NEW MAINTENANCE BUILDING

Mt. Pleasant Central School District
825 Westlake Drive
Thornwood, New York 10594
NYSED: # 66-08-01-06-3-012-001

Architect / Engineer:

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Consultants:

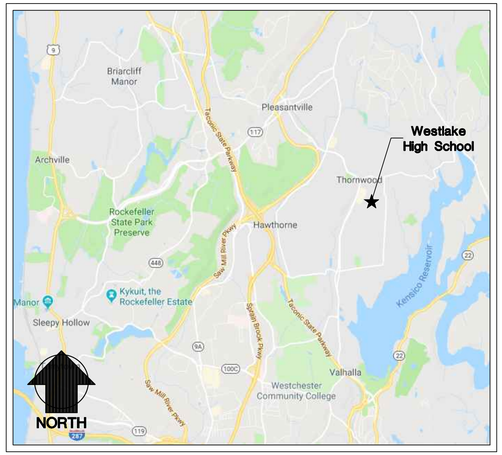
Micucci Engineering | STRUCTURAL
25 Smith Street Nanuet, NY 10954 (845) 623-9100

General Notes

1. ALL WORK SHALL CONFORM TO THE 2020 INTERNATIONAL BUILDING CODE AND ALL OTHER APPLICABLE CODES, ORDINANCES, ETC. FOR NEW YORK STATE AND THE LOCAL AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITH THE EXISTING CONDITIONS AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS AND COMMENCING WORK. COORDINATE SITE ACCESS WITH OWNER.
3. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL SAFE WORKING CONDITIONS AND SHALL OBSERVE ALL SAFETY REQUIREMENTS ESTABLISHED BY JURISDICTIONAL AGENCIES AND THE OWNER. WHERE CONFLICTS EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY. CARE SHALL BE EXERCISED TO AVOID ENDANGERING PERSONNEL OR STRUCTURES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES AND JOB SITE CONDITIONS, INCLUDING SAFETY. CONSTRUCTION SHALL BE PERFORMED IN SUCH A MANNER THAT WORKMEN, OCCUPANTS AND THE PUBLIC ARE PROTECTED FROM INJURY AND ADJOINING PROPERTY SHALL BE PROTECTED FROM DAMAGE BY USE OF SCAFFOLDING, UNDERPINNING OR OTHER APPROVED METHOD. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
5. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN, DEBRIS FREE CONDITION. THE DUST RESULTING FROM REMOVALS SHALL BE CONTROLLED SO AS TO PREVENT ITS SPREAD TO OCCUPIED PORTIONS OF THE BUILDING AND TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA.
6. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, APPROVALS, ETC. PRIOR TO COMMENCING WORK AND SHALL SECURE CERTIFICATE OF OCCUPANCY UPON COMPLETION OF WORK.
7. CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OFF SITE IN AN APPROVED MANNER. THE OWNER SHALL BE CONSULTED PRIOR TO DISPOSAL OF ANY SALVAGED OR EXCESS MATERIALS AT THE COMPLETION OF THE PROJECT.
8. UPON COMPLETION OF WORK, ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
9. ALL WORK SHALL BE SCHEDULED ACCORDING TO THE OWNER'S REQUIREMENTS. CONTRACTOR TO COORDINATE CONSTRUCTION SCHEDULE WITH OWNER.
10. CONTRACTOR SHALL FURNISH ALL MATERIALS AND EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE AND ORDERLY MANNER, UNLESS OTHERWISE NOTED ON THE CONTRACT DOCUMENTS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED DURING THE COURSE OF HIS WORK AND TO ENSURE THE OWNER'S FACILITY IS OPERATIONAL.
12. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND FIELD VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES AND ADDRESS ALL QUESTIONS TO ARCHITECT, IN WRITING, PRIOR TO COMMENCING WORK.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING, FILLING AND CLEANING UPON COMPLETION OF WORK.
14. THE CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS. ALL WRITTEN OR DIMENSIONED INFORMATION TAKES PRECEDENCE OVER THE DRAWING.
15. THE CONTRACTOR SHALL SUBMIT WHERE REQUIRED, SHOP DRAWINGS, SAMPLES AND MOCK-UPS TO THE ARCHITECT FOR APPROVAL PRIOR TO THE START OF FABRICATION OF THOSE ITEMS.
16. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ARCHITECT WITH CERTIFICATES OF INSURANCE PRIOR TO STARTING THE WORK.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND BRACING OF EXISTING STRUCTURES AS NEEDED TO COMPLETE THE NEW WORK.
18. ALL MANUFACTURER'S MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFIC INSTRUCTIONS AND RECOMMENDATIONS. WHERE BRAND NAMES AND MANUFACTURED PRODUCTS ARE CALLED FOR, APPROVED EQUALS WHICH MEET APPLICABLE STANDARDS AND SPECIFICATIONS MAY BE SUBSTITUTED WITH WRITTEN PERMISSION OF THE ARCHITECT AND THE OWNER. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE AND OF EQUAL QUALITY.
19. ALL CHANGES SHALL BE REQUESTED IN WRITING AND MAY ONLY BE APPROVED IN WRITING BY THE ARCHITECT AND THE OWNER PRIOR TO ANY CHANGES BEING MADE.
20. THE ARCHITECT HAS THE RIGHT TO REJECT ANY PORTION OF WORK THAT IS POORLY INSTALLED, DOES NOT MEET INDUSTRY STANDARD, IS UNAUTHORIZED OR WORK DONE CONTRARY TO THE INTENT OF THE CONTRACT DOCUMENTS. SUCH WORK SHALL BE REPLACED, REPAIRED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
21. THE CONTRACTOR SHALL GUARANTEE ALL HIS WORK AND THE WORK OF HIS SUBCONTRACTORS FOR A PERIOD OF ONE YEAR AFTER RECEIVING FINAL ACCEPTANCE AND DO ALL REPAIR WORK AND REPLACEMENT AS NECESSARY DURING THAT PERIOD AT THE CONTRACTOR'S EXPENSE.
22. IN NO EVENT SHALL STRUCTURAL MEMBERS BE CUT OR DRILLED WITHOUT THE WRITTEN APPROVAL OF A LICENSED STRUCTURAL ENGINEER.
23. THE CONTRACTOR SHALL PROVIDE SAFE AND SANITARY CONDITIONS WHERE DEMOLITION AND WRECKING OPERATIONS ARE BEING CARRIED ON. WORK SHALL BE EXECUTED IN SUCH A MANNER THAT HAZARD FROM FIRE, POSSIBILITY OF INJURY, DANGER TO HEALTH AND CONDITIONS WHICH MAY CONSTITUTE A PUBLIC NUISANCE SHALL BE MINIMIZED.
24. THE CONTRACTOR SHALL MAINTAIN UNOBSTRUCTED ACCESS TO ALL UTILITIES AND PUBLIC FACILITIES INCLUDING FIRE HYDRANTS, FIRE ALARM BOXES, POLICE CALL BOXES, STREET LIGHTS, MANHOLES, AMONG OTHERS DURING DEMOLITION.
25. BI-WEEKLY PROGRESS MEETINGS SHALL BE HELD ON SITE DURING THE COURSE OF CONSTRUCTION UNTIL COMPLETION.
26. UPON PROJECT COMPLETION, CONTRACTOR SHALL PROVIDE CLOSE OUT DOCUMENTS INCLUDING, BUT NOT LIMITED TO: ALL MSDS SHEETS, OPERATIONS AND MAINTENANCE MANUALS, WARRANTIES, AND AS BUILT DRAWINGS.
27. CONTRACTOR SHALL ENSURE A MINIMUM 20 YEAR MANUFACTURER'S WARRANTY ON ALL ROOFING MATERIALS.
28. COLOR OF ALL FINISH MATERIALS SHALL BE SELECTED BY OWNER.

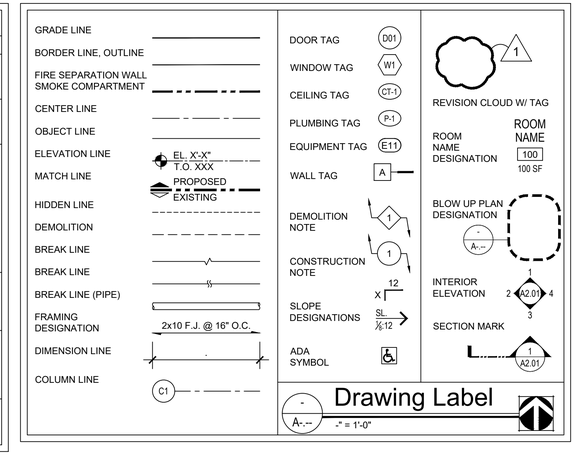
Location Map

NOT TO SCALE



Drawing Index

Symbols



Site Aerial

NOT TO SCALE

Date 7/8/21
Checked MJM
Drawn LH

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Revisions:

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SED PROJECT #66-08-01-06-3-012-001

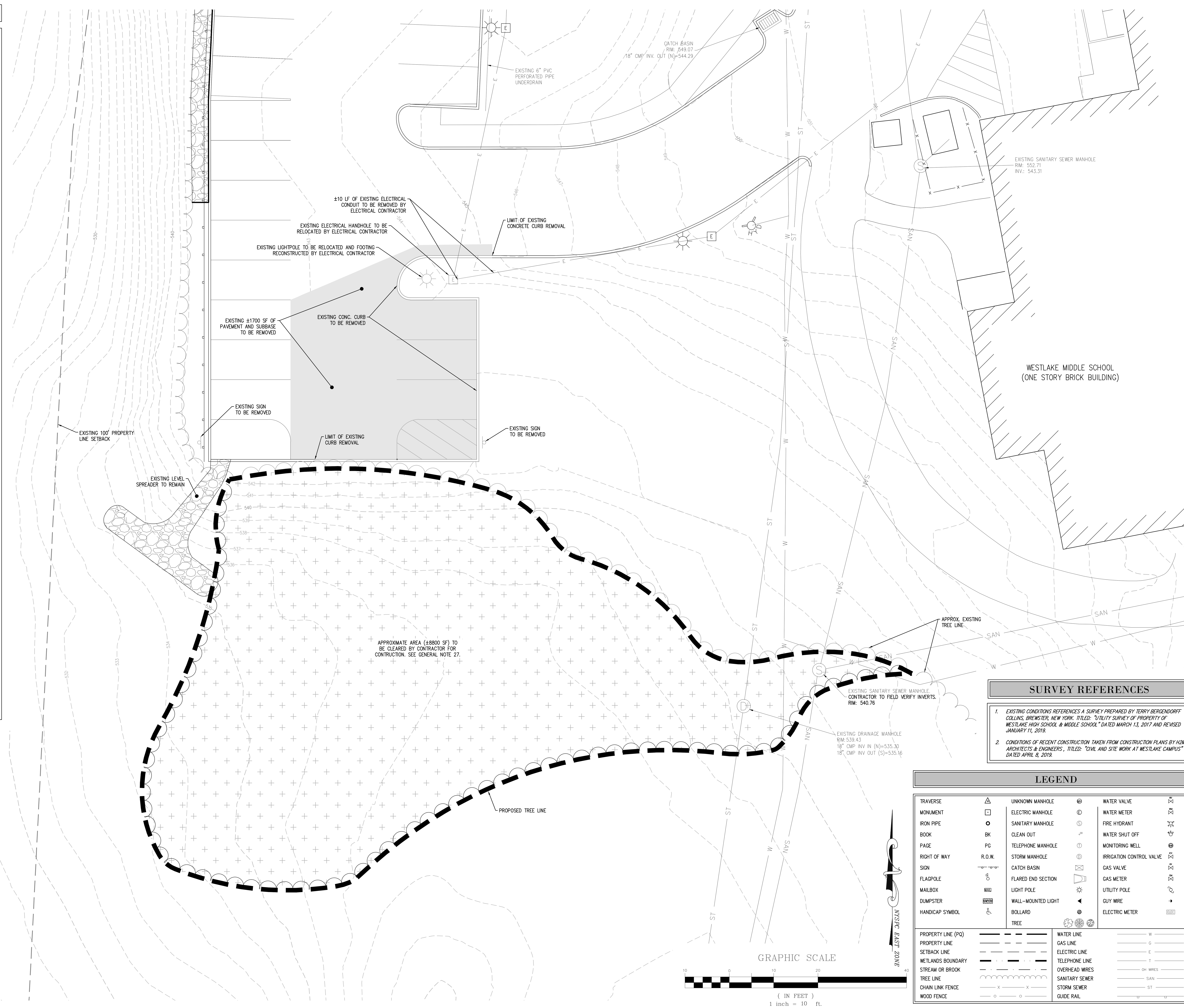
TITLE SHEET & GENERAL NOTES
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02
File No. 4144902T001

T0.01

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR THE REQUIREMENTS OUTLINED IN THE CONTRACT DOCUMENTS, THE WORK SHALL COMPLY WITH THE RULES AND REGULATIONS OF ALL GOVERNMENTAL AGENCIES INCLUDING, BUT NOT LIMITED TO, IBC CODE, STATE UNIFORM CONSTRUCTION CODE, MUNICIPAL CODES AND ORDINANCES, AND FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS. CODE REQUIREMENTS SHALL BE CONSIDERED PART OF THESE CONSTRUCTION DOCUMENTS, WHERE CONFLICTS EXIST, THE MORE STRINGENT REQUIREMENT SHALL TAKE PRECEDENCE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITHE THE EXISTING CONDITIONS PRIOR TO BIDDING.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND SHALL OBSERVE ALL SAFETY REQUIREMENTS ESTABLISHED BY JURISDICTIONAL AGENCIES AND THE OWNER. WHERE CONFLICTS EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY. CARE SHALL BE EXERCISED TO AVOID ENDANGERING PERSONNEL OR STRUCTURES. THESE REQUIREMENTS WILL APPLY CONTINUOUSLY 24 HOURS PER DAY UNTIL FINAL ACCEPTANCE OF THE WORK BY THE OWNER.
4. FURNISH ALL EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE, ORDERLY, AND FIRST CLASS PROFESSIONAL MANNER BY EXPERIENCES WORKMEN SKILLED IN THEIR TRADE.
5. ALL DIMENSIONS ARE MEASURED TO THE ROUGH UNLESS OTHERWISE NOTED. ELEVATIONS AND DIMENSIONS SHOWN ARE FOR GENERAL REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS, AND ELEVATIONS IN THE FIELD PRIOR TO THE USE OF SUCH INFORMATION IN BIDDING OR CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. DRAWINGS ARE NOT TO SCALE, NOTIFY THE ENGINEER IMMEDIATELY OF ANY DIMENSIONAL DISCREPANCIES.
6. THE CONTRACTOR SHALL REPAIR IN KIND, ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATION. SEPARATE PAYMENT WILL NOT BE MADE FOR THIS WORK BUT THE COST WILL BE INCLUDED IN THE VARIOUS PAY ITEMS IN THE PROPOSAL.
7. ALL WORK SHALL BE SCHEDULED IN COMPLIANCE WITH THE OWNER'S REQUIREMENTS FOR THE USE OF THE EXISTING FACILITY.
8. THE SITE SHALL BE KEPT CLEAN AT ALL TIMES. UPON COMPLETION OF WORK, ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
9. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH ANY AND ALL PERMITS ASSOCIATED WITH THIS WORK. THE CONTRACTOR SHALL COORDINATE AND ASSIST THE ENGINEER AND AUTHORIZING AGENCIES IN PERFORMING INSPECTIONS AS REQUIRED.
10. BITUMINOUS CONCRETE (WHERE APPLICABLE) SHALL MEET NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED.
12. THE UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE TAKEN FROM THE BEST AVAILABLE INFORMATION. ACTUAL LOCATIONS OF ALL ABOVE- AND UNDERGROUND UTILITIES, WHETHER PUBLIC OR PRIVATE, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. WITH THE COOPERATION OF THE PUBLIC UTILITY COMPANIES AND/OR A UTILITY LOCATING SERVICE , ALL UTILITIES, SERVICES, ETC. WITHIN TWENTY (20) FEET OF THE PROPOSED LIMITS OF CONSTRUCTION SHALL BE LOCATED AND MARKED OUT PRIOR TO CONSTRUCTION.
13. THE ENGINEER'S OBSERVATION OF THE CONTRACTOR'S PERFORMANCE OF THE WORK IS TO BE SOLELY IN BEHALF OF THE OWNER AND NOT IN BEHALF OF THE CONTRACTOR. THE ENGINEER'S OBSERVATIONS ARE NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
14. THE ENGINEER WILL BE, IN THE FIRST INSTANCE, THE INTERPRETER OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE ENGINEER WILL ALSO HAVE THE AUTHORITY TO REJECT WORK WHICH DOES NOT CONFORM TO THE CONTRACT DOCUMENTS.
15. THE ENGINEER WILL MAKE PERIODIC VISITS TO THE SITE TO FAMILIARIZE HIMSELF GENERALLY WITH THE PROGRESS AND QUALITY OF THE WORK AND TO DETERMINE, IN GENERAL, IF THE WORK IS PROCEEDING IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ON THE BASIS OF HIS ON-SITE OBSERVATIONS AS AN ENGINEER, HE WILL KEEP THE OWNER INFORMED OF THE PROGRESS OF THE WORK AND WILL ENDEAVOR TO GUARD THE OWNER AGAINST DEFECTS AND DEFICIENCIES IN THE WORK OF THE CONTRACTOR. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, SAFETY PRECAUTIONS, NOR FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
16. BACKFILL SHALL BE COMPACTED TO 95% DENSITY (MODIFIED PROCTOR, PER ASTM D 1557), UNLESS OTHERWISE NOTED.
17. BEFORE WORK IS STARTED, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A LIST OF MATERIALS, WITH TRADE NAMES, PROPOSED TO BE FURNISHED AND SHOP DRAWINGS AS REQUESTED BY THE ENGINEER. SUBMITTALS SHALL BE REPRESENTATIVE OF THE MATERIALS TO BE USED BY THE CONTRACTOR IN COMPLETING HIS WORK.
18. AS-BUILT DRAWINGS (4 COPIES) SHALL BE FURNISHED BY THE CONTRACTOR UPON COMPLETION OF THE INSTALLATION OF WORK TO THE ENGINEER FOR APPROVAL. THESE DRAWINGS SHALL SHOW THE EXACT LOCATIONS AND INVERTS OF ALL ITEMS INSTALLED AND/OR ALTERED BY THE CONTRACTOR.
19. CONTRACTOR SHALL PROVIDE GUARANTEES FOR ALL LABOR AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF COMPLETION AND FINAL ACCEPTANCE OF HIS WORK BY THE OWNER, WHICH SHALL INCLUDE AN AGREEMENT TO REPAIR AND MAKE GOOD AT HIS OWN EXPENSE ANY AND ALL DEFECTS WHICH MAY APPEAR IN HIS WORK OR MATERIALS.
20. CONTRACTOR SHALL PROVIDE ALL EXCAVATION AND BACKFILL FOR THE DEMOLITION AND CONSTRUCTION AS SHOWN ON THE DRAWINGS. INCLUDED IN THIS ITEM WILL BE THE EXCAVATION AND REMOVAL OF ALL MATERIALS, INCLUDING STRUCTURES ABOVE AND BELOW THE GROUND, EARTH, ROCK, TOPSOIL, BITUMINOUS PAVEMENT, CONCRETE, BOGGY WASTE, RUBBISH, ASHES, CINDERS, OR ORGANIC MATERIAL SUCH AS PEATY OR HUMUS MATERIAL.
21. BACKFILL SHALL CONSIST OF A SUITABLE SELECTED AND APPROVED EARTH GENERALLY FROM STORAGE OF APPROVED EXCAVATED SOIL, FREE FROM REJECTED ORGANIC MATTER, BOGGY, PEATY HUMUS OR OTHER UNSUITABLE MATERIAL SUCH AS SILT, RUBBISH, WASTE, ASHES, OR CINDERS. BACKFILL SHALL BE FREE OF LARGE BOULDERS MORE THAN SIX (6") INCHES IN THE LARGEST DIMENSION. NO FROZEN MATERIAL SHALL BE USED. IF SUFFICIENT SUITABLE MATERIAL FOR BACKFILL IS NOT AVAILABLE FROM THE EXCAVATED MATERIAL, AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL PROCURE ELSEWHERE A SUFFICIENT QUANTITY OF SUITABLE SELECT FILL MATERIAL AND SHALL FURNISH AS NEEDED AS PART OF THE BASE CONTRACT. BACKFILL SHALL BE PLACED AND COMPACTED WITH A VIBRATORY PLATE TAMPER IN MAXIMUM EIGHT (8") INCH LIFTS
22. CONTRACTOR TO REMOVE & RESET ALL SIGNS IN PROJECT AREA.
23. SIGNS AND STRIPING AS PER MUTCD STANDARDS.
24. QUANTITIES SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR QUANTITY TAKEOFF.
25. ALL TREES AND SHRUBS WITHIN AREAS OF PROPOSED GRADING ARE TO BE REMOVED UNLESS OTHERWISE NOTED ON THE PLAN. COORDINATE WITH ENGINEER PRIOR TO REMOVAL OF THE VEGETATION.
26. LEGEND LINE TYPES AND SYMBOLS ARE FOR VISUAL DESIGN AND ILLUSTRATIVE PURPOSE ONLY. THEY ARE NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
27. ALL TREES, SHRUBS, & ROCKS WITHIN THE LIMIT OF DISTURBANCE OF THE PROJECT ARE TO BE REMOVED AND CLEARED FOR PROPOSED IMPROVEMENTS. CLEARING LIMITS DEPICTED ARE APPROXIMATE ONLY. CONTRACTOR TO FIELD VERIFY LIMITS OF CLEARING REQUIRED FOR CONSTRUCTION OF PROPOSED SITE FEATURES.



SURVEY REFERENCES

1. EXISTING CONDITIONS REFERENCES A SURVEY PREPARED BY TERRY BERGENDORFF COLLINS, BREWSTER, NEW YORK. TITLED: "UTILITY SURVEY OF PROPERTY OF WESTLAKE HIGH SCHOOL & MIDDLE SCHOOL" DATED MARCH 13, 2017 AND REVISED JANUARY 11, 2019.
2. CONDITIONS OF RECENT CONSTRUCTION TAKEN FROM CONSTRUCTION PLANS BY H2M ARCHITECTS & ENGINEERS , TITLED: "CIVIL AND SITE WORK AT WESTLAKE CAMPUS" DATED APRIL 8, 2019.

LEGEND

TRAVERSE		UNKNOWN MANHOLE		WATER VALVE	
MONUMENT		ELECTRIC MANHOLE		WATER METER	
IRON PIPE		SANITARY MANHOLE		FIRE HYDRANT	
BOOK	BK	CLEAN OUT		WATER SHUT OFF	
PAGE	PG	TELEPHONE MANHOLE		MONITORING WELL	
RIGHT OF WAY	R.O.W.	STORM MANHOLE		IRRIGATION CONTROL VALVE	
SIGN		CATCH BASIN		GAS VALVE	
FLAGPOLE		FLARED END SECTION		GAS METER	
MAILBOX		LIGHT POLE		UTILITY POLE	
DUMPSTER		WALL-MOUNTED LIGHT		GUY WIRE	
HANDICAP SYMBOL		BOLLARD		ELECTRIC METER	
		TREE			

PROPERTY LINE (PQ)	WATER LINE
PROPERTY LINE	GAS LINE
SETBACK LINE	ELECTRIC LINE
WETLANDS BOUNDARY	TELEPHONE LINE
STREAM OR BROOK	OVERHEAD WIRES
TREE LINE	SANITARY SEWER
CHAIN LINK FENCE	STORM SEWER
WOOD FENCE	GUIDE RAIL

SED PROJECT #66-08-01-06-3-012-001

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Drawn	JP

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Revisions:

1 ISSUE TO BID ??/??/????

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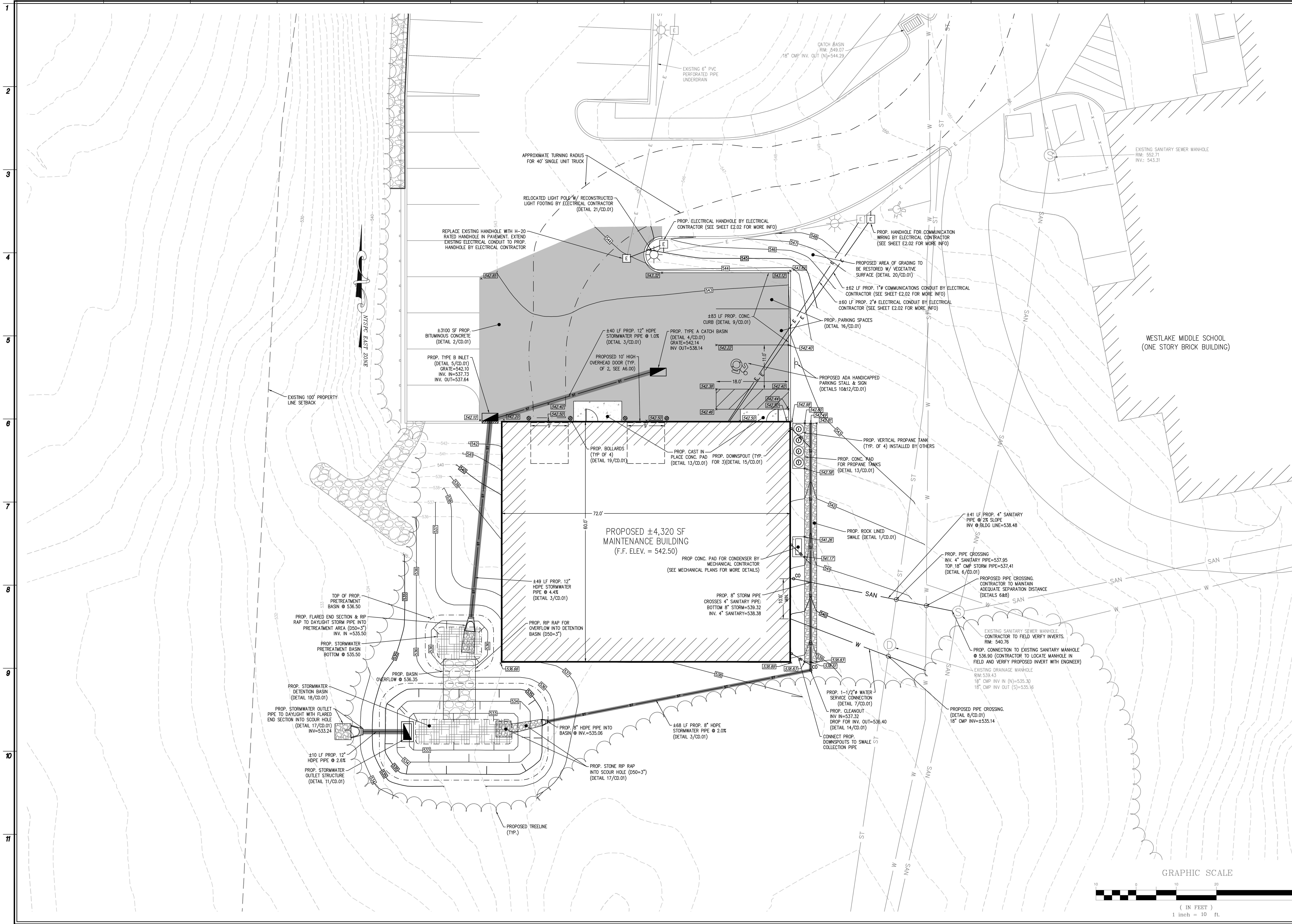
EXISTING CONDITION & DEMOLITION PLAN

NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02
File No. 144902C2

SP.11



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PROPOSED SITE PLAN
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02
File No. 144902C2

SP.21

1 ROCK LINED SWALE DETAIL CD.01 N.T.S.
FINISHED GRADE
2" CLEAN CRUSHED STONE
8" PERFORATED SCH 40 PVC PIPE
EXISTING GRADE
LINE SWALE WITH FILTER FABRIC
UNYIELDING SUBGRADE
2 BITUMINOUS PAVING TO MEET EXISTING DETAIL CD.01 N.T.S.
APPLY TACK COAT
SAWCUT AND APPLY ASPHALTIC JOINT SEALANT
6" MIN.
EXISTING
PROPOSED
EXISTING TOP COURSE TO REMAIN
EXISTING BASE COURSE TO REMAIN
EXISTING SUBBASE TO REMAIN
EXISTING SUBGRADE TO REMAIN
2" BITUMINOUS CONCRETE, TOP COURSE (NYSDOT TYPE 6)
3" BITUMINOUS CONCRETE, STABILIZER BASE (NYSDOT TYPE 1)
6" THICK ITEM 4 SUBBASE COURSE, COMPACTED – SEE NOTE #1
FIRM & UNYIELDING SUBGRADE
NOTES:
1. ALL FILL TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
3 STORMWATER PIPE TRENCH DETAIL CD.01 N.T.S.
FINISHED GRADE
6" TOPSOIL, SEED & PENN MULCH
UNDISTURBED SOIL
BACKFILL TO BE PLACED IN 8" LIFTS AND COMPACTED TO 95% OF THE MAX DRY DENSITY
BACKFILL WITH EXCAVATED TRENCH MATERIAL FREE OF DELETERIOUS MATERIAL AND STONES OVER 6" DIAMETER (SEE NOTE 2)
¾" CLEAN CRUSHED STONE PIPE BEDDING
PROPOSED DRAINAGE PIPE SIZE AND MATERIAL AS NOTED ON PLANS
VARIES
6" MIN.
12"
NOTES:
1. ALL FILL TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
2. ALL DRAINAGE PIPE SHALL BE HDPE WITH A SMOOTH INVERT.
3. ALL EXCAVATION AND TRENCHING TO MEET OSHA REQUIREMENTS.
4 PRECAST CONCRETE A TYPE INLET DETAIL CD.01 N.T.S.
HEAVY DUTY (H-20 LOADING) A-INLET FRAME AND BICYCLE-SAFE GRATE (CAMPBELL FOUNDRY 23rd ED. #3408 OR APPROVED EQUAL)
BICYCLE SAFE GRATE SET FRAME IN MORTAR WITH ONE OR TWO COURSES OF CONCRETE LEVELING BLOCKS
HEAVY DUTY PRECAST CONCRETE A-INLET, DESIGNED FOR H-20 LOADING
PROVIDE M.H. LADDER IF MORE THAN 3'-0" DEEP RUNGS @ 15" O.C. CAMPBELL NO. 2589 2252
SEPARATE 8" THICK CAST-IN-PLACE CONCRETE BASE MAY BE USED WHERE INLET IS TO BE INSTALLED OVER EXISTING PIPING. OTHERWISE, BASE SHALL BE INTEGRAL WITH PRECAST WALLS
SLOPE BOTTOM TOWARDS OUTLET
6" THICK OF COMPACTED ¾" QP STONE ON FIRM UNYIELDING GRADE
NOTE: OUTLET PIPE NOT SHOWN – LOCATION VARIES FOR EACH CATCH BASIN – SEE PLAN
5 PRECAST CONCRETE B TYPE INLET DETAIL CD.01 N.T.S.
FRAME AND BICYCLE-SAFE GRATE. CAMPBELL FOUNDRY 23rd ED. CATALOG NO. 2618 FOR B-INLET CATALOG NO. 2617 FOR D-INLET (ECO-TYPE HEAD) (OR APPROVED EQUAL)
BICYCLE SAFE GRATE SET FRAME IN MORTAR WITH ONE OR TWO COURSES OF CONCRETE LEVELING BLOCKS
PRECAST CONCRETE INLET, DESIGNED FOR H-20 LOADING
PROVIDE M.H. LADDER IF MORE THAN 3'-0" DEEP. RUNGS @ 15" O.C. CAMPBELL NO. 2593 2254
SEPARATE CAST-IN-PLACE CONCRETE BASE MAY BE USED WHERE INLET IS TO BE INSTALLED OVER EXISTING PIPING
6" OF COMPACTED 3/4" QP STONE ON FIRM UNYIELDING SUBGRADE.
CONCRETE BASE
SLOPE BOTTOM TOWARDS OUTLET
NOTE: OUTLET PIPE NOT SHOWN – LOCATION VARIES FOR EACH CATCH BASIN – SEE PLAN
6 WATER / SANITARY LINE SEPARATION DETAIL CD.01 N.T.S.
PROP PRESSURIZED DOMESTIC WATER LINE
PROP SANITARY SEWER LATERAL (SEE SP.21 FOR LOCATIONS)
10' MIN. HORIZONTAL SEPARATION (OUTSIDE OF PIPE TO OUTSIDE OF PIPE)
EXISTING WATER LINE
18" MIN. VERTICAL SEPARATION
4" PROP SANITARY PIPE
PROP. SANITARY PIPE
HORIZONTAL SEPARATION PLAN VIEW
VERTICAL SEPARATION SECTION VIEW
CONCRETE ENCASING WHERE SEPARATION IS NOT FEASIBLE
7 WATER SERVICE CONNECTION DETAIL CD.01 N.T.S.
PROPOSED GRADE
BOX LID FLUSH WITH SURFACE, MUST BE VISIBLE
ALL VALVE BOX MATERIAL MUST BE AMERICAN MADE
CURB BOX 2 1/2" DIA. ARCH PATTERN BASE, SCREW TYPE ADJUSTMENT MUELLER CO. BUFFALO TYPE NO. H-10350 SIZE 100-F 4'-6" TO 6'-6" EXTENSION. (OR APPROVED EQUAL)
1-1/2" CURB STOP BY MUELLER CO. (OR APPROVED EQUAL)
WATER SERVICE TO BE EXTENDED PAST THE SIDEWALK AREA AND PROPERLY CAPPED.
6" OF CLEAN CRUSHED STONE
MUELLER 1-1/2" CORPORATION STOP (OR APPROVED EQUAL)
SPLIT 1-1/2" DOMESTIC WATER FROM WATER SERVICE W/ MUELLER TAPPED TEE (OR APPROVED EQUAL)
EXISTING WATER SERVICE
1-1/2" WATER PIPE
ONE PIECE, NO FTGS.
FOOTPIECE
LAY SERVICE LINE AT SAME ELEVATION AS INVERT OF MAIN
5'-0" MIN.
NOTES:
1. CONTRACTOR TO VERIFY THAT FITTINGS ARE APPROPRIATE FOR THE SPECIFIED WATER PIPE SIZE AND TYPE.
2. BACKFILL SHALL NOT CONTAIN STONE OF MORE THAN 2" DIA. TO BE PROPERLY COMPACTED. BACKFILL TO SAND OR SELECT GRADED STONE. SUBMIT SAMPLE TO ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND/OR DELIVERY TO SITE.
8 UTILITY OFFSET DETAIL CD.01 N.T.S.
TYTON JOINT PIPE BY U.S. PIPE OR APPROVED EQUAL
SELF RESTRAINED MECHANICAL JOINTS, MJ FIELD LOK GASKETS BY US PIP OR APPROVED EQUAL (TYP.)
FINISHED GRADE
EXISTING UTILITY
45° ELBOW
10" MIN.
18" MIN.
NOTE:
1. WHEN THE EXISTING UTILITY IS A SANITARY SEWER, SANITARY SEWER LINE SHALL BE ENCASED IN 6" OF CONCRETE 10 FEET BEFORE AND AFTER THE POINT OF CROSSING.
9 CONCRETE CURB DETAIL CD.01 N.T.S.
1" RADIUS
APPLY TACK COAT
FINISH GRADE
POURED CONCRETE CURB IN 10' MAX. SECTIONS (CONCRETE STRENGTH TO BE 4000 PSI AT 28 DAYS) PROVIDE 1/2" PREMOLDED EXP. JOINTS AT 10' O.C.
6" THICK COMPACTED 3/4" QP BASE COURSE
BITUMINOUS CONCRETE SEE DETAIL FOR ADD'L INFO.
10 ADA HANDICAP PARKING STALL LAYOUT (TYP.) CD.01 N.T.S.
5'-0"
11'-0"
MATCH EXISTING
4" WIDE BLUE TRAFFIC PAINT
HANDICAP SIGN, SEE DETAIL FOR ADDITIONAL INFORMATION (TYP.)
11 STORMWATER OUTLET STRUCTURE CD.01 N.T.S.
PROP. ALUMINUM MODEL APR DEBRIS CAGE AS MANUFACTURED BY EFFLUENT DESIGN & FABRICATION, LLC (OR APPROVED EQUAL) 6"X6" SPACING WITH ⅜" BARS, BOLTED TO CONCRETE
HEAVY DUTY PRECAST CONCRETE OUTLET STRUCTURE FOR H-20 LOADING
OPEN TOP OF OUTLET STRUCTURE=535.14
12" HDPE OUTLET PIPE
2.5"x6" RECTANGULAR ORIFICE @ 534.18
2.5"x4" RECTANGULAR ORIFICE @ 533.60
SLOPE BOTTOM TOWARDS OUTLET
BOTTOM OF BASIN=532.50
6" THICK OF COMPACTED ¾" QP STONE ON FIRM, UNYIELDING GRADE
FILL CONCRETE UP TO OUTLET PIPE
INLET ORIFICES
SECTION VIEW
PLAN VIEW
12 HANDICAP SIGN & POST INSTALLATION DETAIL CD.01 N.T.S.
RESERVED PARKING
HANDICAP SIGN
MOUNT BOTTOM EDGE SIGN 60" ABOVE PARKING LOT SURFACE
13 CONCRETE PAD DETAIL CD.01 N.T.S.
REGRADE TO MEET EXIST SURFACE 4" TOPSOIL, FERTILIZE, HYDROSEED & MULCH (TYP.) GRADE 1:3 MAX.
PROVIDE ALTERNATING TOOLED & ½" PREMOLDED FIBER EXPANSION JOINTS AT EVERY 10'.
BROOM FINISH
PROVIDE SIDE SLOPE AT 1.5–2%
(SEE SITE PLAN FOR DIMENSIONS)
6" THICK, ¾" DIA. STONE BASE ON COMPACTED SUBGRADE
4500 PSI AIR ENTRAINED (MAX 6%) CONCRETE
6X6 W1.7/1.7 WELDED WIRE MESH
NOTES:
1. AT ALL FIXED VERTICAL SURFACES AND STRUCTURE PROVIDE PMF.
2. ALL EXPOSED SURFACES ARE TO BE COATED WITH A TRANSLUCENT CURING COMPOUND CONFORMING TO AASHTO M 148, TYPE 1-D IMMEDIATELY FOLLOWING FINAL FINISHING. COVERAGE SHALL NOT BE LESS THAN ONE GALLON PER 200 SQ. FT.
14 CLEANOUT DETAILS CD.01 N.T.S.
6" PVC CLEANOUT PLUG
4" TO 6" TOPSOIL, SEED, & MULCH (SEE SITE PLAN FOR LOCATIONS)
6" THICK, ¾" DIA. STONE
STANDARD WYE BRANCH
45° ELBOW
8" PVC PIPE
NOTE: ALL PIPE MUST BE PVC SCH 40 OR SDR 35
15 ROOF LEADER DETAILS CD.01 N.T.S.
NEW ROOF LEADER TO BE CONNECTED TO PROPOSED ROOF LEADER PIPING. ROOF LEADER CONNECTION TO BE MADE SUCH THAT DOWNSPOUT PIPE IS PLUMB AND PROPERLY SECURED TO BUILDING
OVERFLOW TEE W/ SLOTTED COVER
LINE OF BUILDING
FINISH GRADE
6" SCH. 40 PVC
6" 90° ELBOW
MINIMUM SLOPE OF 1/8" PER FOOT
16 TYP. PARKING STALL LAYOUT DETAIL CD.01 N.T.S.
9' WIDTH
4" THICK
WHITE, MPI #32, ALKYD TRAFFIC MARKING PAINT
18' LENGTH
CONCRETE CURB
17 TYP. SCOUR HOLE DETAIL CD.01 N.T.S.
PLAN
PIPE WITH FLARED END SECTION INTO SCOUR HOLE
PROP. STONE D_{50} = 3"
SECTION A-A
18 DETENTION BASIN DETAIL CD.01 N.T.S.
BasinProfile
ELEVATION
STATION
PROP. GRADE
PROP. OUTLET STRUCTURE
RIP RAP CHANNEL INTO DETENTION FROM PRETREATMENT BASIN
EXISTING GRADE
PROPOSED GRADE
PROP. SCOUR HOLE
PROPOSED 12" HDPE OUTLET PIPE
REPLACE SOIL AT THE BOTTOM OF THE BASIN WITH SOIL COMPLIANT WITH SPEC 334611
RIP RAP CHANNEL FROM INLET PIPE INTO SCOUR HOLE
PROP. 8" PVC STORM PIPE FROM SWALE INTO BASIN
19 BOLLARD DETAIL CD.01 N.T.S.
6" DIA SCH 40 STEEL PIPE – FILLED WITH CONCRETE 3500 PSI AIR ENTRAINED 4% TO 6%
PAINT STEEL BOLLARD W/ PRIMER & 2 COATS – SHERWIN WILLIAMS INDUSTRIAL ENAMEL. PRIMER SHALL BE SHERWIN WILLIAMS KEM KROMIK METAL PRIMER.
20" SONOTUBE FILLED WITH 3500 PSI CONCRETE, AIR ENTRAINED, 4% TO 6%
20 GRASS RESTORATION CD.01 N.T.S.
TALL FESCUE GRASS SEED OR APPROVED EQUAL (BROADCAST SEED UNLESS OTHERWISE NOTED)
MIN. 4" TOPSOIL LAYER ON TOP OF SUBGRADE. REMOVE EXISTING SOIL & REPLACE WITH TOPSOIL WHERE 4" OF FILL SPACE IS NOT AVAILABLE
EXISTING GRASS AREA
SOIL COMPACTION AND FILL REQUIREMENTS TO FOLLOW SPECIFICATION DIVISION 31
EXISTING GRADE AFTER PROPOSED IMPROVEMENTS
ADD SOIL WHERE NECESSARY TO RAISE EXISTING GRADE TO 4"± BELOW PROPOSED GRADE
EXISTING SUB GRADE
21 LIGHT POLE FOOTING DETAIL CD.01 N.T.S.
NOTE: VERIFY BASE COVER DIMENSIONS PRIOR TO POLE BASE FABRICATION
GROUND LUG ATTACHED TO POLE
HANDHOLE - FUSED CONNECTION AT EVERY POLE
BOND ALL CONDUITS TO POLE, POLE BASE AND GROUND LUG
ACORN NUTS, TYP.
COVER
1" X 1" CHAMFER
POLE BASE FLANGE
INSULATED BONDING AND GROUNDING BUSHING 2" GALVANIZED STEEL CONDUIT 18" BELOW GRADE, NUMBER OF CONDUITS AS REQUIRED
CAD WELD
2" PVC CONDUIT
5/8" x 10' LONG COPPER CLAD GROUND ROD
8" GRD WIRE
4000 PSI PRECAST ROUND CONCRETE FOOTING
SEAL AFTER WIRING IF UNUSED
NO. 4 REBAR LAPPED 24"
#4 REBAR HOOP 1'-0" O.C.
2'-0" MAX.
5'-0" BELOW GRADE
ANCHOR BOLT, SIZE SPECIFICATION & INSTALLATION AS RECOMMENDED BY POLE MANUFACTURER.
4" GRAVEL BASE
COMPACTED SUBGRADE
NOTE:
1. LIGHT POLE DETAIL FROM ORIGINAL PARKING LOT SITE PLAN.

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Drawn	JP

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Revisions:
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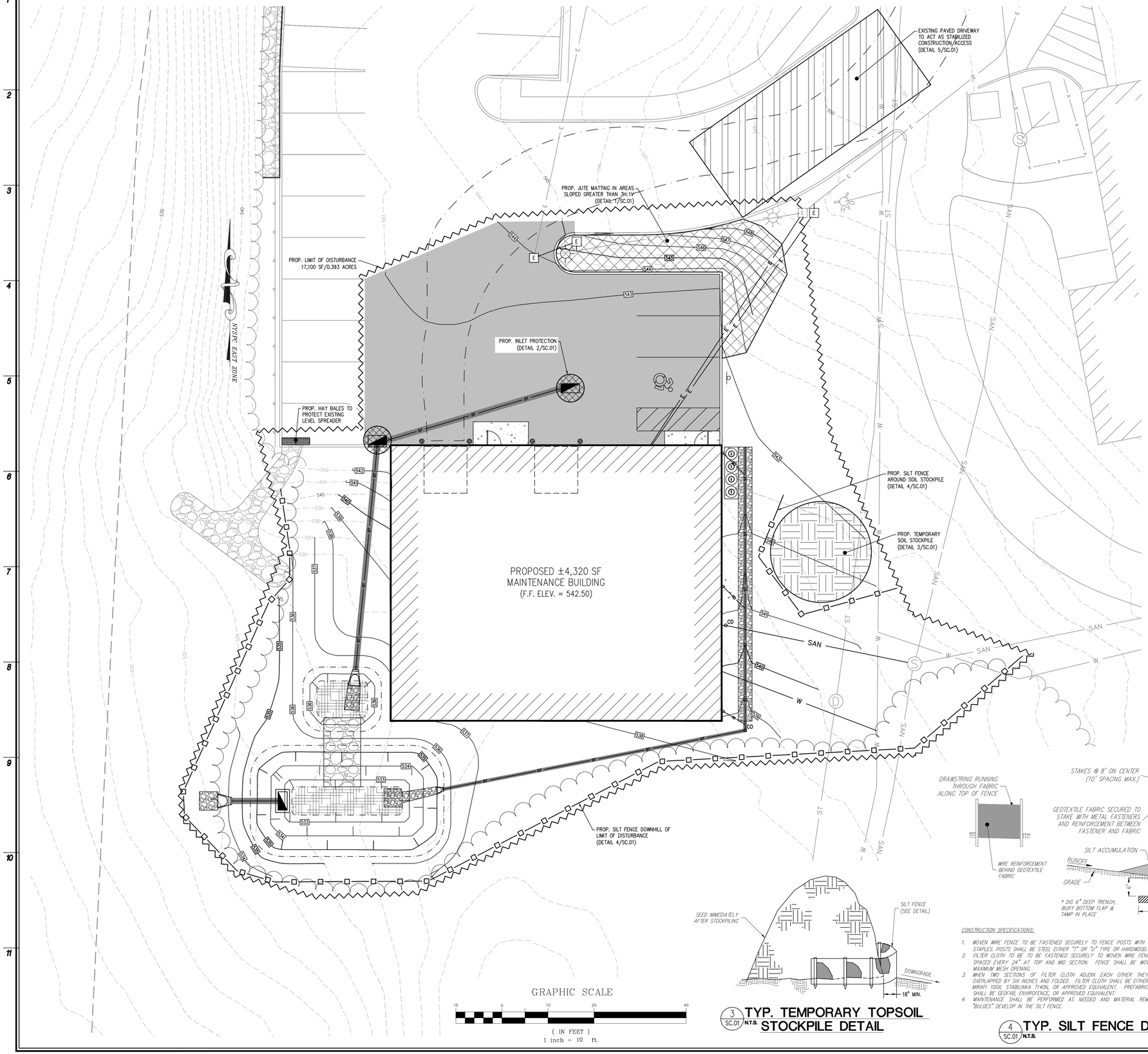
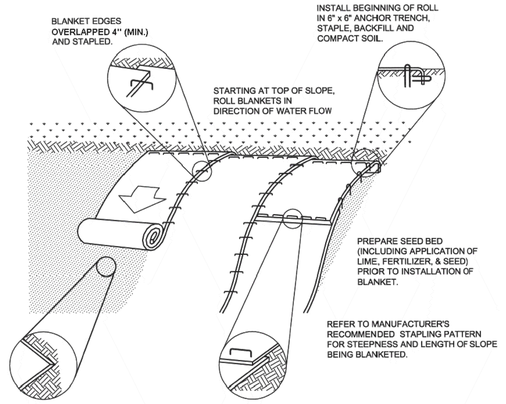
CONSTRUCTION DETAILS
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02
File No. 144902C2

CD.01

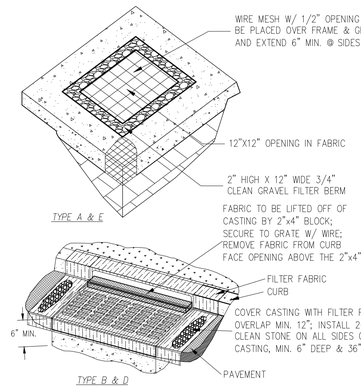




CONSTRUCTION SPECIFICATIONS:

1. SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
2. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
3. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
4. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
5. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
6. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

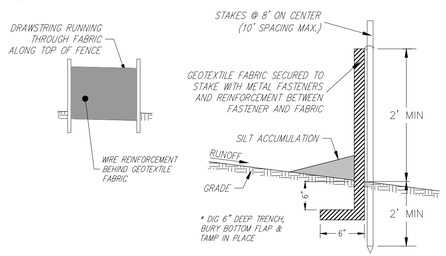
1 SC.01 TYP. JUTE MATTING DETAIL N.T.S.



NOTE:
PROTECTION DEVICE DESIGNED TO CAPTURE AND FILTER RUNOFF FROM THE 1 YEAR, 24 HOUR STORM EVENT AND SAFELY CONVEY HIGHER FLOWS DIRECTLY INTO THE STORM SEWER SYSTEM.

2 SC.01 TYP. FABRIC DROP INLET PROTECTION DETAIL N.T.S.

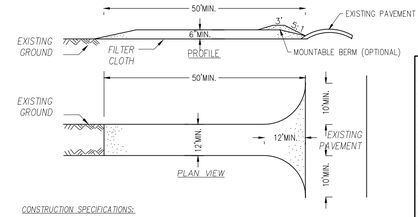
3 SC.01 TYP. TEMPORARY TOPSOIL STOCKPILE DETAIL N.T.S.



CONSTRUCTION SPECIFICATIONS:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLINKA T140N, OR APPROVED EQUIVALENT. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

4 SC.01 TYP. SILT FENCE DETAIL N.T.S.



CONSTRUCTION SPECIFICATIONS:

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

5 SC.01 STABILIZED CONSTUCTION ENTRANCE DETAIL N.T.S.

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Checked	JM
Drawn	JP

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Revisions:

1 ISSUE TO BID ??/??/????

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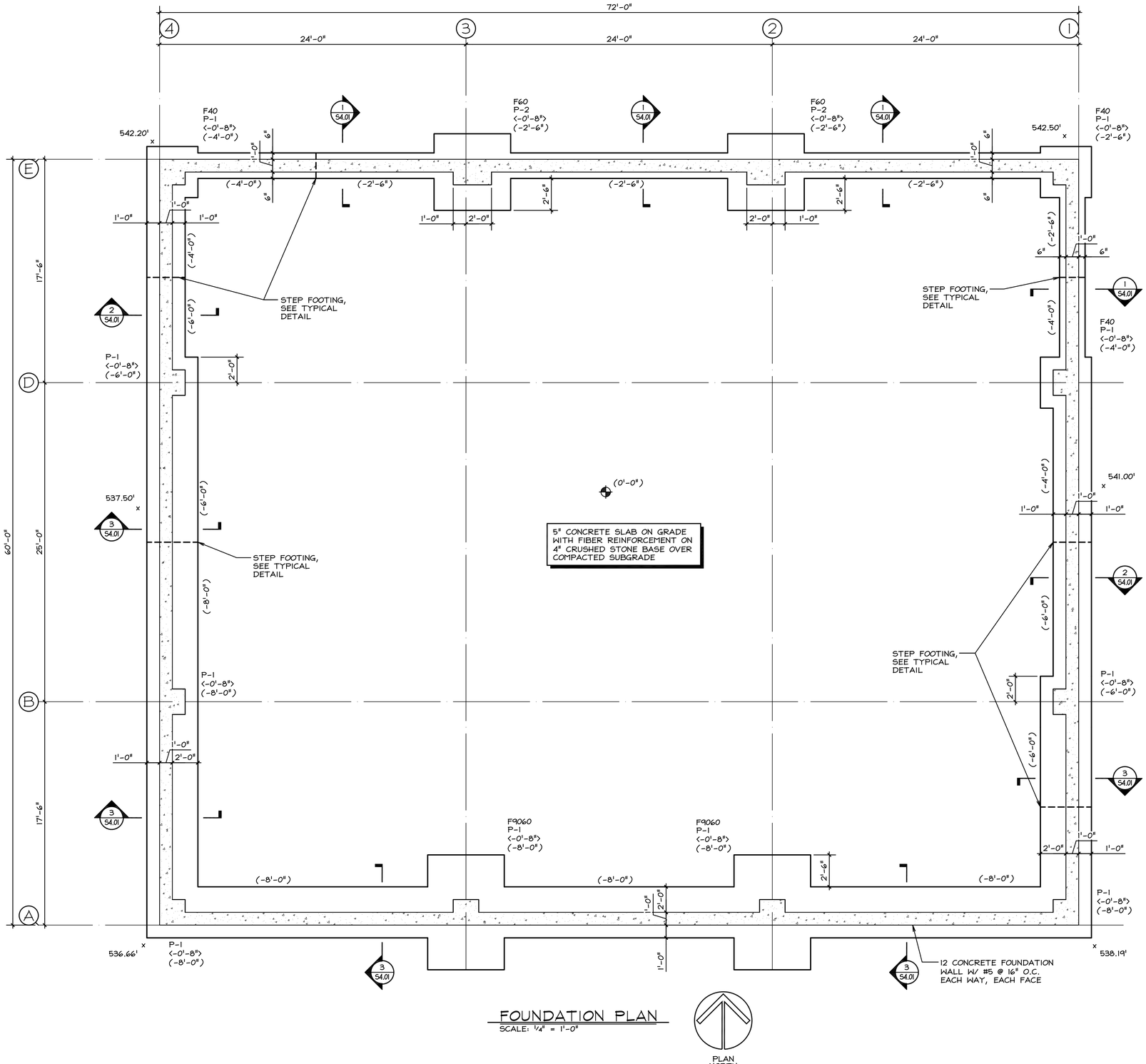
SOIL EROSION & SEDIMENT CONTROL PLAN
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

SED PROJECT #66-08-01-06-3-012-001

Job No. 4.1449.02

File No. 144902C2

SC.01



FOUNDATION PLAN

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

FOUNDATION NOTES

1. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 3'-6" BELOW FINISHED GRADE.
2. TOP OF EXTERIOR COLUMN FOOTING ELEVATIONS SHALL MATCH TOP OF WALL FOOTING ELEVATIONS. BOTTOM OF COLUMN FOOTING SHALL BE ADJUSTED FOR DEPTH OF FOOTING.
3. TOP OF ALL INTERIOR COLUMN FOOTINGS SHALL BE 8" BELOW FINISHED FLOOR SLAB ELEVATION, UNLESS NOTED OTHERWISE.
4. ALL FOOTINGS ARE DESIGNED FOR A MINIMUM SOIL BEARING CAPACITY OF 3,500 PSF. BOTTOM OF FOOTING ELEVATION MAY BE LOWERED TO ACHIEVE THE MINIMUM REQUIRED BEARING CAPACITY. REFER TO THE GEOTECHNICAL ENGINEERING EVALUATION BY JHB ENGINEERING PLLC, DATED JUNE 14 2019, FOR SUBSURFACE CONDITIONS AND CONSTRUCTION PROCEDURES.
5. ALL COLUMN FOOTINGS TO BE CENTERED UNDER PEDESTALS.
6. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, ACTUAL ELEVATION = 542.50'.
7. REFER TO DRAWINGS S6.01 AND S6.02 FOR GENERAL NOTES AND TYPICAL DETAILS.

FOOTING SCHEDULE

FOOTING MARK	FOOTING SIZE	REINFORCING (EACH WAY)	REMARKS
F40	4'-0"x4'-0"x1'-4"	(6) - #5	
F60	6'-0"x6'-0"x1'-6"	(7) - #7	
F9060	9'-0"x6'-0"x1'-6"	(7) - #7	

FOUNDATION SCHEDULE

MARK	DESCRIPTION
P-1	24"x24" CONCRETE PEDESTAL W/ (8) - #6 VERTICAL AND #3 TIES @ 12" O.C.
P-2	36"x24" CONCRETE PEDESTAL W/ (10) - #6 VERTICAL AND #3 TIES @ 12" O.C.
( )	DENOTES TOP OF FOOTING ELEVATION REFERENCED FROM DATUM
< >	DENOTES TOP OF PEDESTAL ELEVATION REFERENCED FROM DATUM
◆( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.
x 100.00'	DENOTES APPROXIMATE FINISHED GRADE ELEVATION. SEE SITE PLAN FOR FURTHER INFORMATION.

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Date 7/16/20
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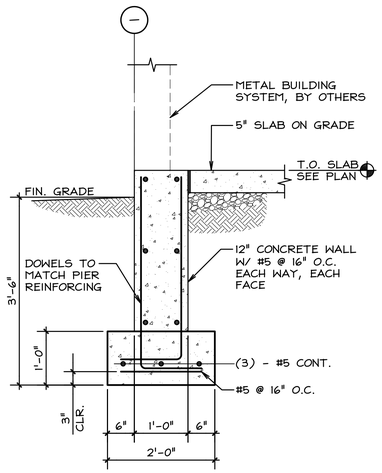
FOUNDATION PLAN
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

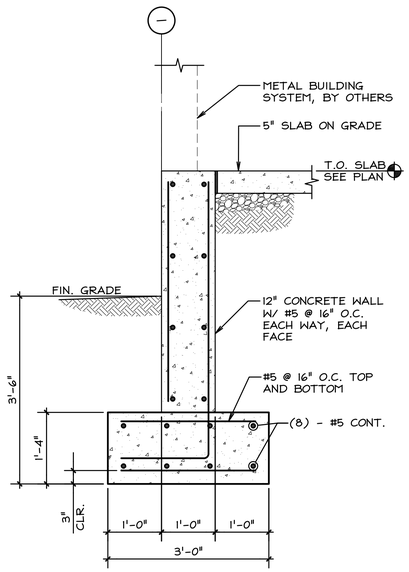
File No. 17149S2.01

S2.01

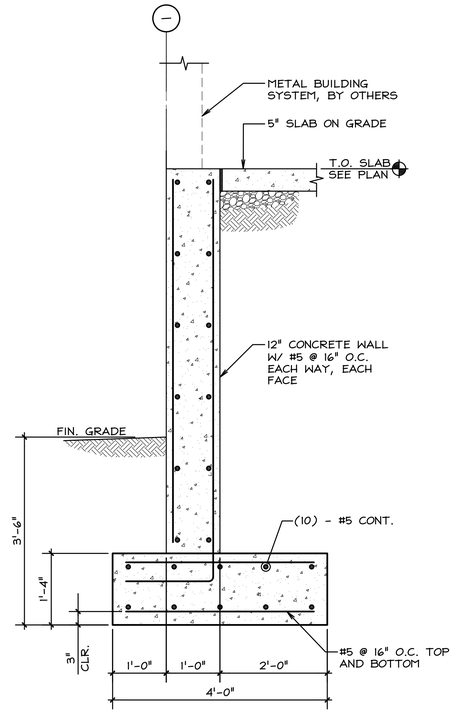
SED PROJECT #66-03-03-0-001-027



SECTION 1 54.01
SCALE: 3/4" = 1'-0"



SECTION 2 54.01
SCALE: 3/4" = 1'-0"



SECTION 3 54.01
SCALE: 3/4" = 1'-0"

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Drawn	AJ

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SECTIONS

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MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

File No. 17149S4.01

S4.01

SED PROJECT #66-03-03-03-0-001-027

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Job No.: 20079 Dwg. 2 of 4

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GENERAL

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF "THE 2020 BUILDING CODE OF NEW YORK STATE," AND LOCAL ORDINANCES.

WORK THESE DRAWING IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS IN THE FIELD BEFORE COMMENCING WORK. ANY DISCREPANCY BETWEEN EXISTING CONDITIONS OR MEASUREMENTS AND THE INFORMATION SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER IMMEDIATELY. NO WORK SHALL CONTINUE UNTIL THE DISCREPANCY IS RESOLVED.

THE CONTRACTOR SHALL PROVIDE THE NECESSARY COORDINATION BETWEEN ALL TRADES WITH REGARD TO THE DRAWINGS. LOCATE BOLTS, SLEEVES, AND TRENCHES AS REQUIRED FOR MECHANICAL TRADES, AND PROVIDE AND INSTALL VARIOUS ITEMS NOT SHOWN ON THESE DRAWINGS BUT AS REQUIRED FOR VARIOUS TRADES.

DO NOT SCALE THE STRUCTURAL DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE STRUCTURAL ENGINEER.

THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDENT ON COMPLETED CONSTRUCTION IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER ASSUMES NO LIABILITY FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR SHALL SUPPLY ANY TEMPORARY BRACING REQUIRED UNTIL BUILDING CONSTRUCTION IS COMPLETE.

DURING CONSTRUCTION THE CONTRACTOR SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOADS. CONSTRUCTION MATERIAL PLACED ON FRAMED FLOORS AND ROOFS SHALL BE SPREAD OUT AS REQUIRED.

THE CONTRACTOR IS RESPONSIBLE FOR SAFETY WITHIN THE JOB SITE AND FOR MEETING ALL APPLICABLE OSHA REQUIREMENTS DURING CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED EXCAVATION SHORING AND THE EVALUATION AND PROTECTION OF ADJACENT STRUCTURES.

FOUNDATIONS AND SLABS ON GRADE

ALL EXCAVATION, SUBGRADE PREPARATION, AND OTHER EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

ALL FOOTINGS ARE DESIGNED FOR A MINIMUM SOIL BEARING CAPACITY OF 3.5 KIPS PER SQUARE FOOT.

ALL FOOTINGS ARE TO BEAR ON UNDISTURBED VIRGIN SOIL OR CONTROLLED COMPACTED FILL.

THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL EXTEND 3'-6" MINIMUM BELOW FINISHED GRADE.

ALL EXCAVATIONS SHALL BE FREE OF WATER BEFORE POURING CONCRETE.

HAND TRIM SIDES AND BOTTOM OF EARTH FORMS AND REMOVE LOOSE DIRT.

NO SUBSEQUENT EXCAVATION SHALL BE NEARER THAN 2:1 (HORIZONTAL:VERTICAL) TO AN INSTALLED FOOTING OR FOUNDATION.

CONCRETE FOUNDATION WALLS SHALL BE PLACED IN ALTERNATE SECTIONS, NOT MORE THAN 60 FEET IN LENGTH. HORIZONTAL CONSTRUCTION JOINTS ARE NOT PERMITTED EXCEPT WHERE SHOWN.

PLACE SLABS ON GROUND PER THICKNESS SHOWN ON DRAWINGS WITH TOP OF SLAB SET TO ACCOMMODATE ARCHITECTURAL FINISHES.

PROVIDE SAW CUT CONTROL JOINTS AT AN OPTIMUM TIME AFTER FINISHING. CUT SLABS WITH A 3/16 INCH THICK BLADE TO 1 INCH DEPTH. LOCATE CONTROL JOINTS AT A MAXIMUM SPACING OF 36 TIMES THE SLAB DEPTH AND AT EACH CORNER, COLUMN AND PLAN IRREGULARITY.

THE CONTRACTOR SHALL SUBMIT POUR SEQUENCE AND JOINT LAYOUT TO THE ARCHITECT FOR APPROVAL PRIOR TO POURING CONCRETE SLABS.

SEPARATE SLABS ON GRADE FROM VERTICAL SURFACES WITH JOINT FILLER. EXTEND JOINT FILLER FROM BOTTOM OF SLAB TO WITHIN ½INCH OF FINISHED SLAB SURFACE.

CONSTRUCT SLAB ON GRADE WITH OVERALL SPECIFIED FF30/FL20 IN ACCORDANCE WITH ACI 302.1. DETERMINATION OF FF/FL NUMBERS WILL BE IN ACCORDANCE WITH ASTM E 1155. THE CONTRACTOR WILL TAKE REMEDIAL MEASURES WHEN FLOOR SLABS DO NOT MEET SPECIFIED REQUIREMENTS.

WHERE COMPACTED FILL IS REQUIRED, WELL GRADED GRANULAR MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12 INCHES AND COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY AS PER ASTM D-1557.

VERIFICATION OF BEARING CAPACITY AND INSPECTION OF COMPACTED FILL SHALL BE COMPLETED BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.

ANY UNEXPECTED SUBGRADE CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER AND GEOTECHNICAL ENGINEER.

CONCRETE

ALL CONCRETE MATERIALS AND CONSTRUCTION PROCEDURES SHALL BE IN ACCORDANCE WITH ACI 318. EVALUATION AND ACCEPTANCE OF CONCRETE STRUCTURES SHALL BE IN ACCORDANCE WITH ACI 301.

SPECIFIED COMPRESSIVE STRENGTH FC AT 28 DAYS:

FOUNDATIONS AND FOOTINGS: 4000 PSI.
WALLS, COLUMNS, ELEVATED SLABS, AND BEAMS: 4000 PSI.
FLOOR SLABS ON GRADE: 3000 PSI

SUBMIT PROPOSED MIX DESIGNS AND TEST DATA BEFORE CONCRETE OPERATIONS BEGIN. ESTABLISH THE REQUIRED AVERAGE STRENGTH OF EACH DESIGN MIX ON THE BASIS OF EITHER FIELD EXPERIENCE OR TRIAL MIXTURES AS SPECIFIED IN ACI 301, AND PROPORTION MIXES PER THE RECOMMENDATIONS OF ACI 211.1. EACH MIX SHALL BE IDENTIFIED AS IT WILL APPEAR ON BATCH TICKETS DELIVERED TO PROJECT SITE.

CONCRETE MIX DESIGN SHALL PROVIDE FOR A CONCRETE SLUMP APPROPRIATE FOR PROJECT CONDITIONS. THE CONCRETE SHALL BE SUFFICIENTLY FLUID TO ALLOW FOR EASE OF PLACEMENT AND SUFFICIENTLY STIFF TO PREVENT SEGREGATION.

AGGREGATE SHALL CONFORM TO ASTM C33.

WATER-TO-CEMENT RATIO SHALL NOT EXCEED 0.45 BY WEIGHT. WEIGHT OF WATER SHALL INCLUDE ALL FREE MOISTURE, INCLUDING LIQUID ADMIXTURES.

AIR-ENTRAINING ADMIXTURE SHALL BE ADDED TO ACHIEVE TOTAL AIR CONTENT OF 6 PERCENT FOR EXTERIOR EXPOSED CONCRETE AND 3 PERCENT FOR CONCRETE NOT EXPOSED TO EXTERIOR WITH A TOLERANCE OF 1 PERCENT.

PROVIDE WATER-REDUCING ADMIXTURES CONFORMING TO ASTM C494 AS REQUIRED FOR PLACEMENT AND WORKABILITY AT THE MAXIMUM WATER TO CEMENT RATIO SPECIFIED.

INDICATE TYPE AND QUANTITY OF ADMIXTURES PROPOSED OR REQUIRED. ADMIXTURES CONTAINING MORE THAN 0.1 PERCENT CHLORIDE IONS ARE NOT PERMITTED. WHERE MIX CONTAINS MORE THAN ONE ADMIXTURE, ALL ADMIXTURES SHALL BE SUPPLIED BY ONE MANUFACTURER. MANUFACTURER SHALL CERTIFY THAT ADMIXTURES ARE COMPATIBLE SUCH THAT DESIRABLE EFFECTS OF EACH ADMIXTURE WILL BE REALIZED. LIQUID ADMIXTURES SHALL BE CONSIDERED PART OF THE TOTAL WATER.

WATER SHALL BE CLEAN, POTABLE AND FREE FROM DELETERIOUS MATERIAL.

PROVIDE DATA FOR PROPRIETARY MATERIALS, INCLUDING ADMIXTURES, CURING MATERIALS, AND FINISH MATERIALS.

SUBMIT MATERIAL CERTIFICATIONS FOR CEMENTITIOUS MATERIALS, AGGREGATES AND ADMIXTURES.

PROVIDE DEFORMED REINFORCING BARS COMPLYING WITH ASTM A615, GRADE 60, EXCEPT WHERE OTHERWISE INDICATED. ALL DETAILING OF REINFORCING SHALL BE IN ACCORDANCE WITH ACI STANDARD 315.

WELDED WIRE FABRIC SHALL BE ASTM A1064, COLD-DRAWN STEEL, PLAIN.

SUBMIT BAR PLACEMENT SHOP DRAWINGS SHOWING THE LOCATION OF REINFORCING AND CONSTRUCTION JOINTS. DELIVER REINFORCEMENT TO PROJECT SITE BUNDLED AND TAGGED INDICATING BAR SIZES, LENGTHS, AND OTHER DATA CORRESPONDING TO INFORMATION SHOWN ON PLACEMENT DRAWINGS.

PLACE REINFORCEMENT TO ACHIEVE NOT LESS THAN MINIMUM CONCRETE COVERAGE AS REQUIRED FOR PROTECTION. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT TO PREVENT DISPLACEMENT.

CONCRETE PROTECTION FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

ELEVATED SLABS: 3/4"
BEAMS AND COLUMNS (PEDESTALS): 1 1/2"
INSIDE FACE OF WALLS: 1"
CONCRETE POURED ON GROUND: 3"
EXTERIOR FACE OF WALLS (AGAINST EARTH): 2"

FIBROUS REINFORCEMENT FOR SLABS SHALL BE FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE COMPLYING WITH ASTM C 1116 TYPE III, 1/2" TO 1 1/2". UNIFORMLY DISPERSE FIBERS IN THE CONCRETE MIX AT THE MANUFACTURER'S RECOMMENDED RATE BUT NOT LESS THAN 1.5 POUNDS PER CUBIC YARD.

PROVIDE CLASS B TENSION LAP SPLICES COMPLYING WITH ACI 318 UNLESS OTHERWISE INDICATED.

SURVEY ANCHOR BOLTS FOR PLACEMENT AND ALIGNMENT PRIOR TO CASTING CONCRETE.

INSTALLATION TOLERANCES FOR ANCHOR BOLTS FOR STRUCTURAL STEEL COLUMNS SHALL COMPLY WITH THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

GROUT SHALL CONFORM TO ASTM C1107, GRADE B NON-SHRINK, NON-METALLIC, PREPACKAGED GROUT WITH A COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.

THE CONTRACTOR IS RESPONSIBLE FOR DESIGN, ENGINEERING, AND CONSTRUCTION OF FORMWORK, CAPABLE OF SUPPORTING ALL APPLIED LOADS UNTIL THE CONCRETE IS ADEQUATELY CURED, WITHIN ALLOWABLE TOLERANCES AND DEFLECTION LIMITS.

LOCATE AND INSTALL CONSTRUCTION JOINTS IN A MANNER WHICH WILL NOT IMPAIR STRENGTH AND WILL HAVE LEAST IMPACT ON APPEARANCE.

PREPARE PREVIOUSLY PLACED CONCRETE BY CLEANING AND APPLYING BONDING AGENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION.

IN LOCATIONS WHERE NEW CONCRETE IS DOWELED TO EXISTING WORK, DRILL HOLES IN EXISTING CONCRETE, INSERT STEEL DOWELS AND PACK SOLID WITH EPOXY GROUT.

FOUNDATION SURFACES AGAINST WHICH CONCRETE IS TO BE PLACED MUST BE FREE FROM STANDING WATER, MUD AND DEBRIS. SURFACES SHALL BE CLEAN AND FREE FROM OIL, OBJECTIONABLE COATINGS, AND LOOSE OR UNSOUND MATERIAL.

ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" X 3/4" CHAMFER, UNLESS SPECIFICALLY INDICATED OTHERWISE ON THE DRAWINGS.

CONSOLIDATE CONCRETE BY MEANS OF MECHANICAL VIBRATORS TO ACHIEVE CONSISTENT CONSOLIDATION WITHOUT SEGREGATION OF COARSE AGGREGATES.

REPAIR SURFACE DEFECTS, INCLUDING TIE HOLES, IMMEDIATELY AFTER REMOVING FORMWORK.

PROTECT CONCRETE FROM SUN AND RAIN. DO NOT PERMIT CONCRETE TO BECOME DRY DURING CURING PERIOD. CONCRETE SHALL NOT BE SUBJECTED TO ANY LOADS UNTIL CONCRETE IS COMPLETELY CURED, AND UNTIL CONCRETE HAS ATTAINED ITS 28 DAY STRENGTH AND 14 DAYS MINIMUM.

UPON COMPLETION OF FINISHING OPERATION, THE SURFACE OF SLABS SHALL BE SEALED AGAINST MOISTURE LOSS FOR 7 DAYS BY THE APPLICATION OF A CURING MEMBRANE OR BLANKET.

CONCRETE IN FORMS SHALL BE KEPT MOIST UNTIL REMOVAL. IMMEDIATELY UPON REMOVAL OF FORMS, AN APPROVED SPRAYED-ON CURING COMPOUND SHALL BE APPLIED TO THE CONCRETE SURFACES IN STRICT COMPLIANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. CURING SHALL BE MAINTAINED FOR 7 DAYS.

FORMED SURFACES SHALL COMPLY WITH MINIMUM TOLERANCES ESTABLISHED IN ACI 117, UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED ON THE DRAWINGS.

FINISH EXPOSED CONCRETE TO OFFER SMOOTH, STAIN-FREE FINAL APPEARANCE AND MINIMUM NUMBER OF JOINTS. PROVIDE FORMING MATERIALS WITH SUFFICIENT STRENGTH TO RESIST HYDROSTATIC HEAD WITHOUT BOW OR DEFLECTION IN EXCESS OF ALLOWABLE TOLERANCES.

COMPLY FULLY WITH RECOMMENDATIONS OF ACI 306 WHEN AIR TEMPERATURES ARE EXPECTED TO DROP BELOW 40°F EITHER DURING CONCRETE PLACEMENT OPERATIONS OR BEFORE CONCRETE HAS CURED. PROTECTIVE MEASURES INCLUDE BUT ARE NOT LIMITED TO HEATING OF MATERIALS, HEATED ENCLOSURES, AND INSULATING BLANKETS.

COMPLY FULLY WITH RECOMMENDATIONS OF ACI 305 WHEN AMBIENT TEMPERATURE BEFORE, DURING, OR AFTER CONCRETE PLACEMENT IS EXPECTED TO EXCEED 90°F OR WHEN COMBINATIONS OF HIGH AIR TEMPERATURE, LOW RELATIVE HUMIDITY, AND WIND SPEED ARE SUCH THAT THE RATE OF EVAPORATION FROM FRESHLY POURED CONCRETE WOULD OTHERWISE EXCEED 0.2 POUNDS PER SQUARE FOOT PER HOUR. PROTECTIVE MEASURES INCLUDE BUT ARE NOT LIMITED TO COOLING OF MATERIALS BEFORE OR DURING MIXING, PLACEMENT DURING EVENING TO DAWN HOURS, FOGGING DURING FINISHING AND CURING, SHADING, AND WINDBREAKS

SAMPLE CONCRETE AND MAKE SPECIMENS FOR TESTING PER ASTM C172 AND ASTM C31. TAKE SAMPLES AT POINT OF DISCHARGE AND REPORT RESULTS OF ALL TESTS.

TEST SLUMP OF THE FIRST 2 LOADS OF CONCRETE DELIVERED FOR EACH POUR AND ONCE PER STRENGTH TEST PERFORMED PER ASTM C143 WITH ADDITIONAL TESTS IF CONCRETE CONSISTENCY CHANGES.

TEST AIR CONTENT OF THE FIRST 2 LOADS OF CONCRETE DELIVERED FOR EACH POUR AND ONCE FOR EACH STRENGTH TEST PERFORMED PER ASTM C173 OR ASTM C231.

TEST CONCRETE TEMPERATURE FOR EACH STRENGTH TEST PERFORMED AND HOURLY WHEN AIR TEMPERATURE IS BELOW 40°F OR ABOVE 90°F.

PROVIDE ONE COMPRESSIVE STRENGTH TEST PER ASTM C39 FOR EVERY 50 CUBIC YARDS OR FRACTION THEREOF FOR EACH DAY'S POUR OF EACH CONCRETE CLASS.

MOLD AND CURE ONE SET OF 4 STANDARD CYLINDERS FOR EACH COMPRESSIVE STRENGTH TEST REQUIRED. TEST ONE SPECIMEN PER SET AT 7 DAYS FOR INFORMATION AND TEST 2 SPECIMENS PER SET FOR ACCEPTANCE OF STRENGTH POTENTIAL AT 28 DAYS. RETAIN ONE SPECIMEN FROM EACH SET FOR LATER TESTING, IF REQUIRED.

EVALUATE CONSTRUCTION AND CURING PROCEDURES AND IMPLEMENT CORRECTIVE ACTION WHEN STRENGTH RESULTS FOR FIELD-CURED SPECIMENS ARE LESS THAN 85 PERCENT OF TEST VALUES FOR COMPANION LABORATORY-CURED SPECIMENS.

COST OF ADDITIONAL TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WHEN UNACCEPTABLE CONCRETE HAS BEEN VERIFIED.

SPECIAL INSPECTIONS

SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1704 OF "THE 2020 BUILDING CODE OF NEW YORK STATE."

THE OWNER SHALL EMPLOY A SPECIAL INSPECTION AGENCY TO PERFORM INSPECTIONS AND TESTING DURING CONSTRUCTION.

SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY MEETING THE REQUIREMENTS OF ASTM E329 - MATERIALS, ASTM D3740 - SOILS, ASTM C1077 - CONCRETE, ASTM A880 - STEEL, AND ASTM E543 - NON-DESTRUCTIVE TESTING.

THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING CODE OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION REQUIRING SPECIAL INSPECTION.

THE SPECIAL INSPECTOR SHALL OBSERVE CONSTRUCTION PROGRESS FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF NOT CORRECTED DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER AND BUILDING OFFICIAL.

THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER, CONTRACTOR, AND OWNER.

THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A FINAL REPORT INDICATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED AND IS IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

INSPECTIONS SHALL BE CONDUCTED FOR THE MATERIALS AND OPERATIONS LISTED PER THE FOLLOWING STATEMENT OF SPECIAL INSPECTIONS:

GEOTECHNICAL INSPECTIONS:

BEARING CAPACITY BELOW SHALLOW FOUNDATIONS
DEPTH OF FOOTING
CLASSIFICATION AND TESTING OF FILL MATERIALS
MATERIAL, DENSITY AND LIFT THICKNESS OF COMPACTED FILL

CONCRETE INSPECTIONS:

PLACEMENT OF REINFORCING STEEL
ANCHOR BOLT LOCATION
VERIFY USE OF REQUIRED MIX DESIGN
SAMPLE CONCRETE FOR STRENGTH TESTS
MEASURE AIR CONTENT, TEMPERATURE, AND SLUMP
FORMWORK FOR SIZE, SHAPE AND LOCATION

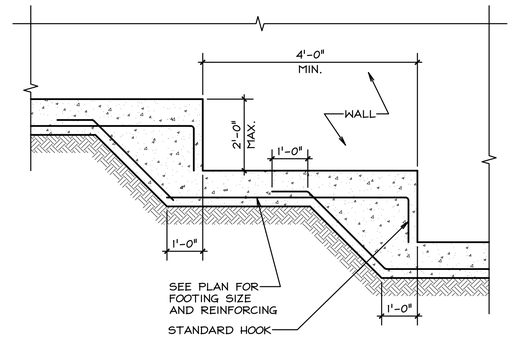
DESIGN LOADS

ROOF
DEAD LOAD : 15 PSF
LIVE LOAD : 25 PSF - CALCULATIONS INCLUDE SNOW DRIFT, WHERE REQUIRED.

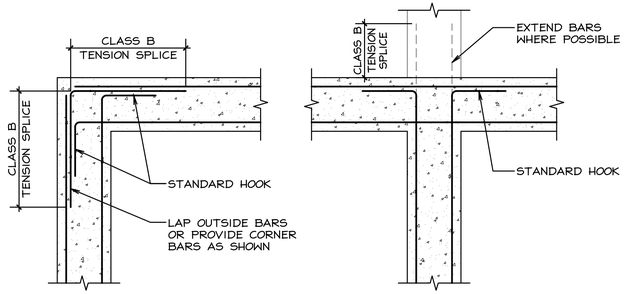
ROOF SNOW LOADS
GROUND SNOW LOAD (P_g): 30 PSF
FLAT ROOF SNOW LOAD (Pf): 21.0 PSF
SNOW EXPOSURE FACTOR (Ce): 1.0
SNOW LOAD IMPORTANCE FACTOR (Is): 1.0
THERMAL FACTOR (Ct): 1.0

WIND LOADS
ULTIMATE DESIGN WIND SPEED (Vult): 115 MPH
RISK CATEGORY: II
WIND EXPOSURE CATEGORY: B
INTERNAL PRESSURE COEFFICIENT: ± 0.18

EARTHQUAKE DESIGN DATA
RISK CATEGORY: II
SEISMIC IMPORTANCE FACTOR (Ie): 1.0
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
-Ss : .268
-S1 : .072
SITE CLASS: C
SPECTRAL RESPONSE COEFFICIENTS:
- Sds : 0.233
- Sd1 : 0.072
SEISMIC DESIGN CATEGORY: B
SEISMIC FORCE RESISTING SYSTEM:
MOMENT RESISTING FRAME
SEISMIC RESPONSE COEFFICIENT (Cs): 0.078
RESPONSE MODIFICATION FACTOR (R): 3.0
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

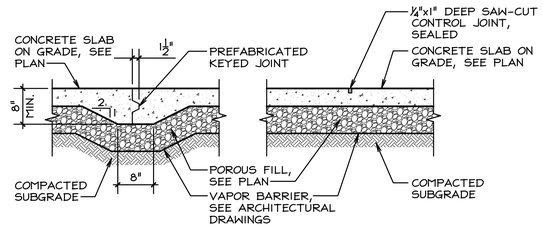


TYPICAL STEPPED FOOTING DETAIL
NOT TO SCALE



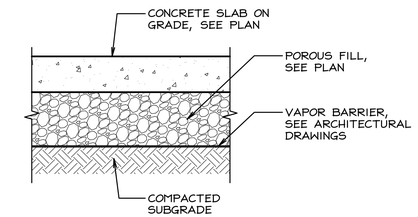
CORNER INTERSECTION

TYPICAL CONCRETE WALL AND FOOTING INTERSECTION
NOT TO SCALE

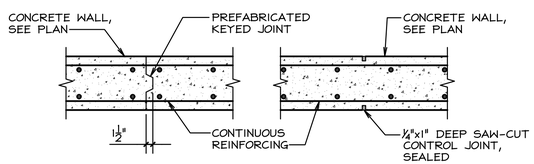


CONSTRUCTION JOINT CONTROL JOINT

TYPICAL CONCRETE SLAB ON GRADE JOINTS
NOT TO SCALE



TYPICAL SLAB ON GRADE
NOT TO SCALE



CONSTRUCTION JOINT CONTROL JOINT

TYPICAL CONCRETE WALL JOINTS
NOT TO SCALE

Micucci Engineering, P.C.
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New City, New York 10956
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Job No.: 20079 Dwg. 3 of 4

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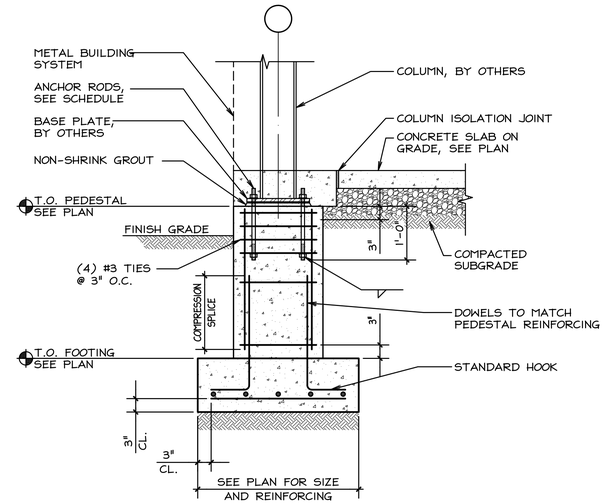
GENERAL NOTES AND TYPICAL DETAILS
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

SED PROJECT #66-03-03-0-001-027

Job No. 4.1449.02

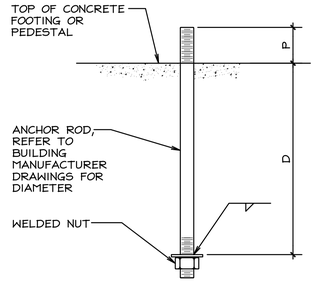
File No. 1714956.01

S6.01



TYPICAL EXTERIOR COLUMN PEDESTAL

NOT TO SCALE



'P': ROD PROJECTION - REFER TO BUILDING MANUFACTURER DRAWINGS AND DETAILS.

'D': EMBEDMENT DEPTH - REFER TO ANCHOR BOLT SCHEDULE.

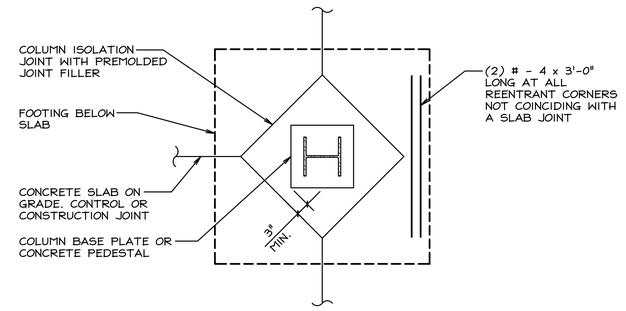
ANCHOR BOLT SCHEDULE

BOLT DIAMETER	EMBEDMENT DEPTH	REMARKS
1"	16"	
¾"	16"	

REFER TO ANCHOR BOLT PLAN AND DETAILS BY BUILDING MANUFACTURER.

TYPICAL ANCHOR BOLT DETAIL

NOT TO SCALE



TYPICAL COLUMN ISOLATION JOINT

NOT TO SCALE

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SED PROJECT #66-03-03-0-001-027

Date	7/16/20
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Revisions:

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SECTIONS AND TYPICAL DETAILS

NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

File No. 17149S6.01

S6.02

Code Analysis

Design Building Codes

2020 Building Code of New York State - Adopts with Amendments: International Building Code 2018 (IBC 2018)
2020 Mechanical Code of New York State - Adopts with Amendments: International Mechanical Code 2018 (IMC 2018)
2020 Plumbing Code of New York State - Adopts with Amendments: International Plumbing Code 2018 (IPC 2018)
2020 Energy Conservation Code of New York State - Adopts with Amendments: International Energy Conservation Code 2018 (IECC 2018)
2020 Fire Code of New York State - Adopts with Amendments: International Fire Code 2018 (IFC 2018)
National Electric Code (NEC)
National Fire Protection Association (NFPA)
2010 ADA Standards
Accessible and Usable Buildings and Facilities 2009 of New York State adopts the A117.1, 2009 without amendments

2020 Building Code of New York State

Chapter 3 Use and Occupancy Classification

Section 304.1 Business Group **B** (Business) (Accessory Use)

Section 311.2 Moderate Hazard Storage **S-1** (Paper in rolls or packs)

Chapter 5 General Building Heights and Areas

Table 504.3 Allowable Building Height in Feet:
Type IIB (nonsprinklered) = **55 Feet**

Table 504.4 Allowable Number of Stories Above Grade Plane
Type IIB = **2 stories**

Section 508 Mixed Use and Occupancy

508.1 General
Each portion of a building shall be individually classified in accordance with Section 302.1. Where a building contains more than one occupancy group, the building or portion thereof shall comply with the applicable provisions of Section 508.2, 508.3 or 508.4, or a combination of these sections.

508.2 Accessory Occupancies
Accessory occupancies are those occupancies that are ancillary to the main occupancy of the building or portion thereof. Accessory occupancies shall comply with the provisions of Sections 508.2.1 through 508.2.4.

508.2.1 Occupancy Classification
Accessory occupancies shall be individually classified in accordance with Section 302.1. The requirements of this code shall apply to each portion of the building based on the occupancy classification of that space.

508.2.2 Allowable Building Height
The allowable height and number of stories of the building containing accessory occupancies shall be in accordance with Section 504 for the main occupancy of the building.

508.2.3 Allowable Building Area
The allowable area of the building shall be based on the applicable provisions of Section 506 for the main occupancy of the building. Aggregate accessory occupancies shall not occupy more than 10 percent of the floor area of the story in which they are located and shall not exceed the tabular values for nonsprinklered buildings in Table 506.2 for each such accessory occupancy.

B occupancy is 9.5% of the total floor area for this building.

508.2.4 Separation of Occupancies
No separation is required between accessory occupancies and the main occupancy.

508.4 Separated Occupancies
Table 508.4 Required Separation of Occupancies (Hours)
B occupancy and **S-1** occupancy = **No Separation Requirement**

Chapter 6 Types of Construction

Table 601 = **Type IIB**

- Primary Structural Frame: 0 Hours
- Nonbearing walls and partitions (exterior): 0 Hours (per Table 602)
- Nonbearing walls and paritions (interior): 0 Hours
- Roof Construction: 0 Hours

Chapter 7 Fire and Smoke Protection Features

Section 705 Exterior Walls

705.5 Fire-Resistance Ratings
Exterior walls shall be fire-resistance-rated in accordance with Tables 601 and 602 and this section. The required fire-resistance rating of exterior walls with a fire separation distance of greater than 10 feet (3048 mm) shall be rated for exposure to fire from the inside. The required fire-resistance rating of exterior walls with a fire separation distance of less than or equal to 10 feet (3048 mm) shall be rated for exposure to fire from both sides.

Table 705.8 Maximum Area of Exterior Wall Openings Based on Fire Separation Distance and Degree of Opening Protection

Fire separation distance (feet): **30 or greater**
Unprotected, Sprinklered: No Limit
Protected: No Limit

Chapter 8 Interior Finishes

801.2 Interior Wall and Ceiling Finish
The provisions of Section 803 shall limit the allowable fire performance and smoke development of interior wall and ceiling finish materials based on occupancy classification.

Section 803 Wall and Ceiling Finishes

803.1 General
Interior wall and ceiling finish materials shall be classified for fire performance and smoke development in accordance with Section 803.1.1 or 803.1.2, except as shown in Sections 803.2 through 803.13. Materials tested in accordance with Section 803.1.2 shall not be required to be tested in accordance with Section 803.1.1.

803.1.1 Interior Wall and Ceiling Finish Materials
Interior wall and ceiling finish materials shall be classified in accordance with ASTM E84 or UL 723. Such interior finish materials shall be grouped in the following classes in accordance with their flame spread and smoke-developed indexes.

Class A: = Flame spread index 0-25; smoke-developed index 0-450.
Class B: = Flame spread index 26-75; smoke-developed index 0-450.
Class C: = Flame spread index 76-200; smoke-developed index 0-450.

Exception: Materials tested in accordance with Section 803.1.2.

Table 803.11 Interior Wall and Ceiling Finish Requirements by Occupancy

Group B (Non-Sprinklered)
Rooms and enclosed spaces: C

Group S (Non-Sprinklered)
Rooms and enclosed spaces: C

Chapter 9 Fire Protection and Life Safety Systems

Section 906 Portable Fire Extinguishers

906.1 Where Required
Portable fire extinguishers shall be installed in all of the following locations:
In Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.

906.2 General Requirements
Portable fire extinguishers shall be selected and installed in accordance with this section and NFPA 10.

906.3 Size and Distribution
The size and distribution of portable fire extinguishers shall be in accordance with Sections 906.3.1 through 906.3.4.

906.3.1 Class A Fire Hazards
The minimum sizes and distribution of portable fire extinguishers for occupancies that involve primarily Class A fire hazards shall comply with Table 906.3(1).

Table 906.3(1) Fire Extinguishers for Class A Fire Hazards
S-1 Occupancy = Moderate Hazard
Minimum rated single extinguisher = **2-A**
Maximum floor area per unit of A = **1,500 square feet**
Maximum floor area per extinguisher = **11,250 square feet**
Maximum distance of travel to extinguisher = **75 feet**

906.5 Conspicuous Location
Portable fire extinguishers shall be located in conspicuous locations where they will have ready access and be immediately available for use. These locations shall be along normal paths of travel, unless the fire code official determines that the hazard posed indicates the need for placement away from normal paths of travel.

906.6 Unobstructed and Unobscured
Portable fire extinguishers shall not be obstructed or obscured from view. In rooms or areas in which visual obstruction cannot be completely avoided, means shall be provided to indicate the locations of extinguishers.

906.7 Hangers and Brackets
Hand-held portable fire extinguishers, not housed in cabinets, shall be installed on the hangers or brackets supplied. Hangers or brackets shall be securely anchored to the mounting surface in accordance with the manufacturer's installation instructions.

Chapter 10 Means of Egress

Section 1003 General Means of Egress

1003.4 Floor Surface
Walking surfaces of the means of egress shall have a slip-resistant surface and be securely attached.

Section 1004 Occupant Load

Section 1005 Means of Egress Sizing

1005.3.2 Other Egress Components
The capacity, in inches, of means of egress components other than stairways shall be calculated by multiplying the occupant load served by such component by a means of egress capacity factor of 0.2 inch (5.1 mm) per occupant.
Exceptions:
For other than Group H and I-2 occupancies, the capacity, in inches, of means of egress components other than stairways shall be calculated by multiplying the occupant load served by such component by a means of egress capacity factor of **0.15 inch** (3.8 mm) per occupant in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and an emergency voice/ alarm communication system in accordance with Section 907.5.2.2.

Section 1006 Number of Exits and Exit Access Doorways

1006.2.1 Egress Based on Occupant Load and Common Path of Egress Travel Distance
Two exits or exit access doorways from any space shall be provided where the design occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1.

Occupancy: B
Maximum occupant load of space: 49
Maximum common path of egress travel distance: with sprinkler system: 100

Occupancy: S
Maximum occupant load of space: 29
Maximum common path of egress travel distance: with sprinkler system: 100

1006.3.3 Single Exits
A single exit or access to a single exit shall be permitted from any story or occupied roof where one of the following conditions exists:
1. The occupant load, number of dwelling units and common path of egress travel distance do not exceed the values in Table 1006.3.3(1) or 1006.3.3(2).

Table 1006.3.3(2)
Occupancy: B
Maximum occupant load of space: 49
Maximum common path of egress travel distance: 75

Occupancy: S
Maximum occupant load of space: 29
Maximum common path of egress travel distance: 75

Section 1009 Accessible Means of Egress

1009.1 Accessible Means of Egress Required
Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress are required by Section 1006.2 or 1006.3 from any accessible space, each accessible portion of the space shall be served by not less than two accessible means of egress.

Section 1010 Doors, Gates and Turnstiles

1010.1.2 Door Swing
Egress doors shall be of the pivoted or side-hinged swinging type.
Exceptions:

1010.1.2.1 Direction of Swing
Pivot or side-hinged swinging doors shall swing in the direction of egress travel where serving a room or area containing an occupant load of 50 or more persons or a Group H occupancy.

Chapter 11 Accessibility

Section 1102 Compliance

1102.1 Design
Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1.

Section 1103 Scopign Requirements

1103.2 General Exceptions
Sites, buildings, structures, facilities, elements and spaces shall be exempt from this chapter to the extent specified in this section.

1103.2.2 Employee Work Areas
Spaces and elements within employee work areas shall only be required to comply with Sections 907.5.2.3.1, 1009 and 1104.3.1 and shall be designed and constructed so that individuals with disabilities can approach, enter and exit the work area. Work areas, or portions of work areas, other than raised courtroom stations in accordance with Section 1108.4.1.4, that are less than 300 square feet (30 m2) in area and located 7 inches (178 mm) or more above or below the ground or finished floor where the change in elevation is essential to the function of the space shall be exempt from all requirements.

Section 1106 Parking and Passenger Loading Facilities

Table 1106.1 Accessible Parking Spaces
Total Parking Spaces Provided: 1-25
Required Minimum Number of Accessible Spaces: 1

2010 ADA Standards

304 Turning Space

304.3.1 Circular Space
The turning space shall be a space of 60 inches diameter minimum. The space shall be permitted to include knee and toe clearance complying with 306.

305 Clear Floor or Ground Space

305.3 Size
The clear floor or ground space shall be 30 inches minimum by 48 inches minimum.

603 Toilet and Bathing Rooms

603.2.1 Turning Space
Turning space complying with 304 shall be provided within the room.

603.2.3 Door Swing
Doors shall not swing into the clear floor space or clearance required for any fixture. Doors shall be permitted to swing into the required turning space.

Section 604 Water Closets

604.1 General
Water closets and toilet compartments shall comply with 604.2 through 604.8.

Section 606 Lavatories and Sinks

606.1 General
Lavatories and sinks shall comply with 606.

Section 608 Shower Compartments

608.1 General
Shower compartments shall comply with 608.

Section 609 Grab Bars

609.1 General
Grab bars in toilet facilities and bathing facilities shall comply with 609.

2020 Plumbing Code of New York State

Section 403 Minimum Plumbing Facilities

Table 403.1 Minimum Number of Required Plumbing Fixtures

Occupants: 4

Occupancy:	B	
Description:	Break Room	
Water Closets:	Male - 1 per 25	(2 Occupants - 1 Provided)
	Female - 1 per 25	(2 Occupants - 1 Provided)
Lavatories:	1 per 40	(4 Occupants - 1 Provided)
Drinking Fountain:	Not Required	
Other:	Not Required	(1 provided)

2020 Energy Conservation Code of New York State

Chapter 3 [CE] General Requirements

Table C301.1 Climate Zones, Moisture Regimes, and Warm-humid Designations by State, County and Territory

New York - 4A Westchester

Chapter 4 [CE] Commercial Energy Efficiency

C401.2 Application
Commercial buildings shall comply with one of the following compliance paths:

1. Prescriptive Compliance Path: The requirements of Sections C402 through C405. In addition, commercial buildings shall comply with Section C406 and tenant spaces shall comply with Section C406.1.1.

Table C402.1.3 Opaque Thermal Envelope Insulation Component Minimum Requirements, R-value Method

Climate Zone: 4A - Group: All other

Roofs:	Metal Buildings	R-19 + R-11 LS
Walls, above grade:	Metall Buildings	R-13 + R-13 ci
Walls, below grade:	Below-grade wall	R-7.5 ci
Slab-on-grade floors:	Unheated slabs	R-10 for 24" below

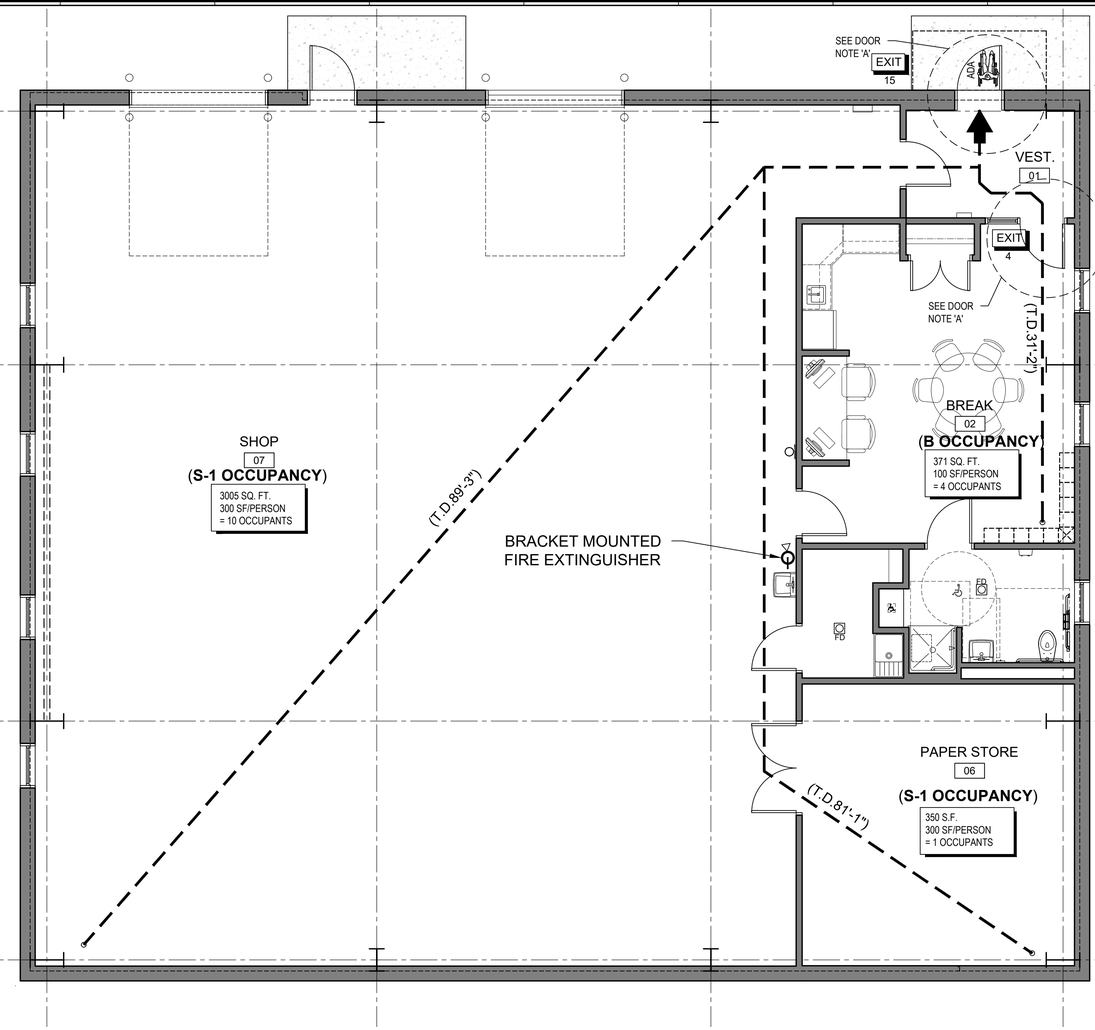
C402.2.5 Slabs-on-grade perimeter insulation
Where the slab on grade is in contact with the ground, the minimum thermal resistance (R-value) of the insulation around the perimeter of unheated or heated slab-on-grade floors designed in accordance with the R-value method of Section C402.1.3 shall be as specified in Table C402.1.3. The insulation shall be placed on the outside of the foundation or on the inside of the foundation wall. The insulation shall extend downward from the top of the slab for a minimum distance as shown in the table or to the top of the footing, whichever is less, or downward to at least the bottom of the slab and then horizontally to the interior or exterior for the total distance shown in the table. Insulation extending away from the building shall be protected by pavement or by not less than of 10 inches (254 mm) of soil.

Exception: Where the slab-on-grade floor is greater than 24 inches (61 mm) below the finished exterior grade, perimeter insulation is not required.

Table C402.4 Building Envelope Fenestration Maximum U-factor and SHGC Requirements

Climate Zone: 4

Vertical Fenestration - U-factor	
Fixed fenestration:	0.38
Operable fenestration:	0.45
Entrance doors:	0.77
Vertical Fenestration - SHGC	
PF < 0.2:	0.36
0.2 ≤ PF < 0.5:	0.43
PF ≥ 0.5:	0.58



1 CA001 **Proposed Egress Plan**
N.T.S.

NORTH

Egress Legend

SYMBOL	DESCRIPTION
0'-0" (#)	TRAVEL DISTANCE (T.D.) MAX. # OF OCCUPANTS
EXIT	ADA PATH OF TRAVEL

DOOR NOTE #1
3'-0" SINGLE LEAF DOOR
EGRESS CAPACITY
2'-9" CLEAR OPENING
33"/0.2" = 165 PEOPLE

Egress Code Analysis

PER THE 2020 INTERNATIONAL BUILDING CODE (IBC)

USE GROUP CLASSIFICATION
B - BUSINESS
S-1 - MODERATE HAZARD WAREHOUSE

SECTION 1004 OCCUPANT LOAD

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

STORAGE & MECHANICAL ROOMS	300	GROSS
BUSINESS AREAS (OFFICES)	100	GROSS

SECTION 1005 MEANS OF EGRESS SIZING
1005.3 REQUIRED CAPACITY BASED ON OCCUPANT LOAD
1005.3.2 OTHER EGRESS COMPONENTS
MEANS OF EGRESS COMPONENTS OTHER THAN STAIRWAYS SHALL BE CALCULATED BY MULTIPLYING THE OCCUPANT LOAD SERVED BY EACH COMPONENT BY A MEANS OF EGRESS CAPACITY FACTOR OF 0.2 INCH PER OCCUPANT.

SECTION 1006 NUMBER OF EXITS AND EXIT ACCESS DOORWAYS
1006.2.1 EGRESS BASED ON OCCUPANT LOAD AND COMMON PATH OF EGRESS TRAVEL DISTANCE.
TWO EXITS OR EXIT ACCESS DOORWAYS FROM ANY SPACE SHALL BE PROVIDED WHERE THE DESIGN OCCUPANT LOAD OR THE COMMON PATH OF EGRESS TRAVEL DISTANCE EXCEEDS THE VALUES LISTED IN TABLE 1006.2.1

"S" OCCUPANCY:
29 MAX OCCUPANT LOAD
100' MAX COMMON PATH OF EGRESS TRAVEL DISTANCE

"B" OCCUPANCY:
49 MAX OCCUPANT LOAD
100' MAX COMMON PATH OF EGRESS TRAVEL DISTANCE

SECTION 1016 EXIT ACCESS
1016.2 EGRESS THROUGH INTERVENING SPACE
EGRESS FROM A ROOM OR SPACE SHALL NOT PASS THROUGH ADJOINING OR INTERVENING ROOMS OR AREAS, EXCEPT WHERE SUCH ADJOINING ROOMS OR AREAS AND THE AREA SERVED ARE ACCESSORY TO ONE OR THE OTHER.
EXCEPTION: MEANS OF EGRESS ARE NOT PROHIBITED THROUGH ADJOINING OR INTERVENING ROOMS OR SPACES IN A GROUP H, S, OR F OCCUPANCY WHERE THE ADJOINING OR INTERVENING ROOMS OR SPACES ARE THE SAME OR LESSER HAZARD OCCUPANCY GROUP.

SECTION 1017 EXIT ACCESS TRAVEL DISTANCE
"B" AND "S-1" OCCUPANCIES - NOT TO EXCEED 200 FEET WITH OUT SPRINKLER SYSTEM

Date	7/8/21
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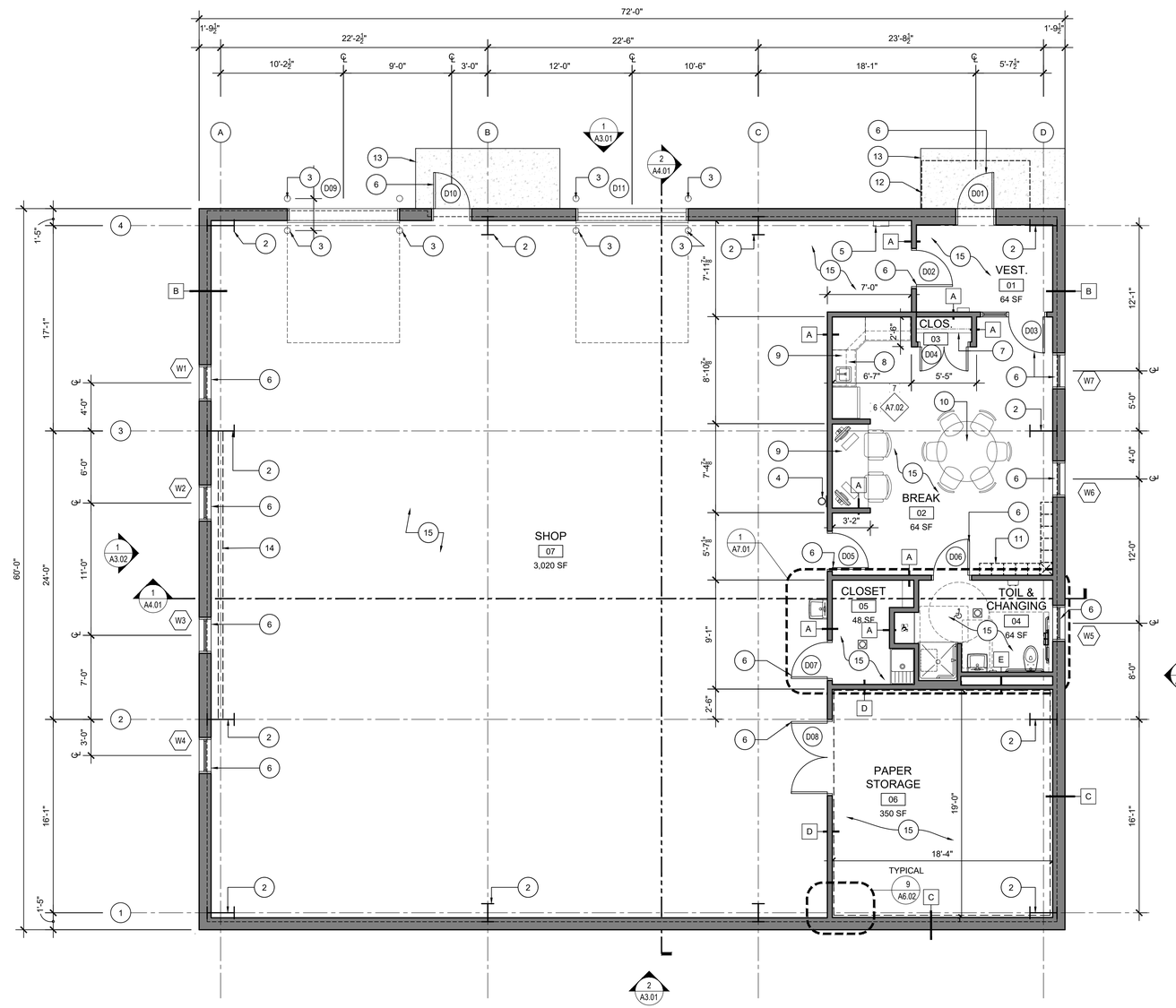
CODE ANALYSIS
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

File No. 144902CA001

SED PROJECT #66-08-01-06-3-012-001

CA0.01



1 A2.01 Proposed Floor Plan

3/16" = 1'-0"

NORTH

Construction Key Notes

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. GC SHALL COORDINATE WITH ALL OTHER PRIMES.
2. STRUCTURAL STEEL FRAMING PER PRE-MANUFACTURED BUILDING MANUFACTURER. COORDINATE BASE PLATE LAYOUT WITH FOUNDATION DRAWING PIER LOCATIONS. ALL EXPOSED STEEL SHALL BR PRIMED AND PAINTED TO MATCH COLOR OF LINER PANELS.
3. CONCRETE FILLED STEEL BOLLARD SEE DETAIL **19/CD.01** FOR ADDITIONAL INFORMATION
4. CONTRACTOR SHALL FURNISH AND INSTALL BRACKET MOUNTED FIRE EXTINGUISHER. REFER TO SHEET **CA0.01** FOR ADDITIONAL INFORMATION
5. ELECTRIC PANEL. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. SEE SHEET **A6.01** FOR ADDITIONAL INFORMATION ON DOOR AND WINDOW TYPES
7. GC SHALL FURNISH AND INSTALL (5) ADJUSTABLE PAINTED WOOD SHELVES IN CLOSET.
8. GC SHALL FURNISH AND INSTALL BASE AND UPPER CABINETS, INCLUDING CORNER CABINETS. SEE SPECIFICATION SECTION **123554** FOR ADDITIONAL INFORMATION
9. GC SHALL FURNISH AND INSTALL NEW COUNTER WITH BACKSPLASH. SEE SPECIFICATION SECTIONS **123554** FOR ADDITIONAL INFORMATION
10. TABLE AND CHAIRS SHALL BE PROVIDED BY OWNER.
11. LOCKERS SHALL BE FURNISHED AND INSTALLED BY OWNER.
12. LINE OF CANOPY ABOVE. REFER TO DETAIL **2/A2.03** FOR ADDITIONAL INFORMATION.
13. PROPOSED CONCRETE PAD AT ENTRANCE. SEE DETAIL **13/CD.01** FOR ADDITIONAL INFORMATION.
14. STRUCTURAL STEEL X-BRACING AS REQUIRED BY PRE-MANUFACTURED BUILDING STRUCTURAL LAYOUT.
15. SEE SHEET **A6.03** FOR PARTITION TYPES. ALL EXPOSED GWB SURFACES SHALL BE PAINTED. SEE SPECIFICATION SECTION **099123** FOR ADDITIONAL INFORMATION.

Date	7/8/21
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SED PROJECT #66-08-01-06-3-012-001

Proposed Floor Plan

NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

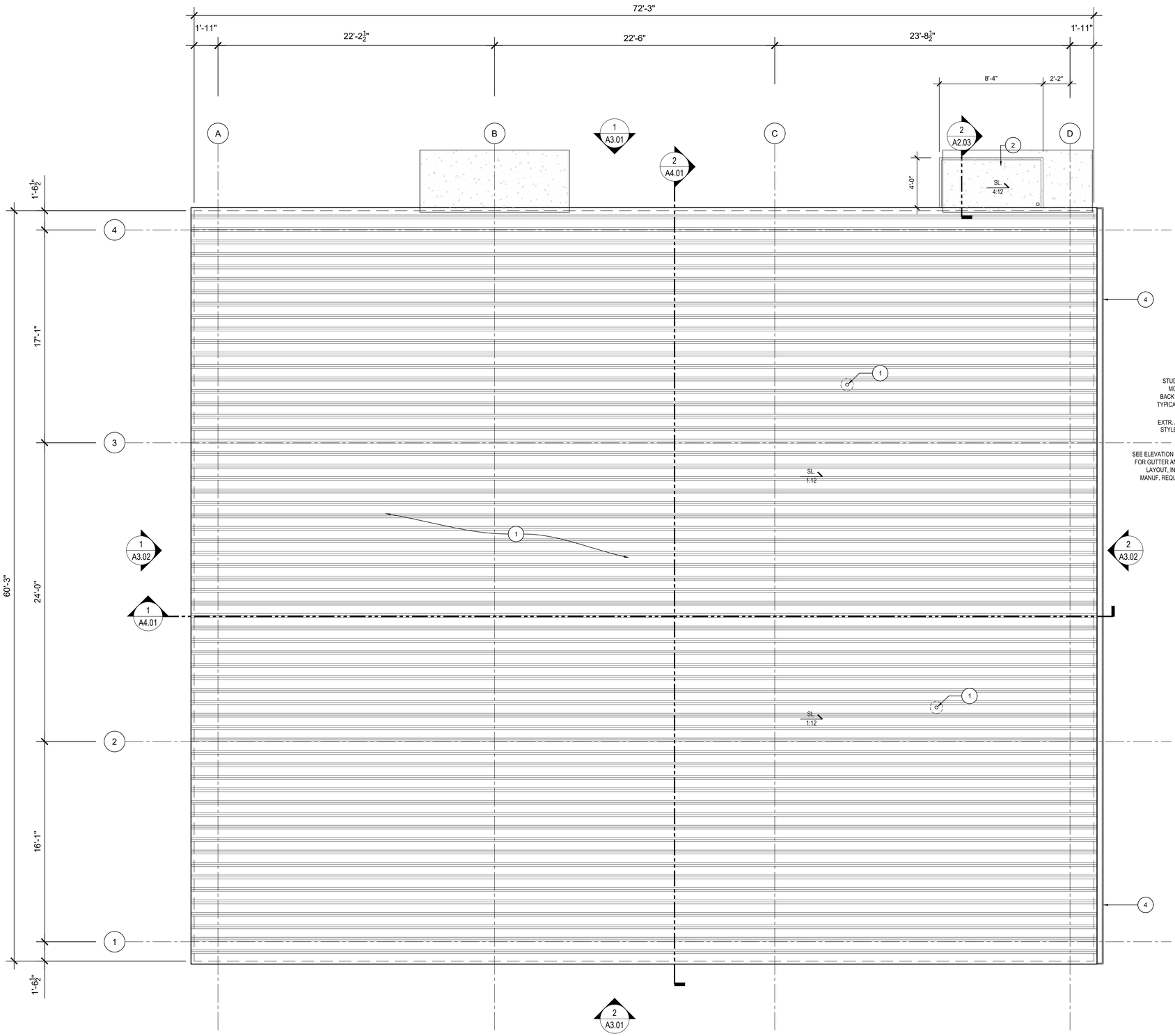
File No. 4144902A100

A2.01

Construction Key Notes

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

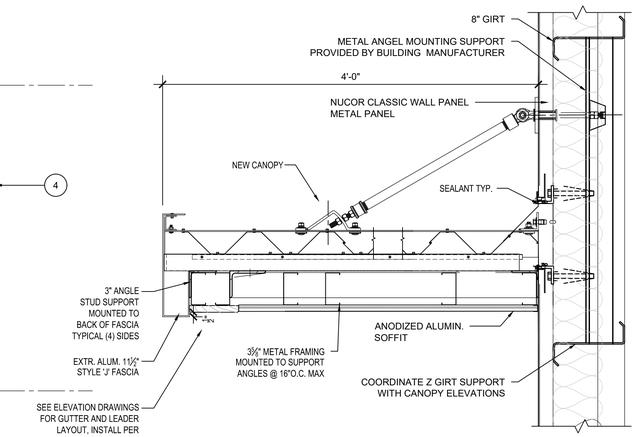
1. VERTICAL RIB STANDING STANDING SEAM ROOF PANEL. REFER TO SPECIFICATION SECTION 13125 FOR ADDITIONAL INFORMATION.
2. PRE-ENGINEERED METAL CANOPY WITH INTEGRAL 3" LEADER. CANOPY SHALL BE "SUPER LUMIDECK" AS MANUFACTURED MY "MAPES" OR APPROVED EQUAL, FINISH SHALL BE CLEAR ANODIZED AS SELECTED BY OWNER.
3. 3" VENT THROUGH ROOF WITH EPDM PIPE BOOT ATTACHED WITH BUTYL TAPE,, MECHANICALLY FASTENED WITH CONTINUOUS SEALANT.
4. CONTINUOUS 7" 'A' STYLE HANGING GUTTER WITH LAP TYPE EXPANSION JOINTS GUTTER SHALL BE KYNAR FINISHED ALUMINUM (0.040 " THICK) IN COLOR SELECTED BY OWNER. DOWNSPOUTS SHALL BE THE SAME MATERIAL AS THE GUTTER 5" DIAMETER AND SHALL DRAIN INTO SWALE COLLECTION PIPING (REFER TO SITE PLAN).



Proposed Roof Plan

1 A2.03 — 1/4" = 1'-0"

NORTH



Canopy Detail

2 A2.03 — 1 1/2" = 1'-0"

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SED PROJECT #66-08-01-06-3-012-001

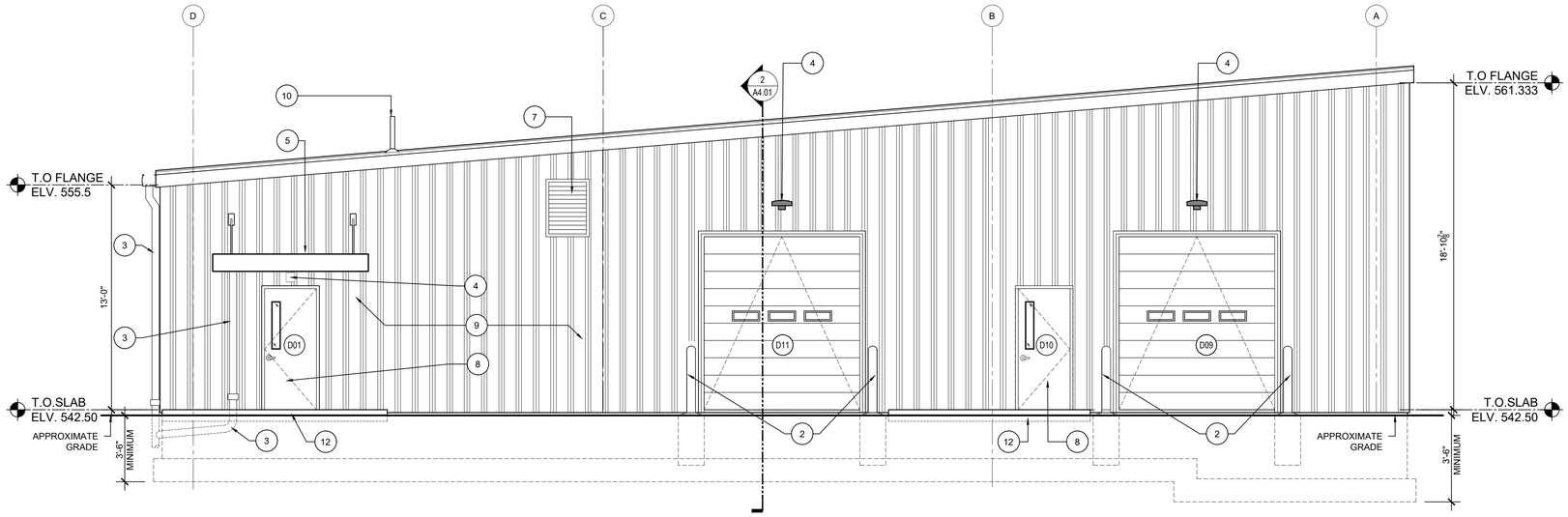
PROPOSED ROOF PLAN

NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

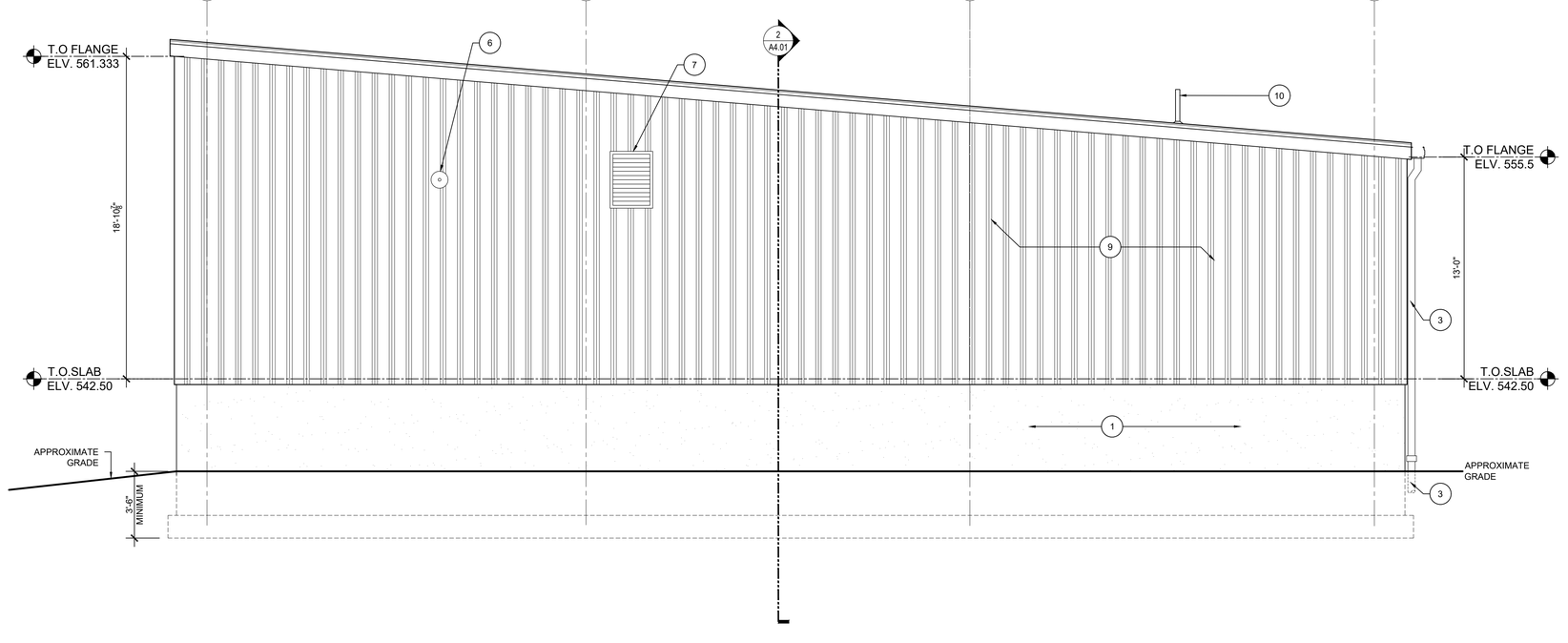
File No. 4144902A203

A2.03



1 A3.01 **North Elevation**

1/4" = 1'-0"



2 A3.01 **South Elevation**

1/4" = 1'-0"

Construction Key Notes

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. CONCRETE FOUNDATION WALL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. PROPOSED BOLLARD: SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
3. ALUMINUM GUTTER AND LEADERS SHALL BE PROVIDED BY PRE-MANUFACTURED BUILDING MANUFACTURER AND INSTALLED BY CONTRACTOR. REFER TO PROPOSED ROOF PLAN FOR ADDITIONAL INFORMATION. LEADERS SHALL DRAIN INTO UNDER GROUND PIPING TO SWALE COLLECTION PIPING. REFER TO SITE PLAN AND SITE DETAILS DRAWINGS FOR ADDITIONAL INFORMATION.
4. SURFACED MOUNTED LIGHT FIXTURE BY EC. GC SHALL PROVIDE INTERNAL WALL BLOCKING AS REQUIRED. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
5. PRE-ENGINEERED METAL CANOPY SYSTEM. SEE 2/A2.03 FOR ADDITIONAL INFORMATION.
6. AIR INTAKE BY MC. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. MECHANICAL LOUVER BY MC. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
8. PAINTED METAL DOOR. REFER TO DOOR SCHEDULE AND SPECIFICATION FOR ADDITIONAL INFORMATION.
9. WALL PANEL SYSTEM AS MANUFACTURED BY PRE-ENGINEERED BUILDING MANUFACTURER. COLOR SHALL BE SELECTED BY OWNER.
10. PROPOSED VENT THOUGH ROOF IS PART OF ADD ALT #1. REFER TO PLUMING DRAWINGS FOR ADDITIONAL INFORMATION.
11. STANDING SEAM ROOF- REFER TO DRAWING A2.03 FOR ADDITIONAL INFORMATION.
12. CAST IN PLACE CONCRETE PAD. REFER TO SITE DRAWING AND DETAIL DRAWING.

Date	7/8/21
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SED PROJECT #66-08-01-06-3-012-001

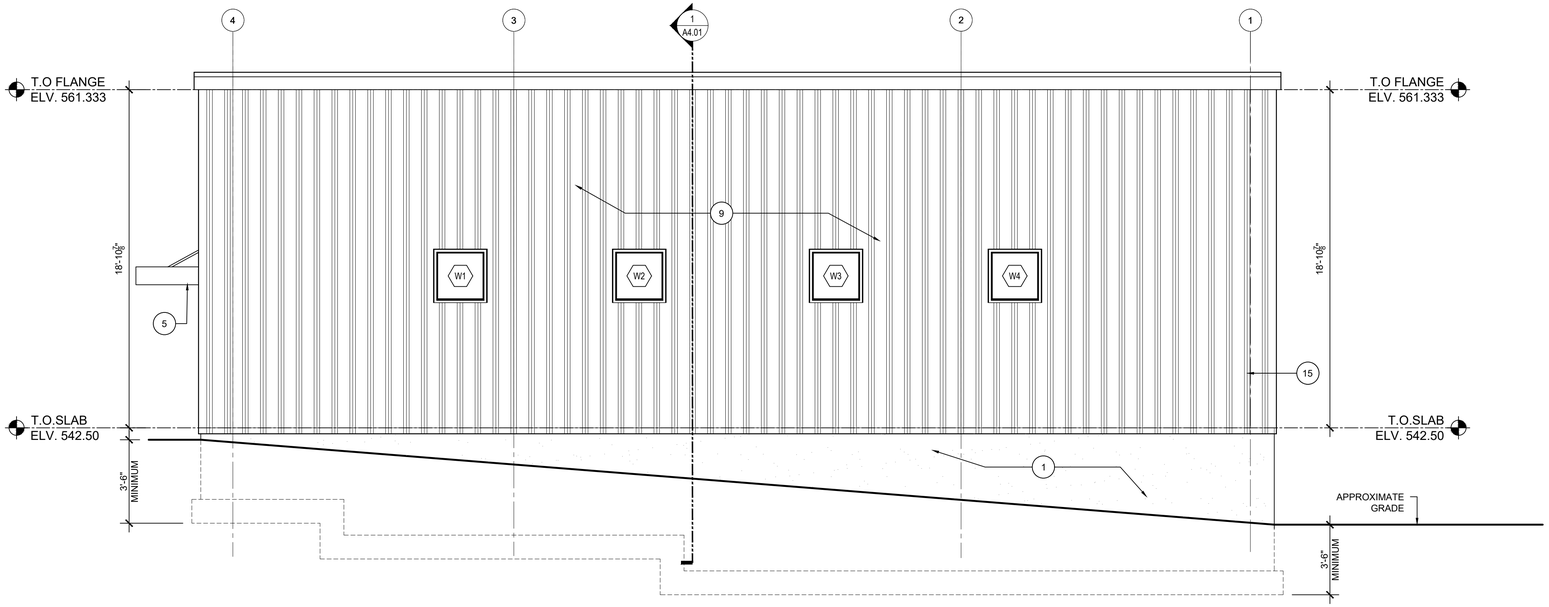
EXTERIOR ELEVATIONS

NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

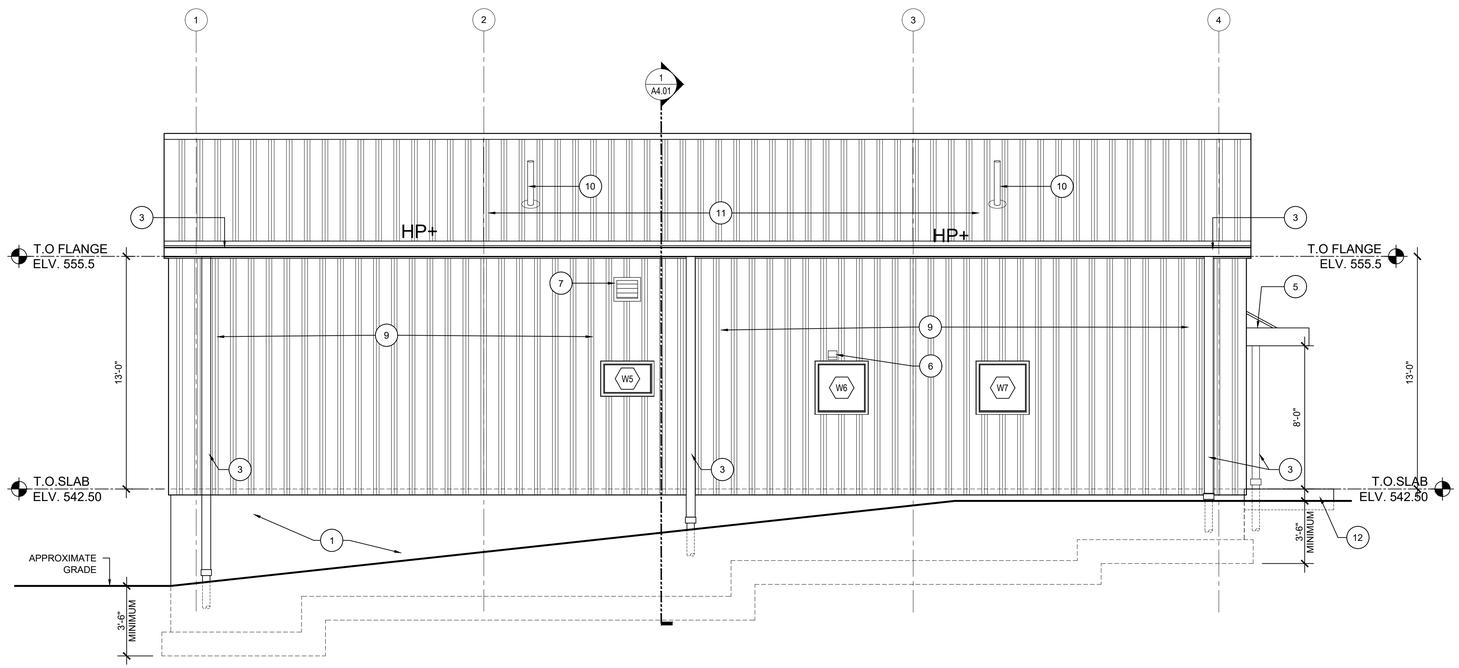
File No. 4144902A301

A3.01



1 A3.01 West Elevation

1/4" = 1'-0"



2 A3.01 East Elevation

1/4" = 1'-0"

Construction Key Notes

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. CONCRETE FOUNDATION WALL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. PROPOSED BOLLARD: SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
3. ALUMINUM GUTTER AND LEADERS SHALL BE PROVIDED BY PRE-MANUFACTURED BUILDING MANUFACTURER AND INSTALLED BY CONTRACTOR. REFER TO PROPOSED ROOF PLAN FOR ADDITIONAL INFORMATION. LEADERS SHALL DRAIN INTO UNDER GROUND PIPING TO SWALE COLLECTION PIPING. REFER TO SITE PLAN AND SITE DETAILS DRAWINGS FOR ADDITIONAL INFORMATION.
4. SURFACED MOUNTED LIGHT FIXTURE BY EC. GC SHALL PROVIDE INTERNAL WALL BLOCKING AS REQUIRED. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
5. PRE-ENGINEERED METAL CANOPY SYSTEM. SEE 2/A2.03 FOR ADDITIONAL INFORMATION.
6. AIR INTAKE BY MC. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. MECHANICAL LOUVER BY MC. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
8. PAINTED METAL DOOR. REFER TO DOOR SCHEDULE AND SPECIFICATION FOR ADDITIONAL INFORMATION.
9. WALL PANEL SYSTEM AS MANUFACTURED BY PRE-ENGINEERED BUILDING MANUFACTURER. COLOR SHALL BE SELECTED BY OWNER.
10. PROPOSED VENT THOUGH ROOF IS PART OF ADD ALT #1. REFER TO PLUMING DRAWINGS FOR ADDITIONAL INFORMATION.
11. STANDING SEAM ROOF- REFER TO DRAWING A2.03 FOR ADDITIONAL INFORMATION.
12. CAST IN PLACE CONCRETE PAD. REFER TO SITE DRAWING AND DETAIL DRAWING.

Date	7/8/21
Checked	CC
Drawn	SC

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SED PROJECT #66-08-01-06-3-012-001

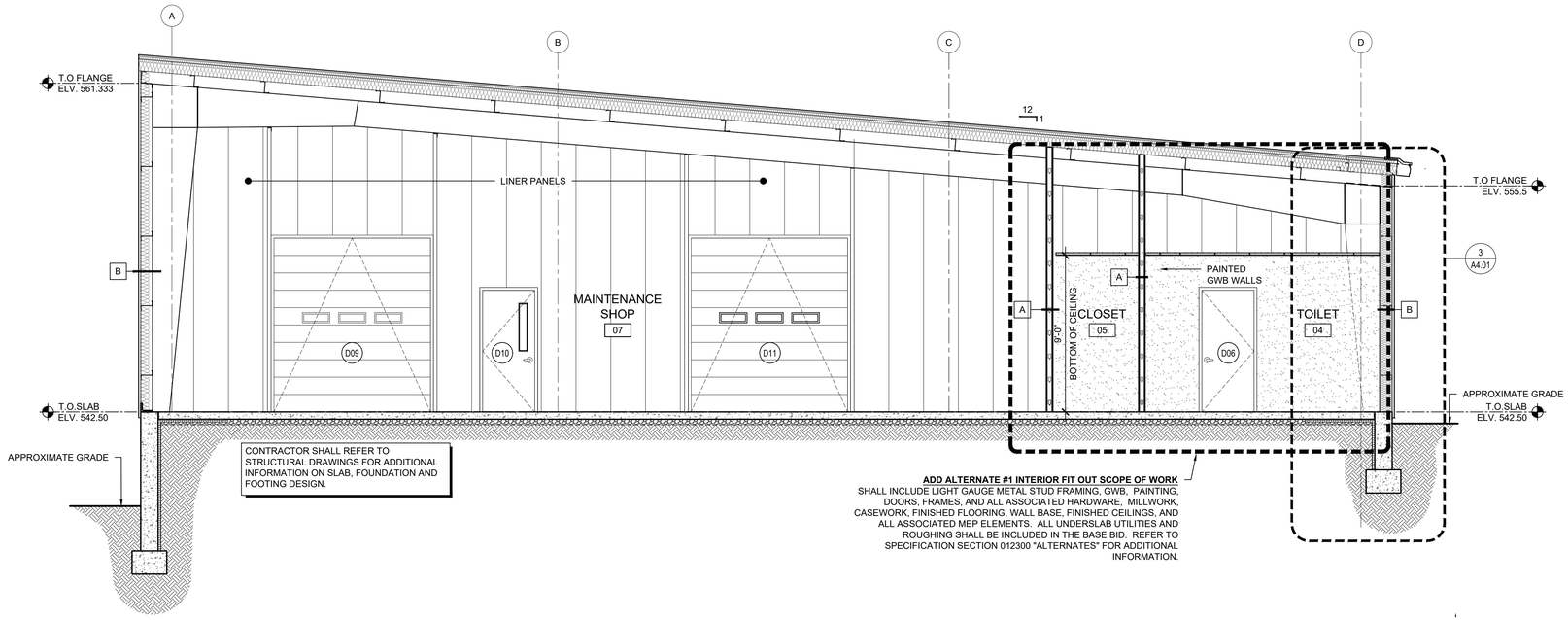
EXTERIOR ELEVATIONS

NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

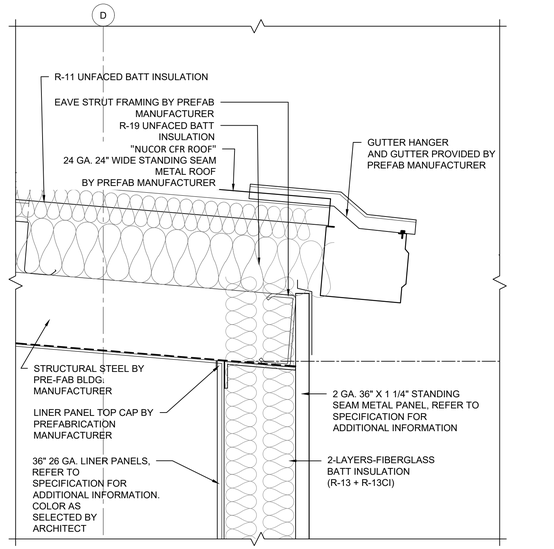
File No. 4144902A301

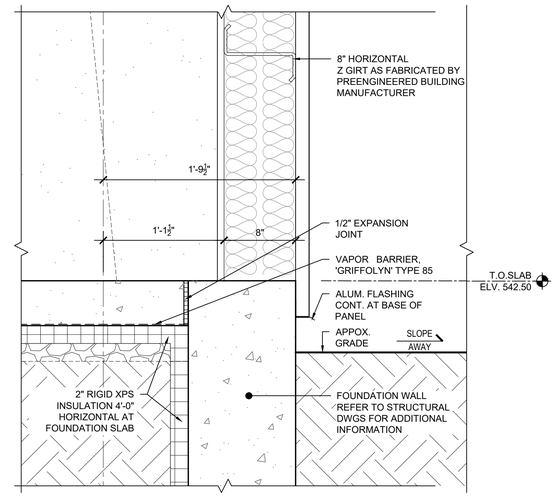
A3.02



1 A4.01 Building Section

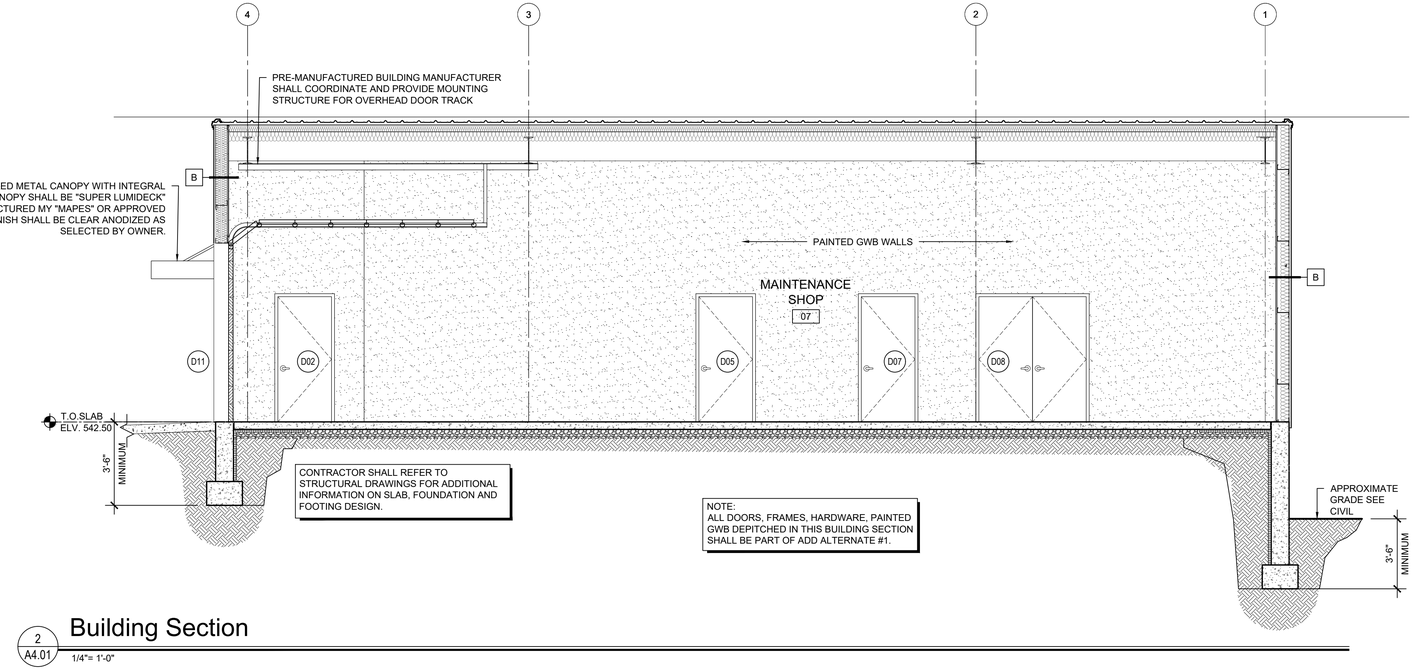
1/4"= 1'-0"





3 A4.01 Wall Section

1 1/2"= 1'-0"



2 A4.01 Building Section

1/4"= 1'-0"

Date	7/8/21
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BUILDING SECTIONS AND WALL SECTION

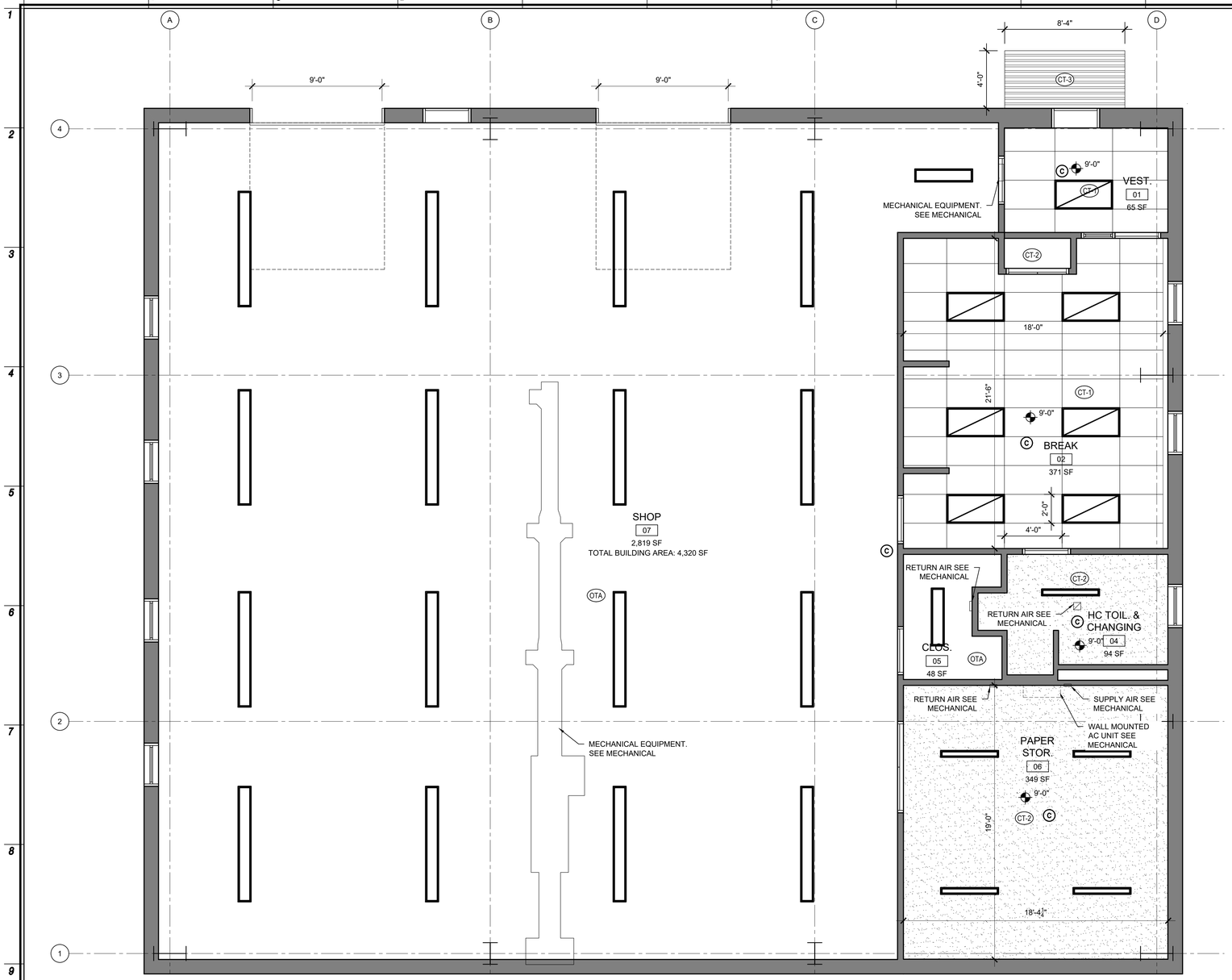
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

File No. 4144902A401

SED PROJECT #66-08-01-06-3-012-001

A4.01



1 A5.01 REFLECTED CEILING PLAN
1/4" = 1'-0"

NORTH

Ceiling Types

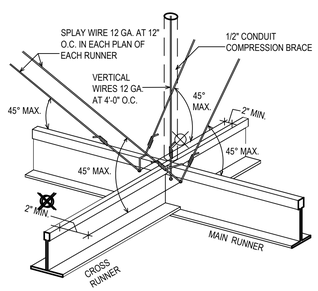
MARK	DESCRIPTION	SYMBOL
CT-1	'CERTAINTEED' 2'X2'X3/4" FIN FISSURED HIGH NRC FLUSH MINERAL FIBER ACOUSTIC CEILING TILE (HHF-457 HNRC) WITH EXPOSED 15/16" 'TRIM' GRID. COLOR: WHITE OR AS SELECTED BY OWNER.	
CT-2	'GP' 5/8" THICK 'DENSARMOR PLUS ABUSE-RESISTANT' BRAND ABUSE/WATER/MOLD/FIRE-RESISTANCE INTERIOR PANELS. FINISH JOINTS AND PAINT, TYP. USE DRYWALL SUSPENSION GRID UNO.	
CT-3	ANODIZED ALUMINUM, METAL PANEL SOFFIT, BY (MAPES).	
OTA	OPEN TO ABOVE- PAINT ALL EXPOSED STRUCTURAL STEEL	

Symbol Legend

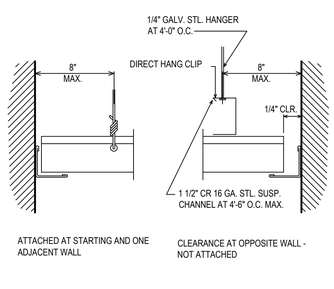
SYMBOL	DESCRIPTION
0'-0"	DATUM: FINISH CEILING HEIGHT ABOVE FINISH FLOOR
CT-#	CEILING TYPE (REFER TO CEILING TYPES SCHEDULE)
	LIGHTING FIXTURES - REFER TO ELECTRICAL PLANS FOR EXACT LIGHTING FIXTURE LOCATIONS. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR CEILING DIFFUSER LOCATIONS.
	CEILING MOUNTED EQUIPMENT - REFER TO ELECTRICAL PLANS FOR EXACT FIXTURE LOCATIONS. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR CEILING DIFFUSER LOCATIONS. MECHANICAL DIFFUSERS - REFER TO MECHANICAL PLANS FOR EXACT CEILING DIFFUSER LOCATIONS. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR LIGHT FIXTURE LOCATIONS.

Typical Ceiling Notes

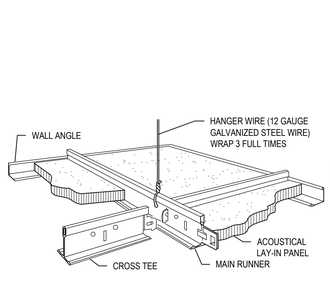
1. ALL ACCESS PANELS, HVAC GRILLES AND REGISTERS, SHALL BE PAINTED TO MATCH CEILING FINISHES.
2. ALL AREAS NOT DEPICTED AS CEILING TILE SHALL BE OPEN TO ABOVE UNLESS OTHERWISE NOTED.
3. ALL CONTRACTORS (I.E. MECHANICAL, ELECTRICAL, PLUMBING) ARE REQUIRED TO COORDINATE THEIR WORK WITH INDIVIDUAL CEILING FINISHES. ALL DISTURBED AREAS RESULTING FROM CONTRACTORS OPERATIONS SHALL BE PATCHED AND DAMAGED AREAS AS A RESULT OF CONTRACTORS OPERATIONS SHALL BE PATCHED AND REPAIRED TO MATCH.
4. FIELD VERIFY ALL DIMENSIONS AND CLEARANCES. COORDINATE INSTALLATION OF LIGHTING, EQUIPMENT, MECHANICAL DUCTWORK, ETC. TO ENSURE PROPER INSTALLATION.
5. ALL COLORS AND PATTERNS TO BE SELECTED BY OWNER, TYPICAL.
6. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY ACCESSORIES INCLUDING PERIMETER MOLDINGS, FASTENERS, SUPPORT WIRES, TRIM, ETC. FOR A COMPLETE INSTALLATION.
7. ALL LIGHTING FIXTURES SHOWN ON REFLECTED CEILING PLAN ARE SHOWN FOR DIAGRAMMATIC PURPOSES ONLY, REFER TO ELECTRICAL LIGHTING PLAN FOR ACTUAL LOCATIONS.



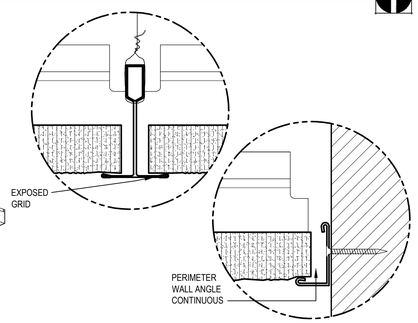
A A5.01 Typ. Susp. Ceiling Detail
1-1/2" = 1'-0" SUSPENSION CEILING SYSTEM



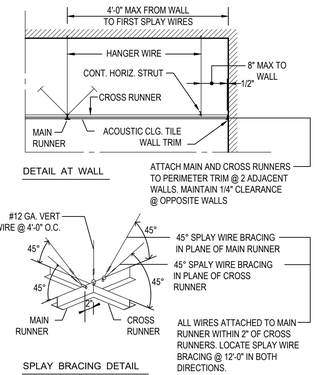
B A5.01 Typ. Clng. Moulding Detail
1-1/2" = 1'-0" SUSPENSION CEILING SYSTEM



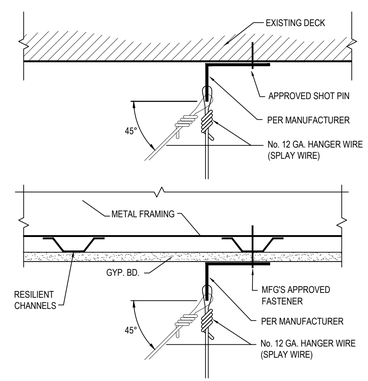
C A5.01 Typ. Susp. Ceiling System
1-1/2" = 1'-0" ACOUSTIC PANEL SUSP. SYSTEM



D A5.01 Typ. Susp. System Profiles
1-1/2" = 1'-0" ACOUSTIC PANEL SUSP. SYSTEM



E A5.01 Typ. Seismic Bracing Detail
3/8" = 1'-0" SUSPENSION CEILING SYSTEM



F A5.01 Typ. Hanger Wire Detail
1-1/2" = 1'-0" SUSPENSION CEILING SYSTEM

Date 7/8/21
Checked CC
Drawn SC

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

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PROPOSED REFLECTED CEILING PLAN
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

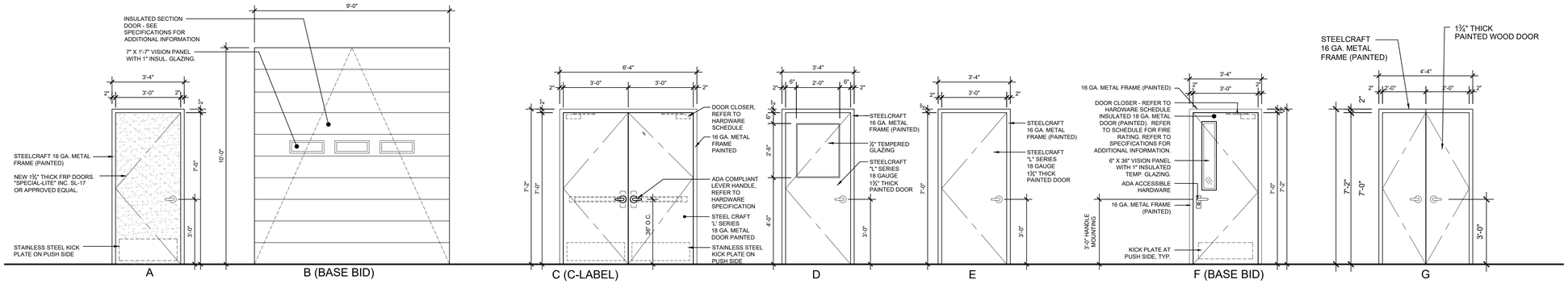
Job No. 4.1449.02
File No. 4144902A501

SED PROJECT #66-08-01-06-3-012-001

A5.01

DOOR SCHEDULE

DOOR NO.	DOOR TYPE	ROOM NAME/ NUMBER	DOOR						FRAME			SILL	HARDWARE (SEE SPECIFICATIONS)				NOTES
			ACTION	MATERIAL	DOOR FINISH	DOOR SIZE		VISION PANEL	DETAIL NO.			DETAIL NO.	HARDWARE SET	CLOSER	PANIC	SECURITY PACKAGE	
						WIDTH	HEIGHT		MAT.	HEAD	JAMB						
FIRST FLOOR																	
01	F	VESTIBULE 01	SINGLE SWING	MTL	PAINT	3'-0"	7'-0"	■	MTL	6/A6.02	7/A6.02	8/A6.02	1.0	■	■		THIS DOOR IS INCLUDED IN BASE BID
02	D	VESTIBULE 01	SINGLE SWING	MTL	PAINT	3'-0"	7'-0"	■	MTL	3/A6.02	4/A6.02	5/A6.02	2.0	■	■		PART OF ADD ALTERNATE #1
03	D	BREAK 02	SINGLE SWING	MTL	PAINT	3'-0"	7'-0"	■	MTL	3/A6.02	4/A6.02	5/A6.02	3.0	■	■		PART OF ADD ALTERNATE #1
04	G	CLOSET 03	PAIR SINGLE SWING	MTL	PAINT	4'-0"	7'-0"	-	MTL	3/A6.02	4/A6.02	5/A6.02	6.0				PART OF ADD ALTERNATE #1
05	E	BREAK 02	SINGLE SWING	MTL	PAINT	3'-0"	7'-0"	-	MTL	3/A6.02	4/A6.02	5/A6.02	3.0				PART OF ADD ALTERNATE #1
06	A	TOILET & CHANGING 04	SINGLE SWING	FRP	ALUMIN	3'-0"	7'-0"	-	MTL	3/A6.02	4/A6.02	5/A6.02	4.0				PART OF ADD ALTERNATE #1
07	E	CLOSET 05	SINGLE SWING	WOOD	PAINT	3'-0"	7'-0"	-	MTL	3/A6.02	4/A6.02	5/A6.02	5.0				PART OF ADD ALTERNATE #1
08	C	PAPER STORAGE 06	PAIR SINGLE SWING	MTL	PAINT	6'-0"	7'-0"	-	MTL	3/A6.02	4/A6.02	5/A6.02	7.0				PART OF ADD ALTERNATE #1
09	B	MAINTENANCE SHOP 07	OVERHEAD	MTL	PAINT	9'-0"	10'-0"	■	N/A	1/A6.02	2/A6.02		8.0				THIS DOOR IS INCLUDED IN BASE BID
10	F	MAINTENANCE SHOP 07	SINGLE SWING	MTL	PAINT	3'-0"	7'-0"	■	MTL	6/A6.02	7/A6.02	8/A6.02	1.0				THIS DOOR IS INCLUDED IN BASE BID
11	B	MAINTENANCE SHOP 07	OVERHEAD	MTL	PAINT	9'-0"	10'-0"	■	N/A	1/A6.02	2/A6.02		8.0				THIS DOOR IS INCLUDED IN BASE BID



Finish Legend

ABBREVIATIONS	DESCRIPTIONS
ACT	ACOUSTIC CEILING TILE: REFER TO REFLECTED CEILING PLAN ON A5.01 FOR CEILING TYPES (CT-#)
CONC.	CONCRETE
MLP	METAL LINER PANEL (REFER TO SPECIFICATION)
GWB	GYPSUM WALL BOARD: 'GP' 5/8" THICK TYPE 'X' FIRE-RESISTANCE INTERIOR GYPSUM PANELS, EACH SIDE FINISH JOINTS AND PAINT, TYP.
O.T.A.	OPEN TO STRUCTURE ABOVE - PAINT FLAT WHITE
PNT-W	PAINT (INTERIOR): "BENJAMIN MOORE" - WHITE DOVE PM-19 WALLS: 1ST COAT PRIMER & 2ND COAT LATEX SEMI-GLOSS/ROYAL SEMI-GLOSS CEILING: LATEX FLAT WHITE
VB	VINYL BASE: 4" HIGH BY JOHNSONITE OR APPROVED EQUAL.
VCT	VINYL COMPOSITION TILE: 12"x12" ARMSTRONG #51804 EARTHSTONE GREIGE
CFC	CONCRETE FLOORS COATING BY "ARMORSEAL": REXTHANE I FLOOR COATING B65-60 SERIES 1st @ 1 MILS 2nd COAT @ 1 MILS 2 COATS TO = 2.0 MILS. DRY

INTERIOR FINISH SCHEDULE

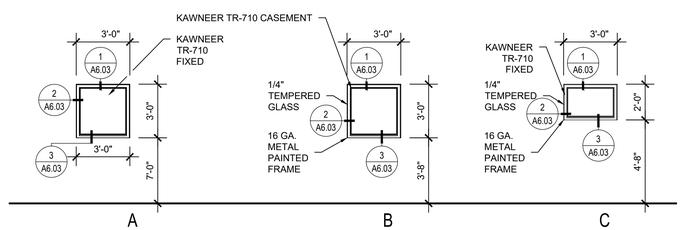
ROOM NO.	ROOM NAME	SUB-FLOOR	FLOOR FINISH	BASE	BASE HEIGHT	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	SIGNAGE SET		CEILING	CEILING HEIGHT	ROOM NO.
01	VESTIBULE	CONC.	CFC	VB	4"	MLP	MLP	GWB	GWB			ACT	9'-0"	01
02	BREAK	CONC.	CFC	VB	4"	GWB	GWB	GWB	GWB			ACT	9'-0"	02
03	CLOSET	CONC.	CFC	VB	4"	GWB	GWB	GWB	GWB			GWB	9'-0"	03
04	TOILET	CONC.	CFC	VB	4"	GWB	GWB	GWB	GWB			GWB	9'-0"	04
05	JANITOR CLOSET	CONC.	CFC	VB	4"	GWB	GWB	CWT	GWB			OTA	SLOPE	05
06	PAPER STORAGE	CONC.	CFC	VB	4"	GWB	GWB	CWT	GWB			GWB	9'-0"	06
07	SHOP	CONC.	CFC	-	-	MLP	GWB	MLP	MLP			OTA	SLOPE	07

NOTE: ALL INTERIOR PARTITIONS, WALL BASE, AND CEILING FINISHES ARE PART OF ADD ALTERNATE #1

WINDOW SCHEDULE

WINDOW NO.	WINDOW TYPE	ROOM NAME/ NUMBER	OPERATION	FRAME		SHADES		SCREENS		NOTES
				MATERIAL	GLAZING	SOLAR SHADE	BLACKOUT	SECURITY SCREEN	INSECT SCREEN	
W1	A	MAINTENANCE SHOP	FIXED	ALUMINUM	1" INSUL.					
W2	A	MAINTENANCE SHOP	FIXED	ALUMINUM	1" INSUL.					
W3	A	MAINTENANCE SHOP	FIXED	ALUMINUM	1" INSUL.					
W4	A	MAINTENANCE SHOP	FIXED	ALUMINUM	1" INSUL.					
W5	C	TOILET/ CHANGING	FIXED	ALUMINUM	1" INSUL.					
W6	B	BREAK	FIXED	ALUMINUM	1" INSUL.					
W7	B	BREAK	FIXED	ALUMINUM	1" INSUL.					

NOTE: ALL WINDOWS SHALL BE INCLUDED IN THE BASE BID



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Date 7/8/21
Checked MTM
Drawn SC

Revisions:

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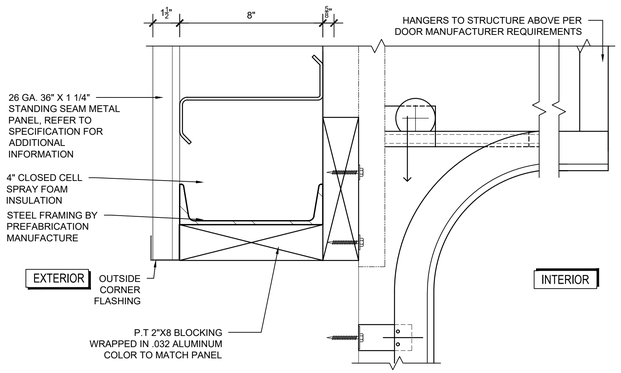
DOOR, WINDOW AND FINISH SCHEDULES
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02
File No. 4144902A601

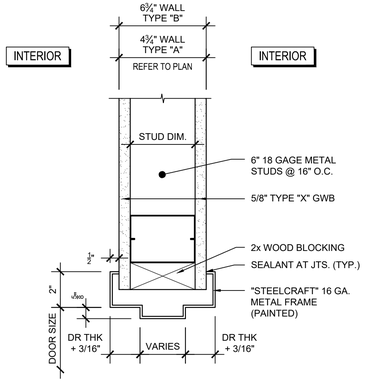
SED PROJECT #66-08-01-06-3-012-001

A6.01



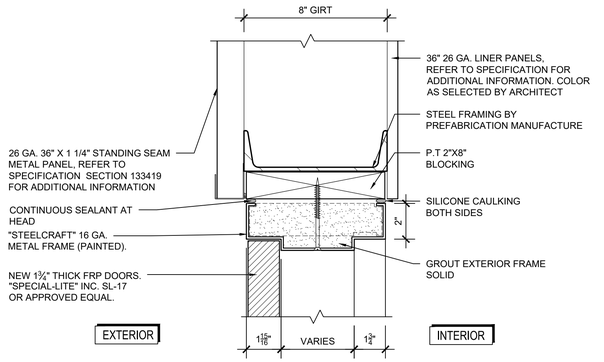
1 A6.02 **Overhead Door Head Detail**

3" = 1'-0"



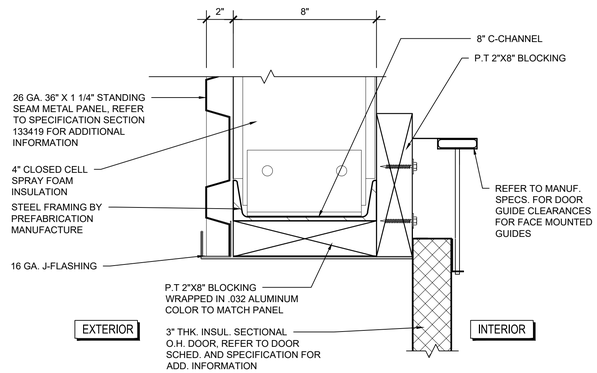
3 A6.02 **Head Detail**

3" = 1'-0" HM INTERIOR



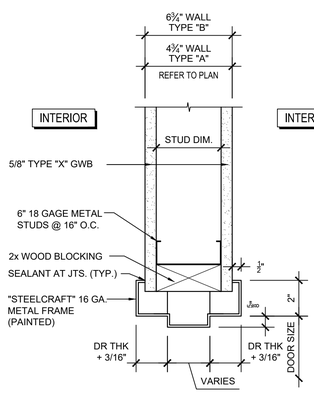
6 A6.02 **Exterior Head Detail**

3" = 1'-0"



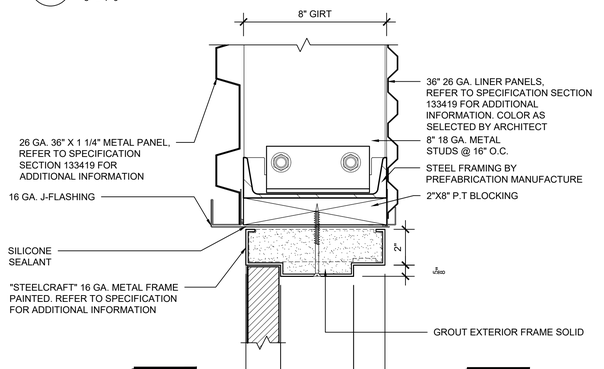
2 A6.02 **Overhead Door Jamb Detail**

3" = 1'-0"



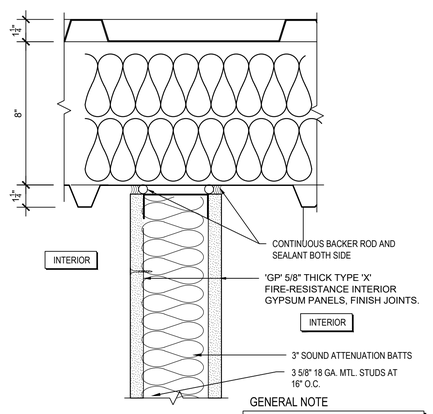
4 A6.02 **Jamb Detail**

3" = 1'-0" HM INTERIOR



7 A6.02 **Exterior Jamb Detail**

3" = 1'-0"

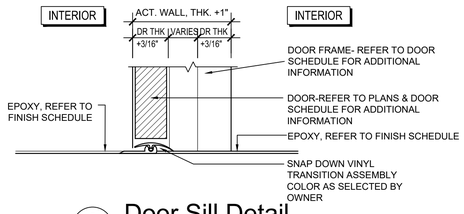


GENERAL NOTE

CONTRACTOR TO RUN PARTITION FROM TOP OF CONCRETE FLOOR TO UNDERSIDE OF STRUCTURE ABOVE, CONT.

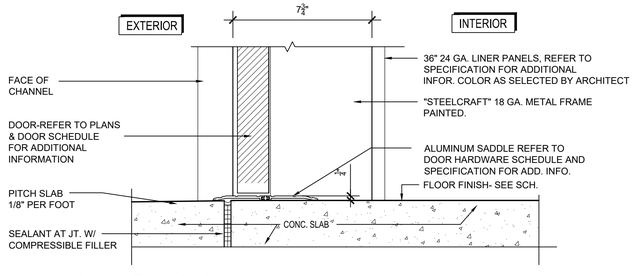
9 A6.02 **Wall Intersections**

3" = 1'-0" Gypsum Wall To Metal liner



5 A6.02 **Door Sill Detail**

3" = 1'-0"



8 A6.02 **Door Sill Detail**

3" = 1'-0"

Date	7/8/21
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Drawn	CC

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SED PROJECT #66-08-01-06-3-012-001

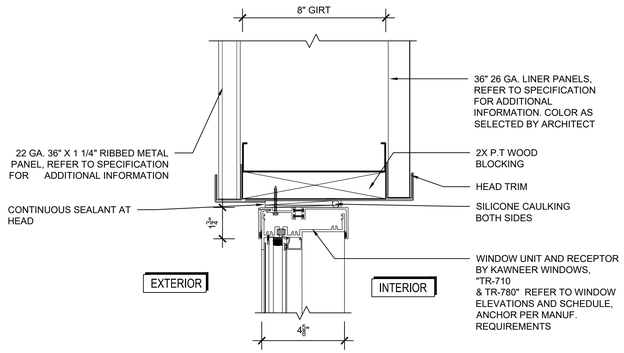
DOOR DETAILS

NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

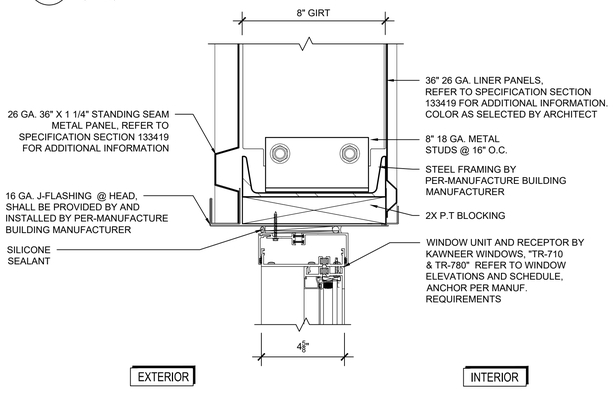
File No. 4144902A601

A6.02



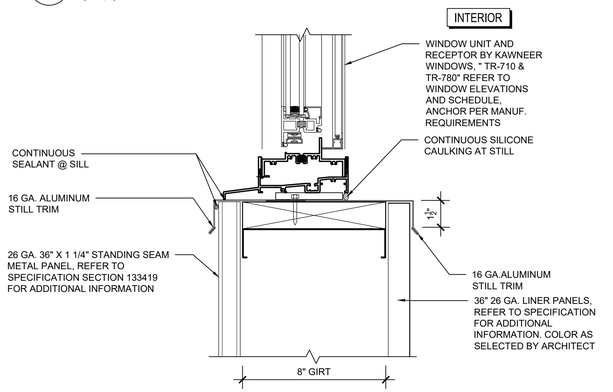
1 A6.03 **Exterior Head Detail**

3" = 1'-0"



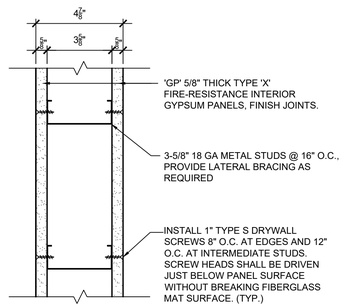
2 A6.03 **Exterior Jamb Detail**

3" = 1'-0"



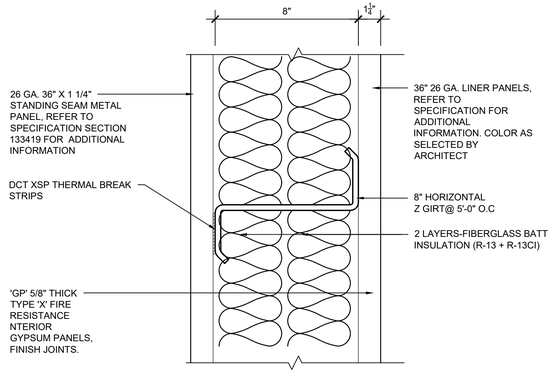
3 A6.03 **Exterior Jamb Detail**

3" = 1'-0"



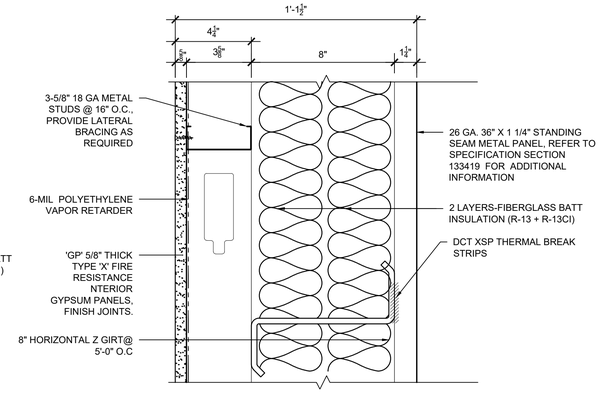
A **Wall Type**

3" = 1'-0" INTERIOR PARTITION



B **Wall Type**

3" = 1'-0" EXTERIOR PARTITION



C **Wall Type**

3" = 1'-0" EXTERIOR PARTITION

D **Wall Type**

3" = 1'-0" INTERIOR PARTITION

E **Wall Type**

3" = 1'-0"

4 A6.03 **Wall Types**

3" = 1'-0"

Date	7/8/21
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Drawn	SCC

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WINDOW DETAILS & WALL TYPE

NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

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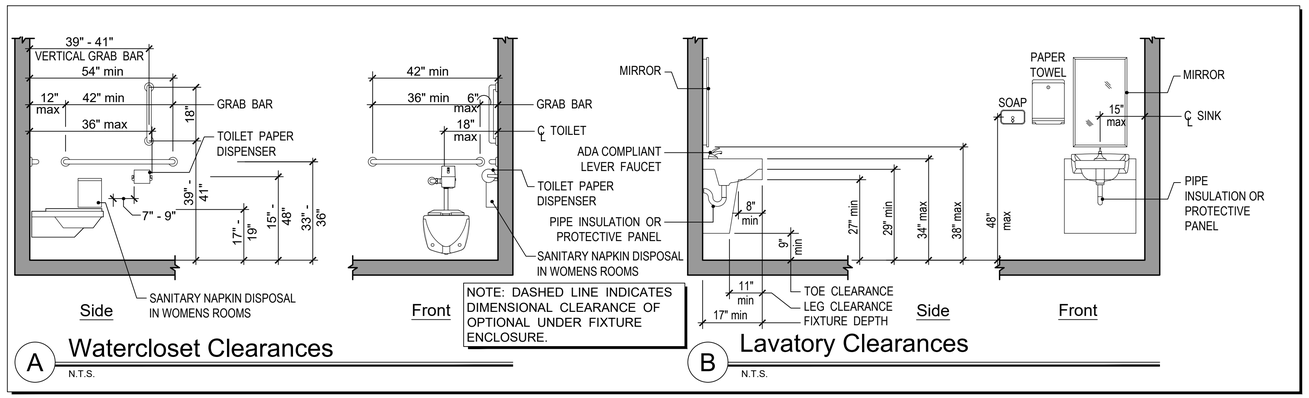
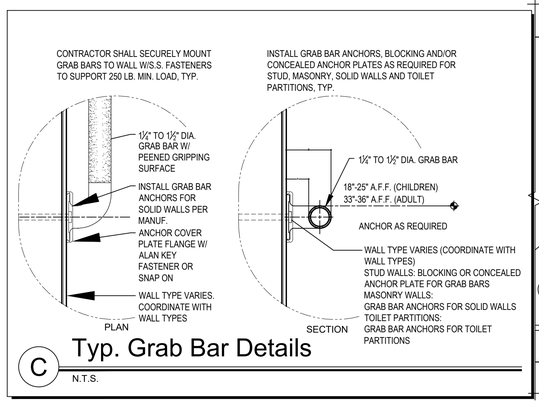
A6.03

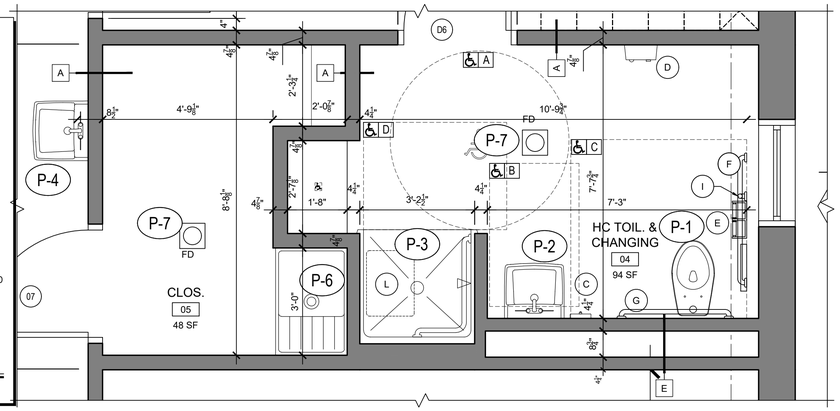


A Watercloset Clearances
N.T.S.

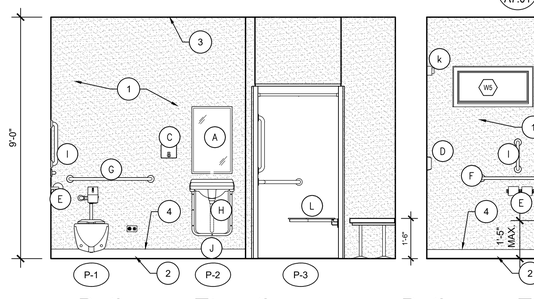
B Lavatory Clearances
N.T.S.



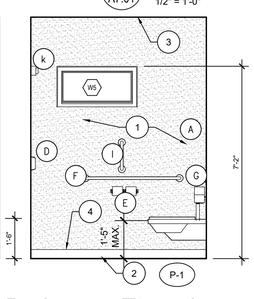
C Typ. Grab Bar Details
N.T.S.



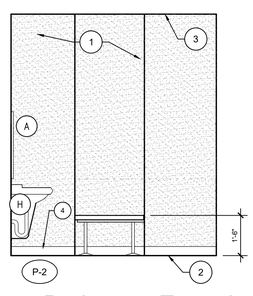
1 A7.01 Enlarged Floor Plan
1/2" = 1'-0"



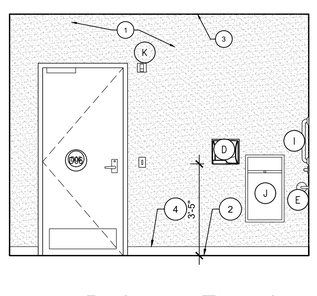
3 A7.01 Bathroom Elevation
3/8" = 1'-0"



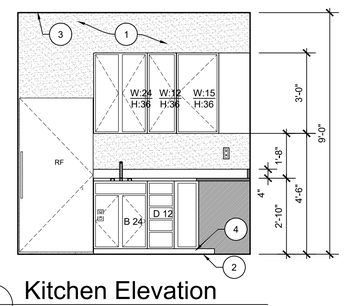
4 A7.01 Bathroom Elevation
3/8" = 1'-0"



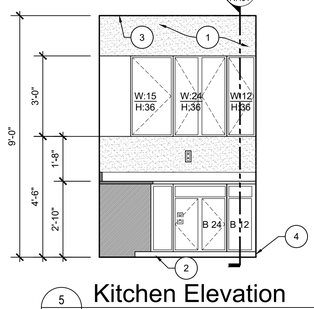
2 A7.01 Bathroom Elevation
3/8" = 1'-0"



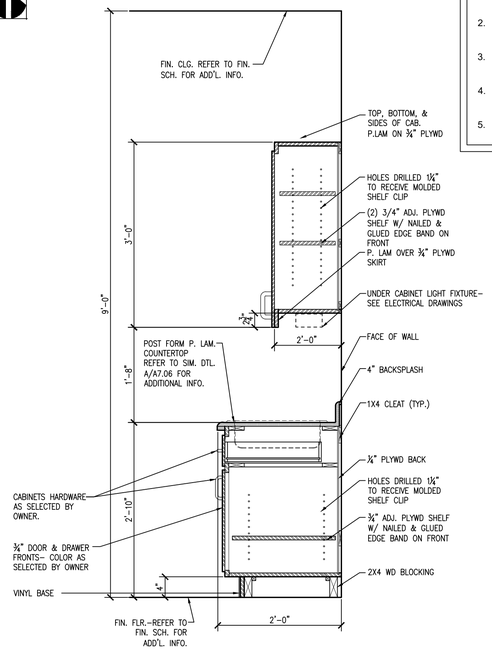
1 A7.01 Bathroom Elevation
3/8" = 1'-0"



6 A7.01 Kitchen Elevation
3/8" = 1'-0"



5 A7.01 Kitchen Elevation
3/8" = 1'-0"



6 A7.01 Base & Wall Cabinet Section
1" = 1'-0"

Typical Toilet Room Notes

1. CONTRACTOR TO COORDINATE EXACT LOCATIONS OF ALL TOILET ROOM ACCESSORIES WITH OWNER PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL SECURELY FASTEN ALL FIXTURES AND ACCESSORIES AT PROPER MOUNTING HEIGHTS.
3. CONTRACTOR SHALL PROVIDE ADEQUATE BLOCKING AT APPROPRIATE MOUNTING HEIGHTS AS REQUIRED FOR ALL ACCESSORIES INCLUDED IN THIS CONTRACT INCLUDING ACCESSORIES SUPPLIED BY OWNER. CONTRACTOR SHALL PROVIDE ALL FASTENERS, ANCHORS, PLATES, ETC. REQ'D. FOR COMPLETE INSTALLATION. ALL FASTENERS SHALL BE STAINLESS STEEL, CORROSION AND VANDAL RESISTANT.
4. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE KIND AND OF EQUAL QUALITY.
5. REFER TO PLUMBING FIXTURE SCHEDULE FOR SPECIFIC PLUMBING FIXTURE SPECIFICATIONS. REFER TO PLUMBING DRAWINGS FOR PIPING LAYOUT.
6. CONTRACTOR SHALL FURNISH AND INSTALL ALL ADA SIGNAGE AS REQUIRED.
7. DIMENSIONS ARE FROM FACE OF FINISH MATERIALS, AND REPRESENT CLEAR AREA.
8. CONTRACTOR TO PROVIDE GRAB BAR ANCHORS FOR SOLID WALL CONSTRUCTION AND CONCEALED ANCHOR PLATE FOR STUD WALL CONSTRUCTION. REFER TO TYPICAL GRAB BAR DETAIL D/A7.01.
9. ALL TOILET ROOM ACCESSORIES SHALL BE STAINLESS STEEL.
10. CONTRACTOR SHALL PROVIDE ALL FASTENERS, ANCHORS, PLATES, ETC. REQ'D FOR COMPLETE INSTALLATION.
11. ALL FASTENERS SHALL BE STAINLESS STEEL, CORROSION AND VANDAL RESISTANT.
12. COLOR OF ALL PLUMBING FIXTURES SHALL BE SELECTED BY OWNER.

Toilet Fixture & Accessory Schedule - Provided & Installed by GC

- (A) ADA TILT MIRROR: "AMERICAN SPECIALTIES, INC. (ASI) MODEL #0535 18"X30" S.S. FIXED ANGLE TILT MIRROR.
- (B) RESERVED
- (C) SOAP DISPENSER: "AMERICAN SPECIALTIES, INC." (ASI) MODEL #9343 SURFACE MOUNTED SOAP DISPENSER.
- (D) HAND DRYER: "AMERICAN SPECIALTIES, INC." (ASI) MODEL #0199-1 ADA COMPLIANT SURFACE MOUNTED DRYER. SATIN STAINLESS STEEL. 120V.
- (E) TOILET TISSUE DISPENSER: (PROVIDED BY OWNER, INSTALLED BY CONTRACTOR) "AMERICAN SPECIALTIES, INC." (ASI) MODEL #0264-1A SURFACE MOUNTED DOUBLE ROLL TOILET TISSUE HOLDER.
- (F) 42" HORIZONTAL GRAB BAR: "AMERICAN SPECIALTIES, INC." (ASI), MODEL #3800, STAINLESS STEEL 1-½" DIAMETER PEENED NON-SLIP GRIPPING SURFACE WITH POLISHED FLANGE- SEE DETAIL A1/A7.01. (SIDE BAR)
- (G) 36" HORIZONTAL GRAB BAR: "AMERICAN SPECIALTIES, INC." (ASI), MODEL #3800, STAINLESS STEEL 1-½" DIAMETER PEENED NON-SLIP GRIPPING SURFACE WITH POLISHED FLANGE- SEE DETAIL A/A7.01. (REAR BAR)
- (H) LAVATORY PROTECTIVE ENCLOSURE "LAV SHIELD" BY "TRUEBRO INC.". MODEL #2018-AS-C. PROVIDE AN ENCLOSURE AT EACH LAVATORY.
- (I) 18" VERTICAL GRAB BAR: "AMERICAN SPECIALTIES, INC." (ASI), MODEL #3800, STAINLESS STEEL 1-½" DIAMETER PEENED NON-SLIP GRIPPING SURFACE WITH POLISHED FLANGE- SEE DETAIL A1/A7.01.
- (J) WASTE RECEPTACLE: "AMERICAN SPECIALTIES, INC." (ASI) MODEL #28206 SURFACE MOUNTED WASTE RECEPTACLE
- (K) SURFACE MOUNTED FIRE ALARM HORN STROBE
- (L) FOLDING SHOWER SEAT: 16 GA. TYPE 304 STAINLESS STEEL TUBING.W/ STAIN FINISH. WALL MOUNT BRACKETS SHALL BE 12 GA. TYPE 304 STAINLESS STEEL. SOLID PHENOLIC SEAT 1/2" THINK FIRE AND MILDEW RESISTANT.

NOTE: CONTRACTOR TO PROVIDE ALL CONCEALED ARM CHAIR SUPPORTS FOR ALL PLUMBING FIXTURES REQUIRED.

- (P-1) ADA WALL-MOUNTED WATER CLOSET: SEE PLUMBING SCHEDULE FOR ADDITIONAL INFO.
- (P-2) LAVATORY (WALL HUNG): SEE PLUMBING SCHEDULE FOR ADDITIONAL INFORMATION.
- (P-3) SHOWER: SEE PLUMBING SCHEDULE FOR ADDITIONAL INFORMATION.
- (P-4) SHOP SINK: SEE PLUMBING SCHEDULE FOR ADDITIONAL INFORMATION.
- (P-6) MOP SINK: SEE PLUMBING SCHEDULE FOR ADDITIONAL INFORMATION.
- (P-7) 3" FLOOR DRAIN: SEE PLUMBING SCHEDULE FOR ADDITIONAL INFORMATION.

Interior Elevation Key Notes

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. FINISH WALLS: (1) PRIMER COAT & (2) FINISH COATS, TYPICAL. SEE FINISH SCHEDULE ON SHEET A6.01 FOR ADDITIONAL INFORMATION.
2. NEW SEALED CONCRETE FLOOR. SEE FINISH SCHEDULE ON SHEET A6.01 FOR ADDITIONAL INFORMATION.
3. FINISH CEILING (1) PRIMER COAT & 2 FINISH COATS. SEE FINISH SCHEDULE ON SHEET A6.01 FOR ADDITIONAL INFORMATION.
4. GC. FURNISH AND INSTALL NEW VINYL WALL BASE. SEE FINISH SCHEDULES ON SHEET A6.01 FOR ADDITIONAL INFORMATION.
5. GC REFER TO SPECIFICATION SECTION 012300 FOR WHICH WORK IS IN THE BASE BID AND WHICH WORK IS INCLUDED IN ADD ALTERNATE #1.

Accessibility Notes

- (A) 60" CLR. WHEELCHAIR TURNING RADIUS
- (B) 30"x48" CLEAR AT LAVATORY
- (C) 56"x60" CLEAR AT WATER CLOSET
- (D) 30"x48" CLEAR SIDE APPROACH

ALL ARCHITECTURAL ELEMENTS DEPICTED ON THIS SHEET ARE PART OF ADD ALTERNATE #1

Date 7/8/21
Checked MTM
Drawn SC

MICHAEL J. McGOVERN, R.A.
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Revisions:

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SED PROJECT #66-08-01-06-3-012-001

PLAN AND ELEVATIONS
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02
File No. 4144902A701

A7.01

Electrical Installation General Notes

Project Information:

1. Unless specifically noted otherwise, it shall be understood that when the words "Owner" or "Client" are used in these drawings they are interchangeable an all refer to Mount Pleasant Central School District ("MPCSD")
2. Unless specifically noted otherwise, it shall be understood that when the words "Architect", "Engineer", or "A/E" are used in these drawings they are interchangeable an all refer to LAN Associates, Engineering, Planning, Architecture Surveying ("LAN").
3. Unless specifically noted otherwise, it shall be understood that when the word "Contractor" is used in the Electrical (E# ##) drawings and/or Electrical Specification sections it refers to the Electrical Contractor.
4. Where any device or part of equipment is referred to in these drawings in the singular number (e.g., "the switch", "the receptacle"), this reference shall be deemed to apply to as many such devices as are required to complete the installation as shown on the drawings.
5. Health, safety and critical operating equipment shall not be compromised without owner's authorization. Schedule shutdown during off hours and implement and maintain a temporary operational plan.

Code & Standards Compliance:

6. Code compliance is mandatory. Nothing in these Drawings and Specifications permits work not conforming to these codes. Where work is shown to exceed minimum code requirements, comply with drawings and specifications. When differences in utility specifications or standards, governmental ordinances or codes occur, the more stringent requirements shall govern the installation.
7. The electric installation shall be in accordance with the currently enforced edition of the National Electrical Code (NEC), National Electrical Safety Code (NESC), American Electricians' Handbook, International Building Code (IBC), Americans with Disabilities Act (ADA), NFPA 55 & 99 ASHRAE 90.1 and NEC Standard of installation. Wherever in the documents the word "code" is stated, the more stringent of the above referenced codes is implied.
8. All contractor supplied materials/equipment shall be new and UL Listed or approved by another Nationally Recognized Testing Laboratory (NRTL).
9. The contractor shall pay for and obtain all permits and inspections required by the building and safety codes and ordinances, and the rules and regulations of any legal body having jurisdiction. Permit and inspections shall be included in the base bid and shall not be cause for an extra.
10. Contractor shall confirm to all safety rules and other regulations, etc. pertaining to construction work on the client's premises. Contractor shall be responsible to ensure that all rules and regulations have been met and coordinate this work with responsible client's personnel.
11. All electrical equipment and raceways permanently attached to structures, including supporting structures and attachments to non-building structures, shall be anchored for seismic loading to resist a horizontal force action in any direction. Contractor shall provide seismic restraints for all conduits larger than 2½" trade diameter. Provide sway braces for conduit and equipment suspended from the overhead. Provide anchor bolts for floor and wall mounted equipment. The installation shall meet the requirements of International Building Code (IBC) as it applies to electrical equipment for Earthquake Loads.
12. Contractor shall review code compliance drawings and identify all penetrations through fire/smoke partitions, floor and roofs. Patch compromised partitions to match fire/smoke resistance rating as stated on code compliance drawings.

General Procedures:

13. All equipment shall be as indicated by the Engineer/Architect.
14. The cost incurred by the acceptance of substitutions shall be borne by the contractor. Proof for the equality of the substitutions shall be by the contractor and differences shall be enumerated with the submittal. Submission without the differences noted can be grounds for rejection without review.
15. Electrical components, including but not limited to, conductor size, overcurrent protection device and disconnect switches are based on the power requirements of the equipment shown on the contract documents. All costs (including additional design fees if required) associated with changes to these power requirements shall be the responsibility of the contractor making the change.
16. Obtain shop drawings and wiring diagrams for the proper installation of related electrical work.
17. The contractor shall remove and reinstall ceiling systems as required for the installation of new electrical work and replace in kind, any components damaged by personnel or equipment during performance of the work.
18. Electrical Contractor shall be responsible for the removal of debris generated by his work and workers at the end of each working day and for general good housekeeping by his workers. Electrical Contractor shall provide required refuse containers.
19. Unless otherwise indicated on the mechanical schedules/drawings, the electrical contractor shall provide and install all disconnect switches for all mechanical equipment (i.e., roof top HVAC units, exhaust fans, variable air volume devices, etc.)

Site Conditions/Drawing Coordination:

20. These drawings and specifications illustrate the work to be performed. The Engineer is not responsible for the means, methods, techniques, sequences, and procedures used to do the work, or the safety aspects of constructions, and nothing on these drawings expressed or implied changes this condition. Prior to bidding and/or starting work the contractor shall visit the project site to determine the conditions under which the work is to be performed and shall be responsible for knowing how they affect the work. Schedule site visit with client's representatives. Additionally, the contractor shall field verify all site dimensions and room layouts. Submission of a bid to perform this work is an acknowledgement of these responsibilities, and that they have been fully considered in planning of the work, and the bid price. No claims or extra charges due to these conditions will be forthcoming.
21. The client will occupy the site and existing building during the entire construction period. Cooperate with the client during construction operations to avoid any conflicts. Perform the work so as not to interfere with the client's operations. Schedule all power outages with client's approval for overtime on Sundays and Holidays at no additional cost to the client.
22. Existing project conditions indicated are based on field observations; existing design/construction documents and existing record documents and are intended to indicate the scope of the work affected by this project.
23. Drawings shall not be scaled. Drawings indicate the general arrangement of systems and requirements of the work. Although size and location of equipment is drawn to scale wherever possible, contractor shall make use of all data in all of the contract documents and verify information at the project site.
24. The electrical contractor shall make his own takeoff on all quantities. It shall be his responsibility, at his cost, to include all equipment and material in order to comply with the intent of the drawings.
25. The circuit numbers are for identification only. The contractor shall be responsible for correctly phasing the circuits in panels.
26. The electrical installation shown is represented diagrammatically and indicates the general arrangement of systems and work. The locations and arrangements of equipment, devices, switchboards, panelboards, partitions, openings, etc. are designed to show preferred configurations to suit known conditions but are approximate and are subject to modifications caused by structural conditions and other existing or proposed equipment. The locations are subject to such modifications as may be found necessary or desirable at the time of installation in order to accommodate field conditions and coordination requirements. Contractor shall follow the intent of the drawings in "laying out" the work and coordinate the work with other trades to verify spacing conditions. Contractor shall determine roughing locations required to effect such coordination. The electrical contractor shall coordinate all work and shall make such changes without extra charge.
27. The contract drawings depict the approximate location of all required equipment and if shown, the diagrammatic arrangement of piping, raceways, conduits, feeders, cables, etc, herein after referred to as "conduit." Conduit runs, if shown, have been depicted with the intention of most clearly indicating the proposed routing. Actual runs may differ if kept within the requirements and provisions of these specifications, and providing that that all modifications have been shown in the shop drawings. Contractor responsible to determine conduit runs and "clear" piping, ductwork, access doors, and other obstructions as applicable. Contractor shall coordinate conduit with work of other trades and alter where necessary to avoid interference. Submit for approval, prior to scaled installation drawings showing the location of all new equipment/devices to be installed and indicating circuitry. Shop drawings shall include all wiring, pull boxes, junction boxes, fittings, wiring devices and dimensioned clearances from the structure and equipment. Coordinate shop drawings with other trades prior to submission.
28. Routing for feeders, instrumentation and control circuits is not shown on the plan drawings. If indicated on the floor plans, they express the intent of routing. Final location and routing shall be suited for the construction of the building and established by the contractor based on the installation conditions and shall be verified in the field. All feeder information, conduit types and installation requirements shall be in accordance with the specifications, electrical riser diagram and appropriate panel schedules.
29. Any cutting, patching, or finish repair work required for the electrical installation is the responsibility of the contractor.
30. Where mounting heights are not detailed or dimensioned, install electrical services and overhead equipment to provide maximum headroom possible. Connect equipment for ease of disconnecting with minimum interference with other installations.
31. Provide temporary power and lighting as required during the entire duration of construction utilizing the existing electrical system as a source. The Electrical Contractor shall remove all temporary power and lighting upon the completion of the project.
32. Unless otherwise noted, refer to architectural drawings for elevations and relative positions of equipment, wall, ceiling and floor information and minor architectural differences in each room.
33. Where conflicts exist, provide in the bid proposal the more costly alternative.

Work/Trade Coordination

34. Coordinate work with other trades to avoid conflict and to provide correct rough in and connection for equipment furnished under trades that require electrical connections. Inform Contractors of other trades of the required access to and clearances around electrical equipment to maintain serviceability and code compliance.
35. The electrical contractor shall verify the size and rating of all approved mechanical equipment prior to the installation of feeder and branch circuit conductors and overcurrent protection devices.
36. AC and Refrigeration Equipment Nameplate Rating: Short circuit and ground fault protection device rating shall not exceed the manufacturer's values marked on the equipment.
37. Sequence, coordinate and integrate installations of electrical materials and equipment for efficient flow of work. Give particular attention to large equipment requiring positioning prior to closing in the building. Coordinate the cutting and patching of building components to accommodated installation of the electrical equipment and materials.
38. Provide coordination drawings for all required access panel locations in gypsum ceiling to architect/engineer for coordination.
39. The Contractor shall coordinate work with the other trades to ensure the minimum safe working clearances around electrical equipment and to ensure access to equipment requiring calibration or maintenance (including motors, controls, instruments, panels, lights, valves, filters, and VAV boxes). Working space and access shall be sufficient for an adult to perform maintenance safely without straddling or removing obstructions and shall conform to NEC requirements (i.e., 110.26 & 110.34). Work that encroaches on working space or that impedes maintenance shall be relocated at the Contractor's expense.

Installation:

40. Grounding shall be installed in accordance with the NEC in accordance with electrode, grounding and bonding requirements for service, equipment and enclosures. Install an insulated equipment ground conductor in each raceway or conduit. Size equipment ground conductor in accordance with NEC Table 250.122. Bond raceways and the frames and enclosures of motors, breakers, switches, and other electrical equipment to the building grounding system. Precaution shall be taken to ensure adequate ground continuity along the conduit or raceway.
41. Provide a separate neutral conductor for each circuit. Install neutral conductors and ground conductors into all switch boxes. Multiple circuits shall not share a common neutral. Neutral shall be sized as large as the phase conductors. Neutral conductors shall not be reduced in size.
42. Arrange connections for single phase circuits to achieve three phase load balance within 20% of the average phase load current. Ungrounded conductors using a common neutral must originate from different phases.
43. The electrical contractor is responsible for maintaining proper phase rotation with all existing three (3) phase electric loads.
44. Phase rotation check: on multi-phase equipment, perform a phase rotation check prior to energizing the equipment. Use Knopp K-3 or equivalent device with red or "A" lead connected to phase A, white or "B" lead connected to phase B, and blue or "C" lead connected to phase C. Note the phase rotation and annotate test documentation with device used, manner connected, rotation observed, date of test, and name of craftsman. Do not energize equipment unless observed rotation matches the requirements of the equipment
45. Contractor shall supply all labor, power cables, conduit boxes, fittings, wiring materials, hardware, supports, and miscellaneous items for a complete electrical installation and connection of the electrical work required, except that the provision for owner supplied equipment shall be only be completed to the point indicated elsewhere on the drawings.
46. The Contractor/Installer shall use a calibrated torque tool to achieve the indicated torque value when the tightening torque numeric values identified on the electrical equipment or in the installation instructions. In the absence of connector or the equipment manufacturer's recommended torque values, the tables in Informative Annex I may be used to correctly tighten screw-type connections for power and lighting circuits. Informative Annex I represents the "Recommended Tightening Torque Tables from UL Standard 486A-B."
47. All cables, not within conduit (ex., MC type, fire alarm, PA), routed within the ceiling cavity must be secured using Bridle rings, J-hooks, or other appropriate means. The cable must not lay on supported ceiling tiles or be fastened to existing electrical conduits, steam pipes, sprinkler pipes, insulated pipes, or be routed in such a fashion as to obstruct access hatches, doors, utility access panels, mechanical service work areas or fittings and shall not be routed through fire doors, ventilating shafts, or grates.
    a. Unless otherwise provided, MC cables shall be secured at intervals not exceeding 6'. Cables containing four or fewer conductors sized no larger than 10 AWG shall be secured within 12" of every box, cabinet, fitting, or other cable termination.
    b. Type MC cable shall be permitted to be unsupported where the cable: (a) Is fished between access points through concealed spaces in finished buildings or structures and supporting is impractical; or (b) Is not more than 6' in length from the last point of cable support to the point of connection to luminaires or other electrical equipment and the cable and point of connection are within an accessible ceiling. Type MC cable fittings shall be permitted as a means of cable support.
48. All cable trays and electrical conduits shall be independently supported and braced independently of the ceiling.
49. All new wiring is to be run concealed wherever possible. All conductors shall be in a surface mounted metallic raceway in public spaces or metallic conduit in utility locations when not routed concealed in the ceiling/wall cavities. Any locations that do not have accessible or dropped ceilings will require the use of surface mounted metallic raceways. Provide pull-boxes (size per code) and locate in conduit runs as required. No exposed cable may be installed.
50. Surface mounted metallic raceway shall meet the following criteria:
    a. Install in accordance with manufacturer's instructions for system components and approved shop drawings. Coordinate installation with adjacent work to ensure proper clearances and to prevent electrical hazards.
    b. Install in accordance with complete system instruction sheets.
    c. Install enclosures to be mechanically continuous and connected to all electrical outlets, boxes, device mounting brackets, and cabinets, in accordance with manufacturer's installation sheets.
    d. Install enclosures to be electrically continuous and bonded in accordance with the National Electric Code for proper grounding.
    e. Mechanical Security: Raceway systems shall be mechanically continuous and connected to all electrical outlets, boxes, device mounting brackets, and cabinets, in accordance with manufacturer's installation sheets.
    f. Electrical Security: Metal raceway shall be electrically continuous and bonded in accordance with the National Electric Code for proper grounding.
    g. Raceway Support: Raceway shall be supported by 2-hole straps at intervals not exceeding 5 feet or in accordance with manufacturer's installation sheets.
    h. Accessories: Provide accessories as required for a complete installation, including insulated bushings and inserts where required by manufacturer.
    i. Unused Openings: Close unused raceway openings using manufacturer's recommended accessories.
51. Where PVC raceway is indicated to be installed exposed in an external environment, expansion fittings shall be installed to meet the requirements of NEC 352.44.
52. All openings and penetrations shall be sealed upon completion of the electrical installation to prevent the spread of smoke and fire through openings. Seal around conduit and raceway penetrations through interior walls and floor separating areas to restore original fire rating; use a UL classified fire sealant. Seal penetrations through roof and exterior walls to make waterproof. Request inspection of fire seals by electrical inspector from authority having jurisdiction before and after placement of fire seal materials. All openings shall be coordinated with the other trades to limit interference and obstruction.
53. Limit the use of electrical metallic tubing (EMT) to where it will not be subject to physical damage or corrosion. Use intermediate metal conduit (IMC) or rigid galvanized steel conduit (RGS) where raceways are embedded in concrete or exposed to physical damage. Use minimum 3/4" conduit except as follows: 1/2" conduit may be used for 20 amp general light and power circuits and for control circuits; 3/8" flexible metal conduit may be used to connect light fixtures in suspended ceilings. Use liquid tight flexible metal conduit for flexible connection to equipment in mechanical rooms or outdoors.
54. Where raceways contain insulated conductors 4 AWG and larger that enter an enclosure, the conductors must be protected from abrasion during and after installation by a fitting that provides a smooth, rounded insulating surface, such as an insulating bushing as per NEC 300.4(G).
55. Install outdoor equipment to be weatherproof (NEMA 3R).
56. All penetrations through exterior walls shall be sealed watertight. Furnish and install seals for conduit and raceways to seal the annular space between the raceway and the building penetration. Furnish and install conduit sealing bushings as manufactured by OZ/Gendy type CSMI or CSMC or approved equal Furnish and install conduit sealing bushings as manufactured by OZ/Gendy type CSBG or approved equal to seal the conductors inside the raceway. Coordinate submittal submission with conductor size, quantity and insulation type.
57. Underground conduits shall be pitched to drain away for them building in manholes.
58. As per the IBC, no conduit, piping, raceway etc. serving other areas may pass through the stair enclosure. Conduit, piping, raceway etc. must terminate at the stair enclosure.

Wire Information:

59. All wiring shall be copper conductor, 600 volts in EMT raceway with approved fittings unless otherwise indicated. Feeder and branch circuit wiring shall be minimum #12 AWG unless otherwise indicated. Feeder and branch circuit wiring larger than #10 AWG shall be stranded conductor: #10 AWG and smaller, shall be solid conductor. Control wiring shall be #18 AWG THWN. Type of insulation as follows unless noted otherwise:
    a. THHN/THWN insulation for #4 AWG and smaller
    b. THW or THHN/THWN insulation for #2 AWG and larger
    c. THW used for all panel feeder and service conductors
    d. XHHW-2 insulation type shall be used where conductors are installed in conduits exposed to the weather.
60. Use the following conductor color codes:

	208Y/120V	480Y/277V
Phase A	Black	Brown
Phase B	Red	Orange
Phase C	Blue	Yellow
Neutral	White	Gray
Equip. Ground	Green	Green

Circuit Breakers:

61. Use 600 VAC circuit breakers.
62. Provide circuit breakers with UL listed interrupting rating (RMS symmetrical amperes) greater than the available fault current shown on the electrical one-line diagram. "Series rated" equipment shall not be accepted.
63. Install UL Listed circuit breaker padlocking devices for service and maintenance personnel on all over current protection devices at the main building panel (MDP or equivalent). The device must have provisions for placement of a lock on it to secure the device in the off position. The lock-out device must be part of the disconnect assembly and must remain in place after the padlock is removed, whether it is a fused disconnect switch, a single circuit breaker, or a circuit breaker in a panelboard. A device that is attached to the circuit breaker handle by a set screw is not an acceptable means to serve as a safe method of locking the device in the off position.
64. All circuit breakers shall be molded case thermal magnetic and rated for available short circuit current.

Receptacles:

65. Receptacles and communications outlets shown on drawings shall be mounted 8" apart on center horizontally. Contractor shall coordinate exact location of all boxes in two hour or less rated assemblies such that area of box per wall area and outlets on opposite side wall horizontally spacing comply with state building code regarding fire resistant construction.
66. In all areas specified in NEC 210.52, all 125-volt, 15- and 20-ampere receptacles shall be listed tamper-resistant receptacles.
67. All outdoor receptacles shall be mounted 42" above the finished grade, unless noted otherwise. The outdoor receptacles shall be GFCI type with a weatherproof enclosure. The weatherproof enclosure shall have a gasketed hinged outlet cover/enclosure which is suitable for wet locations while in use and UL listed as manufactured by TayMac or approved equal.

Labeling:

68. All switchboards, panelboards, industrial control panels and motor control centers that are in other than dwelling occupancies and are likely to require examination, adjustment, servicing or maintenance while energized shall be field marked to warn qualified persons of potential electric arc flash hazards. The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing or maintenance or the equipment. Marking shall be self adhesive, commercial label conforming to NEC 110.16 and ANSI Z535.4. Arc Flash Label shall be Brady (bradyid.com) catalog No. 102308 or equal.
69. Provide identification tags for all new wiring and install at each end and in all intermediate pull/junction boxes, cabinets, housings, etc. Indicate on tags, legibly minimum ¼" high letters, the points of origin and termination of each conduit and conduit run. Label all receptacles and switch covers with panelboard and circuit number. For interior equipment, use Brother P-touch 3 label maker with TC-10 label cartridge or equal. For exterior equipment, use aluminum dymo half-inch tape label with embossed lettering. Abbreviate lettering to provide necessary information with minimum label size (i.e., Panelboard PP1, Circuit 23 should read PP1-23).
70. Label all switchgear, panelboards, and separately-mounted equipment with feeder source and circuit number. For interior equipment, provide white Micarta plate with quarter-inch block lettering. For exterior equipment, provide anodized aluminum plate with quarter-inch embossed block lettering. Attach to equipment using contact cement in a clear space on the upper portion of the equipment cover approximately 66" AFF. Abbreviate lettering or adjust letter size to provide necessary information with minimum label size, (i.e., 227/480V PANEL PP1 FROM MDP CKT 3 or P-1 20 HP PUMP FROM PP1 CKT 3).
71. All panels shall have typed, completed directories indicating equipment served and room number (as indicated on the final building signage) of equipment location, or spare, or space. Identify the purpose of individual circuit breakers, safety switches and motor starters by means of nameplates as indicated. Update directories as panels are altered. Circuit changes shall be reflected on "as-built" drawings.
72. All circuits and circuit modifications must be legibly identified as to their clear, evident, and specific purpose. The identification must include sufficient detail to allow each circuit to be distinguished from all others, and the identification must be on a circuit directory located on the face or inside of the door of a panelboard. Circuit directories containing multiple entries with only ``lights'' or ``outlets'' do not provide the sufficient detail required by the NEC.

Lighting:

73. Support for light fixtures in or on grid-type suspended ceilings: A Seismic Fixture Clamp (SFC) shall be installed as a metal clip to attach recessed fluorescent light fixtures (luminaries) to framing members of metal suspension systems for acoustical and lay-in panel ceilings. One clamp is required at each of the four corners.
74. In mechanical areas, the contractor shall verify locations and make adjustments necessary to clear obstructions and required to suit field conditions.
75. Provide neutral for all lighting circuits.
76. Gang switches together under one faceplate.
77. For installation of light fixtures in areas without a ceiling, contractor shall determine method of support using hanger fittings, threaded rod, and "Unistrut" as applicable. These costs shall be included with the base bid.

Inspections/Warranty:

78. No work shall be concealed until after inspection and approval by proper authorities. If work is concealed without inspection and approval, the Contractor shall be responsible for all work required to both open and restore the concealed areas in addition to any required modifications.
79. The contractor shall make a final inspection of all electrical equipment to ensure that there are no loose electrical connections or electrical circuits subject to electrical break down due to the presence of foreign material. This shall include inspection of all connections made under this contract.
80. The contractor shall contract with an electrical underwriter to provide third-party electrical inspection services (both "rough" and "final") for issuance of a "Certificate of Completion". All fees and costs shall be the responsibility of the contractor.
81. The contractor shall deliver certificates of electrical and other inspections or copies thereof, to the client at the completion of the project with copies to the Engineer/architect.
82. The contractor shall guarantee all work in writing to the client against any and all defects in material and workmanship for a period as indicated in the specification, from date of acceptance and perform all corrective work at no cost to the client.

Application of Raceways

RACEWAY TYPE	APPLICATION
Rigid Steel Conduit	Where exposed to mechanical injury, where specifically required, indoors where exposed to moisture, where required by codes and for all circuits in excess of 600 volts.
I.M.C.	Where exposed to mechanical injury, where specifically required, indoors where exposed to moisture, where required by codes and for all circuits in excess of 600 volts.
E.M.T	Use in every instance except where another material is not specified.
Flexible Metal Clad Cables	Lighting and receptacle branch circuits concealed in hollow spaces of building. May not be used in corridors, places of assembly, or where prohibited by Code.
Type MC Flexible Steel	Use in dry areas for connections to lighting fixtures in hung ceilings, connections to equipment installed in removable panels of hung ceilings. At all transformer or equipment raceway connections where sound and vibration isolation is required.
Liquid-Tight Flexible Conduit	Use in areas subject to moisture where flexible steel is unacceptable, at connections to all motors, and all raised floor areas.
Non-Metallic Conduit	1. Schedule 40 - Where raceways are in slab in below grade levels, for raceway duct banks. 2. Schedule 80 - For underground raceways outside of building which are not encased in concrete. Also for secondary conductors of cold cathode lighting systems.
Wireways and Aux Gutters	Where indicated on the Drawings and as otherwise specifically required.

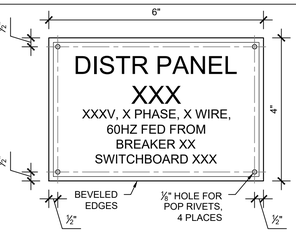
Electrical Grounding Requirements

THE CONTRACTOR SHALL PROVIDE A GROUNDING CONDUCTOR FOR ALL BRANCH FEEDERS AND CIRCUITS IN ACCORDANCE WITH THE FOLLOWING CHART:

Rating or Setting of Automatic Overcurrent Device in Circuit Ahead of Equipment, Conduit, etc., Not Exceeding (Amperes)	Size (AWG or kcmil)		Rating or Setting of Automatic Overcurrent Device in Circuit Ahead of Equipment, Conduit, etc., Not Exceeding (Amperes)	Size (AWG or kcmil)		Rating or Setting of Automatic Overcurrent Device in Circuit Ahead of Equipment, Conduit, etc., Not Exceeding (Amperes)	Size (AWG or kcmil)	
	Copper	Aluminum or Copper-Clad Aluminum*		Copper	Aluminum or Copper-Clad Aluminum*		Copper	Aluminum or Copper-Clad Aluminum*
15	14	12	300	4	2	1600	4/0	350
20	12	10	400	3	1	2000	250	400
30	10	8	500	2	1/0	2500	350	600
40	10	8	600	1	2/0	3000	400	600
60	10	8	800	1/0	3/0	4000	500	800
100	8	6	1000	2/0	4/0	5000	700	1200
200	6	4	1200	3/0	250	6000	800	1200

Note: Where necessary to comply with NEC 250.4(A)(5) or (B)(4), the equipment grounding conductor shall be sized larger than given in this table.
Where ungrounded conductors are increased in size, equipment grounding conductors, where installed, shall be increased in size proportionately according to the circular mil area of the ungrounded conductors.
*See installation restrictions in NEC 250.120

Nameplate/Labeling Requirements



REQUIRED DATA

FIRST LINE: EQUIPMENT DESIGNATION
SECOND LINE: VOLTAGE, PHASE, No. OF WIRE, FREQUENCY
THIRD AND FOURTH LINES: POWER SOURCE AND BREAKER
"XXX": BASED ON FINAL SHOP DRAWING AND INSTALLED EQUIPMENT CIRCUIT NUMBER
TRANSFORMERS: INCLUDE LINE INDICATING "FEEDS TO"

LETTER SIZE & SPACING

TOP ROW: 1" LETTERS
OTHER ROWS: ½" LETTERS
BETWEEN ROWS: ¼" BETWEEN 1st & 2nd, ⅛" FOR OTHER ROWS

NOTES

LETTERING SHALL BE WHITE ON A BLACK BACKGROUND
FOR TRANSFORMERS, INCLUDE PRI & SEC VOLTAGES, PRI AND SEC CONNECTIONS (E.G., DELTA, WYE, ETC.) AND EQUIPMENT SERVING.

GENERAL LABELING REQ.:

Engraved Plastic Nameplates and Signs: Engraving stock, melamine plastic laminate, minimum 1/16" thick for signs up to 20 sq. in. and ⅛" thick for larger sizes. Engraved legend with white letters on black face for normal power, white letters on red face for emergency power. Punched or drilled for mechanical fasteners. Text at ½" high lettering.

Nameplates shall adequately describe the function of the particular equipment involved. Where nameplates are detailed on the drawings, inscription and size of letters shall be as shown and shop drawing submitted for approval. Nameplates for panelboards and switchboards shall include the panel designation, voltage, phase and wire. The next item shall be panel name. In addition, describe where the panel is fed from. For example,

PANEL 1LA, 120/208V, 3PH, 4W
PP1 PANEL
FED FROM MDP

The service disconnect shall be labeled as the "Service Disconnect," per NEC 230.70(B).

Per NEC 110.24(A) the maximum available fault current and the date the fault current calculation was performed shall be legibly marked on the service equipment. Example: Maximum available fault current: 34,000 Symmetrical RMS Amperes Date 12/1/11.

Per NEC 110.16, "Flash Protection. Switchboards, panel boards, industrial control panels, meter socket enclosures, transfer switches and motor control centers in other than dwelling occupancies, which are likely to require examination, adjustment, servicing, or maintenance while energized, shall be field marked to warn qualified persons of potential electric arc flash hazards. The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment." The NEC labeling requirements apply to any electrical equipment installed or modified after 2002. Warning label shall comply with ANSI Z535.4, which specifies colors and signal words to be used.

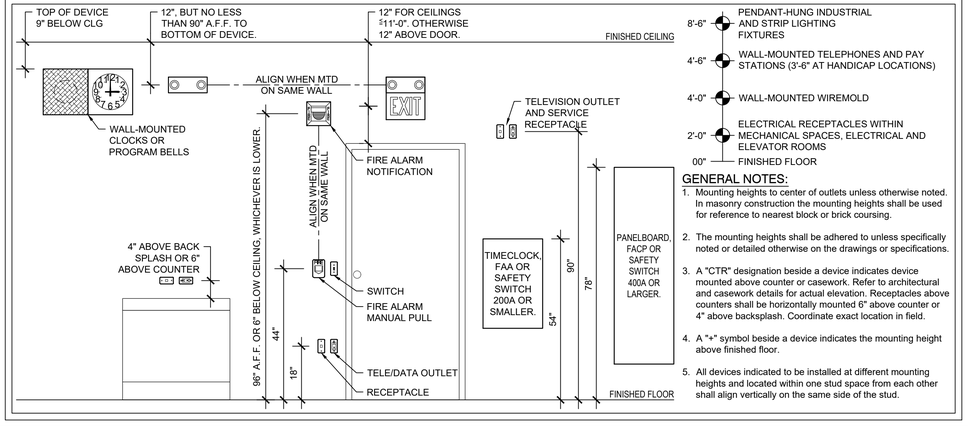
Per NEC 408.4(A), every circuit and circuit identification shall be legibly identified as to its clear, evident, and specific purpose of use.

Per NEC 700.7(B) and NEC 701.7, furnish and install warning label that warns of a shock hazard if the grounding electrode conductor or bonding jumper connection in this type of equipment is removed while alternate energy sources are energized.

Arc Flash Label Requrements

ALL EQUIPMENT WHERE THE RISK OF ARC FLASH EXISTS, i.e.,: SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL PANELS, MOTOR CONTROL CENTERS, DISCONNECT SWITCHES, HVAC EQUIPMENT, ETC., SHALL BE FIELD MARKED WITH LABELS PER NFPA 70E FOR MINIMUM PPE REQUIREMENTS.

Device Mounting Heights



GENERAL NOTES:

1. Mounting heights to center of outlets unless otherwise noted. In masonry construction the mounting heights shall be used for reference to nearest block or brick coursing.
2. The mounting heights shall be adhered to unless specifically noted or detailed otherwise on the drawings or specifications.
3. A "CTR" designation beside a device indicates device mounted above counter or casework. Refer to architectural and casework details for actual elevation. Receptacles above counters shall be horizontally mounted 6" above counter or 4" above backsplash. Coordinate exact location in field.
4. A "+" symbol beside a device indicates the mounting height above finished floor.
5. All devices indicated to be installed at different mounting heights and located within one stud space from each other shall align vertically on the same side of the stud.

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Date 7/8/21
Checked BH
Drawn MH

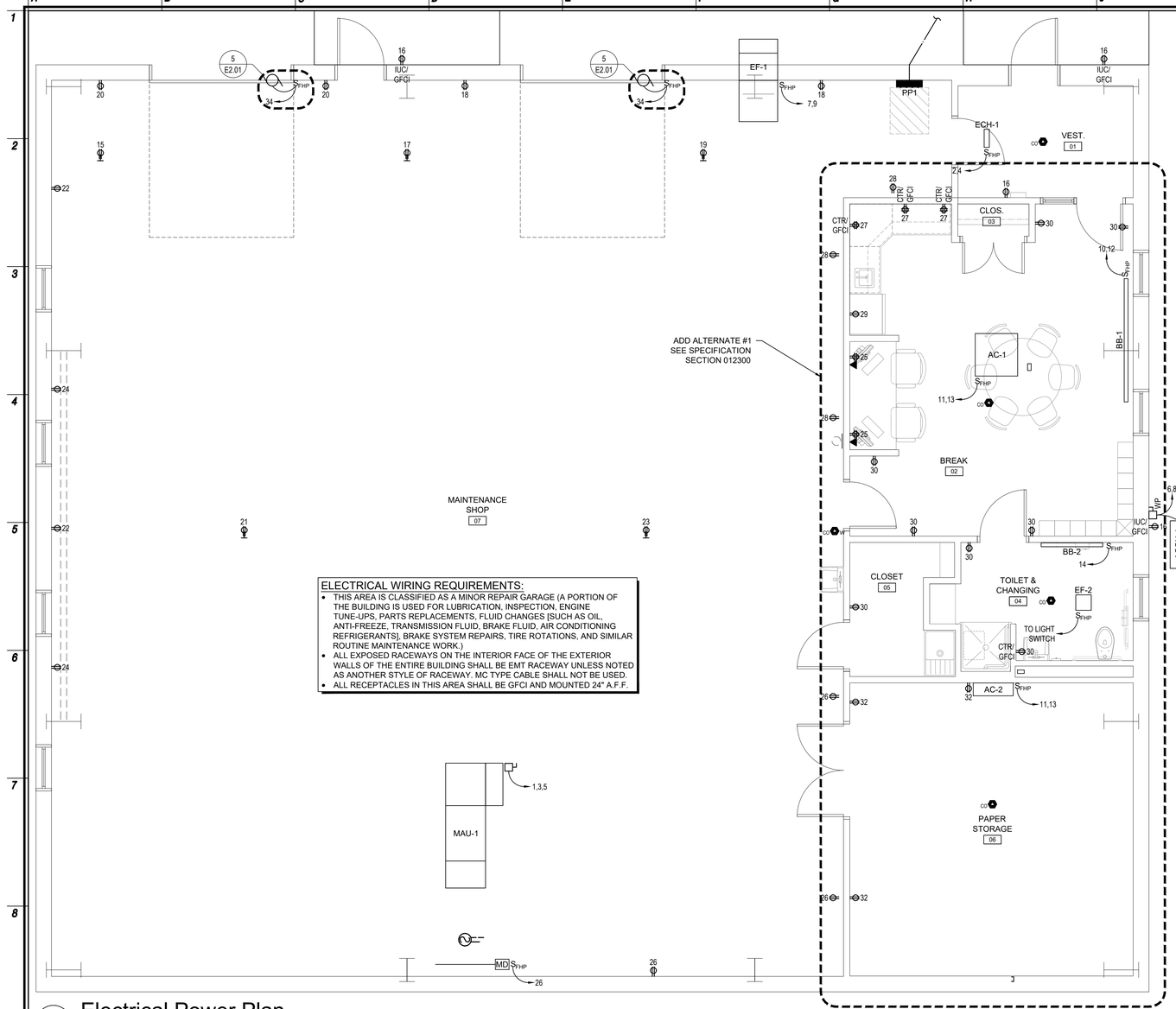
Revisions:

SED PROJECT #66-08-01-06-3-012-001

Electrical Cover Sheet
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02
File No. 4144902E001

E001



ELECTRICAL WIRING REQUIREMENTS:

- THIS AREA IS CLASSIFIED AS A MINOR REPAIR GARAGE (A PORTION OF THE BUILDING IS USED FOR LUBRICATION, INSPECTION, ENGINE TUNE-UPS, PARTS REPLACEMENTS, FLUID CHANGES [SUCH AS OIL, ANTI-FREEZE, TRANSMISSION FLUID, BRAKE FLUID, AIR CONDITIONING REFRIGERANTS], BRAKE SYSTEM REPAIRS, TIRE ROTATIONS, AND SIMILAR ROUTINE MAINTENANCE WORK.)
- ALL EXPOSED RACEWAYS ON THE INTERIOR FACE OF THE EXTERIOR WALLS OF THE ENTIRE BUILDING SHALL BE EMT RACEWAY UNLESS NOTED AS ANOTHER STYLE OF RACEWAY. MC TYPE CABLE SHALL NOT BE USED.
- ALL RECEPTACLES IN THIS AREA SHALL BE GFCI AND MOUNTED 24" A.F.F.

1 E2.01 Electrical Power Plan

1/4" = 1'-0"

PANEL SCHEDULE - PANEL PP1

FED FROM MDP IN MAIN BUILDING | 208/120V

CT#	Load Description	OCPD Type	OCPD Poles	OCPD Rated	Conductors Current	Conductors Neutral	Conductors Ground	Raceway*	Voltage	Load kVA	Load per Phase(A) Phase A	Phase B	Phase C	Voltage Drop %
1/3/5	MAU-1 - MAKEUP AIR UNIT	Std	3	20A	(3) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	3.11	9.6	9.6	9.6	2.76%
2/4	ECH-1 - ELECTRIC CABINET HEATER	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	2	9.62	9.62		3.26%
6/8	ACCU-1 - AIR COOLED CONDENSOR	Std	2	25A	(2) 10 ga.	none	(1) 10 ga.	3/4 in. EMT	208	3.43	16.5		16.5	3.37%
7/9	EF-1 - EXHAUST FAN	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	0.8	4.52	4.52		2.35%
10/12	BB-1 - BASEBOARD	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	2.5		12.02	12.02	3.61%
11/13	AC-1/2 - AC/HEAT PUMP	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	0.35	1.7		1.7	2.12%
14	BB-2 - BASEBOARD	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1	8.33			3.88%
15	OVERHEAD RECEPTACLE A	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.57		5		2.95%
16	VEST. & EXTERIOR RECEPT.	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.54		4.74		2.89%
17	OVERHEAD RECEPTACLE B	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.57			5	2.95%
18	MAINTENANCE SHOP RECEPT. A	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36			3.16	2.53%
19	OVERHEAD RECEPTACLE C	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.57	5			2.95%
20	MAINTENANCE SHOP RECEPT. B	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36	3.16			2.53%
21	OVERHEAD RECEPTACLE D	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.57		5		2.95%
22	MAINTENANCE SHOP RECEPT. C	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36		3.16		2.53%
23	OVERHEAD RECEPTACLE E	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.57			5	2.95%
24	MAINTENANCE SHOP RECEPT. D	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36			3.16	2.53%
25	BREAK COMPUTER RECEPT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.11	9.75			4.05%
26	MAINTENANCE SHOP RECEPT. E	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36	3.16			2.53%
27	BREAK KITCHENETTE	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.08		9.47		3.98%
28	MAINTENANCE SHOP RECEPT. F	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.54		4.74		2.89%
29	BREAK REFRIGERATOR	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.56			4.87	2.92%
30	CLOSET/TOILET RECEPT.	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.54			4.74	2.89%
31	BREAK GEN. RECEPT.	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9	7.89			3.62%
32	PAPER STORAGE RECEPT.	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9	7.89			3.62%
33	OFFICE/STORAGE LIGHTING	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.58		5.07		3.02%
34	GARAGE DOORS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.07		10.45		3.73%
35	MAINT. SHOP LIGHTING	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.18			10.36	4.38%
36-42	BLANK													
		Total Circuits 34						Connected Loads: 26,840 VA			87 A	83 A	76 A	

Voltage: 120 / 208
Circuits: 34 / 42
Neutral Buss: Yes
Ground Buss: Yes
Buss Capacity: 400 A
NEMA: Type 1

Main Connection: breaker
Load kVA: 27
OCPD Size: 175A
OCPD Type: Std
Location:
Remarks: 22kAIC SCCR

*RACEWAY NOTE:
MC TYPE CABLE PERMITTED WHERE CONCEALED ABOVE CEILINGS OR WITHIN WALLS.

3-Phase Connection			
Voltage Drop % for 300 Feet is 2.7%	Current	Neutral	Ground
Raceway: 2 in. dia. PVC-40	(3) 2/0 ga. THHN	(1) 2/0 ga. THHN	(1) 6 ga. THHN

DETAIL KEY NOTES:

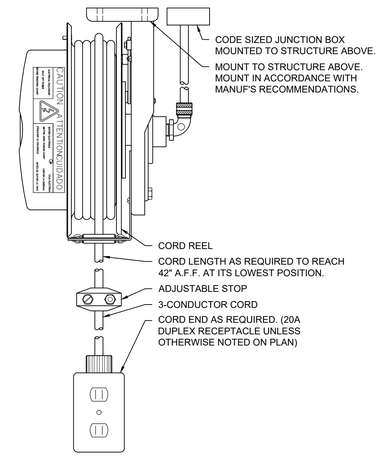
1. BOND EACH PERIMETER STRUCTURAL STEEL COLUMN TO THE CONCRETE ENCASED MAIN GROUNDING ELECTRODE. USE COMPRESSION CONNECTIONS THAT MEET IEEE 837 REQUIREMENTS OR USE EXOTHERMIC WELDS.
2. INSTALL A CONCRETE ENCASED ELECTRODE IN THE BUILDING FOUNDATION. LOCATE ELECTRODE IN THE BOTTOM ONE-THIRD OF THE FOUNDATION WITH AT LEAST 3" OF CONCRETE COVER. USE BARE OR GALVANIZED REBAR THAT ARE MADE ELECTRICALLY CONTINUOUS USING COPPER JUMPERS NOT SMALLER THAN THE REQUIRED GROUNDING ELECTRODE CONDUCTOR. USE REINFORCING BARS NOT SMALLER THAN THE FOLLOWING BASED ON TOTAL LENGTH OF THE INTERCONNECTED AND PARALLEL REBARS.

TOTAL LENGTH	MIN. REBAR SIZE
112 FT	1⅛", #11 BAR
150 FT	1", #8 BAR
192 FT	⅞", #6 BAR
223 FT	⅝", #5 BAR
268 FT	½", #4 BAR

DETAIL GENERAL NOTES:

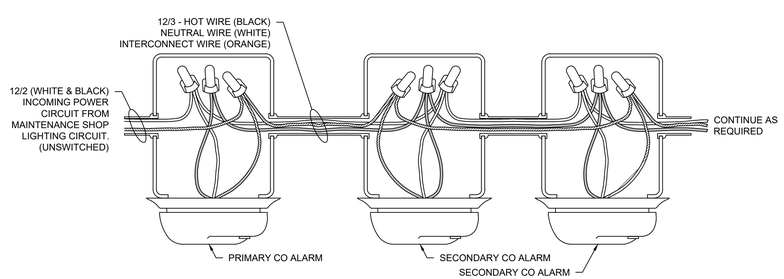
1. INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.
2. TWO WEEKS PRIOR TO THE FINAL INSPECTION, SUBMIT GROUND RESISTANCE FIELD TEST REPORTS TO THE ENGINEER OF RECORD. FIELD TEST REPORTS SHALL INCLUDE A CERTIFICATION BY THE CONTRACTOR THAT THE GROUNDING EQUIPMENT HAS BEEN PROPERLY INSTALLED AND TESTED.
3. PUBLICATIONS LISTED BELOW (INCLUDING AMENDMENTS, ADDENDA, REVISIONS, SUPPLEMENTS, AND ERRATA) FORM A PART OF THE CONTRACT DOCUMENTS TO THE EXTENT REFERENCED.
   a. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. (IEEE): 81 IEEE GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM PART 1: NORMAL MEASUREMENTS.

CONDUCTOR LEGEND:
N - NEUTRAL ϕA - PHASE A
ϕB - PHASE B ϕC - PHASE C
EGC - EQUIPMENT GROUNDING CONDUCTOR
GEC - GROUNDING ELECTRODE CONDUCTOR



4 E2.01 Drop Cord Installation Detail

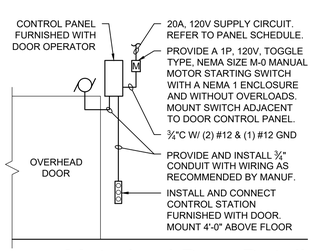
N.T.S.



DETECTORS SHALL BE BRK MODEL No. CO5120BN 120V AC/CD CO ALARM WITH 9V BATTERY BACKUP OR EQUAL.

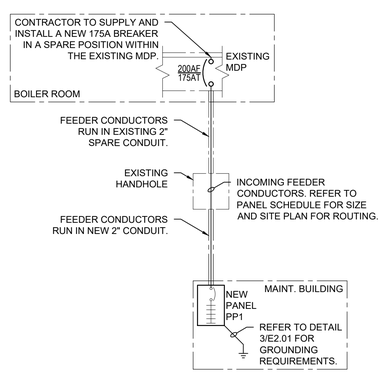
6 E2.01 Carbon Monoxide Detector Wiring Detail

N.T.S.



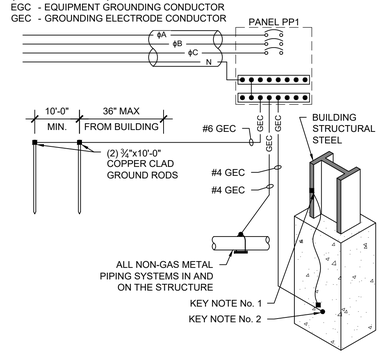
5 E2.01 Motorized Door Detail

N.T.S.



2 E2.01 Electrical Riser Diagram

N.T.S.



3 E2.01 Grounding and Bonding Detail

N.T.S.

Symbol Legend

	PANELBOARD
	REQUIRED CLEAR SPACE. MIN. 30"W x 36"D
	20A DUPLEX RECEPTACLE
	20A DUPLEX RECEPTACLE ON CORD REEL. REFER TO DETAIL 4/E2.01.
	20A QUAD RECEPTACLE
	(2) DATA PORTS CONNECTED TO NETWORK EQUIPMENT RUN TO IT CLOSET IN MAIN SCHOOL BUILDING. REFER TO KEY NOTE 3 ON DRAWING E2.02 FOR ADDITIONAL INFORMATION.
	HOME RUN TO CIRCUIT INDICATED.
S_{FHP}	FRACTIONAL HP MOTOR STARTER WITH THERMAL OVERLOAD.
	CODE SIZED DISCONNECT SWITCH
	STANDALONE DUCT SMOKE DETECTOR FOR UNIT SHUT-DOWN
CO	120VAC CARBON MONOXIDE DETECTOR. INTERCONNECT DEVICES AS PER DETAIL 6/E2.01.
CTR	MOUNTED AT COUNTER HEIGHT
GFCI	GROUND-FAULT CIRCUIT INTERRUPTER
IUC	IN USE COVER
W	WALL MOUNTED
WP	WEATHERPROOF, NEMA 3R

Date	7/8/21
Checked	BH
Drawn	MH

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Electrical Power Plan
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02
File No. 4144902E501

SED PROJECT #66-08-01-06-3-012-001

E2.01

General Site Electric Notes

1. CONTRACTOR SHALL IDENTIFY THE PRESENCE AND LOCATION OF ALL UNDERGROUND EQUIPMENT AND UTILITIES, I.E., ELECTRIC POWER, WATER, GAS, SANITARY DRAIN LINES, STORM DRAIN LINES, ETC., WHETHER EXISTING OR PROPOSED TO BE INSTALLED BY OTHER TRADES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO AVOID INTERFERENCE WITH ANY SUCH SYSTEM.
2. WHERE PVC ELECTRIC RACEWAYS ARE INSTALLED UNDERGROUND IN LOCATIONS OTHER THAN UNDER CONCRETE SLAB, PROVIDE 24" MINIMUM COVER. MAINTAIN A 12" MINIMUM SEPARATION BETWEEN THE CONDUIT AND OTHER SYSTEMS. PITCH CONDUIT TO DRAIN AWAY FROM BUILDINGS. PROVIDE 6" WIDE RED MAGNETICALLY DETECTABLE WARNING TAPE 12" ABOVE CONDUITS.
3. WHERE GREATER THAN THREE (3) CURRENT-CARRYING CONDUCTORS ARE INSTALLED IN ANY ONE CONDUIT OR CABLE, CONDUCTORS MUST BE DERATED AND, IF NEEDED, SIZES INCREASED TO ACCOMMODATE CONDUCTOR DERATING AS REQUIRED BY NEC ARTICLE 310.
4. INSTALL PULL AND JUNCTION BOXES BOTH WHERE SHOWN ON THE DRAWINGS, AND WHERE REQUIRED FOR ALL CHANGES IN DIRECTION, JUNCTION POINTS AND WHERE REQUIRED TO FACILITATE WIRE PULLING. FURNISH BOX SIZES IN ACCORDANCE WITH THE NEC UNLESS LARGER BOXES ARE INDICATED ON THE DRAWINGS.
5. CONDUIT SIZE SHALL BE ¾" MINIMUM UNLESS NOTED OTHERWISE
6. PROVIDE A COMPLETE SET OF AS-BUILT DRAWINGS REFLECTING ACCURATE "AS INSTALLED" CONDITIONS. AS-BUILT DRAWINGS SHALL INDICATE ALL INSTALLED CONDITIONS OF SYSTEMS WITHIN THIS DISCIPLINE. DRAWINGS SHALL BE OF SIMILAR SCALE AS THE CONSTRUCTION DOCUMENTS AND INCLUDE DETAILS AS NECESSARY TO CLEARLY REFLECT THE INSTALLED CONDITION. DRAWINGS SHALL BE BOUND IN A COMPLETE AND CONSECUTIVE SET. SUPPLEMENTAL SKETCHES AND LOOSE PAPERWORK WILL NOT BE ACCEPTED AND WILL BE RETURNED FOR REVISION. THE CONTRACTOR SHALL COMPLY WITH THE ENGINEER'S COMMENTS TO PRODUCE A CLEAR AND CONCISE SET OF DRAWINGS. DRAWINGS SHALL BE SUBMITTED IN BOTH HARD COPY AND ELECTRONIC (AUTO-CAD VERSION AS REQUIRED BY THE OWNER) VERSION.
7. ELECTRICAL INSTALLATIONS MUST COMPLY WITH THE APPLICABLE PROVISIONS OF THE CURRENT EDITIONS OF THE NATIONAL ELECTRICAL SAFETY CODE, NATIONAL ELECTRICAL CODE, OSHA REGULATIONS, AND THE RECLAMATION SAFETY AND HEALTH STANDARDS. THE UNDERWRITERS LABORATORIES, FACTORY MUTUAL LABORATORIES, OR OTHER NATIONALLY RECOGNIZED TESTING LABORATORY MUST APPROVE OR LIST ELECTRICAL WIRE, CONDUIT, APPARATUS, POWER TOOLS, AND EQUIPMENT, FOR THE SPECIFIC APPLICATION. THIS APPROVAL/LISTING MUST APPEAR ON EACH PIECE OF EQUIPMENT OR TOOL AS PART OF THE "MARKING OR LABELING" REQUIRED BELOW.
8. DO NOT USE ELECTRICAL EQUIPMENT UNLESS THE MANUFACTURER'S NAME, TRADEMARK, AND ANOTHER DESCRIPTIVE MARKING BY WHICH THE MANUFACTURER MAY BE IDENTIFIED, IS LOCATED ON THE EQUIPMENT. MARKINGS MUST ALSO PROVIDE VOLTAGE, CURRENT, WATTAGE, APPROVALS/LISTINGS, AND RATINGS AS REQUIRED BY THE EDITION OF THE NATIONAL ELECTRIC CODE IN EFFECT AT THE TIME OF PURCHASE. MARKINGS MUST BE SUFFICIENTLY DURABILITY TO WITHSTAND THE ENVIRONMENT.
9. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR PLANNING EXACT LOCATIONS AND ROUTING OF THE ELECTRICAL SERVICES. THESE SERVICES ARE TO BE PROPERLY COORDINATED, OPTIMIZED PRIOR TO INSTALLATION.
10. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF THE PROPOSED UTILITY INFORMATION SHOWN HEREIN.
11. EC SHALL PROVIDE ALL EXCAVATING AND BACKFILLING REQUIRED FOR ALL NEW WORK, I.E., FILL, COMPACTION, SURFACE, ETC. TO MEET ALL APPLICABLE REQUIREMENTS IDENTIFIED ON THESE DRAWINGS.
12. ALL WORK SHALL COMPLY WITH THE RULES AND REGULATIONS OF ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION.
13. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL SAFE WORKING CONDITIONS AND SHALL OBSERVE ALL SAFETY REQUIREMENTS ESTABLISHED BY JURISDICTIONAL AGENCIES AND THE OWNER. WHERE CONFLICTS EXIST THE MORE STRINGENT REQUIREMENTS SHALL APPLY. CARE SHALL BE EXERCISED TO AVOID ENDANGERING PERSONNEL OR STRUCTURES.
14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AND LEGALLY DISPOSE OF ANY EXCESS FILL MATERIAL GENERATED DURING GRADING AND CONSTRUCTION OPERATIONS.
15. CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND PERSONNEL THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE, ORDERLY AND PROFESSIONAL MANNER.
16. ALL RACEWAYS AND CONDUITS ARE TO BE INSTALLED ACCORDING TO THE 2017 NATIONAL ELECTRICAL CODE AND 2017 NATIONAL ELECTRICAL SAFETY CODE.
17. ALL UNDERGROUND RACEWAY TURNS SHALL BE MADE WILL LONG SWEEP ELBOWS.
18. SPARE CONDUITS SHALL BE CAPPED OR PLUGGED AND A CORROSION RESISTANT PULL LINE OF 200 POUNDS (MINIMUM BREAKING STRENGTH SHALL BE INSTALLED IN CONDUITS UNTIL NEEDED. METALLIC PULL WIRE NOT ACCEPTABLE.

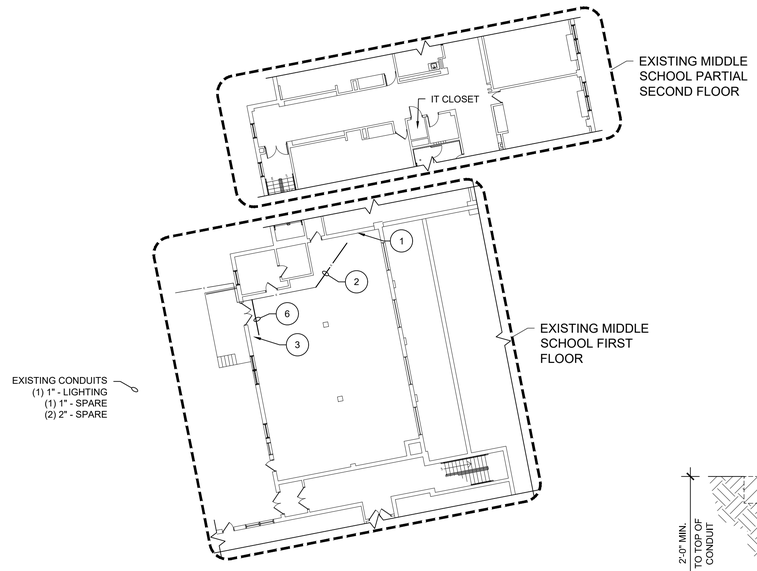
Electrical Site Key Notes

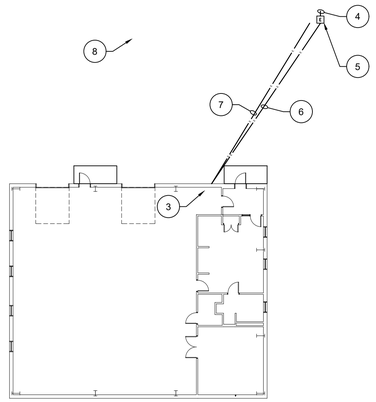
(#) SYMBOL INDICATES SITE KEY NOTE

1. APPROXIMATE LOCATION OF MDP. PROVIDE & INSTALL A NEW 175A, 3P BREAKER TO FEED PANEL PP1.
2. EXTEND NEW 2" EMT FROM EXISTING JB TO EXISTING MDP.
3. APPROXIMATE LOCATION OF NEW NETWORK WIRING CLOSET. CONTRACTOR SHALL PROVIDE RACK AND FIBER SWITCH, NETWORK SWITCH AND ALL ASSOCIATED PARTS & PIECES TO PROVIDE NETWORKING CAPABILITIES TO THE NEW MAINT. GARAGE. INSTALL CAT. 6 WIRING FROM NEW WIRING CLOSET TO EXISTING IT CLOSET.
4. CAPTURE EXISTING 1" SPARE CONDUIT AND RUN TO NEW ELECTRICAL HANDHOLE FOR COMMUNICATION WIRING.
5. NEW ELECTRICAL HANDHOLE. REFER TO HANDHOLE GENERAL REQUIREMENTS FOR ADDITIONAL INFORMATION.
6. NEW 1" CONDUIT FOR COMMUNICATION WIRING. INSTALL NEW 12SM FIBER FROM WC-1 TO MAINTENANCE GARAGE.
7. NEW 2" PVC CONDUIT FROM EXISTING HANDHOLE TO NEW SERVICE ENTRANCE RATED PANELBOARD.
8. REMOVE AND RELOCATE EXISTING LIGHT POLE & FOUNDATION. EXTEND WIRING AND PROVIDE ADDITIONAL HANDHOLES AS REQUIRED. SEE LIGHT POLE BASE DETAIL 21/CD.01 ALL EXCAVATION/FOOTINGS/CONDUIT FOR EXTERIOR ELECTRICALWORK BY EC.

HANDHOLE GENERAL REQUIREMENTS:

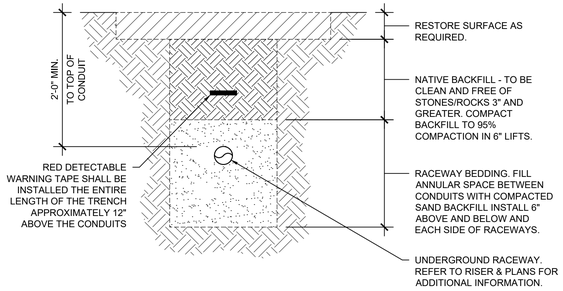
UL LISTED UNDERGROUND HANDHOLE ENCLOSURE AND COVER (66WF), ANSI/SCTE TIER 15 LOAD RATING AS MANUFACTURED BY QUAZITE OR APPROVED EQUAL. UNITS SHALL BE DESIGNED FOR FLUSH BURIAL AND HAVE OPEN BOTTOMS. INSTALL HANDHOLD AND BOXES LEVEL AND PLUMB AND WITH ORIENTATION AND DEPTH COORDINATED WITH CONNECTING CONDUITS TO MINIMIZE BENDS AND DEFLECTIONS REQUIRED FOR PROPER ENTRANCES. CONTRACTOR SHALL COORDINATE LAYOUT AND INSTALLATION OF HANDHOLE WITH FINAL ARRANGEMENTS OF SITE GRADING AND SURFACE FEATURES AS DETERMINED IN THE FIELD. SUPPORT UNIT IN A LEVEL BED OF CRUSHED STONE OR GRAVEL FROM 1/2" SIEVE TO #4 AND COMPACTED TO THE SAME DENSITY AS THE ADJACENT UNDISTURBED EARTH. SET SO THE COVER SURFACE WILL BE FLUSH WITH FINISHED GRADE IN PAVED AREAS. CONTRACTOR SHALL FURNISH ADDITIONAL HANDHOLE(S) (NOT SHOWN) AS REQUIRED TO FACILITATE "WIRE PULL".





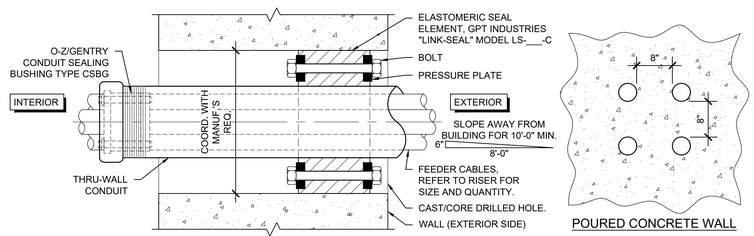
1 E2.02 Partial Electrical Site Plan

1" = 20'-0"



2 E2.02 Conduit Trenching Detail

N.T.S.



3 E2.02 Thru-Wall Conduit Seal Requirements

N.T.S.

811 Know what's **below**. **Call** before you dig.
NY industrial code rule 753 requires no less than two working days notice, but not more than ten days notice.

REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION AND WORK REQUIREMENTS

Date 7/8/21
Checked BH
Drawn MH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

LAN ASSOCIATES
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252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

SED PROJECT #66-08-01-06-3-012-001

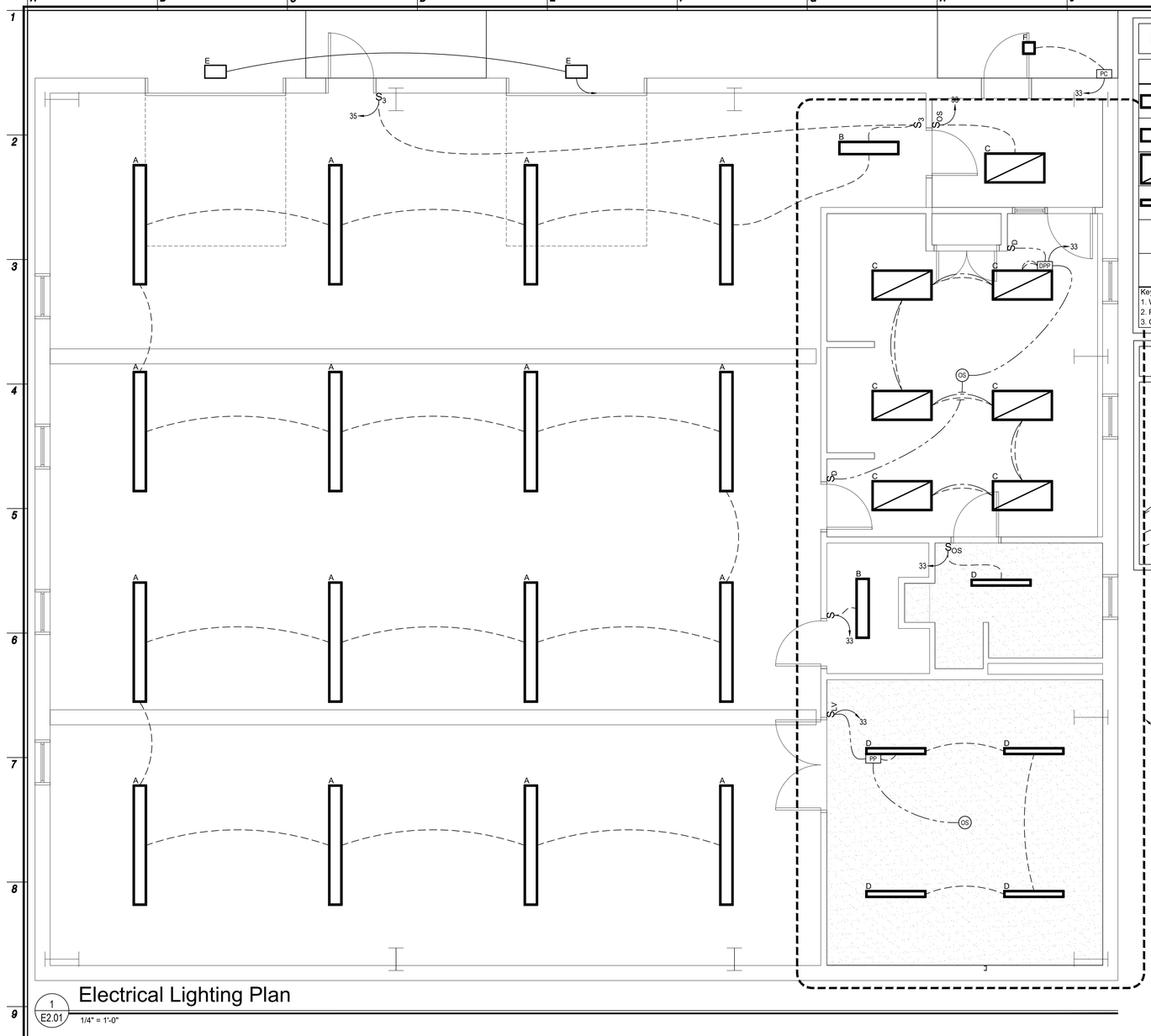
Electrical Site Plan & Details

NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

File No. 4144902E201

E2.02



Electrical Lighting Plan

1 / E2.01

1/4" = 1'-0"

Light Fixture Schedule

SYMBOL	TYPE	FIXTURE INFORMATION						LED INFORMATION			KEY NOTES
		MANUF.	MODEL	DESCRIPTION	VOLT	WATT	MOUNTING	HEIGHT	LUMENS	LPW	CLR	
	A	ACUITY LIGHTING	TZL1N L96 SMR 10000LM FST MVOLT 35K 80CRI LBH0SZU WH - ZACVH - ZLR L96 ZYM UPL WH R56	"ZL1N" LED STRIPLIGHT - 96" - 10,000 NOMINAL LUMENS	UNIV.	68	PENDANT	3'-0" BELOW DECK	8881	131	80CRI, 35K	1
	B	ACUITY LIGHTING	TZL1N L96 SMR 5000LM FST MVOLT 35K 80CRI LBH0SZU WH - ZACVH - ZLR L96 ZYM UPL WH R56	"ZL1N" LED STRIPLIGHT - 48" - 5,000 NOMINAL LUMENS	UNIV.	34	PENDANT	3'-0" BELOW DECK	4515	133	80CRI, 35K	1
	C	ACUITY LIGHTING	2BLT4 48L ADP EZ1 LP835	"BLT" SERIES 2x4 - 4,800 NOMINAL LUMENS	UNIV.	38	CLG. RECESSED	N/A	4960	131	80CRI, 35K	
	D	ACUITY LIGHTING	BLWP4 48L ADP EZ1 LP835	"BLWP" 4' LOW PROFILE LED WRAPAROUND - 4,800 NOMINAL LUMENS	UNIV.	40	CLG. SURFACE	N/A	5137	128	80CRI, 35K	
	E	ACUITY LIGHTING	WSTLED P1 40K VW MVOLT PIR1FC3V COLOR	"WST LED" ARCHITECTURAL WALL SCONCE W/ INTEGRAL PHOTCELL AND OCC SENSOR	UNIV.	12	WALL SURFACE	12'-6" A.F.G.	1529	127	80CRI, 40K	2
	F	ACUITY LIGHTING	CNY LED P0 40K MVOLT WH - CNYBCP	"CNY LED" LED CANOPY/CEILING LUMINAIRE	UNIV.	27	CLG. SURFACE	N/A	3500	130	80CRI, 40K	3

Key Notes
1. WITH PRE-WIRED OCCUPANCY SENSOR, AIRCRAFT CABLE HANGERS, AND SYMMETRICAL REFLECTOR WITH UPLIGHTING.
2. PHOTOCELL OPERATION ENABLED @ 1FC, RAMP UP TIME ON SENSING MOTION - 3 SEC, DWELL TIME AT 100% OUTPUT - 5 MIN, RAMP DOWN TIME AT NO MOTION - 5 MIN., DIMMED STATE - 37%
3. CONNECT TO PHOTOCELL FOR DUSK TO DAWN OPERATION.

Lighting Symbol Legend

- S_3 120VAC, SINGLE POLE TOGGLE SWITCH - "3" INDICATES 3 WAY SWITCHING.
- S_{OS} 120VAC, WALL MOUNT COMBINATION OCCUPANCY SENSOR/MOMENTARY CONTACT SWITCH.
- S_D 120VAC, 0-10V MOMENTARY CONTACT/ DIMMER SWITCH
- S_{LV} 120VAC, 0-10V DIMMER SWITCH
- DPP POWER PACK WITH 0-10V DIMMING OUTPUT
- PC PHOTOCELL
- POWER & CONTROL/SIGNAL MC CABLE (120VAC & 0-10V). SOUTHWIRE MC-PCS DUO OR EQUAL.
- CLASS 2 LOW VOLTAGE CABLE
- 120VAC CABLE
- 120VAC HOMERUN

ADD ALTERNATE #1
REFERE TO SPECIFICATION SECTION
012300 FOR ADDITIONAL INFORMATION

Date 7/8/21
Checked BH
Drawn MH

MICHAEL J. McGOVERN, R.A.
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Electrical Lighting Plan
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

File No. 4144902E501

E5.01

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE NEW YORK STATE ENERGY CODE, INTERNATIONAL MECHANICAL CODE, ASHRAE GUIDELINES, SMACNA, COUNTY GUIDELINES, NEC, NATIONAL STANDARD PLUMBING CODE, AND ALL OTHER APPLICABLE CODES, ORDINANCES, ETC. FOR NEW YORK STATE AND THE LOCAL AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITH THE EXISTING CONDITIONS AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS AND COMMENCING WORK, AND INCLUDE ALL SUCH NECESSARY WORK BASED ON THIS SITE FAMILIARIZATION IN THIS BID.
3. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL SAFE WORKING CONDITIONS AND SHALL OBSERVE ALL SAFETY REQUIREMENTS ESTABLISHED BY JURISDICTIONAL AGENCIES AND THE OWNER. WHERE CONFLICTS EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY. CARE SHALL BE EXERCISED TO AVOID ENDANGERING PERSONNEL OR STRUCTURES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES AND JOB SITE CONDITIONS INCLUDING SAFETY. CONSTRUCTION SHALL BE PERFORMED IN SUCH A MANNER TO PROTECT WORKMEN, OCCUPANTS AND THE PUBLIC FROM INJURY AND ADJOINING PROPERTY SHALL BE PROTECTED FROM DAMAGE BY USE OF SCAFFOLDING, UNDERPINNING OR OTHER APPROVED METHOD. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
5. CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN, DEBRIS FREE CONDITION. THE DUST RESULTING FROM REMOVALS SHALL BE CONTROLLED SO AS TO PREVENT ITS SPREAD TO OCCUPIED PORTIONS OF THE BUILDING AND TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA.
6. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, APPROVALS, ETC. PRIOR TO COMMENCING WORK AND SHALL SECURE CERTIFICATE OF OCCUPANCY UPON COMPLETION OF WORK.
7. CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OFF SITE IN AN APPROVED MANNER. THE OWNER SHALL BE CONSULTED PRIOR TO DISPOSAL OF ANY SALVAGED OR EXCESS MATERIALS AT THE COMPLETION OF THE PROJECT.
8. UPON COMPLETION OF WORK, ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
9. ALL WORK SHALL BE SCHEDULED IN COMPLIANCE WITH THE OWNER'S REQUIREMENTS FOR THE USE OF THE EXISTING FACILITY.
10. CONTRACTOR SHALL FURNISH ALL EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE AND ORDERLY MANNER, AND AS NECESSARY FOR A PROPER OPERATIONAL SYSTEM.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED DURING THE COURSE OF HIS WORK AND TO ENSURE THE OWNER'S FACILITY TO BE OPERATIONAL.
12. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES AND ADDRESS ALL QUESTIONS TO ENGINEER PRIOR TO COMMENCING WORK.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING, FILLING AND CLEANING UPON COMPLETION OF WORK.
14. CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS. ALL WRITTEN OR DIMENSIONED INFORMATION TAKES PRECEDENCE OVER THE DRAWING.
15. CONTRACTOR SHALL SUBMIT, WHERE REQUIRED BY THE ARCH/ENGR, SHOP DRAWINGS AND SUBMITTALS FOR APPROVAL PRIOR TO THE START OF FABRICATION OF THOSE ITEMS. THIS INCLUDES ALL EQUIPMENT, SCHEMATIC DUCTWORK AND PIPING LAYOUT, ETC. CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL EQUIPMENT ETC WILL FIT (WITH PROPER MAINTENANCE CLEARANCES) AT ALL LOCATIONS. REVIEW OF SHOP DRAWINGS/SUBMITTALS BY THE ARCH/ENGR DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING THE CURRENT MODEL NUMBERS, TYPE, & FEATURES OF ALL EQUIPMENT'S & MATERIALS.
16. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH CERTIFICATES OF INSURANCE PRIOR TO STARTING THE WORK.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND BRACING OF EXISTING STRUCTURES AS NEEDED TO COMPLETE THE NEW WORK.
18. ALL MANUFACTURER'S MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND INSTALLED IN ACCORDANCE TO WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS. WHERE BRAND NAMES AND MANUFACTURED PRODUCTS ARE CALLED FOR, APPROVED EQUALS WHICH MEET APPLICABLE STANDARDS AND SPECIFICATIONS MAY BE SUBSTITUTED WITH WRITTEN PERMISSION OF THE ENGINEER AND THE OWNER. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE AND OF EQUAL OR BETTER QUALITY.
19. ALL CHANGES SHALL BE REQUESTED IN WRITING AND MAY ONLY BE APPROVED IN WRITING BY THE ARCHITECT AND THE OWNER PRIOR TO ANY CHANGES BEING MADE.
20. THE ARCHITECT/ENGINEER HAS THE RIGHT TO REJECT ANY PORTION OF WORK THAT IS POORLY INSTALLED, DOES NOT MEET INDUSTRY STANDARD, UNAUTHORIZED, OR WORK DONE CONTRARY TO THE THE INTENT OF THE CONTRACT DOCUMENTS. SUCH WORK SHALL BE REPLACED, REPAIRED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
21. CONTRACTOR SHALL GUARANTEE ALL HIS WORK AND THE WORK OF HIS SUBCONTRACTORS FOR A PERIOD OF TWO (2) YEARS AFTER RECEIVING FINAL ACCEPTANCE AND DO ALL REPAIR WORK AND REPLACEMENT AS NECESSARY DURING THAT PERIOD AT THE CONTRACTOR'S EXPENSE.
22. IN NO EVENT SHALL STRUCTURAL MEMBERS BE CUT OR DRILLED WITHOUT THE WRITTEN APPROVAL OF A LICENSED STRUCTURAL ENGINEER.
23. CONTRACTOR SHALL PROVIDE SAFE AND SANITARY CONDITIONS WHERE DEMOLITION AND WRECKING OPERATIONS ARE BEING CARRIED ON. WORK SHALL BE EXECUTED IN SUCH A MANNER THAT HAZARD FROM FIRE, POSSIBILITY OF INJURY, DANGER TO HEALTH AND CONDITIONS WHICH MAY CONSTITUTE A PUBLIC NUISANCE SHALL BE MINIMIZED.
24. ENGINEER/OWNER MAY ASK THE CONTRACTOR TO PROVIDE DETAILED SHOP DRAWINGS & SUBMITTALS OF ANY/ALL PARTS OF THIS PROJECT WHICH THE ENGINEER/OWNER DEEMS NECESSARY FOR.

HVAC GENERAL NOTES

1. PROCURE AND PAY ALL NECESSARY PERMITS AND LICENSES REQUIRED TO CARRY OUT THE WORK SHOWN. OBTAIN AND PAY FOR ALL FEES.
2. COMPLY WITH ALL FEDERAL, STATE AND MUNICIPAL LAWS AND CODES, ORDINANCES, RULES AND REGULATIONS OF HEALTH, PUBLIC OR OTHER AUTHORITIES CONTROLLING OR LIMITING THE METHODS, MATERIALS TO BE USED OR ACTIONS OF THOSE EMPLOYED.
3. GUARANTEE HVAC SYSTEM FOR A PERIOD OF TWO (2) YEARS FROM OWNER'S ACCEPTANCE TO BE FREE FROM DEFECTS AND REPAIR OR REPLACE, AT NO COST TO OWNER, FAILURES OR DEFECTS.
4. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL HIS DEBRIS.
5. BALANCE HVAC SYSTEM TO QUANTITIES INDICATED. CONTRACTOR TO SUBMIT FOUR (4) SETS OF AIR, WATER AND UNIT BALANCING REPORT TO ENGINEER/OWNER PRIOR TO FINAL ACCEPTANCE OF THE SYSTEM.
6. BIDDERS FOR THIS WORK SHALL VISIT THE PREMISES AND CAREFULLY EXAMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING BIDS. NOT ALL EXISTING CONDITIONS HAVE BEEN IDENTIFIED ON DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER. OF ALL DISCREPANCIES PRIOR TO SUBMITTING BID.
7. ALL BIDDERS SHALL ALSO FAMILIARIZE THEMSELVES WITH THE MEANS OF ENTRANCE AND EXIT AT THE PROPERTY AND ALL OTHER INFORMATION NECESSARY TO PROPERLY CARRY OUT THE WORK.
8. THE CONTRACTOR SHALL, WITH THE APPROVAL OF THE ENGINEER AND WITHOUT ADDITIONAL COST TO THE OWNER, MAKE ALL NECESSARY CHANGES OR MODIFICATIONS TO LOCATIONS AS MAY BE NECESSARY TO SUIT REQUIREMENTS AND CONDITIONS FOR THE PROPER AND CONVENIENTLY ACCESSIBLE LOCATIONS OF ALL PARTS OF EACH SYSTEM.
9. SMALL DETAILS ARE NOT USUALLY SHOWN OR SPECIFIED BUT NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OR WORK SHALL BE FURNISHED AND INSTALLED AT NO ADDITIONAL COST.
10. THE CONTRACTOR SHALL NOTE THAT ALL SERVICE CONNECTIONS MAY NOT BE SHOWN IN TRUE POSITIONS. EACH BIDDER IS CAUTIONED, THEREFORE, TO VERIFY SAME WITH FIELD CONDITIONS.
11. CONTRACTOR SHALL CHECK FOR INTERFERENCE AND VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR INSTALLATION OF PIPING AND DUCTWORK.
12. IF AN ITEM OF EQUIPMENT OTHER THAN THE ITEM(S) SPECIFIED IS APPROVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL COST ARISING OUT OF ADDITIONAL OR CHANGED GENERAL CONSTRUCTION AND MECHANICAL WORK REQUIRED TO ACCOMMODATE THE SUBSTITUTED EQUIPMENT.
13. ALL EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS DIRECTIONS AND RECOMMENDATIONS.
14. PROVIDE TWO (2) SETS OF SPARE FILTERS FOR THE INSTALLED MAU, AC UNITS, & OTHER EQUIPMENT.
15. PROVIDE TWO-YEAR PREVENTIVE & REGULAR MAINTENANCE SERVICE FOR ALL INSTALLED HVAC/MECHANICAL SYSTEM. THIS INCLUDES A MINIMUM OF TWO (2) PERIODIC SERVICE VISITS ANNUALLY TO INSPECT, TEST & CHECK ALL COMPONENTS OF HVAC UNITS AND ANY ADDITIONAL VISITS REQUIRED IF ANY HVAC UNIT FAILS. ALL NECESSARY BELT ALIGNMENTS, PROPER REFRIGERANT CHARGE, PROPER OPERATIONS OF ALL DAMPERS, CONTROLS, ETC. IS INCLUDED IN THIS SCOPE OF WORK.
16. PROVIDE FIRE STOPPING AROUND ALL OPENINGS FOR DUCT, PIPING, CONDUIT, ETC. PENETRATIONS THROUGH CORRIDORS, SLABS AND OTHER RATED PARTITIONS.
17. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND RESTORATION OF AREAS OF MECHANICAL REMOVALS.
18. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DUMPSTER/CONTAINER SERVICES AND LABOR TO KEEP THE BUILDING FREE OF DEBRIS.
19. CONTRACTOR TO PROVIDE TWO (2) SEPARATE TRAINING SESSIONS (FOUR WEEKS APART) ON PROPER OPERATION & TROUBLESHOOTING OF NEW HVAC SYSTEM & CONTROLS.
20. CONTRACTOR TO NOTE THAT BOTH DWGS. & SPECS. ARE COLLECTIVELY A PART OF BID REQUIREMENTS. IN CASE OF ANY DIFFERENCES BETWEEN VARIOUS DWGS. OR BETWEEN DWGS. & SPECS, THE MOST STRINGENT REQUIREMENT WILL PREVAIL.
21. CONTRACTOR TO SUBMIT FOUR (4) SETS OF OPERATION & MAINTENANCE MANUALS, INCLUDING A SUMMARY SHEET OF ALL EQUIPMENT MANUFACTURERS/MODEL'S/SERIAL #'S, SHOP DRAWING SUBMITTALS, WARRANTY INFORMATION, O&M MANUALS, PROJECT INFORMATION, CONTACT DETAILS & AS-BUILT DRAWINGS.
22. CONTRACTOR TO PROVIDE FOUR (4) SETS AND AN ELECTRONIC COPY OF AS-BUILT DRAWINGS OF THE ENTIRE SYSTEM.

GENERAL CONSTRUCTION NOTES

1. REFER TO "MULTIPLE PRIME CONTRACT NOTES" ON DWG. A1.00 & SPECIFICATIONS FOR CONTRACTORS' RESPONSIBILITIES.
2. GC IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING, ROOF ETC. FOR ALL PIPE & DUCT PENETRATIONS. SEAL OPENING WITH 2-HOUR FIRE BARRIER CAULK. SEE DRAWINGS FOR APPROXIMATE LOCATIONS OF PIPES, DUCT, ETC.
3. GC TO REFER TO MECHANICAL DRAWINGS FOR PAINTING, FURNISHING AND INSTALLING ACCESS PANELS, CUTOUT LOCATIONS, ETC.
4. EC SHALL BE RESPONSIBLE FOR REMOVING & RELOCATING EXISTING ELECTRICAL, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW HVAC EQUIPMENT, PIPING & DUCTWORK. CHECK IN FIELD.
5. GC SHALL REMOVE EXISTING CEILING TILES AND CEILING GRID TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. RE-INSTALL ALL CEILING TILES BACK TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES & CEILING GRID. CHECK IN FIELD.

HVAC MATERIALS

EQUIPMENT:

- REFER TO SCHEDULES FOR UNIT MANUFACTURER, SIZE, AND CAPACITY DATA.

DUCTWORK:

- INDOOR AIR DUCTWORK, EXCEPT AS INDICATED BELOW, SHALL BE GALVANIZED STEEL CONSTRUCTION. WEIGHTS AND CONSTRUCTION DETAIL SHALL BE IN ACCORDANCE WITH THE LATEST ASHRAE GUIDE AND/OR SMACNA STANDARDS. MIN. 24 GAUGE DUCTWORK SHALL BE USED FOR THE PROJECT.
- OUTDOOR AIR INTAKE DUCTWORK SHALL BE ALUMINUM CONSTRUCTION CLASS "A' SEALED.
- ALL ROUND DUCTWORK SHALL BE DOUBLE-WALL SPIRAL DUCTWORK
- FLEXIBLE DUCTWORK: SHALL NOT EXCEED FOUR (4) FEET IN LENGTH. FOR ANY HORIZONTAL FLEX DUCT BRANCH TO A CEILING DIFFUSER, FURNISH A 90° BRACE TO MAINTAIN A LONG RADIUS ELBOW TO THE DIFFUSER (TITUS MAKE, MODEL "FLEXRIGHT" OR APPROVAL EQUAL MANUFACTURERS).

AIR DEVICES:

- SD - TITUS MAKE, MODEL 250 (12"x12" OR AS NOTED, STEEL CONSTRUCTION).
- EG - TITUS MAKE, MODEL 350RL STEEL CONSTRUCTION.

NOTES:
1. ALL CEILING DIFFUSERS LOCATED IN GYPSUM BOARD AND/OR CONCEALED SPLINE CEILINGS SHALL BE PROVIDED WITH FRAME TYPE FOR SURFACE MOUNTING.
2. PROVIDE FACTORY INSTALLED 90° BLANK-OFF PLATE(S) IN ALL 2 AND 3 WAY DIFFUSERS.
3. COLOR OF NEW AIR INLETS & OUTLETS SHALL MATCH THE CEILING COLOR.
4. NC RATING OF ALL CDs SHALL NOT EXCEED 20. NC RATING OF ALL RARs/EARs SHALL NOT EXCEED 22.

PIPING:

- REFRIGERANT PIPING SHALL BE HARD COPPER TYPE "K" WITH BRAZED FITTINGS.
- CONDENSATE DRAIN PIPING SHALL BE HARD COPPER TYPE "L" WITH WROUGHT COPPER SOLDERED FITTINGS. REFER TO PLUMBING DRAWINGS.

NOTES:
1. ALL SUPPLY AIR DUCTWORK SHALL BE INTERNALLY LINED FOR A MINIMUM OF 15' DOWNSTREAM OF ALL FCU OR AS NOTED ON THE DRAWINGS.

- DUCT INSULATION NOTE: PROVIDE A MINIMUM 6" OVERLAP WHERE INTERNAL INSULATION ENDS AND EXTERNAL INSULATION BEGINS.
- FRESH AIR INTAKE AND EXPOSED DUCT: 1" THICK, MIN. 2 LB. DENSITY RIGID FIBERGLASS DUCT INSULATION WITH FOIL FACING VAPOR BARRIER FASTENED WITH WELDED CLIPS, CEMENTED JOINTS WITH ALUMINUM TAPE.
- HEATING PIPING INSULATION: REFER TO SPEC. SECTION FOR PIPE INSULATION REQUIREMENTS.
- INTERIOR REFRIGERANT SUCTION & HOT GAS BYPASS PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL).
- EXTERIOR REFRIGERANT SUCTION, LIQUID & HOT GAS BYPASS PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL) & BE PROVIDED WITH MIN. 30 MIL PVC FIELD APPLIED JACKETS.
- CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL). REFER TO PLUMBING DRAWINGS.

SYMBOLS

NOT TO SCALE

= 4-WAY SUPPLY AIR CEILING DIFFUSER (SAD) WITH NECK SIZE AND AND CFM INDICATED ON PLANS.

= RETURN AIR REGISTER (RAR) WITH NECK SIZE AND CFM INDICATED ON PLANS.

= EXHAUST AIR REGISTER (EAR) WITH NECK SIZE AND CFM INDICATED ON PLANS.

= SUPPLY AIR CEILING REGISTER/GRILLE (SAR) WITH NECK SIZE AND CFM INDICATED ON PLANS.

= RETURN AIR REGISTER (RAR) WITH NECK SIZE AND CFM INDICATED ON PLAN

= POINT OF CONNECTION OF NEW PIPING/DUCTWORK TO EXISTING

= POINT OF DISCONNECTION OF NEW PIPING/DUCTWORK TO EXISTING

W" x D" = INDICATES HARD DUCT WITH INTERNAL LINING (DIMENSIONS ARE INSIDE CLEAR WIDTH & DEPTH).

W" x D" = INDICATES HARD DUCT (DIMENSIONS ARE INSIDE CLEAR WIDTH & DEPTH).

= DUCT TURN UP (SUPPLY, RETURN, EXHAUST)

= DUCT TURN DOWN (SUPPLY, RETURN, EXHAUST)

DSD/AD = DUCT SMOKE DETECTOR WITH ACCESS DOOR

FD/AD = FIRE/DAMPER WITH ACCESS DOOR

VD = VOLUME DAMPER

BDD = BACK DRAFT DAMPER

T = INDICATES NEW ROOM THERMOSTAT

CLASSROOM 201 = ROOM NAME / ROOM NUMBER

1 = REVISION

= PIPE TURN UP

= PIPE TURN DOWN

ABBREVIATIONS

&	=	AND	IAQ	=	INDOOR AIR QUALITY
@	=	AT	ID	=	INSIDE DIAMETER (DIM)
ø	=	DIAMETER OR ROUND	IN	=	INCH
(E)	=	EXISTING	INFO	=	INFORMATION
(N)	=	NEW	KMA	=	KITCHEN MAKEUP AIR
AC	=	AIR CONDITIONING UNIT	KMC	=	KITCHEN MECHANICAL CONTRACTOR
ACC	=	AIR COOLED CONDENSING UNIT	KX	=	KITCHEN EXHAUST
AD	=	ACCESS DOOR			
ADD'L	=	ADDITIONAL	LAT	=	LEAVING AIR TEMPERATURE
AFF	=	ABOVE FINISHED FLOOR			
ALC	=	AUTOMATED LOGIC CONTROL	LDB	=	LEAVING DRY BULB
			LSD	=	LINEAR SLOT DIFFUSER
ALT	=	ALTERNATE	LWB	=	LEAVING WET BULB
ALUM	=	ALUMINUM	LWT	=	LEAVING WATER TEMPERATURE
AS	=	AIR SEPARATOR			
BDD	=	BACK DRAFT DAMPER	MAX	=	MAXIMUM
BLDG	=	BUILDING	MC	=	MECHANICAL CONTRACTOR
BMS	=	BUILDING MANAGEMENT SYSTEM	MECH	=	MECHANICAL
			MFR	=	MANUFACTURER
CD	=	CEILING DIFFUSER	MIN	=	MINIMUM
CFM	=	CUBIC FEET PER MINUTE			
CLG	=	CEILING	NK	=	NECK SIZE
CO	=	CLEANOUT	NTS	=	NOT TO SCALE
CP	=	CONDENSATE DRAIN PUMP	OA	=	OUTSIDE AIR
CV	=	CONVECTOR	OD	=	OUTSIDE DIAMETER
DDC	=	DIRECT DIGITAL CONTROL	PC	=	PLUMBING CONTRACTOR
DIA	=	DIAMETER			
DN	=	DOWN	RA	=	RETURN AIR
DSD	=	DUCT SMOKE DETECTOR	RAR	=	RETURN AIR REGISTER
DWG	=	DRAWING	RG	=	RETURN GRILLE
			RM	=	ROOM
EA	=	EAHAUST AIR	RTU	=	ROOFTOP HVAC UNIT
EAR	=	EXHAUST AIR REGISTER			
EAT	=	ENTERING AIR TEMPERATURE	SA	=	SUPPLY AIR
			SAD	=	SUPPLY AIR DIFFUSER
EC	=	ELECTRICAL CONTRACTOR	SAR	=	SUPPLY AIR REGISTER
			SD	=	SMOKE DAMPER
EF	=	EXHAUST FAN	SPEC	=	SPECIFICATION
ENCL	=	ENCLOUSURE	SR	=	SUPPLY AIR SIDE REGISTER
ET	=	EXPANSION TANK			
EXIST	=	EXISTING	SS	=	STAINLESS STEEL
EWT	=	ENTERING WATER TEMPERATURE	TG	=	TRANSFER AIR GRILLE
			TYP	=	TYPICAL
FAI	=	FRESH AIR INTAKE			
FC	=	FLEXIBLE CONNECTION	UH	=	UNIT HEATER
FCU	=	FAN COIL UNIT	UV	=	UNIT VENTILATOR
FD	=	FIRE DAMPER			
FLR	=	FLOOR	VD	=	VOLUME DAMPER
FTR	=	FINED TUBE RADIATION/BASEBOARD	VFD	=	VARIABLE FREQUENCY DRIVE
			VERT	=	VERTICAL
GC	=	GENERAL CONTRACTOR	VIF	=	VERIFY IN FIELD
			VRF	=	VARIABLE REFRIGERANT FLOW
HORIZ	=	HORIZONTAL			
HVAC	=	HEAT/VENTILATION/AIR CONDITIONING	W/	=	WITH
HWH	=	HOT WATER HEATER	WMS	=	WIRE MESH SCREEN

Date	7/8/21
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MICHAEL J. McGOVERN, R.A.
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Revisions:

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MECHANICAL GEN. NOTES, LEGEND & ABBREV.

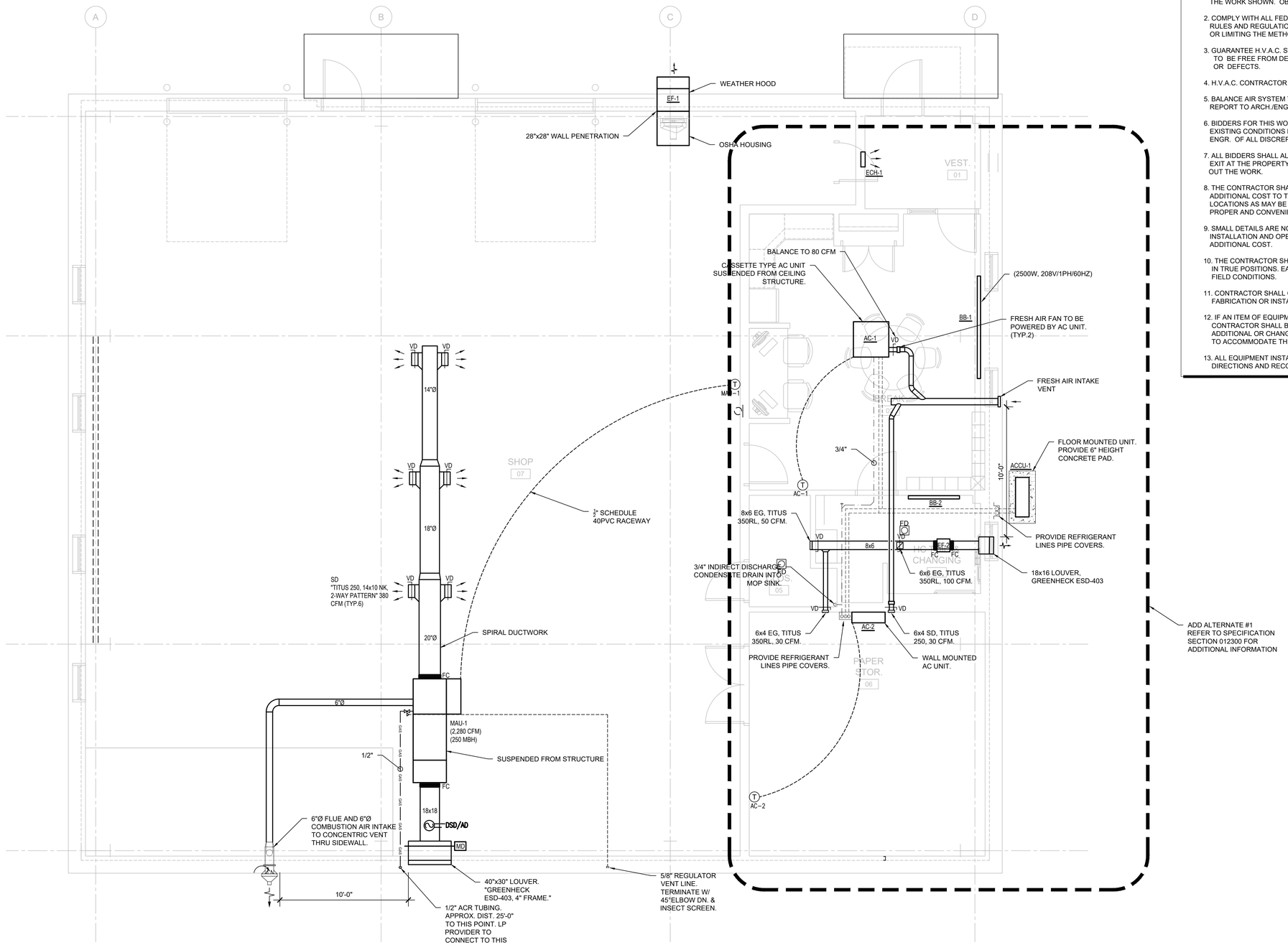
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

SED PROJECT #66-08-01-06-3-012-001

Job No. 4.1449.02

File No. 4144902M001

M0.01



H.V.A.C. GENERAL NOTES

1. PROCURE AND PAY ALL NECESSARY PERMITS AND LICENSES REQUIRED TO CARRY OUT THE WORK SHOWN. OBTAIN AND PAY FOR ALL FEES.
2. COMPLY WITH ALL FEDERAL, STATE AND MUNICIPAL LAWS AND CODES, ORDINANCES, RULES AND REGULATIONS OF HEALTH, PUBLIC OR OTHER AUTHORITIES CONTROLLING OR LIMITING THE METHODS, MATERIALS TO BE USED OR ACTIONS OF THOSE EMPLOYED.
3. GUARANTEE H.V.A.C. SYSTEMS FOR A PERIOD OF ONE YEAR FROM OWNER'S ACCEPTANCE TO BE FREE FROM DEFECTS AND REPAIR OR REPLACE, AT NO COST TO OWNER, FAILURES OR DEFECTS.
4. H.V.A.C. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL HIS DEBRIS.
5. BALANCE AIR SYSTEM TO QUANTITIES INDICATED. CONTRACTOR TO SUBMIT AIR BALANCING REPORT TO ARCH./ENGR./OWNER PRIOR TO FINAL ACCEPTANCE OF THE SYSTEM.
6. BIDDERS FOR THIS WORK SHALL VISIT THE PREMISES AND CAREFULLY EXAMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING BIDS. CONTRACTOR SHALL NOTIFY ARCH. & ENGR. OF ALL DISCREPANCIES PRIOR TO SUBMITTING BID.
7. ALL BIDDERS SHALL ALSO FAMILIARIZE THEMSELVES WITH THE MEANS OF ENTRANCE AND EXIT AT THE PROPERTY AND ALL OTHER INFORMATION NECESSARY TO PROPERLY CARRY OUT THE WORK.
8. THE CONTRACTOR SHALL, WITH THE APPROVAL OF THE ENGINEER AND WITHOUT ADDITIONAL COST TO THE OWNER, MAKE ALL NECESSARY CHANGES OR MODIFICATIONS TO LOCATIONS AS MAY BE NECESSARY TO SUIT REQUIREMENTS AND CONDITIONS FOR THE PROPER AND CONVENIENTLY ACCESSIBLE LOCATIONS OF ALL PARTS OF EACH SYSTEM.
9. SMALL DETAILS ARE NOT USUALLY SHOWN OR SPECIFIED BUT NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OR WORK SHALL BE FURNISHED AND INSTALLED AT NO ADDITIONAL COST.
10. THE CONTRACTOR SHALL NOTE THAT ALL SERVICE CONNECTIONS MAY NOT BE SHOWN IN TRUE POSITIONS. EACH BIDDER IS CAUTIONED, THEREFORE, TO VERIFY SAME WITH FIELD CONDITIONS.
11. CONTRACTOR SHALL CHECK FOR INTERFERENCES AND VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR INSTALLATION OF PIPING AND DUCTWORK.
12. IF AN ITEM OF EQUIPMENT OTHER THAN THE ITEM(S) SPECIFIED IS APPROVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL COST ARISING OUT OF ADDITIONAL OR CHANGED GENERAL CONSTRUCTION AND MECHANICAL WORK REQUIRED TO ACCOMMODATE THE SUBSTITUTED EQUIPMENT.
13. ALL EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS DIRECTIONS AND RECOMMENDATIONS.

2 M2.01 — Proposed 1st Floor Mechanical Plan

1/4" = 1'-0"

NORTH

Date	7/8/21
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PARTIAL PROPOSED 1ST FLOOR MECHANICAL PLAN

NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02

File No. 4144902M001

M2.01

SED PROJECT #66-08-01-06-3-012-001

PROPANE GAS FIRED MAKEUP AIR UNIT SCHEDULE

MARK No.	CFM	MIN. O.A.	SUPPLY HP	ESP IN.	HEATING MBH		EAT/LAT (F°)	ELECTRIC DATA VOLTS/PH/HZ	MCA	MOP	A.F.U.E. %	LP GAS PRESS.MAX/MIN W.C.	UNIT WEIGHT (LBS)	MODEL & MANUFACTURER	REMARKS
					INPUT	OUTPUT									
MAU-1	2,280	2,280	1.5	0.75	250	200	7 / 87.5	208/3/60	9.6	15	81	14"/10"	890	IGX-109-H12-J GREENHECK	INDIRECT GAS FURNACE, SUSPENDED W/ SPRING VIBRATION ISOLATORS, S.S. HEAT EXCHANGER, SMOKE DETECTOR, FILTER RACK, 13:1 TURNDOWN MODULATION, PRESSURE REGULATOR, VALVES, NEMA 3R DISCONNECT SWITCH, THERMOSTAT, THERMOSTAT W/ LOCKING COVER. INTERLOCK UNIT W/ EF-1

ELECTRIC RESISTANCE CABINET/UNIT HEATER SCHEDULE

(TRANE AS STANDARD)

TAG No.	LOCATION	SA (CFM)	HEATING KW	HEATING MBH	ELECTRIC DATA VOLT/PH/HZ	MODEL & MANUFACTURER	WEIGHT (LBS)	DIMENSIONS (W x H x D) (IN.)	REMARKS
ECH-1	VESTIBULE/ENTRANCE	175	2.0	6.8	208/1/60	UHAA-021ATAD TRANE	27	14 x 19 x 4	WALL-RECESSED CABINET HEATER. SEE NOTES.

NOTES:
1. PROVIDE HEAVY-DUTY LOUVERED GRILLE, BUILT-IN TAMPER RESISTANT THERMOSTAT & DISCONNECT SWITCH & FAN DELAY SWITCH FOR ECH-1.
2. PROVIDE W/ DOUBLE POLE LINE BREAK THERMOSTAT WITH OFF OPTION.
3. ECH-1 UNIT COLOR TO BE SELECTED BY OWNER.
4. PROVIDE DDC CONTROLS & CONNECT TO NEW BMS.

EXHAUST FAN SCHEDULE

(GREENHECK AS STANDARD)

TAG No.	SYSTEM SERVED	LOCATION	CFM	STATIC PRESSURE LOSS (IN)	BHP	MHP	RPM	ELECTRIC DATA VOLT/PH/HZ	DIMENSIONS (DIA. x H) (IN)	APPROX. UNIT WEIGHT (LBS)	MODEL & MANUFACTURER	INLET SONES	REMARKS
EF-1	MAINT. SHOP	WALL	2,280	0.52	0.54	3/4	1200	208/1/60	30 X 30	200	SBE-1H20-7 GREENHECK	21	NOTES 1,2,3,4 & 9.
EF-2	BATH./JAN./STORAGE	PLENUM	180	0.2	0.03	1/30	1550	120/1/60	12Wx13Lx12H	30	SQ-70-VG GREENHECK	1.9	NOTES 4,5,6,7,& 8.

NOTES:
1. PROVIDE SHORT WALL HOUSING W/ OSHA PROTECTIVE GUARD
2. PROVIDE 90 DEGREE WEATHER HOOD W/ 0.5 WELDED WIRE BIRDSCREEN.
3. FAN SHALL INTERLOCK WITH MAU-1.
4. PROVIDE SWITCH NEMA1, TOGGLE, & JUNCTION BOX.
5. PROVIDE FAN WITH BACK-DRAFT DAMPER.
6. PROVIDE HANGING ISOLATORS
7. PROVIDE SPEED CONTROLLER (PSC).
8. FAN TO RUN CONTINUOUSLY AND CONTROLLED BY A SWITCH LOCATED IN JANITOR'S CLOSET.
9. THIS FAN IS INCLUDED IN THE BASE BID.

VENTILATION SCHEDULE

Room Name	Floor Area (Sq. Ft.)	Required O.A. per Sq. Ft.	Required O.A. For Space	No. of People	Required O.A. per Person	Required OA For Occupants	Total Min. O.A. Required (CFM)	Zone Air Distribution Effectiveness	Zone Min. O.A. Required (CFM)	Design		Remarks
										O.A. (CFM)	E.A. (CFM)	
MAINTENANCE SHOP	3,020	-	-	-	-	-	-	-	-	2,280	2,280	0.75/SF
BREAK ROOM	357	0.06	21	8	5	40	60	0.8	77	80		
BATHROOM	95	-	-	-	-	-	-	-	-	100		50CFM/FIXT.
JANITOR'S CLOSET	45	-	-	-	-	-	-	-	-	-	50	
PAPER STORAGE	395	0.06	24	-	-	-	24	0.8	30	30	30	
TOTAL	3,913		45	8		40	85			2,390	2,460	

ELECTRIC BASEBOARD SCHEDULE

MARK No.	WATTS	LENGTH	ELECTRIC DATA VOLT - PH - HZ	MODEL & MANUFACTURER	REMARKS
BB-1	2500	8'-0"	208-1-60	QMKC25408W QMARK	FLOOR MOUNTED W/ FRONT & BACK ENCLOSURE PANELS & WALL MOUNTED THERMOSTAT.
BB-2	1000	4'-0"	120-1-60	QMKC2514W QMARK	FLOOR MOUNTED W/ FRONT & BACK ENCLOSURE PANELS & WALL MOUNTED THERMOSTAT.

NOTE: BB-1 AND BB2 ARE TO BE INCLUDED IN ADD ALTERNATE #1. SEE SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

DUCTLESS SPLIT INDOOR AC/HEAT PUMP UNIT SCHEDULE

(DAIKIN AS STANDARD)

TAG No.	AREA SERVED	AIR FLOW (CFM)	COOLING		HEATING	MODEL & MANUFACTURER	ELECTRIC DATA			REFRIGERANT TYPE	APPROX DIMENSION L x W x H (IN)	APPROX WEIGHT (LBS)	REMARKS
			TBMH	SBMH	MBH		VOLT/PH/HZ	MCA	MOP				
AC-1	BREAK ROOM	1,180	34	29.6	41.5	FTFQ36PVJU DAIKIN	208/1/60	1.4	15	R-410A	33 X 33 X 11	66	CLG.-RECESSED HEAT PUMP UNIT. SEE NOTES.
AC-2	PAPER STORAGE	280	8.9	8	11.1	FXAQ09PVJU DAIKIN	208/1/60	0.3	15	R-410A	31 X 9 X 11	27	WALL MOUNTED HEAT PUMP UNIT. SEE NOTES.

NOTES:
1. PROVIDE W/ WALL-MOUNTING PLATE, REMOTE CONTROLLER FOR EACH UNIT.
2. PROVIDE CONDENSATE PUMP. PUMP TO BE POWERED BY AC UNIT.
3. PROVIDE AC-1 & AC-2 W/ FAN FRESH AIR KIT. FAN TO BE POWERED BY AC UNIT.
4. PROVIDE PROPER REFRIGERANT CHARGING FOR ALL UNITS.
5. AC-1 & AC-2 ARE INCLUDED IN ADD ALTERNATE #1 - REFER TO SPECIFICATION SECTION 012300.

OUTDOOR AIR-COOLED CONDENSING UNIT SCHEDULE

(DAIKIN AS STANDARD)

TAG No.	LOCATION	UNIT SERVED	COOLING OPERATING TEMP (°F)	HEATING OPERATING TEMP (°F)	NOMINAL COOLING (MBH)	NOMINAL HEATING (MBH)	MODEL & MANUFACTURER	ELECTRICAL VOLT/PH/HZ	COMPRESSOR NO.	COND FAN NO.	MCA	MOP	REFRIGERANT TYPE	APPROX DIMENSIONS W x D x H (IN)	APPROX. WEIGHT (LBS)	SEER	REMARKS
ACCU-1	GROUND	AC-1&2	14 TO 115	5 TO 60	40.3	37.5	RXTQ36TAVJ9 DAIKIN	208/1/60	1	1	16.5	25	R-410A	37 x 12 x 40	175	18	SEE NOTES

NOTES:
1. ELECTRICAL SUBCONTRACTOR SHALL FURNISH & INSTALL NEMA 3R DISCONNECT SWITCH & GFI CONVENIENCE OUTLET FOR EACH UNIT. REFER TO ELECTRICAL DRAWINGS.
2. PROVIDE W/ LOW AMBIENT CONTROL FOR ACCU-1
3. PROVIDE UNIT W/ WIND BAFFLE.
4. ACCU-1 IS INCLUDED IN ADD ALTERNATE #1. REFER TO SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

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MECHANICAL SCHEDULES
NEW MAINTENANCE BUILDING
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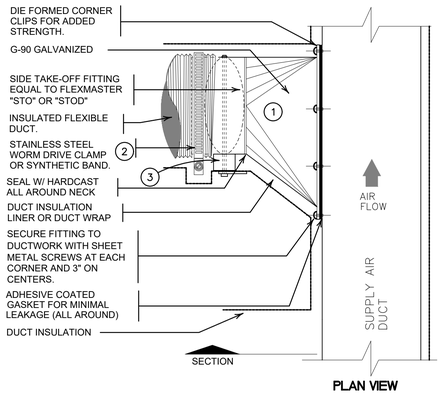
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02
File No. 4144902M001

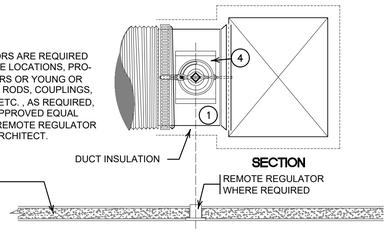
SED PROJECT #66-08-01-06-3-012-001

M6.01



GENERAL NOTE:

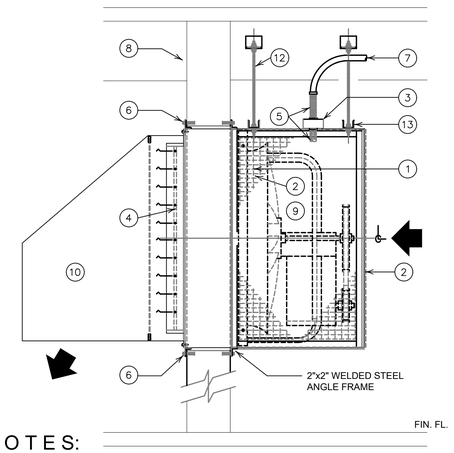
1. WHERE REGULATORS ARE REQUIRED IN NON-ACCESSIBLE LOCATIONS, PROVIDE ACCESS DOORS OR YOUNG OR EQUAL EXTENSION RODS, COUPLINGS, 90° GEAR DRIVES, ETC. , AS REQUIRED, & YOUNG 301 OR APPROVED EQUAL FLUSH MOUNTED REMOTE REGULATOR AS DIRECTED BY ARCHITECT.



NOTES:

1. PROVIDE SQUARE TO ROUND TAP WHERE FLEXIBLE DUCT SIZE EXCEED DIMENSION OF RECTANGULAR DUCT.
2. EXTEND INSULATION AND OUTER JACKET OVER THE SECURE CLAMP/BAND AND TAPE DOWN TO SLEEVE/COLLAR TO MAINTAIN VAPOR BARRIER INTEGRITY. (TYPICAL)
3. PROVIDE DAMPER IF TAP SERVES AN AIR DISTRIBUTION DEVICE.
4. RIGID ROUND DAMPERS SHALL BE "FLEXMASTER" SLBO RAISED PLATFORM.

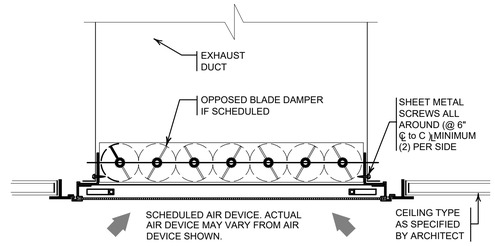
1 ROUND TAP DETAIL
NOT TO SCALE



NOTES:

1. FAN - AIR FLOW DIRECTION AND CONFIGURATION SHALL BE AS SPECIFIED.
2. SHORT WALL HOUSING W/ OSHA PROTECTIVE GUARD
3. JUNCTION BOX - W/ RUBBER GROMMET AT PLENUM PENETRATION).
4. BAROMETRIC BACK DRAFT
5. FLEXIBLE CONDUIT
6. LAG SCREWS @ 6" C TO ℄.
7. 1/2" SCHEDULE 40 PVC CONDUIT
8. STRUCTURE - REFER TO ARCHITECTURAL DRAWINGS.
9. REMOVABLE ACCESS PANEL - LOCATED ON MOTOR SIDE.
10. 90° WEATHERHOOD
12. 1/2"Ø ALL THREADED RODS ATTACHED TO BUILDING STRUCTURE IN AN APPROVED MANNER.
13. 3"x2" CHANNEL SUPPORT ATTACHED TO WIRE GUARD FRAME. (FOR FAN WITH MOTORS IN EXCESS OF 70 lbs.)

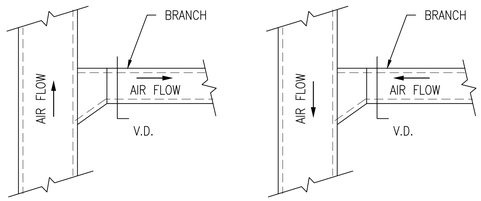
2 WALL MOUNTED PROPELLER FAN INSTALLATION DETAIL
N.T.S.



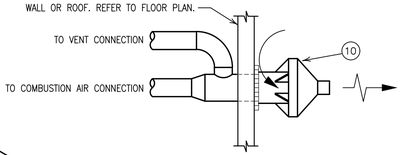
NOTES:

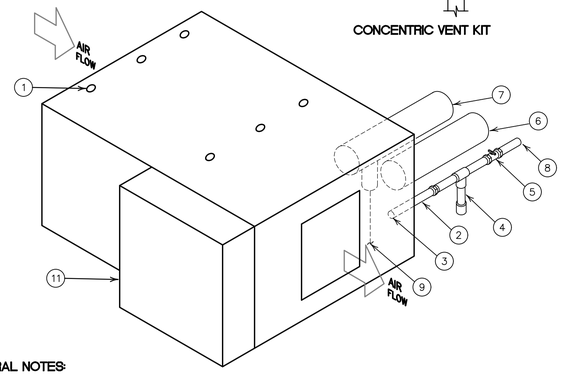
1. RETURN/EXHAUST AIR GRILLE SHALL BE INSTALLED SUCH THAT THE FACE OF THE GRILLE IS FLUSH WITH CEILING.
2. REFER TO DIFFUSER SCHEDULE FOR ADDITIONAL INFORMATION.
3. REFER TO ARCHITECTURAL DRAWING FOR CEILING TYPE AND CONSTRUCTION DETAILS.

3 DUCTED EXHAUST AIR GRILLE DETAIL
NOT TO SCALE



4 DUCT / DIFFUSER TAKE OFF DETAIL
NOT TO SCALE





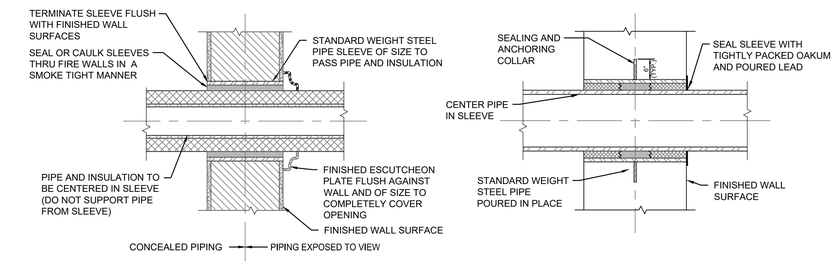
GENERAL NOTES:

1. CONSULT LOCAL CODE AUTHORITIES FOR SPECIFIC REQUIREMENTS.

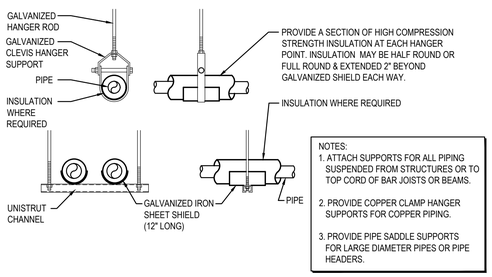
KEYED NOTES:

1. 3/8"- 16 FEMALE THREAD ALL SUSPENSION POINTS.
2. PIPE NIPPLE EXTENDING OUTSIDE THE CABINET.
3. TO GAS VALVE (INSIDE CABINET).
4. 12" DRIP LEG.
5. MANUAL SHUTOFF VALVE.
6. 6" GALVANIZED DUCT COMBUSTION AIR CONNECTION.
7. 6" SCHE. 40 PVC VENT CONNECTION.
8. FROM GAS SUPPLY (PROPANE GAS)
9. CONDENSATE DRAIN TEE, INSTALL 1/2" DRAIN TRAP, PIPE TO FLOOR DRAIN OR OTHER INDIRECT SAN. CONNECTION
10. VENT/COMBUSTION AIR KIT WERE SPECIFIED.
11. CONTROL PANEL

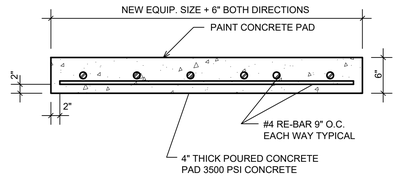
8 MAU INSTALLATION DETAIL
NOT TO SCALE - SCHEMATIC ONLY



5 PIPE SLEEVES THRU WALL DETAILS
NOT TO SCALE



6 PIPE SUPPORT HANGERS
NOT TO SCALE



7 CONCRETE PAD DETAIL
NOT TO SCALE - SCHEMATIC ONLY

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MECHANICAL DETAILS

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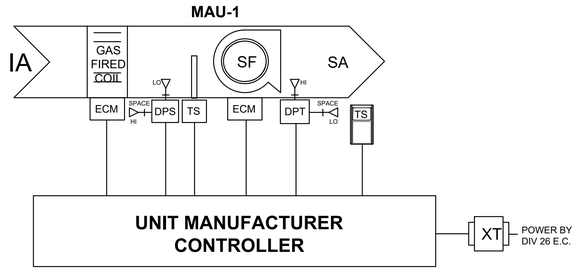
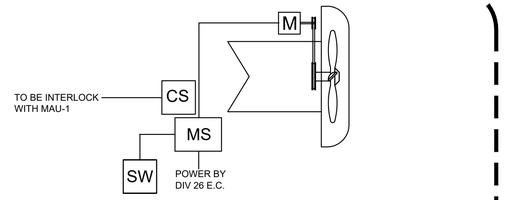


1 MAKEUP AIR UNIT (MAU-1) CONTROLLER
NOT TO SCALE — STAND-ALONE SELF CONTAINED

ADD ALTERNATE #1



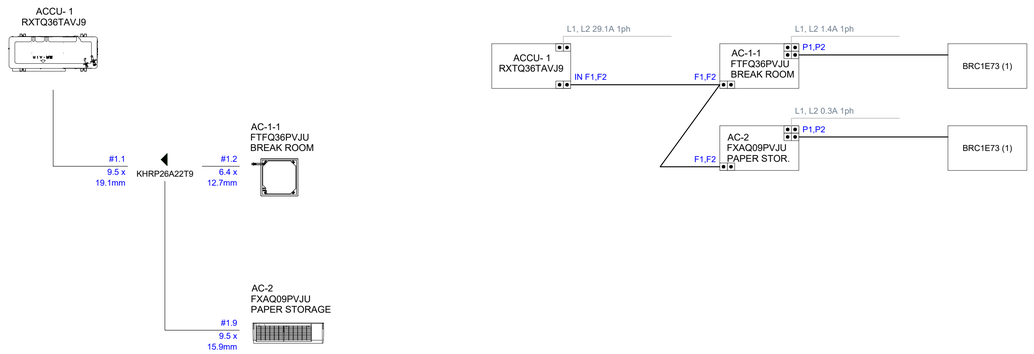
2 EXHAUST FAN EF-1
NOT TO SCALE

ATC DETAIL LEGEND

NOT TO SCALE

AQ	AQUASTAT (SPDT)	———	SHIELDED CABLE - 2 CONDUCTOR - PLENUM RATED #18 AWG MINIMUM) ATC CONTRACTOR SHALL SIZE CONTROL & POWER WIRING (# CONDUCTORS, #AWG, LENGTH, ETC.)
AFS	AIR FLOW STATION (ANALOG)	ES	END SWITCH (SPST)
FS	FLOW SWITCH (DIGITAL)	RH	RELATIVE HUMIDITY SENSOR
A	CONTROL ACTUATOR CONTROL DAMPER OR VALVE	CO	CARBON-MONOXIDE SENSOR
DPS	DIFFERENTIAL PRESSIRE SWITCH (SPDT)	CO2	CARBON-DIOXIDE SENSOR
DPT	DIFFERENTIAL PRESSIRE TRANSDUCER (ANALOG)	SW	WALL-MOUNTED SWITCH
IAQ	INDOOR AIR QUALITY	TS	TEMPERATURE SENSOR (PROBE/IMMERSION)
MS	MAGNETIC STARTER	TS	TEMPERATURE SENSOR (AVERAGING)
VFD	VARIABLE FREQUENCY DRIVE	LLS	LOW-LIMIT TEMPERATURE SWITCH (SPDT)
R	CONTROL RELAY (24VAC-SPDT)	SD	SMOKE DETECTOR (DUCT)
CT	CURRENT TRANSDUCER (ANALOG)	TC	THERMOSTAT SWITCH (SPDT)
CS	CURRENT SWITCH (DIGITAL)	XFMR	120/24VAC TRANSFORMER

ADD ALTERNATE #1



3 HEAT PUMP PIPING AND ELECTRICAL DIAGRAM
NOT TO SCALE — STAND-ALONE SELF CONTAINED

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MECHANICAL CONTROLS
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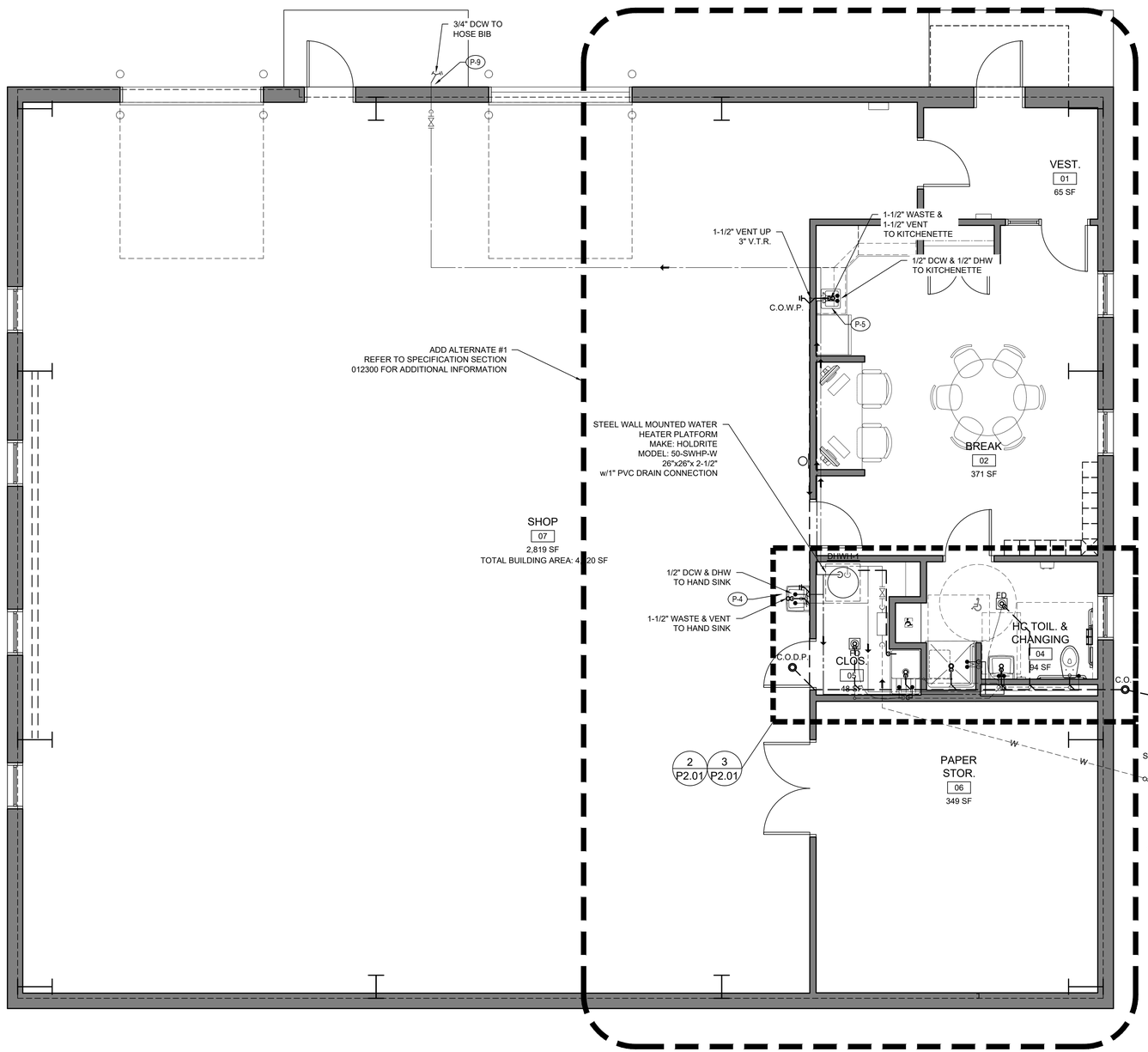
Job No. 4.1449.02

File No. 4144902M001

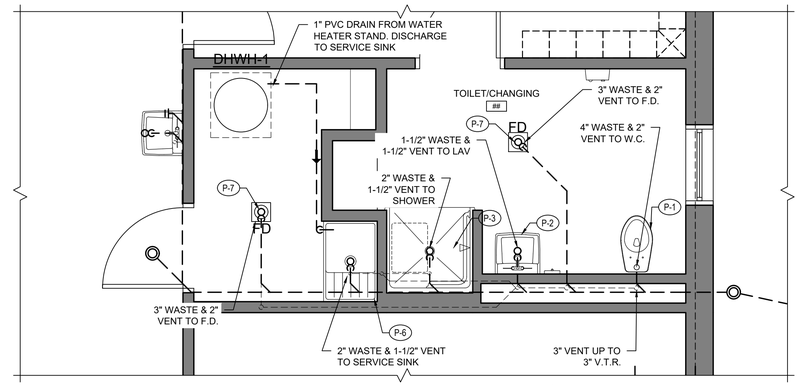
M6.03



1 P2.01 — Proposed 1st Floor Plumbing Plan

1/4" = 1'-0"

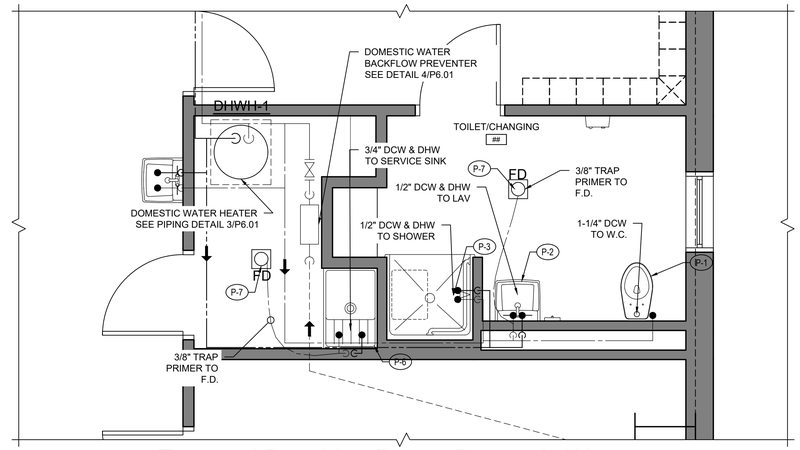
NORTH



2 P2.01 — Enlarged Plumbing Plan - Sanitary/Vent

3/8" = 1'-0"

ADD ALTERNATE #1



3 P2.01 — Enlarged Plumbing Plan - Domestic Water

3/8" = 1'-0"

ADD ALTERNATE #1

Domestic Cold Water (DCW)	
Domestic Hot Water	
Sanitary Waste	
Sanitary Vent	
Propane (LP) Gas	

General Notes

1. ALL WORK SHALL CONFORM TO LATEST EDITION OF NEW YORK STATE ENERGY CODE & PLUMBING CODE, AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND LOCAL AUTHORITY HAVING JURISDICTION.
2. CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
3. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING UP WORK AREAS UPON COMPLETION OF WORK.
5. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES AND INSPECTIONS PRIOR TO COMMENCING WORK. UPON COMPLETION OF WORK THE CONTRACTOR SHALL SECURE CERTIFICATE OF OCCUPANCY.
6. CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
7. ALL PIPING UNDER SLAB IS INCLUDED IN THE BASE BID.

Date	7/8/21
Checked	MAM
Drawn	RJS

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Revisions:

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PROPOSED 1ST FLOOR PLUMBING PLAN
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

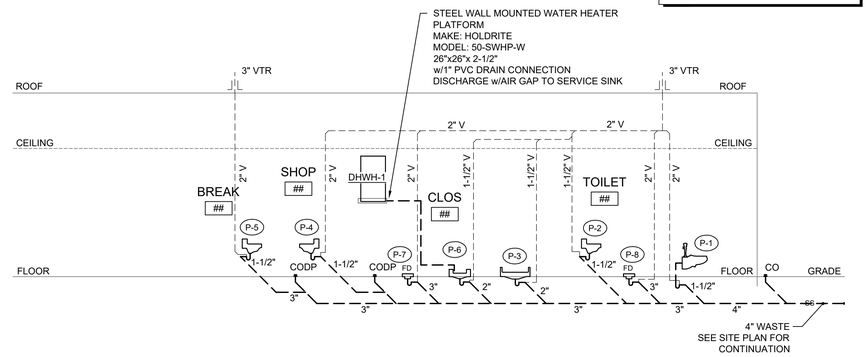
Job No. 4.1449.02

File No. 4144902P001

SED PROJECT #66-08-01-06-3-012-001

P2.01

NOTE:
ALL SANITARY WASTE PIPING IN SLAB/ UNDER SLAB SHALL BE INCLUDED IN THE BASE BID SCOPE OF WORK.



1 P6.01 SANITARY WASTE / VENT PIPING RISER

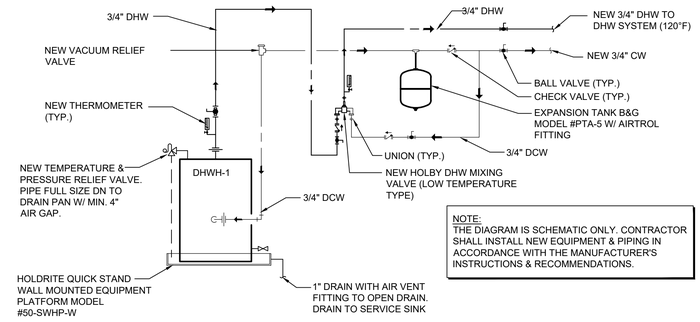
N.T.S.

ELECTRIC DHW HEATER SCHEDULE

(A.O. SMITH AS STANDARD)

TAG No.	QTY.	LOCATION	STORAGE (GAL)	INPUT (KW)	RECOVERY RATE @ 100°F RISE (GPH)	ELECTRIC DATA VOLT/PH/HZ	SIZE	WEIGHT (LBS.)	MODEL & MANUFACTURER	REMARKS
DHWH-1	1	JAN CLOSET	40	5	21	208 / 3 / 60	24" DIA x 32-1/4" H	135	DEL-40D-5 A.O. SMITH	SEE NOTES; WALL MOUNTED

NOTE: PROVIDE TEMPERATURE & PRESSURE RELIEF VALVE. SEE DETAIL FOR ALL REQUIRED VALVES, GAUGES, ACCESSORIES, ETC.

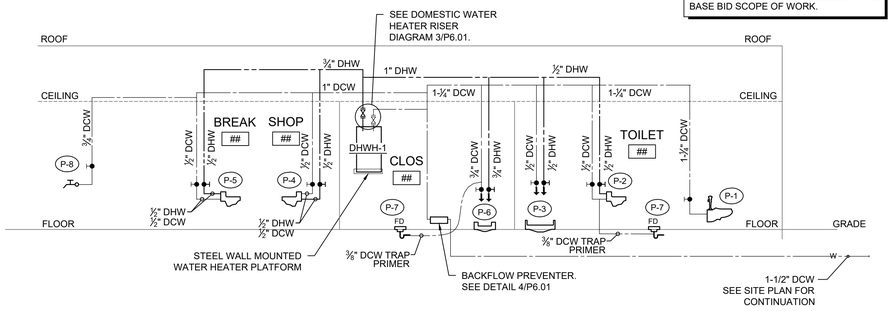


NOTE:
THE DIAGRAM IS SCHEMATIC ONLY. CONTRACTOR SHALL INSTALL NEW EQUIPMENT & PIPING IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS & RECOMMENDATIONS.

3 P6.01 DOMESTIC WATER HEATER PIPING DIAGRAM

N.T.S.

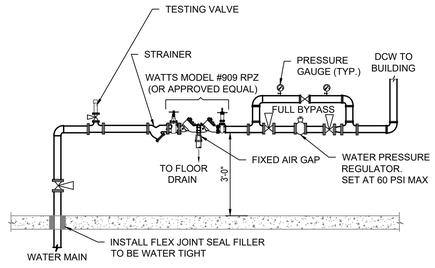
NOTE:
ALL DOMESTIC WATER PIPING IN SLAB/ UNDER SLAB SHALL BE INCLUDED IN THE BASE BID SCOPE OF WORK.



2 P6.01 DOMESTIC WATER PIPING RISER

N.T.S.

- Domestic Cold Water (DCW)
- Domestic Hot Water
- Sanitary Waste
- Sanitary Vent
- Propane (LP) Gas



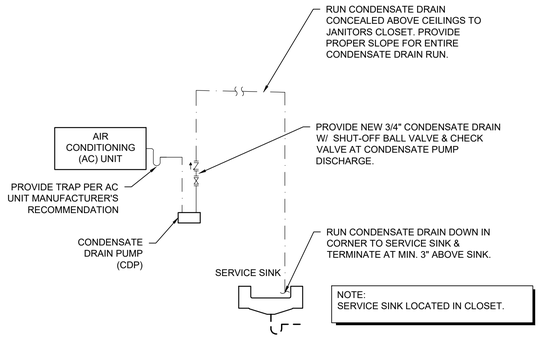
NOTE:
ALL WATER MAIN PIPING IN SLAB/ UNDER SLAB SHALL BE INCLUDED IN THE BASE BID SCOPE OF WORK.

NOTES:

1. ALL PIPING SHALL BE COPPER TYPE "L" W/ SOLDERED FITTINGS (LEAD FREE TYPE). PROVIDE ALL REQUIRED DIELECTRIC FITTINGS FOR CONNECTIONS OF DISSIMILAR METALS.
2. PROVIDE 1/2" DIA. PIPE SUPPORTS FOR RPZ & HORIZONTAL PIPING. THE QUANTITY SHALL BE DETERMINED IN FIELD.
3. RPZ SHALL BE INSTALLED MIN. 8" FROM WALL. INSTALLATION SHALL CONFORM W/ LOCAL WATER COMPANY REGULATIONS & ALL CITY, COUNTY AND STATE HEALTH DEPARTMENT REQUIREMENTS. PC TO COORDINATE PERMITS APPROVAL WITH AHJ.

4 P6.01 BACKFLOW PREVENTER PIPING DETAIL

N.T.S.



NOTE:
SERVICE SINK LOCATED IN CLOSET.

5 P6.01 CONDENSATE DRAIN DETAIL

N.T.S.

ADD ALTERNATE #1 - REFER TO SPECIFICATION SECTION 012300

Date 7/8/21
Checked MAM
Drawn TH

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Revisions:

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SED PROJECT #66-08-01-06-3-012-001

RISER DIAGRAMS
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
THORNWOOD, NY 10594

Job No. 4.1449.02
File No. 4144902P001

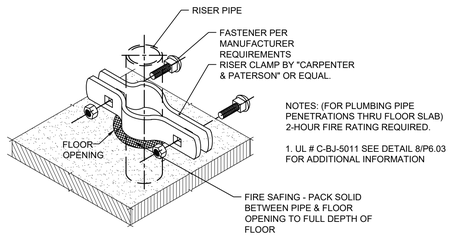
P6.01

PLUMBING FIXTURE SCHEDULE

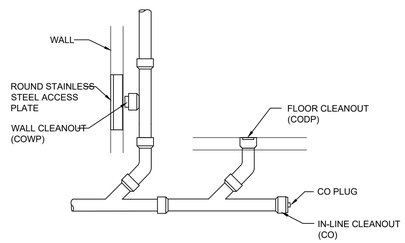
NUMBER	FIXTURE	MANUFACTURER	TYPE & MODEL NO.	TRIM NO.	SUPPLY PIPE NO.	TRAP NO.	SUPPORT NO.	PIPE SIZES					DFU	WSFU	DESCRIPTION
								TRAP	WASTE	VENT	CW	HW			
P-1	WATER CLOSET, PUBLIC/STAFF	AM STANDARD	KINGSTON K-4325	SLOAN ROYAL 111	--	--	J.R. SMITH 0210Y-M54	INTEGRAL	4"	2"	1"	-	6	6	ELONGATED WALL MOUNTED FLUSH VALVE TOILET WITH TOP SPUD, AM STANDARD 2257.101 OPEN-FRONT ELONGATED SEAT 5905.100. PROVIDE WITH SLOAN EXPOSED FLUSHOMETER #ROYAL SMOOTH 1111, 1.28 GPF, HARD WIRED, WATERSENSE LISTED. INSTALL ADA WATER CLOSETS TO MEET ADA HEIGHT REQUIREMENTS. COLOR TO BE WHITE
P-2	LAVATORY	AM STANDARD	LUCERNE 0355.012	SLOAN ETF-880 -4-B-BDT	-	-	J.R. SMITH 0700	1-1/2"	1-1/2"	1-1/2"	½"	½"	2	1	WALL HUNG LAVATORY WITH CONCEALED ARM SUPPORT. PROVIDE WITH SLOAN FAUCET 0.5 GPM. INSTALL ADA LAVATORIES TO MEET ADA HEIGHT REQUIREMENTS. PROVIDE BELOW DECK THERMOSTATIC MIXING VALVE, LIMIT OUTLET TEMPERATURE TO 110°F MAX. COLOR TO BE SELECTED BY OWNER. PROVIDE EL-248 120VAC/24 VAC, 50/60 HZ (40VA) BOX MOUNT TRANSFORMER.
P-3	SHOWER	BESTBATH	4LSS4038ASB	SYMMONS ALLURA 4703	--	--	-	2"	2"	1-1/2"	½"	½"	2	2	PROVIDE GRAB BAR AND SEAT. SEE ARCHITECTURAL PLANS FOR ADDITIONAL ACCESSORIES
P-4	SERVICE/SHOP SINK	AM STANDARD	7695.008	8340.243	--	P-TRAP	FLOOR MOUNTED	2"	2"	1-1/2"	½"	½"	2	2	PROVIDE AM STANDARD 'AKRON" #7695.008 w/ FAUCET 8340.243 WITH VACUUM BREAKER, TRAP 7798.020 2" P-TRAP
P-5	KITCHENETTE SINK	AM STANDARD	22SB.6151511 S.075	-	--	P-TRAP	TOP MOUNTED	1-1/2"	1-1/2"	1-1/2"	½"	½"	2	2	PROVIDE AM STANDARD "COLONY 15x15" STAINLESS STEEL ADA SINGLE BOWL w/ FAUCET ___
P-6	MOP SINK	MUSTEE	65M	63.600A	--	P-TRAP	FLOOR MOUNTED	2"	2"	1-1/2"	½"	½"	2	2	PROVIDE WITH MUSTEE SERVICE SINK FAUCET #63.600A, HOSE AND HOSE HOLDER #65.700, MOP HANGER #65.600, DUREGUARD WALL GUARD #67.2436, DRAIN SEAL #65.311
P-7	3" FLOOR DRAIN	J.R. SMITH	2021S-HP050-CP	--	--	P-TRAP	--	3"	3"	2"	--	--	5	--	SHALLOW TRAP FLOOR DRAIN WITH HINGED GRATE, TRAP PRIMER CONNECTION & CHROME PLATED STRAINER TOP.
P-8	HOSE BIBB	J.R. SMITH	5509QT	--	--	--	--	--	--	--	¾"	--	--	1	NON-FREEZE WALL HYDRANT WITH INTEGRAL VACUUM BREAKER AND STAINLESS STEEL BOX. PROVIDE SHUT-OFF VALVE INSIDE BUILDING.

PLUMBING GENERAL NOTES

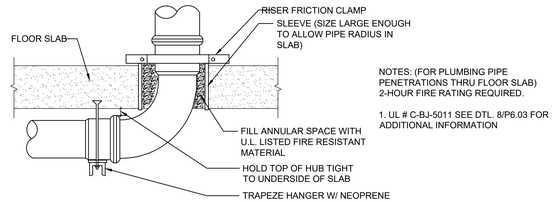
1. PLUMBING CONTRACTOR SHALL VISIT JOB SITE AND NOTE ALL EXISTING CONDITIONS TO BE MET BEFORE SUBMITTING BID. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND SHOW THE INTENT OF WORK.
2. PLUMBING CONTRACTOR TO PROCURE AND PAY FOR ALL NECESSARY PERMITS AND LICENSES REQUIRED TO CARRY OUT WORK, OBTAIN AND PAY FOR ALL NECESSARY CERTIFICATES OF APPROVAL FOR WORK, AND PAY FOR ANY LEGAL FEES.
3. INSTALLATION TO COMPLY WITH ALL FEDERAL, STATE, MUNICIPAL LAWS, AND ALL CODES, RULES, ORDINANCES, AND REGULATIONS OF HEALTH, PUBLIC OR OTHER AUTHORITIES CONTROLLING OR LIMITING THE METHODS, MATERIALS TO BE USED OR ACTIONS OF THOSE EMPLOYED IN THE WORK
4. PLUMBING CONTRACTOR TO PROVIDE TEMPORARY WATER. OWNER TO PAY FOR WATER CONSUMED.
5. PIPE INSTALLATION AS FOLLOWS:
   - 5.A. RUN ALL PIPING CONCEALED IN CEILINGS, WALLS AND PARTITIONS
   - 5.B. ALL PIPING TO BE PITCHED TO LOW POINTS WITH DRAIN VALVES, SOIL, STORM, AND WASTE TO BE SLOPED @ 1/8" PER FOOT MIN.
   - 5.C. SLEEVE PIPING THAT PASSES THROUGH WALLS
   - 5.D. FLASH ALL PIPING THAT PASSES THROUGH ROOF.
   - 5.E. PROVIDE ROD HANGERS WITH CLEVIS PIPE SUPPORT PER NATIONAL PLUMBING CODE 2015.
   - 5.F. PROVIDE VALVES REQUIRED FOR COMPLETE CONTROL OF ALL SYSTEMS. STOP VALVES FOR SUPPLY TO ALL FIXTURES TO BE CHROME PLATED WHERE EXPOSED.
   - 5.G. PROVIDE ACCESS DOORS FOR ALL CONCEALED VALVES AND CLEANOUTS
6. PLUMBING CONTRACTOR TO PERFORM ALL TESTING OF THE PLUMBING WORK IN THE PRESENCE OF THE OWNER. PROVIDE ALL APPARATUS, TEMPORARY CONNECTIONS, AND OTHER REQUIREMENTS TO DO SUCH TESTS. ANY DEFECTS, LEAKS, ETC. WILL BE REPLACED AND TEST REPEATED UNTIL TEST REQUIREMENTS ARE MET.
7. SUBMIT SHOP DRAWINGS OF ALL WORK TO BE DONE, EQUIPMENT, AND FIXTURES FURNISHED.
8. PLUMBING CONTRACTOR TO CARRY OUT PERIODIC CLEANING TO REMOVE RUBBISH ETC., TO LEAVE PREMISES FREE FROM DEBRIS, AND DISCARDED MATERIALS. AFTER INSTALLATION, CLEAN FIXTURES, FITTINGS, ETC. AND LEAVE READY FOR USE.
9. ALL PLUMBING FIXTURES ARE INCLUDED IN ADD ALTERNATE #1. ALL UNDER SLAB AND IN SLAB PIPING THAT WOULD SUPPORT FUTURE INSTALLATION OF THESE FIXTURES SHALL BE INCLUDED IN THE BASE BID.



1 P6.02 **PIPE RISER CLAMP** N.T.S.



2 P6.02 **CLEANOUT DETAIL** N.T.S.



3 P6.02 **BASE OF STACK DETAIL** N.T.S.

PLUMBING SYSTEM MATERIALS

PIPING:

WASTE & VENT PIPING BELOW GRADE SHALL BE SERVICE WEIGHT CAST IRON PIPE WITH GASKETS, ABOVE GRADE SHALL BE NO-HUB SERVICE WEIGHT CAST IRON PIPE WITH STAINLESS STEEL SHIELDED COUPLINGS.

HOT AND COLD WATER PIPING ABOVE GRADE SHALL BE TYPE "L" COPPER WITH WROUGHT COPPER SOLDERED FITTINGS (LEAD-FREE SOLDER). BELOW GRADE SHALL BE TYPE "K" COPPER WITH NO FITTINGS.

INSULATION:

ALL HOT AND COLD WATER PIPING SHALL BE INSULATED WITH 1" THICK FIBERGLASS PIPE INSULATION WITH ASJ JACKET.

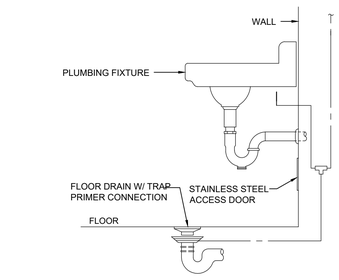
CLEANOUTS:

FLOOR: J.R. SMITH #4020 W/ ROUND NICKEL-BRONZE TOP.

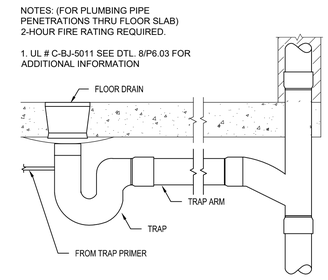
WALL: J.R. SMITH #4532 W/ ROUND STAINLESS STEEL TOP.

LAVATORY PROTECTIVE ENCLOSURE:

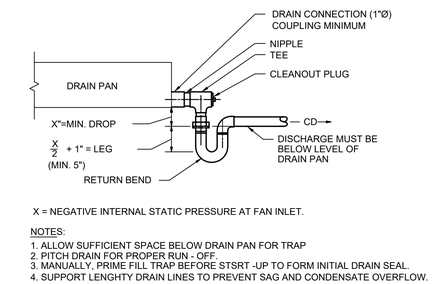
FOR ALL LAVATORIES, INSTALL PROTECTIVE ENCLOSURE "LAV SHIELD" W/ TAMPER-RESISTANT SCREWS BY TRUEBRO OR APPROVED EQUAL.



4 P6.02 **FLOOR DRAIN & TRAP PRIMER** N.T.S.



5 P6.02 **FLOOR DRAIN DETAIL** N.T.S.



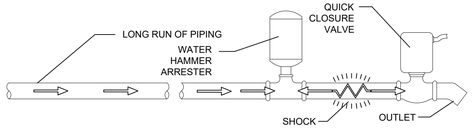
X = NEGATIVE INTERNAL STATIC PRESSURE AT FAN INLET.

NOTES:
1. ALLOW SUFFICIENT SPACE BELOW DRAIN PAN FOR TRAP
2. PITCH DRAIN FOR PROPER RUN - OFF.
3. MANUALLY, PRIME FILL TRAP BEFORE STSRT -UP TO FORM INITIAL DRAIN SEAL.
4. SUPPORT LENGHTY DRAIN LINES TO PREVENT SAG AND CONDENSATE OVERFLOW.

6 P6.02 **CONDENSATE DRAIN TRAP DETAIL** N.T.S.

SIZING & PLACEMENT OF WATER HAMMER ARRESTER (WHA)

THE FOLLOWING CHART INDICATES THE SIZE OF THE WATER ARRESTER REQUIRED FOR LONG RUNS OF PIPING WHICH FEED A SINGLE REMOTE FIXTURE OR APPLIANCE. THE WATER ARRESTER UNIT SHALL BE SIZED BY USING THE CHART AND LOCATED AS CLOSE TO THE POINT OF QUICK CLOSURE AS POSSIBLE.

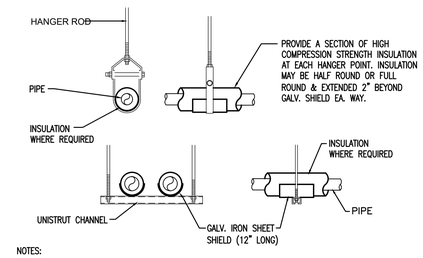


WATER HAMMER ARRESTER SELECTION CHART

LENGTH OF PIPE	NOMINAL PIPE SIZE					
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
25'	5005	5005	5010	5020	5030	5040
50'	5005	5010	5020	5030	5040	5050
75'	5010	5020	5030	1-5005 1-5040	5050	1-5040 1-5050
100'	5020	5030	5040	5050	1-5020 1-5050	2-5050
125'	5020	5030	5050	1-5005 1-5050	1-5040 1-5050	1-5040 2-5050
150'	5030	5040	5050	1-5030 1-5050	2-5050	3-5050

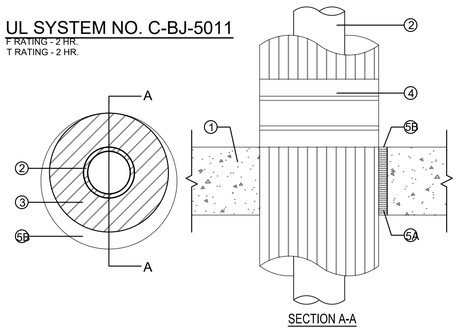
NOTE: THE ABOVE CHART SHOWS LENGTHS OF RUN OF BRANCH PIPING. THE LENGTH OF RUN USED SHALL BE THE LENGTH OF PIPE FROM POINT OF VALVE CLOSURE TO A POINT OF RELIEF, SUCH AS LARGE PIPE RISER TWICE THE SIZE
OF THE BRANCH LINE, MAIN LINE OR WATER TANK.

ALL SIZING RECOMMENDATIONS SHOWN ON THE ABOVE CHART ARE BASED ON AN OPERATING WATER PRESSURE OF 65 PSI OR UNDER AN AVERAGE VELOCITY BETWEEN 5 AND 10 FEET PER SECOND. IF OPERATING PRESSURE IS OVER 65 PSI USE THE NEXT LARGER WATER HAMMER ARRESTER UNIT. WHEN PRESSURE IS ANTICIPATED ABOVE 80 PSI A PRESSURE REDUCING VALVE IS REQUIRED.

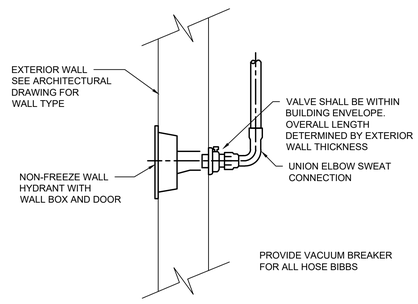


NOTES:
1. ATTACH SUPPORTS FOR ALL PIPING SUSPENDED FROM THE STEEL STRUCTURE TO THE TOP CORD OF JOISTS OR BEAMS.
2. PROVIDE COPPER OR PLASTIC COATED HANGERS FOR NON-INSULATED COPPER PIPE.

7 P6.02 **PIPE SUPPORT HANGERS** N.T.S.



8 P6.02 **TYPICAL PIPE PENETRATION (ALL LOCATIONS)** N.T.S. 2-HOUR RATED



9 P6.02 **WALL HYDRANT DETAIL** N.T.S.

Date 7/8/21
Checked MAM
Drawn TH

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PLUMBING SCHEDULE & DETAILS
NEW MAINTENANCE BUILDING
MOUNT PLEASANT CENTRAL SCHOOL DISTRICT
825 WESTLAKE DRIVE
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