTALL EQUIPMENT ON ROOF. SECURE EQUIPMENT TO ROOF CURB AND ROOF CURB TO ROOF STRUCTURE AS PER DIV. 7 SPECIFICATIONS. ATTACHMENTS SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES.
- 2 PROVIDE COPPER CONDENSATE PIPING ON ROOF AND PROVIDE SUPPORTS AS PER DETAIL. REFER TO DETAIL SHEET. (TYPICAL)
- 3 ROUTE CONDENSATE LINE DOWN TO CEILING SPACE BELOW AT THE APPROXIMATE LOCATION. TERMINATE CONDENSATE LINES AT MOP SINK/FLOOR DRAIN LOCATED INSIDE THE BUILDING. REFER TO PLUMBING DRAWINGS.
- 4 PROVIDE ROOF PENETRATION SYSTEM FOR CONDENSATE PIPING. SEE ASSOCIATED DETAIL ON DETAIL SHEET. COORDINATE INSTALLATION WITH PLUMBING CONTRACTOR.
- 5 PROVIDE FACTORY INSTALLED CONVENIENCE ELECTRICAL OUTLET AT INDICATED RTUS. COORDINATE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ELECTRICAL CONTRACTOR.
- 6 PROVIDE 1" INSULATION & ALUMINUM METAL JACKET ON EXPOSED REFRIGERANT LINES. SEE SPECIFICATIONS. PROVIDE REFRIGERANT LINE SUPPORTS SUITABLE FOR ROOF APPLICATION.
- 7 PROVIDE ROOF PENETRATION SYSTEM FOR REFRIGERANT PIPING, HVAC CONTROL WIRING AND ELECTRICAL POWER CONDUITS. SEE ASSOCIATED DETAIL ON DETAIL SHEET. COORDINATE INSTALLATION WITH ELECTRICAL AND PLUMBING CONTRACTORS.
- 8 SECURE CONDENSING UNIT TO ROOF SUPPORT. ATTACHMENTS SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES. REFER TO DIV. 7 FOR MORE INFORMATION.
- 9 SLEEVE ALL PENETRATIONS PER SPECIFICATIONS. SEAL AROUND PIPING WITH FIRE PROOF CAULKING. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION BOTH INSIDE AND OUTSIDE TO PROVIDE FINISHED LOOK.
- 10 PROVIDE BAROMETRIC RELIEF VENT AS SCHEDULED. SECURE VENT TO CURB AND CURB TO ROOF AS PER GREENHECK INSTALLATION INSTRUCTIONS. ATTACHMENTS SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES. REFER TO ARCHITECTURAL AND STRUCTURAL DETAILS FOR MORE INFORMATION ON ROOF SUBSTRATE. COORDINATE FLASHING OF CURB WITH ROOFING CONTRACTOR.



**KEYPLAN**



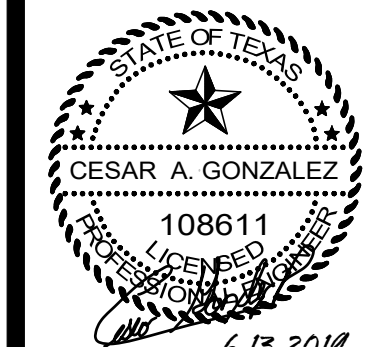
119 W. VAN BUREN AVE. STE. 001  
PHONE: 956-230-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15998





1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA  
COLLEGE PREP  
PHASE II  
Public Schools



6.12.2019

EXHAUST FAN SCHEDULE

MARK	ROOM NUMBER	TYPE	ELECTR. V/H/P	CFM	INPUT WATTS	MOTOR HP	E.S.P. IN. H2O	SOUND IN SONES	MANUFACTURER & MODEL NUMBER	WEIGHT (LBS)	CONTROL NOTES	NOTES
<b>First Floor</b>												
EF-1	TOILET 122B	CEILING MOUNTED	120/60/1	100	52.7	-	0.4	2.0	LOREN COOK GC-186	25	B	1-6
EF-2	GIRLS RESTROOM 138	CEILING MOUNTED	120/60/1	375	188.0	-	0.4	2.0	LOREN COOK GC-740	40	A	1-6
EF-3	BOYS RESTROOM 141	CEILING MOUNTED	120/60/1	375	188.0	-	0.4	2.0	LOREN COOK GC-740	40	A	1-6
EF-4	TOILET 140	CEILING MOUNTED	120/60/1	75	47.2	-	0.4	1.3	LOREN COOK GC-186	25	B	1-6
EF-5	CHEMISTRY LAB, PREP 504, 516	SUSPENDED INLINE	208/3/60	225 / 1,100	-	1/2	0.402 / 0.920	9.9	LOREN COOK 165 SQN-HP	246	A, C	1, 2, 7-11
EF-6	FUME HOOD 502	SUSPENDED INLINE	120/60/1	900	263.0	1/3	0.45	2.7	LOREN COOK ON 962 PLUSTEC	74	A, E	1-4, 6
EF-7	ACID CABINETS 518	SUSPENDED INLINE	120/60/1	50	-	1/3	0.5	-	Series 15	30	A	1.2,12,13
EF-8	CUSTODIAN 142	CEILING MOUNTED	120/60/1	175	67.6	-	0.4	2.0	LOREN COOK GC-542	40	B	1-6
EF-20	LIFE SKILLS RR/SHOWER 146B	CEILING MOUNTED	120/60/1	100	52.7	-	0.4	2.0	LOREN COOK GC-186	25	B	1-6
<b>Second Floor</b>												
EF-9	COPY ROOM	CEILING MOUNTED	120/60/1	100	52.7	-	0.4	2.0	LOREN COOK GC-186	25	D	1-6
EF-10	BREAKROOM 248	CEILING MOUNTED	120/60/1	175	67.6	-	0.4	2.0	LOREN COOK GC-542	40	D	1-6
EF-11	CUSTODIAN 512	CEILING MOUNTED	120/60/1	75	47.2	-	0.4	1.3	LOREN COOK GC-186	25	B	1-6
EF-12	GIRLS RESTROOM 252	CEILING MOUNTED	120/60/1	375	188.0	-	0.4	2.0	LOREN COOK GC-740	40	A	1-6
EF-13	BOYS RESTROOM 254	CEILING MOUNTED	120/60/1	375	188.0	-	0.4	2.0	LOREN COOK GC-740	40	A	1-6
EF-14	TOILET 253	CEILING MOUNTED	120/60/1	75	47.2	-	0.4	1.3	LOREN COOK GC-186	25	B	1-6
EF-15	ART 235	SUSPENDED INLINE	120/60/1	500	-	1/4	0.4	4.0	LOREN COOK 150 SQN-HP	200	A, D	1.2,7,8,11
EF-16	ART 236	SUSPENDED INLINE	120/60/1	500	-	1/4	0.4	4.0	LOREN COOK 150 SQN-HP	200	A, D	1.2,7,8,11
EF-17	CHEMISTRY LAB, PREP 504, 516	SUSPENDED INLINE	208/3/60	225 / 1,100	-	1/2	0.402 / 0.920	9.9	LOREN COOK 165 SQN-HP	246	A, C	1, 2, 7-11
EF-18	FUME HOOD 502	SUSPENDED INLINE	120/60/1	900	263.0	1/3	0.45	2.7	LOREN COOK ON 962 PLUSTEC	74	A, E	1-4, 6
EF-19	ACID CABINETS 518	SUSPENDED INLINE	120/60/1	50	-	1/3	0.5	-	Series 15	30	A	1.2,12,13
EF-21	CUSTODIAN 142	CEILING MOUNTED	120/60/1	175	67.6	-	0.4	2.0	LOREN COOK GC-542	40	B	1-6
<b>First Floor - Phase I Renovation - Alternate No. 4</b>												
EF1-25	TOILET 116B	CEILING MOUNTED	120/60/1	75	47.2	-	0.4	1.3	LOREN COOK GC-186	25	B	1-6

- NOTES:
- PROVIDE FACTORY MOUNTED DISCONNECT.
  - MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL." REFER TO SPECIFICATIONS.
  - PROVIDE FIELD-INSTALLED FAN SPEED CONTROLLER. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR.
  - PROVIDE FAN WITH ALL ALUMINUM BACKDRAFT DAMPER.
  - PROVIDE PAINTED WHITE DELUXE ALUMINUM GRILLE WHERE AVAILABLE. IF DELUXE ALUMINUM GRILLE IS NOT AVAILABLE, PROVIDE PAINTED WHITE STYRENE GRILLE.
  - PROVIDE SPRING TYPE VIBRATION ISOLATORS FOR SUSPENDED INLINE TYPE FANS.
  - PROVIDE RUBBER BUSHING VIBRATION ISOLATORS FOR CEILING MOUNTED TYPE FANS.
  - PROVIDE OSHA MOTOR AND BELT GUARD.
  - PROVIDE AUTOMATIC BELT TENSIONER.
  - FIRST CFM AND STATIC PRESSURE LISTED ARE NORMAL OPERATION VALUES. SECOND CFM AND STATIC PRESSURE ARE PURGE OPERATION VALUES.
  - PROVIDE TWO SPEED MOTOR. COMBINATION TWO SPEED MOTOR STARTER BY DIV. 26.
  - PROVIDE INSULATED HOUSING FOR SOUND ATTENUATION.
  - PROVIDE VIB RESISTANT POLYPROPYLENE HOUSING, BLOWER WHEEL, ADJUSTABLE INTAKE DAMPER AND BACK DRAFT DAMPER.
  - PROVIDE TEFC MOTOR OUTSIDE OF AIRSTREAM. FAN SHALL BE EXPLOSION PROOF.
- CONTROL NOTES:
- PROVIDE DDC START/STOP POINTS. REFER TO SEQUENCES OF OPERATIONS.
  - FAN SHALL BE OPERATED BY WALL SWITCH VIA THE OCCUPANCY SENSOR PROVIDED BY DIV.26 COORDINATE WITH ELECTRICAL.
  - EXHAUST FAN SHALL BE OPERATED BY UTILITY CONTROLLER. PUSHBUTTON SWITCH FOR PURGE OPERATION AND TOGGLE SWITCH FOR NORMAL OPERATION. COORDINATE WITH ELECTRICAL.
  - FAN SHALL BE OPERATED BY TIMER SWITCH PROVIDED BY DIV. 26. COORDINATE WITH ELECTRICAL.
  - FAN OPERATION SHALL BE INTERLOCKED WITH FUME HOOD LIGHT SWITCH. COORDINATE WITH ELECTRICAL CONTRACTOR.

AIR DEVICE & DIFFUSER SCHEDULE

SUPPLY AIR DIFFUSER (SD-1)					
CLG. MODULE SIZE (INCHES)		FACE SIZE (INCHES)	ROUND NECK SIZE	FLEX DUCT SIZE	DIFFUSER PATTERN & CFM
TITUS OWN-AA NC < 20					
DESCRIPTION: ALUMINUM SQUARE CEILING DIFFUSER, BORDER TYPE 3, COLOR WHITE WITH ROUND NECK AND FULL FACE					
24 X 24	24 X 24	TO MATCH NC CRITERIA	SEE PLAN	SD1-CFM	1-4,6
SUPPLY AIR GRILLE (SD-2) SIDE WALL					
NOMINAL DUCT SIZE (INCHES)		FACE SIZE (INCLUDING FRAME)		DIFFUSER PATTERN & CFM	NOTES
TITUS 2795 NC < 20					
DESCRIPTION: AEROBLADE, ALUMINUM, DOUBLE DEFLECTION DIFFUSER BORDER TYPE 1 (SURFACE MOUNT) STATIC PRESSURE: < 0.05" W.G.					
18 X 10	18 X 10	INLET SIZE PLUS 1-3/4"		SD2-CFM	1-4,6-7
RETURN, EXHAUST, TRANSFER AND BAROMETRIC RELIEF AIR GRILLE (RG-1, EG-1, TG-1, BRG-1)					
CFM RANGE		CLG. MODULE SIZE (INCHES)	NOMINAL DUCT SIZE (INCHES)	DIFFUSER PATTERN & CFM	NOTES
TITUS 50F NC < 20					
DESCRIPTION: ALUMINUM GRID EGGRATE RETURN GRILLE WITH BORDER TYPE 3 (LAY-IN).					
0 - 1600	24 X 24	18 X 18	18 X 18	RG1-CFM (RETURN AIR GRILLES ONLY)	1,4,6
0 - 1600	24 X 24	18 X 18	18 X 18	EG1-CFM (EXHAUST AIR GRILLES ONLY)	1,4,5,6
0 - 1600	24 X 24	18 X 18	18 X 18	TG1-CFM (TRANSFER AIR GRILLES ONLY)	1,4,6
0 - 2000	24 X 24	20 X 20	20 X 20	BRG1-CFM (BAROMETRIC RELIEF AIR GRILLES ONLY)	1,4,6
RETURN AIR GRILLE (RG-2) SIDE WALL					
CFM RANGE		FACE SIZE (INCHES)	LENGTH X WIDTH (INCHES)	DIFFUSER PATTERN & CFM	NOTES
TITUS 50F NC < 20					
DESCRIPTION: ALUMINUM GRID EGGRATE RETURN GRILLE WITH BORDER TYPE 1 (SURFACE).					
0-1000		18 X 10		RG2-CFM	1,4,6

NOTES:

- PROVIDE MANUFACTURER'S STANDARD BAKED WHITE ENAMEL FINISH.
- PROVIDE FULL SIZE BACK PAN WITH DUCT ADAPTER.
- INSULATE BACK PAN ON ALL SUPPLY AIR DIFFUSERS AND GRILLES.
- PROVIDE MOUNTING FRAME TYPE COMPATIBLE WITH SCHEDULED CEILING OR WALL (SURFACE OR LAY-IN).
- PROVIDE BALANCING DAMPER ON ALL EXHAUST GRILLES.
- AIR DEVICES SHALL MATCH ARCHITECTURAL FINISH. COORDINATE COLOR WITH ARCHITECT.
- PROVIDE ALUMINUM OPPOSED BLADE DAMPER TITUS MODEL AG-15-AA, OPERABLE THRU FACE OF DIFFUSER.

LOUVER SCHEDULE

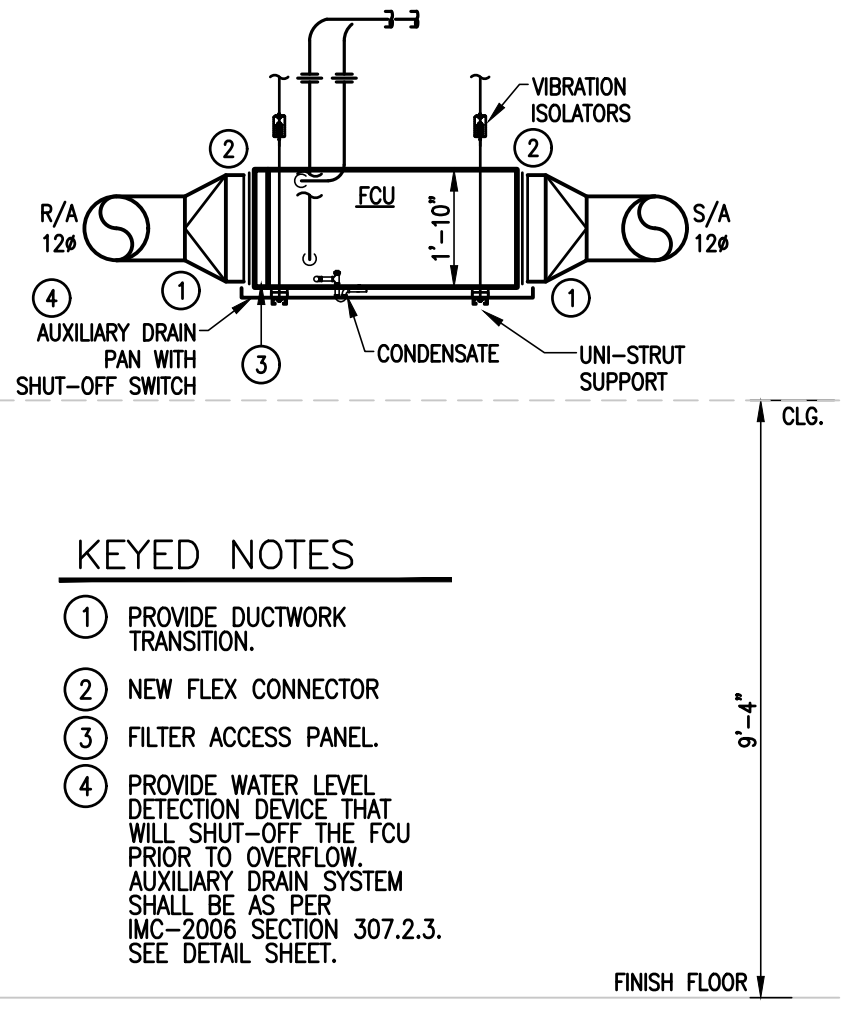
MARK	SERVES	CFM RANGE	FACE SIZE (W X H)	MIN. FREE AREA (FT2)	RUSKIN MODEL NUMBER	NOTES
<b>FIRST FLOOR</b>						
L-1	EF-1, EF-2, EF-3, EF-4	725	36 X 18	2	EMES20MD	ALL
L-2	EF-5, EF-6, EF-7	2100	48 X 36	5.09	EMES20MD	ALL
L-3	EF-8	175	18 X 12	0.41	EMES20MD	ALL
L-4	EF-20	100	12 X 12	0.28	EMES20MD	ALL
<b>SECOND FLOOR</b>						
L-5	EF-9, EF-10	275	24 X 12	0.57	EMES20MD	ALL
L-6	EF-11, EF-12, EF-13, EF-14	900	36 X 18	2	EMES20MD	ALL
L-7	EF-15, EF-16	1000	36 X 24	2.57	EMES20MD	ALL
L-8	EF-17, EF-18, EF-19	2100	48 X 36	5.09	EMES20MD	ALL
L-9	EF-21	175	18 X 12	0.41	EMES20MD	ALL

NOTES:

- PRIOR TO ORDERING, COORDINATE LOUVER FINISH AND EXACT FACE SIZE WITH ARCHITECT.
- PROVIDE STAINLESS STEEL BIRD SCREEN AND HARDWARE.
- PROVIDE FACTORY APPLIED KYNAR 500 FINISH.
- PROVIDE WITH TDI PRODUCT EVALUATION REPORT.

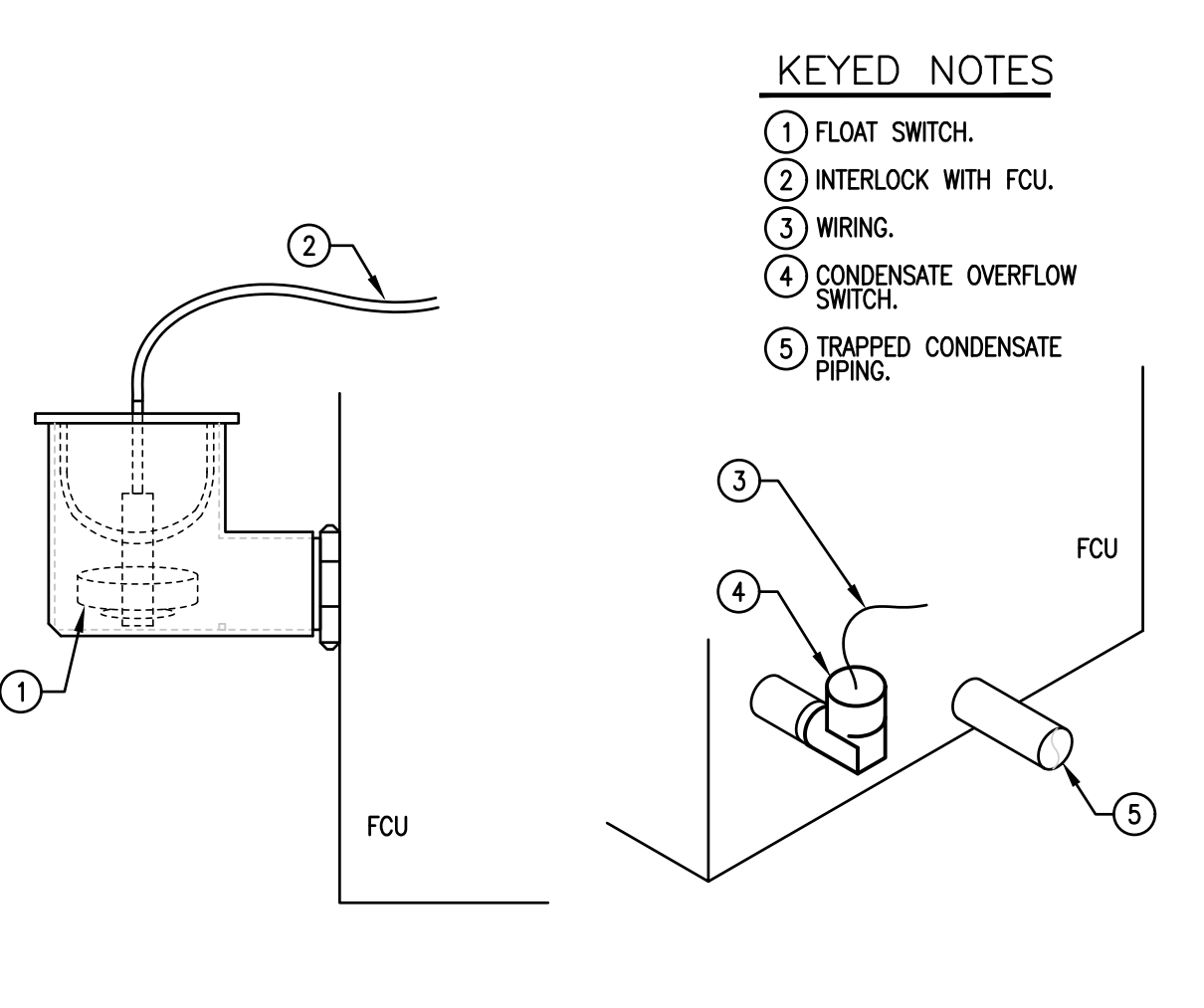
ROOFTOP UNIT SCHEDULE

MARK	NOMINAL	SUPPLY	CFM		ESP (INCHES)	MIN. HP	FLA	MCA	MOCP	AIR ON COND.	COOLING				HEATING				MIN. SEER	WEIGHT LB	NOTES	MODEL NUMBER	CARRIER
			OA	FROM							TOTAL BTUH	SENSIBLE BTUH	EAT DB/WB	LAT DB/WB	KW	STG.	ELECT. V-PH-HZ						
RTU-122	3T	1000	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	33,913	23,068	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-121	3T	1000	400	DOAS	0.8	0.5	16	18	20	460/3/60	100	32,423	27,681	76.0/64.0	55.0/55.0	8.1	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-123	3T	900	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	32,985	21,736	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-125	3T	900	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	32,985	21,736	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-124	3T	900	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	32,985	21,736	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-126	3T	900	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	32,985	21,736	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-129 / 130	3T	1200	430	DOAS	0.8	0.5	16	18	20	460/3/60	100	32,423	27,681	76.0/64.0	55.0/55.0	8.1	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-127	3T	1200	430	DOAS	0.8	0.5	16	18	20	460/3/60	100	32,423	27,681	76.0/64.0	55.0/55.0	8.1	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-128	3T	1200	430	DOAS	0.8	0.5	16	18	20	460/3/60	100	32,423	27,681	76.0/64.0	55.0/55.0	8.1	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-131	3T	900	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	32,985	21,736	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-133	3T	900	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	32,985	21,736	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-132	3T	900	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	32,985	21,736	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-134	3T	1200	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	32,423	27,681	76.0/64.0	55.0/55.0	8.1	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-135	3T	900	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	32,985	21,736	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-136	3T	900	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	32,985	21,736	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-230	3T	1200	400	DOAS	0.8	0.5	16	18	20	460/3/60	100	32,423	27,681	76.0/64.0	55.0/55.0	8.1	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-231 / 232	3T	1300	440	DOAS	0.8	0.5	16	18	20	460/3/60	100	35,125	29,988	76.0/64.0	55.0/55.0	8.1	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-235	3T	1000	350	DOAS	0.8	0.5	12	13	15	460/3/60	100	33,913	23,068	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-233	3T	1000	400	DOAS	0.8	0.5	12	13	15	460/3/60	100	33,913	23,068	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL	50LDC004	
RTU-236	3T	1000	350	DOAS	0.8	0.5	12	13	15	460/3/60	100	33,913	23,068	76.0/66.0	55.0/55.0	5.5	1	460/3/60	17.1	621	ALL		



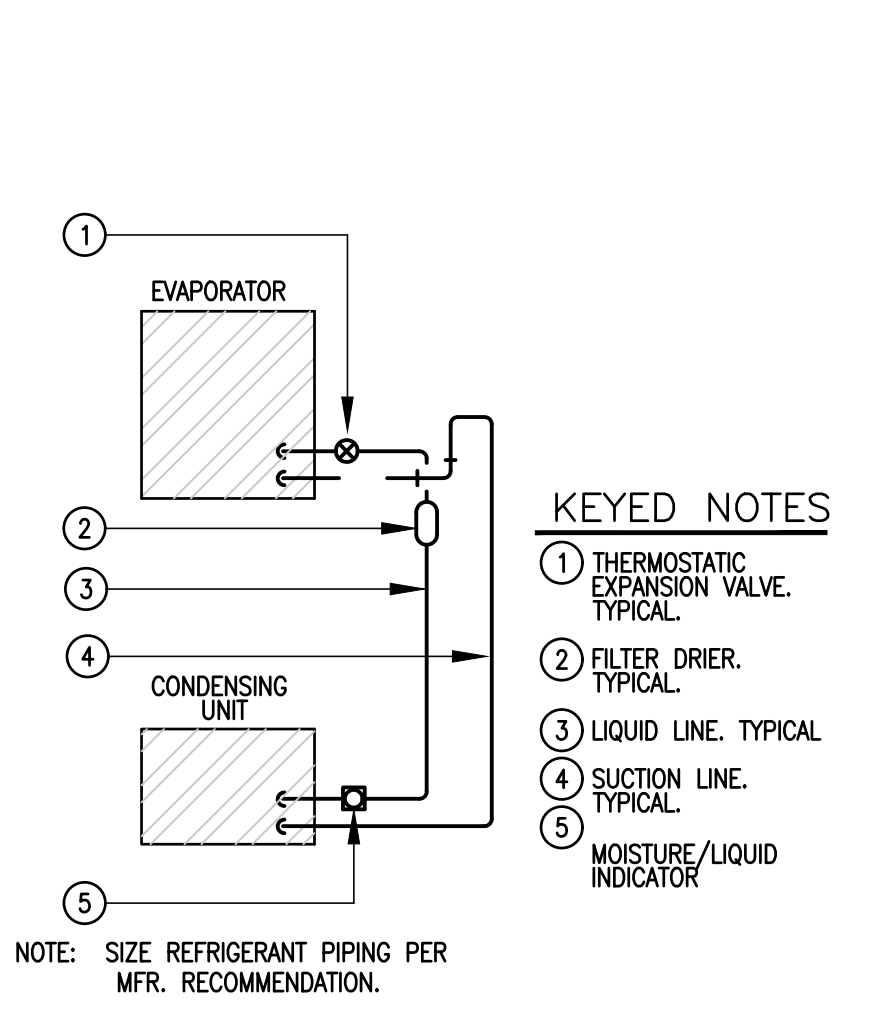
- KEYED NOTES**
- 1 PROVIDE DUCTWORK TRANSITION.
  - 2 NEW FLEX CONNECTOR.
  - 3 FILTER ACCESS PANEL.
  - 4 PROVIDE WATER LEVEL DETECTION DEVICE THAT WILL SHUT-OFF THE FCU PRIOR TO OVERFLOW. AUXILIARY DRAIN SYSTEM SHALL BE AS PER IMC-2008 SECTION 307.2.3. SEE DETAIL SHEET.

**01 FCU DETAIL ELEVATION**  
SCALE: NOT TO SCALE



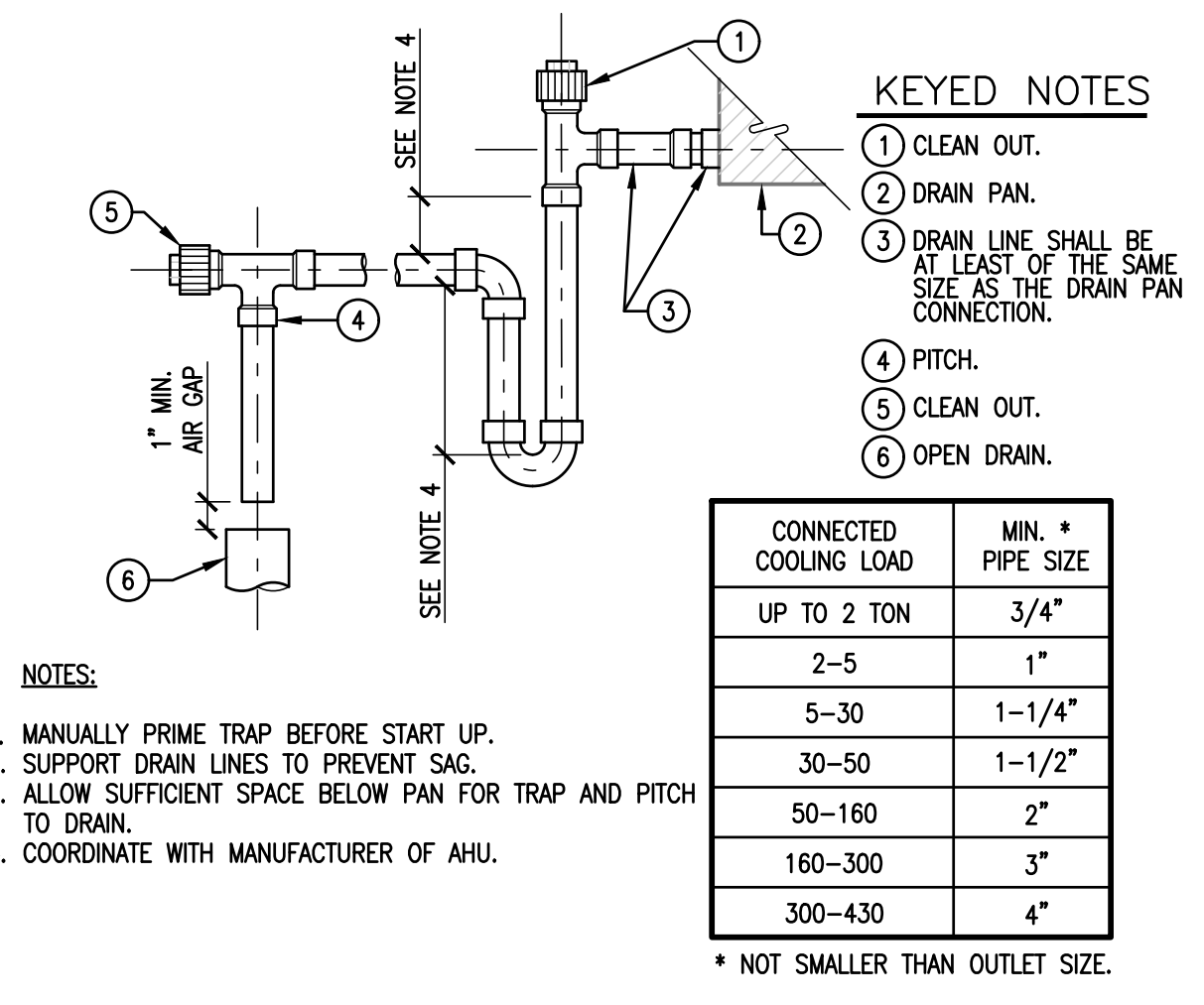
- KEYED NOTES**
- 1 FLOAT SWITCH.
  - 2 INTERLOCK WITH FCU.
  - 3 WIRING.
  - 4 CONDENSATE OVERFLOW SWITCH.
  - 5 TRAPPED CONDENSATE PIPING.

**02 CONDENSATE OVERFLOW SWITCH DETAIL**  
SCALE: NOT TO SCALE



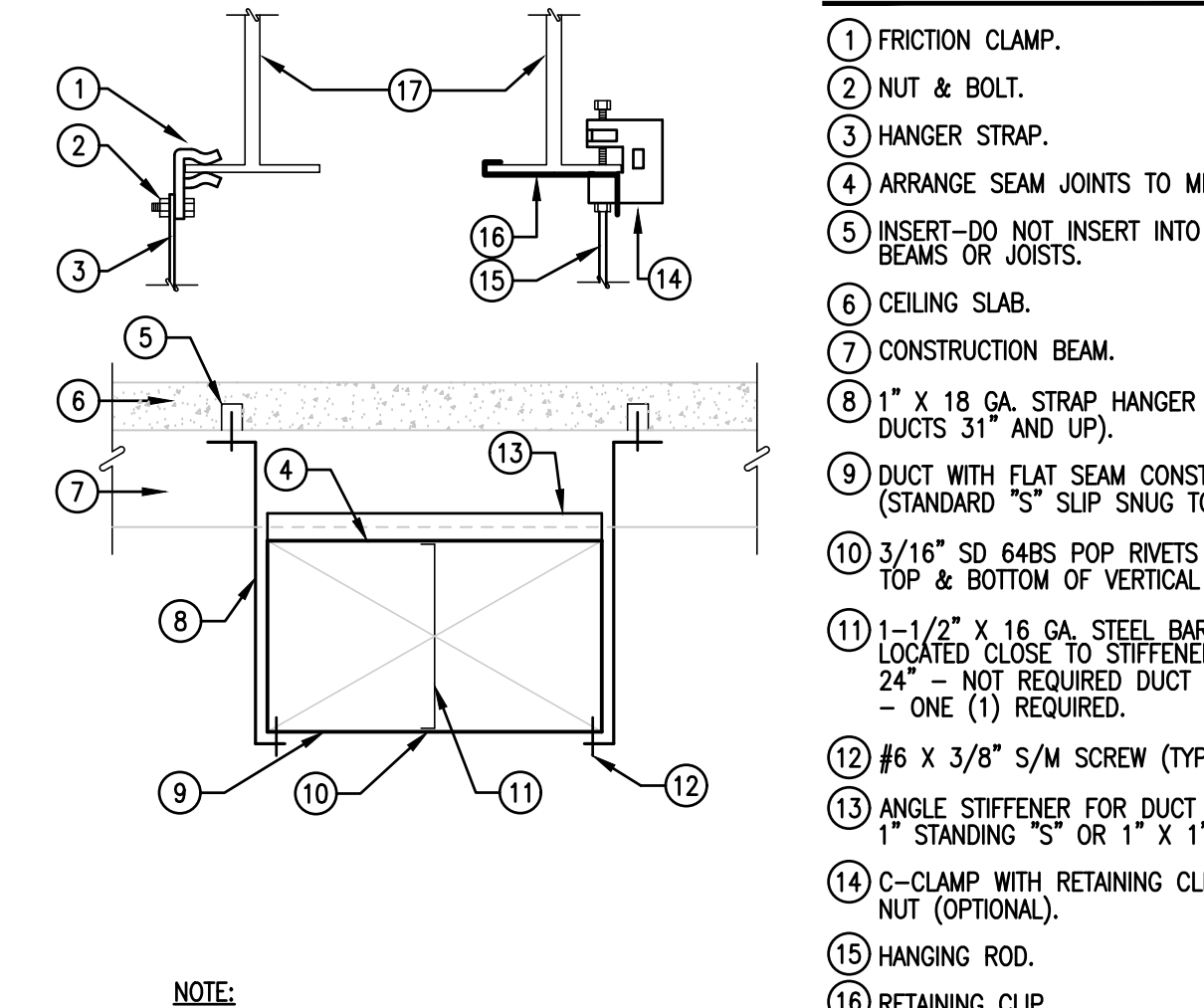
- KEYED NOTES**
- 1 THERMOSTATIC EXPANSION VALVE, TYPICAL.
  - 2 FILTER DRIER, TYPICAL.
  - 3 LIQUID LINE, TYPICAL.
  - 4 SUCTION LINE, TYPICAL.
  - 5 MOISTURE/LIQUID INDICATOR.

**03 REFRIGERANT PIPING DETAIL**  
SCALE: NOT TO SCALE



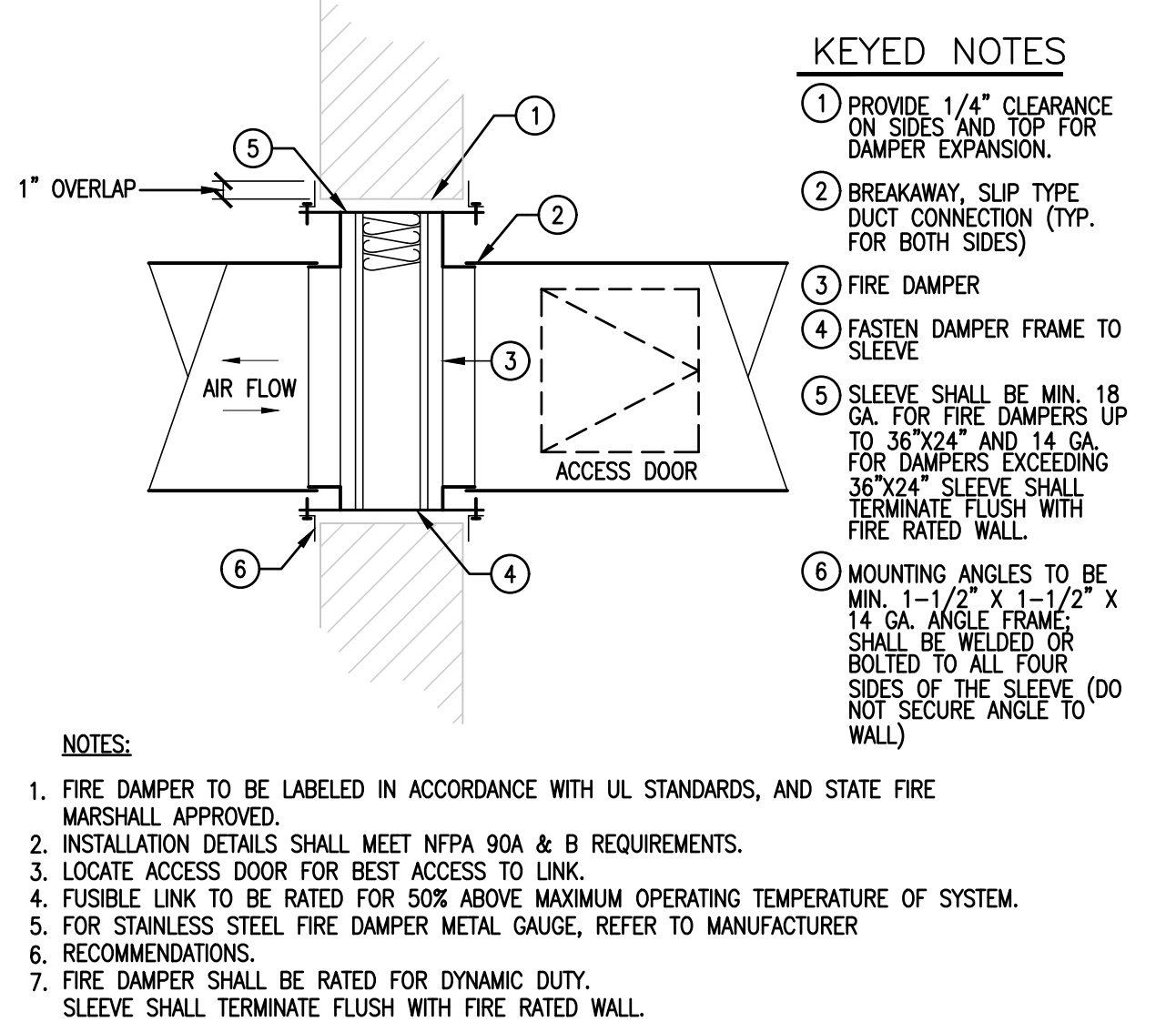
- KEYED NOTES**
- 1 CLEAN OUT.
  - 2 DRAIN PAN.
  - 3 DRAIN LINE SHALL BE AT LEAST OF THE SAME SIZE AS THE DRAIN PAN CONNECTION.
  - 4 PITCH.
  - 5 CLEAN OUT.
  - 6 OPEN DRAIN.

**04 CONDENSATE DRAIN TRAP PIPE DETAIL**  
SCALE: NOT TO SCALE



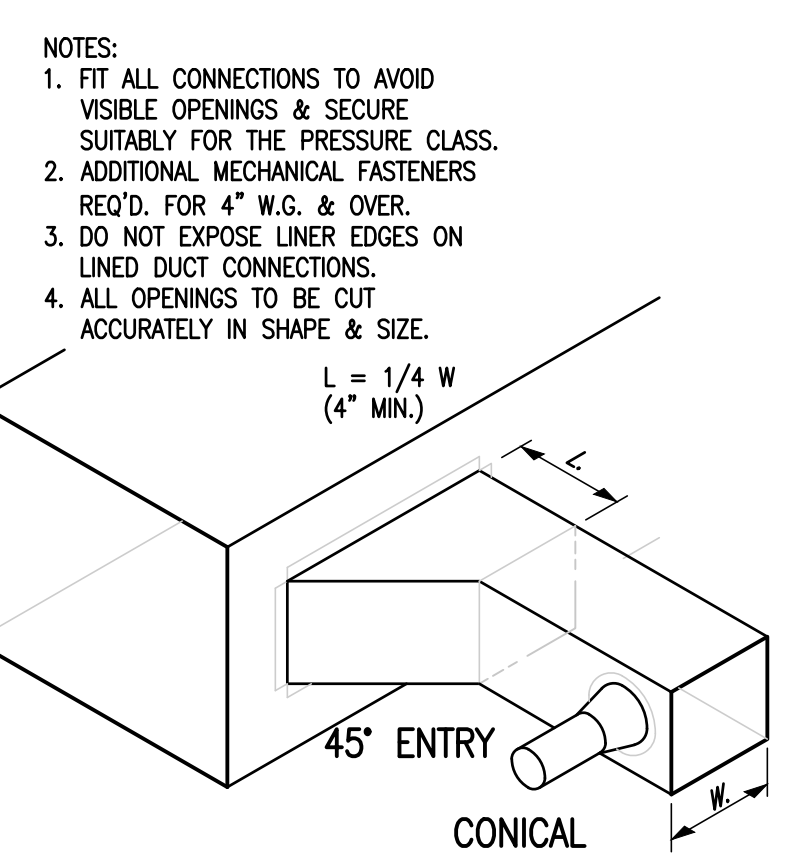
- KEYED NOTES**
- 1 FRICTION CLAMP.
  - 2 NUT & BOLT.
  - 3 HANGER STRAP.
  - 4 ARRANGE SEAM JOINTS TO MISS BEAMS.
  - 5 INSERT-DO NOT INSERT INTO BOTTOM OF BEAMS OR JOISTS.
  - 6 CEILING SLAB.
  - 7 CONSTRUCTION BEAM.
  - 8 1" X 18 GA STRAP HANGER (ONE HANGER ON DUCTS 31" AND UP).
  - 9 DUCT WITH FLAT SEAM CONSTRUCTION (STANDARD "S" SLIP SNUG TO BEAM).
  - 10 3/16" SD #48S POP RIVETS (TWO EACH AT TOP & BOTTOM OF VERTICAL STIFFENER).
  - 11 1-1/2" X 1/8" GA STEEL BAR SUPPORT LOCATED CLOSE TO STIFFENER. DUCT WIDTH TO 24" - NOT REQUIRED. DUCT WIDTH 25" TO 47" - ONE (1) REQUIRED.
  - 12 #6 X 3/8" S/A SCREW (TYP).
  - 13 ANGLE STIFFENER FOR DUCT WIDTH 25" TO 40". STANDING 5" OR 1" X 1 1/2" ANGLE.
  - 14 C-CLAMP WITH RETAINING CLIP OR WITH LOCK NUT (OPTIONAL).
  - 15 HANGING ROD.
  - 16 RETAINING CLIP.
  - 17 STRUCTURAL.

**05 DUCT SUPPORT DETAIL**  
SCALE: NOT TO SCALE



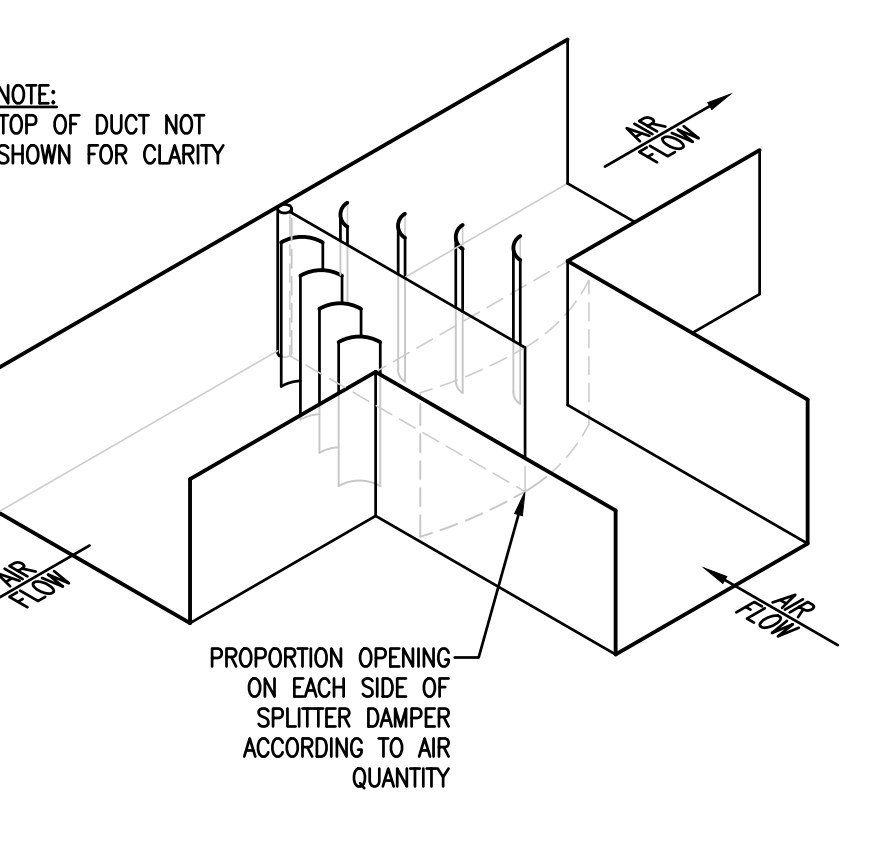
- KEYED NOTES**
- 1 PROVIDE 1/4" CLEARANCE ON SIDES AND TOP FOR DAMPER EXPANSION.
  - 2 BREAKAWAY, SLIP TYPE DUCT CONNECTION (TYP. FOR BOTH SIDES).
  - 3 FIRE DAMPER.
  - 4 FASTEN DAMPER FRAME TO SLEEVE.
  - 5 SLEEVE SHALL BE MIN. 18 GA FOR FIRE DAMPERS UP TO 36" X 24" AND 14 GA FOR DAMPERS EXCEEDING 36" X 24". SLEEVE SHALL TERMINATE FLUSH WITH FIRE RATED WALL.
  - 6 MOUNTING ANGLES TO BE MIN. 1-1/2" X 1-1/2" X 1/4" ANGLE FRAME SHALL BE WELDED OR BOLTED TO ALL FOUR SIDES OF THE SLEEVE. DO NOT SECURE ANGLE TO WALL.

**06 FIRE DAMPER WITH ACCESS PANEL DETAIL**  
SCALE: NOT TO SCALE



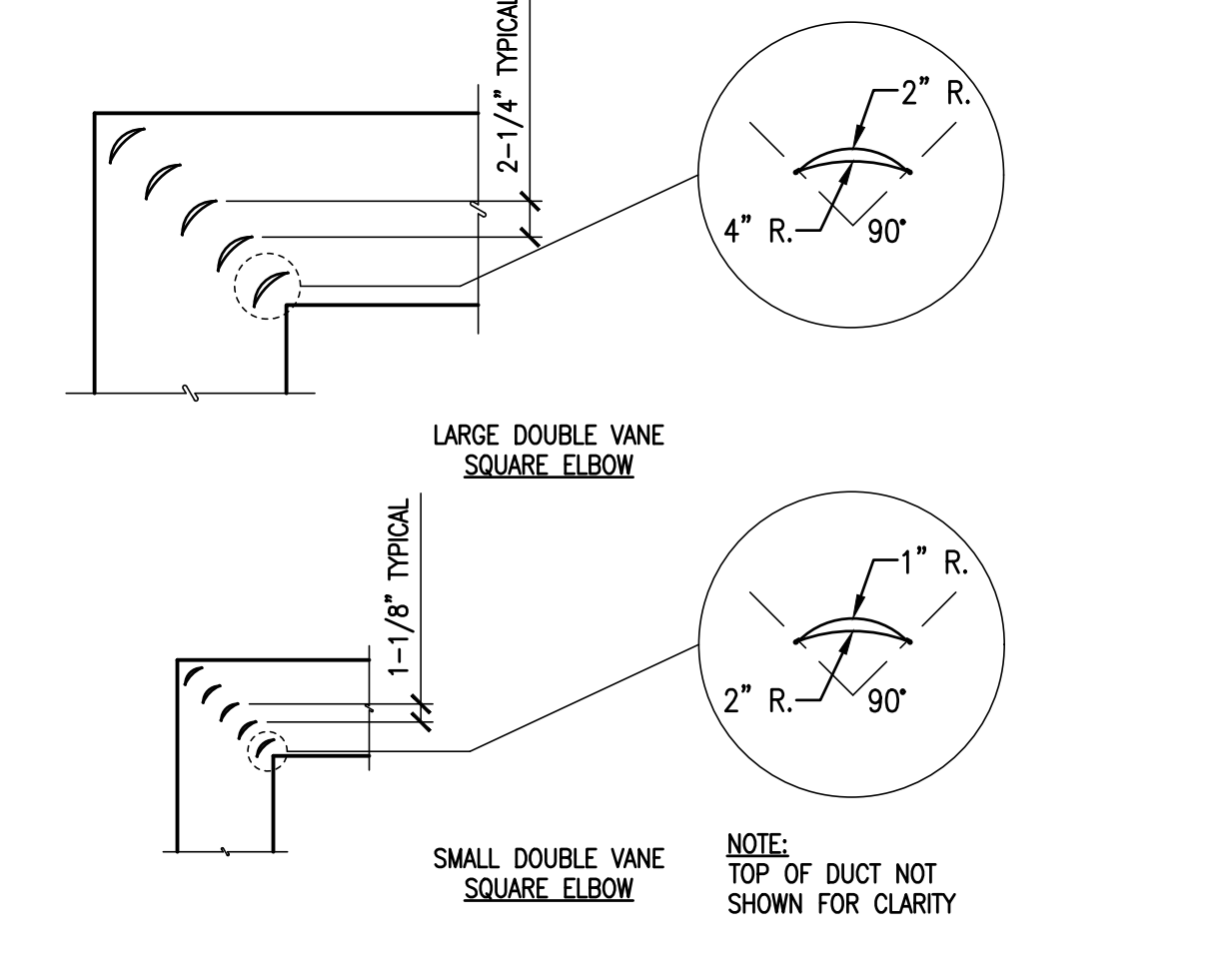
- NOTES:**
1. FIT ALL CONNECTIONS TO AVOID VISIBLE OPENINGS & SECURE SUITABLY FOR THE PRESSURE CLASS.
  2. ADDITIONAL MECHANICAL FASTENERS REQ'D. FOR 4" W.G. & OVER.
  3. DO NOT EXPOSE LINER EDGES ON LINED DUCT CONNECTIONS.
  4. ALL OPENINGS TO BE CUT ACCURATELY IN SHAPE & SIZE.
- $L = 1/4 W$  (4" MIN.)

**07 BRANCH CONNECTION DETAIL**  
SCALE: NOT TO SCALE



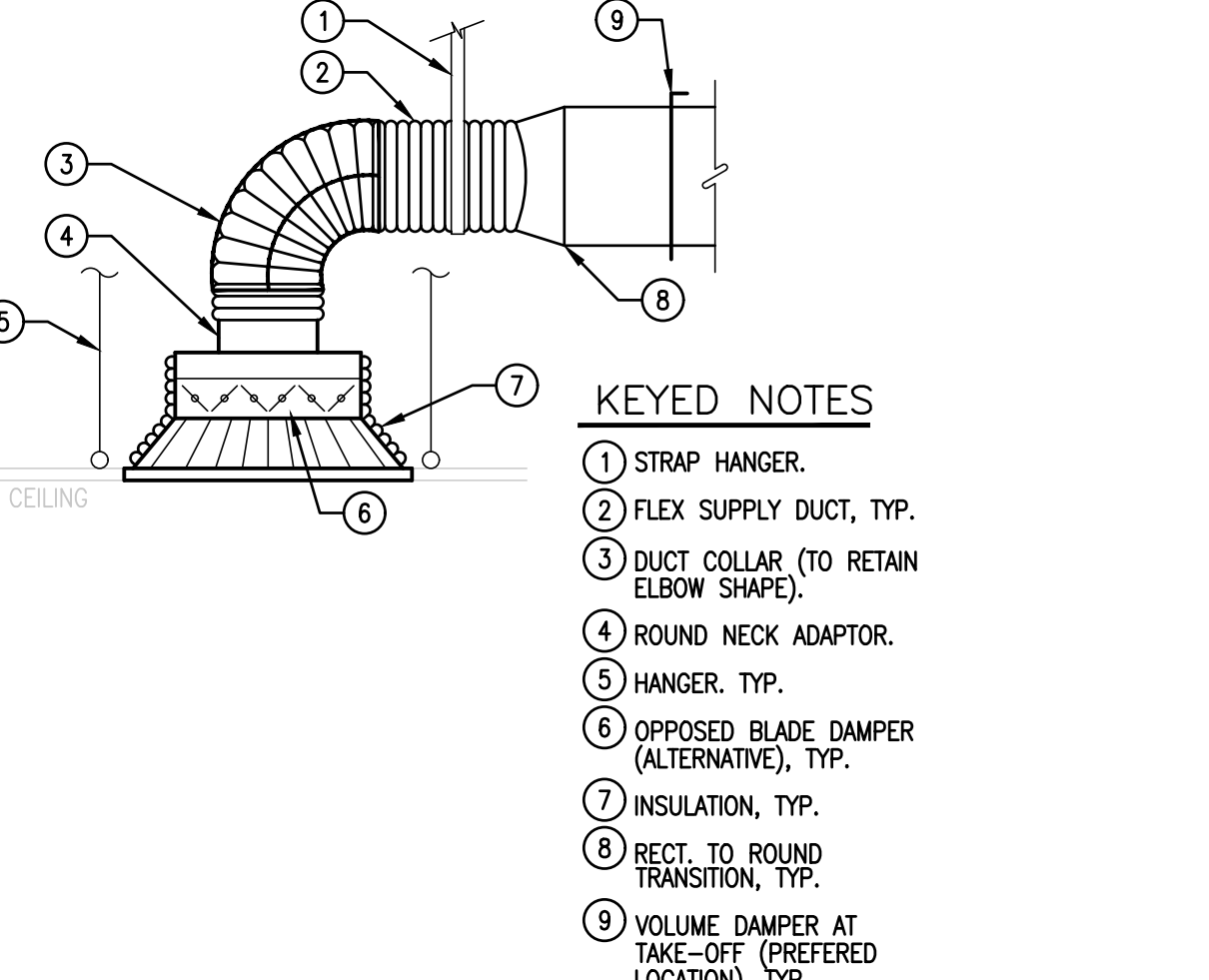
- NOTE:** TOP OF DUCT NOT SHOWN FOR CLARITY
- PROPORTION OPENING ON EACH SIDE OF SPLITTER DAMPER ACCORDING TO AIR QUANTITY

**08 TYPICAL SPLITTER DAMPER DETAIL**  
SCALE: NOT TO SCALE



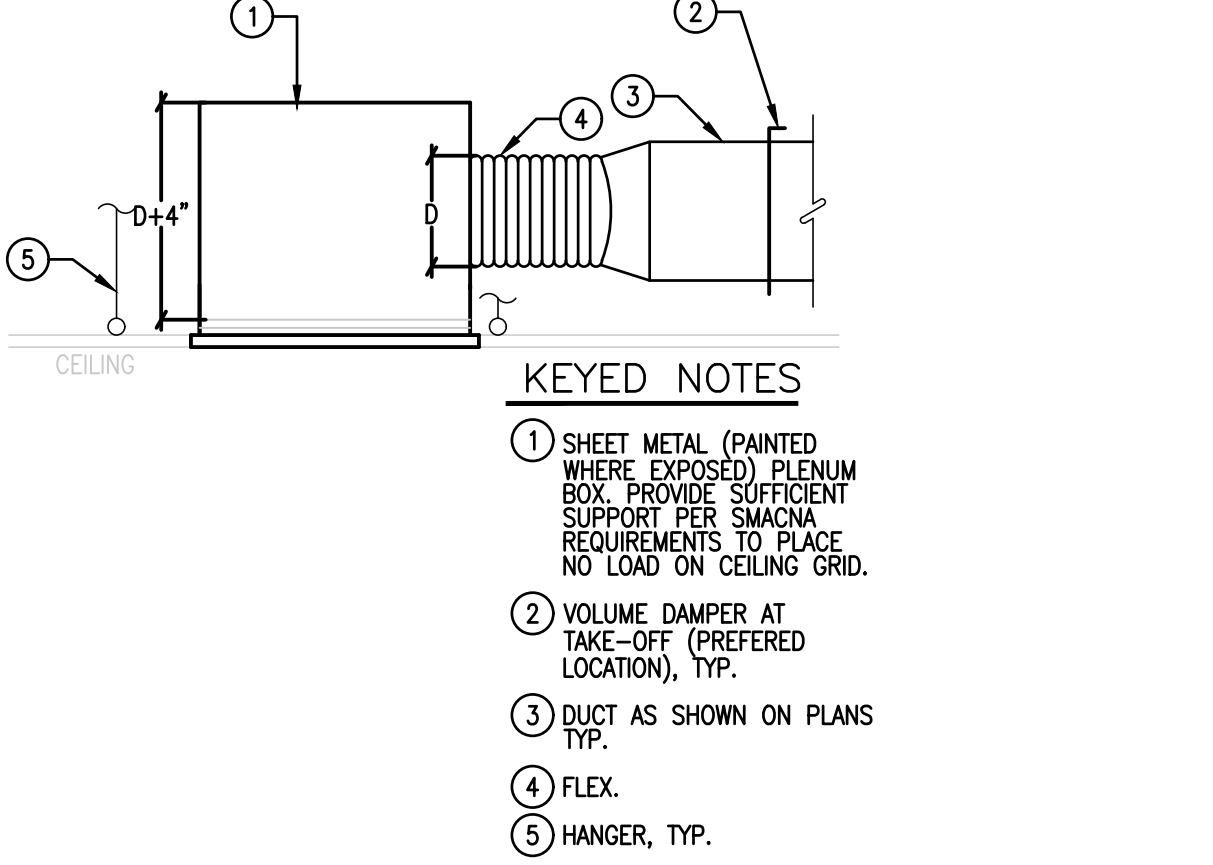
- NOTE:** TOP OF DUCT NOT SHOWN FOR CLARITY

**09 TYPICAL VANED DUCT ELBOWS DETAIL**  
SCALE: NOT TO SCALE



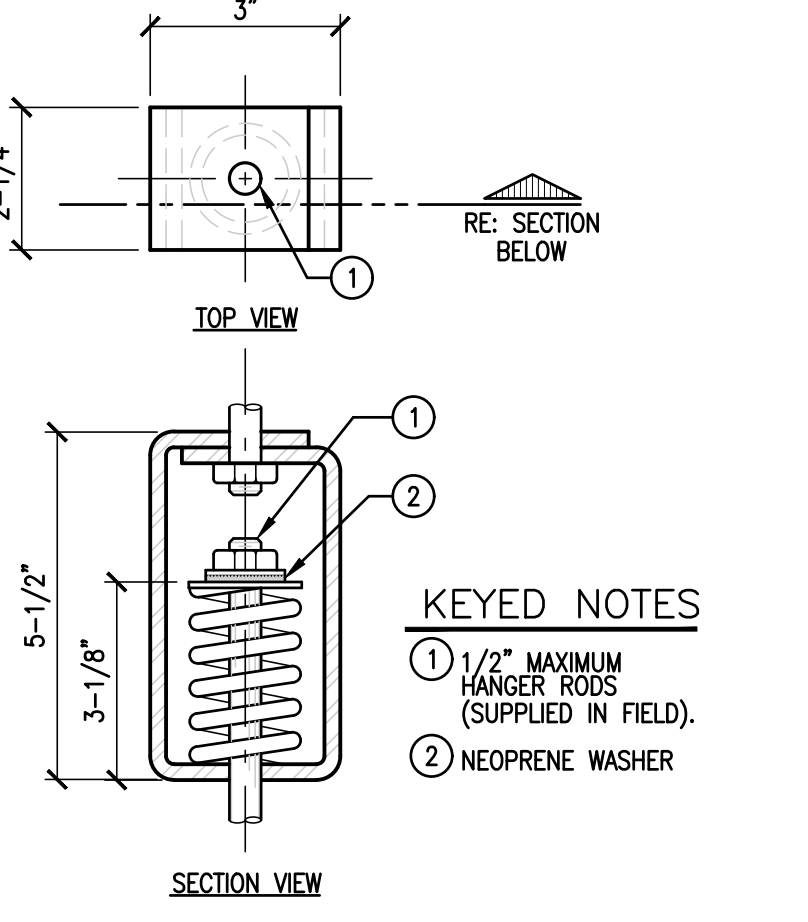
- KEYED NOTES**
- 1 STRAP HANGER.
  - 2 FLEX SUPPLY DUCT, TYP.
  - 3 DUCT COLLAR (TO RETAIN ELBOW SHAPE).
  - 4 ROUND NECK ADAPTOR.
  - 5 HANGER, TYP.
  - 6 OPPOSED BLADE DAMPER (ALTERNATIVE), TYP.
  - 7 INSULATION, TYP.
  - 8 RECT. TO ROUND TRANSITION, TYP.
  - 9 VOLUME DAMPER AT TAKE-OFF (PREFERRED LOCATION), TYP.

**10 CEILING DIFFUSER SUPPORT DETAIL**  
SCALE: NOT TO SCALE



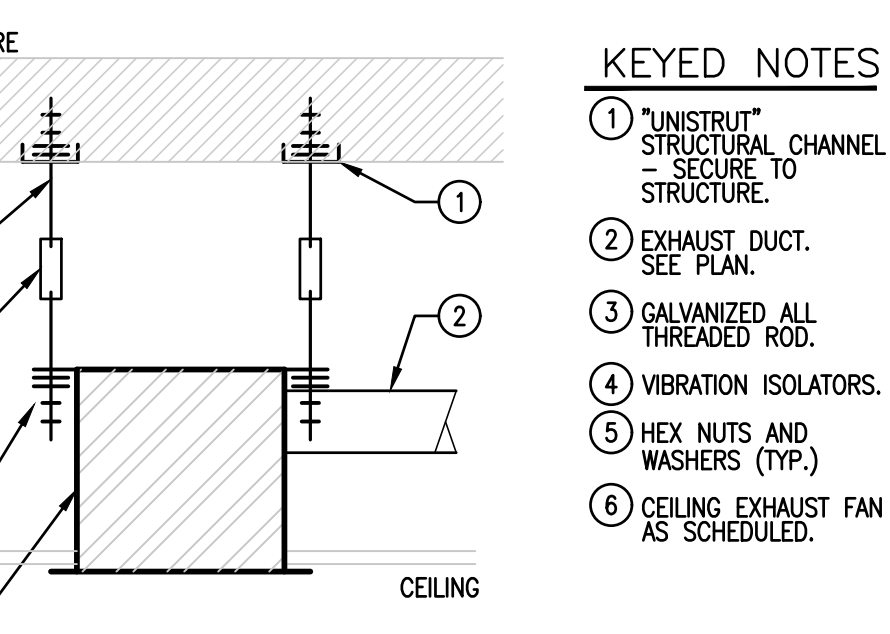
- KEYED NOTES**
- 1 SHEET METAL (PAINTED WHERE EXPOSED) PLEUM BOX PROVIDE SUFFICIENT SUPPORT FOR SMACNA REQUIREMENTS TO PLACE NO LOAD ON CEILING GRID.
  - 2 VOLUME DAMPER AT TAKE-OFF (PREFERRED LOCATION), TYP.
  - 3 DUCT AS SHOWN ON PLANS.
  - 4 FLEX.
  - 5 HANGER, TYP.

**11 CEILING RETURN GRILLE DETAIL**  
SCALE: NOT TO SCALE



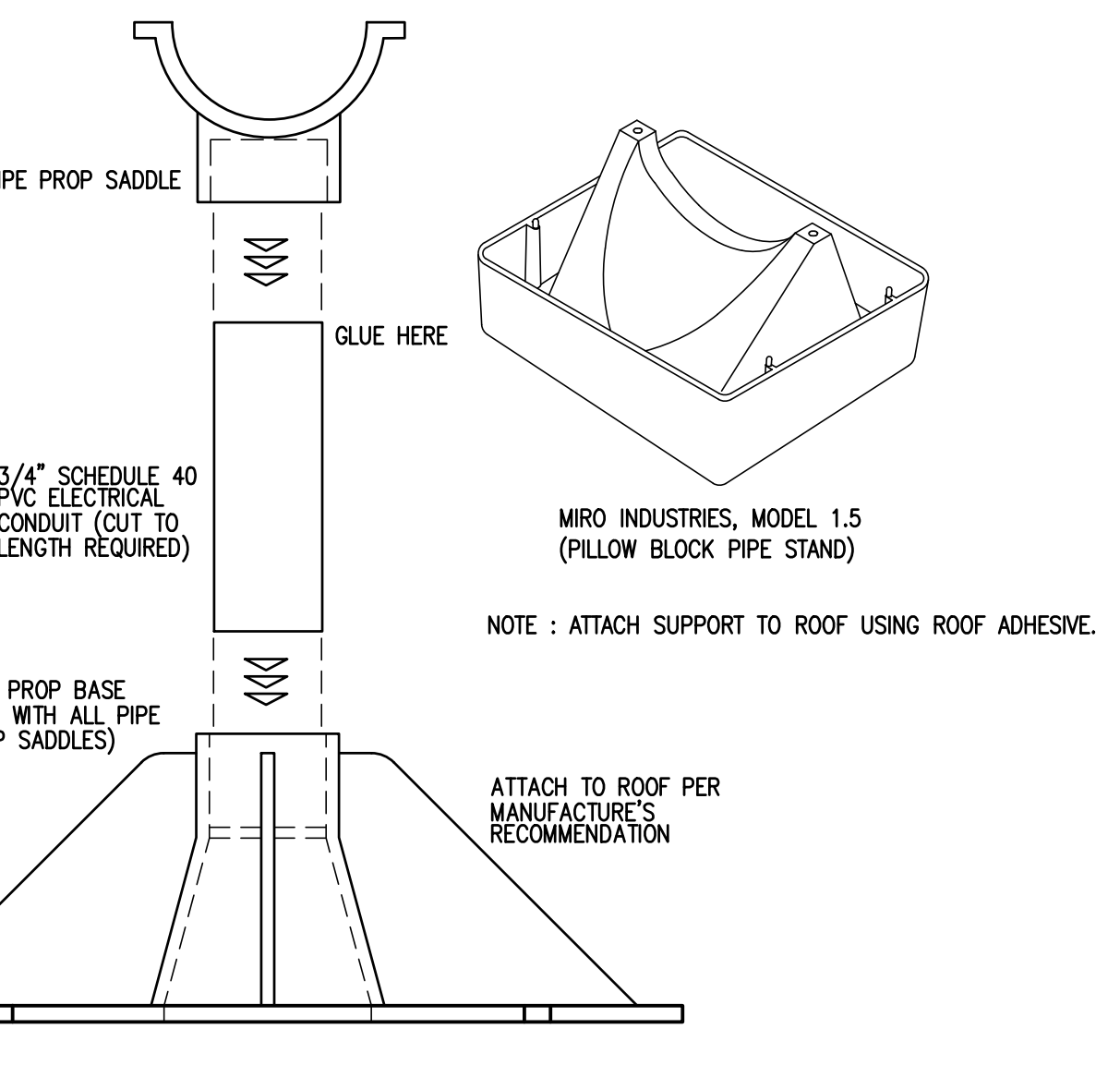
- KEYED NOTES**
- 1 1/2" MAXIMUM HANGER RODS (SUPPLIED IN FIELD).
  - 2 NEOPRENE WASHER.

**12 SPRING ISOLATION HANGER DETAIL**  
SCALE: NOT TO SCALE



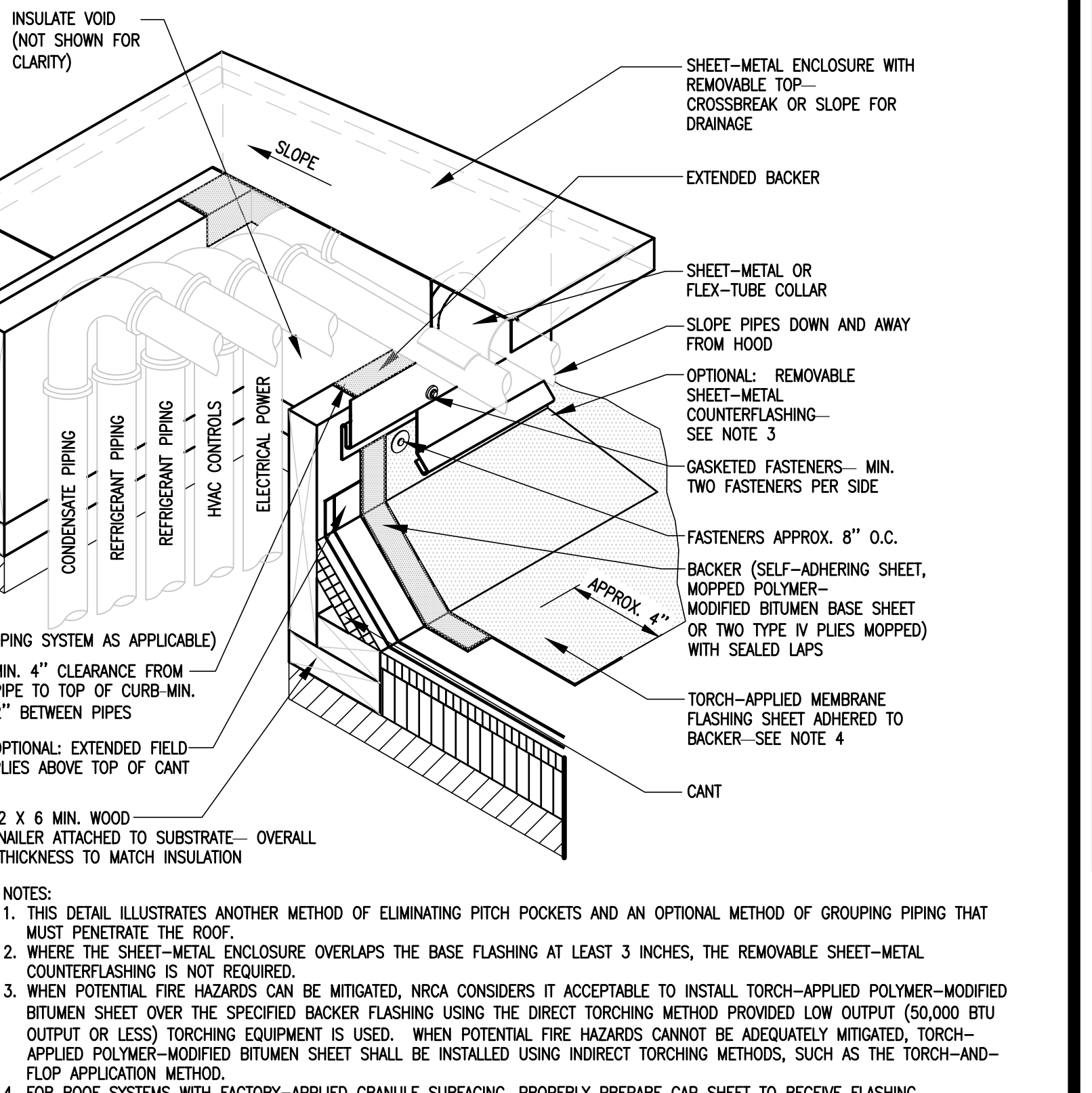
- KEYED NOTES**
- 1 "UNISTRUT" STRUCTURAL CHANNEL - SECURE TO STRUCTURE.
  - 2 EXHAUST DUCT. SEE PLAN.
  - 3 GALVANIZED ALL THREADED ROD.
  - 4 VIBRATION ISOLATORS.
  - 5 HEX NUTS AND WASHERS (TYP.).
  - 6 CEILING EXHAUST FAN AS SCHEDULED.

**13 CEILING EXHAUST FAN MOUNTING DETAIL**  
SCALE: NOT TO SCALE



- NOTE:** ATTACH SUPPORT TO ROOF USING ROOF ADHESIVE.

**14 CONDENSATE PIPE SUPPORT DETAIL**  
SCALE: NOT TO SCALE



- NOTES:**
1. THIS DETAIL ILLUSTRATES ANOTHER METHOD OF ELIMINATING PITCH POCKETS AND AN OPTIONAL METHOD OF GROUPING PIPING THAT MUST PENETRATE THE ROOF.
  2. WHERE THE SHEET-METAL ENCLOSURE OVERLAPS THE BASE FLASHING AT LEAST 3 INCHES, THE REMOVABLE SHEET-METAL COUNTERFLASHING IS NOT REQUIRED.
  3. WHEN POTENTIAL FIRE HAZARDS CAN BE MITIGATED, NRCA CONSIDERS IT ACCEPTABLE TO INSTALL TORCH-APPLIED POLYMER-MODIFIED BITUMEN SHEET OVER THE SPECIFIED BACKER FLASHING USING THE DIRECT TORCHING METHOD PROVIDED LOW OUTPUT (50,000 BTU OUTPUT OR LESS) TORCHING EQUIPMENT IS USED. WHEN POTENTIAL FIRE HAZARDS CANNOT BE ADEQUATELY MITIGATED, TORCH-APPLIED POLYMER-MODIFIED BITUMEN SHEET SHALL BE INSTALLED USING INDIRECT TORCHING METHODS, SUCH AS THE TORCH-AND-FLOP APPLICATION METHOD.
  4. FOR ROOF SYSTEMS WITH FACTORY-APPLIED GRANULE SURFACING, PROPERLY PREPARE CAP SHEET TO RECEIVE FLASHING.

**15 HVAC PIPING ROOF PENETRATION DETAIL**  
SCALE: NOT TO SCALE

REVISIONS BY

**GMS ARCHITECTS**  
1150 Parkside Lane Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  
Public Schools

© Copyright 2019  
Gomez Mendez Samz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: M6.01

6.12.2019

**ETHOS engineering**  
119 W. VAN BUREN AVE. STE. 101  
PHONE: 956-210-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15988

**ABBREVIATIONS:**

A	AMPS	EF	EXHAUST FAN	INT.	INTRUSION DETECTION
ABC	ABOVE CEILING LINE	EXT.	EXTERNAL OR EXTERIOR	NTS	NOT TO SCALE
AC	ABOVE COUNTER BACKSPLASH	FACP	FIRE ALARM CONTROL PANEL	MECH	MECHANICAL
ACCU	AIR COOLED CONDENSING UNIT	FCU	FAN COIL UNIT	MS	MOTOR STARTER
AF	ABOVE FINISHED FLOOR	FD	FIRE DAMPER	PA	PUBLIC ADDRESS
B.	BOTTOM	FS	FLAT SCREEN	PH	PHASE
BL.C.	BELOW CEILING LINE	G.	GROUND	RML	ROOM
C.	CONDUIT OR COMMON	GA.	GAGE	SPD	SURGE PROTECTION DEVICE
CLG.	CEILING	GALV.	GALVANIZED	SS	STAINLESS STEEL
COMB.	COMBINATION	GRND.	GROUND	TSTAT	THERMOSTAT
COND.	CONDUIT	HP	HORSEPOWER	UG	UNDERGROUND
CU.	COPPER	HWAC	HEATING, VENTILATION, & AIR CONDITIONING	UNO	UNLESS OTHERWISE NOTED
DDC	DIRECT DIGITAL CONTROLS			V	VOLTS
DISC.	DISCONNECT	IG	ISOLATED GROUND	W	WIRE

**SCOPE OF WORK:**

- A. THE FOLLOWING SUMMARY OF WORK IS INTENDED AS AN AID TO ACHIEVE AN UNDERSTANDING OF THE VARIOUS ELEMENTS OF WORK INCLUDED IN THE PROJECT, AS IS NOT INTENDED TO BE ALL-INCLUSIVE. DETAILED DESCRIPTIONS OF WORK AND REQUIREMENTS ARE GIVEN IN DRAWINGS AND SPECIFICATIONS.
- GENERAL: THE IDEA OWASSA PHASE II ADDITION CONSISTS OF NEW TWO STORY BUILDING, APPROXIMATE 31,126 S.F. THIS BUILDING WILL GENERALLY BE OPERATED FROM 7:00AM TO 6:00PM. (MONDAY THROUGH FRIDAY) WITH OCCASIONAL AFTER HOURS AND WEEKENDS USE.
  - ELECTRICAL: PROVIDE ALL MATERIALS AND LABOR ASSOCIATED WITH COMPLETE OPERATIONAL ELECTRICAL DISTRIBUTION SYSTEM. MAJOR ITEMS OF WORK INCLUDE, BUT ARE NOT LIMITED TO:
    - ELECTRICAL SERVICE:
      - CONNECT TO EXISTING SWITCHBOARD.
      - SINGLE PHASE PROTECTION: PROVIDE AS NOTED ON PANELS SCHEDULES.
    - LIGHTING SYSTEMS: INTERIOR LIGHTING SYSTEM SHALL CONSIST OF LED LIGHT FIXTURES.
    - POWER SYSTEMS: PROVIDE MISCELLANEOUS DUPLEX RECEPTACLES, ISOLATED GROUND RECEPTACLES FOR COMPUTER TERMINALS, DUPLEX RECEPTACLES FOR FLAT SCREENS, CONNECTIONS FOR HWAC AND PLUMBING EQUIPMENT.
    - MULTIMEDIA SYSTEM: PROVIDE MULTIMEDIA OUTLETS FOR WALL MOUNT PROJECTORS AND FLAT SCREENS INCLUDING CONNECTORS, WIRING ETC.
    - FIRE ALARM SYSTEM: EXPAND EXISTING ADDRESSABLE CONTROL PANEL WITH VOICE EVALUATION CAPABILITIES TO ACCOMMODATE NEW BUILDING INDICATING AND INITIATING DEVICES. INDICATING DEVICES SHALL ALSO BE PROVIDED TO COMPLY WITH NFPA 2012.
    - SCHOOL INTERCOM SYSTEM:
      - PHASE II: PROVIDE NEW BUILDING SPEAKERS AND CALL-IN SWITCHES IN CLASSROOMS AND OFFICES. HALLWAYS AND BUILDING EXTERIOR WALLS WITH SPEAKERS TO TRANSMIT GENERAL ANNOUNCEMENTS.
      - PHASE I: UPGRADE EXISTING CONTROL PANEL. IF EXISTING DEVICES AND CABLING ARE NOT COMPATIBLE WITH NEW CONTROL PANEL, REMOVE AND PROVIDE NEW.
    - INTRUSION DETECTION SYSTEM: EXPAND AS REQUIRED EXISTING CONTROL PANEL TO ACCOMMODATE NEW BUILDING KEYPADS, MOTION DETECTORS AND MAGNETIC CONTACTS AS NOTED ON DRAWINGS.
    - COMMUNICATION AND DATA PROCESSING EQUIPMENT: PROVIDE CABLING, CONNECTORS, PATCH PANELS, RACKS, ETC.
    - EXTERIOR ATHLETIC LIGHTING: PROVIDE SOCCER FIELDS(S) WITH STEEL POLES AND LED POWERED LIGHT FIXTURES AND ASSOCIATED ELECTRICAL DISTRIBUTION SYSTEM.

**SUBMITTALS -SPECIAL REQUIREMENTS**

- MANUFACTURER'S STANDARD DIMENSIONED DRAWINGS, PERFORMANCE AND PRODUCT DATA SHALL BE EDITED TO DELETE REFERENCE TO EQUIPMENT, FEATURES, OR INFORMATION, WHICH IS NOT APPLICABLE TO THE EQUIPMENT BEING SUPPLIED FOR THIS PROJECT, INCLUDING BILL OF MATERIALS.
- FAKES AND COPIES OF FAKES ARE NOT ACCEPTABLE.
- ELECTRICAL SUBMITTALS SHALL BE SUBMITTED ELECTRONICALLY. PLEASE ORGANIZE THE FILES IN PACKAGES AS FOLLOWS (PDF FORMAT). FILES WOULD NEED TO BE PROPERLY IDENTIFIED (COVER LETTER, STAMPED, ETC.) FROM THE GENERAL CONTRACTOR.
  - MISCELLANEOUS ELECTRICAL
    - 268519 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
    - 268526 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
    - 268529 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
    - 268533 RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS
    - 268553 IDENTIFICATION FOR ELECTRICAL SYSTEMS
    - 268544 SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING
    - 265726 WIRING DEVICES
    - 268558 HAND DRYER
  - ELECTRICAL GEAR
    - 262280 LOW VOLTAGE TRANSFORMERS
    - 262416 PANELBOARDS
    - 262913 FUSES
    - 262816 ENCLOSED SWITCHES AND CIRCUIT BREAKERS
    - 262913 ENCLOSED CONTROLLERS
    - 264313 SURGE PROTECTION FOR LOW-VOLTAGE ELECTRICAL POWER CIRCUIT
  - ELECTRICAL STUDIES
    - 268572 OVERCURRENT PROTECTIVE DEVICE SHORT-CIRCUIT STUDY
    - 268574 ARCH FLASH STUDY
  - LIGHT FIXTURES
    - 265116 INTERIOR LIGHTING
    - 265219 EMERGENCY AND EXIT LIGHTING
    - 265621 EXTERIOR LIGHTING
    - 268623 LIGHT CONTROL DEVICES
    - 268943.23 RELAY BASED LIGHTING CONTROL
    - 265668 EXTERIOR ATHLETIC LIGHTING
  - SPECIAL SYSTEMS:
    - 267218 FIRE ALARM SYSTEM
    - 267238 SCHOOL INTERCOM
    - 267240 INTRUSION DETECTION SYSTEM
    - 269758 VOICE AND DATA COMMUNICATIONS CABLING EQUIPMENT
  - COMMISSIONING:
    - 268986 COMMISSIONING OF ELECTRICAL SYSTEMS

**LIGHTING SYMBOL LEGEND:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	2'X4' LIGHT FIXTURE - TYPE AS NOTED	- - - -
	EMERGENCY 2'X4' LIGHT FIXTURE-TYPE AS NOTED CONNECT BATTERY PACK TO BE ON AT ALL TIMES (UNSWITCHED)	- - - -
	SURFACE/WRAPAROUND LIGHT FIXTURE	- - - -
	SURFACE/WRAPAROUND EMERGENCY LIGHT FIXTURE CONNECT BATTERY PACK TO BE ON AT ALL TIMES (UNSWITCHED)	- - - -
	SINGLE FACE EXIT SIGN CEILING OR WALL MOUNTING (DIRECTIONAL ARROWS WHERE INDICATED)	12" ABV. EGRESS OPENING
	DOUBLE FACE EXIT SIGN CEILING OR WALL MOUNTING (DIRECTIONAL ARROWS WHERE INDICATED)	12" ABV. EGRESS OPENING
	EMERGENCY LIGHTING UNIT	8'-0" AFF
	WALL MOUNT LIGHT FIXTURE - TYPE AS NOTED	

- NOTES:**  
1.) REFERENCE LIGHT FIXTURE SCHEDULE FOR ALL MOUNTING HEIGHTS.

**WIRING DEVICES SYMBOL LEGEND:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
S	SINGLE POLE TOGGLE SWITCH - HUBBELL MODEL #HBL1221X	48" AFF
S <sub>3</sub>	THREE WAY TOGGLE SWITCH - HUBBELL MODEL #HBL1223X	48" AFF
S <sub>4</sub>	FOUR WAY TOGGLE SWITCH - HUBBELL MODEL #HBL1224X	48" AFF
S <sub>6</sub>	KEYED TOGGLE SWITCH CORBIN TYPE - HUBBELL MODEL #HBL1221RKLX	48" AFF
S <sub>10</sub>	DIGITAL SWITCH - MODEL #CH1 X X PWH	48" AFF

- NOTES:**  
1.) 48" AFF INDICATES TO TOP OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

**WIRING DEVICES SYMBOL LEGEND:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DUPLEX RECEPTACLE TAMPER RESISTANT - HUBBELL MODEL #B300XTR	18" AFF
GFCI	DUPLEX RECEPTACLE TAMPER RESISTANT W/ GROUND FAULT INTERRUPTING TYPE - HUBBELL MODEL #GFR1ST28X	18" AFF
GFCI W/ICP	DUPLEX RECEPTACLE TAMPER RESISTANT W/ GRND. FAULT INTERRUPTING TYPE - HUBBELL MODEL #GFR1ST28X & WHILE IN USE WEATHERPROOF COVER - HUBBELL MODEL #WPE2H	18" AFF
AC	DUPLEX RECEPTACLE TAMPER RESISTANT - HUBBELL MODEL #B300XTR MOUNT @ +4" HORIZONTALLY ABOVE COUNTER BACKSPLASH (U.N.O.)	4" ACB
IG	DUPLEX RECEPTACLE TAMPER RESISTANT ISOLATED GROUND TYPE - HUBBELL MODEL #I63352TR	18" AFF
FS	DUPLEX RECEPTACLE FOR FLAT SCREEN - HUBBELL MODEL #CRS352X	84" AFF
	SPECIAL RECEPTACLE - TYPE AS NOTED	18" AFF
WB	JUNCTION BOX W/ BLANK COVERPLATE	AS REQUIRED
USB	DUPLEX RECEPTACLE AND USB RECEPTACLE COMBINATION - HUBBELL MODEL #USB28X2X	18" AFF
WB	DUPLEX RECEPTACLE FOR WHITE BOARD PROJECTOR - HUBBELL MODEL #CRS352X	AS REQUIRED
	POLYMER CONCRETE PULL BOX W/ LOGO COVER - SEE DETAIL	AS REQUIRED
	CLOCK HANGER FOR SINGLE FACE CLOCK - HUBBELL MODEL #HBL5235 (2" INDICATES DUAL SIDED CLOCK)	9'-0" AFF

- NOTES:**  
1.) U.N.O. INDICATES UNLESS NOTED OTHERWISE.  
18" AFF INDICATES TO TOP OF DEVICE.  
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.  
AC INDICATES 4" ABOVE COUNTER TO BOTTOM OF DEVICE.

**GENERAL SYMBOL LEGEND:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO
	DISCONNECT SWITCH - NON FUSED	AS REQUIRED
	DISCONNECT SWITCH - FUSED	AS REQUIRED
	COMBINATION MOTOR STARTER/DISCONNECT SWITCH	AS REQUIRED
	MOTOR CONNECTION	AS REQUIRED
	EQUIPMENT CONNECTION	AS REQUIRED
	ELECTRICAL PANELBOARD - SURFACE MOUNTED	AS REQUIRED
	ELECTRICAL PANELBOARD - RECESSED/FLUSH MOUNTED	AS REQUIRED
	SURGE PROTECTION DEVICE	AS REQUIRED
	UNDERGROUND RACEWAY	AS REQUIRED
	CONCEALED RACEWAY	AS REQUIRED
	CONDUIT OR EMT HOMERUN TO PANELBOARD CONCEALED IN WALLS OR ABOVE CEILING. LONG CROSSMARKS DENOTE NUMBER OF "HOT" CONDUCTORS SHORT CROSSMARKS INDICATE NEUTRALS AND DOTS INDICATE NUMBER OF GROUND CONDUCTORS. ARROW INDICATES HOME RUN TO ELECTRICAL PANEL.	AS REQUIRED

**FIRE ALARM SYMBOL LEGEND:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	FIRE ALARM MANUAL PULLSTATION - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE.	48" AFF
	FIRE ALARM STROBE HORN CEILING OR WALL MOUNTED - PROVIDE 15/75 CANDELA UNO.C. - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE.	80" AFF
	FIRE ALARM SPEAKER STROBE CEILING OR WALL MOUNTED - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE. PROVIDE WIREGUARD "WG" WHERE DESIGNATED.	80" AFF
	FIRE ALARM STROBE LIGHT CEILING OR WALL MOUNTED - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE.	80" AFF
	FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE.	CLG.
	FIRE ALARM HEAT DETECTOR CEILING OR WALL MOUNTED - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE.	CLG.
	FIRE ALARM H.V.A.C. DUCT SMOKE DETECTOR W/ SHUNT TRIP RELAY - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE. PROVIDE A REMOTE TEST SWITCH IN ACCESSIBLE LOCATION.	- - - -

- NOTES:**  
1.) 48" AFF INDICATES TO TOP OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

**SPECIAL SYSTEMS SYMBOL LEGEND:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	3-GANG FLAT SCREEN OUTLET - PROVIDE LARGE CAPACITY WALL BOX HUBBELL MODEL NO. HBL263 WITH 1.5" RACEWAY STUBBED INTO ACCESSIBLE CLG. W/ PULL WIRE AND MUD RING AND HBL981 LOW VOLTAGE DIVIDER. NUMBER INDICATES AMOUNT OF DATA DROPS.	72" AFF
	MULTIMEDIA OUTLET - PROVIDE 2-GANG MUD RING SECURED TO METAL STUDS WITH METAL STRAP WITH 1.5" RACEWAY STUBBED INTO ACCESSIBLE CLG. W/ PULL WIRE AND MUD RING - SEE DETAIL. NUMBER INDICATES AMOUNT OF DATA DROPS.	18" AFF
	DATA OUTLET/VOICE OVER IP - PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE - SEE DETAIL. NUMBER INDICATES AMOUNT OF DATA DROPS.	18" AFF
	WIRELESS ACCESS POINT - PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE - SEE DETAIL. NUMBER INDICATES AMOUNT OF DATA DROPS.	CLG.
	JUNCTION BOX FOR WHITE BOARD PROJECTOR - SEE DETAIL. NUMBER INDICATES AMOUNT OF DATA DROPS.	AS REQUIRED

- NOTES:**  
1.) 48" AFF INDICATES TO TOP OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

**INTRUSION DETECTION SYMBOL LEGEND:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	INTRUSION DETECTION MOTION DETECTOR FULL COVERAGE TYPE - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE.	9'-0" AFF
	INTRUSION DETECTION MOTION DETECTOR HALLWAY COVERAGE TYPE - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE.	9'-0" AFF
	INTRUSION DETECTION GLASS BREAK SENSOR	ABV. CLG.
	INTRUSION DETECTION KEYPAD PROVIDE WITH STI COVER - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE.	48" AFF
	INTRUSION DETECTION DOOR MAGNETIC CONTACT - PROVIDE WITH 1/2" C AND PULLWIRE.	- - - -

- NOTES:**  
1.) 48" AFF INDICATES TO TOP OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

**INTERCOM SYSTEMS SYMBOL LEGEND:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	INTERCOM OUTDOOR HORN WEATHER PROOF - PROVIDE BACKBOX W/ 1/2" C AND PULLWIRE.	9'-6" AFF
	INTERCOM BUTTON - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE .	48" AFF
	INTERCOM SPEAKER CEILING MOUNT	CLG.
	INTERCOM ADMINISTRATION CONTROL STATION HANDSET - PROVIDE BACKBOX WITH 1/2" C AND PULLWIRE STUBBED INTO ACCESSIBLE CLG.	18" AFF

- NOTES:**  
1.) 48" AFF INDICATES TO TOP OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

**LUTRON CONTROL SYMBOLS:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO
	DIMMING WALLSTATION - LUTRON PX-2BR-L-QWH-101	48" AFF
	ENERGI SAVR NODE - LUTRON QSN-4116-S	AS REQUIRED
S <sub>10</sub>	2-BUTTON CONTROL STATION - LUTRON MODEL #QSWS2-281-WH	48" AFF
S <sub>15</sub>	VACANCY DIMMING WALL SENSOR SWITCH - LUTRON MODEL #MS-2101-V-WH. PROVIDE 0-10V SIGNAL WIRE IN RACEWAY FROM SWITCH TO EACH CONTROLLED LIGHT FIXTURE.	48" AFF
S <sub>63</sub>	COMPANION 3-WAY SWITCH - LUTRON MODEL #MA-AS-WH. PROVIDE COMMUNICATION WIRE IN RACEWAY TO CORRESPONDING VACANCY WALL SWITCH SENSOR.	48" AFF
S <sub>7</sub>	EXHAUST FAN TIMER SWITCH - LUTRON MODEL #MA-TS1 (CW-1-WH)	48" AFF
	STANDARD RANGE LOW VOLTAGE DUAL TECH CEILING VACANCY SENSOR - LUTRON MODEL #LOS-CDT-2800-WH.	CLG.
	EXTENDED RANGE LOW VOLTAGE DUAL TECH CEILING VACANCY SENSOR - LUTRON MODEL #LOS-CDT-2800-WH.	CLG.
	POWER PACK FOR EXHAUST FAN - LUTRON MODEL #PP-DV. INTERFACE WITH ROOM VACANCY SENSOR.	ABV. CLG.

- NOTES:**  
1.) 48" AFF INDICATES TO TOP OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE. REFERENCE LIGHTING CONTROL SCHEMATIC DETAILS FOR ALL LUTRON CONTROLS WIRING REQUIREMENTS.

**REVISIONS**

No.	REVISIONS	BY

GMS ARCHITECTS

1150 Paredes Lne Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA COLLEGE PREP PHASE II

IDEA Public Schools

RAY PEINADO  
125390  
TEXAS REGISTERED  
ENGINEER

6.12.2019

© Copyright 2019  
Gomez-Mendez-Saenz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: **E2.01**

Ethos Engineering

119 W. VAN EPPEN AVE. STE. 101  
PHONE: 361-210-3425  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-1598



1150 Paradise Ln. Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

**GENERAL NOTES:**

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 200/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. MULTIPLE OCCUPANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0-10V SIGNAL WIRING TO EACH DIMMED LIGHT EXISTING DRIVER AND WALL SWITCH.
6. EACH 200/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

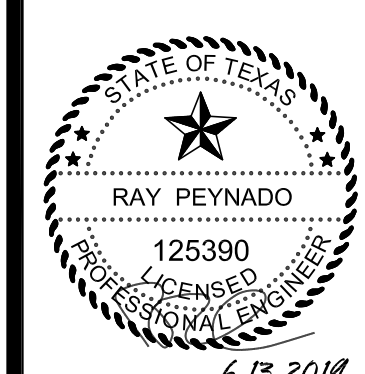
**KEYED NOTES:**

- 1 NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES - TYPICAL.
- 2 CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH - TYPICAL.
- 3 MOUNT FIXTURE TYPE "L2E" 12" ABOVE MIRROR - TYPICAL.
- 4 MOUNT LIGHT FIXTURE TYPE "ME" AT 8'-0" AFF TO CENTER OF FIXTURE - TYPICAL.
- 5 VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.
- 6 PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING - TYPICAL. SEE DETAIL 01/E6.01. CONNECT TO NEAREST 277V CIRCUIT.
- 7 WALL MOUNT LIGHT FIXTURES IN THIS ROOM AT 8'-0" AFF TO CENTER OF FIXTURE.
- 8 REMOVE EXISTING LIGHT FIXTURE AND DELIVER TO OWNER.



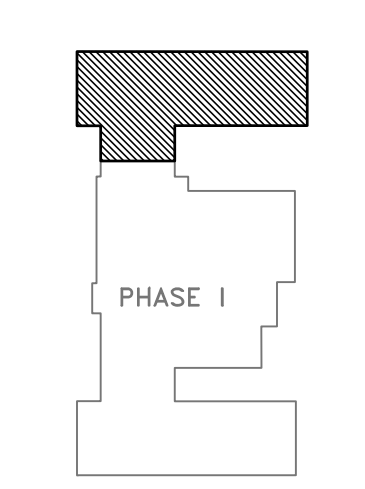
**01 LIGHTING PLAN (FIRST FLOOR)**  
SCALE: 1/16" = 1'-0"  
NORTH

**IDEA-OWASSA COLLEGE PREP PHASE II**



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: E3.01



119 W. VAN EMBUREN AVE. STE. 101  
PHONE: 956-270-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15986



1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

**GENERAL NOTES:**

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12S. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. MULTIPLE OCCUPANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0-10V SIGNAL WIRING TO EACH DIMMED LIGHT EXISTING DRIVER AND WALL SWITCH.
6. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

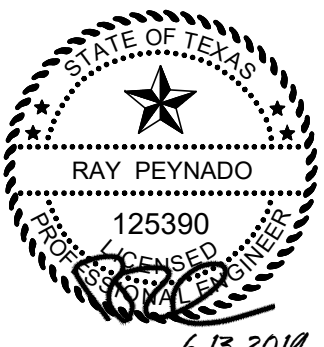
**KEYED NOTES:**

- 1 NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES - TYPICAL.
- 2 CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH - TYPICAL.
- 3 MOUNT FIXTURE TYPE "L2E" 12" ABOVE MIRROR - TYPICAL.
- 4 PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING - TYPICAL. SEE DETAIL 01/E6.01. CONNECT TO NEAREST 277V CIRCUIT.
- 5 MOUNT LIGHT FIXTURE TYPE "N" AT 24"-6" AFF TO CENTER OF FIXTURE - TYPICAL.
- 6 MOUNT FIXTURE TYPE "J2E" TO MATCH PHASE I.
- 7 PROVIDE UNISTRUT/THREADED ROD AND SUSPEND LIGHT FIXTURE AT 9'-0" AFF. COORDINATE INSTALLATION WITH HVAC DUCT WORK.
- 8 MOUNT LIGHT FIXTURE TYPE "N" AT 20'-9" AFF TO CENTER OF FIXTURE.



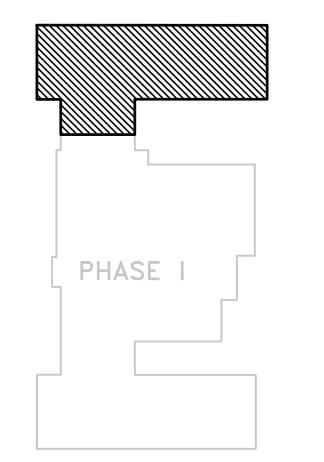
01 LIGHTING PLAN (SECOND FLOOR)  
SCALE: 1/8" = 1'-0"  
NORTH

IDEA-OWASSA COLLEGE PREP PHASE II



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: As Noted  
David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet:



E3.02

No.	REVISIONS	BY



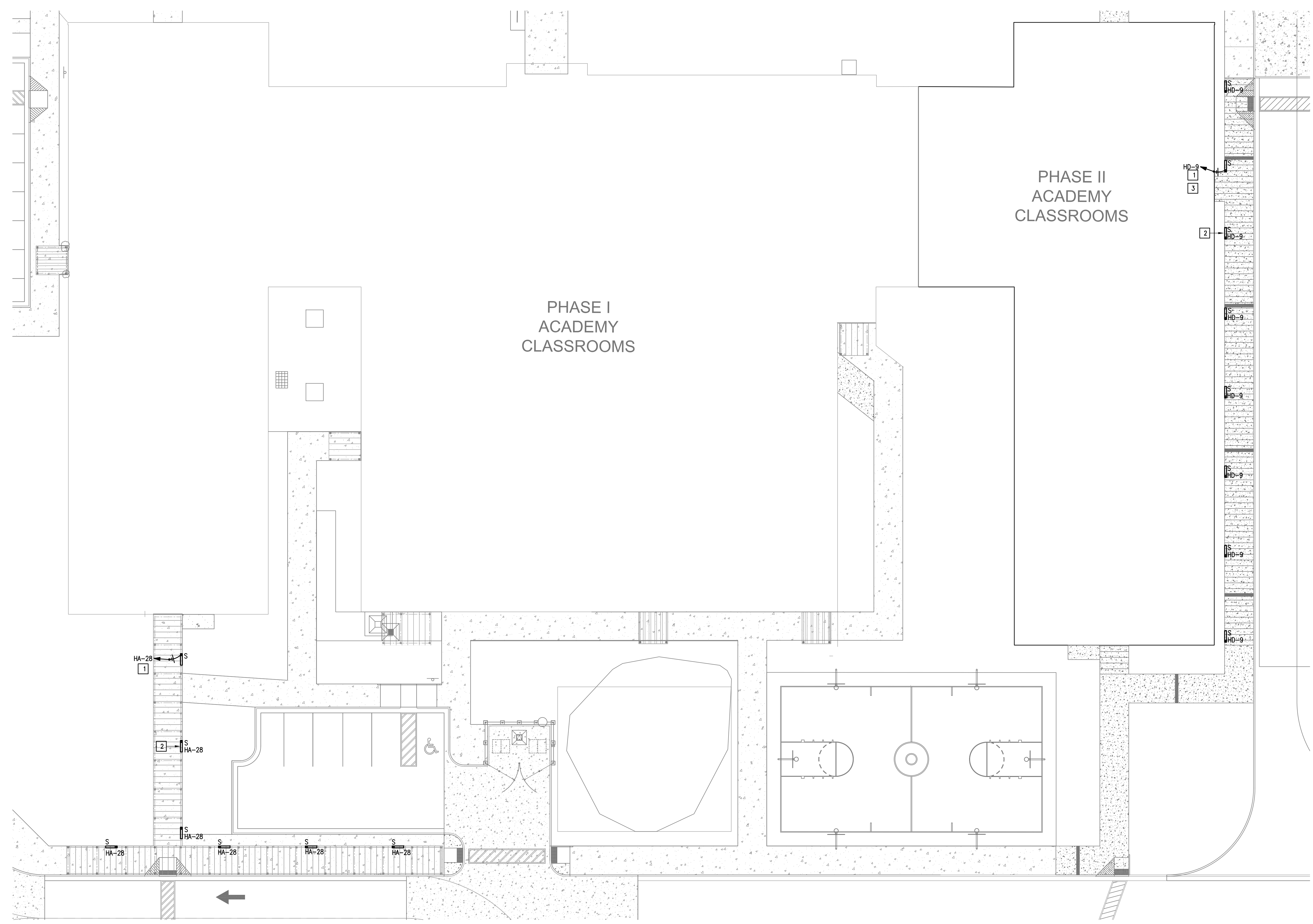
1150 Paredes Line Rd.  
Brownsville, TX 78526  
(956) 546-0110  
fax (956) 546-0196

**GENERAL NOTES:**

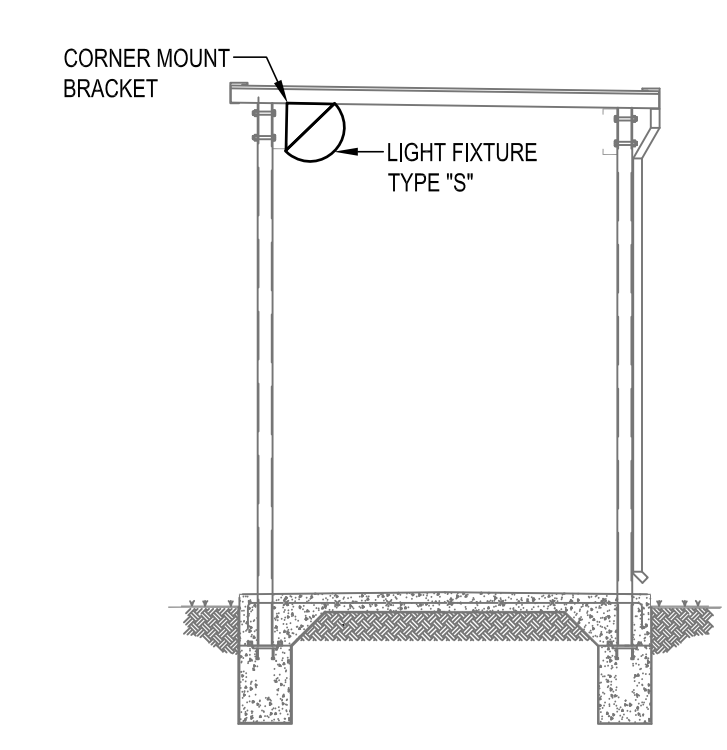
- LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
- PROVIDE 0-18V SIGNAL WIRING TO EACH DIMMED LIGHT EXISTING DRIVER AND WALL SWITCH.
- EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
- EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.

**KEYED NOTES:**

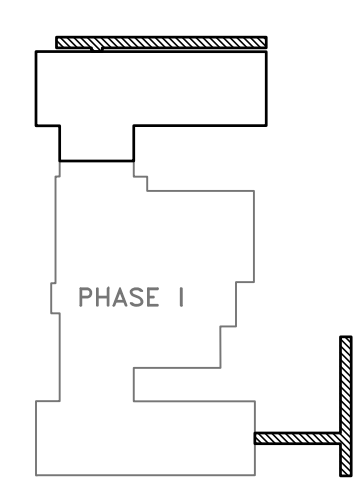
- VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.
- SECURE TO CANOPY HORIZONTAL STRUCTURAL STEEL - SEE DETAIL - TYPICAL.
- FIELD COORDINATE EXISTING CONDITIONS FOR HOME RUN ROUTING.



**01 CANOPY LIGHTING PLAN**  
SCALE: 1/16" = 1'-0"  
NORTH

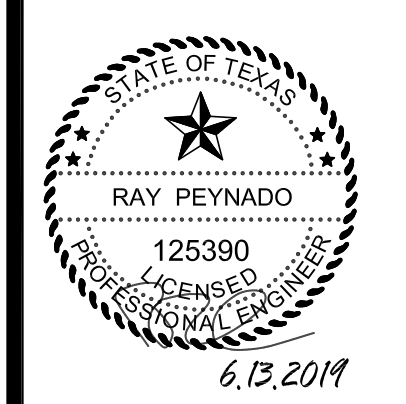


**02 CANOPY DETAIL**  
SCALE: NOT TO SCALE



**ETHOS engineering**  
119 W. VAN EMBLEN AVE., STE. 101  
PHOENIX, AZ 85007  
PHONE: 602-230-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15986

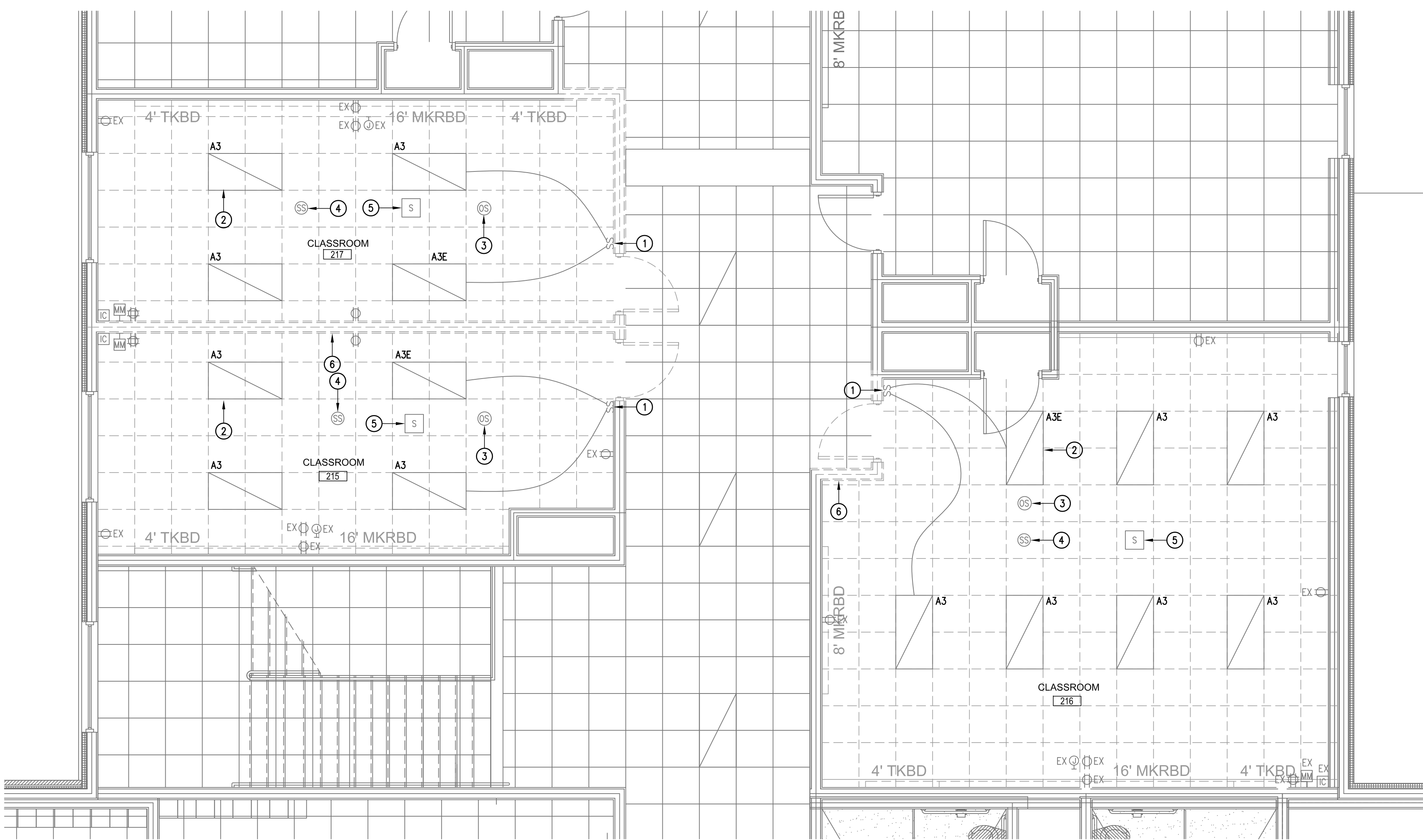
**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  
 IDEA Public Schools



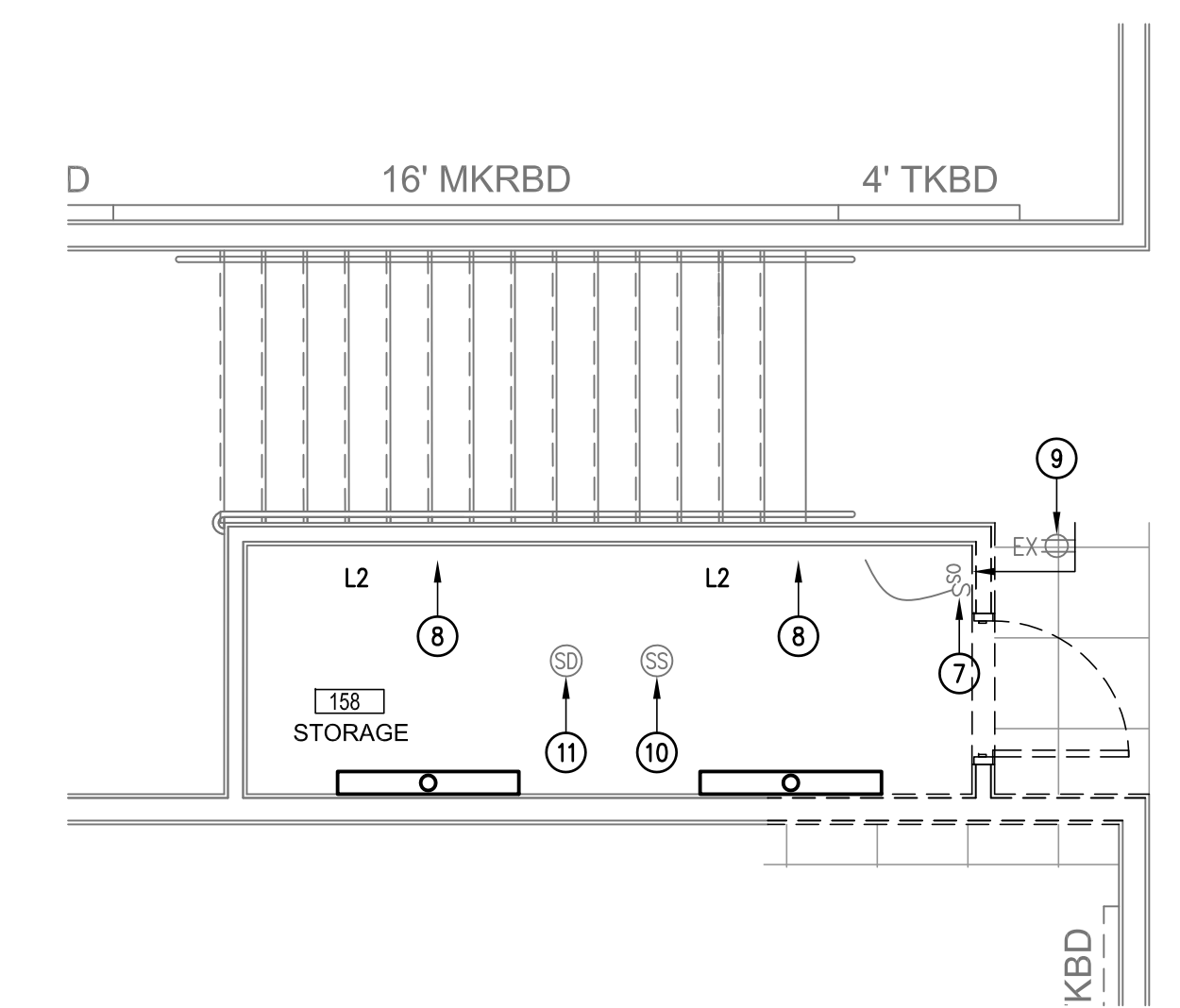
© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: As Noted  
David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet:

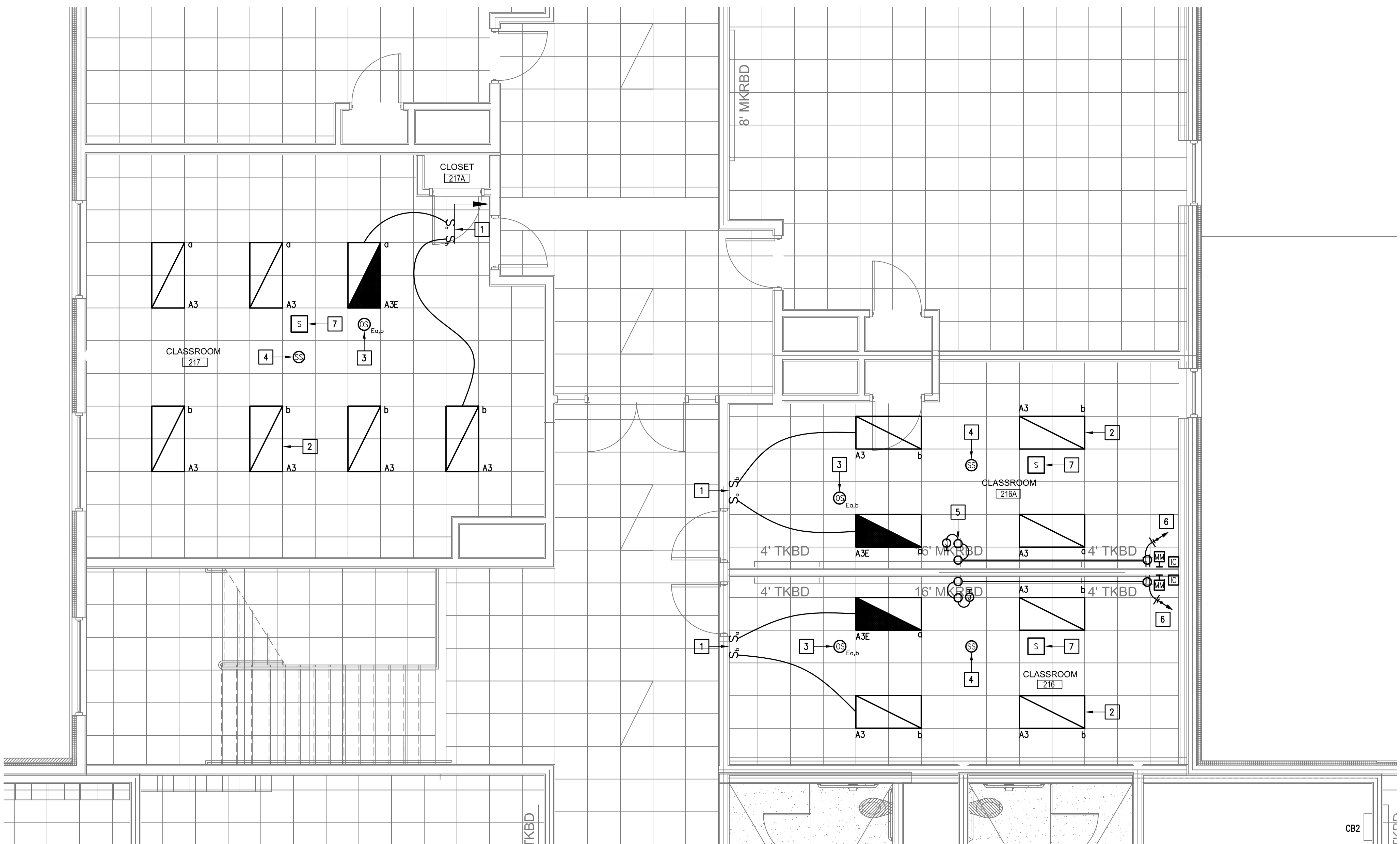
**E3.03**



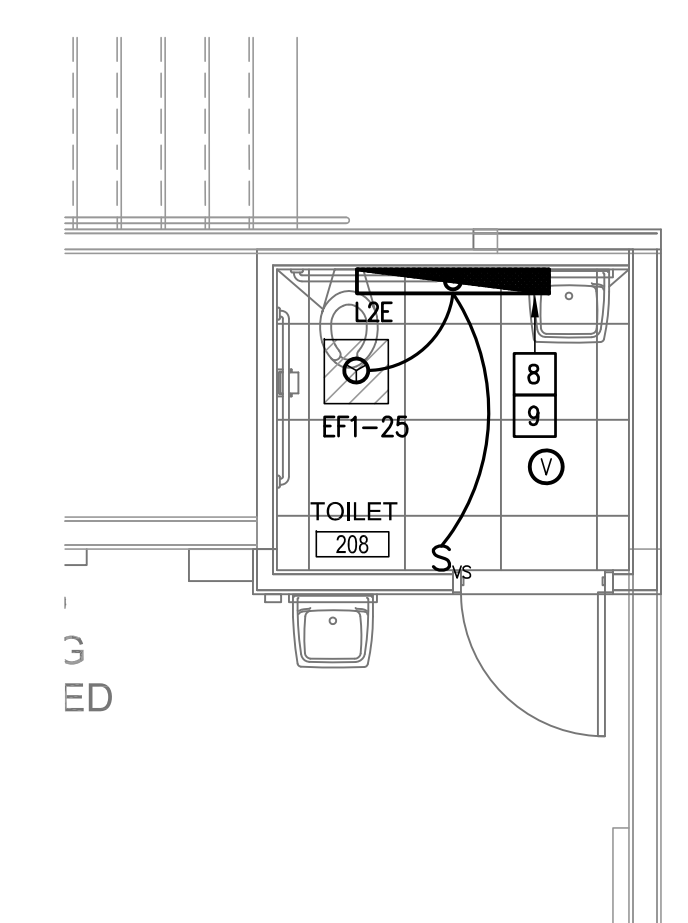
01  
2ND FLOOR  
LIGHTING AND ELECTRICAL  
DEMOLITION PLAN  
SCALE: 1/4" = 1'-0"



02  
ALTERNATE NO. 4 - 1ST FLOOR  
LIGHTING AND ELECTRICAL  
DEMOLITION PLAN  
SCALE: 1/4" = 1'-0"



03  
2ND FLOOR  
LIGHTING AND ELECTRICAL  
RENOVATION PLAN  
SCALE: 1/4" = 1'-0"



04  
ALTERNATE NO. 4 - 1ST FLOOR  
LIGHTING AND ELECTRICAL  
RENOVATION PLAN  
SCALE: 1/4" = 1'-0"

DEMOLITION GENERAL NOTES:

- REFER TO ARCHITECTURAL SPECIFICATIONS FOR PHASING REQUIREMENTS.
- THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
- IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS REQUIRES EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
- REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR WALL AND CEILINGS TO BE REMOVED.
- ITEMS DESIGNATED WITH AN "EX" ARE EXISTING TO REMAIN AS IS.
- PRIOR TO DEMOLITION, IN CEILING SCHEDULED TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.

DEMOLITION KEYED NOTES:

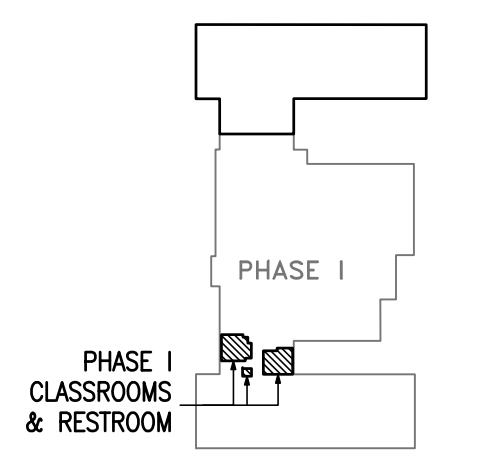
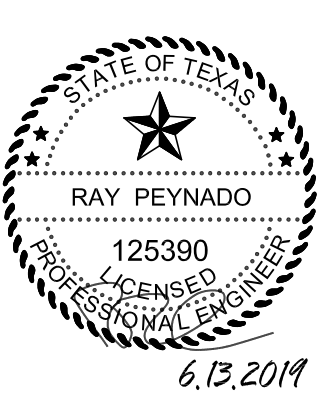
- DISCONNECT AND REMOVE EXISTING LIGHTING SWITCHES FOR RELOCATION.
- DISCONNECT AND REMOVE EXISTING LIGHTING FIXTURE FOR RELOCATION - TYPICAL.
- DISCONNECT AND REMOVE EXISTING OCCUPANCY SENSOR AND ASSOCIATED POWER PACK FOR RELOCATION.
- DISCONNECT AND REMOVE EXISTING FIRE ALARM SPEAKER STROBE FOR RELOCATION.
- DISCONNECT AND REMOVE EXISTING INTERCOM SPEAKER FOR RELOCATION.
- DISCONNECT AND REMOVE ANY AND ALL LIGHTING, ELECTRICAL AND SPECIAL SYSTEMS ALONG WITH RELATED RACEWAYS, WIRING AND SUPPORT HARDWARE LOCATED ON WALLS TO BE REMOVED - TYPICAL.
- DISCONNECT EXISTING LIGHTING SWITCH FOR REMOVAL.
- DISCONNECT EXISTING LIGHTING FIXTURE FOR REMOVAL.
- DISCONNECT EXISTING RECEPTACLE FOR REMOVAL.
- DISCONNECT EXISTING FIRE ALARM SPEAKER STROBE FOR REMOVAL.
- DISCONNECT EXISTING FIRE ALARM SMOKE DETECTOR FOR REMOVAL.

GENERAL NOTES:

- LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12C. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
- INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
- EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
- IF NEW DEVICES ARE TO BE INSTALLED ON EXISTING WALLS; PROVIDE SURFACE MOUNTED METAL RACEWAYS AND BOXES (WIREFOLD).

KEYED NOTES:

- EXISTING LIGHTING SWITCHES AT NEW LOCATION.
- EXISTING LIGHTING FIXTURE AT NEW LOCATION. CONNECT TO EXISTING ROOM LIGHTING CIRCUIT.
- EXISTING OCCUPANCY SENSOR AND ASSOCIATED POWER PACK AT NEW LOCATION.
- EXISTING FIRE ALARM SPEAKER STROBE AT NEW LOCATION. PROVIDE NEW WIRING.
- PROVIDE ELECTRICAL J-BOX FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR - TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J-BOX PER MANUFACTURERS PUBLISHED TEMPLATES - SEE DETAILS.
- CONNECT TO AN EXISTING 20A/1P SPARE BREAKER.
- EXISTING CEILING SPEAKER AT NEW LOCATION.
- MOUNT FIXTURE TYPE "L2E" 12" ABOVE MIRROR - TYPICAL.
- CONNECT TO EXISTING 120V LIGHTING CIRCUIT.

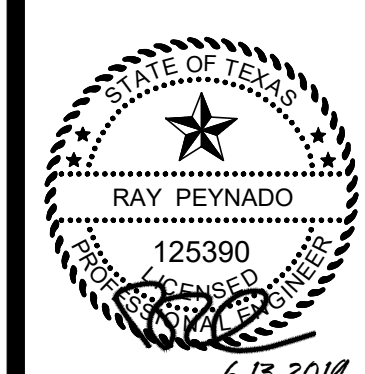




1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA COLLEGE PREP PHASE II

Public Schools



© Copyright 2019  
Gomez Mendez Sants Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: E4.01

ETHOS engineering  
119 W. VAN BUREN ST. STE 101  
PHONE: 956-230-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15986

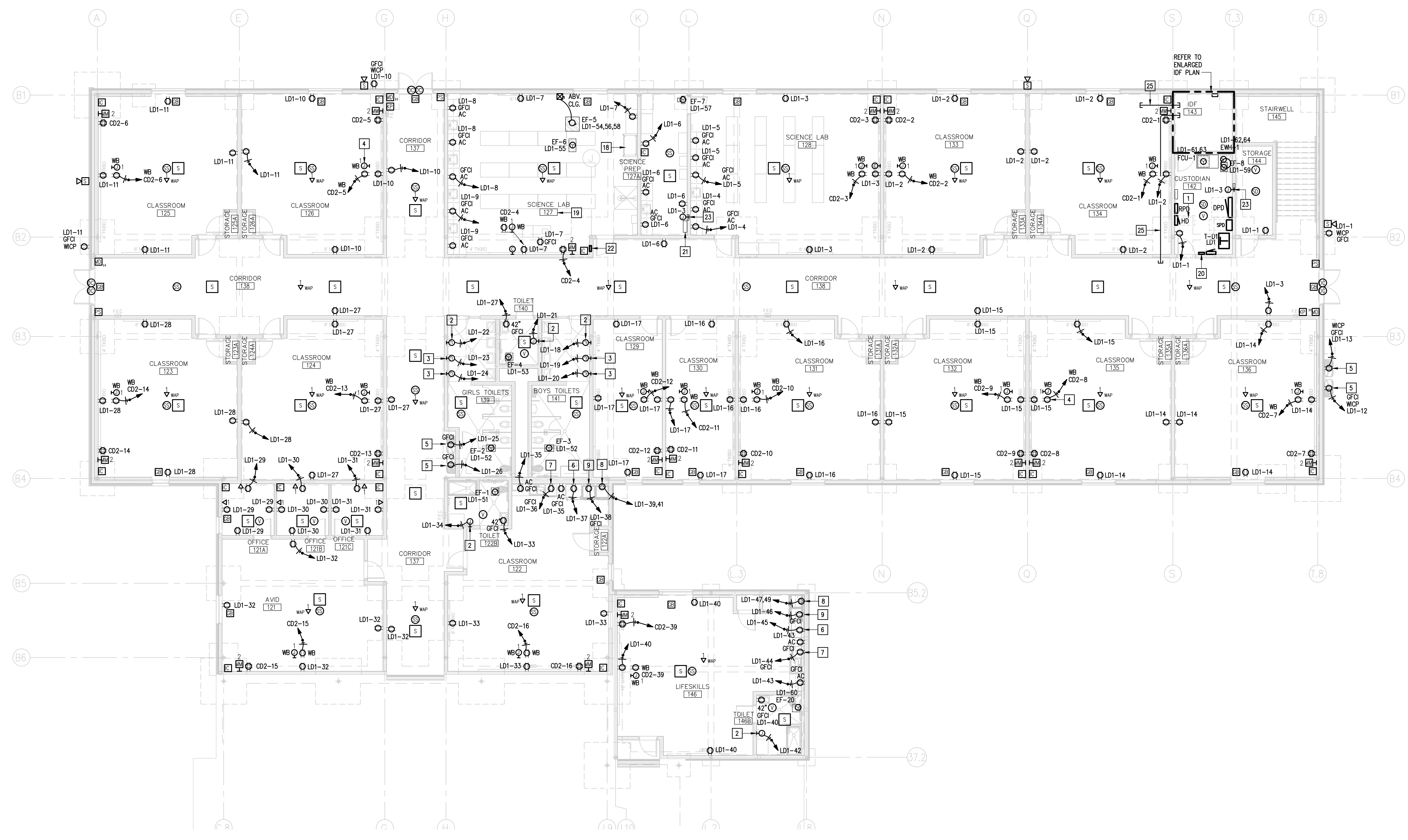
E4.01

**GENERAL NOTES:**

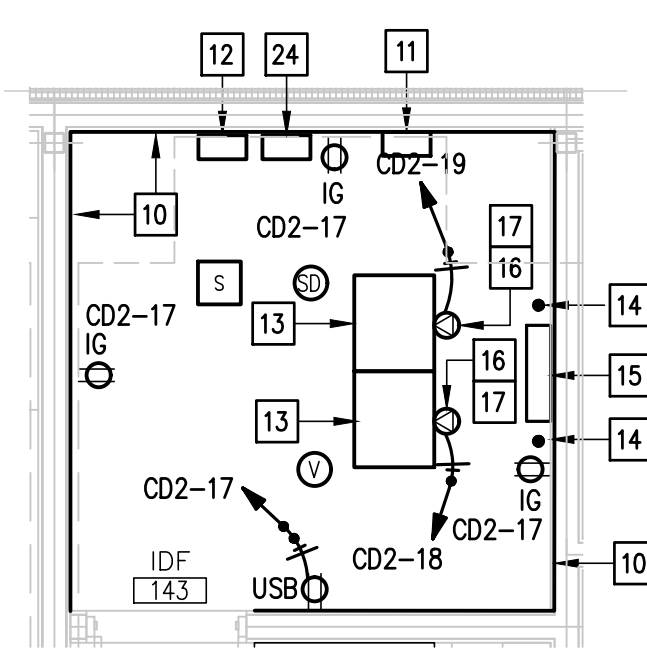
1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS - INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS), 3 INSULATED "HOT", 3 INSULATED "NEUTRAL" AND 1 SHARED "GROUND".
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
7. PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS, "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
8. THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUS.
9. PROVIDE 1-2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
10. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
11. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

**KEYED NOTES:**

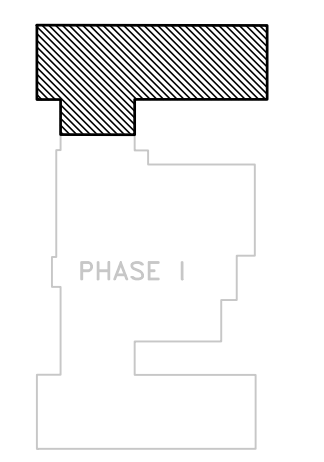
- 1 NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES - TYPICAL.
- 2 PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBROCK B-750 (OR EQUAL). BRANCH CIRCUIT: 3/4" - 2#10 & #10G. MOUNT @ 48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
- 3 PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBROCK B-750 (OR EQUAL). BRANCH CIRCUIT: 3/4" - 2#10 & #10G. MOUNT @ 48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
- 4 PROVIDE ELECTRICAL OUTLET FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR - TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J-BOX PER MANUFACTURERS PUBLISHED TEMPLATES - SEE DETAILS.
- 5 CONNECT ELECTRIC DRINKING FOUNTAIN; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. ROUGH-IN AT 17'-7 1/16" TO CENTER OF J-BOX. COORDINATE WITH PLUMBING CONTRACTOR.
- 6 CONNECT REFRIGERATOR; BRANCH CIRCUIT: 1/2" - 2#12 & #12G.
- 7 CONNECT DISHWASHER; BRANCH CIRCUIT: 1/2" - 2#12 & #12G.
- 8 PROVIDE SPECIAL RECEPTACLE FOR CLOTHES DRYER (NEMA 10-30R); BRANCH CIRCUIT: 3/4" - #10 & #10G.
- 9 CONNECT CLOTHES WASHER; BRANCH CIRCUIT: 1/2" C 2#12 & #12G.
- 10 PROVIDE 3/4" X 4" PLYWOOD TELEPHONE/DATA BOARD ON ALL WALLS. FIRE RESISTIVE TREATED (A-D INT-APA). MOUNT AT 24" AFF.
- 11 PROVIDE INTERCOM SYSTEM SWITCHING MODULES WALL MOUNTED.
- 12 PROVIDE INTRUSION DETECTION SYSTEM CONTROL PANEL; BRANCH CIRCUIT: 1/2" - 2#12 & #12G, CD2-40.
- 13 PROVIDE DATA RACK - SEE SPECIFICATIONS.
- 14 PROVIDE GROUND BUS BAR. REFER TO GROUNDING ELECTRICAL RISER DIAGRAM.
- 15 PROVIDE 6" H X 6" D (WIDTH AS REQUIRED) SURFACE MOUNTED WIREWAY WITH HINGED COVER. ROUTE SPECIAL SYSTEMS RACEWAYS TO THIS LOCATION - SEE SITE PLAN AND DETAIL.
- 16 PROVIDE SPECIAL RECEPTACLE FOR IDF-UPS(NEMA L5-30R); BRANCH CIRCUIT: 3/4" - 2#10 & #10G.
- 17 PENDANT MOUNTED SEE DETAIL, FIELD CONFIRM EXACT LOCATION WITH OWNER/IT SUBCONTRACTOR.
- 18 CONNECT FUMEHOOD. CONNECT BRANCH CIRCUIT TO THE MOTOR, LIGHT, & SWITCH. LD1-65. MOUNT THE THERMAL SWITCH ABOVE THE FUMEHOOD IN THE ACCESSIBLE CEILING SPACE.
- 19 CONNECT ALL RECEPTACLE CIRCUITS (EXCLUDING THE COMPUTER RECEPTACLES) IN THIS ROOM THROUGH THE CORRESPONDING CONTACTOR ENCLOSURES FOR EMERGENCY SHUTOFF PURPOSES THEN THROUGH THE CORRESPONDING PANEL.
- 20 PROVIDE (SURFACE MOUNTED) CONTACTOR ENCLOSURE. ENCLOSURE SHALL BE ISMET E-1-2-12-K-L-EX. SEE SCIENCE LAB UTILITY CONTROLS DETAIL.
- 21 PROVIDE (SURFACE MOUNTED) LOW VOLTAGE RELAYS FOR SOLENOID ENCLOSURE. ENCLOSURE SHALL BE ISMET S-1-1-1-2-24VAC-1"(DW)-K-F-A. COORDINATE THE EXACT LOCATION W/ THE ARCHITECT. COORDINATE THE INSTALLATION W/ THE PLUMBING CONTRACTOR. MOUNT AT 48" A.F.F. TO CENTER OF THE BOX. SEE SCIENCE LAB UTILITY CONTROLS DETAIL.
- 22 PROVIDE (SEMI-RECESSED) EMERGENCY UTILITY CONTROLLER W/ PURGE FAN CIRCUIT & ADDITIONAL LOW SPEED CONTROL. SWITCH FACING PREP ROOM. CONTROLLER SHALL BE ISMET 1-3-X-3-K. BRANCH CIRCUIT: 1/2" RACEWAY - 2#12 & #12G. MOUNT AT 48" A.F.F. TO CENTER OF HIGHEST SWITCH. SEE SCIENCE LAB UTILITY CONTROLS DETAIL.
- 23 CONNECT ELECTRONIC PRIMER. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
- 24 PROVIDE FIRE ALARM POWER SUPPLY; BRANCH CIRCUIT: 1/2" - 2#12 & #12G, CD2-43.
- 25 2-4" EMT STUB-OUT FOR COMMUNICATIONS WIRING.



**01 ELECTRICAL PLAN (FIRST FLOOR)**  
SCALE: 1/8" = 1'-0"



**02 ENLARGED IDF PLAN (FIRST FLOOR)**  
SCALE: 1/4" = 1'-0"



KEYPLAN  
ETHOS engineering  
119 W. VAN BUREN ST. STE 101  
PHONE: 956-230-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15986

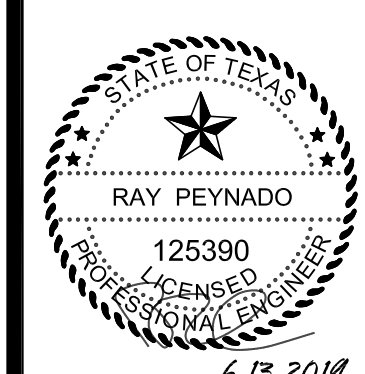




1150 Paradise Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA COLLEGE PREP PHASE II

IDEA Public Schools



6.12.2019

© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

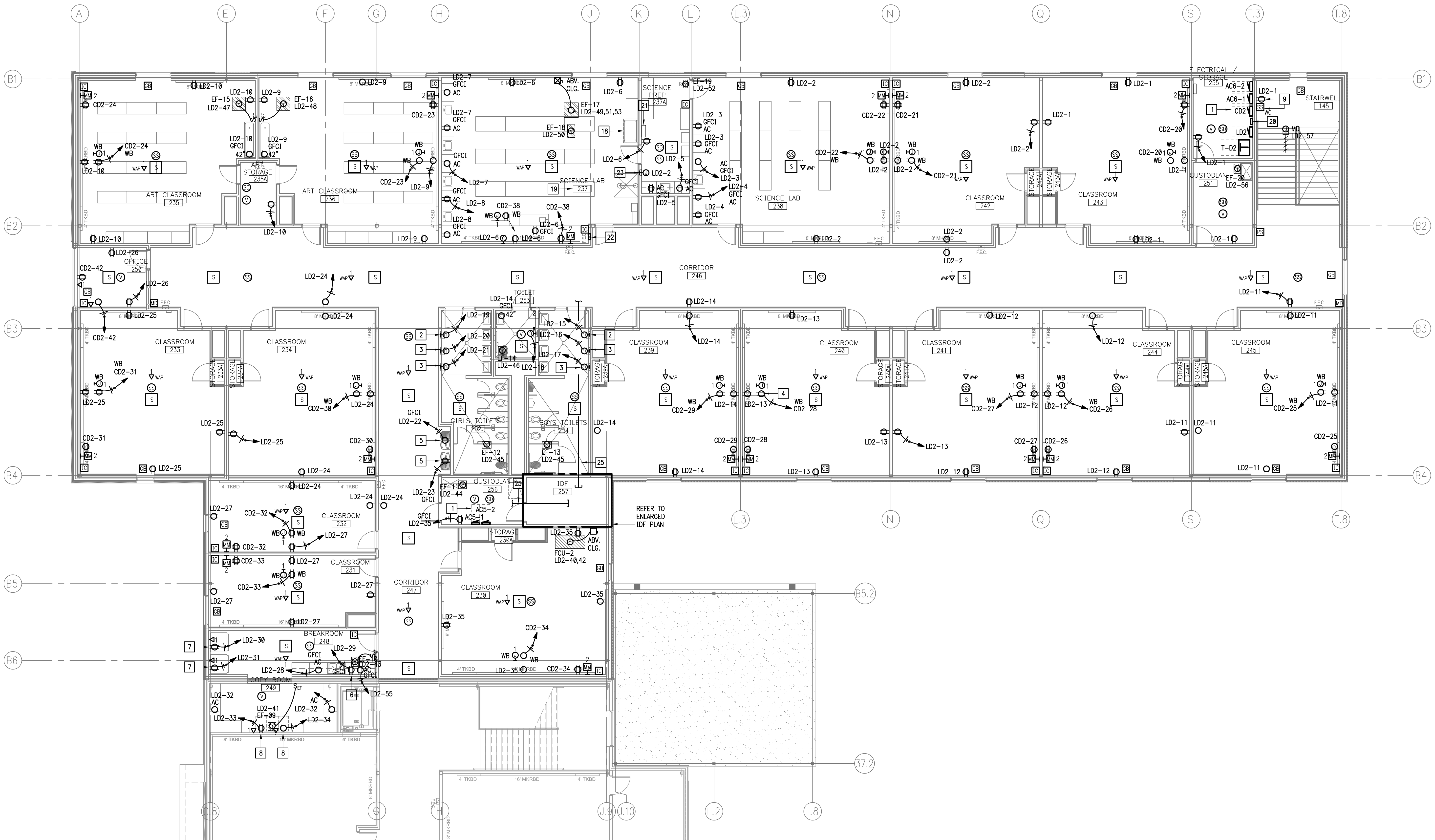
Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: E4.02

**GENERAL NOTES:**

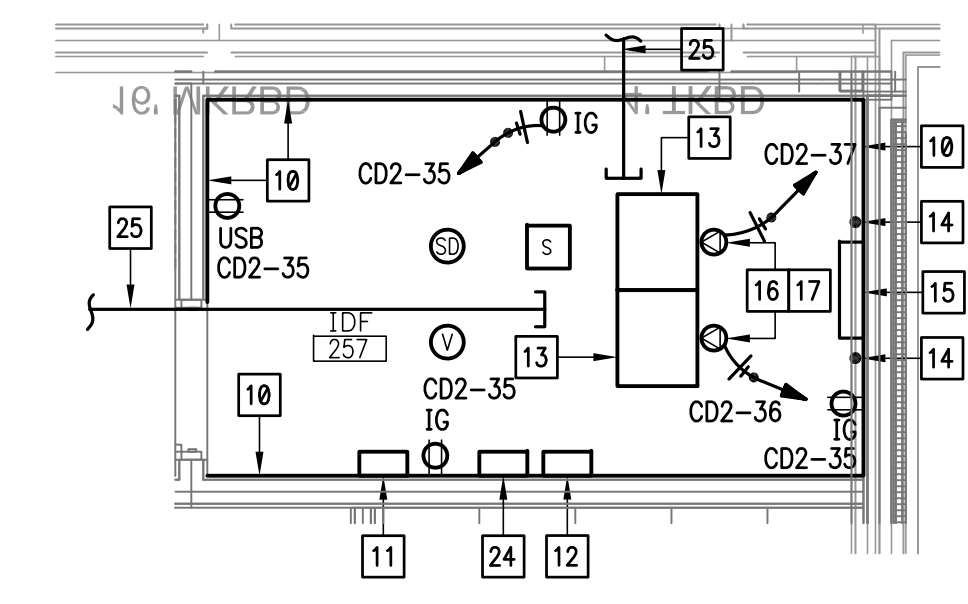
- ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G; 28A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
- HOMERUNS - INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS), 3 INSULATED "HOT", 3 INSULATED "NEUTRAL" AND 1 SHARED "GROUND".
- PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
- PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
- PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS, PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
- PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
- PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS, "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
- THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUSS.
- PROVIDE 1-2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
- USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
- EACH 28A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

**KEYED NOTES:**

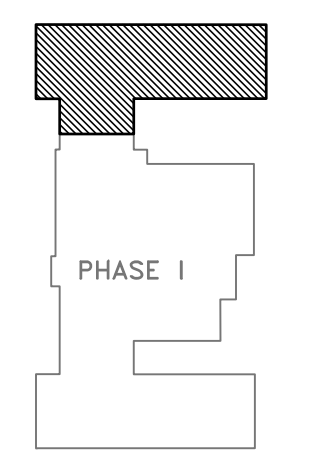
- NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES - TYPICAL.
- PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBBIK B-750 (OR EQUAL). BRANCH CIRCUIT: 3/4" - 2#10 & #10G. MOUNT @ +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
- PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBBIK B-750 (OR EQUAL). BRANCH CIRCUIT: 1/2" - 2#12 & #12G. MOUNT @ +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
- PROVIDE ELECTRICAL OUTLET FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR - TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J-BOX PER MANUFACTURERS PUBLISHED TEMPLATES - SEE DETAILS.
- CONNECT ELECTRIC DRINKING FOUNTAIN. BRANCH CIRCUIT: 1/2" - 2#12 & #12G. ROUGH-IN AT 17"-7/16" TO CENTER OF J-BOX. COORDINATE WITH PLUMBING CONTRACTOR.
- CONNECT DISHWASHER. BRANCH CIRCUIT: 1/2" - 2#12 & #12G.
- CONNECT VENDING MACHINE. BRANCH CIRCUIT: 1/2" - 2#12 & #12G.
- CONNECT COPY MACHINE. BRANCH CIRCUIT: 1/2" - 2#12 & #12G.
- MOUNTING HEIGHT TO BE FROM TOP OF LANDING.
- PROVIDE 3/4" X 4", PLYWOOD TELEPHONE/DATA BOARD ON ALL WALLS. FIRE RESISTIVE TREATED (A-D INT-APA). MOUNT AT 24" AFF.
- PROVIDE INTERCOM SYSTEM SWITCHING MODULES WALL MOUNTED.
- PROVIDE INTRUSION DETECTION SYSTEM CONTROL PANEL. BRANCH CIRCUIT: 1/2" - 2#12 & #12G. CD2-41.
- PROVIDE DATA RACK - SEE SPECIFICATIONS.
- PROVIDE GROUND BUS BAR. REFER TO GROUNDING ELECTRICAL RISER DIAGRAM.
- PROVIDE 6" X 6" (WIDTH AS REQUIRED) SURFACE MOUNTED WIREWAY WITH HINGED COVER. ROUTE SPECIAL SYSTEMS RACEWAYS TO THIS LOCATION - SEE SITE PLAN AND DETAIL.
- PROVIDE SPECIAL RECEPTACLE FOR IDF-UPS (NEMA L5-30P). BRANCH CIRCUIT: 3/4" - 2#10 & #10G.
- PENDANT MOUNTED SEE DETAIL. FIELD CONFIRM EXACT LOCATION WITH OWNER/IT SUBCONTRACTOR.
- CONNECT FUMEHOOD. CONNECT BRANCH CIRCUIT TO THE MOTOR, LIGHT, & SWITCH. LD2-54. MOUNT THE THERMAL SWITCH ABOVE THE FUMEHOOD IN THE ACCESSIBLE CEILING SPACE.
- CONNECT ALL RECEPTACLE CIRCUITS (EXCLUDING THE COMPUTER RECEP) IN THIS ROOM THROUGH THE CORRESPONDING CONTACTOR ENCLOSURES FOR EMERGENCY SHUTOFF PURPOSED THEN THROUGH THE CORRESPONDING PANEL.
- PROVIDE (SURFACE MOUNTED) CONTACTOR ENCLOSURE. ENCLOSURE SHALL BE ISMET E-1-2-12-K-L-EX. SEE SCIENCE LAB UTILITY CONTROLS DETAIL.
- PROVIDE (SURFACE MOUNTED) LOW VOLTAGE RELAYS FOR SOLENOID ENCLOSURE. ENCLOSURE SHALL BE ISMET S-1-1-1-2-24VAC-1"(DW)-K-F-A. COORDINATE THE EXACT LOCATION W/ THE ARCHITECT. COORDINATE THE INSTALLATION W/ THE PLUMBING CONTRACTOR. MOUNT AT 48" A.F.F. TO CENTER OF THE BOX. SEE SCIENCE LAB UTILITY CONTROLS DETAIL.
- PROVIDE (SEMI-RECESSED) EMERGENCY UTILITY CONTROLLER W/ PURGE FAN CIRCUIT & ADDITIONAL LOW SPEED CONTROL SWITCH FACING PREP ROOM. CONTROLLER SHALL BE ISMET 1-3-X-3-K. BRANCH CIRCUIT: 1/2" RACEWAY - 2#12 & #12G. MOUNT AT 48" A.F.F. TO CENTER OF HIGHEST SWITCH. SEE SCIENCE LAB UTILITY CONTROLS DETAIL.
- CONNECT ELECTRONIC PRIMER. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
- PROVIDE FIRE ALARM POWER SUPPLY. BRANCH CIRCUIT: 1/2" - 2#12 & #12G. CD2-44.
- PROVIDE 4" RACEWAY ABOVE CEILING (PENETRATE FIRE RATED WALL) FOR SPECIAL SYSTEMS WIRING.



**01 ELECTRICAL PLAN (SECOND FLOOR)**  
SCALE: 1/8" = 1'-0"



**02 ENLARGED IDF PLAN (SECOND FLOOR)**  
SCALE: 1/4" = 1'-0"



KEYPLAN



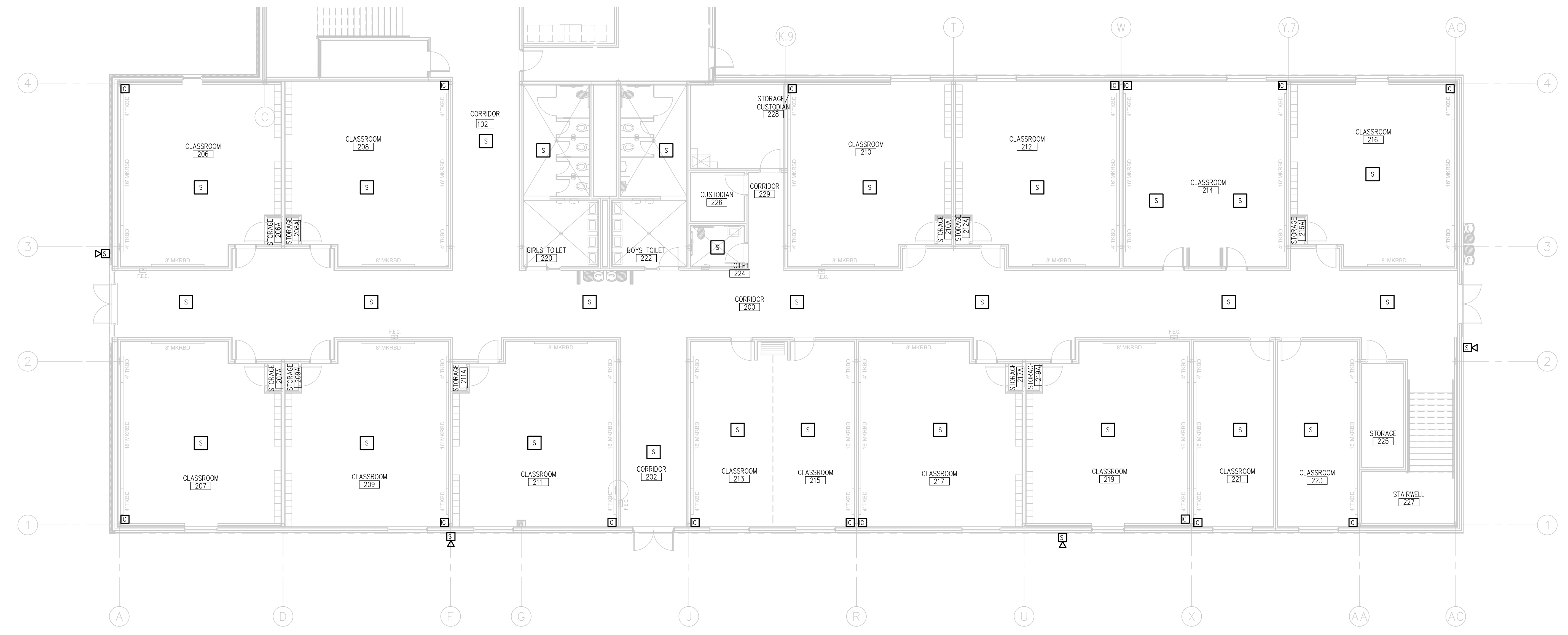
119 W. VAN EMBUREN AVE. STE. 101  
PHONE: 956-230-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-1598


**INTERCOM DEMOLITION**  
**GENERAL NOTES:**


- IF EXISTING DEVICES (CALL-IN SWITCHES, SPEAKERS, HORNS, ADMINISTRATIVE HAND SETS) ARE NOT COMPATIBLE WITH NEW SYSTEM, PLEASE REMOVE AND PROVIDE NEW DEVICES.
- IF EXISTING CABLING ARE NOT COMPATIBLE WITH NEW SYSTEM, PLEASE REMOVE AND PROVIDE NEW CABLING.
- REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNER'S DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
- EXISTING RACEWAYS INTERCONNECTING BUILDINGS MAY BE REUSED. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING RACEWAYS. IF NECESSARY CONTRACTOR TO PROVIDE NEW RACEWAYS.

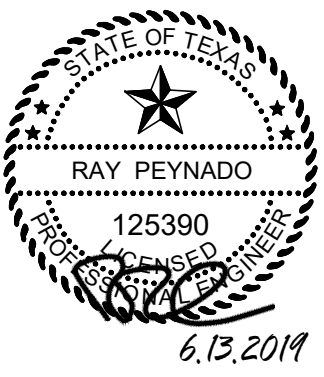
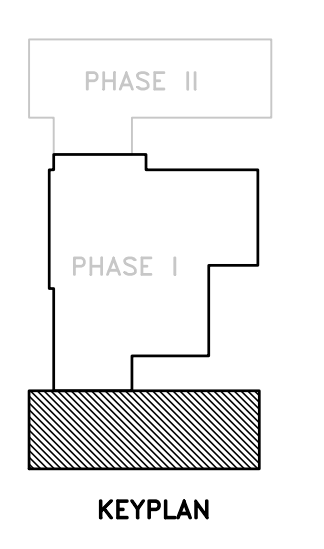
**GENERAL NOTES:**

- FIELD COORDINATE PRIOR TO BIDDING TO ASSESS EXISTING CONDITIONS.
- ADJUST LOCATION OF NEW DEVICES IF NECESSARY DUE TO EXISTING CONDITIONS.
- ALL WORK THAT COULD DISRUPT SCHOOL INSTRUCTION SHALL BE SCHEDULED FOR AFTER SCHOOL OR DURING HOLIDAY HOURS. COORDINATE SCHEDULING WITH SCHOOL PRINCIPAL.



**INTERCOM UPGRADE PLAN**  
**01 PHASE I** (1ST FLOOR)   
 SCALE: 1/8" = 1'-0"

**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  




© Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers

Date: JUNE 13, 2019  
 Scale: As Noted  
 Project Architect: David Monreal, AIA  
 Drawn By: ETHOS  
 Job No: IDEA OWASSA II  
 Sheet:



**E4.03**

No.	REVISIONS	BY



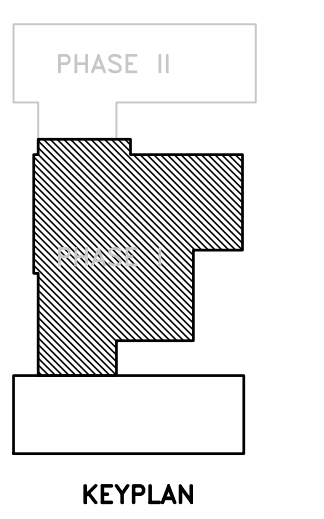
1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  
 IDEA Public Schools



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: E4.04

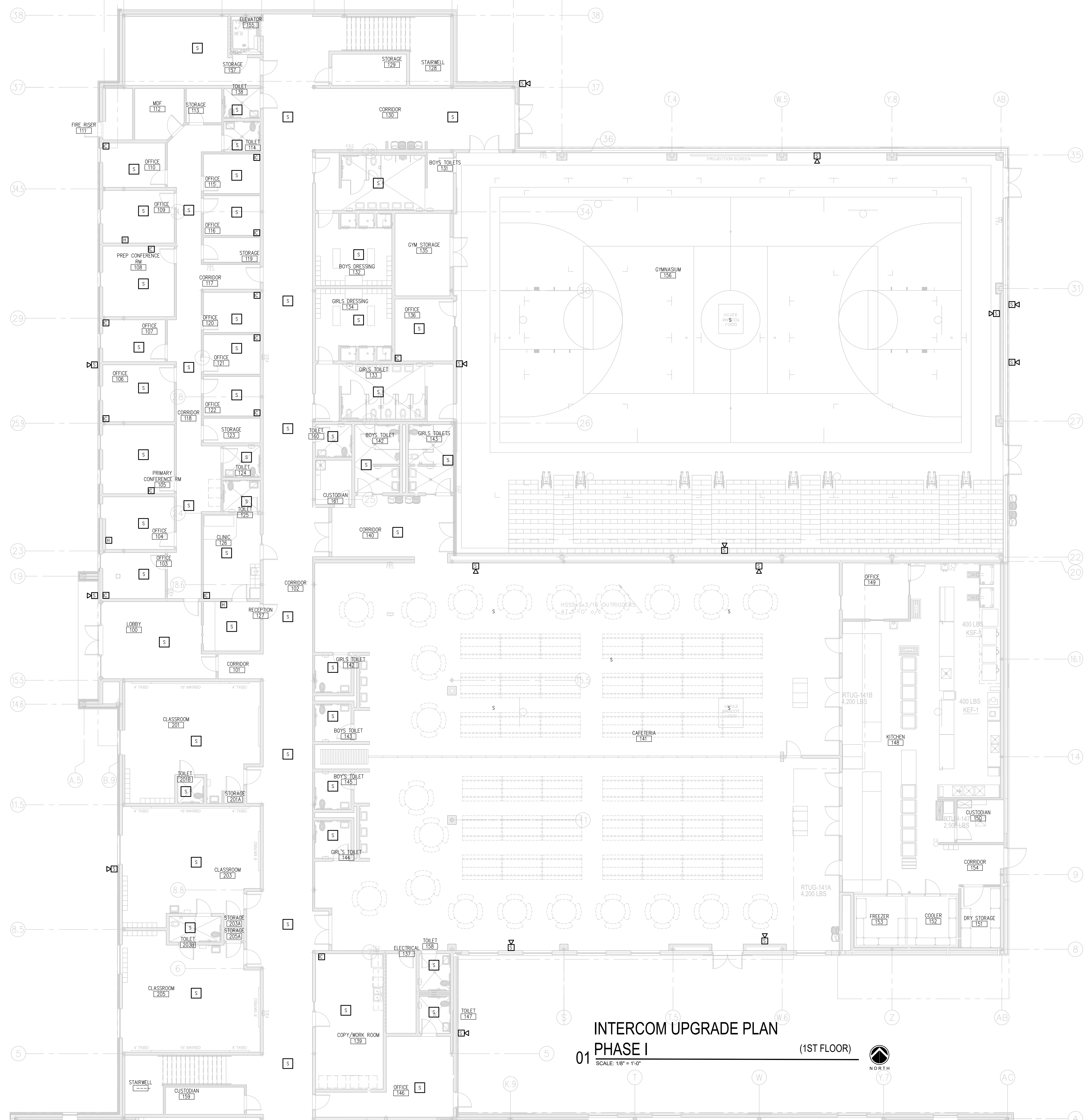


**INTERCOM DEMOLITION**  
**GENERAL NOTES:**

- IF EXISTING DEVICES (CALL-IN SWITCHES, SPEAKERS, HORNS, ADMINISTRATIVE HAND SETS) ARE NOT COMPATIBLE WITH NEW SYSTEM, PLEASE REMOVE AND PROVIDE NEW DEVICES.
- IF EXISTING CABLING ARE NOT COMPATIBLE WITH NEW SYSTEM, PLEASE REMOVE AND PROVIDE NEW CABLING.
- REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNER'S DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
- EXISTING RACEWAYS INTERCONNECTING BUILDINGS MAY BE REUSED. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING RACEWAYS. IF NECESSARY CONTRACTOR TO PROVIDE NEW RACEWAYS.

**GENERAL NOTES:**

- FIELD COORDINATE PRIOR TO BIDDING TO ASSESS EXISTING CONDITIONS.
- ADJUST LOCATION OF NEW DEVICES IF NECESSARY DUE TO EXISTING CONDITIONS.
- ALL WORK THAT COULD DISRUPT SCHOOL INSTRUCTION SHALL BE SCHEDULED FOR AFTER SCHOOL OR DURING HOLIDAY HOURS. COORDINATE SCHEDULING WITH SCHOOL PRINCIPAL.



**INTERCOM UPGRADE PLAN**  
**01 PHASE I** (1ST FLOOR)  
 SCALE: 1/8" = 1'-0"




**INTERCOM DEMOLITION**  
**GENERAL NOTES:**


- IF EXISTING DEVICES (CALL-IN SWITCHES, SPEAKERS, HORNS, ADMINISTRATIVE HAND SETS) ARE NOT COMPATIBLE WITH NEW SYSTEM, PLEASE REMOVE AND PROVIDE NEW DEVICES.
- IF EXISTING CABLING ARE NOT COMPATIBLE WITH NEW SYSTEM, PLEASE REMOVE AND PROVIDE NEW CABLING.
- REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNER'S DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
- EXISTING RACEWAYS INTERCONNECTING BUILDINGS MAY BE REUSED. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING RACEWAYS. IF NECESSARY CONTRACTOR TO PROVIDE NEW RACEWAYS.

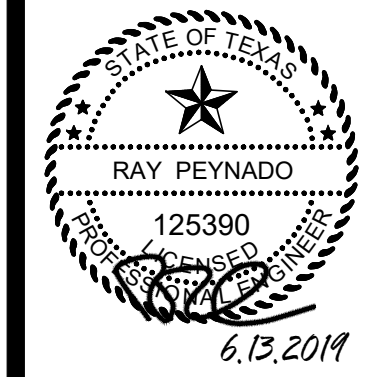
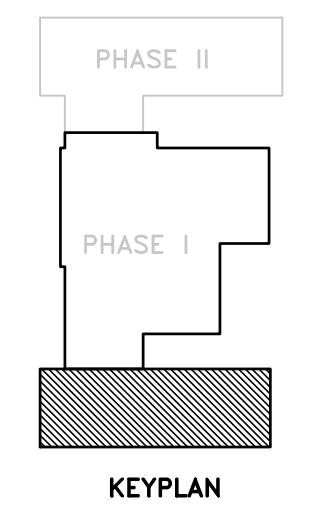
**GENERAL NOTES:**

- FIELD COORDINATE PRIOR TO BIDDING TO ASSESS EXISTING CONDITIONS.
- ADJUST LOCATION OF NEW DEVICES IF NECESSARY DUE TO EXISTING CONDITIONS.
- ALL WORK THAT COULD DISRUPT SCHOOL INSTRUCTION SHALL BE SCHEDULED FOR AFTER SCHOOL OR DURING HOLIDAY HOURS. COORDINATE SCHEDULING WITH SCHOOL PRINCIPAL.



**INTERCOM UPGRADE PLAN**  
**01 PHASE I** (2ND FLOOR)   
 SCALE: 1/8" = 1'-0"

**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  




© Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers  
 Date: JUNE 13, 2019  
 Scale: As Noted  
 Project Architect: David Monreal, AIA  
 Drawn By: ETHOS  
 Job No: IDEA OWASSA II  
 Sheet:



**E4.05**

No.	REVISIONS	BY



GMS ARCHITECTS  
1150 Paredes Line Rd.  
Brownsville, TX 78526  
(956) 546-0110  
fax (956) 546-0196

**INTERCOM DEMOLITION**  
**GENERAL NOTES:**

- IF EXISTING DEVICES (CALL-IN SWITCHES, SPEAKERS, HORNS, ADMINISTRATIVE HAND SETS) ARE NOT COMPATIBLE WITH NEW SYSTEM, PLEASE REMOVE AND PROVIDE NEW DEVICES.
- IF EXISTING CABLING ARE NOT COMPATIBLE WITH NEW SYSTEM, PLEASE REMOVE AND PROVIDE NEW CABLING.
- REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNER'S DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
- EXISTING RACEWAYS INTERCONNECTING BUILDINGS MAY BE REUSED. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING RACEWAYS. IF NECESSARY CONTRACTOR TO PROVIDE NEW RACEWAYS.

**GENERAL NOTES:**


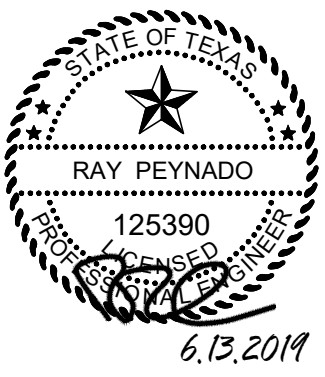
- FIELD COORDINATE PRIOR TO BIDDING TO ASSESS EXISTING CONDITIONS.
- ADJUST LOCATION OF NEW DEVICES IF NECESSARY DUE TO EXISTING CONDITIONS.
- ALL WORK THAT COULD DISRUPT SCHOOL INSTRUCTION SHALL BE SCHEDULED FOR AFTER SCHOOL OR DURING HOLIDAY HOURS. COORDINATE SCHEDULING WITH SCHOOL PRINCIPAL.



**INTERCOM UPGRADE PLAN**  
**01 PHASE I** (2ND FLOOR)  
SCALE: 1/8" = 1'-0"



IDEA-OWASSA  
COLLEGE PREP PHASE II

PHASE II  
PHASE I

KEYPLAN

© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: E4.06

**ETHOS** engineering  
119 W. VAN BUREN AVE. STE. 101  
PHONE 956-240-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15998

No.	REVISIONS	BY

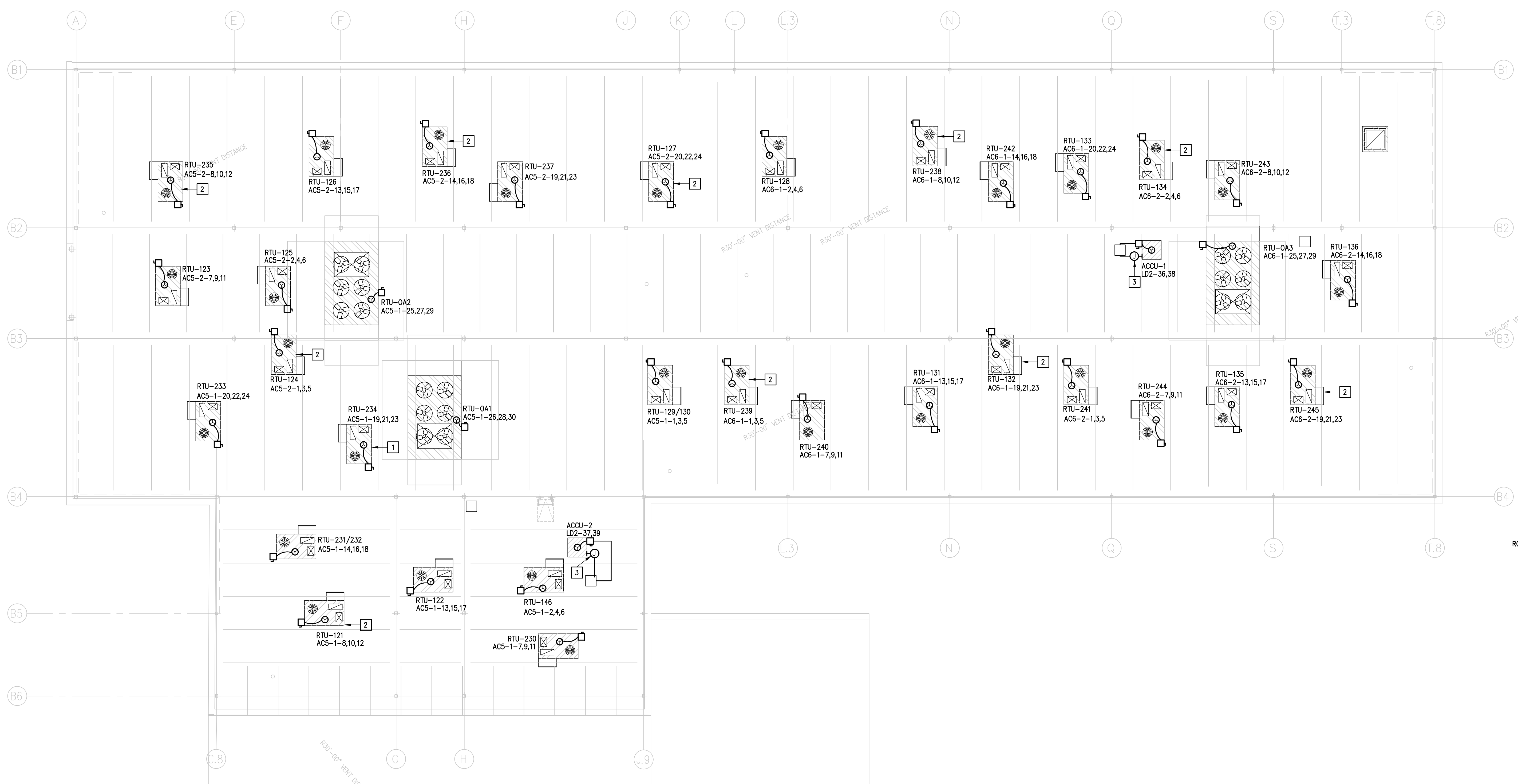
GMS ARCHITECTS  
 1150 Paredes Line Rd.  
 Brownsville, TX 78526  
 (956) 546-0110  
 fax (956) 546-0196

**GENERAL NOTES:**

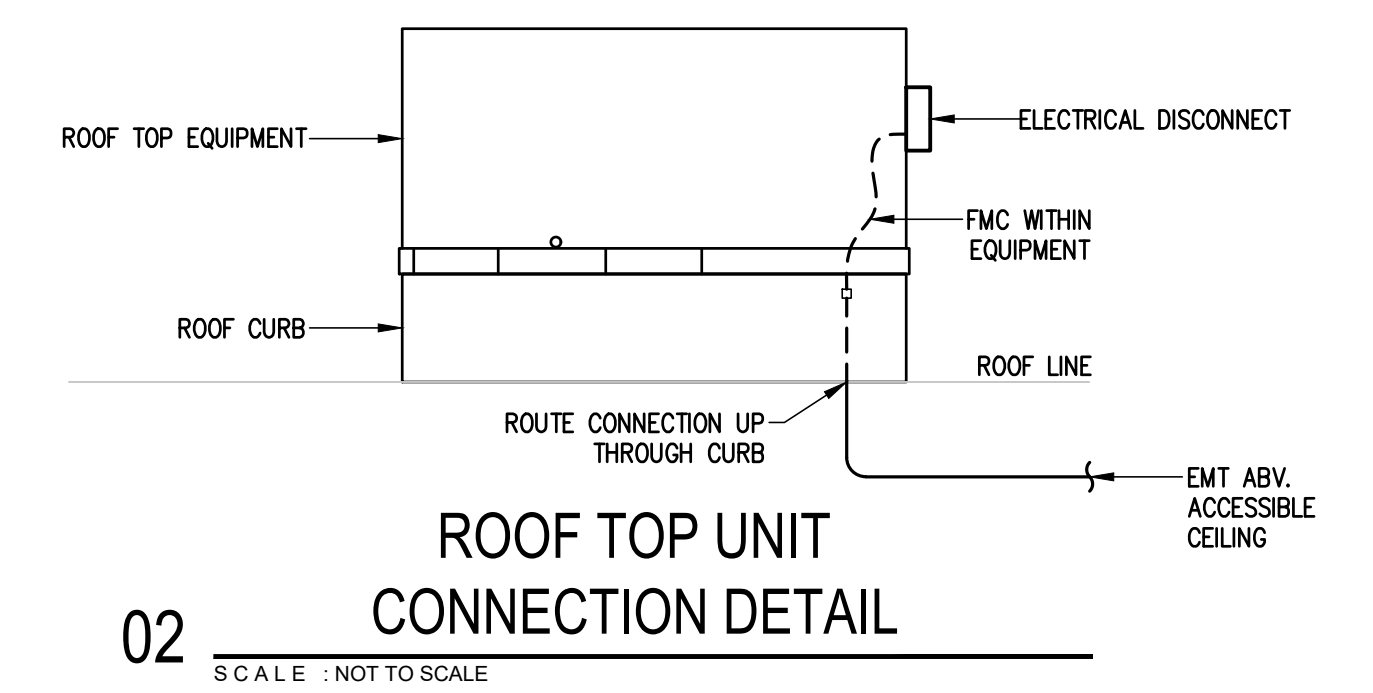
- HOMERUNS - INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS); 3 INSULATED "HOT", 3 INSULATED "NEUTRAL" AND 1 SHARED "GROUND".
- PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSTING.
- PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
- PROVIDE 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

**KEYED NOTES:**

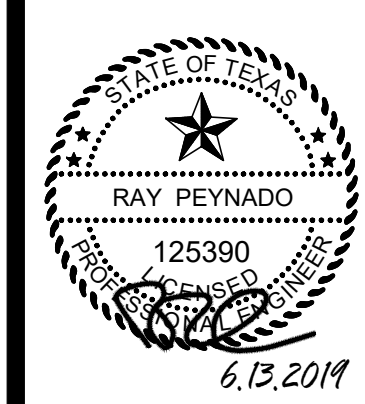
- CONNECT ROOF TOP UNIT. ROUTE CONNECTION THROUGH ROOF CURB AND SECURE DISCONNECT TO EQUIPMENT. COORDINATE DISCONNECT LOCATION WITH HVAC CONTRACTOR TO ENSURE NOT TO OBSTRUCT ACCESSIBLE PANELS - TYPICAL.
- CONNECT INTEGRAL GFCI RECEPTACLE TO NEAREST 120V NON-GFCI CIRCUIT.
- PROVIDE WEATHERPROOF J-BOX ON ROOF AND 3/4" RACEWAY WITH PULLWIRE BACK TO THE CHEMCURB ROOF PENETRATION AND CONTINUE TO THE FCU LOCATION - TYPICAL.



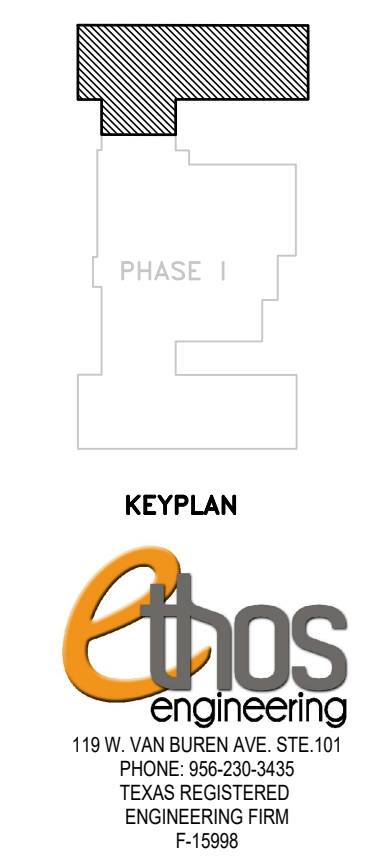
**01 ELECTRICAL PLAN (ROOF)**  
 SCALE: 1/8" = 1'-0"  
 NORTH



**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  
**IDEA Public Schools**



© Copyright 2019  
 Gomez Mendez Saez Inc.  
 Architects-Planners  
 Interior Designers  
 Date: JUNE 13, 2019  
 Scale: As Noted  
 Project Architect: David Monreal, AIA  
 Drawn By: ETHOS  
 Job No: IDEA OWASSA II  
 Sheet:

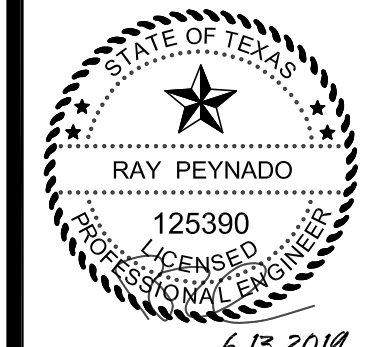


**E5.01**



1150 Parkside Lane Rd.  
Brownsville, TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA COLLEGE PREP PHASE II



6.12.2019

© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: E6.01



119 W. VAN BUREN ST. STE. 201  
PHONE 956-250-3425  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-1598

E6.01

EQUIPMENT CONNECTION SCHEDULE:

DESIGN	HP/KW	FLA	MCA	MOCF	VOLTAGE	DISCONNECT	BRANCH CIRCUIT
RTU-121, 127, 128, 129/130, 134, 146, 230, 231/232, 237, 238, 239, 243	-	-	18	20	480V/3PHASE	30A, 3PNF, 600V, NEMA 3R (EACH)	1/2" - 3#12 & #12G (EACH)
RTU-122, 123, 124, 125, 126, 131, 132, 133, 135, 136, 233, 234, 235, 236, 240, 241, 242, 244, 245	-	-	13	15	480V/3PHASE	30A, 3PNF, 600V, NEMA 3R (EACH)	1/2" - 3#12 & #12G (EACH)
RTU-0A1,0A2,0A3	2 HP	-	64	80	480V/3PHASE	100A, 3PNF, 600V, NEMA 3R (EACH)	1.25" - 3#4 & #8G (EACH)
FCU-1	1/2 HP	-	5	15	208V/1PHASE	30A, 2PNF, 240V, NEMA 1	1/2" - 2#12 & #12G
FCU-2	1/2 HP	-	5	15	208V/1PHASE	30A, 2PNF, 240V, NEMA 1	1/2" - 2#12 & #12G
ACCU-1	-	-	12.4	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 3R	1/2" - 2#12 & #12G
ACCU-2	-	-	12.4	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 3R	1/2" - 2#12 & #12G
EWH-1	3 KW	14.4	-	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 1	1/2" - 2#12 & #12G

NOTE: LOCATE EQUIPMENT MEANS OF DISCONNECT WITHIN EQUIPMENT SIGHT. DO NOT INSTALL BELOW DUCTWORK OR PLUMBING LINES.

EXHAUST FAN CONNECTION SCHEDULE:

DESIGNATION	HP/WATTS	FLA	VOLTAGE	CONNECTION FOR EACH	BRANCH CIRCUIT
EF-1	52.7 W	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA VACANCY SENSOR SWITCH.	1/2" - 2#12 & #12G
EF-2	188 W	1.8	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTRACTOR.	1/2" - 2#12 & #12G
EF-3	188 W	1.8	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTRACTOR.	1/2" - 2#12 & #12G
EF-4	47.2 W	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR SWITCH.	1/2" - 2#12 & #12G
EF-5	1/2 HP	2.4	208V/3PHASE	CONNECT ABOVE CEILING. PROVIDE A 2-SPEED COMBINATION MOTOR STARTER NEMA SIZE 00. INTERLOCKING BY HVAC CONTROLS CONTRACTOR TO ISMET CONTROL PANEL.	(1) 3/4" - 6#12 & #12G
EF-6	263 W	2.4	120V/1PHASE	CONNECT ABOVE CEILING. SWITCH VIA FUME HOOD SWITCH. INTERLOCKING BY HVAC CONTROLS CONTR.	1/2" - 2#12 & #12G
EF-7	1/3 HP	7.2	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTRACTOR.	1/2" - 2#12 & #12G
EF-8	67.6 W	0.6	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA VACANCY SENSOR SWITCH.	1/2" - 2#12 & #12G
EF-9	52.7 W	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA TIMER SWITCH.	1/2" - 2#12 & #12G
EF-10	67.6 W	0.6	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA TIMER SWITCH.	1/2" - 2#12 & #12G
EF-11	47 1/4	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA VACANCY SENSOR SWITCH.	1/2" - 2#12 & #12G
EF-12	188 W	1.8	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTRACTOR.	1/2" - 2#12 & #12G
EF-13	188 W	1.8	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTRACTOR.	1/2" - 2#12 & #12G
EF-14	47.2 W	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA VACANCY SENSOR SWITCH.	1/2" - 2#12 & #12G
EF-15	1/4 HP	5.8	120V/1PHASE	CONNECT ABOVE CEILING. SWITCH VIA TIMER SWITCH. INTERLOCKING BY HVAC CONTROLS CONTRACTOR.	1/2" - 2#12 & #12G
EF-16	1/4 HP	5.8	120V/1PHASE	CONNECT ABOVE CEILING. SWITCH VIA TIMER SWITCH. INTERLOCKING BY HVAC CONTROLS CONTRACTOR.	1/2" - 2#12 & #12G
EF-17	1/2 HP	2.4	208V/3PHASE	CONNECT ABOVE CEILING. PROVIDE A 2-SPEED COMBINATION MOTOR STARTER NEMA SIZE 00. INTERLOCKING BY HVAC CONTROLS CONTRACTOR TO ISMET CONTROL PANEL.	(1) 3/4" - 6#12 & #12G
EF-18	1/3 HP	7.2	120V/1PHASE	CONNECT ABOVE CEILING. SWITCH VIA FUME HOOD SWITCH. INTERLOCKING BY HVAC CONTROLS CONTR.	1/2" - 2#12 & #12G
EF-19	1/3 HP	7.2	120V/1PHASE	CONNECT ABOVE CEILING. INTERLOCKING BY HVAC CONTROLS CONTRACTOR.	1/2" - 2#12 & #12G
EF-20	67.6 W	0.6	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA VACANCY SENSOR SWITCH.	1/2" - 2#12 & #12G
ALTERNATE NO. 4					
EF1-25	67.6 W	0.6	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA VACANCY SENSOR SWITCH.	1/2" - 2#12 & #12G

1. PROVIDE HIGH AND LOW SPEED WIRING FROM STARTER TO MOTOR.

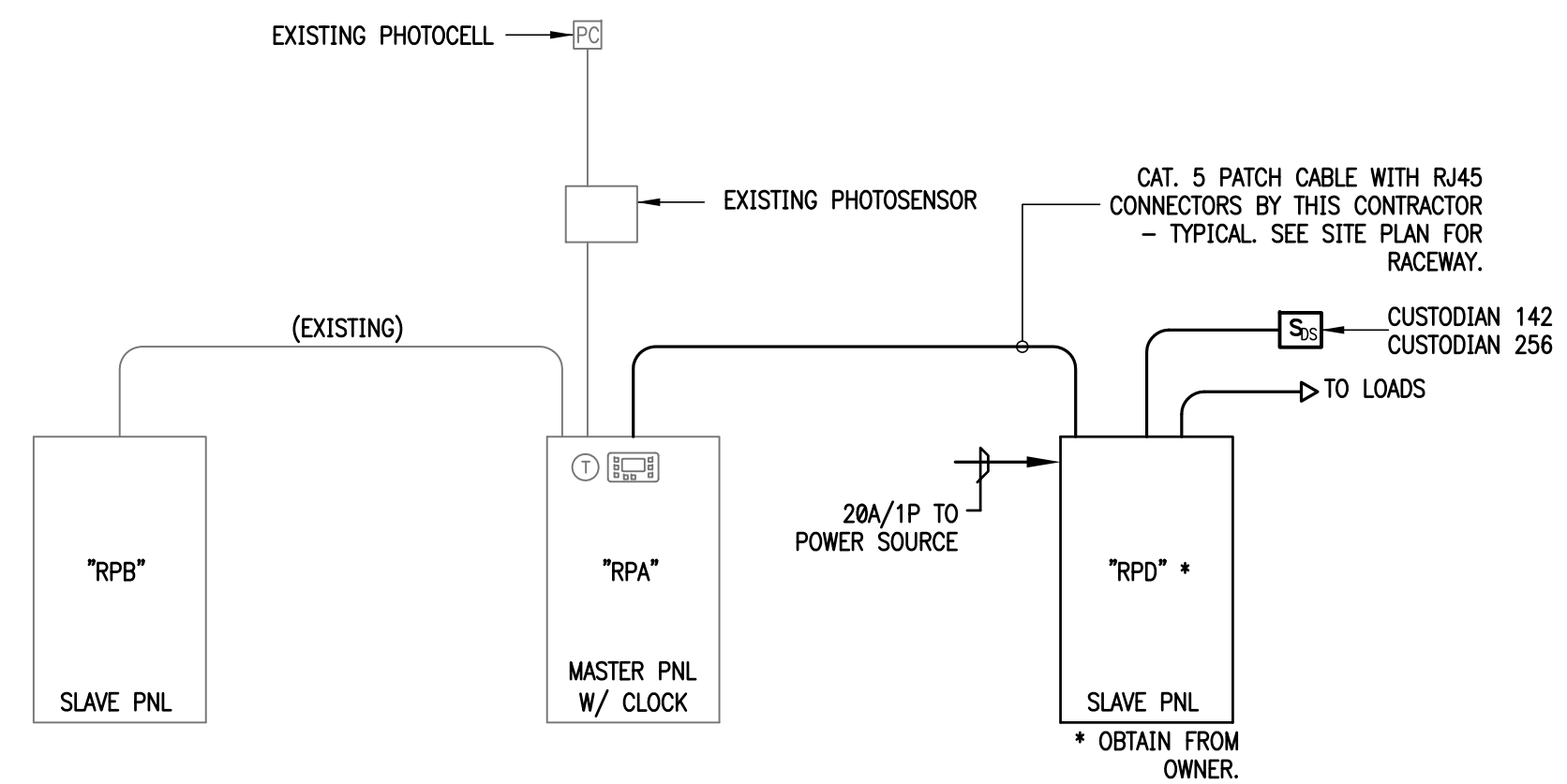
TRANSFORMER SCHEDULE:

DESIGN	KVA	PV	SV	DEGREE RISE	CONNECTION	FREQ HZ	SERVES PANELS	CAT. NO.	PRIMARY FEEDER (75°C COPPER)
T-D1	45	480	120/208	115	DELTA Y	60	LD1	POWER SMITHS: Easaver20M-45-480-208-HD-T115-F60	1.25" - 3#3 & #8G
T-D2	75	480	120/208	115	DELTA Y	60	LD2, CD2	POWER SMITHS: Easaver20M-75-480-208-HD-T115-F60	2" - 3#1/0 & #8G

LUMINAIRE SCHEDULE

CALLOUT	LAMP	DESCRIPTION	DRIVER	MOUNTING	MODEL	INPUT WATTS	VOLTS	NOTE	LUMENS
A2	LED	2'X4' LAY-IN INDIRECT LED TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 40L G21 LP840 WILLIAMS: LT24 L40 AF DIM UNV	34	120V 1P 2W 277V 1P 2W		4032
A2E	LED	2'X4' LAY-IN INDIRECT LED TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 40L G21 LP840 ELA14L WILLIAMS: LT24 L40 AF DIM UNV EM/10W	34	120V 1P 2W 277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	4032
A3	LED	2'X4' LAY-IN INDIRECT LED TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 48L G21 LP840 WILLIAMS: LT24 L52 AF DIM UNV	45	277V 1P 2W		5234
A3E	LED	2'X4' LAY-IN INDIRECT LED TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 48L G21 LP840 ELA TSP/LP WILLIAMS: LT24 L52 AF DIM UNV EM/10W	45	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	5234
D2	LED	4' WRAPAROUND	0-10V	CHAIN/SURFACE	LITHONIA: SBL 40L G21 LP840 LSI: NA10 LED SS NW UE EM	32	120V 1P 2W 277V 1P 2W		3994
D2E	LED	4' WRAPAROUND	0-10V	CHAIN/SURFACE	LITHONIA: SBL4 40L G21 EL1AL LP840 LSI: NA10 LED SS NW UE EM	32	120V 1P 2W 277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	3994
G2	LED	2'X4' FLANGED LED TROFFER	0-10V	RECESSED	LITHONIA: ZGLT F 4 40L G21 LP840 WILLIAMS: LPT-24-L43/640-SAF12125-DFX-2448W-DIM-UNV	39	277V 1P 2W		4290
G2E	LED	2'X4' FLANGED LED TROFFER	0-10V	RECESSED	LITHONIA: ZGLT F 4 40L G21 LP840 ELA TSP/LP WILLIAMS: LPT-24-L43/640-SAF12125-DFX-2448W-EM/10W-DIM-UNV	39	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	4290
J2E	LED	8' LED LINEAR	0-10V	RECESSED	FINELITE: HP4R-H-80-40-F-277V-SO-VF FORCAST: SRT-44-FG-95-40K-8-UNV-WH-EMLED	56	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	5808
L2	LED	LED WALL BRACKET	0-10V	WALL	LITHONIA: WL4 40L SLD LP840 LSI: W44 4 HO NW UE	40	277V 1P 2W		2950
L2E	LED	LED WALL BRACKET	0-10V	WALL	LITHONIA: WL4 40L SLD LP840 EL7L LSI: W44 4 HO NW UE EM	40	120V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	2950
ME	LED	LED WALLPACK	0-10V	SURFACE	LITHONIA: WSR LED 1 10A700/40K SR4 MVOLT ELCW X RAYON: T650LED DL 30 UN112 40 T4 EM	22	277V 1P 2W	PROVIDE UL LISTED FOR WET LOCATIONS AND WITH AN EMERGENCY BATTERY PACK. PROVIDE METALLIC SILVER COLOR FINISH TO MATCH PHASE I.	2655
N	LED	LED WALLPACK	0-10V	SURFACE	LITHONIA: WSR LED 2 10A700/40K SR4 MVOLT X RAYON: T650LED DL 40 UN112 40 T4 MTO	45	277V 1P 2W	PROVIDE UL LISTED FOR WET LOCATIONS. PROVIDE METALLIC SILVER COLOR FINISH TO MATCH PHASE I.	3404
P1	LED	LED ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	LSI: MRM LED 30L SIL SW HV DIM 40 78CRI 1MS0M4HV MSV LSI: R1P85 A156 27 S MSV PROVIDE A \$5,000 ALLOWANCE FOR THE PURCHASE OF EACH POLE/FIXTURES SET UP	209	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH AN EMERGENCY BATTERY PACK. PROVIDE METALLIC SILVER COLOR FINISH TO MATCH PHASE I.	30538
P2	LED	LED ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	LSI: MRM LED 30L SIL 3 HV DIM 40 78CRI 1MS0M4HV MSV LSI: R1P85 A156 27 S MSV PROVIDE A \$5,000 ALLOWANCE FOR THE PURCHASE OF EACH POLE/FIXTURES SET UP	209	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH AN EMERGENCY BATTERY PACK. PROVIDE METALLIC SILVER COLOR FINISH TO MATCH PHASE I.	32176
S	LED	SURFACE CORNER MOUNT	0-10V	SURFACE	KENALL: MLH48-48-R-LG-PP-45L40K-DCC-277-CMB LUMINAIRE LED: VPF84 50W 4000K DIM 120-277 OP WHT	45	277V 1P 2W	PROVIDE CORNER MOUNT BRACKET.	5072
X1	LED	SINGLE SIDED LED EXIT SIGN		WALL/CEILING	LITHONIA: LV S W 1 R 120/277 UM EL N SD MULE LIGHTING: WLXC-1-R-W-U-SD	3	277V 1P 2W	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.	0
X2	LED	DOUBLE SIDED LED EXIT SIGN		WALL/CEILING	LITHONIA: LV S W 2 R 120/277 UM EL N SD MULE LIGHTING: WLXC-2-R-W-U-SD	5	277V 1P 2W	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.	0

GENERAL NOTES:  
 1. LIGHT FIXTURE EQUALS MANUFACTURED BY COLUMBIA AND METALUX ARE ACCEPTABLE, PROVIDED THEY MEET OR EXCEED SPECIFICATIONS.  
 2. EXTRA MATERIALS: SEE SPECIFICATIONS.  
 3. EMERGENCY BATTERY PACKS SHALL BE COMPLETE FACTORY INSTALLED WITH NI-CAD BATTERY, CHARGER INDICATING LIGHT, ELECTRONIC CIRCUITRY, 1400 LUMENS OUTPUT, 90 MINUTES DURATION & FIVE FULL YEARS WARRANTY.  
 4. FURNISH ALL 2' X 4' LAY-IN LIGHT FIXTURES WITH INTEGRAL CEILING CLIPS.



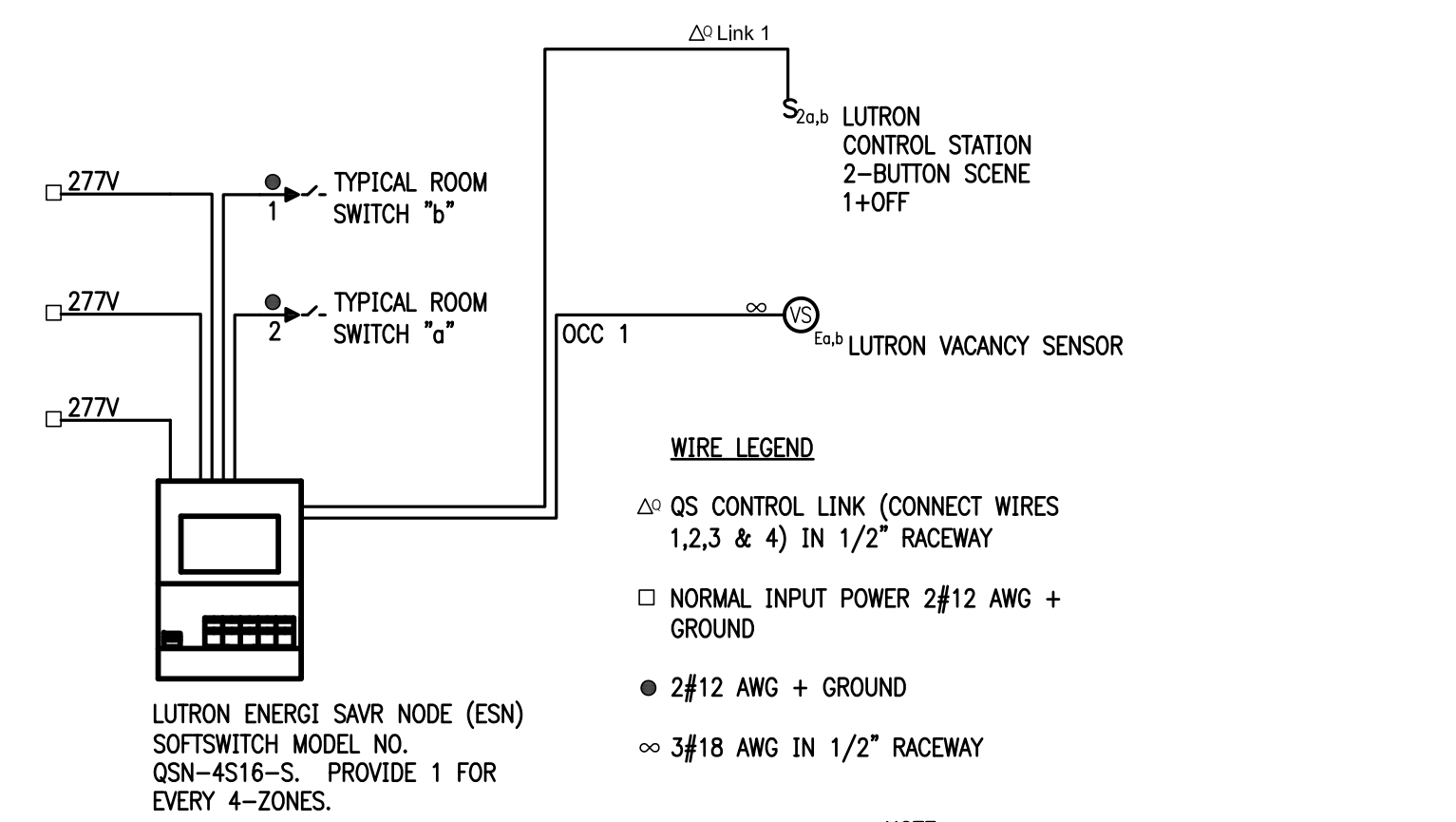
02 LIGHTING MANAGEMENT SYSTEM RISER DETAIL  
SCALE: NOT TO SCALE

GENERAL NOTES:

- FURNISH ALL COMPONENTS AND HARDWARE AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM - SEE SPECIFICATIONS "NETWORK LIGHTING CONTROLS".
- REFER TO SCHEDULES FOR RELAY PANEL MODEL NUMBERS.
- MASTER RELAY PANEL WITH CLOCK AND PHOTO CELL TO CONTROL SLAVE RELAY PANELS.
- RELAY PANEL CONTROLS CIRCULATING PUMP, EXTERIOR, AREA AND CORRIDOR LIGHTING (SWEEPER SWITCHES) WHERE NOTED.

PANEL NAME: "RPD" (LC & O)  
 PANEL DESCRIPTION: 277/480V - Relays  
 CATALOG NUMBER (INTERIOR): GR1416 LTD INT 16CR DTCMOD DV PANEL ID: GR1400 Series  
 CATALOG NUMBER (ENCLOSURE): GR1416 LTD ENC HL SWINE1 MOUNTING: Surface

RELAY NO.	CONTROL TYPE	SOURCE	VAC	LOAD W/VA	CIRCUIT DESCRIPTION	FIXTURE TYPE
1	NC	NORMAL	277V	----	EXTERIOR LIGHTING (HD-9)	LED
2	NC	NORMAL	277V	----	EXTERIOR LIGHTING (HD-11)	LED
3	NC	NORMAL	480V	----	AREA LIGHTING (HD-10)	LED
4	NC	NORMAL	480V	----	AREA LIGHTING (HD-12)	LED
5	NC	NORMAL	277V	----	SPARE	----
6	NC	NORMAL	277V	----	SPARE	----
7	NC	NORMAL	277V	----	SPARE	----
8	NC	NORMAL	277V	----	SPARE	----
9	NC	NORMAL	277V	----	SPARE	----
10	NC	NORMAL	277V	----	SPARE	----
11	NC	NORMAL	277V	----	SPARE	----
12	NC	NORMAL	277V	----	SPARE	----
13	NC	NORMAL	277V	----	SPARE	----
14	NC	NORMAL	277V	----	SPARE	----
15	NC	NORMAL	277V	----	SPARE	----
16	NC	NORMAL	277V	----	SPARE	----



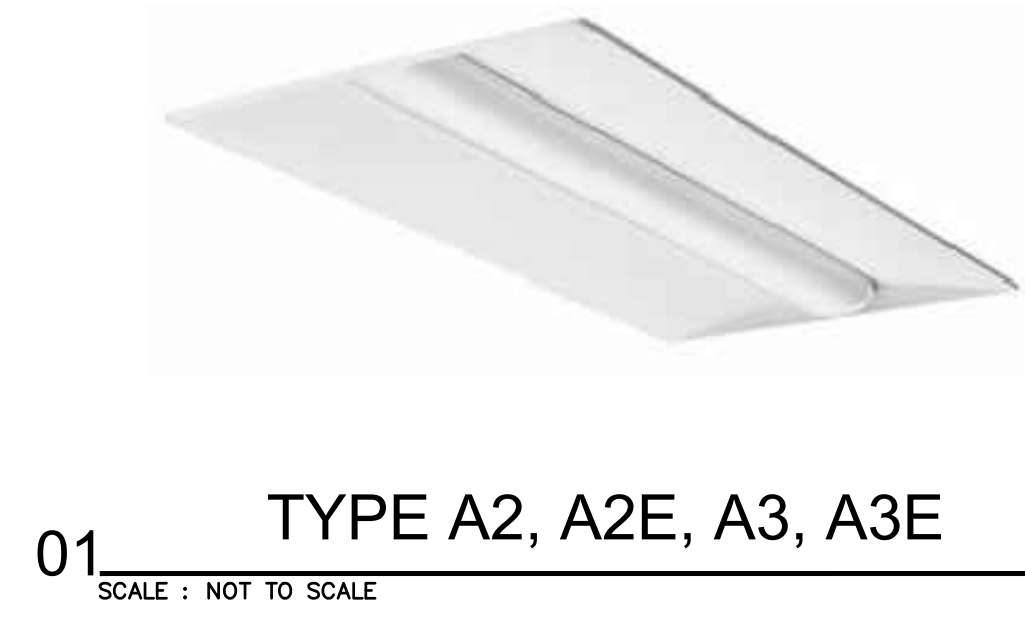
01 LIGHTING CONTROL WIRING DETAIL  
SCALE: NOT TO SCALE

NOTE:  
 1. REFER TO LIGHTING DRAWINGS FOR EXACT NUMBER OF SWITCHES AND OCCUPANCY SENSORS APPLICABLE TO BE PROVIDED AT EACH ROOM.

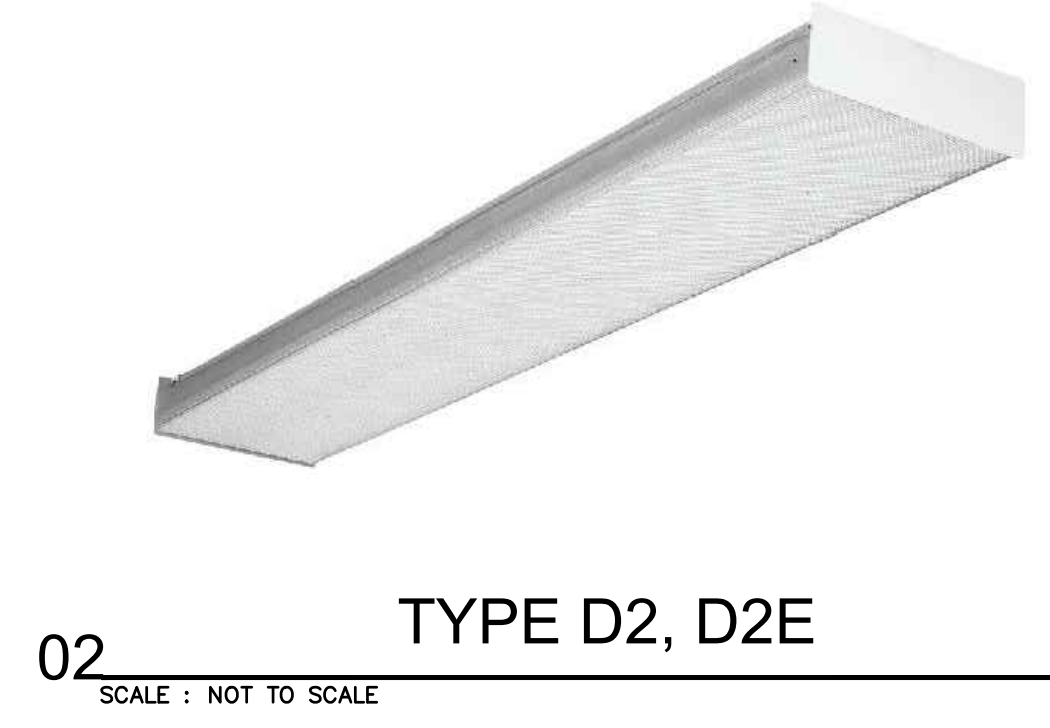
No.	REVISIONS	BY



GMS ARCHITECTS  
 1150 Paredes Line Rd.  
 Brownsville TX 78526  
 (956) 546-0110  
 fax (956) 546-0196



01 TYPE A2, A2E, A3, A3E  
 SCALE : NOT TO SCALE



02 TYPE D2, D2E  
 SCALE : NOT TO SCALE



03 TYPE G2, G2E  
 SCALE : NOT TO SCALE



04 TYPE J2E  
 SCALE : NOT TO SCALE



05 TYPE L2  
 SCALE : NOT TO SCALE



06 TYPE ME, N  
 SCALE : NOT TO SCALE



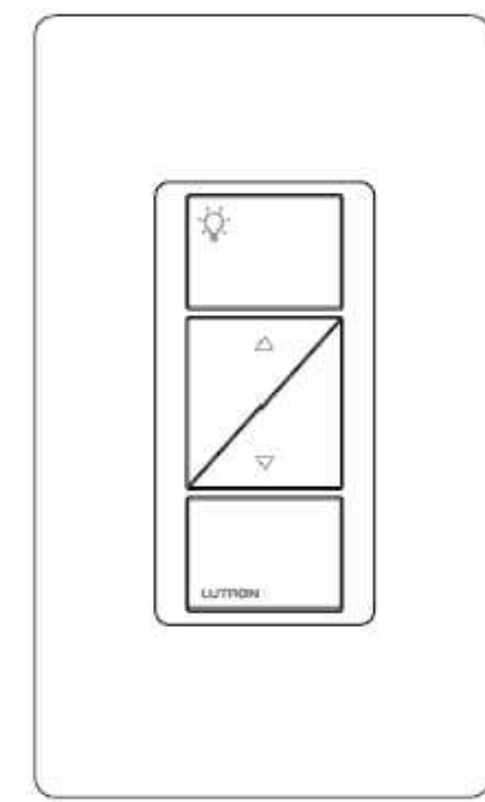
07 TYPE P1, P2  
 SCALE : NOT TO SCALE



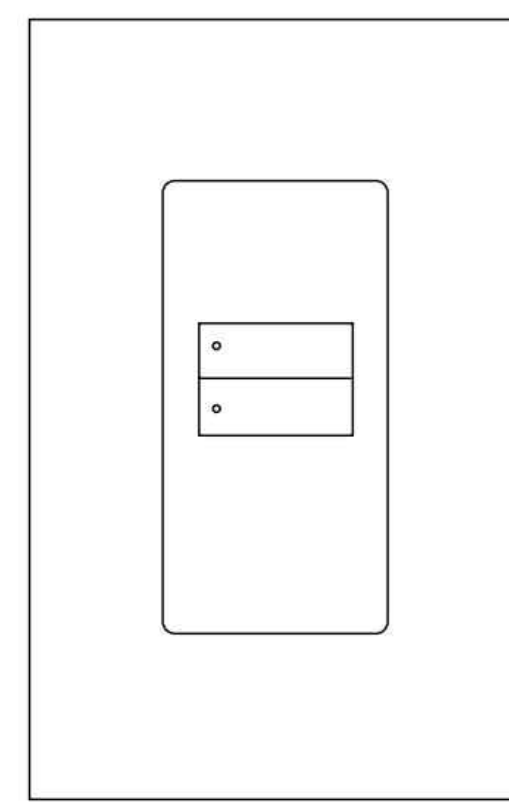
08 TYPE S  
 SCALE : NOT TO SCALE



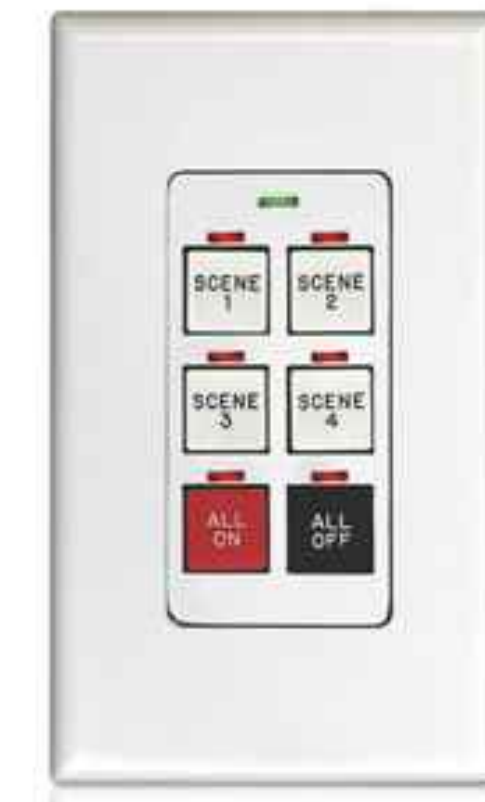
09 TYPE X1, X2  
 SCALE : NOT TO SCALE



10 LUTRON PX-2BRL DIMMING WALLSTATION  
 SCALE : NOT TO SCALE



11 LUTRON QSWS2-2BI WALLSTATION  
 SCALE : NOT TO SCALE



12 ACUITY CH1 DIGITAL SWITCH  
 SCALE : NOT TO SCALE



13 KEYED SWITCH HUBBELL HBL1221RKLX  
 SCALE : NOT TO SCALE

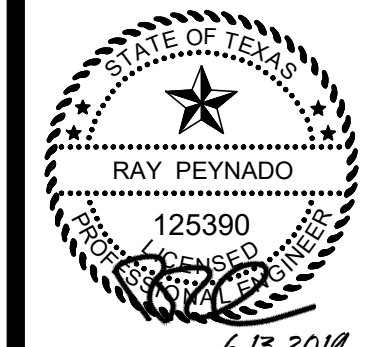


14 LUTRON MS-Z101-V-WH WALL SWITCH  
 SCALE : NOT TO SCALE



15 LUTRON SENSOR  
 SCALE : NOT TO SCALE

IDEA-OWASSA  
 COLLEGE PREP PHASE II  
 IDEA Public Schools



© Copyright 2019  
 Gomez Mendez Saez Inc.  
 Architects-Planners  
 Interior Designers  
 Date: JUNE 13, 2019  
 Scale: As Noted  
 Project Architect: David Monreal, AIA  
 Drawn By: ETHOS  
 Job No: IDEA OWASSA II  
 Sheet: E6.02



119 W. VAN BUREN AVE. STE. 101  
 PHOENIX, AZ 85007  
 PHONE: 602-270-3435  
 TEXAS REGISTERED  
 ENGINEERING FIRM  
 F-15988

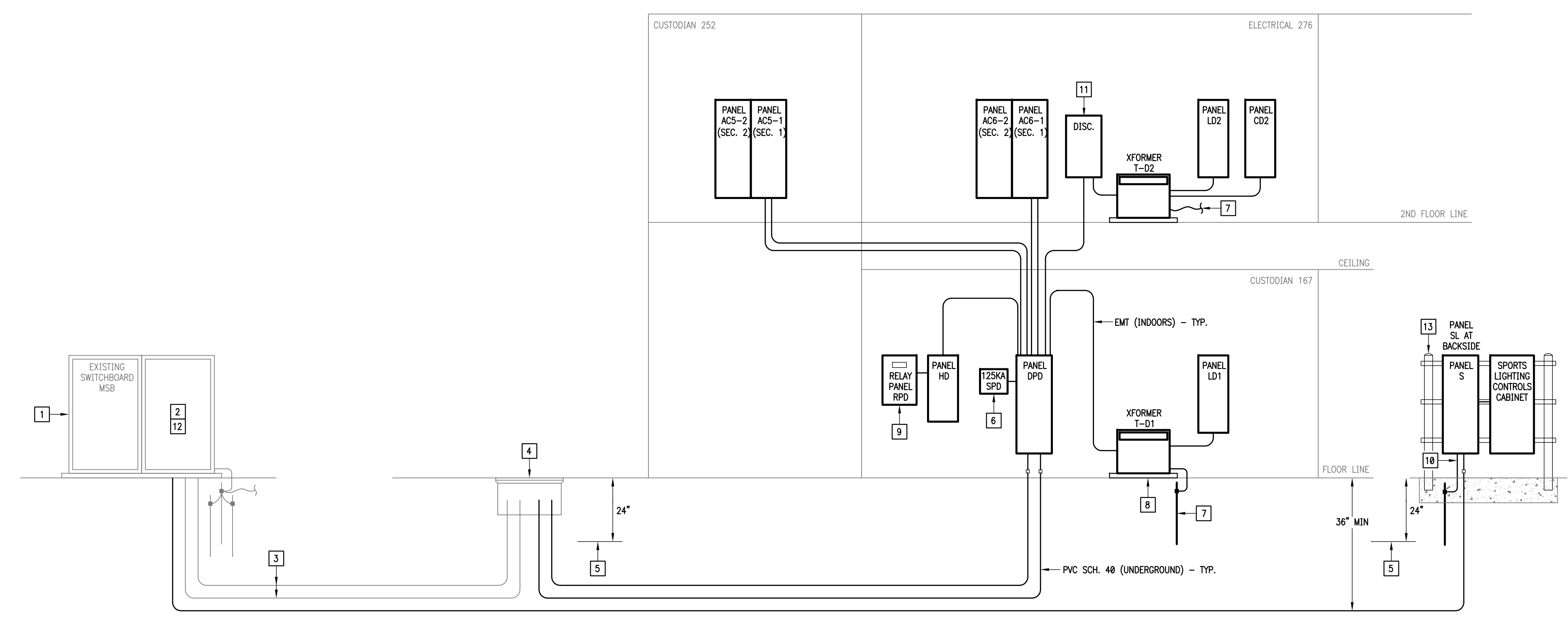


**KEYED NOTES:**

- 1 EXISTING EATON POW-R-LINE C SWITCHBOARD 2500A, 277/480V, 3ø, 4W.
- 2 CONNECT NEW DISTRIBUTION PANELBOARD "DPD" TO EXISTING SPARE 800A/3P BREAKER IN "MSB".
- 3 EXISTING (2)-4" RACEWAYS. FIELD VERIFY EXACT LOCATION.
- 4 EXISTING "ELECTRICAL" POLYMER CONCRETE PULL BOX - SEE MEP SITE PLAN.
- 5 PROVIDE CONTINUOUS DETECTABLE UNDERGROUND WARNING TAPE.
- 6 PROVIDE 125KA EXTERNALLY MOUNTED SPD ACT COMMUNICATIONS MODEL #ACT1471-277Y-160-F-C1-SWM.
- 7 SEE GROUNDING RISER DIAGRAM.
- 8 PROVIDE 4" HOUSEKEEPING CONCRETE PAD - TYPICAL.
- 9 INSTALL & CONNECT RELAY PANEL PROVIDED TO OWNER ON PHASE I.
- 10 PROVIDE 3/4"X 10" COPPER CLAD GROUND ROD AND 3/4" - #1/0 BARE COPPER GROUND ELECTRODE CONDUCTOR.
- 11 PROVIDE 200A, 3PNF, 600V, NEMA 1 DISCONNECT.
- 12 CONNECT NEW DISTRIBUTION PANELBOARD "S" TO EXISTING SPARE 400A/3P BREAKER IN "MSB".
- 13 PROVIDE A HOT-DIPPED RIGID GALVANIZED SUPPORT STRUCTURE WITH CONCRETE FOOTING AS REQUIRED.

**RACEWAYS EMBEDDED IN FOUNDATION GENERAL NOTES:**

- RACEWAYS EMBEDDED WITHIN THE SLAB SHALL COMPLY WITH THE FOLLOWING:
1. SHALL HAVE A MINIMUM SPACING OF 2".
  2. SHALL NOT BE LARGER THAN 1".
  3. SHALL NOT BE RUN THROUGH THE SURFACE AREA OF THE FOOTING.
  4. SHALL NOT BE CROSSED OVER/UNDER EACH OTHER WITH THE SLAB.
  5. SHALL NOT BE TIED TO THE REBAR.
  6. SHALL BE A MINIMUM OF 1.5" AWAY FROM SLAB REBAR. IF SPACING CANNOT BE ACCOMPLISHED IT SHALL BE PROVIDED BELOW GRADE.



01 ELECTRICAL RISER DIAGRAM  
 SCALE: NONE

**FEEDER SCHEDULE:**

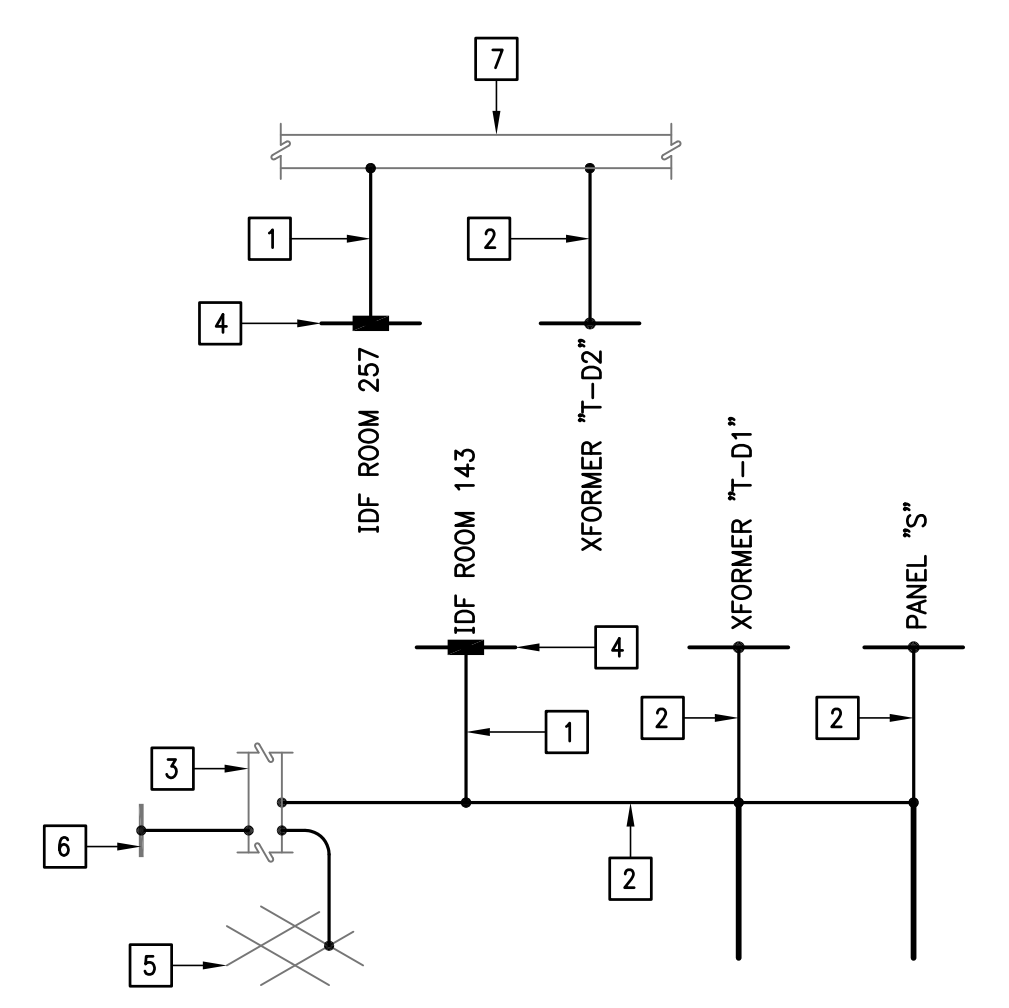
FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
30	1" - 3#10 & #10C	SL
60	1" - 4#6 & #10C	HD
125	1.5" - 4#1 & #6C	LD1, LD2
125	2" - 4#1, #6C & #61G	CD2
400	4" - 4#600KCMIL & #3C	ACS-1, ACS-2, ACS-1, ACS-2, S
800	(2-RUNS) 4" - 4#600KCMIL & #1/0C	DPD

SIZING METHOD: COPPER 75°C

**ALT. #1 FEEDER SCHEDULE:**

FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
30	1" - 3#8 & #8C	SL
60	1" - 4#4 & #8C	HD
125	2" - 4#2/0 & #4G	LD1, LD2
125	2" - 4#2/0, #4G & #41G	CD2
400	(2 RUNS) 2.5" - 4#250KCMIL & #1G	ACS-1, ACS-2, ACS-1, ACS-2, S
800	TO REMAIN AS NOTED ON BASE BID.	DPD

SIZING METHOD: ALUMINUM 75°C



**GROUNDING RISER KEYED NOTES:**

- 1 #4 BARE COPPER GROUND CONDUCTOR.
- 2 #1/0 BARE COPPER GROUND ELECTRODE CONDUCTOR.
- 3 CADWELD CONNECT TO BUILDING STRUCTURE STEEL.
- 4 GROUNDING BUS BAR - TYPICAL.
- 5 CADWELD CONNECT TO BUILDING REBAR.
- 6 BOND/CLAMP TO COPPER WATER LINE.
- 7 CADWELD TO BUILDING STRUCTURE STEEL.

02 GROUNDING RISER DIAGRAM  
 SCALE: NONE

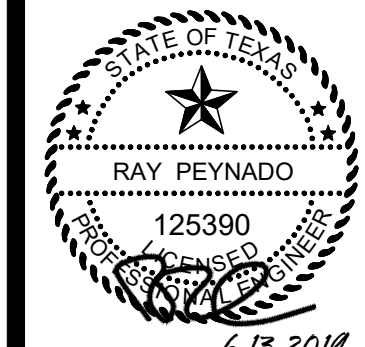


119 W. VAN RIVER AVENUE, STE. 001  
 PHONE 956-220-3435  
 TEXAS REGISTERED  
 ENGINEERING FIRM  
 F-15906



1150 Paredes Line Rd.  
Brownsville, TX 77526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA COLLEGE PREP PHASE II  
Public Schools



6.12.2019  
© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

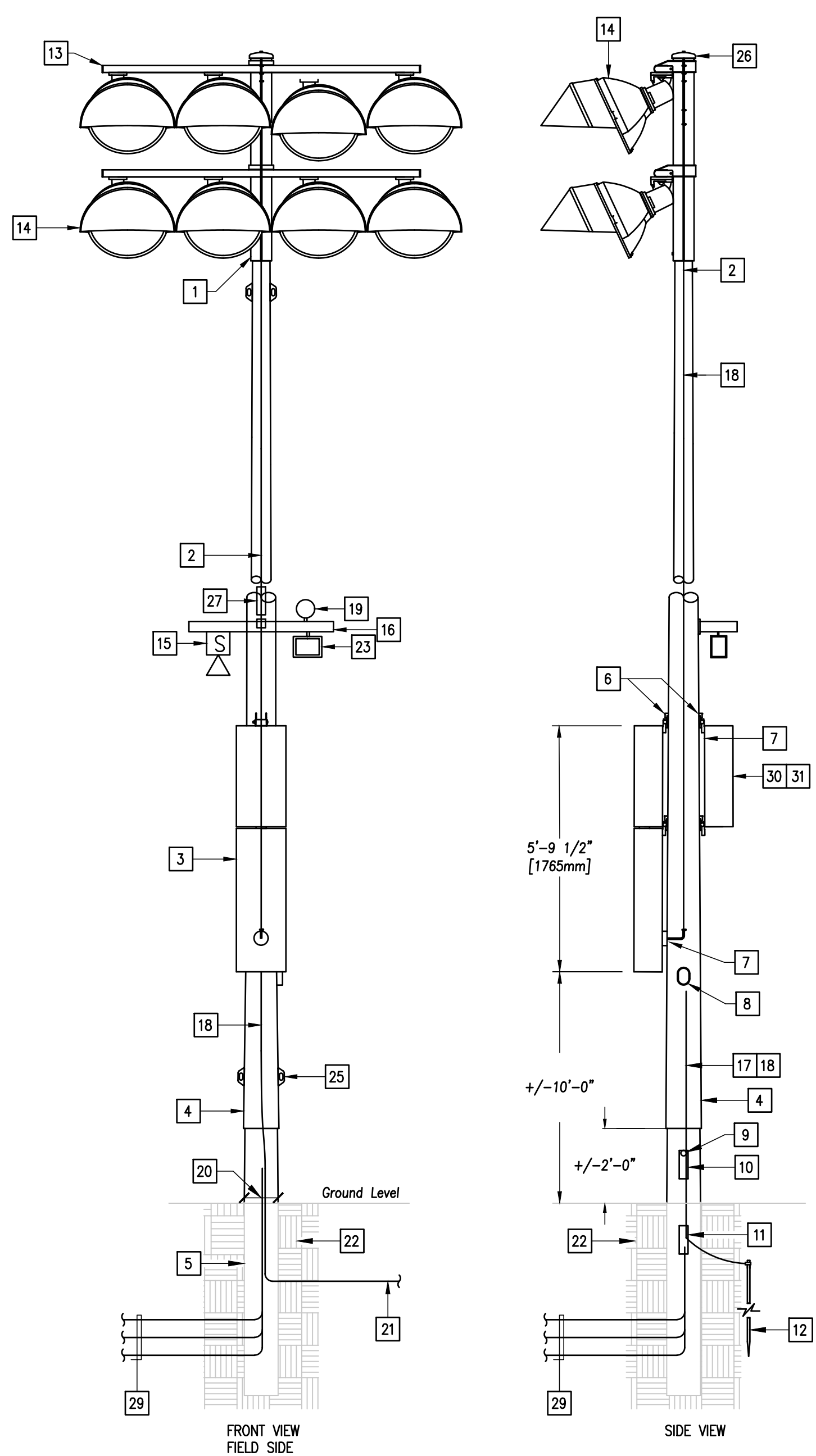
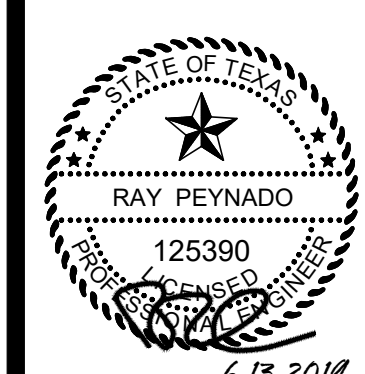
Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: E8.01

LD1			ROOM CUSTODIAN 142			VOLTS 208Y/120V 3P 4W			BUS AMPS 225			AIC 10,000					
MOUNTING SURFACE			NEUTRAL 100%			LUGS STANDARD			FED FROM UTILITY			MAIN BKR 125					
NOTE: PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.																	
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA			CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA								
			A	B	C				A	B	C						
1	20/1	RECEPT.	0.54			2	20/1	RECEPT.	1.44								
3	20/1	RECEPT.	0.74			4	20/1	RECEPT.	0.36								
5	20/1	RECEPT.		0.54		6	20/1	RECEPT.		0.54				0.9			
7	20/1	RECEPT.	0.72			8	20/1	RECEPT.			0.9						
9	20/1	RECEPT.		0.36		10	20/1	RECEPT.			0.9						
11	20/1	RECEPT.		1.08		12	20/1	DRINKING FOUNTAIN			0.8						
13	20/1	DRINKING FOUNTAIN	0.8			14	20/1	RECEPT.	1.08								
15	20/1	RECEPT.		1.26		16	20/1	RECEPT.		1.08							
17	20/1	RECEPT.		1.08		18	20/1	HAND DRYER			1.5						
19	20/1	HAND DRYER	1.5			20	20/1	HAND DRYER			1.5						
21	20/1	HAND DRYER		1.5		22	20/1	HAND DRYER			1.5						
23	20/1	HAND DRYER			1.5	24	20/1	HAND DRYER									
25	20/1	DRINKING FOUNTAIN	0.8			26	20/1	DRINKING FOUNTAIN	0.8								
27	20/1	RECEPT.		1.08		28	20/1	RECEPT.		0.9							
29	20/1	RECEPT.		0.72		30	20/1	RECEPT.		0.9				0.72			
31	20/1	RECEPT.		0.72		32	20/1	RECEPT.		1.5							
33	20/1	RECEPT.		0.72		34	20/1	HAND DRYER			1.5						
35	20/1	RECEPT.		0.36		36	20/1	DISHWASHER			1.2						
37	20/1	REFRIG	1.2			38	20/1	WASHER	1.2								
39	30/2	DRYER		2.5		40	20/1	RECEPT.		0.72							
41				2.5		42	20/1	HAND DRYER			1.5						
43	20/1	RECEPT.	0.36			44	20/1	DISHWASHER	1.2								
45	20/1	REFRIG		1.2		46	20/1	WASHER		1.2							
47	30/2	DRYER		2.5		48	20/2	GATE OPERATOR		1.2				0.96			
49				2.5		50				0.96							
51	20/1	EF-1, LIGHTING	0.092			52	20/1	EF-2, EF-3		0.416							
53	20/1	EF-4, LIGHTING		0.092		54	20/3	EF-5		0.305				0.305			
55	20/1	EF-6				56											
57	20/1	EF-7	0.282			58											
59	20/1	EF-8, LIGHTING		0.864		60	20/1	EF-20, LIGHTING		0.305				0.092			
61	15/2	FOU-1		0.52		62	20/2	EMH-1		1.5							
63				0.52		64				1.5							
65	20/1	FUME HOOD			0.1	66	20/1	SPACE						0			
67	20/1	SPACE				68	20/1	SPACE						0			
69	20/1	SPACE				70	20/1	SPACE						0			
71	20/1	SPACE				72	20/1	SPACE						0			
73	20/1	SPACE				74	20/1	SPACE						0			
75	20/1	SPACE				76	20/1	SPACE						0			
77	20/1	SPACE				78	20/1	SPACE						0			
79	20/1	SPACE				80	20/1	SPACE						0			
81	20/1	SPACE				82	20/1	SPACE						0			
83	20/1	SPACE				84	20/1	SPACE						0			
			TOTAL CONNECTED KVA BY PHASE						21.4			21.2			20.1		
			CONN KVA						CONN KVA			CONN KVA			CONN KVA		
			CALC KVA						CALC KVA			CALC KVA			CALC KVA		
			(125%)						(125%)			(125%)			(125%)		
			0.176						0.22			0.125			0.125		
			LARGEST MOTOR						LARGEST MOTOR			LARGEST MOTOR			LARGEST MOTOR		
			1.92						2.4			0			0		
			(100%)						(100%)			(100%)			(100%)		
			3.77						3.77			0			0		
			RECEPTACLES						RECEPTACLES			RECEPTACLES			RECEPTACLES		
			41.3						25.7			0			0		
			(50%+10)						(50%+10)			(N/A)			(N/A)		
			KITCHEN EQUIP						KITCHEN EQUIP			KITCHEN EQUIP			KITCHEN EQUIP		
			0						0			0			0		
			(N/A)						(N/A)			(N/A)			(N/A)		
			TOTAL KVA						TOTAL KVA			TOTAL KVA			TOTAL KVA		
			62.7						47.6			62.7			47.6		
			BALANCED 3-PHASE AMPS						BALANCED 3-PHASE AMPS			BALANCED 3-PHASE AMPS			BALANCED 3-PHASE AMPS		
			132						132			132			132		

LD2			ROOM ELECTRICAL/STORAGE 255			VOLTS 208Y/120V 3P 4W			BUS AMPS 225			AIC 10,000					
MOUNTING SURFACE			NEUTRAL 100%			LUGS STANDARD			FED FROM UTILITY			MAIN BKR 125					
NOTE: PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.																	
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA			CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA								
			A	B	C				A	B	C						
1	20/1	RECEPT.	1.26			2	20/1	RECEPT.	1.45								
3	20/1	RECEPT.	0.54			4	20/1	RECEPT.	0.36								
5	20/1	RECEPT.		0.36		6	20/1	RECEPT.		0.36				0.9			
7	20/1	RECEPT.	0.54			8	20/1	RECEPT.			0.36						
9	20/1	RECEPT.		0.9		10	20/1	RECEPT.			1.08						
11	20/1	RECEPT.		1.08		12	20/1	RECEPT.			1.08						
13	20/1	RECEPT.	0.9			14	20/1	RECEPT.	1.08								
15	20/1	HAND DRYER		1.5		16	20/1	HAND DRYER			1.5						
17	20/1	HAND DRYER			1.5	18	20/1	HAND DRYER			1.5						
19	20/1	HAND DRYER	1.5			20	20/1	HAND DRYER			1.5						
21	20/1	HAND DRYER		1.5		22	20/1	DRINKING FOUNTAIN			0.8						
23	20/1	DRINKING FOUNTAIN			0.8	24	20/1	RECEPT.			1.26						
25	20/1	RECEPT.	0.9			26	20/1	RECEPT.		0.36							
27	20/1	RECEPT.		1.08		28	20/1	RECEPT.		0.18							
29	20/1	DISHWASHER		1.2		30	20/1	RECEPT.		1							
31	20/1	VENDING MACHINE	1			32	20/1	RECEPT.		0.36							
33	20/1	COPIER		1.2		34	20/1	COPIER		1.2							
35	20/1	RECEPT.		0.9		36	20/2	* ACCU-1		2.08							
37	20/2	* ACCU-2	2.08			38				2.08							
39				2.08		40	15/2	FOU-2		0.52							
41	20/1	EF-09		0.058		42				0.52							
43	20/1	EF-10	0.075			44	20/1	EF-11, LIGHTING		0.116							
45	20/1	EF-12, EF-13		0.416		46	20/1	EF-14, LIGHTING		0.092				0.696			
47	20/1	EF-15		0.696		48	20/1	EF-16		0.292							
49	20/3	EF-17		0.305		50	20/1	EF-18		0.864							
51				0.305		52	20/1	EF-19									
53				0.305		54	20/1	FUME HOOD		0.075				0.1			
55	20/1	RECEPT.	0.18			56	20/1	EF-20									
57	20/1	MOT. DAMPER		0.01		58	20/1	SPACE						0			
59	20/1	SPACE				60	20/1	SPACE						0			
61	20/1	SPACE				62	20/1	SPACE						0			
63	20/1	SPACE				64	20/1	SPACE						0			
65	20/1	SPACE				66	20/1	SPACE						0			
67	20/1	SPACE				68	20/1	SPACE						0			
69	20/1	SPACE				70	20/1	SPACE						0			
71	20/1	SPACE				72	20/1	SPACE						0			
73	20/1	SPACE				74	20/1	SPACE						0			
75	20/1	SPACE				76	20/1	SPACE						0			
77	20/1	SPACE				78	20/1	SPACE						0			
79	20/1	SPACE				80	20/1	SPACE						0			
81	20/1	SPACE				82	20/1	SPACE						0			
83	20/1	SPACE				84	20/1	SPACE						0			
			TOTAL CONNECTED KVA BY PHASE						16.4			16.1			16		
			CONN KVA						CONN KVA			CONN KVA			CONN KVA		
			CALC KVA						CALC KVA			CALC KVA			CALC KVA		
			(125%)						(125%)			(125%)			(125%)		
			0.104						0.13			0.125			0.125		
			LARGEST MOTOR						LARGEST MOTOR			LARGEST MOTOR			LARGEST MOTOR		
			4.16						5.2			0			0		
			(125%)						(125%)			(100%)			(100%)		
			9.39						9.39			0			0		
			RECEPTACLES						RECEPTACLES			RECEPTACLES			RECEPTACLES		
			34.8						22.4			0			0		
			(50%+10)						(50%+10)			(N/A)			(N/A)		
			KITCHEN EQUIP						KITCHEN EQUIP			KITCHEN EQUIP			KITCHEN EQUIP		
			0						0			0			0		
			(N/A)						(N/A)			(N/A)			(N/A)		
			TOTAL KVA						TOTAL KVA			TOTAL KVA			TOTAL KVA		
			48.6						37.3			48.6			37.3		
			BALANCED 3-PHASE AMPS						BALANCED 3-PHASE AMPS			BALANCED 3-PHASE AMPS			BALANCED 3-PHASE AMPS		
			103						103			103			103		



1150 Paredes Line Rd.  
Brownsville, TX 78526  
(956) 546-0110  
fax (956) 546-0196



**TYPICAL SPORTS LIGHTING LIGHT POLE DETAIL**  
01  
SCALE: NOT TO SCALE

**LIGHT POLE DETAIL NOTES:**

- 1 POLETOP LUMINAIRE ASSEMBLY.
- 2 WIRE HARNESS.
- 3 ELECTRICAL COMPONENTS ENCLOSURES  
a. DRIVERS  
b. CAPACITORS  
c. SMART LAMP CONTROL  
d. FUSING  
e. PRIMARY LAMPING LUGS  
f. ONE DISCONNECT PER CIRCUIT  
g. PER LIGHT-STRUCTURE GREEN SYSTEM  
h. GROUNDING LUG
- 4 GALVANIZED STEEL POLE (1, 2, 3, OR 4 SECTIONS).
- 5 PRECAST CONCRETE BASE (CENTRIFUGALLY SPUN PRESTRESSED).
- 6 ATTACHMENT BRACKET.
- 7 WIRE ACCESS HUB.
- 8 HANDHOLE WITH GROUNDING LUG ACCESS.
- 9 LIFTING BAR HOLE.
- 10 ABOVE GROUND ACCESS HOLE.
- 11 UNDERGROUND ACCESS HOLE.
- 12 3/4" X 10" GROUNDING ROD.
- 13 HOT DIP GALVANIZED CROSS ARM WITH CONCEALED WIRING.
- 14 EACH LIGHT FIXTURE SHALL BE INDIVIDUALLY FUSED. SEE POLE SCHEDULE FOR NUMBER OF LIGHT FIXTURES AT EACH POLE.
- 15 FUTURE OUTDOOR SPEAKER HORN.
- 16 THREE POINT BRACKET. SEE POLE SCHEDULE FOR MOUNTING HT.
- 17 #2 GROUND WIRE.
- 18 WRING INSIDE POLE - TYP.
- 19 FUTURE CCTV CAMERA.
- 20 POLE DIAM. AT BASE. COORDINATE W/ SUPPLIER.
- 21 SPORTS LIGHTING ELECTRICAL RACEWAY SEE SHEET MEPL01.
- 22 CONCRETE BACKFILL ALL AROUND POLE PER POLE MANUF. RECOMMENDATIONS.
- 23 FUTURE SPEAKER.
- 24 EXPANSION FITTING.
- 25 JACKING EAR.
- 26 REMOVABLE POLE CAP.
- 27 FUTURE WIFI TRANSMITTER.
- 28 TO POWER SOURCE.
- 29 COMMUNICATIONS RACEWAYS. SEE POLE FEEDER SCHEDULE.
- 30 PROVIDE 2 - 20A/GFI RECEPTACLES (2-20A, 120V CIRCUITS), 1" - 2#10 & #10G EACH. CONNECT CIRCUITS TO PANELBOARD SL.
- 31 ELECTRICAL COMPONENTS ENCLOSURE FOR FUTURE WIFI EQUIPMENT.

S		LOAD KVA			CT #		LOAD KVA		
CT #	CT BKR	A	B	C	CT #	CT BKR	A	B	C
1	20/3	2.49	2.49		2	20/3	2.49	2.49	2.49
3					4				
5					6				
7	20/3	2.49	2.49		8	20/3	2.49	2.49	2.49
9					10				
11					12				
13	100/3	0	0		14	100/3	0	0	2.49
15					16				
17					18				
19	30/2	0.18	0		20	50/3	0	0	0
21					22				
23	20/1	0	0		24				
		TOTAL CONNECTED KVA BY PHASE					10.2	9.98	9.98
		CONN KVA	CALC KVA				CONN KVA	CALC KVA	
LIGHTING		29.9	37.4				0	0	
LARGEST MOTOR		0	0				0	0	
OTHER MOTORS		0	0				0	0	
RECEPTACLES		0.18	0.18				0	0	
KITCHEN EQUIP		0	0				0	0	
							30.1	37.6	
							BALANCED 3-PHASE AMPS	45.2	

1. PROVIDE NEMA 3R (304 STAINLESS STEEL) ENCLOSURE.

**SPORTS LIGHTING - POLE SCHEDULE**

DESIG	POLE HT.	NO. OF FIXTURES "SL"	NO. OF DRIVERS	MODEL	NOTES	CONTACTOR I.D./AMPS
S1	60 FT	4	4	MUSCO: TLC-LED-1200	1	C1/30
S2	60 FT	4	4	MUSCO: TLC-LED-1200	-	C2/30
S3	60 FT	4	4	MUSCO: TLC-LED-1200	-	C3/30
S4	60 FT	4	4	MUSCO: TLC-LED-1200	-	C4/30

NOTES:  
1. PROVIDE ELECTRICAL ENCLOSURE AND RECEPTACLE FOR FUTURE FIBER MEDIA CONVERTER.

SL		LOAD KVA			CT #		LOAD KVA		
CT #	CT BKR	A	B	C	CT #	CT BKR	A	B	C
1	20/1	0.18	0		2	20/1	0	0	0
3	20/1	0	0		4	20/1	0	0	0
5	20/1	0	0		6	20/1	0	0	0
7	20/1	0	0		8	20/1	0	0	0
		TOTAL CONNECTED KVA BY PHASE					0.18	0	
		CONN KVA	CALC KVA				CONN KVA	CALC KVA	
LIGHTING		0	0				0	0	
LARGEST MOTOR		0	0				0	0	
OTHER MOTORS		0	0				0	0	
RECEPTACLES		0.18	0.18				0	0	
KITCHEN EQUIP		0	0				0	0	
							0.18	0.18	
							BALANCED AMPS	0.75	

1. PROVIDE NEMA 3R ENCLOSURE.  
2. PROVIDE PACKAGED POWER SUPPLY WITH INTEGRAL 7.5KVA TRANSFORMER, 30A/2P 480V PRIMARY MCB AND 40A/2P 240V SECONDARY MCB.

**SPORTS FIELDS - FEEDER SCHEDULE**

POLES	FLA	VOLTS	APPROX DIST	XVD	FEEDER	NOTES
S1	9.0	480	63'	0.3	1.5" - 4#10 & #12G	ALL
S2	9.0	480	264'	1.1	1.5" - 4#10 & #12G	ALL
S3	9.0	480	242'	1.0	1.5" - 4#10 & #12G	1-4
S4	9.0	480	351'	1.4	1.5" - 4#10 & #12G	1-4

NOTES:  
1. FEEDER DISTANCES ARE FOR VOLTAGE DROP CALCULATIONS ONLY, NOT FOR BIDDING PURPOSES.  
2. DONT SPLICE WIRING BELOW GRADE, PROVIDE ABOVE GRADE CAST ALUMINUM BOXES AT POLE BASE.  
3. PROVIDE PULLBOXES AS REQUIRED, SIZE PER NED.  
4. SIZE PULL AND SPLICE BOXES PER NEC. PROVIDE WHERE REQUIRED FOR PULLING NEEDS  
5. PROVIDE 3-1" RACEWAYS WITH PULLWIRE (INTERCOM, DATA, SOUND). TERMINATE RACEWAYS AT PULLBOX.



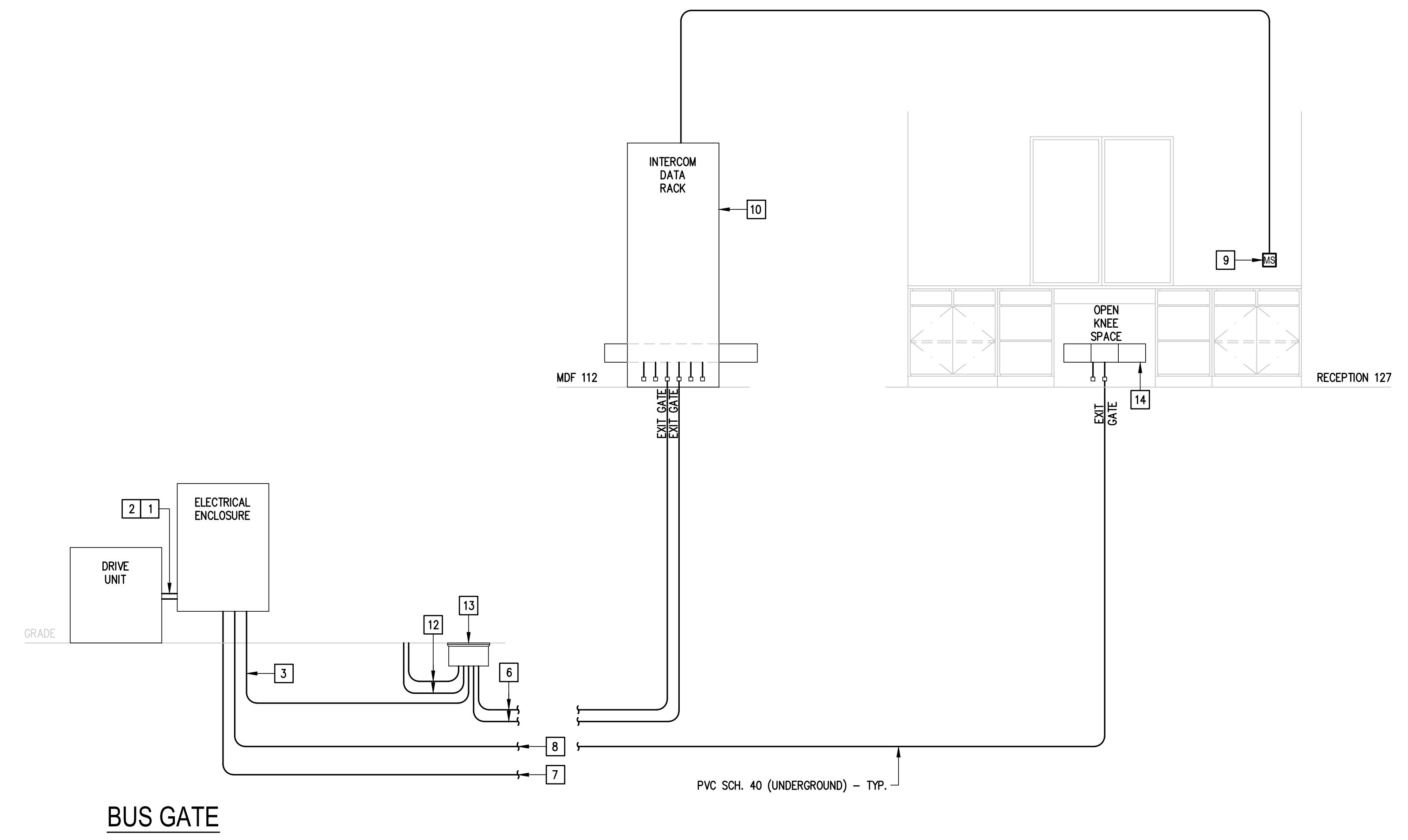
119 W. VAN BUREN AVE. STE. 011  
PHONE 361-210-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
E-15988



No.	REVISIONS	BY



1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

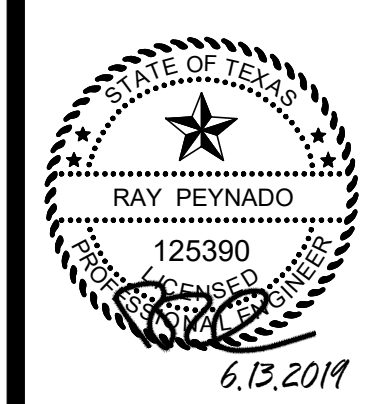


- NOTES:**
- COORDINATE EXACT LOCATION OF COMPONENTS WITH GATE EQUIPMENT SUPPLIER PRIOR TO ANY ROUGH-IN.
  - INTERCOM/VIDEO CAMERA AND CAT5 WIRING BY THIS CONTRACTOR. PROVIDE NEW AIPHONE SYSTEM.
  - ALL COMMUNICATIONS WIRING SHALL BE "AQUASEAL" WEATHER RESISTANT TYPE.
  - ALL GATES CONTROL WIRING SHALL BE PROVIDED BY GATE EQUIPMENT SUB-CONTRACTOR.

- KEYED NOTES:**
- PROVIDE 1-2" RACEWAY-(POWER).
  - PROVIDE 1-2" RACEWAY-(CONTROL WIRING).
  - PROVIDE 1-2" - CONTROL WIRING.
  - PROVIDE 2-1.25" RACEWAYS FOR PEDESTAL AND AIPHONE WIRING.
  - PROVIDE NEW 15"x17" TIER 22 RATED POLYMER CONCRETE PULL BOX WITH "COMMUNICATIONS" COVER LOGO - SEE DETAIL.
  - PROVIDE 1-2" RACEWAY WITH CAT5 CABLE FOR VIDEO DOOR STATION INTERCOM & VIDEO CAMERA AND 1-2" RACEWAY FOR SPARE. TERMINATE AT MDF ROOM WIREWAY.
  - PROVIDE 1-2" RACEWAY TO POWER SOURCE. SEE MEP SITE PLAN.
  - PROVIDE 1-2" RACEWAY TO RECEPTION 116 FOR CONTROLS. TERMINATE AT WIREWAY BELOW DESK.
  - PROVIDE AIPHONE MODEL #AX-084C-SS CENTRAL EXCHANGE UNIT MOUNTED ON RACK.
  - PROVIDE 3 - 2-GANG GANGABLE LARGE CAPACITY WALL BOXES HUBBELL MODEL # HBL985 FLUSH MOUNTED IN WALL. PROVIDE A BLANK COVER PLATE.
  - PROVIDE AIPHONE MODEL #AX-8MV-W MASTER STATION.

01 SLIDE GATE OPERATOR DETAIL  
SCALE: NOT TO SCALE

IDEA-OWASSA COLLEGE PREP PHASE II  
IDEA Public Schools



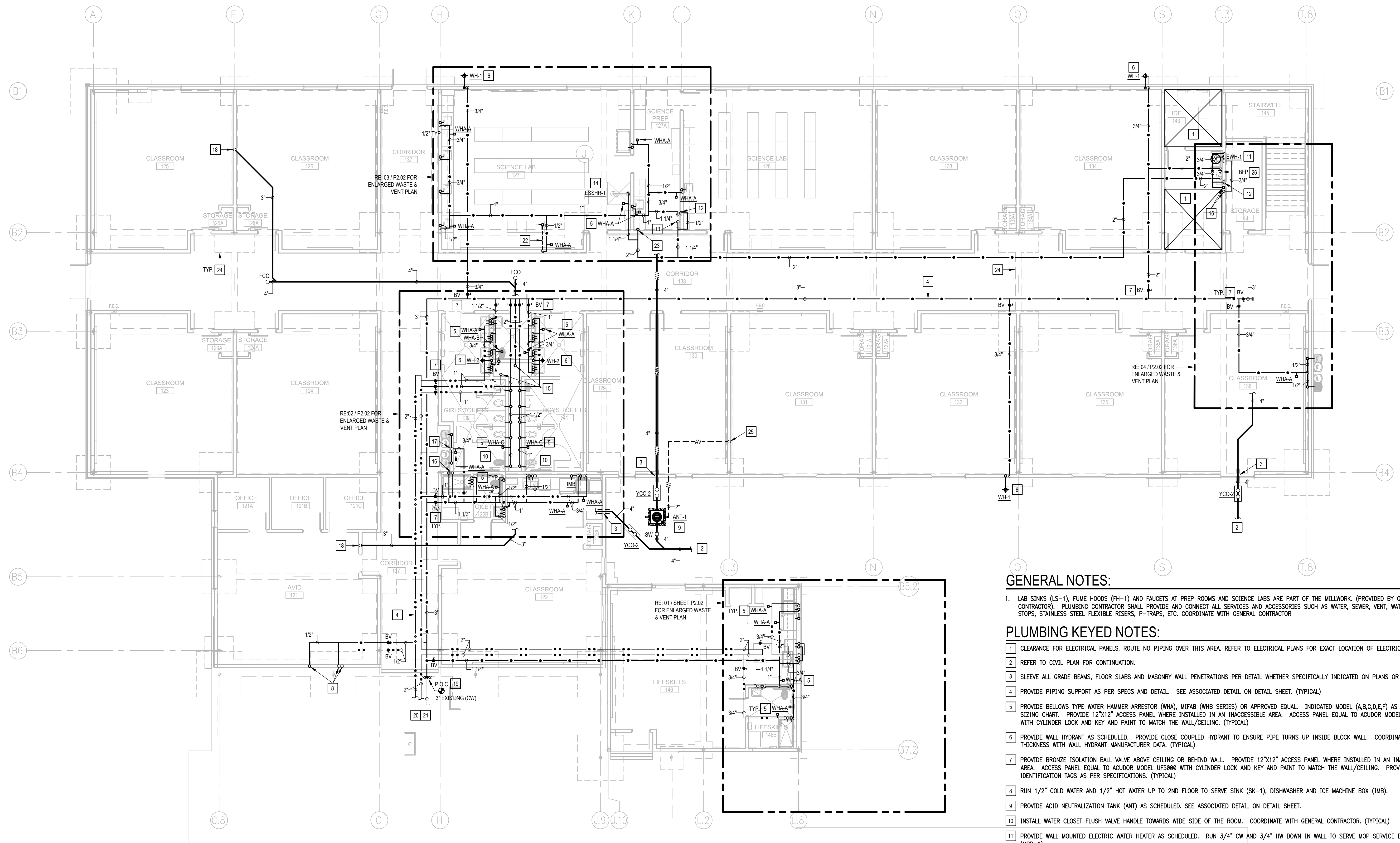
© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet:



119 W. VAN HORN AVE. STE. 101  
PHONE 956-210-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15988

E9.02



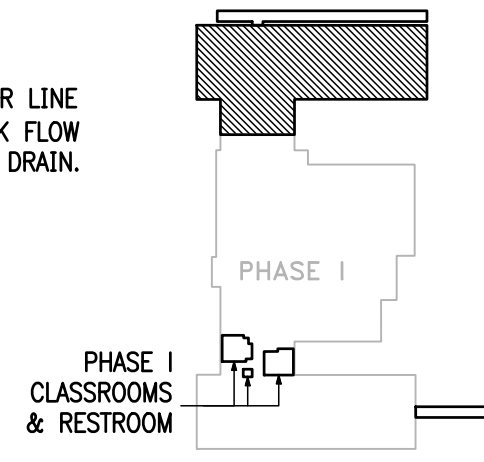
1ST FLOOR  
01 PLUMBING PLAN  
SCALE: 1/8" = 1'-0"  
PLAN NORTH

**GENERAL NOTES:**

- LAB SINKS (LS-1), FUME HOODS (FH-1) AND FAUCETS AT PREP ROOMS AND SCIENCE LABS ARE PART OF THE MILLWORK. (PROVIDED BY GENERAL CONTRACTOR). PLUMBING CONTRACTOR SHALL PROVIDE AND CONNECT ALL SERVICES AND ACCESSORIES SUCH AS WATER, SEWER, VENT, WATER STOPS, STAINLESS STEEL FLEXIBLE RISERS, P-TRAPS, ETC. COORDINATE WITH GENERAL CONTRACTOR

**PLUMBING KEYED NOTES:**

- CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
- REFER TO CIVIL PLAN FOR CONTINUATION.
- SLEEVE ALL GRADE BEAMS, FLOOR SLABS AND MASONRY WALL PENETRATIONS PER DETAIL WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT.
- PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
- PROVIDE BELLWAS TYPE WATER HAMMER ARRESTOR (WHA), MIFAB (WHB SERIES) OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"x12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UFS000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
- PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA. (TYPICAL)
- PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"x12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UFS000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
- RUN 1/2" COLD WATER AND 1/2" HOT WATER UP TO 2ND FLOOR TO SERVE SINK (SK-1), DISHWASHER AND ICE MACHINE BOX (IMB).
- PROVIDE ACID NEUTRALIZATION TANK (ANT) AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR. (TYPICAL)
- PROVIDE WALL MOUNTED ELECTRIC WATER HEATER AS SCHEDULED. RUN 3/4" CW AND 3/4" HW DOWN IN WALL TO SERVE MOP SERVICE BASIN. (MSB-1)
- PROVIDE A PPP MODEL MPB-500 ELECTRONIC TRAP PRIMER OR APPROVED EQUAL. TAP FROM TOP OF COLD WATER LINE AND CONNECT TO TRAP PRIMER BOX. LOCATE BOX ABOVE CEILING. REFER TO DETAIL ON SHEET FOR MORE INFORMATION.
- DROP DOMESTIC WATER LINE INTO SOLENOID ENCLOSURE BOX TO SERVE LAB SINKS. RE: DETAIL SHEET. SOLENOID ENCLOSURE PROVIDED BY ELECTRICAL CONTRACTOR. COORDINATE ALL CONNECTIONS AND MOUNTING HEIGHT WITH ELECTRICAL CONTRACTOR.
- PROVIDE EMERGENCY EYE/FACE WASH AND SHOWER AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- RUN 2" COLD WATER AND 1" HOT WATER UP TO 2ND FLOOR.
- RUN 3/4" COLD WATER AND 3/4" HOT WATER UP TO 2ND FLOOR TO SERVE MOP SERVICE BASIN (MSB-1).
- RUN 1/2" COLD WATER DOWN TO SERVE 1ST FLOOR ELECTRIC DRINKING FOUNTAINS (EDF-1 / EDF-2) AND 1/2" COLD WATER UP TO 2ND FLOOR TO SERVE ELECTRIC DRINKING FOUNTAINS. (EDF-1 / EDF-2)
- 2" WASTE DOWN FROM 2ND FLOOR.
- CONNECT NEW DOMESTIC COLD WATER PIPING INTO EXISTING AT THIS APPROXIMATE LOCATION.
- EXTEND DOMESTIC HOT WATER LOOP TO SERVE NEW BUILDING ADDITION PLUMBING FIXTURES. REFER TO SITE PLAN MEP 101; DETAIL 06 FOR FURTHER CONTINUATION. REMOVE SECTION OF EXISTING HOT WATER PIPING, AND CONNECT NEW HOT WATER PIPING AS SHOWN AT THIS APPROXIMATE LOCATION.
- REMOVE AND REPLACE CEILING TILES IN THE EXISTING BUILDING TO ACCOMMODATE NEW HOT AND COLD WATER PIPING.
- PROVIDE 1/2" SOFT DRAW COPPER UNDER CONCRETE FLOOR SLAB. ROUTE PIPING UNDERNEATH THE POLYETHYLENE VAPOR BARRIER. PIPING SHALL NOT BE EMBEDDED IN THE CONCRETE FLOOR SLAB. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL. (TYPICAL)
- RUN 2" COLD WATER UP TO 2ND FLOOR TO SERVE CHEMISTRY LAB CLASSROOM.
- STRUCTURAL FOUNDATION SHOWN FOR REFERENCE AND COORDINATION PURPOSES. REFER TO STRUCTURAL DRAWINGS FOR MORE DETAILS. (TYPICAL)
- 2" ACID VENT UP TO 2ND FLOOR.
- PROVIDE BACK FLOW PREVENTER (BFP) WILKINS MODEL #975XL OR APPROVED EQUAL. INSTALL BACK FLOW PREVENTER AGAINST WALL IN WATER LINE SERVING SCIENCE LAB TABLES UPSTREAM THE SOLENOID ENCLOSURE BOX AND 40" A.F.F. PROVIDE MINIMUM 3' CLEARANCE IN FRONT OF BACK FLOW PREVENTER FOR TESTING AND SERVICE. PROVIDE DRAIN RECEPTOR UNDER BACK FLOW PREVENTER AND RUN COPPER LINE TO NEAREST FLOOR DRAIN. REFER TO DETAIL SHEET.



**KEYPLAN**  
PHASE I  
CLASSROOMS & RESTROOM

Ethos Engineering  
119 W. VAN BUREN AVE. STE. 101  
PHONE: 956-210-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15988

No.	REVISIONS	BY

GMS ARCHITECTS  
1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA COLLEGE PREP PHASE II  
Public Schools



© Copyright 2019  
Gomez Mendez Samz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet:

**P2.01**

No.	REVISIONS	BY



1150 Paradise Lane Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA  
COLLEGE PREP PHASE II  
Public Schools



© Copyright 2019  
Gomez Mendez Santsz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: P2.02

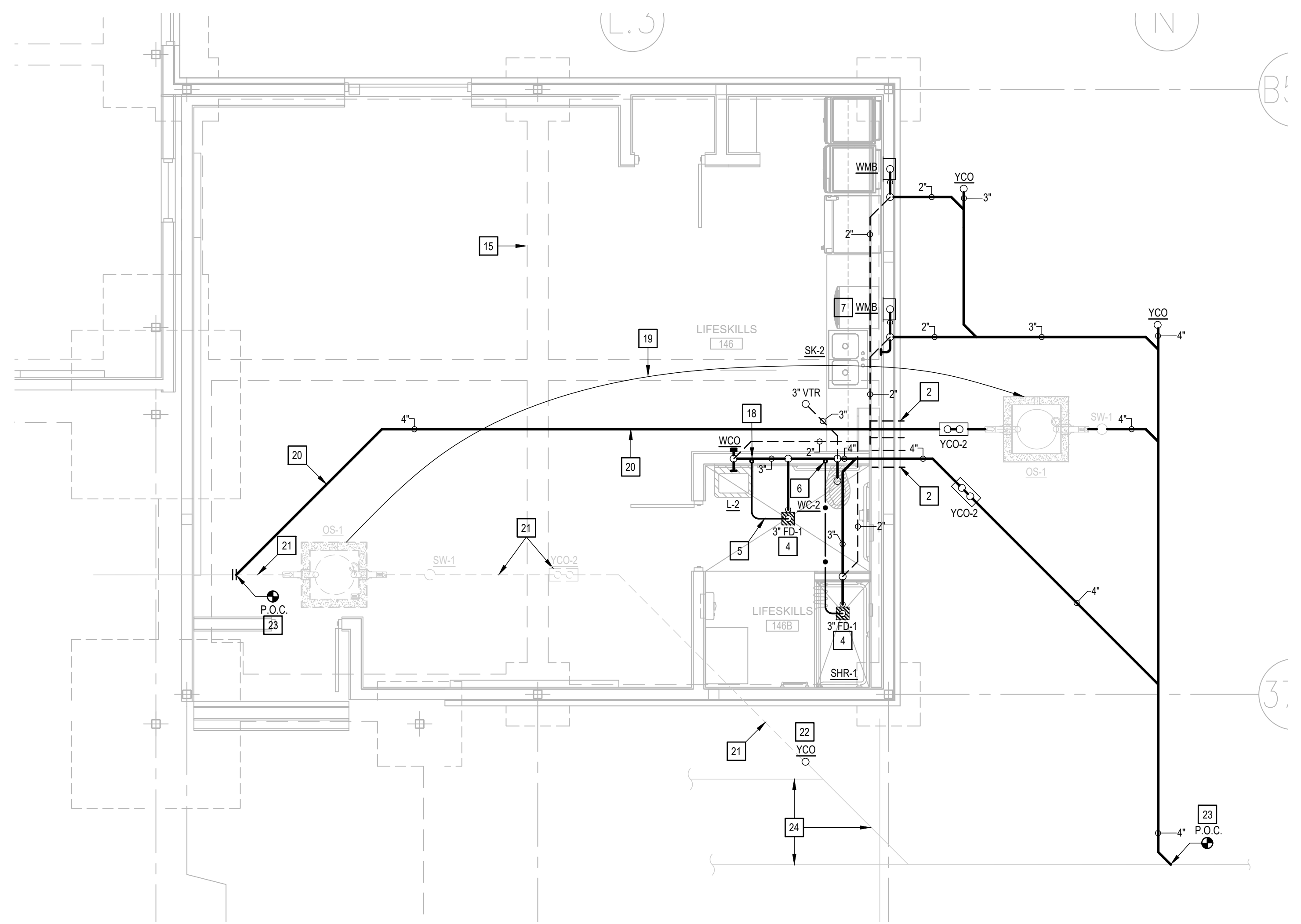
**P2.02**

**GENERAL NOTES:**

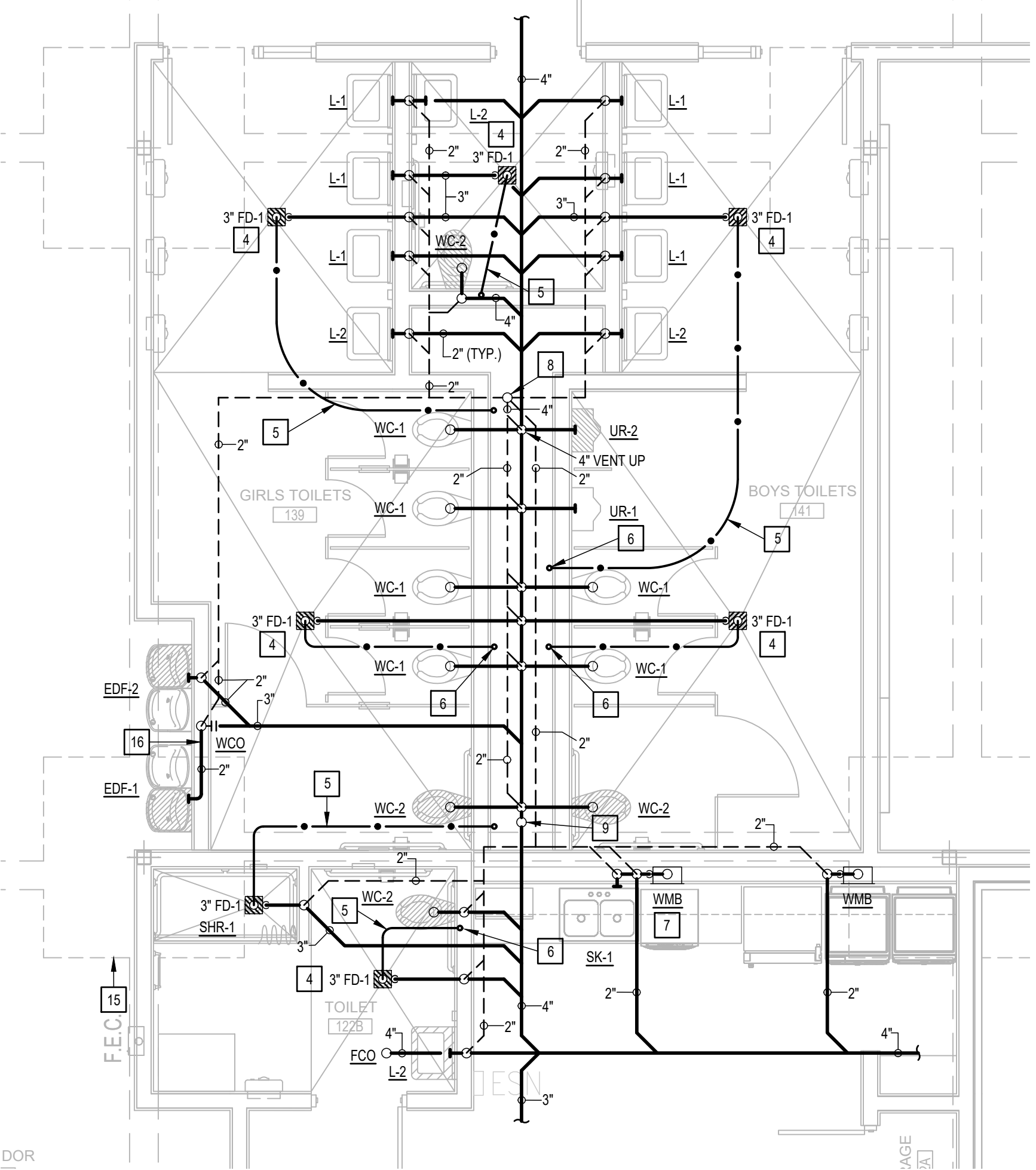
- LAB SINKS (LS-1), FUME HOODS (FH-1) AND FAUCETS AT PREP ROOMS AND SCIENCE LABS ARE PART OF THE MILLWORK. (PROVIDED BY GENERAL CONTRACTOR). PLUMBING CONTRACTOR SHALL PROVIDE AND CONNECT ALL SERVICES AND ACCESSORIES SUCH AS WATER, SEWER, VENT, WATER STOPS, STAINLESS STEEL FLEXIBLE RISERS, P-TRAPS, ETC. COORDINATE WITH GENERAL CONTRACTOR

**PLUMBING KEYED NOTES:**

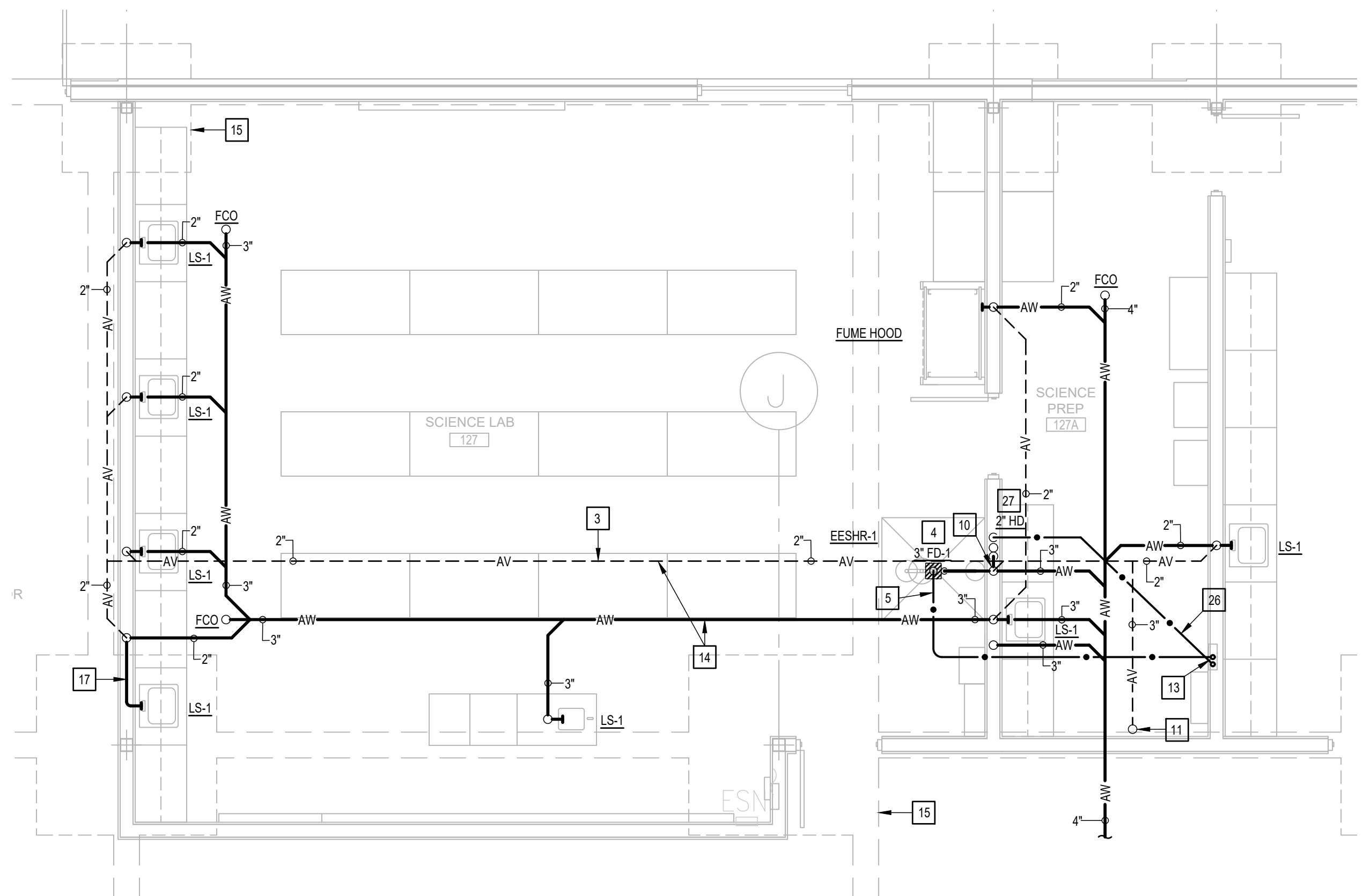
- CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
- SLEEVE ALL GRADE BEAMS, FLOOR SLABS AND MASONRY WALL PENETRATIONS PER DETAIL WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT.
- PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
- PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- PROVIDE 1/2" SOFT DRAWN COPPER FROM TRAP-PRIMER. ROUTE PIPING UNDERNEATH THE POLYETHYLENE VAPOR BARRIER. PIPING SHALL NOT BE EMBEDDED IN THE CONCRETE FLOOR SLAB. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL. (TYPICAL)
- CONNECT TO FLUSH VALVE TRAP-PRIMER (WC). SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
- DISHWASHING MACHINE MUST DISCHARGE BY MEANS OF AN AIR GAP TO PREVENT SEWAGE FROM BACKING UP INTO THE DISHWASHING COMPARTMENT IN THE EVENT OF A STOPPAGE IN THE DRAINAGE SYSTEM
- 4" VENT UP TO 2ND FLOOR.
- 4" WASTE DOWN FROM 2ND FLOOR.
- 3" ACID WASTE DOWN FROM 2ND FLOOR.
- 3" ACID WENT UP TO 2ND FLOOR.
- 2" VENT UP TO 2ND FLOOR.
- CONNECT TO ELECTRONIC TRAP-PRIMER VALVE ABOVE CEILING GRID. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- PROVIDE ACID RESISTANT PIPING FOR ALL WASTE AND VENT SYSTEM SERVING SCIENCE LABS. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- STRUCTURAL FOUNDATION SHOWN FOR REFERENCE AND COORDINATION PURPOSES. REFER TO STRUCTURAL DRAWINGS FOR MORE DETAILS. (TYPICAL)
- 3" WASTE UP TO 3" WCO TO CLEAR CONCRETE FOOTING. RUN 2" WASTE LINE TO EDF-1 ABOVE CONCRETE SLAB AND 2" VENT UP.
- RUN 2" WASTE LINE INSIDE WALL ABOVE CONCRETE SLAB.
- CONNECT TO LAVATORY P-TRAP TRAP-PRIMER ZURN Z-1021 OR APPROVED EQUAL.
- EXISTING OIL SEPARATOR (OS-1) WITH ASSOCIATED SAMPLE WELL (SW-1) TO BE RELOCATED TO THIS APPROXIMATE LOCATION.
- PROVIDE NEW SANITARY SEWER LINE (SAME MATERIAL AND SIZE AS EXISTING).
- EXISTING SANITARY SEWER LINE AND YARD CLEANOUTS TO BE REMOVED.
- PROVIDE NEW YARD CLEAN OUT (YCO) AT THIS APPROXIMATE LOCATION.
- CONNECT NEW SANITARY SEWER LINE INTO EXISTING LINE AT THIS APPROXIMATE LOCATION.
- APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE TO REMAIN IN PLACE.
- 3" WASTE DOWN FROM 2ND FLOOR.
- PROVIDE 1/2" SOFT DRAWN COPPER. ROUTE PIPING IN CEILING SPACE TO 2" HUB DRAIN.
- PROVIDE 2" HUB DRAIN FOR EMERGENCY EYEWASH DRAIN. PROVIDE A 2"x3" HUB INCREASER. PROVIDE A 12"x12" ACCESS PANEL FOR MAINTENANCE ACCESS PANEL EQUAL TO ACUDOR MODEL UF5800 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING.



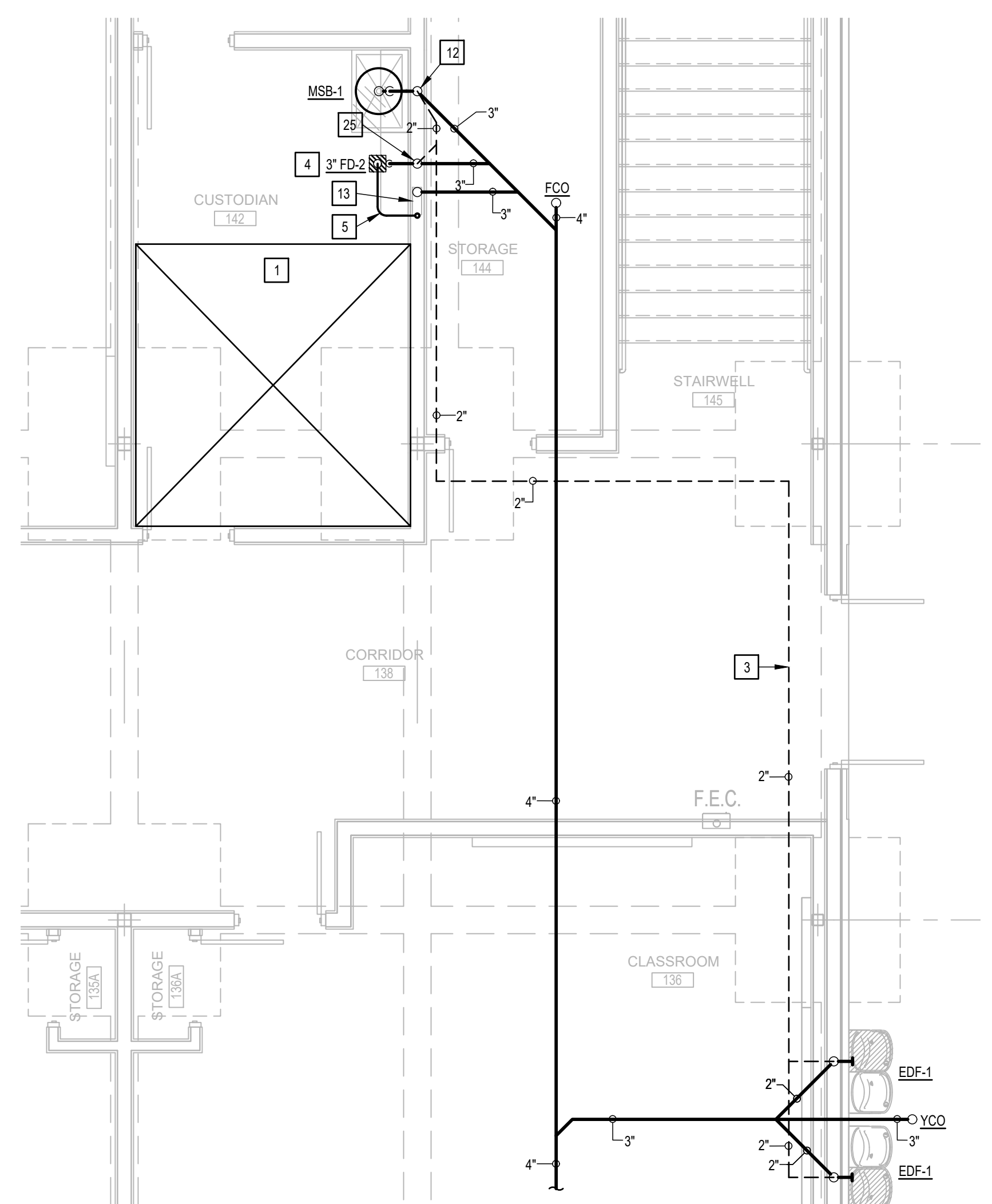
**01**  
1ST FLOOR  
**WASTE & VENT PLAN**  
SCALE: 1/4" = 1'-0"  
PLAN NORTH



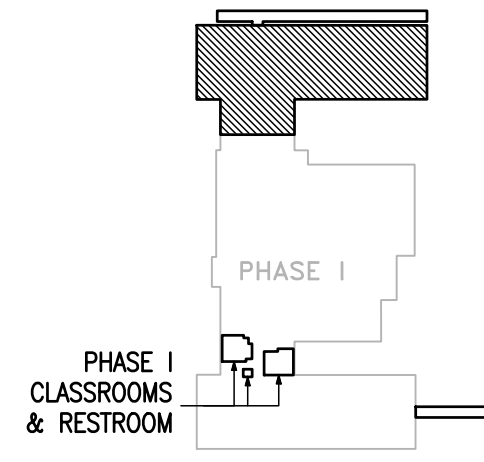
**02**  
1ST FLOOR  
**WASTE & VENT PLAN**  
SCALE: 1/4" = 1'-0"  
PLAN NORTH



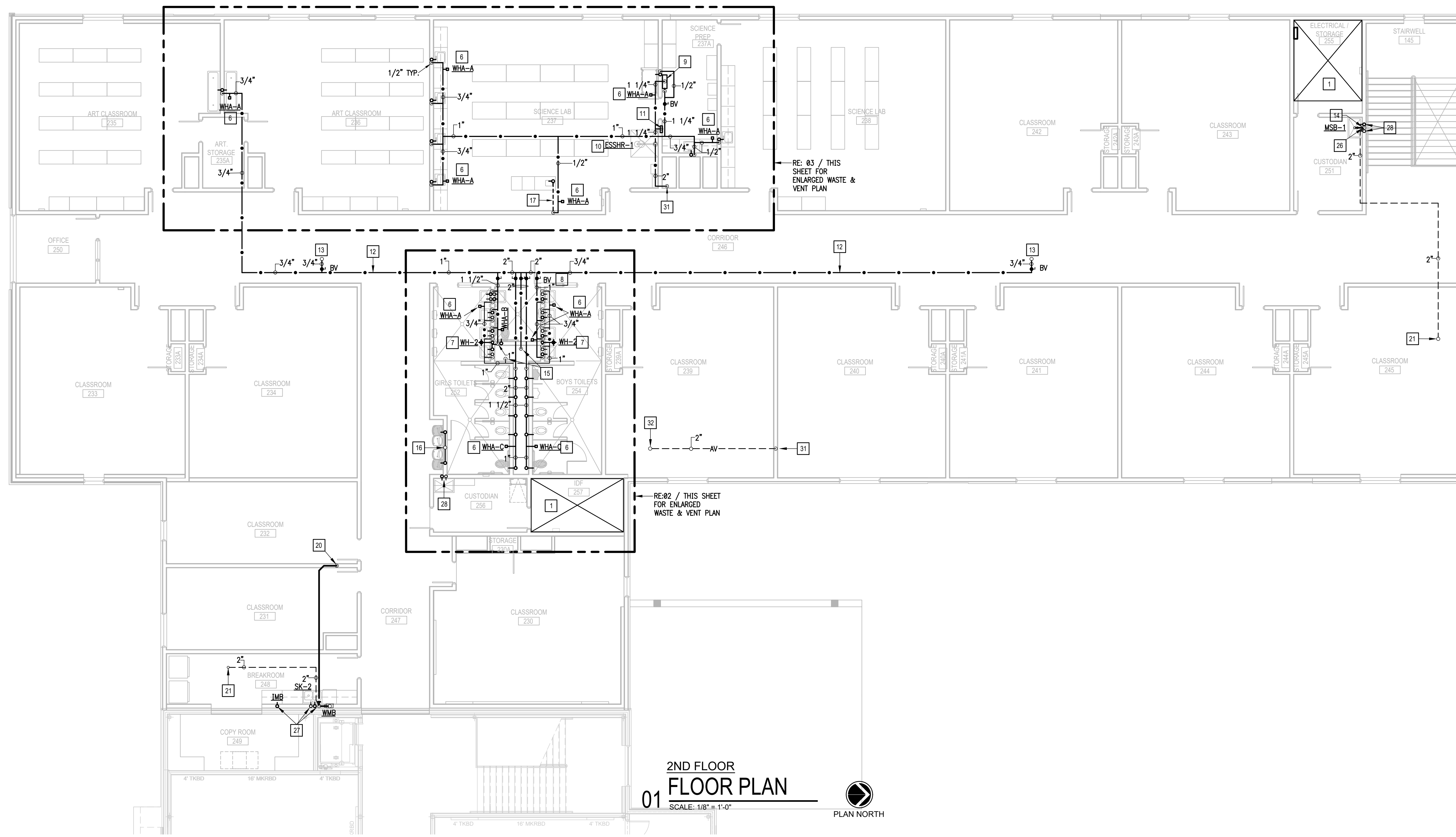
**03**  
1ST FLOOR  
**WASTE & VENT PLAN**  
SCALE: 1/4" = 1'-0"  
PLAN NORTH



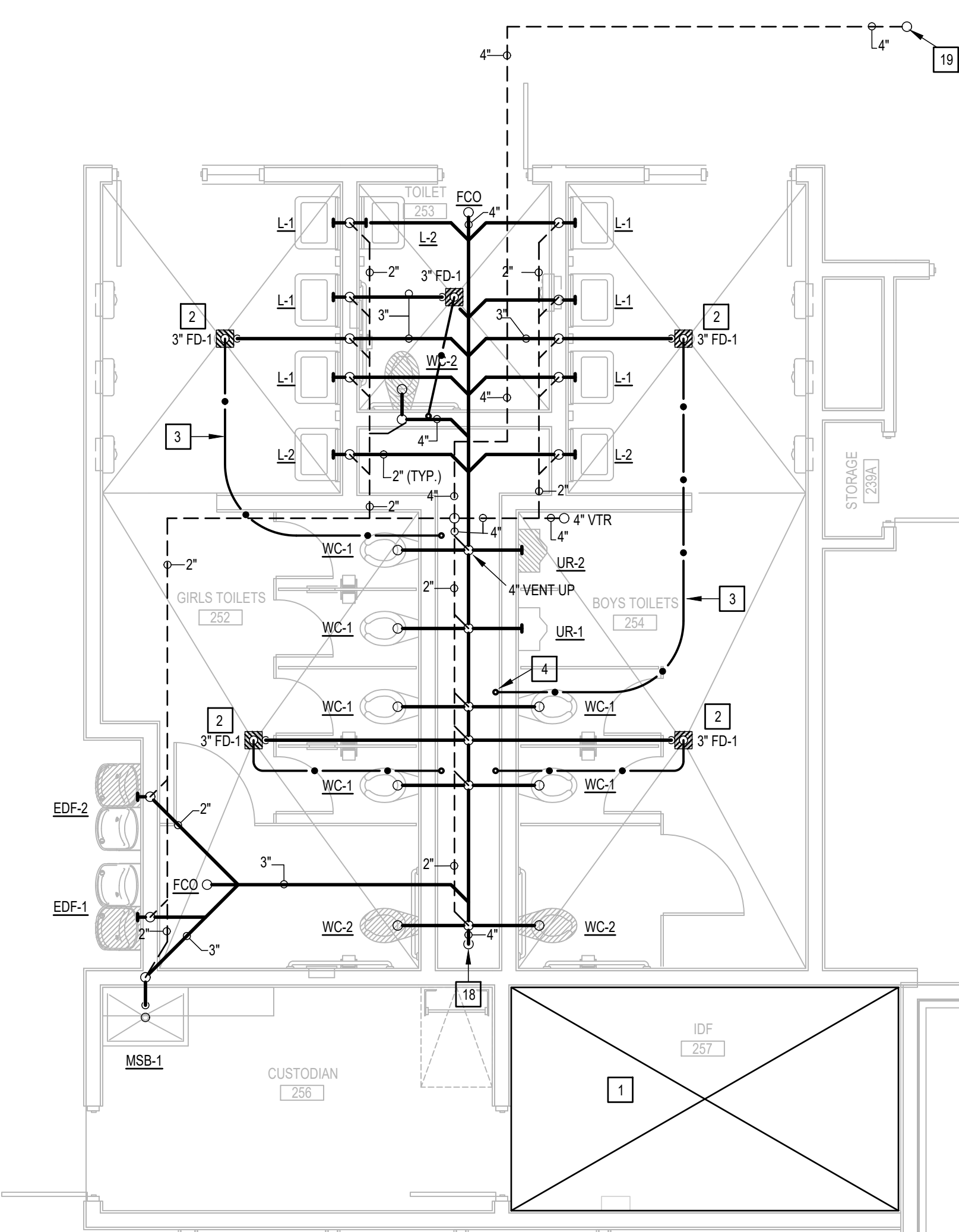
**04**  
1ST FLOOR  
**WASTE & VENT PLAN**  
SCALE: 1/4" = 1'-0"  
PLAN NORTH



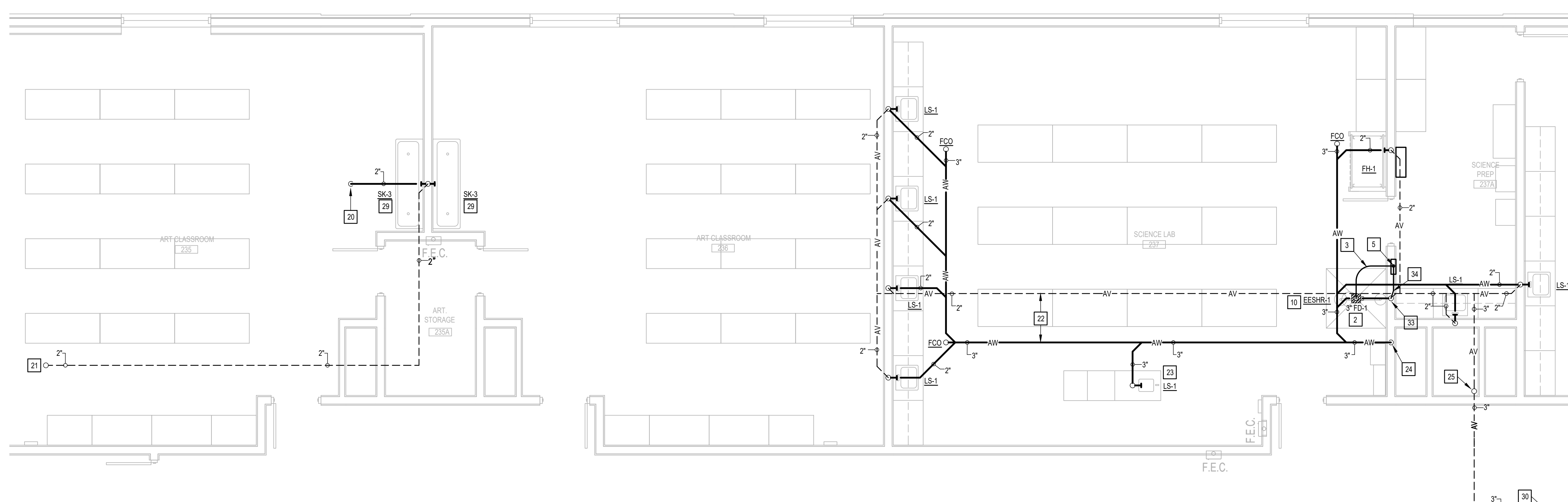
119 W. VAN BUREN AVE. STE. 011  
PHONE: 361-230-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15988



2ND FLOOR  
FLOOR PLAN  
01  
SCALE: 1/8" = 1'-0"  
PLAN NORTH



2ND FLOOR  
WASTE AND VENT  
02  
SCALE: 1/4" = 1'-0"  
PLAN NORTH



2ND FLOOR  
WASTE AND VENT  
03  
SCALE: 1/4" = 1'-0"  
PLAN NORTH

**GENERAL NOTES:**

- LAB SINKS (LS-1), FUME HOODS AND FAUCETS AT PREP ROOMS AND SCIENCE LABS ARE PART OF THE MILLWORK. (PROVIDED BY GENERAL CONTRACTOR). PLUMBING CONTRACTOR SHALL PROVIDE AND CONNECT ALL SERVICES AND ACCESSORIES SUCH AS WATER, SEWER, VENT, WATER STOPS, STAINLESS STEEL FLEXIBLE RISERS, P-TRAPS, ETC. COORDINATE WITH GENERAL CONTRACTOR.

**KEYED NOTES:**

- CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
- PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
- PROVIDE 1/2" SOFT DRAWN COPPER FROM TRAP-PRIMER. (TYPICAL)
- CONNECT TO FLUSH VALVE TRAP-PRIMER (WC). SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
- CONNECT TO ELECTRONIC TRAP-PRIMER VALVE. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- PROVIDE BELLWIS TYPE WATER HAMMER ARRESTOR (WHA), MIFAB (MIFB SERIES) OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"x12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
- PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA. (TYPICAL)
- PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"x12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
- DROP DOMESTIC WATER LINE INTO SOLENOID ENCLOSURE BOX TO SERVE LAB SINKS. RE: DETAIL SHEET. SOLENOID ENCLOSURE PROVIDED BY ELECTRICAL CONTRACTOR. COORDINATE ALL CONNECTIONS AND MOUNTING HEIGHT WITH ELECTRICAL CONTRACTOR.
- PROVIDE EMERGENCY EYE/FACE WASH AND SHOWER AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- PROVIDE A PFP MODEL MPD-500 ELECTRIC TRAP PRIMER OR APPROVED EQUAL. TAP FROM TOP OF COLD WATER LINE AND DOWN IN WALL CAVITY TO FD.
- PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET - TYPICAL.
- 3/4" CW UP TO ROOF HYDRANT.
- 2" VENT UP FROM 1ST FLOOR.
- 2" CW AND 1" HW FROM 1ST FLOOR.
- 1/2" CW FROM 1ST FLOOR.
- RUN 1/2" CW IN 1ST FLOOR CEILING SPACE.
- 4" WASTE DOWN TO 1ST FLOOR.
- 4" VENT UP FROM 1ST FLOOR AND TO 4" VENT THROUGH ROOF. (VTR)
- 2" WASTE DOWN TO 1ST FLOOR.
- 2" VENT UP TO 2" VENT THROUGH ROOF. (VTR)
- PROVIDE ACID RESISTANT PIPING FOR ALL WASTE AND VENT SYSTEM SERVING SCIENCE LABS. REFER TO SPECIFICATIONS FOR MORE INFORMATION. (TYPICAL)
- PROVIDE PLUMBING CONNECTION TO INSTRUCTORS DESK AS PER DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- 3" ACID WASTE DOWN TO 1ST FLOOR.
- 3" ACID VENT UP FROM 1ST FLOOR.
- 3" WASTE DOWN TO 1ST FLOOR.
- 1/2" CW AND 1/2" HW FROM 1ST FLOOR TO SERVE (SK-2) AND ICE MACHINE BOX.
- 3/4" CW AND 3/4" HW FROM 1ST FLOOR.
- PROVIDE CLAY TRAP, JOSAM CO., MODEL 6100-1/2 OR APPROVED EQUAL. INSTALL AS PER MANUFACTURER RECOMMENDATION.
- 3" ACID WASTE UP TO 3" VENT THROUGH ROOF. (VTR)
- 2" CW FROM 1ST FLOOR.
- 3" WASTE DOWN TO 1ST FLOOR.
- PROVIDE 2" HUB DRAIN FOR EMERGENCY EYEWASH DRAIN. PROVIDE A 2"x3" HUB INCREASER. PROVIDE A 12"x12" ACCESS PANEL FOR MAINTENANCE. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
- PROVIDE 1/2" SOFT DRAWN COPPER. ROUTE PIPING IN CEILING SPACE TO 2" HUD DRAIN.

No.	REVISIONS	BY



1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  
 Public Schools



© Copyright 2019  
Gomez Mendez-Sanz Inc.  
Architects-Planners  
Interior Designers

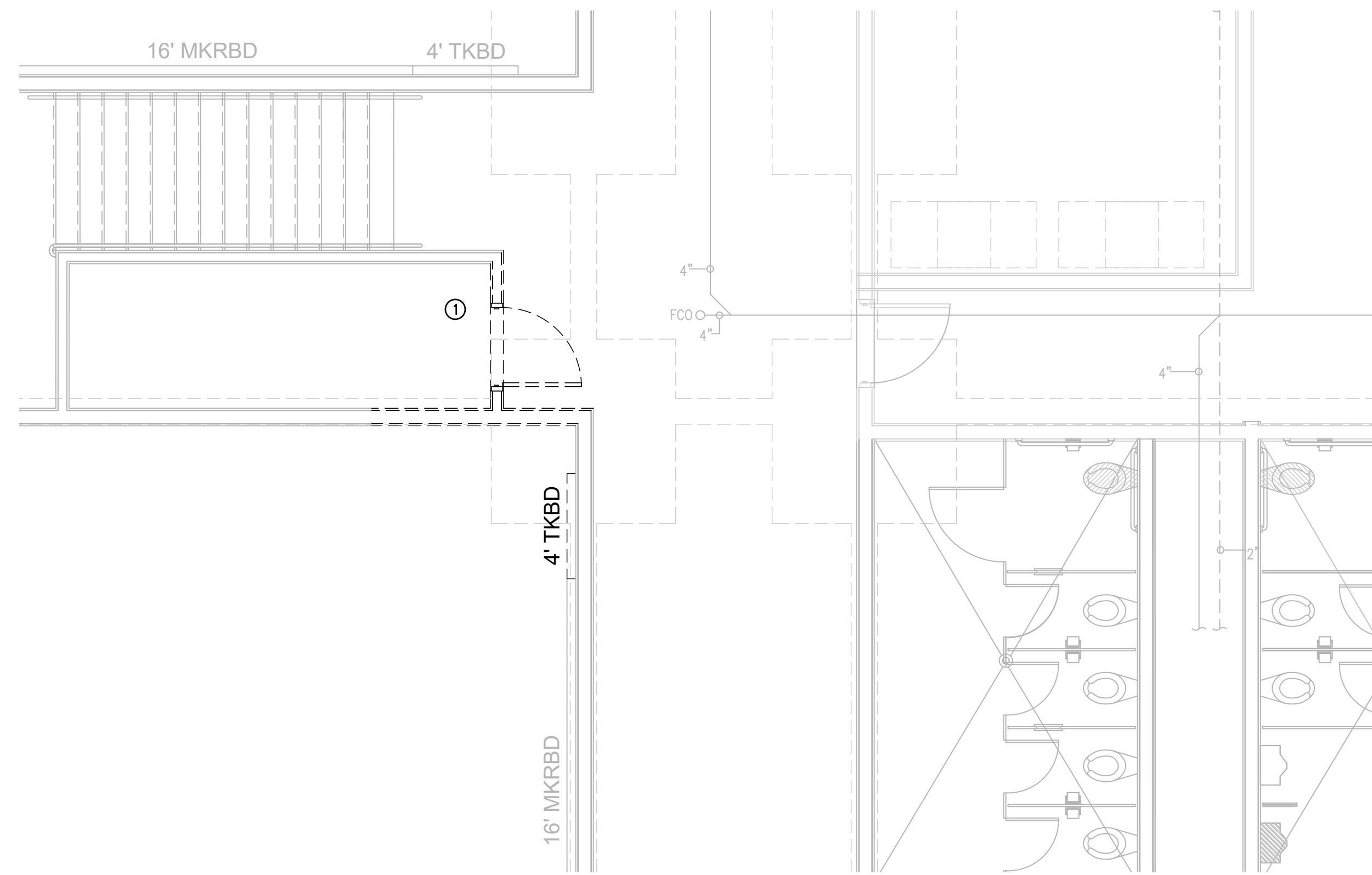
Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: P2.03



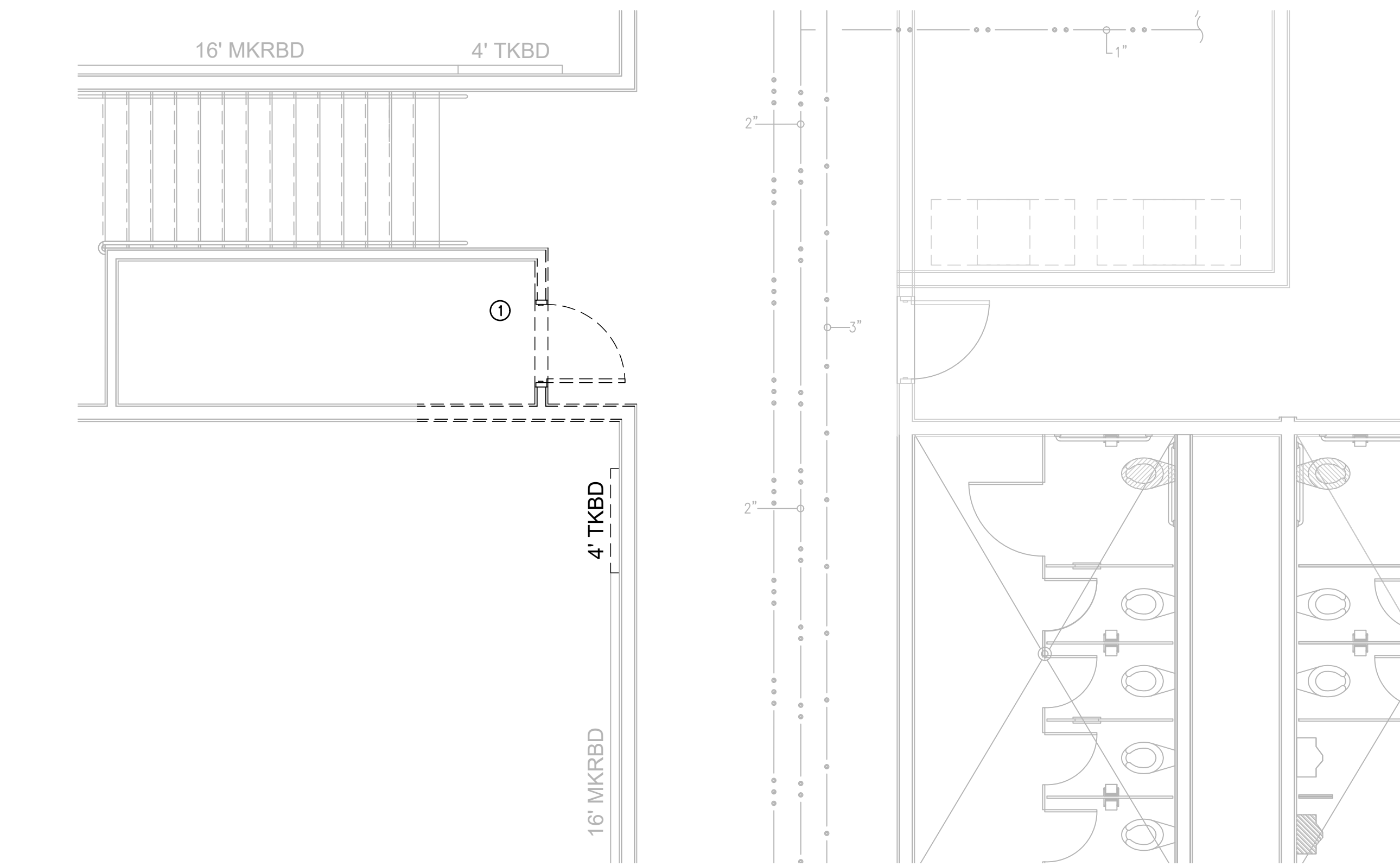
119 W. VAN BUREN AVE. STE 101  
PHONE: 956-230-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15986

P2.03

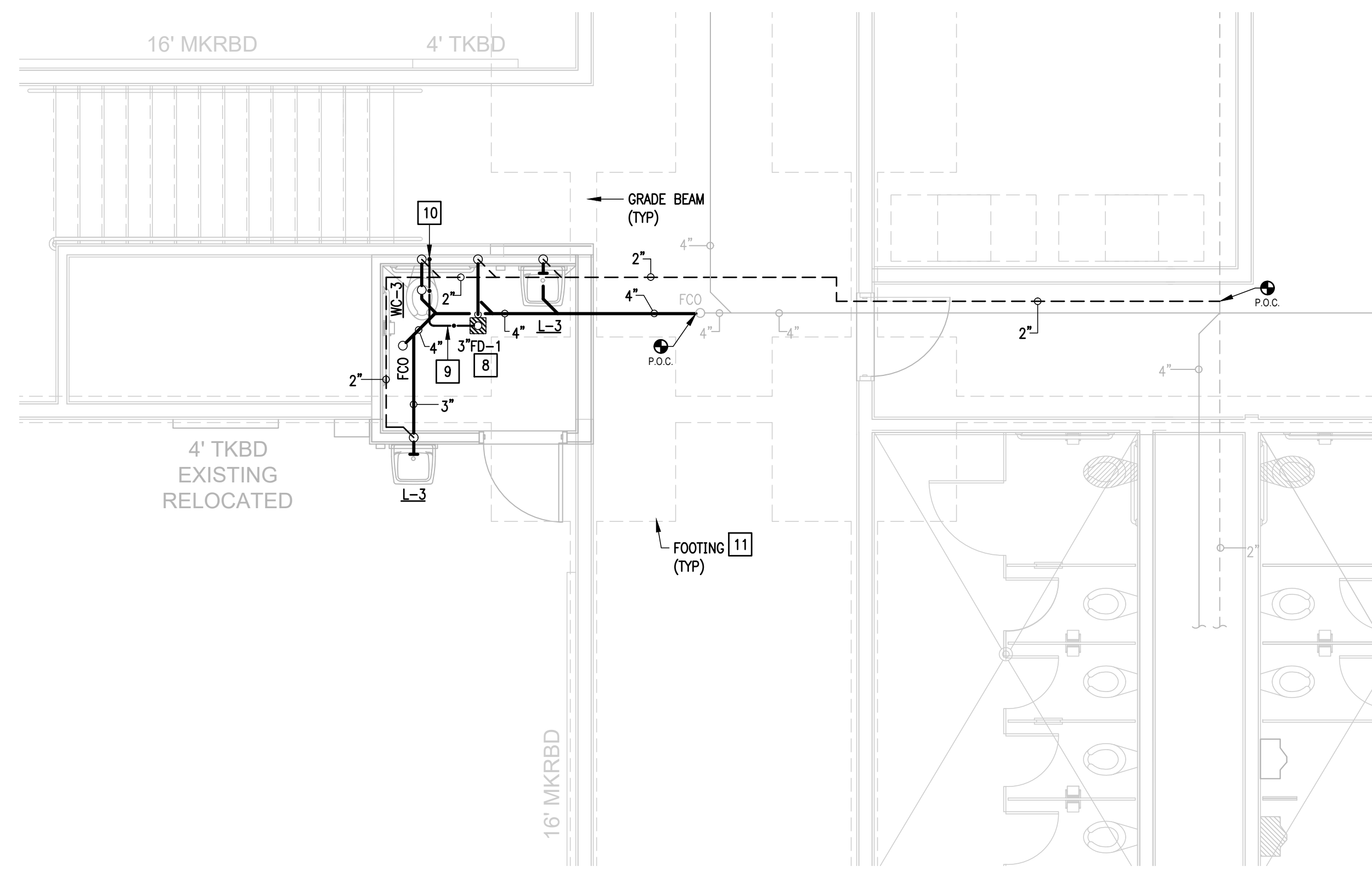




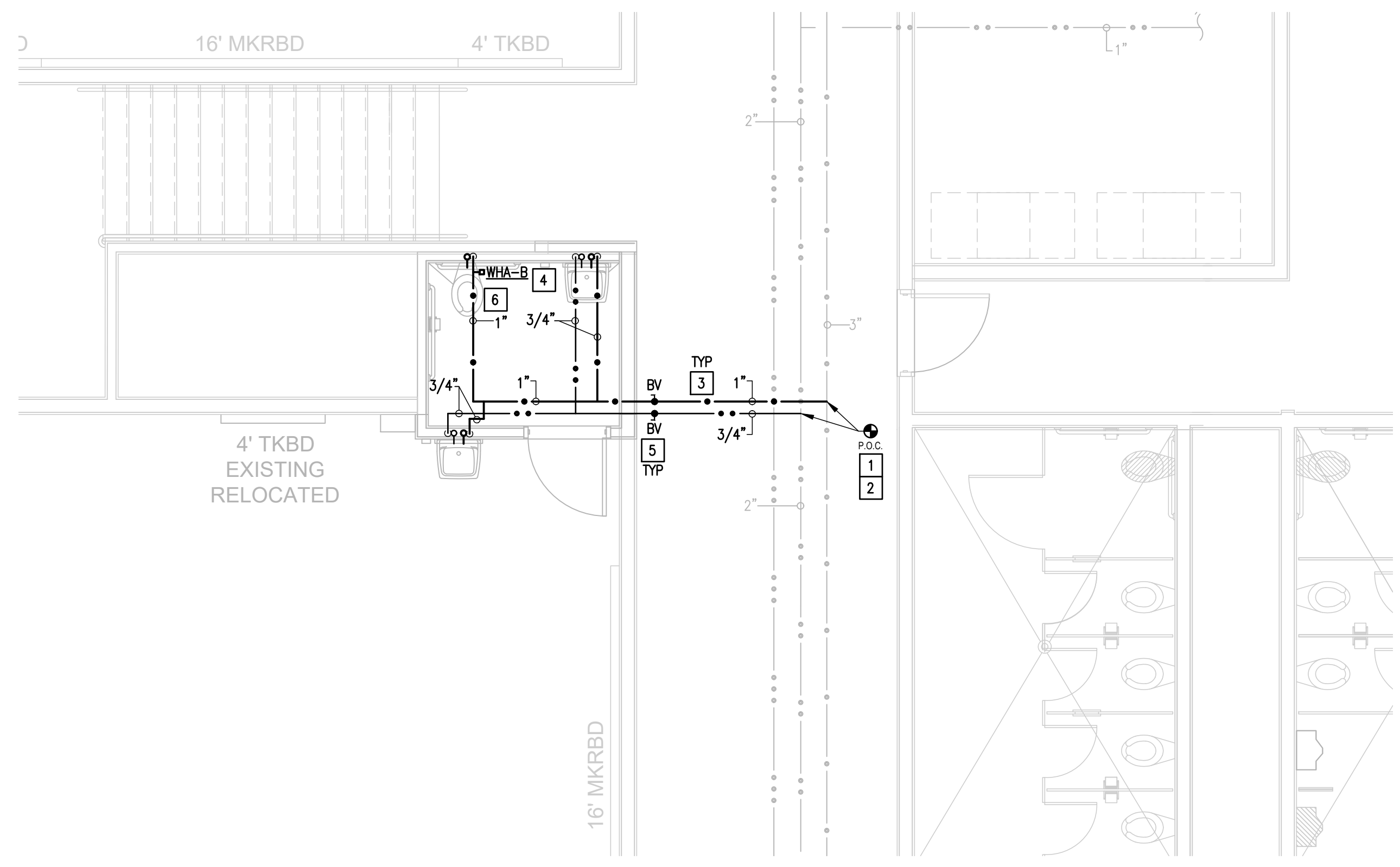
ALTERNATE NO. 4 - 1ST FLOOR - PHASE I RENOVATION  
**03 DEMOLITION WASTE & VENT PLAN**  
 SCALE: 1/4" = 1'-0"



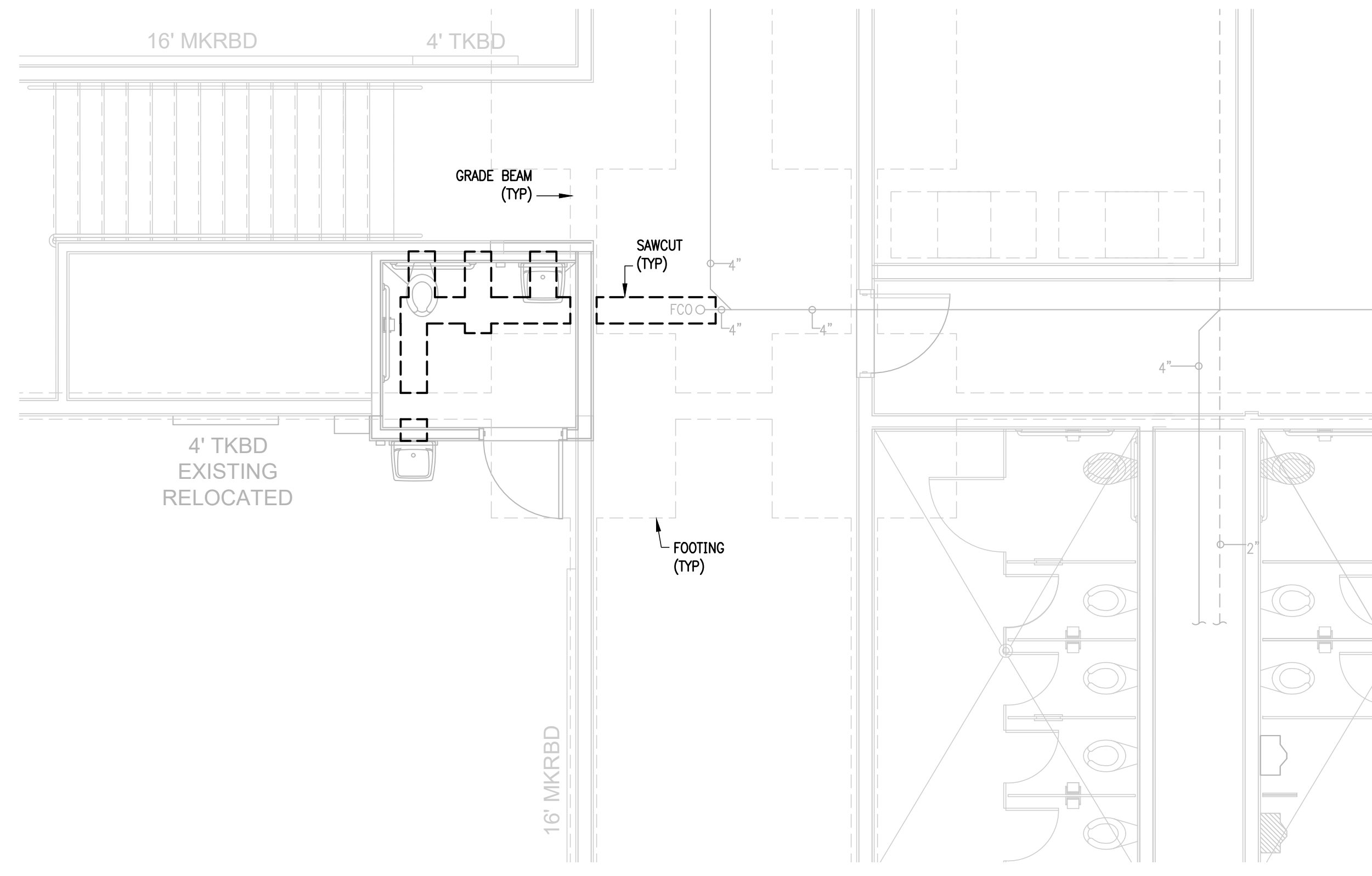
ALTERNATE NO. 4 - 1ST FLOOR - PHASE I RENOVATION  
**01 DEMOLITION PLUMBING PLAN**  
 SCALE: 1/4" = 1'-0"



ALTERNATE NO. 4 - 1ST FLOOR - PHASE I RENOVATION  
**04 NEW WASTE & VENT PLAN**  
 SCALE: 1/4" = 1'-0"



ALTERNATE NO. 4 - 1ST FLOOR - PHASE I RENOVATION  
**02 NEW PLUMBING PLAN**  
 SCALE: 1/4" = 1'-0"



ALTERNATE NO. 4 - 1ST FLOOR - PHASE I RENOVATION  
**05 SAWCUTTING PLAN**  
 SCALE: 1/4" = 1'-0"



ALTERNATE NO. 4 - PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER & MODEL NUMBER	DESCRIPTION	CONNECTIONS				NOTES	REMARKS
			WASTE	VENT	CW	HW		
WC-3	AMERICAN STD. 2282.001 SLOAN ROYAL #111-1.28 SEAT 58016.055	18-1/4" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR PRE-K ADA MOUNTING.	4"	2"	1"	-	1,2,3	12" TO TOP OF SEAT
L-3	KOHLER K1729-0 K-15597-F-CP ZURN #21231 CARRIER 17 GA. DRAIN AND 17 GA. P-TRAP W/CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270-LF-BRKT-BV	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED LAVATORY SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR PRE-K ADA MOUNTING. THERMOSTATIC POINT OF USE MIXING VALVE. SET AT NO MORE THAN 110 DEGREES.	2"	2"	3/4"	3/4"	4	24" FROM FLOOR TO RIM
FD-1	ZURN # ZN415B-P	BODY ASSEMBLY WITH TYPE B STRAINER, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET INVERTED MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH TRAP-PRIMER CONNECTION.	3"	2"	-	-		

- NOTES:
1. INSTALL FLUSH VALVE ON THE WIDE SIDE OF STALL.
  2. PROVIDE ADA APPROVED FLUSH VALVE HANDLE FOR ALL ADA PLUMBING FIXTURES.
  3. REFER TO PLUMBING PLAN FOR FIXTURES THAT WILL REQUIRE TRAP PRIMER CONNECTIONS.
  4. PROVIDE TRUEBRO LAVATORY (WHITE) LAV SHIELD MODEL #2018 (KO-K PRE-CUT). SHIELD SHALL BE SECURED TO WALL AS PER MANUFACTURER'S RECOMMENDATION.

**DEMOLITION KEYED NOTES:**

1. PREPARE AREA FOR NEW PLUMBING FIXTURES.

**PLUMBING KEYED NOTES:**

1. CONNECT NEW 1" DOMESTIC COLD WATER PIPING INTO EXISTING 3" DOMESTIC WATER PIPING AT THIS APPROXIMATE LOCATION.
2. CONNECT NEW 3/4" DOMESTIC HOT WATER PIPING INTO EXISTING 2" DOMESTIC HOT WATER PIPING AT THIS APPROXIMATE LOCATION.
3. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET - TYPICAL.
4. PROVIDE WATER HAMMER ARRESTOR (WHA), MFAB OR APPROVED EQUAL INDICATED MODEL (A,B,C,D,E,F) AS PER MFAB SIZING CHART. PROVIDE 12"x12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UFS000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
5. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"x12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UFS000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
6. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR.
7. CONNECT NEW 4" SANITARY SEWER PIPING INTO EXISTING 4" SANITARY SEWER PIPING AT THIS APPROXIMATE LOCATION.
8. PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
9. PROVIDE 1/2" SOFT DRAIN COPPER FROM TRAP-PRIMER. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
10. CONNECT TO FLUSH VALVE TRAP-PRIMER (WC). SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
11. STRUCTURAL FOUNDATION SHOWN FOR REFERENCE AND COORDINATION PURPOSES. REFER TO STRUCTURAL DRAWINGS FOR MORE DETAILS. (TYPICAL).

No.	REVISIONS	BY

GMS ARCHITECTS  
 1150 Paredes Line Rd.  
 Brownsville TX 78526  
 (956) 546-0110  
 fax (956) 546-0196

IDEA-OWASSA  
 COLLEGE PREP PHASE II  
 Public Schools

**IDEA**  
 Public Schools

CESAR A. GONZALEZ  
 108611  
 6/12/2019

© Copyright 2019  
 Gomez Mendez Saenz Inc.  
 Architects-Planners  
 Interior Designers  
 Date: JUNE 13, 2019  
 Scale: As Noted  
 Project Architect: David Monreal, AIA  
 Drawn By: ETHOS  
 Job No: IDEA OWASSA II  
 Sheet:

**ETHOS**  
 engineering  
 119 W. VAN BUREN AVE. STE. 101  
 PHONE: 956-210-3435  
 TEXAS REGISTERED  
 ENGINEERING FIRM  
 F-15986

P2.04

No.	REVISIONS	BY



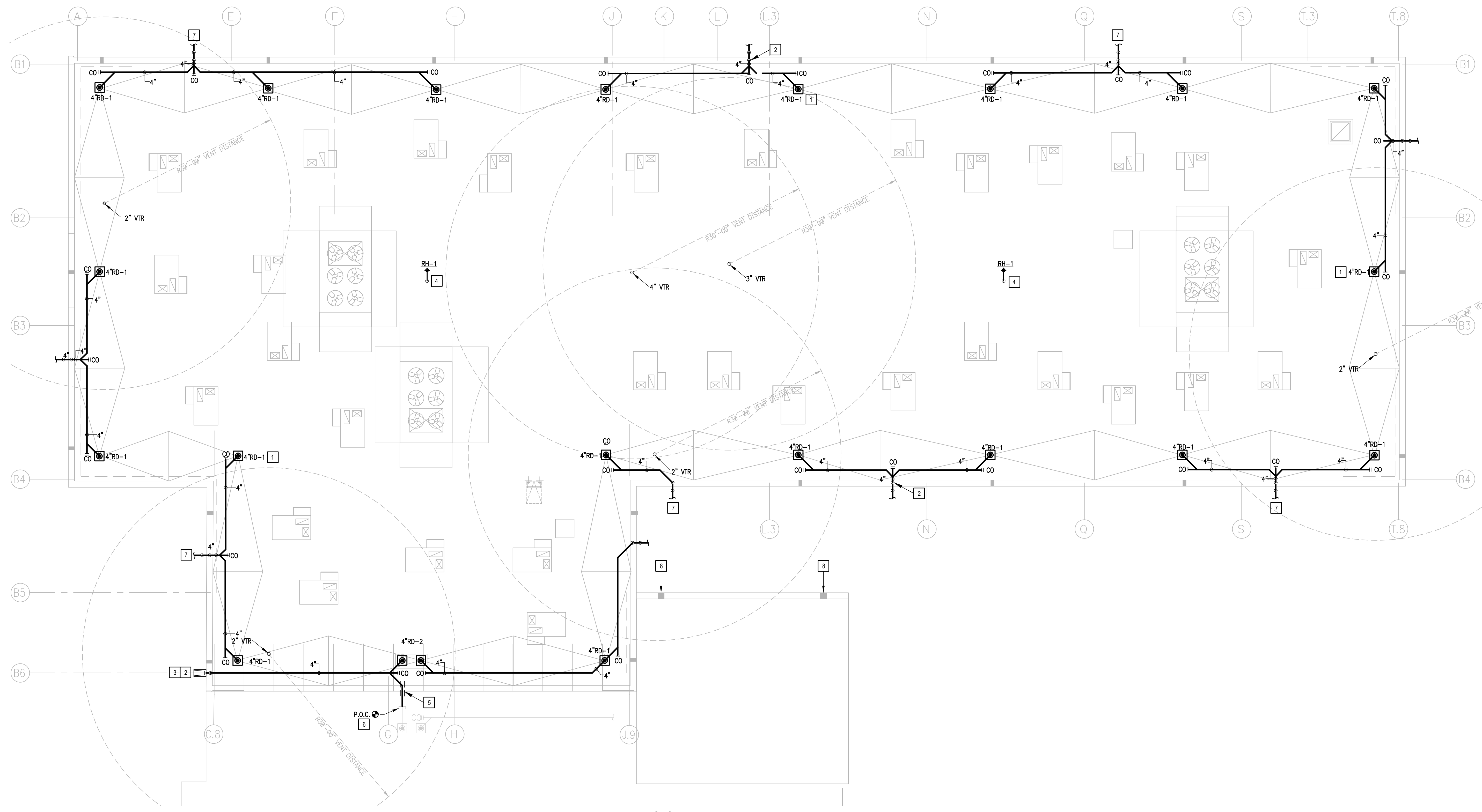
1150 Paredes Line Rd.  
Brownsville TX 78526  
(956) 546-0110  
fax (956) 546-0196

**GENERAL NOTES:**

1. ALL HORIZONTAL LEADERS TO BE A MINIMUM OF 1/8" PER FOOT SLOPE.
2. ALL VERTICAL LEADER LINES DOWN AND CONCEALED IN PLUMBING CHASE UNLESS OTHERWISE NOTED. REFER TO DRAWINGS.
3. COORDINATE ROOF DRAIN PIPING WITH GENERAL CONTRACTOR AND HVAC CONTRACTOR.
4. PROVIDE INSULATION ON ALL ABOVE GROUND STORM LINES. REFER TO SPECIFICATIONS FOR DETAILS.
5. STORM DRAIN PIPING AND SEWER PIPING SHOWN ON THIS PLAN TO BE INSTALLED UNDER THE ROOF AND ABOVE THE CEILING OF SECOND FLOOR.

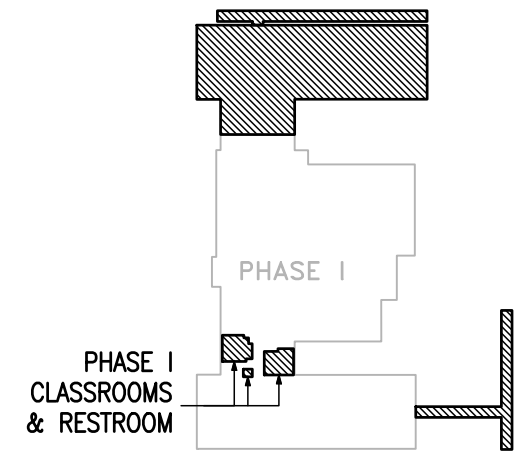
**KEYED NOTES:**

- 1 PROVIDE ROOF DRAIN AS SCHEDULED. SEE ASSOCIATED DETAILS ON DETAIL SHEET. (TYPICAL)
- 2 DROP STORM PIPING IN WALL. REFER TO ARCHITECTURAL SHEET AND COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. SEE ASSOCIATED DETAILS ON DETAIL SHEET. (TYPICAL)
- 3 PROVIDE SPLASH BLOCK AS SHOWN.
- 4 PROVIDE ROOF HYDRANT AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAILS SHEET. (TYPICAL)
- 5 PROVIDE PIPE PENETRATION ON EXISTING AND NEW WALL TO ACCOMMODATE SECONDARY STORM SEWER PIPE AS SHOWN. COORDINATE WORK WITH GENERAL CONTRACTOR.
- 6 CONNECT NEW ROOF DRAIN PIPING INTO EXISTING AT THIS APPROXIMATE LOCATION.
- 7 PRIMARY ROOF DRAIN PIPING DISCHARGING AT THIS APPROXIMATE LOCATION TO STORM DRAIN SYSTEM. REFER TO CIVIL PLAN FOR CONNECTION AND CONTINUATION. COORDINATE WITH CIVIL UTILITY CONTRACTOR. (TYPICAL)
- 8 SCUPPER AND CIVIL STORM PIPING CONNECTION WILL BE COORDINATED BY ARCHITECT AND CIVIL ENGINEER. REFER TO ARCHITECTURAL AND CIVIL PLANS FOR MORE DETAIL.



**01 ROOF PLAN**  
SCALE: 1/8" = 1'-0"  
PLAN NORTH

**IDEA-OWASSA**  
**COLLEGE PREP PHASE II**  
 Public Schools



© Copyright 2019  
Gomez Mendez Saenz Inc.  
Architects-Planners  
Interior Designers  
Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: P3.01



1150 Paredes Line Rd.  
Brownsville, TX 78526  
(956) 546-0110  
fax (956) 546-0196

IDEA-OWASSA COLLEGE PREP PHASE II  
Public Schools



6.12.2019  
© Copyright 2019  
Gomez Mendez Szantz Inc.  
Architects-Planners  
Interior Designers

Date: JUNE 13, 2019  
Scale: As Noted  
Project Architect: David Monreal, AIA  
Drawn By: ETHOS  
Job No: IDEA OWASSA II  
Sheet: P4.01

ELECTRIC WATER HEATER SCHEDULE

MARK	LOCATION	SERVING	GALLON CAPACITY	KW	NUMBER OF ELEMENTS	RECOVERY IN GPH AT 120F RISE	ELECT. V/PH	MANUFACTURER & MODEL	NOTES
EW-1	SEE PLANS	SEE PLANS	10	3	1	10	208/160	AO SMITH DEL-10	ALL

NOTES:  
1. MANUFACTURER & MODEL NUMBER ARE "OR APPROVED EQUAL".  
2. PROVIDE IMMERSION TYPE THERMOSTAT.

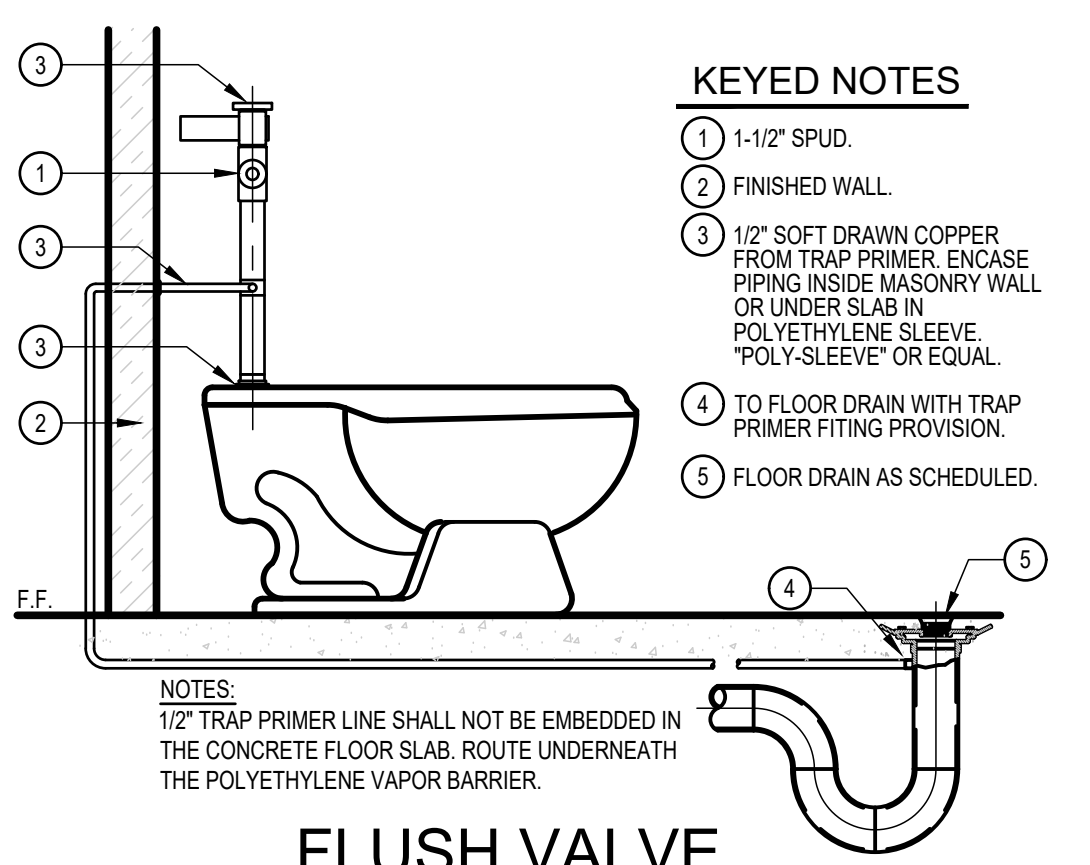
PLUMBING SYMBOLS LEGEND

COLD WATER SUPPLY	WCO	WALL CLEANOUT
HOT WATER SUPPLY		*GATE VALVE (GV)
GAS LINE		*BALL VALVE
SOIL & WASTE LINE - ENLARGED PLANS		VALVE IN RISER TYPE AS NOTED
VENT LINE - ENLARGED PLANS		WC
ACID WASTE LINE - ENLARGED PLANS	UR	URINAL
ACID VENT LINE - ENLARGED PLANS	L	LAVATORY
FIRE SPRINKLER LINE	SK	SINK
FLOOR CLEANOUT	EDF	ELECTRIC DRINKING FOUNTAIN
FLOOR CLEANOUT - 2 WAY	MSB	MOP SERVICE BASIN
FLOOR DRAIN (FD) WITH DEEP SEAL TRAP	EESH	EMERGENCY EYESHOWER
HUB DRAIN WITH DEEP SEAL TRAP	TP	TRAP PRIMER
FLOOR SINK	EVH	ELECTRIC WATER HEATER
YARD CLEANOUT	VTR	VENT THRU ROOF
YARD CLEANOUT - 2 WAY	CO	CLEANOUT
WALL HYDRANT	A.F.F.	ABOVE FINISH FLOOR
TRAP PRIMER	ADT	ACID DILUTION TANK
*WATER HAMMER	GT	GREASE TRAP

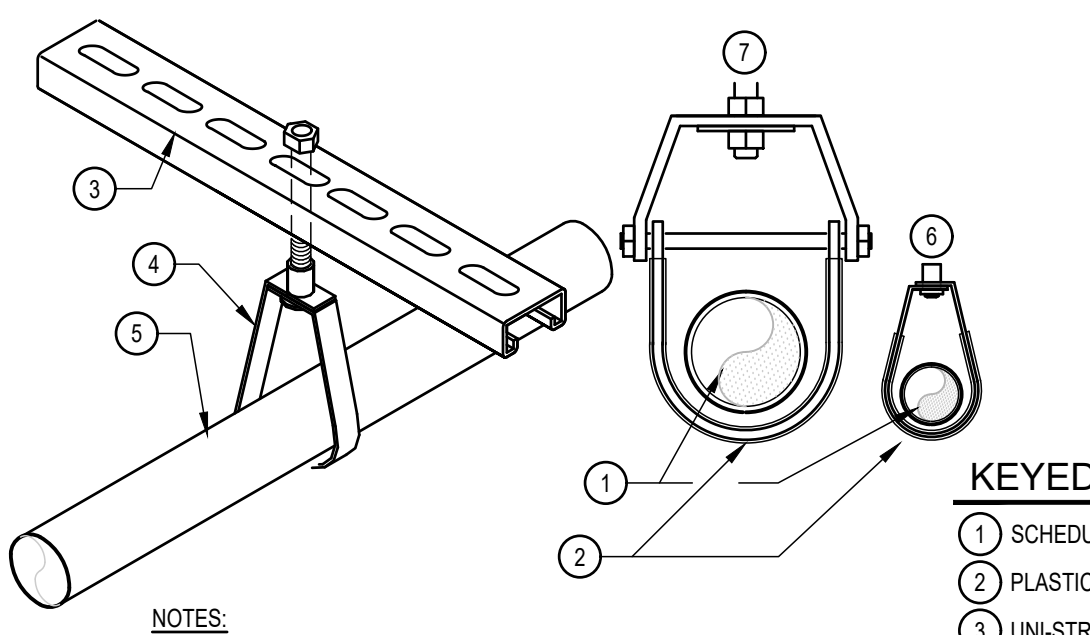
\* PROVIDE 12"x12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA.

GENERAL NOTES: (APPLY TO ALL PLUMBING SHEETS)

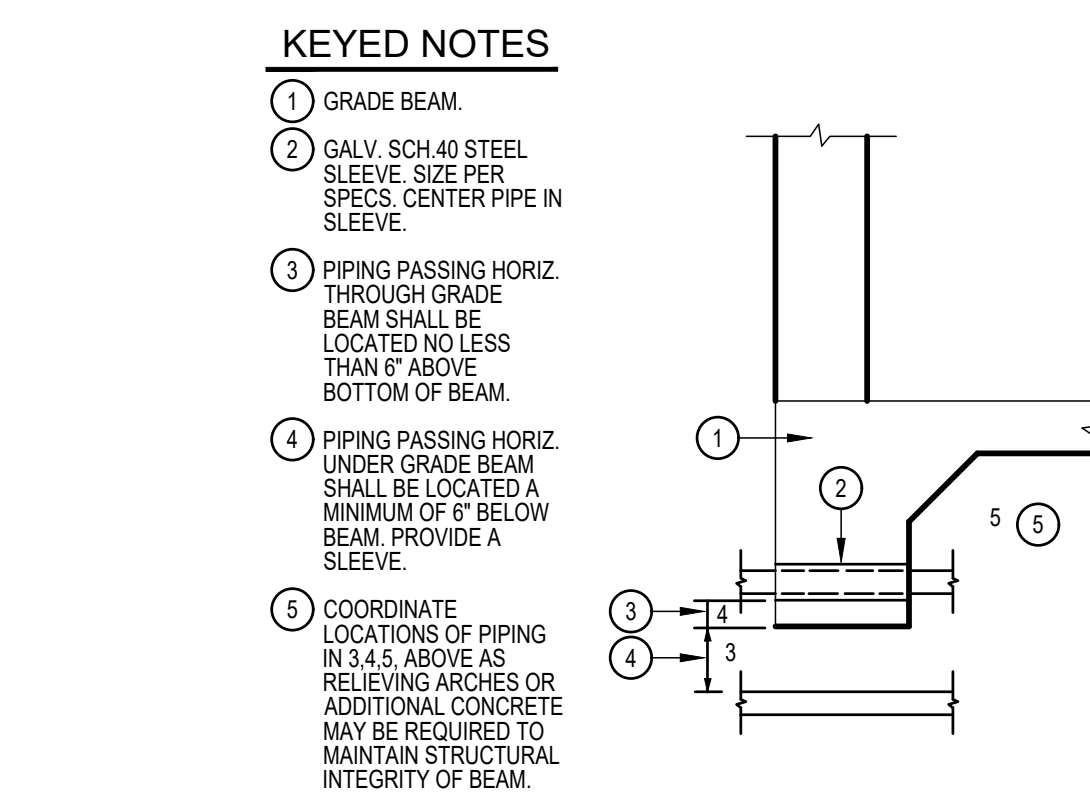
1. ALL PLUMBING WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AS ADAPTED AND AMENDED BY THE INSPECTING AUTHORITIES.
2. DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.
3. ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID CONFLICT WITH THE WORK OF OTHER TRADES. COORDINATE WITH MECHANICAL, ELECTRICAL AND STRUCTURAL FOR PROPER CLEARANCES.
4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASING AND SEQUENCE OF CONSTRUCTION WORK.
5. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR.
6. SLEEVE ALL OUTSIDE WALLS, FOUNDATION GRADE BEAMS, INTERIOR WALL PENETRATIONS, AND FIRE SEAL ALL PENETRATION THROUGH FIRE WALLS AND FLOORS WHETHER SHOWN ON PLANS OR NOT.
7. PROVIDE MINIMUM 15" OF SEPARATION BETWEEN HVAC INTAKES AND VENT THRU ROOFS.
8. RECORD INVERT ELEVATIONS OF ALL YARD CLEAN OUT (YCO) ON "AS-BUILT" DRAWINGS.
9. PROVIDE SHUT-OFF VALVES (STOPS) ON ALL ROUGH-INS TO FIXTURES AND EQUIPMENTS.
10. PROVIDE WATER HAMMER ARRESTORS AS INDICATED ON THE DRAWINGS. AIR CHAMBERS NOT AN APPROVED SUBSTITUTE.
11. PROVIDE ANY BACKFLOW PREVENTION DEVICE REQUIRED BY CODE OR LOCAL AUTHORITIES. CONTRACTOR SHALL VERIFY THIS WITH CITY AND LOCAL AGENCIES AND INCLUDE COST IN BID. CONTRACTOR TO HAVE BACK FLOWS CERTIFIED.
12. REFER TO PLUMBING FIXTURE ROUGH-IN SCHEDULE FOR INDIVIDUAL PIPE CONNECTIONS TO FIXTURES.
13. PRIOR TO POURING FOUNDATION AND ERECTING CMU WALLS, COORDINATE INSTALLATION OF PLUMBING FIXTURE CARRIERS WITH GENERAL CONTRACTOR.
14. METAL STUDS AT DRY WALLS SHALL NOT BE CUT THRU HORIZONTAL DIRECTION. COORDINATE WITH DRY WALL CONTRACTOR.
15. CONTRACTOR SHALL NOT CUT ANY EXTERIOR WALL METAL STUD.



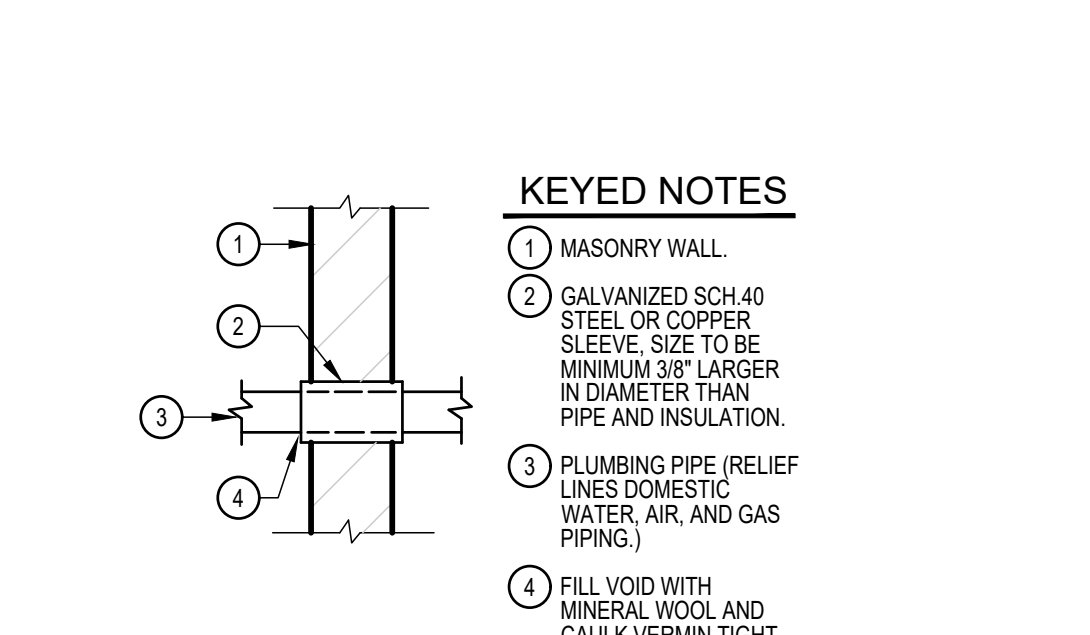
02 TRAP PRIMER DETAIL  
SCALE: NOT TO SCALE



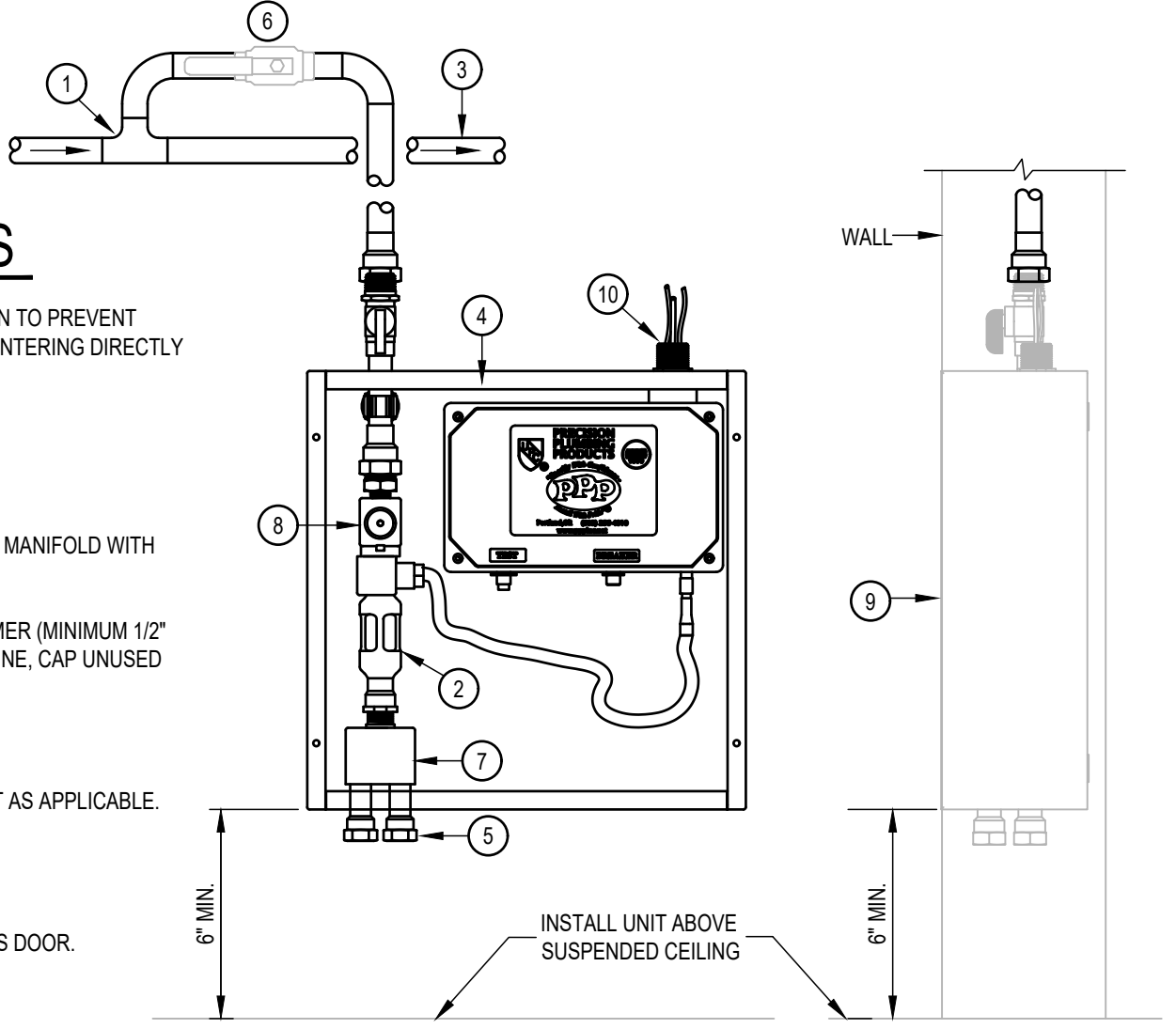
04 DOMESTIC WATER LINE PIPING SUPPORT DETAIL  
SCALE: NOT TO SCALE



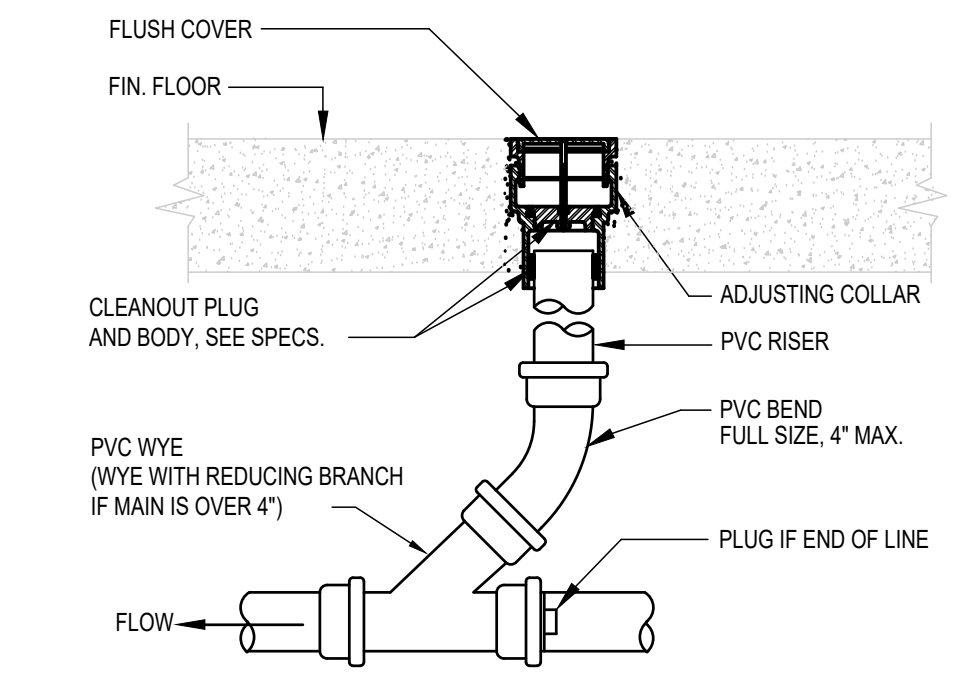
06 GRADE BEAM SLEEVE DETAIL  
SCALE: NOT TO SCALE



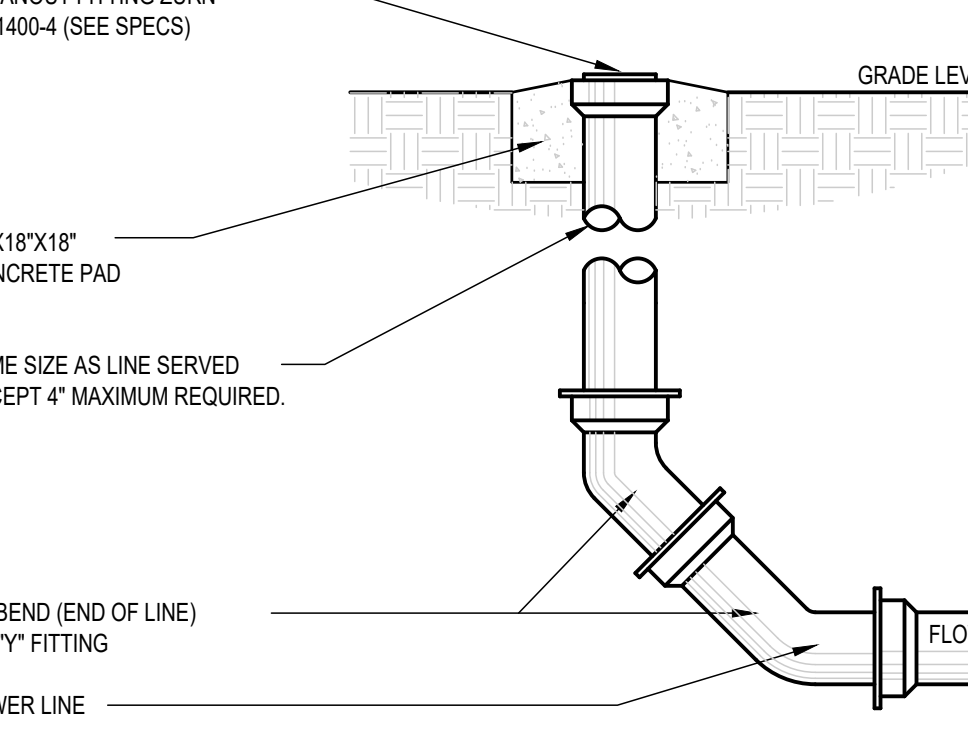
08 WALL SLEEVE DETAIL  
SCALE: NOT TO SCALE



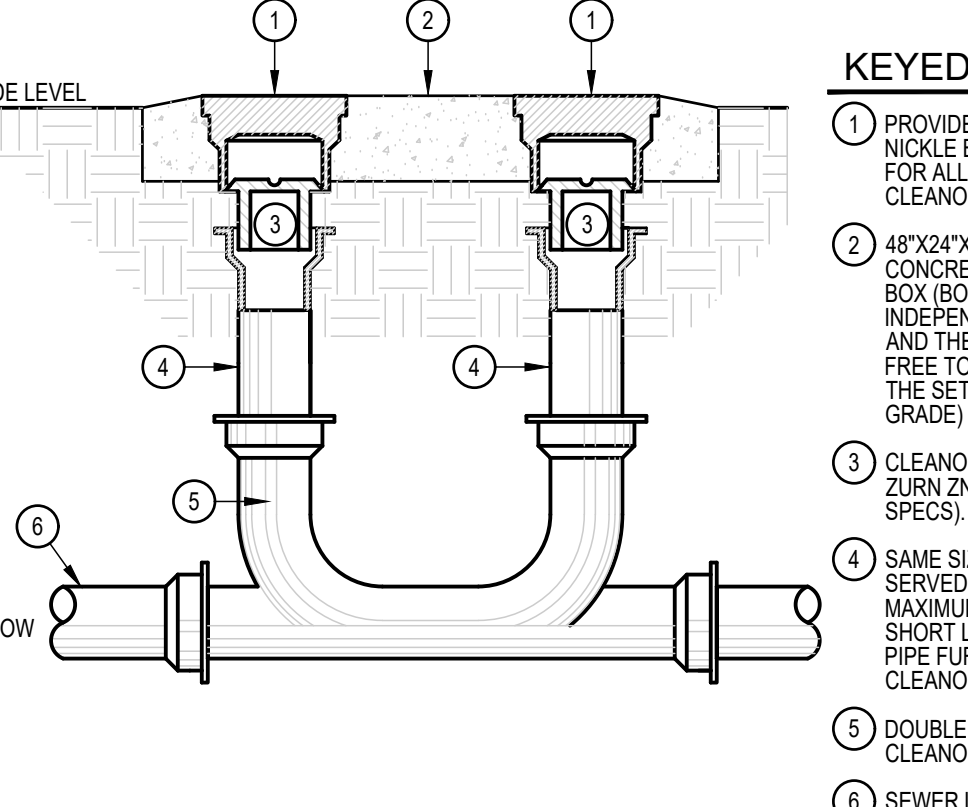
09 ELECTRONIC TRAP PRIMER CONNECTION DETAIL  
SCALE: NOT TO SCALE



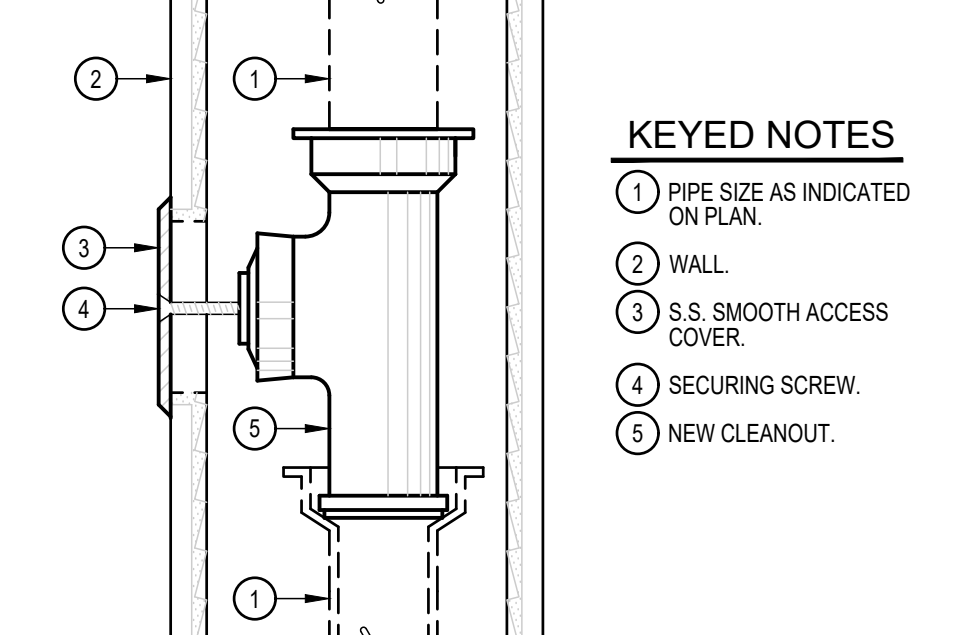
01 FLOOR CLEANOUT DETAIL  
SCALE: NOT TO SCALE



03 YARD CLEANOUT DETAIL  
SCALE: NOT TO SCALE



05 2-WAY YARD CLEANOUT DETAIL  
SCALE: NOT TO SCALE



07 WALL CLEANOUT DETAIL  
SCALE: NOT TO SCALE

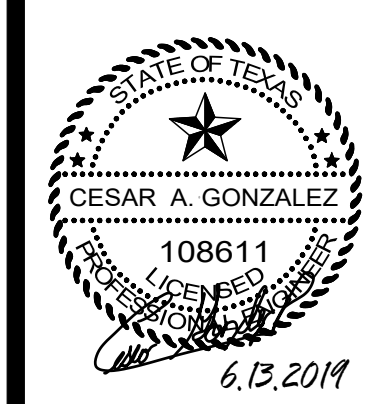
PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER & MODEL NUMBER	DESCRIPTION	CONNECTIONS				NOTES	REMARKS
			WASTE	VENT	CW	HW		
WC-1	AMERICAN STD. 3451.001 SLOAN ROYAL #111-1.6 SEAT 5901.100	15\"/>						
WC-2	AMERICAN STD. 3461.001 SLOAN ROYAL #111-1.6 SEAT 5901.100	16-1/2\"/>						
UR-1	AMERICAN STD. 5901.001 SLOAN ROYAL #186-0.5 ZURN # Z122Z CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14\"/>						
UR-2	SAME AS UR-1	SAME AS UR-1 EXCEPT FOR ADULT ADA MOUNTING	3"	2"	3/4"	-	2	17" TO RIM OF BASIN
L-1	KOHLER KINGSTON K-2005 CHICAGO FAUCET 420-T41E2805ABCP 0.5 GPM AERATOR ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P-TRAP W/ CLEAN OUT TRUEBRO LAV SHIELD	21" X 18" WALL MOUNTED WHITE VITREOUS CHINA, 4" ON CENTER HOLES LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT. SINGLE LEVER, 4" ON CENTER, CHROME PLATED SOLID BRASS CONSTRUCTION FAUCET WITH THERMOSTATIC MIXING VALVE, ASSE 1070 COMPLANT, SCALDING PROTECTION INCLUDED. SET AT 110 DEGREES. CHROME PLATED SUPPLY STOPS AND ESCUTCHEONS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE, P-TRAP AND CARRIER FOR ADULT STANDARD MOUNTING	2"	2"	1/2"	1/2"	3.4	32" FROM FLOOR TO RIM
L-2	SAME AS L-1	SAME AS L-1 EXCEPT FOR ADULT ADA MOUNTING	2"	2"	1/2"	1/2"	3.4	34" FROM FLOOR TO RIM
SHR-1	LEONARD AQUATROL 4500-H-06-1.5GPM-VS 515P(G)-DZL ADA RATED SHOWER	CONCEALED PRESSURE BALANCING VALVE ASSE 1016 LISTED WITH LOW FLOW INSTITUTIONAL 1.5GPM SHOWERHEAD AND VANDAL RESISTANT SCREWS. INLINE DIVERTER VALVE WITH LEVER HANDLE, 69" HAND HELD SHOWER AND 30" GLIDE BAR. SET HOT WATER TEMPERATURE AT 110 DEG. HIGH SCHOOL ADA MOUNTING.	3"	2"	1/2"	1/2"		
SK-1	ELKAY # LRAD-252160-3 SINK CHICAGO FAUCET 0.5 GPM # 1100-GA243-317ABCP DRAIN # LK499 17 GA. DRAIN AND 17 GA. P-TRAP W/ CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270-LF-BRKT-BV	25" X 21" SINGLE COMPARTMENT SINK, #18 GAUGE, TYPE 304 NICKEL BEARING STAINLESS STEEL, 6" DEEP, TOP MOUNTED INSTALLATION ON 4" CENTER HOLES OFF-CENTER DRAIN OPENINGS. DUAL HANDLE, TOP MOUNTED MIXING FAUCET WITH STAINLESS STEEL ESCUTCHEON. PROVIDE CHROME PLATED STOPS AND FLEXIBLE STAINLESS STEEL RISERS, CHROME PLATED DRAIN GRID & TAILPIECE & P-TRAP.	2"	2"	1/2"	1/2"	6	SEE ARCHITECTURAL
SK-2	ELKAY # LRAD-252260-3 SINK CHICAGO FAUCET 0.5 GPM # 1100-GA243-317ABCP DRAIN # LK499 17 GA. DRAIN AND 17 GA. P-TRAP W/ CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270-LF-BRKT-BV	29" X 22" DOUBLE COMPARTMENT SINK, #18 GAUGE, TYPE 304 NICKEL BEARING STAINLESS STEEL, 6" DEEP, TOP MOUNTED INSTALLATION ON 4" CENTER HOLES OFF-CENTER DRAIN OPENINGS. DUAL HANDLE, TOP MOUNTED MIXING FAUCET WITH STAINLESS STEEL ESCUTCHEON. PROVIDE CHROME PLATED STOPS AND FLEXIBLE STAINLESS STEEL RISERS, CHROME PLATED DRAIN GRID & TAILPIECE.	2"	2"	1/2"	1/2"	6	SEE ARCHITECTURAL
SK-3	ELKAY EWM4620-4 SINK LK490GNO5T4H, FAUCET (TWO) LK168 DRAIN 0.5GPM AERATOR	80" X 20" COMPARTMENT, 14 GAUGE TYPE 304 STAINLESS STEEL, TWO STATION FAUCET WITH 6\"/>						
EESH-1	BRADLEY S19-314-AA1BBB400	COMBINATION EMERGENCY EYEFACE WASH AND SHOWER BARRIER FREE. 1 1/4" GALVANIZED STEEL WITH BRADTECT SAFETY YELLOW COATING (CORROSION RESISTANT), STAY OPEN SHOWER AND EYEWASH CHROME PLATED BRASS BALL VALVE, YELLOW PLASTIC SHOWERHEAD WITH 10" DIA. PLASTIC SHROUD, HALO EYEFACE WASH, YELLOW PLASTIC BOWL WITH PLASTIC DUST COVER, 304 SS HANDLE.	-	-	1-1/4"	-		
EDF-1	ELKAY LVRC1L8SC LKAPREZL CARRIER ZURN Z-1225 CARRIER	B/L LEVEL FILTERED ELECTRIC DRINKING FOUNTAIN, FRONT AND SIDE TOUCH CONTROLS, 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P-TRAP, APRON AND CARRIER, FOR ADULT STANDARD & ADA MOUNTING, OUTDOOR RATED, VANDAL RESISTANT. PROVIDE WATER SENTRY FILTER 51300C.	2"	2"	1/2"	-		SEE ARCHITECTURAL
EDF-2	ELKAY LVRC1L8VSKZEZH20 LKAPREZL APRON ZURN Z-1225 CARRIER	B/L LEVEL FILTERED ELECTRIC DRINKING FOUNTAIN W/ ELECTRONIC BOTTLE FILLER BUTTON MECHANICAL FRONT BUBBLER ACTIVATION, 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P-TRAP, APRON AND CARRIER, FOR ADULT STD & ADA MOUNTING, VANDAL RESISTANT. PROVIDE WATER SENTRY FILTER 51300C.	2"	2"	1/2"	-		SEE ARCHITECTURAL
DF-1	ELKAY EZ2H20LK4430BF1M	OUTDOOR BOTTLE FILLING STATION TRI-LEVEL PEDESTAL. FEATURES SHALL INCLUDE 316 STAINLESS, LAMINAR FLOW, HEAVY DUTY VANDAL RESISTANT, FURNISHED WITH VANDAL RESISTANT BUBBLER. PRODUCT SHALL BE FLOOR MOUNTED, FREESTANDING FOR OUTDOOR APPLICATION. UNIT SHALL BE LEAD-FREE DESIGN. PROVIDE WATER SENTRY FILTER 51300C.	2"	-	1/2"	-		SEE ARCHITECTURAL COORDINATE COLOR WITH OWNER AND ARCHITECT
SHR-1	LEONARD AQUATROL 4500-H-06-1.5GPM-VS 515P(G)-DZL ADA RATED SHOWER	CONCEALED PRESSURE BALANCING VALVE ASSE 1016 LISTED WITH LOW FLOW INSTITUTIONAL 1.5GPM SHOWERHEAD AND VANDAL RESISTANT SCREWS. INLINE DIVERTER VALVE WITH LEVER HANDLE, 69" HAND HELD SHOWER AND 30" GLIDE BAR. SET HOT WATER TEMPERATURE AT 110 DEG. HIGH SCHOOL ADA MOUNTING.	3"	2"	1/2"	1/2"		
MSB-1	FAT T58 3003 MOP BASIN # 832-AA WITH HOSE AND HOSE BRACKET, FAUCET, MOP BRACKET, WALL GUARD AND STRAINER # 888-CC MOP BRACKET # MSG 2424 WALL GUARD # 1453-B8 STRAINER	80X24X12 PRECAST TERRAZO MOP SERVICE BASIN WITH HOSE AND HOSE BRACKET, FAUCET, MOP BRACKET, WALL GUARD AND STRAINER.	3"	2"	3/4"	3/4"		
WH-1	ZURN # Z1300-SS-34UN HYDRANT	ENCASED NON-FREEZE ANTI-SIPHON WALL HYDRANT, BRONZE, NON-TURNING OPERATING ROD STOP VALVE IN SUPPLY, KEY OPERATED CONTROL VALVE, STAINLESS STEEL BOX WITH HINGED COVER.	-	-	3/4"	-		
WH-2	ZURN # Z1350 HYDRANT	ENCASED MODERATE CLIMATE WALL HYDRANT FOR NARROW WALL, CHROME, SCREWDRIVER OPERATED STOP VALVE IN SUPPLY, KEY OPERATED CONTROL.	-	-	3/4"	-		
FD-1	ZURN # ZN415B-P	BODY ASSEMBLY WITH TYPE B STRAINER, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET INVERTED MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH TRAP PRIMER CONNECTION.	3"	2"	-	-		
FD-2	ZURN # ZN415I	BODY ASSEMBLY WITH TYPE I STRAINER, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET INVERTED MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH TRAP PRIMER CONNECTION.	3"	2"	-	-		
IMB	GUY GRAY BIM875	VALVE, STAINLESS STEEL BOX WITH HINGED COVER GALVANIZED STEEL ICE MACHINE BOX, FURNISHED WITH 1/2" PIP INLET X 1/4" OD OUTLET COMPRESSION ANGLE VALVE.	-	-	3/4"	-		
RD-1	MIFAB 1200-W	15" DIA. LARGE SUMP ROOF DRAIN, GALV. SUMP RECEIVER CAST IRON DRAIN BODY, C.I. WATERPROOFING MEMBRANE CLAMP RING WITH INTEGRAL GRAVEL STOP, OVERFLOW STANDPIPE, SELF-LOCKING POLYETHYLENE DOME STRAINER.	SEE PLANS					
RD-2	MIFAB 1270	15" DIA. COMBINED LARGE SUMP ROOF DRAIN W/ SECONDARY OVERFLOW, 24\"/>						
WMB	GUY GRAY B200	GALVANIZED STEEL WASHING MACHINE BOX, FURNISHED WITH QUARTER TURN BALL VALVE AND TWO 1/2" MIPSWHEAT CONNECTION VALVE AND A 1-1/2" OR 2" THREADED DRAIN FITTING & LOCKWALNUT.	1-1/2" OR 2"	-	3/4"	3/4"		
RH-1	JAY R. SMITH 5906	NON-FREEZE ROOF HYDRANT WITH GALV. CASING AND ADJUSTABLE FLOW WHEEL LOCK HANDLE WITH DECK FLANGE AND UNDER DECK CLAMP.	-	-	3/4"	-		

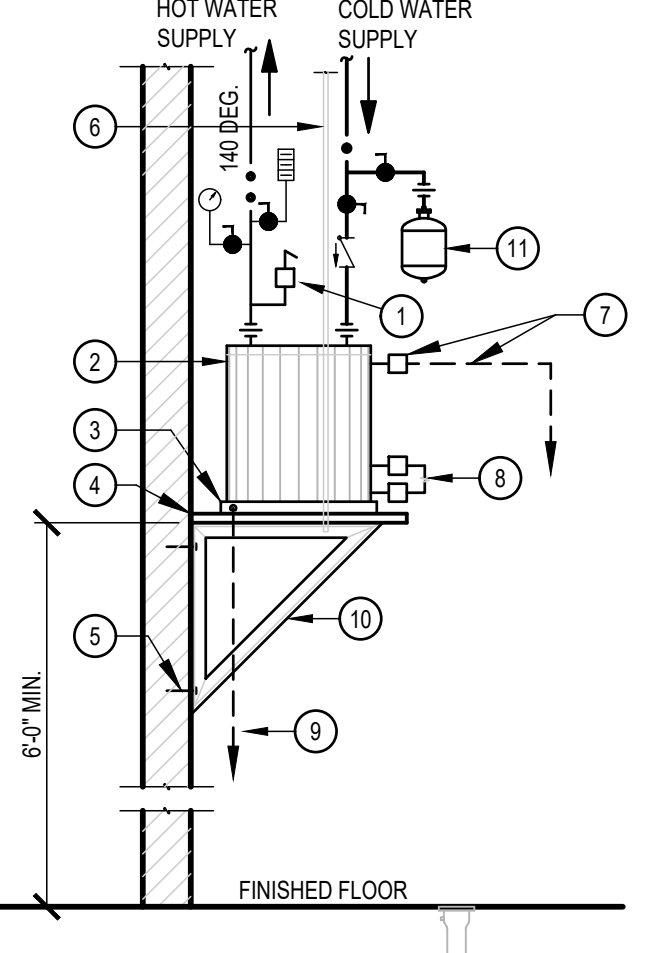
- NOTES:  
1. INSTALL FLUSH VALVE ON THE WIDE SIDE OF STALL.  
2. PROVIDE ADA APPROVED FLUSH VALVE HANDLE FOR ALL ADA PLUMBING FIXTURES.  
3. REFER TO PLUMBING PLAN FOR FIXTURES THAT WILL REQUIRE TRAP PRIMER CONNECTIONS.  
4. PROVIDE TRUEBRO LAVATORY (WHITE) LAV SHIELD MODEL #2018 (K&K PRE-CUT). SHIELD SHALL BE SECURED TO WALL AS PER MANUFACTURER'S RECOMMENDATION.  
5. PROVIDE TRUEBRO LAVATORY GUARD MODEL #103 COLOR WHITE. COVER SHALL BE SECURED WITH SNAP-SLIP FLUSH REUSABLE FASTENERS. ANGLE STOPS SHALL HAVE LOCK-UP LOCKING ACCESS COVERS.  
6. PROVIDE TRUEBRO (WHITE) BASIN GUARD UNDER SINK PROTECTIVE ENCLOSURE.



119 W. VAN BUREN AVE. STE 101  
PHONE: 956-230-3435  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-1598

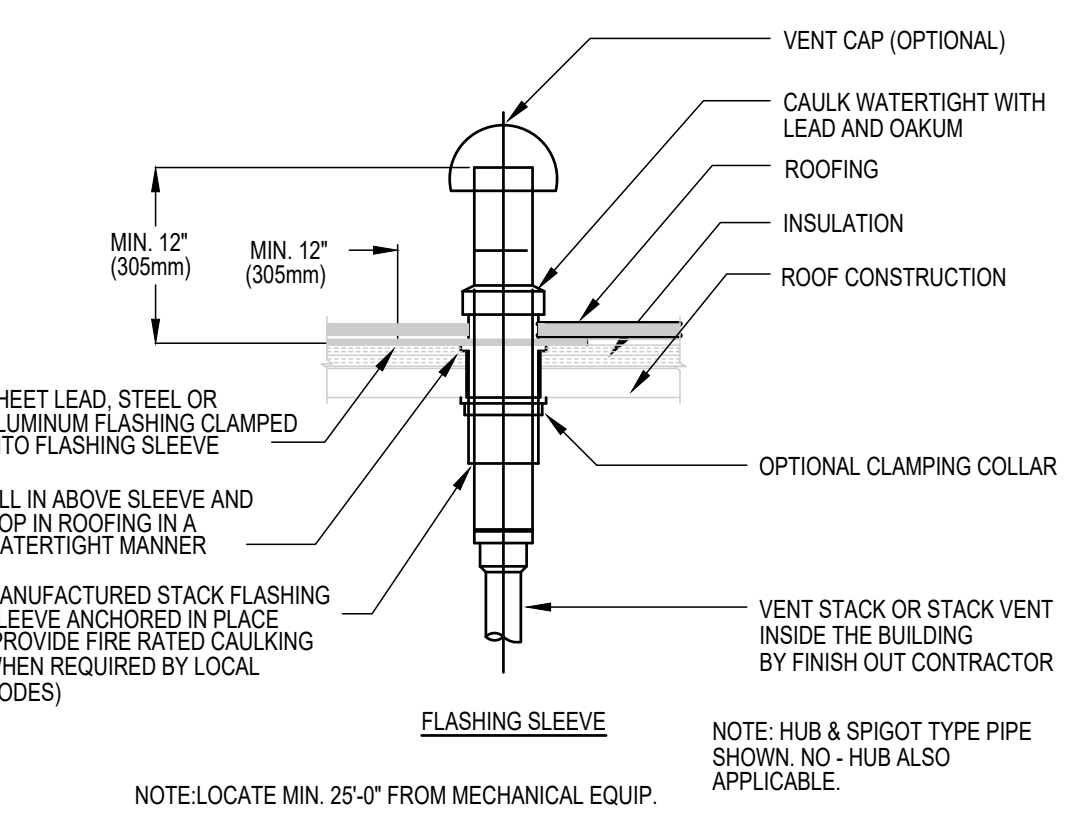


NOTE:  
PROVIDE HEAT TRAP DEVICE OR AN ARRANGEMENT OF TUBING AS PER IECC.  
INSULATE THE FIRST 3' OF OUTLET PIPING AND THE INLET PIPING BETWEEN  
THE STORAGE TANK AND A HEAT TRAP (INCLUDE THE HEAT TRAP).

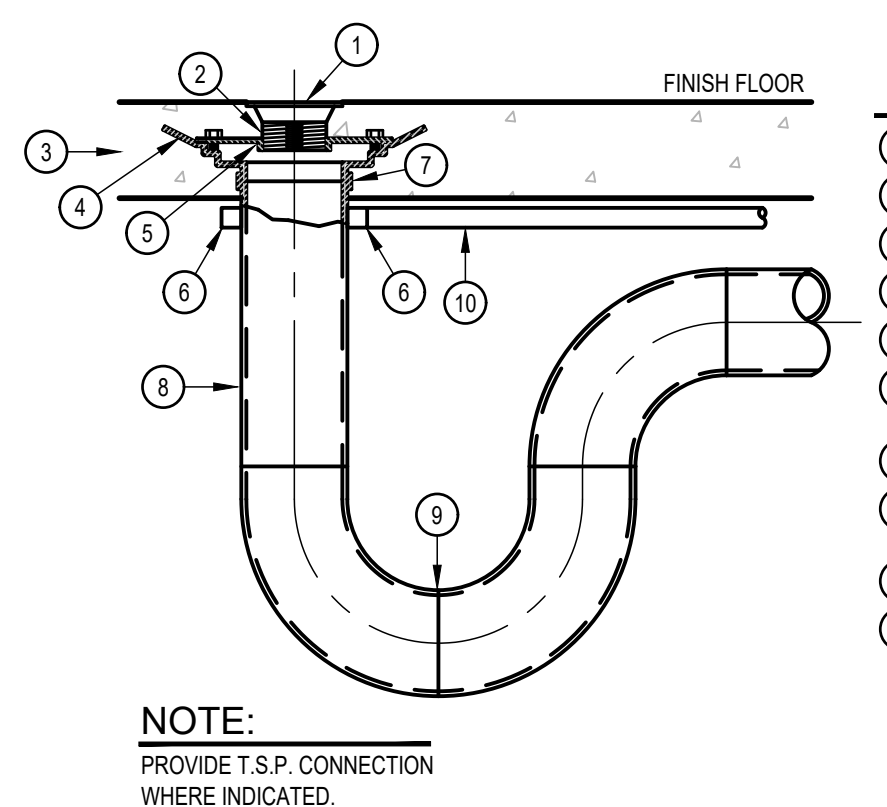


- KEYED NOTES**
- POP-OFF VALVE/ANTI-SIPHON DEVICE.
  - ELECTRIC WATER HEATER AS SCHEDULED.
  - PAN WITH DRAIN.
  - 3/4" MIN. MOISTURE RESISTANT PLYWOOD.
  - SECURE TO WALL AS REQUIRED.
  - (2) 3/8" RODS, SECURE TO STRUCTURE.
  - RELIEF VALVE WITH 3/4" MIN. COPPER DRAIN LINE TO MOP SINK OR OPEN DRAIN.
  - HEATING ELEMENT AS SPEC'D.
  - COPPER DRAIN LINE TO MOP SINK OR OPEN DRAIN.
  - (2) KNEE BRACES @ 1' 25X1 25X 25 GALV. @ 8" O.C. WITH WELDED JOINTS.
  - EXPANSION TANK, WESSLES COMPANY MODEL TT-AS.

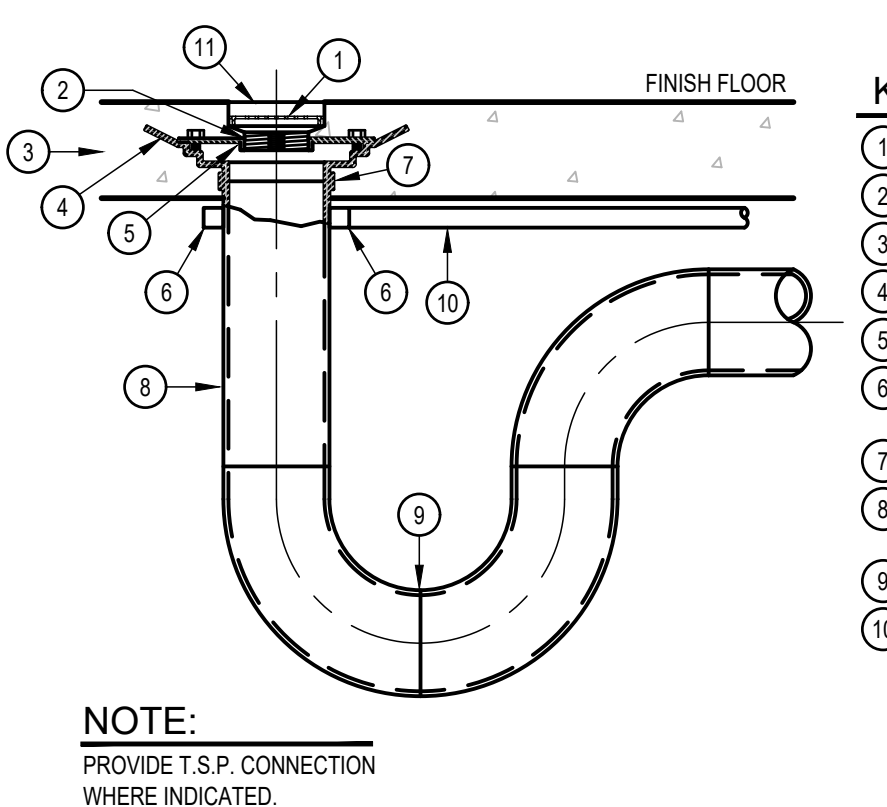
**01 WALL MOUNTED ELECTRIC WATER HEATER DETAIL**  
SCALE: NOT TO SCALE



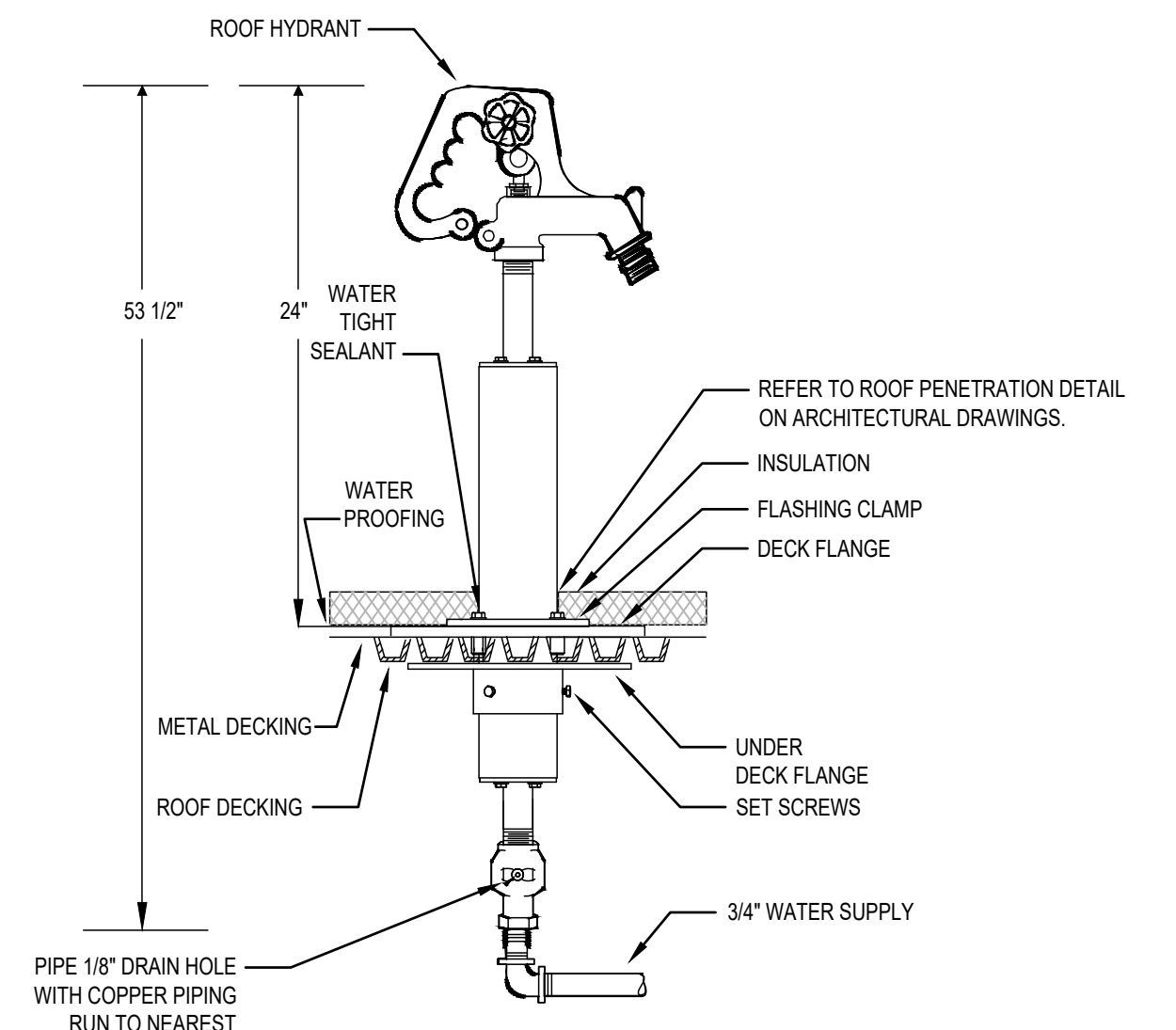
**02 VENT THRU ROOF DETAIL**  
SCALE: NOT TO SCALE



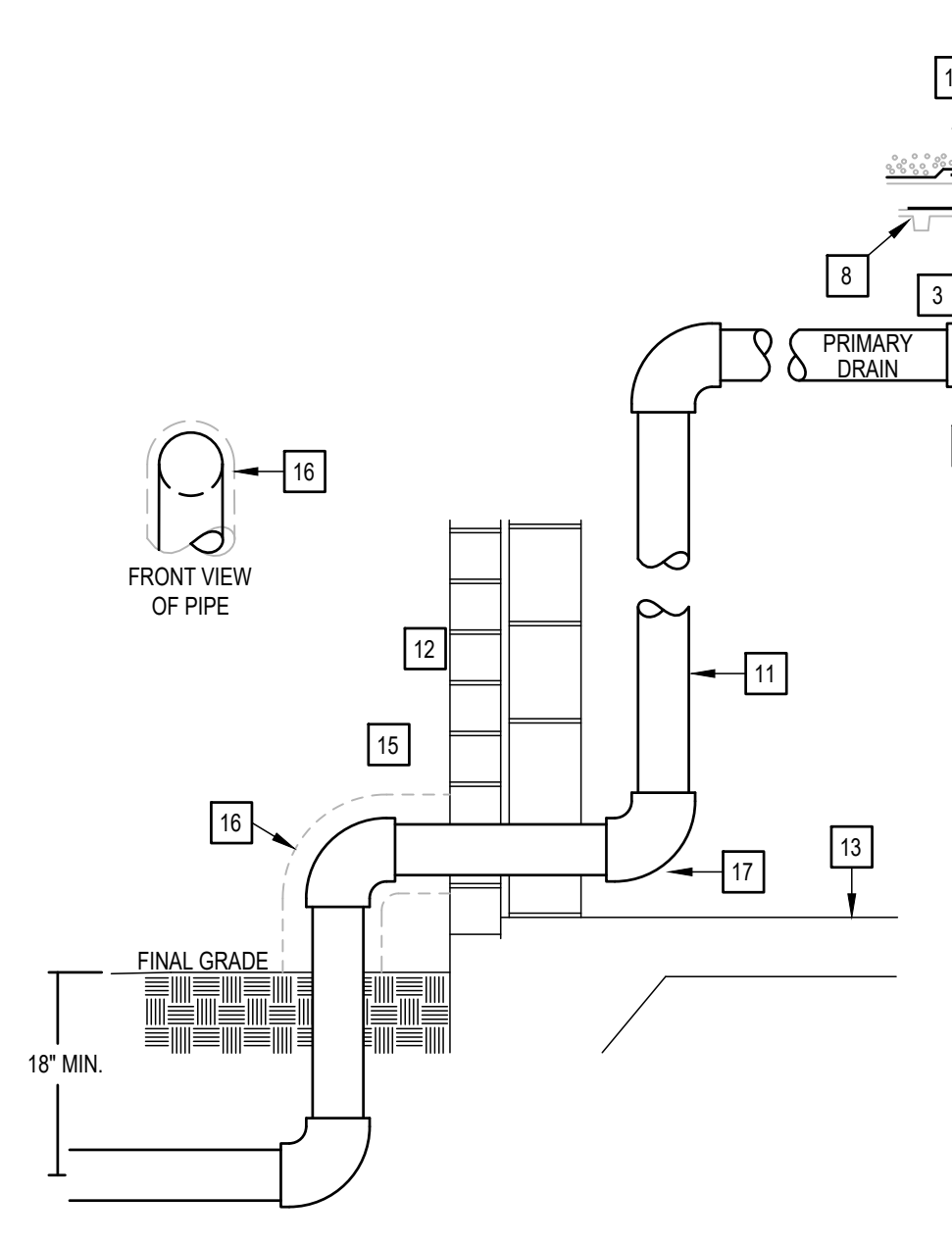
**03 FD-1 FLOOR DRAIN WITH TRAP PRIMER DETAIL**  
SCALE: NOT TO SCALE



**04 FD-2 FLOOR DRAIN WITH TRAP PRIMER DETAIL**  
SCALE: NOT TO SCALE



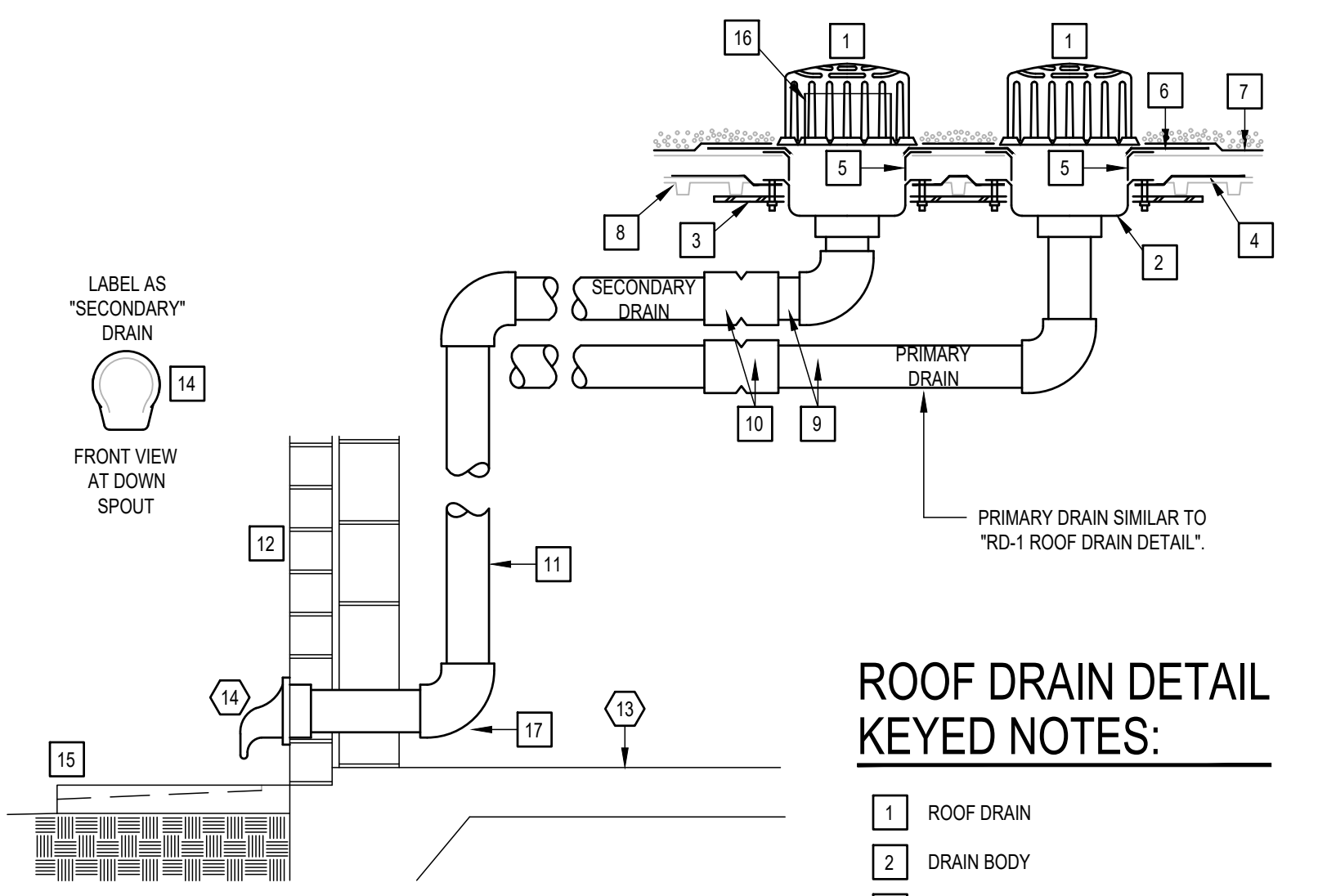
**05 RH-1 ROOF HYDRANT DETAIL**  
SCALE: NOT TO SCALE



**06 RD-1 PRIMARY ROOF DRAIN DETAIL**  
SCALE: NOT TO SCALE

**ROOF DRAIN DETAIL KEYED NOTES:**

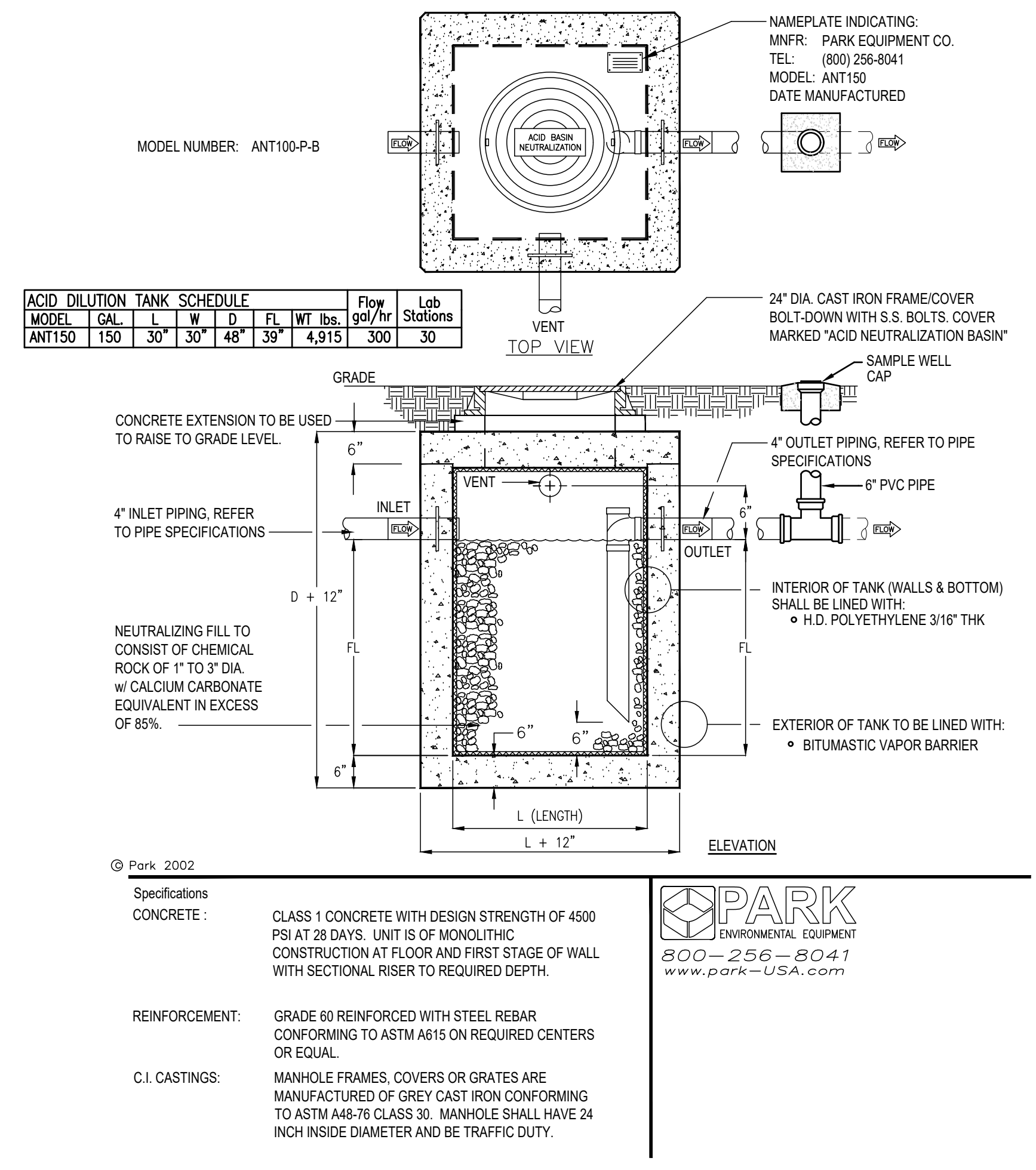
- ROOF DRAIN
- DRAIN BODY
- UNDER DECK CLAMP
- ROOF SUMP RECEIVER
- EXTENSION COLLAR
- 4# LEAD FLASHING-EXTEND MINIMUM 12" FROM DRAIN BODY
- COUNTER FLASHING
- ROOF DECK
- MINIMUM 1/4" PER FEET SLOPE ON HORIZONTAL RUNS
- RUBBER 12" RINGS TYPE EXPANSION COUPLING WITHIN 4 FEET OF EACH ROOF DRAIN
- RAIN WATER CONDUCTOR INSIDE PIPE CHASE
- WALL
- FLOOR
- ROOF
- PROVIDE DOWNSPOUT NOZZLE EQUAL TO JOSAM 2510.
- ALUMINUM METAL JACKET
- FILL BLOCK WITH CONCRETE AT ELBOW AREA



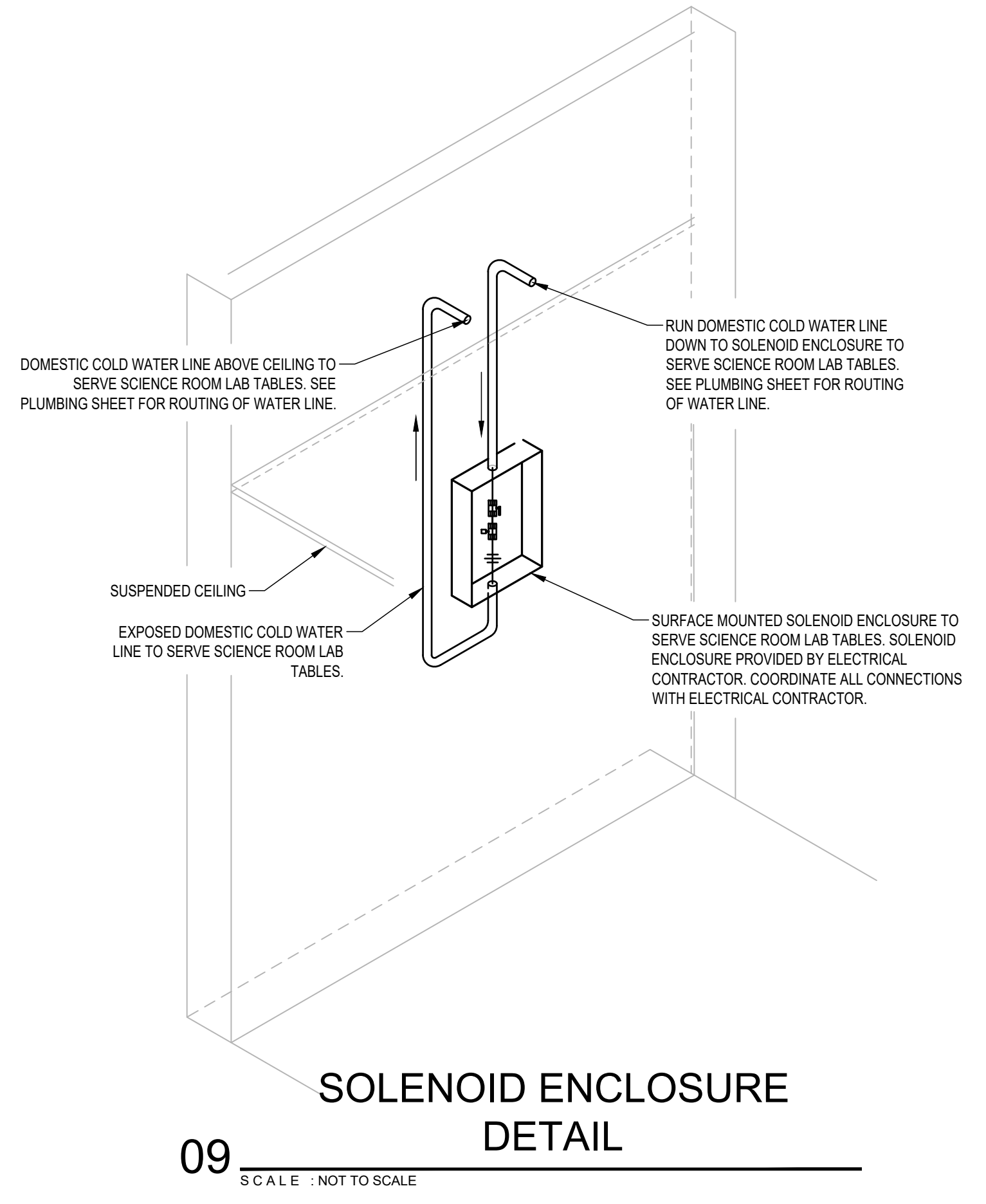
**07 RD-2 COMBINATION SECONDARY WITH PRIMARY ROOF DRAIN DETAIL**  
SCALE: NOT TO SCALE

**ROOF DRAIN DETAIL KEYED NOTES:**

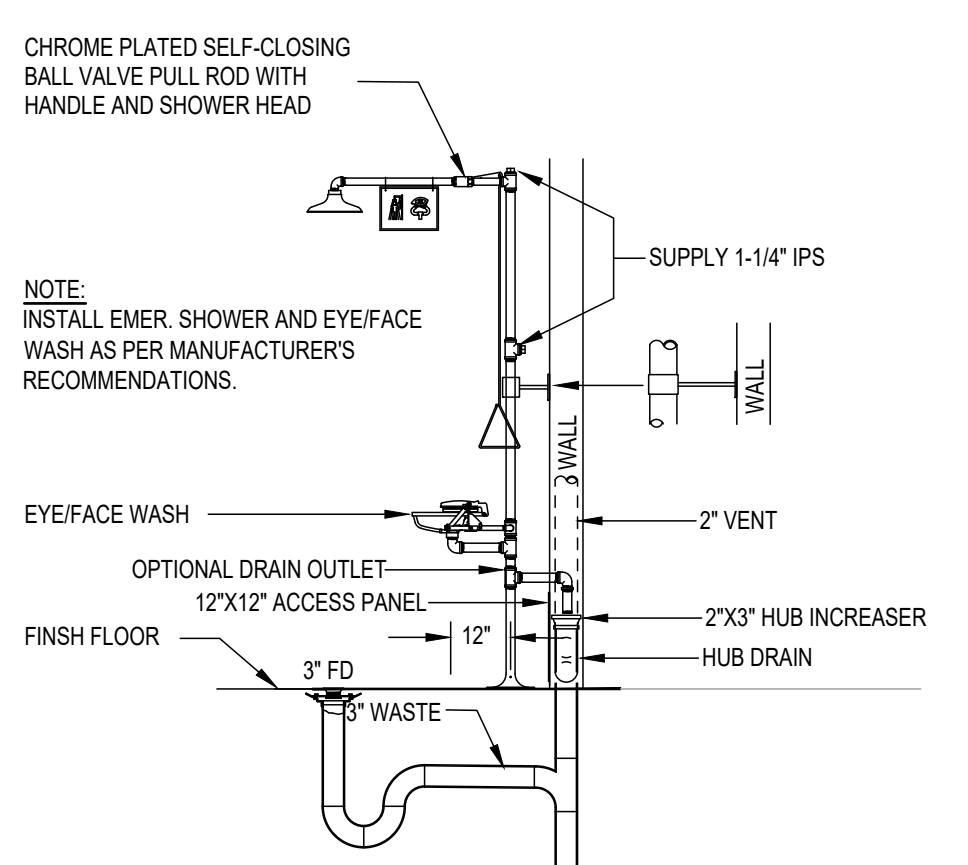
- ROOF DRAIN
- DRAIN BODY
- UNDER DECK CLAMP
- ROOF SUMP RECEIVER
- EXTENSION COLLAR
- 4# LEAD FLASHING-EXTEND MINIMUM 12" FROM DRAIN BODY
- COUNTER FLASHING
- ROOF DECK
- MINIMUM 1/4" PER FEET SLOPE ON HORIZONTAL RUNS
- EXPANSION COUPLING WITHIN 4 FEET OF EACH ROOF DRAIN
- RAIN WATER CONDUCTOR INSIDE PIPE CHASE
- WALL
- FLOOR
- PROVIDE DOWNSPOUT NOZZLE EQUAL TO JOSAM 2510.
- SPLASH BLOCK (GENERAL CONTRACTOR)
- ADJUSTABLE STANDPIPE
- FILL BLOCK WITH CONCRETE AT ELBOW AREA



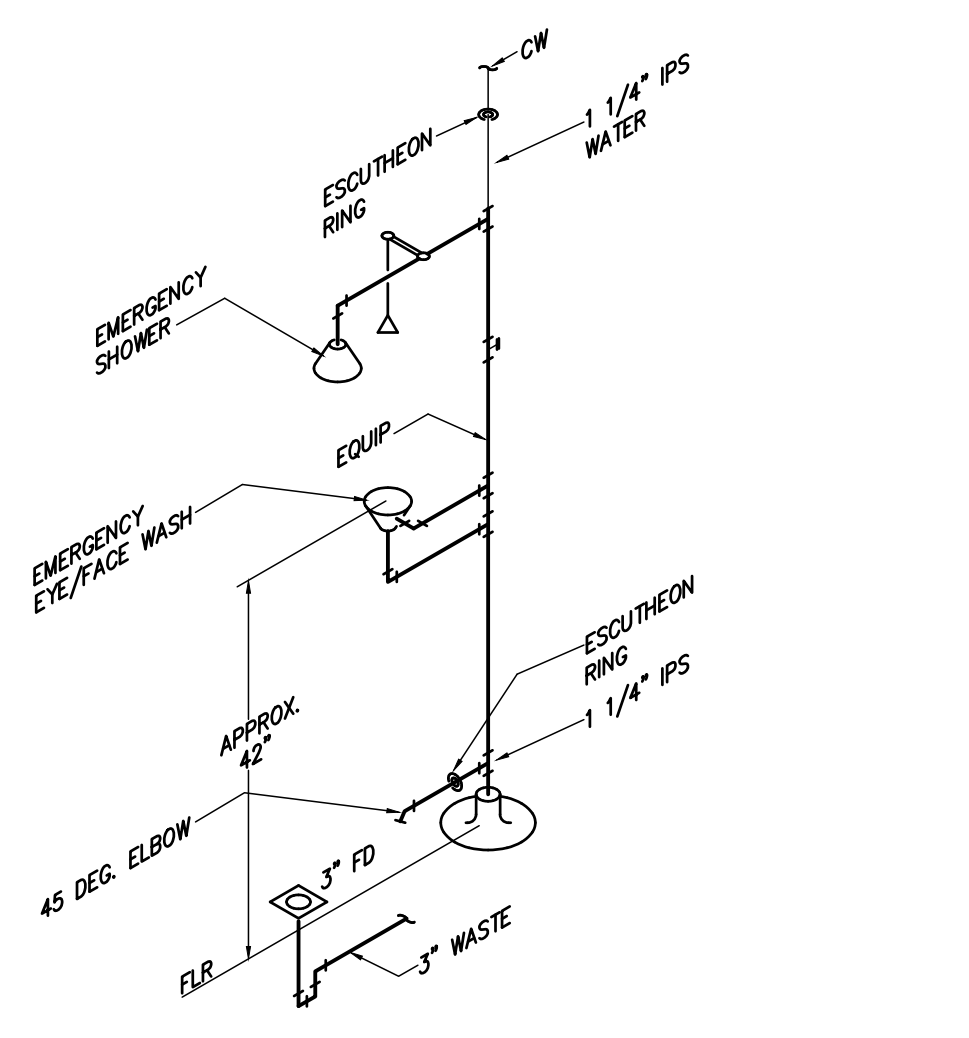
**08 ANT-1 ACID NEUTRALIZATION TANK DETAIL**  
SCALE: NOT TO SCALE



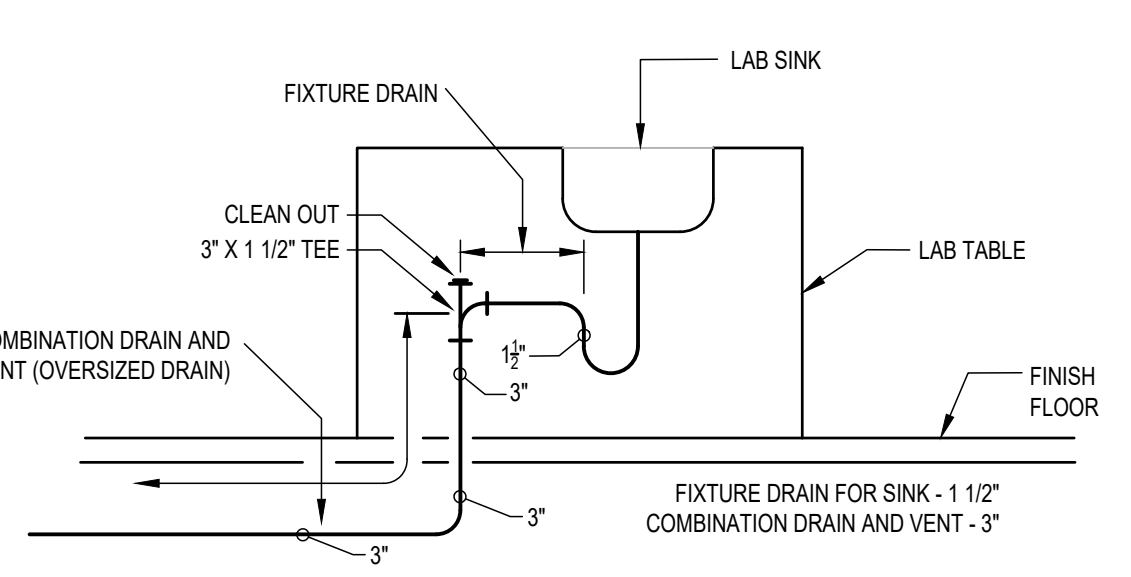
**09 SOLENOID ENCLOSURE DETAIL**  
SCALE: NOT TO SCALE



**10 EMERGENCY SHOWER & EYE/FACE DETAIL**  
SCALE: NOT TO SCALE



**11 EMERGENCY SHOWER & EYE/FACE PIPING SCHEMATIC**  
SCALE: NOT TO SCALE



**12 INSTRUCTORS DESK SINK DRAIN DETAIL**  
SCALE: NOT TO SCALE