CIVIL/SITE CONSTRUCTION GENERAL NOTES:

1. THESE PLANS REFERENCE LOCATION AND TOPOGRAPHIC SURVEY PREPARED BY:
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   CLIFTON PARK, NY 12065
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   DATED: 01/16/2020

   HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 (NAD83) PROJECTED ON THE NEW YORK STATE PLANE COORDINATE SYSTEM (EAST ZONE)
   VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)
   REFERENCE CONTROL POINT IS CONTINUOUSLY OPERATING REFERENCE STATION (CORS) NEWBURGH CORS ARP (NYNB)

2. PROVIDE IMPROVEMENTS IN ACCORDANCE WITH UNIFIED FACILITIES GUIDE SPECIFICATIONS LATEST EDITION, WITH AMENDMENTS THERETO AND AS SPECIFIED IN THESE CONTRACT DRAWINGS AND APPENDICES.

3. PRIOR TO ANY CONSTRUCTION, PROVIDE A PHASING PLAN INCLUSIVE OF A WRITTEN SEQUENCE OF CONSTRUCTION AND PLANS SHOWING PHASED WORK AREAS, STOCKPILE AREAS, WORKER PARKING AREAS, TRAILER LOCATION, MATERIAL STORAGE AREAS, MAINTAINED SITE ENTRANCE LOCATION, PORTABLE SANITARY STATIONS, HAUL ROUTES AND ALL OTHER NECESSARY CONTRACTOR CONSTRUCTION AREAS. ALL MATERIAL STORAGE AND CONTRACTOR OPERATIONS MUST BE LOCATED WITHIN THE LIMIT OF DISTURBANCE IDENTIFIED ON THE PLANS. SUBMIT PHASING PLAN TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL. CONTRACTOR MUST FOLLOW THE HAUL ROUTE AS DEPICTED ON SHEET CS102 "TRUCK ACCESS PLAN".

4. PROVIDE PROPER AND SUFFICIENT CONSTRUCTION PROTECTION TO THE WORKERS AND ALL PERSONNEL ONSITE. OSHA EM 385-1-1, AND OTHER FEDERAL, STATE, AND LOCAL CODES MUST BE FOLLOWED.

5. WORK AND MATERIAL MUST MEET THE STANDARD DOCUMENTS AND PROCEDURES FOR USMA, INCLUDING REQUIREMENTS OF THE UNITED FACILITIES CRITERIA (UFC), ENGINEERING PLANNING STANDARDS FOR WEST POINT, WEST POINT INSTALLATION DESIGN GUIDE, LOCAL, STATE, AND FEDERAL LAWS, STATUTES, RULES, AND REGULATIONS, LATEST EDITION.

6. PERFORM WORK IN A SAFE AND CAUTIOUS MANNER IN ACCORDANCE WITH EM 385-1-1.

7. QUANTITIES SHOWN HEREIN ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY. VERIFY ALL QUANTITIES AND PROVIDE SUPERINTENDENCE, MATERIAL, LABOR, SURVEYING, AND COORDINATION NECESSARY TO CONSTRUCT THE PROJECT COMPLETE AND AS GENERALLY INTENDED IN THE CONTRACT DOCUMENTS. CONTRACTOR MUST PROVIDE COORDINATION WITH CONTRACTING OFFICER, USMA AUTHORITIES, AND UTILITIES FOR ALL INTERFACING REQUIRED BY THE PROJECT.

8. AT NO COST TO THE GOVERNMENT, DISTURBED AREAS OUTSIDE THE LIMIT OF DISTURBANCE, MUST BE RESTORED TO EXISTING CONDITIONS .

9. IMPLEMENT AND MAINTAIN ALL SOIL EROSION CONTROL STRUCTURES AND MEASURES THROUGHOUT CONSTRUCTION. FOLLOW NYSDEC SOIL EROSION AND SEDIMENT CONTROL REQUIREMENTS.A SEQUENCE OF CONSTRUCTION MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL..

10. IN CASE OF DISCREPANCIES BETWEEN THESE PLANS AND THE PROJECT SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT MUST APPLY.

11. SUBMISSIONS REQUIRED FOR DOCUMENTATION OF CONFORMANCE TO THE CONTRACT PLANS, DOCUMENTS, AND SPECIFICATIONS MUST BE PROVIDED TO THE CONTRACTING OFFICER FOR DISTRIBUTION TO THE APPROPRIATE REVIEWER.

12. INGRESS AND EGRESS TO AND FROM THE CONSTRUCTION SITE MUST BE KEPT READILY ACCESSIBLE AND UNOBSTRUCTED AT ALL TIMES. CONSTRUCTION EQUIPMENT MUST NOT OBSTRUCT ROADWAYS AND/OR PASSAGEWAYS UNLESS PRE-APPROVAL IS REQUESTED FROM THE COR 14 DAYS PRIOR TO NEED (FOR ITS SUBMISSION TO USMA AN DPW). NO PARKING OR STOPPING ALONG INGRESS-EGRESS ROUTE WILL BE PERMITTED.

13. MAINTAIN THE CONSTRUCTION SITE AND THE AREAS OF WORK DAILY. CONSTRUCTION DEBRIS MUST BE REMOVED FROM THE CONSTRUCTION SITE ON A DAILY BASIS. NO BURNING OF DEBRIS OR USE OF EXPLOSIVES WILL BE PERMITTED.

14. PREPARE, LAYOUT, AND INSTALL WORK IN SUCH A MANNER AS NOT TO DELAY OR INTERFERE WITH THE PROGRESS OF OTHER INSTALLATION CONTRACT WORK AND/OR ANY WORK DESIGNATED TO BE PERFORMED UNDER ANY OTHER CONTRACT ON THE INSTALLATION AND/OR ANY OTHER WORK IN PROGRESS ON THE INSTALLATION.

15. PROVIDE ALL TESTING SERVICES AND SUBMIT, TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL. PROVIDE A LIST OF ALL TESTS TO BE PERFORMED BY EACH TESTING SERVICE.

16. QUALITY CONTROL INSPECTION AND TESTING MUST BE MADE BY A USACE-APPROVED LABORATORY UNDER CONTRACT TO THE CONTRACTOR. COPIES OF REPORTS AND TESTING RESULTS ASSOCIATED WITH THE CONTRACTOR'S QUALITY CONTROL PROGRAM MUST BE SUBMITTED TO THE CONTRACTING OFFICER.

17. ILLUMINATE AND PROTECT ALL ELEMENTS COMPLETED OR PARTIALLY COMPLETED AND EXCAVATED TRENCHES AND OPENINGS AT ALL TIMES TO PROTECT AGAINST INJURY TO WORKERS, PEDESTRIANS, WILDLIFE, ETC.

18. DO NOT SCALE DRAWINGS. DETAILS, NOTES, AND THE LIKE ARE TYPICAL AND APPLY IN GENERAL TO SIMILAR CONDITIONS.

19. BY SUBMITTING A PROPOSAL OR AGREEMENT TO PERFORM WORK, THE CONTRACTOR AGREES THAT THEY ARE SKILLED AND EXPERIENCED IN THE USE AND INTERPRETATION OF PLANS AND SPECIFICATIONS, THEY HAVE CAREFULLY REVIEWED THE PLANS AND SPECIFICATIONS FOR THIS PROJECT AND HAVE FOUND THEM TO BE FREE OF AMBIGUITIES AND SUFFICIENT FOR BID AND CONSTRUCTION PURPOSES. FURTHER, THEY HAVE CAREFULLY EXAMINED THE SITE OF THE WORK AND FROM THEIR OWN OBSERVATIONS ARE SATISFIED AS TO THE NATURE AND LOCATION OF THE WORK; THE CHARACTER, QUALITY, AND QUANTITY OF MATERIALS; THE DIFFICULTIES LIKELY TO BE ENCOUNTERED, AND OTHER ITEMS WHICH MAY AFFECT THE PERFORMANCE OF WORK OTHERWISE, COMPLY WITH NYSDEC AND NYSDOT REQUIREMENTS.

20. WORK MUST BE SCHEDULED AND FULLY COORDINATED IN ADVANCE OF PERFORMANCE WITH THE CONTRACTING OFFICER.

21. ALL CURB/EDGE OF PAVEMENT RADII ARE MINIMUM 3' UNLESS OTHERWISE NOTED.

22. PROVIDE MAINTENANCE OF TRAFFIC PLANS AND TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REQUIREMENTS. COORDINATE WITH THE CONTRACTING OFFICER.

23. THE CONTRACTOR MUST FOLLOW ALL LIFE SAFETY MEASURES APPLICABLE TO THE PROJECT. FIRETRUCK ACCESS TO CULLUM HALL AND THE SURROUNDING BUILDINGS MUST BE MAINTAINED AT ALL TIMES. THE CONTRACTOR MUST NOTIFY WEST POINT FIRE DEPARTMENT AND DPW 14-DAYS PRIOR TO ANY ACTIVITY THAT PREVENTS FIRE TRUCK ACCESS TO THE PROJECT AREA.

24. STRICTLY OBSERVE POLICE AND FIRE PREVENTION CODES AND REGULATIONS AT ALL TIMES.

25. THE CONTRACTOR MUST MAINTAIN OPEN TWO-WAY TRAFFIC ROUTES ALONG CULLUM ROAD FOR VEHICLES AT ALL TIMES. THE CONTRACTOR MUST SUBMIT A TRAFFIC SAFETY PLAN OR ROADWAY CLOSURE PLAN TO WEST POINT DPW FOR APPROVAL, 14-DAYS PRIOR TO ANY LANE OR ROADWAY CLOSURE.

26. THE CONTRACTOR MUST DESIGNATE A VEHICLE TIRE WASH AREA AND COORDINATE THE LOCATION WITH THE CONTRACTING OFFICER. ALL CONSTRUCTION VEHICLES MUST BE WASHED PRIOR TO LEAVING THE PROJECT SITE. THE WASH AREA MUST BE SWEPT CLEAN DAILY AND ACCEPTED BY THE CONTRACTING OFFICER.

27. CLEANING/WASHOUT OF CONCRETE DELIVERY VEHICLES MUST BE LIMITED TO CLEANING THE CHUTES WITH AS LITTLE WATER AS POSSIBLE. THE WATER MUST BE DISCHARGED INTO ONE OF THE FOLLOWING:

    FOR CONCRETE DELIVERIES EXCEEDING 30 CY OVER A 1 WEEK PERIOD:
    1. PROVIDE A PORTABLE, SELF-CONTAINED AND WATERTIGHT ROLL-OFF METAL BIN/CONTAINER THAT IS DELIVERED AND COLLECTED BY A FIRM THAT SPECIALIZES IN CONCRETE WASHOUT CONTAINERS AND RECYCLING.

    FOR PERIODIC CONCRETE DELIVERIES LESS THAN 30 CY OVER A 1 WEEK PERIOD THE FOLLOWING WASH-OUT CONTAINER IS ACCEPTABLE:
    1. A HEAVY-DUTY, WOVEN POLYPROPYLENE OUTER BAG WITH 6-MM CORRUGATED PLASTIC INNER WALLS OR A 6-MM POLYETHYLENE LINER.
    2. A WATER RESISTANT CORRUGATED BOX AND A 6-MM POLY LINER.
    3. A REINFORCED PVC, UV AND WEATHER RESISTANT FORMED STRUCTURE.

    THE WASHOUT STRUCTURE SHALL BE STURDY ENOUGH FOR PICK-UP AND REMOVAL ONCE THE CONCRETE HAS HARDENED. IT SHALL BE PLACED AND SECURED IN A LEVEL AREA AWAY FROM ANY STORM DRAINS AND WATERCOURSES. ONCE THE CONCRETE HAS HARDENED, ANY REMAINING WATER SHALL BE PUMPED FROM THE WASHOUT AND DISPOSED OF AT A FACILITY PERMITTED TO RECEIVE LIQUID WASTE. THE SOLID CONCRETE RESIDUE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH LOCAL REGULATIONS. UNDER NO CIRCUMSTANCES SHALL THE DRUM OF THE TRUCK BE EMPTIED OF EXCESS CONCRETE AND/OR WASHED-OUT ON SITE. SIMILAR PROCEDURES SHALL BE ADHERED TO FOR WASHOUT OF PORTABLE CEMENT AND CONCRETE MIXERS.

    SUBMIT SHOP DRAWINGS OF THE PROPOSED WASHOUT CONTAINER AND LOCATION FOR APPROVAL PRIOR TO ANY CONCRETE DELIVERY.

DEMOLITION NOTES:

1. BEFORE THE EXECUTION OF WORK, FOLLOW THE USMA DPW DIG SAFE GUIDELINES WITHIN AND OBTAIN A PROJECT DIG SAFE PERMIT FOR UTILITIES ON/ADJACENT TO THE SITE. CONTACT " DIG SAFELY NY" AT 811 PRIOR TO CONSTRUCTION. NOTIFY NYS ONE-CALL AND ALL LOCAL UTILITY COMPANIES/PURVEYORS OWNING OR HAVING JURISDICTION CONCERNING UTILITIES.

2. THE INTENT OF THE DEMOLITION SHOWN ON THE DRAWINGS IS TO GENERALLY OUTLINE THE TYPES OF MATERIALS TO BE REMOVED AND THE LIMITS OF THE REMOVALS. THE QUANTITY OF ITEMS TO BE REMOVED WITHIN THE LIMIT OF DEMOLITION MAY VARY FROM THOSE DEPICTED ON THE PLANS. THE INTENT AND REQUIREMENT IS FOR THE CONTRACTOR TO REMOVE THE EXISTING VEGETATION AND IMPROVEMENTS AND REGRADE AS REQUIRED TO CONSTRUCT THE PROPOSED DEVELOPMENT. ALL MEANS AND METHODS INCLUDING SAFETY REQUIREMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

3. SURFACE AND SUBGRADE DISTURBANCE BELOW THE PAVEMENT DGA MUST NOT EXCEED 0.99 AC. WITHIN THE PROJECT LIMIT OF DISTURBANCE. CONTRACTOR MUST NOTIFY CONTRACTING OFFICER IF THE DISTURBANCE THRESHOLD WILL BE EXCEEDED PRIOR TO ANY EXCAVATION.

4. REMOVE SIGNS, STRUCTURES, FENCES, AND EXISTING IMPROVEMENTS FROM THE CONSTRUCTION SITE AS REQUIRED. THE SITE MUST BE LEFT IN AN ORDERLY AND NEAT CONDITION.

5. REMOVE/RELOCATE EXISTING UTILITY SERVICES, WHERE SHOWN ON PLANS AND UNCOVERED BY DEMOLITION, CONSISTENT WITH THE DRAWINGS AND TO THE EXTENT AND MANNER SATISFACTORY TO THE CONTRACTING OFFICER AND UTILITY COMPANIES INVOLVED.

6. PIPES, CULVERTS, ETC. WITHIN AND NEAR THE AREA OF WORK MUST BE KEPT FREE FROM MATERIAL ENTERING THE DRAINAGE SYSTEMS DURING CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION, REMOVE ALL ACCUMULATED SEDIMENT. DISPOSE OF ALL UNSUITABLE OR EXCESS EXCAVATED MATERIALS OFF OF GOVERNMENT PROPERTY.

7. EXERCISE CARE TO PREVENT DAMAGE TO AND PROTECT ANY MATERIALS OR STRUCTURES THAT ARE TO REMAIN IN PLACE. TAKE ALL NECESSARY PRECAUTIONS IN EXCAVATING AND HAND EXCAVATE AS DEEMED NECESSARY TO PROTECT SUBSURFACE UTILITIES. DAMAGE TO ANY EXISTING UTILITY RESULTING FROM THE CONTRACTOR'S OPERATIONS MUST BE IMMEDIATELY REPAIRED IN A MANNER AS APPROVED BY THE CONTRACTING OFFICER AT NO ADDITIONAL COST TO THE GOVERNMENT. IF THE CONTRACTING OFFICER DEEMS IT IS NECESSARY, THE CONTRACTING OFFICER CAN REQUIRE REPAIR OPERATIONS TO BE PERFORMED CONTINUOUSLY UNTIL WORKS ARE ACCEPTABLE TO THE CONTRACTING OFFICER AND AT NO ADDITIONAL COST TO THE GOVERNMENT.

8. DESIGN TEMPORARY CLOSURES, BARRICADES, RAILINGS, AND TEMPORARY PROTECTION USED TO PROTECT THE WORK, AND PERSONNEL IN ACCORDANCE WITH EM 385, CHAPTER 23. IF REQUESTED, PROVIDE DRAWINGS INDICATING THE LOCATIONS, EXTENT, AND CONSTRUCTION DETAILS OF SAME. ALL TEMPORARY CONSTRUCTION STRUCTURES MUST BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.

9. PROTECT ALL AREAS OUTSIDE THE LIMIT OF DISTURBANCE WHICH ARE ADJACENT TO CONSTRUCTION ACTIVITY. ALL AREAS OUTSIDE THE LIMIT OF DISTURBANCE WHICH ARE DAMAGED BY THE CONTRACTOR, MUST BE RESTORED TO THEIR ORIGINAL CONDITION AND THAT OF THE SURROUNDING AREA. THE RESTORATION MUST BE DONE AT NO ADDITIONAL COST TO THE GOVERNMENT AND MUST BE APPROVED BY CONTRACTING OFFICER.

10. HAUL EXCAVATED SOIL, DEMOLISHED MATERIAL, RUBBISH AND DEBRIS OFF-SITE AND OFF INSTALLATION EXCEPT ITEMS DIRECTED BY THE CONTRACTING OFFICER TO BE SALVAGED. DEMOLISHED MATERIAL TO BE MANAGED ACCORDING TO THE PROJECT ENVIRONMENTAL CONTROLS SPECIFICATIONS. ITEMS FROM THE SITE MUST BE LEGALLY DISPOSED OF WITHOUT DISRUPTING VEHICULAR OR PEDESTRIAN FLOW.

11. RE-USE/PROCESSING OF ASPHALT/CONCRETE WILL NOT BE ALLOWED ON SITE.

12. PREVENT CONTAMINATED WATER, GASOLINE, OR ANY OTHER CONTAMINANTS FROM ENTERING THE PROJECT AREAS. FOLLOW REQUIREMENTS FOR SPILL RESPONSE.

13. MANAGEMENT OF WASTES GENERATED FROM THIS PROJECT AS WELL AS UNKNOWN CONTAMINATION IS ADDRESSED IN THE CONTRACT DOCUMENTS.

14. CONTROL DUST BY PERIODICALLY SPRAYING WORK AREA WITH WATER, PER NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, LATEST EDITION.

15. EXISTING INLETS, STORMWATER PIPING AND/OR SWALES IMMEDIATELY BELOW THE DISTURBED AREAS MUST HAVE EROSION CONTROL WORKS INSTALLED TO PREVENT ENTRY OF SEDIMENT DURING CONSTRUCTION. DISTURBED AREAS MUST BE STABILIZED IN ACCORDANCE WITH THE SOIL EROSION CONTROL PLAN AND NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, LATEST EDITION. A SEQUENCE OF CONSTRUCTION SCHEDULE MUST BE SUBMITTED AND APPROVED BY THE CONTRACTING OFFICER PRIOR TO START OF WORK.

16. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS, EQUIPMENT, AND UNUSED MATERIALS FROM GOVERNMENT PROPERTY.

17. THE CONTRACTOR MUST FOLLOW THE GUIDELINES OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY FOR SHORT TERM NOISE STANDARDS.

18. THE ABATEMENT OF HAZARDOUS MATERIALS, IF ENCOUNTERED, MUST BE COMPLETED IN ACCORDANCE WITH THE PROJECT DOCUMENTS TO THE SATISFACTION OF THE GOVERNMENT.

GRADING NOTES:

1. THE GEOTECHNICAL INVESTIGATION REPORT PREPARED FOR THIS PROJECT IS INCLUDED IN THE PROJECT SPECIFICATIONS AND MUST BE REVIEWED THOROUGHLY PRIOR TO BID SUBMISSION / CONSTRUCTION. REFER TO GEOTECHNICAL REPORT FOR CLASSIFICATION OF SUBGRADE MATERIALS.

2. DESIGN TEMPORARY CONSTRUCTION STRUCTURES SUCH AS SHEETING & SHORING FOR EXCAVATIONS. PROVIDE DESIGN CALCULATIONS AND DRAWINGS SHOWING LOCATION, EXTENT, AND CONSTRUCTION DETAILS OF SAID TEMPORARY STRUCTURES AND SUPPORTS PROPOSED. DOCUMENTS MUST BE PREPARED AND SEALED BY A NYS LICENSED PROFESSIONAL ENGINEER. CONTRACTOR MUST SUBMIT A TASK SPECIFIC EXCAVATION AND SHORING PLAN TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL PRIOR TO ANY SITE EXCAVATION.

3. MAXIMUM SLOPE OF RESTORED AREAS MUST BE 3:1 UNLESS OTHERWISE NOTED. ALL EXPOSED EXCAVATIONS MUST BE STABILIZED IN ACCORDANCE WITH NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (BLUE BOOK), LATEST EDITION.

4. ALL SUBBASE AND SUBBASES MATERIAL MUST BE PLACED AND COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. PROVIDE CERTIFICATION BY A PROFESSIONAL GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF NEW YORK THAT ALL SUBGRADE, FILL, AND SUBBASE BELOW AND AGAINST IMPROVEMENTS INCLUDING FOUNDATIONS, PAVEMENT, BELOW GRADE STRUCTURES, SIDEWALKS, WALLS, AND OTHER PROJECT COMPONENTS HAVE BEEN COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

5. NOTIFY THE CONTRACTING OFFICER OF ANY SUBGRADES NOT MEETING THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS. PROVIDE THE CONTRACTING OFFICER WITH RECOMMENDATIONS FOR REMOVAL LIMITS.

6. ALL IMPORTED FILL MATERIAL MUST BE OBTAINED FROM AN APPROVED OFF-POST BORROW AREA. ALL EXCAVATED MATERIAL FROM THE PROJECT SITE MUST BE DISPOSED OFF-POST AS WASTE. REFER TO THE PROJECT SPECIFICATIONS FOR SATISFACTORY MATERIAL REQUIREMENTS.

7. BORROW OR SELECT FILL MUST BE SELECT GRANULAR FILL PURCHASED FROM AN APPROVED SAND AND GRAVEL COMPANY AND BROUGHT TO THE CULLUM HALL SITE. THE SAND AND GRAVEL COMPANY MUST SUBMIT A CERTIFICATE OF COMPLIANCE WITH CONTRACT SPECIFICATIONS. CONTRACTOR MUST SUBMIT DOCUMENTATION THAT BORROW/SELECT FILL COMPLY WITH THE CONTRACT DOCUMENTS, FEDERAL, STATE AND LOCAL REQUIREMENTS. CONTRACTOR MUST SUBMIT BORROW SITE AND TESTING DATA PER THE PROJECT SPECIFICATIONS.

8. THE BOTTOM OF ALL EXCAVATIONS OR FOUNDATIONS MUST BE SCARFIED TO A MINIMUM DEPTH OF 6" AND COMPACT AS INDICATED WITHIN THE CONTRACT DOCUMENTS.

9. ALL EXCAVATED MATERIAL MUST BE HAULED OFF-SITE AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

10. PROPOSED SPOT ELEVATIONS AND CONTOURS SHOWN ARE FINISHED GRADE UNLESS OTHERWISE NOTED.

11. ALL EXISTING GRADES MUST BE VERIFIED PRIOR TO CONSTRUCTION.

12. PROVIDE GRADE SHEETS TO THE CONTRACTING OFFICER FOR REVIEW PRIOR TO PAVEMENT/CURBING/SIDEWALK INSTALLATION.

13. THE MAXIMUM GRADE WITHIN ACCESSIBLE PARKING STALLS/ACCESS AISLES MUST BE 2.0%.

14. ACCESSIBLE ACCESS WAYS AND IMPROVEMENTS MUST BE IN ACCORDANCE WITH FEDERAL REQUIREMENTS.

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: KM
DRAWN BY: DP
CHECKED BY: JK
SUBMITTED BY:
SIZE: ANSI D
ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO.: 20190494

U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NEW YORK, NY

JACOBS / EWING COLE *A Joint Venture*

US ARMY
WEST POINT CULLUM HALL
WEST POINT, NEW YORK

CIVIL
GENERAL NOTES

SHEET IDENTIFICATION

C-001

CIVIL CONCRETE AND REINFORCEMENT NOTES:

1. DESIGN IS BASED ON THE FOLLOWING MATERIAL STRENGTHS USING NORMAL WEIGHT CONCRETE:
   A. 28-DAY CONCRETE CYLINDER STRENGTH:
      SLABS ON GROUND 4,000 PSI
   B. DEFORMED BAR REINFORCEMENT 60,000 PSI
   C. WELDED WIRE REINFORCEMENT 65,000 PSI

2. PROVIDE THE FOLLOWING MINIMUM COVER FOR REINFORCEMENT:
   A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH. 3 IN.
   B. CONCRETE EXPOSED TO WEATHER.
      NO. 6 THROUGH NO. 18 BARS 2 IN.
      NO. 5 BARS AND SMALLER 1 1/2 IN.

3. PROVIDE ½" PRE-FORMED EXPANSION JOINTS AGAINST ALL HARD SURFACES INCLUDING BUT NOT LIMITED TO OTHER CONCRETE STRUCTURES, MASONRY OF ANY KIND, METALS OF ANY KIND, ETC.

DRAINAGE & UTILITY NOTES:

1. NOTIFY AND COORDINATE WITH WEST POINT DPW AND/OR UTILITY COMPANIES FOR ALL UTILITY RELATED WORK.
2. REFER TO ALL CONTRACT DRAWINGS FOR LOCATION AND SIZES OF GAS, ELECTRICAL,TELECOMMUNICATIONS, STORM, WATER, AND SANITARY CONNECTIONS TO THE BUILDING.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST OBTAIN A USMA DPW DIG SAFE PERMIT FOR THE PROJECT.
4. LOCATION AND SIZES OF UTILITIES ARE APPROXIMATE. CONSTRUCTION MUST COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES MUST BE FIELD VERIFIED BY TEST PIT(S) PRIOR TO PURCHASING MATERIALS AND THE COMMENCEMENT OF CONSTRUCTION. DISCREPANCIES MUST BE REPORTED IMMEDIATELY IN WRITING TO THE CONTRACTING OFFICER.
5. THE CONTRACTOR MUST PROTECT ADJACENT UTILITIES DURING CONSTRUCTION TO AVOID DAMAGE AND MUST TAKE ALL NECESSARY PRECAUTIONS IN EXCAVATING. HAND EXCAVATE AS DEEMED NECESSARY TO PROTECT SUBSURFACE UTILITIES. DAMAGE TO ANY EXISTING UTILITY RESULTING FROM THE CONTRACTOR'S OPERATIONS MUST BE IMMEDIATELY REPAIRED IN A MANNER AS APPROVED BY THE CONTRACTING OFFICER AT NO ADDITIONAL COST TO THE GOVERNMENT. IF THE CONTRACTING OFFICER DEEMS IT IS NECESSARY, THE CONTRACTING OFFICER CAN REQUIRE REPAIR OPERATIONS TO BE PERFORMED CONTINUOUSLY UNTIL WORKS ARE ACCEPTABLE TO THE CONTRACTING OFFICER AND AT NO ADDITIONAL COST TO THE GOVERNMENT.
6. UTILITY MANHOLE / VALVE COVERS, RIMS, GRATES, VENTS, AND OTHER COMPONENTS WHICH ARE NOT BEING REMOVED AND ARE WITHIN AREAS OF DISTURBANCE MUST BE RESET TO GRADE.
7. CONCRETE THRUST BLOCKS MUST BE INSTALLED ON ALL WATER LINE BENDS, TEES, CROSSES, ELBOWS, VALVES, CAPS, ETC. IN ACCORDANCE WITH THE THRUST BLOCK DETAIL. RESTRAINED JOINTS MAY BE SUBSTITUTED IN LIEU OF THRUST BLOCKS. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS OF THE JOINT FITTINGS TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL.
8. THE EXISTING WATER SYSTEM WILL BE OPERATIONAL DURING THE RENOVATION OF CULLUM HALL.
9. NEW WATER MAIN SERVICE CONNECTIONS MUST BE DIP AND MUST BE INSTALLED WITH A MINIMUM OF 54" OF COVER FROM FINISHED GRADE TO TOP OF THE PIPE. DISINFECTION, HYDROSTATIC TESTING, AND BACTERIOLOGICAL TESTING MUST BE PERFORMED IN ACCORDANCE WITH UFC / AWWA / WATER COMPANY SPECIFICATIONS.
10. THE LOCATION, ELEVATION, AND SIZE OF EXISTING UTILITIES SHOWN ON THE CONTRACT DRAWINGS ARE APPROXIMATE. THE FOLLOWING MUST BE PERFORMED:
    A. VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE WORK AREA PRIOR TO CONSTRUCTION. EXCAVATE TEST PITS AS REQUIRED;
    B. EXERCISE EXTREME CAUTION WHEN WORKING ADJACENT TO EXISTING STORM, SANITARY, GAS, STEAM SYSTEMS, POWER, COMMUNICATIONS OR WATER LINES TO PREVENT DAMAGE. INSTALL SUPPORTS AND BRACES AS REQUIRED. THE DESIGN AND CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK, MUST BE SUBMITTED TO THE COR FOR REVIEW AND APPROVAL PRIOR TO EXCAVATION.
    C. IMMEDIATELY REPAIR ANY DAMAGE TO THE EXISTING UTILITIES RESULTING FROM CONSTRUCTION AT NO ADDITIONAL COST TO THE GOVERNMENT.
    D. MAINTAIN UTILITIES IN ACTIVE OPERATION AT ALL TIMES UNLESS THEY ARE TO BE ABANDONED OR REMOVED;
    E. NOTIFY AND OBTAIN APPROVALS FROM UTILITY COMPANY/WEST POINT DPW/CONTRACTING OFFICER, PRIOR TO PERFORMING WORK.
    F. UTILITIES THAT ARE TO BE ABANDONED/REMOVED MUST BE APPROVED BY THE CONTRACTING OFFICER. SERVICES TO ADJACENT FACILITIES MUST NOT BE INTERRUPTED.
11. PRE-CAST CONCRETE STRUCTURES AND REINFORCING STEEL WITHIN PRE-CAST STRUCTURES MUST BE DESIGNED BY THE STRUCTURE MANUFACTURER. REINFORCING STEEL WITHIN POURED-IN-PLACE DRAINAGE STRUCTURES MUST BE DESIGNED BY A NYS LICENSED ENGINEER AND SUBMITTED TO THE CONTRACTING OFFICER FOR REVIEW.
12. SHOP DRAWINGS FOR ALL STRUCTURES MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK AND SUBMITTED FOR REVIEW AND APPROVAL BY CONTRACTING OFFICER.
13. SANITARY SEWER PIPE MUST BE SDR 35 PVC AND MUST BE TESTED FOR COMPLIANCE WITH ASTM STANDARDS FOR INFILTRATION / EXFILTRATION.
14. DEWATER TRENCHES AS REQUIRED FOR INSTALLATION OF THE IMPROVEMENTS. THE CONTRACTOR MUST MAINTAIN THE WATER TABLE 2-FEET BELOW THE BOTTOM OF TRENCH.
15. ALL STORMWATER INLETS MUST BE EQUIPPED WITH A BICYCLE SAFE ECO GRATE AND CAST WITH "NO DUMPING - DRAINS TO RIVER OR WATERWAY".
16. CURB STORMWATER INLETS MUST HAVE A 6" FACE AND TYPE N CURB BOX.
17. EXISTING STORM PIPING TO REMAIN, MUST BE CLEANED TO THE NEAREST INLET / MANHOLE AND/OR DISCHARGE POINT.
18. ELECTRICAL, FIBER OPTIC, AND COMMUNICATION CONDUIT UNDER AND WITHIN 20' OF VEHICLE TRAVEL WAYS MUST BE ENCASED IN CONCRETE.
19. REFER TO ELECTRIC AND COMMUNICATION PLANS FOR NUMBER AND ARRANGEMENT OF ELECTRICAL AND COMMUNICATION CONDUIT WITHIN DUCT BANKS.
20. PROVIDE TEMPORARY ELECTRIC POWER AS NEEDED FOR ALL CONSTRUCTION OPERATIONS UNTIL ELECTRIC IS EXTENDED TO THE SITE AND SUITABLE FOR USE. REFER TO ELECTRIC PLANS.
21. ALL OPEN EXCAVATIONS WITHIN VEHICULAR TRAVEL AND PARKING AREAS MUST BE COVERED WITH A STEEL PLATE, RATED FOR HS-25 LOADING.
22. NOTIFY THE CONTRACTING OFFICER, WEST POINT DPW, AND WEST POINT MWR, 14-DAYS PRIOR TO ANY TEMPORARY CLOSURES.
23. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE CONTRACTING OFFICER OF ANY CONFLICTS WITH UNEXPECTED UTILITIES OR STRUCTURES ENCOUNTERED DURING CONSTRUCTION.
24. THE CONTRACTOR MUST SUBMIT A DEWATERING PLAN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK, TO THE CONTRACTING OFFICER 14-DAYS PRIOR TO ANY DEWATERING OPERATIONS.
25. ALL UTILITY BEDDING MUST BE WRAPPED IN GEOTEXTILE FABRIC.
26. AMERICAN WATER (AW) IS THE OWNER AND OPERATOR OF ALL SANITARY SEWER AND DOMESTIC/FIRE WATER MAINS AT WEST POINT.
27. ANY SEWER MAIN AND/OR DOMESTIC.FIRE WATER MAIN REPLACEMENT OR MODIFICATION MUST BE COMPLETED BY AW UNLESS DIRECTED OTHERWISE.
28. THE SEWER MAIN WITHIN THE UTILITY TUNNEL MAY ONLY BE MODIFIED AND/OR CONSTRUCTED UPON BY AW.
29. THE CONTRACTOR MUST NOTIFY AND COORDINATE WITH AMERICAN WATER PRIOR TO THE SHUT-OFF OF ANY WATER MAIN OR BUILDING SERVICE.
30. ALL NEW BELOW-GRADE STRUCTURES MUST BE DESIGNED TO SUPPORT HS-25 LOADING. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS, SIGNED AND SEALED BE A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK, TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL PRIOR TO THE PURCHASE OF ALL STRUCTURES.
31. PRIOR TO EXCAVATION, DISCONNECTION, CUTTING, OR REMOVAL OF ANY UTILITY SERVICE, COORDINATE WITH THE CONTRACTING OFFICER, WEST POINT DPW, AND THE PRIVATE UTILITY PURVEYOR TO ENSURE UNINTERRUPTED SERVICE TO SURROUNDING FACILITIES. SUBMIT TEMPORARY SERVICE PLANS FOR APPROVAL PRIOR TO ANY UTILITY WORK.

1

LEGEND

ITEM	EXISTING	PROPOSED
CURB		
EDGE OF PAVEMENT		
TREE LINE		
FENCE	X X X	X X X
GUIDE RAIL		
METAL RAIL		
UNDERGROUND COMMUNICATION LINE	COMM	COMM
UNDERGROUND ELECTRIC (PRIMARY)	E	E
UNDERGROUND ELECTRIC (SECONDARY)		ES
STORM LINE	SD	SD
SANITARY LINE	SAN	SAN
WATER LINE	W W	W W
GAS LINE	G	G
STEAM LINE	HPS	HPS
CHILLED WATER SUPPLY	CHWS CHWS	
CHILLED WATER RETURN	CHWR CHWR	
UNKNOWN MANHOLE	M	
SANITARY MANHOLE	S	S
STORM MANHOLE	D	D
ELECTRIC MANHOLE/HANDHOLE	E	E
TELE. PED.	TCP	
WATER VALVE	W	W
UNKNOWN JUNCTION BOX		
CATCH BASIN	CB	CB
CLEANOUT		CO
ROUND CATCH BASIN	CB	
COMMUNICATION MANHOLE	C	
SOIL BORING LOCATION	B-4	
GUY WIRE		
POST/ BOLLARD		
ROCK/BOULDER		
SHRUB		
CONIFEROUS TREE		
DECIDUOUS TREE		
TREE STUMP		
SIGN		
STEAM MANHOLE		
ELECTRICAL JUNCTION BOX		
LIGHT POLE		
UNKNOWN VENT		
GAS VALVE		
FIRE HYDRANT		
CONCRETE (POURED IN PLACE)		
BOLLARD		
INLET PROTECTION		
LIMIT OF DISTURBANCE		
HAND EXCAVATION/EXCAVATE WITH CAUTION TO FACE OF WALL/CURB		
PAVEMENT SAWCUT		

LIST OF ABBREVIATIONS

ABA	ARCHITECTURAL BARRIERS ACT
ABC	AGGREGATE BASE COURSE
AC	ACRES
ADA	AMERICAN WITH DISABILITIES ACT
APPROX.	APPROXIMATE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AW	AMERICAN WATER
BC	BOTTOM OF CURB
BIT.	BITUMINOUS
BLDG	BUILDING
CB	CATCH BASIN
CLF	CHAIN LINK FENCE
CO	CLEAN OUT
COMM	COMMUNICATION
CONC	CONCRETE
CORS	CONTINUOUSLY OPERATING REFERENCE STATION
CW	CHILLED WATER
DC	DEPRESSED CURB
DGA	DENSE GRADED AGGREGATE
DIA.	DIAMETER
DIP	DUCTILE IRON PIPE
DIM.	DIMENSION
DMH	DRAINAGE MANHOLE
DPW	DIRECTORATE OF PUBLIC WORKS
DWG	DRAWING
EA	EACH
ELEC.	ELECTRIC
EL./ELEV.	ELEVATION
EM	ENGINEERS MANUAL
EOP	EDGE OF PAVEMENT
ETC	ET CETERA
EX./EXIST.	EXISTING
FF	FINISHED FLOOR
GR	GRATE
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT MIX ASPHALT
HP	HIGH POINT
IN.	INCH
INV	INVERT
LF	LINEAR FEET
LOD	LIMIT OF DISTURBANCE
MAX.	MAXIMUM
MH	MANHOLE
MIN.	MINIMUM
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
NAD	NORTH AMERICAN DATUM
NAVD	NORTH AMERICAN VERTICAL DATUM
NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NYSDOT	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
PERF.	PERFORATED
PIV	POST INDICATOR VALVE
PROP.	PROPOSED
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REIN.	REINFORCED
REQ'D	REQUIRED
SAN	SANITARY
SDR	STANDARD DIMENSION RATIO
SF	SQUARE FEET
SMH	SANITARY MANHOLE
STA.	STATION
TBR	TO BE REMOVED
TC	TOP OF CURB
TP	TOP OF CONCRETE PAD
TW	TOP OF WALL
TYP.	TYPICAL
UFC	UNIFIED FACILITIES CRITERIA
USMA	UNITED STATES MILITARY ACADEMY
W/	WITH
WWF	WELDED WIRE FABRIC

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO.: 20190494
DESIGNED BY: KM
DRAWN BY: DP
CHECKED BY: JK
SUBMITTED BY:
SIZE: ANSI D

U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NEW YORK, NY

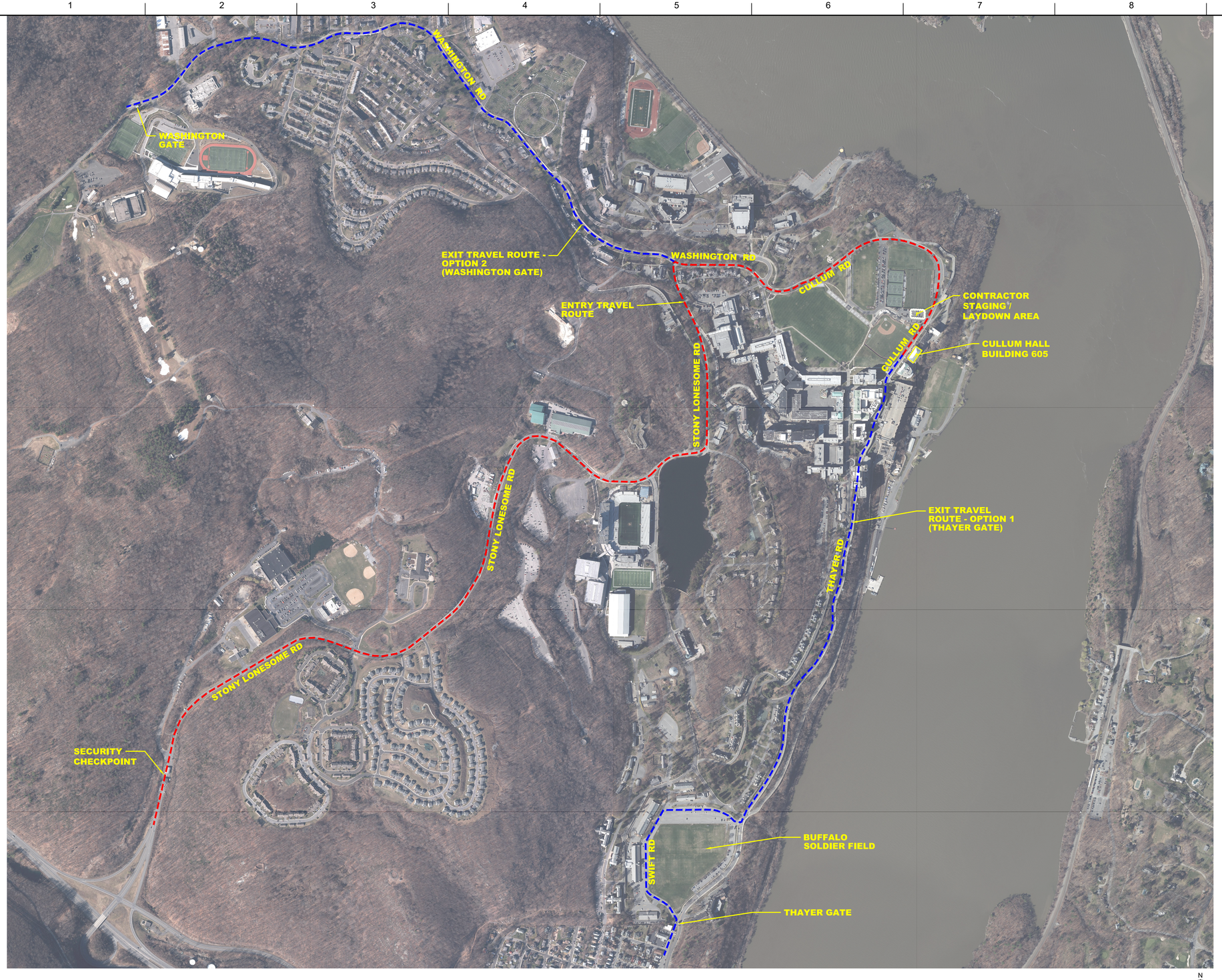
JACOBS / EWING COLE A Joint Venture

US ARMY
WEST POINT CULLUM HALL
WEST POINT, NEW YORK

CIVIL
GENERAL NOTES, LEGEND AND ABBREVIATIONS

SHEET IDENTIFICATION
C-002

RTA SUBMISSION 2/11/2021



GENERAL SHEET NOTES

1. GOVERNMENT RESERVES THE ABILITY TO SELECT EITHER OF THE EXIT ROUTES AT TIME OF CONSTRUCTION.

A1 TRUCK ACCESS PLAN
SCALE: 1"=500'

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U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
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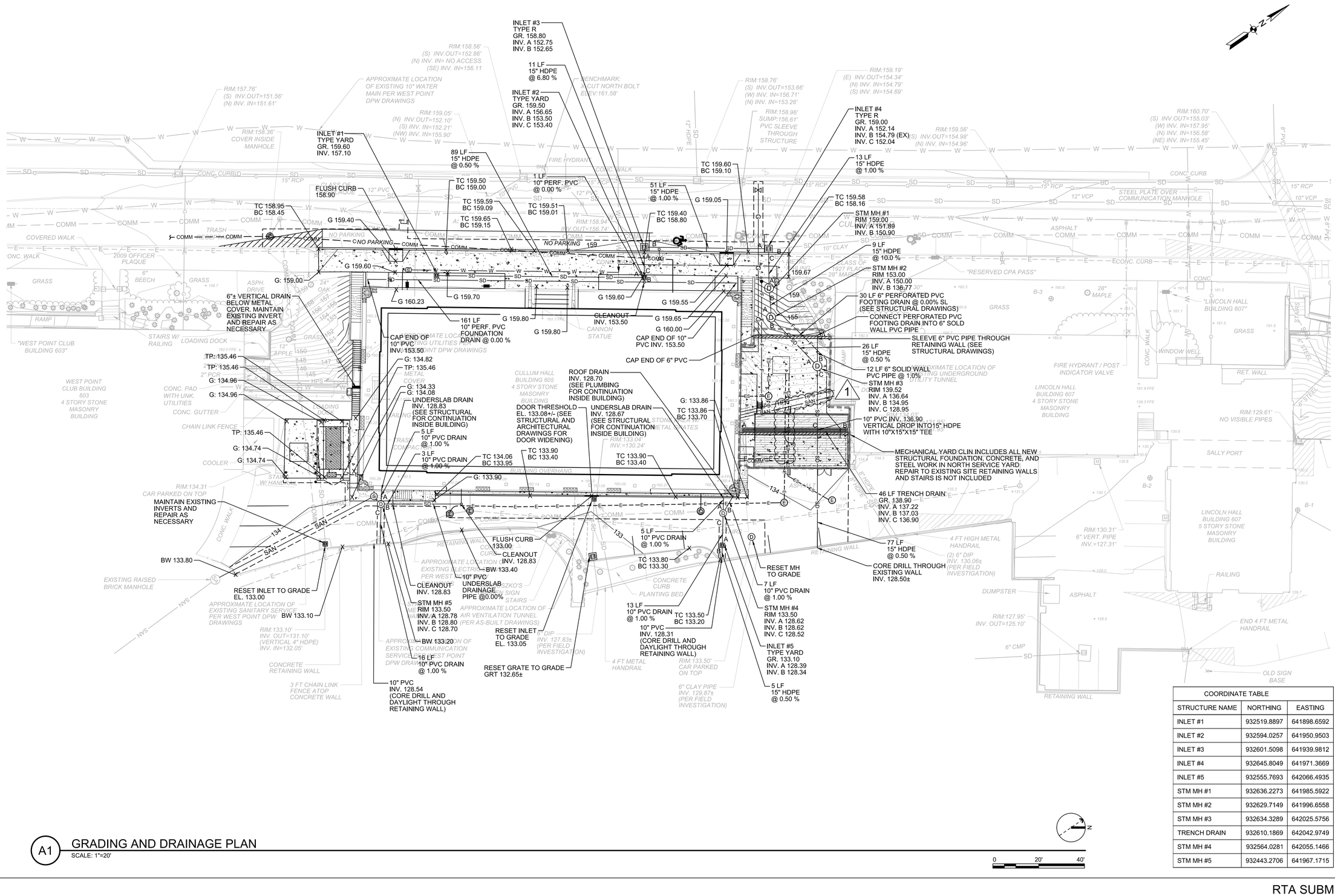
US ARMY
WEST POINT CULLUM HALL
WEST POINT, NEW YORK

CIVIL
TRUCK ACCESS PLAN

SHEET IDENTIFICATION
CS102



COORDINATE TABLE		
STRUCTURE NAME	NORTHING	EASTING
INLET #1	932519.8897	641898.6592
INLET #2	932594.0257	641950.9503
INLET #3	932601.5098	641939.9812
INLET #4	932645.8049	641971.3669
INLET #5	932555.7693	642066.4935
STM MH #1	932636.2273	641985.5922
STM MH #2	932629.7149	641996.6558
STM MH #3	932634.3289	642025.5756
TRENCH DRAIN	932610.1869	642042.9749
STM MH #4	932564.0281	642055.1466
STM MH #5	932443.2706	641967.1715

A1 GRADING AND DRAINAGE PLAN
SCALE: 1"=20'

0 20' 40'

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US ARMY
WEST POINT CULLUM HALL
WEST POINT, NEW YORK

CIVIL
GRADING AND DRAINAGE PLAN

SHEET IDENTIFICATION
CG101

RTA SUBMISSION 2/11/2021

SOIL EROSION PLAN

A1 SOIL EROSION PLAN
SCALE: 1"=20'

0 20' 40'

RTA SUBMISSION 2/11/2021

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NEW YORK DISTRICT
NEW YORK, NY

JACOBS / EWING COLE A Joint Venture

US ARMY
WEST POINT CULLUM HALL
WEST POINT, NEW YORK

CIVIL
SOIL EROSION PLAN

SHEET IDENTIFICATION
CG102

GENERAL SHEET NOTES

1. NEW STEAM AND SANITARY SERVICE TO BE INSTALLED WITHIN UTILITY TUNNEL BELOW CULLUM HALL. (SEE MECHANICAL AND PLUMBING DRAWINGS)
2. THE NEW STEAM AND SANITARY SERVICE MUST BE EXTENDED WITHIN THE UTILITY TUNNEL NORTH FROM THE NORTH CULLUM WALL AND CONNECT INTO THE EXISTING STEAM AND SANITARY SERVICE FOR LINCOLN HALL AT THE SOUTH LINCOLN HALL WALL.
3. REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND FIRE PROTECTION DRAWINGS FOR MECHANICAL YARD LAYOUT AND EQUIPMENT LOCATIONS.
4. REFER TO ELECTRICAL DRAWINGS FOR GENERATOR LAYOUT.
5. AMERICAN WATER (AW) IS THE OWNER AND OPERATOR OF ALL SANITARY SEWER AND DOMESTIC/FIRE WATER MAINS THROUGHOUT USMA WEST POINT. THE MAINS MUST ONLY BE MODIFIED AND/OR CONSTRUCTED UPON BY AW.
6. CITY LIGHT AND POWER (CLP) IS THE OWNER AND OPERATOR OF ALL ELECTRICAL TRANSMISSION, DISTRIBUTION, AND SERVICE THROUGHOUT USMA WEST POINT. THE SYSTEM MUST ONLY BE MODIFIED AND/OR CONSTRUCTED UPON BY CLP.
7. USAG WEST POINT HAS PRIVATIZED WATER, WASTEWATER, AND ELECTRICAL SERVICE. ALL UTILITY WORK ON THESE SYSTEMS SHALL BE COORDINATED WITH THE UTILITY SYSTEMS OWNERS:

   ELECTRIC - CITY LIGHT AND POWER
   WATER - AMERICAN WATER FEDERAL SERVICES
   WASTEWATER - AMERICAN WATER FEDERAL SERVICES

   PRIMARY POINT OF CONTACT FOR COORDINATION IS RANGI MATHEW, RANGI.K.MATHEW2.CIV@MAIL.MIL
8. GENERATOR PAD MUST BE SIZED ACCORDINGLY BASED ON SELECTED GENERATOR MANUFACTURER REQUIREMENTS.
9. GENERATOR FENCING AND GATE LAYOUT MUST BE COORDINATED WITH THE FINAL GENERATOR MANUFACTURER SELECTED TO PROVIDE THE REQUIRED OFFSET FROM THE GENERATOR TO THE FENCE FOR SAFE ACCESS AND TO ACCESS THE DOOR SWING AREA.

SEE TELCOMM DRAWINGS FOR CONTINUATION TO DAVIS BARRACKS
EX. COMM MH-1021 CONNECT COMM. SERVICE INTO EXISTING COMMUNICATION MANHOLE (SEE TELCOMM DRAWINGS)
EX. COMM MH-25
COMM. SERVICE
EXISTING 6" DIP STUB FROM 10" MAIN COORDINATE WITH WEST POINT DPW FOR WATER SHUT-OFF
CONNECT TO EXISTING GAS SERVICE
3" GAS VALVE
NEW 3" POLYETHYLENE GAS SERVICE
4"x6" REDUCER LOCATE EAST OF 8" FIRE CONNECTION.
8" DIP FIRE WATER SERVICE
6"x6"x8" TEE
FIRE DEPARTMENT CONNECTION (SEE FIRE PROTECTION PLAN)
4" VALVE
8" PIV
COMM. SERVICE
4" DIP FIRE WATER SERVICE
8" DIP FIRE WATER SERVICE
EXTEND NEW SANITARY AND STEAM, FROM CULLUM HALL TO LINCOLN HALL, WITHIN UTILITY TUNNEL FOR LINCOLN HALL CONNECTION (SEE MECHANICAL AND PLUMBING DRAWINGS)
MECHANICAL YARD CLIN INCLUDES ALL NEW STRUCTURAL FOUNDATION, CONCRETE, AND STEEL WORK IN NORTH SERVICE YARD REPAIR TO EXISTING SITE RETAINING WALLS AND STAIRS IS NOT INCLUDED
SEE PLUMBING DRAWINGS FOR CONTINUATION WITHIN BUILDING
SEE TELCOMM DRAWINGS FOR CONTINUATION WITHIN BUILDING
SEE PLUMBING DRAWINGS FOR CONTINUATION WITHIN BUILDING
MH-1 SECONDARY ELECTRIC MANHOLE TO SERVE CULLUM HALL
4" DIP WATER SERVICE
STEAM SERVICE SEE MECHANICAL DRAWINGS FOR CONTINUATION WITHIN BUILDING
4" DIP FIRE SERVICE WITHIN UTILITY TUNNEL TO CULLUM HALL (SEE FIRE PROTECTION PLAN)
GENERATOR ELECTRIC CONDUIT (SEE ELECTRICAL DRAWINGS FOR CONTINUATION)
6" DIP FIRE SERVICE TO CULLUM HALL (SEE FIRE PROTECTION PLAN)
8" WATER SERVICE CONNECTION FOR FIRE PUMP HOUSE
MECHANICAL YARD/DUNNAGE AREA ABOVE (SEE MECHANICAL, PLUMBING, FIRE PROTECTION AND ELECTRICAL DRAWINGS)
CONNECT TO NEW SANITARY SEWER SERVICE WITHIN UTILITY TUNNEL BELOW CULLUM HALL. SEE PLUMBING PLAN FOR CONTINUATION
FIRE PUMP HOUSE ELECTRICAL AND COMMUNICATION SERVICE
SEE TELCOMM DRAWINGS FOR CONTINUATION WITHIN BUILDING
FIRE PUMP HOUSE (SEE FIRE PROTECTION PLAN)
SECONDARY ELECTRIC SERVICE CONDUITS (SPARE FOR LINCOLN HALL)
MH-2 SECONDARY ELECTRIC MANHOLE TO SERVICE LINCOLN HALL
GENERATOR FENCING AND GATE LAYOUT MUST BE COORDINATED WITH THE FINAL GENERATOR MANUFACTURER SELECTED TO PROVIDE THE REQUIRED OFFSET FROM THE GENERATOR TO THE FENCE FOR SAFE ACCESS AND TO ACCESS THE DOOR SWING AREA
RELOCATED TRASH COMPACTOR (SEE ELECTRICAL DRAWINGS FOR COORDINATION)
GENERATOR, GENERATOR PAD, AND ASSOCIATED EQUIPMENT (SEE ELECTRICAL DRAWINGS FOR COORDINATION)
8" CHILLED WATER SUPPLY AND RETURN INSTALLED UNDER SEPARATE CONTRACT (SEE MECHANICAL DRAWINGS FOR TAPS AND CONTINUATION WITHIN BUILDING)
SANITARY MH #1 RIM. 134.00 INVERTS AND SIZE OF PIPE TO BE VERIFIED IN FIELD
PVC SANITARY SERVICE (MATCH EXISTING SIZE, INVERTS AND SLOPE)
CONNECT INTO EXISTING BRICK MANHOLE MATCH INVERT
INSTALL PIPE THROUGH EXISTING CONCRETE RETAINING WALL
MH-3 PRIMARY ELECTRIC MANHOLE
PRIMARY ELECTRIC SERVICE
EX. COMM MH-25B
COMM. SERVICE (SEE TELCOMM DRAWINGS FOR CONNECTION)
CONNECT COMM. SERVICE INTO EXISTING COMMUNICATION MANHOLE (SEE TELCOMM DRAWINGS)
CONNECT NEW PRIMARY ELECTRIC SERVICE INTO EXISTING ELECTRIC MANHOLE (SEE ELECTRICAL DRAWINGS)

RIM:158.56' (S) INV.OUT=152.86' (N) INV. IN= NO ACCESS (SE) INV. IN=156.11
APPROXIMATE LOCATION OF EXISTING 10" WATER MAIN PER WEST POINT DPW DRAWINGS
RIM:157.76' (S) INV.OUT=151.56' (N) INV. IN=151.61'
RIM:159.05' (N) INV.OUT=152.10' (S) INV. IN=152.21' (NW) INV. IN=155.90'
RIM:159.36' COVER INSIDE MANHOLE
BENCHMARK: X-CUT NORTH BOLT ELEV:161.58'
RIM:158.76' (S) INV.OUT=153.66' (W) INV. IN=156.71' (N) INV. IN=153.26'
RIM:158.96' SUMP:156.61' PVC SLEEVE THROUGH STRUCTURE
RIM:159.19' (E) INV.OUT=154.34' (N) INV. IN=154.79' (S) INV. IN=154.69'
RIM:159.56' (S) INV.OUT=154.98' (N) INV. IN=154.96'
RIM:158.94' INV.OUT=158.74'
RIM:134.31 MARKED ON TOP
EXISTING RAISED BRICK MANHOLE
APPROXIMATE LOCATION OF EXISTING SANITARY SERVICE PER WEST POINT DPW DRAWINGS
RIM:133.10' INV. OUT=131.10' (VERTICAL 4" HDPE) INV. IN=132.05'
APPROXIMATE LOCATION OF EXISTING ELECTRIC SERVICE PER WEST POINT DPW DRAWINGS
APPROXIMATE LOCATION OF AIR VENTILATION TUNNEL (PER AS-BUILT DRAWINGS)
APPROXIMATE LOCATION OF EXISTING COMMUNICATION SERVICE PER WEST POINT DPW DRAWINGS
6" DIP INV. 127.83± (PER FIELD INVESTIGATION)
RIM:133.50' CAR PARKED ON TOP
6" CLAY PIPE INV. 129.87± (PER FIELD INVESTIGATION)
CULLUM HALL BUILDING 605 4 STORY STONE MASONRY BUILDING
APPROXIMATE LOCATION OF EXISTING UNDERGROUND UTILITY TUNNEL
LINCOLN HALL BUILDING 607 4 STORY STONE MASONRY BUILDING
RIM:134.03' (E) INV.OUT=131.95' (E) INV. OUT=131.95'
RIM:130.31' 6" VERT. PIPE INV.=127.31'
(2) 6" DIP INV. 130.06± (PER FIELD INVESTIGATION)
RIM:129.61' NO VISIBLE PIPES
LINCOLN HALL BUILDING 607 5 STORY STONE MASONRY BUILDING
RIM:127.95' INV. OUT=125.10'
6" CMP
BENCHMARK: BOX CUT ELEV:129.39'
RIM:134.08' INV.=130.24'

COORDINATE TABLE		
STRUCTURE NAME	NORTHING	EASTING
ELEC MH-1	932609.3191	642024.3578
ELEC MH-2	932606.4149	642077.4624
ELEC-MH-3	932588.5762	642066.4643
EX. COMM MH-1021	932469.6150	641843.4470
EX. COMM MH-25	932477.5050	641839.6870
EX. COMM MH-25B	932556.4260	642048.9300
SANITARY MH #1	932442.7054	641962.6737

A1 UTILITY PLAN
SCALE: 1"=20'

0 20' 40'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
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U.S. ARMY CORPS OF ENGINEERS NEW YORK DISTRICT NEW YORK, NY

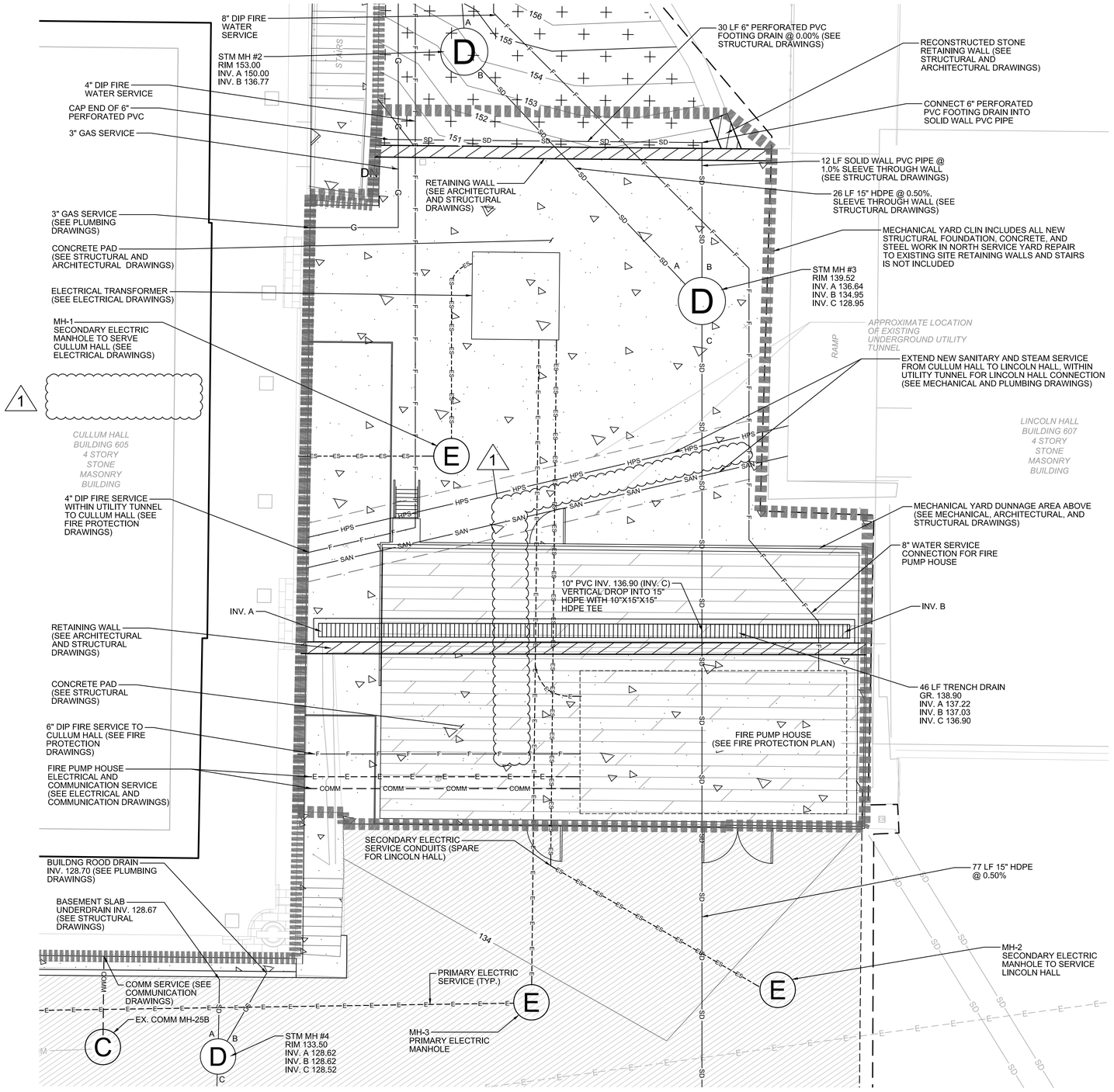
JACOBS / EWING COLE A Joint Venture

US ARMY WEST POINT CULLUM HALL WEST POINT, NEW YORK

CIVIL UTILITY PLAN

SHEET IDENTIFICATION
CU101

RTA SUBMISSION 2/11/2021



A4 MECHANICAL YARD DETAIL
1" = 5'

0 5' 10'

NOTES:

1. FOR CONTINUATION OF ALL UTILITIES REFER TO ELECTRICAL, COMMUNICATION, MECHANICAL, PLUMBING, FIRE PROTECTION, AND CIVIL DRAWINGS.
2. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR MECHANICAL YARD PAD / WALL LAYOUT.
3. REFER TO STRUCTURAL DRAWINGS FOR ALL PIPE AND STRUCTURE PENETRATIONS THROUGH THE PADS AND WALLS.
4. REFER TO CIVIL DRAWINGS FOR ADDITIONAL DEMOLITION, SITE, GRADING, DRAINAGE, AND UTILITY FEATURES.
5. REFER TO CIVIL SHEET C-101 FOR EXISTING CONDITIONS.

US Army Corps of Engineers®

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US ARMY
WEST POINT CULLUM HALL
WEST POINT, NEW YORK

CIVIL
CONSTRUCTION DETAILS

SHEET IDENTIFICATION
C-506

RTA SUBMISSION 2/11/2021

ABBREVIATIONS

A.B.	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
ADJMT.	ADJUSTMENT
ADDTL.	ADDITIONAL
ADH.	ADHESIVE
ANCH.	ANCHOR
ARCH.	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BLDG.	BUILDING
BLKG.	BLOCKING
BM.	BEAM
BOT.	BOTTOM
BPL.	BASEPLATE
BRCG.	BRACING
BRG.	BEARING
BRK.	BRICK
BRKT.	BRACKET
B.S.	BOTH SIDE (USED W/ REINF)
B.S.	BRICK SHELF
BSMT.	BASEMENT
BTWN.	BETWEEN
B.W.	BOTH WAYS
C&C	COMPONENTS & CLADDING
CANT.	CANTILEVER
C.B.	CONCRETE BEAM
CFMF	COLD FORMED METAL FRAMING
C.J.	CONTROL JOINT
CL.	CENTERLINE
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
COMP.	COMPRESSIBLE
CONC.	CONCRETE
CONN.	CONNECTION
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
COORD.	COORDINATE
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CR.	CRIPPLED
DBL.	DOUBLE
DET.	DETAIL
DEV.	DEVELOP, DEVELOPMENT
DIAG.	DIAGONAL
DIST.	DISTANCE
DISCONT.	DISCONTINUOUS
DK.	DECK
D.L.	DEAD LOAD
DN.	DOWN
DWG.	DRAWING
DWL.	DOWEL
EA.	EACH
E. E.	EACH END
E.F.	EACH FACE
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMB.	EMBED, EMBEDMENT
E.O.R.	ENGINEER OF RECORD
EQ.	EQUAL
ETC.	ETCETERA
E.W.	EACH WAY
E-W	EAST-WEST
EXIST., (E)	EXISTING
EXP.	EXPANSION
EXP. JT.	EXPANSION JOINT
FCTD.	FACTORED
FDN.	FOUNDATION
FIN.	FINISH
FLG.	FLANGE
FLR.	FLOOR
FRMG.	FRAMING
F.S.	FAR SIDE
FTG.	FOOTING
GA.	GAGE
GALV.	GALVANIZED
GB	GRADE BEAM
G.C.	GENERAL CONTRACTOR
GRAN.	GRANULAR
H.	HORIZONTAL (USED W/ REINF.)
HK.	HOOK
HORIZ.	HORIZONTAL
H.P.	HIGH POINT
I.E.	INVERT ELEVATION
I.F.	INSIDE FACE
INCL.	INCLUSIVE
INFO.	INFORMATION
INS.	INSULATION
JST.	JOIST
JT.	JOINT
K.	KIPS (1000 LB.)
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
L.L.	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
L.P.	LOW POINT
LW	LIGHT WEIGHT
MAS.	MASONRY
MAX.	MAXIMUM
MECH.	MECHANICAL
MTL.	METAL
MFR.	MANUFACTURER
MIN.	MINIMUM
N.A.	NEUTRAL AXIS
NO.	NUMBER
N.S.	NEAR SIDE
N-S	NORTH-SOUTH
NW	NORMAL WEIGHT
O.C.	ON CENTER
O.F.	OUTSIDE FACE
OPNG.	OPENING
OPP.HD.	OPPOSITE HAND
ORIENT.	ORIENTATION
PC.	PRECAST
P.C.	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PED.	PEDESTAL
PENET.	PENETRATION
PERIM.	PERIMETER
PL.	PLATE
PLUMB.	PLUMBING
PW.	PLYWOOD
PNL.	PANEL
PREM.	PREMOLDED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
REINF.	REINFORCING
REQD.	REQUIRED
RET.	RETAINING
REV.	REVISION
RF.	ROOF
R.O.	ROUGH OPENING
SCHED.	SCHEDULE
SECT.	SECTION
SIM	SIMILAR
SL	SLOTTED
SPAN.	SPANDREL
SPEC.	SPECIFICATIONS
STAGG.	STAGGERED
STD.	STANDARD
STIFF.	STIFFENER
STL.	STEEL
STRU.	STRUCTURAL
SUPP.	SUPPORT
T.&B.	TOP AND BOTTOM
TEMP.	TEMPORARY
THK.	THICK, THICKNESS
T.O.C.	TOP OF CONCRETE
TOL.	TOLERANCE
T.O.P.	TOP OF PEDESTAL
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
V.	VERTICAL (USED W/ REINF.)
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
WD.	WOOD
W.P.	WORK POINT
W.S.	WATER STOP
WWF	WELDED WIRE FABRIC

GENERAL NOTES

GENERAL NOTES

1. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE SITE BEFORE ORDERING ANY MATERIALS AND BEGINNING ANY WORK. FIELD SURVEY AND ESTABLISH THE EXISTING BUILDING DIMENSIONS WHERE NEW CONSTRUCTION ABUTS EXISTING BUILDINGS. THIS FIELD SURVEY MUST INCLUDE, BUT MUST NOT BE LIMITED TO THE FOLLOWING: DIMENSIONS OF EXISTING BUILDING FACE INCLUDING ALL FENESTRATIONS, PROJECTIONS, ETC, PLUMBNESS OF WALLS, FLOOR AND ROOF ELEVATIONS, AND ALL OTHER PERTINENT DIMENSIONS. SUBMIT THE SURVEY TO THE COR FOR INFORMATION ONLY AND MAKE THE SURVEY AVAILABLE TO SUBCONTRACTORS.

2. THE CONTRACTOR MUST BE RESPONSIBLE FOR ALL WORK AND COORDINATION INVOLVED TO PROVIDE ALL OPENINGS SHOWN ON THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS. PROVIDE FRAMING AND ALL CONNECTIONS AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS. (NOTE - NOT ALL OPENINGS ARE SHOWN ON THE STRUCTURAL DRAWINGS.)

3. ALL CONTRACTORS MUST BE RESPONSIBLE TO ENSURE PROPER STORAGE OF MATERIAL IS MAINTAINED SO AS NOT TO CAUSE OVERLOADING OF THE EXISTING OR NEW STRUCTURE DURING PERFORMANCE OF THIS WORK. GENERAL CONTRACTOR TO COORDINATE.

4. ALL CONTRACTORS MUST VERIFY AND/OR ESTABLISH ALL EXISTING CONDITIONS AND DIMENSIONS AT THE SITE BEFORE ORDERING ANY MATERIAL AND COMMENCEMENT OF ANY WORK.

5. IF THE EXISTING CONDITIONS DO NOT PERMIT THE INSTALLATION OF THE WORK IN ACCORDANCE WITH THE DETAILS AS SHOWN, NOTIFY THE COR IMMEDIATELY AND PROVIDE A SKETCH OF THE CONDITION WITH A PROPOSED MODIFICATION TO THE DETAILS GIVEN ON THE CONTRACT DOCUMENTS. THE FINAL INSTALLATION MUST BE DONE AS REQUIRED BY THE ARCHITECT AS DIRECTED BY THE COR.

6. WHERE ALTERATIONS INVOLVE THE EXISTING SUPPORTING STRUCTURE, PROVIDE ALL SHORING, BRACING, GUYS AND PROTECTION REQUIRED TO ENSURE THE STRUCTURAL INTEGRITY OF THE EXISTING BUILDING.

7. COORDINATE ALL RELATED TRADE ACTIVITY REGARDING SHUT DOWNS, RE-ROUTING, TEMPORARY INSTALLATION, ETC. NECESSARY FOR THIS INSTALLATION WITH THE COR.

8. ESTABLISH SPECIFIC MEANS AND METHODS FOR INSTALLATION AND COORDINATE THE WORK FOR ALL CONTRACTORS AND COMPLY WITH THE GOVERNMENT'S GENERAL REQUIREMENTS.

9. COORDINATE THE LOCATION AND DIMENSIONS OF ELEVATOR PITS, WALLS, POSTS, HOISTWAY AND OPENINGS WITH ELEVATOR MANUFACTURER.

10. COORDINATE WITH EQUIPMENT MANUFACTURERS FOR EXACT SIZE, LOCATION, ETC. OF PITS, CAST-IN ITEMS, WALLS, ETC. BEFORE LAYOUT, ORDERING ANY MATERIAL OR COMMENCEMENT OF ANY WORK.

FOUNDATION NOTES

1. FOUNDATIONS LOCATED OUTSIDE THE FOOTPRINT OF THE BUILDING MUST BEAR ON SUBGRADE HAVING A MINIMUM ALLOWABLE BEARING PRESSURE OF 3,000 PSF. FOUNDATIONS LOCATED WITHIN THE FOOTPRINT OF THE BUILDING MUST BEAR ON BEDROCK HAVING A MINIMUM ALLOWABLE BEARING PRESSURE OF 10,000 PSF. BEARING CAPACITY MUST BE VERIFIED IN THE FIELD BY A LICENSED GEOTECHNICAL INSPECTOR HIRED BY THE CONTRACTOR. ROCK RECEIVING FOUNDATIONS MUST BE SOUND, FREE OF SHATTERED OR SPLINTERED FRAGMENTS, AND APPROXIMATELY LEVEL. CONCRETE-ROCK SLIDING COEFFICIENT OF 0.5 SHALL BE USED.

2. BASED ON EXISTING BUILDING INFORMATION AND GEOTECHNICAL INVESTIGATION, IT IS ASSUMED THAT EXISTING BUILDING FOUNDATIONS BEAR ON BEDROCK. CONTRACTOR MUST FIELD VERIFY THIS PRESUMPTION. IF ROCK IS NOT ENCOUNTERED WHEN EXCAVATIONS REACH THE BOTTOM ELEVATION OF EXISTING ADJACENT FOOTINGS, THE EXISTING FOOTINGS MUST BE REINFORCED BY AN UNDERPINNING METHOD, TO A DEPTH DETERMINED BY THE GEOTECHNICAL ENGINEER, NECESSARY TO PROVIDE THE DESIGN BEARING CAPACITY OF 10,000 PSF. IN THE EVENT THIS CONDITION IS FOUND, THE CONTRACTOR SHALL FOLLOW THE CONTRACT REQUIREMENTS FOR SEEKING DIRECTION AND RESOLUTION OF THIS CONDITION AND ANY ASSOCIATED REMEDIES. CONTRACTOR IS NOT PERMITTED TO EXCAVATE LOWER THAN EXISTING FOOTINGS OR PROCEEDING FURTHER WITHOUT APPROVAL OF CONTRACTING OFFICER.

3. ALL COLUMN FOOTINGS MUST BE CENTERED ON THE COLUMN CENTERLINES, UNLESS OTHERWISE NOTED.

4. PROVIDE DEWATERING DURING EARTHWORK OPERATIONS INCLUDING PREVENTIVE MEASURES RELATED TO EXCAVATION STABILITY. DEWATER TO PREVENT SLOUGHING OF EXCAVATION SLOPES AND WALLS, BOILS, UPLIFT, AND HEAVE IN THE EXCAVATION AND TO ELIMINATE INTERFERENCE WITH ORDERLY PROGRESS OF CONSTRUCTION. CONTROL MEASURES MUST BE TAKEN TO MAINTAIN THE INTEGRITY OF THE IN SITU MATERIAL. THE DEWATERING SYSTEM MUST BE CONTINUOUSLY OPERATED UNTIL CONSTRUCTION WORK BELOW EXISTING WATER LEVEL IS COMPLETE. CONTRACTOR TO SUBMIT WEEKLY PERFORMANCE RECORDS. CARE MUST BE TAKEN TO IMMEDIATELY CONTROL ANY WATER SEEPAGE TO PREVENT SATURATION OF THE SUBGRADE.

5. BOTTOM OF FOOTING GIVEN IN THE FOUNDATION PLAN MARKED THUS (,,) ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD IN ACCORDANCE WITH NOTES ABOVE. IT IS ASSUMED THAT EXISTING BUILDING FOOTINGS BEAR ON BEDROCK. IF EXCAVATION OF A NEW FOOTING REACHES THE BOTTOM OF AN ADJACENT EXISTING FOOTING AND NO ROCK IS ENCOUNTERED, STOP EXCAVATING AND NOTIFY THE COR IMMEDIATELY.

6. ALL EXISTING UNDERGROUND UTILITIES IN THE AREA OF THE NEW CONSTRUCTION MUST BE RELOCATED UNLESS OTHERWISE NOTED ON THE DRAWINGS BEFORE ANY NEW FOUNDATION WORK IS STARTED. PROVIDE PROTECTION FOR NEW AND EXISTING UTILITIES. ACCESS HOLES, CATCH BASINS, ETC. USING SHEETING AND SHORING DESIGNED BY THE CONTRACTOR'S DELEGATED REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.

7. COORDINATE ALL FOUNDATION WORK WITH ALL UNDERGROUND UTILITIES. DO NOT PLACE UTILITIES BELOW SPREAD FOOTINGS UNLESS APPROVED BY THE ARCHITECT. IF ANY SUCH CONDITION OCCURS, THE CONTRACTOR MUST NOTIFY THE COR AND DROP THE BOTTOM OF FOOTING.

8. COORDINATE ALL FOUNDATION WORK WITH ALL UNDERGROUND UTILITIES. EXTREME CARE MUST BE TAKEN DURING EXCAVATION AND CONSTRUCTION OF NEW FOUNDATION WORK SO AS NOT TO DISTURB THE EXISTING CONSTRUCTION AND UTILITIES.

9. BACKFILL AGAINST WALLS MUST FOLLOW THE CRITERIA NOTED. AS A MINIMUM, WALLS MUST HAVE REACHED THEIR 28 DAY DESIGN STRENGTH OR BE IN PLACE 14 DAYS, WHICHEVER IS LONGER. EQUIPMENT USED TO COMPACT THE BACKFILL WILL BE SUCH AS TO LIMIT PRESSURES ON THE WALLS TO THE DESIGN VALUES AND TO BE REVIEWED AND ACCEPTED BY THE GEOTECHNICAL ENGINEER. BACKFILL EVENLY ON BOTH SIDES OF FOUNDATION WALLS FOR GREATEST HEIGHT POSSIBLE.

10. PROVIDE STANDARD STEEL PIPE SLEEVES FOR PIPES PASSING THROUGH CONCRETE WALLS AND NEATLY CORED HOLES A MINIMUM OF ONE PIPE SIZE LARGER THAN PIPE THROUGH EXISTING CONCRETE WALLS WHERE SHOWN ON THE DRAWINGS. COORDINATE CORED HOLES WITH SEALANT, ETC., REQUIREMENTS WITH RELATED SPECIFICATIONS. SEE TYPICAL DETAIL ON DRAWING S-501.

11. WHERE EXCAVATION FOR UTILITY TRENCHES IS LOWER THAN AND CLOSER THAN A 1.5H:1V SLOPE TO THE BOTTOM OF A NEW OR EXISTING COLUMN OR WALL FOOTING, BACKFILL THE EXCAVATION WITH LEAN MIX CONCRETE. TOP OF FILL TO BE ON A 1.5H:1V SLOPE FROM BOTTOM OF ADJACENT FOUNDATIONS.

12. FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY TERRACON CONSULTANTS - GEOCONCEPTS ENGINEERING, INC. DATED JUNE 16, 2020 (& OCTOBER 26, 2020 ADDENDUM).

    TERRACON CONSULTANTS-GEOCONCEPTS ENGINEERING, INC.
    19955 HIGHLAND VISTA DRIVE
    SUITE 170
    ASHBURN, VA 20147

    A COPY OF THE SOILS AND FOUNDATION INVESTIGATION ANALYSIS REPORT IS INCLUDED IN THE SPECIFICATION FOR INFORMATION ONLY.

13. FOR ADDITIONAL REQUIREMENTS SEE TYPICAL DETAILS AND THE SPECIFICATIONS.

CONCRETE NOTES

1. CONCRETE MUST HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:

INTERIOR FOUNDATIONS, PIERS AND PEDESTALS	4000 PSI
EXTERIOR SLAB ON GRADE	4500 PSI
INTERIOR SLAB ON GRADE (NOTED S1 IN PLAN)	4000 PSI
INTERIOR SLAB ON GRADE (NOTED S2 IN PLAN)	3000 PSI
LIGHTWEIGHT SLAB ON METAL DECK	3000 PSI
NORMAL WEIGHT SLAB ON METAL DECK	3500 PSI
EXTERIOR EQUIPMENT PADS	4500 PSI
EXTERIOR CONCRETE AND FOUNDATIONS	4500 PSI
TERRACE LIGHTWEIGHT SLAB ON METAL DECK	4500 PSI
EXTERIOR LIGHTWEIGHT TOPPING SLAB	4500 PSI
ALL CONCRETE EXPOSED TO FREEZE-THAW CONDITIONS	4500 PSI
ALL OTHER CONCRETE	4000 PSI

2. REINFORCING TO BE ASTM A615 GRADE 60. ALL MESH SHALL BE ASTM A1064. ALL REINFORCING STEEL PLACED IN CONCRETE LOCATED WITHIN OR BELOW THE WATER TABLE MUST BE EPOXY COATED.

3. PROVIDE SYNTHETIC POLYPROPYLENE FIBERS (FIBERMESH) IN ALL CONCRETE SLABS ON GRADE AND ELEVATED CONCRETE SLABS. FIBERS WILL CONFORM TO ASTM C1116, TYPE III AND ICC ES AC32 SECTIONS 3.1.1 AND 3.1.2.

4. ALL CONCRETE WORK MUST BE CURED FOR A MINIMUM OF 7 DAYS IN ACCORDANCE WITH ACI STANDARDS.

5. CONTRACTOR MUST VERIFY THE DIMENSIONS OF AND INSTALL IN THE FORMS ALL SLOTS, SLEEVES, ANCHOR BOLTS, MASONRY ANCHORS, POCKETS, ETC. AS REQUIRED FOR OTHER TRADES.

6. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR CONCRETE EQUIPMENT PADS AND FOUNDATIONS REQUIRED.

7. ALL SHORING AND/OR RESHORING FOR SUPPORTED CONCRETE SLABS MUST BE LEFT IN PLACE UNTIL THE CONCRETE HAS REACHED ITS 28 DAY STRENGTH AND A MINIMUM OF 14 DAYS.

8. SEE SECTIONS AND DETAILS FOR ALL EQUIPMENT OPENINGS, DEPRESSIONS, ETC. CONTRACTOR MUST COORDINATE EQUIPMENT REQUIREMENTS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS.

9. FOR ADDITIONAL REQUIREMENTS, SEE TYPICAL DETAILS AND THE SPECIFICATIONS.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL MUST CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS.

WIDE FLANGE AND WT SHAPES	ASTM A992/A992M GRADE 50
BASE PLATES, COLUMN CAPS, MOMENT PLATES, GUSSET PLATES, WEB PLATES, AND SPLICE PLATES	ASTM A572/A572M GRADE 50
HOLLOW STRUCTURAL STEEL MEMBERS	ASTM A500/A500M GRADE B
STEEL PIPES	ASTM A53/A53M GRADE B
ANGLES, CHANNELS, AND PLATES	ASTM A36/A36M

2. VERIFY IN THE FIELD, BY A SURVEY, ALL EXISTING CONDITIONS CONNECTED WITH STRUCTURAL STEEL WORK INCLUDING ANCHOR BOLT LOCATIONS PRIOR TO ORDERING ANY MATERIAL OR COMMENCEMENT OF ANY WORK.

3. PROVIDE SATISFACTORY BRACING OF THE EXISTING AND NEW STEEL FRAME UNTIL ALL NEW FRAMING AND THE METAL DECK IS ERECTED AND FINAL CONNECTIONS ARE COMPLETE AND THE CONCRETE SLABS ON METAL DECK ARE PLACED.

4. ALL STRUCTURAL STEEL DIRECTLY EXPOSED TO THE WEATHER MUST BE HOT DIPPED GALVANIZED AND TOUCHED UP WITH TWO COATS OF HIGH SOLIDS ZINC RICH PRIMER WHERE ABRADED OR AFTER WELDING (SEE SPECIFICATIONS).

5. MAIN SUPPORT MEMBERS FOR THE METAL DECK ARE SHOWN ON THE CONTRACT DRAWINGS. PROVIDE ADDITIONAL SECONDARY FRAMING AS REQUIRED AT NO ADDITIONAL COST TO THE GOVERNMENT.

WHERE WELDING STAINLESS STEEL COMPONENTS, CONTRACTOR MUST COMPLY WITH REQUIREMENTS OF AWS D1.6. WELDER QUALIFICATIONS FOR STAINLESS STEEL ARE REQUIRED.

6. BEAM TO BEAM AND/OR BEAM TO COLUMN CONNECTIONS MARKED Mc MUST BE DETAILED TO DEVELOP FULL MOMENT CAPACITY AT THE CONNECTION IN ADDITION TO STANDARD SHEAR CONNECTION. THESE MOMENT CONNECTIONS ARE TO BE MADE BY FULL PENETRATION WELDS OF BOTH BEAM FLANGES. COORDINATE THESE DETAILS WITH OTHER FRAMING ELEMENTS AS REQUIRED.

7. SEQUENCE OF ERECTION FOR STRUCTURAL STEEL TO BE COORDINATED AS REQUIRED FOR AREAS SUPPORTED BY CANTILEVERS. ALL MOMENT CONNECTIONS AND/OR OTHER CONNECTIONS FOR CANTILEVERED FRAMING MUST HAVE TEMPORARY BRACING AND SUPPORT OF CANTILEVER FRAMING UNTIL ALL FINAL CONNECTIONS ARE COMPLETED AND INSPECTED BY THE TESTING AND INSPECTION AGENCY, AND THE RESULTS ACCEPTED PRIOR TO ERECTING FRAMING SUPPORTED BY THE CANTILEVER ENDS.

8. ANY FIELD WELDING TO ANY EXISTING THIN MEMBER MUST BE PERFORMED WITH EXTREME CARE SO AS TO AVOID EXCESSIVE DAMAGE TO THE BASE METAL.

9. EQUALLY SPACE BEAMS BETWEEN COLUMNS/GIRDERS UNLESS OTHERWISE NOTED.

10. FOR ADDITIONAL REQUIREMENTS, SEE TYPICAL DETAILS AND THE SPECIFICATIONS.

METAL DECK NOTES

1. METAL DECK MUST CONFORM TO THE REQUIREMENTS OF THE STEEL DECK INSTITUTE (SDI).

2. COMPOSITE METAL FLOOR DECK SUPPORTING LIGHT WEIGHT CONCRETE SLAB MUST BE CONTINUOUS OVER A MINIMUM OF TWO OR MORE SPANS UNLESS INDICATED OTHERWISE.

3. FOR ADDITIONAL INFORMATION SEE THE SPECIFICATIONS.

STRUCTURAL DRAWING INDEX

		100% SET 12/22/2020	RTA SET 02/11/2021	AMENDMENT 1 (1) 04/07/2021	
S-001	STRUCTURAL NOTES AND INDEX SHEET	X	X	X	
S-002	STRUCTURAL NOTES	X	X		
S-003	WIND AND LIVE LOAD DIAGRAMS	X	X		
SD-100	LEVEL B3 / FOUNDATION DEMOLITION PLAN	X	X	X	
SD-101	LEVEL B2 STRUCTURAL DEMOLITION PLAN	X	X		
SD-102	LEVEL B1 STRUCTURAL DEMOLITION PLAN	X	X		
SD-110	LEVEL 1 STRUCTURAL DEMOLITION PLAN	X	X		
SD-120	LEVEL 2 STRUCTURAL DEMOLITION PLAN	X	X		
SD-130	ATTIC LEVEL STRUCTURAL DEMOLITION PLAN	X	X		
S-100	LEVEL B3 + B2 ARCHIVE / FOUNDATION PLAN	X	X		
S-100.1	UNDERSLAB DRAINAGE PLAN	X	X		
S-101	LEVEL B2 FLOOR FRAMING PLAN	X	X		
S-102	LEVEL B1 FLOOR FRAMING PLAN	X	X		
S-110	LEVEL 1 FLOOR FRAMING PLAN	X	X		
S-120	LEVEL 2 FLOOR AND STAGE FRAMING PLAN	X	X		
S-130	ATTIC LEVEL FRAMING PLANS	X	X	X	
S-140	ROOF FRAMING PLAN AND ADD ALT NO. 1 ROOF REPLACEMENT	X	X		
S-301	SECTIONS	X	X		
S-302	SECTIONS	X	X		
S-303	SECTIONS	X	X		
S-304	SECTIONS	X	X		
S-305	SECTIONS	X	X		
S-306	SECTIONS	X	X		
S-307	SECTIONS	X	X		
S-401	BEARING WALL ELEVATIONS	X	X		
S-402	BEARING WALL ELEVATIONS	X	X		
S-403	BEARING WALL ELEVATIONS	X	X		
S-404	SCREEN WALL ELEVATIONS	X	X		
S-501	TYPICAL DETAILS	X	X		
S-502	TYPICAL DETAILS	X	X		
S-503	TYPICAL DETAILS	X	X		
S-504	TYPICAL DETAILS	X	X		
S-601	COLUMN SCHEDULE AND DETAILS	X	X	X	

DESIGN CRITERIA UFC 3-301-01 / ASCE 7-16 / IBC 2018

FLOOR DESIGN LIVE LOADS (SEE DIAGRAMS ON S-003)

CATWALKS / DUNNAGE PLATFORMS (AROUND EQUIPMENT)	40 PSF
OFFICE PLUS PARTITIONS	50 PSF+20 PSF
CORRIDOR	80 PSF
LIBRARY STACK ROOMS	150 PSF
BALCONY / TERRACE	100 PSF
MECHANICAL / ELECTRICAL ROOMS (TYPICAL)	150 PSF*
MECHANICAL / ELECTRICAL ROOMS (HEAVY)	250 PSF*
STAIRS	100 PSF
HIGH DENSITY STORAGE	300 PSF
ASSEMBLY AREAS	100 PSF
BALROOM STAGE	150 PSF

*LIVE LOADS INCLUDE EQUIPMENT WEIGHT. LOCALIZED PRESSURES BENEATH EQUIPMENT MAY EXCEED THE STATED LIVE LOAD, BUT THE OVERALL FRAMING SYSTEM IS ADEQUATE.

COLLATERAL LOADS (SUPERIMPOSED DEAD LOADS)*

BALCONY/TERRACE	125 PSF
LIBRARY STACK ROOMS	15 PSF
EXISTING FLOORS	15 PSF
CATWALKS	5 PSF
DUNNAGE PLATFORMS	15 PSF
MECHANICAL / ELECTRICAL ROOMS	20 PSF
HIGH DENSITY STORAGE	35 PSF
ASSEMBLY AREAS	15 PSF

*COLLATERAL LOADS DO NOT INCLUDE SELF WEIGHT OF SLAB, DECK, OR FRAMING ELEMENTS.

ROOF DESIGN LIVE LOADS

ROOF	20 PSF

DEFLECTION CRITERIA

DEAD LOAD: EXISTING BUILDING DEAD LOAD DEFLECTIONS HAVE BEEN FULLY EXPERIENCED AND HAVE NOT BEEN CONSIDERED FOR DESIGN. NEW FLOOR FRAMING IS DESIGNED FOR L/240.
LIVE LOAD: IT IS ASSUMED THAT EXISTING FRAMING WAS DESIGNED FOR LIVE LOAD DEFLECTIONS OF L/360. NEW FLOOR FRAMING IS DESIGNED FOR L/360. HIGH-DENSITY STORAGE COMPONENTS MUST BE COORDINATED WITH THE SCOPE OF WORK FOR THOSE AREAS WHERE THEY ARE TO BE INSTALLED. (1)

SNOW LOADS (CRITERIA IDENTIFIED IN STRUCTURAL LOAD DATA TOOL, HOSTED ON WHOLE BUILDING DESIGN GUIDE WEBSITE (https://www.wbdg.org/additional-resources/tools/ufcsldt))

GROUND SNOW LOAD,	Pg=30 PSF
FLAT ROOF SNOW LOAD (USED FOR DESIGN)	Pf=30 PSF*
MAXIMUM DRIFT LOAD (FOR AREAS OF SNOW BUILD UP)*	80 PSF
SNOW EXPOSURE FACTOR,	Ce=0.9
SNOW LOAD IMPORTANCE FACTOR	I=1.10
THERMAL FACTOR,	Ct=1.00
DEPTH TO FROST	54 INCHES

LATERAL LOADS - WIND (CRITERIA IDENTIFIED IN STRUCTURAL LOAD DATA TOOL, HOSTED ON WHOLE BUILDING DESIGN GUIDE WEBSITE (https://www.wbdg.org/additional-resources/tools/ufcsldt))

WIND LOAD DESIGN PARAMETERS	
BASIC WIND SPEED,	V=122 MPH
WIND EXPOSURE	D
INTERNAL PRESSURE COEFFICIENT,	GCpi=±0.18

WIND LOAD ON MAIN WIND FORCE RESISTING SYSTEM (FACTORED) - SEE DIAGRAMS ON S-003
WIND LOADS ON COMPONENTS AND CLADDING (FACTORED) - SEE DIAGRAMS ON S-003

LATERAL LOADS - SEISMIC (CRITERIA IDENTIFIED IN STRUCTURAL LOAD DATA TOOL, HOSTED ON WHOLE BUILDING DESIGN GUIDE WEBSITE (https://www.wbdg.org/additional-resources/tools/ufcsldt))

RISK CATEGORY	III
SEISMIC IMPORTANCE FACTOR,	I=1.25
SHORT PERIOD MAPPED SPECTRAL RESPONSE ACCELERATION	S_S=0.26g
1-SECOND MAPPED SPECTRAL RESPONSE ACCELERATION	S_1=0.06g
LONG PERIOD TRANSITION PERIOD	T_L=6
SITE CLASS	C
SHORT PERIOD SPECTRAL RESPONSE COEFFICIENT	S_{DS}=0.226
1-SECOND PERIOD SPECTRAL RESPONSE COEFFICIENT	S_{D1}=0.059
SEISMIC DESIGN CATEGORY,	B
ANALYSIS PROCEDURE	EQUIV. LAT. FORCE
BASIC SEISMIC-FORCE-RESISTING SYSTEM	ORDINARY PLAIN MASONRY SHEAR WALLS
RESPONSE MODIFICATION FACTOR,	R=1.5

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: KMK
DRAWN BY: ZBW
CHECKED BY: PC
SUBMITTED BY: PC
DATE: 2/11/2021
ISSUE DATE: 02/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494
ANSI D

US ARMY CORPS OF ENGINEERS

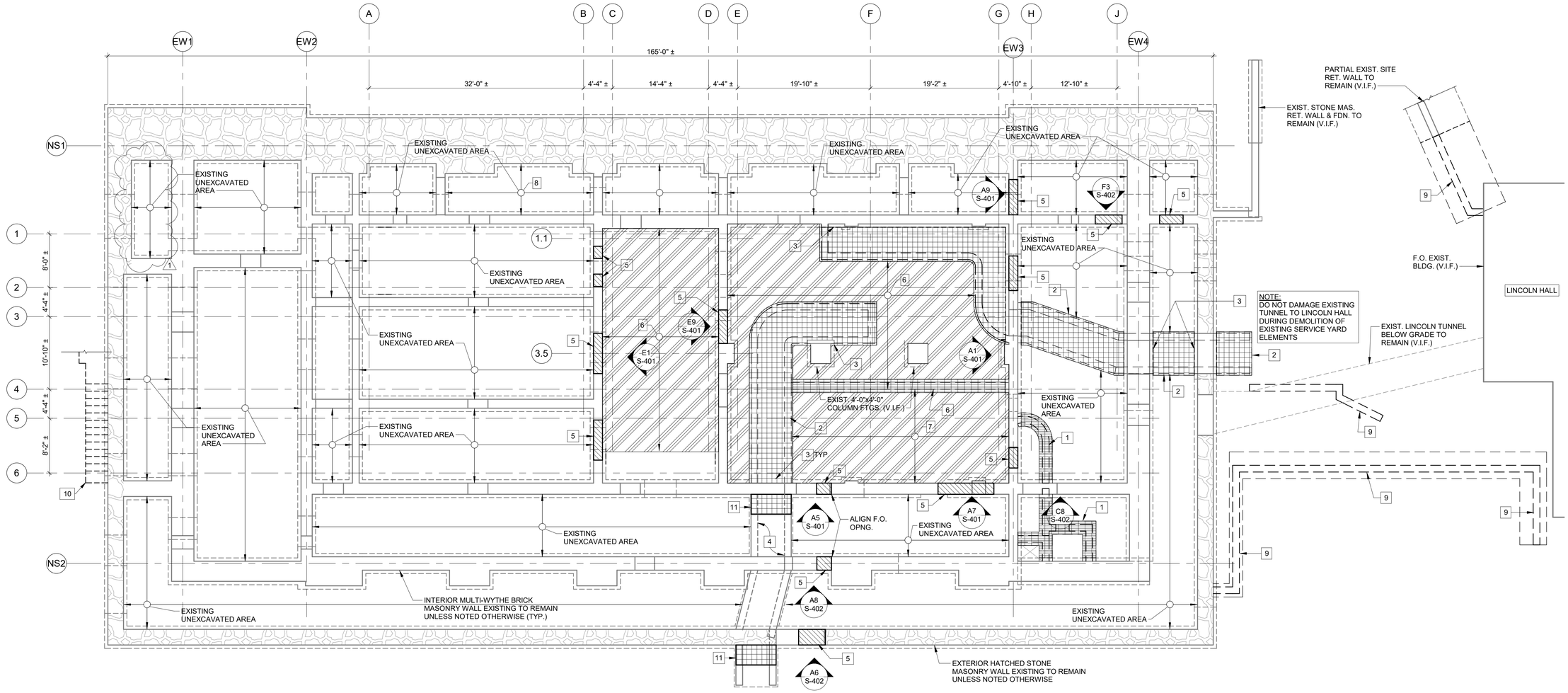
JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

STRUCTURAL NOTES AND INDEX SHEET

SHEET ID
S-001

RTA SUBMISSION 02/11/2021



B1
SD-100

LEVEL B3 / FOUNDATION DEMOLITION PLAN

1/8" = 1'-0"

KEY NOTES:

1. DEMOLISH EXISTING NON-LOAD BEARING PARTITION WALL AND FOUNDATION.
2. DEMOLISH EXISTING AIR TUNNEL WALLS, FOUNDATION AND CONCRETE LID.
3. DEMOLISH AIR TUNNEL UP TO FACE OF EXISTING WALL FOOTING. DO NOT DAMAGE EXISTING WALL FOOTING. (TYP.)
4. EXISTING TUNNEL TO REMAIN.
5. PARTIALLY DEMOLISH EXISTING LOAD-BEARING WALL FOR NEW DOOR. SEE BEARING WALL ELEVATIONS ON S-401 & S-402.
6. DEMOLISH EXISTING LEVEL B3 SLAB ON GRADE & RETAINING WALL AT MECHANICAL PIT SLAB.
7. DEMOLISH EXISTING MECHANICAL PIT SLAB ON GRADE.
8. DEMOLISH EXISTING FOOTINGS, CROSS-BRACING, AND FRAMING.
9. DEMOLISH EXISTING SITE RETAINING WALL AND FOUNDATION WITHIN AREA OF NEW CONCRETE WALL AND FOUNDATION.
10. DEMOLISH EXISTING EXTERIOR CONCRETE STAIR, LANDING, AND CHEEK WALLS.
11. PARTIALLY DEMOLISH EXISTING TUNNEL CONCRETE LID. SEE RELATED DISCIPLINE DRAWINGS FOR EXTENTS.

LEVEL B3 / FOUNDATION DEMOLITION GENERAL NOTES:

1. WALLS, SLABS, FOUNDATIONS, AND OTHER STRUCTURAL ELEMENTS ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE (TYP.).
2. EXISTING LEVEL B3 SLABS ON GRADE TOP OF SLAB EL. 134'-7 3/4" ±. EXISTING MECHANICAL PIT SLAB ON GRADE TOP OF SLAB ELEVATION 130'-8 1/2" ±.
3. COORDINATE ALL EXISTING FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION WORK.
4. PROVIDE AND MAINTAIN SHORING, BRACING, OR STRUCTURAL SUPPORT TO MAINTAIN STABILITY. SEE NOTES ON S-001 AND S-002 FOR MORE INFORMATION.
5. DEMOLISH FOUNDATION ELEMENTS TO FACE OF EXISTING BEARING WALL FOUNDATIONS. DO NOT DISTURB BEARING WALLS OR BEARING WALL FOUNDATIONS. PROVIDE TEMPORARY SHORING DURING CONSTRUCTION (TYP.).
6. FOR BALANCE OF NON-LOAD BEARING PARTITION AND ARCHITECTURAL ELEMENTS TO BE DEMOLISHED - SEE ARCHITECTURAL DRAWINGS.

LEVEL B3 / FOUNDATION DEMOLITION PLAN LEGEND

- AREAS INDICATED THUS ARE INACCESSIBLE AND PRESUMED UNEXCAVATED. NO WORK IS ANTICIPATED IN THESE LOCATIONS. (NOT USED)
- DENOTES EXISTING STONE WALL.
- DENOTES SITE ITEMS TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES AREA TO BE DEMOLISHED. SEE KEY NOTES. (NOT USED)
- DENOTES PARTITION WALLS TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES LOAD-BEARING WALLS TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES AIR TUNNELS TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES SLABS TO BE DEMOLISHED. SEE KEY NOTES.

PLAN NORTH

8 4 0 8 16

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

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: KMK
DRAWN BY: ZBW
CHECKED BY: PC
SUBMITTED BY:
SIZE: ANSI D
ISSUE DATE: 02/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

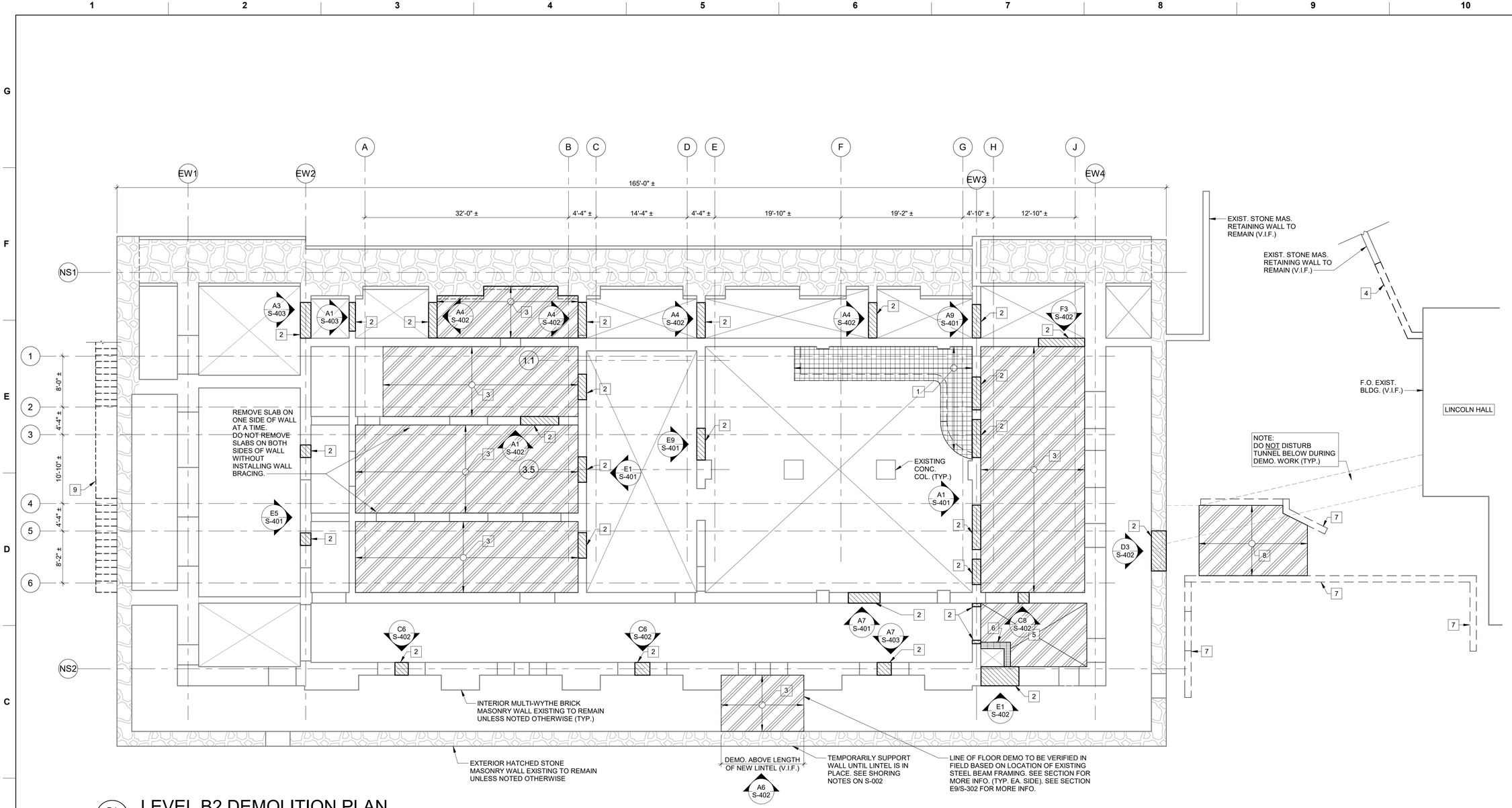
LEVEL B3 / FOUNDATION DEMOLITION PLAN

SHEET ID

SD-100

File Path: C:\Revit Local Files\C0031C-S-18-CENTRAL_kkearns@ewingcole.com.rvt
Plot Date: 4/6/2021 9:57:19 AM

RTA SUBMISSION 02/11/2021



B1 / SD-101

LEVEL B2 DEMOLITION PLAN

1/8" = 1'-0"

KEY NOTES:

1. DEMOLISH STRUCTURAL SLAB OVER EXISTING AIR TUNNEL.
2. NEW OPENING IN EXISTING LOAD-BEARING WALL. SEE BEARING WALL ELEVATIONS ON S-401 & S-402.
3. DEMOLISH EXISTING STRUCTURAL SLAB AND STEEL FRAMING.
4. PARTIALLY DEMOLISH EXISTING SITE RETAINING WALL IN AREA OF NEW CONCRETE RETAINING WALL.
5. DEMOLISH EXISTING STRUCTURE FOR NEW ELEVATOR.
6. DEMOLISH EXISTING WALLS FOR OLD SMOKE FLUE.
7. DEMOLISH EXISTING SITE RETAINING WALL.
8. DEMOLISH EXISTING EXTERIOR SLAB ON GRADE.
9. DEMOLISH EXISTING EXTERIOR CONCRETE STAIR, LANDING, AND CHEEK WALLS.

LEVEL B2 DEMOLITION GENERAL NOTES:

1. TOP OF EXISTING FINISHED FLOOR EL. 139'-10 3/4"±.
2. WALLS, SLABS, AND OTHER STRUCTURAL ELEMENTS ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE (TYP.).
3. EXISTING FLOOR CONSISTS OF STRUCTURAL FLAT CLAY TILE ARCH CONSTRUCTION. THE FLAT TILE ARCH CONSTRUCTION IS ASSUMED TO BE SUPPORTED BY STEEL WIDE FLANGE BEAMS OF UNKNOWN SIZE AND SPACING. A CONCRETE TOPPING SLAB PROVIDES A SUBSTRATE FOR THE FLOORING. BEAMS SPAN TO MULTI-WYTHE BRICK AND STONE BEARING WALLS. EXISTING DEPTH OF STRUCTURE 16" TO BE VERIFIED IN FIELD. FLOOR CONSTRUCTION MUST BE FIELD VERIFIED. TAKE CARE NOT TO DAMAGE EXISTING CLAY TILE FLOOR CONSTRUCTION OR CONCRETE TOPPING DURING DEMOLITION OR CONSTRUCTION OPERATIONS.
4. COORDINATE ALL EXISTING FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION WORK.
5. DEMOLISH EXISTING SLABS ON GRADE AND STRUCTURAL FLOOR FRAMING ELEMENTS TO FACES OF EXISTING BEARING WALLS. DO NOT DISTURB EXISTING BEARING WALLS (TYP.).
6. PROVIDE AND MAINTAIN SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. SEE SHORING NOTES ON S-002 FOR MORE INFORMATION.
7. FOR MORE INFORMATION, SEE S-001 AND S-002 FOR NOTES, S-401 AND S-402 FOR BEARING WALL ELEVATIONS, AND S-501 THROUGH S-504 FOR TYPICAL DETAILS.
8. FOR BALANCE OF NON-LOAD BEARING PARTITION AND ARCHITECTURAL ELEMENTS TO BE DEMOLISHED - SEE ARCHITECTURAL DRAWINGS.

LEVEL B2 DEMOLITION PLAN LEGEND

- DENOTES EXISTING STONE WALL.
- DENOTES SITE ITEMS TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES SLAB AND STRUCTURE TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES PARTITION WALL TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES LOAD-BEARING WALL TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES AIR TUNNEL TO BE DEMOLISHED. SEE KEY NOTES.

PLAN NORTH

8 4 0 8 16

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

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

ISSUE DATE: 02/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494

DESIGNED BY: KMK
DRAWN BY: ZBW
CHECKED BY: AP
SUBMITTED BY: RJ
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

LEVEL B2 STRUCTURAL DEMOLITION PLAN

SHEET ID

SD-101

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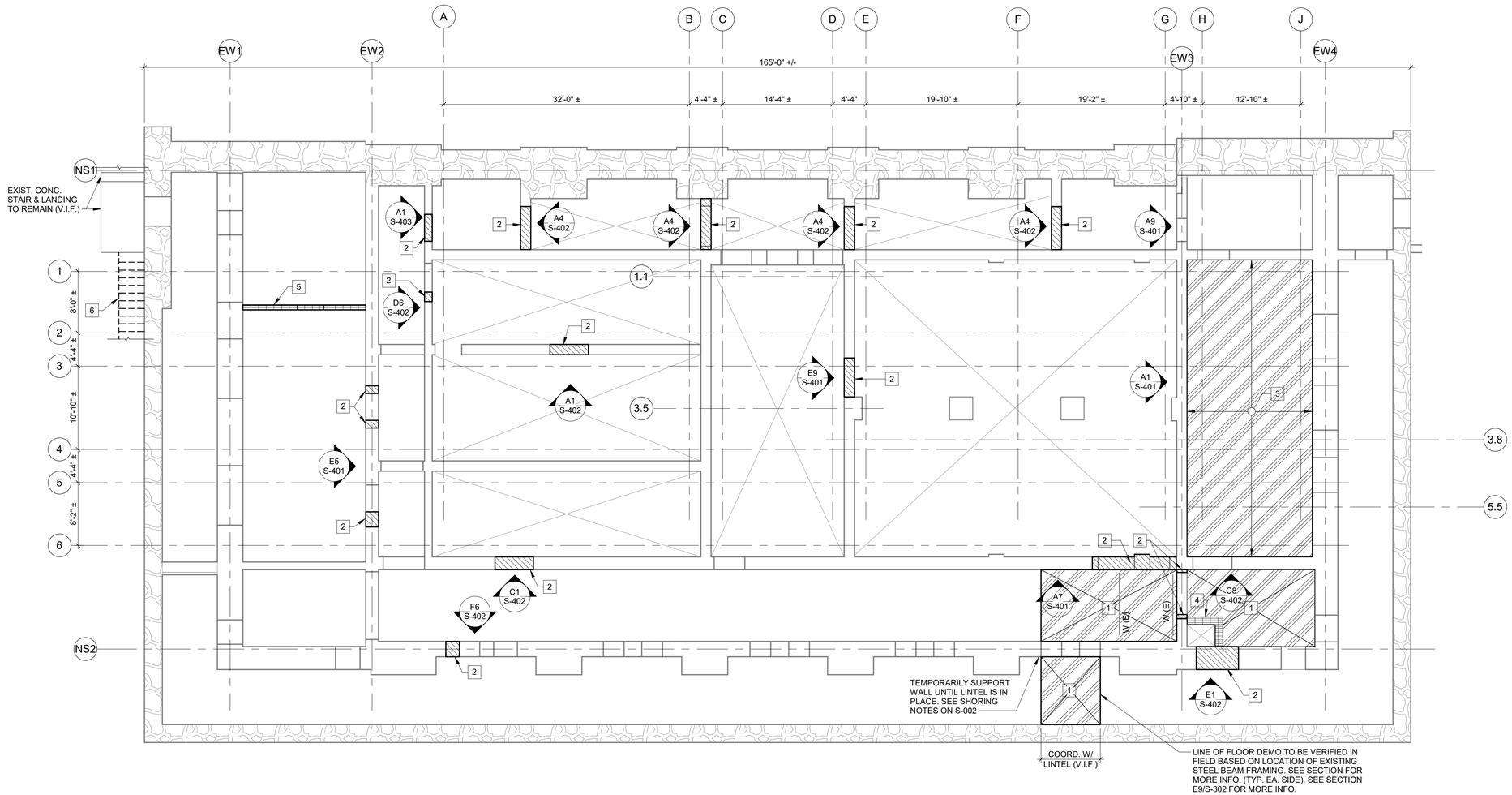

B1
SD-102

LEVEL B1 DEMOLITION PLAN

1/8" = 1'-0"

KEY NOTES:

1 DEMOLISH EXISTING STRUCTURE FOR NEW ELEVATOR.

2 PARTIALLY DEMOLISH EXISTING LOAD-BEARING WALL FOR NEW DOOR. SEE BEARING WALL ELEVATIONS ON S-401, S-402, & S-403.

3 DEMOLISH EXISTING STRUCTURAL FLOOR AND FRAMING. (V.I.F.)

4 DEMOLISH EXISTING WALLS FOR OLD SMOKE FLUE.

5 DEMOLISH EXISTING LOAD-BEARING WALL.

6 DEMOLISH EXISTING EXTERIOR CONCRETE STAIR, LANDING, AND CHEEK WALLS.

LEVEL B1 DEMOLITION GENERAL NOTES:

1. TOP OF EXISTING FINISHED FLOOR EL. 150'-0 3/4"± UNLESS OTHERWISE NOTED.

2. EXISTING FLOOR CONSISTS OF STRUCTURAL FLAT CLAY TILE ARCH CONSTRUCTION. THE FLAT TILE ARCH CONSTRUCTION IS ASSUMED TO BE SUPPORTED BY STEEL WIDE FLANGE BEAMS OF UNKNOWN SIZE AND SPACING. A CONCRETE TOPPING SLAB PROVIDES A SUBSTRATE FOR THE FLOORING. BEAMS SPAN TO MULTI-WYTHE BRICK AND STONE BEARING WALLS. EXISTING DEPTH OF STRUCTURE 16" TO BE VERIFIED IN FIELD. FLOOR CONSTRUCTION MUST BE FIELD VERIFIED. TAKE CARE NOT TO DAMAGE EXISTING CLAY TILE FLOOR CONSTRUCTION OR CONCRETE TOPPING DURING DEMOLITION OR CONSTRUCTION OPERATIONS.

3. WALLS, SLABS, AND OTHER STRUCTURAL ELEMENTS ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE (TYP.).

4. COORDINATE ALL EXISTING FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION WORK.

5. PROVIDE AND MAINTAIN SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. SEE SHORING NOTES ON S-002 FOR MORE INFORMATION.

6. DEMOLISH EXISTING STRUCTURAL SLABS AND FLOOR FRAMING ELEMENTS TO FACES OF EXISTING BEARING WALLS. DO NOT DISTURB EXISTING BEARING WALLS (TYP.).

7. FOR MORE INFORMATION, SEE S-001 AND S-002 FOR NOTES, S-401 AND S-402 FOR BEARING WALL ELEVATIONS, AND S-501 THROUGH S-504 FOR TYPICAL DETAILS.

8. FOR BALANCE OF NON-LOAD BEARING PARTITION AND ARCHITECTURAL ELEMENTS TO BE DEMOLISHED - SEE ARCHITECTURAL DRAWINGS.

LEVEL B1 DEMOLITION PLAN LEGEND

- DENOTES EXISTING STONE WALL.
- DENOTES SITE ITEMS TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES FLOOR STRUCTURE TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES PARTITION WALLS TO BE DEMOLISHED. SEE KEY NOTES.
- DENOTES LOAD-BEARING WALLS TO BE DEMOLISHED. SEE KEY NOTES.

PLAN NORTH

8 4 0 8 16

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

US Army Corps of Engineers ®

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1	AMENDMENT 1	4/7/2021
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US ARMY CORPS OF ENGINEERS

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WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

LEVEL B1 STRUCTURAL DEMOLITION PLAN

SHEET ID

SD-102

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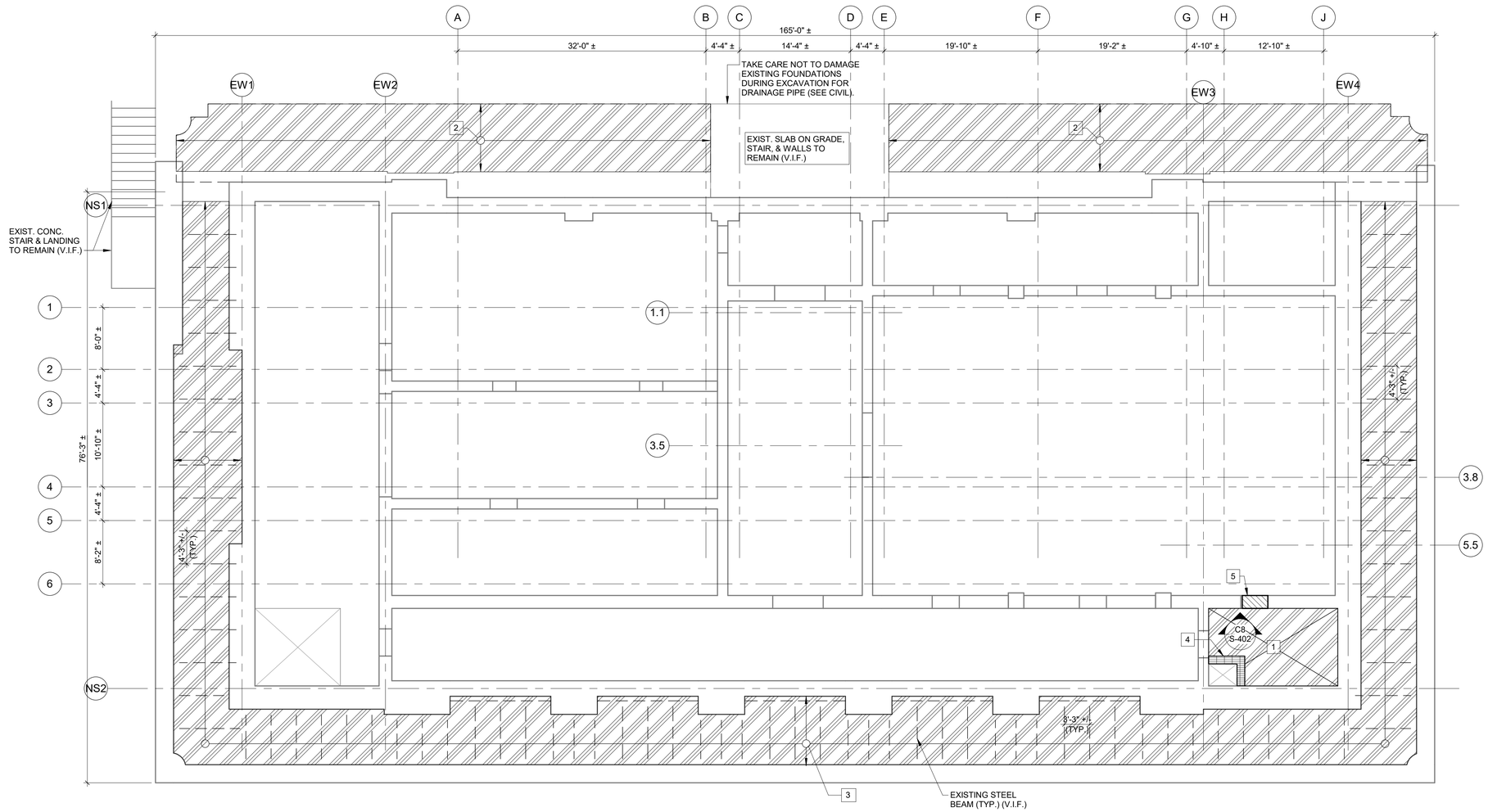

LEVEL 1 DEMOLITION PLAN

B1 / SD-110

1/8" = 1'-0"

KEY NOTES:

1 DEMOLISH STRUCTURE FOR NEW ELEVATOR.

2 REMOVE WEST TERRACE BRICK PAVERS AND DEMOLISH SLAB ON GRADE UP TO BUILDING FACE.

3 EXTENT OF EXISTING TERRACE FRAMING TO BE DEMOLISHED BETWEEN STONE WALLS. VERIFY ALL FRAMING IN FIELD.

4 DEMOLISH EXISTING WALLS FOR OLD SMOKE FLUE.

5 PARTIALLY DEMOLISH EXISTING LOAD-BEARING WALL FOR NEW DOOR. SEE BEARING WALL ELEVATIONS ON S-401, S-402, & S-403.

LEVEL 1 DEMOLITION GENERAL NOTES:

1. TOP OF EXISTING FINISHED FLOOR EL. 161'-7 3/4"± UNLESS OTHERWISE NOTED.

2. EXISTING FLOOR CONSISTS OF STRUCTURAL FLAT CLAY TILE ARCH CONSTRUCTION. THE FLAT TILE ARCH CONSTRUCTION IS ASSUMED TO BE SUPPORTED BY STEEL WIDE FLANGE BEAMS OF UNKNOWN SIZE AND SPACING. A CONCRETE TOPPING SLAB PROVIDES A SUBSTRATE FOR THE FLOORING. BEAMS SPAN MULTI-WYTHE BRICK AND STONE BEARING WALLS. EXISTING DEPTH OF STRUCTURE 16" TO BE VERIFIED IN FIELD. FLOOR CONSTRUCTION MUST BE FIELD VERIFIED. TAKE CARE NOT TO DAMAGE EXISTING CLAY TILE FLOOR CONSTRUCTION OR CONCRETE TOPPING DURING DEMOLITION OR CONSTRUCTION OPERATIONS.

3. WALLS, SLABS, AND OTHER STRUCTURAL ELEMENTS ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE (TYP.).

4. CONTRACTOR TO COORDINATE ALL EXISTING FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION WORK.

5. PROVIDE AND MAINTAIN SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. SEE SHORING NOTES ON S-002 FOR MORE INFORMATION.

6. DEMOLISH EXISTING SLABS ON GRADE AND STRUCTURAL FLOOR FRAMING ELEMENTS TO FACES OF EXISTING BEARING WALLS. DO NOT DISTURB EXISTING BEARING WALLS (TYP.).

7. FOR MORE INFORMATION, SEE S-001 AND S-002 FOR NOTES, AND S-501 THROUGH S-504 FOR TYPICAL DETAILS.

8. FOR BALANCE OF NON-LOAD BEARING PARTITION AND ARCHITECTURAL ELEMENTS TO BE DEMOLISHED - SEE ARCHITECTURAL DRAWINGS.

LEVEL 1 DEMOLITION PLAN LEGEND

- DENOTES EXISTING STONE WALL.
- DENOTES FRAMING TO BE DEMOLISHED. SEE KEY NOTES. (1)
- DENOTES FLOOR STRUCTURE TO BE DEMOLISHED. SEE KEY NOTES. (1)
- DENOTES LOAD-BEARING WALL TO BE DEMOLISHED. SEE KEY NOTES. (1)
- DENOTES PARTITION WALL TO BE DEMOLISHED. SEE KEY NOTES. (1)

8 4 0 8 16

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

PLAN NORTH

US Army Corps of Engineers ®

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1	AMENDMENT 1	4/7/2021
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DESIGNED BY: KMK
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US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

LEVEL 1 STRUCTURAL DEMOLITION PLAN

SHEET ID

SD-110

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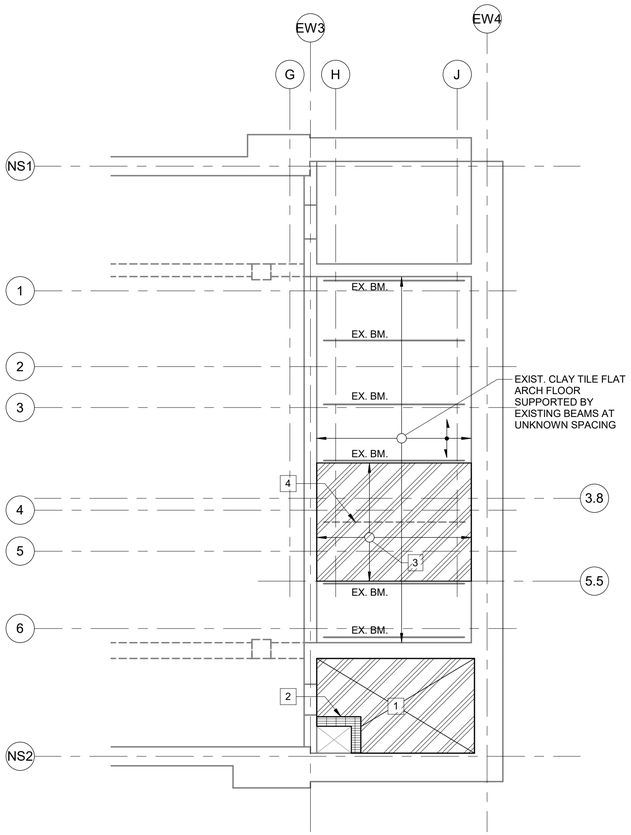
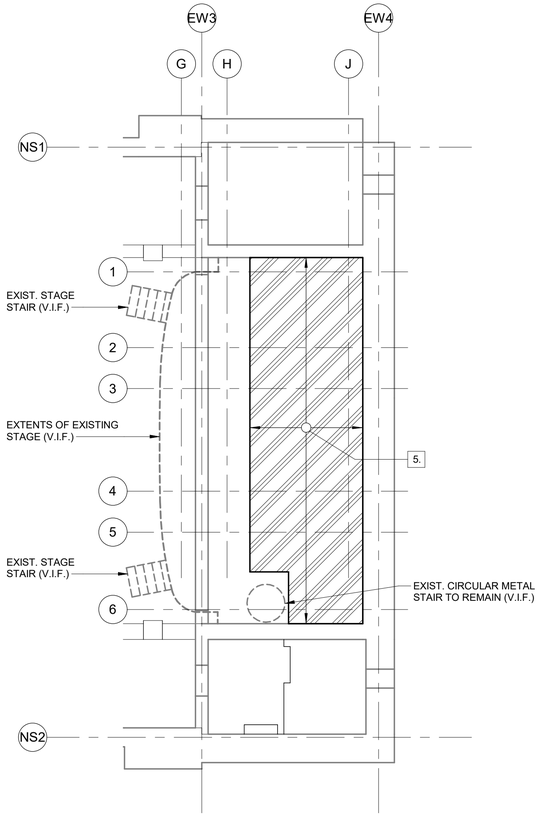


C3 / SD-120 LEVEL 2 PARTIAL DEMOLITION PLAN

1/8" = 1'-0"



C6 / SD-120 LEVEL 2 PARTIAL DEMOLITION PLAN - STAGE LEVEL

1/8" = 1'-0"

LEVEL 2 STAGE / FRAMING PLAN LEGEND

DENOTES APPROXIMATE EXTENT OF EXISTING STAGE FRAMING TO BE DEMOLISHED FOR DUCTWORK, COORDINATE WITH MECHANICAL DRAWINGS.

DENOTES PARTITION WALLS TO BE DEMOLISHED. SEE KEY NOTES. (1)

KEY NOTES:

1. DEMOLISH STRUCTURE FOR NEW ELEVATOR.
2. DEMOLISH EXISTING WALLS FOR OLD SMOKE FLUE.
3. WHERE MECHANICAL DUCT CONFLICTS WITH EXISTING BEAM, REMOVE CLAY TILE ARCH BAYS ON EITHER SIDE OF CONFLICTING BEAM TO CENTERLINE OF ADJACENT BEAMS (V.I.F.). WHERE DUCT PENETRATION OCCURS BETWEEN EXISTING BEAMS, SEE TYPICAL DETAILS ON S-504.
4. REMOVE EXISTING BEAM WHERE IT INTERFERES WITH DUCT PENETRATION (V.I.F.).
5. DEMOLISH EXISTING STAGE FLOOR AND FRAMING TO INSTALL DUCTWORK. COORDINATE WITH MECHANICAL DRAWINGS.

LEVEL 2 NOTES:

1. TOP OF EXISTING FINISHED FLOOR ELEVATION 177'-2 3/4"± TO BE FIELD VERIFIED.
2. WALLS, SLABS, FOUNDATIONS, AND OTHER STRUCTURAL ELEMENTS ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE (TYP.).
3. EXISTING FLOOR CONSISTS OF STRUCTURAL FLAT CLAY TILE ARCH CONSTRUCTION. THE FLAT TILE ARCH CONSTRUCTION IS ASSUMED TO BE SUPPORTED BY STEEL WIDE FLANGE BEAMS OF UNKNOWN SIZE AND SPACING. A CONCRETE TOPPING SLAB PROVIDES A SUBSTRATE FOR THE FLOORING. BEAMS SPAN TO MULTI-WYTHE BRICK AND STONE BEARING WALLS. EXISTING DEPTH OF STRUCTURE IS ESTIMATED TO BE 16". FLOOR CONSTRUCTION MUST BE VERIFIED IN FIELD. TAKE CARE NOT TO DAMAGE EXISTING CLAY TILE FLOOR CONSTRUCTION OR CONCRETE TOPPING DURING DEMOLITION OR CONSTRUCTION OPERATIONS.
4. COORDINATE ALL EXISTING FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION WORK.
5. COORDINATE ALL DIMENSIONS FOR MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS AND EQUIPMENT MANUFACTURER.
6. SEE DRAWINGS S-001 AND S-002 FOR ADDITIONAL NOTES AND S-501 FOR TYPICAL DETAILS.
7. PROVIDE AND MAINTAIN SHORING, BRACING, OR STRUCTURAL SUPPORT TO MAINTAIN STABILITY. SEE NOTES ON S-001 AND S-002 FOR MORE INFORMATION.
8. FOR BALANCE OF NON-LOAD BEARING PARTITION AND ARCHITECTURAL ELEMENTS TO BE DEMOLISHED - SEE ARCHITECTURAL DRAWINGS.

LEVEL 2 STAGE NOTES:

1. TOP OF EXISTING STAGE ELEVATION 180'-9 1/4"± TO BE FIELD VERIFIED.
2. WALLS, SLABS, FOUNDATIONS, AND OTHER STRUCTURAL ELEMENTS ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE (TYP.).
3. EXISTING STAGE CONSTRUCTION IS ASSUMED TO CONSIST OF CONVENTIONAL WOOD FLOOR JOISTS SUPPORTING WOOD DECKING ACTING AS A SUBSTRATE FOR THE STAGE FLOOR. FLOOR JOISTS SPAN TO WOOD POSTS AND ARE ANCHORED IN THE LEVEL 2 FLOOR BELOW. STAGE FLOOR CONSTRUCTION MUST BE VERIFIED IN FIELD.
4. COORDINATE ALL EXISTING FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION WORK.
5. COORDINATE ALL DIMENSIONS FOR MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS AND EQUIPMENT MANUFACTURER.
6. SEE DRAWINGS S-001 AND S-002 FOR ADDITIONAL NOTES AND S-501 FOR TYPICAL DETAILS.
7. PROVIDE AND MAINTAIN SHORING, BRACING, OR STRUCTURAL SUPPORT TO MAINTAIN STABILITY. SEE NOTES ON S-001 AND S-002 FOR MORE INFORMATION.
8. FOR BALANCE OF NON-LOAD BEARING PARTITION AND ARCHITECTURAL ELEMENTS TO BE DEMOLISHED - SEE ARCHITECTURAL DRAWINGS.

PLAN NORTH

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

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CHECKED BY: PC
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SOLICITATION NO.: W912DS-19-R-0014
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US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

LEVEL 2 STRUCTURAL DEMOLITION PLAN

SHEET ID

SD-120

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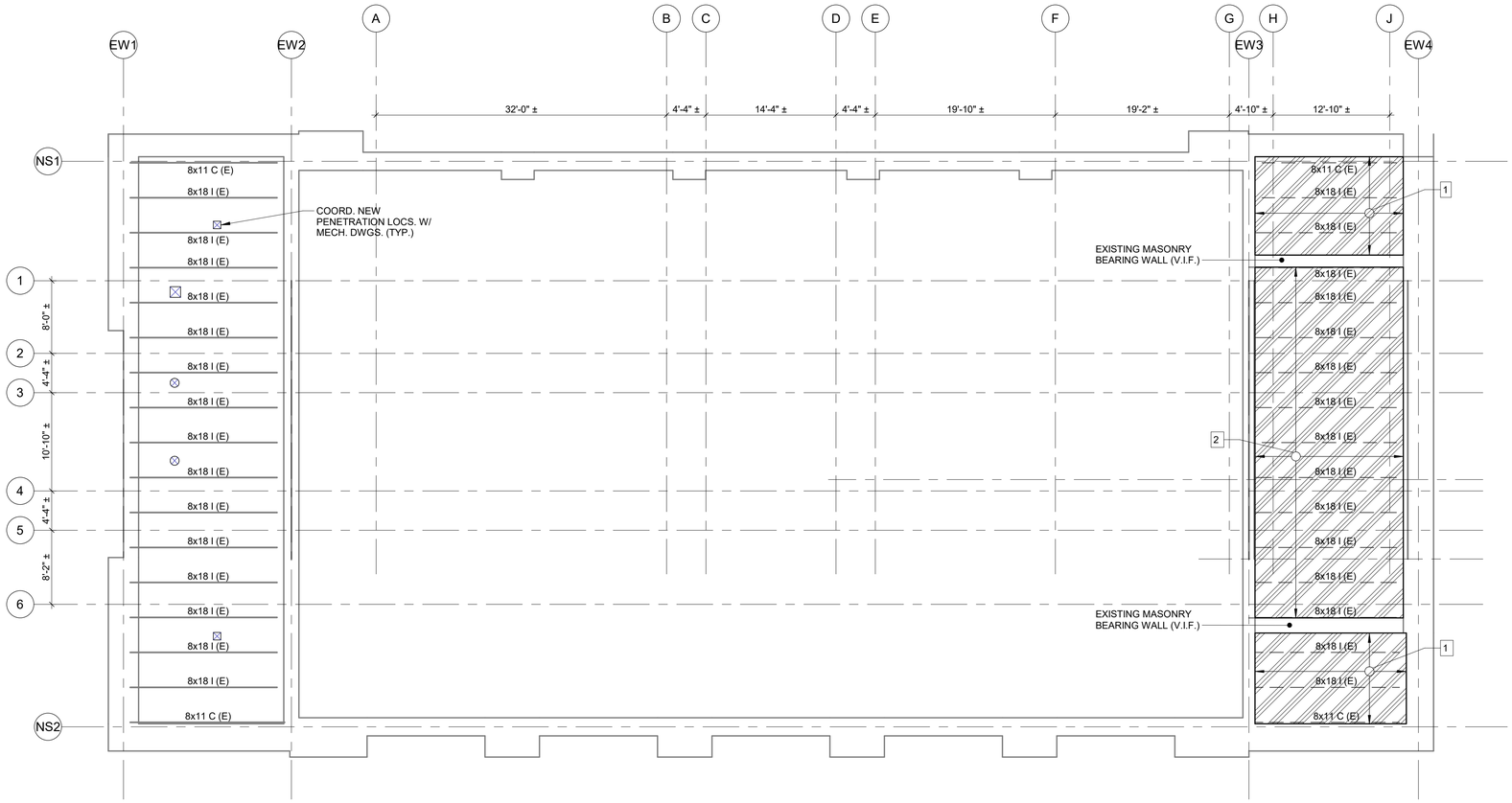

B2
SD-130

ATTIC LEVEL DEMOLITION PLAN

1/8" = 1'-0"

KEY NOTES:

1 REMOVE EXISTING STEEL BEAMS & CLAY TILE ARCH FLOOR BETWEEN WALLS (V.I.F.).

2 REMOVE EXISTING STEEL BEAMS AND WOOD PLANKS BETWEEN EXISTING MASONRY WALLS.

ATTIC LEVEL DEMOLITION NOTES:

1. TOP OF EXISTING STEEL ELEVATION TO BE FIELD VERIFIED.
2. WALLS, SLABS, AND OTHER STRUCTURAL ELEMENTS ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE (TYP.).
3. CONTRACTOR TO COORDINATE EXISTING FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION WORK.
4. PROVIDE AND MAINTAIN SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. SEE SHORING NOTES ON S-002 FOR MORE INFORMATION.
5. FOR MORE INFORMATION, SEE S-001 AND S-002 FOR NOTES, AND S-501 THROUGH S-504 FOR TYPICAL DETAILS.

ATTIC LEVEL DEMOLITION PLAN LEGEND

DENOTES FRAMING TO BE DEMOLISHED. SEE KEY NOTES.

DENOTES FLOOR STRUCTURE TO BE DEMOLISHED. SEE KEY NOTES.

PLAN NORTH

US Army Corps of Engineers ®

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US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

ATTIC LEVEL STRUCTURAL DEMOLITION PLAN

SHEET ID

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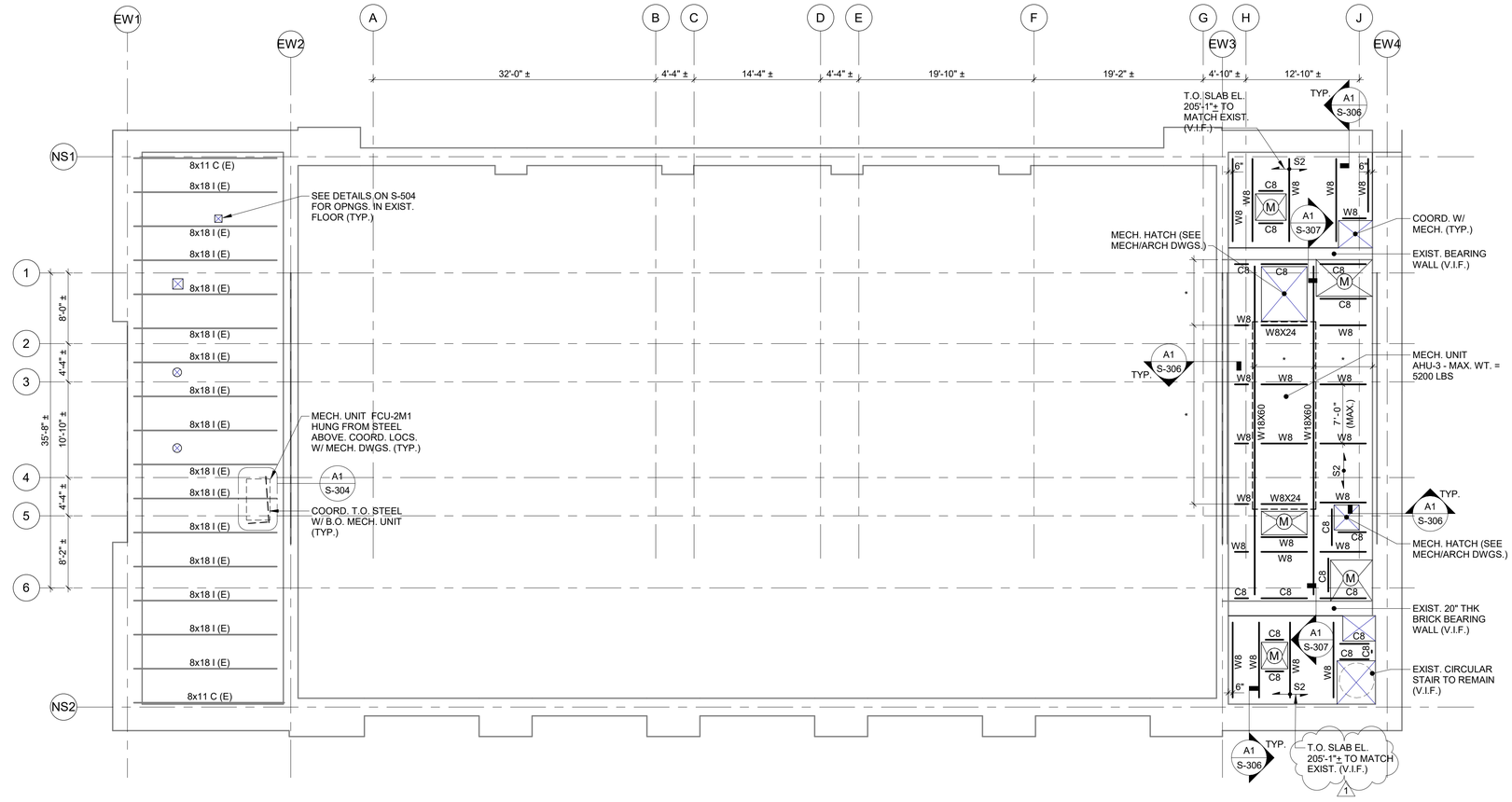

C2
S-130

ATTIC PARTIAL FRAMING PLAN

1/8" = 1'-0"

ATTIC FRAMING PLAN LEGEND

S2 — DENOTES SPAN OF 3-1/4 INCH LIGHTWEIGHT CONCRETE SLAB ON 2-INCH BY 20-GAUGE GALVANIZED COMPOSITE METAL DECK, REINFORCED WITH 6x6-W1.4xW1.4 W.W.F. (TOTAL SLAB THICKNESS = 5-1/4 INCHES). TOP OF SLAB ELEVATION 203'-0"±. TOP OF STEEL ELEVATION 202'-6 3/4"±. (UNLESS NOTED OTHERWISE)

(M) — DENOTES AREA DESIGNATED FOR MECHANICAL / ELECTRICAL / PLUMBING CHASE AREA.

ATTIC LEVEL NOTES:

1. W8 DENOTES W8X18. C8 DENOTES C8X11.5.

2. COORDINATE ALL DIMENSIONS NOTED THUS, * , WITH EXISTING CONDITIONS AND EQUIPMENT MANUFACTURER.

3. COORDINATE SIZE AND LOCATION OF ALL FLOOR AND WALL OPENINGS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND TYPICAL DETAILS. FRAME SLAB OPENINGS IN ACCORDANCE WITH TYPICAL DETAIL E7/S-503 AND DETAILS ON S-504. SEE S-401-S-403 AND RELATED SECTIONS FOR LINTELS AT WALL OPENINGS. REFER TO TYPICAL DETAILS FOR LINTELS NOT SPECIFICALLY SHOWN ON WALL ELEVATIONS. NOT ALL OPENINGS ARE SHOWN ON THE STRUCTURAL DRAWINGS.

4. SEE DRAWINGS S-001 AND S-002 FOR ADDITIONAL NOTES, S-601 FOR COLUMN SCHEDULE AND S-501 FOR TYPICAL DETAILS.

8 4 0 8 16

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

PLAN NORTH

US Army Corps of Engineers ®

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US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

ATTIC LEVEL FRAMING PLAN

SHEET ID

S-130

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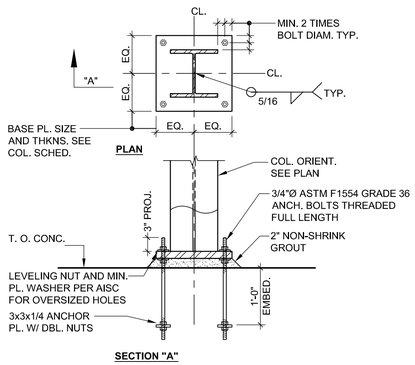
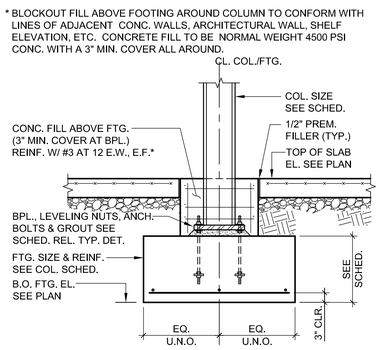
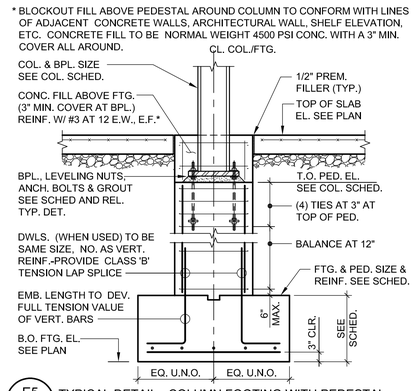


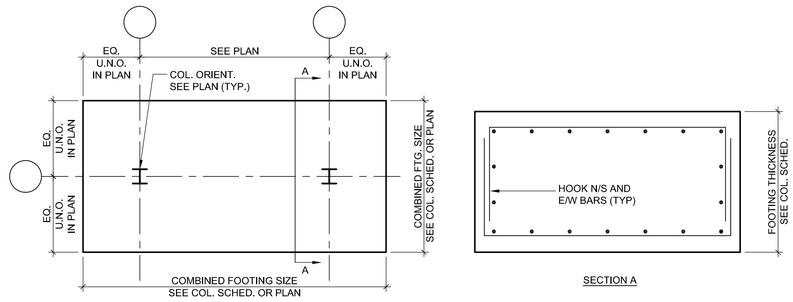
E1 S-601 TYPICAL DETAIL - COLUMN BASE PLATE TYPE 'A'
NO SCALE



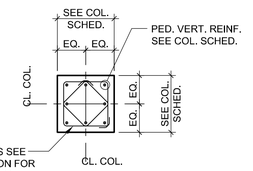
E3 S-601 TYPICAL DETAIL - COLUMN FOOTING WITHOUT PEDESTAL
NO SCALE



E5 S-601 TYPICAL DETAIL - COLUMN FOOTING WITH PEDESTAL
NO SCALE



E7 S-601 TYPICAL DETAIL - COMBINED FOOTING
NO SCALE



NOTE:
FOR PEDESTAL ORIENTATION SEE PLAN

C1 S-601 TYPICAL DETAIL - TIE / PEDESTAL DETAIL 'A'
NO SCALE

COLUMN SCHEDULE

COLUMN NUMBER / COLUMN SUPPORT		A						B						C			D		E			F			G			H		J		K			K.6		L		COLUMN NUMBER / COLUMN SUPPORT	
		1	2	3	4	5	6	1	2	3	4	5	6	1.1	3.5	6	1.1	6	1	3.8	6	1	3.8	6	1	3.8	6	1	5.5	1	5.5	2.5	6.4	7	4.9	7	4.9	7		
BASEMENT LEVEL B1	150'-0 3/4"																																						BASEMENT LEVEL B1	150'-0 3/4"
BASEMENT LEVEL B2	139'-10 3/4"																																						BASEMENT LEVEL B2	139'-10 3/4"
BASEMENT LEVEL B3	1 VARIES	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x39	W10x45	W10x33	W10x45	W10x49	W10x33	W10x39	W10x45	W10x33	W10x33	W10x49	W10x33	W10x39	W10x68	W10x68	W10x68	W10x68	W10x68	W10x68	W10x68	BASEMENT LEVEL B3	134'-7 3/4"
DEPRESSED MECH. ROOM SLAB	130'-8 1/2"	1	1	1	1	1	1	1	1	1	1	1	1	1			1		1			1			1			1	1	1	1								DEPRESSED MECH. ROOM SLAB	130'-8 1/2"
BASE PLATE	SIZE N.-S. / N.E.-S.W.	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	SIZE N.-S. / N.E.-S.W.	BASE PLATE
	SIZE E.-W. / N.W.-S.E.	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	SIZE E.-W. / N.W.-S.E.	
	THICKNESS	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	THICKNESS	
	BASE PLATE TYPE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	BASE PLATE TYPE	
PEDESTAL	TOP ELEV.														134'-4"	134'-4"		134'-4"		134'-4"	134'-4"		134'-4"	134'-4"								137'-10"	133'-7"	133'-7"	137'-10"	133'-7"	137'-10"	133'-7"	TOP ELEV.	PEDESTAL
	SIZE N.-S. / N.E.-S.W.														22"	22"		22"		22"	22"		22"	22"								22"	22"	22"	22"	22"	22"	22"	SIZE N.-S. / N.E.-S.W.	
	SIZE E.-W. / N.W.-S.E.														22"	22"		22"		22"	22"		22"	22"								22"	22"	22"	22"	22"	22"	22"	SIZE E.-W. / N.W.-S.E.	
	VERT. REINF.														(8) #6	(8) #6		(8) #6		(8) #6	(8) #6		(8) #6	(8) #6								(8) #8	(8) #6	(8) #6	(8) #6	(8) #6	(8) #6	(8) #6	VERT. REINF.	
	TIES														#3	#3		#3		#3	#3		#3	#3								#3	#3	#3	#3	#3	#3	#3	TIES	
	TIE DETAIL														A	A		A		A	A		A	A								A	A	A	A	A	A	A	TIE DETAIL	
FOOTING	SIZE N.-S. / N.E.-S.W.	3'-0"		3'-0"		3'-0"		3'-0"		3'-0"		3'-0"		16'-4"	3'-0"	16'-4"	SEE COLUMN C-1.1 FOR COMBINED FTG. INFO.	SEE COLUMN C-6 FOR COMBINED FTG. INFO.	6'-6"	4'-6"		6'-2"	4'-0"	3'-0"	4'-4"	3'-0"		3'-0"	3'-0"	5'-0"	3'-0"	4'-0"	4'-0"	6'-6"	4'-0"	4'-0"	4'-0"	6'-6"	SIZE N.-S. / N.E.-S.W.	FOOTING
	SIZE E.-W. / N.W.-S.E.	10'-0"		12'-10"		10'-2"		10'-0"		12'-10"		10'-2"		3'-0"	4'-0"	3'-0"			6'-6"	15'-9"		4'-1"	4'-0"	3'-2"	6'-4"	15'-9"		3'-0"	3'-0"	5'-0"	5'-0"	4'-0"	4'-0"	6'-6"	4'-0"	4'-0"	8'-0"	6'-6"	SIZE E.-W. / N.W.-S.E.	
	THICKNESS	2'-0"		2'-0"		2'-0"		2'-0"		2'-0"		2'-0"		1'-6"	1'-6"	1'-6"			3'-0"	1'-6"		1'-6"	1'-6"	1'-6"	3'-0"	2'-0"		1'-6"	2'-0"	1'-6"	2'-0"	1'-6"	1'-6"	2'-6"	1'-6"	1'-6"	3'-0"	2'-6"	THICKNESS	
	REINF. N.-S./N.E.-S.W.	(17) #6 B.		(20) #6 B.		(17) #6 B.		(17) #6 B.		(20) #6 B.		(17) #6 B.		(6) #5 T. (6) #5 B.	(6) #5 B.	(6) #5 T. (6) #5 B.			(9)#7 T. (9)#7 B.	(26) #5 B. (26) #5 B.		(8)#4 T. (8)#4 B.	(8) #5 B.	(7) #4 T. (7) #4 B.	(9)#7 T. (9)#7 B.	(28) #5 B.		(6) #4 B.	(8) #4 B.	10) #4 T. 10) #4 B.	13) #4 B.	(8) #5 T. (8) #5 B.	(8) #5 T. (8) #5 B.	(10)#6 T. (10)#6 B.	(8) #5 T. (8) #5 B.	(8) #5 T. (8) #5 B.	(27)#6 T. (27)#6 B.	(10)#6 T. (10)#6 B.	REINF. N.-S. / N.E.-S.W.	
	SIZE E.-W. / N.W.-S.E.	(8) #6 T. (8) #6 B.		(8) #6 T. (8) #6 B.		(8) #6 T. (8) #6 B.		(8) #6 T. (8) #6 B.		(8) #6 T. (8) #6 B.		(8) #6 T. (8) #6 B.		(17) #6 B.	(5) #5 B.	(17) #6 B			(9)#7 T. (9)#7 B.	(7) #5 T. (7) #5 B.		(12)#4 B.	(8) #5 B.	(9) #4 T. (9) #4 B.	(9)#7 T. (9)#7 B.	(8) #5 T.		(6) #4 B.	(8) #4 B.	10) #4 T. 10) #4 B.	(8) #4 B.	(8) #5 T. (8) #5 B.	(8) #5 T. (8) #5 B.	(10)#6 T. (10)#6 B.	(8) #5 T. (8) #5 B.	(8) #5 T. (8) #5 B.	(8) #6 T. (8) #6 B.	(10)#6 T. (10)#6 B.	REINF. E.-W. / N.W.-S.E.	
COLUMN NUMBER / COLUMN SUPPORT		1	2	3	4	5	6	1	2	3	4	5	6	1.1	3.5	6	1.1	6	1	3.8	6	1	3.8	6	1	3.8	6	1	5.5	1	5.5	2.5	6.4	7	4.9	7	4.9	7	COLUMN NUMBER / COLUMN SUPPORT	
		A						B						C			D		E			F			G			H		J		K			K.6		L			

HOT DIP GALVANIZED

NOTE:
|| - DENOTES PERMITTED COLUMN SPLICE PER C1/S-503

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

ISSUE DATE: 02/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494

DESIGNED BY: KMK
DRAWN BY: ZBW
CHECKED BY: PC
SUBMITTED BY: PC
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE A Joint Venture

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

COLUMN SCHEDULE AND DETAILS

SHEET ID
S-601

RTA SUBMISSION 02/11/2021

ROOFING NOTES:

BATTEN SEAM ROOFING:

1. AT LOCATIONS TO RECEIVE NEW BATTEN SEAM ROOFING, PROVIDE HIGH TEMP. ICE & WATERSHIELD MIN. 2'-0" UP ROOF SLOPE ONTO EXISTING TERRA COTTA ROOF DECK. PROVIDE NEW SHEET UNDERLAYMENT & ROSIN PAPER.
2. CAREFULLY UNFASTEN EXISTING COPPER BATTEN SEAM ROOFING AT CUT TO SLIDE NEW UNDERLAYMENT & COPPER ROOFING UNDER EXISTING ROOFING. LAP EXISTING UNDERLAYMENT OVER NEW UNDERLAYMENT 2" MIN.
3. PROVIDE MIN. 2'-0" OF P.T. BATTENS SIZE & PROFILE TO MATCH EXISTING AT BOTTOM OF STEEP ROOF SLOPE. JOIN NEW WOOD BATTENS WITH EXISTING BATTENS WITH A SCARF JOINT.
4. PROVIDE 20 OZ. PRE-PATINATED COPPER BATTEN SEAM ROOFING AT A MINIMUM 2'-0" AT BOTTOM OF STEEP ROOF SLOPES. PROVIDE AN ADDITIONAL 1'-0" OF ROOFING ALTERNATING EVERY OTHER PANEL TO AVOID CONTINUOUS HORIZONTAL SEAMS BETWEEN PANELS.

FLAT SEAM ROOFING:

5. PROVIDE HIGH TEMP ICE & WATERSHIELD, SHEET UNDERLAYMENT, ROSIN PAPER, & 20 OZ. FLAT SEAM PLAIN COPPER (UNLESS NOTED OTHERWISE) ROOFING.
6. CONSTRUCT FLAT SEAM ROOFING USING PANELS NO LARGER THAN 1'-6" X 2'-0".
7. PROVIDE EXPANSION BATTENS BY EXTENDING BATTENS SEAMS ONTO FLAT SEAM ROOFING WHERE SHOWN ON THE ROOF PLAN.

GUTTERS:

8. PROVIDE NEW BUILT-IN GUTTER STRUCTURE, BLOCKING, & SHEATHING W/ PT WOOD. INCREASE HEIGHT OF GUTTER FASCIA AT EXISTING LOCATION BY 2" TO INCREASE GUTTER CAPACITY. SLOPE GUTTERS 1/8:12 MIN. TOWARD EXISTING & NEW DRAIN LOCATIONS.
9. LINE GUTTERS WITH ICE & WATERSHIELD, UNDERLAYMENT, ROSIN PAPER, & 24 OZ. PLAIN COPPER.
10. CONSTRUCT NEW FASCIA WITH 20 OZ. ZINC-COATED COPPER.

ROOF LEADERS:

11. AT LOCATIONS INDICATED ON ROOF PLAN, PROVIDE COPPER DRAINS AND LEADERS. SIZES AS INDICATED.
12. PROVIDE NEW GUTTER SCREENS AND STRAINERS AT ALL DRAINS.
13. PROVIDE NEW COPPER LEADERS THROUGH INTERIOR OF BUILDING DOWN TO SUBSURFACE DRAINS. COORDINATE ACCESS FOR REMOVAL OF EXISTING AND INSTALLATION OF NEW ROOF LEADERS WITH CUTTING AND PATCHING OF INTERIOR FINISHES. SEE INTERIOR DRAWINGS.
14. REMOVE AND REINSTALL CHIMNEY CAPS AS REQUIRED FOR INSTALLATION OF NEW ROOF LEADERS ON EAST SIDE OF THE BUILDING.

SNOWGUARDS:

15. REINSTALL SALVAGED SNOWGUARD FENCES & MOUNTING BRACKETS AT ORIGINAL LOCATIONS. PROVIDE NEW SS MOUNTING HARDWARE. TYP. SEE SPECIFICATION 07 62 13 COPPER SHEET METAL ROOFING, FLASHING AND TRIM.

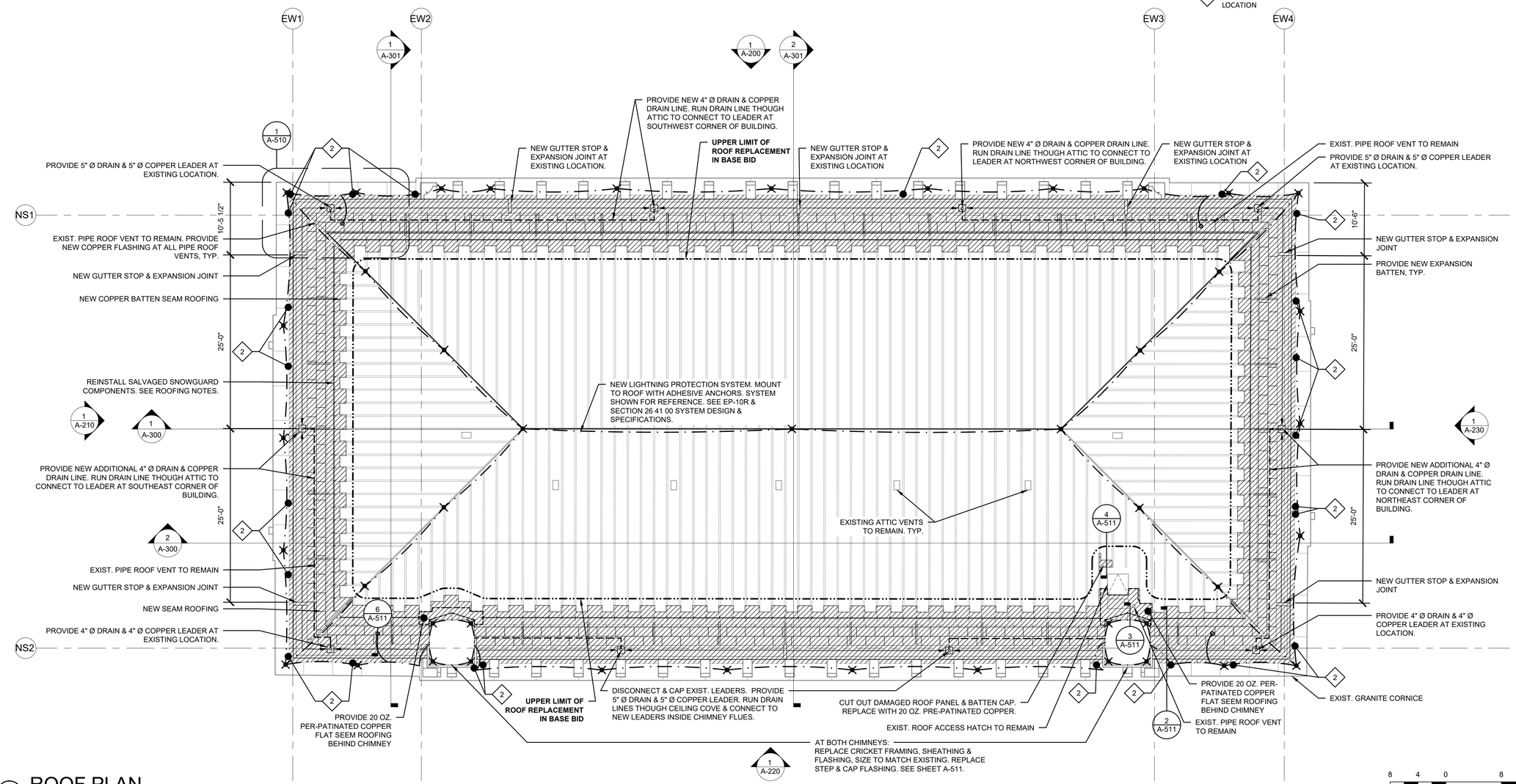
1

ROOF KEY

- LIMIT LINE FOR BASE BID ROOFING REPLACEMENT
- NEW COPPER ROOFING & GUTTER REPLACEMENT
- NEW GUTTER DRAIN
- FLOW SLOPE
- NEW DRAIN LINE IN ATTIC SPACE
- EXIST. ROOF PIPE VENT TO REMAIN
- LIGHTNING PROTECTION CABLE, SEE EP-10R
- LIGHTNING PROTECTION AIR TERMINAL, SEE EP-10R
- LIGHTNING PROTECTION THROUGH ROOF CONNECTION, SEE EP-10R

KEYED MASONRY REPAIRS:

1. REPLACE STONE UNIT TO MATCH EXISTING STONE TYPE, DIMENSIONS AND PROFILE
2. DUTCHMAN REPAIR (APPROXIMATE 3" Ø EACH)
3. CRACK REPAIR
4. COMPOSITE MORTAR PATCH
5. REPAIR AND REINSTALL STONE UNIT IN SAME LOCATION



1 A-145 ROOF PLAN
1/8" = 1'-0"

PLAN NORTH

8 4 0 8 16
SCALE: 1/8"=1'-0" FEET

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: JN
DRAWN BY: ZB
CHECKED BY: JN
SUBMITTED BY:
SIZE: ANSI D
ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-R-0014
PROJECT NO: 20190494

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

ROOF PLAN

SHEET ID
A-145

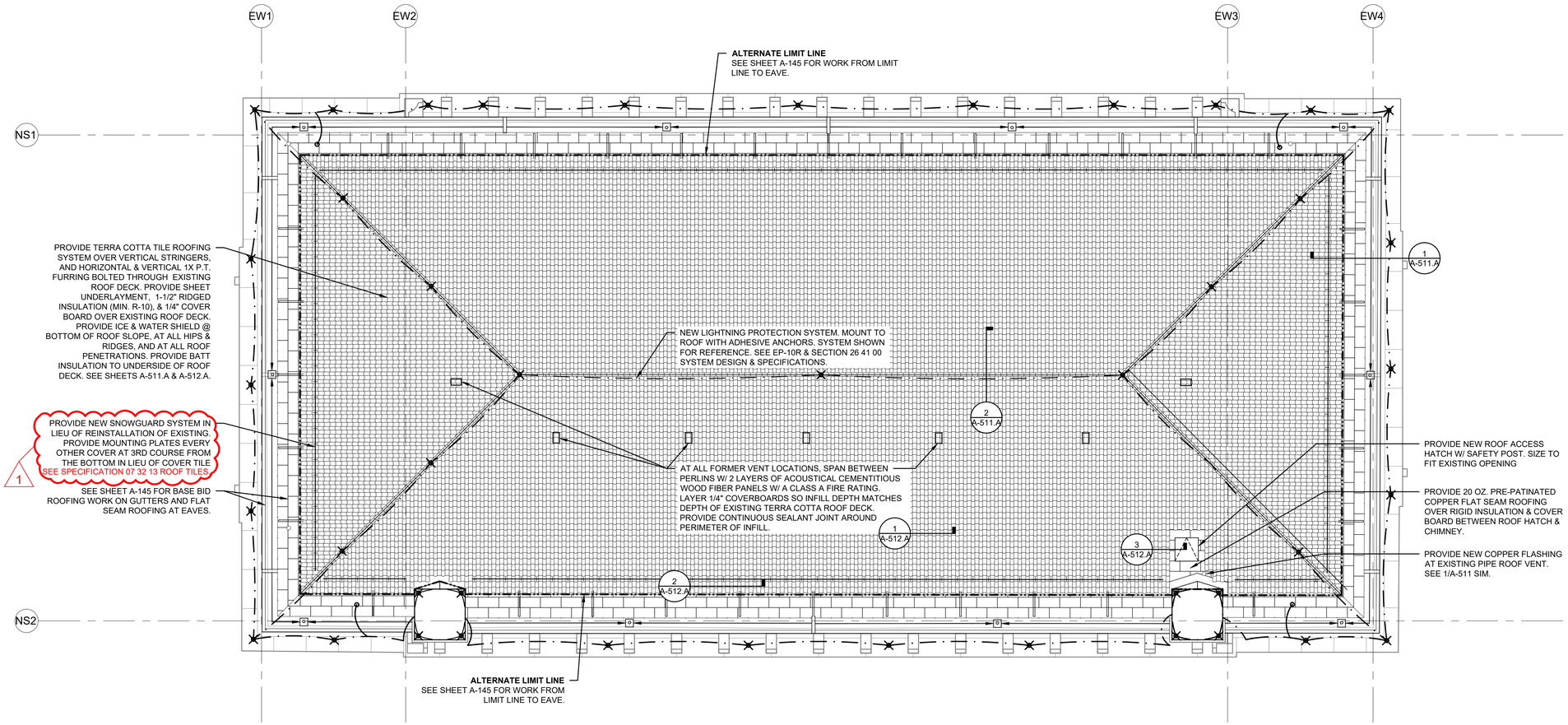
RTA SUBMISSION 2/11/2021

ROOF KEY

- LIMIT LINE BETWEEN ALTERNATE NO. 1 & BASE BID
- GUTTER DRAIN
- EXIST. ROOF PIPE VENT TO REMAIN
- LIGHTNING PROTECTION CABLE, SEE EP-10R
- LIGHTNING PROTECTION AIR TERMINAL, SEE EP-10R
- LIGHTNING PROTECTION THROUGH ROOF CONNECTION, SEE EP-10R

ALTERNATE NO. 1 - NOTES:

1. ALTERNATE NO. 1 ITEMS ARE IN ADDITION TO BASE BID ROOFING ITEMS UNLESS NOTED OTHERWISE. SEE A-145 FOR BASE BID ROOFING WORK & ROOF LEVEL MASONRY WORK.



1 A-145.A ROOF PLAN - ALTERNATE NO. 1

1/8" = 1'-0"

FULL ROOF REPLACEMENT

PLAN NORTH

8 4 0 8 16

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

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: JN
DRAWN BY: ZB
CHECKED BY: JN
SUBMITTED BY:
ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-R-0014
PROJECT NO: 20190494
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

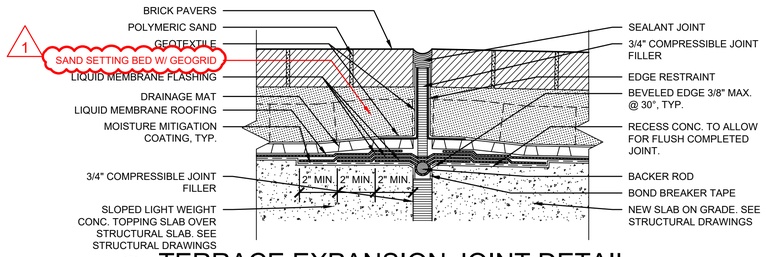
WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

ALTERNATE NO. 1 - ROOF PLAN

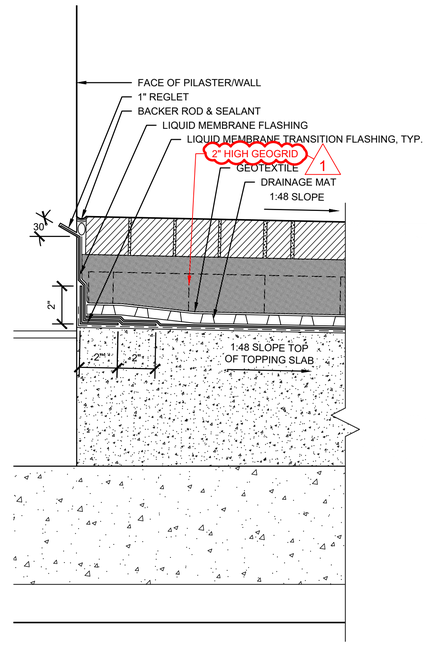
SHEET ID

A-145.A

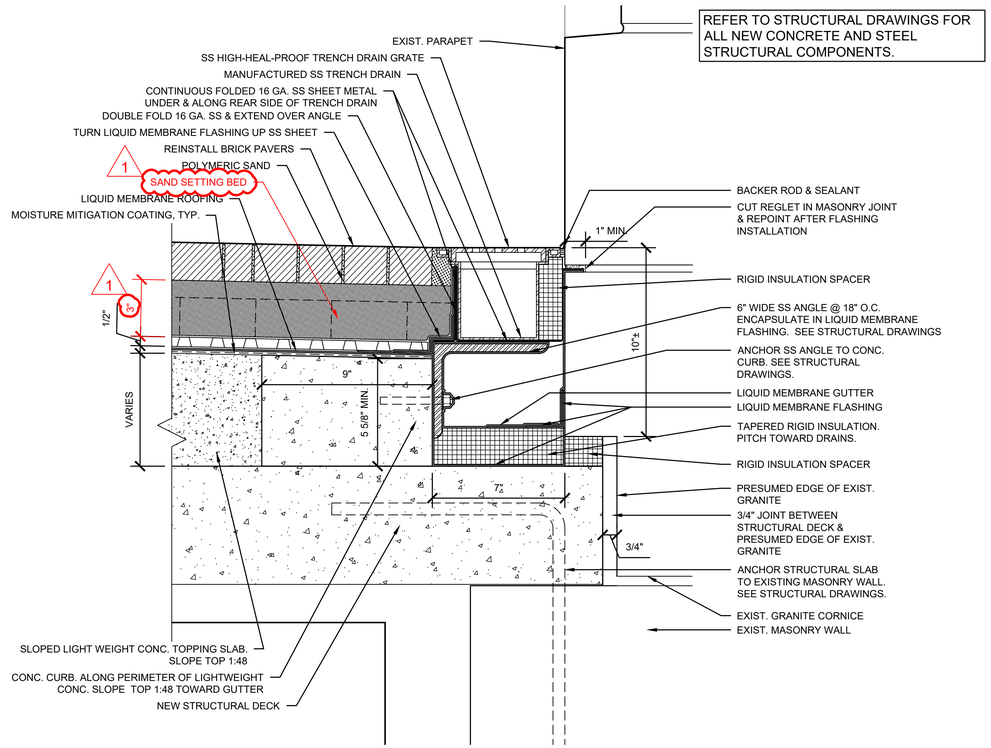
RTA SUBMISSION 2/11/2021



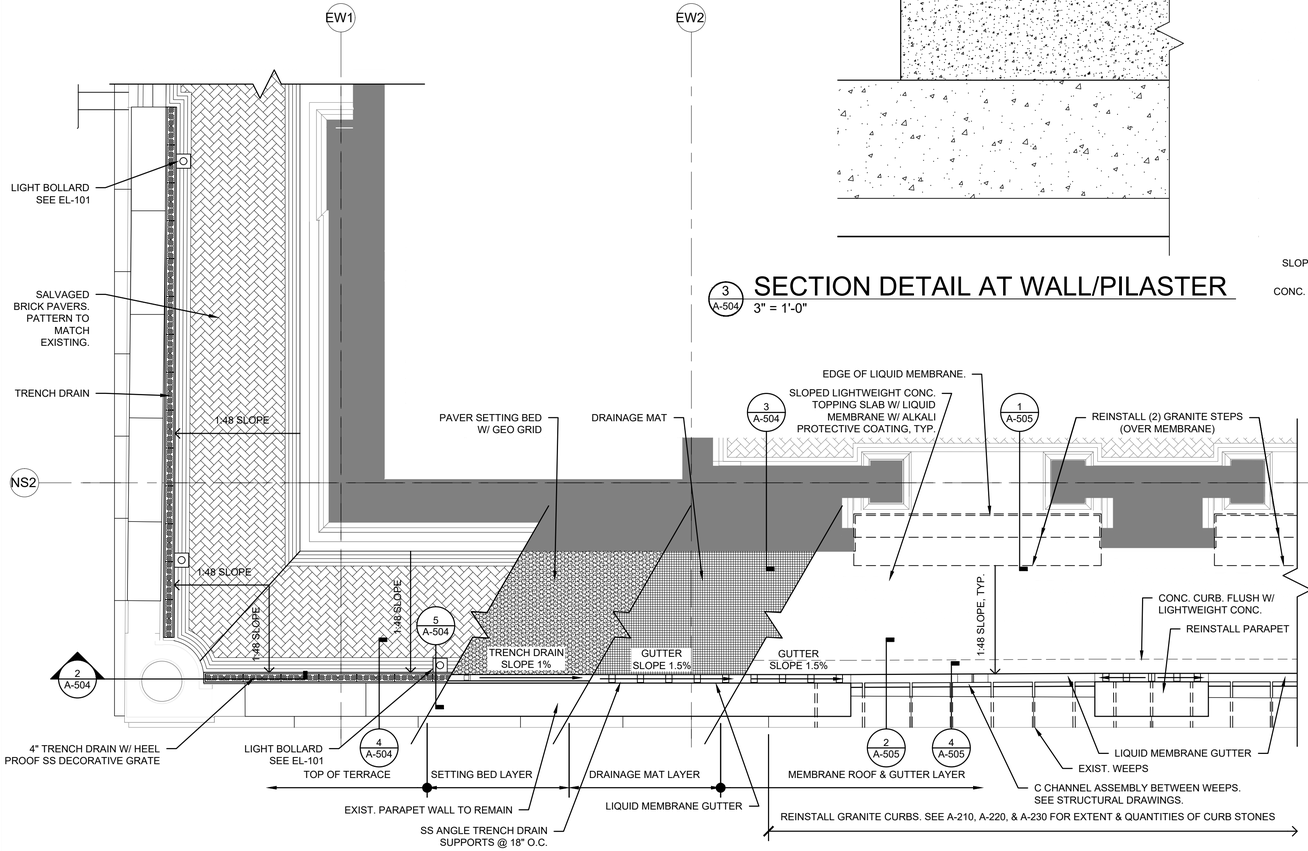
6 / A-504 TERRACE EXPANSION JOINT DETAIL
3" = 1'-0"



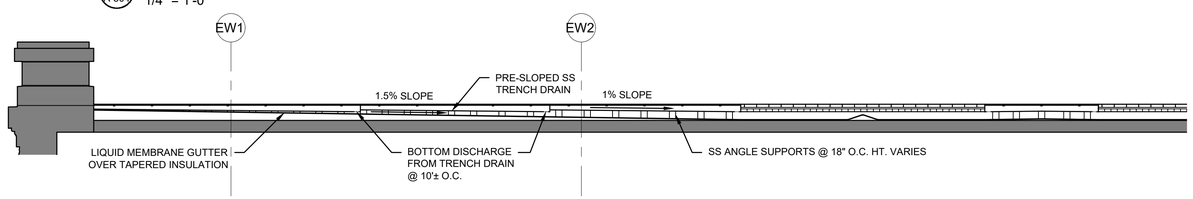
3 / A-504 SECTION DETAIL AT WALL/PILASTER
3" = 1'-0"



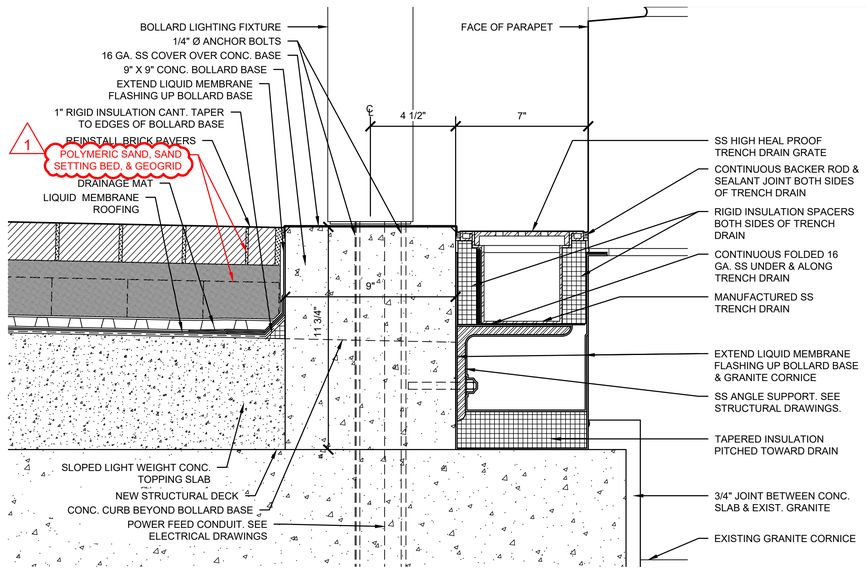
4 / A-504 SECTION DETAIL AT PARAPET
3" = 1'-0"



1 / A-504 TERRACE CUT AWAY PLAN
1/4" = 1'-0"



2 / A-504 TYPICAL DRAINAGE PROFILE
1/4" = 1'-0"



5 / A-504 BOLLARD MOUNTING DETAIL
3" = 1'-0"

PLAN NORTH

4 2 0 4 8
SCALE: 1/4"=1'-0" FEET

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: JN
DRAWN BY: ZB
CHECKED BY: ZB
SUBMITTED BY:
ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-R-0014
PROJECT NO: 20190494
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
JACOBS / EWING COLE A Joint Venture

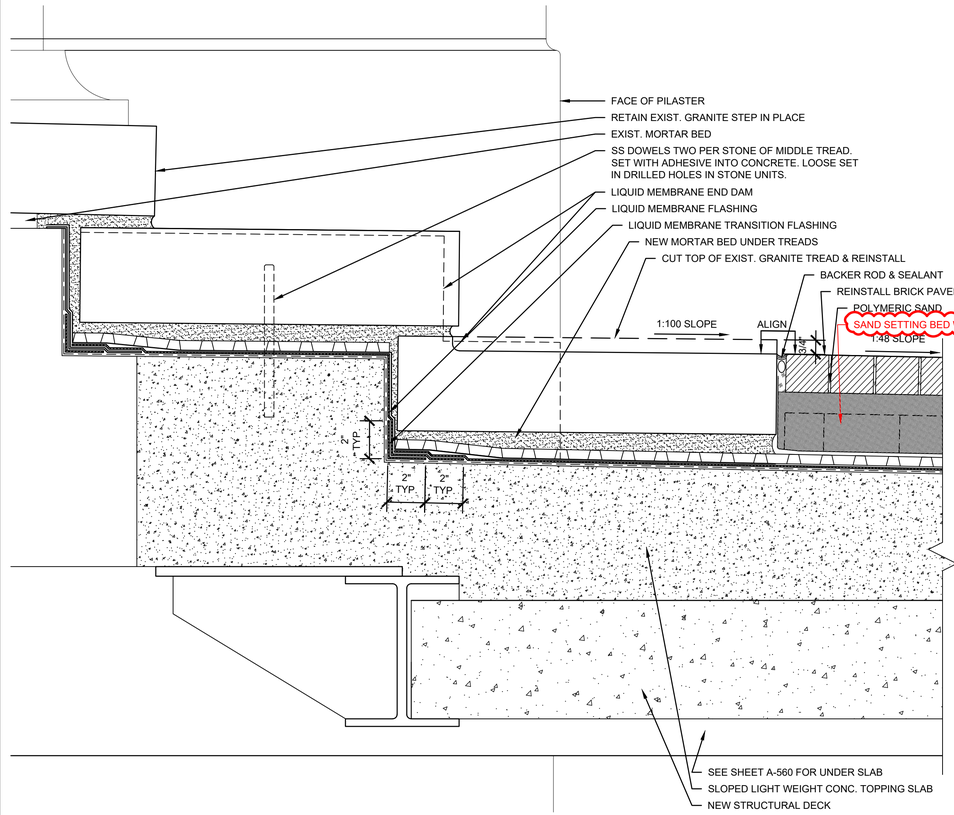
WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

TERRACE ENLARGED PLAN & DETAILS

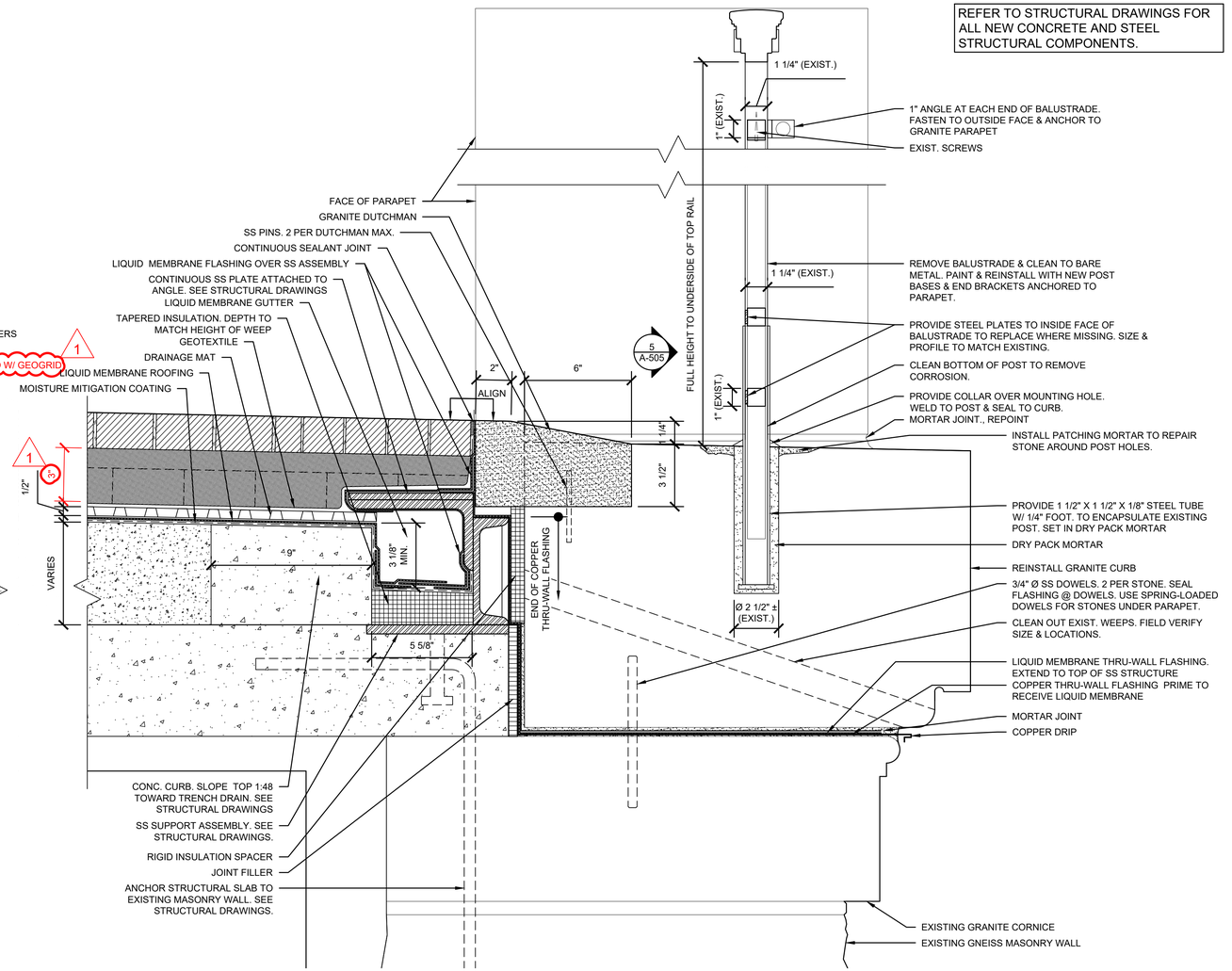
SHEET ID
A-504

RTA SUBMISSION 2/11/2021

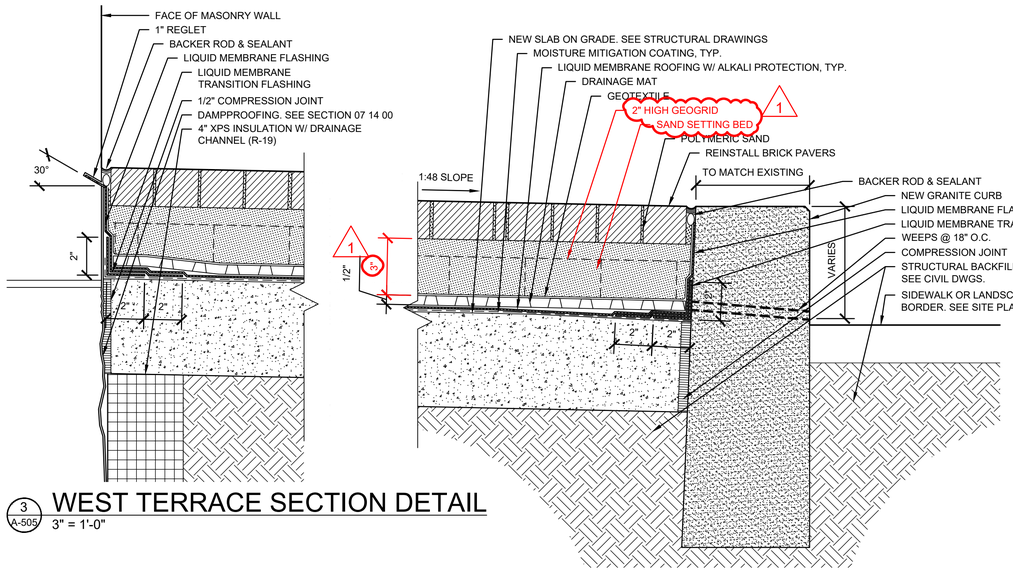
REFER TO STRUCTURAL DRAWINGS FOR ALL NEW CONCRETE AND STEEL STRUCTURAL COMPONENTS.



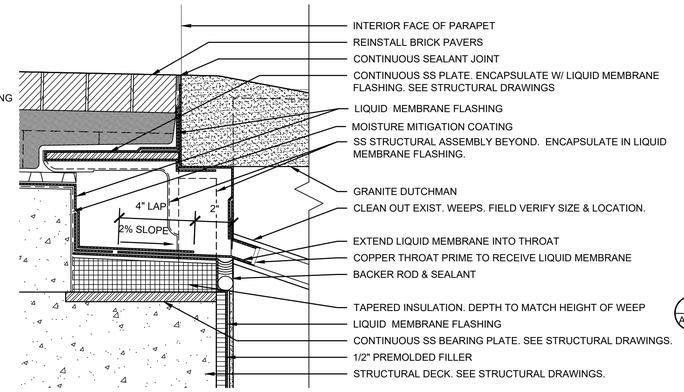
1 A-505 TERRACE SECTION DETAIL @ LOGGIA STEPS
3" = 1'-0"



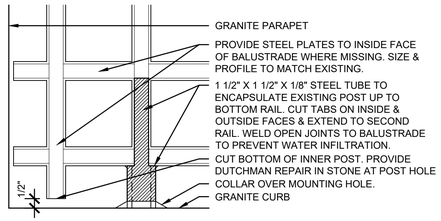
2 A-505 TERRACE SECTION DETAIL @ BALUSTRADE
3" = 1'-0"



3 A-505 WEST TERRACE SECTION DETAIL
3" = 1'-0"



4 A-505 TERRACE SECTION DETAIL @ WEEPS
3" = 1'-0"



5 A-505 BALUSTRADE BASE ELEVATION
3" = 1'-0"

6 3 0 6
SCALE: 3"=1'-0" INCHES

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: JN
DRAWN BY: ZB
CHECKED BY: ZB
SUBMITTED BY:
ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-R-0014
PROJECT NO: 20190494
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS

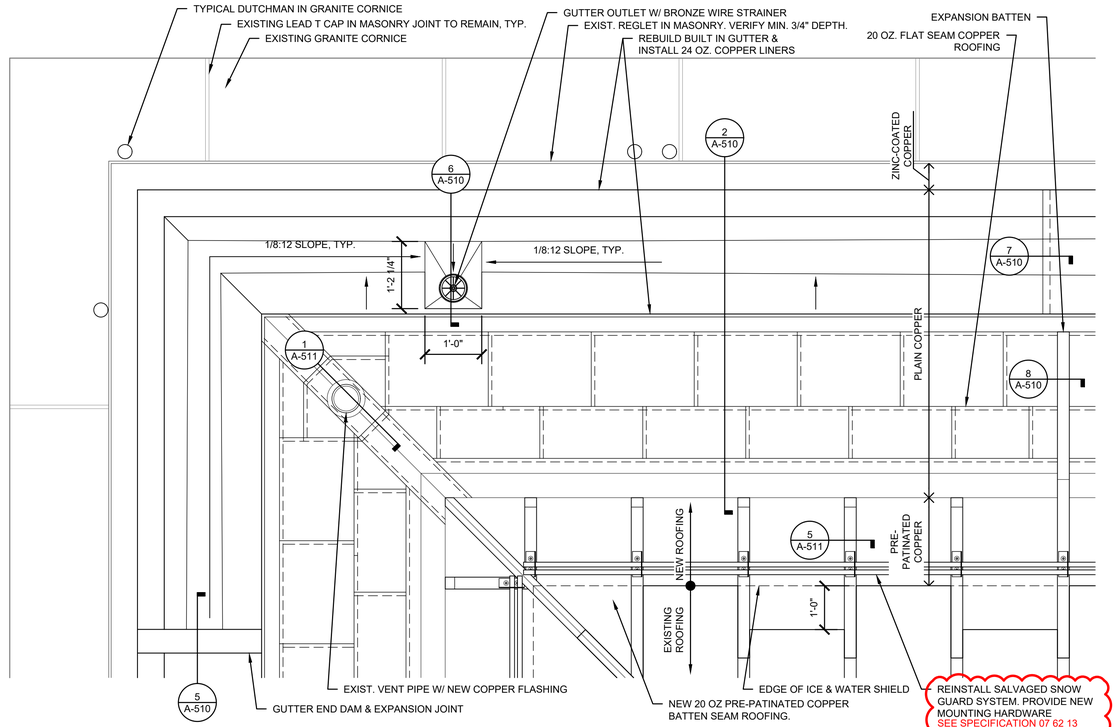
JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

TERRACE DETAILS

SHEET ID
A-505

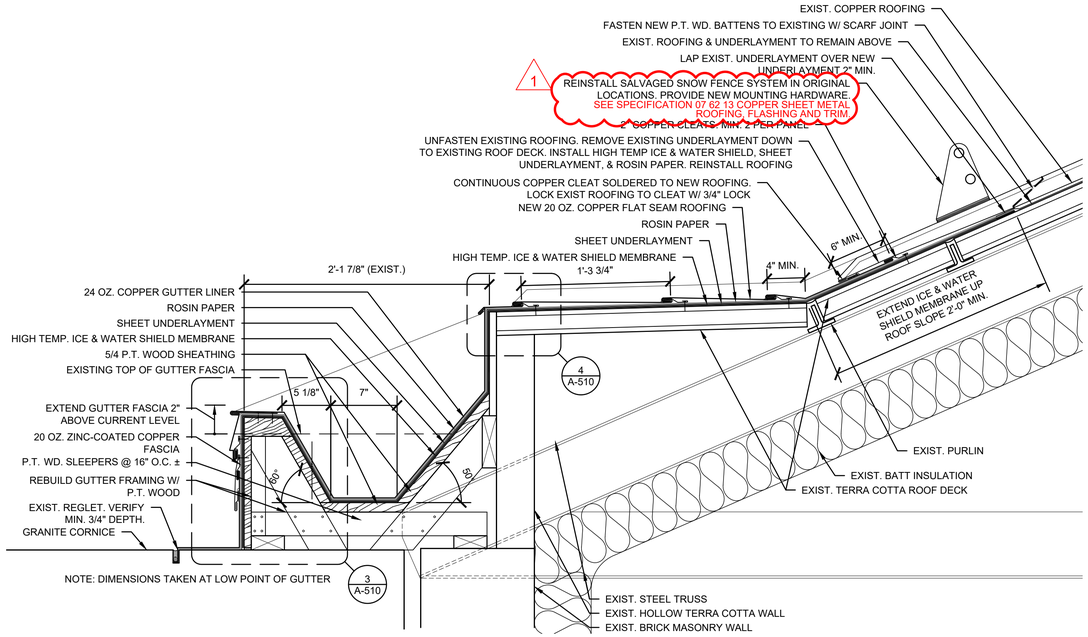
RTA SUBMISSION 2/11/2021



1 A-510 ENLARGED PARTIAL ROOF PLAN

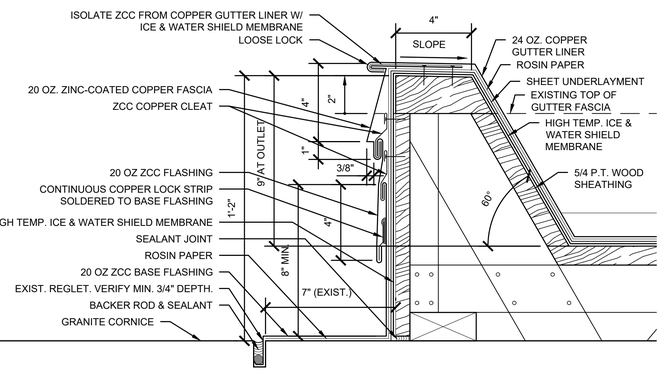
3/4" = 1'-0"

(LIGHTNING PROTECTION SYSTEM NOT SHOWN FOR CLARITY)



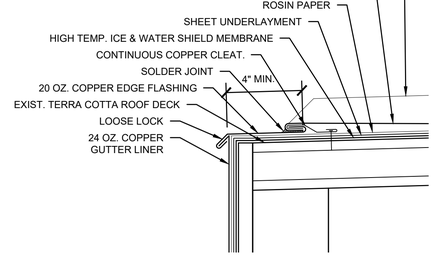
2 A-510 GUTTER SECTION DETAIL

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



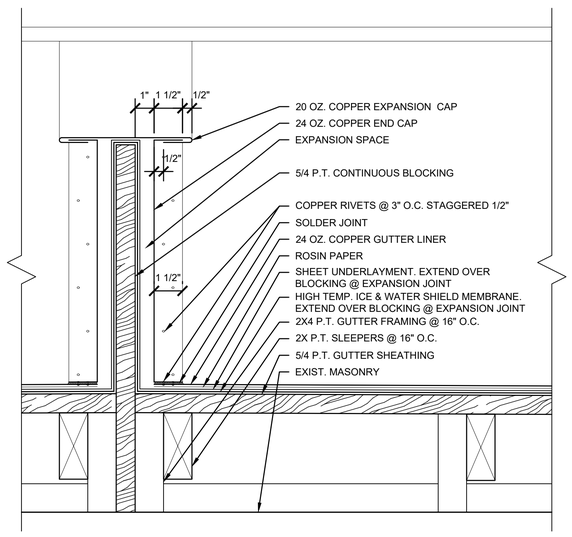
3 A-510 GUTTER FASCIA DETAIL

3" = 1'-0"



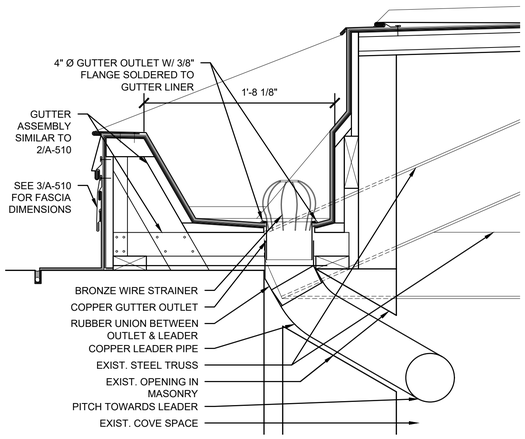
4 A-510 GUTTER EAVE DETAIL

3" = 1'-0"



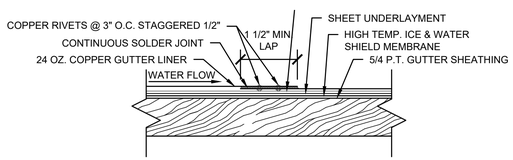
5 A-510 GUTTER EXPANSION JOINT DETAIL

3" = 1'-0"



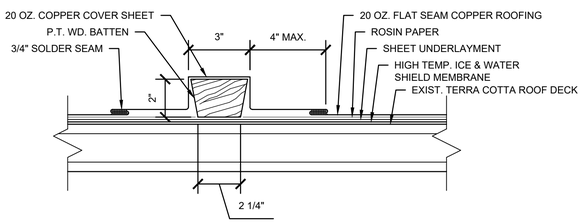
6 A-510 GUTTER OUTLET SECTION DETAIL

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



7 A-510 GUTTER SEAM DETAIL

6" = 1'-0"



8 A-510 EXPANSION BATTEN DETAIL

3" = 1'-0"

1 6" 0 1

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

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	R/A SUBMISSION	2/11/2021

ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-R-0014
PROJECT NO: 20190494

DESIGNED BY: JN
DRAWN BY: ZB
CHECKED BY: ZB
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

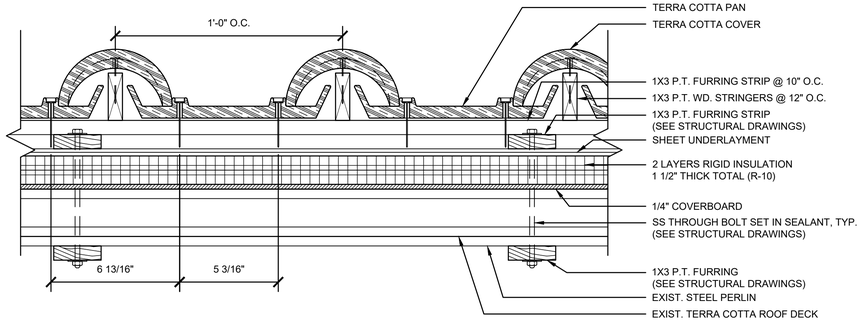
WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

ROOF DETAILS

SHEET ID

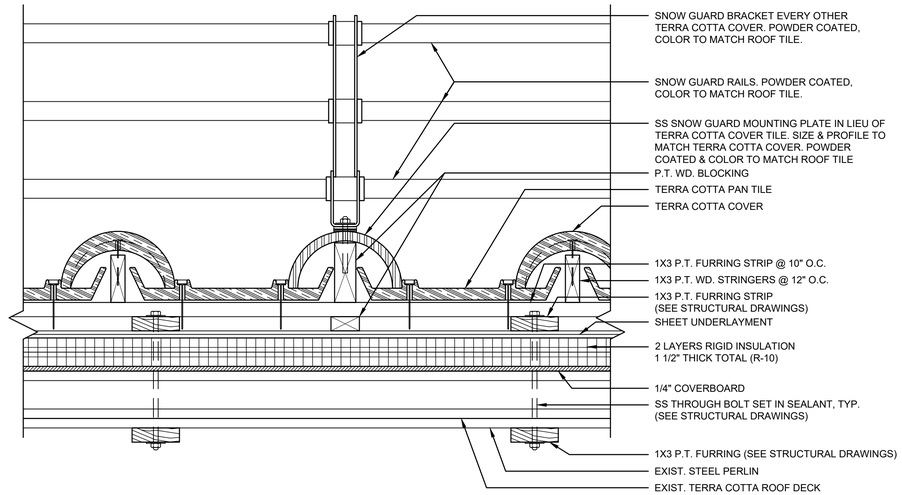
A-510

RTA SUBMISSION 2/11/2021



1 A-512.A HORIZONTAL SECTION DETAIL - TILE ROOF

3" = 1'-0"

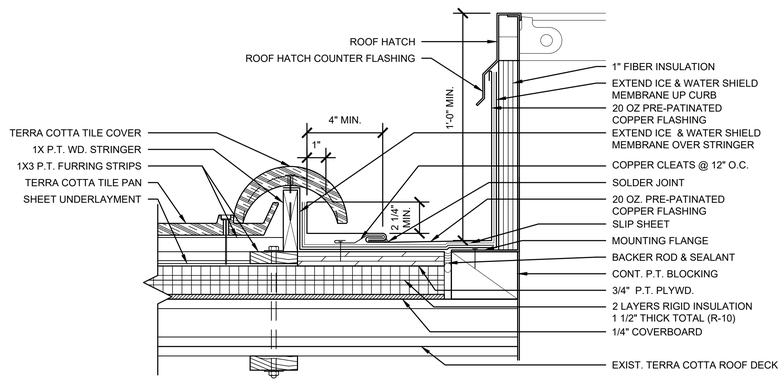


2 A-512.A SNOW GUARD DETAIL - TILE ROOF

3" = 1'-0"

NOTE:
SEE SPECIFICATION 07 32 13 ROOF TILES FOR SNOW GUARD SYSTEM AT TILE ROOFING.

1



3 A-512.A ROOF HATCH DETAIL - TILE ROOF

3" = 1'-0"

6 3 0 6

SCALE: 3"=1'-0" INCHES

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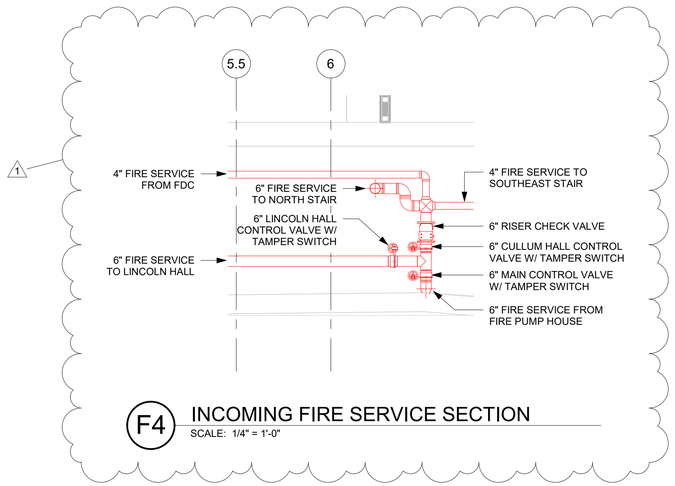
ALTERNATE NO. 1 - ROOF DETAILS

SHEET ID

A-512.A

RTA SUBMISSION 2/11/2021

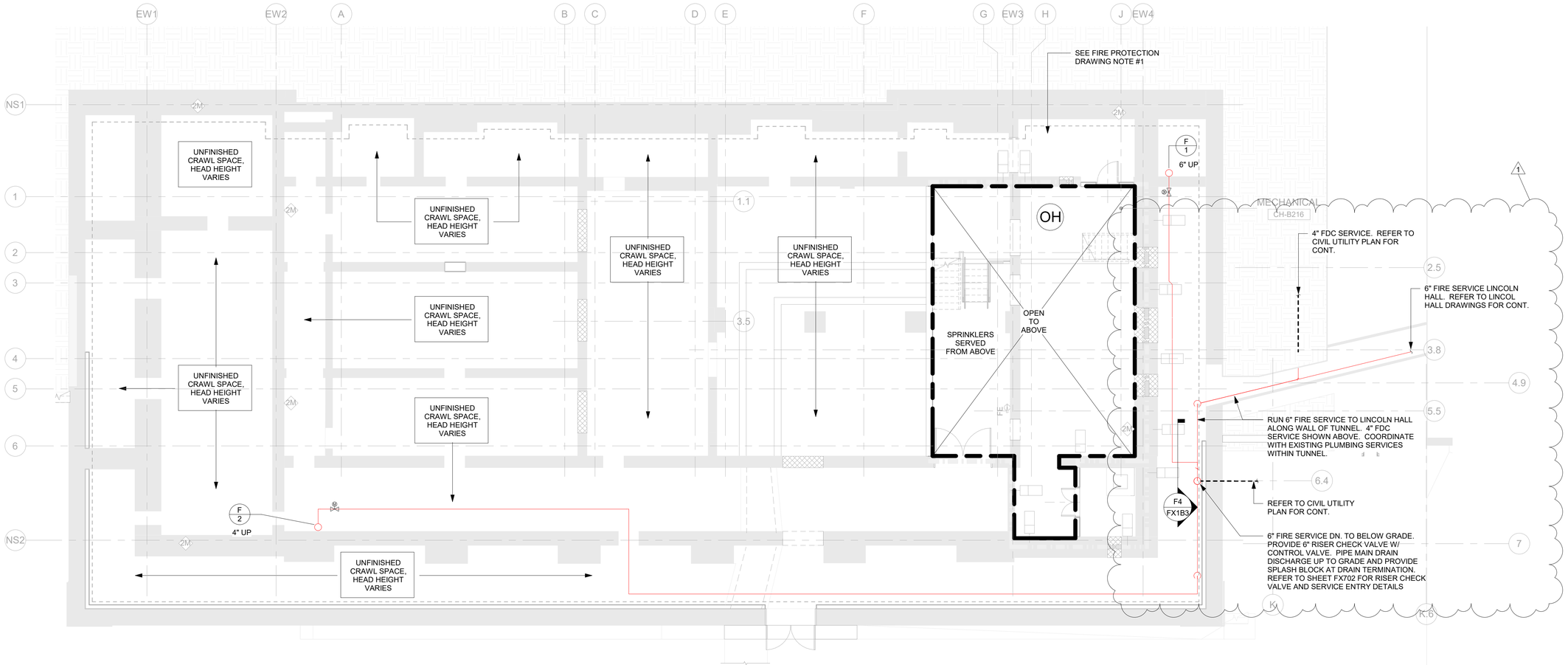


F4 INCOMING FIRE SERVICE SECTION

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

FIRE PROTECTION DRAWING NOTES:

1. PROVIDE INTERMEDIATE LEVEL SPRINKLER WITH SHIELD BELOW ALL OPEN GRATE CATWALKS.
2. NO AUTOMATIC SPRINKLER PROTECTION PROVIDED IN UNFINISHED CRAWL SPACE AREAS. AREAS ARE CONSIDERED NORMALLY UNOCCUPIED BUILDING SERVICE EQUIPMENT SUPPORT AREAS AND THEREFORE DO NOT REQUIRE SPRINKLER PROTECTION.
3. IT IS NOT PERMITTED TO ANCHOR TO, OR SUPPORT FROM, THE EXISTING CLAY TILE ARCH FLOOR CONSTRUCTION. UTILITIES, DUCTWORK, LIGHTING, ARCHITECTURAL ELEMENTS, ETC. MUST BE SUPPORTED BY SECONDARY FRAMING, ATTACHED TO THE EXISTING PRIMARY STEEL FLOOR FRAMING. DESIGN OF SECONDARY FRAMING AND CONNECTIONS TO STEEL MUST BE BY PERFOMED BY THE CONTRACTOR'S LICENSED DOR. REFER TO TYPICAL DETAIL E5/S-504 AND RELATED SPECIFICATIONS.
4. REFER TO DRAWING A-005 FOR GENERAL NOTES AND REQUIREMENTS ON RUNNING UTILITIES IN HISTORIC SPACES.



A1 FX1B3 BASEMENT FLOOR B3 FIRE PROTECTION PLAN

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

PLAN NORTH

8 4 0 8 16

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

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1	AMENDMENT 1	4/7/2021
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DRAWN BY: CJW
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PROJECT NO: 20190494

US ARMY CORPS OF ENGINEERS

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WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

BASEMENT FLOOR B3 FIRE PROTECTION PLAN

SHEET ID

FX1B3

File Path: C:\Revit Local Files\C0031C-FP-18-CENTRAL_cwhitesellUXL3V.rvt
Plot Date: 4/5/2021 11:34:05 AM

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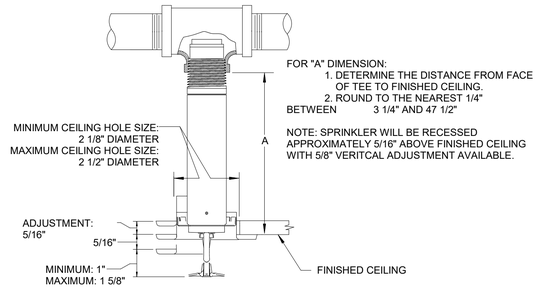
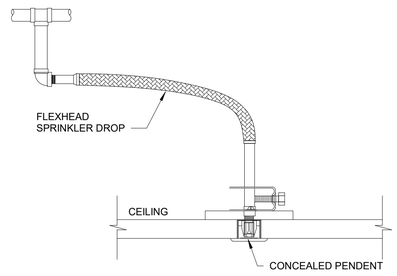
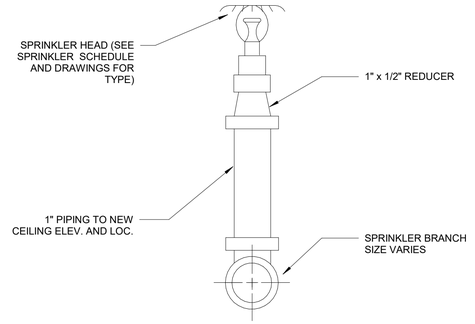


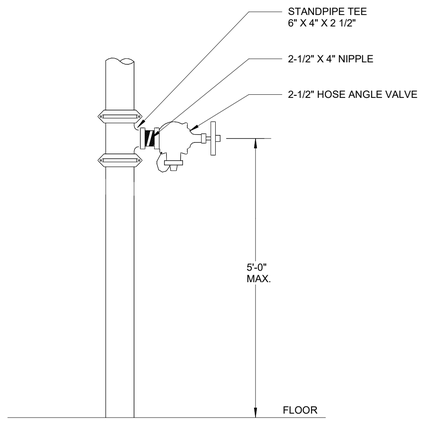
F1 / FX702 DRY PENDANT SPRINKLER HEAD IN FINISHED CEILING
SCALE: N.T.S.



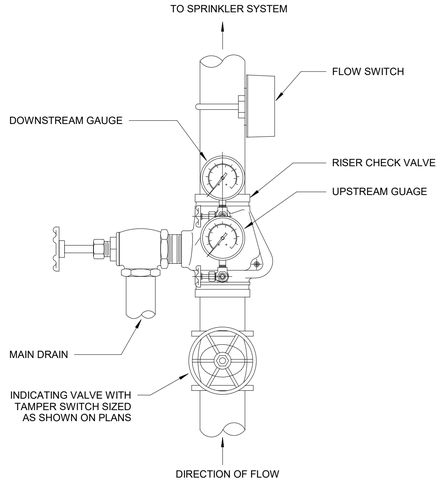
F4 / FX702 FLEXHEAD SPRINKLER DROP
SCALE: N.T.S.



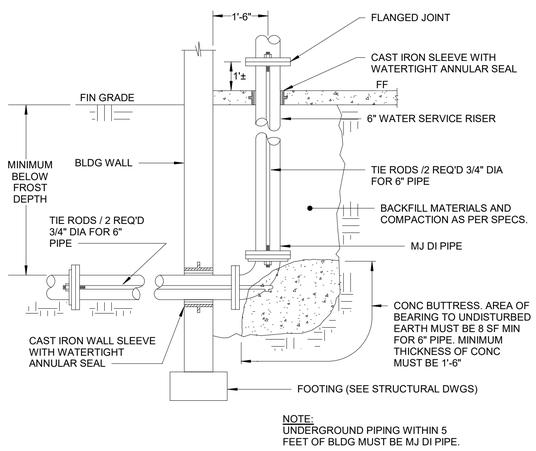
F7 / FX702 UPRIGHT SPRINKLER HEAD
SCALE: N.T.S.



C1 / FX702 FIRE DEPARTMENT VALVE ON STANDPIPE
SCALE: N.T.S.

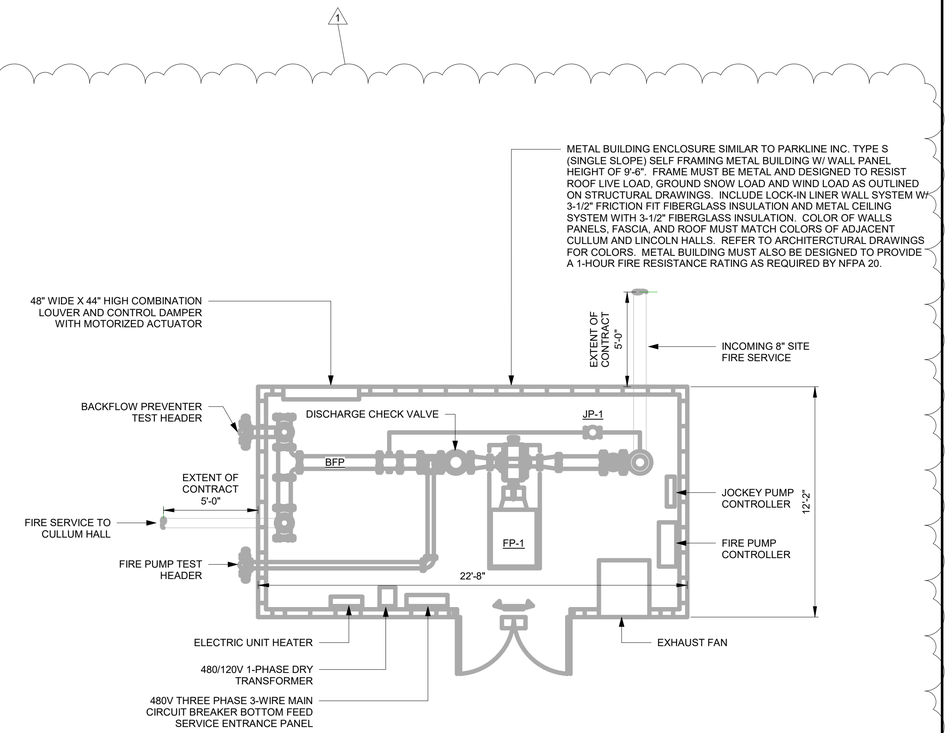


C4 / FX702 RISER CHECK VALVE ASSEMBLY
SCALE: N.T.S.



NOTE:
UNDERGROUND PIPING WITHIN 5 FEET OF BLDG MUST BE MJ DI PIPE.

A1 / FX702 BUILDING WATER SERVICE ENTRY
SCALE: N.T.S.



A8 / FX702 FIRE PUMP HOUSE
SCALE: 1/4" = 1'-0"

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1	AMENDMENT 1	4/7/2021
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DESIGNED BY: CJW
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SUBMITTED BY:
SIZE: ANSI D
ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494

US ARMY CORPS OF ENGINEERS
JACOBS / EWING COLE A Joint Venture

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

FIRE PROTECTION DETAILS

SHEET ID
FX702

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Plot Date: 4/5/2021 11:34:05 AM

RTA SUBMISSION 2/11/2021

SOUTHEAST STAIR (F/2)

NORTH STAIR (F/1)

ROOF

TO SPRINKLERS — FS — DR

2-1/2" — 6" — F

ATTIC

TO SPRINKLERS — FS — DR

THIRD FLOOR

TO SPRINKLERS — FS — DR — FHV ← 2-1/2" FHV (TYP.)

2-1/2" — 6" — DR

SECOND FLOOR

TO SPRINKLERS — FS — DR — FHV

TO SPRINKLERS — FS — DR

4" "STORZ" FREESTANDING FDC FOR COMBINATION STANDPIPE SYSTEM. LOCATE WITHIN 150'-0" OF FIRE HYDRANT LOCATED ON CULLUM ROAD.

4"

FIRST FLOOR

TO SPRINKLERS — FS — DR

REFER TO CIVIL UTILITY PLAN FOR ROUTING OF FDC PIPING

FHV — 4"

BASEMENT B1

TO SPRINKLERS — FS — DR — FHV — 6" — 2-1/2"

BASEMENT B2

FHV — 4" — 6" — 4" — FS

6" TEST HEADER WITH (3) 2-1/2" HOSE CONNECTIONS

6" BACKFLOW PREVENTER TEST HEADER WITH (3) 2-1/2" HOSE CONNECTIONS

FIRE PUMP HOUSE

DISCHARGE DRAIN RISER TO GRADE

DISCHARGE DRAIN RISER TO GRADE

6" RISER CHECK VALVE

SPILL DRAIN OUTSIDE ONTO SPLASHBLOCK

DR — F — 6" — TO LINCOLN HALL VIA SERVICE TUNNEL

6" — JP-1 — 6" BFP — FP-1 — F — 8"

BASEMENT B3

6" — F — PIV

8" FIRE WATER CONNECTION FROM WATER MAIN (SEE CIVIL DRAWINGS FOR CONTINUATION)

A1 / FX703

FIRE PROTECTION RISER DIAGRAM

SCALE: N.T.S.

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SIZE: ANSI D

US ARMY CORPS OF ENGINEERS

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WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

FIRE PROTECTION RISER

SHEET ID

FX703

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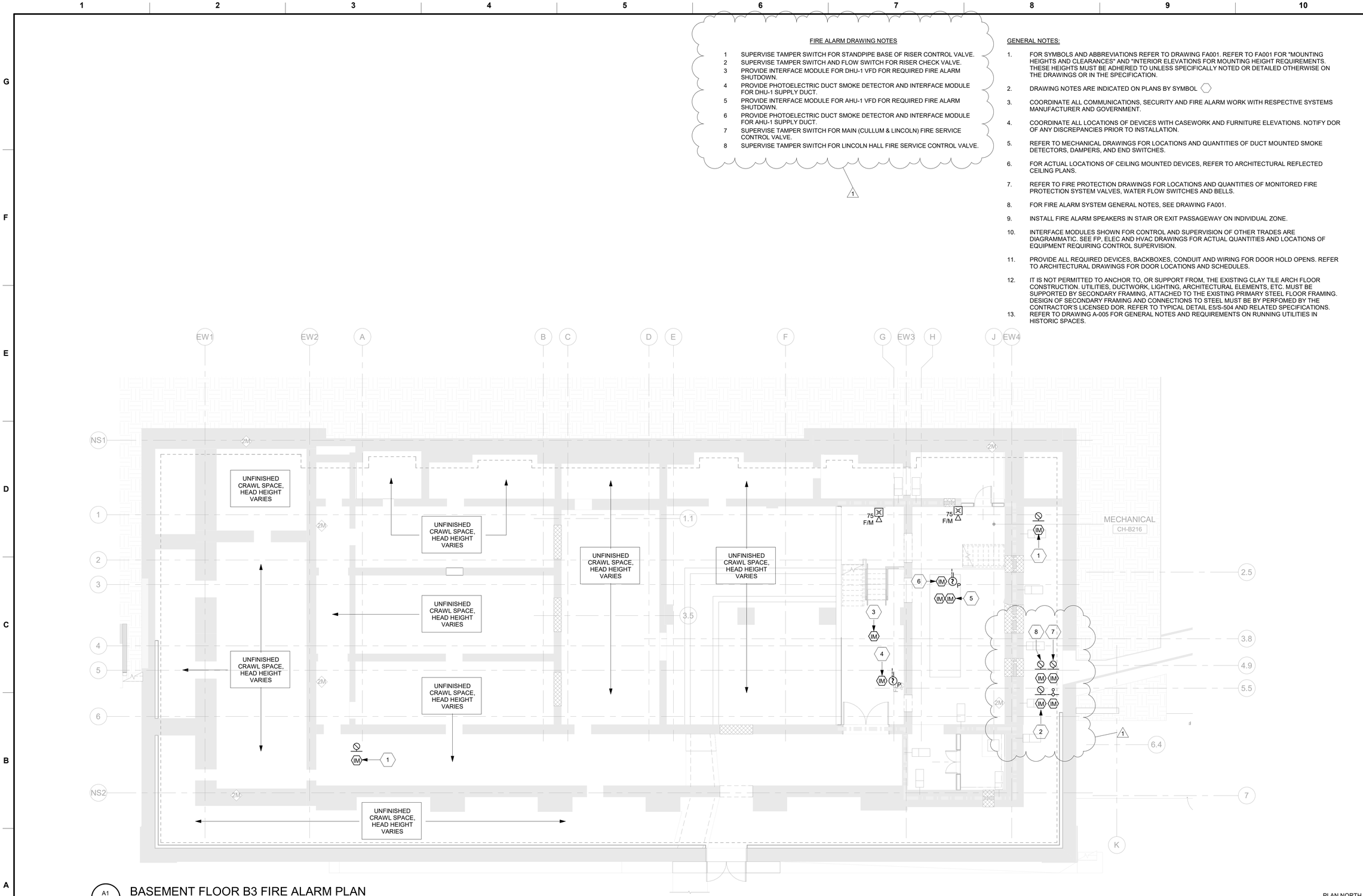
RTA SUBMISSION 2/11/2021



FIRE ALARM DRAWING NOTES

1. SUPERVISE TAMPER SWITCH FOR STANDPIPE BASE OF RISER CONTROL VALVE.
2. SUPERVISE TAMPER SWITCH AND FLOW SWITCH FOR RISER CHECK VALVE.
3. PROVIDE INTERFACE MODULE FOR DHU-1 VFD FOR REQUIRED FIRE ALARM SHUTDOWN.
4. PROVIDE PHOTOELECTRIC DUCT SMOKE DETECTOR AND INTERFACE MODULE FOR DHU-1 SUPPLY DUCT.
5. PROVIDE INTERFACE MODULE FOR AHU-1 VFD FOR REQUIRED FIRE ALARM SHUTDOWN.
6. PROVIDE PHOTOELECTRIC DUCT SMOKE DETECTOR AND INTERFACE MODULE FOR AHU-1 SUPPLY DUCT.
7. SUPERVISE TAMPER SWITCH FOR MAIN (CULLUM & LINCOLN) FIRE SERVICE CONTROL VALVE.
8. SUPERVISE TAMPER SWITCH FOR LINCOLN HALL FIRE SERVICE CONTROL VALVE.

GENERAL NOTES:

1. FOR SYMBOLS AND ABBREVIATIONS REFER TO DRAWING FA001. REFER TO FA001 FOR "MOUNTING HEIGHTS AND CLEARANCES" AND "INTERIOR ELEVATIONS FOR MOUNTING HEIGHT REQUIREMENTS. THESE HEIGHTS MUST BE ADHERED TO UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATION.
2. DRAWING NOTES ARE INDICATED ON PLANS BY SYMBOL ⬡
3. COORDINATE ALL COMMUNICATIONS, SECURITY AND FIRE ALARM WORK WITH RESPECTIVE SYSTEMS MANUFACTURER AND GOVERNMENT.
4. COORDINATE ALL LOCATIONS OF DEVICES WITH CASEWORK AND FURNITURE ELEVATIONS. NOTIFY DOR OF ANY DISCREPANCIES PRIOR TO INSTALLATION.
5. REFER TO MECHANICAL DRAWINGS FOR LOCATIONS AND QUANTITIES OF DUCT MOUNTED SMOKE DETECTORS, DAMPERS, AND END SWITCHES.
6. FOR ACTUAL LOCATIONS OF CEILING MOUNTED DEVICES, REFER TO ARCHITECTURAL REFLECTED CEILING PLANS.
7. REFER TO FIRE PROTECTION DRAWINGS FOR LOCATIONS AND QUANTITIES OF MONITORED FIRE PROTECTION SYSTEM VALVES, WATER FLOW SWITCHES AND BELLS.
8. FOR FIRE ALARM SYSTEM GENERAL NOTES, SEE DRAWING FA001.
9. INSTALL FIRE ALARM SPEAKERS IN STAIR OR EXIT PASSAGEWAY ON INDIVIDUAL ZONE.
10. INTERFACE MODULES SHOWN FOR CONTROL AND SUPERVISION OF OTHER TRADES ARE DIAGRAMMATIC. SEE FP, ELEC AND HVAC DRAWINGS FOR ACTUAL QUANTITIES AND LOCATIONS OF EQUIPMENT REQUIRING CONTROL SUPERVISION.
11. PROVIDE ALL REQUIRED DEVICES, BACKBOXES, CONDUIT AND WIRING FOR DOOR HOLD OPENS. REFER TO ARCHITECTURAL DRAWINGS FOR DOOR LOCATIONS AND SCHEDULES.
12. IT IS NOT PERMITTED TO ANCHOR TO, OR SUPPORT FROM, THE EXISTING CLAY TILE ARCH FLOOR CONSTRUCTION. UTILITIES, DUCTWORK, LIGHTING, ARCHITECTURAL ELEMENTS, ETC. MUST BE SUPPORTED BY SECONDARY FRAMING, ATTACHED TO THE EXISTING PRIMARY STEEL FLOOR FRAMING. DESIGN OF SECONDARY FRAMING AND CONNECTIONS TO STEEL MUST BE BY PERFOMED BY THE CONTRACTOR'S LICENSED DOR. REFER TO TYPICAL DETAIL E5/S-504 AND RELATED SPECIFICATIONS.
13. REFER TO DRAWING A-005 FOR GENERAL NOTES AND REQUIREMENTS ON RUNNING UTILITIES IN HISTORIC SPACES.

A1 / FA1B3 BASEMENT FLOOR B3 FIRE ALARM PLAN

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

PLAN NORTH

8 4 0 8 16

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

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
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US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

BASEMENT FLOOR B3 FIRE ALARM PLAN

SHEET ID

FA1B3

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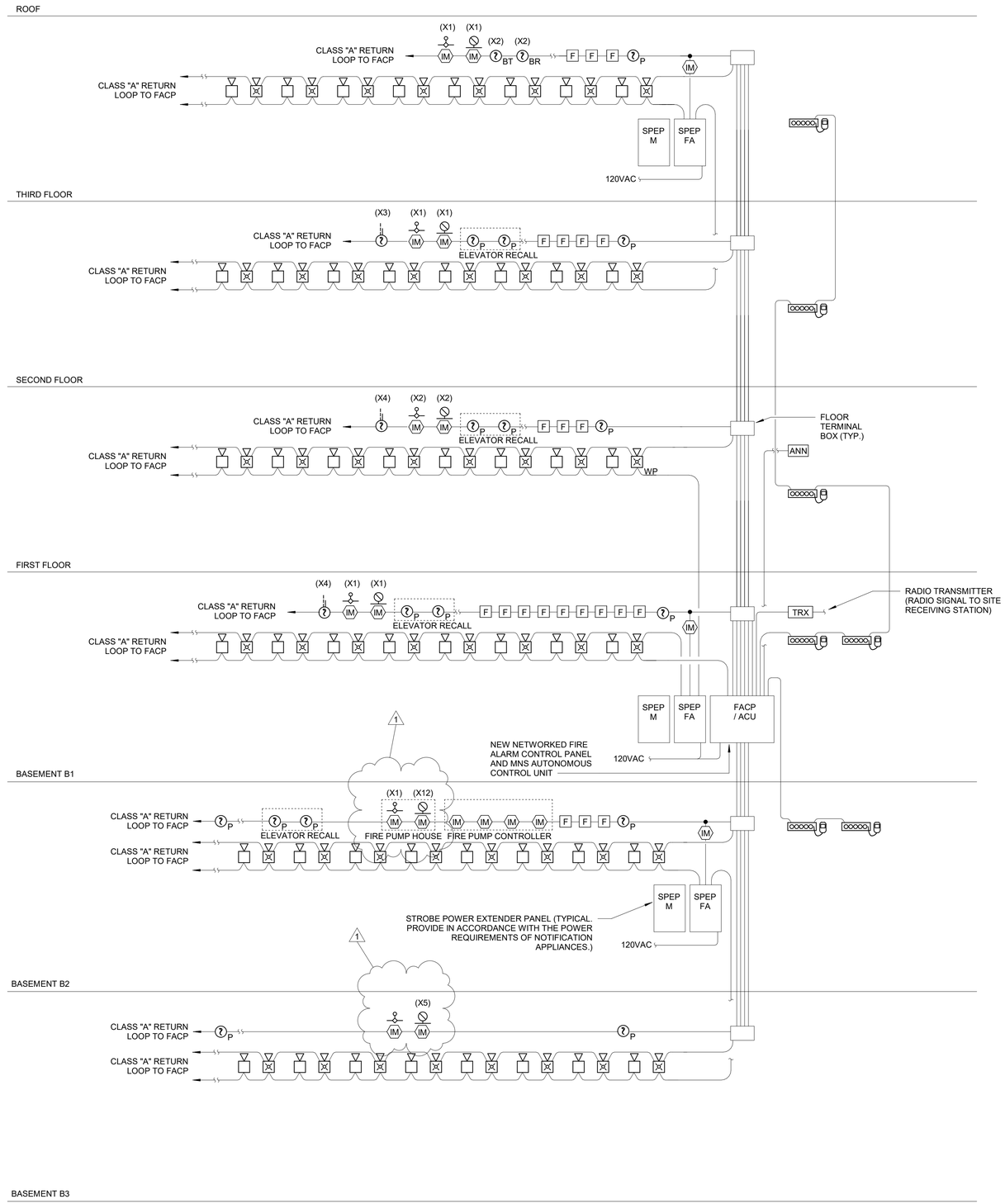
Plot Date: 4/5/2021 10:25:47 AM

RTA SUBMISSION 2/11/2021

FIRE ALARM RISER DIAGRAM NOTES:

1. REFER TO FLOOR PLANS FOR LOCATIONS OF PANELS AND OTHER MAJOR EQUIPMENT. THIS DIAGRAM DOES NOT SHOW ALL REQUIRED DEVICES. IT IS INTENDED TO CONVEY GENERAL PERFORMANCE CHARACTERISTICS OF THE FIRE ALARM SYSTEM. ALL EQUIPMENT AND DEVICES WILL BE NEW.
2. SIGNALING LINE CIRCUITS MUST BE ARRANGED AS CLASS "A" FOR CONNECTION OF ALL SENSORS AND ADDRESSABLE DEVICES. EACH SIGNALING LINE CIRCUIT MUST BE PROVIDED WITH A MINIMUM OF 25 PERCENT SPARE CAPACITY.
3. T-TAPPING OF CLASS "A" SIGNALING LINE CIRCUITS MUST NOT BE PERMITTED.
4. NOTIFICATION APPLIANCE CIRCUITS MUST BE ARRANGED AS CLASS "A" FOR CONNECTION OF ALL APPLIANCES. EACH NOTIFICATION APPLIANCE CIRCUIT MUST BE PROVIDED WITH A MINIMUM 25 PERCENT SPARE CAPACITY.
5. ADDRESSABLE INTERFACE MODULES AND RELAYS MUST BE USED TO CONNECT NON-ADDRESSABLE INITIATING DEVICES TO THE SIGNALING LINE CIRCUIT AND TO PERFORM AUXILIARY CONTROL FUNCTIONS VIA THE FIRE ALARM SYSTEM.
6. REFER TO HVAC MECHANICAL DRAWINGS FOR EXACT LOCATION OF DUCT SMOKE DETECTORS IN AIR HANDLING UNIT.



A1 / FA701 BUILDING FIRE ALARM / MASS NOTIFICATION RISER

SCALE: N.T.S.

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SUBMITTED BY:
SIZE: ANSI D

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WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

FIRE ALARM RISER

SHEET ID

FA701

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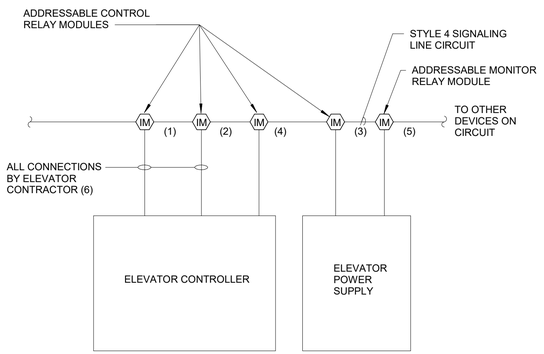
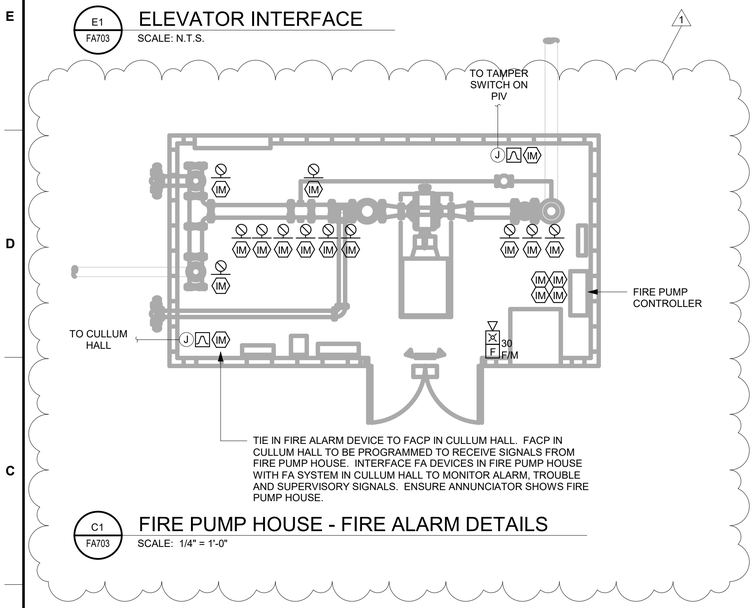
RTA SUBMISSION 2/11/2021

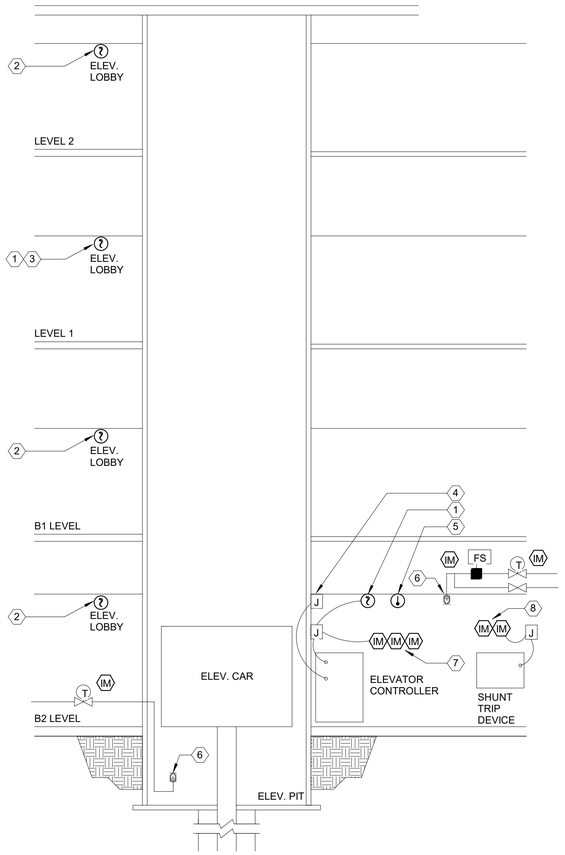


NOTES:
1. CONTROL MODULE FOR ELEVATOR RECALL TO DESIGNATED LEVEL.
2. CONTROL MODULE FOR ELEVATOR RECALL TO ALTERNATE LEVEL.
3. CONTROL MODULE FOR ELEVATOR POWER SHUT DOWN.
4. CONTROL MODULE FOR IN-CAB WARNING LAMP (FIREMAN'S HELMET).
5. MONITOR MODULE FOR SUPERVISION OF POWER SHUNT TRIP BREAKER.
6. COORDINATE LOCATION AND MODULE FUNCTION WITH THE ELEVATOR CONTRACTOR.

E1 / FA703 — ELEVATOR INTERFACE
SCALE: N.T.S.



C1 / FA703 — FIRE PUMP HOUSE - FIRE ALARM DETAILS
SCALE: 1/4" = 1'-0"



B4 / FA703 — PASSENGER ELEVATOR DETAIL
SCALE: N.T.S.

KEYED NOTES:

1. ONLY SMOKE DETECTORS IN ELEVATOR LOBBIES AND IN ELEVATOR MACHINE ROOM INITIATE RECALL.
2. ALTERNATE FLOOR ELEVATOR RECALL SMOKE DETECTOR APPLIES ONLY IF THREE STORIES OR MORE, OR TRAVEL GREATER THAN 25'.
3. FIRST FLOOR ELEVATOR RECALL SMOKE DETECTOR. IF SMOKE IS DETECTED ON FIRST FLOOR THEN ELEVATOR MUST RECALL TO ALTERNATE FLOOR.
4. JUNCTION BOX FOR TELEPHONE CABLES TO ELEVATOR CAR. EXTEND TO ELEVATOR CONTROLLER AS REQUIRED, VIA 1/2" CONDUIT.
5. FIXED-TEMPERATURE TYPE 195 DEGREES (F) HEAT DETECTOR FOR ELEVATOR DISCONNECT SHUNT-TRIP. LOCATE WITHIN 24" OF SPRINKLER HEAD. VERIFY WITH FIRE SPRINKLER CONTRACTOR THAT SPRINKLER HEAD IS MINIMUM 215 DEGREES (F) RATED.
6. FIRE SPRINKLER HEAD W/ INDICATING CONTROL VALVE. FLOW SWITCH TO SHUNT POWER WITH ZERO TIME DELAY.
7. FIRE ALARM INTERFACE MODULES:
   A. ELEVATOR RECALL TO PRIMARY LEVEL
   B. ELEVATOR RECALL TO ALTERNATE LEVEL
   C. IN-CAB WARNING LAMP (FIREMAN'S HELMET)
8. FIRE ALARM INTERFACE MODULES:
   A. CONTROL RELAY FOR ELEVATOR POWER SHUNT
   B. SUPERVISE POWER SHUNT TRIP BREAKER

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494
DESIGNED BY: CJW
DRAWN BY: CJW
CHECKED BY: TAW
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

FIRE ALARM DETAILS

SHEET ID
FA703

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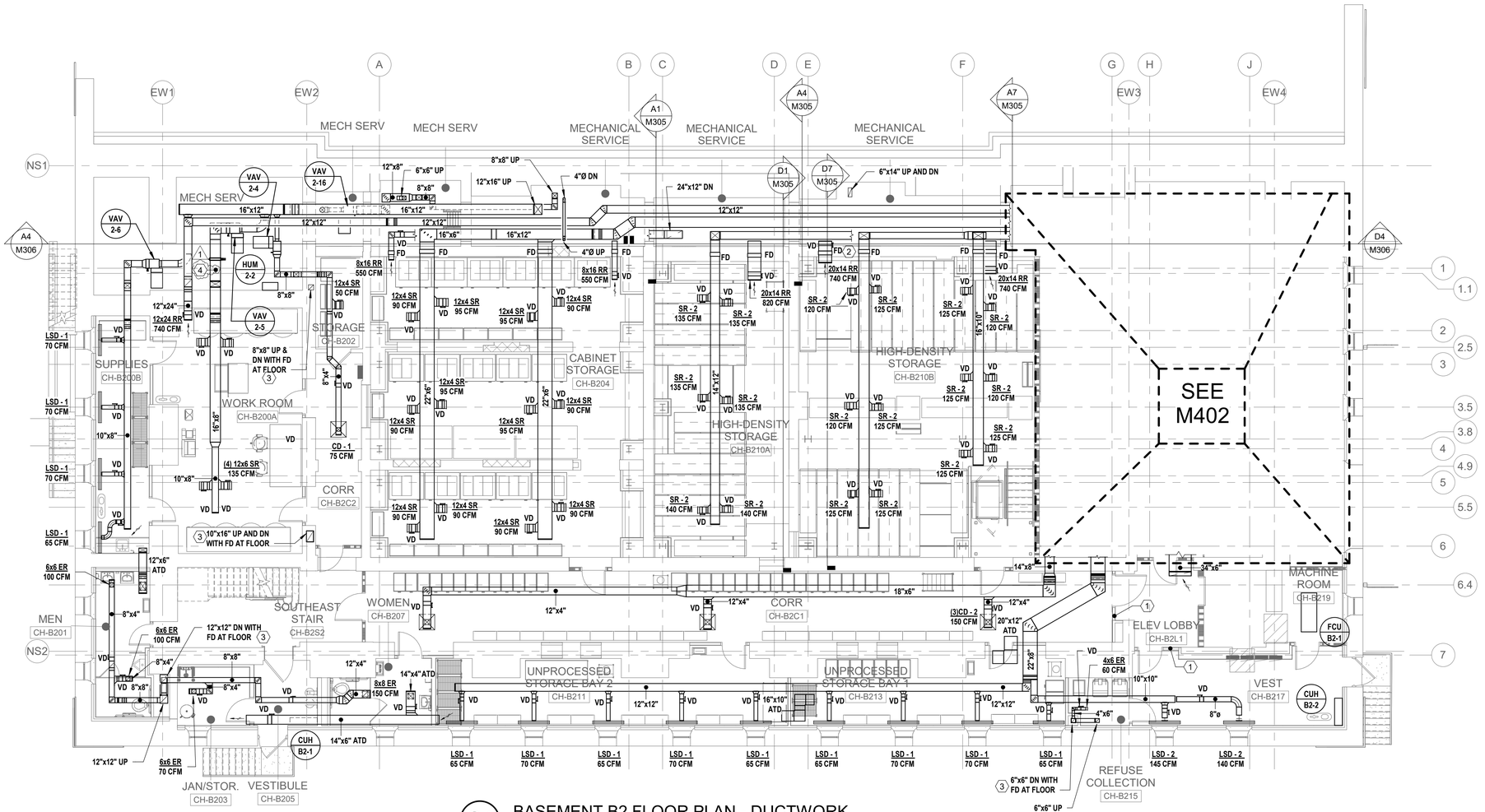
Plot Date: 4/5/2021 10:25:48 AM

RTA SUBMISSION 2/11/2021



C4 BASEMENT B2 FLOOR PLAN - DUCTWORK

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

GENERAL NOTES:

1. IT IS NOT PERMITTED TO ANCHOR TO, OR SUPPORT FROM THE EXISTING CLAY TILE ARCH FLOOR CONSTRUCTION. UTILITIES, DUCTWORK, PIPING, OR EQUIPMENT, ETC. MUST BE SUPPORTED BY SECONDARY FRAMING, ATTACHED TO THE EXISTING PRIMARY STEEL FLOOR FRAMING. DESIGN OF SECONDARY FRAMING AND CONNECTIONS TO STEEL MUST BE PERFORMED BY THE CONTRACTOR'S LICENSED ENGINEER. REFER TO TYPICAL DETAIL E5/S-504 AND RELATED SPECIFICATIONS.

SHEET NOTES:

1. RETURN AIR PLENUM PATHWAY. WALL MUST BE OPEN (NO DRYWALL) ABOVE CEILING HEIGHT.
2. ONE SIDED FIRE DAMPER TO ALLOW AIR DEVICE TO BE FLUSH WITH WALL.
3. PROVIDE WALL/CEILING ACCESS PANEL ADJACENT TO FIRE DAMPER LOCATION FOR INSPECTION AND SERVICE. COORDINATE WITH ARCHITECTURAL DRAWINGS.
4. MAINTAIN STRAIGHT DUCTWORK LENGTH (APPROXIMATELY 2'-0") DOWNSTREAM OF HUMIDIFIER TO ACCOMMODATE HUMIDIFIER MANUFACTURER'S ABSORPTION DISTANCE AT SCHEDULED DESIGN CONDITIONS. DUCTWORK MUST BE STAINLESS STEEL FROM 6" UPSTREAM OF THE HUMIDIFIER DISPERSION TUBE TO 6" DOWNSTREAM OF THE SUBMITTED HUMIDIFIER'S ABSORPTION DISTANCE.

PLAN NORTH

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: WMF
DRAWN BY: SCB
CHECKED BY: WCJ
SUBMITTED BY: SCB
SIZE: ANSI D

ISSUE DATE: 4/7/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE A Joint Venture

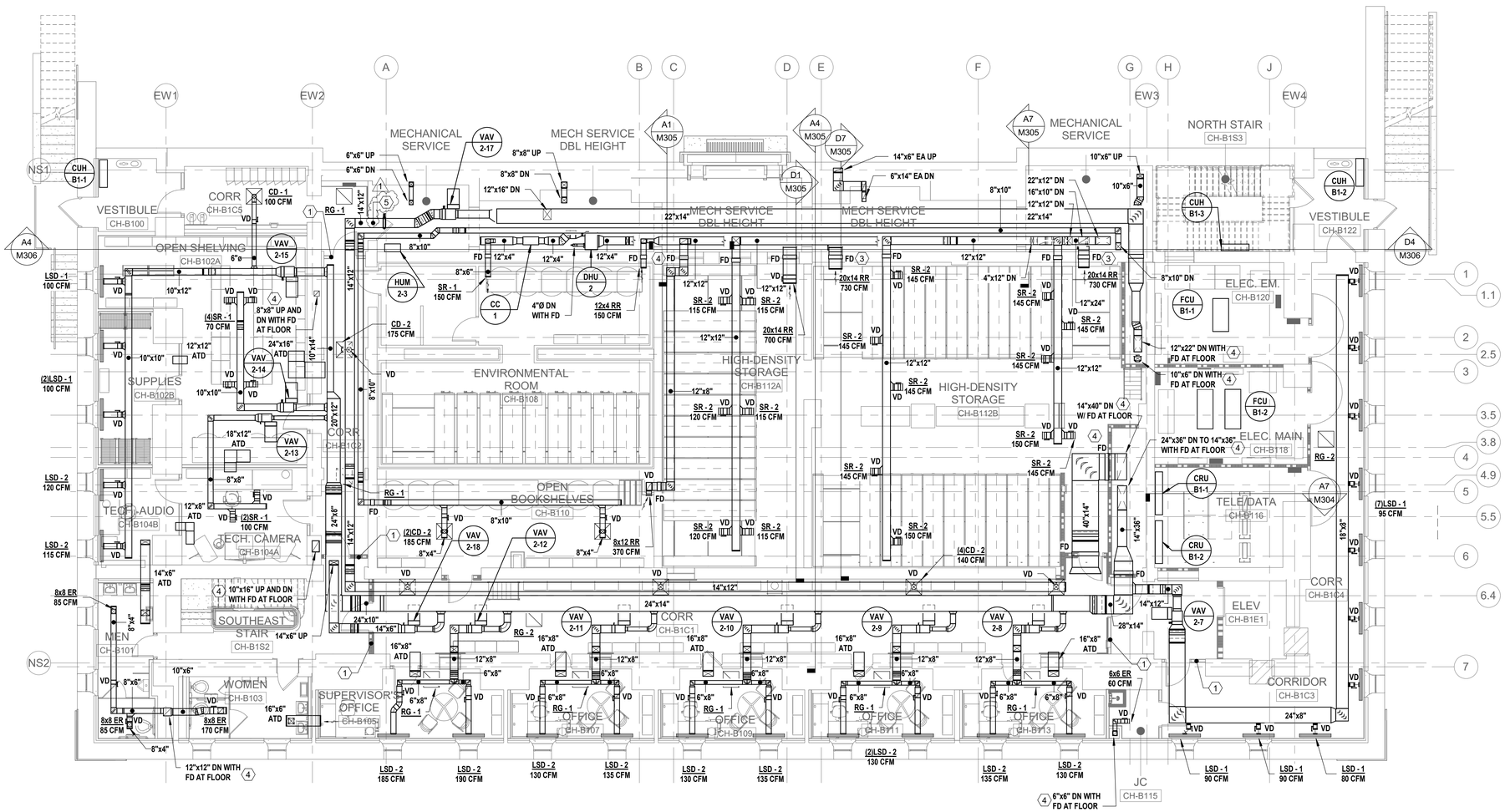
WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

BASEMENT FLOOR PLAN B2 - DUCTWORK

SHEET ID

MH1B2

RTA SUBMISSION 2/11/2021



C4 BASEMENT B1 FLOOR PLAN - DUCTWORK

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

GENERAL NOTES:

1. IT IS NOT PERMITTED TO ANCHOR TO, OR SUPPORT FROM THE EXISTING CLAY TILE ARCH FLOOR CONSTRUCTION. UTILITIES, DUCTWORK, PIPING, OR EQUIPMENT, ETC. MUST BE SUPPORTED BY SECONDARY FRAMING, ATTACHED TO THE EXISTING PRIMARY STEEL FLOOR FRAMING. DESIGN OF SECONDARY FRAMING AND CONNECTIONS TO STEEL MUST BE PERFORMED BY THE CONTRACTOR'S LICENSED ENGINEER. REFER TO TYPICAL DETAIL E5/S-504 AND RELATED SPECIFICATIONS.

SHEET NOTES:

1. RETURN AIR PLENUM PATHWAY. WALL MUST BE OPEN (NO DRYWALL) ABOVE CEILING HEIGHT.
2. FIRE DAMPER IN 22"x14" AND 10"x6" SUPPLY DUCTS
3. ONE SIDED FIRE DAMPER TO ALLOW AIR DEVICE TO BE FLUSH WITH WALL.
4. PROVIDE WALL/CEILING ACCESS PANEL ADJACENT TO FIRE DAMPER LOCATION FOR INSPECTION AND SERVICE. COORDINATE WITH ARCHITECTURAL DRAWINGS.
5. MAINTAIN STRAIGHT DUCTWORK LENGTH (APPROXIMATELY 2'-0") DOWNSTREAM OF HUMIDIFIER TO ACCOMMODATE HUMIDIFIER MANUFACTURER'S ABSORPTION DISTANCE AT SCHEDULED DESIGN CONDITIONS. DUCTWORK MUST BE STAINLESS STEEL FROM 6" UPSTREAM OF THE HUMIDIFIER DISPERSION TUBE TO 6" DOWNSTREAM OF THE SUBMITTED HUMIDIFIER'S ABSORPTION DISTANCE.

PLAN NORTH

8 4 0 8 16

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

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: WMF
DRAWN BY: SCB
CHECKED BY: WMF
SUBMITTED BY: KK
SIZE: ANSI D

ISSUE DATE: 4/7/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE A Joint Venture

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

BASEMENT FLOOR PLAN B1 - DUCTWORK

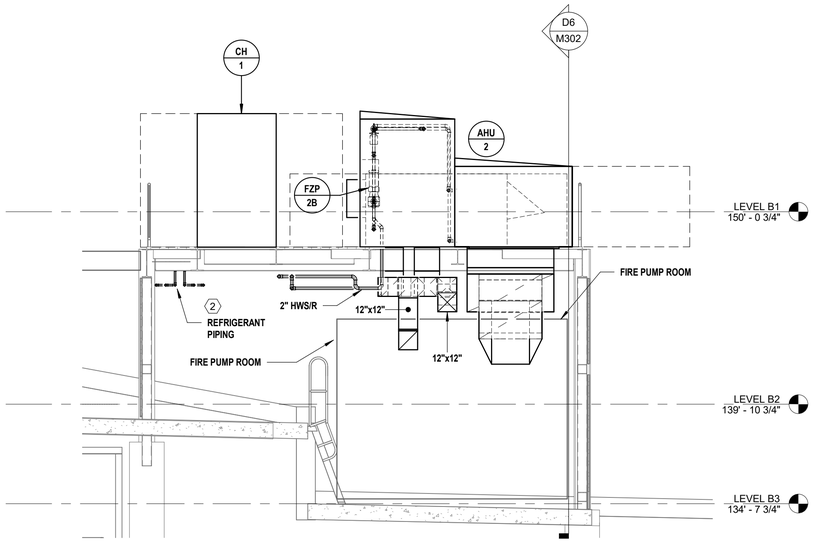
SHEET ID

MH1B1

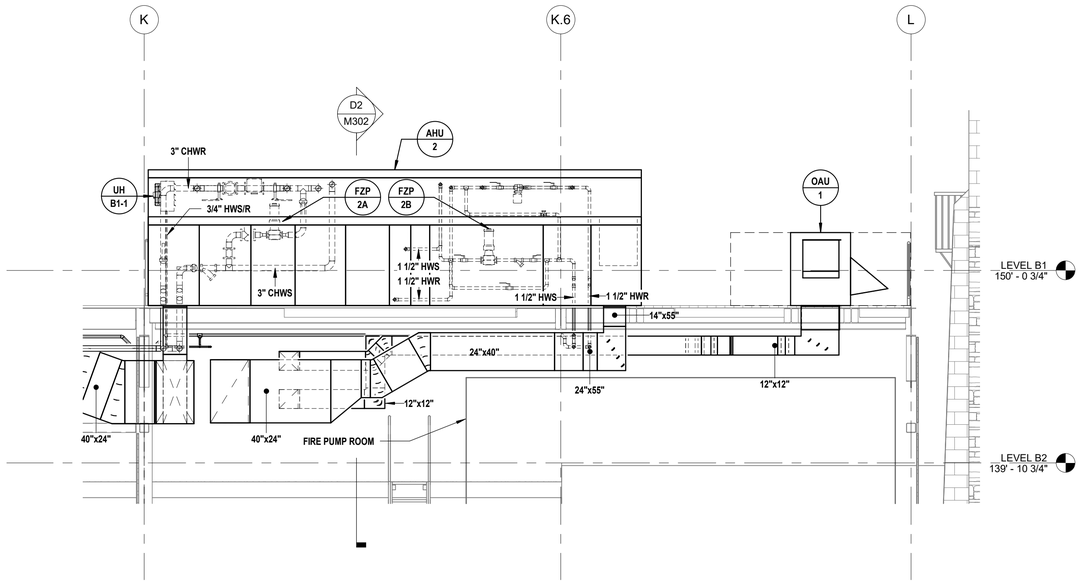
RTA SUBMISSION 2/11/2021

SHEET NOTES:

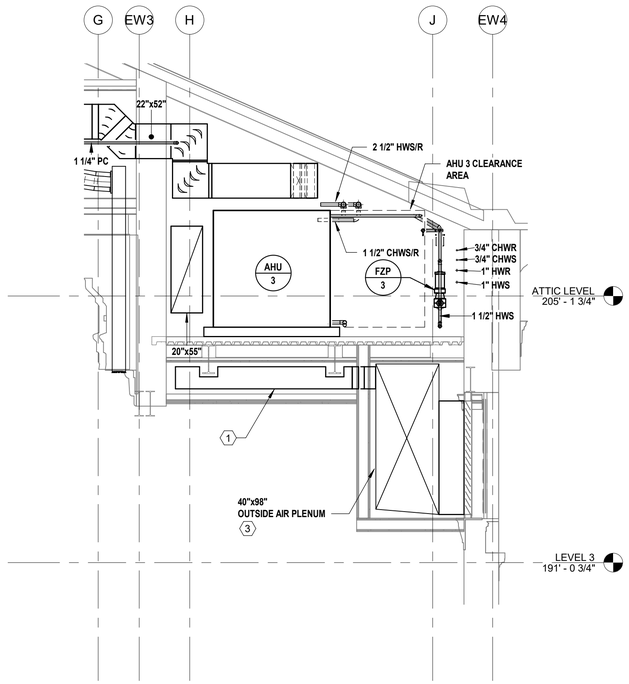
1. CUSTOM FIELD FABRICATED PLENUM FORMED AROUND STRUCTURAL FRAMING.
2. SUGGESTED PATHWAY FOR COLD BOX MANUFACTURER'S REFRIGERANT PIPING.
3. OUTSIDE AIR PLENUM MUST BE PITCHED TOWARDS THE LOUVERS FOR CARRYOVER WATER TO DRAIN.



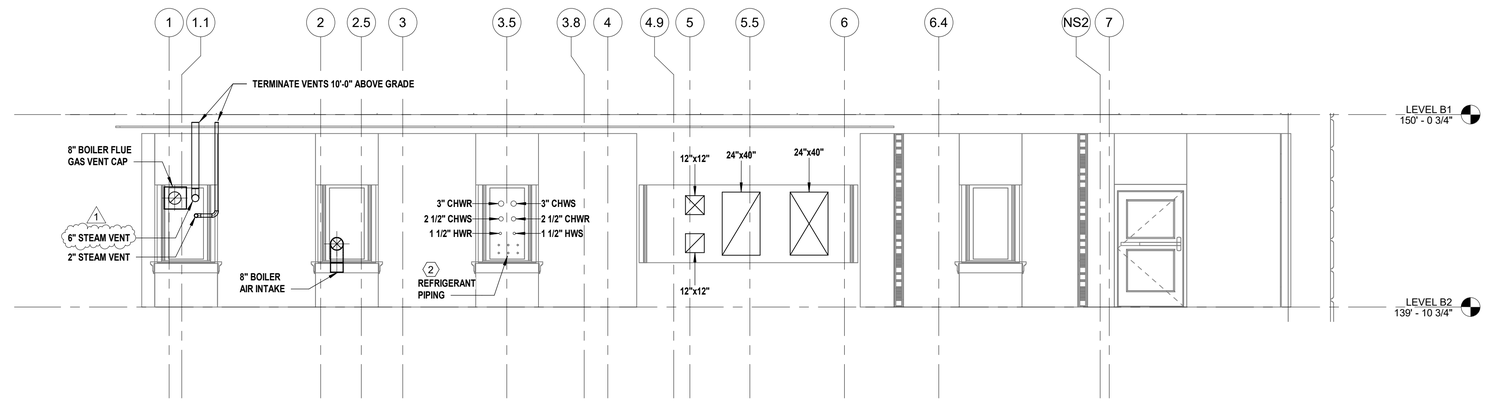
D2 SERVICE YARD NORTH VIEW
SCALE: 1/4" = 1'-0"



D6 SERVICE YARD WEST VIEW
SCALE: 1/4" = 1'-0"



A2 AHU 3 WEST VIEW
SCALE: 1/4" = 1'-0"



A6 LEVEL B2 MECHANICAL WALL PENETRATIONS
SCALE: 1/4" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

ISSUE DATE: 4/7/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494

DESIGNED BY: WMF
DRAWN BY: SCB
CHECKED BY: WCJ
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

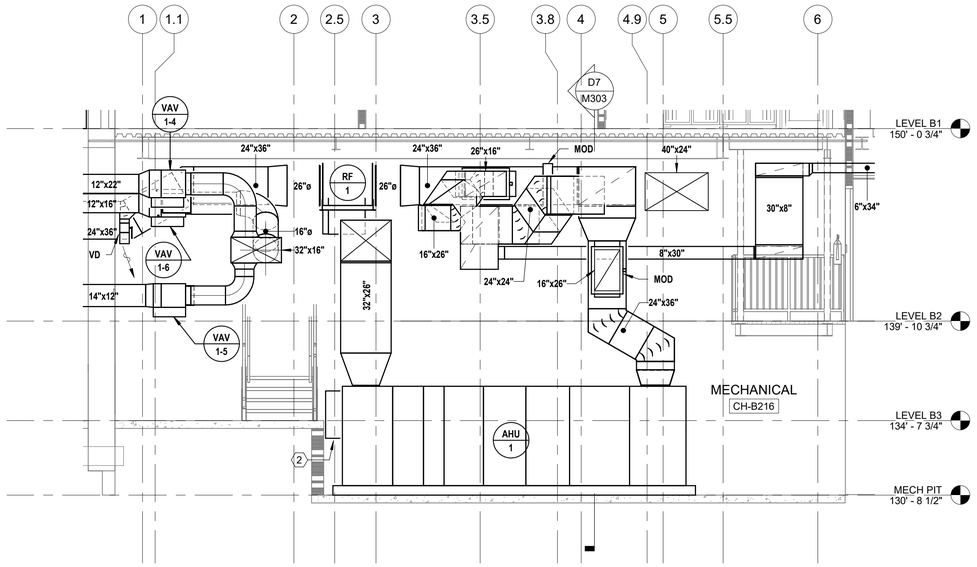
SECTIONS - HVAC

SHEET ID
M302

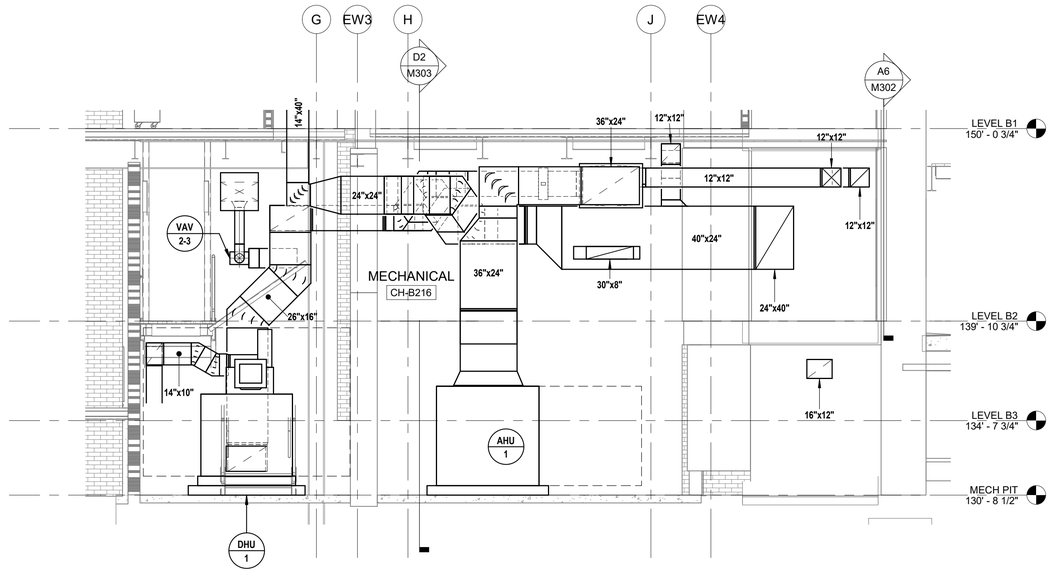
RTA SUBMISSION 2/11/2021

SHEET NOTES:

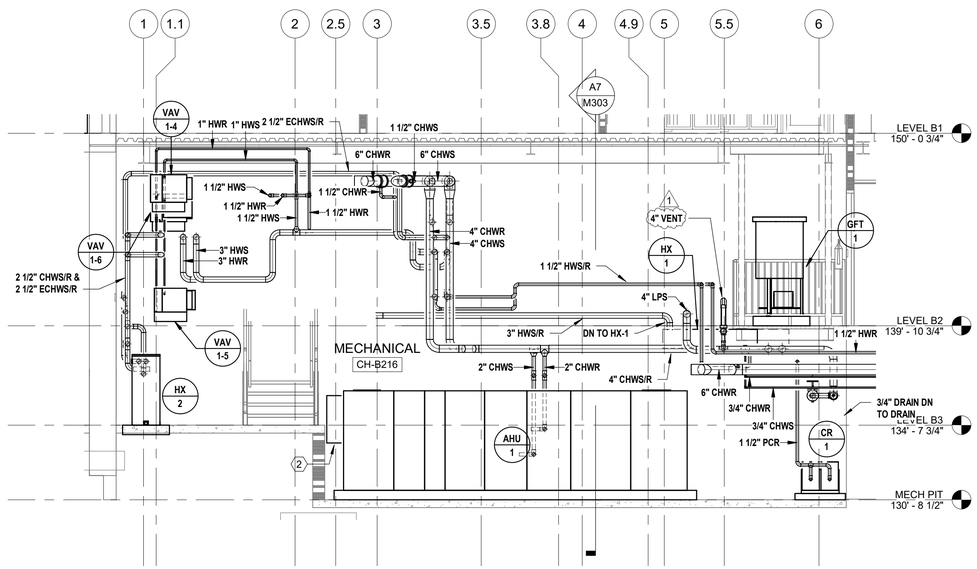
1. REFRIGERANT PIPING BY COLDBOX MANUFACTURER. SUGGESTED PIPING PATH INTO BUILDING.
2. UNISTRUT MOUNTED BAS PANEL (JACE) INTERFACE.



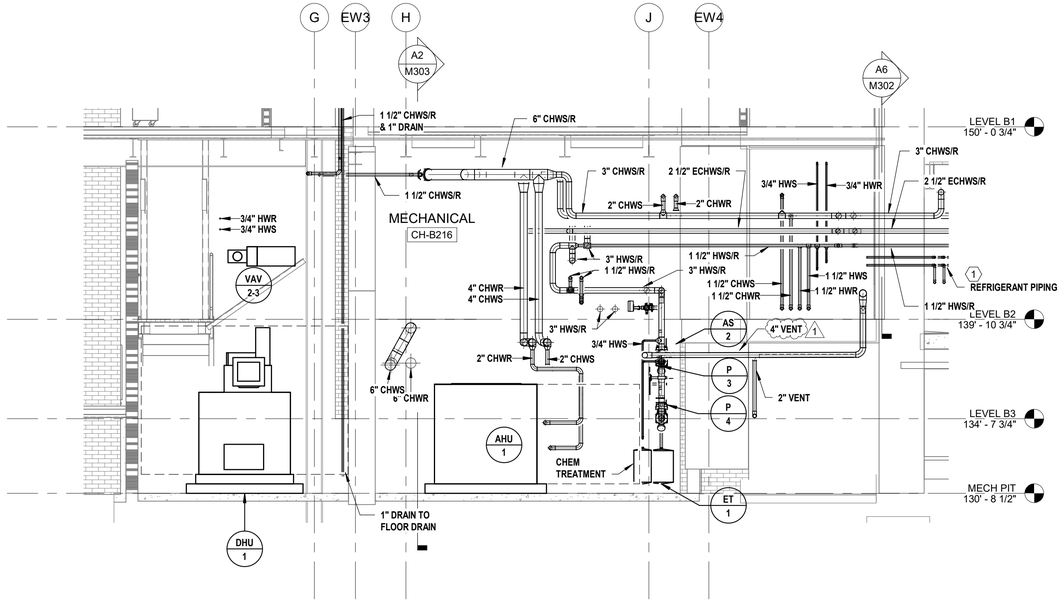
D2 MECHANICAL ROOM NORTH VIEW DUCTWORK
SCALE: 1/4" = 1'-0"



D7 MECHANICAL ROOM WEST VIEW DUCTWORK
SCALE: 1/4" = 1'-0"



A2 MECHANICAL ROOM NORTH VIEW PIPING
SCALE: 1/4" = 1'-0"



A7 MECHANICAL ROOM WEST VIEW PIPING
SCALE: 1/4" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: WMF
DRAWN BY: SCB
CHECKED BY: WCJ
SUBMITTED BY:
ISSUE DATE: 4/7/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS

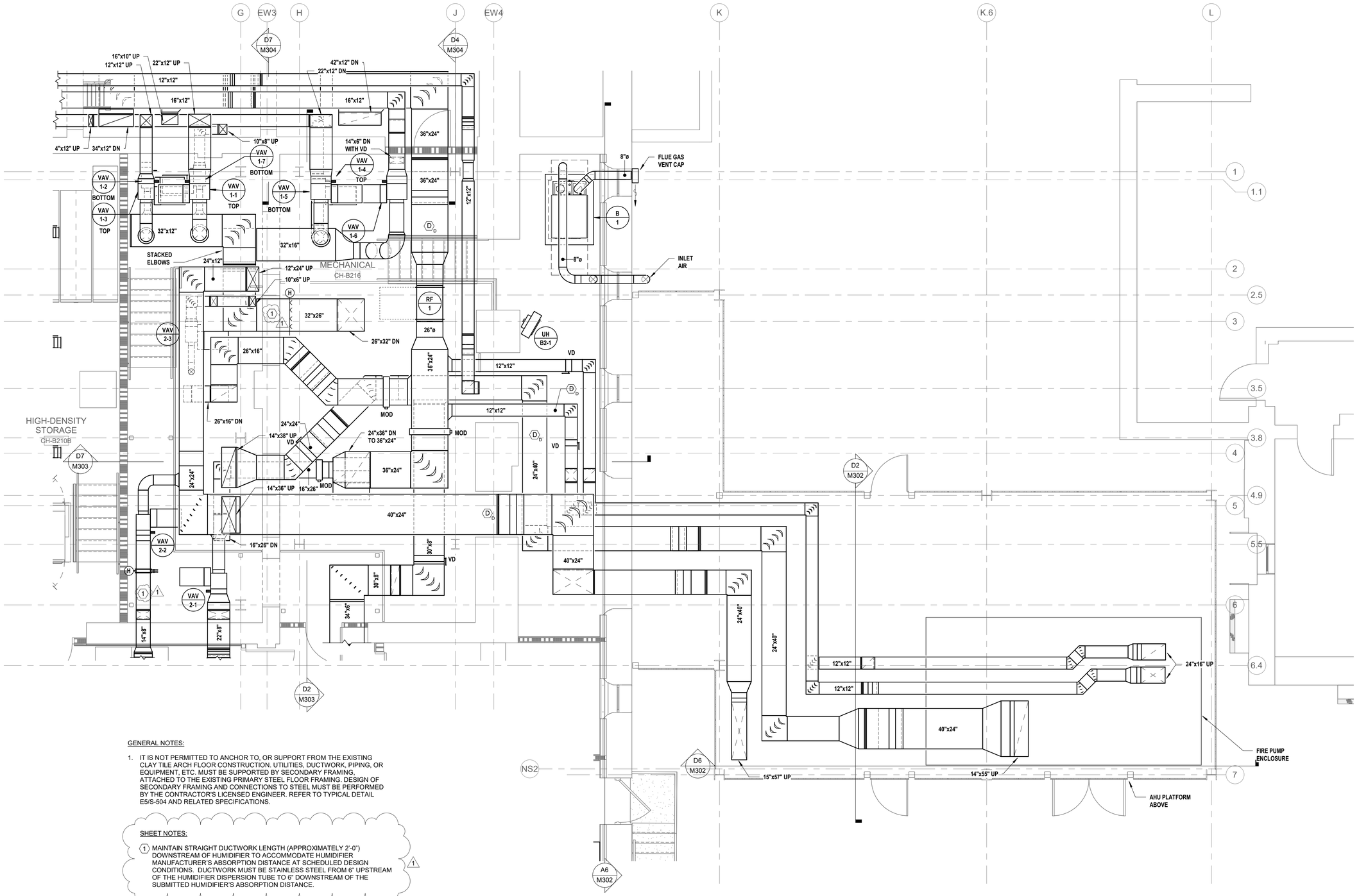
JACOBS / EWING COLE A Joint Venture

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

SECTIONS - HVAC

SHEET ID
M303

RTA SUBMISSION 2/11/2021



GENERAL NOTES:

1. IT IS NOT PERMITTED TO ANCHOR TO, OR SUPPORT FROM THE EXISTING CLAY TILE ARCH FLOOR CONSTRUCTION. UTILITIES, DUCTWORK, PIPING, OR EQUIPMENT, ETC. MUST BE SUPPORTED BY SECONDARY FRAMING, ATTACHED TO THE EXISTING PRIMARY STEEL FLOOR FRAMING. DESIGN OF SECONDARY FRAMING AND CONNECTIONS TO STEEL MUST BE PERFORMED BY THE CONTRACTOR'S LICENSED ENGINEER. REFER TO TYPICAL DETAIL E5/S-504 AND RELATED SPECIFICATIONS.

SHEET NOTES:

(1) MAINTAIN STRAIGHT DUCTWORK LENGTH (APPROXIMATELY 2'-0") DOWNSTREAM OF HUMIDIFIER TO ACCOMMODATE HUMIDIFIER MANUFACTURER'S ABSORPTION DISTANCE AT SCHEDULED DESIGN CONDITIONS. DUCTWORK MUST BE STAINLESS STEEL FROM 6' UPSTREAM OF THE HUMIDIFIER DISPERSION TUBE TO 6' DOWNSTREAM OF THE SUBMITTED HUMIDIFIER'S ABSORPTION DISTANCE.

A4 ENLARGED UPPER MECH ROOM AND NORTH SERVICE YARD - DUCTWORK

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

PLAN NORTH

4 2 0 4 8

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

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: WMF
DRAWN BY: SCB
CHECKED BY: WCJ
SUBMITTED BY: MK
SIZE: ANSI D
ISSUE DATE: 4/7/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

ENLARGED MECH ROOM & SERVICE YARD PLANS - HVAC

SHEET ID

M402

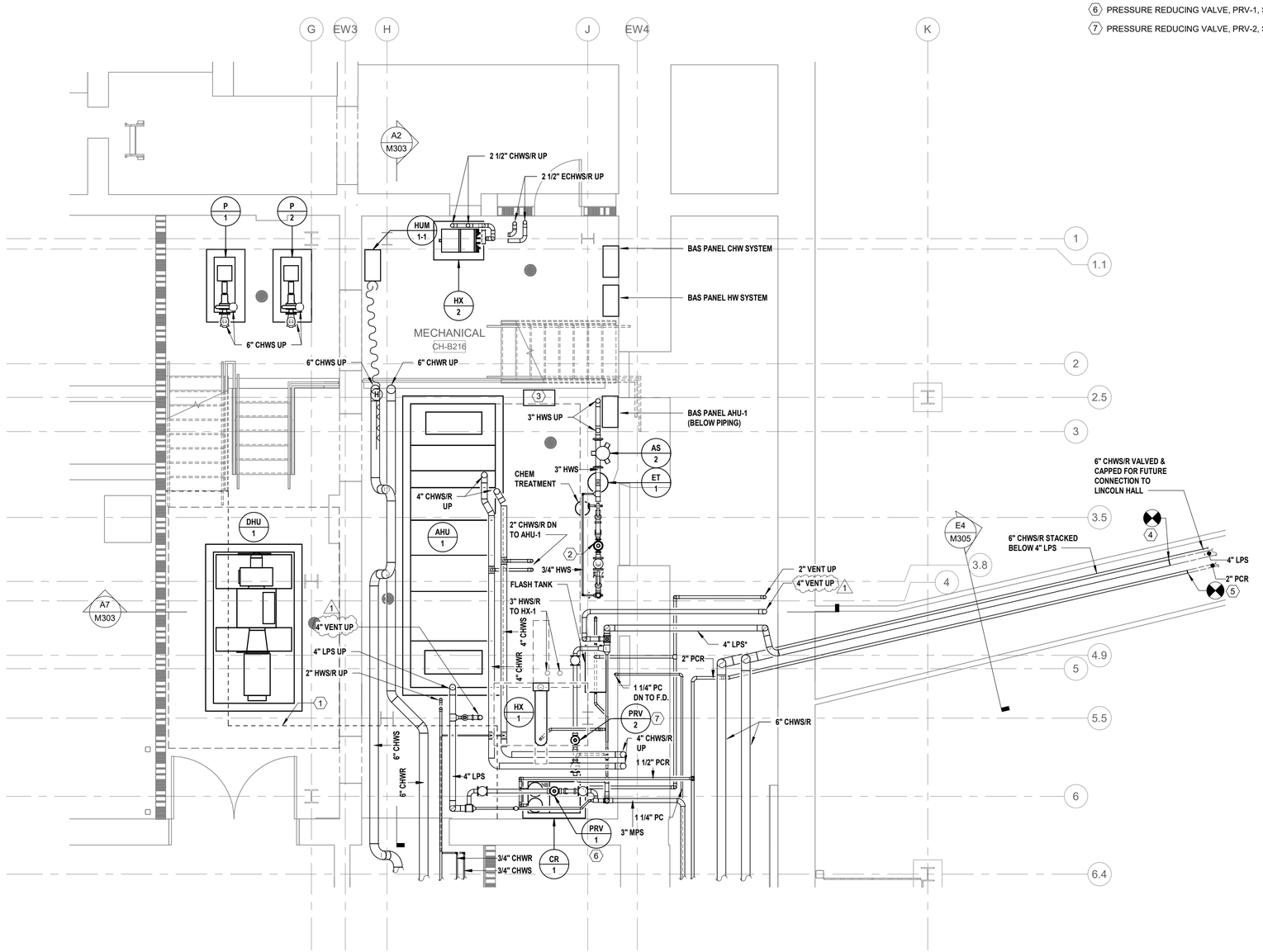
RTA SUBMISSION 2/11/2021

GENERAL NOTES:

1. IT IS NOT PERMITTED TO ANCHOR TO, OR SUPPORT FROM THE EXISTING CLAY TILE ARCH FLOOR CONSTRUCTION. UTILITIES, DUCTWORK, PIPING, OR EQUIPMENT, ETC. MUST BE SUPPORTED BY SECONDARY FRAMING, ATTACHED TO THE EXISTING PRIMARY STEEL FLOOR FRAMING. DESIGN OF SECONDARY FRAMING AND CONNECTIONS TO STEEL MUST BE PERFORMED BY THE CONTRACTOR'S LICENSED ENGINEER. REFER TO TYPICAL DETAIL E5/S-504 AND RELATED SPECIFICATIONS.

SHEET NOTES:

1. EDGE OF CATWALK ABOVE.
2. HW PUMPS RACKED ALONG WALL. P/3 ON TOP AND P/4 ON BOTTOM. PROVIDE UNISTRUT SUPPORTS POST UP FROM THE FLOOR.
3. UNISTRUT MOUNTED BAS PANEL (JACE) INTERFACE.
4. CONNECT NEW 4" LPS TO EXISTING LPS SERVING LINCOLN HALL.
5. CONNECT NEW 2" PCR TO EXISTING PCR SERVING LINCOLN HALL.
6. PRESSURE REDUCING VALVE, PRV-1, SERVES CULLUM HALL.
7. PRESSURE REDUCING VALVE, PRV-2, SERVES LINCOLN HALL.



A4 ENLARGED LOWER MECH ROOM - PIPING

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

PLAN NORTH

4 2 0 4 8

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

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: WMF
DRAWN BY: SCB
CHECKED BY: WCJ
SUBMITTED BY:

ISSUE DATE: 4/7/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

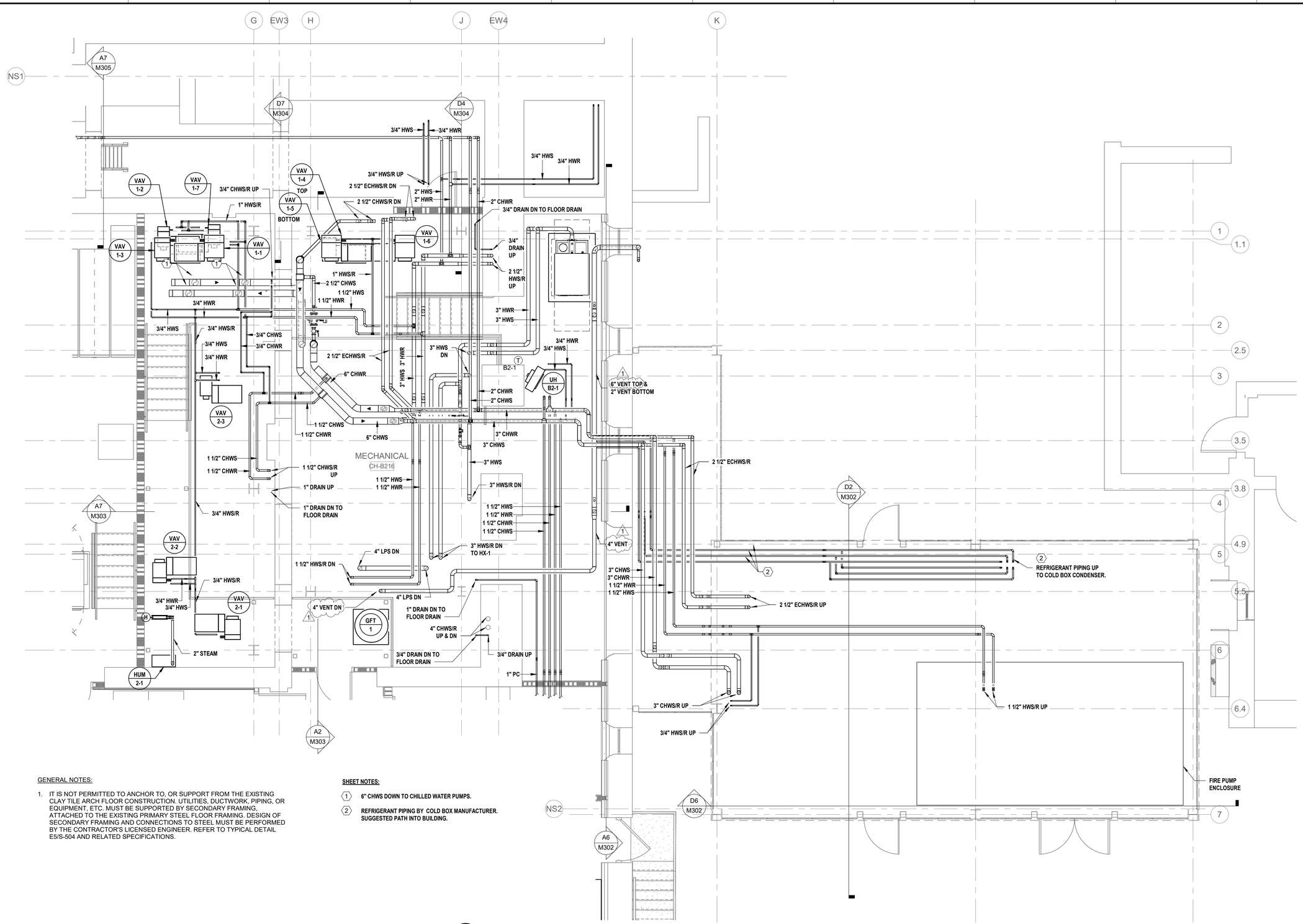
WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

ENLARGED MECH ROOM PLANS - HVAC

SHEET ID

M404

RTA SUBMISSION 2/11/2021



GENERAL NOTES:

1. IT IS NOT PERMITTED TO ANCHOR TO, OR SUPPORT FROM THE EXISTING CLAY TILE ARCH FLOOR CONSTRUCTION. UTILITIES, DUCTWORK, PIPING, OR EQUIPMENT, ETC. MUST BE SUPPORTED BY SECONDARY FRAMING, ATTACHED TO THE EXISTING PRIMARY STEEL FLOOR FRAMING. DESIGN OF SECONDARY FRAMING AND CONNECTIONS TO STEEL MUST BE PERFORMED BY THE CONTRACTOR'S LICENSED ENGINEER. REFER TO TYPICAL DETAIL E5/S-504 AND RELATED SPECIFICATIONS.

SHEET NOTES:

1. 6" CHWS DOWN TO CHILLED WATER PUMPS.
2. REFRIGERANT PIPING BY COLD BOX MANUFACTURER. SUGGESTED PATH INTO BUILDING.

A4 ENLARGED UPPER MECH ROOM AND NORTH SERVICE YARD - PIPING
SCALE: 1/4" = 1'-0"

PLAN NORTH

4 2 0 4 8
SCALE: 1/4"=1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: WMF
DRAWN BY: SCB
CHECKED BY: WCJ
SUBMITTED BY: SK
SIZE: ANSI D
ISSUE DATE: 4/7/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C0031
PROJECT NO: 20190494

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE A Joint Venture

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

ENLARGED MECH ROOM & SERVICE YARD PLANS - HVAC

SHEET ID
M405

RTA SUBMISSION 2/11/2021

COMPUTER ROOM AIR CONDITIONING UNIT SCHEDULE (SEE HPE SCHEDULE FOR ELECTRICAL SERVICE)

SYMBOL	TYPE	SERVICE	LOCATION	TOTAL CFM	FAN DATA			EAT °F		LAT °F		MBH		GPM	COOLING COIL NOM. TONS	CONTROL VALVE			BRANCH PIPE SIZE	REHEAT			HUMIDIFIER		REMARKS (NOTES 1, 2, 3)	BASIS OF DESIGN
					ESP IN. WG	MAX KW	HP	DB	WB	DB	WB	TOT.	SENS.			TYPE	MAX. PD (FT.)	FAIL POS.		MBH	ELECTRIC KW	ELECTRIC STEPS	CAPACITY LBS/HR	TYPE		
CRU B1-1	WALL-MOUNTED	TELECOM	TELECOM	1,200	0.0	0.398	0.75	72	58.7	55.0	52.2	22.4	21.9	5.3	3	2W MOD.	7 FT.	NO	1"	20.4	5.5	2	3	STM	-	LIEBERT DME044C
CRU B1-2	WALL-MOUNTED	TELECOM	TELECOM	1,200	0.0	0.398	0.75	72	58.7	55.0	52.5\2	22.4	21.9	5.3	3	2W MOD.	7 FT.	NO	1"	20.4	5.5	2	3	STM	-	LIEBERT DME044C

NOTES:
1. PROVIDE UNIT WITH REMOTE WALL MOUNTED MICROPROCESSOR CONTROL KEYPAD.
2. PROVIDE INTEGRAL CONDENSATE PUMP.
3. PROVIDE SPARE SET OF ALL FILTERS.

CABINET UNIT HEATER SCHEDULE (SEE HPE SCHEDULE FOR ELECTRICAL SERVICE)

SYMBOL	TYPE (NOTE 2)	LOCATION	FAN (NOTE 1)			HEATING CAPACITY									REMARKS (SEE NOTES) 3, 6, 9, 10	BASIS OF DESIGN
											CONTROL VALVE					
			CFM	HP / WATTS	RPM	MBH	EAT °F	GPM	PD/ FT. WG	EWT °F	TYPE	MAX. PD (FT.)	FAIL POS.	BRANCH PIPE SIZE	ROWS	
CUH 1-1	HCAB	CH-103 - WOMEN	350	0.25	MEDIUM	7.2	65	0.9	3.2	180	2W MOD.	7 FT.	NO	3/4"	2	5	TRANE B04
CUH 1-2	HCAB	CH-105 - MEN	300	0.25	MEDIUM	8.2	65	1.1	3.3	180	2W MOD.	7 FT.	NO	3/4"	2	5	TRANE B04
CUH B2-1	VCAB	B205 - VEST	350	58 WATTS	MEDIUM	16	65	2	5.5	180	-	-	-	3/4"	3	4, 7, 8	TRANE FF-B04
CUH B2-2	VCAB	B217 - VEST	350	58 WATTS	MEDIUM	16	65	2	5.5	180	-	-	-	3/4"	3	4, 7, 8	TRANE FF-B04
CUH B1-1	VCAB	B100 - VEST	350	58 WATTS	MEDIUM	16	65	2	5.5	180	-	-	-	3/4"	3	4, 7, 8	TRANE FF-B04
CUH B1-2	VCAB	B122 - VEST	350	58 WATTS	MEDIUM	16	65	2	5.5	180	-	-	-	3/4"	3	4, 7, 8	TRANE FF-B04
CUH B1-3	VCAB	NW STAIR	350	58 WATTS	MEDIUM	21	65	2.7	5.5	180	-	-	-	3/4"	3	4, 7, 8	TRANE FF-B04

NOTES:
1. AIR FLOW INCLUDES ALLOWANCES FOR ALL INTEGRAL PRESSURE DROPS (INCLUDING INTAKE AND DISCHARGE GRILLES, COILS AND FILTERS.
2. TYPES - VCAB = VERTICAL CABINET, HCAB = HORIZONTAL CABINET.
3. PROVIDE UNIT WITH HINGED VANDAL-PROOF ACCESS DOORS
4. PROVIDE UNIT HEATER WITH INTEGRAL FAN ON-OFF AUTO SWITCH & THERMOSTAT. ON A CALL FOR HEAT THE UNIT CONTROLS MUST OPEN A SOLENOID VALVE LOCATED UNDER UNIT COVER IN AN ACCESSIBLE LOCATION. ALL CONTROL DEVICES, TRANSFORMERS, ETC. MUST COME PRE-WIRED WITH UNIT.
5. UNIT HEATER MUST BE CONTROLLED THRU DDC SYSTEM.
6. PROVIDE 1" THROWAWAY FILTER FOR RETURN AIR.
7. COORDINATE WITH DOR FOR FINISHES COLOR.
8. PROVIDE ACCESSIBLE EXTENDED CABINET TO ENCLOSE ALL CUH TRIM AND ACCESSORIES.
9. PROVIDE SPARE SET OF ALL FILTERS.
10. PROVIDE UNIT MOUNTED DISCONNECT SWITCH.

UNIT HEATER SCHEDULE (SEE HPE SCHEDULE FOR ELECTRICAL SERVICE)

SYMBOL	TYPE	LOCATION	FAN			HEATING CAPACITY								REMARKS (SEE NOTES 1,2,3,4,5)	BASIS OF DESIGN
											CONTROL VALVE				
			CFM	HP / WATTS	RPM	MBH	EAT °F	GPM	PD/ FT. WG	EWT °F	TYPE	MAX. PD (FT.)	FAIL POS.	BRANCH PIPE SIZE	
UH B2-1	EX	MECHANICAL B216	420	16W	1350	15.7	65	1.9	2.2	180	2W MOD.	7 FT.	NO	3/4"	-	TRANE S-A18
UH B1-1	EX	AHU-2 VESTIBULE	420	16W	1350	15.7	65	1.9	2.2	180	2W MOD.	7 FT.	NO	3/4"	-	TRANE S-A18

NOTES:
1. AIR FLOW INCLUDES ALLOWANCES FOR ALL INTEGRAL PRESSURE DROPS (INCLUDING INTAKE AND DISCHARGE GRILLES, COILS AND FILTERS).
2. TYPES - EX = EXPOSED, VCAB = VERTICAL RECESSED CABINET, HCAB = HORIZONTAL CABINET.
3. ALL UNITS MUST BE HORIZONTAL DISCHARGE WITH INTEGRAL FAN GUARDS.
4. UNIT HEATER MUST BE CONTROLLED THROUGH THE BAS.
5. PROVIDE UNIT MOUNTED DISCONNECT SWITCH.

STEAM PRESSURE REDUCING STATION SCHEDULE

SYMBOL	LOCATION	PRESSURE REDUCING VALVE				RELIEF VALVE				REMARKS	BASIS OF DESIGN
		SIZE (IN.)	FLOW LBS/HR.	INIT. PSIG	FIN. PSIG	FLOW LBS/HR.	SET PSIG	MIN. SIZE (IN.)	ORIFICE (SQ. IN.)		
PRV-1	TUNNEL	1.5	1,500	50	5	1,500	20	2	-	CULLUM; SEE NOTE 1 & 2	SPIRAX SARCO 25P (YELLOW)
PRV-2	TUNNEL	1.5	1,500	50	10	1,500	20	2	-	LINCOLN; SEE NOTE 1 & 2	SPIRAX SARCO 25P (YELLOW)

NOTES
1. SOUND VALUES INCLUDE THE EFFECTS OF ACOUSTIC PLATES AS WELL AS ACOUSTIC BLANKETS. (1)
2. RELIEF VALVE - BASIS OF DESIGN - SPRIAX SARCO SVS708J, PROVIDE WITH DRIP PAN ELBOW AND (2) VENT ROUTED TO ATMOSPHERE.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
0	RTA SUBMISSION	2/11/2021
1	AMENDMENT 1	4/7/2021

DESIGNED BY: WMF
DRAWN BY: RKG
CHECKED BY: WCJ
SUBMITTED BY: SK
SIZE: ANSI D
ISSUE DATE: 4/7/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-1b-C0031
PROJECT NO: 20190494

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

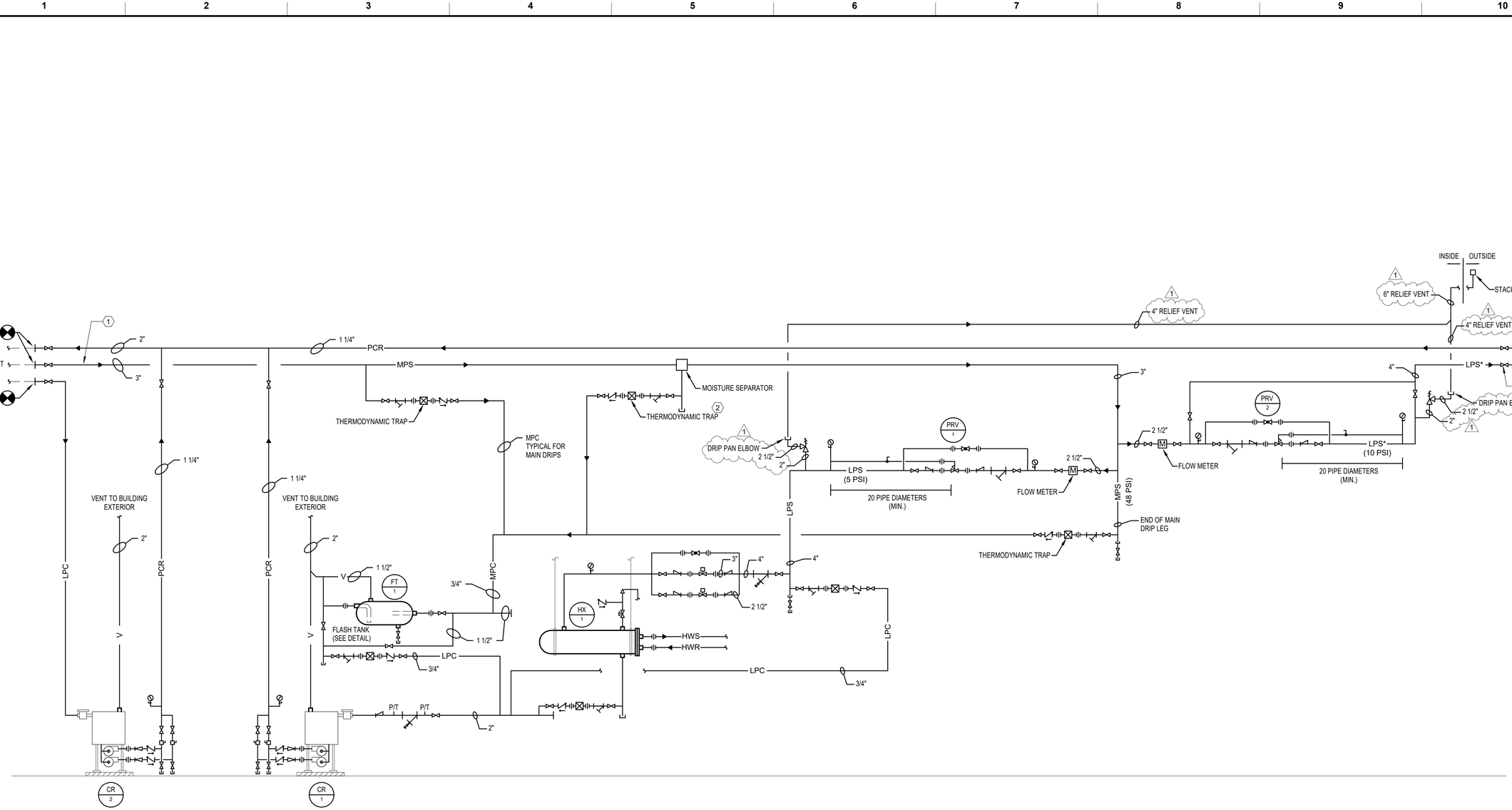
WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

SCHEDULES - HVAC

SHEET ID

M605

RTA SUBMISSION 2/11/2021



B5 / M705 STEAM FLOW DIAGRAM

NTS

GENERAL NOTES:

1. RATE ALL STEAM PIPING, EQUIPMENT AND ACCESSORIES UP TO AND INCLUDING THE HEAT EXCHANGER FOR 125 PSIG STEAM.
2. ALL STEAM TRAPS MUST BE FLOAT AND THERMOSTATIC UNLESS NOTED OTHERWISE.

SHEET NOTES:

(1) PROVIDE LINE SIDE ISOLATION VALVEWITH BYPASS AND 1 1/2" WARM UP VALVE.

(2) PROVIDE INLINE, LINE-SIZE, CYCLONE-TYPE, STEAM MOISTURE SEPARATOR DESIGNED TO SEPARATE AND DRAIN ENTRAINED WATER DROPLETS WITH A MINIMUM EFFICIENCY OF 99% FOR REMOVING PARTICULATE AND LIQUID 10 MICRONS OR LARGER IN SIZE. IT MUST BE DUCTILE IRON CONSTRUCTION, RATED FOR 125 PSI MINIMUM WORKING PRESSURE.

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ISSUE DATE: 4/7/2021
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CONTRACT NO.: W912DS-19-C0031
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DESIGNED BY: WMF
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SUBMITTED BY: BK
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE *A Joint Venture*

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

FLOW DIAGRAMS - HVAC

SHEET ID

M705

RTA SUBMISSION 2/11/2021

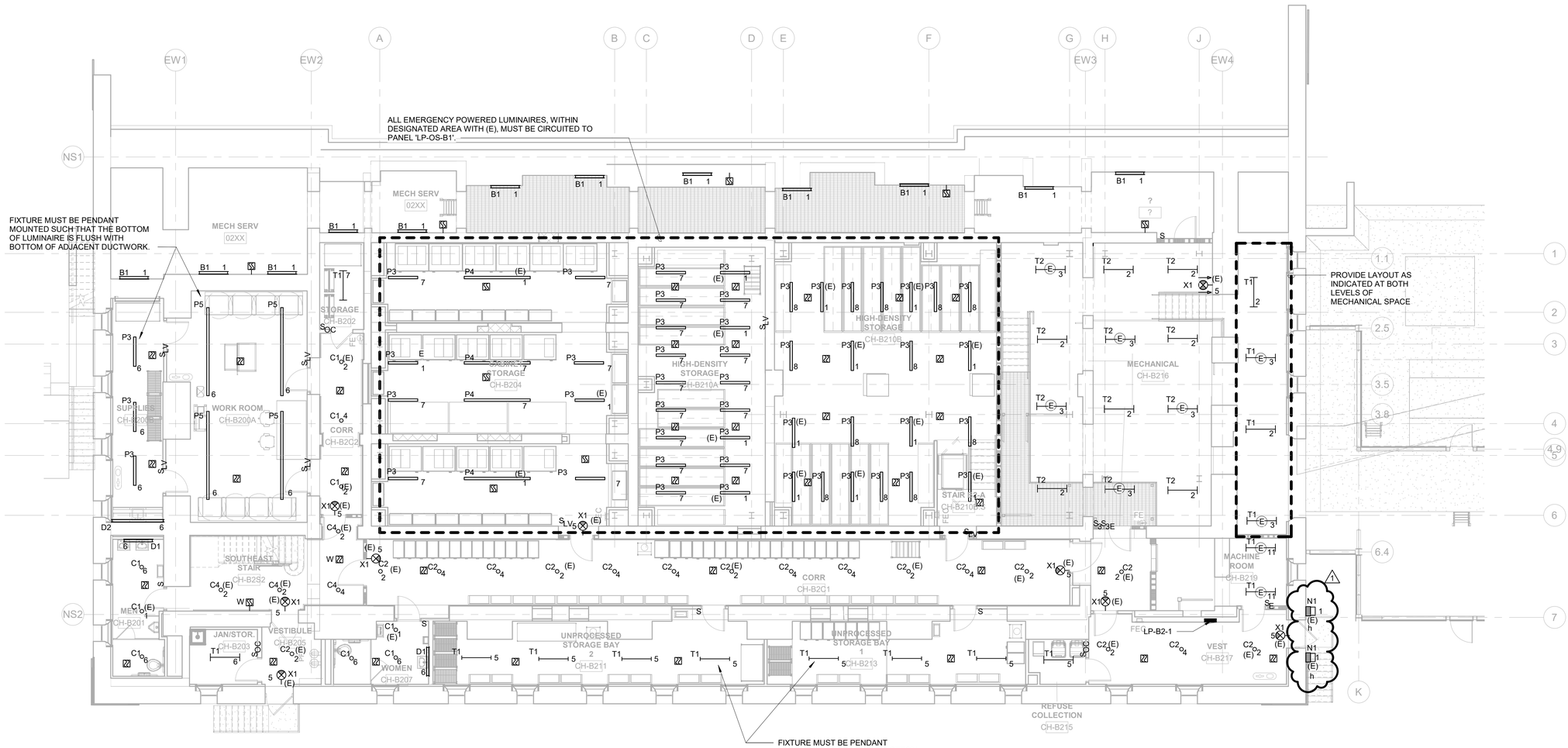
GENERAL NOTES:

1. FOR GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND DRAWING INDEX REFER TO DRAWINGS E-001 AND E-002.
2. FOR LUMINAIRE DESCRIPTION, REFER TO LUMINAIRE SCHEDULE ON DRAWING EL-601.
3. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND SECTIONS FOR EXACT LOCATION OF CEILING MOUNTED LUMINAIRES.
4. UNLESS OTHERWISE NOTED, PROVIDE THE FOLLOWING WIRE SIZES BASED ON THE CIRCUIT LENGTH IN ORDER TO LIMIT VOLTAGE DROP TO LESS THAN 3%.

   FOR 120V:
   A. LESS THAN 90 FEET PROVIDE 2#12 & #12G, 3/4"C.
   B. MORE THAN 90 FEET BUT LESS THAN 150 FEET PROVIDE 2#10 & #10G, 3/4"C.
   C. MORE THAN 150 FEET PROVIDE 2#8 & #8G, 3/4"C.

   FOR 277V:
   A. LESS THAN 180 FEET PROVIDE 2#12 & #12G, 3/4"C.
   B. MORE THAN 180 FEET BUT LESS THAN 300 FEET PROVIDE 2#10 & #10G, 3/4" C.
   C. MORE THAN 300 FEET PROVIDE 2#8 & #8G, 3/4"C.

5. LOCATIONS OF LUMINAIRES IN ELECTRICAL AND MECHANICAL ROOMS MUST BE COORDINATED WITH THE ROOM EQUIPMENT AND OVERHEAD UTILITIES.
6. CONTRACTOR MUST BE RESPONSIBLE TO PROVIDE ALL COMPONENTS INCLUDING SENSORS, MODULES, RELAYS, POWER PACKS, ETC. TO COORDINATE FINAL SELECTED LIGHTING CONTROL SYSTEM AND PROVIDE A FULLY FUNCTIONING LIGHTING CONTROL SYSTEM.
7. FINAL QUANTITIES AND LOCATIONS OF ALL OCCUPANCY SENSORS MUST BE PROVIDED BASED ON SUBMITTED LIGHTING CONTROL MANUFACTURER PRODUCT REQUIREMENTS AND MUST BE INCLUDED IN THE SHOP DRAWING SUBMITTALS.
8. BRANCH CIRCUITS FEEDING CORRIDORS AND PASSAGEWAYS MUST NOT FEED AREAS THAT ARE LOCALLY SWITCHED.
9. PROVIDE AN ADDITIONAL 5% SUPPLEMENTAL EXIT SIGNS INCLUDING INSTALLATION AND ASSOCIATED CIRCUITING FOR EACH TYPE SPECIFIED AS PART OF THE PROJECT SCOPE. LOCATIONS MUST BE DETERMINED IN THE FIELD AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION. REFER TO INTERIOR LIGHTING SPECIFICATION FOR FURTHER INFORMATION.
10. UNLESS OTHERWISE NOTED, CIRCUIT ALL NORMALLY POWERED LUMINAIRES TO PANEL 'LP-B2-1'.
11. UNLESS OTHERWISE NOTED, CIRCUIT ALL EMERGENCY POWERED LUMINAIRES, DESIGNATED WITH (E),TO PANEL 'ELP-B1'.
12. REFER TO DRAWING A-005 FOR CRITERIA ON RUNNING UTILITIES IN HISTORIC SPACES.
13. IT IS NOT PERMITTED TO ANCHOR TO, OR SUPPORT FROM, THE EXISTING CLAY TILE ARCH FLOOR CONSTRUCTION. UTILITIES, DUCTWORK, LIGHTING, ARCHITECTURAL ELEMENTS, ETC. MUST BE SUPPORTED BY SECONDARY FRAMING, ATTACHED TO THE EXISTING PRIMARY STEEL FLOOR FRAMING. DESIGN OF SECONDARY FRAMING AND CONNECTIONS TO STEEL MUST BE BY PERFOMED BY THE CONTRACTOR'S LICENSED ENGINEER. REFER TO TYPICAL DETAIL E5/S-504 AND RELATED SPECIFICATIONS.



E1 / EL-10B2 ELECTRICAL LIGHTING PLAN - BASEMENT LEVEL B2
SCALE: 1/8" = 1'-0"

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

PLAN NORTH

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	AMENDMENT 1	4/7/2021
0	RTA SUBMISSION	2/11/2021

DESIGNED BY: CR
DRAWN BY: MJP
CHECKED BY:
SUBMITTED BY:
ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
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ELECTRICAL LIGHTING PLAN - BASEMENT LEVEL B2

SHEET ID

EL-10B2

RTA SUBMISSION 2/11/2021