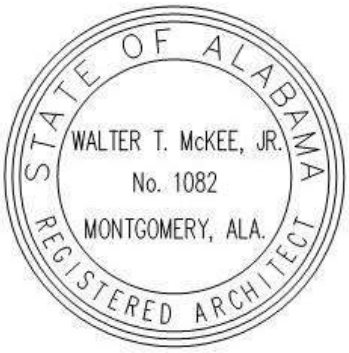
McKEE & ASSOCIATES
ARCHITECTS, INC.

Addendum No. 2
Date: November 28, 2023



Project:
Additions To Robertsdale High School
For The Baldwin County Board of Education
Robertsdale, Alabama

MCKEE PROJECT NO. 23-195
ALABAMA DIVISION OF CONSTRUCTION MANAGEMENT NO. 2023533

The following changes and/or substitutions to the plans and specifications are hereby made a part of same and are incorporated in full force as part of the contract.

Bidders shall acknowledge receipt of this Addendum in writing on their Proposal Form.

A2.1 GENERAL MODIFICATIONS: None

A2.2 SPECIFICATIONS MODIFICATIONS: None

A2.3 DRAWING MODIFICATIONS:

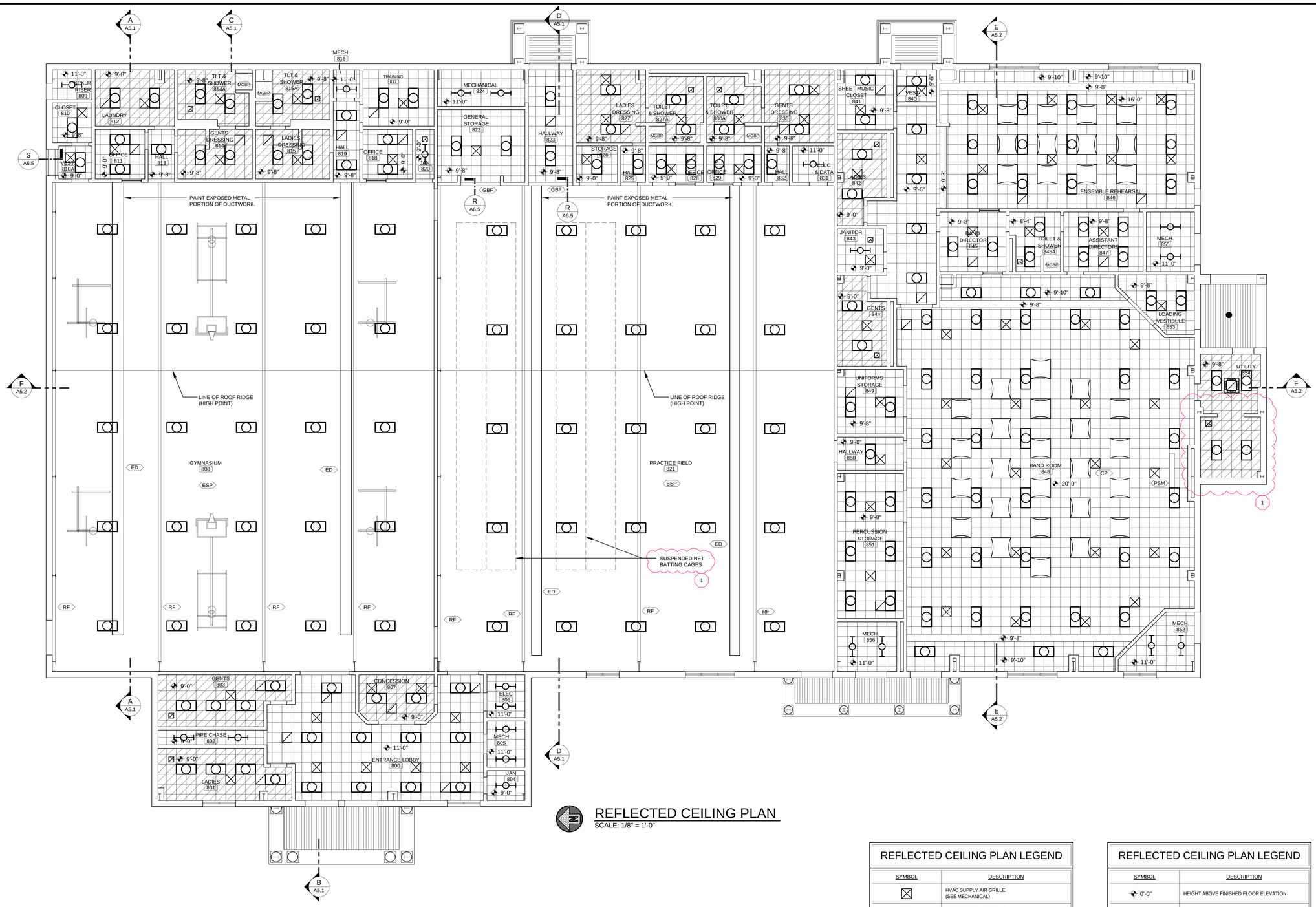
A. See the attached Revised Drawings as follows:

1. Sheets **FP1.1, FP1.2, P1.1, P1.2, P2.1, P2.2, P3.1, M1.1, M2.1, M2.2, M3.1, E0.1, E1.1, E2.1, E3.1, and E5.1 (Revised 11.20.2023)**, herein.
2. Sheets **G0.1, A2.1 (Revised 11.28.2023)** herein.
3. Sheets **C-1.0, C-2.0, C-2.1, C-2.2, C-3.0, C-3.1, C-3.2, C-4.0, C-4.1, C-5.0, C-5.1, C-5.2, C-5.3, C-6.0, C-6.1, C-6.2, C-6.3, C-7.0, C-7.1, C-7.2, C-7.3 (Revised 11.28.2023). Sheets C-2.2, C-5.3, and C-7.2 are added sheets.**

B. **Sheet C-4.2 is deleted** from the drawings.

A2.4 CLARIFICATIONS & RESPONSES: None

END OF ADDENDUM



REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

REFLECTED CEILING PLAN LEGEND

SYMBOL	DESCRIPTION
	HVAC SUPPLY AIR GRILLE (SEE MECHANICAL)
	HVAC RETURN AIR GRILLE (SEE MECHANICAL)
	EXHAUST FAN GRILLE (SEE MECHANICAL)
	CASSETTE HEAT PUMP (SEE MECHANICAL)
	ACOUSTICAL SOUND DIFFUSER, 4' X 4'
CP	CEILING MOUNTED PROJECTOR LOCATION
ED	EXPOSED DUCTWORK - NO PAINT
EDP	EXPOSED DUCTWORK - PAINT
ESP	EXPOSED STRUCTURE - PAINT
GBF	GYPSUM BOARD FURRING
GBP	GYPSUM BOARD - PAINT
MGBP	MOISTURE RESISTANT GYPSUM BOARD - PAINT
MSPV	METAL SOFFIT PANELS - VENTED
PSM	CEILING RECESSED PROJECTION SCREEN - MOTORIZED
RF	EXPOSED RIGID FRAME STEEL MEMBER - PAINT
SLP	STEEL LINTEL - PAINT

REFLECTED CEILING PLAN LEGEND

SYMBOL	DESCRIPTION
0'-0"	HEIGHT ABOVE FINISHED FLOOR ELEVATION
	2'x2' LAY-IN ACOUSTICAL CEILING
	2'x2' VINYL CLAD LAY-IN ACOUSTICAL CEILING
	GYPSUM BOARD (SUSPENDED AS REQUIRED)
	LINEAR CEILING
	2'x4' RECESSED OR SURFACE MOUNTED LIGHT FIXTURE (SEE ELECTRICAL)
	2'x2' RECESSED OR SURFACE MOUNTED LIGHT FIXTURE (SEE ELECTRICAL)
	1'x4' RECESSED OR SURFACE MOUNTED LIGHT FIXTURE (SEE ELECTRICAL)
	1'x4' SURFACE MOUNTED LIGHT FIXTURE (SEE ELECTRICAL)
	RECESSED ROUND LIGHT FIXTURE (SEE ELECTRICAL)

ADDITIONS TO ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9833

STATE OF ALABAMA REGISTERED ARCHITECT
WALTER T. McKEE, JR.
No. 1802
MONTGOMERY, ALA.

SHEET TITLE : REFLECTED CEILING PLAN

MCKEE JOB # : 23-195

DRAWN BY : VH, JL

DATE: 10-11-2023

REVISED DATE: 1 11-28-2023

REVISED DATE:

REVISED DATE:

SHEET NO. : A2.1

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UTILITY PLAN NOTES

1. THE CONTRACTOR SHALL NOTIFY CONSTRUCTION MANAGER'S CONSTRUCTION SURVEILLANCE REPRESENTATIVE AND LOCAL JURISDICTIONAL INSPECTOR 48 HOURS BEFORE THE BEGINNING OF EACH PHASE OF CONSTRUCTION.

2. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL CODES, AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.

3. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF ANY DISCREPANCIES OR ERRORS HE DISCOVERS IN THE PLAN.

4. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER OR HIS REPRESENTATIVE OR THE ENGINEER MAY BE CAUSE FOR THE WORK TO BE UNACCEPTABLE.

5. THE CONTRACTOR IS REQUIRED TO USE THE ONE-CALL CENTER TELEPHONE NUMBER FOR THE PURPOSE OF COORDINATING THE MARKING OF UNDERGROUND UTILITIES.

6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS ARE NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS, HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. CONTRACTOR TO CONTACT THE UTILITY COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE.

7. THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBING CURBING, PAVING AND COMPACTED SUB-GRADE.

8. UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE INCLUDES THE NECESSARY RELOCATION. THE CONTRACTOR SHOULD SEEK ASSISTANCE FROM ALL UTILITY COMPANIES TO LOCATE AND PROTECT THEIR FACILITIES.

9. THE CONTRACTORS SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE BY HIS EQUIPMENT TO EXISTING UTILITIES, CROSS-DRAIN PIPES AND HEADWALLS.

10. THE CONTRACTOR SHALL EXPLORE AHEAD 200 FEET SO ADJUSTMENTS CAN BE MADE IN THE ALIGNMENT OF THE PIPE IN CASE OF CONFLICTS WITH EXISTING STRUCTURES, UTILITIES AND PIPING.

11. ALL EXCESS MATERIAL FROM EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR. COST FOR THIS WORK SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING PIPE FROM FLOATING. IF PIPE FLOATS DURING CONSTRUCTION, THE CONTRACTOR SHALL RELAY PIPE TO GRADE AT HIS EXPENSE.

13. ALL PROPERTY LINE MARKERS (IRON PINS, CONCRETE MONUMENTS, ETC.) DESTROYED DURING CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF ALABAMA TO RESET PROPERTY MARKERS. THE COST FOR THIS WORK SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

14. THE CONTRACTOR SHALL MEET OR EXCEED ALL REQUIREMENTS OF EACH UTILITIES' CONSTRUCTION SPECIFICATIONS.

GRADING AND DRAINAGE NOTES

1. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND WORK AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.

2. ALL SILT BARRIERS MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT BARRIER AND DETENTION FACILITIES ARE CONSTRUCTED.

3. ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING.

4. ALL SLOPES SHALL BE STABILIZED AS SOON AS POSSIBLE.

5. COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ATM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED AT OR NEAR OPTIMUM MOISTURE. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

6. ALL FILL MATERIAL AND COMPACTION REQUIREMENTS SHALL MEET THE GEOTECHNICAL REPORT PREPARED BY GEOCON ENGINEERING & MATERIALS TESTING.

7. MAXIMUM SLOPE OF EMBANKMENT SHALL BE 3.0 FEET HORIZONTAL TO 1.0 FOOT VERTICAL, OR MATCH EXISTING.

8. PROPOSED CONTOUR INTERVALS ARE AS LABELED. ALL PROPOSED CONTOURS ARE FINISHED GRADES.

9. THE CONTRACTOR WILL INSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED OR RE-GRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS IN AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.

10. EXCESS EARTH CUT MATERIAL, IF ANY, SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE APPROVED TO BE PLACED ON SITE BY THE OWNER.

11. ALL STORM DRAINAGE PIPE SHALL BE LAID ON SMOOTH CONTINUOUS GRADES WITH NO VISIBLE BENDS AT JOINTS.

12. ALL STORM DRAINAGE INLET STRUCTURES SHALL HAVE METAL FRAME AND COVER FOR ACCESS.

13. THE CONTRACTOR SHALL PROVIDE ANY EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

14. SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. THE SOILS ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.

15. CONTRACTOR SHALL REMOVE ALL UNSUITABLE MATERIAL FROM LIMITS OF ROADWAY CONSTRUCTION AS DIRECTED BY AN INDEPENDENT GEOTECHNICAL-TECHNICAL ENGINEER. UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL DRAINAGE SWALES MUST BE GRASSED AND RIP-RAP MUST BE PLACED AS SHOWN TO CONTROL EROSION.

2. SILT FENCE MUST MEET THE REQUIREMENTS OF LOCAL JURISDICTIONAL AGENCY, SAID REQUIREMENTS AS SHOWN BY THESE PLANS.

3. DISTURBED AREAS SHALL BE VEGETATED AFTER CONSTRUCTION. USE TEMPORARY SEASONAL SEEDING AND MULCHING ON GOING AS PER ALDOT STANDARD SPEC. SECTIONS 652 AND 656 RESPECTIVELY AND USE CENTIPEDE SOD FOR PERMANENT GRASSING AS PER ALDOT STANDARD SPEC. SECTION 654.

4. ADDITIONAL EROSION CONTROL MEASURES OR SILT BARRIERS TO BE PLACED AS SHOWN AND/OR DIRECTED BY THE PROJECT ENGINEER AND/OR LOCAL JURISDICTIONAL INSPECTOR.

5. WHEN ANY CONSTRUCTION BORDERS A DRAINAGE COURSE:

   A. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY BUILDING OR OTHER EXCAVATION SPOIL DIRT, CONSTRUCTION TRASH OR DEBRIS, ETC., FROM THE DRAINAGE AREA SHOWN HEREON IN AN EXPEDITIOUS MANNER AS CONSTRUCTION PROGRESSES.

   B. THE CONTRACTOR HEREBY AGREES TO STOP ALL WORK AND RESTORE THESE AREAS IMMEDIATELY UPON NOTIFICATION BY THE LOCAL JURISDICTIONAL INSPECTOR AND/OR PROFESSIONAL ENGINEER.

6. FOR ALL CONSTRUCTION ALONG AND/OR ACROSS WATERWAYS, BANK PROTECTION AND STABILIZATION SHALL BE REQUIRED AS PER LOCAL JURISDICTIONAL EROSION LAWS,

7. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION AND SHALL BE MAINTAINED IN PROPER WORKING ORDER UNTIL ALL DISTURBED AREAS ARE STABILIZED. CONSTRUCTION ENTRANCE PADS SHALL BE INSTALLED BY THE CONTRACTOR AT CONSTRUCTION ACCESS POINTS PRIOR TO LAND DISTURBANCE.

8. A COPY OF THE APPROVED LAND DISTURBANCE PLAN SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBING ACTIVITY IS IN PROGRESS.

9. CONSTRUCT SILT FENCE ALONG THE DOWNSTREAM SIDE OF ALL PROPOSED FILL CONSTRUCTION.

10. EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

11. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. CONTRACTOR SHALL CLEAN OUT ALL SEDIMENT PONDS WHEN REQUIRED BY THE ENGINEER OR LOCAL JURISDICTIONAL INSPECTOR. CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

12. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS 1/3 OF THE HEIGHT OF THE SILT FENCE UTILIZED FOR EROSION CONTROL. IN THE DETENTION POND, SILT SHALL BE REMOVED WHEN A DEPTH OF 18" HAS ACCUMULATED AT THE WEIR.

13. ALL EASEMENTS DISTURBED MUST BE DRESSED AND GRASSED TO CONTROL EROSION IN ACCORDANCE WITH EASEMENT PLATS PRIOR ACCEPTANCE.

14. SILT BARRIERS TO BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES.

15. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND THE WORK AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.

16. TREE PROTECTION AND EROSION CONTROL MEASURES ARE TO BE ACCOMPLISHED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

17. ALL SILT BARRIERS MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT BARRIER AND DETENTION FACILITIES ARE CONSTRUCTED.

18. ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING.

19. ALL DISTURBED AREAS TO BE GRASSED AS SOON AS POSSIBLE WITH SEASONAL TEMPORARY SEEDING AND MULCHING AS PER ALDOT STANDARD SPEC. SECTIONS 652 AND 656.

20. ALL SLOPES SHALL BE STABILIZED AS SOON AS POSSIBLE.

21. GRASS AREAS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH GRASS IN KIND. IN AREAS OF INDECIPHERABLE GRASSES USE CENTIPEDE SOD FOR PERMANENT GRASSING AS PER ALDOT STANDARD SPEC. SECTION 654.

22. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM REQUIRED MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL DEVICES TO ENSURE THEIR FUNCTION AT ALL TIMES.

23. IF HEAVY RAINFALL IS PREDICTED, CONTRACTOR SHALL INSPECT EROSION CONTROL ITEMS WITH ENGINEER PRIOR TO EVENT, IF AT ALL POSSIBLE. ANY IMPROVEMENTS, CLEANING, OR ADJUSTMENTS THAT ARE REQUIRED PRIOR TO EVENT SHALL BE GIVEN FULL URGENCY AS MUCH IS POSSIBLE.

SITE NOTES

1. ALL CONCRETE SHALL BE CLASS A, 4,000 PSI AT 28 DAYS COMPRESSIVE STRENGTH WITH A MAXIMUM SLUMP OF 4" UNLESS NOTED OTHERWISE. ALL EXPOSED CONCRETE TO HAVE A FINE BROOM FINISH.

2. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER OR TENANT.

3. ALL DIMENSIONS ARE FACE OF CURB OR AS NOTED.

4. NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL METHODS AS MAY BE NECESSARY PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART VI, SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION. THE PROJECT WILL REQUIRE ROAD CLOSURE/ TRAFFIC CONTROL SCHEME.

5. SPECIAL CARE SHALL BE GIVEN WHILE WORKING NEAR PRIVATE RESIDENCES. ANY DAMAGES TO OR ADJACENT TO PRIVATE PROPERTY SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.

6. IF ANY CONFLICTS EXIST BETWEEN APPLICABLE ACCESSIBILITY CODES, STANDARDS AND GUIDELINES THE CODES, STANDARDS, AND GUIDELINES PROVIDING THE GREATER DEGREE OF ACCESSIBILITY TAKE PRECEDENCE AS PER HUD MAP CHAPTER 5 GUIDELINES.

7. ALL ACCESSIBILITY CODES, STANDARDS AND GUIDELINES USED FOR THE PROJECT DESIGN MUST BE INCLUDED WITHIN THE CODE SUMMARY.

UTILITY PROVIDERS

POWER: BALDWIN EMC
WATER: ROBERTSDALE W&S
SEWER: ROBERTSDALE W&S
GAS: RIVIERA UTILITIES
TEL./FIBER: UNITI FIBER

ON-SITE CONTACT: SAWGRASS CONSULTING LLC.
(251) 544-7900 (OFFICE)
(251) 544-7918 (FAX)

ADDITIONS TO ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
30673 Sgt. E. I. "Boots" Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7900

ALABAMA LICENSED No. 31242 PROFESSIONAL ENGINEER James H. Robertson 11-28-23

SHEET TITLE :	PROJECT NOTES
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	
SHEET NO. :	C-1.0

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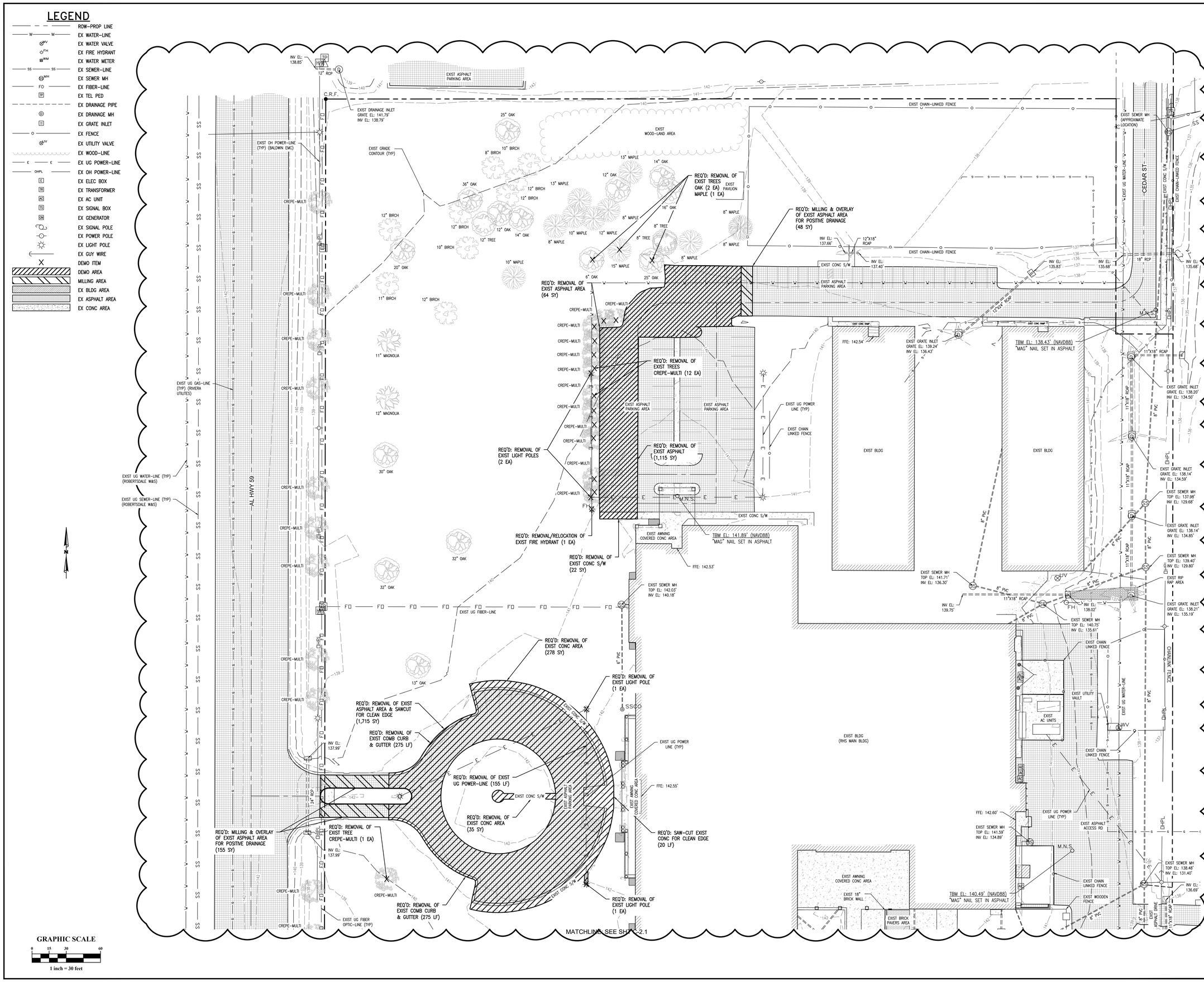

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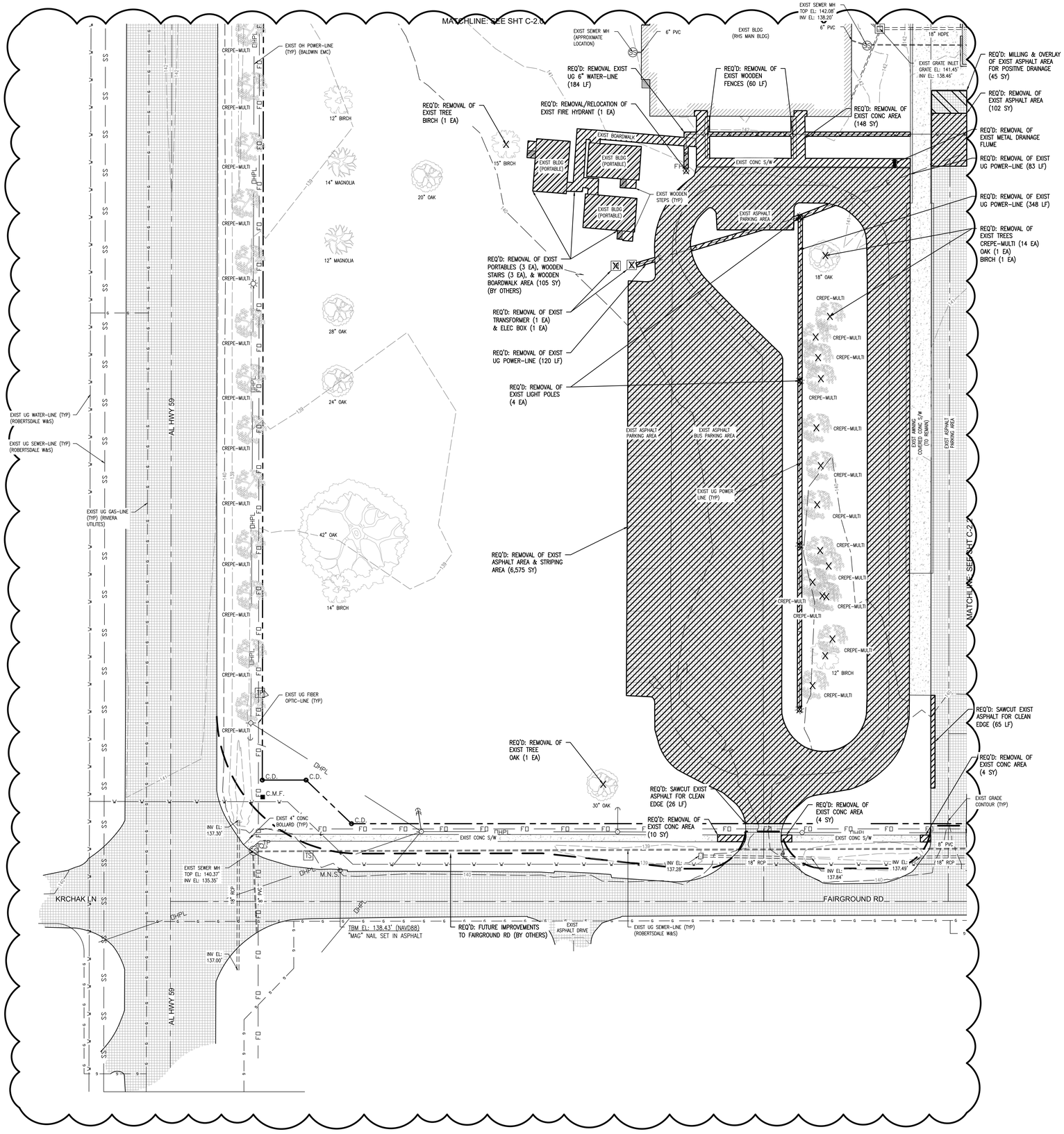
- Tuesday, November 28, 2023 2:24:23 PM

LEGEND

- ROW–PROP LINE
- EX WATER–LINE
- EX WATER VALVE
- EX FIRE HYDRANT
- EX WATER METER
- EX SEWER–LINE
- EX SEWER MH
- EX FIBER–LINE
- EX TEL PED
- EX DRAINAGE PIPE
- EX DRAINAGE MH
- EX GRATE INLET
- EX FENCE
- EX UTILITY VALVE
- EX WOOD–LINE
- EX UG POWER–LINE
- EX OH POWER–LINE
- EX ELEC BOX
- EX TRANSFORMER
- EX AC UNIT
- EX SIGNAL BOX
- EX GENERATOR
- EX SIGNAL POLE
- EX POWER POLE
- EX LIGHT POLE
- EX GUY WIRE
- DEMO ITEM
- DEMO AREA
- MILLING AREA
- EX BLDG AREA
- EX ASPHALT AREA
- EX CONC AREA



GRAPHIC SCALE

0 15 30 60

1 inch = 30 feet

ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
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Sawgrass
ENGINEERING · SURVEYING · CONSTRUCTION MANAGEMENT
30813 Fgt 5 | 1 Boone Thomas Drive, Spanish Fort, AL 36527
Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER
John H. Robertson

SHEET TITLE :	EXIST COND & DEMO PLAN 2
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

SHEET NO. : C-2.1

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- Tuesday, November 28, 2023 2:24:28 PM

LEGEND

- ROW-PROP LINE
- EX WATER-LINE
- EX WATER VALVE
- EX FIRE HYDRANT
- EX WATER METER
- EX SEWER-LINE
- EX SEWER MH
- EX FIBER-LINE
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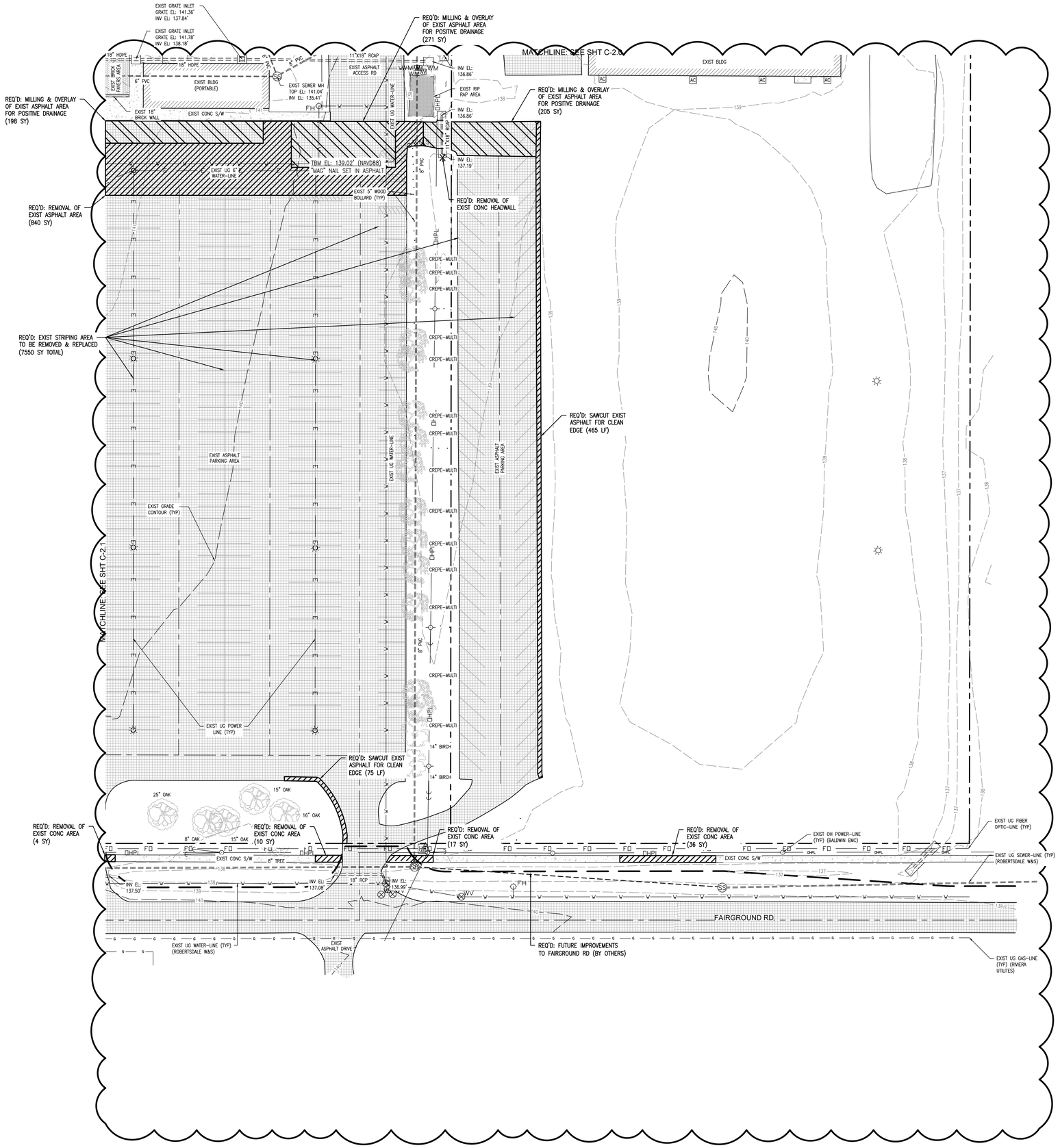

GRAPHIC SCALE

0 15 30 60

1 inch = 30 feet

ADDITIONS

TO

ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

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Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
30071 Sgt E. T. "Rocky" Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7000

ALABAMA LICENSED PROFESSIONAL ENGINEER 11-28-23 James H. Robertson

SHEET TITLE :	EXIST COND & DEMO PLAN 3
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
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SHEET NO. : C-2.2

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\EXIST-DEMO PLAN.dwg
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LEGEND

- ROW-PROP LINE
- EX WATER-LINE
- EX WATER VALVE
- EX FIRE HYDRANT
- EX WATER METER
- PR WATER-LINE
- PR FIRE HYDRANT
- PR FDC
- EX SEWER-LINE
- EX SEWER MH
- PR-SEWER-LINE
- PR-SEWER MH
- PR-SEWER CO
- EX FIBER-LINE
- EX TEL PED
- EX DRAINAGE PIPE
- PR DRAINAGE SWALE
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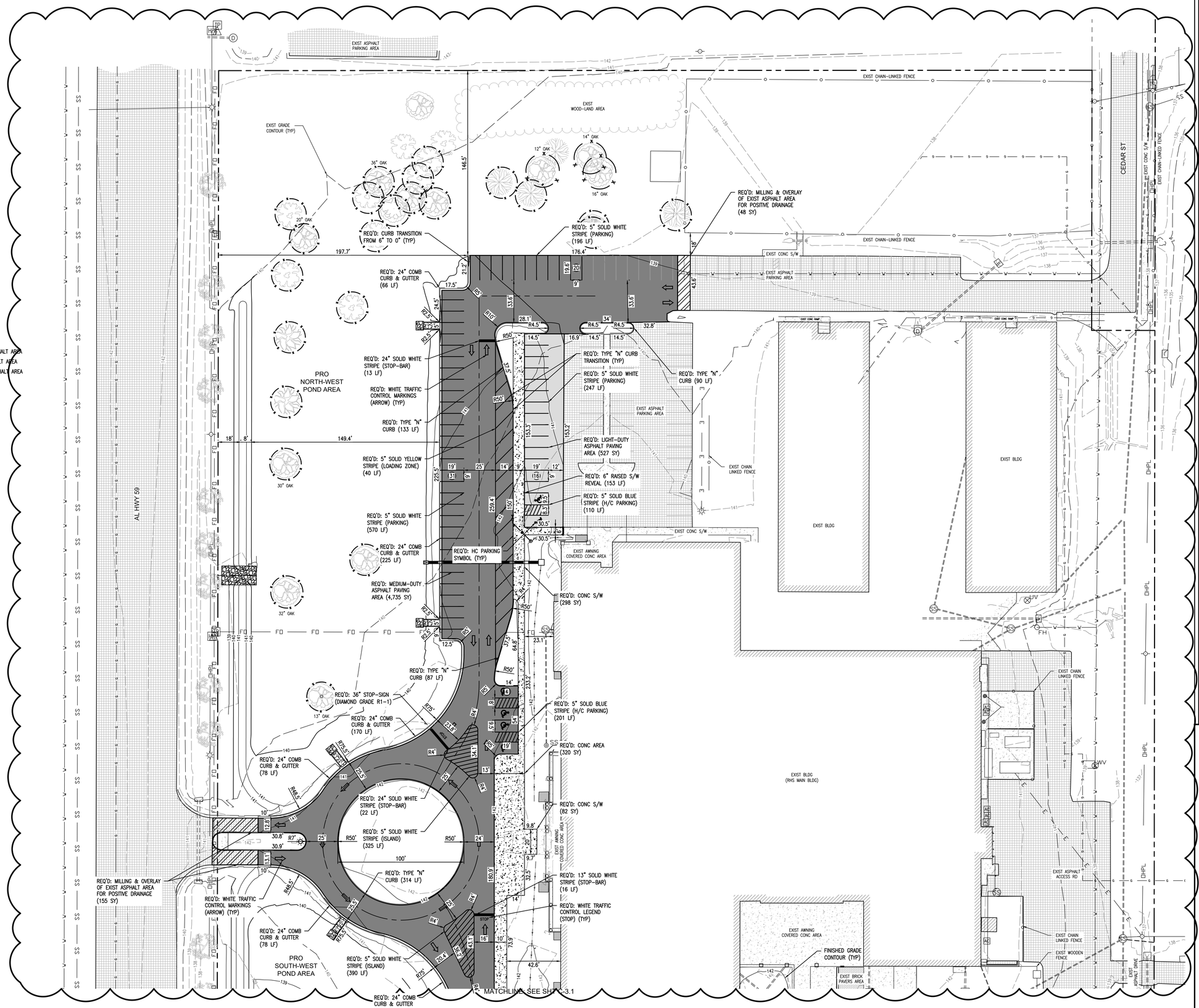
- EX BLDG AREA
- EX ASPHALT AREA
- EX CONC AREA
- PR MEDIUM-DUTY ASPHALT AREA
- PR LIGHT-DUTY ASPHALT AREA
- PR MILL-OVERLAY ASPHALT AREA
- PR CONC AREA
- PR BLDG
- PR AWNING AREA
- MILLING AREA



GRAPHIC SCALE

0 15 30 60

1 inch = 30 feet

ADDITIONS TO ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
30073 Sgt. E. T. Touch Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7000

ALABAMA LICENSED PROFESSIONAL ENGINEER James H. Robertson

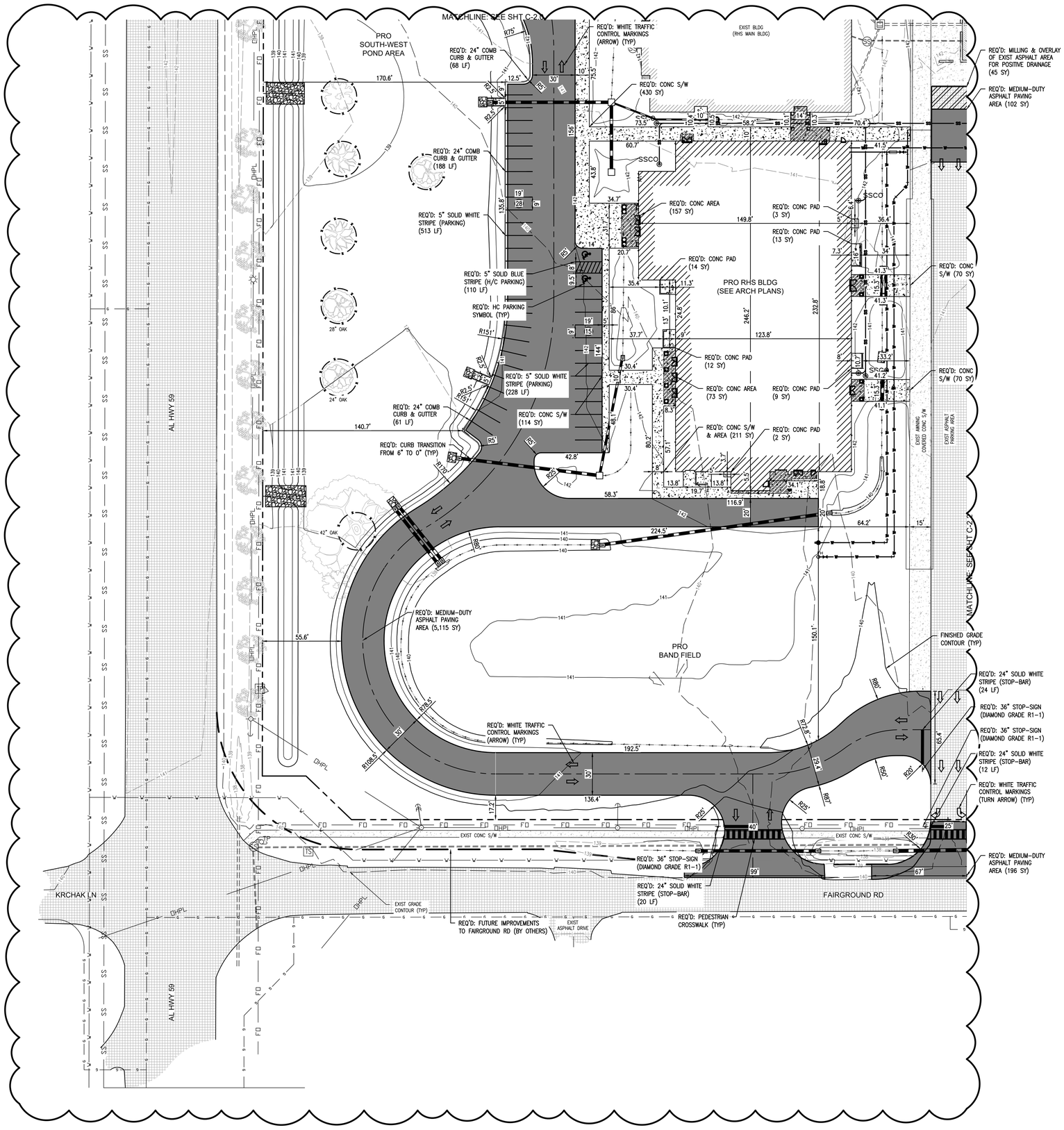
SHEET TITLE :	GEOMETRIC PLAN 1
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

SHEET NO. : C-3.0

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\GEO-UTIL PLAN.dwg
- Tuesday, November 28, 2023 2:24:56 PM

LEGEND

- ROW-PROP LINE
- EX WATER-LINE
- EX WATER VALVE
- EX FIRE HYDRANT
- EX WATER METER
- PR WATER-LINE
- PR FIRE HYDRANT
- PR FDC
- EX SEWER-LINE
- EX SEWER MH
- PR-SEWER-LINE
- PR-SEWER MH
- PR-SEWER CO
- EX FIBER-LINE
- EX TEL PED
- EX DRAINAGE PIPE
- PR DRAINAGE SWALE
- EX DRAINAGE MH
- EX GRATE INLET
- EX FENCE
- EX UTILITY VALVE
- EX WOOD-LINE
- EX UG POWER-LINE
- EX OH POWER-LINE
- EX ELEC BOX
- EX TRANSFORMER
- EX AC UNIT
- EX SIGNAL BOX
- EX GENERATOR
- EX SIGNAL POLE
- EX POWER POLE
- EX LIGHT POLE
- EX GUY WIRE
- EX BLDG AREA
- EX ASPHALT AREA
- EX CONC AREA
- PR MEDIUM-DUTY ASPHALT AREA
- PR LIGHT-DUTY ASPHALT AREA
- PR MILL-OVERLAY ASPHALT AREA
- PR CONC AREA
- PR BLDG
- PR AWNING AREA
- MILLING AREA



GRAPHIC SCALE

0 15 30 60

1 inch = 30 feet

ADDITIONS

TO

ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
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ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
30073 Sgt E. T. "Boudi" Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7000

ALABAMA LICENSED PROFESSIONAL ENGINEER Thomas H. Robertson

SHEET TITLE :	GEOMETRIC PLAN 2
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

SHEET NO. : C-3.1

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\GEO-UTIL PLAN.dwg
- Tuesday, November 28, 2023 2:25:05 PM

LEGEND

- ROW–PROP LINE
- EX WATER–LINE
- EX WATER VALVE
- EX FIRE HYDRANT
- EX WATER METER
- PR WATER–LINE
- PR FIRE HYDRANT
- PR FDC
- EX SEWER–LINE
- EX SEWER MH
- PR–SEWER–LINE
- PR–SEWER MH
- PR–SEWER CO
- EX FIBER–LINE
- EX TEL PED
- EX DRAINAGE PIPE
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- EX TRANSFORMER
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- EX SIGNAL BOX
- EX GENERATOR
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- EX POWER POLE
- EX LIGHT POLE
- EX GUY WIRE
- EX BLDG AREA
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- PR CONC AREA
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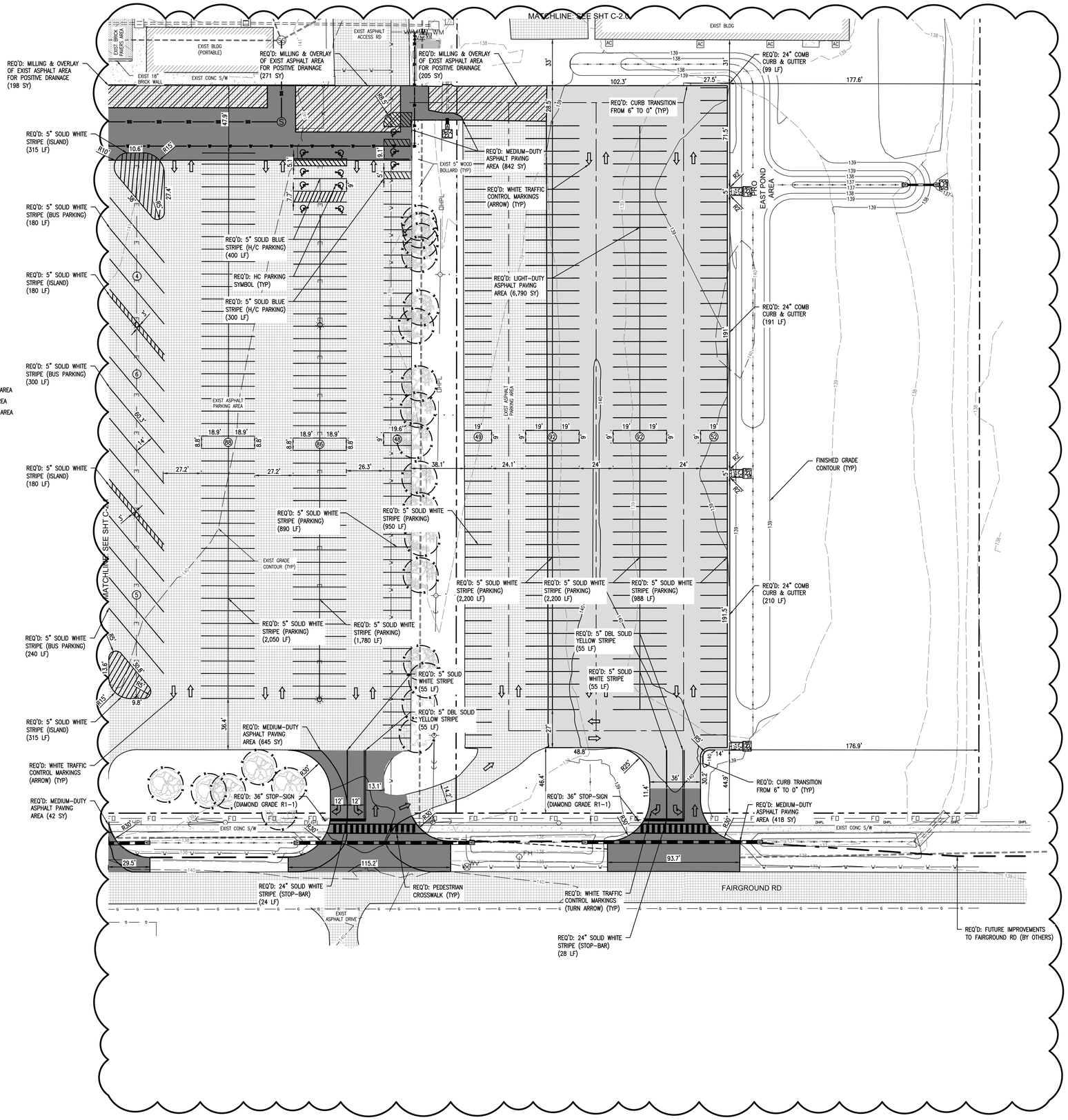

GRAPHIC SCALE

0 15 30 60

1 inch = 30 feet

ADDITIONS TO ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

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30873 Fgt 1, 1 Stone Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER
James H. Robertson

SHEET TITLE :	GEOMETRIC PLAN 3
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

SHEET NO. : C-3.2

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\GEO-UTIL PLAN.dwg
- Tuesday, November 28, 2023 2:25:14 PM

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- Tuesday, November 28, 2023 2:25:24 PM

LEGEND

- ROW–PROP LINE
- EX. WATER–LINE
- EX. WATER VALVE
- EX. FIRE HYDRANT
- EX. WATER METER
- PR. WATER–LINE
- PR. FIRE HYDRANT
- PR. FDC
- EX. SEWER–LINE
- EX. SEWER MH
- PR–SEWER–LINE
- PR–SEWER MH
- PR–SEWER CO
- EX. FIBER–LINE
- EX. TEL PED
- EX. DRAINAGE PIPE
- PR. DRAINAGE SWALE
- EX. DRAINAGE MH
- EX. GRATE INLET
- EX. FENCE
- EX. UTILITY VALVE
- EX. WOOD–LINE
- EX. UG POWER–LINE
- EX. OH POWER–LINE
- EX. ELEC BOX
- EX. TRANSFORMER
- EX. AC UNIT
- EX. SIGNAL BOX
- EX. GENERATOR
- EX. SIGNAL POLE
- EX. POWER POLE
- EX. LIGHT POLE
- EX. GUY WIRE
- EX. BLDG AREA
- EX. ASPHALT AREA
- EX. CONC AREA
- PR. MEDIUM–DUTY ASPHALT AREA
- PR. LIGHT–DUTY ASPHALT AREA
- PR. MILL–OVERLAY ASPHALT AREA
- PR. CONC AREA
- PR. BLDG
- PR. AWNING AREA
- MILLING AREA

GRAPHIC SCALE
0 15 30 60
1 inch = 30 feet

AL HWY 59

EXIST UG WATER–LINE (TYP) (RIGHT/SIDE OF ROAD)
EXIST UG SEWER–LINE (TYP) (RIGHT/SIDE OF ROAD)
EXIST UG GAS–LINE (TYP) (UTILITIES VARIES)
EXIST OH POWER–LINE (TYP) (BALDWIN EMC)
EXIST UG FIBER–LINE (TYP)
EXIST GRADE CONTOUR (TYP)
EXIST ASPHALT PARKING AREA
EXIST WOOD–LAND AREA
EXIST PAVILION
PRO SOUTH–WEST POND AREA
PRO NORTH–WEST POND AREA
EXIST UG FIBER–LINE
EXIST AWNING COVERED CONC AREA
EXIST CONC S/W
EXIST CHAIN LINKED FENCE
EXIST UG POWER–LINE (TYP)
EXIST ASPHALT ACCESS RD
EXIST WOODEN FENCE
EXIST BRICK PAVERS AREA
EXIST BLDG (RHS MAIN BLDG)
EXIST AC UNITS
EXIST UTILITY VAULT
EXIST ASPHALT DRIVE
EXIST CHAIN–LINKED FENCE
EXIST UG WATER–LINE
EXIST SEWER MH TOP EL: 141.17' INV EL: 130.35'
EXIST SEWER MH TOP EL: 140.75' INV EL: 130.01'
EXIST SEWER MH TOP EL: 138.48' INV EL: 131.40'
EXIST SEWER MH TOP EL: 141.89' INV EL: 134.89'
EXIST SEWER MH TOP EL: 141.37' INV EL: 134.35'
EXIST SEWER MH (APPROXIMATE LOCATION)
FFE: 142.55'
FFE: 142.60'
FFE: 142.34'
FFE: 143.53'
FFE: 142.37'
FH
6" PVC
8" PVC
CEDAR ST
MATCHLINE SEE SHT C-4.1

REQ'D: 6" PVC CL. 900 FIRE–LINE (20 LF)
REQ'D: 6" MJ 45° FITTING W/THRUST BLOCKS (WATER)
REQ'D: RELOCATED FIRE HYDRANT ASSEMBLY & NEW 6" GATE VALVE

ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

SHEET TITLE : UTILITY PLAN 1
MCKEE JOB # : 23-195
DRAWN BY : BAT
DATE: 10-11-23
REVISED DATE: 11-28-23
REVISED DATE:
REVISED DATE:
SHEET NO. : C-4.0

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET , MONTGOMERY , ALABAMA 36104 (334) 834-9933

Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
3067 Sgt. E. I. "Boots" Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7990

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

ADDITIONS TO ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

SHEET TITLE : UTILITY PLAN 2

MCKEE JOB # : 23-195

DRAWN BY : BAT

DATE: 10-11-23

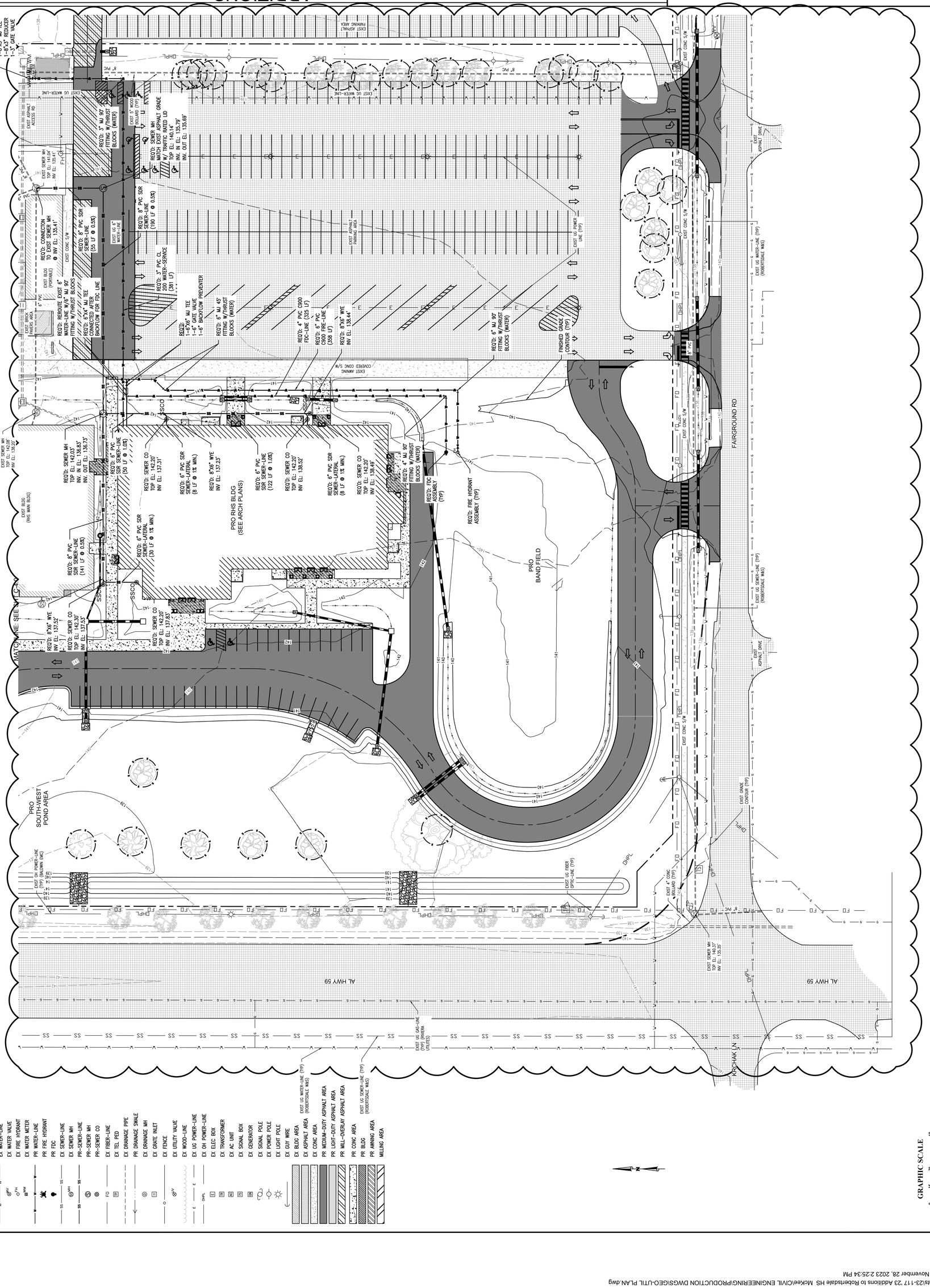
REVISED DATE: 11-28-23

REVISED DATE:

REVISED DATE:

SHEET NO. : C-4.1

SAWGRASS ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
30873 SR 181 Spur, Fairhope, Baldwin Cnty, Alabama 36532 Phone: (251) 544-7600



- S:\1-Clients\23-117 '23 Additions to Robertsdale HS Mckee\CIVIL ENGINEERING\PRODUCTION DWGS\GEO-UTIL PLAN.dwg
- Tuesday, November 28, 2023 2:25:34 PM

LEGEND

- ROW-PROP LINE
- EX WATER-LINE
- EX WATER VALVE
- EX FIRE HYDRANT
- EX WATER METER
- PR WATER-LINE
- PR FIRE HYDRANT
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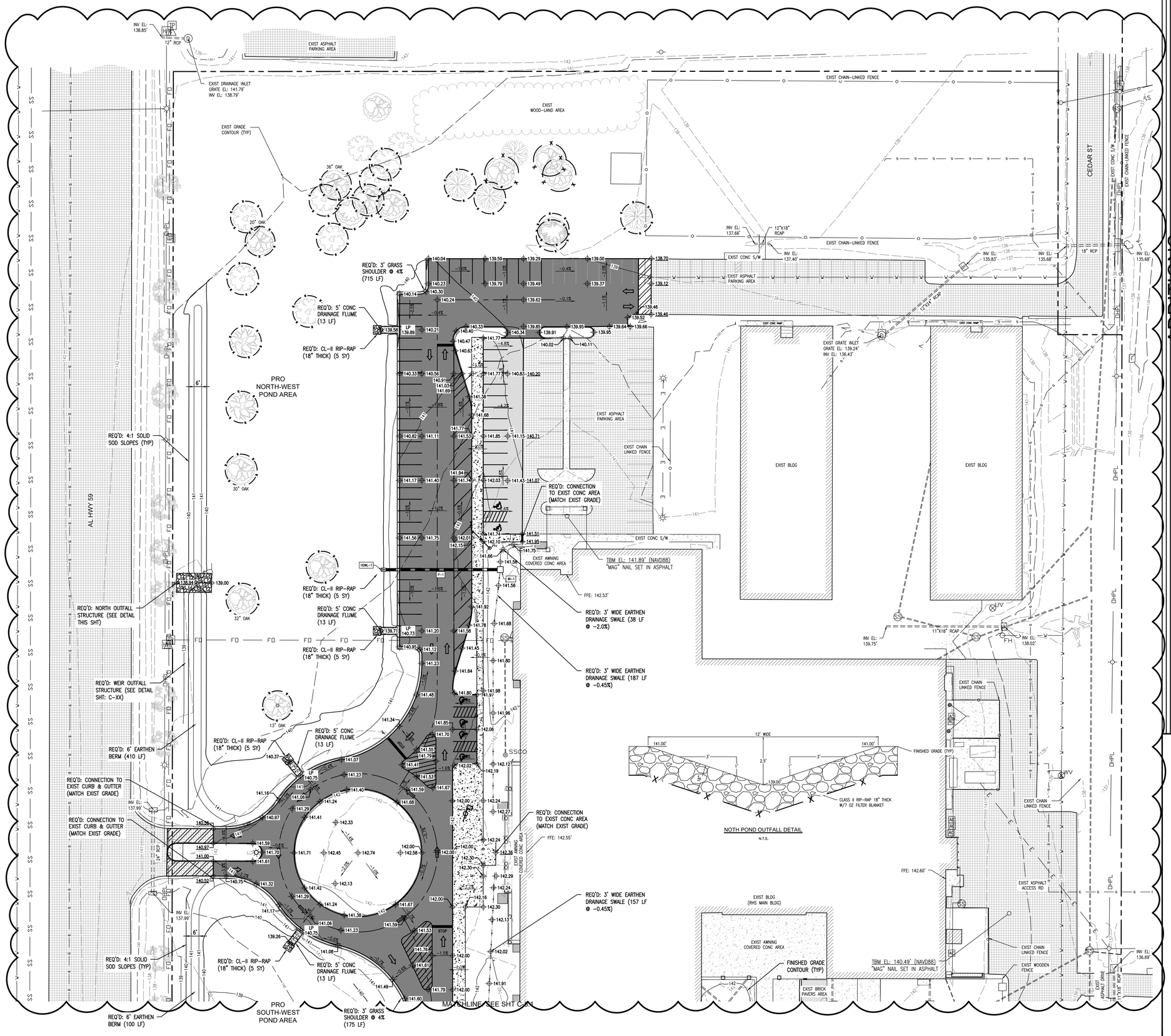
- PR LIGHT-DUTY ASPHALT AREA
- PR MILL-OVERLAY ASPHALT AREA
- PR CONC AREA
- PR BLDG
- PR AWNING AREA
- MILLING AREA

WEIR STRUCTURE SCHEDULE			
NAME	RIM EL	INV IN	INV OUT
WI-1	141.52		139.81 (P-1)

HEADWALL STRUCTURE SCHEDULE	
NAME	INVERT
HDWL-1	139.53 (P-1)

Pipe Table				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
P-1	18"	93.34'	0.30%	



GRAPHIC SCALE

0 15 30 60

1 inch = 30 feet

ADDITIONS TO ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
30073 Sgt. E. T. Touze Thomas Drive, Spanish Fort, AL 36527 Phone (251) 544-7000

ALABAMA LICENSED PROFESSIONAL ENGINEER 11-28-23 James H. Robertson

SHEET TITLE :	GRADING & DRAINAGE PLAN 1
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

SHEET NO. : C-5.0

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\GRAD-DRAIN-EC PLAN.dwg
- Tuesday, November 28, 2023 2:26:10 PM

LEGEND

- ROW-PROP LINE
- EX WATER-LINE
- EX WATER VALVE
- EX FIRE HYDRANT
- EX WATER METER
- PR WATER-LINE
- PR FIRE HYDRANT
- PR FDC
- EX SEWER-LINE
- EX SEWER MH
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- PR-SEWER MH
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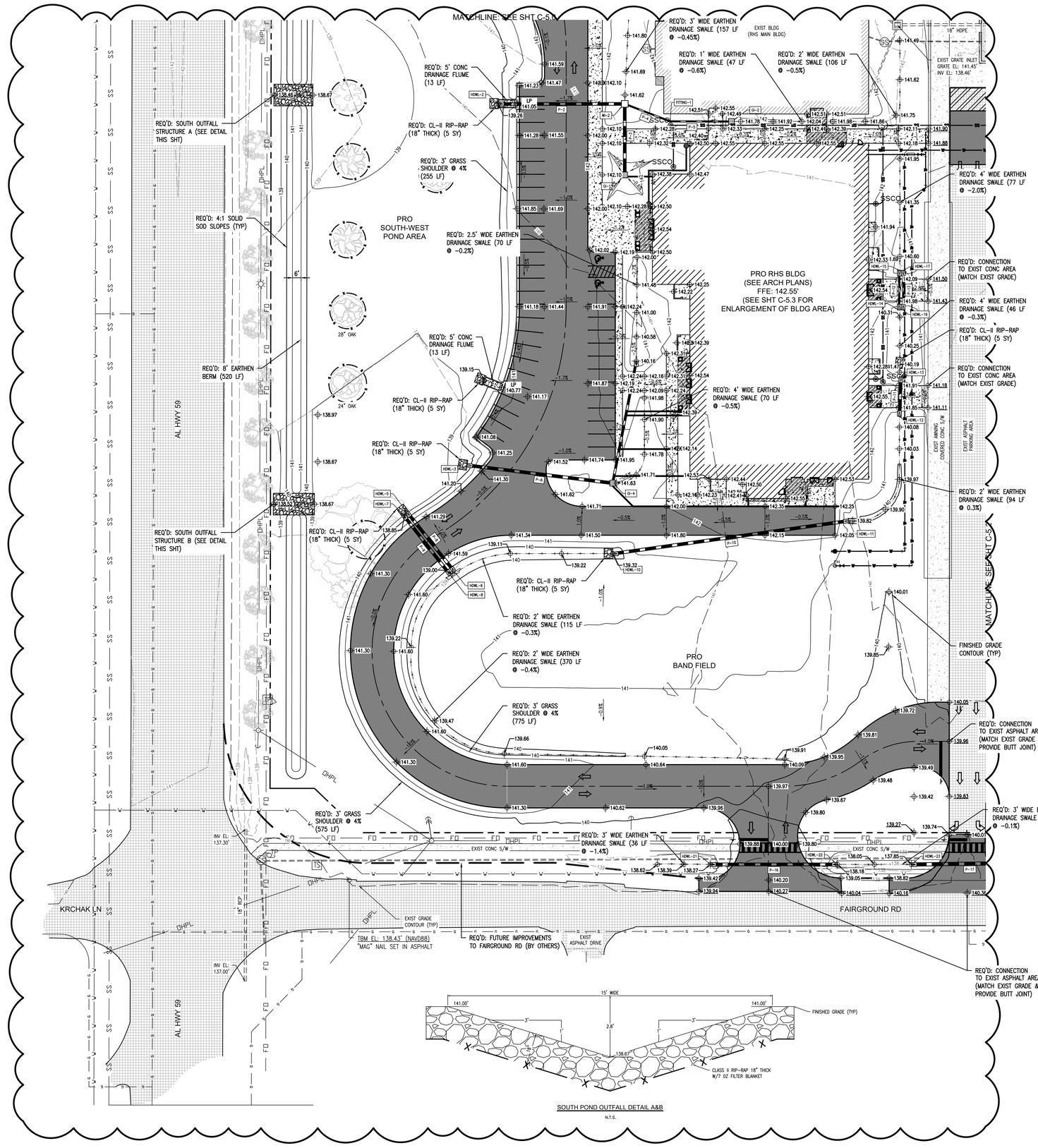

SOUTH POND OUTFALL DETAIL A&B

N.T.S.

Pipe Table				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
P-2	18"	87.58'	0.30%	
P-3	18"	49.20'	0.30%	
P-4	10"	33.62'	0.30%	Corrugated HDPE Pipe
P-5	10"	42.59'	0.30%	Corrugated HDPE Pipe
P-6	18"	101.69'	0.30%	
P-7	15"	86.20'	0.91%	Corrugated HDPE Pipe
P-8	18"	53.09'	-0.30%	
P-9	18"	52.93'	0.30%	
P-10	18"	165.33'	0.30%	
P-11	18"	27.33'	0.30%	
P-12	10"	27.38'	0.29%	Corrugated HDPE Pipe
P-13	10"	27.33'	-0.29%	Corrugated HDPE Pipe
P-16	18"	88.11'	0.30%	
P-17	22"	81.20'	0.20%	

HEADWALL STRUCTURE SCHEDULE	
NAME	INVERT
HDWL-2	139.25 (P-2)
HDWL-3	139.07 (P-6)
HDWL-4	140.16 (P-7)
HDWL-5	138.37 (P-8)
HDWL-6	138.53 (P-8)
HDWL-7	138.83 (P-9)
HDWL-8	138.99 (P-9)
HDWL-10	139.32 (P-10)
HDWL-11	139.81 (P-10)
HDWL-12	140.10 (P-11)
HDWL-13	140.18 (P-11)
HDWL-14	140.32 (P-12)
HDWL-15	140.40 (P-12)
HDWL-16	140.32 (P-13)
HDWL-17	140.40 (P-13)
HDWL-21	138.08 (P-16)
HDWL-22	137.82 (P-16)
HDWL-23	137.74 (P-17)

WEIR STRUCTURE SCHEDULE			
NAME	RIM EL	INV IN	INV OUT
WI-2	141.60	139.51 (P-3) 139.51 (P-4)	139.51 (P-2)

GRATE STRUCTURE SCHEDULE			
NAME	RIM EL	INV IN	INV OUT
GI-1	141.91		139.66 (P-3)
GI-2	141.75		139.74 (P-5)
GI-4	141.63	139.38 (P-7)	139.38 (P-6)

GRAPHIC SCALE

0 15 30 60

1 inch = 30 feet

ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

EXIST ASPHALT PARKING AREA
5'6000 SQ. FEET

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
3900 Fall Ft. 1 "Stone" Thomas Drive, Spanish Fort, AL 36527
Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER 25 JULY 2024 John H. Robertson

SHEET TITLE : GRADING & DRAINAGE PLAN 2

MCKEE JOB # : 23-195

DRAWN BY : BAT

DATE: 10-11-23

REVISED DATE: 11-28-23

REVISED DATE:

REVISED DATE:

SHEET NO. : C-5.1

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\GRAD-DRAIN-EC PLAN.dwg
- Tuesday, November 28, 2023 2:26:45 PM

LEGEND

- ROW-PROP LINE
- EX WATER-LINE
- EX WATER VALVE
- EX FIRE HYDRANT
- EX WATER METER
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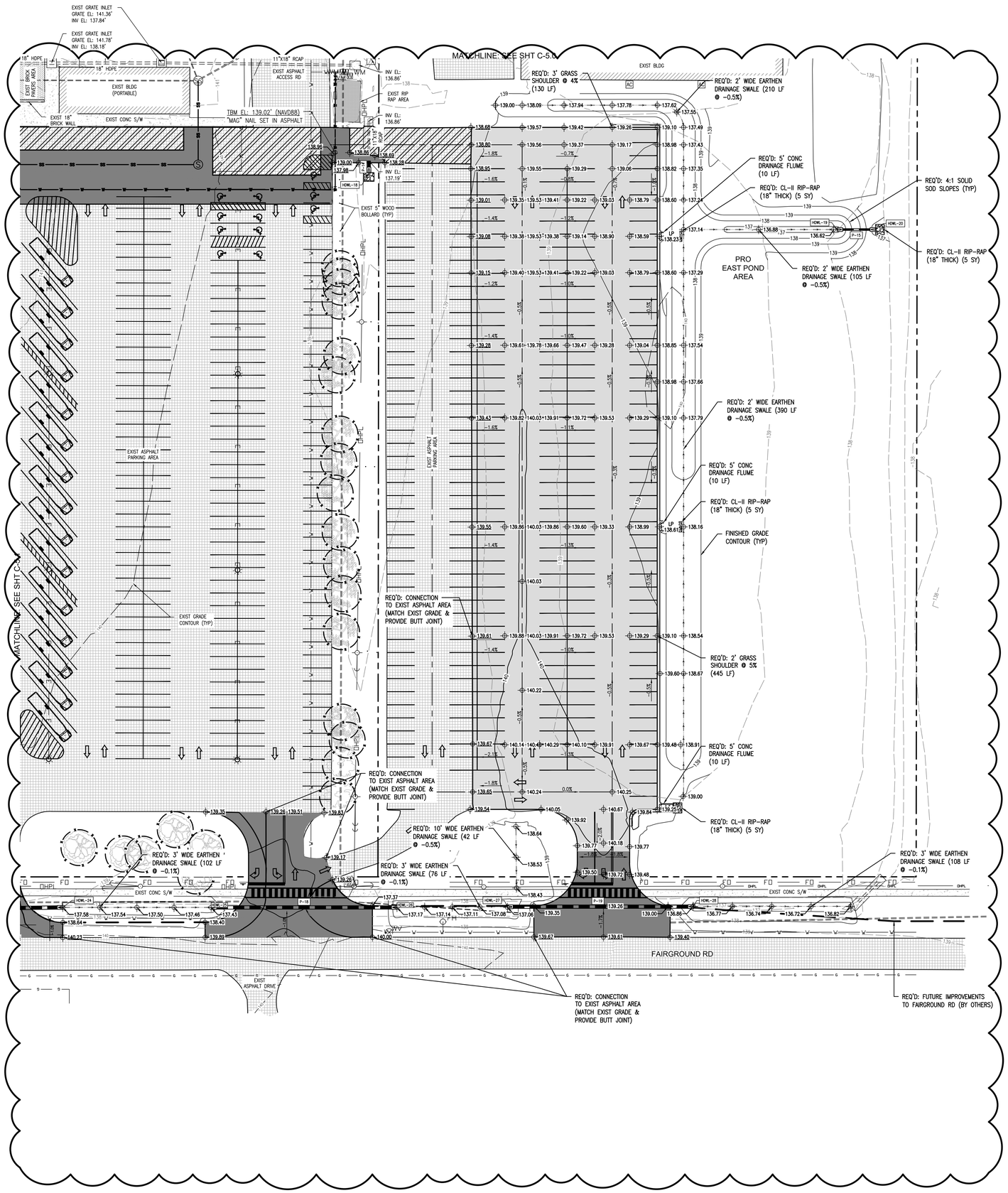

GRAPHIC SCALE

0 15 30 60

1 inch = 30 feet

Pipe Table				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
P-14	18"	8.00'	0.00%	
P-15	12"	26.50'	0.50%	Corrugated HDPE Pipe
P-17	22"	81.20'	0.20%	
P-18	22"	128.00'	0.20%	
P-19	22"	128.00'	0.20%	

HEADWALL STRUCTURE SCHEDULE	
NAME	INVERT
HDWL-18	136.86 (P-14)
HDWL-19	136.11 (P-15)
HDWL-20	135.98 (P-15)
HDWL-24	137.58 (P-17)
HDWL-25	137.43 (P-18)
HDWL-26	137.17 (P-18)
HDWL-27	137.06 (P-19)
HDWL-28	136.80 (P-19)

ADDITIONS TO ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

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30873 Fgt Ft. 1 "Boone" Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER Robert Hanson

SHEET TITLE : GRADING & DRAINAGE PLAN 3

MCKEE JOB # : 23-195

DRAWN BY : BAT

DATE: 10-11-23

REVISED DATE: 11-28-23

REVISED DATE:

REVISED DATE:

SHEET NO. : C-5.2

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\GRAD-DRAIN-EC PLAN.dwg
- Tuesday, November 28, 2023 2:26:59 PM

LEGEND

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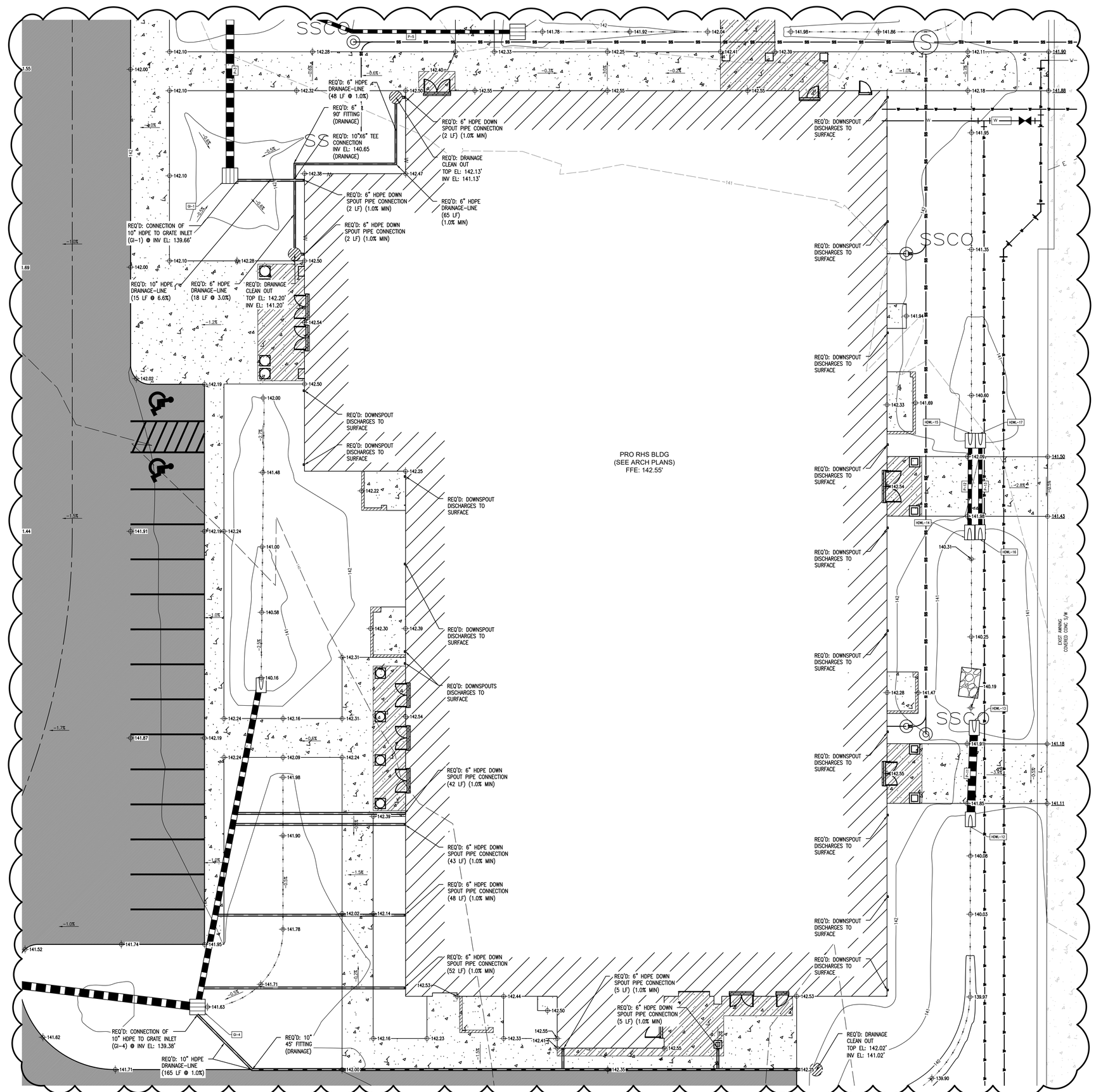
- PR AWNING AREA
- MILLING AREA



GRAPHIC SCALE

0 10 20 40

1 inch = 20 feet

ADDITIONS

TO

ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

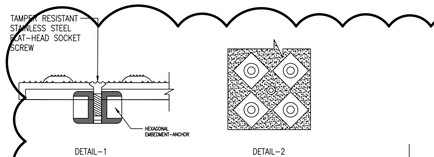
Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
30073 Eye E. 1 Road Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7000

ALABAMA LICENSED PROFESSIONAL ENGINEER 11-28-23 James H. Robertson

SHEET TITLE :	GRADING & DRAINAGE PLAN 4
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

SHEET NO. : C-5.3

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\GRAD-DRAIN-EC PLAN.dwg
- Tuesday, November 28, 2023 2:27:11 PM



"ARMOR TILE-REPLACEMENT" FOR NEW CONSTRUCTION
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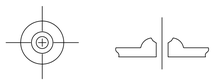
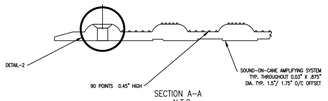




SECTION A-A
N.T.S.



SECTION A-A
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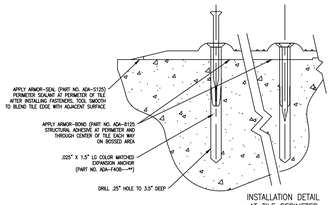
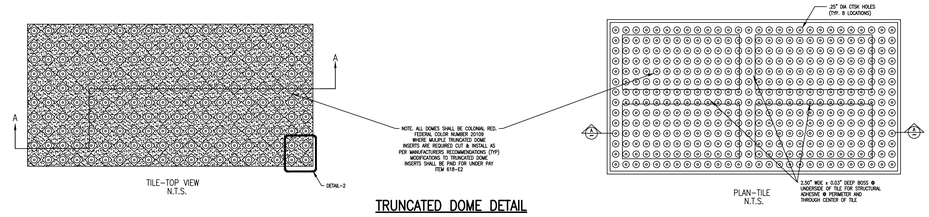


INSTALLATION DETAIL AT TILE PERIMETER
N.T.S.



TRUNCATED DOME DETAIL
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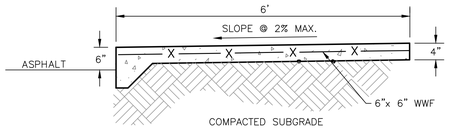
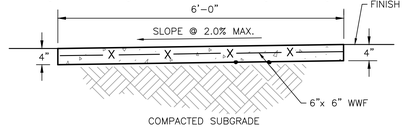


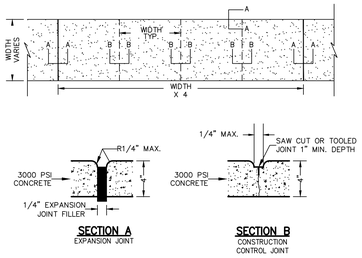
COMPACTED SUBGRADE

RAISED
CONCRETE SIDEWALK
N.T.S.



COMPACTED SUBGRADE

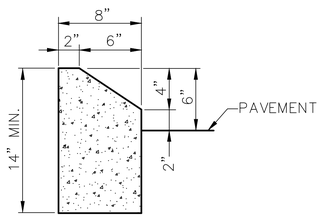
FLUSH
CONCRETE SIDEWALK
N.T.S.



NOTES:

1. PROVIDE 6 FEET BETWEEN CONTROL JOINTS AND 24 FEET BETWEEN EXPANSION JOINTS.
2. ALL EXPANSION JOINTS SHALL BE 1/2" THICK, NEOPRENE MATERIAL.
3. EXPANSION MATERIAL TO BE USED AT ALL PC'S, PT'S AND STRUCTURES.

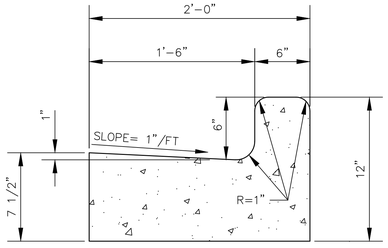
CONCRETE WALK DETAIL
N.T.S.



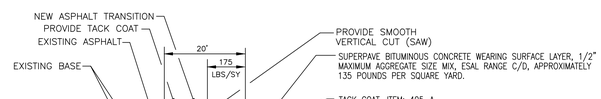
TYPE "N" CONCRETE CURB
N.T.S.

FOR USE ON LANDSCAPE ISLANDS

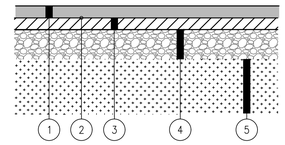
NOTE:
ALL CONCRETE SHALL BE 3,000 PSI.



*24" CURB & GUTTER DETAIL
(TYPE "C" MODIFIED)
N.T.S.

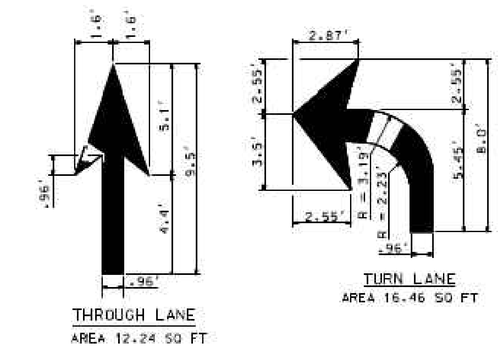


BUTT JOINT DETAIL
N.T.S.

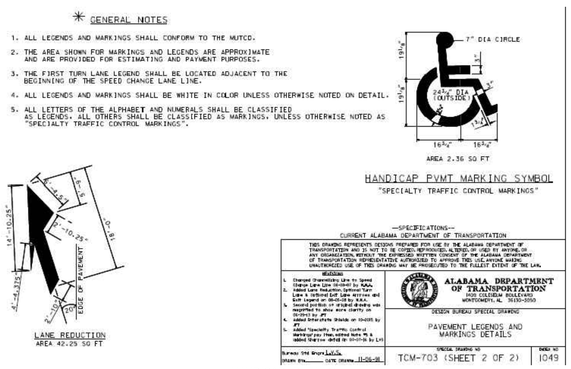


MEDIUM DUTY ASPHALT PAVEMENT SECTION
(FOR USE IN ROAD AREA)
N.T.S.

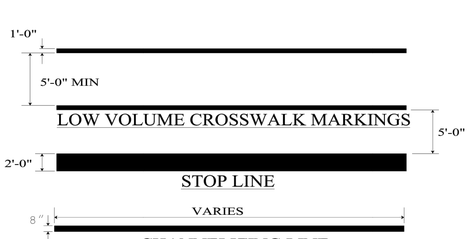
1. 2" ALDOT SECTION 424A, BITUMINOUS WEARING SURFACE (220 LB/SY - 1/2" MAX AGGREGATE SIZE MIX)
2. ALDOT SECTION 405 TACK COAT
3. 2" ALDOT SECTION 424A, BITUMINOUS WEARING SURFACE (220 LB/SY - 3/4" MAX AGGREGATE SIZE MIX)
4. 6" ALDOT SECTION 825 CRUSHED AGGREGATE BASE MATERIAL (100% STANDARD DENSITY)
5. IN-SITE MATERIAL (TOP 12" SHALL BE COMPACTED TO 100% STANDARD DENSITY)



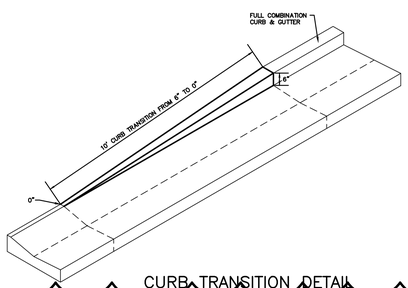
TRAFFIC MARKINGS DETAILS
N.T.S.



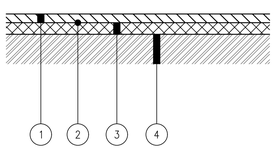
HANDICAP DETAILS
N.T.S.



STRIPING LEGEND DETAILS
N.T.S.

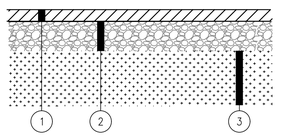


CURB TRANSITION DETAIL
N.T.S.



EX. ASPHALT OVERLAY SECTION
N.T.S.

1. 1.5" ALDOT SECTION 429A, BITUMINOUS WEARING SURFACE (165 lb/sy)
2. ALDOT SECTION 405, TACK COAT
3. EXISTING ASPHALT (TO REMAIN)
4. EXISTING BASE/SUBGRADE (TO REMAIN)



LIGHT DUTY ASPHALT PAVEMENT SECTION
(FOR USE IN PARKING AREA)
N.T.S.

1. 2" ALDOT SECTION 424A, BITUMINOUS WEARING SURFACE (220 LB/SY - 1/2" MAX AGGREGATE SIZE MIX)
2. 6" ALDOT SECTION 825 CRUSHED AGGREGATE BASE MATERIAL (100% STANDARD DENSITY)
3. IN-SITE MATERIAL (TOP 12" SHALL BE COMPACTED TO 100% STANDARD DENSITY)

ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
30813 Fgt. E. 1 "Boone" Thomas Drive, Spanish Fort, AL 36527
Phone: (251) 544-7600

ALABAMA LICENSED
William H. Robertson
PROFESSIONAL ENGINEER

SHEET TITLE :	CIVIL CONSTRUCTION DETAILS 1
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

SHEET NO. : C-6.0

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\NOTES-DETAILS.dwg
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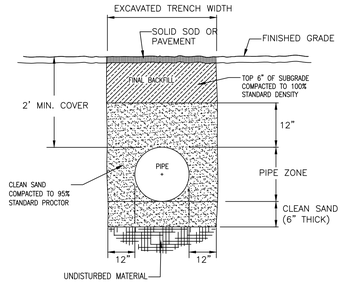
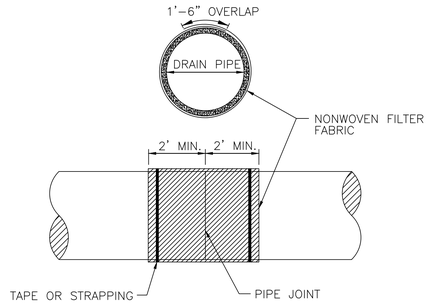


PIPE TRENCH BACKFILL DETAIL

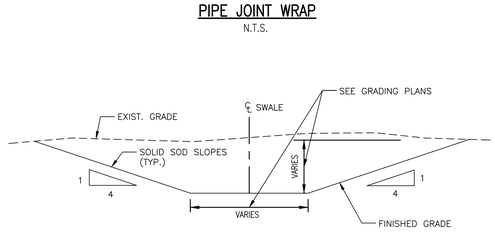
N.T.S.



NOTE:
JOINTS ON ALL STORM DRAIN PIPES SHALL BE PIPE WRAPPED WITH A NON-WOVEN FILTER FABRIC AS SHOWN IN THIS DETAIL.

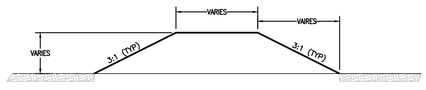
PIPE JOINT WRAP

N.T.S.



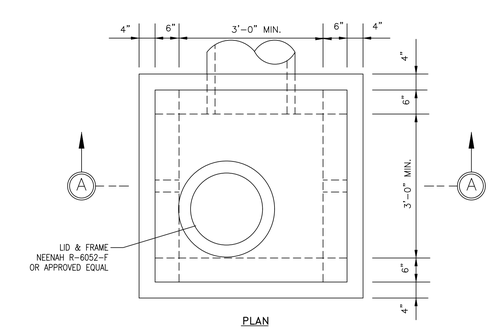
DRAINAGE SWALE DETAIL

N.T.S.

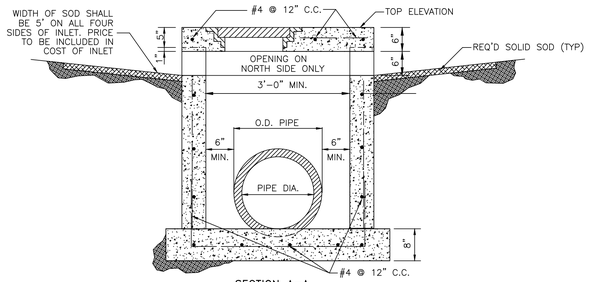


BERM DETAIL

N.T.S.



PLAN



SECTION A-A

WEIR INLET DETAIL

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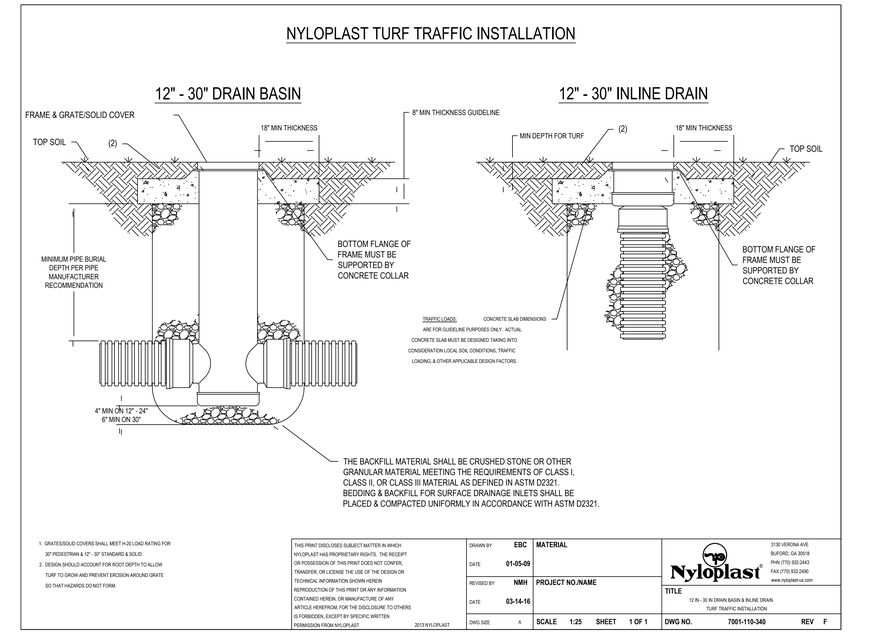

1. GRATES/SOLID COVERS SHALL MEET H-20 LOAD RATING FOR 30" PEDESTRIAN & 12" - 30" STANDARD & SOLID
2. DESIGN SHOULD ACCOUNT FOR ROOT DEPTH TO ALLOW TURF TO GROW AND PREVENT EROSION AROUND GRATE SO THAT HAZARDS DO NOT FORM.

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DRAWN BY	EBC
DATE	01-05-09
REVISED BY	NMH
DATE	03-14-16
DWG SIZE	A

MATERIAL

PROJECT NO./NAME

Nyloplast®
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

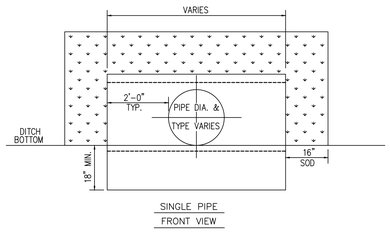
TITLE
12 IN - 30 IN DRAIN BASIN & INLINE DRAIN
TURF TRAFFIC INSTALLATION

SCALE 1:25 SHEET 1 OF 1 DWG NO. 7001-110-340 REV F

NYLOPLAST INLET DETAILS

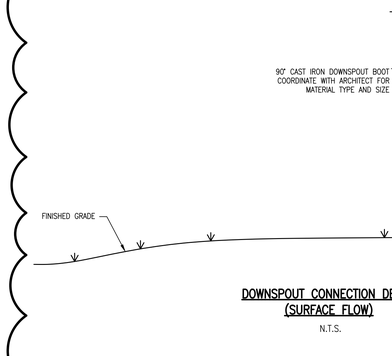
N.T.S.

NOTE: SEE ALDOT STATE STANDARD SPECIAL DRAWING NO. HW-614-SP FOR ADDITIONAL INFORMATION.



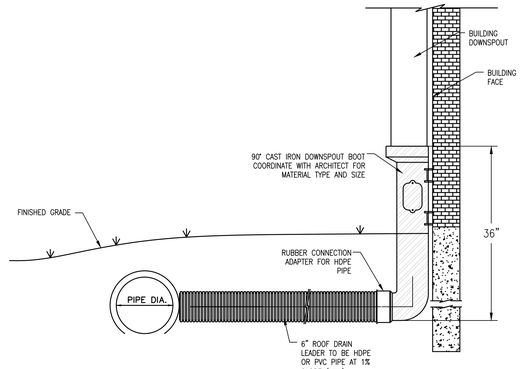
4:1 CONCRETE SLOPED HEADWALL DETAIL

N.T.S.



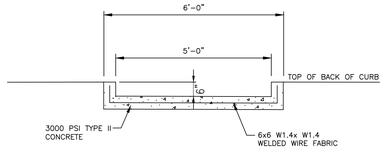
DOWNSPOUT CONNECTION DETAIL (SURFACE FLOW)

N.T.S.

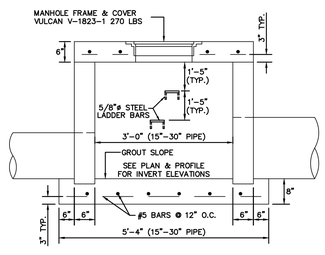


DOWNSPOUT CONNECTION DETAIL (PIPE CONNECTION)

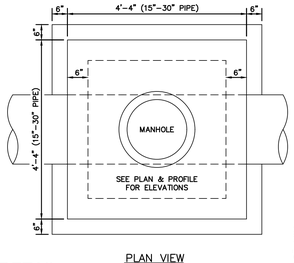
N.T.S.



FLUME SECTION



TYPICAL SECTION

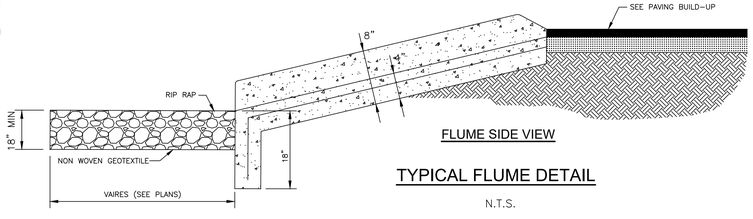


PLAN VIEW

JUNCTION BOX DETAIL

N.T.S.

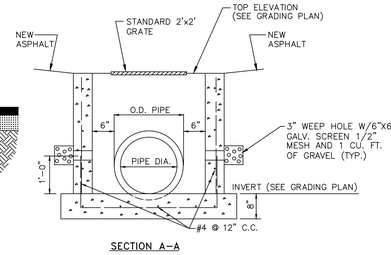
NOTE: STEPS REQUIRED FOR BOX HEIGHTS 4'-0" AND GREATER.



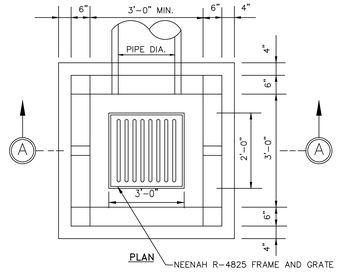
FLUME SIDE VIEW

TYPICAL FLUME DETAIL

N.T.S.



SECTION A-A



CONCRETE GRATE INLET DETAIL

N.T.S.

ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
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3683 Fgt. E. 1 "Stone" Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 31247
Thomas H. Robertson

SHEET TITLE :	CIVIL CONSTRUCTION DETAILS 2
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

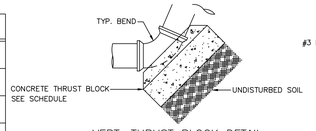
SHEET NO. : C-6.1

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\NOTES-DETAILS.dwg
- Tuesday, November 28, 2023 2:27:26 PM

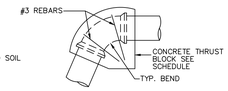
THRUST BLOCK BEARING AREAS (SQ.FT.)						VERTICAL ANCHOR BLOCK VOLUMES		
SIZE	PLUGGED END OR TEE	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND	45° VERT. BEND	22-1/2° VERT. BEND	GATE VALVE
2" DIA. PIPE LINE	1.0	1.0	1.0	1.0	1.0	9.3 CU. FT.	4 CU. FT.	0.5 CU. FT.
4" DIA. PIPE LINE	1.9	2.6	1.4	1.0	1.0	21.1 CU. FT.	9.8 CU. FT.	0.8 CU. FT.
6" DIA. PIPE LINE	3.6	5.0	2.7	1.4	1.0	50 CU. FT.	16 CU. FT.	1.0 CU. FT.
8" DIA. PIPE LINE	5.8	8.2	4.4	2.25	1.2			1.5 CU. FT.

NOTE: THRUST BLOCK BEARING AREAS SHALL BE INCREASED IN POOR TRENCH CONDITIONS AS DIRECTED BY THE ENGINEER

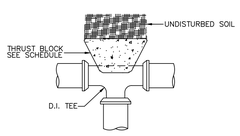
DESIGN CRITERIA: TEST PRESSURE – 150 PSI SOIL BEARING PRESSURE – 1 TON PER SQ. FT.



VERT. THRUST BLOCK DETAIL



VERT. THRUST BLOCK DETAIL



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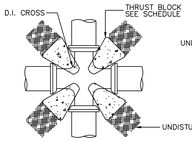
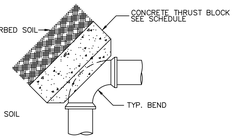
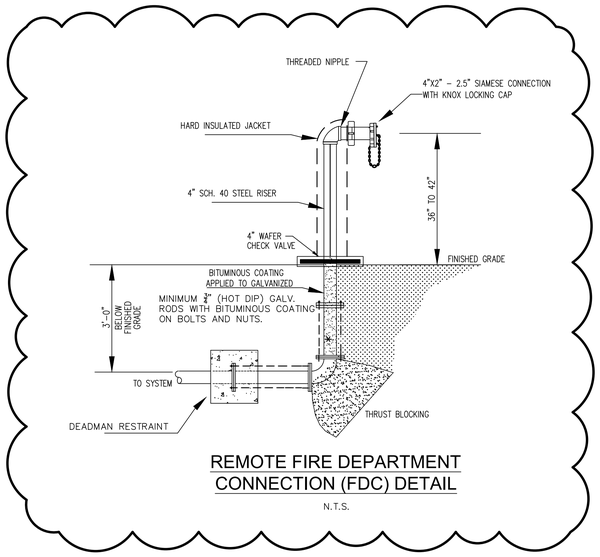


CROSS THRUST BLOCK DETAIL



HORIZ. THRUST BLOCK DETAIL

THRUST BLOCK DETAIL

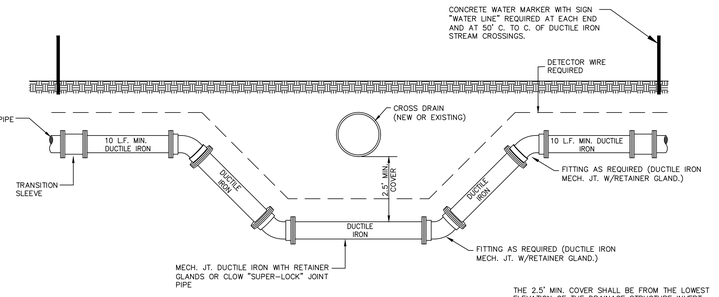


REMOTE FIRE DEPARTMENT CONNECTION (FDC) DETAIL

N.T.S.

FIRE HYDRANT ASSEMBLY

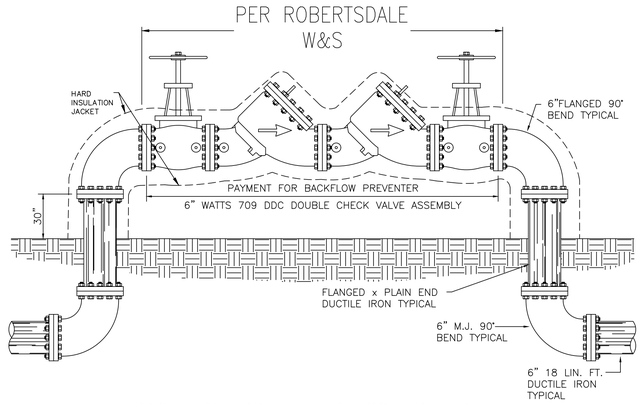
TYPICAL TRENCH DETAIL



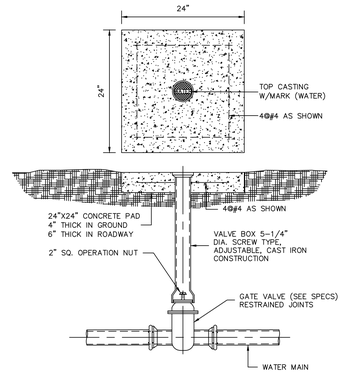
TYPICAL DRAINAGE PIPE CROSSING

NOT TO SCALE

THE 2.5' MIN. COVER SHALL BE FROM THE LOWEST ELEVATION OF THE DRAINAGE STRUCTURE INVERT. THIS ELEVATION SHALL BE MAINTAINED NO LESS THAN 10' EACH SIDE OF THE CROSS DRAIN REGARDLESS OF THE GROUND ELEVATION WHICH MAY RESULT IN COVER DEPTHS SIGNIFICANTLY GREATER THAN THE 2.5' MIN.)



BACKFLOW PREVENTER ASSEMBLY DETAIL FOR FIRE WATER LINE



WATER GATE VALVE

ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

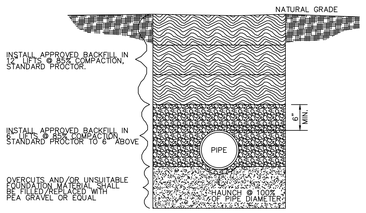
Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
3663 Fall Ft. 1 Blvd Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER 31242 James H. Robertson

SHEET TITLE :	WATER DETAILS
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

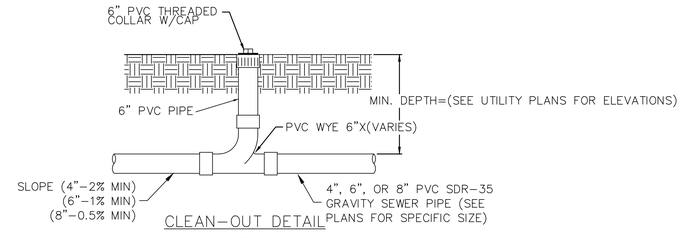
SHEET NO. : C-6.2

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\NOTES-DETAILS.dwg
- Tuesday, November 28, 2023 2:27:29 PM



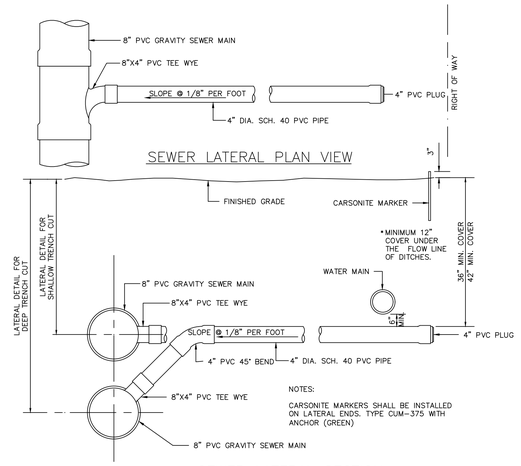
TYPICAL TRENCH DETAIL

N.T.S.



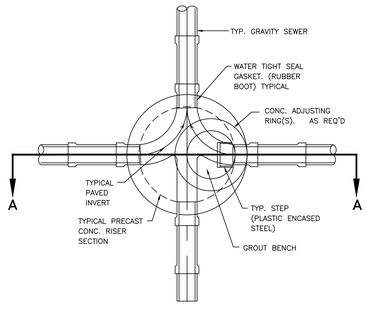
CLEAN–OUT DETAIL

N.T.S.

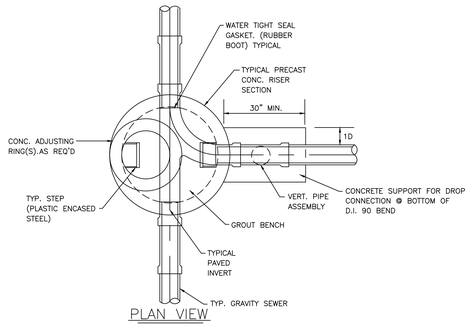


SEWER LATERAL SECTION

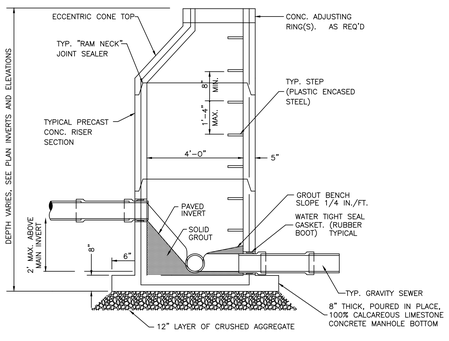
N.T.S.



PLAN VIEW



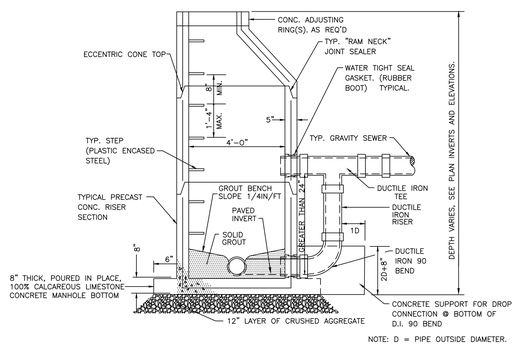
PLAN VIEW



TYPICAL PRECAST CONCRETE MANHOLE

SECTION A–A

N.T.S.



NOTE: D = PIPE OUTSIDE DIAMETER.

TYPICAL PRECAST CONCRETE DROP MANHOLE

SECTION A–A

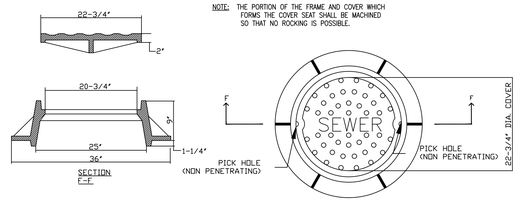
N.T.S.

GENERAL NOTES:

- ALL PRECAST REINFORCED CONCRETE MANHOLE SECTIONS SHALL CONFORM TO ASTM C 478.
- WHEN SHORT MANHOLE SECTIONS ARE USED UNDER PAVED AREAS THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR THE REINFORCING REQUIRED TO SUPPORT THE TRAFFIC LOAD
- ALL MANHOLES SHALL BE CONSTRUCTED USING TYPE 2 CEMENT, AND 100% CALCAREOUS AGGREGATE
- GROUT MANHOLE RING TO MANHOLE SECTION INSIDE & OUT AS APPROVED BY THE ENG.
- THE 1ST MANHOLE STEP SHALL NOT BE MORE THAN 15" FROM THE TOP OF THE MANHOLE.
- SPECIFICATIONS:

MODEL: VULCAN FOUNDRY V-1418 – 1 TYPE 1 PICK HOLE

COVER WEIGHT	130 LBS.
RING WEIGHT	280 LBS.
TOTAL WEIGHT	410 LBS.



THE RING AND COVER SHALL MEET THE REQUIREMENTS OF THE CITY OF FAIRHOPE SANITARY SEWER SPECIFICATIONS. THIS IS TO INCLUDE THE LABEL ON THE MANHOLE COVER.

MANHOLE FRAME & COVER DETAIL

N.T.S.

ADDITIONS
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ROBERTSDALE, ALABAMA
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Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
30873 Fgt 1, "Bone" Thomas Drive, Spanish Fort, AL 36527
Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER
Brian A. Robertson

SHEET TITLE : SEWER DETAILS

MCKEE JOB # : 23-195

DRAWN BY : BAT

DATE: 10-11-23

REVISED DATE: 11-28-23

REVISED DATE:

REVISED DATE:

SHEET NO. : C-6.3

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\NOTES-DETAILS.dwg
- Tuesday, November 28, 2023 2:27:34 PM

LEGEND

- PRO INLET WATTLE PROTECTION
- PRO DITCH CHECK WATTLE
- PRO CONC WASHOUT
- PRO SLIT FENCE
- PRO SAFETY FENCE
- PRO CONSTRUCTION ENTRANCE
- PRO SEED & MULCH AREA
- PRO SOLID SOD AREA

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6. DISTURBED AREAS SHALL BE GRADED, SODDED, OR VEGETATED (SEEDED AND MULCHED)WITHIN 13 DAYS OF ANY CONSTRUCTION ACTIVITY FOR AN EFFECTIVE BMP.
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14. INACTIVE PROJECTS (MORE THAN 7 DAYS) SHALL BE MULCHED IF INACTIVE FOR LESS THAN 60 DAYS. IF INACTIVE FOR MORE THAN 60 DAYS, DISTURBED AREAS SHALL BE SEEDED & MULCHED.

EXIST ASPHALT PARKING AREA
EXIST WOOD-LAND AREA
EXIST GRADE CONTOUR (TYP)
REQ'D: SEEDED & MULCHED AREA (4,265 SY)
36" OAK
20" OAK
REQ'D: SILT FENCE (TYPE A) (880 LF)
REQ'D: CONCRETE WASHOUT PAD
EXIST CHAIN-LINKED FENCE
EXIST CONC S/W
REQ'D: DITCH WATTLE (TYP)
CEDAR ST
REQ'D: 50'x20' TEMP CONST ENTRANCE
REQ'D: SOLID SODDED AREA (74 SY)
REQ'D: SOLID SODDED AREA (34 SY)
PRO NORTH-WEST POND
REQ'D: TREE PROTECTION (TYP)
30" OAK
REQ'D: CONSTRUCTION SAFETY FENCE (ORANGE IN COLOR)
AL HWY 59
EXIST CHAIN LINKED FENCE
EXIST BLDG
EXIST AWNING COVERED CONC AREA
REQ'D: INLET WATTLE PROTECTION (TYP)
32" OAK
REQ'D: SOLID SODDED AREA (4,275 SY)
REQ'D: SOLID SODDED AREA (85 SY)
15" OAK
REQ'D: SOLID SODDED AREA (850 SY)
REQ'D: SOLID SODDED AREA (640 SY)
EXIST BLDG (RHS MAIN BLDG)
REQ'D: SOLID SODDED AREA (1,150 SY)
REQ'D: SILT FENCE (TYPE A) (95 LF)
PRO SOUTH-WEST POND
REQ'D: SOLID SODDED AREA (368 SY)
EXIST ASPHALT ACCESS RD
EXIST WOODEN FENCE
EXIST BRICK PAVERS AREA
FINISHED GRADE CONTOUR (TYP)
EXIST ASPHALT DRIVE
MATCHLINE SEE SHT C-7.1

GRAPHIC SCALE
0 15 30 60
1 inch = 30 feet

ADDITIONS TO ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
3909 Fall Ft. 1 "Stone" Thomas Drive, Spanish Fort, AL 36527
Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 31241
John H. Robertson III

SHEET TITLE :	EROSION CONTROL PLAN 1
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

SHEET NO. : C-7.0

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\GRAD-DRAIN-EC PLAN.dwg
- Tuesday, November 28, 2023 2:28:03 PM

LEGEND

- PRO INLET WATTLE PROTECTION
- PRO DITCH CHECK WATTLE
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- PRO SAFETY FENCE
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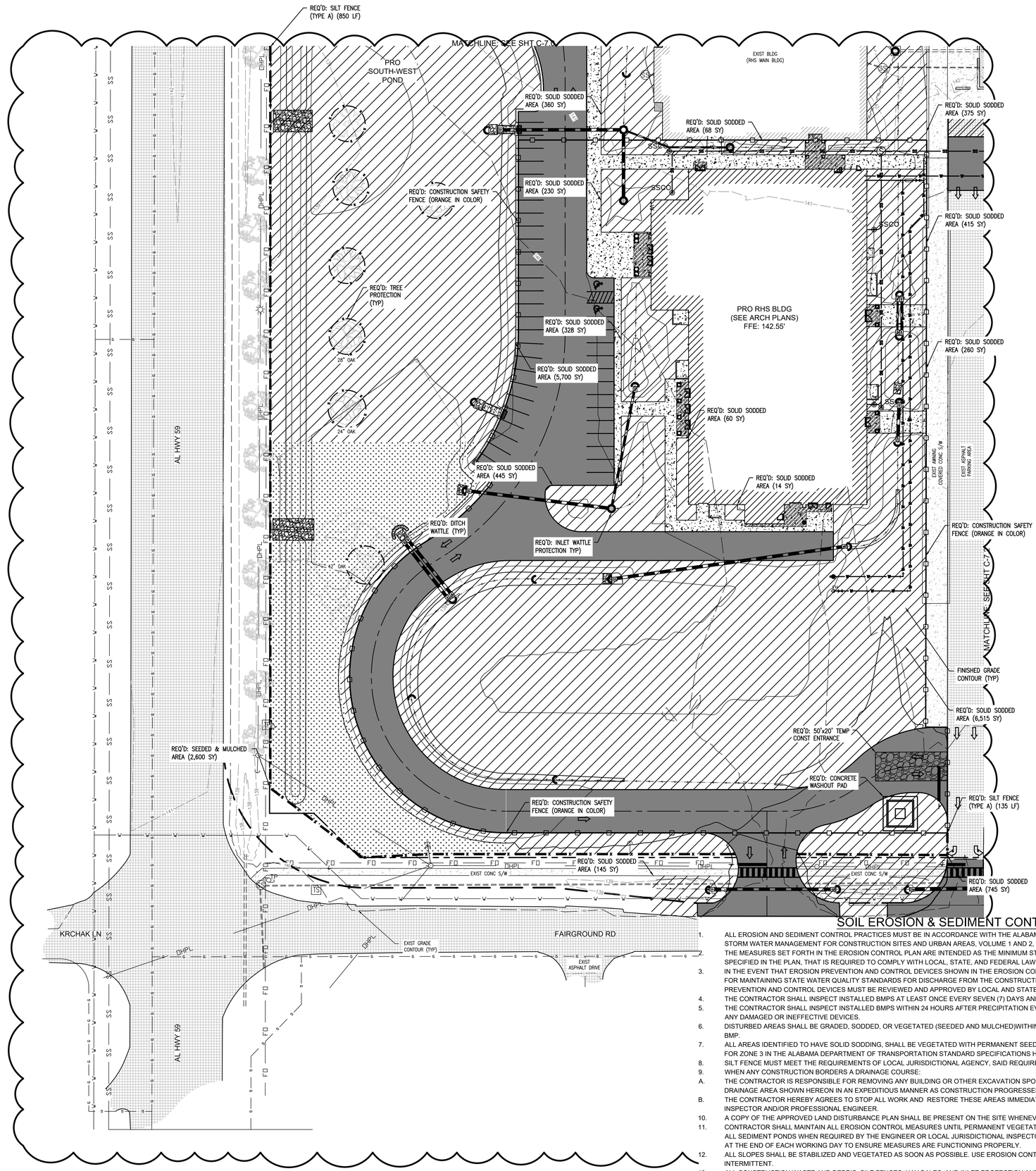

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ADDITIONS TO ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

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36073 Hgt 5 1 "Stone" Thomas Drive Spanish Fort, AL 36527
Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER
Robert Hagan

SHEET TITLE :	EROSION CONTROL PLAN 2
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

SHEET NO. : C-7.1

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- Tuesday, November 28, 2023 2:28:11 PM

LEGEND

- PRO INLET WATTLE PROTECTION
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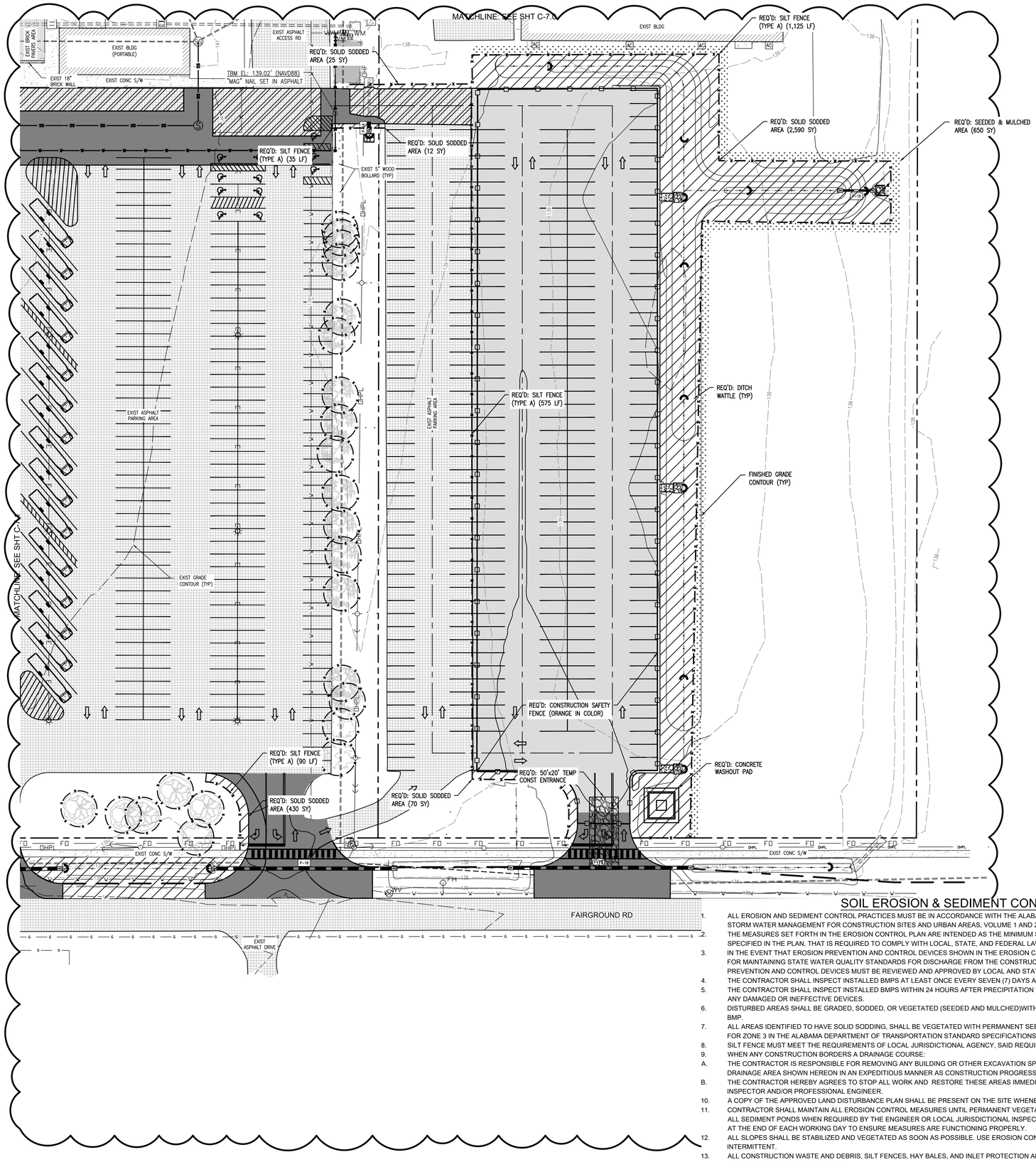

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8. SILT FENCE MUST MEET THE REQUIREMENTS OF LOCAL JURISDICTIONAL AGENCY, SAID REQUIREMENTS AS SHOWN BY THESE PLANS.
9. WHEN ANY CONSTRUCTION BORDERS A DRAINAGE COURSE:
   - A. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY BUILDING OR OTHER EXCAVATION SPOIL DIRT, CONSTRUCTION TRASH OR DEBRIS, ETC., FROM THE DRAINAGE AREA SHOWN HEREON IN AN EXPEDITIOUS MANNER AS CONSTRUCTION PROGRESSES.
   - B. THE CONTRACTOR HEREBY AGREES TO STOP ALL WORK AND RESTORE THESE AREAS IMMEDIATELY UPON NOTIFICATION BY THE LOCAL JURISDICTIONAL INSPECTOR AND/OR PROFESSIONAL ENGINEER.
10. A COPY OF THE APPROVED LAND DISTURBANCE PLAN SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBING ACTIVITY IS IN PROGRESS.
11. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. CONTRACTOR SHALL CLEAN OUT ALL SEDIMENT PONDS WHEN REQUIRED BY THE ENGINEER OR LOCAL JURISDICTIONAL INSPECTOR. CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
12. ALL SLOPES SHALL BE STABILIZED AND VEGETATED AS SOON AS POSSIBLE. USE EROSION CONTROL BLANKET (ECB) WHERE GRASSING SLOPES ARE INTERMITTENT.
13. ALL CONSTRUCTION WASTE AND DEBRIS, SILT FENCES, HAY BALES, AND INLET PROTECTION AND OTHER TEMPORARY BMP'S HALL BE REMOVED FROM THE SITE UPON CONSTRUCTION COMPLETION.
14. INACTIVE PROJECTS (MORE THAN 7 DAYS) SHALL BE MULCHED IF INACTIVE FOR LESS THAN 60 DAYS. IF INACTIVE FOR MORE THAN 60 DAYS, DISTURBED AREAS SHALL BE SEEDED & MULCHED

ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

McKEE & ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

Sawgrass
ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
30873 Fqt E-1 "Stone" Thomas Drive Spanish Fort, AL 36527 Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 31242
James H. Robertson

SHEET TITLE :	EROSION CONTROL PLAN 3
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	
SHEET NO. :	C-7.2

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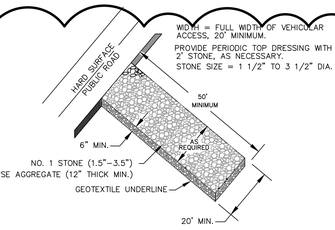
- Tuesday, November 28, 2023 2:28:21 PM



STONE PAD CONSTRUCTION EXIT

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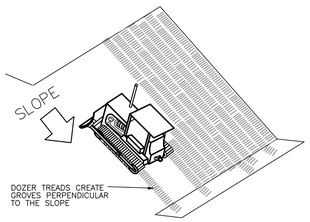

SURFACE ROUGHENING

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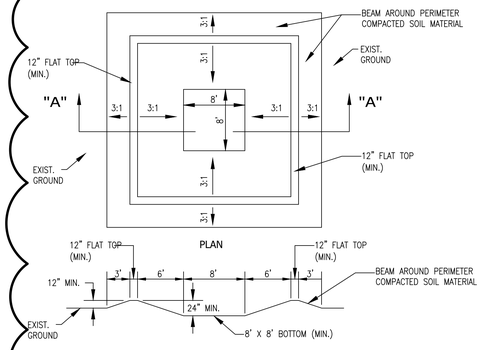

CONCRETE WASHOUT AREA DETAILS

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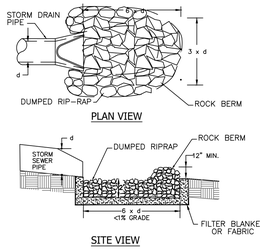
GENERAL NOTES

1. TYPE "A" SILT FENCE SHALL BE USED IN AREAS OF CONCENTRATED FLOW.
2. SILT FENCES ARE TEMPORARY EROSION CONTROL ITEMS THAT SHALL BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS AND CHANNELS.
3. SILT FENCE SHOULD BE PLACED WELL INSIDE PROPERTY BOUNDARY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR A BACK–UP FENCE IF FIRST BECOMES FULL. SILT FENCES SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION OPERATION.
4. WHEREVER POSSIBLE, SILT FENCES SHALL BE CONSTRUCTED ACROSS A FLAT AREA IN THE SHAPE OF A HORSESHOE. THIS AIDS IN POND–ING OF RUNOFF AND FACILITATES SEDIMENTATION.
5. AFTER THE CONSTRUCTION AREA IS STABILIZED AND EROSION ACTIVITY CURTAILED, SILT FENCES SHALL BE REMOVED.
6. RING FASTENERS USED TO SECURE GEOTEXTILES TO WOVEN WIRE SHALL BE 13 GA. (AMERICAN).
7. IF WOOD POSTS ARE USED, STAPLES FOR SECURING WOVEN WIRE TO POSTS SHALL BE NINE (9) GAUGE, GALVANIZED, 1 1/2" LONG, FIVE (5) PER POST Ø APPROXIMATELY 1'–0" ON CENTER.
8. WOVEN WIRE TO BE 12 1/2 GAUGE (MINIMUM).

SPECIFICATIONS

CURRENT ALABAMA DEPARTMENT OF TRANSPORTATION



RIPRAP OUTLET PROTECTION

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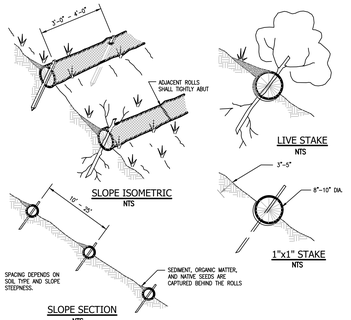
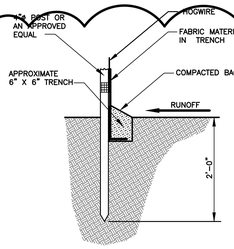


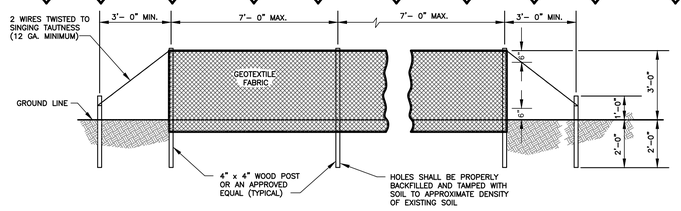
NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" – 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

STRAW WATTLES

SLOPE STABILIZATION INSTALLATION DETAIL

NTS





TYPE "A" TYPICAL SILT FENCE INSTALLATION

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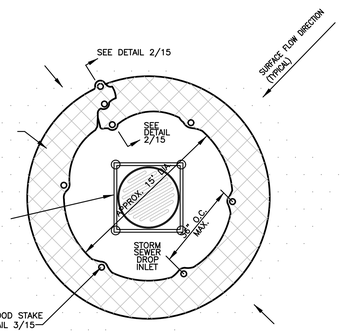
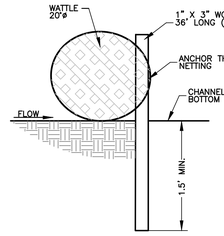
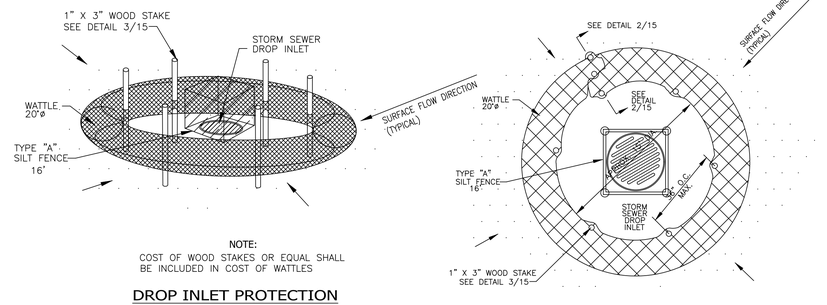


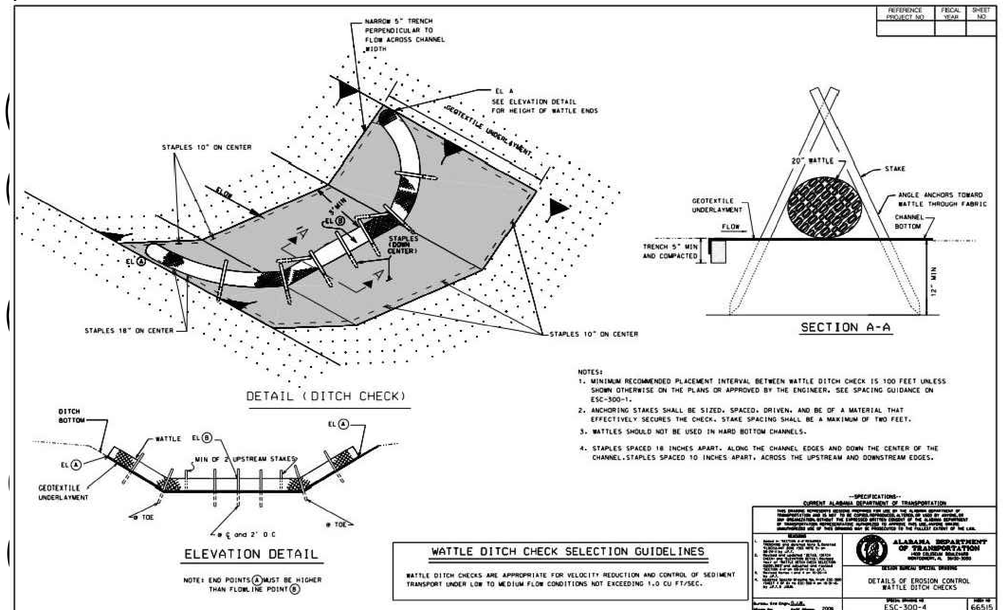




NOTE:
COST OF WOOD STAKES OR EQUAL SHALL BE INCLUDED IN COST OF WATTLES

DROP INLET PROTECTION

NTS



NOTES:
1. MINIMUM RECOMMENDED PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECK IS 100 FEET UNLESS SHOWN OTHERWISE ON THE PLANS OR APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON ESC-300-1.
2. ANCHORING STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. STAKE SPACING SHALL BE A MAXIMUM OF TWO FEET.
3. WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.
4. STAPLES SPACED 18 INCHES APART- ALONG THE CHANNEL EDGES AND DOWN THE CENTER OF THE CHANNEL.STAPLES SPACED 10 INCHES APART, ACROSS THE UPSTREAM AND DOWNSTREAM EDGES.

WATTLE DITCH CHECK SELECTION GUIDELINES

WATTLE DITCH CHECKS ARE APPROPRIATE FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS NOT EXCEEDING 1.0 CU FT/SEC.

REFERENCE PROJECT NO. | FISCAL YEAR | SHEET NO.

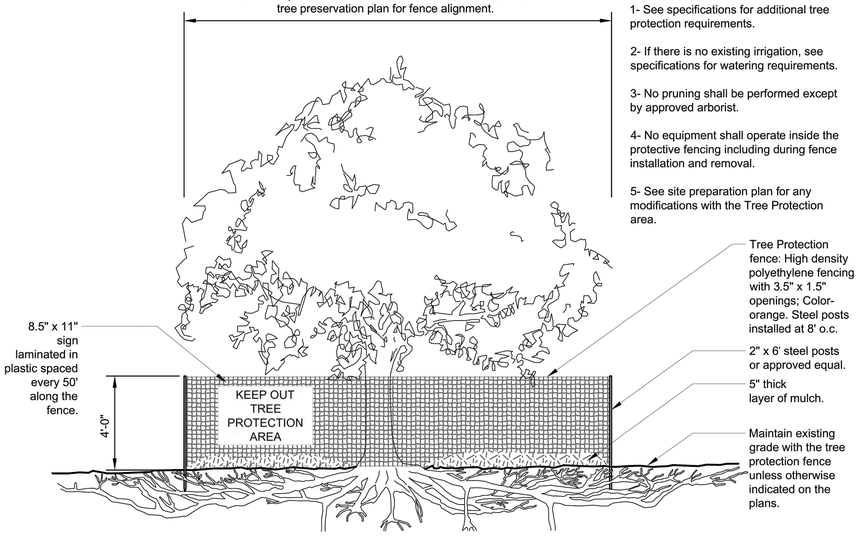
SPECIFICATIONS: CURRENT ALABAMA DEPARTMENT OF TRANSPORTATION

ALABAMA DEPARTMENT OF TRANSPORTATION
1409 COLEMAN BOULEVARD
MONTGOMERY, AL 36130-3050
DESIGN BUREAU/ SPECIAL DRAWING

DETAILS OF EROSION CONTROL WATTLE DITCH CHECKS

STATE PROJECT NO. | SHEET NO.
ESC-300-4 | 66515

NOT TO SCALE



Notes:
1- See specifications for additional tree protection requirements.

2- If there is no existing irrigation, see specifications for watering requirements.

3- No pruning shall be performed except by approved arborist.

4- No equipment shall operate inside the protective fencing including during fence installation and removal.

5- See site preparation plan for any modifications with the Tree Protection area.

TREE PROTECTION DETAIL

NTS

ADDITIONS
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ROBERTSDALE, ALABAMA
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ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT
3663 Fairfield Court, Spanish Fort, AL 36527 Phone: (251) 544-7600

ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 31245
James H. Robertson, Jr.

SHEET TITLE :	EROSION CONTROL DETAILS
MCKEE JOB # :	23-195
DRAWN BY :	BAT
DATE:	10-11-23
REVISED DATE:	11-28-23
REVISED DATE:	
REVISED DATE:	

SHEET NO. : C-7.3

- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGS\NOTES-DETAILS.dwg
- Tuesday, November 28, 2023 2:28:28 PM

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
	PANELBOARD – SEE RESPECTIVE PANELBOARD SCHEDULE.
A/1	BRANCH CIRCUIT CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING. ARROWS INDICATE CIRCUIT HOMERUN, HASHMARKS INDICATE NUMBER OF CONDUCTORS, ABSENCE OF HASHMARKS INDICATES TWO CONDUCTORS PLUS GROUND. "A" DENOTES PANELBOARD SERVING CIRCUIT, "1" INDICATES CIRCUIT BREAKER SPACE IN PANELBOARD. SEE RESPECTIVE PANEL CIRCUIT SCHEDULE. MINIMUM CONDUCTOR SIZE = #12 AWG.
	INDICATES CONDUIT RUN UNDERGROUND.
	NON-FUSED DISCONNECT, HEAVY DUTY (SAFETY) SWITCH – SIZE AND TYPE AS NOTED. TOP OF SWITCH 6'-6" A.F.F. PROVIDE MECHANICALLY FASTENED PHENOLIC LABEL.
	ELECTRIC MOTOR – SEE RESPECTIVE EQUIPMENT SCHEDULE.
	20A, 125 VAC 2P., 3W., GROUNDING TYPE, DOUBLE DUPLEX RECEPTACLE. FLUSH WALL MOUNTED 18" A.F.F. WITH GROUND PIN FACING UP UNLESS NOTED OTHERWISE.
	20A, 125 VAC 2P., 3W., GROUNDING TYPE, DUPLEX RECEPTACLE. FLUSH WALL MOUNTED 18" A.F.F. WITH GROUND PIN FACING UP UNLESS NOTED OTHERWISE.
	INDICATES GROUND FAULT CIRCUIT INTERRUPTING RECEPTACLE. FLUSH WALL MOUNTED 18" A.F.F. WITH GROUND PIN FACING UP UNLESS NOTED OTHERWISE.
	20A, 125 VAC 2P., 3W., GROUNDING TYPE, DUPLEX RECEPTACLE WITH TOP OUTLET UNSWITCHED AND THE BOTTOM OUTLET SWITCHED WITH THE LIGHT FIXTURES. PROVIDE PHENOLIC LABEL INDICATING BOTTOM OUTLET IS CONTROLLED WITH THE LIGHT FIXTURES AND WILL SWITCH OFF WHEN THE ROOM IS UNOCCUPIED. RECEPTACLE SHALL BE FLUSH WALL MTD. 18" A.F.F. UNLESS NOTED OTHERWISE.
	20A, 125 VAC 2P., 3W., GROUNDING TYPE, DOUBLE DUPLEX RECEPTACLE WITH TOP OUTLET UNSWITCHED AND THE BOTTOM OUTLET SWITCHED WITH THE LIGHT FIXTURES. PROVIDE PHENOLIC LABEL INDICATING BOTTOM OUTLET IS CONTROLLED WITH THE LIGHT FIXTURES AND WILL SWITCH OFF WHEN THE ROOM IS UNOCCUPIED. RECEPTACLE SHALL BE FLUSH WALL MTD. 18" A.F.F. UNLESS NOTED OTHERWISE.
	(2) 20A, 125 VAC 2P., 3W., GROUNDING TYPE, DUPLEX RECEPTACLES FLUSH MOUNTED IN FLOOR BOX WITH FLUSH FACEPLATE AND (2) TYPE "D2" DATA OUTLETS AS INDICATED ON TELECOM LEGEND. PROVIDE DEVICE MOUNTING BRACKETS FOR EACH DEVICE. ONE OF THE TWO DUPLEX RECEPTACLES SHALL BE SWITCHED ENTIRELY. FLOOR BOX EQUAL TO WIREMOLD CAT# RFB4 SERIES WITH COVER EQUAL TO WIREMOLD CAT# FPCTC(FINISH BY ARCHITECT). PROVIDE A MINIMUM 1" CONDUIT FOR CAT-5e CABLES ROUTED UNDERGROUND OVER TO NEAREST FULL WALL AND UP TO 6" ABOVE ACCESSIBLE CEILING.
J	JUNCTION BOX LOCATION. SIZE AND TYPE AS REQUIRED.
	INSTALL OUTLET TO MATCH PLUG ON EQUIPMENT.
P	POWER RELAY TO INTERLOCK WITH 277V LIGHTS OR MECHANICAL CONTROLS EQUIPMENT. COORDINATE VOLTAGE REQUIREMENTS WITH THE MECHANICAL CONTRACTOR FOR MECHANICAL EQUIPMENT INTERLOCKS.
FAC	ADDRESSABLE INTELLIGENT FIRE ALARM SYSTEM CONTROL PANEL – WITH CELLULAR AUTO-DIAL OUT. VOICE EVACUATION CAPABLE.
ERCES	EMERGENCY RADIO RESPONDER COVERAGE HEAD END EQUIPMENT.
F	FIRE ALARM SYSTEM ADDRESSABLE PULL STATION – SEMI FLUSH MOUNTED 48" A.F.F. TO TOP UNLESS NOTED OTHERWISE.
CO	CARBON MONOXIDE SENSOR
SD	ADDRESSABLE INTELLIGENT CEILING MOUNTED FIRE ALARM SYSTEM PHOTOELECTRIC TYPE SMOKE DETECTOR WITH BASE.
HD	ADDRESSABLE INTELLIGENT FIRE ALARM SYSTEM HEAT DETECTOR RATE OF RISE TYPE.
F	FIRE ALARM SYSTEM SPEAKER / STROBE DEVICE CEILING MOUNTED, UNLESS NOTED OTHERWISE. ALL STROBES IN COMMON SPACES OR CORRIDORS SHALL BE SYNCHRONIZED. CANDELA VALUE AS INDICATED.
F	FIRE ALARM SYSTEM VISUAL DEVICE CEILING MOUNTED, UNLESS NOTED OTHERWISE. ALL STROBES IN COMMON SPACES OR CORRIDORS SHALL BE SYNCHRONIZED. CANDELA VALUE AS INDICATED.
F	FIRE ALARM SYSTEM SPEAKER / STROBE DEVICE SEMI FLUSH WALL MOUNTED AT 80" A.F.F. OR 6" BELOW THE FINISHED CEILING WHICHEVER IS LOWER, UNLESS NOTED OTHERWISE. ALL STROBES IN COMMON SPACES OR CORRIDORS SHALL BE SYNCHRONIZED. CANDELA VALUE AS INDICATED.
F	FIRE ALARM SYSTEM VISUAL DEVICE SEMI FLUSH WALL MOUNTED AT 80" A.F.F. OR 6" BELOW THE FINISHED CEILING WHICHEVER IS LOWER, UNLESS NOTED OTHERWISE. ALL STROBES IN COMMON SPACES OR CORRIDORS SHALL BE SYNCHRONIZED. CANDELA VALUE AS INDICATED.
F	EXTERIOR FIRE ALARM SYSTEM AUDIO ALARM (WEATHERPROOF DEVICE WITH WEATHERPROOF CAST BOX). FLUSH MOUNT. COORDINATE MOUNTING LOCATION WITH OBSTACLES AND MOUNT AS REQUIRED.
S R	ADDRESSABLE INTELLIGENT FIRE ALARM SYSTEM DUCT MOUNTED PHOTOELECTRIC SMOKE DETECTOR COMPLETE WITH HOUSING AND AIR SAMPLING TUBES. "S" DENOTES DETECTOR IN SUPPLY DUCT; "R" DENOTES DETECTOR IN RETURN DUCT.
R	FIRE ALARM SYSTEM INTERFACE MODULE – MOUNTED AT EQUIPMENT.
S	SPRINKLER SYSTEM FLOW SWITCH. FURNISHED BY FIRE ALARM SYSTEM SUPPLIER, INSTALLED BY FIRE PROTECTION (SPRINKLER) SYSTEM CONTRACTOR, AND CONNECTED TO FIRE ALARM SYSTEM CONTROL PANEL BY FIRE ALARM SYSTEM CONTRACTOR.
S	SPRINKLER SYSTEM TAMPER SWITCH. FURNISHED BY FIRE ALARM SYSTEM SUPPLIER, INSTALLED BY FIRE PROTECTION (SPRINKLER) SYSTEM CONTRACTOR, AND CONNECTED TO FIRE ALARM SYSTEM CONTROL PANEL BY FIRE ALARM SYSTEM CONTRACTOR.
VCC	ADDRESSABLE INTELLIGENT FIRE ALARM VOICE COMMAND CENTER.
MIC	ADDRESSABLE INTELLIGENT FIRE ALARM FIRE FIGHTERS MICROPHONE FLUSH MOUNTED IN WALL. COORDINATE FINAL LOCATION WITH THE AHJ PRIOR TO ROUGH-IN.
C	INDICATES DEVICE FLUSH MOUNTED HORIZONTALLY 6" ABOVE COUNTERTOP OR IN BACKSPLASH.
EWC	COORDINATE DEVICE LOCATION WITH ELECTRIC WATER COOLER. MOUNT IN AN ACCESSIBLE LOCATION.
WP	INDICATES WEATHER RESISTANT WIRING DEVICE WITH WEATHER PROOF IN-USE COVER PLATE. OUTLET BOX HOODS INSTALLED IN WET LOCATIONS WITH THIS MARKING SHALL BE IDENTIFIED AS "EXTRA-DUTY." (1)
GFI	INDICATES GROUND FAULT CIRCUIT INTERRUPTER TYPE DEVICE.
R	INDICATES RED DEVICE WITH RED FACE PLATE

SYMBOLS NOTES: UNLESS OTHERWISE NOTED THE FOLLOWING SHALL APPLY:

1. ALL OUTLETS SHALL BE FLUSH MOUNTED.
2. MOUNTING HEIGHTS ARE FROM THE CENTER LINE OF THE DEVICE.
3. ALL SINGLE GANG AND TWO GANG DEVICES SHALL USE A 4" SQ. BOX WITH EXTENSION RING.
4. ALL MULTI – GANG DEVICES SHALL USE A COMMON COVER PLATE
5. ALL DEVICES (i.e. SWITCHES, RECEPTACLES, TELEPHONE OUTLETS, ETC.) SHALL BE GRAY WITH STAINLESS STEEL COVER PLATES.
6. A.F.F. INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR.
7. ALL WIRING SHALL BE COPPER.
8. DO NO INSTALL OUTLETS BACK TO BACK.
9. PROVIDE INDICATES THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL.
10. WHERE MORE THAN 3 CURRENT CARRYING CONDUCTORS MAY BE RUN IN A SINGLE CONDUIT, NEC SECTION 310.15 SHALL APPLY.

ANY PENETRATIONS THROUGH RATED WALLS SHALL BE SEALED PER THE NEC WITH UL LISTED FIRE STOPPING COMPOUND.

ALL RECEPTACLES LOCATED THROUGHOUT THE SCHOOL SHALL BE LISTED TAMPER-RESISTANT TYPE.

CONTRACTOR SHALL PROVIDE THE OWNER WITH RECORD DRAWINGS AND MANUALS THAT PROVIDE INSTRUCTION ABOUT THE OPERATION AND MAINTENANCE OF THE BUILDING'S ELECTRICAL DISTRIBUTION SYSTEM. REFER TO ASHRAE 90.1 2013 8.7.

LIGHTING FIXTURE SCHEDULE

- LIGHTING MANUFACTURERS OTHER THAN THOSE LISTED IN THIS SCHEDULE SHALL SUBMIT **PRIOR APPROVAL NO LESS THAN 10 DAYS PRIOR TO BID**. NO FIXTURES WILL BE REVIEWED AFTER THE 10 DAY DEADLINE, NO EXCEPTIONS. SUBSTITUTE PACKAGES MAY BE RESUBMITTED **ONE TIME** FOLLOWING THE INITIAL ENGINEER'S REVIEW. FAILURE TO PROVIDE AN APPROVED EQUIVALENT PACKAGE WILL RESULT IN DISAPPROVAL OF THE ENTIRE SUBSTITUTE PACKAGE. MANUFACTURERS NOT APPROVED PRIOR TO BID SHALL NOT BE SUBMITTED FOR CONSTRUCTION.
- MANUFACTURERS LISTED AS EQUALS ON THIS SCHEDULE ARE PRE-APPROVED TO BID. **PART NUMBERS LISTED ON THIS SCHEDULE ARE THE "AS SPECIFIED" FIXTURES.** ANY MANUFACTURERS LISTED ON THIS SCHEDULE WITHOUT PART NUMBERS ARE **NOT** CONSIDERED "AS SPECIFIED". THE LIGHTING PACKAGE SUBMITTED FOR CONSTRUCTION SHALL MEET OR EXCEED THE LIGHTING SPECIFICATIONS AND THE "AS SPECIFIED" FIXTURES ON THIS SCHEDULE, AND COMPLY WITH THE DESIGN AND FUNCTIONALITY REQUIREMENTS SHOWN ON THE LIGHTING PLANS, NO EXCEPTIONS. **IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THEIR LIGHTING PACKAGE IS EQUAL TO THE SPECIFICATIONS AND PLANS PRIOR TO BIDDING.** ANY FIXTURE PACKAGE SUBMITTED FOR REVIEW DURING THE CONSTRUCTION PHASE THAT IS NOT EQUAL TO THE AS SPECIFIED FIXTURES AND PLANS WILL BE REJECTED. THE ACCEPTANCE OF AN EQUAL PACKAGE SHALL BE AT THE SOLE DISCRETION OF THE ARCHITECT AND ENGINEER. **ANY ADDITIONAL COSTS INCURRED BY BRINGING AN INFERIOR LIGHTING PACKAGE UP TO THE STANDARDS OF THE SPECIFICATIONS, AS SPECIFIED LIGHTING FIXTURES, AND PLANS DUE TO LACK OF QUALITY AND/OR FUNCTION OF DESIGN SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND HIS/HER LIGHTING SUPPLIER, NO EXCEPTIONS.** THESE REQUIREMENTS SHALL ALSO BE INCLUSIVE OF ALL LIGHTING CONTROL SYSTEMS.

MARK	LAMPS: LUMENS	LAMPS: WATTS	LAMPS: TYPE	MOUNTING	MANUFACTURER AND CATALOG NUMBER	NOTES
D1S	1000	12.8W	LED 35K	RECESSED FLANGE	H.E. WILLIAMS 6DR-TL-L10/835-DIM1-UNV-SW-OF-CS-WET/CC-N-F1 COTHAM EVO63H-35/10-L06-AR-LSS-EZ1-TRW PORTFOLIO LDRC	
EX	N/A	1W	LED RED	UNIVERSAL	CHLORIDE ER55LD3R EMERGILITE BAPVN1R ASTRALITE DCA-R-BA-EM-SD	PROVIDE ARROWS AS INDICATED ON PLANS.
EXG	N/A	1W	LED RED	UNIVERSAL	CHLORIDE ER55LD3R-WG4 LITHONIA LE-S-1-R-EL N-ELA WG COOPER CX7TWG10	PROVIDE ARROWS AS INDICATED ON PLANS.
HB40 HB40E	40,000	364W	LED	SUSPENDED 23'0" A.F.F.	H.E. WILLIAMS GH-4-L480/840-FA-WG11-GC2/Y18/15-DIM-UNV LITHONIA IBG-480001M-SCF-4FL-GND-MVOLT-GZ10-40K-80CRI-DMH-BAC240M75-WGIBG44 METALUX CABIL-48SE-MFL-UNV-L840-CD-PW-DHB-WG164-1-TOGGLE-30-2PK	SO CORD IS NOT APPROVED FOR FIXTURE POWER CONNECTION. E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY. PROVIDE ADDITIONAL AIRCRAFT CABLE AS REQUIRED FOR MOUNTING FIXTURE.
L130 L130E	3000	21W	LED 35K	SUSPENDED 9'0" A.F.F.	HE WILLIAMS 7SR-4-L30/835-YBY-DRV-UNV LITHONIA CLX-L48-3000LM-SFT-RDL-WD-MVOLT-GZ10-35K-80CRI-WH-HC36 M12 METALUX 4SNLED-LD5-30SL-LC-UNV-L835-CD-1-U-AYC	E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY.
L140 L140E	4000	31W	LED 35K	SUSPENDED 9'0" A.F.F.	HE WILLIAMS 7SR-4-L50/835-(L40)-YBY-DRV-UNV LITHONIA CLX-L48-4000LM-SFT-RDL-WD-MVOLT-GZ10-35K-80CRI-WH-HC36 M12 METALUX 4SNLED-LD5-41SL-LC-UNV-L835-CD-1-U-AYC	E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY.
L150E	5000	38W	LED 35K	SUSPENDED 9'0" A.F.F.	HE WILLIAMS 7SR-4-L50/835-YBY-DRV-UNV LITHONIA CLX-L48-5000LM-SFT-RDL-WD-MVOLT-GZ10-35K-80CRI-WH-HC36 M12 METALUX 4SNLED-LD5-49SL-LC-UNV-L835-CD-1-U-AYC	E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY.
LP30 LP30E	3000	29W	LED 35K	RECESSED GRID	DAYBRITE 2FPZ30L835-4-DS-UNV-DIM LITHONIA EPANL-2X4-3000-80CRI-35K-MIN1-ZT-MVOLT METALUX 24FPSL2SCT3-LOW	E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY. PROVIDE 1% DIMMING DRIVER.
LP38 LP38E	3800	40.2W	LED 35K	RECESSED GRID	DAYBRITE 2FPZ38L835-4-DS-UNV-DIM LITHONIA EPANL-2X4-4000-80CRI-35K-MIN1-ZT-MVOLT METALUX 24FPSL2SCT3-MED	E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY. PROVIDE 1% DIMMING DRIVER.
LP43 LP43E	4300	45W	LED 35K	RECESSED GRID	DAYBRITE 2FPZ43L835-4-DS-UNV-DIM LITHONIA EPANL-2X4-4800-80CRI-35K-MIN1-ZT-MVOLT METALUX 24FPSL2SCT3-MED	E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY. PROVIDE 1% DIMMING DRIVER.
LP48 LP48E	4800	45W	LED 35K	RECESSED GRID	DAYBRITE 2FPZ48L835-4-DS-UNV-DIM LITHONIA EPANL-2X4-4800-80CRI-35K-MIN1-ZT-MVOLT METALUX 24FPSL2SCT3-MED	E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY. PROVIDE 1% DIMMING DRIVER.
LP54E	5400	56.3W	LED 35K	RECESSED GRID	DAYBRITE 2FPZ54L835-4-DS-UNV-DIM LITHONIA EPANL-2X4-5400-80CRI-35K-MIN1-ZT-MVOLT METALUX 24FPSL2SCT3-HIGH	E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY. PROVIDE 1% DIMMING DRIVER.
LP60 LP60E	6000	56.3W	LED 35K	RECESSED GRID	DAYBRITE 2FPZ60L835-4-DS-UNV-DIM LITHONIA EPANL-2X4-6000-80CRI-35K-MIN1-ZT-MVOLT METALUX 24FPSL2SCT3-HIGH	E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY. PROVIDE 1% DIMMING DRIVER.
LP80 LP80E	8000	80.4	LED 35K	RECESSED GRID	DAYBRITE 2FPZ80L835-4-DS-UNV-DIM	E – PROVIDE INTEGRAL 10W EMERGENCY BATTERY. PROVIDE 1% DIMMING DRIVER.
PL2**	24000	178	LED 40K	POLE 30'6" A.F.G.	FIXTURE: GARDCO ECF-S-64L-900-NW-G2-2-AR-277-LLC-CM30-IMR7-PCB-BZ POLE: GARDCO TRA-CA-7/4-156-30-D1-BZ OR EQUAL OR EQUAL	PROVIDE WITH INTEGRAL PHOTOCELL ON/OFF CONTROL AND 30% DIMMING AFTER 15 MINUTES NO ACTIVITY.
PL4**	24000	178	LED 40K	POLE 30'6" A.F.G.	FIXTURE: GARDCO ECF-S-64L-900-NW-G2-4-AR-277-LLC-CM30-IMR7-PCB-BZ POLE: GARDCO TRA-CA-7/4-156-30-D1-BZ OR EQUAL OR EQUAL	PROVIDE WITH INTEGRAL PHOTOCELL ON/OFF CONTROL AND 30% DIMMING AFTER 15 MINUTES NO ACTIVITY.
PL5**	24000	178	LED 40K	POLE 30'6" A.F.G.	FIXTURE: GARDCO ECF-S-64L-900-NW-G2-5-AR-277-LLC-CM30-IMR7-PCB-BZ POLE: GARDCO TRA-CA-7/4-156-30-D1-BZ OR EQUAL OR EQUAL	PROVIDE WITH INTEGRAL PHOTOCELL ON/OFF CONTROL AND 30% DIMMING AFTER 15 MINUTES NO ACTIVITY.
SF SFE	2600	32	LED 40K	SURFACE	FC LIGHTING FCW3800 UNV 4000K CRI85 26L BRE SP20 OR EQUAL OR EQUAL	E – PROVIDE REMOTE 10W EMERGENCY BATTERY EQUAL TO BBUX
WP2**	9000	70	LED 40K	WALL 17'0" A.F.G.	GARDCO 121-32L-700-NW-G4-2-277-LLC-CM30-IMR3-PCB-BZ OR EQUAL OR EQUAL	PROVIDE WITH INTEGRAL PHOTOCELL ON/OFF CONTROL AND 30% DIMMING AFTER 15 MINUTES NO ACTIVITY.
WP3**	9000	70	LED 40K	WALL 17'0" A.F.G.	GARDCO 121-32L-700-NW-G4-3-277-LLC-CM30-IMR3-PCB-BZ OR EQUAL OR EQUAL	PROVIDE WITH INTEGRAL PHOTOCELL ON/OFF CONTROL AND 30% DIMMING AFTER 15 MINUTES NO ACTIVITY.
WP4**	9000	70	LED 40K	WALL 17'0" A.F.G.	GARDCO 121-32L-700-NW-G4-4-277-LLC-CM30-IMR3-PCB-BZ OR EQUAL OR EQUAL	PROVIDE WITH INTEGRAL PHOTOCELL ON/OFF CONTROL AND 30% DIMMING AFTER 15 MINUTES NO ACTIVITY.
WS2** WS2E**	2700	22	LED 40K	WALL 7'6" A.F.G.	GARDCO 121-16L-400-NW-G4-2-277-LLC-CM30-IMR2-PCB-BZ OR EQUAL OR EQUAL	PROVIDE WITH INTEGRAL PHOTOCELL ON/OFF CONTROL AND 30% DIMMING AFTER 15 MINUTES NO ACTIVITY. E – PROVIDE INTEGRAL COLD WEATHER EMERGENCY BATTERY.
WS4** WS4E**	2700	22	LED 40K	WALL 7'6" A.F.G.	GARDCO 121-16L-400-NW-G4-4-277-LLC-CM30-IMR2-PCB-BZ OR EQUAL OR EQUAL	PROVIDE WITH INTEGRAL PHOTOCELL ON/OFF CONTROL AND 30% DIMMING AFTER 15 MINUTES NO ACTIVITY. E – PROVIDE INTEGRAL COLD WEATHER EMERGENCY BATTERY.

** FIXTURE SHALL BE PROVIDED WITH PHOTO AND MOTION CONTROL AND BE PROGRAMMED TO DIM BY 30% DURING ANY PERIOD WHERE NO ACTIVITY HAS BEEN DETECTED FOR LONGER THAN 15 MINUTES. THE CONTRACTOR SHALL COORDINATE SPECIFIC REQUIREMENTS WITH THE FIXTURE MANUFACTURER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL CONTROLS AND ACCESSORIES HAVE BEEN PROVIDED WITH THE FIXTURE FOR A COMPLETE AND FUNCTIONAL ASSEMBLY REGARDLESS OF THE SPECIFIED MODEL NUMBER. SEE KEYNOTES ON LIGHTING PLANS FOR ADDITIONAL INFORMATION.

GENERAL NOTES:

1. THE MOUNTING HEIGHTS/PENDANT LENGTHS OF ALL FIXTURES SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION.
2. ANY EXPOSED RACEWAY SHALL BE PAINTED TO MATCH THE BACKGROUND COLOR.
3. PROVIDE FLANGE KITS FOR ALL FIXTURES INSTALLED IN A SHEET ROCK CEILING.
4. CONTRACTOR SHALL ORDER FIXTURES WITH PROTECTIVE COVER OPTION TO PROTECT FIXTURES DURING CONSTRUCTION.
5. FIXTURE TAGS THAT INCLUDE "E" SHALL BE PROVIDED WITH EMERGENCY BATTERY BACK UP.

OVERALL ELECTRICAL GENERAL NOTES:

a. THE CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH THE EXTENT OF WORK REQUIRED TO COMPLETE THE JOB PRIOR TO BIDDING.

b. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO ROUGH IN AND INSTALLATION.

c. ALL PRIMARY CONDUIT SHALL BE RUN AT 48" BELOW FINISHED GRADE. ALL SECONDARY AND EXTERIOR UNDERGROUND BRANCH CIRCUIT CONDUIT(S) SHALL BE RUN 36" BELOW FINISHED GRADE.

d. IN ALL MECHANICAL ROOMS, ALL CONDUIT AND BOXES ARE TO BE SURFACE MOUNTED.

e. THE CONTRACTOR SHALL PROVIDE WEATHER PROOF / FIRE SEAL AS REQUIRED ON ALL EXTERIOR WALL PENETRATIONS.

f. IT IS THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR TO PROVIDE ANY NECESSARY COMPONENTS (i.e. BOOSTER PANELS) AND MAKE ALL THE NECESSARY CONNECTIONS FROM THE NEW FIRE ALARM DEVICES AND JUNCTION BOX TO THE EXISTING FIRE ALARM CONTROL PANEL IN THE EXISTING ELECTRICAL ROOM AND THE TO ENSURE A FULLY FUNCTIONAL CAMPUS WIDE SYSTEM.

g. ALL PHASING OF WORK SHALL BE SCHEDULED WITH THE OWNER AND ARCHITECT PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL SCHEDULE ALL OUTAGES WITH THE OWNER AT LEAST (14) DAYS IN ADVANCE AND ANY GIVEN OUTAGE SHALL NOT BE A DURATION IN EXCESS OF (8) HOURS.

h. CONTRACTOR SHALL COORDINATE ALL UNDERGROUND WORK WITH OTHER EXISTING/NEW UTILITIES TO AVOID CONFLICT.

LIGHTING SYMBOL LEGEND

SYMBOL	DESCRIPTION
	"LED" LIGHTING FIXTURE. LETTER(S) DENOTE TYPE – SEE LIGHTING FIXTURE SCHEDULE.
	"LED" LIGHTING FIXTURE WITH INTEGRAL BATTERY BACKUP.
	LED LIGHTING FIXTURE. LETTER(S) DENOTE TYPE – SEE LIGHTING FIXTURE SCHEDULE.
	"LED" EXIT LIGHT. DARKENED QUADRANTS INDICATE ILLUMINATED FACES, ARROWS AS INDICATED. LETTER(S) DENOTE TYPE – SEE LIGHTING FIXTURE SCHEDULE.
$	20 AMP, 120/277 VAC SINGLE POLE TOGGLE SWITCH – FLUSH WALL MOUNTED 48" A.F.F. UNLESS NOTED OTHERWISE. SUBSCRIPT INDICATES AS FOLLOWS: 3 – 20 AMP, 120/277 VAC THREE WAY TOGGLE SWITCH 4 – 20 AMP, 120/277 VAC FOUR WAY TOGGLE SWITCH DT – DUAL TECHNOLOGY MOTION SENSOR WALL SWITCH. WATTSTOPPER DW-100. TIME DELAY DURATION SHALL BE 20 MINUTES MAXIMUM. PROGRAM FOR "MANUAL ON". DTA – DUAL TECHNOLOGY MOTION SENSOR WALL SWITCH. WATTSTOPPER DW-100. TIME DELAY DURATION SHALL BE 20 MINUTES MAXIMUM. PROGRAM FOR "AUTOMATIC ON". DT3 – MULTI-WAY DUAL TECHNOLOGY MOTION SENSOR WALL SWITCH. WATTSTOPPER DW-103. TIME DELAY DURATION SHALL BE 20 MINUTES MAXIMUM. PROGRAM FOR "MANUAL ON". M – 30 AMP SWITCH EQUAL TO HUBBELL HBL7832D OR HBL7810D, AS REQUIRED. PROVIDE PHENOLIC LABEL. MO – LOW VOLTAGE MOMENTARY TOGGLE SWITCH EQUAL TO WATTSOPPER LVS-1 FOR "MANUAL ON" CONTROL OF CEILING MOUNTED OCCUPANCY SENSOR. MOD – LOW VOLTAGE MANUAL ON AND DIMMING WALL SWITCH EQUAL TO WATTSTOPPER DCLV2. SEE LIGHTING PLANS AND DETAILS FOR ADDITIONAL REQUIREMENTS. PROGRAM FOR "MANUAL ON". PROVIDE ALL 0-10V WIRING AS REQUIRED. D – 0-10V ON/OFF/DIMMING WALL SWITCH. SEE LIGHTING PLANS AND DETAILS FOR ADDITIONAL REQUIREMENTS. LVX – LOW VOLTAGE MOMENTARY WALL SWITCH COMPATIBLE WITH RELAY PANEL. SEE LIGHTING PLANS AND DETAILS FOR ADDITIONAL REQUIREMENTS. PROGRAM FOR "MANUAL ON" AND "AUTOMATIC OFF". DTD – DUAL TECHNOLOGY MOTION SENSOR WALL SWITCH. WATTSTOPPER DW-311. TIME DELAY DURATION SHALL BE 20 MINUTES MAXIMUM. PROGRAM FOR "MANUAL ON". PROVIDE ALL 0-10V WIRING AS REQUIRED.
	DUAL TECHNOLOGY CEILING-MOUNTED 360° OCCUPANCY SENSOR, WATTSTOPPER DT-300. SEE LIGHTING CONTROL WIRING DIAGRAM FOR ADDITIONAL INFORMATION. MOUNT AT LOCATION AS INDICATED ON PLANS. DEVICE SHALL BE PROGRAMMED FOR "AUTOMATIC ON" (UNLESS INDICATED OTHERWISE ON PLANS). PROGRAM SUCH THAT BOTH TECHNOLOGIES ARE REQUIRED TO TRIGGER LIGHTS "ON" AND EITHER TECHNOLOGY SHALL "HOLD" LIGHTS "ON". SEE PLANS FOR SENSOR LOCATIONS THAT ARE "MANUAL ON" ONLY. TIME DELAY DURATION SHALL BE 20 MINUTES MAXIMUM. SEE MANUFACTURERS INSTRUCTIONS FOR APPROPRIATE DIP SWITCH SETTINGS.
HB	PASSIVE INFRARED, LOW VOLTAGE, HIGH BAY, CEILING-MOUNTED 360° OCCUPANCY SENSOR, WATTSTOPPER HB300B-L3. SEE LIGHTING CONTROL WIRING DIAGRAM FOR ADDITIONAL INFORMATION. MOUNT AT LOCATION AS INDICATED ON PLANS. DEVICE SHALL BE PROGRAMMED FOR "AUTOMATIC ON" (UNLESS INDICATED OTHERWISE ON PLANS). SEE PLANS FOR SENSOR LOCATIONS THAT ARE "MANUAL ON" ONLY. TIME DELAY DURATION SHALL BE 20 MINUTES MAXIMUM. SEE MANUFACTURERS INSTRUCTIONS FOR APPROPRIATE DIP SWITCH SETTINGS.
PP	POWER PACK RELAY FOR CONTROL OF LIGHTING CONTROLS, EQUAL TO WATTSTOPPER CAT# BZ-150. MOUNT DEVICE IN AN ACCESSIBLE LOCATION.
ODP	OUTDOOR PIR MOTION SENSOR WITH DAYLIGHT PHOTO CONTROL AND DIMMING EQUAL TO WATTSTOPPER FSP-211. SEE LIGHTING PLANS FOR ADDITIONAL INFORMATION. PROVIDE ALL 0-10V WIRING AS REQUIRED.

SYMBOLS LEGEND GENERAL NOTES:

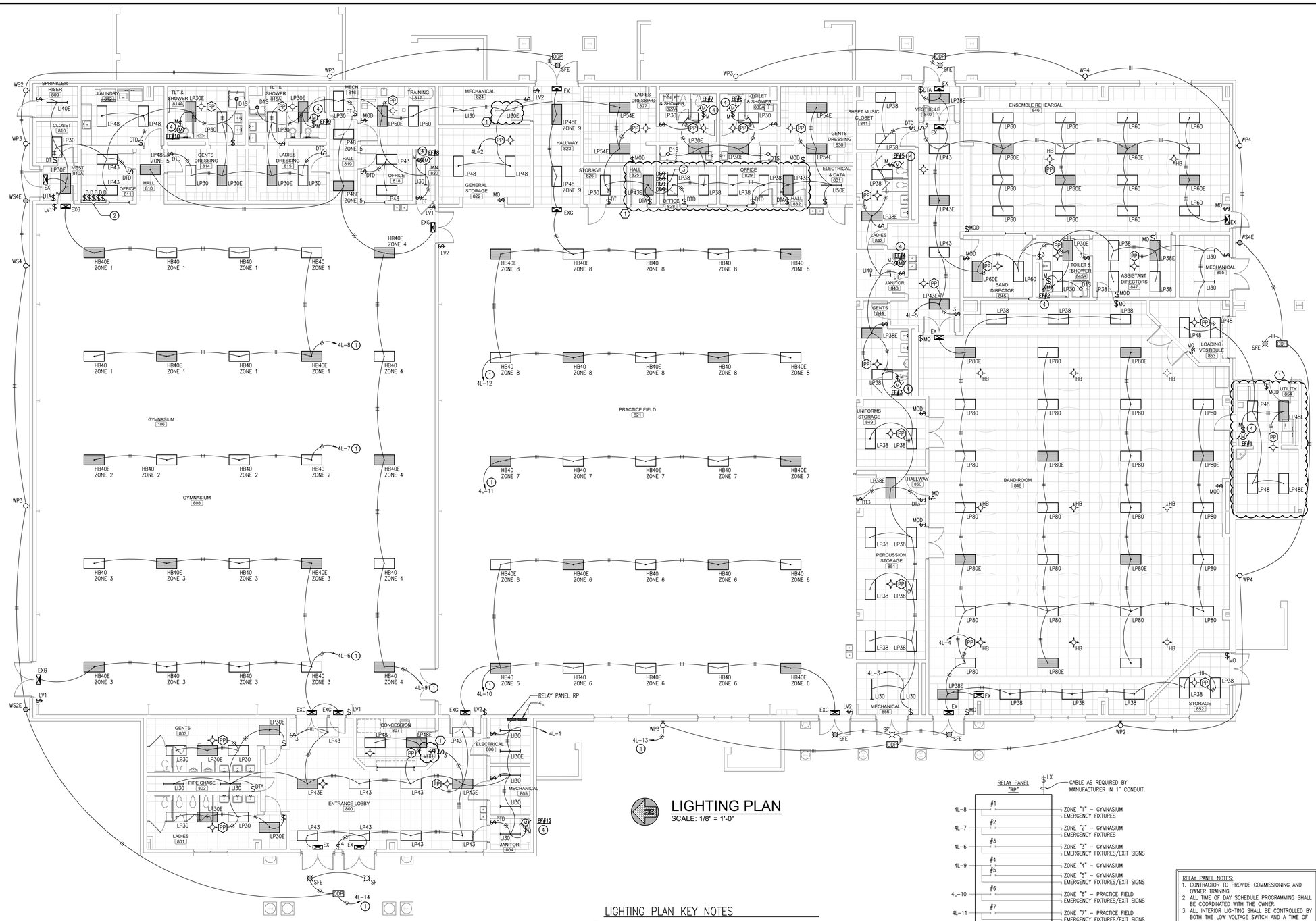
1. ALL DEVICES ARE TO BE FLUSH MOUNTED.
2. MOUNTING HEIGHTS ARE FROM THE CENTER LINE OF THE DEVICE.
3. ALL SINGLE GANG AND TWO GANG DEVICES SHALL USE A 4" SQ. BOX WITH EXTENSION RING.
4. ALL MULTI – GANG DEVICES SHALL USE A COMMON COVER PLATE COLORS FOR ALL DEVICES (i.e. SWITCHES, RECEPTACLES, TELEPHONE OUTLETS, ETC.) SHALL BE GRAY WITH STAINLESS STEEL COVER PLATES.
5. LIGHTING CONTROL SYSTEM SHALL BE PROGRAMMED BY A CERTIFIED LIGHTING CONTROLS COMMISSIONING INSTALLER.
6. CONTRACTOR SHALL REFERENCE DETAIL SHEET FOR LOW VOLTAGE LIGHTING SWITCH WIRING REQUIREMENTS.
7. CONTRACTOR SHALL REFERENCE DETAIL SHEET FOR LIGHTING CONTROL WIRING REQUIREMENTS.

CONTRACTOR SHALL PROVIDE A MINIMUM OF 4 HOURS OWNER TRAINING ON THE LIGHTING CONTROL SYSTEM BY A FACTORY CERTIFIED REPRESENTATIVE.

CONTRACTOR SHALL SUBMIT AN OCCUPANCY SENSOR LAYOUT ON A FLOOR PLAN AS PART OF THE SHOP DRAWINGS.

SYSTEMS SYMBOL LEGEND

SYMBOL	DESCRIPTION
D1	WIRELESS SMART TV POWER AND DATA. COORDINATE ELEVATION WITH ARCHITECT PRIOR TO ANY ROUGH-IN. LOCATIONS SHOWN ON PLAN ARE APPROXIMATIONS ONLY AND SHALL NOT BE USED FOR SPECIFIC ROUGH-IN LOCATIONS. ALL ROUGH-IN LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO BEGINNING ANY WORK. SMART TV IS PROVIDED BY OTHERS, 120V POWER AND DATA IS TO BE CONNECTED BY THE ELECTRICAL CONTRACTOR. PROVIDE AND INSTALL 120V 20A RECEPTACLE AS RECOMMENDED BY THE TV MANUFACTURER. PROVIDE POWER CONNECTION TO LOCAL RECEPTACLE CIRCUIT. FIELD COORDINATE RECEPTACLE MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN, RECEPTACLE SHALL BE CONCEALED BEHIND TV. CONTRACTOR SHALL INSTALL D2 DATA OUTLET CONCEALED BEHIND SMART TV. FIELD COORDINATE DATA OUTLET MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.
IC	INTERCOM SYSTEM WALL MOUNTED CALL STATION. MOUNT 48" AFF.
	WEATHER-PROOF, WALL MOUNTED, INTERCOM SYSTEM SPEAKER. MOUNT 9'-0" AFF.
S	INTERCOM SYSTEM CEILING MOUNTED SPEAKER.
C	WIRELESS WALL ANALOG 120V POWERED CLOCK, MOUNTED 1' ABOVE MARKER BOARD. COORDINATE EXACT LOCATION WITH ARCHITECT. PROVIDE ALL POWER CONNECTIONS AS REQUIRED TO POWER CIRCUIT IN SERVING SPACE. COORDINATE WITH CLOCK MANUFACTURER FOR RECEPTACLE REQUIREMENTS PRIOR TO ANY ROUGH-IN. PROVIDE GFCI TYPE RECEPTACLE WHERE REQUIRED BY CODE.
D1	DATA OUTLET IN A 4" SQUARE BOX WITH 1 GANG EXTENSION RING. DEVICE MOUNTED 18" AFF UNLES

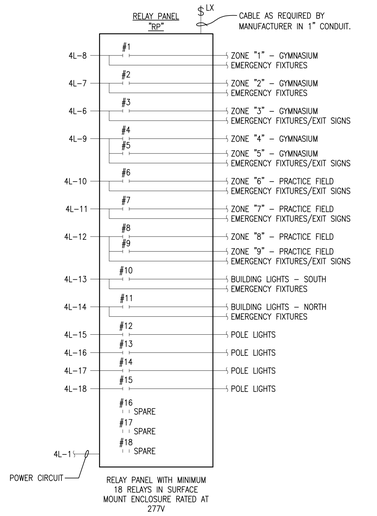


LIGHTING PLAN

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

LIGHTING PLAN KEY NOTES

1. THROUGH RELAY PANEL RP.
2. DIMMER SWITCHES FOR CONTROL OF EACH ZONE IN THE GYM. PROVIDE LOW VOLTAGE WIRING IN 1/2" CONDUIT TO EACH FIXTURE IN THE CORRESPONDING ZONE. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.
3. DIMMER SWITCHES FOR CONTROL OF EACH ZONE IN THE PRACTICE FIELD. PROVIDE LOW VOLTAGE WIRING IN 1/2" CONDUIT TO EACH FIXTURE IN THE CORRESPONDING ZONE. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.
4. PROVIDE CONNECTION TO 277V LIGHTING CIRCUIT. PROVIDE POWER RELAY FOR CONTROL OF 120V FAN.



RELAY PANEL CONNECTION DIAGRAM

SCALE: NONE

RELAY PANEL NOTES:
1. CONTRACTOR TO PROVIDE COMMISSIONING AND OWNER TRAINING.
2. ALL TIME OF DAY SCHEDULE PROGRAMMING SHALL BE COORDINATED WITH THE OWNER.
3. ALL INTERIOR LIGHTING SHALL BE CONTROLLED BY BOTH THE LOW VOLTAGE SWITCH AND A TIME OF DAY SCHEDULE AS PROVIDED BY THE OWNER.
4. ALL EXTERIOR LIGHTING SHALL BE CONTROLLED BY A TIME OF DAY SCHEDULE AS PROVIDED BY THE OWNER.

RELAY PANEL SWITCH DESCRIPTIONS

$_{LV1}$ SIX BUTTON SWITCH CONTROLS RELAYS #1, #2, #3, #4, & #5. ONE BUTTON FOR EACH RELAY AND ONE ON/OFF BUTTON FOR ALL RELAYS ON SWITCH.

$_{LV2}$ FIVE BUTTON SWITCH CONTROLS RELAYS #6, #7, #8, & #9. ONE BUTTON FOR EACH RELAY AND ONE ON/OFF BUTTON FOR ALL RELAYS ON SWITCH.

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ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

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HILARY M. THOMAS
27723
No. 27723
STATE OF ALABAMA
REGISTERED ARCHITECT
ARCHITECTS

SHEET TITLE : LIGHTING PLAN

MCKEE JOB # : 23-195

DRAWN BY : RDH

DATE: 10-11-2023

REVISED DATE: 1 11-20-2023

REVISED DATE:

REVISED DATE:

H.M. YONGE & ASSOCIATES, INC.
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SHEET NO. : E1.1

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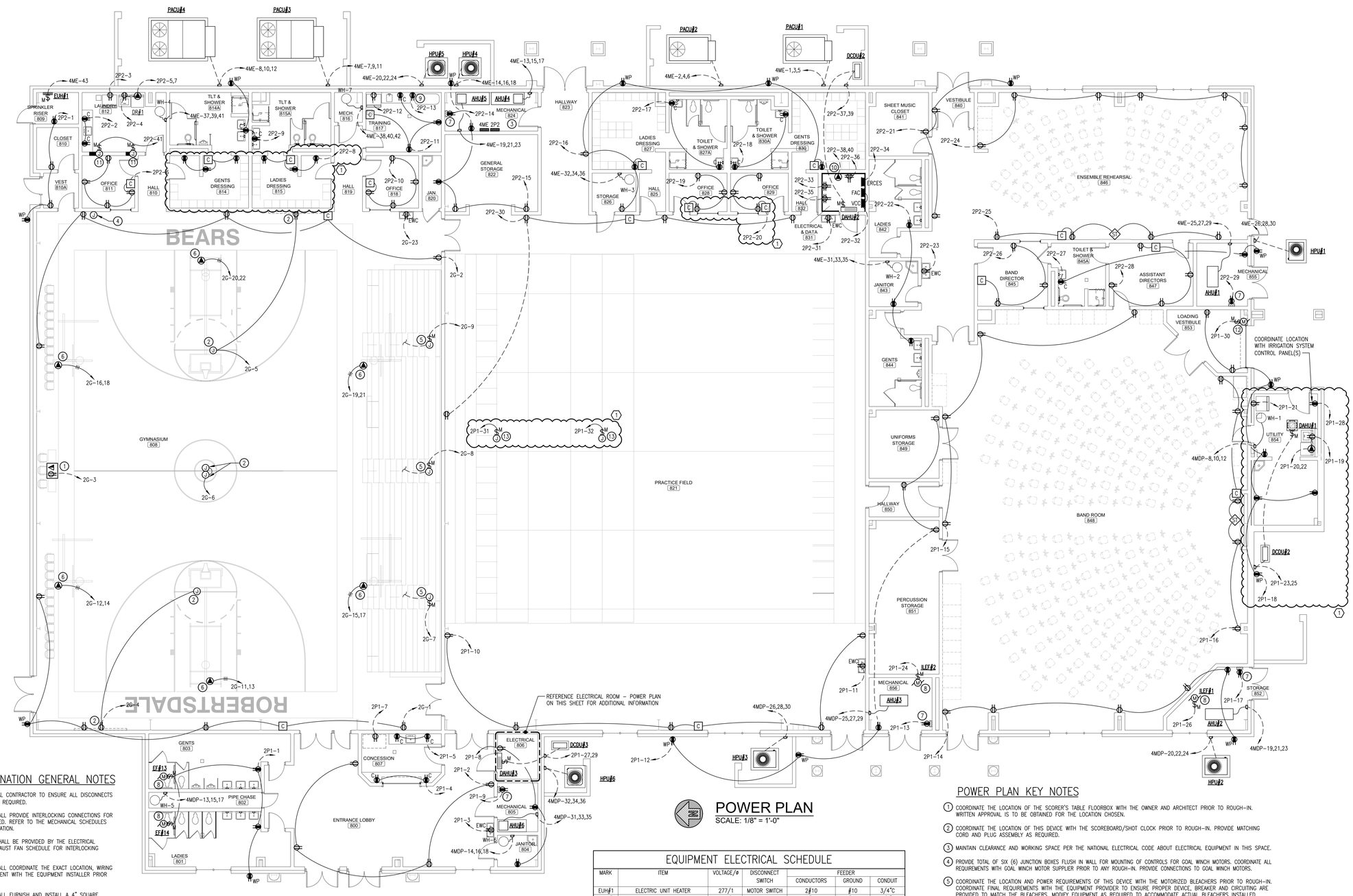
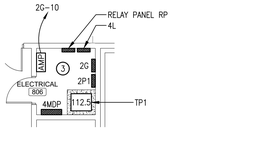


POWER PLAN
SCALE: 1/8" = 1'-0"

EQUIPMENT COORDINATION GENERAL NOTES

1. COORDINATE WITH THE MECHANICAL CONTRACTOR TO ENSURE ALL DISCONNECTS AND/OR VFD'S ARE PROVIDED AS REQUIRED.
2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE INTERLOCKING CONNECTIONS FOR ALL HVAC EQUIPMENT AS REQUIRED. REFER TO THE MECHANICAL SCHEDULES FOR EXACT INTERLOCKING INFORMATION.
3. ALL EXHAUST FAN INTERLOCKS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. REFER TO THE EXHAUST FAN SCHEDULE FOR INTERLOCKING REQUIREMENTS.
4. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT LOCATION, WIRING AND CONNECTION OF ALL EQUIPMENT WITH THE EQUIPMENT INSTALLER PRIOR TO INSTALLATION.
5. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A 4" SQUARE OUTLET BOX WITH SINGLE GANG PLASTER RING FOR EACH THERMOSTAT. PLASTER RING SHALL BE MOUNTED IN A VERTICAL ORIENTATION. 56" A.F.F. TO CENTER UNLESS NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A 3/4" CONDUIT FROM THERMOSTAT OUTLET BOX UP IN WALL TO 6" ABOVE CEILING HEIGHT AND OUT OF WALL. EXTEND CONDUIT TO AREA WITH ACCESSIBLE CEILING. LABEL CONDUIT ABOVE ACCESSIBLE CEILING WITH SERVED THERMOSTAT LOCATION. CONDUIT SHALL HAVE NYLON INSULATING BUSHING ON EACH END. PROVIDE PULL STRING IN CONDUIT. REFER TO MECHANICAL DRAWINGS FOR THERMOSTAT LOCATIONS. MOUNT UNIT HEATER THERMOSTATS AS REQUIRED.
6. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A DEDICATED, 20 AMP, 120 VOLT CIRCUIT FOR EACH HVAC CONTROL PANEL. REFER TO MECHANICAL DRAWINGS FOR HVAC CONTROL PANEL LOCATIONS.
7. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF ALL EQUIPMENT SITE SWITCHES PRIOR TO INSTALLATION.
8. ALL DISCONNECTS FOR EQUIPMENT SHALL BE MOUNTED SECURELY TO THE FLOOR OR STRUCTURE. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL UNISTRUT AND MOUNTING HARDWARE AS REQUIRED TO MOUNT THE DISCONNECTS. ALL EXTERIOR DISCONNECTS SHALL BE NEMA-3R.
9. CIRCUIT BREAKERS SERVING EQUIPMENT ARE BASIS OF DESIGN ONLY. EXACT CIRCUIT BREAKER AND CONDUCTOR SIZES SHALL BE COORDINATED WITH ACTUAL EQUIPMENT BEING INSTALLED PRIOR TO ORDERING OF PANELBOARD. ANY COST INCREASE ASSOCIATED WITH INCREASED CIRCUIT REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE EQUIPMENT INSTALLER. ELECTRICIAN SHALL SIZE CIRCUIT BREAKERS, CONDUCTORS, CONDUITS, AND DISCONNECTS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND INDICATE THE APPROPRIATE CHANGES ON AS-BUILT DOCUMENTS.
10. IN ALL MECHANICAL ROOMS, COORDINATE WITH THE MECHANICAL CONTRACTOR TO ENSURE CODE REQUIRED CLEARANCES AND WORKING SPACES ARE MAINTAINED AT ALL ELECTRICAL EQUIPMENT.



ELECTRICAL ROOM - POWER PLAN
SCALE: 1/8" = 1'-0"

EQUIPMENT ELECTRICAL SCHEDULE

MARK	ITEM	VOLTAGE/#	DISCONNECT SWITCH	FEEDER		
				CONDUCTORS	GROUND	CONDUIT
EUH#1	ELECTRIC UNIT HEATER	277/1	MOTOR SWITCH	2#10	#10	3/4"C
DAHU#1	DUCTLESS SPLIT INDOOR UNIT	208/1	MOTOR SWITCH	2#12	#12	3/4"C
DCDU#1	DUCTLESS SPLIT OUTDOOR UNIT	208/1	30/2 N3R	2#12	#12	3/4"C
DAHU#2	DUCTLESS SPLIT INDOOR UNIT	208/1	MOTOR SWITCH	2#12	#12	3/4"C
DCDU#2	DUCTLESS SPLIT OUTDOOR UNIT	208/1	30/2 N3R	2#12	#12	3/4"C
DAHU#3	DUCTLESS SPLIT INDOOR UNIT	208/1	MOTOR SWITCH	2#12	#12	3/4"C
DCDU#3	DUCTLESS SPLIT OUTDOOR UNIT	208/1	30/2 N3R	2#12	#12	3/4"C
AHU#1	AIR HANDLING UNIT	480/3	30/3 N1	3#10	#10	3/4"C
HPU#1	HEAT PUMP UNIT	480/3	30/3 N3R	3#12	#12	3/4"C
AHU#2	AIR HANDLING UNIT	480/3	60/3 N1	3#8	#10	3/4"C
HPU#2	HEAT PUMP UNIT	480/3	30/3 N3R	3#10	#10	3/4"C
AHU#3	AIR HANDLING UNIT	480/3	60/3 N1	3#8	#10	3/4"C
HPU#3	HEAT PUMP UNIT	480/3	30/3 N3R	3#10	#10	3/4"C
AHU#4	AIR HANDLING UNIT	480/3	30/3 N1	3#12	#12	3/4"C
HPU#4	HEAT PUMP UNIT	480/3	30/3 N3R	3#12	#12	3/4"C
AHU#5	AIR HANDLING UNIT	480/3	30/3 N1	3#12	#12	3/4"C
HPU#5	HEAT PUMP UNIT	480/3	30/3 N3R	3#12	#12	3/4"C
AHU#6	AIR HANDLING UNIT	480/3	30/3 N1	3#10	#10	3/4"C
HPU#6	HEAT PUMP UNIT	480/3	30/3 N3R	3#12	#12	3/4"C
PACU#1	PACKAGED AIR CONDITIONING UNIT	480/3	60/3 N3R	3#8	#10	3/4"C
PACU#2	PACKAGED AIR CONDITIONING UNIT	480/3	60/3 N3R	3#8	#10	3/4"C
PACU#3	PACKAGED AIR CONDITIONING UNIT	480/3	60/3 N3R	3#8	#10	3/4"C
PACU#4	PACKAGED AIR CONDITIONING UNIT	480/3	60/3 N3R	3#8	#10	3/4"C
WH-1	WATER HEATER	480/3	30/3 N1	3#12	#12	3/4"C
DR#1	ELECTRIC DRYER	208/1	RECEPT	3#10	#10	3/4"C

EQUIPMENT ELECTRICAL SCHEDULE NOTES:

1. COORDINATE WITH THE MECHANICAL CONTRACTOR TO ENSURE ALL DISCONNECTS AND/OR VFD'S ARE PROVIDED AS REQUIRED.
2. DUCTLESS SPLIT SYSTEM INDOOR UNIT RECEIVES POWER FROM OUTDOOR UNIT. COORDINATE REQUIREMENTS WITH THE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
3. REFERENCE TYPICAL EXTERIOR AC/HP ELECTRICAL CONNECTION DETAIL FOR EXTERIOR DISCONNECT MOUNTING AND CONNECTION REQUIREMENTS FOR ALL EXTERIOR HVAC EQUIPMENT.
4. DUPLICATE VOLTAGE, DISCONNECT, AND FEEDER SIZE FOR WH-2, WH-3, WH-4, WH-5, WH-6, & WH-7.

POWER PLAN KEY NOTES

1. COORDINATE THE LOCATION OF THE SCORER'S TABLE FLOORBOX WITH THE OWNER AND ARCHITECT PRIOR TO ROUGH-IN. WRITTEN APPROVAL IS TO BE OBTAINED FOR THE LOCATION CHOSEN.
2. COORDINATE THE LOCATION OF THIS DEVICE WITH THE SCOREBOARD/SHOT CLOCK PRIOR TO ROUGH-IN. PROVIDE MATCHING CORD AND PLUG ASSEMBLY AS REQUIRED.
3. MAINTAIN CLEARANCE AND WORKING SPACE PER THE NATIONAL ELECTRICAL CODE ABOUT ELECTRICAL EQUIPMENT IN THIS SPACE.
4. PROVIDE TOTAL OF SIX (6) JUNCTION BOXES FLUSH IN WALL FOR MOUNTING OF CONTROLS FOR GOAL WINCH MOTORS. COORDINATE ALL REQUIREMENTS WITH GOAL WINCH MOTOR SUPPLIER PRIOR TO ANY ROUGH-IN. PROVIDE CONNECTIONS TO GOAL WINCH MOTORS.
5. COORDINATE THE LOCATION AND POWER REQUIREMENTS OF THIS DEVICE WITH THE MOTORIZED BLEACHERS PRIOR TO ROUGH-IN. COORDINATE FINAL REQUIREMENTS WITH THE EQUIPMENT PROVIDER TO ENSURE PROPER DEVICE, BREAKER AND CIRCUITING ARE PROVIDED TO MATCH THE BLEACHERS. MODIFY EQUIPMENT AS REQUIRED TO ACCOMMODATE ACTUAL BLEACHERS INSTALLED. PROVIDE A 3/4" CONDUIT WITH PULL STRING TO LOCATION DESIGNATED BY THE OWNER FOR CONTROL OF BLEACHERS.
6. COORDINATE DEVICE LOCATION WITH BASKETBALL GOAL WINCH. PROVIDE NEMA L14-20 RECEPTACLE. MOUNT DEVICE WITHIN 3'-0" OF WINCH. COORDINATE FINAL POWER REQUIREMENTS WITH SUPPLIED WINCH TO ENSURE PROPER ELECTRICAL EQUIPMENT IS PROVIDED. PROVIDE 3/4" CONDUIT WITH PULLSTRING TO LOCATION AS REQUIRED BY EQUIPMENT INSTALLER FOR WINCH CONTROL.
7. COORDINATE THE FINAL LOCATION AND POWER REQUIREMENTS OF THE HVAC CONTROL PANEL WITH THE CONTROLS CONTRACTOR PRIOR TO ROUGH IN. CIRCUIT NUMBER AS INDICATED. CONNECT TO ADDITIONAL HVAC CONTROL PANELS ON SAME CIRCUIT.
8. PROVIDE CONNECTION TO MECHANICAL EQUIPMENT AS INDICATED ON MECHANICAL SCHEDULES. PROVIDE POWER RELAY AT VOLTAGE REQUIRED BY THE MECHANICAL CONTRACTOR FOR CONTROL OF 120V FAN. COORDINATE ALL WORK WITH THE MECHANICAL CONTRACTOR.
9. COORDINATE FINAL REQUIREMENTS OF WHIRLPOOL WITH THE OWNER TO ENSURE PROPER BREAKER, CIRCUIT, AND DISCONNECT SIZE ARE PROVIDED.
10. COORDINATE FINAL POWER REQUIREMENTS WITH THE OWNER TO ENSURE PROPER BREAKER SIZE, CIRCUIT SIZE, AND RECEPTACLE SIZE ARE ALL PROVIDED.
11. COORDINATE DEVICE LOCATIONS WITH SMOKE DAMPER.
12. PROVIDE POWER CONNECTION AS REQUIRED TO MOTORIZED BAY DOOR.
13. COORDINATE THE FINAL LOCATION AND POWER REQUIREMENTS OF THE INDOOR RETRACTABLE BATTING TUNNEL WITH EQUIPMENT INSTALLER PRIOR TO ROUGH IN. ADJUST BREAKER AND WIRE SIZE AS REQUIRED. HOMERUN SHALL BE 2#10, 1#10G, 3/4"C. PROVIDE ADDITIONAL 3/4" CONDUIT WITH PULLSTRING FOR CONTROL WIRING TO LOCATION AS DESIGNATED BY OWNER. (1)

AUTOMATIC RECEPTACLE CONTROLS HAVE NOT BEEN PROVIDED; IN ACCORDANCE WITH THE EXCEPTION TO ASHRAE 90.1 – 2013, SECTION 8.4.2

BUILDING METERING HAS NOT BEEN PROVIDED; IN ACCORDANCE WITH THE EXCEPTION TO ASHRAE 90.1 – 2013, SECTION 8.4.3

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ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

McKEE and ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

SHEET TITLE : POWER PLAN

MCKEE JOB # : 23-195

DRAWN BY : RDH

DATE: 10-11-2023

REVISED DATE: (1) 11-20-2023

REVISED DATE:

REVISED DATE:

SHEET NO. : E2.1

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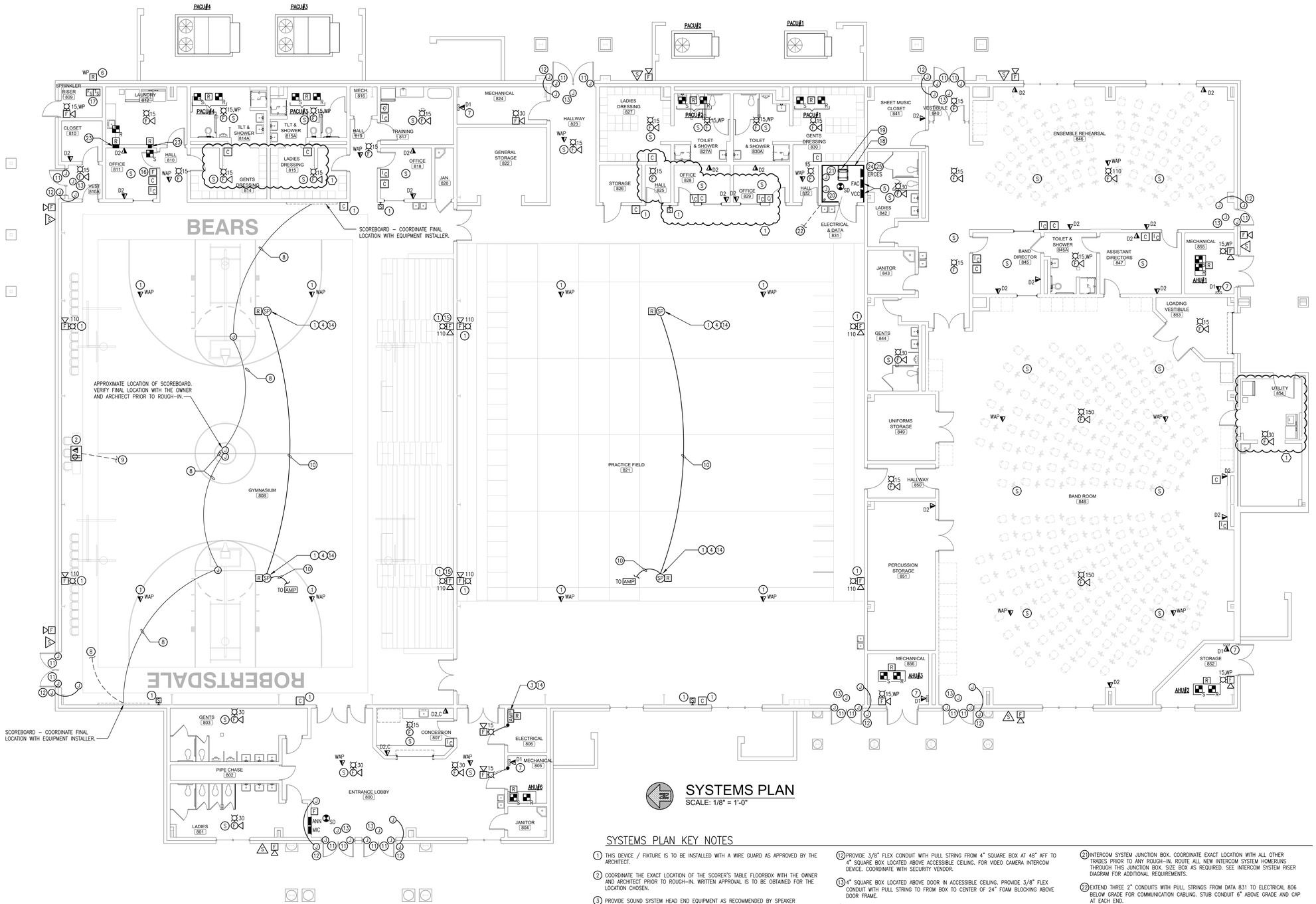
- Tuesday, November 28, 2023 8:24:31 AM



SYSTEMS PLAN
SCALE: 1/8" = 1'-0"

SYSTEMS PLAN KEY NOTES

1. THIS DEVICE / FIXTURE IS TO BE INSTALLED WITH A WIRE GUARD AS APPROVED BY THE ARCHITECT.
2. COORDINATE THE EXACT LOCATION OF THE SCORER'S TABLE FLOORBOX WITH THE OWNER AND ARCHITECT PRIOR TO ROUGH-IN. WRITTEN APPROVAL IS TO BE OBTAINED FOR THE LOCATION CHOSEN.
3. PROVIDE SOUND SYSTEM HEAD END EQUIPMENT AS RECOMMENDED BY SPEAKER MANUFACTURER. PROVIDE A 1" CONDUIT WITH PULL STRING TO CEILING MOUNTED SPEAKERS IN GYM. ALSO PROVIDE A 1" CONDUIT WITH PULL STRING TO SCORER'S TABLE FLOOR BOX. PROVIDE SPEAKER CONTROLS AS RECOMMENDED BY SPEAKER MANUFACTURER.
4. ORIENT SPEAKERS PER MANUFACTURER'S RECOMMENDATIONS TO PROVIDE OPTIMAL SOUND. PROVIDE SAFETY MOUNTING HARDWARE AND WIRE GUARDS AS REQUIRED. COORDINATE THE LOCATION WITH THE BEAMS/JOISTS/CEILING AND CENTER THE SPEAKERS WITH THE ROOM. THE LOUDSPEAKERS SHALL BE SOUNDSPHERE 110A OR EQUAL. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. NEW FIRE ALARM SYSTEM CONTROL PANEL WITH VOICE COMMAND CENTER.
6. ELECTRIC FIRE BELL. COORDINATE WITH FIRE PROTECTION INSTALLER. PROVIDE ALL CONNECTIONS AS REQUIRED.
7. DATA DROP FOR HVAC CONTROL PANEL. CONTRACTOR TO COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO ANY ROUGH-IN.
8. 3/4" CONDUIT WITH PULLSTRING BETWEEN SHOT CLOCKS AND SCOREBOARDS. PROVIDE SINGLE 1" CONDUIT WITH PULLSTRING TO SCORER'S TABLE FLOORBOX.
9. PROVIDE A 1" AND 1-1/4" CONDUIT WITH PULL STRING TO COMMUNICATIONS BACKBOARD FOR COMMUNICATIONS WIRING. COORDINATE FINAL REQUIREMENTS WITH THE OWNER PRIOR TO ROUGH-IN.
10. 3/4" CONDUIT WITH PULL STRING.
11. PROVIDE 3/8" FLEX CONDUIT WITH PULL STRING FROM 4" SQUARE BOX WITH 8" OF FOAM BLOCKING LOCATED IN DOOR FRAME AT CENTER HINGE UP TO ABOVE ACCESSIBLE CEILING. FOR ELECTRIC LOCKING DOOR. COORDINATE WITH SECURITY VENDOR.
12. PROVIDE 3/8" FLEX CONDUIT WITH PULL STRING FROM 4" SQUARE BOX AT 48" AFF TO 4" SQUARE BOX LOCATED ABOVE ACCESSIBLE CEILING. FOR VIDEO CAMERA INTERCOM DEVICE. COORDINATE WITH SECURITY VENDOR.
13. 4" SQUARE BOX LOCATED ABOVE DOOR IN ACCESSIBLE CEILING. PROVIDE 3/8" FLEX CONDUIT WITH PULL STRING TO FROM BOX TO CENTER OF 24" FOAM BLOCKING ABOVE DOOR FRAME.
14. SOUND SYSTEM SHALL BE INTEGRATED INTO THE FIRE ALARM SYSTEM. FIRE ALARM SIGNALS SHALL BE BROADCAST THROUGH THE SOUND SYSTEM IN THE EVENT OF AN EMERGENCY. SOUND SYSTEM INSTALLER SHALL COORDINATE WITH THE FIRE ALARM CONTRACTOR FOR ALL INTERCONNECTION REQUIREMENTS. PROVIDE BATTERY BACKUP SYSTEM AS REQUIRED.
15. COORDINATE MOUNTING HEIGHT OF DEVICE WITH BLEACHERS. DEVICE SHALL BE LOCATED 80" ABOVE TOP LEVEL OF BLEACHERS.
16. COORDINATE WITH OWNER TO PROVIDE PULL STATION IN A CONSTANTLY ATTENDED LOCATION.
17. COORDINATE QUANTITY AND LOCATION OF FLOW AND TAMPER SWITCHES WITH FIRE PROTECTION INSTALLER PRIOR TO ROUGH-IN.
18. PROVIDE 3/4" x 4' PLYWOOD BACKBOARD SPANNING EACH WALL OF THE DATA ROOM. PROVIDE 6" CLEARANCE ABOVE FLOOR. ALL POWER AND DATA RECEPTACLES SHALL BE FLUSH WITH BACKBOARD. PROVIDE #6 GROUND IN 3/4" EMT CONDUIT FROM SERVING ELECTRICAL PANEL TO BACKBOARD. COIL 10' SLACK AT BACKBOARD. PROVIDE GROUND BUS BAR (HARGER GBI SERIES) AS REQUIRED BY COMMUNICATIONS CONTRACTOR.
19. FULL HEIGHT FLOOR MOUNT EQUIPMENT RACK WITH EQUIPMENT MOUNTING HARDWARE AS REQUIRED. REFER TO RACK ELEVATION DETAIL. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT INCLUDING BUT NOT LIMITED TO SWITCHES, ROUTERS, FIBER DRAWERS, PATCH PANELS, JACKS, CORDS...ETC AS REQUIRED TO INTERFACE WITH EXISTING DATA SYSTEM. INSTALLER SHALL HAVE RCDD ON STAFF. SEE SITE PLAN FOR INCOMING FIBER CONNECTION REQUIREMENTS.
20. CLOCK SYSTEM WIRELESS TRANSMITTER. COORDINATE EXACT LOCATION WITH ALL OTHER TRADES PRIOR TO ANY ROUGH-IN. SIZE BOX AS REQUIRED.
21. INTERCOM SYSTEM JUNCTION BOX. COORDINATE EXACT LOCATION WITH ALL OTHER TRADES PRIOR TO ANY ROUGH-IN. ROUTE ALL NEW INTERCOM SYSTEM HOMERUNS THROUGH THIS JUNCTION BOX. SIZE BOX AS REQUIRED. SEE INTERCOM SYSTEM RISER DIAGRAM FOR ADDITIONAL REQUIREMENTS.
22. EXTEND THREE 2" CONDUITS WITH PULL STRINGS FROM DATA 831 TO ELECTRICAL 806 BELOW GRADE FOR COMMUNICATION CABLING. STUB CONDUIT 6" ABOVE GRADE AND CAP AT EACH END.
23. SMOKE DAMPER. PROVIDE ALL CONNECTIONS AS REQUIRED TO FIRE ALARM CONTROL PANEL ALONG WITH DUCT DETECTOR TO CLOSE DAMPER. COORDINATE CONNECTION REQUIREMENTS WITH MECHANICAL.
24. ALLOWANCE #1: TESTING SHALL BE PERFORMED TO DETERMINE THE NEED FOR AN EMERGENCY RADIO COMMUNICATION ENHANCEMENT SYSTEM (ERCES). PROVIDE AN ALLOWANCE OF $4,500.00 FOR ERRC SYSTEM TESTING.
25. ALLOWANCE #2: PROVIDE A COMPLETE EMERGENCY RADIO COMMUNICATION ENHANCEMENT SYSTEM (ERCES). PROVIDE ALL DEDICATED 120V POWER CONNECTIONS AS REQUIRED BY EQUIPMENT VENDOR. PROVIDE AN ALLOWANCE OF $150,000.00 FOR ERCES SYSTEM DESIGN AND INSTALLATION.

INTERCOM SPEAKERS AND CALL-IN STATIONS ARE NOT INDICATED WITH SPEAKER WIRING: CONTRACTOR SHALL PROVIDE INTERCOM WIRING BETWEEN SPEAKERS AND CALL-IN STATIONS. MAXIMUM FOUR SPEAKERS PER INTERCOM CIRCUIT, ONE SPEAKER WITH ONE CALL-IN STATION PER INTERCOM CIRCUIT, AND ONE OUTDOOR SPEAKER PER INTERCOM CIRCUIT. INTERCOM CIRCUIT HOMERUN SHALL BE RUN BACK TO DATA ROOM AND TERMINATED AT INTERCOM HEAD-END EQUIPMENT. REFERENCE INTERCOM RISER DIAGRAM FOR ADDITIONAL INFORMATION. INTERCOM SYSTEM REQUIREMENTS SHALL BE COORDINATED WITH THE SPECIFICATIONS AND INTERCOM SYSTEM INSTALLER.

CONTRACTOR SHALL COORDINATE WITH THE ARCHITECTURAL REFLECTED CEILING PLAN FOR ALL CEILING MOUNTED FIRE ALARM INTERCOM, AND DATA DEVICE LOCATIONS, PRIOR TO ANY ROUGH-IN.

SYSTEMS GENERAL NOTES

1. COORDINATE WITH THE MECHANICAL CONTRACTOR, THE EXACT LOCATION OF THE AIR HANDLER/ROOF TOP UNIT SHUTDOWNS (AT THE CONTROL PANEL OR AT THE UNIT).
2. VERIFY EXACT NUMBER AND LOCATION OF DUCT DETECTORS FROM MECHANICAL PLAN, NOT RISER DIAGRAM.
3. VERIFY EXACT NUMBER AND LOCATION OF TAMPER AND FLOW SWITCHES FROM PLUMBING PLANS, NOT RISER DIAGRAM.
4. VERIFY LOCATION AND MOUNTING HEIGHT OF ALL DEVICES WITH FURNITURE PLAN AND OWNER PRIOR TO ROUGH IN (SPECIFICALLY AT THE FURNITURE IN THE CLASSROOMS).

ADDITIONS TO ROBERTSDALE HIGH SCHOOL
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ARCHITECTS, INC.
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STATE OF ALABAMA
REGISTERED
No. 6467
ARCHITECT
ROBERT DAVID HOWARD
ARCHITECTS

SHEET TITLE : SYSTEMS PLAN

MCKEE JOB # : 23-195

DRAWN BY : RDH

DATE: 10-11-2023

REVISED DATE: 1 11-20-2023

REVISED DATE:

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H.M. YONGE & ASSOCIATES, INC.
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SHEET NO. : E3.1

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PANEL 4MDP SCHEDULE

NEMA 1 SURFACE MOUNT — (A) 19,078 SCA AVAILABLE
600A M.B. 480Y/277V 3ø 4W — 25,000 AIC RATING

CKT NO.	LOAD DESCRIPTION	BREAKER POLE	BREAKER AMP	KVA	KVA	BREAKER AMP	BREAKER POLE	LOAD DESCRIPTION	CKT NO.
1									2
3	PANEL 4L	3	60	33.0	183.2	300	3	PANEL 4ME	4
5									6
7									8
9	PANEL 2P1 (THROUGH XFMR TP1)	3	225	84.0	6.0	15	3	WATER HEATER WH-1	10
11									12
13									14
15	WATER HEATER WH-5	3	15	6.0	6.0	15	3	WATER HEATER WH-6	16
17									18
19									20
21	AIR HANDLING UNIT AHU#2	3	45	29.0	13.8	25	3	HEAT PUMP UNIT HPU#2	22
23									24
25									26
27	AIR HANDLING UNIT AHU#3	3	45	29.0	13.8	25	3	HEAT PUMP UNIT HPU#3	28
29									30
31									32
33	AIR HANDLING UNIT AHU#6	3	30	16.2	6.9	15	3	HEAT PUMP UNIT HPU#6	34
35									36
37									38
39	SPARE	3	100	·	·	125	3	SPACE	40
41									42
43									44
45	SPACE	3	125	·	·	125	3	SPACE	46
47									48
49									50
51	SPACE	3	30	·	·	30	3	SURGE PROTECTION DEVICE	52
53									54

CONNECTED LOAD 426.9 KVA

(A) PROVIDE PHENOLIC LABEL AFFIXED TO PANEL INDICATING THIS VALUE ALONG WITH THE DATE OF THE INSTALLATION.

PANEL 4ME SCHEDULE

NEMA 1 SURFACE MOUNT
400A M.L.O. 480Y/277V 3ø 4W — 18,000 AIC RATING

CKT NO.	LOAD DESCRIPTION	BREAKER POLE	BREAKER AMP	KVA	KVA	BREAKER AMP	BREAKER POLE	LOAD DESCRIPTION	CKT NO.
1									2
3	PACKAGED AIR CONDITIONING UNIT PACU#1	3	40	20.9	20.9	40	3	PACKAGED AIR CONDITIONING UNIT PACU#2	4
5									6
7									8
9	PACKAGED AIR CONDITIONING UNIT PACU#3	3	50	26.5	26.5	50	3	PACKAGED AIR CONDITIONING UNIT PACU#4	10
11									12
13									14
15	AIR HANDLING UNIT AHU#4	3	15	9.5	5.1	15	3	HEAT PUMP UNIT HPU#4	16
17									18
19									20
21	AIR HANDLING UNIT AHU#5	3	20	10.9	5.8	15	3	HEAT PUMP UNIT HPU#5	22
23									24
25									26
27	AIR HANDLING UNIT AHU#1	3	30	19.0	11.1	20	3	HEAT PUMP UNIT HPU#1	28
29									30
31									32
33	WATER HEATER WH-2	3	15	6.0	6.0	15	3	WATER HEATER WH-3	34
35									36
37									38
39	WATER HEATER WH-4	3	15	6.0	6.0	15	3	WATER HEATER WH-7	40
41									42
43	ELECTRIC UNIT HEATER - SPRINKLER	1	15	3.0					44
45	SPARE	1	20	·	·	20	3	SPARE	46
47	SPARE	1	20	·					48
49									50
51	SPACE	3	60	·	·	60	3	SPACE	52
53									54

CONNECTED LOAD 183.2 KVA

PANEL 4L SCHEDULE

NEMA 1, SURFACE MOUNT
100A M.L.O. 480Y/277V 3ø 4W — 18,000 AIC RATING

CKT NO.	LOAD DESCRIPTION	BREAKER POLE	BREAKER AMP	KVA	KVA	BREAKER AMP	BREAKER POLE	LOAD DESCRIPTION	CKT NO.
1	LTS/EF - ELEC, MECH, JANITOR, CONCESSION, LOBBY, GENTS, LADIES	1	20	0.9	2.3	20	1	LIGHTS/EF'S - EAST SIDE	2
3	LIGHTS/EF - MECH, PERC, HALL, UNIF, GENTS, JANITOR, LADIES, SHEET	1	20	1.1	3.2	20	1	LIGHTS - BAND ROOM, STORAGE	4
5	LIGHTS/EF - BAND DIR, ASSIST, UTIL TLT&SHWR, MECH, LOAD, ENSEMBLE	1	20	1.8	3.0	20	1	LIGHTS - GYMNASIUM WEST	6
7	LIGHTS - GYMNASIUM MIDDLE	1	20	1.5	3.0	20	1	LIGHTS - GYMNASIUM EAST	8
9	LIGHTS - GYM SEATING & HALLS	1	20	2.0	3.7	20	1	LIGHTS - PRACTICE FIELD WEST	10
11	LIGHTS - PRACTICE FIELD MIDDLE	1	20	1.9	3.8	20	1	LIGHTS - PRACTICE FIELD EAST, HALL	12
13	BUILDING LIGHTS - SOUTH	1	20	0.7	0.4	20	1	BUILDING LIGHTS - NORTH	14
15	POLE LIGHTS - SOUTH DRIVE	1	20	0.6	1.1	20	1	POLE LIGHTS - PARKING	16
17	POLE LIGHTS - PARKING	1	20	0.9	1.1	20	1	POLE LIGHTS - PARKING	18
19	SPARE	1	20	·	·	20	1	SPARE	20
21	SPARE	1	20	·	·	20	1	SPARE	22
23	SPARE	1	20	·	·	20	1	SPARE	24
25	SPACE	1	20	·	·	20	1	SPACE	26
27	SPACE	1	20	·	·	20	1	SPACE	28
29	SPACE	1	20	·	·	20	1	SPACE	30

CONNECTED LOAD 33.0 KVA

(A) PROVIDE PHENOLIC LABEL AFFIXED TO PANEL INDICATING THIS VALUE ALONG WITH THE DATE OF THE INSTALLATION.

PANEL 2P1 SCHEDULE

NEMA 3R, SURFACE MOUNT
400A M.B. 208Y/120V 3ø 4W — 22,000 AIC RATING

CKT NO.	LOAD DESCRIPTION	BREAKER POLE	BREAKER AMP	KVA	KVA	BREAKER AMP	BREAKER POLE	LOAD DESCRIPTION	CKT NO.
1	RECEPT/EF - GENTS, LADIES, W. EXT	1	20	0.9	0.8	20	1	RECEPT - ENTRANCE LOBBY 800	2
3	WATER COOLER - ENTR. LOBBY (G)	1	20	0.4	0.4	20	1	RECEPT - CONCESSION 807	4
5	RECEPT - CONCESSION 807	1	20	0.4	·	20	1	SPARE	6
7	RECEPT - CONCESSION 807 (G)	1	20	0.6	0.6	20	1	RECEPT - ELECT, MECH, JAN	8
9	DDC PANEL - MECH 805	1	20	0.2	0.9	20	1	RECEPT - PRACTICE FIELD 821	10
11	WATER COOLER - PRAC. FIELD (G)	1	20	0.4	1.1	20	1	RECEPT - WEST EXTER, MECH, HALL, PERCUSSION & UNIFORM STORAGE	12
13	DDC PANEL - MECH 856	1	20	0.2	1.1	20	1	RECEPT - BAND RM, STO, W. EXT	14
15	RECEPT - BAND ROOM 848	1	20	0.8	1.3	20	1	RECEPT - BAND ROOM 848	16
17	DDC PANEL - STORAGE 852	1	20	0.2	1.3	20	1	RECEPT - S. EXT, UTIL, LOAD VEST	18
19	WASHING MACHINE - UTILITY 854 (G)	1	20	1.2	4.9	30	2	DRYER - UTILITY 854 (G)	20
21	ICE MACHINE - UTILITY 854 (G)	1	20	1.2					22
23	DUCTLESS SPLIT SYSTEM - UTILITY	2	15	1.7	0.7	20	1	EXHAUST FAN - MECH 856	24
25					0.7	20	1	EXHAUST FAN - STORAGE 852	26
27	DUCTLESS SPLIT SYSTEM - ELECT	2	20	1.8	0.6	20	1	IRRIGATION CONTROLLER - UTILITY	28
29					0.6	20	1	MOTORIZED BAY DOOR - LOADING	30
31	BATTING TUNNEL - PRAC FIELD 821	1	25	1.7	1.7	25	1	BATTING TUNNEL - PRAC FIELD 821	32 (1)
33	SPARE	1	20	·	·	20	1	SPARE	34
35	SPARE	1	20	·	·	20	1	SPARE	36
37	SPARE	1	20	·	·	20	1	SPARE	38
39	SPARE	1	20	·	·	20	1	SPARE	40
41	SPARE	1	20	·	·	20	1	SPARE	42
43	SPACE	1	20	·					44
45	SPACE	1	20	·	·	30	3	SURGE PROTECTION DEVICE	46
47	SPACE	1	20	·					48
49									50
51	PANEL 2P2	3	150	38.6	17.0	60	3	PANEL 2G	52
53									54

CONNECTED LOAD 84.0 KVA

(G) PROVIDE GROUND-FAULT CIRCUIT INTERRUPTER TYPE BREAKER.

PANEL 2G SCHEDULE

NEMA 1, SURFACE MOUNT
100A M.L.O. 208Y/120V 3ø 4W — 22,000 AIC RATING

CKT NO.	LOAD DESCRIPTION	BREAKER POLE	BREAKER AMP	KVA	KVA	BREAKER AMP	BREAKER POLE	LOAD DESCRIPTION	CKT NO.
1	RECEPT - GYM 808, NORTH EXTER	1	20	1.1	0.9	20	1	RECEPT - GYM 808	2
3	SCOREKEEPER'S TABLE - GYM 808	1	20	0.4	0.5	20	1	SCOREBOARD/SHOT CLOCK SOUTH	4
5	SCOREBOARD/SHOT CLOCK NORTH	1	20	0.5	0.4	20	1	SCOREBOARD CENTER COURT	6
7	BLEACHERS SOUTH - GYM 808	1	15	0.8	0.8	15	1	BLEACHERS MIDDLE - GYM 808	8
9	BLEACHERS NORTH - GYM 808	1	15	0.8	0.8	20	1	GYM SPEAKER SYSTEM AMP - ELECT	10
11	BASKETBALL GOAL WINCH SOUTH	2	15	1.6	1.6	15	2	BASKETBALL GOAL WINCH SOUTHWEST	12
13									14
15	BASKETBALL GOAL WINCH SOUTHEAST	2	15	1.6	1.6	15	2	BASKETBALL GOAL WINCH NORTHWEST	16
17									18
19	BASKETBALL GOAL WINCH NORTHEAST	2	15	1.6	1.6	15	2	BASKETBALL GOAL WINCH NORTH	20
21									22
23	WATER COOLER - GYM 808 (G)	1	20	0.4	·	20	1	SPARE	24
25	SPARE	1	20	·	·	20	1	SPARE	26
27	SPARE	1	20	·	·	20	1	SPARE	28
29	SPARE	1	20	·	·	20	1	SPARE	30

CONNECTED LOAD 17.0 KVA

(G) PROVIDE GROUND-FAULT CIRCUIT INTERRUPTER TYPE BREAKER.

PANEL 2P2 SCHEDULE

NEMA 1, SURFACE MOUNT
225A M.L.O. 208Y/120V 3ø 4W — 10,000 AIC RATING

CKT NO.	LOAD DESCRIPTION	BREAKER POLE	BREAKER AMP	KVA	KVA	BREAKER AMP	BREAKER POLE	LOAD DESCRIPTION	CKT NO.
1	RECEPT - SPRINKLER, CLOSET, VESTIBULE, NORTH EXTERIOR	1	20	0.8	0.4	20	1	RECEPT - LAUNDRY 812	2
3	ICE MACHINE - LAUNDRY 812 (G)	1	20	1.2	1.2	20	1	WASHING MACHINE - LAUNDRY (G)	4
5	DRYER - LAUNDRY 812 (G)	2	30	4.9	0.9	20	1	RECEPT - OFFICE 811	6
7					1.5	20	1	RECEPT - GENTS/LADIES DRESSING	8
9	RECEPT - TLT SHWR 814A & 815A EAST EXTERIOR	1	20	0.6	0.9	20	1	RECEPT - OFFICE 818	10
11	RECEPT - TRAINING 817	1	20	0.8	1.2	20	1	ICE MACHINE - TRAINING 817 (G)	12
13	WHIRLPOOL - TRAINING 817	1	20	0.8	0.2	20	1	DDC PANEL - MECH 824	14
15	RECEPT - MECH 824, GEN STO 822, JAN 820, EAST EXTERIOR	1	20	0.9	1.5	20	1	RECEPT - HALL 823, STO 826, EAST EXTER, LADIES/GENTS DRESSING	16
17	RECEPT - TOILET & SHOWER 827A	1	20	0.4	0.4	20	1	RECEPT - TOILET & SHOWER 830A	18
19	RECEPT - OFFICE 828	1	20	0.8	0.8	20	1	RECEPT - OFFICE 829	20
21	RECEPT - SHEET MUSIC, VEST, EAST EXTERIOR, ENSEMBLE REH HALL	1	20	0.8	0.6	20	1	RECEPT - LADIES, JAN, GENTS	22
23	WATER COOLER - ENSEM HALL (G)	1	20	0.4	1.3	20	1	RECEPT - ENSEMBLE REHEARSAL	24
25	RECEPT - ENSEMBLE REHEARSAL	1	20	1.1	0.8	20	1	RECEPT - BAND DIRECTOR 845	26
27	RECEPT - TLT & SHWR 845A, MECH, SOUTH EXTERIOR	1	20	0.6	0.9	20	1	RECEPT - ASSISTANT DIRECTORS	28
29	DDC PANEL - MECH 855	1	20	0.2	0.9	20	1	RECEPT - PRACTICE FIELD 821	30
31	WATER COOLER - PRAC FIELD (G)	1	20	0.4	0.8	20	1	FIRE ALARM CP - DATA 831 (L)	32
33	INTERCOM SYSTEM - DATA 831	1	20	0.6	0.8	20	1	ERCES - DATA 831 (L)	34
35	CLOCK SYSTEM - DATA 831	1	20	0.6	0.6	20	1	COMM RACK - DATA 831	36
37	DUCTLESS SPLIT SYSTEM - DATA 831	2	20	1.8	5.0	30	2	COMM RACK - DATA 831	38
39									40
41	SMOKE DAMPERS - LAUND. 812 (L)	1	20	0.2	·	20	1	SPARE	42
43	SPARE	1	20	·	·	20	1	SPARE	44
45	SPARE	1	20	·	·	20	1	SPARE	46
47	SPARE	1	20	·	·	20	1	SPARE	48
49	SPARE	1	20	·	·	20	1	SPARE	50
51	SPARE	1	20	·	·	20	1	SPARE	52
53	SPARE	1	20	·	·	20	1	SPARE	54
55	SPARE	1	20	·	·	20	1	SPARE	56
57	SPARE	1	20	·	·	20	1	SPARE	58
59	SPARE	1	20	·	·	20	1	SPARE	60
61	SPACE	1	20	·	·	20	1	SPACE	62
63	SPACE	1	20	·	·	20	1	SPACE	64
65	SPACE	1	20	·	·	20	1	SPACE	66
67	SPACE	1	20	·	·	20	1	SPACE	68
69	SPACE	1	20	·	·	20	1	SPACE	70
71	SPACE	1	20	·	·	20	1	SPACE	72

CONNECTED LOAD 38.6 KVA

(G) PROVIDE GROUND-FAULT CIRCUIT INTERRUPTER TYPE BREAKER.
(L) PROVIDE LOCKABLE MECHANISM FOR BREAKER.

ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

McKEE and ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

SHEET TITLE : ELECTRICAL PANEL SCHEDULES

MCKEE JOB # : 23-195

DRAWN BY : RDH

DATE: 10-11-2023

REVISED DATE: (1) 11-20-2023

REVISED DATE:

REVISED DATE:

H.M. YONGE & ASSOCIATES, INC.
CONSULTING ENGINEERS // EST. 1988
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PENSACOLA, FLORIDA 32502
PHONE: (850)434-2661
253 ST. ANTHONY STREET
MOBILE, ALABAMA 36603
PHONE: (251)690-7446

SHEET NO. : E5.1

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- Tuesday, November 28, 2023 8:24:33 AM

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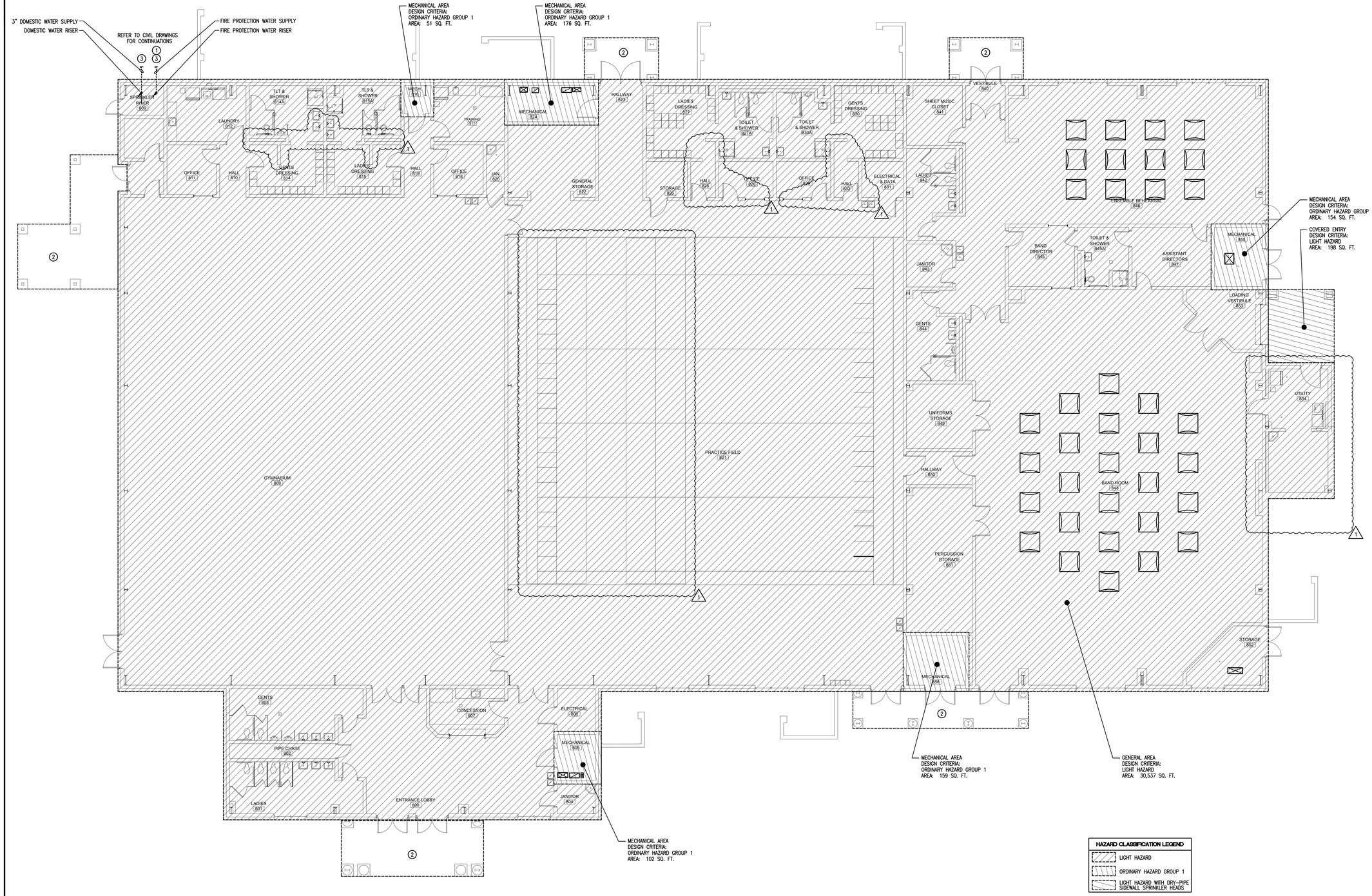

HAZARD CLASSIFICATION LEGEND
LIGHT HAZARD
ORDINARY HAZARD GROUP 1
LIGHT HAZARD WITH DRY-PIPE SIDEWALL SPRINKLER HEADS

FIRE SUPPRESSION PLAN

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

0 4' 8' 16'

FIRE SUPPRESSION KEYNOTES:

1. FIRE SUPPRESSION WATER SUPPLY LINE SHALL BE PRESSURE TESTED AND WITNESSED BY AN ALABAMA BUILDING COMMISSION OFFICIAL PRIOR TO CONNECTION OF RISERS.
2. NON-COMBUSTIBLE CANOPY CONSTRUCTION FOR PEDESTRIAN TRAFFIC ONLY. FIRE SUPPRESSION NOT REQUIRED.
3. PIPING TO BE CONTINUED FROM BACKFLOW PREVENTER.

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ADDITIONS TO ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

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ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

ALABAMA LICENSED No. 14948 PROFESSIONAL ENGINEER HOWARD M. YONGE

11/27/23

SHEET TITLE :	FIRE SUPPRESSION PLAN
MCKEE JOB # :	23-195
DRAWN BY :	D. B.
DATE:	10-11-2023
REVISED DATE:	11-20-2023
REVISED DATE:	
REVISED DATE:	

SHEET NO. : FP1.1

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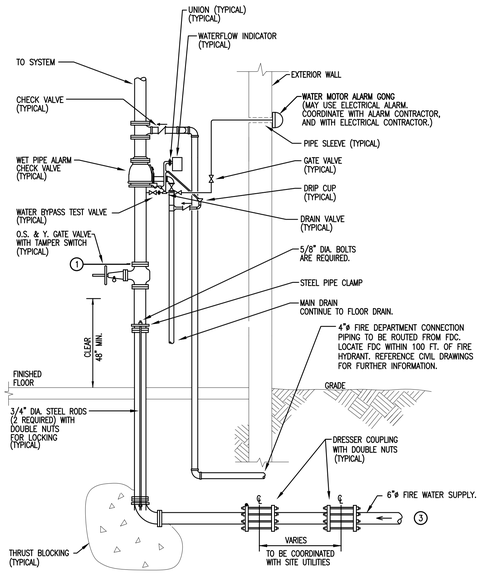

WET PIPE FIRE RISER DETAIL

NOT TO SCALE

FIRE SUPPRESSION KEYNOTES:

1. FIRE SUPPRESSION WATER SUPPLY LINE SHALL BE PRESSURE TESTED AND WITNESSED BY AN ALABAMA BUILDING COMMISSION OFFICIAL PRIOR TO CONNECTION OF RISERS.
2. COVERED AWNING TO BE PROTECTED WITH SIDE-WALL MOUNTED WET-PIPE SPRINKLER HEADS.
3. PIPING TO BE CONTINUED FROM BACKFLOW PREVENTER.

SYSTEM DESIGN APPROACH CRITERIA

ORDINARY HAZARD GROUP 1 – WET PIPE FIRE SPRINKLER SYSTEM WITH A DENSITY OF .15 GPM OVER A MINIMUM REMOTE AREA OF 1500 SQUARE FEET WITH A HOSE STREAM ALLOWANCE OF 250 GPM AND 130 SQUARE FEET OF COVERAGE PER SPRINKLER HEAD MAXIMUM.

LIGHT HAZARD – WET PIPE FIRE SPRINKLER SYSTEM WITH A DENSITY OF .10 GPM OVER A MINIMUM REMOTE AREA OF 1500 SQUARE FEET WITH A HOSE STREAM ALLOWANCE OF 100 GPM AND 225 SQUARE FEET OF COVERAGE PER SPRINKLER HEAD MAXIMUM. AN ADDITIONAL FLOW SHALL BE REQUIRED FOR THE DRY PIPE SYSTEM PER NFPA-13.

DESIGN OF UNDERGROUND FIRE MAIN PIPING SHALL BE PER NFPA-24. SPRINKLER DESIGN SHALL BE IN

WATER FLOW DATA

THE CONTRACTOR SHALL CONDUCT A HYDRANT FLOW TEST AT POINT OF CONNECTION TO OBTAIN CURRENT FLOW CONDITIONS FOR THE SPRINKLER SYSTEM HYDRAULIC CALCULATIONS. THE TEST HYDRANT SHALL BE THE ONE CLOSEST TO THE BLDG. THIS HYDRANT WILL SUPPLY THE STATIC AND RESIDUAL PRESSURES.

(MIC) MICROBIAL INDUCED CORROSION IS NOT EXPECTED.

STATIC PRESSURE: 49 PSI
RESIDUAL PRESSURE: 48 PSI
WATER FLOW: 805 GPM

PRESSURE HYDRANT – A3
FLOW HYDRANT – A1
CALCULATED FLOW @ 20 PSI = 4,958 GPM
DATA FROM TEST CONDUCTED ON 25 October 2023 @ 1030

1

FIRE SUPPRESSION GENERAL NOTES:

1. COORDINATE INSTALLATION OF FIRE ZONE RISERS WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ADEQUATE SPACE FOR INSTALLATION.
2. SEE NFPA 13 – 2-8.2 FOR CONNECTIONS PASSING THROUGH OR UNDER FOUNDATION WALLS.
3. COORDINATE PIPE ROUTING WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS TO INSURE ADEQUATE SPACE IS AVAILABLE.
4. REFERENCE FLOW TEST DATA AND EVALUATE WHETHER STRATEGIC UPSIZING OF LINES CAN PROVIDE SUFFICIENT WATER FLOW AND PRESSURE.
5. FOR CLARITY NOT ALL PIPING TURNS ARE SHOWN IN DETAIL.
6. FIRE SUPPRESSION WATER SUPPLY LINE SHALL BE FLOWED AND WITNESSED PRIOR TO CONNECTION OF RISER.

HAZARD CLASSIFICATION LEGEND
LIGHT HAZARD
ORDINARY HAZARD GROUP 1
LIGHT HAZARD WITH DRY-PIPE SIDEWALL SPRINKLER HEADS

ADDITIONS
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ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

ALABAMA LICENSED ARCHITECT HOWARD M. MCKEE 6446 PROFESSIONAL
11/27/23

SHEET TITLE : FIRE SUPPRESSION DETAILS

MCKEE JOB # : 23-195

DRAWN BY : D. B.

DATE: 10-11-2023

REVISED DATE: 11-20-2023

REVISED DATE:

REVISED DATE:

SHEET NO. : FP1.2

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ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

LOCATION MAP

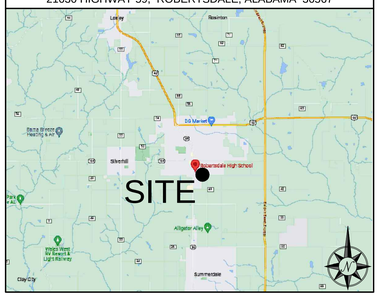
ROBERTSDALE, ALABAMA

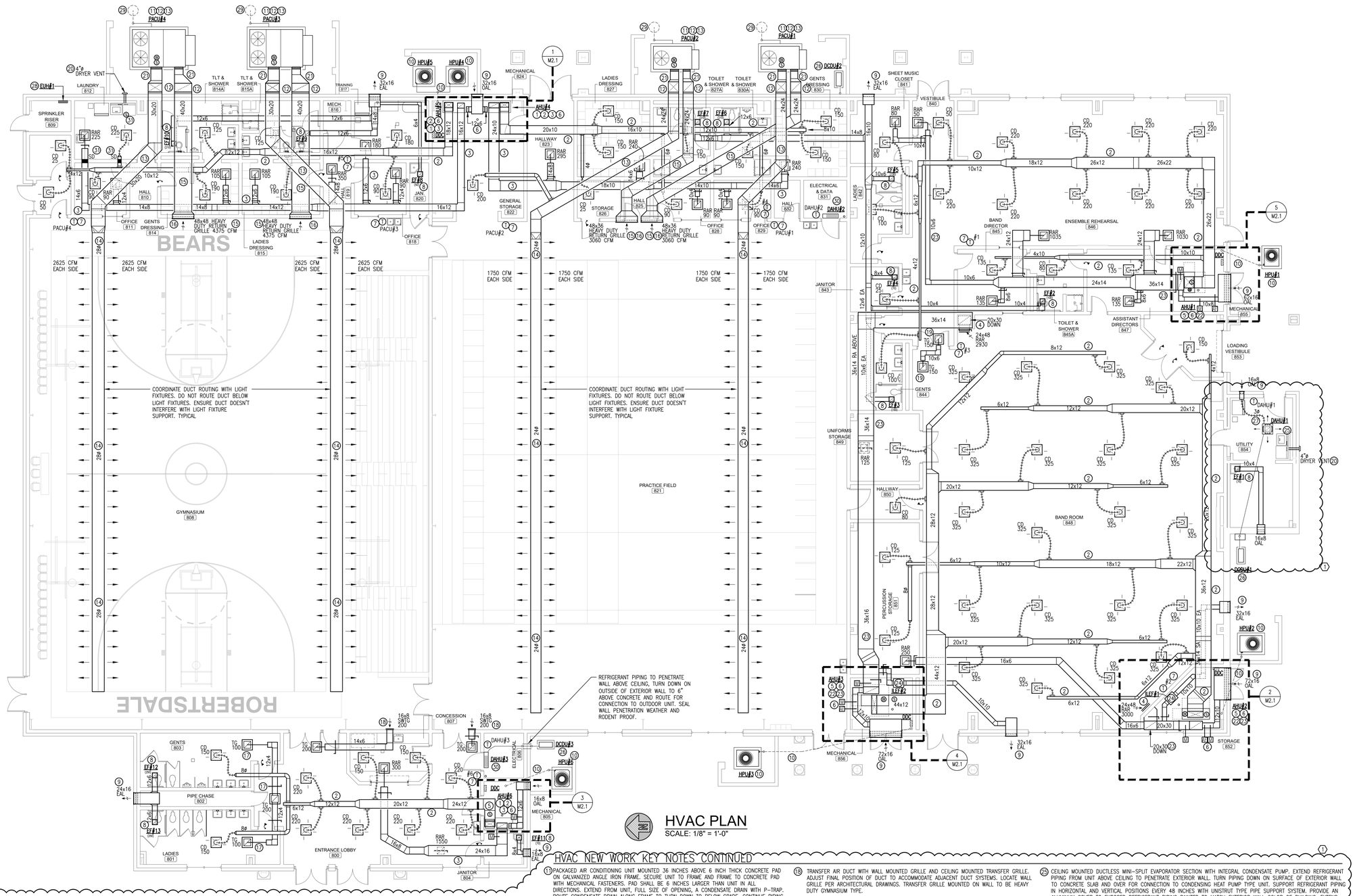


VICINITY MAP

ROBERTSDALE HIGH SCHOOL

21630 HIGHWAY 59, ROBERTSDALE, ALABAMA 36567


Loxley
Rawlinson
Silverhill
Robertsdale High School
SITE
Alligator Alley
Summerdale
Bay Minette
Daphne
Spanish Fort
Foley
Gulf Shores
Orange Beach
Perdido Key
Pensacola
Gulf Breeze
Milton
Navarre
Destin
Fort Walton Beach
Crestview
Niceville
Valparaiso
DeFuniak Springs
Chipley
Panama City
Panama City Beach
Lynn Haven
Callaway
Parker
Southport
Springfield
Millville
Cedar Grove
Bennett
Lynn Haven
Mexico Beach
Port St. Joe
Wewahitchka
Clarksville
Blountstown
Bristol
Sumatra
Carrabelle
Apalachicola
Eastpoint
St. George Island
Lanark Village
Panacea
Crawfordville
Wakulla Springs
Sopchoppy
Medart
Woodville
Tallahassee
Havana
Quincy
Midway
Chattahoochee
Greensboro
Gretna
Bristol
Blountstown
Marianna
Sneads
Jay
Milton
Pace
Gulf Breeze
Navarre
Fort Walton Beach
Destin
Crestview
Niceville
Valparaiso
DeFuniak Springs
Chipley
Panama City
Panama City Beach
Lynn Haven
Callaway
Parker
Southport
Springfield
Millville
Cedar Grove
Bennett



HVAC NEW WORK KEY NOTES

1. AIR HANDLING UNIT OF SPLIT SYSTEM HEAT PUMP MOUNTED ON RETURN AIR PLENUM CONSTRUCTED OF NON-COMBUSTIBLE MATERIALS, A METAL FRAME SHALL BE OF GALVANIZED ANGLED IRON WITH GALVANIZED SHEET METAL SIDES AND TOP. INSULATE INTERIOR OF PLENUM WITH 1-1/2 INCH THICK FIBROUS DUCT BOARD. APPLY INSULATION TO TOP, BOTTOM AND SIDES TO COVER ALL INTERIOR EXPOSED SURFACES. EXTEND FROM UNIT, FULL SIZE OF UNIT OPENING A CONDENSATE DRAIN ROUTED TO SPILL ONTO FLOOR DRAIN. COMPLETELY INSULATE CONDENSATE DRAIN LINE FROM UNIT TO FLOOR DRAIN. INCLUDE IN P-TRAP OF DRAIN LINE A FLOAT SWITCH TO AUTOMATICALLY SHUT DOWN UNIT AS DRAINAGE SYSTEM FLOODS.
2. SUPPLY AIR DUCTWORK SHALL EXTEND UP FROM UNIT FULL SIZE OF OPENING WITH TRANSITION TO INDICATED DUCT SIZE. ROUTE DUCT ABOVE CEILING GENERALLY AS INDICATED WITH OFFSETS TO AVOID OBSTRUCTIONS. EXTEND BRANCH DUCTS FOR CONNECTION OF DESIGNATED AIR DEVICES. INCLUDE A MANUAL VOLUME DAMPER IN EACH BRANCH DUCT AND BALANCE AIR DEVICE TO INDICATED AIR FLOW.
3. RETURN AIR DUCTWORK SHALL BE EXTENDED UP FROM RETURN AIR PLENUM AND ELBOW TO HORIZONTAL POSITION ABOVE CEILING. COORDINATE FINAL ELEVATION OF DUCTWORK WITH ADJACENT DUCT SYSTEMS. EXTEND BRANCH DUCTS FROM TRUNK DUCT FOR CONNECTION TO DESIGNATED AIR DEVICES. INCLUDE A MANUAL VOLUME DAMPER IN EACH BRANCH DUCT AND BALANCE AIR DEVICE TO INDICATED AIR FLOW. ADDITIONALLY, A MANUAL VOLUME DAMPER AND MOTORIZED DAMPER SHALL BE INSTALLED IN RETURN AIR DUCT ABOVE PLENUM. BALANCE MANUAL VOLUME DAMPER TO INDICATED AIR FLOW. INTERLOCK MOTORIZED VOLUME DAMPER WITH AIRFLOW MEASURING STATION SUCH THAT THE DAMPER OPERATES IN REVERSE OF MOTORIZED OUTDOOR AIR INTAKE DAMPER.
4. RETURN AIR DUCT SHALL EXTEND FROM TRUNK DUCT TO TURN DOWN FOR CONNECTION TO WALL MOUNTED RETURN AIR REGISTER. MOUNT RETURN AIR REGISTER WITH BOTTOM 18 INCHES ABOVE FLOOR. INCLUDE A MANUAL VOLUME DAMPER IN HORIZONTAL DUCT ABOVE CHASE. LINE INTERIOR OF DUCT WITH 1 INCH THICK FIBROUS LINER FROM WALL REGISTER UP THROUGH CONNECTION TO TRUNK DUCT.
5. DUCT MOUNTED SMOKE DETECTOR AND BI-POLAR IONIZATION DEVICE IN SUPPLY AIR DUCT. INTERLOCK DETECTOR WITH AIR HANDLING UNIT AND FIRE ALARM PANEL AS DETECTOR IS ACTIVATED, THE AIR HANDLING UNIT SHALL AUTOMATICALLY SHUT DOWN AND A SIGNAL SENT TO THE FIRE ALARM PANEL. INTERLOCK BI-POLAR IONIZATION DEVICE WITH AIR HANDLING UNIT SUCH THAT AS UNIT IS OPERATING THE BI-POLAR DEVICE SHALL BE OPERATING AND OTHERWISE BOTH SHALL NOT BE OPERATING.
6. OUTDOOR AIR INTAKE DUCTWORK SHALL BE EXTENDED UP FROM RETURN AIR PLENUM AND OVER FOR CONNECTION TO WALL MOUNTED OUTDOOR AIR INTAKE LOUVER. INSTALL A MANUAL VOLUME DAMPER AND MOTORIZED DAMPER IN OUTDOOR AIR DUCTWORK WITHIN 36 INCHES OF PLENUM. AN AIR FLOW MEASURING STATION SHALL ALSO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. BALANCE MANUAL VOLUME DAMPER TO INDICATED AIR FLOW. INTERLOCK MOTORIZED DAMPER WITH AIR FLOW STATION AND BUILDING AUTOMATED CONTROL SYSTEM SUCH THAT DAMPER SHALL BE OPEN DURING OCCUPIED HOURS AND MODULATE ACCORDING TO CARBON DIOXIDE LEVELS AND AIR FLOW MEASURING STATION. OTHERWISE THE MOTORIZED DAMPER SHALL BE CLOSED. INTERLOCK RETURN AIR DAMPER WITH AIRFLOW MEASURING STATION SUCH THAT THIS DAMPER OPERATES IN REVERSE OF THE MOTORIZED OUTDOOR AIR INTAKE DAMPER.
7. WALL MOUNTED CONTROLLER FOR TEMPERATURE, HUMIDITY AND CARBON DIOXIDE TO BE CONTROLLED AND MONITORED. COORDINATE INTERLOCKING OF OUTDOOR AIR MOTORIZED DAMPER DIRECTLY TO BUILDING AUTOMATION SYSTEM THROUGH DDC CONTROL PANEL.
8. CEILING MOUNTED EXHAUST FAN WITH EXHAUST AIR DISCHARGE DUCTWORK ROUTED FOR CONNECTION TO DESIGNATED TRUNK DUCT OR PLENUM OF DISCHARGE AIR LOUVER. INTERLOCK CONTROL OF EXHAUST FAN AS SCHEDULED.
9. WALL MOUNTED LOUVER THAT IS WEATHERPROOF AND HURRICANE RATED PER MIAMI-DADE STANDARDS. PROVIDE LOUVER WITH FULL SIZE PLENUM EXTENDING A MINIMUM OF 16 INCHES FROM BACK OF LOUVER FOR CONNECTION OF DESIGNATED DUCTWORK.
10. OUTDOOR (HEAT PUMP TYPE) CONDENSING UNIT MOUNTED ON 6 INCH THICK CONCRETE PAD. PAD SHALL BE 6 INCHES LARGER THAN UNIT IN ALL DIRECTIONS. SECURE UNIT TO PAD AT EACH SUPPORT UNLESS OTHERWISE NOTED. EXTEND REFRIGERANT PIPING FROM CONDENSING UNIT DOWN TO BELOW GRADE INSIDE OF 6 INCH UNDERGROUND PVC (SCH. 40) CONDUIT TO BELOW MECHANICAL ROOM TO TURN UP ON WALL AS INDICATED. INCLUDE A 3/4 INCH CONDUIT INSIDE OF 6 INCH CONDUIT WITH REFRIGERANT PIPING FOR CONTROL WIRING. SEAL BOTH ENDS OF OPEN CONDUIT RODENT AND WEATHERPROOF. USE OF SPRAY FOAM ALONE IS NOT ACCEPTABLE.

HVAC NEW WORK KEY NOTES CONTINUED

11. PACKAGED AIR CONDITIONING UNIT MOUNTED 36 INCHES ABOVE 6 INCH THICK CONCRETE PAD ON GALVANIZED ANGLE IRON FRAME. SECURE UNIT TO FRAME AND FRAME TO CONCRETE PAD WITH MECHANICAL FASTENERS. PAD SHALL BE 6 INCHES LARGER THAN UNIT IN ALL DIRECTIONS. EXTEND FROM UNIT, FULL SIZE OF OPENING, A CONDENSATE DRAIN WITH P-TRAP. ROUTE CONDENSATE DRAIN ALONG FRAME TO TURN DOWN TO BELOW GRADE. CONTINUE PIPING FOR 36 INCHES AND TERMINATE INSIDE OF DRY WELL.
12. SUPPLY AND RETURN AIR DUCTWORK SHALL BE EXTENDED FROM UNIT FULL SIZE OF OPENING WITH TRANSITION TO INDICATED DUCT SIZE. ROUTE DUCT ABOVE GRADE TO EXTERIOR WALL TO TURN UP ON WALL TO ABOVE CEILING ELEVATION. BOTH DUCT SYSTEMS SHALL PENETRATE THE EXTERIOR WALL AT THE SAME ELEVATION. DUCT PENETRATION OF EXTERIOR WALL SHALL BE RODENT PROOF AND WEATHER TIGHT PER ARCHITECTURAL INSTRUCTIONS. ONCE THE DUCTWORK IS INTERIOR OF THE BUILDING COORDINATE ELEVATION CHANGES TO ACCOMMODATE FINAL ROUTING.
13. SUPPLY AIR DUCTWORK SHALL OFFSET UPWARD TO PENETRATE WALL INTO GYMNASIUM WITH BOTTOM OF DUCTWORK 12 INCHES MINIMUM ABOVE THE TOP ELEVATION OF THE LIGHT FIXTURES. TRANSITION DUCT FROM RECTANGULAR TO SQUARE AND TO SPIRAL PRIOR TO WALL PENETRATION. EXTEND SUPPLY DUCT A MINIMUM OF 12 INCHES INTO GYMNASIUM FOR CONNECTION OF FABRIC SPIRAL DUCTWORK. PROVIDE A DUCT ESCUTCHEON AROUND SPIRAL DUCT ON WALL PENETRATION.
14. FABRIC SPIRAL DUCTWORK SHALL BE INSTALLED WITH THE BOTTOM OF THE DUCT A MINIMUM OF 12 INCHES ABOVE THE TOP ELEVATION OF THE LIGHT FIXTURES. MECHANICAL CONTRACTOR TO COORDINATE FINAL DUCT ELEVATION WITH ARCHITECTURAL DRAWINGS. FABRIC DUCTWORK SHALL BE PROVIDED WITH A FULL SUPPORT STRUCTURAL SYSTEM THAT PREVENTS THE DUCTWORK FROM COLLAPSING AS THE AIR HANDLING UNIT IS NOT OPERATING.
15. RETURN AIR DUCTWORK SHALL BE ROUTED BENEATH SUPPLY AIR DUCTWORK AT AN ELEVATION OF APPROXIMATELY 24 INCHES ABOVE CEILING. COORDINATE FINAL ELEVATION WITH ARCHITECTURAL DRAWINGS AND ADJACENT DUCT SYSTEMS. TERMINATE RETURN AIR DUCTWORK ON PLENUM BEHIND WALL MOUNTED RETURN AIR REGISTER. INCLUDE A MANUAL VOLUME DAMPER IN RETURN AIR DUCTWORK AND BALANCE RETURN REGISTER TO INDICATED AIR FLOW.
16. WALL MOUNTED RETURN AIR REGISTER TO BE POSITIONED WITH BOTTOM 24 INCHES ABOVE CEILING. COORDINATE FINAL POSITION WITH ARCHITECTURAL DRAWINGS. REGISTER SHALL BE HEAVY DUTY GYMNASIUM RATED TYPE. INCLUDE A FULL SIZE PLENUM BEHIND REGISTER 12 INCHES MINIMUM DEEP. CONNECT RETURN AIR DUCT TO PLENUM.
17. TRANSFER AIR DUCT WITH TRANSFER GRILLES AT EACH END AND ONE TRANSFER GRILLE AT CENTER.
18. TRANSFER AIR DUCT WITH WALL MOUNTED GRILLE AND CEILING MOUNTED TRANSFER GRILLE. ADJUST FINAL POSITION OF DUCT TO ACCOMMODATE ADJACENT DUCT SYSTEMS. LOCATE WALL GRILLE PER ARCHITECTURAL DRAWINGS. TRANSFER GRILLE MOUNTED ON WALL TO BE HEAVY DUTY GYMNASIUM TYPE.
19. TRANSFER AIR DUCT WITH GRILLES AT EACH END. ADJUST FINAL LOCATION TO ACCOMMODATE ADJACENT DUCT SYSTEMS.
20. CLOTHES DRYER LINT EXHAUST VENT TO BE EXTENDED FROM FULL SIZE OF DRYER VENT OPENING (VERIFY AS 4 INCHES). EXTEND EXHAUST VENT ADJACENT TO WALL TO TERMINATE ON WALL WITH FULL SIZE VENT CAP HAVING A BACK DRAFT DAMPER. INSTALL VENT DUCT WITHOUT HAVING 'BELLIES,' SCREWS PROTRUDING INTO AIR STREAM, AND IN ACCORDANCE WITH IBC MECHANICAL.
21. DUCTWORK EXPOSED TO WEATHER SHALL BE DOUBLE WALL WITH 1-1/2 INCH OF FIBROUS INSULATION BETWEEN LAYERS. THE OUTER LAYER OF GALVANIZED SHEET METAL SHALL BE SEALED WEATHERPROOF AND WATER TIGHT. SUPPORT DUCTWORK ABOVE GRADE EVERY 48 INCHES WITH UNISTRUT FRAME MOUNTED ON 4 INCH THICK CONCRETE PADS. VERTICAL DUCT SHALL BE SUPPORTED EVERY 84 INCHES WITH UNISTRUT KNEE BASE SYSTEM FASTENED TO EXTERIOR WALL.
22. AIR HANDLING UNIT MOUNTED IN VERTICAL POSITION ON 6 INCH HIGH CONCRETE HOUSEKEEPING PAD. CONCRETE PAD SHALL BE EXTENDED BEHIND UNIT FOR SUPPORT OF RETURN AIR DUCTWORK SYSTEM. EXTEND FROM FULL SIZE OF UNIT OPENING A CONDENSATE DRAIN WITH P-TRAP TO TERMINATE ABOVE FLOOR DRAIN. SUPPORT CONDENSATE DRAIN LINE EVERY 48 INCHES WITH UNISTRUT TYPE PIPE SUPPORT SYSTEM. INSULATE ENTIRE LENGTH OF CONDENSATE DRAIN LINE FROM UNIT TO ABOVE FLOOR DRAIN. INCLUDE IN P-TRAP A FLOAT SWITCH TO AUTOMATICALLY SHUT DOWN UNIT AS DRAINAGE SYSTEM FLOODS.
23. EXTEND FROM BACK OF UNIT, FULL SIZE OF UNIT OPENING A RETURN AIR DUCT. ELBOW DUCT UP WITH TRANSITION TO INDICATED DUCT SIZE. ROUTE DUCT ABOVE CEILING GENERALLY AS INDICATED WITH OFFSETS TO AVOID INTERFERENCES. EXTEND BRANCH DUCTS FOR CONNECTION OF DESIGNATED AIR DEVICES. INCLUDE A MANUAL VOLUME DAMPER IN EACH BRANCH DUCT AND BALANCE TO DESIGNATED AIR FLOW. A MANUAL VOLUME DAMPER AND MOTORIZED DAMPER SHALL BE INSTALLED IN RETURN AIR DUCT UPSTREAM OF THE OUTDOOR AIR INTAKE DUCTWORK. BALANCE MANUAL VOLUME DAMPER TO INDICATED AIR FLOW. INTERLOCK MOTORIZED VOLUME DAMPER WITH AIRFLOW MEASURING STATION SUCH THAT THE DAMPER OPERATES IN REVERSE OF MOTORIZED OUTDOOR AIR INTAKE DAMPER.
24. DUCT MOUNTED IN LINE EXHAUST FAN WITH EXHAUST DUCT ROUTED FOR CONNECTION TO PLENUM ON EXHAUST AIR DISCHARGE LOUVER. INTERLOCK EXHAUST FAN WITH MOTORIZED OUTDOOR INTAKE DAMPER SUCH THAT AS DAMPER IS OPEN THE FAN SHALL BE OPERATING AND OTHERWISE NOT BE OPERATING.
25. CEILING MOUNTED DUCTLESS MINI-SPLIT EVAPORATOR SECTION WITH INTEGRAL CONDENSATE PUMP. EXTEND REFRIGERANT PIPING FROM UNIT ABOVE CEILING TO PENETRATE EXTERIOR WALL. TURN PIPING DOWN ON SURFACE OF EXTERIOR WALL TO CONCRETE SLAB AND OVER FOR CONNECTION TO CONDENSING HEAT PUMP TYPE UNIT. SUPPORT REFRIGERANT PIPING IN HORIZONTAL AND VERTICAL POSITIONS EVERY 48 INCHES WITH UNISTRUT TYPE PIPE SUPPORT SYSTEM. PROVIDE AN ALUMINUM COVER TO EXPOSED REFRIGERANT PIPING PAINTED TO MATCH EXTERIOR WALL COLOR OF BUILDING. EXTEND FROM CONDENSATE PUMP A SCH. 40 PVC DISCHARGE DRAIN PIPE ABOVE CEILING OVER TO EXTERIOR WALL TO TURN DOWN ON INSIDE SURFACE TO SPILL INTO JANITOR'S SINK. COMPLETELY INSULATE ENTIRE LENGTH OF HORIZONTAL DRAIN PIPING. SUPPORT DRAIN PIPING SIMILARLY TO REFRIGERANT PIPING. PROVIDE WALL MOUNTED TEMPERATURE CONTROLLER CONNECTED TO BUILDING AUTOMATION SYSTEM.
26. OUTDOOR HEAT PUMP CONDENSING UNIT FOR DUCTLESS MINI-SPLIT, MOUNT UNIT ON 4 INCH CONCRETE PAD. SECURE UNIT AT EACH CORNER TO PAD. EXTEND REFRIGERANT PIPING FROM UNIT OVER TO EXTERIOR WALL AND TURN UP ON SURFACE TO PENETRATE WALL ABOVE CEILING ELEVATION. SUPPORT PIPING IN HORIZONTAL AND VERTICAL POSITIONS EVERY 48 INCHES WITH UNISTRUT TYPE PIPE SUPPORT SYSTEM. PROVIDE ALUMINUM COVER OVER REFRIGERANT PIPING PAINTED TO MATCH COLOR OF BUILDING.
27. EXTEND FROM FULL SIZE OF UNIT OPENING AN OUTDOOR AIR INTAKE DUCT FOR CONNECTION TO WALL MOUNTED LOUVER. VERIFY DUCT SIZE AS 3 INCHES. INCLUDE A MOTORIZED DAMPER AND MANUAL VOLUME DAMPER IN DUCT AND BALANCE TO SCHEDULED AIR FLOW. INTERLOCK MOTORIZED DAMPER WITH WALL MOUNTED CONTROLLER SUCH THAT DAMPER SHALL BE OPEN DURING OCCUPIED HOURS AND CLOSED OTHERWISE.
28. WALL MOUNTED ELECTRIC UNIT HEATER WITH INTEGRAL CONTROLS. BOTTOM OF HEATER SHALL BE 6'0" ABOVE FINISHED FLOOR SET CONTROLLER FOR 45°F SUCH THAT UNIT IS ENERGIZED BELOW THIS SETTING.
29. CONDENSATE DRY WELL TO BE POSITIONED GENERALLY AS INDICATED. PROVIDE 24 INCH DIAMETER PVC (SCH.40) DRAINAGE PIPING THAT IS 48 INCHES LONG AND FILL WITH NO.2 PEA GRAVEL. (REFERENCE DETAIL FOR ADDITIONAL INFORMATION).
30. DUCTLESS MINI-SPLIT EVAPORATOR SECTION MOUNTED ON WALL AT 16 INCHES BENEATH CEILING. PROVIDE WALL MOUNTED TEMPERATURE CONTROLLER FOR CONTROL OF UNIT THROUGH DDC CONTROL PANEL. ROUTE REFRIGERANT PIPING ABOVE CEILING OVER WALL AND THROUGH EXTERIOR FOR CONNECTION TO OUTDOOR UNIT. EXTEND CONDENSATE PIPING FROM UNIT DOWN ON WALL TO SPILL INTO FLOOR DRAIN.
31. SMOKE DAMPER. INTERLOCK WITH SMOKE DETECTOR LOCATED IN LAUNDRY ROOM.

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ADDITIONS TO ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

McKEE and ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

SHEET TITLE : HVAC PLAN

MCKEE JOB # : 23-195

DRAWN BY : AWB

DATE: 10-11-2023

REVISED DATE: 1 11-20-2023

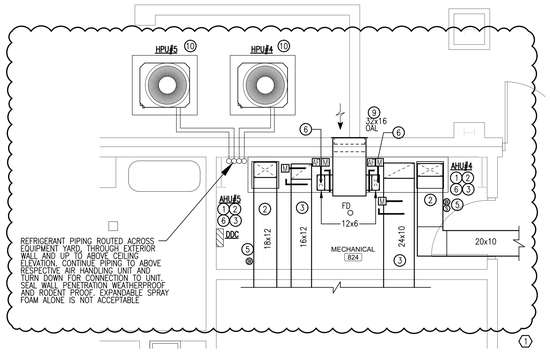
REVISED DATE:

REVISED DATE:

SHEET NO. : M1.1

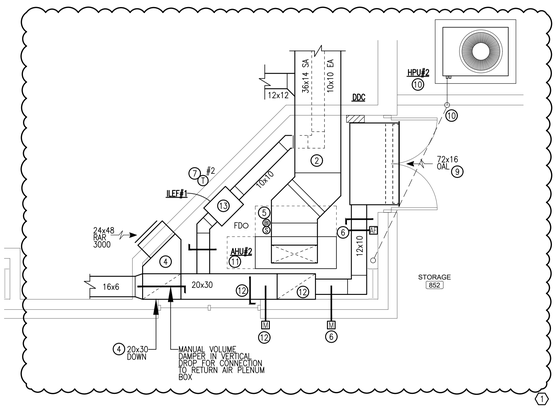
- M:\Jobs_Active\23108 Robertsdale High School Band Room\23108M11 HVAC PLAN.dwg
- Monday, November 27, 2023 3:24:26 PM

M:\Jobs_Active\23108 Robertsdale High School Band Room\23108M11 HVAC PLAN.dwg 10/05/23 10:22



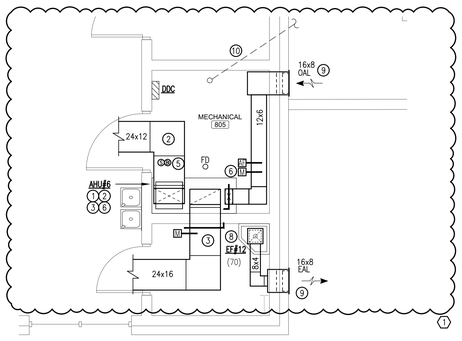
1 M2.1 — ENLARGED MECHANICAL ROOM 824 PLAN

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



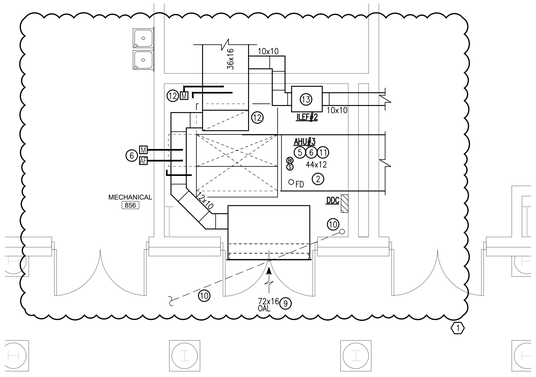
2 M2.1 — ENLARGED MECHANICAL ROOM 852 PLAN

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



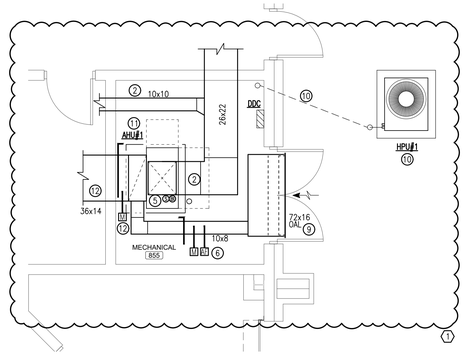
3 M2.1 — ENLARGED MECHANICAL ROOM 805 PLAN

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



4 M2.1 — ENLARGED MECHANICAL ROOM 856 PLAN

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



5 M2.1 — ENLARGED MECHANICAL ROOM 855 PLAN

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

HVAC NEW WORK KEY NOTES

1. AIR HANDLING UNIT OF SPLIT SYSTEM HEAT PUMP MOUNTED ON RETURN AIR PLENUM CONSTRUCTED OF NON-COMBUSTIBLE MATERIALS. A METAL FRAME SHALL BE OF GALVANIZED ANGLED IRON WITH GALVANIZED SHEET METAL SIDES AND TOP. INSULATE INTERIOR OF PLENUM WITH 1-1/2 INCH THICK FIBROUS DUCT BOARD. APPLY INSULATION TO TOP, BOTTOM AND SIDES TO COVER ALL INTERIOR EXPOSED SURFACES. EXTEND FROM UNIT, FULL SIZE OF UNIT OPENING A CONDENSATE DRAIN ROUTED TO SPILL ONTO FLOOR DRAIN. COMPLETELY INSULATE CONDENSATE DRAIN LINE FROM UNIT TO FLOOR DRAIN. INCLUDE IN P-TRAP OF DRAIN LINE A FLOAT SWITCH TO AUTOMATICALLY SHUT DOWN UNIT AS DRAINAGE SYSTEM FLOODS.
2. SUPPLY AIR DUCTWORK SHALL EXTEND UP FROM UNIT FULL SIZE OF OPENING WITH TRANSITION TO INDICATED DUCT SIZE. ROUTE DUCT ABOVE CEILING GENERALLY AS INDICATED WITH OFFSETS TO AVOID OBSTRUCTIONS. EXTEND BRANCH DUCTS FOR CONNECTION OF DESIGNATED AIR DEVICES. INCLUDE A MANUAL VOLUME DAMPER IN EACH BRANCH DUCT AND BALANCE AIR DEVICE TO INDICATED AIR FLOW.
3. RETURN AIR DUCTWORK SHALL BE EXTENDED UP FROM RETURN AIR PLENUM AND ELBOW TO HORIZONTAL POSITION ABOVE CEILING. COORDINATE FINAL ELEVATION OF DUCTWORK WITH ADJACENT DUCT SYSTEMS. EXTEND BRANCH DUCTS FROM TRUNK DUCT FOR CONNECTION TO DESIGNATED AIR DEVICES. INCLUDE A MANUAL VOLUME DAMPER IN EACH BRANCH DUCT AND BALANCE AIR DEVICE TO INDICATED AIR FLOW. ADDITIONALLY, A MANUAL VOLUME DAMPER AND MOTORIZED DAMPER SHALL BE INSTALLED IN RETURN AIR DUCT ABOVE PLENUM. BALANCE MANUAL VOLUME DAMPER TO INDICATED AIR FLOW. INTERLOCK MOTORIZED VOLUME DAMPER WITH AIRFLOW MEASURING STATION SUCH THAT THE DAMPER OPERATES IN REVERSE OF MOTORIZED OUTDOOR AIR INTAKE DAMPER.
4. RETURN AIR DUCT SHALL EXTEND FROM TRUNK DUCT TO TURN DOWN FOR CONNECTION TO WALL MOUNTED RETURN AIR REGISTER. MOUNT RETURN AIR REGISTER WITH BOTTOM 18 INCHES ABOVE FLOOR. INCLUDE A MANUAL VOLUME DAMPER IN HORIZONTAL DUCT ABOVE CHASE, UNLESS OTHERWISE NOTED. LINE INTERIOR OF DUCT WITH 1 INCH THICK FIBROUS LINER FROM WALL REGISTER UP THROUGH CONNECTION TO TRUNK DUCT.
5. DUCT MOUNTED SMOKE DETECTOR AND BI-POLAR IONIZATION DEVICE IN SUPPLY AIR DUCT. INTERLOCK DETECTOR WITH AIR HANDLING UNIT AND FIRE ALARM PANEL. AS DETECTOR IS ACTIVATED, THE AIR HANDLING UNIT SHALL AUTOMATICALLY SHUT DOWN AND A SIGNAL SENT TO THE FIRE ALARM PANEL. INTERLOCK BI-POLAR IONIZATION DEVICE WITH AIR HANDLING UNIT SUCH THAT AS UNIT IS OPERATING THE BI-POLAR DEVICE SHALL BE OPERATING AND OTHERWISE BOTH SHALL NOT BE OPERATING.
6. OUTDOOR AIR INTAKE DUCTWORK SHALL BE EXTENDED UP FROM RETURN AIR PLENUM AND OVER FOR CONNECTION TO WALL MOUNTED OUTDOOR AIR INTAKE LOUVER. INSTALL A MANUAL VOLUME DAMPER AND MOTORIZED DAMPER IN OUTDOOR AIR DUCTWORK WITHIN 36 INCHES OF PLENUM. AN AIR FLOW MEASURING STATION SHALL ALSO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. BALANCE MANUAL VOLUME DAMPER TO INDICATED AIR FLOW. INTERLOCK MOTORIZED DAMPER WITH AIR FLOW STATION AND BUILDING AUTOMATED CONTROL SYSTEM SUCH THAT DAMPER SHALL BE OPEN DURING OCCUPIED HOURS AND MODULATE ACCORDING TO CARBON DIOXIDE LEVELS AND AIR FLOW MEASURING STATION. OTHERWISE THE MOTORIZED DAMPER SHALL BE CLOSED. INTERLOCK RETURN AIR DAMPER WITH AIRFLOW MEASURING STATION SUCH THAT THIS DAMPER OPERATES IN REVERSE OF THE MOTORIZED OUTDOOR AIR INTAKE DAMPER.
7. WALL MOUNTED CONTROLLER FOR TEMPERATURE, HUMIDITY AND CARBON DIOXIDE TO BE CONTROLLED AND MONITORED. COORDINATE INTERLOCKING OF OUTDOOR AIR MOTORIZED DAMPER DIRECTLY TO BUILDING AUTOMATION SYSTEM THROUGH DDC CONTROL PANEL.
8. CEILING MOUNTED EXHAUST FAN WITH EXHAUST AIR DISCHARGE DUCTWORK ROUTED FOR CONNECTION TO DESIGNATED TRUNK DUCT OR PLENUM OF DISCHARGE AIR LOUVER. INTERLOCK CONTROL OF EXHAUST FAN AS SCHEDULED.
9. WALL MOUNTED LOUVER THAT IS WEATHERPROOF AND HURRICANE RATED PER MIAMI-DADE STANDARDS. PROVIDE LOUVER WITH FULL SIZE PLENUM EXTENDING A MINIMUM OF 16 INCHES FROM BACK OF LOUVER FOR CONNECTION OF DESIGNATED DUCTWORK.
10. OUTDOOR (HEAT PUMP TYPE) CONDENSING UNIT MOUNTED ON 6 INCH THICK CONCRETE PAD. PAD SHALL BE 6 INCHES LARGER THAN UNIT IN ALL DIRECTIONS. SECURE UNIT TO PAD AT EACH SUPPORT. EXTEND REFRIGERANT PIPING FROM CONDENSING UNIT DOWN TO BELOW GRADE INSIDE OF 6 INCH UNDERGROUND PVC (SCH. 40) CONDUIT TO BELOW MECHANICAL ROOM TO TURN UP ON WALL AS INDICATED. INCLUDE A 3/4 INCH CONDUIT INSIDE OF 6 INCH CONDUIT WITH REFRIGERANT PIPING FOR CONTROL WIRING. SEAL BOTH ENDS OF OPEN CONDUIT RODENT AND WEATHERPROOF. USE OF SPRAY FOAM ALONE IS NOT ACCEPTABLE.
11. AIR HANDLING UNIT MOUNTED IN VERTICAL POSITION ON 6 INCH HIGH CONCRETE HOUSEKEEPING PAD. CONCRETE PAD SHALL BE EXTENDED BEHIND UNIT FOR SUPPORT OF RETURN AIR DUCTWORK SYSTEM. EXTEND FROM FULL SIZE OF UNIT OPENING A CONDENSATE DRAIN WITH P-TRAP TO TERMINATE ABOVE FLOOR DRAIN. SUPPORT CONDENSATE DRAIN LINE EVERY 48 INCHES WITH UNISTRUT TYPE PIPE SUPPORT SYSTEM. INSULATE ENTIRE LENGTH OF CONDENSATE DRAIN LINE FROM UNIT TO ABOVE FLOOR DRAIN. INCLUDE IN P-TRAP A FLOAT SWITCH TO AUTOMATICALLY SHUT DOWN UNIT AS DRAINAGE SYSTEM FLOODS.
12. EXTEND FROM BACK OF UNIT, FULL SIZE OF UNIT OPENING A RETURN AIR DUCT. ELBOW DUCT UP WITH TRANSITION TO INDICATED DUCT SIZE. ROUTE DUCT ABOVE CEILING GENERALLY AS INDICATED WITH OFFSETS TO AVOID INTERFERENCES. EXTEND BRANCH DUCTS FOR CONNECTION OF DESIGNATED AIR DEVICES. INCLUDE A MANUAL VOLUME DAMPER IN EACH BRANCH DUCT AND BALANCE TO DESIGNATED AIR FLOW. A MANUAL VOLUME DAMPER SHALL BE INSTALLED IN RETURN AIR DUCT UPSTREAM OF THE OUTDOOR AIR INTAKE DUCTWORK. INTERLOCK MOTORIZED VOLUME DAMPER WITH AIRFLOW MEASURING STATION SUCH THAT THE DAMPER OPERATES IN REVERSE OF MOTORIZED OUTDOOR AIR INTAKE DAMPER.
13. DUCT MOUNTED IN LINE EXHAUST FAN WITH EXHAUST DUCT ROUTED FOR CONNECTION TO PLENUM ON EXHAUST AIR DISCHARGE LOUVER. INTERLOCK EXHAUST FAN WITH MOTORIZED OUTDOOR INTAKE DAMPER SUCH THAT AS DAMPER IS OPEN THE FAN SHALL BE OPERATING AND OTHERWISE NOT BE OPERATING.

ADDITIONS
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631 SOUTH HULL STREET . MONTGOMERY . ALABAMA 36104 (334) 834-9933

SHEET TITLE : HVAC DETAILS - ENLARGED MECHANICAL ROOM PLANS

MCKEE JOB # : 23-195

DRAWN BY : AWB

DATE: 10-11-2023

REVISED DATE: 1 11-20-2023

REVISED DATE:

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H.M. YONGE & ASSOCIATES, INC.
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SHEET NO. : M2.1

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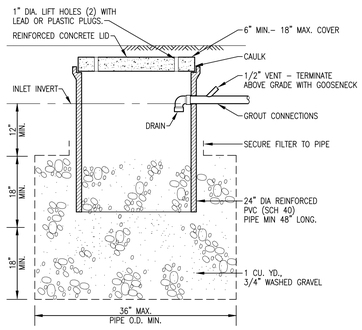
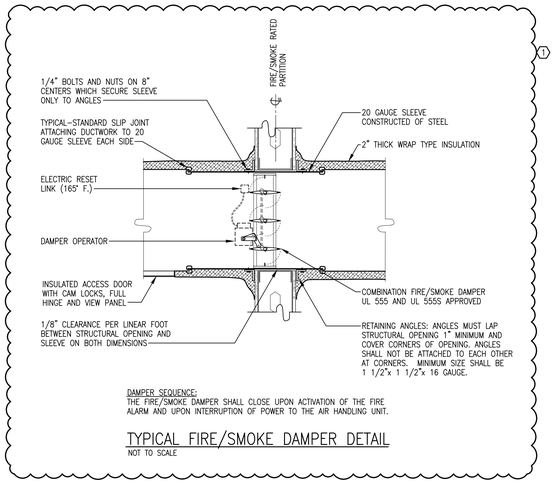
- Monday, November 27, 2023 3:24:31 PM

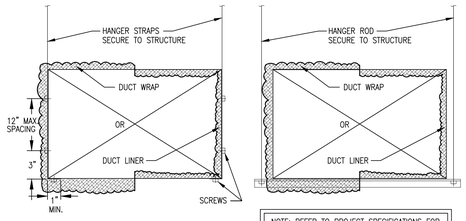


TYPICAL DRYWELL DETAIL
NOT TO SCALE



DAMPER SEQUENCE:
THE FIRE/SMOKE DAMPER SHALL CLOSE UPON ACTIVATION OF THE FIRE ALARM AND UPON INTERRUPTION OF POWER TO THE AIR HANDLING UNIT.

TYPICAL FIRE/SMOKE DAMPER DETAIL
NOT TO SCALE

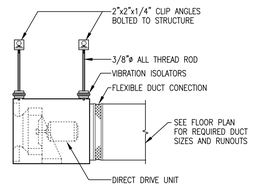


NOTE: REFER TO PROJECT SPECIFICATIONS FOR INSULATION/LINER REQUIREMENTS.

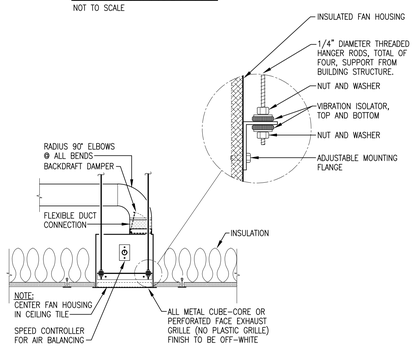
MAXIMUM HALF OF DUCT PERIMETER	PAIR AT 10 ft. SPACING		PAIR AT 8 ft. SPACING		PAIR AT 5 ft. SPACING		PAIR AT 4 ft. SPACING	
	STRAP	ROD	STRAP	ROD	STRAP	ROD	STRAP	ROD
$\frac{P}{2}$ = 72"	1"x22 ga.	1/4"	1"x22 ga.	1/4"	1"x22 ga.	1/4"	1"x22 ga.	1/4"
$\frac{P}{2}$ = 96"	1"x18 ga.	3/8"	1"x20 ga.	1/4"	1"x22 ga.	1/4"	1"x22 ga.	1/4"
$\frac{P}{2}$ = 120"	1"x16 ga.	3/8"	1"x18 ga.	3/8"	1"x22 ga.	1/4"	1"x22 ga.	1/4"
$\frac{P}{2}$ = 168"	1"x16 ga.	1/2"	1"x16 ga.	3/8"	1"x18 ga.	3/8"	1"x18 ga.	3/8"
$\frac{P}{2}$ = 168"	N/A	1/2"	1.5"x16 ga.	1/2"	1"x16 ga.	3/8"	1"x16 ga.	3/8"

WHEN STRAPS ARE LAP JOINED, USE THESE MINIMUM FASTENERS:
1"x18, 20, 22 ga. – TWO # 10
1"x16 ga. – TWO 1/4" DIA.
1.5"x16 ga. – TWO 3/8" DIA.
PLACE FASTENERS IN SERIES, NOT SIDE BY SIDE.

TYPICAL DUCT HANGER DETAIL & SCHEDULE
NOT TO SCALE

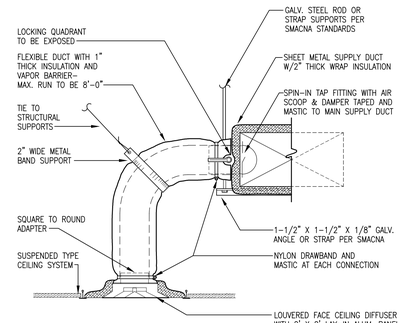


INLINE EXHAUST FAN
NOT TO SCALE

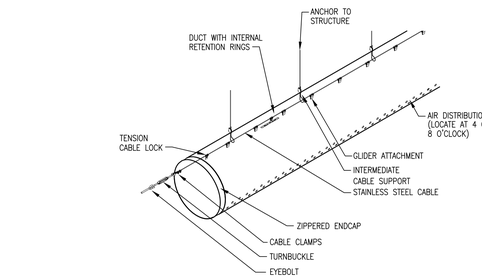


NOTE: SUPPORT RODS TO ROOF STRUCTURE – DO NOT SUPPORT FAN WITH CEILING SYSTEM

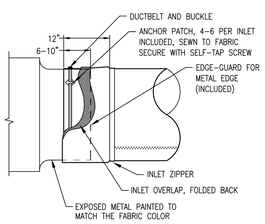
TYPICAL EXHAUST FAN DETAIL
NOT TO SCALE



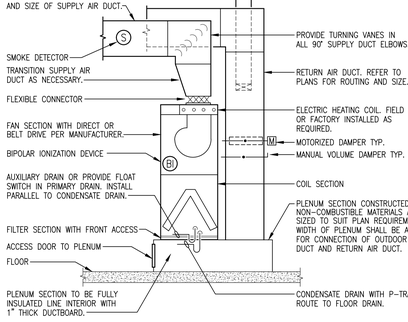
TYPICAL CEILING DIFFUSER DETAIL
NOT TO SCALE



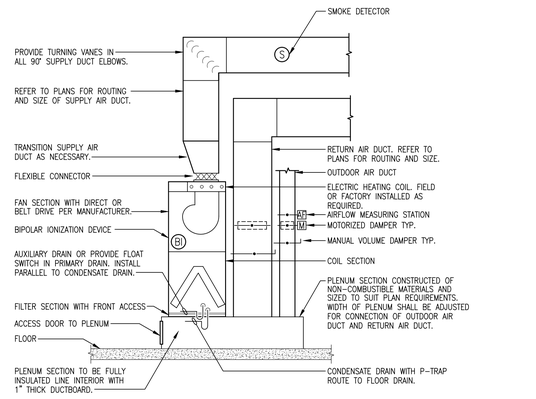
HORIZONTAL FABRIC DUCT SUSPENSION DETAILS
NOT TO SCALE



FABRIC DUCT INLET ATTACHMENT DETAIL
NOT TO SCALE



TYPICAL VERTICAL AHU DETAIL
NOT TO SCALE



TYPICAL VERTICAL AHU DETAIL
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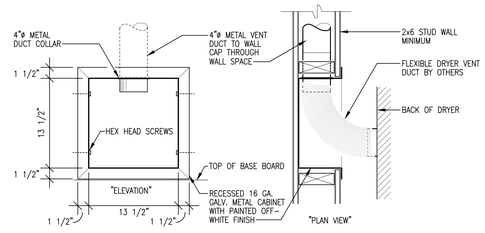
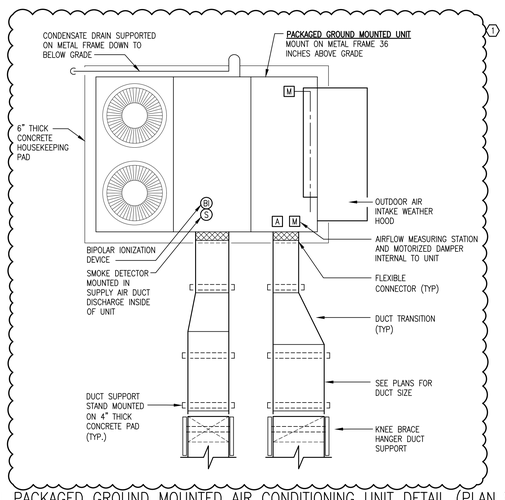
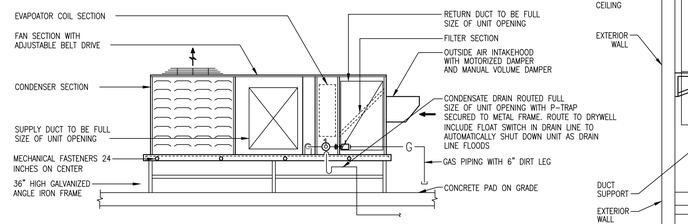
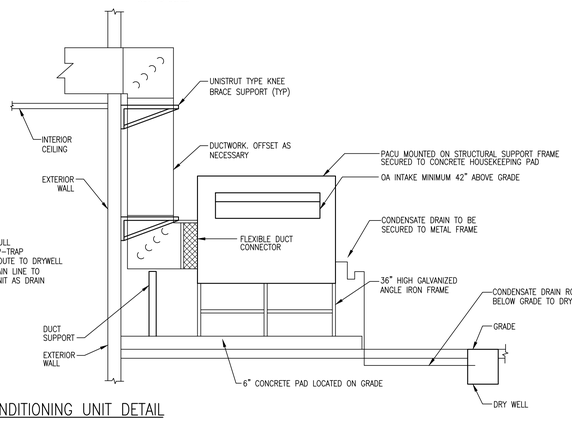


TYPICAL DRYER VENT BOX DETAIL
NOT TO SCALE



TYPICAL PACKAGED GROUND MOUNTED AIR CONDITIONING UNIT DETAIL (PLAN VIEW)
NOT TO SCALE (SCHEMATIC)





TYPICAL PACKAGED GROUND MOUNTED AIR CONDITIONING UNIT DETAIL
NOT TO SCALE

NOTE:
PACKAGED UNIT MOUNTED 36 INCHES ABOVE 6 INCH THICK CONCRETE SLAB ON GALVANIZED ANGLE IRON FRAME. SECURE UNIT TO FRAME AND FRAME TO CONCRETE PAD WITH MECHANICAL FASTENERS. PAD SHALL BE 6 INCHES LARGER THAN UNIT IN ALL DIRECTIONS. EXTEND FROM UNIT, FULL SIZE OF OPENING, A CONDENSATE DRAIN WITH P–TRAP. ROUTE CONDENSATE DRAIN ALONG FRAME TO TURN DOWN TO 6 INCHES BELOW GRADE. TERMINATE DRAIN LINE WITH DRY WELL. INCLUDE A FLOAT SWITCH IN DRAIN PAN INSIDE OF UNIT TO AUTOMATICALLY SHUT DOWN UNIT AS DRAINAGE SYSTEM FLOODS

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SHEET TITLE : HVAC DETAILS

MCKEE JOB # : 23-195

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REVISED DATE:

SHEET NO. : M2.2

- M:\Jobs_Active\23108 Robertsdale High School Band Room\23108M22 HVAC DETAILS.dwg
- Monday, November 27, 2023 3:24:36 PM

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AIR DEVICE SCHEDULE

MARK	CFM	MAX. NC	AIR DEVICE SIZE	DUCT CONNECTION SIZE	REMARKS (TYPE)
0-75	0-75	25	6"x6"	6"ø	CD
76-150	76-150	25	9"x6"	7"ø	CD
151-200	151-200	25	9"x9"	8"ø	CD
201-300	201-300	25	9"x9"	9"ø	CD
301-400	301-400	25	9"x12"	10"ø	CD
401-500	401-500	25	12"x12"	12"ø	CD
501-625	501-625	25	15"x12"	12"ø	CD
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0-150	0-150	25	8"x8"	SEE PLANS	RAR
151-450	151-450	25	12"x12"	SEE PLANS	RAR
451-600	451-600	25	14"x14"	SEE PLANS	RAR
601-1000	601-1000	25	18"x18"	SEE PLANS	RAR
1001-2000	1001-2000	25	24"x24"	SEE PLANS	RAR
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0-150	0-150	25	8"x8"	SEE PLANS	ER/TR
151-450	151-450	25	12"x12"	SEE PLANS	ER/TR
451-600	451-600	25	14"x14"	SEE PLANS	ER/TR
601-1000	601-1000	25	18"x18"	SEE PLANS	ER/TR
1001-2000	1001-2000	25	24"x24"	SEE PLANS	ER/TR

NOTES:
1. PROVIDE 24"X24" PANEL FOR ALL AIR DEVICES IN LAY-IN CEILING.
2. PROVIDE DUCT CONNECTION SIZE SHOWN UNLESS OTHERWISE NOTED ON PLANS.
3. AIR DEVICE SIZES SHOWN ON PLANS TAKE PRECEDENCE OVER THIS SCHEDULE.

MECHANICAL LEGEND

DUCTWORK	
12"ø / 12"ø	DOUBLE WALL, ROUND OR FLAT OVAL SPIRAL SEAM DUCTWORK. SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS.
12"x8"	RECTANGULAR DUCTWORK. SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS.
12"ø	ROUND METAL SNAPLOCK DUCTWORK. SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS.
	FACTORY FABRICATED AND INSULATED SOUND ATTENUATING FLEXIBLE ROUND DUCT. MAX LENGTH SHALL BE 8 FT.
	SQUARE THROAT ELBOW IN RECTANGULAR DUCTWORK WITH DOUBLE WALL TURNING VANES. PROVIDE FOR ALL DUCTWORK 12" AND LARGER IN THE TURNING DIRECTION.
	RECTANGULAR BRANCH DUCT TAKEOFF FROM RECTANGULAR MAIN DUCT. TAKEOFF SHALL BE MADE WITH A 45° COLLAR. SEE DETAIL.
	LONG RADIUS ELBOW IN RECTANGULAR OR ROUND DUCT. PROVIDE FOR ALL DUCTWORK SMALLER THAN 12" IN THE TURNING DIRECTION.
	MITERED ELBOW "VARD BEND" IN SINGLE WALL ROUND OR FLAT OVAL SPIRAL SEAM DUCT. PROVIDE WITH DOUBLE WALL TURNING VANES.
	BRANCH CONNECTION IN ROUND OR FLAT OVAL SPIRAL SEAM DUCT MADE WITH A CONICAL TEE FITTING.
	ROUND BRANCH DUCT TAKEOFF FROM RECTANGULAR MAIN DUCT. BRANCH DUCT SHALL BE FLEXIBLE ROUND OR ROUND SNAPLOCK DUCT AS INDICATED. ROUND DUCT TAP-IN SHALL BE MADE WITH SIDE TAKEOFF FITTING WITH MANUAL VOLUME DAMPER. SEE DETAIL.
	MANUAL VOLUME DAMPER IN RECTANGULAR OR ROUND CUT. PROVIDE WITH LOCKING QUADRANT REGULATOR.
M	AUTOMATIC CONTROL DAMPER. MOTORIZED FULLY MODULATING DAMPER.
	RECTANGULAR OR FLAT OVAL TO ROUND DUCT TRANSITION PER SMACNA DUCT CONSTRUCTION STANDARDS.
FD SD	FIRE DAMPER(FD); SMOKE DAMPER(S); FIRE/SMOKE DAMPER(F/S). PROVIDE WITH DUCT ACCESS DOOR AND CLOSURE ANGLES. SEE DETAIL.
	UNDERCUT DOOR ⅜" TO ALLOW FOR AIRFLOW IN THE DIRECTION INDICATED.
T	THERMOSTAT WITH EQUIPMENT NUMBER SERVED – MOUNT AT 48" AFF.
TS	TEMPERATURE SENSOR
S	SMOKE DETECTOR
M	MOTORIZED DAMPER
BI	BIPOLAR IONIZATION DEVICE
AF	AIRFLOW MEASURING STATION
	MANUAL VOLUME DAMPER

PACKAGED AIR CONDITIONING UNIT W/ GAS HEAT SCHEDULE

MARK #	AHU DATA NOMINAL TONS	TOTAL CFM	OA CFM	ESP	MOTOR HP	COOLING CAPACITY @ DESIGN CONDITIONS EAT °F(db/wb)	LAT °F(db/wb)	AMBIENT °F(db/wb)	TOTAL MBH	SENSIBLE MBH	MIN. EER @ ARI	MIN. IEER @ ARI	# OF COMPR.	COMPR. RLA (EACH)	# OF FANS	OUTDOOR FAN FLA (EACH)	GAS HEATER DATA OUTPUT MBH	INPUT (MBH)	# OF STAGES	FILTER TYPE	ELECTRICAL DATA (1) VOLTS	Hz	PHASE	MCA	MOCP	AREA SERVED	REMARKS (33)
PACU#1	10	3,500	440	1.0"	3	80/67	55/55	94/77	122	90	11.0	12.7	2	1 @ 13.2 1 @ 5.8	1	1.4 A	192	240	MOD.	2" PLEATED	460	60	3	30 A	40 A	PRACTICE FLD	SZVAV (2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12)(13)(14)(15)(16)(17)(18)(19)(20)(21)(22)(23)(24)(25)(26)(27)(28)(29)(30)(31)(32)
PACU#2	10	3,500	440	1.0"	3	80/67	55/55	94/77	122	90	11.0	12.7	2	1 @ 13.2 1 @ 5.8	1	1.4 A	192	240	MOD.	2" PLEATED	460	60	3	30 A	40 A	PRACTICE FLD	SZVAV (2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12)(13)(14)(15)(16)(17)(18)(19)(20)(21)(22)(23)(24)(25)(26)(27)(28)(29)(30)(31)(32)
PACU#3	15	5,250	875	1.0"	3	80/67	55/55	94/77	185	137	10.8	12.2	2	1 @ 16.7 1 @ 8.2	2	1.1 A	324	400	MOD.	2" PLEATED	460	60	3	41 A	50 A	GYMNASIUM	SZVAV (2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12)(13)(14)(15)(16)(17)(18)(19)(20)(21)(22)(23)(24)(25)(26)(27)(28)(29)(30)(31)(32)
PACU#4	15	5,250	875	1.0"	3	80/67	55/55	94/77	185	137	10.8	12.2	2	1 @ 16.7 1 @ 8.2	2	1.1 A	324	400	MOD.	2" PLEATED	460	60	3	41 A	50 A	GYMNASIUM	SZVAV (2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12)(13)(14)(15)(16)(17)(18)(19)(20)(21)(22)(23)(24)(25)(26)(27)(28)(29)(30)(31)(32)

NOTES:
1. PROVIDE WITH SINGLE POINT POWER CONNECTION.
2. SMOKE DETECTORS WITH WEATHERPROOF COVER SHALL BE MOUNTED IN THE SUPPLY AND RETURN AIR DUCT SYSTEM. DETECTORS SHALL BE PROVIDED BY DIV. 16, INSTALLED BY DIV. 15, AND WIRED BY DIV. 16.
3. EXTERNAL STATIC PRESSURE DROP DOES NOT INCLUDE FILTERS OR AUXILIARY HEATER.
4. PROVIDE WITH STANDARD MOTOR.
5. PROVIDE WITH LOW AMBIENT KIT FOR COOLING OPERATION DOWN TO 0°F.
6. PROVIDE WITH ANTI-SHORT CYCLE TIMER.
7. UNIT SHALL HAVE SINGLE ZONE VARIABLE AIR VOLUME CONTROL.
8. REFRIGERANT TYPE SHALL BE R-410A.
9. ENERGY EFFICIENCY RATIO (EER) AND IEER RATED @ ARI CONDITIONS.
10. PROVIDE WITH FACTORY INSTALLED CONDENSER COIL GUARDS.
11. PROVIDE WITH FACTORY INSTALLED CONDENSER COIL GUARDS.
12. PROVIDE WITH STAINLESS STEEL IAQ DRAIN PAN SLOPED IN TWO DIRECTIONS.
13. FILTERS SHALL HAVE A MINIMUM MERV 8 RATING.
14. TRAP CONDENSATE AT UNIT AND ROUTE FULLY INSULATED CONDENSATE DRAIN LINE TO TERMINATE AS SHOWN ON PLANS. CONDENSATE DRAIN LINE SHALL BE COPPER OR PVC. SEE CONDENSATE DRAIN DETAIL. PROVIDE PADS, BASE RAILS, AND/OR CURBS OF SUFFICIENT HEIGHT TO ENABLE CORRECT TRAP DEPTH.
15. PROVIDE FACTORY INSTALLED CONDENSATE OVERFLOW SWITCH IN PRIMARY DRAIN PAN IN ACCORDANCE WITH UL508 TO SHUT DOWN UNIT PRIOR TO PAN OVERFLOW.
16. MODULATING DAMPER IN OUTSIDE AIR INTAKE SHALL REMAIN OPEN DURING ALL OCCUPIED TIMES AND SHALL BE CLOSED OTHERWISE. DAMPER SHALL MODULATE BETWEEN MINIMUM AND MAXIMUM POSITIONS BASED ON SPACE CO2 LEVELS (1,000 PPM) DURING OCCUPIED HOURS. PROVIDE NECESSARY AIRFLOW CONTROLS FOR VARYING OUTSIDE AIR REQUIREMENTS.
17. PROVIDE UNIT WITH FACTORY PROVIDED HUMIDITY SENSOR FOR SPACE HUMIDITY CONTROL VIA MODULATING HOT GAS REHEAT.
18. UNIT SHALL HAVE A MINIMUM OF 5 STAGES OF COOLING OR VARIABLE SPEED COMPRESSOR CONTROL.
19. BASIS OF DESIGN: TRANE YSJ.
20. PROVIDE WITH MANUFACTURER'S ON BOARD CONTROLLER FOR CONTROL OF ALL UNIT OPERATIONS. CONTROLLER SHALL INTERFACE WITH SCHOOL BOARD'S EXISTING CONTROLS PROVIDER (SIEMENS) VIA BACNET CARD.
    PROVIDE WITH SUPPLY FAN FAILURE SWITCH. IF AIRFLOW IS NOT PROVEN BY THE DP SWITCH WITHIN 40 SECONDS, THE CONTROLLER SHALL SHUT DOWN UNIT AND SEND AN ERROR MESSAGE TO THE BUILDING AUTOMATION SYSTEM (BAS).
21. PROVIDE WITH PHASE MONITOR.
22. EQUIPMENT SHALL BE PAD MOUNTED ON GRADE. GENERAL CONTRACTOR SHALL PROVIDE CONCRETE HOUSEKEEPING PAD AND ENSURE PAD IS LEVEL PRIOR TO EQUIPMENT INSTALLATION.
23. PROVIDE WITH THE FOLLOWING EXTENDED MANUFACTURER WARRANTIES: PARTS (2-5YR.), LABOR (2-5YR.), & COMPRESSOR (6-10YR.).
24. PROVIDE WITH FACTORY INSTALLED CO2 SENSOR WIRING.
25. PROVIDE WITH TOOL-LESS HAIL GUARDS.
26. PROVIDE WITH ENHANCED DEHUMIDIFICATION OPERATION TO ALLOW MODULATION OF AIRFLOW AND COMPRESSOR OPERATION FOR ADDITIONAL MOISTURE REMOVAL.
27. PROVIDE WITH FREEZE STAT.
28. PROVIDE WITH MANUFACTURER'S ZONE SENSOR FOR SINGLE ZONE VAV OPERATION. (2-SPEED FAN OPERATION IS NOT ACCEPTABLE).
29. PROVIDE WITH HIGH SHORT CIRCUIT CURRENT RATING. SEE SPECIFICATIONS.
30. PROVIDE WITH ZONE SENSOR BY UNIT MANUFACTURER.
31. PROVIDE CONDENSER COIL WITH CORROSION PROTECTION COATING PASSING 5,000-HOUR SALT SPRAY TEST IN ACCORDANCE WITH ASTM B117.
32. CONTRACTOR SHALL FIELD INSTALL AIR PURIFICATION DEVICE (BI-POLAR IONIZATION). REFER TO SPECIFICATIONS. BI-POLAR DEVICE SHALL DE-ENERGIZE WHEN SUPPLY FAN IS OFF.
33. UNIT CONTROLS SHALL BE INTEGRAL TO UNIT FOR SELF SUSTAINED CONTROL. COMPRESSOR STAGING AND FAN SPEEDS SHALL BE BY INTEGRALS.

SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE

MARK #	AHU DATA (13)(15) NOMINAL TONS	TOTAL CFM	OA CFM	ESP	MOTOR HP	COOLING CAPACITY @ DESIGN CONDITIONS EAT °F(db/wb)	LAT °F(db/wb)	AMBIENT °F(db/wb)	TOTAL BTU/HR	SENSIBLE BTU/HR	HEATING CAPACITY @ ARI STANDARD CONDITIONS EDB °F	AMBIENT °F	TOTAL BTU/HR	MIN. SEER (14)	MIN. EER (14)	MIN. COP/HSPF (23)	AHU ELECTRICAL DATA (1) kW	# OF STAGES	VOLTS	Hz	PHASE	INDOOR MOCP	INDOOR MCA	HEAT PUMP ELECTRICAL DATA COMPR. RLA QTY./AMPS	OUTDOOR FAN FLA QTY./AMPS	VOLTS	Hz	PHASE	OUTDOOR MCA	OUTDOOR MOCP	AREA SERVED	REMARKS
AHU#1/ HPU#1	7.5	2,685	320	0.75"	3	80/67	55/55	94/77	95,000	76,000	70	47	74,000	NA	11.0	3.3	15	2	460	60	3	30	27	2 @ 6.1	1 @ 1.1	460	60	3	15	20	ENSEMBLE	VERTICAL UPFLOW; DRAW-THRU (2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12)(13)(14)(15)(16)(17)(18)(19)(20)(21)(22)(24)(25)(26)(27)(28)
AHU#2/ HPU#2	10.0	3,650	440	0.75"	3	80/67	55/55	94/77	122,000	94,000	70	47	105,000	NA	11.0	3.3	25	2	460	60	3	45	44	2 @ 7.2	1 @ 2.2	460	60	3	18	25	BAND ROOM	VERTICAL UPFLOW; DRAW-THRU (2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12)(13)(14)(15)(16)(17)(18)(19)(20)(21)(22)(24)(25)(26)(27)(29)
AHU#3/ HPU#3	10.0	3,455	440	0.75"	3	80/67	55/55	94/77	122,000	94,000	70	47	105,000	NA	11.0	3.3	25	2	460	60	3	45	44	2 @ 7.2	1 @ 2.2	460	60	3	18	25	BAND ROOM	VERTICAL UPFLOW; DRAW-THRU (2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12)(13)(14)(15)(16)(17)(18)(19)(20)(21)(22)(24)(25)(26)(27)(29)
AHU#4/ HPU#4	3.0	1,105	150	0.50"	1/2	80/67	55/55	93/77	36,000	25,200	70	47	35,000	15	NA	8.8	7.6	1	460	60	3	13	15	5.7	1 @ 0.4	460	60	3	8	15	PRACTICE DRESSING RM	VERTICAL UPFLOW; DRAW-THRU (2)(3)(4)(5)(6)(9)(10)(11)(12)(13)(16)(17)(18)(21)(24)(25)(26)(27)(30)
AHU#5/ HPU#5	4.0	1,290	150	0.50"	3/4	80/67	55/55	93/77	48,000	33,600	70	47	47,000	15	NA	8.8	9.6	2	460	60	3	17	20	6.4	1 @ 0.6	460	60	3	9	15	GYM DRESSING RM	VERTICAL UPFLOW; DRAW-THRU (2)(3)(4)(5)(6)(9)(10)(11)(12)(13)(16)(17)(18)(21)(24)(25)(26)(27)(30)
AHU#6/ HPU#6	5.0	1,920	250	0.50"	1	80/67	55/55	93/77	60,000	42,000	70	47	59,000	15	NA	8.8	14.4	2	460	60	3	26	30	7.6	1 @ 0.7	460	60	3	10	15	GYM LOBBY	VERTICAL UPFLOW; DRAW-THRU (2)(3)(4)(5)(6)(9)(10)(11)(12)(13)(16)(17)(18)(19)(20)(24)(25)(26)(27)(30)

NOTES:
1. PROVIDE WITH FACTORY INSTALLED AUXILIARY ELECTRIC STRIP HEAT.
2. AIR HANDLER TO HAVE SINGLE POINT POWER CONNECTION. PROVIDE TRANSFORMER AS NECESSARY FOR SMALLER UNITS.
3. TRAP CONDENSATE AT UNIT AND ROUTE CONDENSATE DRAIN LINE TO FLOOR DRAIN. CONDENSATE DRAIN LINE SHALL BE COPPER OR PVC. SEE CONDENSATE DRAIN DETAIL. PROVIDE PADS, BASE RAILS, AND/OR CURBS OF SUFFICIENT HEIGHT TO ENABLE CORRECT TRAP DEPTH.
4. PROVIDE WITH ANTI SHORT-CYCLE TIMER.
5. PROVIDE WITH LOW AMBIENT KIT.
6. INSTALL FLOAT SWITCH IN PRIMARY DRAIN PAN IN ACCORDANCE WITH UL508 TO SHUT DOWN UNIT PRIOR TO PAN OVERFLOW.
7. AHU FAN SHALL BE VARIABLE SPEED TYPE.
8. (1) PROVIDE WITH APR VALVE ON LEAD CIRCUIT FOR DEHUMIDIFICATION APPLICATION.
9. REFRIGERANT TYPE SHALL BE R-410A.
10. UNIT CONTROLS SHALL BE BY DDC SYSTEM. REFER TO SPECIFICATIONS.
11. CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE OF EQUIPMENT WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.
12. (1) PROVIDE EVAPORATOR AND CONDENSER COILS WITH CORROSION PROTECTIVE COATING. COATING SHALL PASS 5,000 HOUR SALT SPRAY TEST PER ASTM B117.
13. PROVIDE 3 PHASE HEATER.
14. EER/SEER SHOWN IS RATED AT AHRI CONDITIONS.
15. EXTERNAL STATIC PRESSURE SHOWN DOES NOT INCLUDE PRESSURE DROP THRU ELECTRIC HEATER, COIL, OR FILTERS.
16. AHU FAN SHALL BE CONSTANT VOLUME TYPE.
17. ELECTRIC HEATER kW SHOWN IS FOR NOMINAL VOLTAGE. DE-RATE FOR ACTUAL VOLTAGE.
18. PROVIDE WITH CONDENSER HAIL/COIL GUARDS.
19. PROVIDE WITH DUCT MOUNTED SMOKE DETECTORS IN SUPPLY AIR LOCATIONS.
20. PROVIDE WITH STANDARD MOTOR.
21. PROVIDE WITH NON-CORROSIVE, DOUBLE SLOPED DRAIN PAN.
22. PROVIDE WITH DUAL REFRIGERATION CIRCUITS. AIR HANDLER SHALL HAVE AN INTERTWINED COIL.
23. MINIMUM HSPF/COP INDICATED IS FOR 47°F OUTDOOR DRY BULB TEMPERATURE.
24. PROVIDE WITH 2" THICK THROWAWAY PLEATED TYPE FILTERS. FILTERS SHALL BE MINIMUM OF MERV 7 AS RATED BY ASHRAE 52.2.
25. CONTRACTOR SHALL FIELD INSTALL AIR PURIFICATION DEVICE (BI-POLAR IONIZATION). REFER TO SPECIFICATIONS. BI-POLAR DEVICE SHALL DE-ENERGIZE WHEN SUPPLY FAN IS OFF.
26. HEAT PUMP SHALL SERVE AS STAGE 1 HEATING. ELECTRIC HEATER SHALL SERVE AS STAGE 2 HEATING AND DEFROST CYCLE. DURING STAGE 2 HEATING, THE HEAT PUMP AND ELECTRIC HEAT SHALL OPERATE SIMULTANEOUSLY. IF SPACE TEMPERATURE CAN BE MAINTAINED THRU HEAT PUMP OPERATION ONLY, CONTROLS SHALL PREVENT ELECTRIC HEAT FROM OPERATING. COORDINATE WITH CONTROLS CONTRACTOR.
27. PROVIDE WITH 2-POSITION MOTORIZED DAMPER IN RETURN AIR DUCT.
28. BASIS OF DESIGN – TRANE: OUTDOOR (TWA090), INDOOR (TWE090)
29. BASIS OF DESIGN – TRANE: OUTDOOR (TWA120), INDOOR (TWE120)
30. BASIS OF DESIGN – TRANE: OUTDOOR (4TWA7), INDOOR (TAM9)

ABBREVIATIONS

@	AT	FLA	FULL LOAD AMPS
AD	ACCESS DOOR	°F	FAHRENHEIT
AFMS	AIRFLOW MEASURING STATION	HPU	HEAT PUMP UNIT
AH	AIR HANDLING UNIT	HP	HORSEPOWER
AFF	ABOVE FINISHED FLOOR	IAQ	INDOOR AIR QUALITY
ARI	AIR CONDITIONING & REFRIGERATION INSTITUTE	MCA	MINIMUM CIRCUIT AMPACITY
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, & AIR CONDTIONING ENGINEERS	MOCP	MAXIMUM OVERCURRENT PROTECTION
BTUH	BRITISH THERMAL UNIT PER HOUR	OAL	OUTSIDE AIR LOUVER
CD	CEILING DIFFUSER	PACU	PACKAGED A/C UNIT
CFM	CUBIC FEET PER MINUTE	RAR	RETURN AIR REGISTER
DCDU	DUCTLESS CONDENSING UNIT	RLA	RATED LOAD AMPS
DDC	DIRECT DIGITAL CONTROL	SD	SMOKE DAMPER
EAL	EXHAUST AIR LOUVER	TG	TRANSFER GRILLE
EAT	ENTERING AIR TEMPERATURE	W	WATTS
EDB	ENTERING DRY BULB		
EF	EXHAUST FAN		
ESP	EXTERNAL STATIC PRESSURE		
EWB	ENTERING WET BULB		

DUCTLESS SPLIT AIR CONDITIONING UNIT SCHEDULE

MARK	AHU DATA TOTAL CFM	MOTOR	COOLING CAPACITY @ AHRI STANDARD CONDITIONS EDB	EWB	AMBIENT	COOLING BTU/HR	REFR. TYPE	HEATING CAPACITY @ AHRI STANDARD CONDITIONS EDB	AMBIENT	HEATING BTU/HR	MIN. SEER	COMPR. RLA	OUTDOOR FAN FLA	INDOOR MCA	OUTDOOR UNIT MCA	OUTDOOR UNIT MOCP	ELEC. DATA (V/Hz/PH)	SERVES	REMARKS
DAHU#1/ DCDU#1	265	0.3 FLA	80°F	67°F	95°F/75°F	9,000	R-410	70	47	11,000	20.0	7 A	0.5 A	1.0 A	9 A	15 A	208/60/1	UTILITY 854	(2)(3)(4)(5)(6)(7)(8)(10)(11)
DAHU#2/ DCDU#2	250	0.19 FLA	80°F	67°F	95°F/75°F	12,000	R-410	NA	NA	NA	20.0	7 A	0.5 A	1.0 A	11 A	28 A	208/60/1	ELEC/DATA 831	(1)(2)(3)(4)(5)(6)(7)(9)(10)
DAHU#3/ DCDU#3	250	0.19 FLA	80°F	67°F	95°F/75°F	12,000	R-410	NA	NA	NA	20.0	7 A	0.5 A	1.0 A	11 A	28 A	208/60/1	ELEC 806	(1)(2)(3)(4)(5)(6)(7)(9)(10)

NOTES:
1. PROVIDE WALL-MOUNTED INDOOR UNIT COMPLETE WITH A WALL MOUNTED THERMOSTAT.
2. COMPRESSOR SHALL BE INVERTER DRIVEN TYPE.
3. INDOOR UNIT RECEIVES POWER FROM OUTDOOR UNIT THRU FIELD SUPPLIED INTERCONNECTED WIRING. COORDINATE WIRING REQUIREMENTS WITH ELECTRICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ELECTRICAL CONTRACTOR PROVIDING POWER TO INDOOR UNIT.
4. ROUTE FULLY INSULATED CONDENSATE DRAIN LINE TO FLOOR DRAIN IN SAME SPACE OR MOP SINK.
5. PROVIDE WITH DRAIN PAN LEVEL SENSOR TO SHUT DOWN UNIT PRIOR TO PAN OVERFLOW. SENSOR SHALL BE PROVIDED BY UNIT MANUFACTURER.
6. AIRFLOW SHOWN IS FOR "MEDIUM" CFM SETTING WITH DRY COIL CONDITION.
7. PROVIDE WITH 7 YEAR COMPRESSOR AND 5 YEAR PARTS MANUFACTURER WARRANTY.
8. BASIS OF DESIGN: MITSUBISHI SLZ-KF09/SUZ-KA09.
9. BASIS OF DESIGN: MITSUBISHI PKA-A12/PUY-A12.
10. FAN MOTORS 1/12 HORSEPOWER OR GREATER AND LESS THAN 1 HORSEPOWER SHALL BE ELECTRONICALLY COMMUTATED OR HAVE A MINIMUM EFFICIENCY OF 70% WHEN RATED IN ACCORDANCE WITH DOE 10 CFR 431. THESE MOTORS SHALL ALSO HAVE THE MEANS TO ADJUST MOTOR SPEED FOR EITHER BALANCING OR REMOTE CONTROL. BELT DRIVEN FANS MAY USE SHEAVE ADJUSTMENTS FOR AIR FLOW BALANCING IN LIEU OF VARYING MOTOR SPEED.
11. PROVIDE CEILING-MOUNTED INDOOR UNIT COMPLETE WITH A WALL MOUNTED THERMOSTAT.

ELECTRIC UNIT HEATER SCHEDULE

MARK EUH#	CFM	HEATING CAPACITY INPUT KW	STAGES	OUTPUT BTU/HR	ELECTRICAL DATA AMPS	VOLTS	Hz	PHASE	REMARKS
1	65	3.0	1 @ 3 KW	10,200	10.8	277	60	1	(1)

NOTES:
1. UNIT HEATER IS TO BE WALL MOUNTED. UNIT SHALL BE PROVIDED WITH INTEGRAL CONTROLS. PROVIDE ALL ACCESSORIES FOR INSTALLATION ON WALL.

FAN SCHEDULE

MARK #	TOTAL CFM	TSP IN WC	MAX RPM	TYPE DRIVE (2)	TYPE FAN (1)	CONTROL (8)	INTERLOCK WITH	MOTOR HP/WATTS	MAX SONES	ELECTRICAL DATA VOLTS	Hz	PHASE	FAN SERVICE	REMARKS
EF#1	70	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	80 W	2.5	120	60	1	UTILITY 854	(3)(4)(5)(6)(7)(9)
EF#2	100	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	90 W	5.5	120	60	1	TOILET 840A	(3)(4)(5)(6)(7)(9)
EF#3	150	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	90 W	5.5	120	60	1	GENTS 844	(3)(4)(5)(6)(7)(9)
EF#4	70	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	80 W	2.5	120	60	1	JANITOR 843	(3)(4)(5)(6)(7)(9)
EF#5	150	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	90 W	5.5	120	60	1	LADIES 842	(3)(4)(5)(6)(7)(9)
EF#6	210	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	135 W	5.5	120	60	1	TOILET 830A	(3)(4)(5)(6)(7)(9)
EF#7	210	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	135 W	5.5	120	60	1	TOILET 827A	(3)(4)(5)(6)(7)(9)
EF#8	50	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	80 W	2.5	120	60	1	JANITOR 820	(3)(4)(5)(6)(7)(9)
EF#9	210	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	135 W	5.5	120	60	1	TOILET 815	(3)(4)(5)(6)(7)(9)
EF#10	210	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	135 W	5.5	120	60	1	TOILET 814	(3)(4)(5)(6)(7)(9)
EF#11	70	0.5"	1080	DD	CEF	INTM.	LIGHT SWITCH	80 W	2.5	120	60	1	JANITOR 804	(3)(4)(5)(6)(7)(9)
EF#12	250	0.5"	1080	DD	CEF	INTM.	AHU#6	135 W	5.5	120	60	1	TOILET 803	(3)(4)(5)(6)(7)(9)
EF#13	250	0.5"	1080	DD	CEF	INTM.	AHU#6	135 W	5.5	120	60	1	TOILET 801	(3)(4)(5)(6)(7)(9)
ILEF#1	400	0.5"	900	DD	ILF	INTM.	AHU#2	1/4 HP	2.0	120	60	1	AHU#2	(3)(4)(5)(6)
ILEF#2	400	0.5"	900	DD	ILF	INTM.	AHU#3	1/4 HP	2.0	120	60	1	AHU#3	(3)(4)(5)(6)

NOTES:
1. CEF – CEILING MOUNTED
   ILEF – INLINE EXHAUST FAN
   UVS– UTILITY VENT SET
2. DD – DIRECT DRIVE
   BD – BELT DRIVE
3. PROVIDE WITH FAN SPEED CONTROLLER. CONTROLLER SHALL BE MOUNTED TO FAN.
4. PROVIDE WITH INTEGRAL DISCONNECT.
5. PROVIDE MOTOR WITH THERMAL OVERLOAD.
6. PROVIDE WITH INTEGRAL GRAVITY BACKDRAFT DAMPER.
7. PROVIDE WITH ALUMINUM GRILLE. PLASTIC GRILLES WILL NOT BE ACCEPTABLE.
8. CONT. – FAN FUNS CONTINUOUSLY DURING OCCUPIED HOURS SUBJECT TO INTERLOCK CONTROL
   INTM. – INTERMITTENTLY
9. FAN MOTORS 1/12 HORSEPOWER OR GREATER AND LESS THAN 1 HORSEPOWER SHALL BE ELECTRONICALLY COMMUTATED OR HAVE A MINIMUM EFFICIENCY OF 70% WHEN RATED IN ACCORDANCE WITH DOE 10 CFR 431. THESE MOTORS SHALL ALSO HAVE THE MEANS TO ADJUST MOTOR SPEED FOR EITHER BALANCING OR REMOTE CONTROL. BELT DRIVEN FANS MAY USE SHEAVE ADJUSTMENTS FOR AIR FLOW BALANCING IN LIEU OF VARYING MOTOR SPEED.

ADDITIONS
TO
ROBERTSDALE HIGH SCHOOL
ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

McKEE and ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

SHEET TITLE : HVAC LEGEND AND SCHEDULES

MCKEE JOB # : 23-195

DRAWN BY : AWB

DATE: 10-11-2023

REVISED DATE: (1) 11-20-2023

REVISED DATE:

REVISED DATE:

H.M. YONGE & ASSOCIATES, INC.
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SHEET NO. : M3.1

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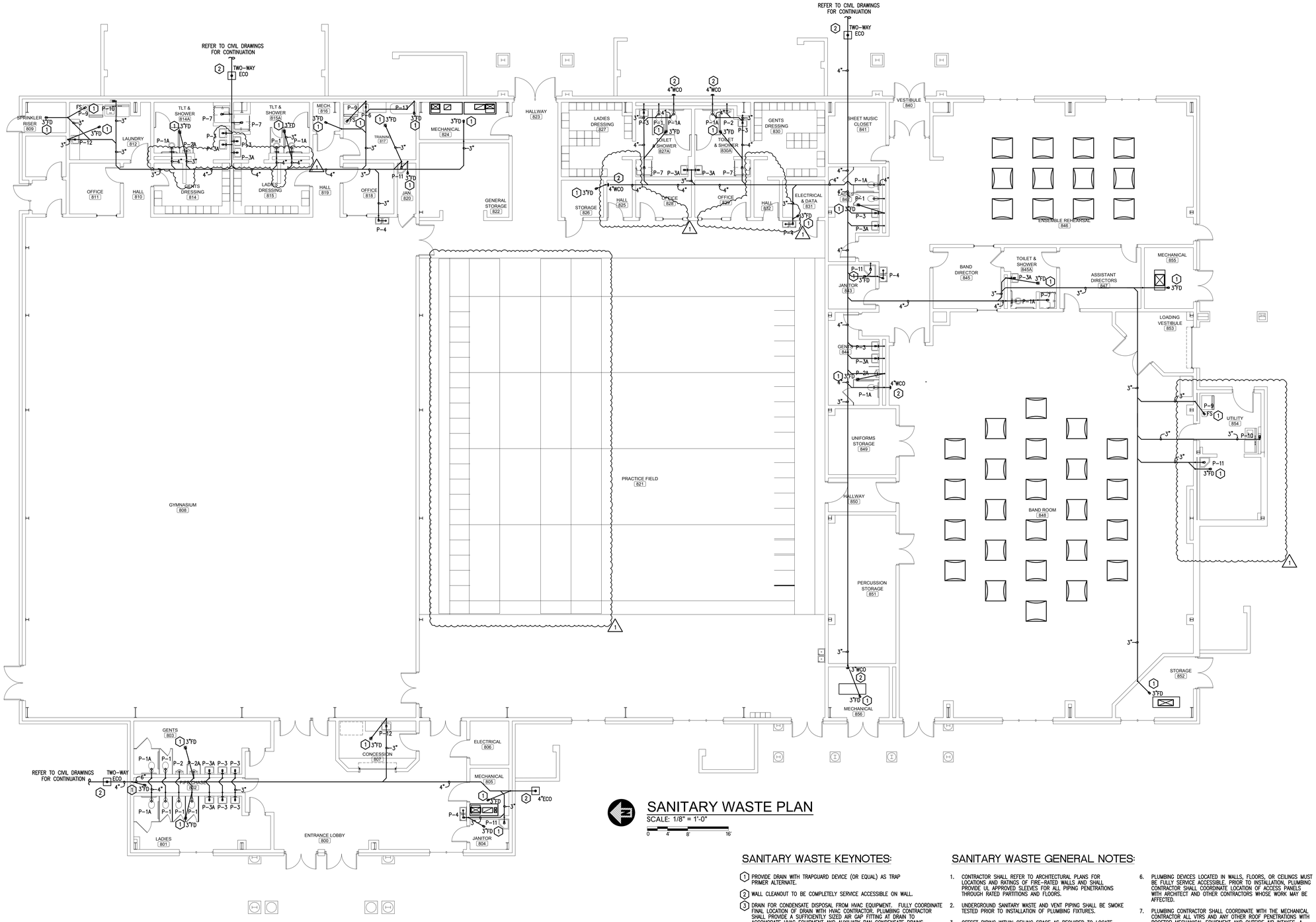
- Monday, November 27, 2023 3:24:41 PM

AWB> M:\Jobs_Active\23108 Robertsdale High School Band Room\23108M31 HVAC SCHEDULES.dwg 09/29/23 15:11



SANITARY WASTE PLAN

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

0 4' 8' 16'

SANITARY WASTE KEYNOTES:

1. PROVIDE DRAIN WITH TRAPGUARD DEVICE (OR EQUAL) AS TRAP PRIMER ALTERNATE.
2. WALL CLEANOUT TO BE COMPLETELY SERVICE ACCESSIBLE ON WALL.
3. DRAIN FOR CONDENSATE DISPOSAL FROM HVAC EQUIPMENT. FULLY COORDINATE FINAL LOCATION OF DRAIN WITH HVAC CONTRACTOR. PLUMBING CONTRACTOR SHALL PROVIDE A SUFFICIENTLY SIZED AIR GAP FITTING AT DRAIN TO ACCOMODATE HVAC EQUIPMENT AND AUXILIARY PAN CONDENSATE DRAINS.
4. FINAL LOCATION OF DRAIN TO BE ADJUSTED AS NECESSARY TO BE FULLY FUNCTIONAL AND ACCESSIBLE. COORDINATE WITH EQUIPMENT SUPPLIER(S) AS NECESSARY.

SANITARY WASTE GENERAL NOTES:

1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND RATINGS OF FIRE-RATED WALLS AND SHALL PROVIDE UL APPROVED SLEEVES FOR ALL PIPING PENETRATIONS THROUGH RATED PARTITIONS AND FLOORS.
2. UNDERGROUND SANITARY WASTE AND VENT PIPING SHALL BE SMOKE TESTED PRIOR TO INSTALLATION OF PLUMBING FIXTURES.
3. OFFSET PIPING WITHIN CEILING SPACE AS REQUIRED TO LOCATE PIPE RISERS AND DROPS WITHIN WALLS AS SHOWN ON PLANS.
4. PROVIDE ALL FLOOR DRAINS, FLOOR SINKS, AND TRENCH DRAINS WITH TRAP PRIMER PIPING FROM A SELF-CONTAINED TRAP PRIMER DISTRIBUTION UNIT WITH 1/2" ISOLATION VALVE. MAXIMUM OF FOUR FIXTURES PER TRAP PRIMER UNIT. UNIT TO BE MOUNTED PER MANUFACTURER'S RECOMMENDATIONS.
5. ALL HORIZONTAL PORTIONS OF THE SANITARY WASTE PIPING SERVING FOR CONDENSATE DISPOSAL SHALL BE INSULATED WITH 1" THICK SECTIONAL FIBERGLASS INSULATION WITH AN "ASJ" JACKET. INSULATION SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. CONDENSATE DRAIN TRAP SHALL ALSO BE INSULATED.
6. PLUMBING DEVICES LOCATED IN WALLS, FLOORS, OR CEILINGS MUST BE FULLY SERVICE ACCESSIBLE. PRIOR TO INSTALLATION, PLUMBING CONTRACTOR SHALL COORDINATE LOCATION OF ACCESS PANELS WITH ARCHITECT AND OTHER CONTRACTORS WHOSE WORK MAY BE AFFECTED.
7. PLUMBING CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR ALL VTRS AND ANY OTHER ROOF PENETRATIONS WITH ROOFTOP MECHANICAL EQUIPMENT AND OUTSIDE AIR INTAKES. A MINIMUM DISTANCE OF 12 FEET SHALL BE MAINTAINED BETWEEN ALL OUTSIDE AIR INTAKES AND VTRS PER 2021 IMC.
8. ALL PIPING PENETRATIONS OF FIRE-RATED BARRIERS SHALL BE SUFFICIENTLY PROTECTED TO MEET CURRENT CODE.
9. REFER TO SANITARY WASTE RISER DIAGRAM FOR SANITARY VENT SYSTEM ROUTING AND SIZING.

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PHONE: (251)690-7446

ADDITIONS TO ROBERTSDALE HIGH SCHOOL

ROBERTSDALE, ALABAMA

FOR THE

BALDWIN COUNTY BOARD OF EDUCATION

McKEE and ASSOCIATES
ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

STATE OF ALABAMA LICENSED ARCHITECT No. 14648 EDWARD M. JONES PROFESSIONAL ENGINEER

11/27/23

SHEET TITLE :	SANITARY WASTE PLAN
MCKEE JOB # :	23-195
DRAWN BY :	D. B.
DATE:	10-11-2023
REVISED DATE:	11-20-2023
REVISED DATE:	
REVISED DATE:	

SHEET NO. : P1.1

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- 27 November, 2023 14:02:52 PM

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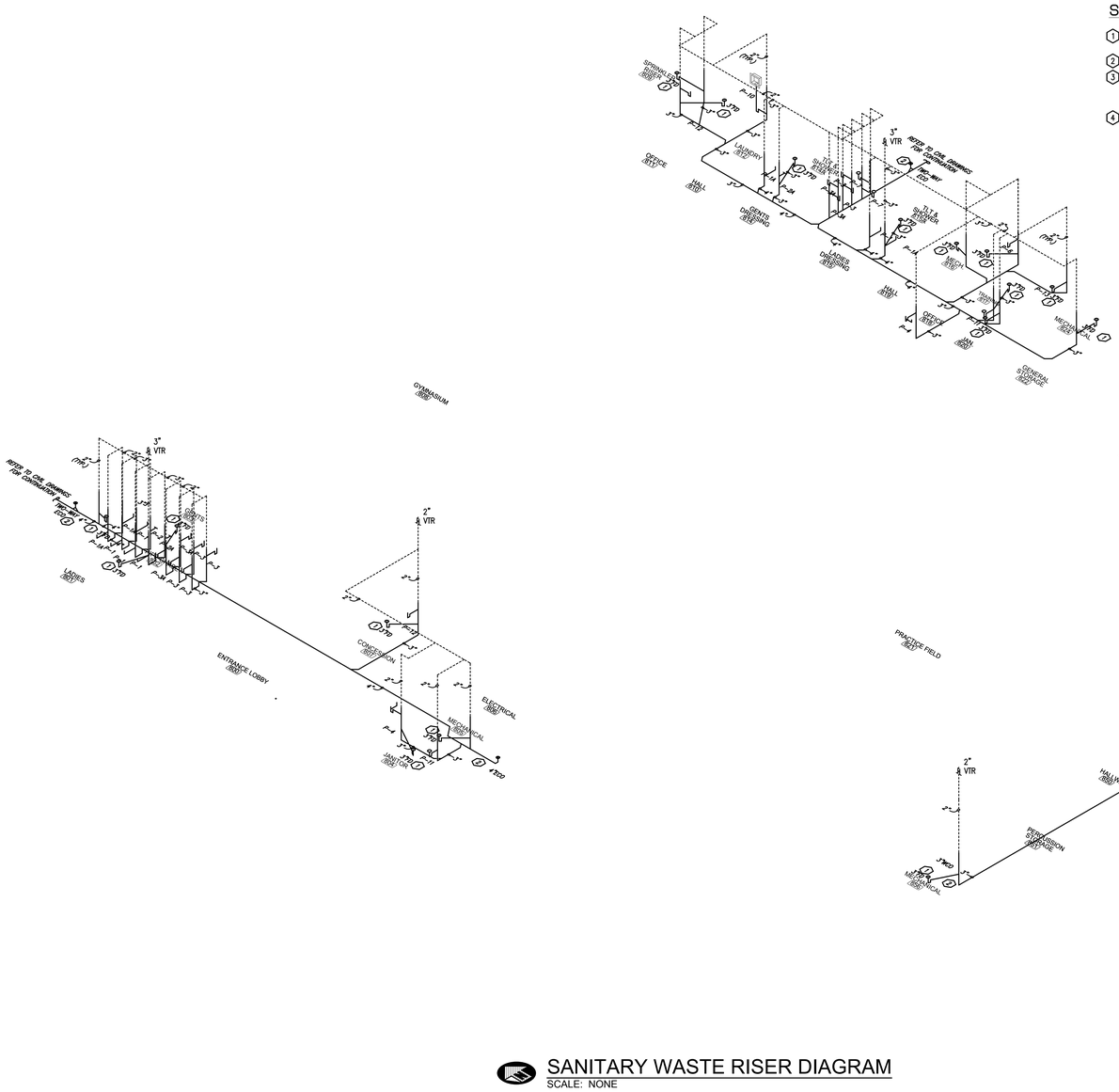
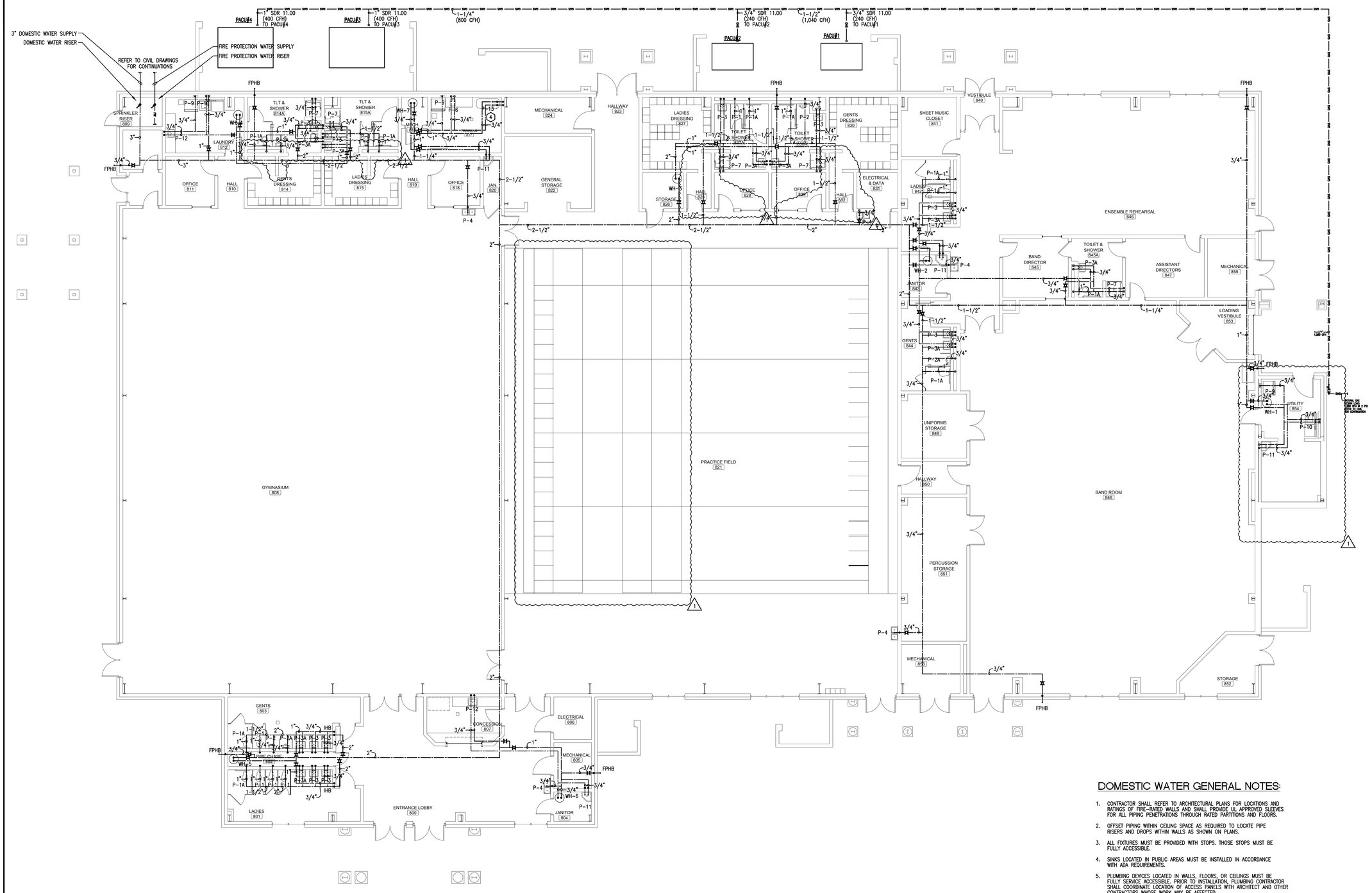

GYMNASIUM
3" VIR
REFER TO CIVIL DRAWINGS FOR CONTINUATION
2" VIR
ENTRANCE LOBBY
CONCESSION
ELECTRICAL
MECHANICAL
JAN
STORAGE
HALL
OFFICE
LAUNDRY
TOILET
DRESSING
LOADING
GIRLS
BOYS
MECHANICAL
GENERAL STORAGE
PRACTICE FIELD
HALLWAY
PERCUSSION
UNIFORMS
BAND ROOM
ENSEMBLE REHEARSAL
ASSISTANT DIRECTOR
VESTIBULE
VESTIBULE
VESTIBULE



DOMESTIC WATER PLAN

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

0 4' 8' 16'

DOMESTIC WATER GENERAL NOTES:

1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND RATINGS OF FIRE-RATED WALLS AND SHALL PROVIDE UL APPROVED SLEEVES FOR ALL PIPING PENETRATIONS THROUGH RATED PARTITIONS AND FLOORS.
2. OFFSET PIPING WITHIN CEILING SPACE AS REQUIRED TO LOCATE PIPE RISERS AND DROPS WITHIN WALLS AS SHOWN ON PLANS.
3. ALL FIXTURES MUST BE PROVIDED WITH STOPS. THOSE STOPS MUST BE FULLY ACCESSIBLE.
4. SINKS LOCATED IN PUBLIC AREAS MUST BE INSTALLED IN ACCORDANCE WITH ADA REQUIREMENTS.
5. PLUMBING DEVICES LOCATED IN WALLS, FLOORS, OR CEILINGS MUST BE FULLY SERVICE ACCESSIBLE. PRIOR TO INSTALLATION, PLUMBING CONTRACTOR SHALL COORDINATE LOCATION OF ACCESS PANELS WITH ARCHITECT AND OTHER CONTRACTORS WHOSE WORK MAY BE AFFECTED.
6. PLUMBING CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR ALL VTR'S AND ANY OTHER ROOF PENETRATIONS WITH ROOFTOP MECHANICAL EQUIPMENT AND OUTSIDE AIR INTAKES. A MINIMUM DISTANCE OF 12 FEET SHALL BE MAINTAINED BETWEEN ALL OUTSIDE AIR INTAKES AND VTR'S PER 2021 IMC.
7. ALL PIPING PENETRATIONS OF FIRE-RATED BARRIERS SHALL BE SUFFICIENTLY PROTECTED TO MEET CURRENT CODE.
8. PLUMBING CONTRACTOR SHALL FULLY COORDINATE PIPE ROUTING WITH MECHANICAL CONTRACTOR TO ENSURE EFFICIENT UTILIZATION OF AVAILABLE SPACE. DUCT ROUTING SHALL HAVE PRIORITY OVER PRESSURIZED-PIPE ROUTING.

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ARCHITECTS, INC.
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

STATE OF ALABAMA LICENSED PROFESSIONAL ENGINEER No. 14048 EDWARD M. BRYANT 11/27/23

SHEET TITLE : DOMESTIC WATER PLAN

MCKEE JOB # : 23-195

DRAWN BY : D. B.

DATE: 10-11-2023

REVISED DATE: 11-20-2023

REVISED DATE:

REVISED DATE:

SHEET NO. : P2.1

H.M. YONGE & ASSOCIATES, INC.
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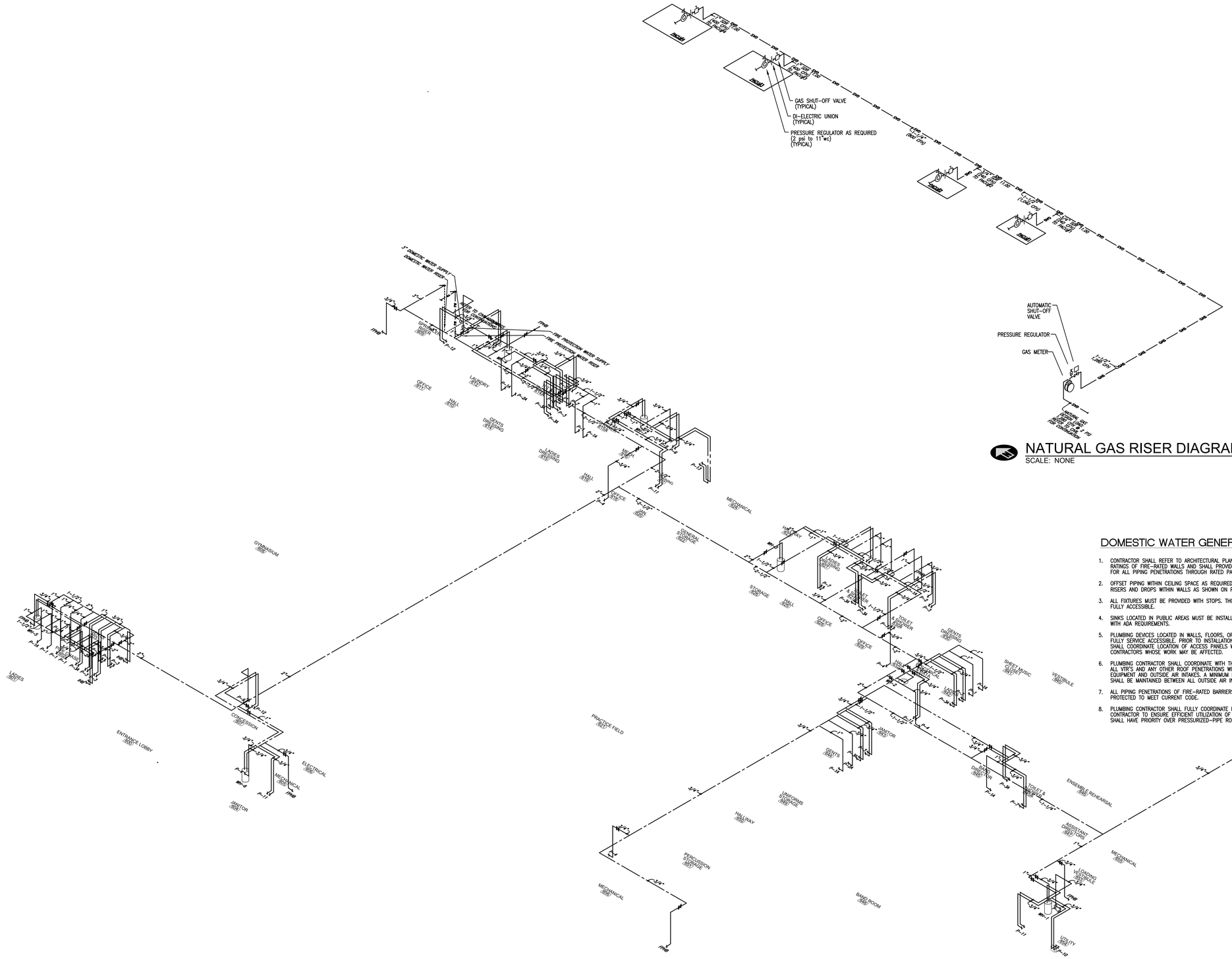

NATURAL GAS RISER DIAGRAM
SCALE: NONE

DOMESTIC WATER RISER DIAGRAM
SCALE: NONE

DOMESTIC WATER GENERAL NOTES:

1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND RATINGS OF FIRE-RATED WALLS AND SHALL PROVIDE UL APPROVED SLEEVES FOR ALL PIPING PENETRATIONS THROUGH RATED PARTITIONS AND FLOORS.
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631 SOUTH HULL STREET . MONTGOMERY . ALABAMA 36104 (334) 834-9933

11/27/23

SHEET TITLE :	DOMESTIC WATER RISER DIAGRAM
MCKEE JOB # :	23-195
DRAWN BY :	D. B.
DATE:	10-11-2023
REVISED DATE:	11-20-2023
REVISED DATE:	
REVISED DATE:	

SHEET NO. : P2.2

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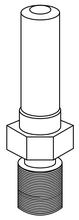
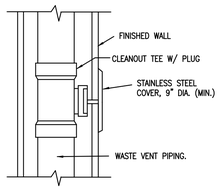


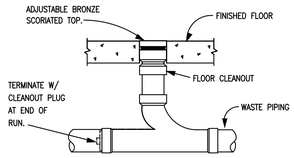
AIR PRELOAD PSI	FIXTURE UNITS	P.D.I. SYMBOL
60	1–11	A
60	12–32	B
60	33–60	C
60	61–113	D
60	114–154	E
60	155–330	F

NOTE: WATER HAMMER ARRESTORS TO BE LOCATED ABOVE ELEVATION OF CEILING.

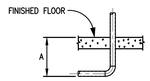
WATER HAMMER DETAIL
NOT TO SCALE



WALL CLEANOUT DETAIL
NOT TO SCALE



FLOOR CLEANOUT DETAIL
NOT TO SCALE

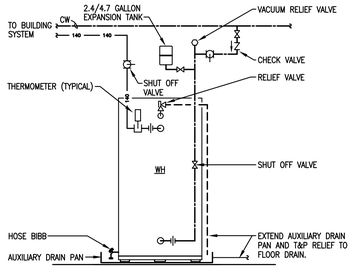


NOM. PIPE DIAMETER	MINIMUM A DIMENSION
1"	12"
2"	15"
3"	18"
4"	20"
6"	24"
8"	30"

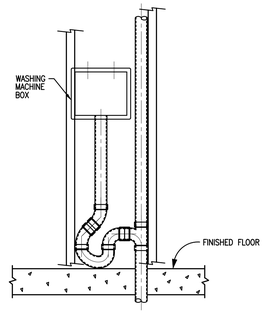
PIPING SLAB-PENETRATION DETAIL
NOT TO SCALE

NOTES: ADJACENT PIPING SLAB PENETRATIONS SHALL HAVE A MINIMUM OF ONE INCH CLEARANCE BETWEEN THEM.

ALL PENETRATIONS SHALL BE MADE VERTICALLY.



ELECTRIC WATER HEATER DETAIL
NOT TO SCALE



WASHING MACHINE BOX DETAIL
NOT TO SCALE

WATER HEATER SCHEDULE

MARK	CAPACITY (GALLONS)	STORAGE TEMP °F	LOCATION	ELECTRICAL DATA				REMARKS
				VOLTS	PHASE	Hz	kW	
WH-1	40	140	UTILITY 854	480	3	60	6.0	GLASS-LINED, FOAM INSULATED, ENERGY MISER TYPE WITH EXPANSION TANK, T&P RELIEF VALVE, AUXILIARY DRAIN PAN AND HEAT TRAPS. (BASIS OF DESIGN: RHEEM-RUUD ELD40-3,3.)
WH-2	40	140	JANITOR 843	480	3	60	6.0	GLASS-LINED, FOAM INSULATED, ENERGY MISER TYPE WITH EXPANSION TANK, T&P RELIEF VALVE, AUXILIARY DRAIN PAN AND HEAT TRAPS. (BASIS OF DESIGN: RHEEM-RUUD ELD40-3,3.)
WH-3	40	140	STORAGE 826	480	3	60	6.0	GLASS-LINED, FOAM INSULATED, ENERGY MISER TYPE WITH EXPANSION TANK, T&P RELIEF VALVE, AUXILIARY DRAIN PAN AND HEAT TRAPS. (BASIS OF DESIGN: RHEEM-RUUD ELD40-3,3.)
WH-4	40	140	LAUNDRY 812	480	3	60	6.0	GLASS-LINED, FOAM INSULATED, ENERGY MISER TYPE WITH EXPANSION TANK, T&P RELIEF VALVE, AUXILIARY DRAIN PAN AND HEAT TRAPS. (BASIS OF DESIGN: RHEEM-RUUD ELD40-3,3.)
WH-5	40	140	PIPE CHASE 802	480	3	60	6.0	GLASS-LINED, FOAM INSULATED, ENERGY MISER TYPE WITH EXPANSION TANK, T&P RELIEF VALVE, AUXILIARY DRAIN PAN AND HEAT TRAPS. (BASIS OF DESIGN: RHEEM-RUUD ELD40-3,3.)
WH-6	40	140	JANITOR 804	480	3	60	6.0	GLASS-LINED, FOAM INSULATED, ENERGY MISER TYPE WITH EXPANSION TANK, T&P RELIEF VALVE, AUXILIARY DRAIN PAN AND HEAT TRAPS. (BASIS OF DESIGN: RHEEM-RUUD ELD40-3,3.)
WH-7	40	140	MECH. 816	480	3	60	6.0	GLASS-LINED, FOAM INSULATED, ENERGY MISER TYPE WITH EXPANSION TANK, T&P RELIEF VALVE, AUXILIARY DRAIN PAN AND HEAT TRAPS. (BASIS OF DESIGN: RHEEM-RUUD ELD40-3,3.)

NOTES:
1. WH-1 SHALL HAVE TWO ELEMENTS AT 3.0kW EACH WIRED FOR SIMULTANEOUS OPERATION.
2. WH-2 SHALL HAVE TWO ELEMENTS AT 3.0kW EACH WIRED FOR SIMULTANEOUS OPERATION.
3. WH-3 SHALL HAVE TWO ELEMENTS AT 3.0kW EACH WIRED FOR SIMULTANEOUS OPERATION.
4. WH-4 SHALL HAVE TWO ELEMENTS AT 3.0kW EACH WIRED FOR SIMULTANEOUS OPERATION.
5. WH-5 SHALL HAVE TWO ELEMENTS AT 3.0kW EACH WIRED FOR SIMULTANEOUS OPERATION.
6. WH-6 SHALL HAVE TWO ELEMENTS AT 3.0kW EACH WIRED FOR SIMULTANEOUS OPERATION.
7. WH-7 SHALL HAVE TWO ELEMENTS AT 3.0kW EACH WIRED FOR SIMULTANEOUS OPERATION.

PLUMBING LEGEND

AFF	ABOVE FINISHED FLOOR
CO	CLEANOUT
CW	COLD WATER
ECO	EXTERIOR CLEANOUT
FD	FLOOR DRAIN
HW	HOT WATER
WCO	WALL CLEANOUT
VTR	VENT THRU ROOF
———	COLD WATER PIPING
———	UNDERGROUND COLD WATER PIPING
———	140° HOT WATER PIPING
—·—·—·—	SANITARY WASTE PIPING
—FW—FW—	FIRE WATER PIPING
———	VENT PIPING
—— ——	BALL VALVE
	P-TRAP
	VENT THRU ROOF
	WATER HAMMER ARRESTOR

PLUMBING FIXTURE CONNECTION SCHEDULE

MARK	FIXTURE	CONNECTIONS			DESCRIPTION
		WASTE	CW	HW	
P-1	WATER CLOSET	4"	1"	--	15" HIGH ELONGATED BOWL, FLOOR MOUNTED, FLOOR OUTLET, FLUSH VALVE TYPE. PROVIDE WHITE OPEN FRONT SEAT LESS COVER.
P-1A	WATER CLOSET (HANDICAPPED)	4"	1"	--	16-1/2" HIGH ELONGATED BOWL, FLOOR MOUNTED, FLOOR OUTLET, FLUSH VALVE TYPE. PROVIDE WHITE OPEN FRONT SEAT LESS COVER. INSTALL PER ADA REQUIREMENTS.
P-2	URINAL	2"	3/4"	--	WALL HUNG TYPE WITH FLUSH VALVE AND FLOOR MOUNTED CARRIER. MANUAL 1.0 gpf FLUSH
P-2A	URINAL (HANDICAPPED)	2"	3/4"	--	WALL HUNG TYPE WITH FLUSH VALVE AND FLOOR MOUNTED CARRIER. MANUAL 1.0 gpf FLUSH. INSTALL PER ADA REQUIREMENTS.
P-3	LAVATORY	1-1/2"	3/4"	3/4"	WALL HUNG VITREOUS CHINA WITH SINGLE LEVER FAUCET AND GRID WASTE, 1-1/2" 17 GA. P-TRAP, FLEXIBLE SUPPLIES AND STOPS. FLOOR MOUNTED CONCEALED ARM CARRIER, AND INSULATION KIT.
P-3A	LAVATORY (HANDICAPPED)	1-1/2"	3/4"	3/4"	WALL HUNG VITREOUS CHINA WITH SINGLE LEVER FAUCET AND GRID WASTE, 1-1/2" 17 GA. P-TRAP, FLEXIBLE SUPPLIES AND STOPS. FLOOR MOUNTED CONCEALED ARM CARRIER, AND INSULATION KIT. INSTALL PER ADA REQUIREMENTS.
P-4	WATER COOLER	1-1/2"	1/2"	--	WALL HUNG, DUAL-HEIGHT COOLER 1-1/4", 17 GA P-TRAP, FLEXIBLE SUPPLY WITH ANGLE STOP AND FLOOR-SUPPORTED CARRIER. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. INSTALL PER ADA REQUIREMENTS. UNIT TO INCLUDE BOTTLE-FILLING STATION.
P-5	UTILITY SINK	2"	3/4"	3/4"	32"x16" SINGLE COMPARTMENT, POLYPROPYLENE. PROVIDE WITH GOOSENECK FAUCET WITH 4" WRIST BLADE HANDLES, BASKET STRAINER, 17 GA. P-TRAP, SUPPLY WITH STOP.
P-6	TRAINER'S ROOM SINK	1-1/2"	3/4"	3/4"	SINGLE COMPARTMENT, STAINLESS STEEL SINK. PROVIDE WITH GOOSENECK FAUCET WITH SPRAY, LEVER HANDLE, GRID WASTE, 17 GA. P-TRAP, AND FLEXIBLE SUPPLIES WITH STOPS.
P-7	SHOWER (HANDICAPPED)	3"	3/4"	3/4"	PRE-FABRICATED SHOWER UNIT. PROVIDE WITH PRESSURE BALANCED ANTI-SCALD SINGLE LEVER VALVE WITH HAND HELD SHOWER HEAD, VERTICAL BAR, HOSE, VACUUM BREAKER, AND WALL SUPPLY ELBOW. INSTALL PER ADA REQUIREMENTS.
P-8	FIXTURE NUMBER	NOT USED			
P-9	ICE MAKER BOX	--	1/2"	--	GALVANIZED STEEL, WALL RECESSED BOX WITH 1/2" COLD WATER VALVE
P-10	WASHING MACH. BOX	2"	3/4"	3/4"	GALVANIZED STEEL, WALL RECESSED BOX
P-11	JANITOR'S SINK	3"	1/2"	1/2"	24"x24"x12" FLOOR-MOUNTED TYPE WITH WALL-MOUNTED FAUCET, VACUUM BREAKER, WALL BRACE, 3" IPS DRAIN, STAINLESS STEEL GRATE AND WALL SPLASH GUARDS, AND MOP RACK.
P-12	COUNTER SINK	1-1/2"	3/4"	3/4"	17"x22" SINGLE COMPARTMENT, STAINLESS STEEL WITH 8" CENTERS. PROVIDE GOOSENECK FAUCET WITH 4" WRIST BLADE HANDLES, GRID STRAINER, 17 GA. P-TRAP, SUPPLIES WITH STOPS. PROVIDE INSULATION KIT.
P-13	WHIRLPOOL	--	3/4"	3/4"	UNIT TO BE PROVIDED BY OTHERS BUT FULLY INSTALLED WITH ALL NEEDED CONNECTIONS TO TO BE MADE BY THE PLUMBING AND ELECTRICAL CONTRACTORS.

NOTE: FIXTURES SHALL BE WHITE AND FAUCETS SHALL BE POLISHED CHROME UNLESS OTHERWISE INDICATED. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL HANDICAPPED FIXTURES SHALL BE ADA COMPLIANT AND INSTALLED PER ADA REQUIREMENTS. REFERENCE ARCHITECTURAL PLANS FOR INSTALLATION HEIGHTS. ALL DOMESTIC WATER PIPING ABOVE THE SLAB SHALL BE INSULATED INCLUDING PIPING INSIDE WALLS. PIPING SHALL NOT BE INSTALLED IN A MANNER IN WHICH CONTACT WITH MASONRY PRODUCTS IS ALLOWED. EACH FIXTURE MUST BE PROVIDED WITH STOPS. ALL STOPS MUST BE FULLY ACCESSIBLE. TEMPERED WATER FOR PUBLIC LAVATORIES MUST BE SUPPLIED THROUGH A TEMPERATURE-LIMITING DEVICE THAT CONFORMS TO ASSE 1070. SEE 2021 IPC 416.5. MAKE REVISIONS AS REQUIRED FOR COMPLIANCE.

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ADDITIONS
TO
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ROBERTSDALE, ALABAMA
FOR THE
BALDWIN COUNTY BOARD OF EDUCATION

McKEE and ASSOCIATES
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STATE OF ALABAMA LICENSED ARCHITECT No. 14648 PROFESSIONAL EDWARD M. MCKEE 11/27/23

SHEET TITLE : PLUMBING LEGEND, SCHEDULES, AND DETAILS

MCKEE JOB # : 23-195

DRAWN BY : D. B.

DATE: 10-11.2023

REVISED DATE: 11-20-2023

REVISED DATE:

REVISED DATE:

SHEET NO. : P3.1

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