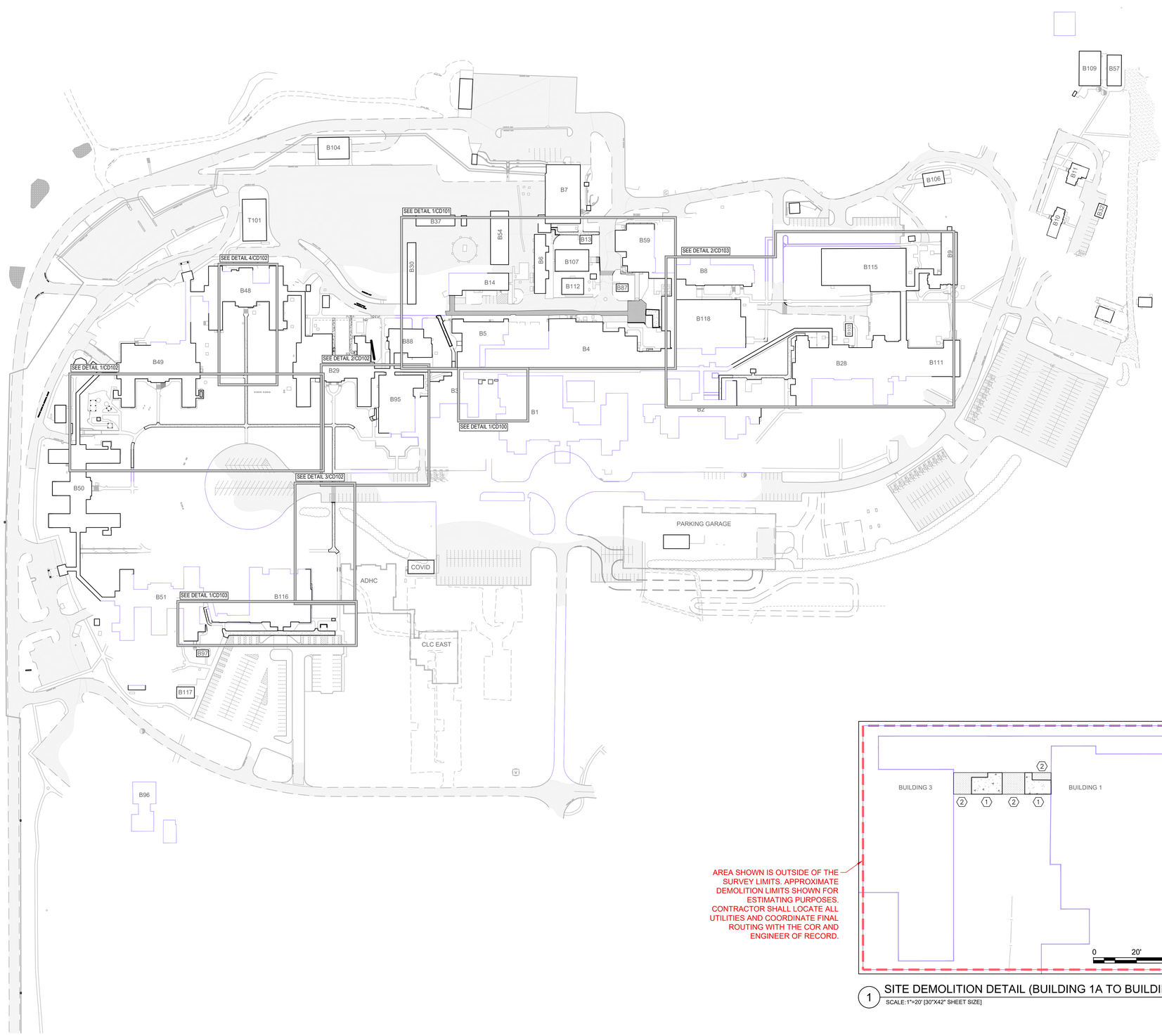


LEGEND

- APPROXIMATE LIMITS OF CONCRETE REMOVAL
- APPROXIMATE LIMITS OF ROCK MULCH REMOVAL
- APPROXIMATE LIMITS OF ASPHALT REMOVAL
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.

N

0 100' 200'

GENERAL NOTES

1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021; INFORMATION SUPPLIED BY THE VA; ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL; AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS, MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

AREA SHOWN IS OUTSIDE OF THE SURVEY LIMITS. APPROXIMATE DEMOLITION LIMITS SHOWN FOR ESTIMATING PURPOSES. CONTRACTOR SHALL LOCATE ALL UTILITIES AND COORDINATE FINAL ROUTING WITH THE COR AND ENGINEER OF RECORD.

1 SITE DEMOLITION DETAIL (BUILDING 1A TO BUILDING 3)
SCALE: 1"=20' [30"X42" SHEET SIZE]

DEMOLITION NOTES

1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE A PRE-CONSTRUCTION CONDITION REPORT OF ALL ACCESS ROUTES AND ROADS AND HAVE IT APPROVED BY THE CONTRACTING OFFICER'S REPRESENTATIVE (COR).
2. PHASE DEMOLITION AS NEEDED TO MAINTAIN DRAINAGE AND UTILITIES FOR MINIMAL DISRUPTION.
3. INSTALL PERIMETER EROSION CONTROL PRIOR TO THE COMMENCEMENT OF WORK.
4. INSTALL CONSTRUCTION FENCE PER SPECIFICATION SECTION 01 00 00 - GENERAL REQUIREMENTS.
5. TREE REMOVAL SHALL INCLUDE CUTTING, DISPOSAL AND STUMP/ROOT REMOVAL TO A DEPTH OF 2 FT BELOW FINISHED GRADE.
6. EXCEPT AS NOTED, ALL AREAS WITHIN CONSTRUCTION LIMITS SHALL BE CLEARED AND GRUBBED PER PLANS AND SPECIFICATIONS.
7. TREES TO BE SAVED SHALL BE PROTECTED WITH ORANGE CONSTRUCTION FENCE AS PART OF EROSION CONTROL FENCE CONSTRUCTION LIMITS.
8. CONTRACTOR TO CONTAIN ALL EQUIPMENT/TRUCKS AND VEHICLES TO CONSTRUCTION ZONE.
9. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING IRRIGATION EQUIPMENT. ANY EXISTING IRRIGATION EQUIPMENT INCLUDING, BUT NOT LIMITED TO, HEADS, VALVES, WIRES, PIPES AND FITTINGS THAT ARE DISTURBED DURING CONSTRUCTION WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATCHING EQUIPMENT. PRIOR TO CONSTRUCTION, LOCATE THE EXISTING IRRIGATION EQUIPMENT AND PIPE IN THE CONSTRUCTION AREA AND MARK LOCATIONS, USING MARKING SPRAY PAINT FOR PIPE AND WIRE STAKE FLAGS FOR HEADS AND VALVE BOXES.

KEY NOTES

1. REMOVE EXISTING CONCRETE PAVEMENT. EXTEND REMOVAL LIMITS TO NEAREST EXISTING JOINT. SAWCUT PAVEMENT AT REMOVAL LIMITS.
2. REMOVE/SALVAGE EXISTING ROCK MULCH AS REQUIRED FOR DUCTBANK INSTALLATION.

No	REVISION	DATE

CONSULTANT

SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: IAN J. WEBER, PE

SIGNATURE:

DATE MARCH 28, 2022 LICENSE # 55502

APPROVED DATE:	APPROVED PROJECT COR DATE:	APPROVED PATIENT SAFETY DATE:	APPROVED EMS MANAGER DATE:	APPROVED DIRECTOR FMS DATE:	
APPROVED DATE:	APPROVED SERVICE LINE DIRECTOR DATE:	APPROVED SAFETY MANAGER DATE:	APPROVED R/D MANAGER DATE:	APPROVED ASSOCIATE DIRECTOR DATE:	
APPROVED DATE:	APPROVED GEMS COORDINATOR DATE:	APPROVED CHIEF OF POLICE DATE:	APPROVED PROJECTS SECTION MANAGER DATE:	APPROVED NURSE EXECUTIVE DATE:	
APPROVED DATE:	APPROVED INFECTION CONTROL NURSE DATE:	APPROVED EOT MANAGER DATE:	APPROVED ASSISTANT CHIEF ENGINEER DATE:	APPROVED CHIEF OF STAFF DATE:	

DRAWING TITLE: OVERALL DEMOLITION PLAN

APPROVED MEDICAL CENTER DIRECTOR DATE:

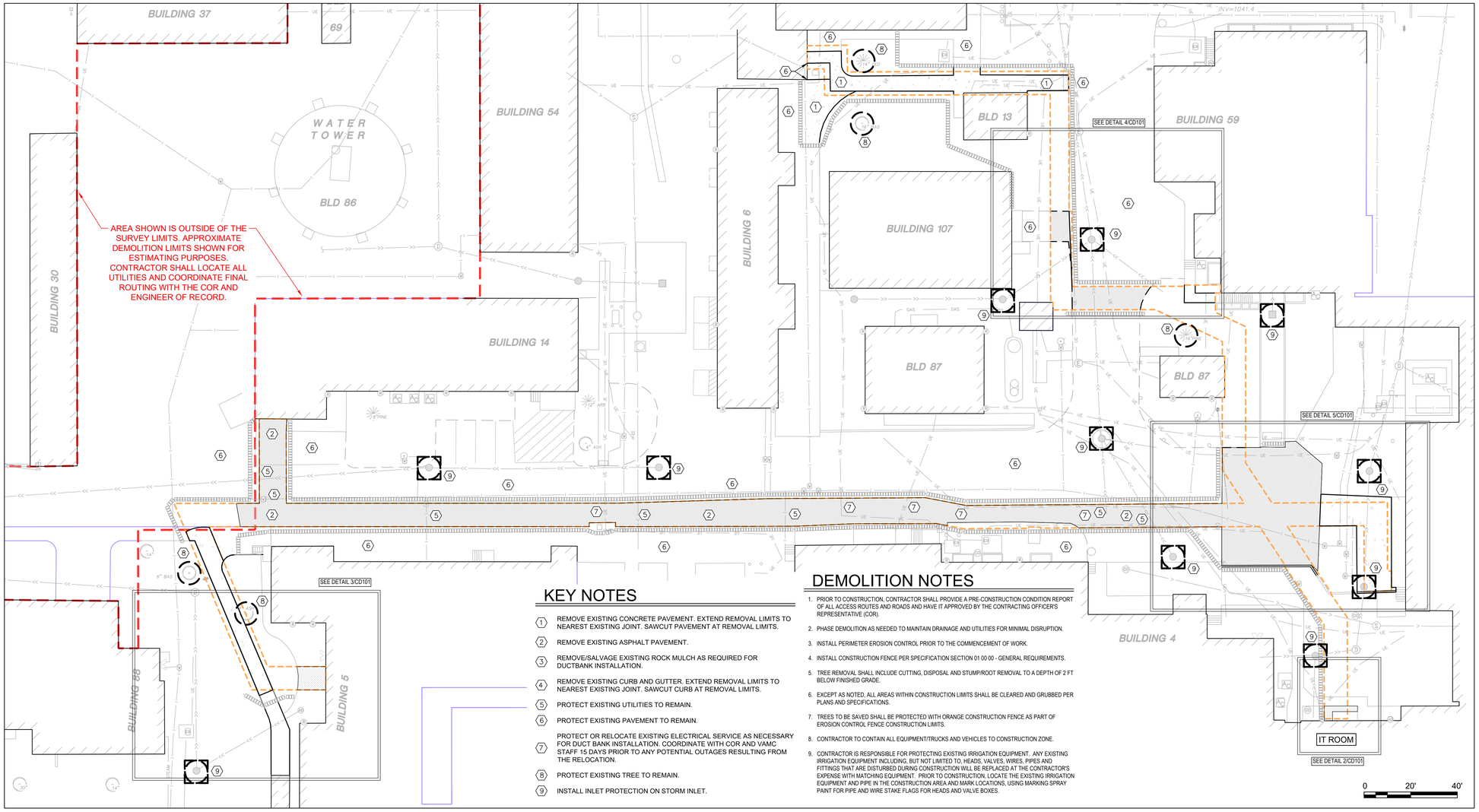
PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

BUILDING No: CAMPUS | CHECKED BY: JJW | DRAWN: CDN

LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE: 1"=100'
PROJECT NO: 656-21-235
DRAWING NO: CD-100
SHEET OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



1 SITE DEMOLITION PLAN 1
SCALE: 1"=20' [30"X42" SHEET SIZE]

KEY NOTES

1. REMOVE EXISTING CONCRETE PAVEMENT. EXTEND REMOVAL LIMITS TO NEAREST EXISTING JOINT. SAWCUT PAVEMENT AT REMOVAL LIMITS.
2. REMOVE EXISTING ASPHALT PAVEMENT.
3. REMOVE/SALVAGE EXISTING ROCK MULCH AS REQUIRED FOR DUCTBANK INSTALLATION.
4. REMOVE EXISTING CURB AND GUTTER. EXTEND REMOVAL LIMITS TO NEAREST EXISTING JOINT. SAWCUT CURB AT REMOVAL LIMITS.
5. PROTECT EXISTING UTILITIES TO REMAIN.
6. PROTECT EXISTING PAVEMENT TO REMAIN.
7. PROTECT OR RELOCATE EXISTING ELECTRICAL SERVICE AS NECESSARY FOR DUCT BANK INSTALLATION. COORDINATE WITH COR AND VAMC STAFF 15 DAYS PRIOR TO ANY POTENTIAL OUTAGES RESULTING FROM THE RELOCATION.
8. PROTECT EXISTING TREE TO REMAIN.
9. INSTALL INLET PROTECTION ON STORM INLET.

DEMOLITION NOTES

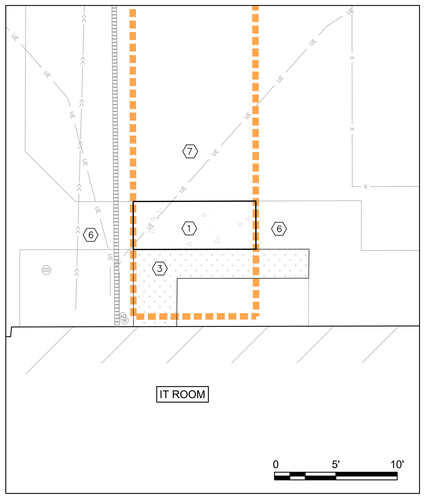
1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE A PRE-CONSTRUCTION CONDITION REPORT OF ALL ACCESS ROUTES AND ROADS AND HAVE IT APPROVED BY THE CONTRACTING OFFICER'S REPRESENTATIVE (COR).
2. PHASE DEMOLITION AS NEEDED TO MAINTAIN DRAINAGE AND UTILITIES FOR MINIMAL DISRUPTION.
3. INSTALL PERIMETER EROSION CONTROL PRIOR TO THE COMMENCEMENT OF WORK.
4. INSTALL CONSTRUCTION FENCE PER SPECIFICATION SECTION 01 00 00 - GENERAL REQUIREMENTS.
5. TREE REMOVAL SHALL INCLUDE CUTTING, DISPOSAL AND STUMP/ROOT REMOVAL TO A DEPTH OF 2 FT BELOW FINISHED GRADE.
6. EXCEPT AS NOTED, ALL AREAS WITHIN CONSTRUCTION LIMITS SHALL BE CLEARED AND GRUBBED PER PLANS AND SPECIFICATIONS.
7. TREES TO BE SAVED SHALL BE PROTECTED WITH ORANGE CONSTRUCTION FENCE AS PART OF EROSION CONTROL FENCE CONSTRUCTION LIMITS.
8. CONTRACTOR TO CONTAIN ALL EQUIPMENT/TRUCKS AND VEHICLES TO CONSTRUCTION ZONE.
9. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING IRRIGATION EQUIPMENT. ANY EXISTING IRRIGATION EQUIPMENT INCLUDING, BUT NOT LIMITED TO, HEADS, VALVES, WIRES, PIPES AND FITTINGS THAT ARE DISTURBED DURING CONSTRUCTION WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATCHING EQUIPMENT. PRIOR TO CONSTRUCTION, LOCATE THE EXISTING IRRIGATION EQUIPMENT AND PIPE IN THE CONSTRUCTION AREA AND MARK LOCATIONS, USING MARKING SPRAY PAINT FOR PIPE AND WIRE STAKE FLAGS FOR HEADS AND VALVE BOXES.

LEGEND

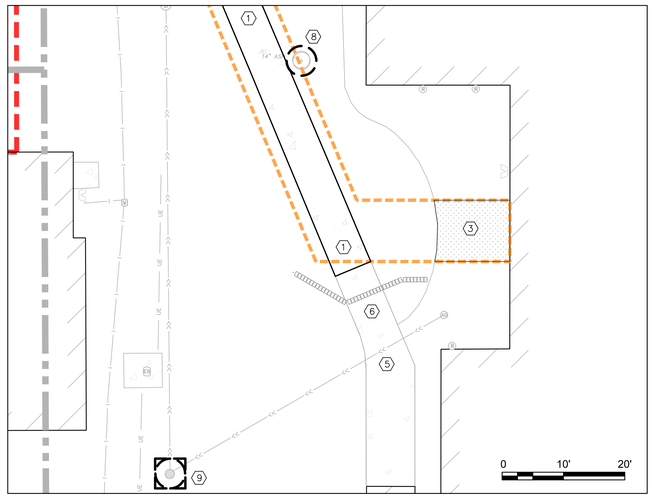
- APPROXIMATE LIMITS OF CONCRETE REMOVAL
- APPROXIMATE LIMITS OF ROCK MULCH REMOVAL
- APPROXIMATE LIMITS OF ASPHALT REMOVAL
- LIMITS OF TOPOGRAPHIC SURVEY
- APPROXIMATE EXCAVATION LIMITS
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- BIOROLL LOCATION
- SILT FENCE LOCATION
- INSTALL TREE PROTECTION FENCING
- INSTALL INLET PROTECTION ON STORM INLET

GENERAL NOTES

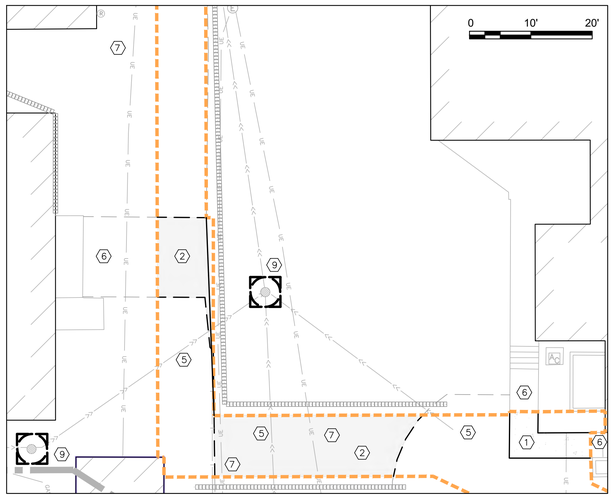
1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021. INFORMATION SUPPLIED BY THE VA: ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL; AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS. MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.



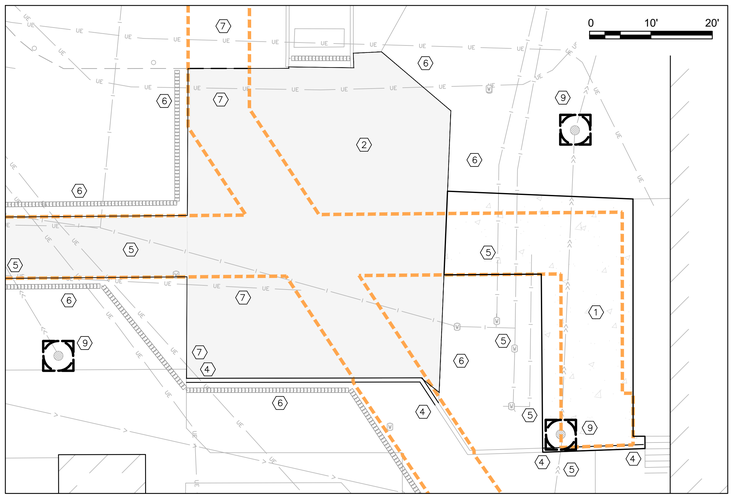
2 SITE DEMOLITION DETAIL (BUILDING 4)
SCALE: 1"=5' [30"X42" SHEET SIZE]



3 SITE DEMOLITION DETAIL (BUILDING 5)
SCALE: 1"=10' [30"X42" SHEET SIZE]



4 SITE DEMOLITION DETAIL (BUILDING 59)
SCALE: 1"=10' [30"X42" SHEET SIZE]



5 SITE DEMOLITION DETAIL (BUILDING 118)
SCALE: 1"=10' [30"X42" SHEET SIZE]

No	REVISION	DATE

CONSULTANT
SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N., #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: IAN J. WEBER, PE
SIGNATURE:
DATE MARCH 28, 2022 LICENSE # 55502

APPROVED DATE:	APPROVED PROJECT COR DATE:	APPROVED PATIENT SAFETY DATE:	APPROVED EMS MANAGER DATE:	APPROVED DIRECTOR FMS DATE:
APPROVED DATE:	APPROVED SERVICE LINE DIRECTOR DATE:	APPROVED SAFETY MANAGER DATE:	APPROVED M/O MANAGER DATE:	APPROVED ASSOCIATE DIRECTOR DATE:
APPROVED DATE:	APPROVED GEMS COORDINATOR DATE:	APPROVED CHIEF OF POLICE DATE:	APPROVED PROJECTS SECTION MANAGER DATE:	APPROVED NURSE EXECUTIVE DATE:
APPROVED DATE:	APPROVED INFECTION CONTROL NURSE DATE:	APPROVED CBT MANAGER DATE:	APPROVED ASSISTANT CHIEF ENGINEER DATE:	APPROVED CHIEF OF STAFF DATE:

APPROVED MEDICAL CENTER DIRECTOR DATE:

DRAWING TITLE: DEMOLITION PLAN 1

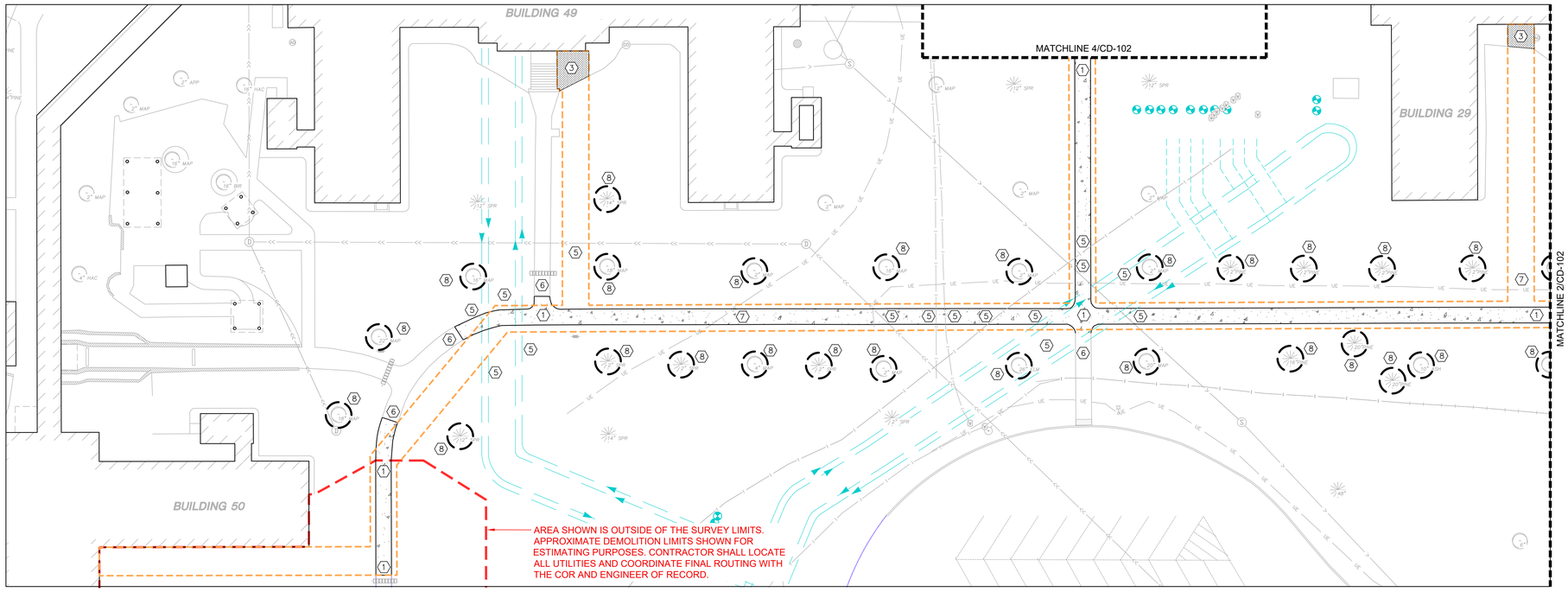
PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

BUILDING No	CHECKED BY	DRAWN
CAMPUS	IJW	CDN

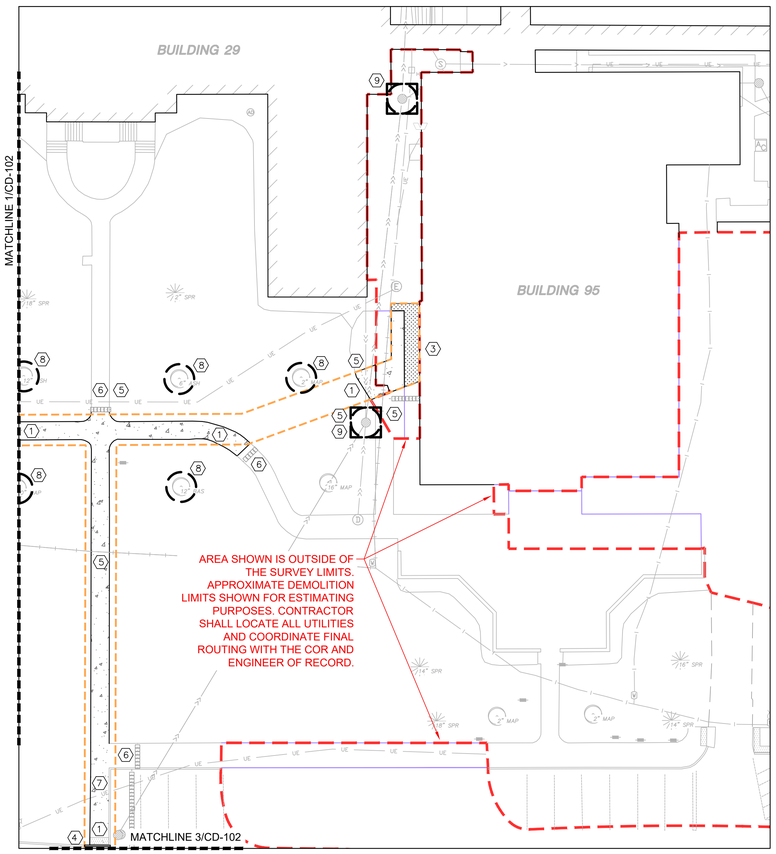
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE: 1"=20'
PROJECT NO: 656-21-235
DRAWING NO: CD-101
SHEET NO: OF

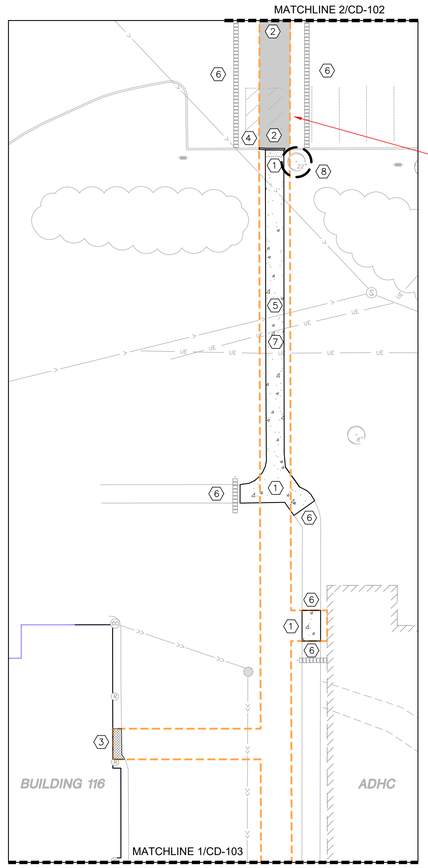
U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



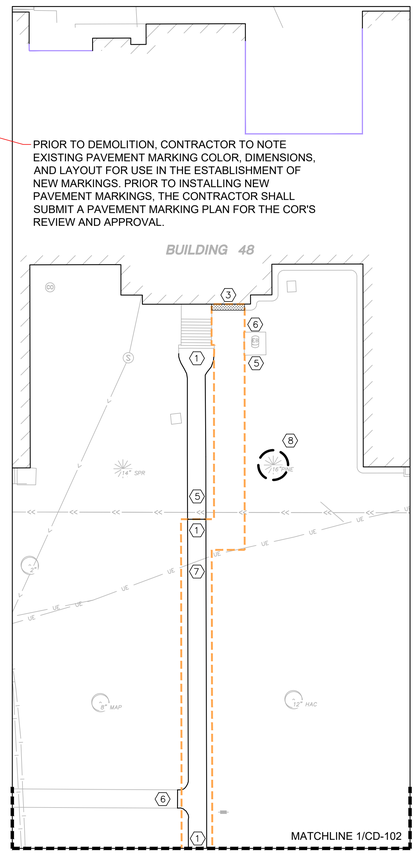
1 SITE DEMOLITION PLAN 2
SCALE: 1"=20' [30"X42" SHEET SIZE]



2 SITE DEMOLITION PLAN 3
SCALE: 1"=20' [30"X42" SHEET SIZE]



3 SITE DEMOLITION PLAN 4
SCALE: 1"=20' [30"X42" SHEET SIZE]



4 SITE DEMOLITION PLAN 5
SCALE: 1"=20' [30"X42" SHEET SIZE]

LEGEND

- APPROXIMATE LIMITS OF CONCRETE REMOVAL
- APPROXIMATE LIMITS OF ROCK MULCH REMOVAL
- APPROXIMATE LIMITS OF ASPHALT REMOVAL
- LIMITS OF TOPOGRAPHIC SURVEY
- APPROXIMATE EXCAVATION LIMITS
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- BIOROLL LOCATION
- SILT FENCE LOCATION
- APPROXIMATE GEOTHERMAL UTILITY LOCATION. CONTRACTOR TO CONFIRM LOCATION AND PROTECT IN PLACE TO AVOID DAMAGE TO EXISTING SYSTEM.
- INSTALL TREE PROTECTION FENCING
- INSTALL INLET PROTECTION ON STORM INLET

GENERAL NOTES

1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021; INFORMATION SUPPLIED BY THE VA; ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL; AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS. MINIMUM DAILY. MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

DEMOLITION NOTES

1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE A PRE-CONSTRUCTION CONDITION REPORT OF ALL ACCESS ROUTES AND ROADS AND HAVE IT APPROVED BY THE CONTRACTING OFFICER'S REPRESENTATIVE (COR).
2. PHASE DEMOLITION AS NEEDED TO MAINTAIN DRAINAGE AND UTILITIES FOR MINIMAL DISRUPTION.
3. INSTALL PERIMETER EROSION CONTROL PRIOR TO THE COMMENCEMENT OF WORK.
4. INSTALL CONSTRUCTION FENCE PER SPECIFICATION SECTION 01 00 00 - GENERAL REQUIREMENTS.
5. TREE REMOVAL SHALL INCLUDE CUTTING, DISPOSAL AND STUMP/ROOT REMOVAL TO A DEPTH OF 2 FT BELOW FINISHED GRADE.
6. EXCEPT AS NOTED, ALL AREAS WITHIN CONSTRUCTION LIMITS SHALL BE CLEARED AND GRUBBED PER PLANS AND SPECIFICATIONS.
7. TREES TO BE SAVED SHALL BE PROTECTED WITH ORANGE CONSTRUCTION FENCE AS PART OF EROSION CONTROL FENCE CONSTRUCTION LIMITS.
8. CONTRACTOR TO CONTAIN ALL EQUIPMENT/TRUCKS AND VEHICLES TO CONSTRUCTION ZONE.
9. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING IRRIGATION EQUIPMENT. ANY EXISTING IRRIGATION EQUIPMENT INCLUDING, BUT NOT LIMITED TO, HEADS, VALVES, WIRES, PIPES AND FITTINGS THAT ARE DISTURBED DURING CONSTRUCTION WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATCHING EQUIPMENT. PRIOR TO CONSTRUCTION, LOCATE THE EXISTING IRRIGATION EQUIPMENT AND PIPE IN THE CONSTRUCTION AREA AND MARK LOCATIONS, USING MARKING SPRAY PAINT FOR PIPE AND WIRE STAKE FLAGS FOR HEADS AND VALVE BOXES.

KEY NOTES

1. REMOVE EXISTING CONCRETE PAVEMENT. EXTEND REMOVAL LIMITS TO NEAREST EXISTING JOINT. SAWCUT PAVEMENT AT REMOVAL LIMITS.
2. REMOVE EXISTING ASPHALT PAVEMENT.
3. REMOVE/SALVAGE EXISTING ROCK MULCH AS REQUIRED FOR DUCTBANK INSTALLATION.
4. REMOVE EXISTING CURB AND GUTTER. EXTEND REMOVAL LIMITS TO NEAREST EXISTING JOINT. SAWCUT CURB AT REMOVAL LIMITS.
5. PROTECT EXISTING UTILITIES TO REMAIN.
6. PROTECT EXISTING PAVEMENT TO REMAIN.
7. PROTECT OR RELOCATE EXISTING ELECTRICAL SERVICE AS NECESSARY FOR DUCT BANK INSTALLATION. COORDINATE WITH COR AND VAMC STAFF 15 DAYS PRIOR TO ANY POTENTIAL OUTAGES RESULTING FROM THE RELOCATION.
8. PROTECT EXISTING TREE TO REMAIN.
9. INSTALL INLET PROTECTION ON STORM INLET

N

0 20' 40'

No	REVISION	DATE

CONSULTANT
AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5529
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N., #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: IAN J. WEBER, PE
SIGNATURE:
DATE MARCH 28, 2022 LICENSE # 55502

APPROVED	DATE:	APPROVED PROJECT COR	DATE:	APPROVED PATIENT SAFETY	DATE:	APPROVED EMS MANAGER	DATE:	APPROVED DIRECTOR FMS	DATE:	APPROVED MEDICAL CENTER DIRECTOR	DATE:
APPROVED	DATE:	APPROVED SERVICE LINE DIRECTOR	DATE:	APPROVED SAFETY MANAGER	DATE:	APPROVED W/O MANAGER	DATE:	APPROVED ASSOCIATE DIRECTOR	DATE:		
APPROVED	DATE:	APPROVED GEMS COORDINATOR	DATE:	APPROVED CHIEF OF POLICE	DATE:	APPROVED PROJECTS SECTION MANAGER	DATE:	APPROVED NURSE EXECUTIVE	DATE:		
APPROVED	DATE:	APPROVED INFECTION CONTROL NURSE	DATE:	APPROVED CBT MANAGER	DATE:	APPROVED ASSISTANT CHIEF ENGINEER	DATE:	APPROVED CHIEF OF STAFF	DATE:		

DRAWING TITLE: DEMOLITION PLAN 2

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
BUILDING No: CAMPUS
CHECKED BY: IJW
DRAWN: CDN
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE: 1"=20'
PROJECT NO: 656-21-235
DRAWING NO: CD-102
SHEET OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

LEGEND

- APPROXIMATE LIMITS OF CONCRETE REMOVAL
- APPROXIMATE LIMITS OF ROCK MULCH REMOVAL
- APPROXIMATE LIMITS OF ASPHALT REMOVAL
- LIMITS OF TOPOGRAPHIC SURVEY
- APPROXIMATE EXCAVATION LIMITS
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- BIOROLL LOCATION
- SILT FENCE LOCATION
- APPROXIMATE GEOTHERMAL UTILITY LOCATION. CONTRACTOR TO CONFIRM LOCATION AND PROTECT IN PLACE TO AVOID DAMAGE TO EXISTING SYSTEM.
- INSTALL TREE PROTECTION FENCING
- INSTALL INLET PROTECTION ON STORM INLET

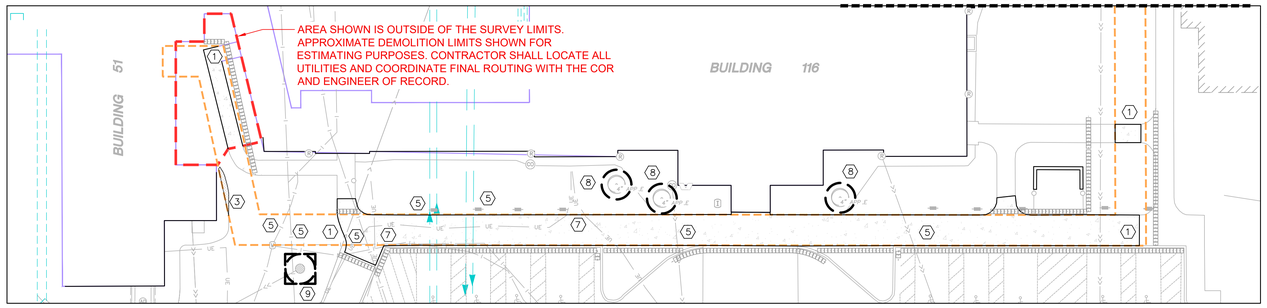
DEMOLITION NOTES

1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE A PRE-CONSTRUCTION CONDITION REPORT OF ALL ACCESS ROUTES AND ROADS AND HAVE IT APPROVED BY THE CONTRACTING OFFICER'S REPRESENTATIVE (COR).
2. PHASE DEMOLITION AS NEEDED TO MAINTAIN DRAINAGE AND UTILITIES FOR MINIMAL DISRUPTION.
3. INSTALL PERIMETER EROSION CONTROL PRIOR TO THE COMMENCEMENT OF WORK.
4. INSTALL CONSTRUCTION FENCE PER SPECIFICATION SECTION 01 00 00 - GENERAL REQUIREMENTS.
5. TREE REMOVAL SHALL INCLUDE CUTTING, DISPOSAL AND STUMP/ROOT REMOVAL TO A DEPTH OF 2 FT BELOW FINISHED GRADE.
6. EXCEPT AS NOTED, ALL AREAS WITHIN CONSTRUCTION LIMITS SHALL BE CLEARED AND GRUBBED PER PLANS AND SPECIFICATIONS.
7. TREES TO BE SAVED SHALL BE PROTECTED WITH ORANGE CONSTRUCTION FENCE AS PART OF EROSION CONTROL FENCE CONSTRUCTION LIMITS.
8. CONTRACTOR TO CONTAIN ALL EQUIPMENT/TRUCKS AND VEHICLES TO CONSTRUCTION ZONE.
9. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING IRRIGATION EQUIPMENT. ANY EXISTING IRRIGATION EQUIPMENT INCLUDING, BUT NOT LIMITED TO, HEADS, VALVES, WIRES, PIPES AND FITTINGS THAT ARE DISTURBED DURING CONSTRUCTION WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATCHING EQUIPMENT. PRIOR TO CONSTRUCTION, LOCATE THE EXISTING IRRIGATION EQUIPMENT AND PIPE IN THE CONSTRUCTION AREA AND MARK LOCATIONS, USING MARKING SPRAY PAINT FOR PIPE AND WIRE STAKE FLAGS FOR HEADS AND VALVE BOXES.

N

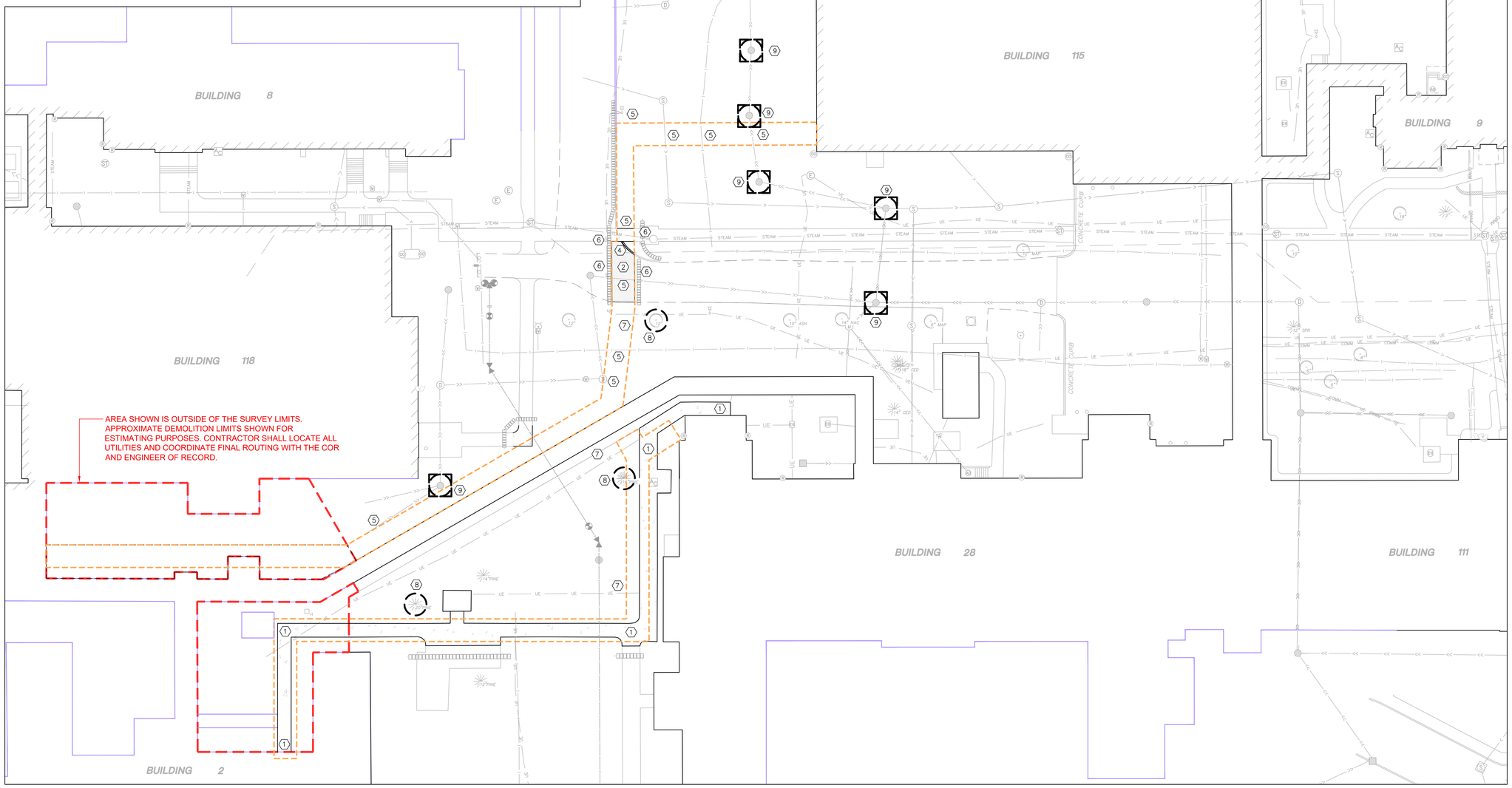
0 20' 40'

MATCHLINE 1/CD-102



1 SITE DEMOLITION PLAN 6

SCALE: 1"=20' [30"X42" SHEET SIZE]



2 SITE DEMOLITION PLAN 7

SCALE: 1"=20' [30"X42" SHEET SIZE]

GENERAL NOTES

1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021; INFORMATION SUPPLIED BY THE VA; ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL; AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS, MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2 C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

KEY NOTES

1. REMOVE EXISTING CONCRETE PAVEMENT. EXTEND REMOVAL LIMITS TO NEAREST EXISTING JOINT. SAWCUT PAVEMENT AT REMOVAL LIMITS.
2. REMOVE EXISTING ASPHALT PAVEMENT.
3. REMOVE/SALVAGE EXISTING ROCK MULCH AS REQUIRED FOR DUCTBANK INSTALLATION.
4. REMOVE EXISTING CURB AND GUTTER. EXTEND REMOVAL LIMITS TO NEAREST EXISTING JOINT. SAWCUT CURB AT REMOVAL LIMITS.
5. PROTECT EXISTING UTILITIES TO REMAIN.
6. PROTECT EXISTING PAVEMENT TO REMAIN.
7. PROTECT OR RELOCATE EXISTING ELECTRICAL SERVICE AS NECESSARY FOR DUCT BANK INSTALLATION. COORDINATE WITH COR AND VAMC STAFF 15 DAYS PRIOR TO ANY POTENTIAL OUTAGES RESULTING FROM THE RELOCATION.
8. PROTECT EXISTING TREE TO REMAIN.
9. INSTALL INLET PROTECTION ON STORM INLET

No	REVISION	DATE

CONSULTANT

SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: IAN J. WEBER, PE

SIGNATURE:

DATE MARCH 28, 2022 LICENSE # 55502

APPROVED DATE:	APPROVED PROJECT COR DATE:	APPROVED PATIENT SAFETY DATE:	APPROVED EMS MANAGER DATE:	APPROVED DIRECTOR FMS DATE:	
APPROVED DATE:	APPROVED SERVICE LINE DIRECTOR DATE:	APPROVED SAFETY MANAGER DATE:	APPROVED R/D MANAGER DATE:	APPROVED ASSOCIATE DIRECTOR DATE:	
APPROVED DATE:	APPROVED GEMS COORDINATOR DATE:	APPROVED CHIEF OF POLICE DATE:	APPROVED PROJECTS SECTION MANAGER DATE:	APPROVED NURSE EXECUTIVE DATE:	
APPROVED DATE:	APPROVED INFECTION CONTROL NURSE DATE:	APPROVED CBT MANAGER DATE:	APPROVED ASSISTANT CHIEF ENGINEER DATE:	APPROVED CHIEF OF STAFF DATE:	APPROVED MEDICAL CENTER DIRECTOR DATE:

DRAWING TITLE: DEMOLITION PLAN 3

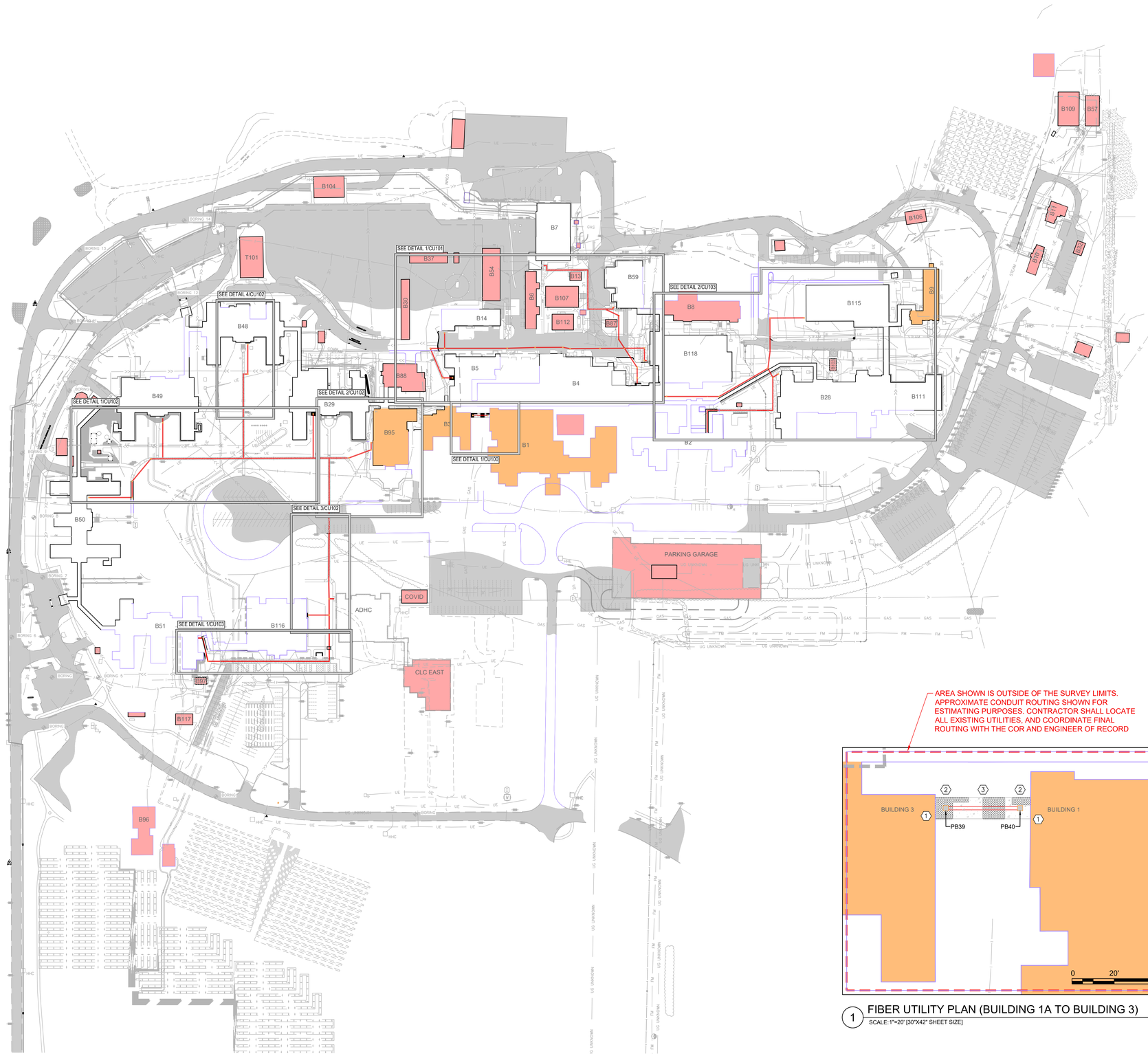
PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

BUILDING No	CHECKED BY	DRAWN
CAMPUS	IJW	CDN

LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE: 1"=20'
PROJECT NO: 656-21-235
DRAWING NO: CD-103
SHEET OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



N

0 100' 200'

LEGEND

- EXISTING PAVEMENT EDGE
- EXISTING CONCRETE CURB
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING HYDRANT AND GATE VALVE
- EXISTING SANITARY MANHOLE
- EXISTING STORM SEWER INLETS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING GEOTHERMAL
- EXISTING FIBER OPTIC
- EXISTING STEAM / CHILLED WATER
- EXISTING GAS MAIN
- EXISTING UNIDENTIFIED UNDERGROUND UTILITY
- PROPOSED EXTERIOR FIBER OPTIC DUCT LINE
- PROPOSED EXTERIOR PULL BOX
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- BUILDING NOT TO RECEIVE B-SIDE FIBER
- BUILDING TO RECEIVE B-SIDE FIBER THROUGH INTERNAL ROUTING SEE ELECTRICAL / COMMUNICATION PLANS.

GENERAL NOTES

1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021; INFORMATION SUPPLIED BY THE VA; ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL; AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS, MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

AREA SHOWN IS OUTSIDE OF THE SURVEY LIMITS. APPROXIMATE CONDUIT ROUTING SHOWN FOR ESTIMATING PURPOSES. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES, AND COORDINATE FINAL ROUTING WITH THE COR AND ENGINEER OF RECORD

1 FIBER UTILITY PLAN (BUILDING 1A TO BUILDING 3)
SCALE: 1"=20' [30"X42" SHEET SIZE]

KEY NOTES

1. COORDINATE FIBER OPTIC CONNECTION TO BUILDING WITH ELECTRICAL PLANS.
2. INSTALL NEW PULLBOX PER 3/CJ-501
3. INSTALL NEW CAST IN PLACE CONCRETE DUCTBANK PER 1/CJ-501

Description	Northing	Easting
PB39	207835.5126	739606.6954
PB40	207835.5126	739641.9668

CAST IN PLACE DUCT BANK SCHEDULE	
LOCATION	DETAIL
PB39 - PB40	1/CJ-501 (C)

No	REVISION	DATE

CONSULTANT
SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134 | Phone: 402.991.5520 | www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: IAN J. WEBER, PE
SIGNATURE:
DATE MARCH 28, 2022 LICENSE # 55502

APPROVED DATE:	APPROVED PROJECT COR DATE:	APPROVED PATIENT SAFETY DATE:	APPROVED EMS MANAGER DATE:	APPROVED DIRECTOR FMS DATE:	
APPROVED DATE:	APPROVED SERVICE LINE DIRECTOR DATE:	APPROVED SAFETY MANAGER DATE:	APPROVED R/D MANAGER DATE:	APPROVED ASSOCIATE DIRECTOR DATE:	
APPROVED DATE:	APPROVED GEMS COORDINATOR DATE:	APPROVED CHIEF OF POLICE DATE:	APPROVED PROJECTS SECTION MANAGER DATE:	APPROVED NURSE EXECUTIVE DATE:	
APPROVED DATE:	APPROVED INFECTION CONTROL NURSE DATE:	APPROVED EOT MANAGER DATE:	APPROVED ASSISTANT CHIEF ENGINEER DATE:	APPROVED CHIEF OF STAFF DATE:	APPROVED MEDICAL CENTER DIRECTOR DATE:

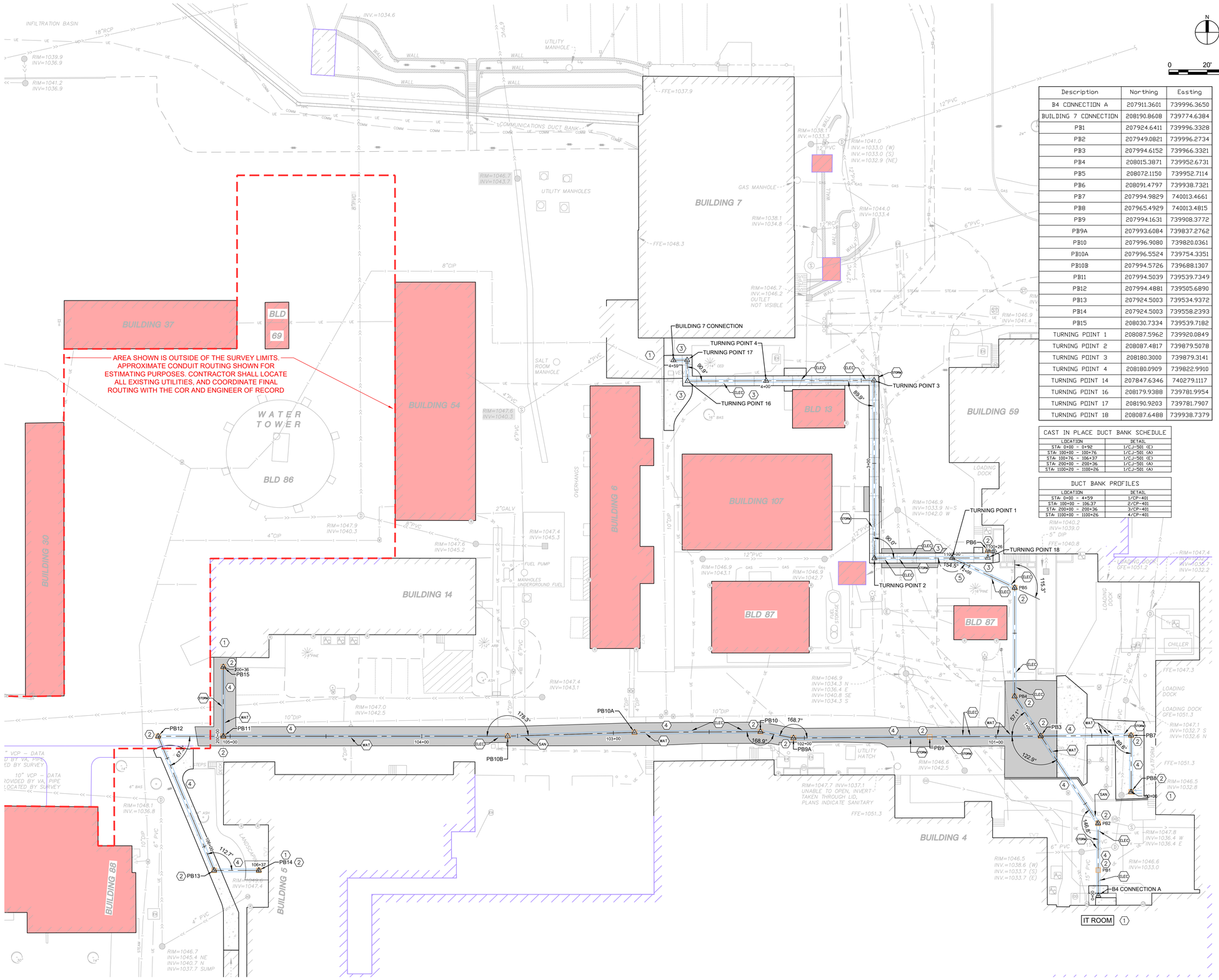
DRAWING TITLE
FIBER UTILITY PLAN - OVERALL DSP

PROJECT TITLE
EHRM INFRASTRUCTURE UPGRADES

BUILDING No: CAMPUS | CHECKED BY: IJW | DRAWN: CDN
LOCATION: VA MEDICAL CENTER, ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE: 1"=100'
PROJECT NO: 656-21-235
DRAWING NO: CU-100
DVG OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



Description	Northing	Easting
B4 CONNECTION A	207911.3601	739996.3650
BUILDING 7 CONNECTION	208190.8608	739774.6384
PB1	207924.6411	739996.3328
PB2	207949.0821	739996.2734
PB3	207994.6152	739966.3321
PB4	208015.3871	739952.6731
PB5	208072.1150	739952.7114
PB6	208091.4797	739938.7321
PB7	207994.9829	740013.4661
PB8	207965.4929	740013.4815
PB9	207994.1631	739908.3772
PB9A	207993.6084	739837.2762
PB10	207996.9080	739820.0361
PB10A	207996.5524	739754.3351
PB10B	207994.5726	739688.1307
PB11	207994.5039	739539.7349
PB12	207994.4881	739505.6890
PB13	207924.5003	739534.9372
PB14	207924.5003	739558.2393
PB15	208030.7334	739539.7182
TURNING POINT 1	208087.5962	739920.0849
TURNING POINT 2	208087.4817	739879.5078
TURNING POINT 3	208180.3000	739879.3141
TURNING POINT 4	208180.0909	739822.9910
TURNING POINT 14	207847.6346	740279.1117
TURNING POINT 16	208179.9388	739781.9954
TURNING POINT 17	208190.9203	739781.7907
TURNING POINT 18	208087.6488	739938.7379

CAST IN PLACE DUCT BANK SCHEDULE	
LOCATION	DETAIL
STA: 0+00 – 0+92	1/CJ-501 (E)
STA: 100+00 – 100+76	1/CJ-501 (A)
STA: 100+76 – 106+37	1/CJ-501 (E)
STA: 200+00 – 200+36	1/CJ-501 (A)
STA: 1100+20 – 1100+26	1/CJ-501 (A)

DUCT BANK PROFILES	
LOCATION	DETAIL
STA: 0+00 – 4+59	1/CP-401
STA: 100+00 – 106.37	2/CP-401
STA: 200+00 – 200+36	3/CP-401
STA: 1100+00 – 1100+26	4/CP-401

LEGEND

- EXISTING PAVEMENT EDGE
- EXISTING CONCRETE CURB
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING HYDRANT AND GATE VALVE
- EXISTING SANITARY MANHOLE
- EXISTING STORM SEWER INLETS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING GEOTHERMAL
- EXISTING FIBER OPTIC
- EXISTING STEAM / CHILLED WATER
- EXISTING GAS MAIN
- EXISTING UNIDENTIFIED UNDERGROUND UTILITY
- PROPOSED EXTERIOR FIBER OPTIC DUCT LINE
- PROPOSED EXTERIOR PULL BOX
- EXISTING UTILITY CROSSING
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- BUILDING NOT TO RECEIVE B-SIDE FIBER
- BUILDING TO RECEIVE B-SIDE FIBER THROUGH INTERNAL ROUTING SEE ELECTRICAL / COMMUNICATION PLANS.
- NEW CONCRETE PAVEMENT
- NEW ASPHALT PAVEMENT

GENERAL NOTES

1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021; INFORMATION SUPPLIED BY THE VA; ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL; AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS, MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

KEY NOTES

1. COORDINATE FIBER OPTIC CONNECTION TO BUILDING WITH ELECTRICAL PLANS.
2. INSTALL NEW PULLBOX PER 3/CJ-501
3. INSTALL NEW PRECAST CONCRETE TRENCH PER 7/CJ-502 AND 10/CJ-502
4. INSTALL NEW CAST IN PLACE CONCRETE DUCTBANK PER 1/CJ-501
5. TRANSITION TO/FROM PRECAST TO CAST IN PLACE DUCT BANK. SEE DUCT BANK PROFILES FOR ADDITIONAL INFORMATION.

1 FIBER UTILITY PLAN (STA 0+00 - 4+59)

SCALE: 1"=20' [30"X42" SHEET SIZE]

No	REVISION	DATE

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: IAN J. WEBER, PE

SIGNATURE:

DATE MARCH 28, 2022 LICENSE # 55502

APPROVED DATE:	APPROVED PROJECT COR DATE:	APPROVED PATIENT SAFETY DATE:	APPROVED EMS MANAGER DATE:	APPROVED DIRECTOR FMS DATE:	DRAWING TITLE: FIBER UTILITY PLAN - DSP
APPROVED DATE:	APPROVED SERVICE LINE DIRECTOR DATE:	APPROVED SAFETY MANAGER DATE:	APPROVED M/O MANAGER DATE:	APPROVED ASSOCIATE DIRECTOR DATE:	
APPROVED DATE:	APPROVED GEMS COORDINATOR DATE:	APPROVED CHIEF OF POLICE DATE:	APPROVED PROJECTS SECTION MANAGER DATE:	APPROVED NURSE EXECUTIVE DATE:	
APPROVED DATE:	APPROVED INFECTION CONTROL NURSE DATE:	APPROVED CIT MANAGER DATE:	APPROVED ASSISTANT CHIEF ENGINEER DATE:	APPROVED CHIEF OF STAFF DATE:	APPROVED MEDICAL CENTER DIRECTOR DATE:

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

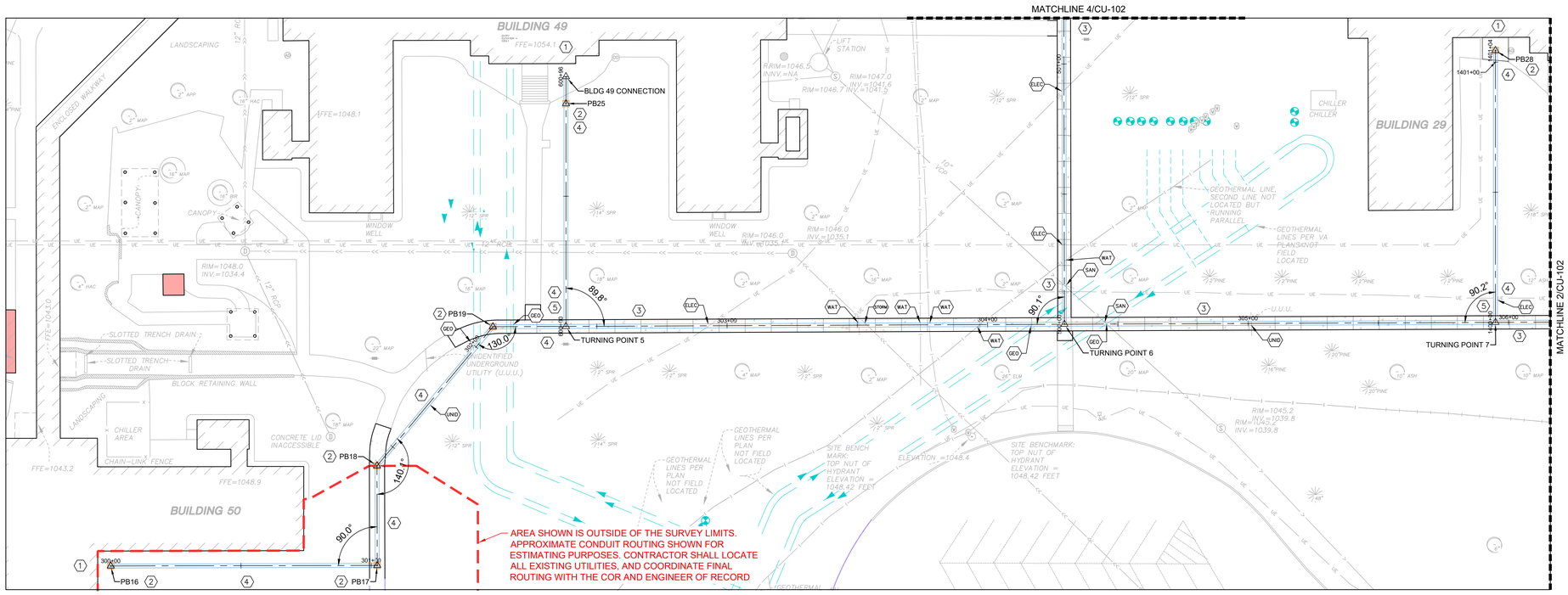
DATE: MARCH 28, 2022
PLOT SCALE: 1"=20'
PROJECT NO: 656-21-235

BUILDING No: CAMPUS | CHECKED BY: IJW | DRAWN: CDN | DRAWING NO: CU-101

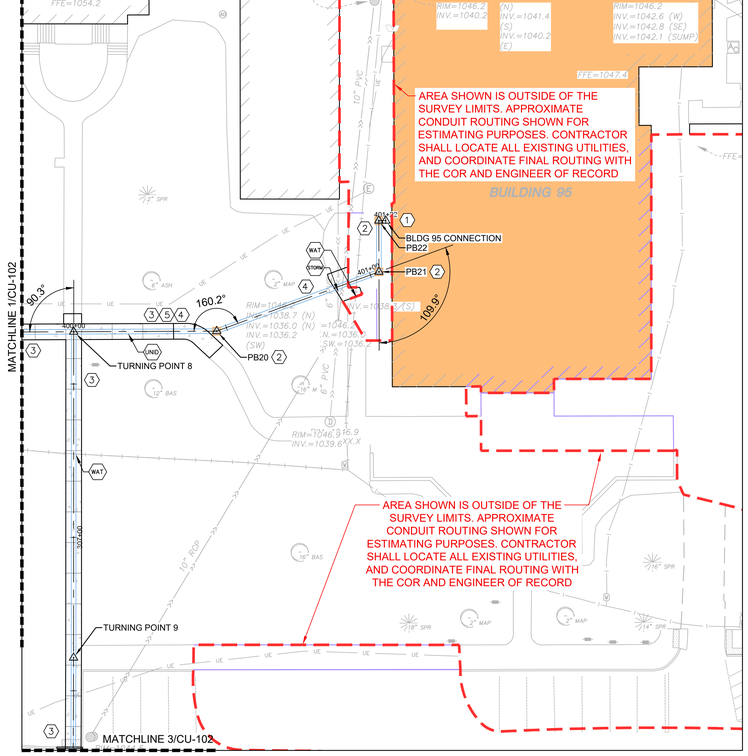
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

SHEET OF

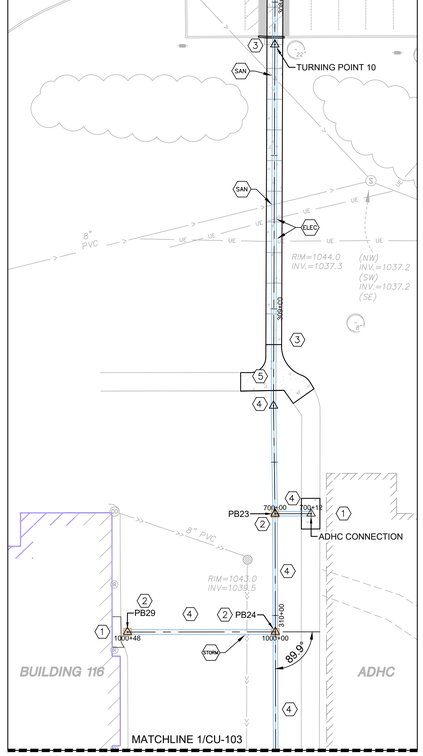
U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



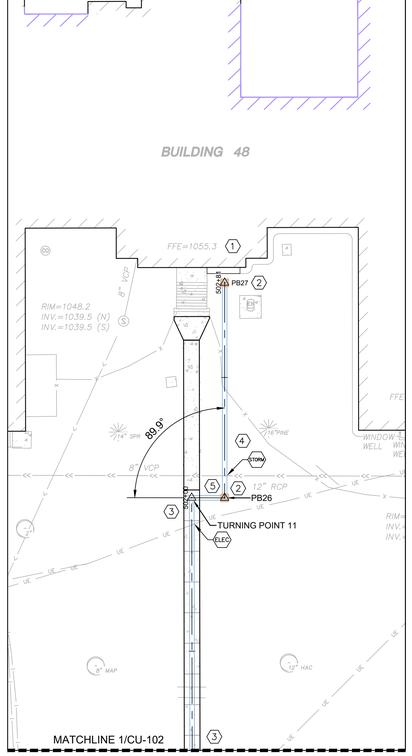
1 FIBER UTILITY PLAN (STA 300+00 - 306+16)
SCALE: 1"=20' [30"X42" SHEET SIZE]



2 FIBER UTILITY PLAN (STA 400+00 - 401+22)
SCALE: 1"=20' [30"X42" SHEET SIZE]



3 FIBER UTILITY PLAN (STA 307+70 - 310+44)
SCALE: 1"=20' [30"X42" SHEET SIZE]



4 FIBER UTILITY PLAN (STA 501+18 - 502+81)
SCALE: 1"=20' [30"X42" SHEET SIZE]

Description	Northing	Easting
ADHC CONNECTION	207400.4452	739277.4569
BLDG 49 CONNECTION	207828.5362	738871.1656
BLDG 95 CONNECTION	207770.5163	739367.6878
PB16	207640.5532	738696.4133
PB17	207640.7693	738798.7103
PB18	207679.0350	738798.6205
PB19	207732.4731	738843.1191
PB20	207734.5052	739312.5910
PB21	207753.8390	739365.4822
PB22	207770.5103	739365.4378
PB23	207400.4141	739265.7091
PB24	207361.9054	739265.8110
PB25	207818.1905	738871.1655
PB26	207933.4212	739072.8854
PB27	208003.5450	739072.8854
PB28	207838.5988	739227.9813
PB29	207361.8494	739217.5852
TURNING POINT 5	207732.5945	738871.1656
TURNING POINT 6	207733.4228	739062.5204
TURNING POINT 7	207734.1390	739227.9897
TURNING POINT 8	207734.3033	739265.9532
TURNING POINT 9	207628.0113	739265.9128
TURNING POINT 10	207553.4093	739265.6383
TURNING POINT 11	207933.4421	739062.1514

CAST IN PLACE DUCT BANK SCHEDULE

LOCATION	DETAIL
STA: 300+00 - 302+16	1/CJ-501 (B)
STA: 309+18 - 310+05	1/CJ-501 (C)
STA: 310+05 - 310+44	1/CJ-501 (B)
STA: 400+21 - 401+20	1/CJ-501 (C)
STA: 502+00 - 502+81	1/CJ-501 (B)
STA: 600+00 - 600+96	1/CJ-501 (B)
STA: 1000+00 - 1000+48	1/CJ-501 (A)
STA: 1400+00 - 1401+04	1/CJ-501 (B)

DUCT BANK PROFILES

LOCATION	DETAIL
STA: 300+00 - 314+59	1/CP-402, 2/CP-402, 3/CP-402
STA: 400+00 - 401+22	4/CP-402
STA: 500+00 - 502+81	1/CP-403
STA: 600+00 - 600+87	2/CP-403
STA: 1000+00 - 1000+48	6/CP-403
STA: 1400+00 - 1401+05	8/CP-403

LEGEND

- EXISTING PAVEMENT EDGE
- EXISTING CONCRETE CURB
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING HYDRANT AND GATE VALVE
- EXISTING SANITARY MANHOLE
- EXISTING STORM SEWER INLETS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING GEOTHERMAL
- EXISTING FIBER OPTIC
- EXISTING STEAM / CHILLED WATER
- EXISTING GAS MAIN
- EXISTING UNIDENTIFIED UNDERGROUND UTILITY
- PROPOSED EXTERIOR FIBER OPTIC DUCT LINE
- PROPOSED EXTERIOR PULL BOX
- EXISTING UTILITY CROSSING
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- BUILDING NOT TO RECEIVE B-SIDE FIBER
- BUILDING TO RECEIVE B-SIDE FIBER THROUGH INTERNAL ROUTING SEE ELECTRICAL / COMMUNICATION PLANS.
- NEW CONCRETE PAVEMENT
- NEW ASPHALT PAVEMENT

N
0 20' 40'

GENERAL NOTES

1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021; INFORMATION SUPPLIED BY THE VA; ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL; AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS, MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

KEY NOTES

1. COORDINATE FIBER OPTIC CONNECTION TO BUILDING WITH ELECTRICAL PLANS.
2. INSTALL NEW PULLBOX PER 3/CJ-501
3. INSTALL NEW PRECAST CONCRETE TRENCH PER 7/CJ-502 AND 10/CJ-502
4. INSTALL NEW CAST IN PLACE CONCRETE DUCTBANK PER 1/CJ-501
5. TRANSITION TO/FROM PRECAST TO CAST IN PLACE DUCT BANK. SEE DUCT BANK PROFILES FOR ADDITIONAL INFORMATION.

No	REVISION	DATE

CONSULTANT
AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: IAN J. WEBER, PE
SIGNATURE:
DATE MARCH 28, 2022 LICENSE # 55502

APPROVED DATE:	APPROVED PROJECT COR DATE:	APPROVED PATIENT SAFETY DATE:	APPROVED EMS MANAGER DATE:	APPROVED DIRECTOR FMS DATE:	
APPROVED DATE:	APPROVED SERVICE LINE DIRECTOR DATE:	APPROVED SAFETY MANAGER DATE:	APPROVED M/O MANAGER DATE:	APPROVED ASSOCIATE DIRECTOR DATE:	
APPROVED DATE:	APPROVED GEMS COORDINATOR DATE:	APPROVED CHIEF OF POLICE DATE:	APPROVED PROJECTS SECTION MANAGER DATE:	APPROVED NURSE EXECUTIVE DATE:	
APPROVED DATE:	APPROVED INFECTION CONTROL NURSE DATE:	APPROVED CIT MANAGER DATE:	APPROVED ASSISTANT CHIEF ENGINEER DATE:	APPROVED CHIEF OF STAFF DATE:	

DRAWING TITLE: FIBER UTILITY PLAN - DSP
APPROVED MEDICAL CENTER DIRECTOR DATE:

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
BUILDING No: CAMPUS | CHECKED BY: LJV | DRAWN: CDN
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE: 1"=20'
PROJECT NO: 656-21-235
DRAWING NO: CU-102
SHEET OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

GENERAL NOTES

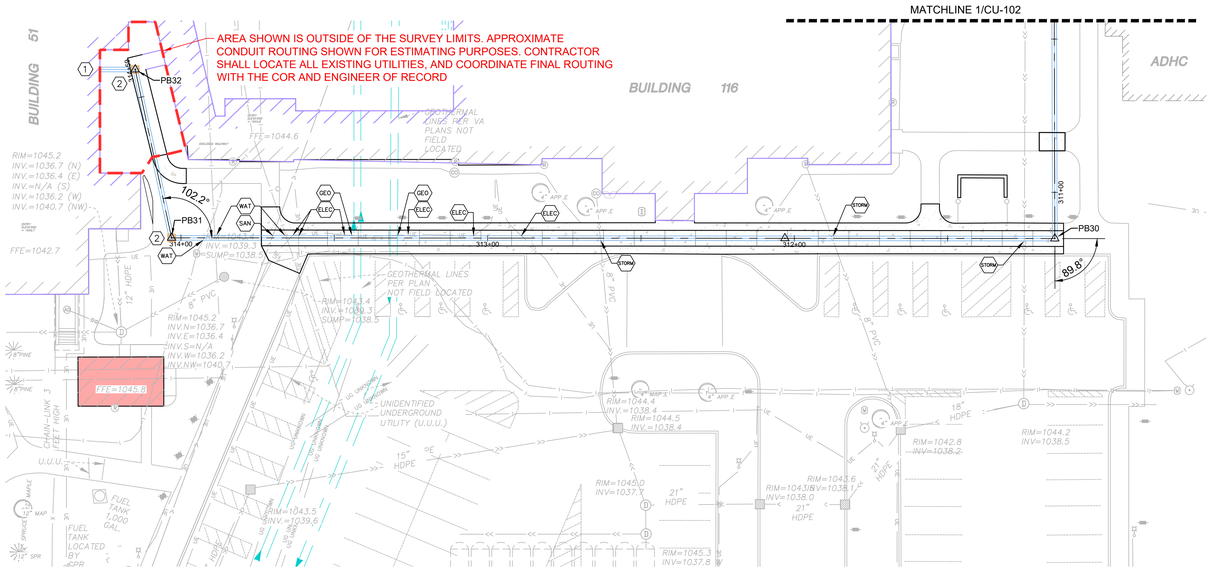
1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021. INFORMATION SUPPLIED BY THE VA, ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS), AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL, AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS, MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

N

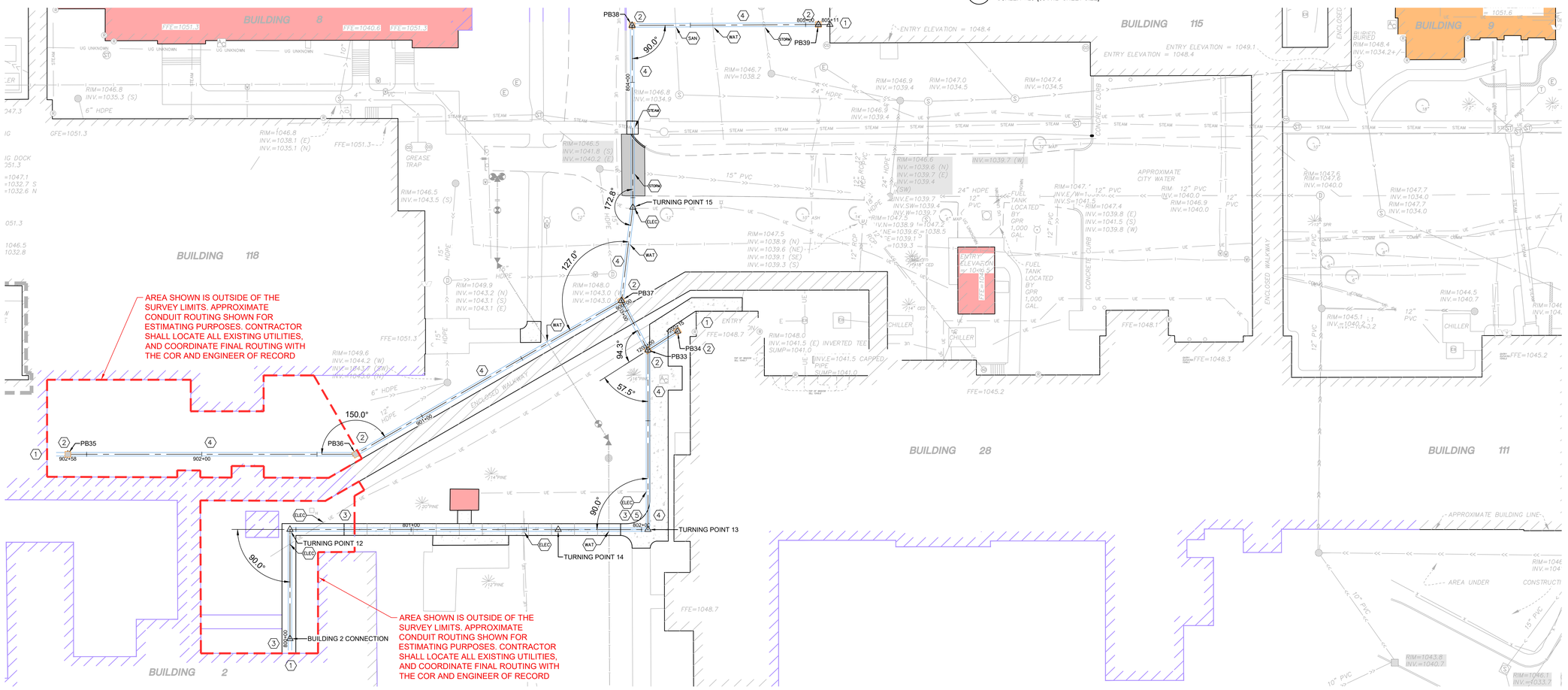
0 20' 40'

LEGEND

- EXISTING PAVEMENT EDGE
- EXISTING CONCRETE CURB
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING HYDRANT AND GATE VALVE
- EXISTING SANITARY MANHOLE
- EXISTING STORM SEWER INLETS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING GEOTHERMAL
- EXISTING FIBER OPTIC
- EXISTING STEAM / CHILLED WATER
- EXISTING GAS MAIN
- EXISTING UNIDENTIFIED UNDERGROUND UTILITY
- PROPOSED EXTERIOR FIBER OPTIC DUCT LINE
- PROPOSED EXTERIOR PULL BOX
- EXISTING UTILITY CROSSING
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- BUILDING NOT TO RECEIVE B-SIDE FIBER
- BUILDING TO RECEIVE B-SIDE FIBER THROUGH INTERNAL ROUTING SEE ELECTRICAL / COMMUNICATION PLANS.
- NEW CONCRETE PAVEMENT
- NEW ASPHALT PAVEMENT



1 FIBER UTILITY PLAN (STA 310+44 - 314+59)
SCALE: 1"=20' [30"X42" SHEET SIZE]



2 FIBER UTILITY PLAN (STA 800+00 - 805+11)
SCALE: 1"=20' [30"X42" SHEET SIZE]

Description	Northing	Easting
BUILDING 2 CONNECTION	207800.2699	740162.7048
PB30	207252.2070	739266.1014
PB31	207252.4453	738978.0803
PB32	207307.3314	738966.2264
PB33	207925.4819	740318.0832
PB34	207933.6781	740330.9419
PB35	207880.3177	740066.2987
PB36	207880.3177	740191.2570
PB37	207946.9295	740306.5852
PB38	208066.3377	740311.1830
PB39	208066.7117	740392.0335
TURNING POINT 12	207847.6760	740162.7048
TURNING POINT 13	207847.6208	740318.0832
TURNING POINT 14	207847.6346	740279.1117
TURNING POINT 15	207987.4022	740311.5195

CAST IN PLACE DUCT BANK SCHEDULE

LOCATION	DETAIL
STA: 313+74 - 314+59	1/CJ-501 (A)
STA: 801+91 - 802+81	1/CJ-501 (B)
STA: 802+81 - 803+05	1/CJ-501 (E)
STA: 803+05 - 805+11	1/CJ-501 (A)
STA: 900+00 - 902+58	1/CJ-501 (C)
STA: 1200+00 - 1200+15	1/CJ-501 (A)

DUCT BANK PROFILES

LOCATION	DETAIL
STA: 300+00 - 314+59	1/CP-402, 2/CP-402, 3/CP-402
STA: 800+00 - 805+54	4/CP-403
STA: 900+00 - 902+58	5/CP-403
STA: 1200+00 - 1200+15	7/CP-403

KEY NOTES

1. COORDINATE FIBER OPTIC CONNECTION TO BUILDING WITH ELECTRICAL PLANS.
2. INSTALL NEW PULLBOX PER 3/CJ-501
3. INSTALL NEW PRECAST CONCRETE TRENCH PER 7/CJ-502 AND 10/CJ-502
4. INSTALL NEW CAST IN PLACE CONCRETE DUCTBANK PER 1/CJ-501
5. TRANSITION TO/FROM PRECAST TO CAST IN PLACE DUCT BANK. SEE DUCT BANK PROFILES FOR ADDITIONAL INFORMATION.

No	REVISION	DATE

CONSULTANT
AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

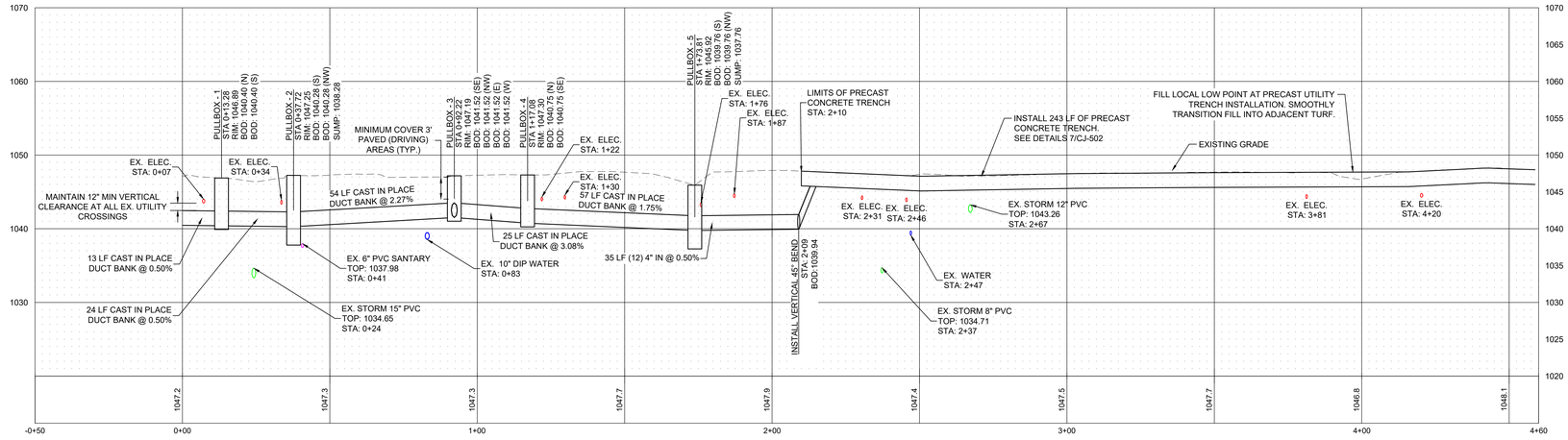
ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: IAN J. WEBER, PE
SIGNATURE:
DATE MARCH 28, 2022 LICENSE # 55502

APPROVED DATE:	APPROVED PROJECT COR DATE:	APPROVED PATIENT SAFETY DATE:	APPROVED EMS MANAGER DATE:	APPROVED DIRECTOR FMS DATE:	DRAWING TITLE: FIBER UTILITY PLAN - DSP
APPROVED DATE:	APPROVED SERVICE LINE DIRECTOR DATE:	APPROVED SAFETY MANAGER DATE:	APPROVED R/G MANAGER DATE:	APPROVED ASSOCIATE DIRECTOR DATE:	
APPROVED DATE:	APPROVED GEMS COORDINATOR DATE:	APPROVED CHIEF OF POLICE DATE:	APPROVED PROJECTS SECTION MANAGER DATE:	APPROVED NURSE EXECUTIVE DATE:	
APPROVED DATE:	APPROVED INFECTION CONTROL NURSE DATE:	APPROVED EOT MANAGER DATE:	APPROVED ASSISTANT CHIEF ENGINEER DATE:	APPROVED CHIEF OF STAFF DATE:	APPROVED MEDICAL CENTER DIRECTOR DATE:

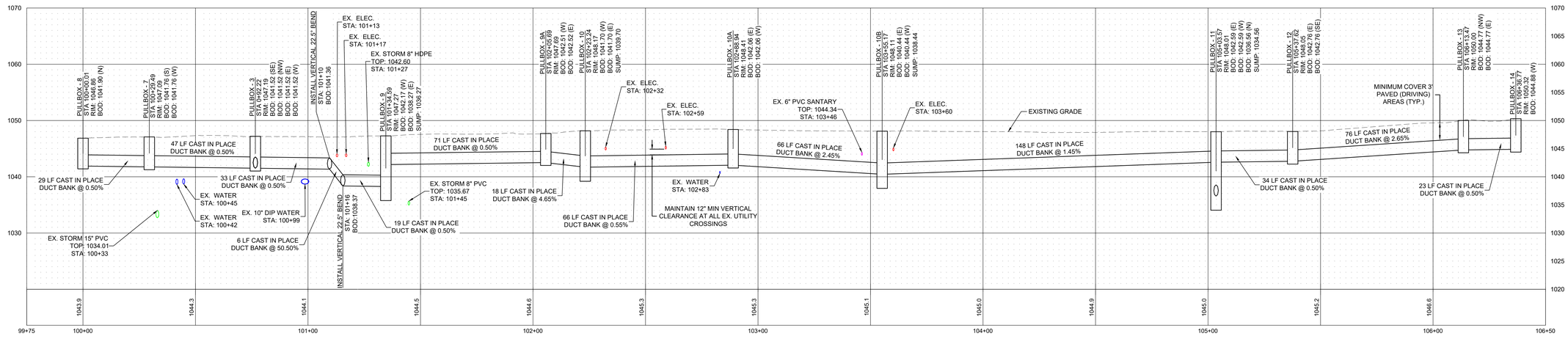
PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
BUILDING No: CAMPUS | CHECKED BY: IJW | DRAWN: CDN
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303
DATE: MARCH 28, 2022
PLOT SCALE: 1"=20'
PROJECT NO.: 656-21-235
DRAWING NO.: CU-103
SHEET OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



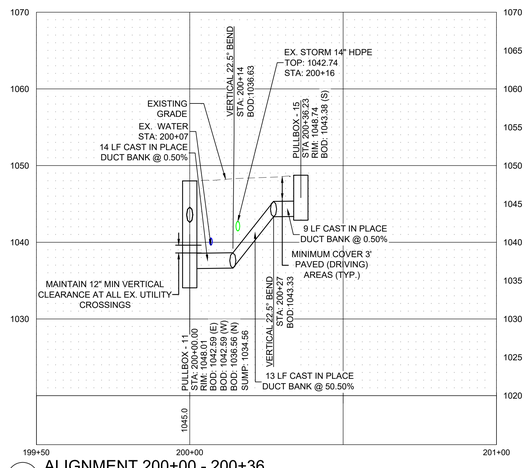
1 ALIGNMENT 0+00 - 4+59

SCALE: H: 1" = 20' V: 1" = 8'



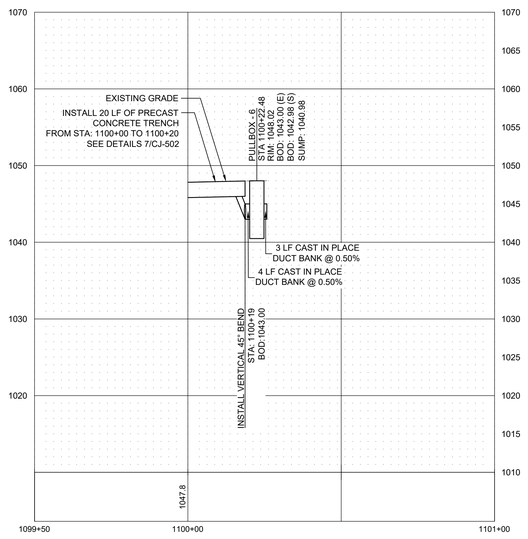
2 ALIGNMENT 100+00 - 106+37

SCALE: H: 1" = 20' V: 1" = 8'



3 ALIGNMENT 200+00 - 200+36

SCALE: H: 1" = 20' V: 1" = 8'



4 ALIGNMENT 1100+00 - 1100+26

SCALE: H: 1" = 20' V: 1" = 8'

UTILITY CROSSING KEY

- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING ELECTRICAL LINE
- EXISTING WATER MAIN
- EXISTING GEOTHERMAL LINE
- EXISTING STEAM LINE
- EXISTING UNKNOWN UTILITY

NOTES:

1. CONTRACTOR TO RAISE OR LOWER EXISTING ELECTRICAL, COMMUNICATION, AND GAS LINES IN-PLACE AT EACH CROSSING TO PROVIDE A MINIMUM OF 12" MIN. VERTICAL CLEARANCE. THIS WORK SHALL BE INCIDENTAL TO DUCT BANK CONSTRUCTION.
2. LOCATION OF EXISTING UTILITIES IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY AND NOTIFY COR OF ANY CONFLICTS WITH THE PROPOSED DUCT BANK.
3. SEE SHEETS CU-100 - CU-103 FOR HORIZONTAL ALIGNMENT OF PROPOSED DUCT BANK .
4. TOP OF PRECAST DUCT BANK SHALL MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. PROPOSED SLOPES ARE APPROXIMATE.
5. ELEVATIONS OF WATER, ELECTRICAL, COMMUNICATION, NATURAL GAS, AND GEOTHERMAL ARE APPROXIMATE. A THREE (3) FOOT DEPTH HAS BEEN SHOWN FOR REFERENCE FOR ELECTRICAL, COMMUNICATION, NATURAL GAS, AND GEOTHERMAL UTILITIES. AN 8 FOOT DEPTH HAS BEEN SHOWN FOR REFERENCE FOR WATER UTILITIES. CONTRACTOR TO VERIFY DEPTHS OF ALL UTILITIES SHOWN WITHIN THE EXCAVATION LIMITS PRIOR COMMENCING EXCAVATION OPERATIONS.

No	REVISION	DATE

CONSULTANT

SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N., #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: IAN J. WEBER, PE

SIGNATURE:

DATE MARCH 28, 2022 LICENSE # 55502

APPROVED / DATE:	APPROVED PROJECT COR / DATE:	APPROVED PATIENT SAFETY / DATE:	APPROVED EMS MANAGER / DATE:	APPROVED DIRECTOR FMS / DATE:	
APPROVED / DATE:	APPROVED SERVICE LINE DIRECTOR / DATE:	APPROVED SAFETY MANAGER / DATE:	APPROVED M/S MANAGER / DATE:	APPROVED ASSOCIATE DIRECTOR / DATE:	
APPROVED / DATE:	APPROVED GEMS COORDINATOR / DATE:	APPROVED CHIEF OF POLICE / DATE:	APPROVED PROJECTS SECTION MANAGER / DATE:	APPROVED NURSE EXECUTIVE / DATE:	
APPROVED / DATE:	APPROVED INFECTION CONTROL NURSE / DATE:	APPROVED DIT MANAGER / DATE:	APPROVED ASSISTANT CHIEF ENGINEER / DATE:	APPROVED CHIEF OF STAFF / DATE:	

DRAWING TITLE: PROFILE 1

APPROVED MEDICAL CENTER DIRECTOR / DATE:

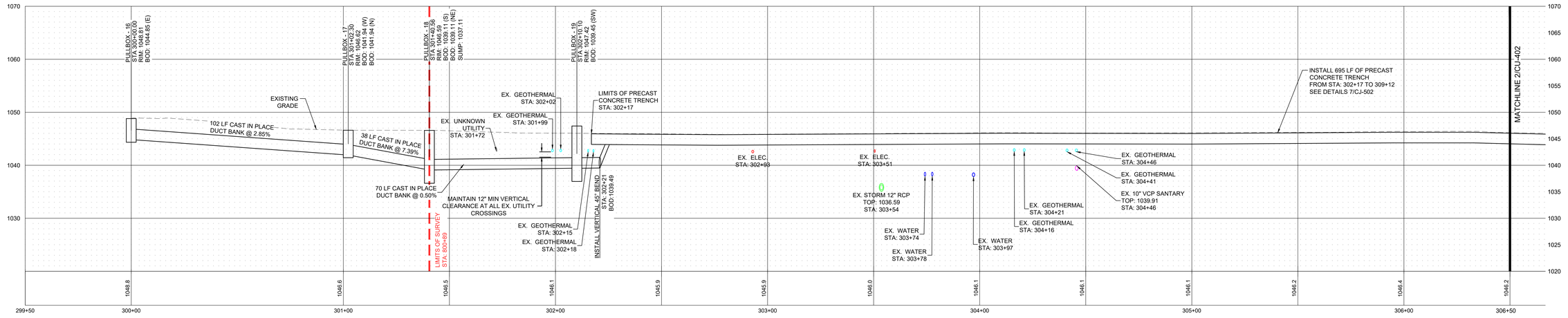
PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

BUILDING No: CAMPUS | CHECKED BY: LJV | DRAWN: CDN

LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

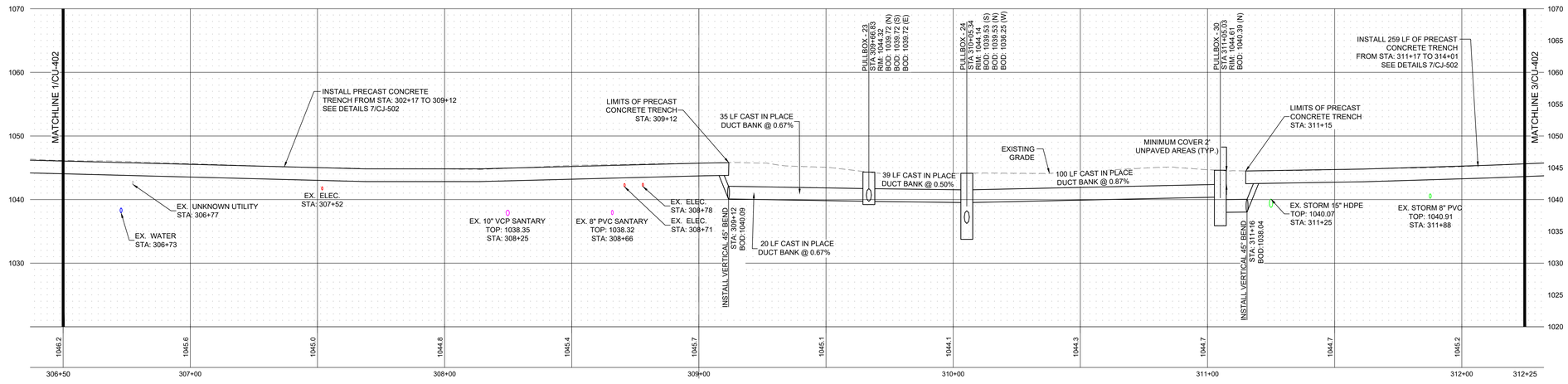
DATE: MARCH 28, 2022
PLOT SCALE:
PROJECT NO: 656-21-235
DRAWING NO: CP-401
SHEET OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



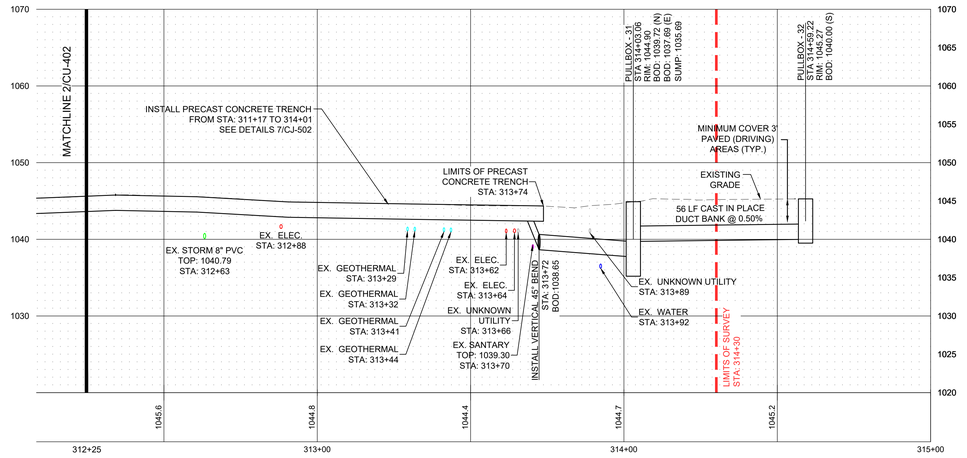
1 ALIGNMENT 3+00 - 306+50

SCALE: H: 1" = 20' V: 1" = 8'



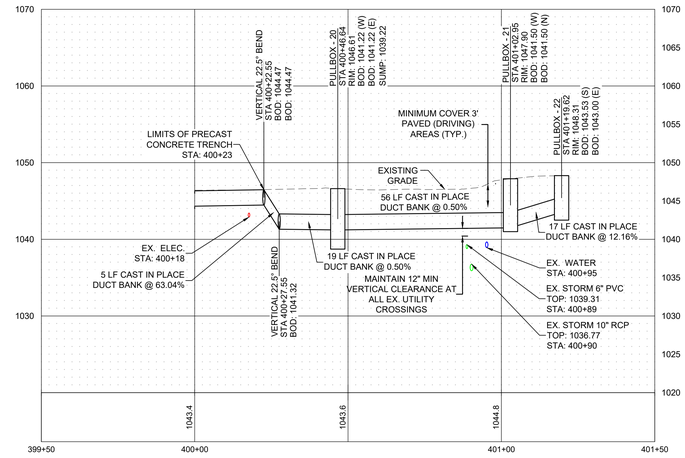
2 ALIGNMENT 306+50 - 312+25

SCALE: H: 1" = 20' V: 1" = 8'



3 ALIGNMENT 312+25 - 314+59

SCALE: H: 1" = 20' V: 1" = 8'



4 ALIGNMENT 400+00 - 401+22

SCALE: H: 1" = 20' V: 1" = 8'

UTILITY CROSSING KEY

- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING ELECTRICAL LINE
- EXISTING WATER MAIN
- EXISTING GEOTHERMAL LINE
- EXISTING STEAM LINE
- EXISTING UNKNOWN UTILITY

NOTES:

1. CONTRACTOR TO RAISE OR LOWER EXISTING ELECTRICAL, COMMUNICATION, AND GAS LINES IN-PLACE AT EACH CROSSING TO PROVIDE A MINIMUM OF 12" MIN. VERTICAL CLEARANCE. THIS WORK SHALL BE INCIDENTAL TO DUCT BANK CONSTRUCTION.
2. LOCATION OF EXISTING UTILITIES IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY AND NOTIFY COR OF ANY CONFLICTS WITH THE PROPOSED DUCT BANK.
3. SEE SHEETS CU-100 - CU-103 FOR HORIZONTAL ALIGNMENT OF PROPOSED DUCT BANK .
4. TOP OF PRECAST DUCT BANK SHALL MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. PROPOSED SLOPES ARE APPROXIMATE.
5. ELEVATIONS OF WATER, ELECTRICAL, COMMUNICATION, NATURAL GAS, AND GEOTHERMAL ARE APPROXIMATE. A THREE (3) FOOT DEPTH HAS BEEN SHOWN FOR REFERENCE FOR ELECTRICAL, COMMUNICATION, NATURAL GAS, AND GEOTHERMAL UTILITIES. AN 8 FOOT DEPTH HAS BEEN SHOWN FOR REFERENCE FOR WATER UTILITIES. CONTRACTOR TO VERIFY DEPTHS OF ALL UTILITIES SHOWN WITHIN THE EXCAVATION LIMITS PRIOR COMMENCING EXCAVATION OPERATIONS.

No	REVISION	DATE

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle
Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: IAN J. WEBER, PE

SIGNATURE:

DATE MARCH 28, 2022 LICENSE # 55502

APPROVED	DATE:	APPROVED PROJECT COR	DATE:	APPROVED PATIENT SAFETY	DATE:	APPROVED EMS MANAGER	DATE:	APPROVED DIRECTOR FMS	DATE:
APPROVED	DATE:	APPROVED SERVICE LINE DIRECTOR	DATE:	APPROVED SAFETY MANAGER	DATE:	APPROVED M/O MANAGER	DATE:	APPROVED ASSOCIATE DIRECTOR	DATE:
APPROVED	DATE:	APPROVED GEMS COORDINATOR	DATE:	APPROVED CHIEF OF POLICE	DATE:	APPROVED PROJECTS SECTION MANAGER	DATE:	APPROVED NURSE EXECUTIVE	DATE:
APPROVED	DATE:	APPROVED INFECTION CONTROL NURSE	DATE:	APPROVED CBT MANAGER	DATE:	APPROVED ASSISTANT CHIEF ENGINEER	DATE:	APPROVED CHIEF OF STAFF	DATE:
								APPROVED MEDICAL CENTER DIRECTOR	DATE:

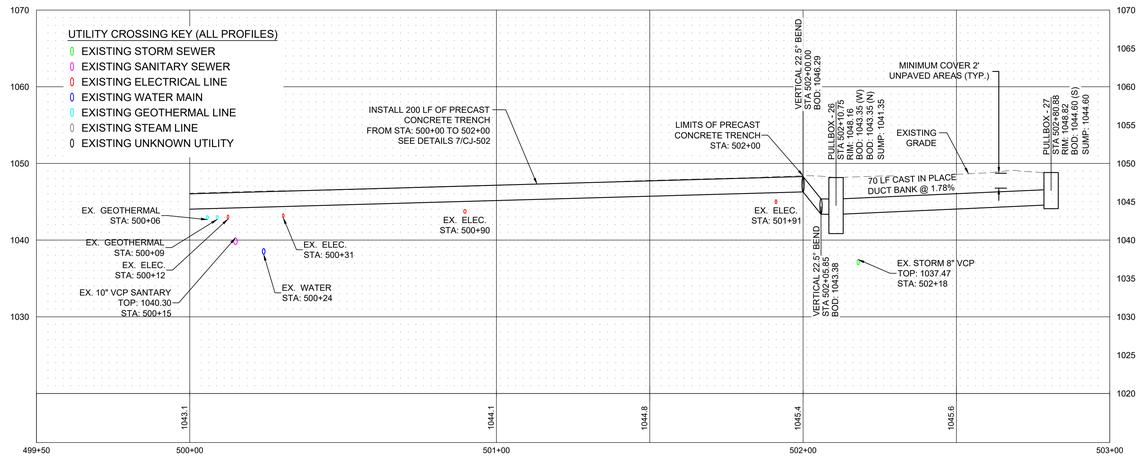
DRAWING TITLE
PROFILE 2

PROJECT TITLE
EHRM INFRASTRUCTURE UPGRADES

BUILDING No: CAMPUS
CHECKED BY: LJV
DRAWN: CDN
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

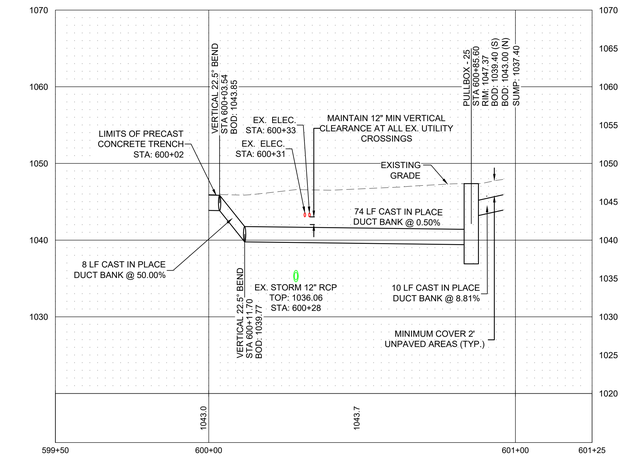
DATE: MARCH 28, 2022
PLOT SCALE
PROJECT NO: 656-21-235
DRAWING NO: CP-402
SHT. OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



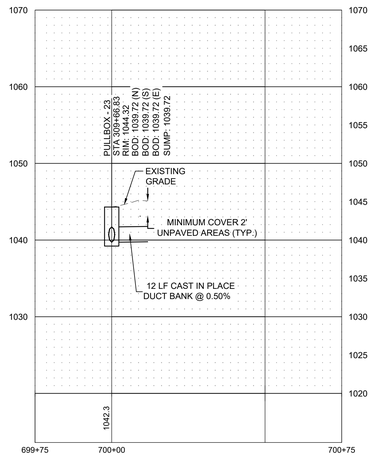
1 ALIGNMENT 500+00 - 502+81

SCALE: H: 1" = 20' V: 1" = 8'



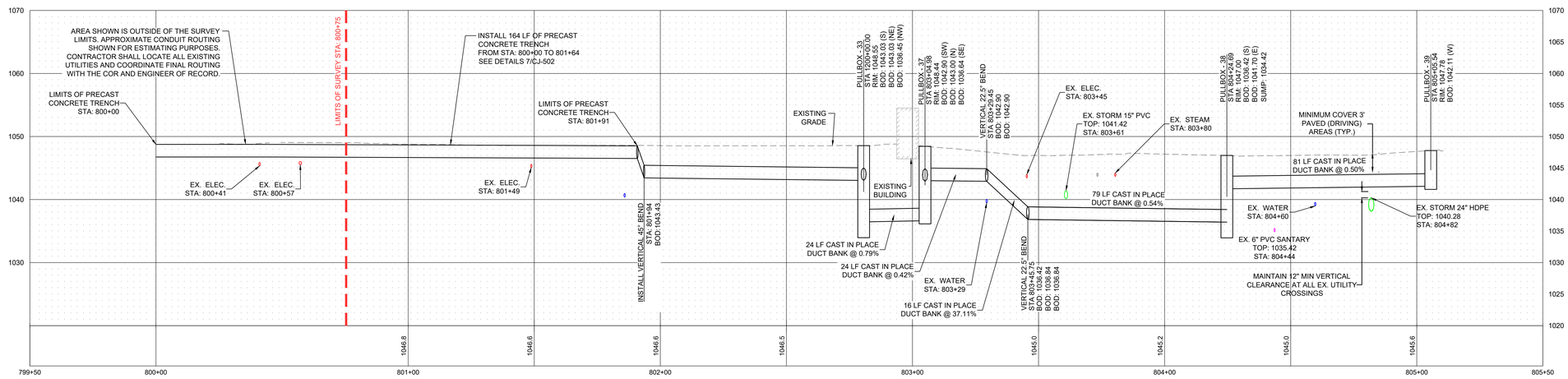
2 ALIGNMENT 600+00 - 600+87

SCALE: H: 1" = 20' V: 1" = 8'



3 ALIGNMENT 700+00 - 700+12

SCALE: H: 1" = 20' V: 1" = 8'



4 ALIGNMENT 800+00 - 805+54

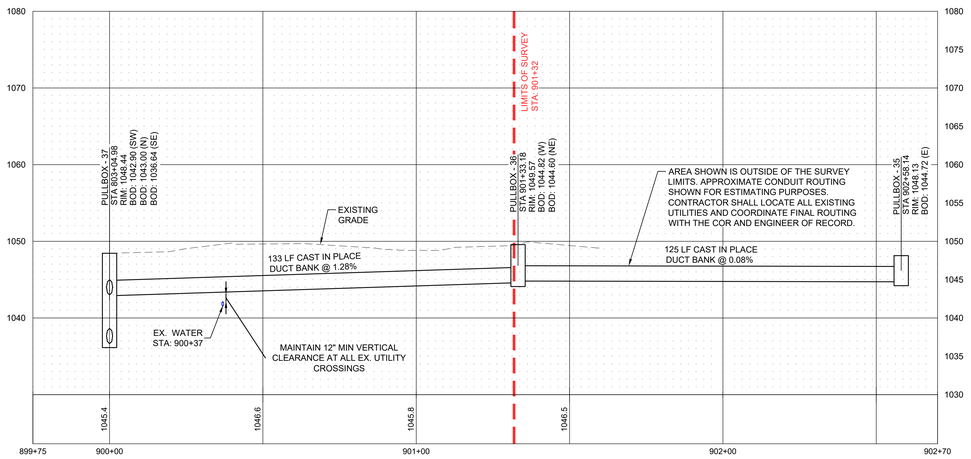
SCALE: H: 1" = 20' V: 1" = 8'

NOTES:

1. CONTRACTOR TO RAISE OR LOWER EXISTING ELECTRICAL, COMMUNICATION, AND GAS LINES IN-PLACE AT EACH CROSSING TO PROVIDE A MINIMUM OF 12" MIN. VERTICAL CLEARANCE. THIS WORK SHALL BE INCIDENTAL TO DUCT BANK CONSTRUCTION.
2. LOCATION OF EXISTING UTILITIES IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY AND NOTIFY COR OF ANY CONFLICTS WITH THE PROPOSED DUCT BANK.
3. SEE SHEETS CU-100 - CU-103 FOR HORIZONTAL ALIGNMENT OF PROPOSED DUCT BANK .
4. TOP OF PRECAST DUCT BANK SHALL MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. PROPOSED SLOPES ARE APPROXIMATE.
5. ELEVATIONS OF WATER, ELECTRICAL, COMMUNICATION, NATURAL GAS, AND GEOTHERMAL ARE APPROXIMATE. A THREE (3) FOOT DEPTH HAS BEEN SHOWN FOR REFERENCE FOR ELECTRICAL, COMMUNICATION, NATURAL GAS, AND GEOTHERMAL UTILITIES. AN 8 FOOT DEPTH HAS BEEN SHOWN FOR REFERENCE FOR WATER UTILITIES. CONTRACTOR TO VERIFY DEPTHS OF ALL UTILITIES SHOWN WITHIN THE EXCAVATION LIMITS PRIOR COMMENCING EXCAVATION OPERATIONS.

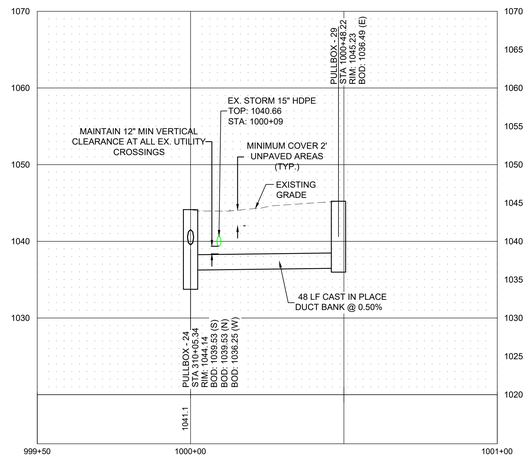
EXCAVATION AT ENCLOSED WALKWAY NOTES:

1. PIER FOOTING LOCATION SHOWN IS APPROXIMATE AND BASED ON THE CONNECTION CORRIDOR PLAN SHEET NUMBER 101 60 (SHEET NUMBER 11 OF 30) DATED MARCH 15, 1929. A COPY OF THE CONNECTION CORRIDOR PLANS IS AVAILABLE AT THE VAHCS CAMPUS, AND CAN BE MADE AVAILABLE FOR REVIEW AT THE REQUEST OF THE CONTRACTOR.
2. BOTTOM OF PIER FOOTING IS APPROXIMATELY 7'-6" BELOW EXISTING GRADE.
3. CONTRACTOR TO VERIFY PIER FOOTING LOCATIONS PRIOR TO BORING. CONTRACTOR TO TAKE ALL MEANS NECESSARY TO AVOID DAMAGE TO THE EXISTING CORRIDOR. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE CORRIDOR WHETHER FOOTINGS ARE DETERMINED TO VARY IS TYPE, LOCATION, OR DEPTH. NOTIFY THE COR IMMEDIATELY OF ANY DISCREPANCIES FOUND.
4. CROSSING LOCATION SHALL BE AT THE MID POINT BETWEEN TWO FOOTINGS, AND SHOULD OCCUR AT THE DEPTH SHOWN ON THE PLAN AND PROFILES.
5. IF NECESSARY, THE CONTRACTOR SHALL EMPLOY SHORING TO SUPPORT THE CORRIDOR DURING EXCAVATION. SUCH SHORING SHALL BE DESIGNED BY AN ENGINEER LICENSED IN THE STATE OF MINNESOTA EXPERIENCED IN THE DESIGN OF SUCH TEMPORARY SUPPORT SYSTEMS. WHERE REQUIRED, SHORING DESIGNS SHALL BE SIGNED AND SUBMITTED TO THE COR FOR REVIEW PRIOR TO THE COMMENCEMENT OF THE WORK.



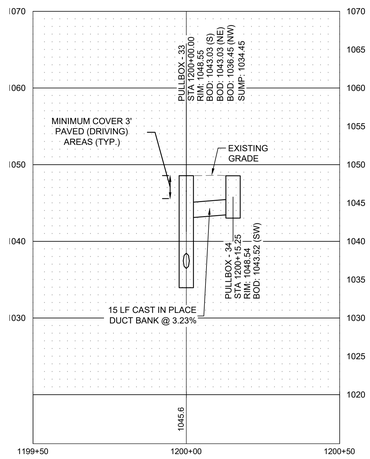
5 ALIGNMENT 900+00 - 902+58

SCALE: H: 1" = 20' V: 1" = 8'



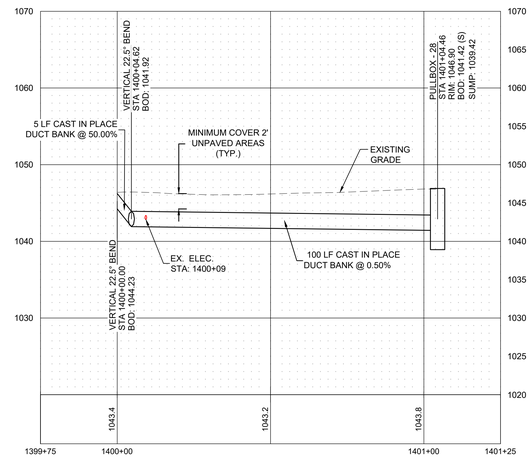
6 ALIGNMENT 1000+00 - 1000+49

SCALE: H: 1" = 20' V: 1" = 8'



7 ALIGNMENT 1200+00 - 1200+16

SCALE: H: 1" = 20' V: 1" = 8'



8 ALIGNMENT 1400+00 - 1401+05

SCALE: H: 1" = 20' V: 1" = 8'

No	REVISION	DATE

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: IAN J. WEBER, PE

SIGNATURE:

DATE MARCH 28, 2022 LICENSE #_55502

APPROVED DATE:	APPROVED PROJECT COR DATE:	APPROVED PATIENT SAFETY DATE:	APPROVED EMS MANAGER DATE:	APPROVED DIRECTOR FMS DATE:	
APPROVED DATE:	APPROVED SERVICE LINE DIRECTOR DATE:	APPROVED SAFETY MANAGER DATE:	APPROVED M/O MANAGER DATE:	APPROVED ASSOCIATE DIRECTOR DATE:	
APPROVED DATE:	APPROVED GEMS COORDINATOR DATE:	APPROVED CHIEF OF POLICE DATE:	APPROVED PROJECTS SECTION MANAGER DATE:	APPROVED NURSE EXECUTIVE DATE:	
APPROVED DATE:	APPROVED INFECTION CONTROL NURSE DATE:	APPROVED CET MANAGER DATE:	APPROVED ASSISTANT CHIEF ENGINEER DATE:	APPROVED CHIEF OF STAFF DATE:	

DRAWING TITLE: PROFILE 3

APPROVED MEDICAL CENTER DIRECTOR DATE

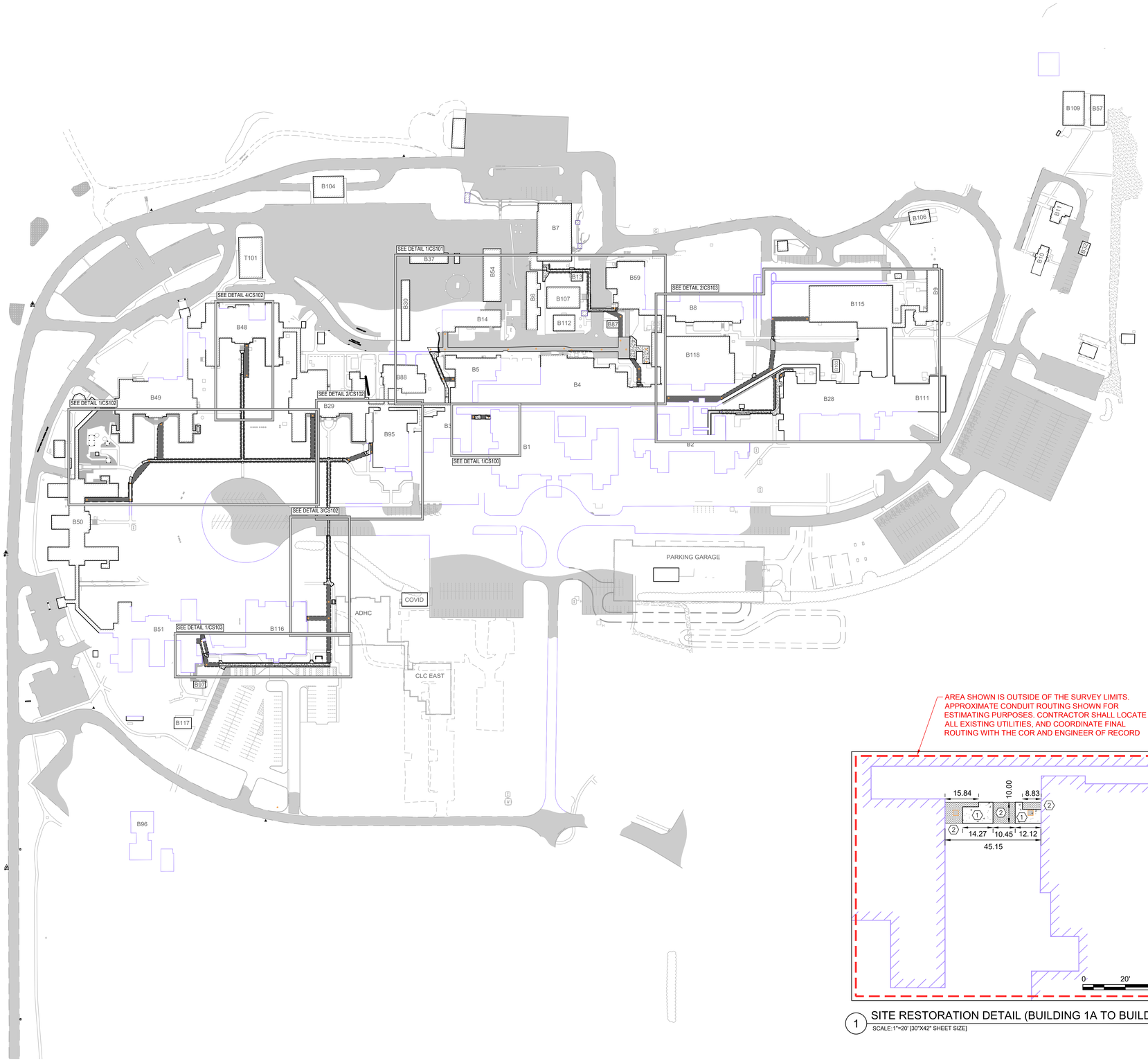
PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

BUILDING No: CAMPUS | CHECKED BY: LJV | DRAWN: CDN

LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE:
PROJECT NO: 656-21-235
DRAWING NO: CP-403
SVG OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



LEGEND

- PROPERTY LIMITS
- APPROXIMATE TURF RESTORATION
- PROPOSED CONCRETE PAVEMENT
- APPROXIMATE ROCK MULCH RESTORATION
- PROPOSED ASPHALT PAVEMENT
- LIMITS OF CONSTRUCTION
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- PROPOSED EXTERIOR PULLBOX

N

0 100' 200'

GENERAL NOTES

1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021; INFORMATION SUPPLIED BY THE VA; ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTORS PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL, AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS, MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

AREA SHOWN IS OUTSIDE OF THE SURVEY LIMITS. APPROXIMATE CONDUIT ROUTING SHOWN FOR ESTIMATING PURPOSES. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES, AND COORDINATE FINAL ROUTING WITH THE COR AND ENGINEER OF RECORD

1 SITE RESTORATION DETAIL (BUILDING 1A TO BUILDING 3)
SCALE: 1"=20' [30"X42" SHEET SIZE]

RESTORATION NOTES

1. CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED FOR FIBER OPTIC CONSTRUCTION IN-KIND WITHIN 14 CALENDAR DAYS OF COMPLETING WORK.
2. LIMITS OF DISTURBANCE ARE APPROXIMATED ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED.
3. CONTRACTOR SHALL FIELD LOCATED ALL PLANTINGS IN COORDINATION WITH VAMC STAFF AND AS APPROVED BY THE COR.
4. DO NOT INSTALL ANY PLANT MATERIAL UNTIL AFTER THE IRRIGATION SYSTEM IS OPERATIONAL. IF IRRIGATION SYSTEMS ARE DISTURBED DURING CONSTRUCTION, THE CONTRACTOR SHALL RESTORE THE SYSTEM TO WORKING ORDER.
5. ALL SEED AND PLANTING AREAS WITH NO PERMANENT IRRIGATION SHALL RECEIVE TEMPORARY IRRIGATION BY THE CONTRACTOR FOR THE ESTABLISHMENT PERIOD.

KEY NOTES

1. INSTALL NEW REINFORCED SIDEWALK PER 6/CJ-502
2. REPLACE ROCK MULCH AS REQUIRED FOR DUCTBANK INSTALLATION IN KIND. NEW ROCK MULCH TO MATCH EXISTING IN COLOR, MATERIAL, AND GRADATION.

No	REVISION	DATE

CONSULTANT

SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5529
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: IAN J. WEBER, PE

SIGNATURE:

DATE MARCH 28, 2022 LICENSE # 55502

APPROVED / DATE:	APPROVED PROJECT COR / DATE:	APPROVED PATIENT SAFETY / DATE:	APPROVED EMS MANAGER / DATE:	APPROVED DIRECTOR FMS / DATE:	
APPROVED / DATE:	APPROVED SERVICE LINE DIRECTOR / DATE:	APPROVED SAFETY MANAGER / DATE:	APPROVED W/O MANAGER / DATE:	APPROVED ASSOCIATE DIRECTOR / DATE:	
APPROVED / DATE:	APPROVED GEMS COORDINATOR / DATE:	APPROVED CHIEF OF POLICE / DATE:	APPROVED PROJECTS SECTION MANAGER / DATE:	APPROVED NURSE EXECUTIVE / DATE:	
APPROVED / DATE:	APPROVED INFECTION CONTROL NURSE / DATE:	APPROVED EOT MANAGER / DATE:	APPROVED ASSISTANT CHIEF ENGINEER / DATE:	APPROVED CHIEF OF STAFF / DATE:	

APPROVED MEDICAL CENTER DIRECTOR / DATE:

DRAWING TITLE: OVERALL SITE RESTORATION PLAN

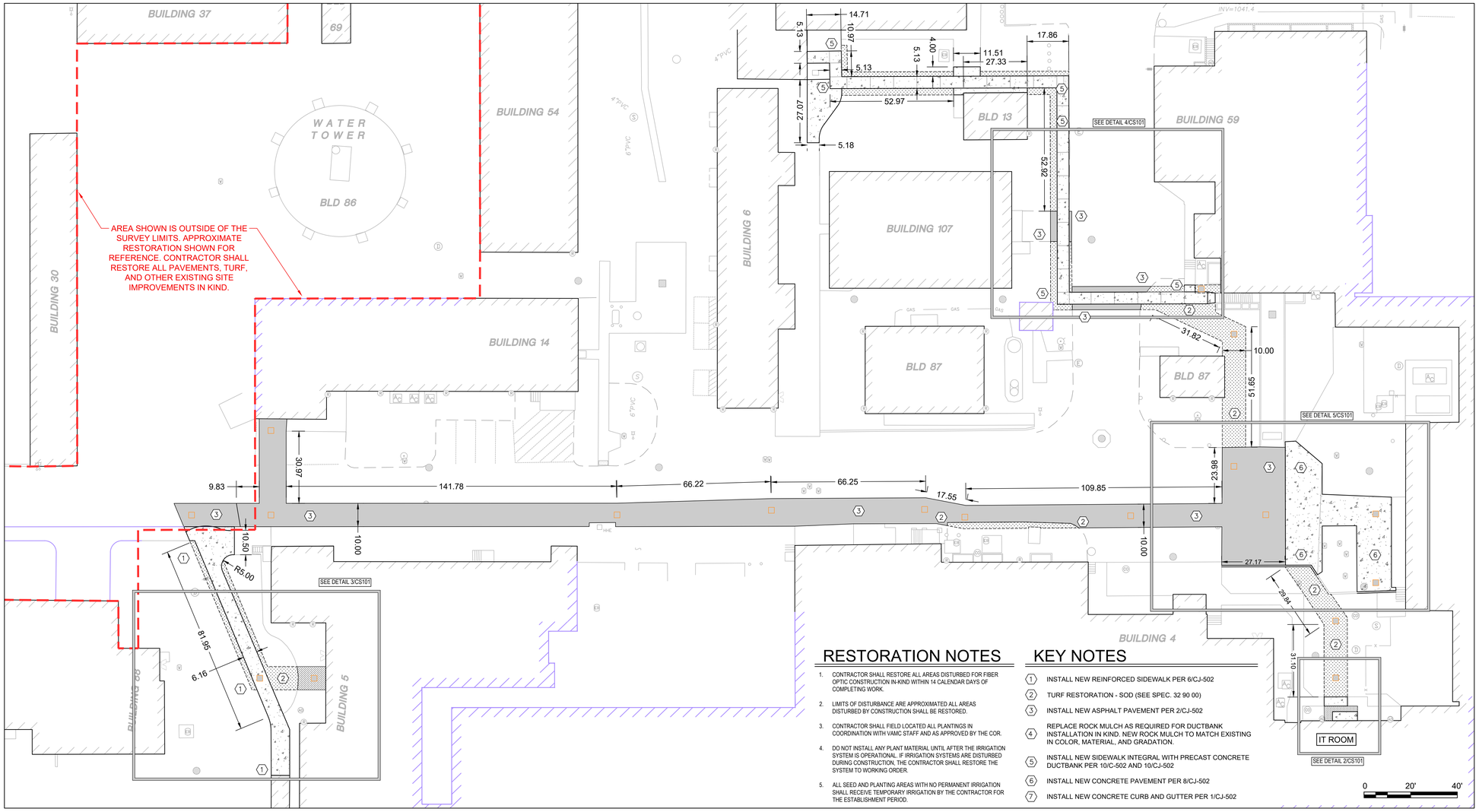
PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

BUILDING No	CHECKED BY	DRAWN
CAMPUS	IJW	CDN

DATE: MARCH 28, 2022
PLOT SCALE: 1"=100'
PROJECT NO: 656-21-235
DRAWING NO: CS-100
SHEET NO: OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



LEGEND

- PROPERTY LIMITS
- APPROXIMATE TURF RESTORATION
- PROPOSED CONCRETE PAVEMENT
- APPROXIMATE ROCK MULCH RESTORATION
- PROPOSED ASPHALT PAVEMENT
- LIMITS OF TOPOGRAPHIC SURVEY
- LIMITS OF CONSTRUCTION
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- PROPOSED EXTERIOR PULLBOX

N

GENERAL NOTES

1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021; INFORMATION SUPPLIED BY THE VA; ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL; AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS, MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

RESTORATION NOTES

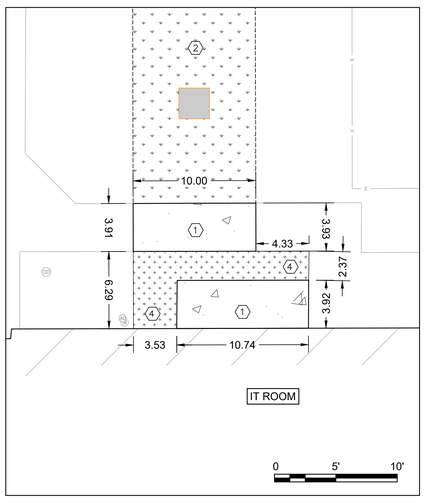
1. CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED FOR FIBER OPTIC CONSTRUCTION IN-KIND WITHIN 14 CALENDAR DAYS OF COMPLETING WORK.
2. LIMITS OF DISTURBANCE ARE APPROXIMATED ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED.
3. CONTRACTOR SHALL FIELD LOCATED ALL PLANTINGS IN COORDINATION WITH VAMC STAFF AND AS APPROVED BY THE COR.
4. DO NOT INSTALL ANY PLANT MATERIAL UNTIL AFTER THE IRRIGATION SYSTEM IS OPERATIONAL. IF IRRIGATION SYSTEMS ARE DISTURBED DURING CONSTRUCTION, THE CONTRACTOR SHALL RESTORE THE SYSTEM TO WORKING ORDER.
5. ALL SEED AND PLANTING AREAS WITH NO PERMANENT IRRIGATION SHALL RECEIVE TEMPORARY IRRIGATION BY THE CONTRACTOR FOR THE ESTABLISHMENT PERIOD.

KEY NOTES

1. INSTALL NEW REINFORCED SIDEWALK PER 8/CJ-502
2. TURF RESTORATION - SOD (SEE SPEC. 32 90 00)
3. INSTALL NEW ASPHALT PAVEMENT PER 2/CJ-502
4. REPLACE ROCK MULCH AS REQUIRED FOR DUCTBANK INSTALLATION IN KIND. NEW ROCK MULCH TO MATCH EXISTING IN COLOR, MATERIAL, AND GRADATION.
5. INSTALL NEW SIDEWALK INTEGRAL WITH PRECAST CONCRETE DUCTBANK PER 10/C-502 AND 10/CJ-502
6. INSTALL NEW CONCRETE PAVEMENT PER 8/CJ-502
7. INSTALL NEW CONCRETE CURB AND GUTTER PER 1/CJ-502

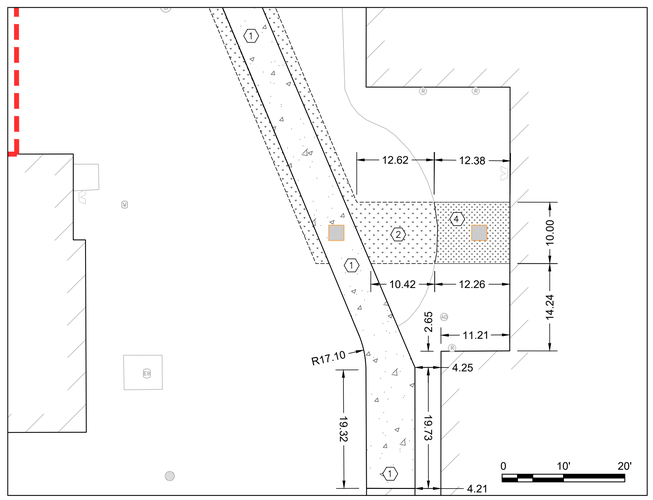
1 SITE RESTORATION PLAN 1

SCALE: 1"=20' [30"X42" SHEET SIZE]



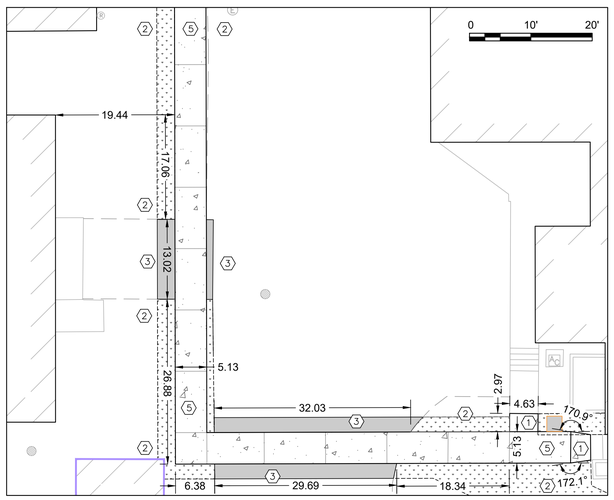
2 SITE RESTORATION DETAIL (BUILDING 4)

SCALE: 1"=5' [30"X42" SHEET SIZE]



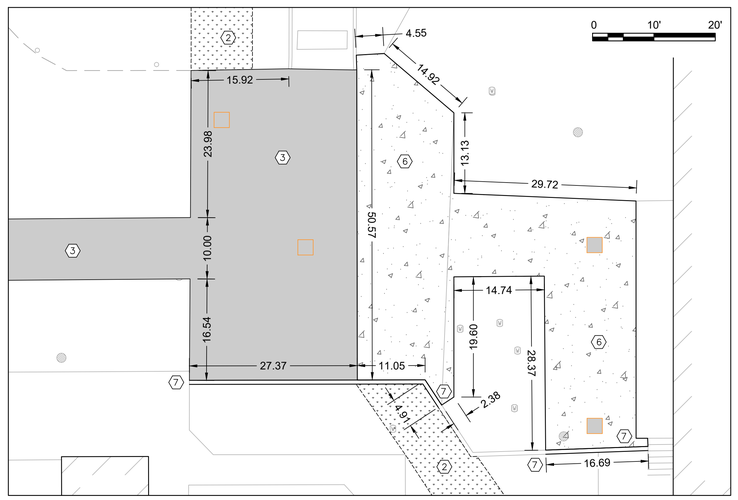
3 SITE RESTORATION DETAIL (BUILDING 5)

SCALE: 1"=10' [30"X42" SHEET SIZE]



4 SITE RESTORATION DETAIL (BUILDING 59)

SCALE: 1"=10' [30"X42" SHEET SIZE]



5 SITE RESTORATION DETAIL (BUILDING 118)

SCALE: 1"=10' [30"X42" SHEET SIZE]

No	REVISION	DATE

CONSULTANT

Specialized Engineering Solutions
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: IAN J. WEBER, PE

SIGNATURE:

DATE MARCH 28, 2022 LICENSE # 55502

APPROVED / DATE:	APPROVED PROJECT COR / DATE:	APPROVED PATIENT SAFETY / DATE:	APPROVED EMS MANAGER / DATE:	APPROVED DIRECTOR FMS / DATE:	
APPROVED / DATE:	APPROVED SERVICE LINE DIRECTOR / DATE:	APPROVED SAFETY MANAGER / DATE:	APPROVED R/G MANAGER / DATE:	APPROVED ASSOCIATE DIRECTOR / DATE:	
APPROVED / DATE:	APPROVED OEMS COORDINATOR / DATE:	APPROVED CHIEF OF POLICE / DATE:	APPROVED PROJECTS SECTION MANAGER / DATE:	APPROVED NURSE EXECUTIVE / DATE:	
APPROVED / DATE:	APPROVED INFECTION CONTROL NURSE / DATE:	APPROVED CIT MANAGER / DATE:	APPROVED ASSISTANT CHIEF ENGINEER / DATE:	APPROVED CHIEF OF STAFF / DATE:	

APPROVED MEDICAL CENTER DIRECTOR / DATE:

DRAWING TITLE: SITE RESTORATION PLAN 1

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

DATE: MARCH 28, 2022
PLOT SCALE: 1"=20'
PROJECT NO: 656-21-235

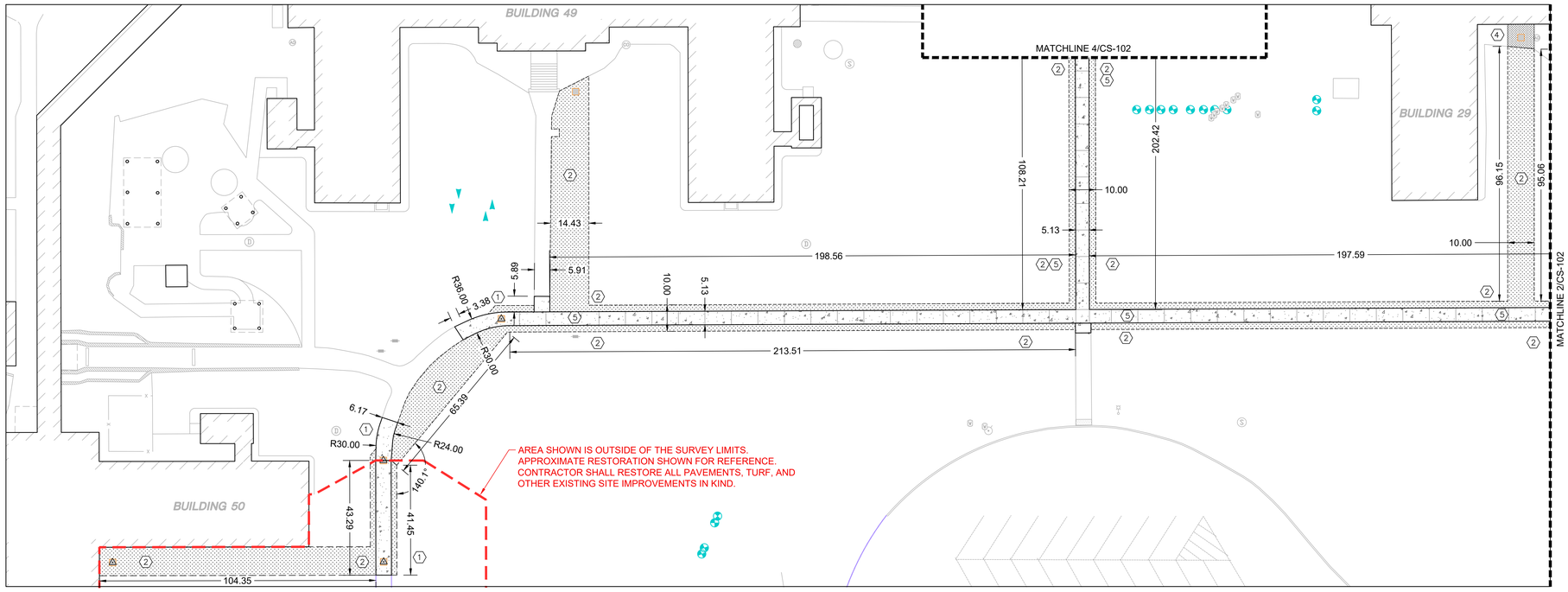
BUILDING No	CHECKED BY	DRAWN
CAMPUS	IJW	CDN

DRAWING NO: CS-101

LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DWG OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



1 SITE RESTORATION PLAN 2
SCALE: 1"=20' [30"X42" SHEET SIZE]

2 SITE RESTORATION PLAN 3
SCALE: 1"=20' [30"X42" SHEET SIZE]

3 SITE RESTORATION PLAN 4
SCALE: 1"=20' [30"X42" SHEET SIZE]

4 SITE RESTORATION PLAN 5
SCALE: 1"=20' [30"X42" SHEET SIZE]

LEGEND

- PROPERTY LIMITS
- APPROXIMATE TURF RESTORATION
- PROPOSED CONCRETE PAVEMENT
- APPROXIMATE ROCK MULCH RESTORATION
- PROPOSED ASPHALT PAVEMENT
- LIMITS OF TOPOGRAPHIC SURVEY
- LIMITS OF CONSTRUCTION
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- PROPOSED EXTERIOR PULLBOX

N

0 20' 40'

GENERAL NOTES

1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021; INFORMATION SUPPLIED BY THE VA; ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL; AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS, MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

KEY NOTES

1. INSTALL NEW REINFORCED SIDEWALK PER 6/CJ-502
2. TURF RESTORATION - SOD (SEE SPEC. 32 90 00)
3. INSTALL NEW ASPHALT PAVEMENT PER 2/CJ-502
4. REPLACE ROCK MULCH AS REQUIRED FOR DUCTBANK INSTALLATION IN KIND. NEW ROCK MULCH TO MATCH EXISTING IN COLOR, MATERIAL, AND GRADATION.
5. INSTALL NEW SIDEWALK INTEGRAL WITH PRECAST CONCRETE DUCTBANK PER 7/CJ-502 AND 10/CJ-502.
6. INSTALL NEW CONCRETE PAVEMENT PER 8/CJ-502
7. INSTALL NEW CONCRETE CURB AND GUTTER PER 1/CJ-502

RESTORATION NOTES

1. CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED FOR FIBER OPTIC CONSTRUCTION IN-KIND WITHIN 14 CALENDAR DAYS OF COMPLETING WORK.
2. LIMITS OF DISTURBANCE ARE APPROXIMATED ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED.
3. CONTRACTOR SHALL FIELD LOCATED ALL PLANTINGS IN COORDINATION WITH VAMC STAFF AND AS APPROVED BY THE COR.
4. DO NOT INSTALL ANY PLANT MATERIAL UNTIL AFTER THE IRRIGATION SYSTEM IS OPERATIONAL. IF IRRIGATION SYSTEMS ARE DISTURBED DURING CONSTRUCTION, THE CONTRACTOR SHALL RESTORE THE SYSTEM TO WORKING ORDER.
5. ALL SEED AND PLANTING AREAS WITH NO PERMANENT IRRIGATION SHALL RECEIVE TEMPORARY IRRIGATION BY THE CONTRACTOR FOR THE ESTABLISHMENT PERIOD.

No	REVISION	DATE

CONSULTANT
SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedesdmg.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: IAN J. WEBER, PE
SIGNATURE:
DATE MARCH 28, 2022 LICENSE # 55502

APPROVED / DATE:	APPROVED PROJECT COR / DATE:	APPROVED PATIENT SAFETY / DATE:	APPROVED EMS MANAGER / DATE:	APPROVED DIRECTOR FMS / DATE:	
APPROVED / DATE:	APPROVED SERVICE LINE DIRECTOR / DATE:	APPROVED SAFETY MANAGER / DATE:	APPROVED R/D MANAGER / DATE:	APPROVED ASSOCIATE DIRECTOR / DATE:	
APPROVED / DATE:	APPROVED GEMS COORDINATOR / DATE:	APPROVED CHIEF OF POLICE / DATE:	APPROVED PROJECTS SECTION MANAGER / DATE:	APPROVED NURSE EXECUTIVE / DATE:	
APPROVED / DATE:	APPROVED INFECTION CONTROL NURSE / DATE:	APPROVED CET MANAGER / DATE:	APPROVED ASSISTANT CHIEF ENGINEER / DATE:	APPROVED CHIEF OF STAFF / DATE:	APPROVED MEDICAL CENTER DIRECTOR / DATE:

DRAWING TITLE: SITE RESTORATION PLAN 2

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

BUILDING No	CHECKED BY	DRAWN
CAMPUS	IJW	CDN

LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE: 1"=20'
PROJECT NO.: 656-21-235
DRAWING NO.: CS-102
DWG OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

0 20' 40'

LEGEND

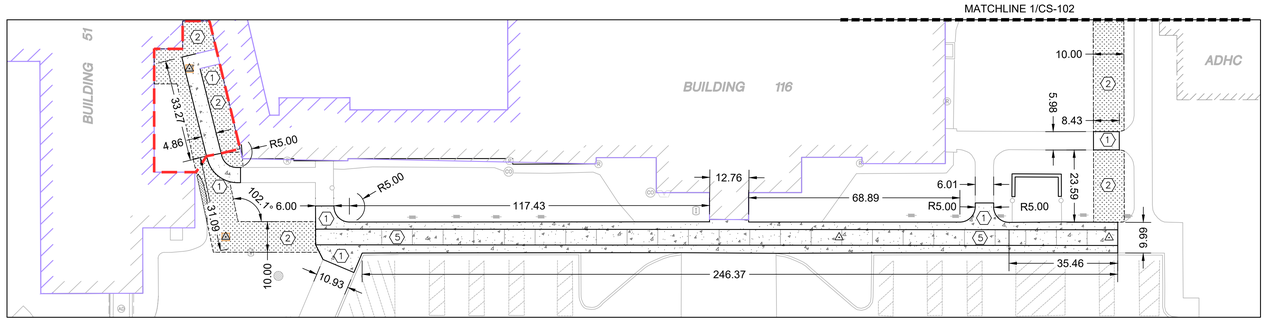
- PROPERTY LIMITS
- APPROXIMATE TURF RESTORATION
- PROPOSED CONCRETE PAVEMENT
- APPROXIMATE ROCK MULCH RESTORATION
- PROPOSED ASPHALT PAVEMENT
- LIMITS OF TOPOGRAPHIC SURVEY
- LIMITS OF CONSTRUCTION
- APPROXIMATE BUILDING/PAVEMENT LOCATION FROM AERIAL IMAGERY.
- PROPOSED EXTERIOR PULLBOX

KEY NOTES

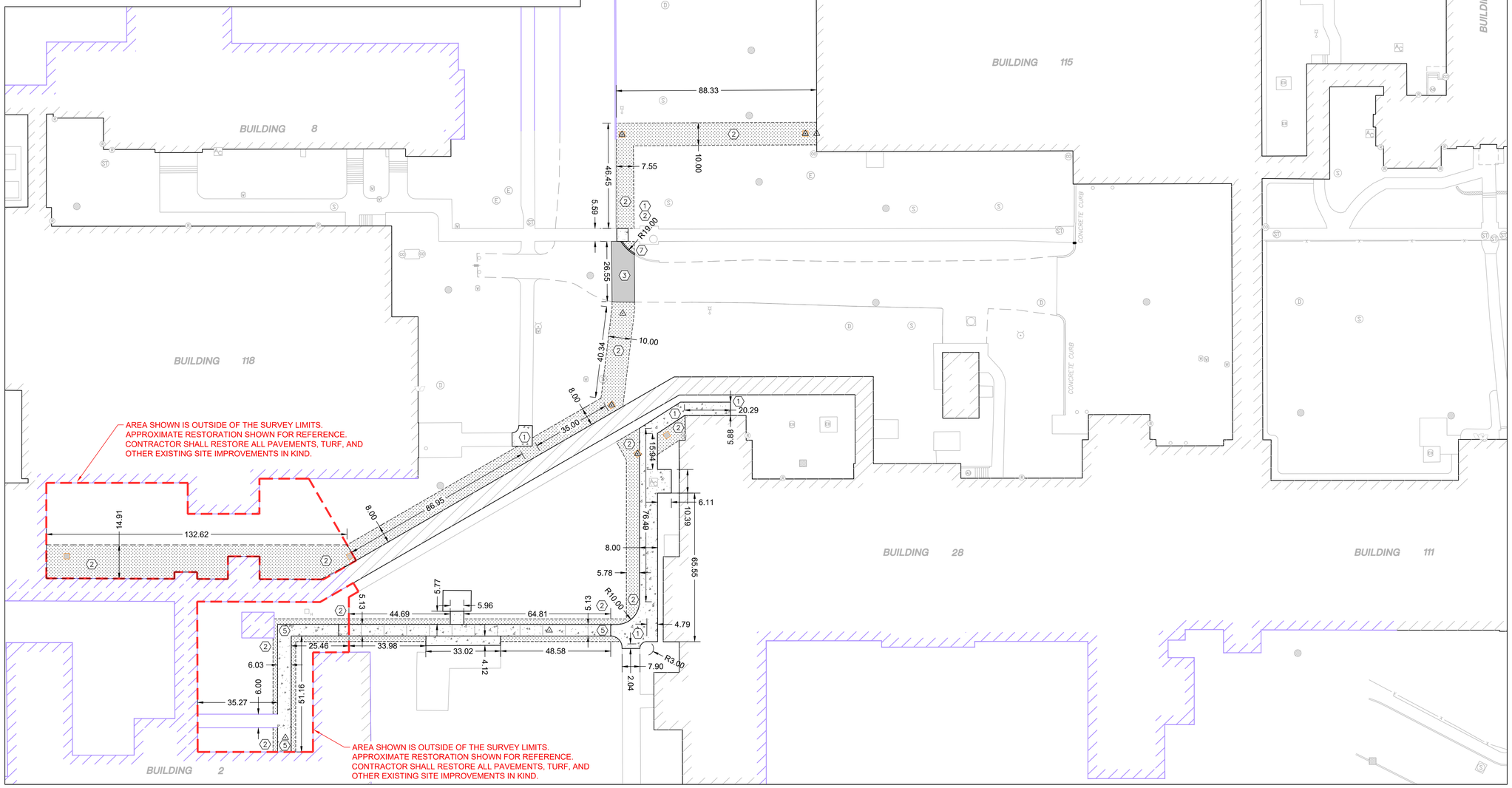
1. INSTALL NEW REINFORCED SIDEWALK PER 6/CJ-502
2. TURF RESTORATION - SOD (SEE SPEC. 32 90 00)
3. INSTALL NEW ASPHALT PAVEMENT PER 2/CJ-502
4. REPLACE ROCK MULCH AS REQUIRED FOR DUCTBANK INSTALLATION IN KIND. NEW ROCK MULCH TO MATCH EXISTING IN COLOR, MATERIAL, AND GRADATION.
5. INSTALL NEW SIDEWALK INTEGRAL WITH PRECAST CONCRETE DUCTBANK PER 7/CJ-502 AND 10/CJ-502
6. INSTALL NEW CONCRETE PAVEMENT PER 2/CJ-502
7. INSTALL NEW CONCRETE CURB AND GUTTER PER 1/CJ-502
8. INSTALL NEW SITE LIGHTING.

RESTORATION NOTES

1. CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED FOR FIBER OPTIC CONSTRUCTION IN-KIND WITHIN 14 CALENDAR DAYS OF COMPLETING WORK.
2. LIMITS OF DISTURBANCE ARE APPROXIMATED ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED.
3. CONTRACTOR SHALL FIELD LOCATED ALL PLANTINGS IN COORDINATION WITH VAMC STAFF AND AS APPROVED BY THE COR.
4. DO NOT INSTALL ANY PLANT MATERIAL UNTIL AFTER THE IRRIGATION SYSTEM IS OPERATIONAL. IF IRRIGATION SYSTEMS ARE DISTURBED DURING CONSTRUCTION, THE CONTRACTOR SHALL RESTORE THE SYSTEM TO WORKING ORDER.
5. ALL SEED AND PLANTING AREAS WITH NO PERMANENT IRRIGATION SHALL RECEIVE TEMPORARY IRRIGATION BY THE CONTRACTOR FOR THE ESTABLISHMENT PERIOD.



1 SITE RESTORATION PLAN 6
SCALE: 1"=20' [30"X42" SHEET SIZE]



2 SITE RESTORATION PLAN 7
SCALE: 1"=20' [30"X42" SHEET SIZE]

GENERAL NOTES

1. SURVEY DATA SHOWN IS A COMBINATION OF TOPOGRAPHIC AND UTILITY SURVEYS PERFORMED BY ANDERSON ENGINEERING DATED NOVEMBER 2018, DECEMBER 2018, JUNE 2020, AND SEPTEMBER 2021; INFORMATION SUPPLIED BY THE VA; ANTICIPATED SITE IMPROVEMENTS (FROM COMPLETED DESIGN DOCUMENTS); AND AS APPROXIMATED FROM AERIAL IMAGERY. EXISTING CONDITIONS MAY HAVE CHANGED FROM THE DATE OF THE SURVEYS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS (LOCATION AND ELEVATION) PRIOR TO CONSTRUCTION, AND ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY OF ANY CONDITIONS FOUND TO BE VARYING, AND IMPACTING THE PROPOSED WORK. ALL VARYING CONDITIONS, REGARDLESS OF THE IMPACT TO THE WORK, SHALL BE NOTED ON THE RECORD DRAWINGS MAINTAINED IN THE FIELD (REDLINES) AND INCLUDED WITHIN THE CONTRACTOR'S PREPARED ASBUILTS AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR'S ASBUILTS AND REDLINES SHALL BE SUBMITTED TO THE COR AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REGULARLY MAINTAIN RECORDS OF THE WORK PERFORMED, FIELD CHANGES, VARYING CONDITIONS, ECT. AT A MINIMUM, SUCH MARKUPS SHALL BE IN THE FORM OF FIELD NOTES RECORDED ON THE CONTRACT DOCUMENTS AND MAINTAINED WITHIN THE CONSTRUCTION TRAILER. SUCH RECORD DRAWINGS SHALL BE MADE AVAILABLE TO THE COR, OR THE COR'S DESIGNATED REPRESENTATIVE, UPON REQUEST.
3. ALL WORK TO BE CONSTRUCTED IN A LEGAL MANNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. REFER TO ELECTRICAL PLANS FOR INSTALLATION OF ALL CONDUIT WITHIN 5.0 FEET OF BUILDINGS AND OTHER LOCATIONS NOTED ON THE CIVIL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE TOPS OF CAST IN PLACE CONCRETE DUCT BANKS SHALL BE NO LESS THAN 24" UNDER LANDSCAPED AREAS OR 30" UNDER PAVED SURFACES, BUT NO LESS THAN AS SHOWN ON THE CIVIL DRAWINGS.
6. ALL CONCRETE-ENCASED CONDUIT IS EXPECTED TO BE INSTALLED THROUGH TRADITIONAL EXCAVATION. DIRECTIONAL BORE OR JACKING OF SUCH CONDUIT IS NOT ANTICIPATED WITH THE PROJECT, AND SHALL NOT BE UNDERTAKEN WITHOUT PRIOR APPROVAL BY THE COR.
7. BEFORE PERFORMING TRENCHING WORK, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITHIN THE EXCAVATION LIMITS.
8. ALL MULTIPLE CONDUIT RUNS SHALL HAVE CONDUIT SPACERS SECURELY SUPPORTING AND MAINTAINING UNIFORM SPACING OF THE DUCT ASSEMBLY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
9. DUCT BANKS SHALL NOT SLOPE TOWARDS BUILDINGS.
10. AFTER CONCRETE DUCT BANKS HAVE SUFFICIENTLY CURED, THE CONTRACTOR SHALL BACKFILL THE TRENCH, AND INSTALL DETECTABLE UNDERGROUND WARNING TAPE, IN ACCORDANCE WITH THE SPECIFICATIONS AND DUCT BANK DETAILS.
11. MAINTAIN 12" MINIMUM SEPARATION BETWEEN EXTERIOR OF CONCRETE ENCASEMENT AND OTHER UTILITY SYSTEMS INCLUDING BUT NOT LIMITED SANITARY SEWER, WATER MAIN, STORM SEWER, AND CHILLED WATER SERVICES.
12. THE CONTRACTOR SHALL KEEP DUCTS CLEAN OF EARTH, SAND, OR GRAVEL; AND SEAL WITH TAPERED PLUGS UPON COMPLETION OF EACH PORTION OF WORK.
13. THE CONTRACTOR SHALL PLAN WORK SO AS TO LIMIT THE EXTENTS OF OPEN TRENCHING.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION ACTIVITIES.
15. VERIFY, PROCURE, INSTALL, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES PRIOR TO THE COMMENCEMENT OF WORK.
16. INSTALL TREE PROTECTION FENCING AROUND THOSE TREES INDICATED ON THE DEMOLITION PLANS (SEE SHEETS CD-100 - CD-103).
17. PROTECT ALL EXISTING SITE ELEMENTS (TREES, UTILITIES, CURB, ETC...) NOT NOTED FOR REMOVAL. REPLACE IN KIND IF DAMAGED.
18. PATCH IN-KIND ALL DISTURBED PAVEMENTS & CURBS.
19. STREET SWEEP TO PREVENT DIRT AND DEBRIS ENTERING INTO ADJACENT WALKS AND ROADWAYS. MINIMUM DAILY, MAINTAIN CONFORMANCE WITH APPLICABLE STORM WATER POLLUTION PREVENTION PRACTICES.
20. NEW CONSTRUCTION FEATURES SHALL MATCH INTO EXISTING WHERE APPLICABLE (PAVEMENT, CURBS, SIDEWALKS). PROVIDE SMOOTH TRANSITIONS AT MATCH IN POINTS.
21. THE CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO PROVIDE CONSTRUCTION STAKING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS THROUGHOUT CONSTRUCTION.
22. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
23. SUBSTITUTIONS FROM INFO SHOWN HEREIN SHALL BE REVIEWED AND APPROVED BY THE COR.
24. COORDINATE ALL UTILITY RELOCATIONS / DISRUPTIONS WITH THE COR AND VAMC STAFF. NOTIFY THE COR OF ANY POTENTIAL DISRUPTIONS AT LEAST 15 CALENDAR DAYS IN ADVANCE OF THE WORK.
25. ALL LANDSCAPED AREAS DISTURBED FOR THE DUCT BANK INSTALLATION ARE TO BE RESTORED IN KIND. TURF AREAS SHALL BE RESTORED WITH SALT TOLERANT SOD PER MNDOT STANDARD SPECIFICATION 3878.2.C. PER THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THE SOD THROUGH THE ESTABLISHMENT PERIOD.
26. THE LOCATION OF THE CONDUIT, HAND HOLES, AND MAINTENANCE HOLES SHOWN ARE APPROXIMATE LOCATIONS. FIELD COORDINATE THE FINAL LOCATION WITH VAHCS STAFF AND THE COR PRIOR TO INSTALLATION.
27. HAND HOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE GROUND LINE.
28. WITH THE EXCEPTION OF DRAIN HOLES, HAND HOLES / MANHOLES / PULL BOXES SHALL BE CONSTRUCTED TO CREATE A WATER TIGHT ENCLOSURE.
29. NO ADDITIONAL COST SHALL BE APPROVED FOR PLACING CONDUITS DEEPER THAN THE REQUIRED MINIMUM DEPTH TO AVOID EXISTING UNDERGROUND UTILITIES.
30. PROVIDE A SLACK LOOP WITHIN EACH HAND HOLE MEETING OR EXCEEDING THE MANUFACTURER'S SPECIFICATIONS, BUT NO LESS THAN 25 FT. THE SLACK LOOPS SHALL BE SECURED SO THAT FIBER IS NOT RESTING ON BOTTOM OF STRUCTURE AFTER FINAL INSTALLATION.

No	REVISION	DATE

CONSULTANT
AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134 | Phone: 402.991.5520 | www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: IAN J. WEBER, PE
SIGNATURE:
DATE MARCH 28, 2022 LICENSE # 55502

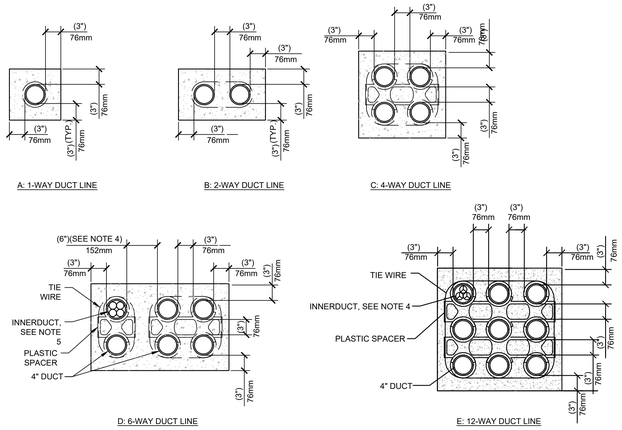
APPROVED / DATE:	APPROVED PROJECT COR / DATE:	APPROVED PATIENT SAFETY / DATE:	APPROVED EMS MANAGER / DATE:	APPROVED DIRECTOR FMS / DATE:	
APPROVED / DATE:	APPROVED SERVICE LINE DIRECTOR / DATE:	APPROVED SAFETY MANAGER / DATE:	APPROVED R/D MANAGER / DATE:	APPROVED ASSOCIATE DIRECTOR / DATE:	
APPROVED / DATE:	APPROVED GEMS COORDINATOR / DATE:	APPROVED CHIEF OF POLICE / DATE:	APPROVED PROJECTS SECTION MANAGER / DATE:	APPROVED NURSE EXECUTIVE / DATE:	
APPROVED / DATE:	APPROVED INFECTION CONTROL NURSE / DATE:	APPROVED CBT MANAGER / DATE:	APPROVED ASSISTANT CHIEF ENGINEER / DATE:	APPROVED CHIEF OF STAFF / DATE:	APPROVED MEDICAL CENTER DIRECTOR / DATE:

DRAWING TITLE: SITE RESTORATION PLAN 3

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
BUILDING No: CAMPUS | CHECKED BY: IJW | DRAWN: CDN
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE: 1"=20'
PROJECT NO: 656-21-235
DRAWING NO: CS-103
DVG OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

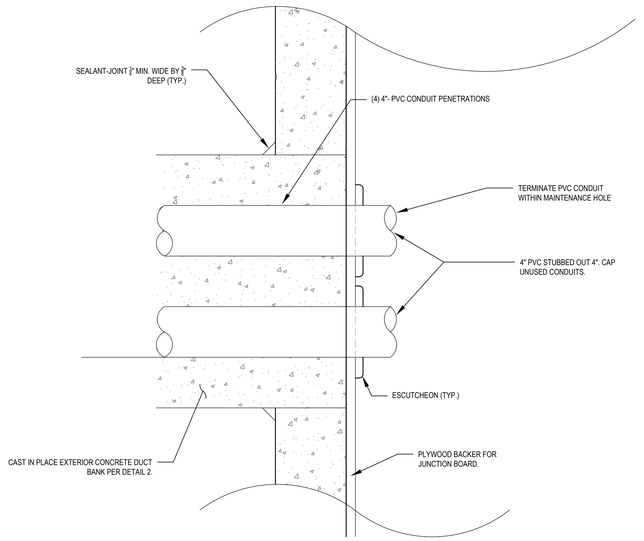


GENERAL NOTES:

1. CONCRETE SHALL BE 3000 P.S.I. @ 28 DAYS, OR AS SPECIFIED.
2. PROVIDE #4 REINFORCING RODS ON TOP AND BOTTOM OF DUCTS WHEN CROSSING UTILITIES OR PLACED IN ROADWAYS. CONTINUE REINFORCEMENT 10 FT BEYOND ALL STREET AND UTILITY CROSSING
3. MINIMUM COVER TO TOP OF ENVELOPE SHALL BE 610mm (24") OR AS OTHERWISE SPECIFIED IN SECTION 26 05 41.
4. PROVIDE MINIMUM 152mm (6") SPACE BETWEEN POWER AND TELECOMMUNICATION DUCTS. INCREASE SIZE AS REQUIRED.
5. INNERDUCT QUANTITY AND SIZE AS INDICATED ON PLANS.

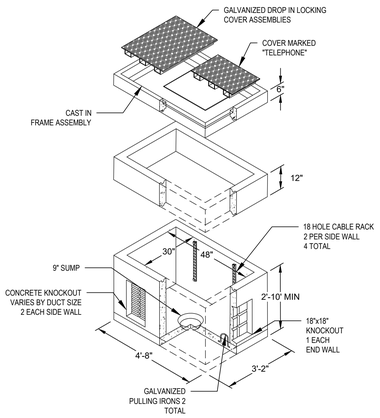
1 DUCT BANK DETAILS
VA STANDARD DETAIL - SD260541-02

SCALE: NOT TO SCALE



2 PULL BOX PENETRATION DETAIL

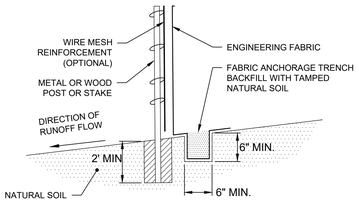
SCALE: NOT TO SCALE



NOTE: SEE PLANNED CONSTRUCTION PROFILE SHEETS FOR INDIVIDUAL STRUCTURE DEPTHS AND KNOCKOUT INVERTS AND LOCATIONS

3 EXTERIOR PULL BOX (30"X48")

SCALE: NOT TO SCALE

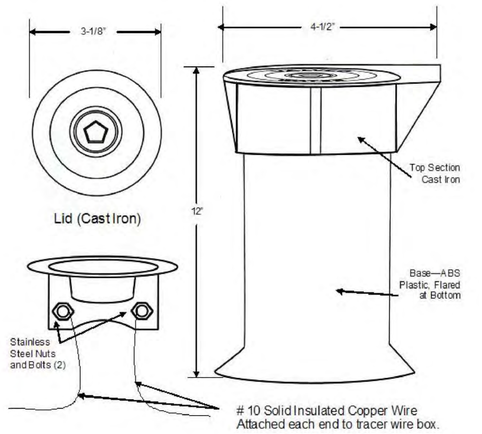


NOTE: DEPENDING UPON CONFIGURATION, ATTACH FABRIC TO WIRE MESH WITH HOG RINGS, STEEL POSTS WITH TIE WIRES, OR WOOD POSTS WITH STAPLES.

TYPICAL INSTALLATION

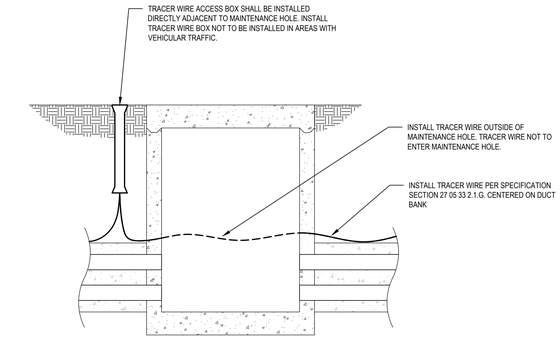
4 SILT FENCE

SCALE: NOT TO SCALE



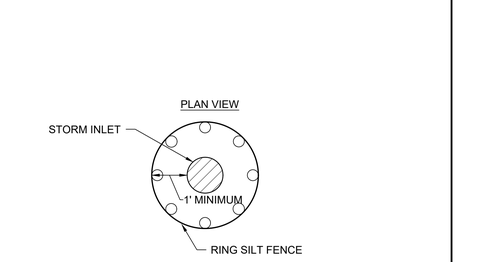
5 TRACER WIRE ACCESS BOX

SCALE: NOT TO SCALE



6 TRACER WIRE FOR CONCRETE DUCT BANK

SCALE: NOT TO SCALE

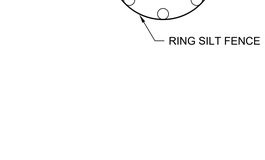


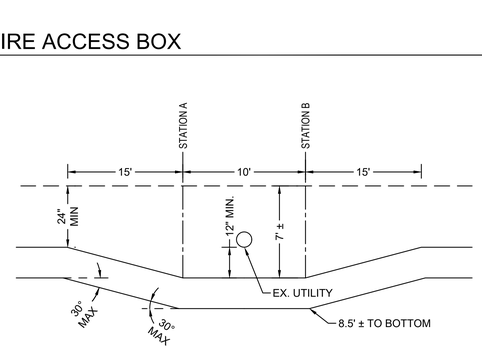
NOTE: DEPENDING UPON CONFIGURATION, ATTACH FABRIC TO WIRE MESH WITH HOG RINGS, STEEL POSTS WITH TIE WIRES, OR WOOD POSTS WITH STAPLES.

TYPICAL INSTALLATION

7 INLET PROTECTION

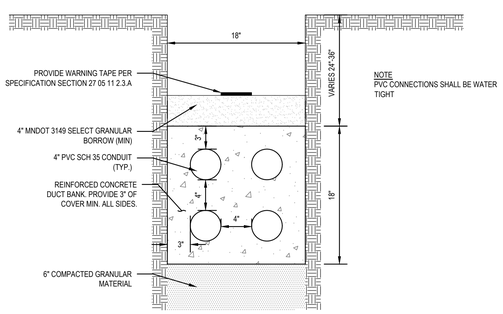
SCALE: NOT TO SCALE





8 NEW FIBER OPTIC UNDER EXISTING UTILITY

SCALE: NOT TO SCALE

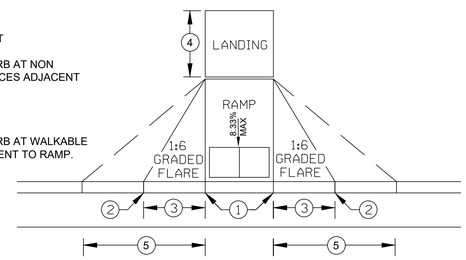


9 WARNING TAPE DETAIL

SCALE: NOT TO SCALE

NOTES:

1. 0' CURB HEIGHT.
2. FULL CURB HEIGHT
3. 3' FOR 6" HIGH CURB AT NON WALKABLE SURFACES ADJACENT TO RAMP
4. 4'X4' MINIMUM
5. 6" FOR 6" HIGH CURB AT WALKABLE SURFACES ADJACENT TO RAMP.



10 CONCRETE PEDESTRIAN RAMP

SCALE: NOT TO SCALE

No	REVISION	DATE

CONSULTANT

SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: IAN J. WEBER, PE

SIGNATURE:

DATE MARCH 28, 2022 LICENSE # 55502

APPROVED	DATE:	APPROVED PROJECT COR	DATE:	APPROVED PATIENT SAFETY	DATE:	APPROVED EMS MANAGER	DATE:	APPROVED DIRECTOR FMS	DATE:
APPROVED	DATE:	APPROVED SERVICE LINE DIRECTOR	DATE:	APPROVED SAFETY MANAGER	DATE:	APPROVED M/O MANAGER	DATE:	APPROVED ASSOCIATE DIRECTOR	DATE:
APPROVED	DATE:	APPROVED GEMS COORDINATOR	DATE:	APPROVED CHIEF OF POLICE	DATE:	APPROVED PROJECTS SECTION MANAGER	DATE:	APPROVED NURSE EXECUTIVE	DATE:
APPROVED	DATE:	APPROVED INFECTION CONTROL NURSE	DATE:	APPROVED CIT MANAGER	DATE:	APPROVED ASSISTANT CHIEF ENGINEER	DATE:	APPROVED CHIEF OF STAFF	DATE:
								APPROVED MEDICAL CENTER DIRECTOR	DATE:

DRAWING TITLE: CIVIL DETAILS

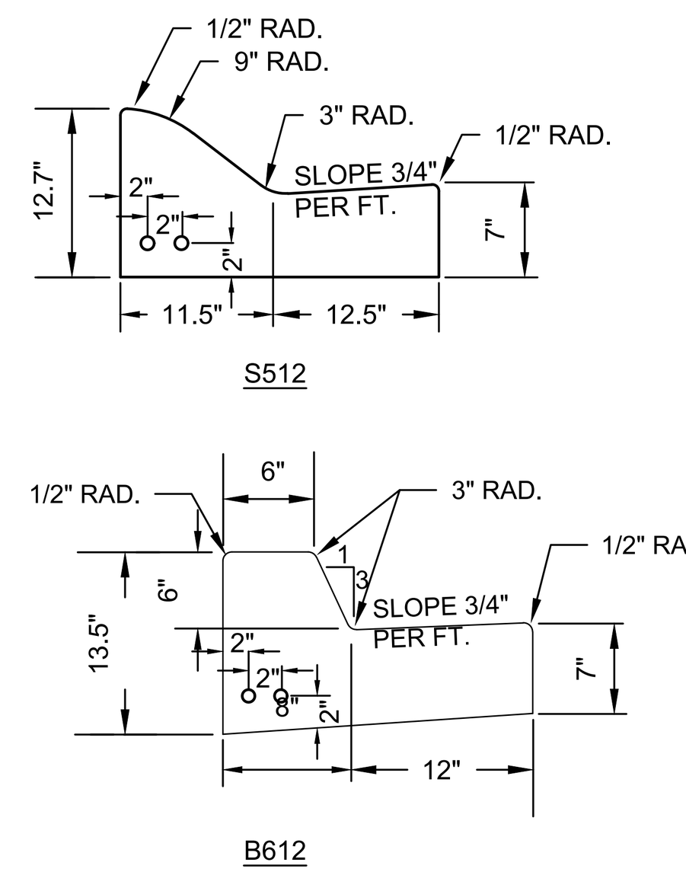
PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

BUILDING No: CAMPUS | CHECKED BY: LJV | DRAWN BY: CDN

LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE:
PROJECT NO: 656-21-235
DRAWING NO: C2-501
DWG OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



WHERE CURB CROSSES UTILITY TRENCHES (EXISTING OR NEW) 2#4 REINFORCING RODS SHALL BE PLACED IN THE LOWER PORTION OF THE CURB 20 FEET IN LENGTH CENTERED ON THE TRENCH.

INSTALL 2#4 REINFORCING RODS AT CATCH BASINS NO LESS THEN 10 FEET IN LENGTH ON EITHER SIDE OF STRUCTURE.

NOTE:
CONTROL JOINTS SHALL CONFORM WITH MNDOT SPEC. 2531.3C.

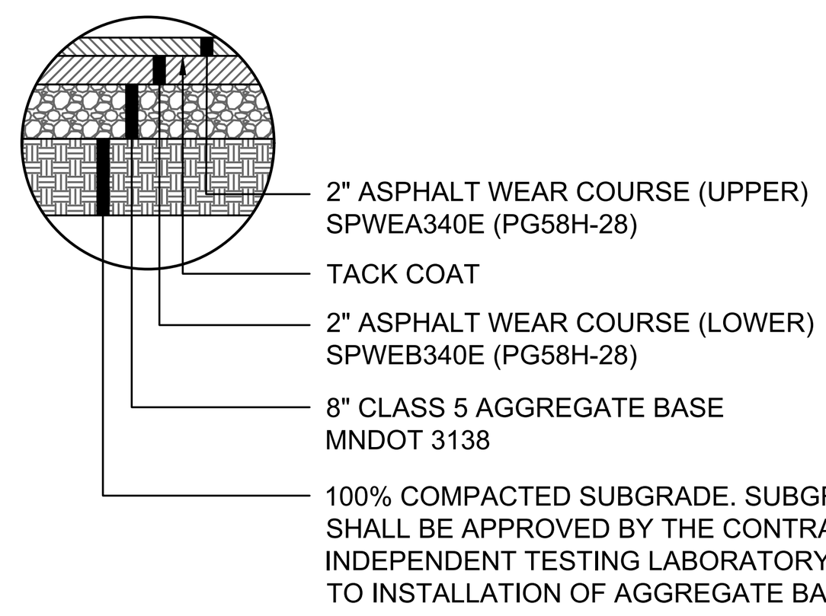
ALL CURB SHALL BE 4000 PSI WITH 6% AIR ENTRAINMENT.

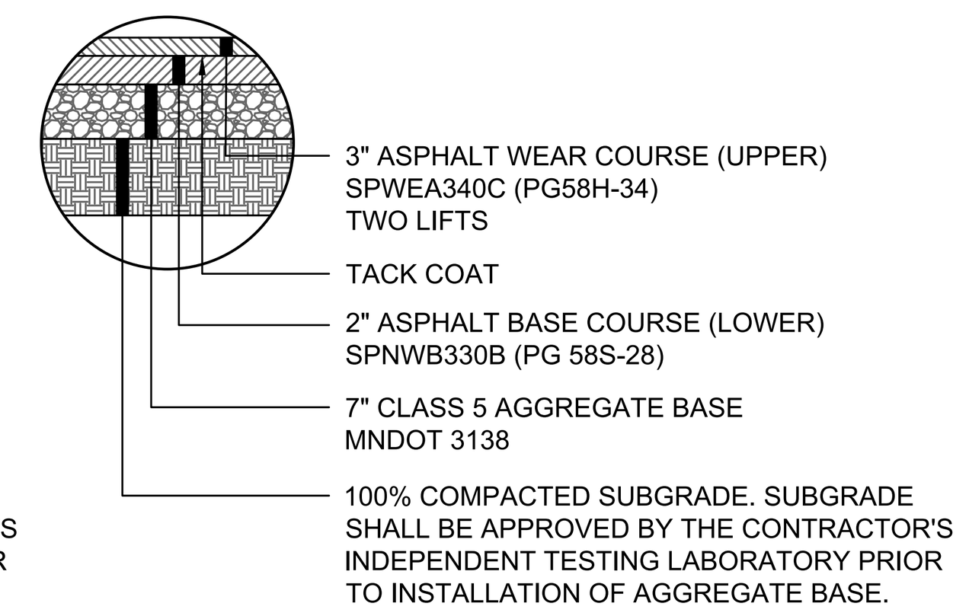
CLEAR CURING COMPOUND SHALL BE APPLIED AT ALL V412 CURB AND GUTTER.

WHITE PIGMENTED CURING COMPOUND SHALL BE APPLIED AT ALL S512 CURB AND GUTTER.

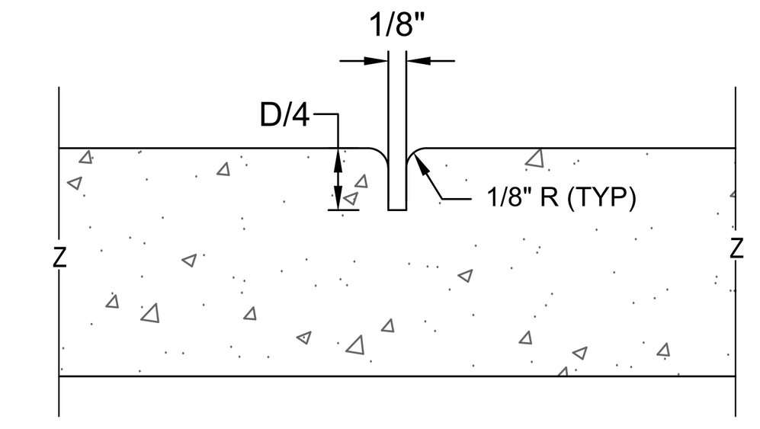
INSTALL TIP-OUT GUTTER WHERE PAVEMENT SLOPES AWAY FROM CURB.

1 TYPICAL CONCRETE CURB AND GUTTER
SCALE: NOT TO SCALE

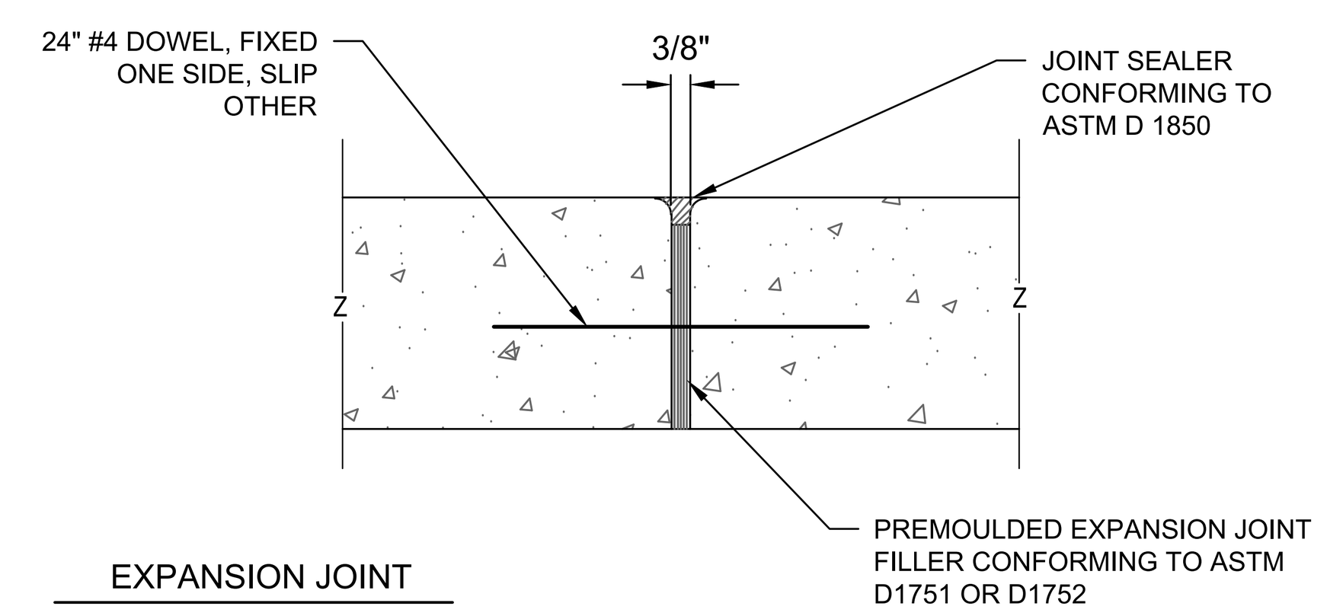




2 TYPICAL ASPHALT PAVEMENT
SCALE: NOT TO SCALE



CONTROL JOINT
PROVIDE CONTROL JOINTS PER MANUFACTURER RECOMMENDATIONS.

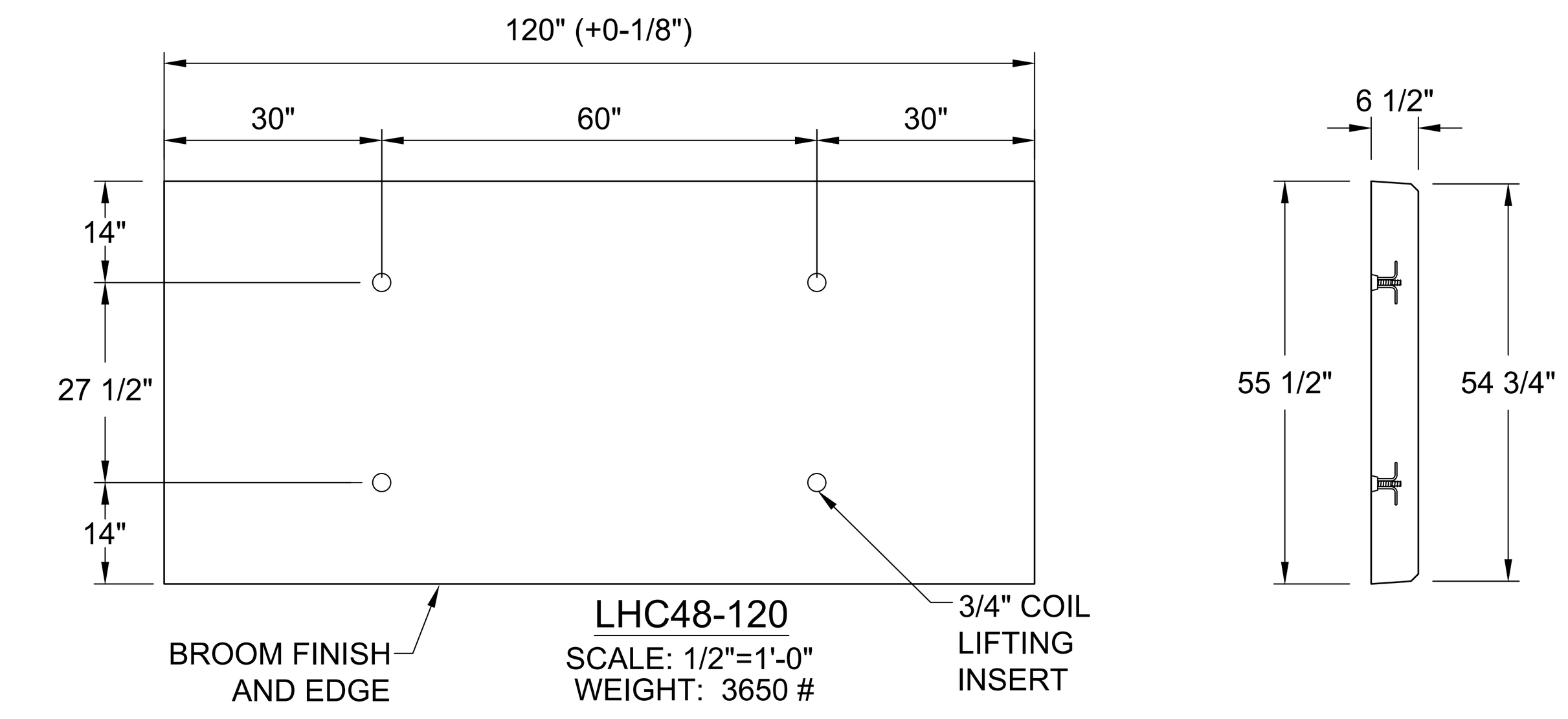


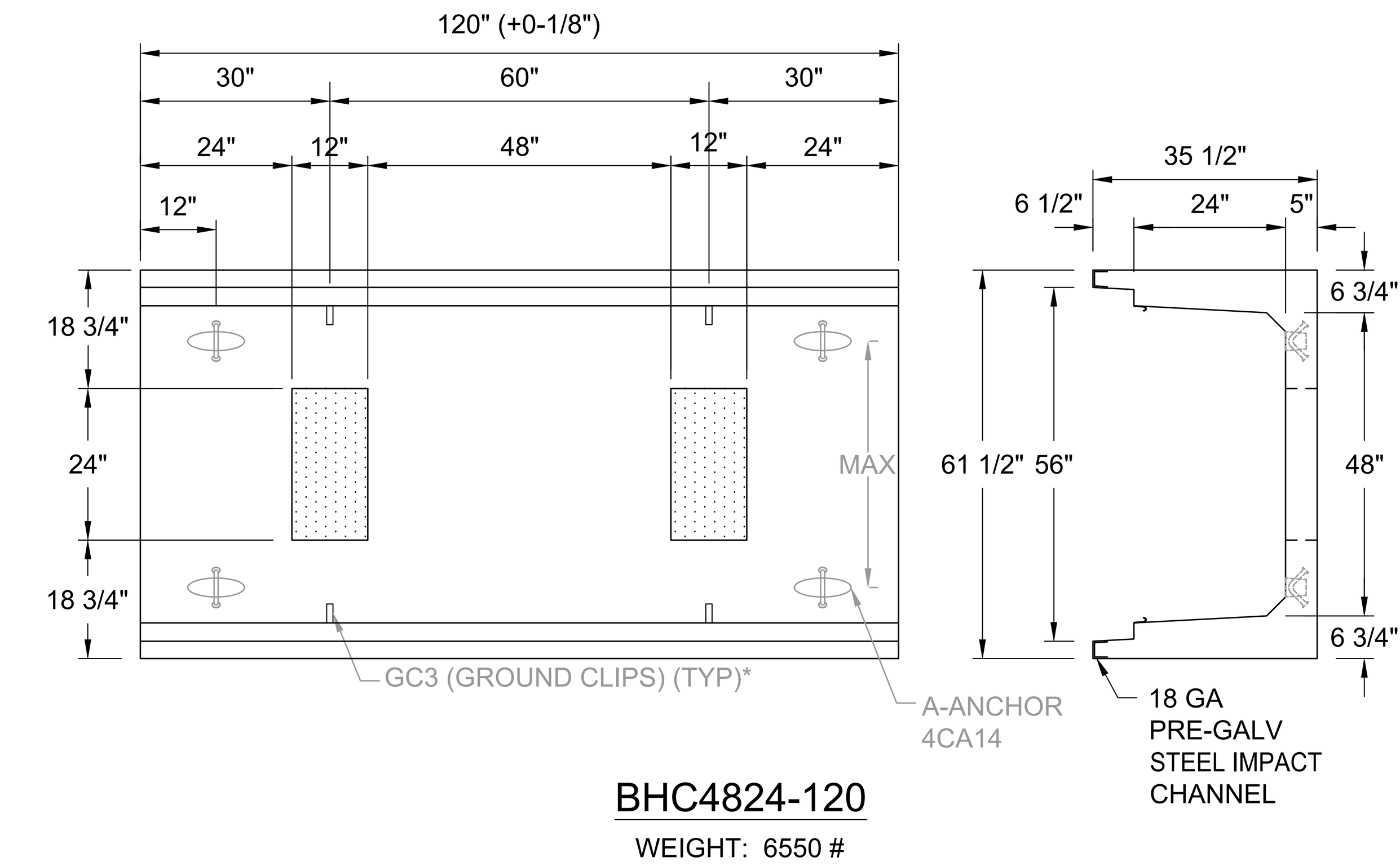
EXPANSION JOINT

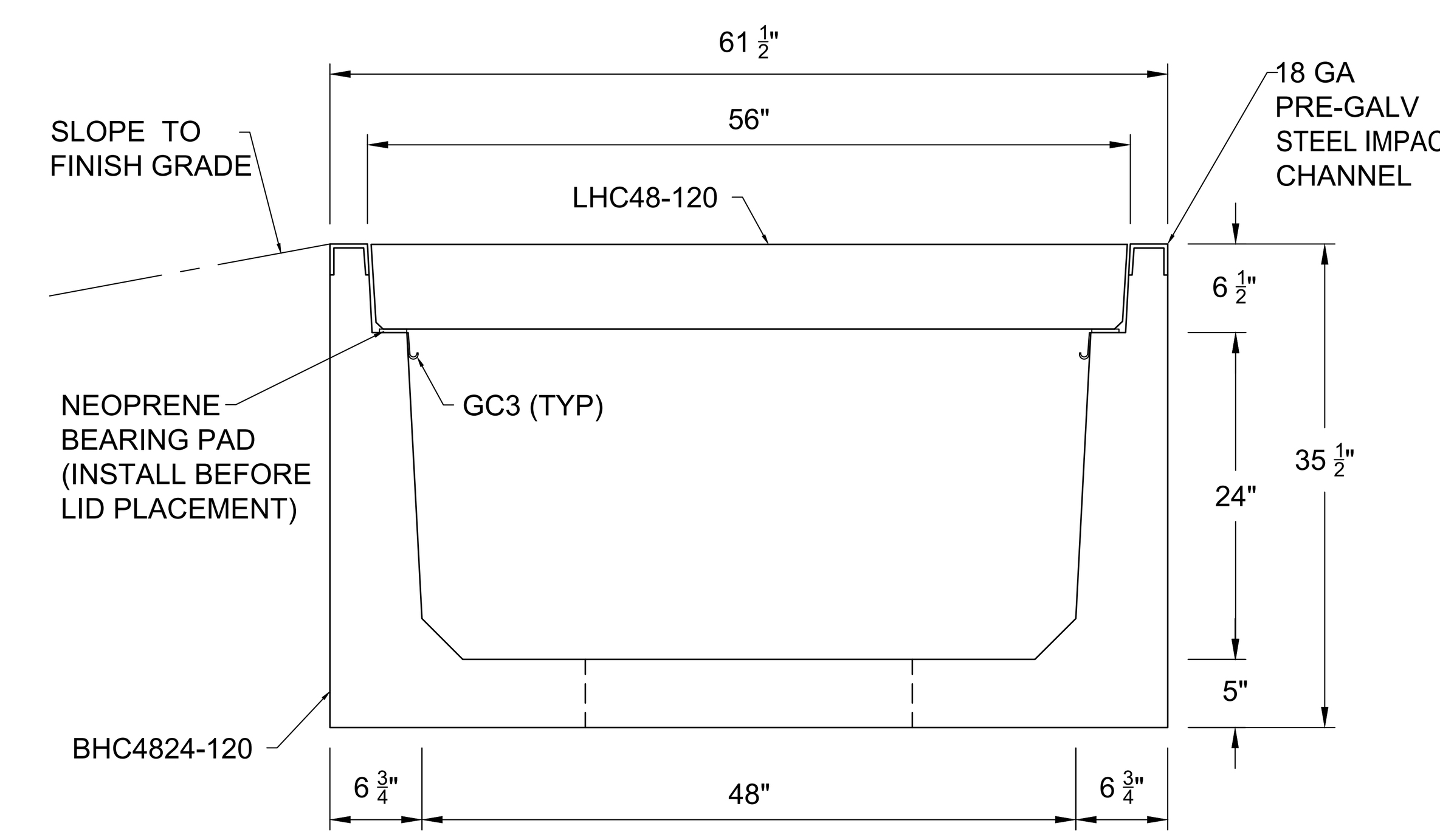
PROVIDE EXPANSION JOINTS AT BUILDING AND CONCRETE STOOP INTERFACE, AS WELL AS EVERY 24 FEET OF CONTINUOUS SIDEWALK AND AT SIDEWALK INTERSECTIONS.

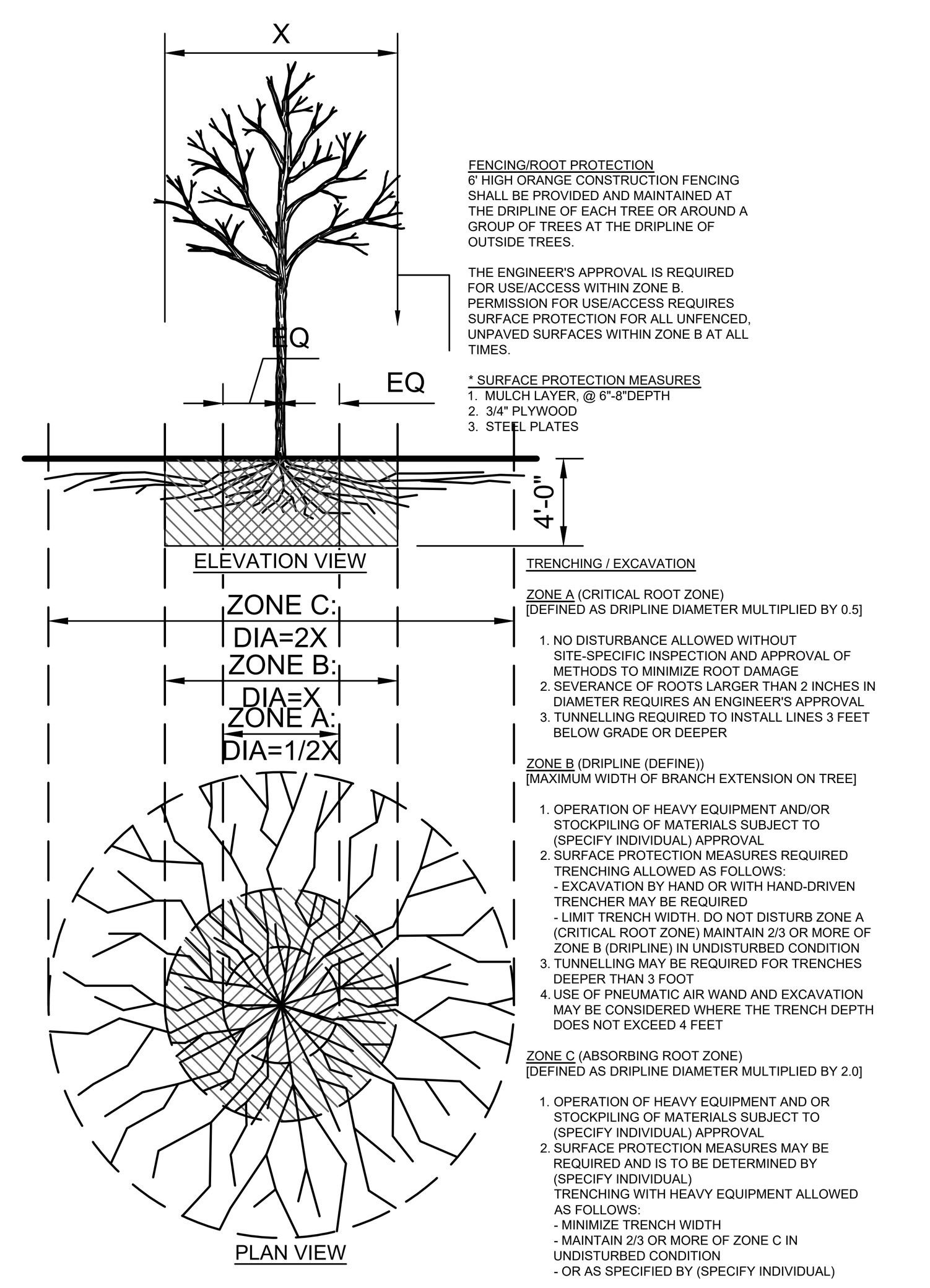
NOTE: JOINTS SHALL NOT BE SAW CUT.

3 TYPICAL CONCRETE JOINTS
SCALE: NOT TO SCALE









FENCING/ROOT PROTECTION
6' HIGH ORANGE CONSTRUCTION FENCING SHALL BE PROVIDED AND MAINTAINED AT THE DRIPLINE OF EACH TREE OR AROUND A GROUP OF TREES AT THE DRIPLINE OF OUTSIDE TREES.

THE ENGINEER'S APPROVAL IS REQUIRED FOR USE/ACCESS WITHIN ZONE B. PERMISSION FOR USE/ACCESS REQUIRES SURFACE PROTECTION FOR ALL UNFENCED, UNPAVED SURFACES WITHIN ZONE B AT ALL TIMES.

* SURFACE PROTECTION MEASURES
1. MULCH LAYER, @ 6"-8"DEPTH
2. 3/4" PLYWOOD
3. STEEL PLATES

TRENCHING / EXCAVATION

ZONE A (CRITICAL ROOT ZONE)
[DEFINED AS DRIPLINE DIAMETER MULTIPLIED BY 0.5]

1. NO DISTURBANCE ALLOWED WITHOUT SITE-SPECIFIC INSPECTION AND APPROVAL OF METHODS TO MINIMIZE ROOT DAMAGE
2. SEVERANCE OF ROOTS LARGER THAN 2 INCHES IN DIAMETER REQUIRES AN ENGINEER'S APPROVAL
3. TUNNELLING REQUIRED TO INSTALL LINES 3 FEET BELOW GRADE OR DEEPER

ZONE B (DRIPLINE (DEFINE))
[MAXIMUM WIDTH OF BRANCH EXTENSION ON TREE]

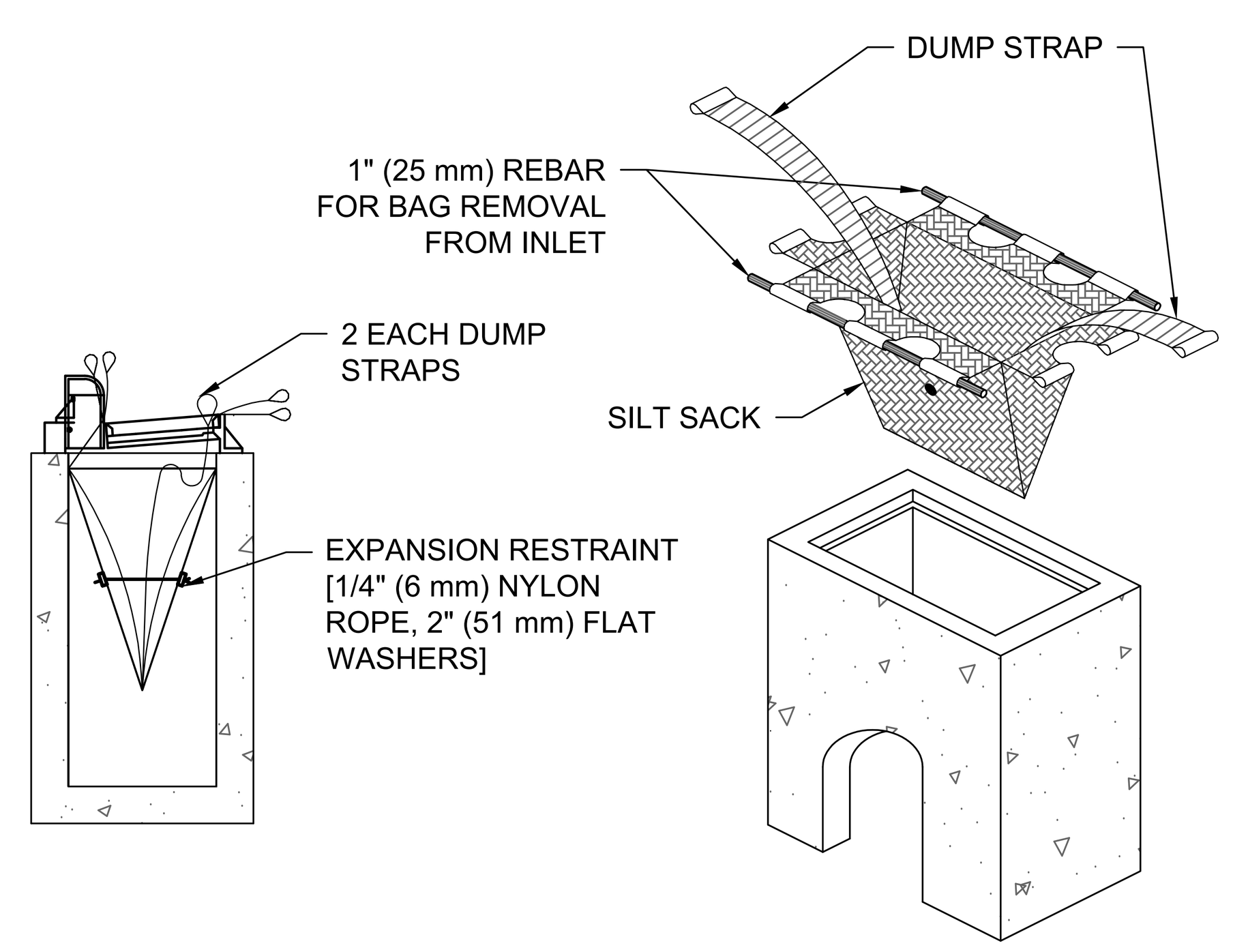
1. OPERATION OF HEAVY EQUIPMENT AND/OR STOCKPILING OF MATERIALS SUBJECT TO (SPECIFY INDIVIDUAL) APPROVAL
2. SURFACE PROTECTION MEASURES REQUIRED TRENCHING ALLOWED AS FOLLOWS:
- EXCAVATION BY HAND OR WITH HAND-DRIVEN TRENCHER MAY BE REQUIRED
- LIMIT TRENCH WIDTH. DO NOT DISTURB ZONE A (CRITICAL ROOT ZONE) MAINTAIN 2/3 OR MORE OF ZONE B (DRIPLINE) IN UNDISTURBED CONDITION
3. TUNNELLING MAY BE REQUIRED FOR TRENCHES DEEPER THAN 3 FOOT
4. USE OF PNEUMATIC AIR WAND AND EXCAVATION MAY BE CONSIDERED WHERE THE TRENCH DEPTH DOES NOT EXCEED 4 FEET

ZONE C (ABSORBING ROOT ZONE)
[DEFINED AS DRIPLINE DIAMETER MULTIPLIED BY 2.0]

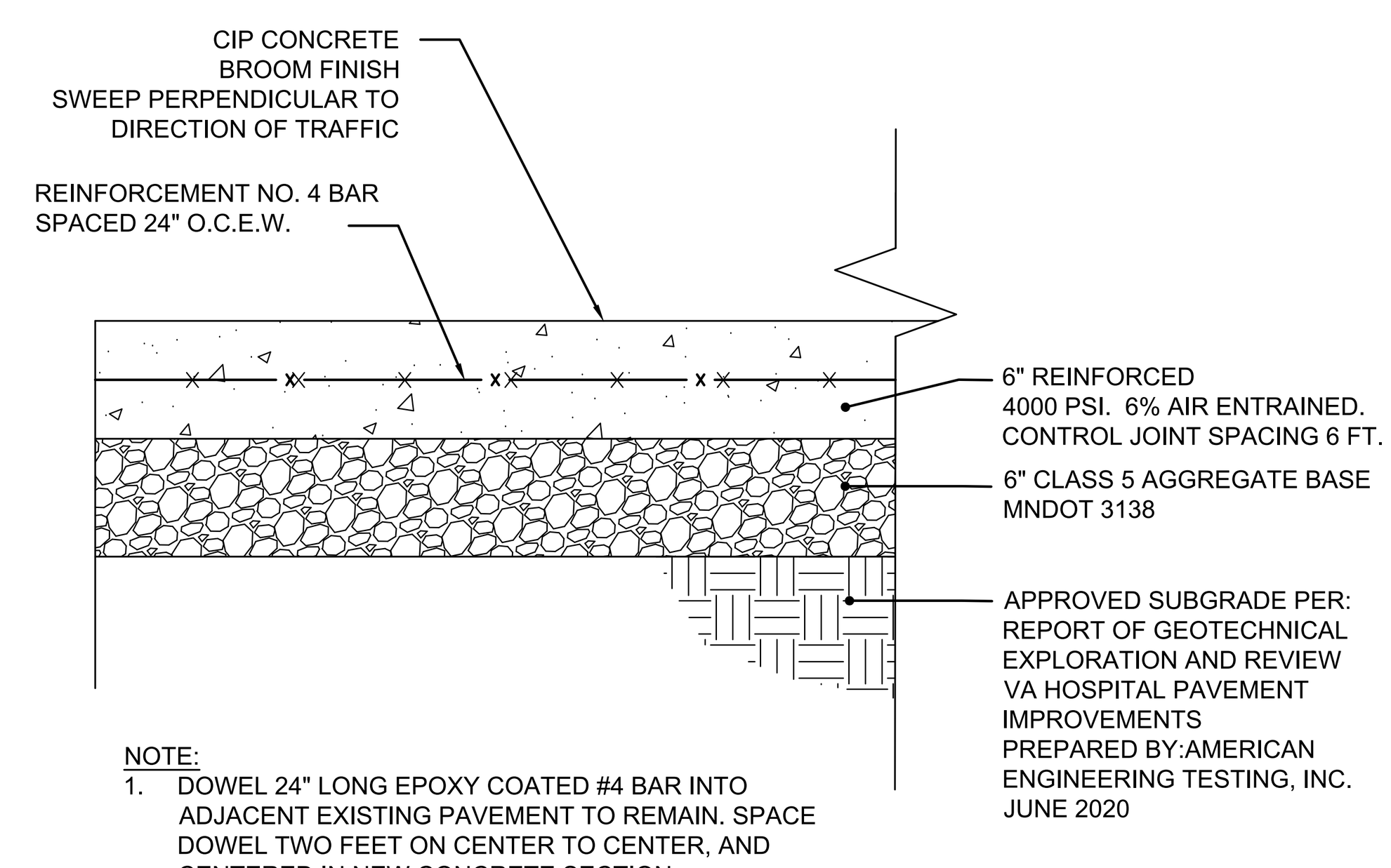
1. OPERATION OF HEAVY EQUIPMENT AND OR STOCKPILING OF MATERIALS SUBJECT TO (SPECIFY INDIVIDUAL) APPROVAL
2. SURFACE PROTECTION MEASURES MAY BE REQUIRED AND IS TO BE DETERMINED BY (SPECIFY INDIVIDUAL)
TRENCHING WITH HEAVY EQUIPMENT ALLOWED AS FOLLOWS:
- MINIMIZE TRENCH WIDTH
- MAINTAIN 2/3 OR MORE OF ZONE C IN UNDISTURBED CONDITION
- OR AS SPECIFIED BY (SPECIFY INDIVIDUAL)

TREE PROTECTION DETAIL

4 TREE PROTECTION FENCING
SCALE: NOT TO SCALE

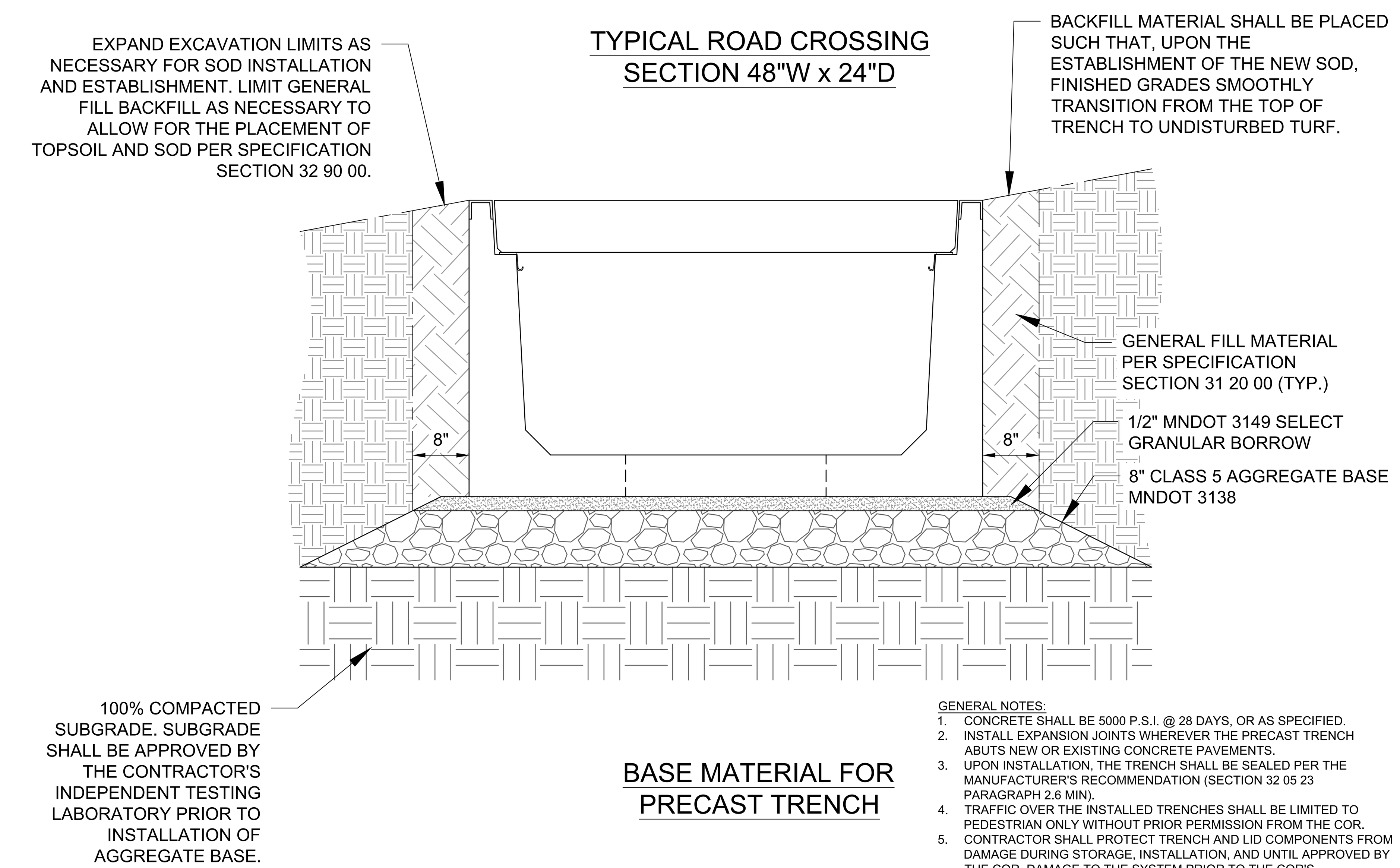


5 STORM SEWER INLET PROTECTION
SCALE: NOT TO SCALE



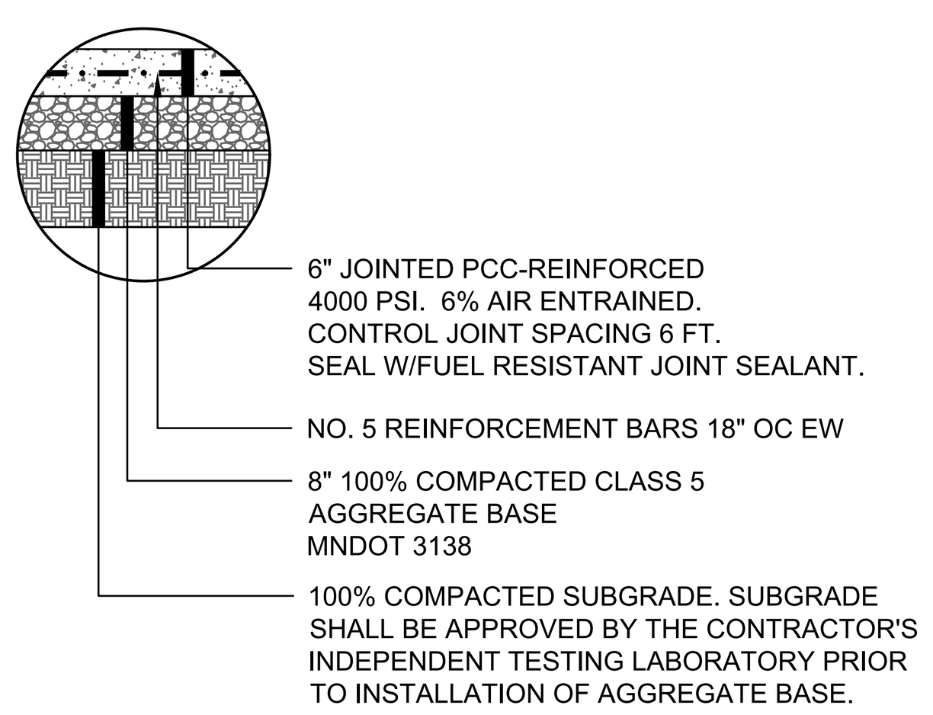
NOTE:
1. DOWEL 24" LONG EPOXY COATED #4 BAR INTO ADJACENT EXISTING PAVEMENT TO REMAIN. SPACE DOWEL TWO FEET ON CENTER TO CENTER, AND CENTERED IN NEW CONCRETE SECTION
2. CONCRETE PANEL DIMENSIONS SHALL BE NO GREATER THAN SIX (6) FEET.

6 TYPICAL CONCRETE SIDEWALK
SCALE: NOT TO SCALE



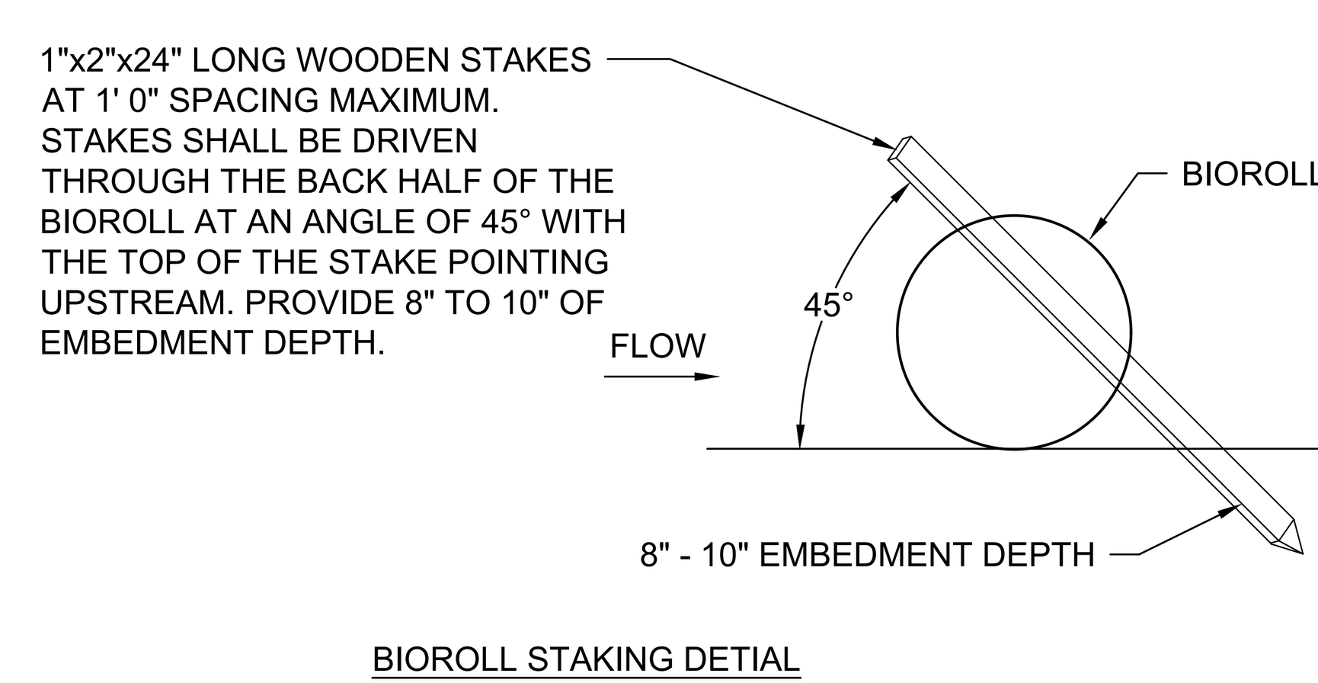
GENERAL NOTES:
1. CONCRETE SHALL BE 5000 P.S.I. @ 28 DAYS, OR AS SPECIFIED.
2. INSTALL EXPANSION JOINTS WHEREVER THE PRECAST TRENCH ABUTS NEW OR EXISTING CONCRETE PAVEMENTS.
3. UPON INSTALLATION, THE TRENCH SHALL BE SEALED PER THE MANUFACTURER'S RECOMMENDATION (SECTION 32 05 23 PARAGRAPH 2.6 MIN).
4. TRAFFIC OVER THE INSTALLED TRENCHES SHALL BE LIMITED TO PEDESTRIAN ONLY WITHOUT PRIOR PERMISSION FROM THE COR.
5. CONTRACTOR SHALL PROTECT TRENCH AND LID COMPONENTS FROM DAMAGE DURING STORAGE, INSTALLATION, AND UNTIL APPROVED BY THE COR. DAMAGE TO THE SYSTEM PRIOR TO THE COR'S ACCEPTANCE SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST.

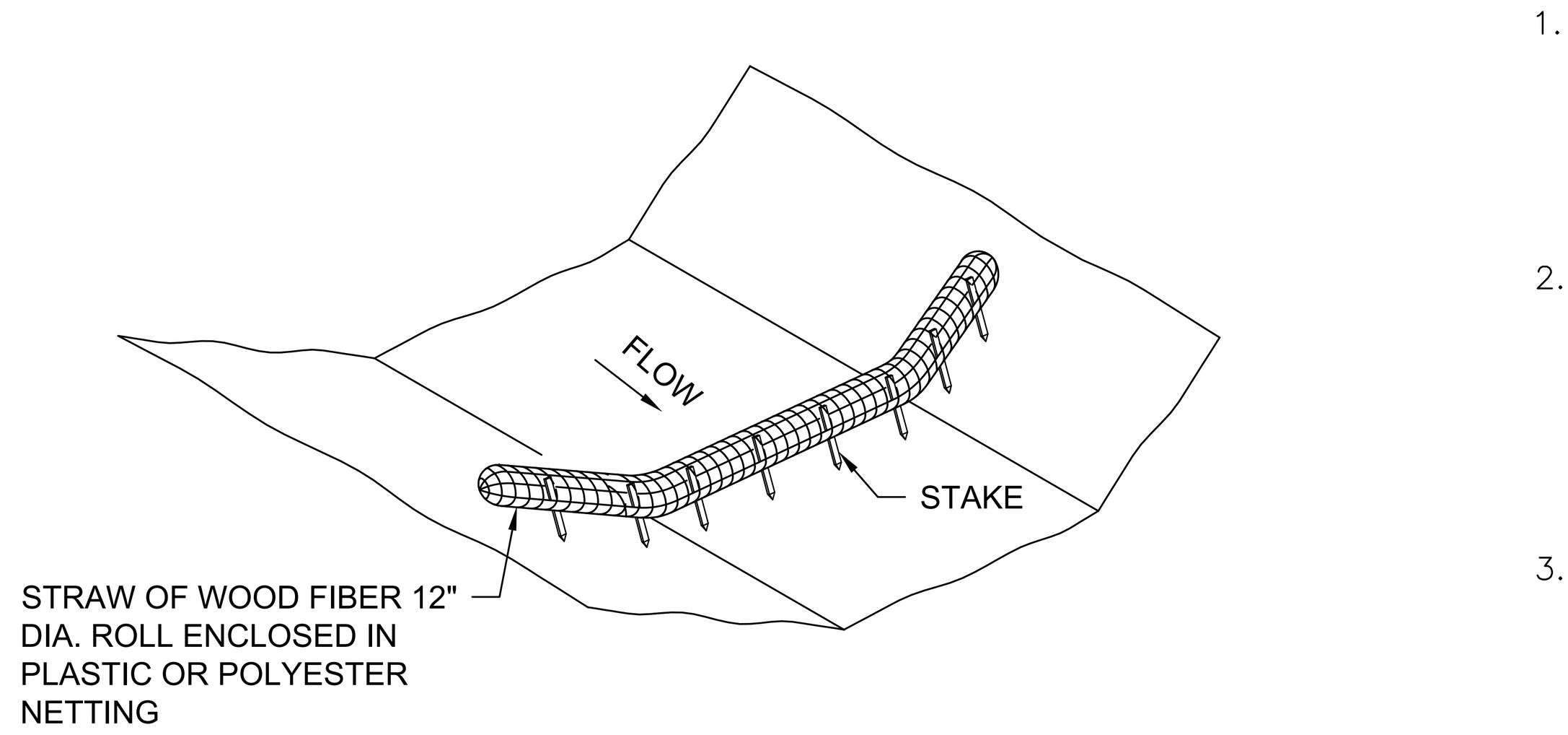
7 TYPICAL PRECAST TRENCH
SCALE: NOT TO SCALE



NOTE:
1. DOWEL 16" LONG EPOXY COATED #4 BAR INTO ADJACENT EXISTING PAVEMENT TO REMAIN SPACE DOWEL TWO FEET ON CENTER TO CENTER, AND CENTERED IN NEW CONCRETE SECTION
2. CONCRETE PANEL DIMENSIONS SHALL BE NO GREATER THAN SIX (6) FEET.
3. PRIOR TO PLACEMENT OF AGGREGATE BASE THE SUBGRADE SHALL BE COMPACTED. CONTRACTOR SHALL MAKE AT LEAST FOUR PASSES WITH A SELF PROPELLED VIBRATORY ROLL HAVING A DRUM DIAMETER NO LESS THAN THREE (3) FEET.
4. COMPACTION EFFORT SHALL BE OBSERVED AND DOCUMENTED BY A GEOTECHNICAL ENGINEER OR TECHNICIAN. COR SHALL BE NOTIFIED IF UNSUITABLE SOILS ARE IDENTIFIED DURING THE COURSE OF THIS EFFORT.

8 TYPICAL CONCRETE PAVEMENT
SCALE: NOT TO SCALE





CONSTRUCTION SPECIFICATIONS:

1. BIOROLLS MUST HAVE FULL CONTACT WITH THE SOIL SURFACE.
2. EXTEND THE BIOROLLS PAST TO THE FLOWLINE OF THE CHANNEL. EXTEND BIOROLLS TO AN ELEVATION TWO FEET HIGHER THAN THE FLOWLINE OF THE CHANNEL.
3. IF USED IN AREAS OF CONCENTRATED FLOWS, BIOROLLS SHALL BE PLACED PERPENDICULAR TO THE FLOW AND PARALLEL TO THE SLOPE CONTOURS.

MAINTENANCE:

1. BIOROLLS SHOULD BE INSPECTED FOR SEDIMENT ACCUMULATION AFTER EACH RUNOFF PRODUCING STORM EVENT. SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE HALF OF THE ORIGINAL HEIGHT OF THE MEASURE.
2. REGULAR INSPECTIONS SHALL BE MADE TO INSURE EROSION IS NOT PRESENT FROM FLOWS AROUND THE EDGES OF THE BIOROLLS. EROSION CAUSED BY HIGH FLOWS AROUND THE EDGES OF THE BIOROLLS SHOULD BE CORRECTED IMMEDIATELY.
3. REGULAR INSPECTIONS SHALL BE MADE TO IDENTIFY ANY BIOROLLS THAT HAVE BEEN DAMAGED BY HIGH FLOWS. DAMAGED BIOROLLS SHALL BE REPLACED IMMEDIATELY.

9 TYPICAL BIOROLL INSTALLATION
SCALE: NOT TO SCALE

No	REVISION	DATE

CONSULTANT
SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle Omaha, NE 68134
Phone: 402.991.5520 www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: IAN J. WEBER, PE
SIGNATURE: [illegible]
DATE MARCH 28, 2022 LICENSE # 55502

APPROVED: DATE:	APPROVED: PROJECT COR DATE:	APPROVED: PATIENT SAFETY DATE:	APPROVED: EMS MANAGER DATE:	APPROVED: DIRECTOR FMS DATE:
APPROVED: DATE:	APPROVED: SERVICE LINE DIRECTOR DATE:	APPROVED: SAFETY MANAGER DATE:	APPROVED: M/O MANAGER DATE:	APPROVED: ASSOCIATE DIRECTOR DATE:
APPROVED: DATE:	APPROVED: GEMS COORDINATOR DATE:	APPROVED: CHIEF OF POLICE DATE:	APPROVED: PROJECTS SECTION MANAGER DATE:	APPROVED: NURSE EXECUTIVE DATE:
APPROVED: DATE:	APPROVED: INFECTION CONTROL NURSE DATE:	APPROVED: OIT MANAGER DATE:	APPROVED: ASSISTANT CHIEF ENGINEER DATE:	APPROVED: CHIEF OF STAFF DATE:

DRAWING TITLE: CIVIL DETAILS
APPROVED: MEDICAL CENTER DIRECTOR DATE:

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
BUILDING No: CAMPUS | CHECKED BY: IJW | DRAWN: CDN
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

DATE: MARCH 28, 2022
PLOT SCALE
PROJECT NO. 656-21-235
DRAWING NO. CJ-502
DWG. OF

VA
U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

ROOM FINISH SCHEDULE - TELECOM ROOMS - TYP

	NAME		FLOOR FINISH	BASE FINISH	WALL FINISH				CEILING FINISH	REMARKS
					FRONT	BACK	SIDE	SIDE		
	TELECOM ROOMS		SD-1	RB-1	P-1	FP-1	FP-1	FP-1	EXPOSED	FRONT WALL IS WALL WITH DOOR. ALL PLYWOOD SURFACES TO BE FINISHED WITH FP-1. ALL OTHER SURFACES TO BE P-1.

EXISTING STATIC DISSIPATIVE FLOOR FINISH WILL REMAIN FOR THE FOLLOWING TELECOM ROOMS. CONTRACTOR SHALL PROTECT EXISTING FLOOR FINISHES WHILE PERFORMING EHRM UPGRADES.

BUILDING		NUMBER								
B2		**001A**								
B3		**205E**								
B4		**222A**								
B8		**116**								
B11		**C00A**								
B14		**101A**								
B29		**015**								
B48		**221**								
B49		**001**								
B96		**104B**								

ROOM FINISH SCHEDULE

FOR CLARITY ALL FINISHES ARE ORENTED TO PLAN NORTH, WITH NORTH BEING UP

BUILDING	NAME	NUMBER	FLOOR FINISH	BASE FINISH	WALL FINISH				CEILING FINISH	REMARKS
					NORTH	EAST	SOUTH	WEST		
B1	LOCKER	005E	VCT-1	RB-1	P-2	P-2	P-2	P-2	ACT-1	
B4	REDUNDANT DEMARC	052	SD-1	RB-1	P-1	FP-1	FP-1	FP-1	EXPOSED	
B4	REDUNTANT DATA...	053	SD-1	RB-1	P-1	FP-1	FP-1	FP-1	EXPOSED	
B9	DATA	16	SD-1	FP-1	P-1	FP-1	FP-1	FP-1	EXPOSED	
B48	OFFICE	122A	VCT-1	RB-1	P-2	P-2	P-2	P-2	ACT-1	
	MED ROOM	122B	VCT-1	RB-1	P-2	P-2	P-2	P-2	ACT-1	
	CLEAN (SPD)	124B	EXIST	RB-1	SC-1	SC-1	SC-1	SC-1	EXIST	

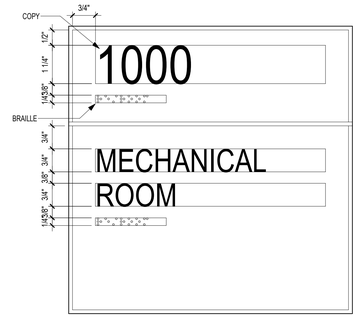
MATERIALS SCHEDULE

SPEC NO.	CODE	MATERIAL	MANUFACTURER	STYLE	COLOR	SIZE	REMARKS
07 14 16		COLD FLUID APPLIED WATERPROOFING	DRYLOCK	EXTREME CONCRETE & MASONRY WATERPROOFER	BRIGHT WHITE		
09 30 13	CT-1	CERAMIC WALL TILE	DALTILE	COLOR WHEEL CLASSIC	ARCTIC WHITE 0190	4 1/4" X 4 1/4"	
09 51 00	ACT-1	ACOUSTIC CEILING TILE	USG	RADAR BASIC ACOUSTICAL PANELS 2110	WHITE	24" X 24"	GRID: DONN BRAND DX, FLAT WHITE 050
09 65 13	RB-1	RESILIENT BASE	VPI BRAND	VINYL BASE	97 FAWN	4"	
09 65 19	VCT-1	VINYL COMPOSITION TILE	ARMSTRONG	STANDARD EXCELON IMPERIAL TEXTURE	FORTRESS WHITE 51839	12" X 12" X 1/8"	
	SD-1	STATIC CONTROL VINYL TILE	FLEXCO	DELANE ESD VINYL			
09 91 00	FP-1	PAINT	FLAME CONTROL	FIRE RETARDANT PAINT SYSTEM	WHITE		1 UNDERCOAT FLAME CONTROL 20-20 INTUMESCENT PAINT, 1 TOPCOAT FLAME CONTROL 400
	P-1	PAINT	BENJAMIN MOORE	ECO SPEC	MATCH SHERWIN WILLAMS 7005 PURE WHITE		
	P-2	PAINT	BENJAMIN MOORE	ECO SPEC	GRAY MIST 932		
	P-3	PAINT	BENJAMIN MOORE	ULTRA SPEC HP D.T.M ACRYLIC LOW LUSTRE HP25	BRONZE TONE 64		

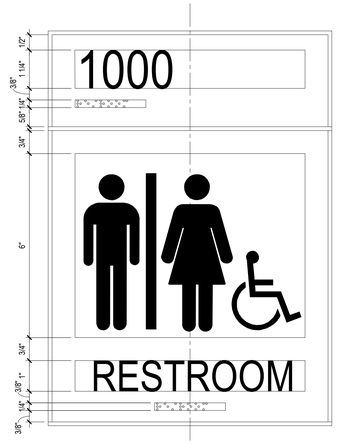
SIGN MESSAGE SCHEDULE

BUILDING	ROOM #	SIGN MESSAGE	SIGN TYPE	REMARKS
	005E	LOCKER	IN-04.01	
	005F	--	IN-03.01	
	A05C	--	IN-03.01	
	A101	--	IN-03.01	
B1	A200	--	IN-03.01	
B2	001A	--	IN-03.01	
	052	--	IN-03.01	
	053	--	IN-03.01	
	123C	--	IN-03.01	
B4	222A	--	IN-03.01	
B5	116	--	IN-03.01	
B7	102A	--	IN-03.01	
B8	116	--	IN-03.01	
B9	100B	--	IN-03.01	
B10	012B	--	IN-03.01	
B11	C00A	--	IN-03.01	
B14	101A	--	00	REINSTALL SALVAGED ROOM ID...
	066A	--	IN-03.01	
B28	003A	--	IN-03.01	
	122A	OFFICE	IN-04.01	
	122B	MED ROOM	IN-04.01	
B48	123	--	IN-03.01	
B49	001	--	IN-03.01	
B50	020	--	IN-03.01	
B51	001	--	IN-03.01	
B95	11	--	IN-03.01	
B96	104B	--	IN-03.01	
B109	101	--	IN-03.01	
B116	111	--	IN-03.01	
B118	005	--	IN-03.01	

1 IN-03.01 ROOM NUMBER ID
6" = 1'-0"



2 IN-04.01 PRIMARY ROOM ID
6" = 1'-0"



3 IN-09.01 RESTROOM ID
6" = 1'-0"

No	REVISION	DATE

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

Name:

Typed or Printed Name: Tom Oleiak

Date: 03/30/2022 License Number: MN# 18157

DRAWING TITLE
INTERIOR SCHEDULES & SIGNAGE DETAILS

PROJECT TITLE
EHRM INFRASTRUCTURE UPGRADES

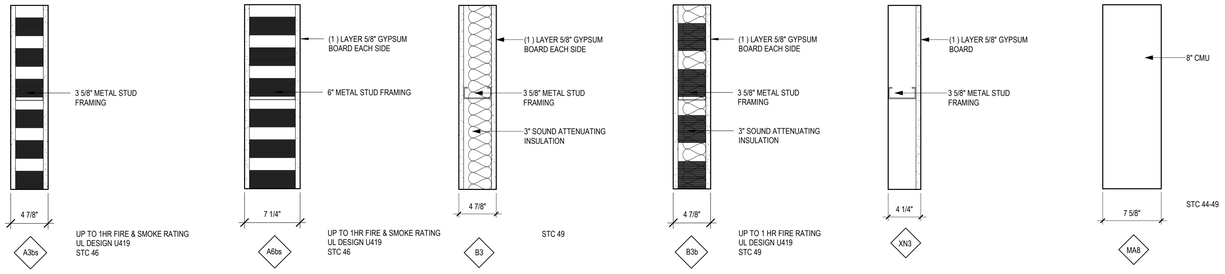
DATE: 03/30/2022
PLOT SCALE:
PROJECT NO: 656-21-235

BUILDING No	CHECKED BY	DRAWN	DRAWING NO
GENERAL	EM	MP	AS600

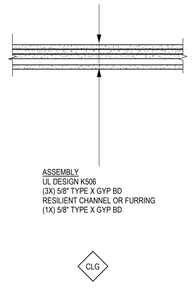
LOCATION: VA MEDICAL CENTER, ST CLOUD, MN 56303
FULLY SPRINKLERED
DWG OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

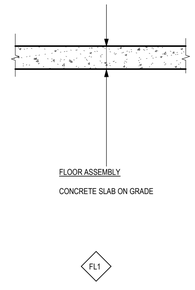
4/21/2022 4:01:09 PM
C:\Users\Public\Documents\Revit Projects\16305-0-Campus-R21_EMarkKort.rvt



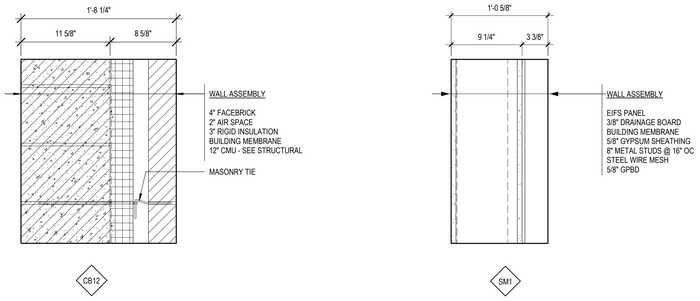
TYPES - PARTITION



TYPE - RATED CEILING

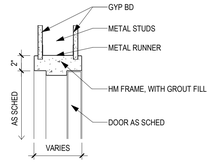


TYPES - FLOOR



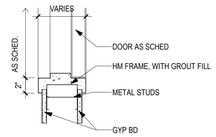
TYPES - WALL

NOTE:
1. FOR PARTITION THICKNESS SEE PLANS AND PARTITION TYPES
2. SEE AS602 FOR FRAMING INFORMATION.



2 HM DOOR FRAME IN METAL STUD PARTITION - HEAD
1 1/2" = 1'-0"

NOTE:
1. FOR PARTITION THICKNESS SEE PLANS AND PARTITION TYPES
2. SEE AS602 FOR FRAMING INFORMATION.



3 HM DOOR FRAME IN METAL STUD PARTITION - JAMB
1 1/2" = 1'-0"

PARTITION GENERAL NOTES:

1. SEE LIFE SAFETY PLANS FOR REQUIRED PARTITION FIRE RATINGS.
2. GYPSUM BOARD AND METAL STUDS USED IN FIRE RATED SEPARATION PARTITIONS SHALL EXTEND FROM FLOOR TO UNDERSIDE OF STRUCTURE, UNLESS NOTED OTHERWISE.
3. WHERE SMOKE PARTITIONS ARE REQUIRED BY LIFE SAFETY PLANS, THE FOLLOWING APPLIES TO ALL NON-ACOUSTICAL TYPE SMOKE PARTITIONS: EXTEND GYPSUM BOARD ON CORRIDOR SIDE TO STRUCTURE ABOVE. SEAL TOP AND BOTTOM OF PARTITION AND ALL PENETRATIONS THROUGH PARTITION ON CORRIDOR SIDE WITH A SMOKE SEALANT HAVING A MINIMUM WARM SMOKE TEMPERATURE OF 400 DEGREES FAHRENHEIT. ALL SEALS MUST HAVE PRE-APPROVAL OF CODE OFFICIAL.
4. CONTRACTORS TO VERIFY CONDITIONS ABOVE CEILING AT EXISTING PARTITIONS IDENTIFIED WITH FIRE/SMOKE PARTITION SYMBOLS. REPAIR CONDITIONS THAT DO NOT MEET REQUIREMENTS OF THE INDICATED FIRE/SMOKE RATING SHOWN, SUCH AS BUT NOT LIMITED TO OPENINGS IN PARTITIONS, GAPS AROUND DUCTWORK, PIPES AND CONDUIT, MISSING SMOKE DAMPERS, ETC
5. DIMENSIONS TO METAL STUD PARTITION ARE MEASURED TO FINISH FACE OF PARTITION UNLESS NOTED OTHERWISE
6. THE DIMENSION SHOWING THE LOCATION OF A DOOR FRAME IN GYPSUM BOARD WALLS IS TO THE INSIDE OF THE DOOR FRAME (DOOR OPENING). PROVIDE 4" TYPICAL DIMENSION IF NO DIMENSION IS SHOWN.
7. SOUND ATTENUATING INSULATION MEANS GLASS FIBER OR MINERAL WOOL BATTS OR BLANKETS BEARING THE UL LABEL FOR FIRE RESISTANCE. VERIFY TYPE AND DENSITY (PCF) WITH FIRE TEST NUMBER SHOWN ON PARTITION TYPE.
8. FOR PARTITION HEIGHTS SEE PARTITION TAG LEGEND AND TAG SUBSCRIPTS ON PLANS.
9. ALL FURRING TO BE PARTITION TYPE XP3, ALL PARTITIONS ARE TO BE PARTITION TYPE B3, UNLESS NOTED OTHERWISE.
10. FOR PARTITION TYPES WITH GYPSUM BOARD ON ONE SIDE ONLY, INSTALL GYPSUM BOARD ON ROOM SIDE, UNLESS NOTED OR DETAILED OTHERWISE. FOR SHAFTWALL PARTITION TYPES, INSTALL LINER PANEL ON NON-ACCESSIBLE SIDE, UNLESS NOTED OR DETAILED OTHERWISE.
11. PROVIDE 1/2" DEFLECTION SPACE AT THE TOP OF STUDS AT ALL PARTITIONS EXTENDING TO STRUCTURE, UNLESS NOTED OTHERWISE.
12. WHEN GYPSUM BOARD PARTITIONS ARE LOCATED BELOW STRUCTURE THAT HAS A VERTICAL DEFLECTION MOVEMENT MORE THAN 1/2", PROVIDE PARTITION HEADS WITH VERTICAL MOVEMENT CAPABILITY TO MATCH THAT DEGREE OF MOVEMENT. MAINTAIN THE REQUIRED FIRE RATING OF FIRE RATED PARTITIONS FROM FLOOR TO STRUCTURE ABOVE WITH FIRE TESTED HEAD CONSTRUCTION.
13. WHEN PARTITION FRAMING RUNS HIGHER THAN 12'-0" ABOVE FINISH FLOOR, BRACE PARTITION BACK TO STRUCTURE ABOVE WITH METAL STUDS EVERY 4'-0" ON CENTER MINIMUM.
14. BULKHEAD FRAMING SHALL EXTEND TO UNDERSIDE OF STRUCTURE WITH DIAGONAL STUD FRAMING BRACES AT 4'-0" ON CENTER (2 BRACES MINIMUM) WITH GYPSUM BOARD EXTENDING 6" ABOVE CEILING MINIMUM, UNLESS NOTED OTHERWISE.
15. GENERAL CONTRACTOR SHALL PROVIDE AND COORDINATE ALL IN-WALL BLOCKING FOR WALL MOUNTED CASEWORK AND EQUIPMENT SUPPLIED BY THIS CONTRACT, OWNER FURNISHED OR BY VENDORS. CONTRACTORS TO PROVIDE SHEET METAL BLOCKING FOR WALL MOUNTED EQUIPMENT, CASEWORK, DOOR STOPS, ACCESSORIES, ETC, UNLESS NOTED OTHERWISE.
16. IN WET AREAS SUCH AS BUT NOT LIMITED TO SHOWER, TUB, GLASS WASHING ROOMS, SOILED UTILITY ROOMS, JANITOR CLOSETS, COMMERCIAL FOOD PROCESSING ROOMS, ETC, USE TILE BACKER BOARD BEHIND THE CERAMIC TILE AND EXTEND TO 2'-0" BEYOND ALL SIDES OF THE PLUMBING FIXTURE. IN DOUBLE LAYER WALLS WHERE THE TILE BACKER BOARD IS INSTALLED OVER A BASE LAYER OF GYPSUM BOARD, APPLY A WATER BARRIER (BUILDING WRAP) NOT A VAPOR RETARDER, OVER THE BASE LAYER OF GYPSUM BOARD. IN HIGH HUMIDITY AREAS SUCH AS, BUT NOT LIMITED TOO, SAUNAS, STEAM ROOMS AND SWIMMING POOLS, WHERE WALLS ARE EXPOSED TO CONSTANT MOISTURE, USE TILE BACKER BOARD BEHIND CERAMIC TILE.
17. IN WET AREAS SUCH AS SOILED UTILITY ROOMS, JANITOR CLOSETS, ETC, USE 5/8" WATER RESISTANT GYPSUM BOARD OR 5/8" FR WATER RESISTANT GYPSUM BOARD.
18. FOR ALL REMODELING PROJECTS, ALL PARTITIONS NOTED AT INFILLS WITHIN, OR EXTENSIONS ONTO EXISTING PARTITIONS, ARE NOTED AS SUCH FOR INTENT ONLY. ALL EXPOSED PARTITION FACES ARE TO ALIGN.

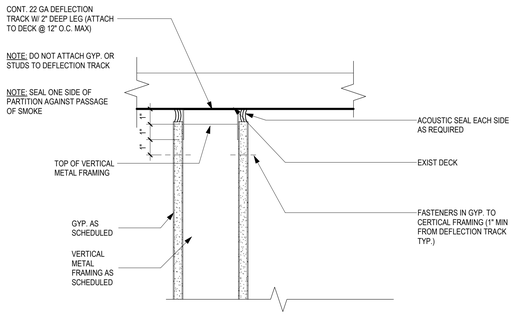
LEAK PREVENTION BARRIER SCHEDULE

BUILDING NO.	ROOM NO.	ROOM NAME	LEAK PREVENTION BARRIER WATERPROOFING	OVERHEAD LEAK DIVERTER AND DRAIN PIPING
1	005F	TELECOM ROOM	MWP INT: NORTH	
2	001A	TELECOM ROOM	MWP INT: WEST	YES
3	205E	TELECOM ROOM	MWP INT: WEST	
4	123C	TELECOM ROOM	MASONRY INT: WEST	
7	102A	TELECOM ROOM	MASONRY INT: SOUTH. MASONRY EXT: NORTH & EAST	YES
8	116	TELECOM ROOM	MWP INT: EAST	
10	012B	TELECOM ROOM	MWP INT: SOUTHEAST	YES
28	066A	TELECOM ROOM	MWP INT: NORTH	
48	221	TELECOM ROOM	MWP INT: NORTH	
49	001	TELECOM ROOM	MWP INT: NORTH	
51	001	TELECOM ROOM	MWP INT: EAST	
116	111	TELECOM ROOM		

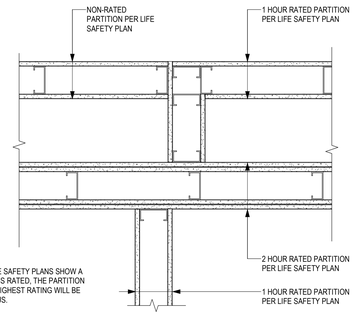
SEE GENERAL NOTES SHEET FOR DETAIL. MWP = MEMBRANE WATERPROOFING. MASONRY = FLUID-APPLIED WATERPROOFING. INT = INTERIOR. EXT = EXTERIOR

1 LEAK PREVENTION BARRIER
3" = 1'-0"

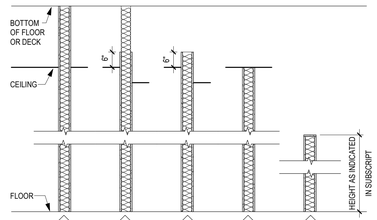
0 2" 4" 8"



GUIDELINE - NON-RATED OR SMOKE RESISTANT



GUIDELINE - RATED WALL INTERSECTIONS



GENERAL NOTES:
1. FOR PARTITIONS WITH UNEQUAL LAYERS OF GYPSUM BOARD ON EACH SIDE, THE SIDE OF THE PARTITION WITH THE TAG INDICATES WHERE THE EXTRA LAYER(S) OF GYPSUM BOARD ARE TO BE INSTALLED. REFER TO PARTITION TYPES FOR MORE INFORMATION
2. DIMENSIONS TO METAL STUD PARTITIONS ARE MEASURED TO FINISH FACE UNLESS NOTED OTHERWISE
3. AT INFILL WITHIN OR EXTENSIONS ONTO EXISTING PARTITIONS, THE PARTITION TAG NOTED IS FOR INTENT ONLY. FINISHED PARTITION FACES ARE TO ALIGN WITH ADJACENT EXISTING PARTITION FACES
4. SUBSCRIPTS MAY BE USED WITH ANY PARTITION TYPE

No	REVISION	DATE

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.
Name:
Typed or Printed Name: Tom Olesak
Date: 03/30/2022 License Number: MN# 18157

DRAWING TITLE: BUILDING ELEMENT TYPES AND DETAILS

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
DATE: 03/30/2022
PLOT SCALE:
PROJECT NO: 656-21-235
BUILDING NO: GENERAL
CHECKED BY: EM
DRAWN: EM, BW
DRAWING NO: AS601
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303
FULLY SPRINKLERED
DWG. OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

4/21/2022 4:01:14 PM
C:\Users\Public\Documents\Revit Projects\16305-0-Campus-R21_EMlankfort.rvt

OPENING SCHEDULE

VA Building Number	LEVEL	ASSOCIATED ROOMS		OPENING			PANEL INFORMATION			FRAME INFORMATION		HDW GROUP	FIRE LABEL (MIN)	GASKET	ELECTRICAL	S LABEL	COMMENTS
		FROM ROOM NAME	TO ROOM NAME	NUMBER	WIDTH	HEIGHT	PANEL TYPE	2ND PANEL TYPE	PANEL GLAZING	FRAME TYPE	FRAME GLAZING						
1	BASEMENT	CORRIDOR	LOCKER	005E	3'-0"	7'-0"	WD-F		NONE	HMS-1	NONE	HW-5	-	-	-	-	LOCKER ROOM DOOR
1	BASEMENT		TELECOM ROOM	005F	3'-0"	7'-0"	WD-F		NONE	HMM-1	NONE	HW-3.2B	45	Y	Y	Y	
1	BASEMENT	MECH	TELECOM ROOM	A05C	3'-0"	7'-0"	HM-F		NONE	HMS-1	NONE	HW-3.2B	45	Y	Y	Y	
1	SECOND FLOOR		TELECOM ROOM	A200	3'-0"	7'-0"	WD-F		NONE	HMM-1	NONE	HW-3.2B	45	Y	Y	Y	
4	BASEMENT		REDUNDANT DEMARC	052	3'-0"	7'-0"	HM-F		NONE	HMS-1	NONE	HW-3.2A.1	45	Y	Y	Y	
4	BASEMENT		REDUNDANT DATA CENTER UPS	053	6'-0"	7'-0"	HM-F	HM-F	NONE	HMS-1	NONE	HW-11.2	45	Y	Y	Y	
4	FIRST FLOOR		TELECOM ROOM	123C	3'-0"	7'-0"	WD-F		NONE	HMS-1	NONE	HW-3.2B	45	Y	Y	Y	
5	FIRST FLOOR	EXIST RM	TELECOM ROOM	116	3'-0"	7'-0"	HM-F		NONE	HMM-1	NONE	HW-3.2B	45	Y	Y	Y	
7	FIRST FLOOR		TELECOM ROOM	102A	3'-0"	7'-0"	HM-FS		NONE	HMM-1S	NONE	HW-3.2	45	Y	Y	Y	
9	FIRST FLOOR	LOBBY	TELECOM ROOM	100B	3'-0"	7'-0"	WD-F		NONE	HMS-1	NONE	HW-3.2B	45	Y	Y	Y	
28	BASEMENT	STAIR HALL	TELECOM ROOM	003A	3'-0"	7'-0"	WD-F		NONE	HMS-1	NONE	HW-3.2B	45	Y	Y	Y	
28	BASEMENT	STAIR HALL	TELECOM ROOM	066A	3'-0"	7'-0"	WD-F		NONE	HMS-1	NONE	HW-3.2B	45	Y	Y	Y	
48	FIRST FLOOR	OFFICE	MED ROOM	122B	3'-0"	7'-0"	WD-F		NONE	HMS-1	NONE	HW-SH-3D.1	-	Y	Y	Y	
50	BASEMENT		TELECOM ROOM	020	3'-0"	7'-0"	WD-F		NONE	HMS-1	NONE	HW-3.2B	45	Y	Y	Y	
51	BASEMENT		TELECOM ROOM	001	3'-6"	7'-0"	WD-F		NONE	HMS-1	NONE	HW-3.2B	45	Y	Y	Y	

DOOR PANEL NAMING

NOTE: ACTUAL PANELS MAY VARY FROM DESCRIPTIONS BELOW. REFER TO PANEL TYPE ELEVATIONS

HM-GF

PANEL PREFIXES

AL-	ALUMINUM
CG-	COILING GRILLE
CS-	COILING SLATS
HM-	HOLLOW METAL
OS-	OVERHEAD SECTIONAL
RD3-	REVOLVING DOOR 3 PANEL
RD4-	REVOLVING DOOR 4 PANEL
VL-	VERTICAL LIFT
WD-	WOOD

PANEL SUFFIXES

AG	ALL GLASS
BF	BIFOLD
BFG	BIFOLD GLASS
D	DUTCH
DG	DUTCH GLASS
DS	DUTCH W/SHELF
F	FLUSH
G2	GLASS 2 LIGHT
G3	GLASS 3 LIGHT
GF	GLASS FULL
GH	GLASS HALF
LF	LOUVER FULL
LGH	LOUVER GLASS HALF
LH	LOUVER HALF
LNV	LOUVER NARROW VISION
NV	NARROW VISION
NV2	NARROW VISION 2 LIGHT
NV3	NARROW VISION 3 LIGHT
NVC	NARROW VISION CENTERED
RP2	RAISED PANEL 2 PANEL
RP4	RAISED PANEL 4 PANEL
RP6	RAISED PANEL 6 PANEL
RP8	RAISED PANEL 8 PANEL
V	VISION
W	WINDOWS (1 ROW)
WT	WINDOWS THROUGHOUT

DOOR FRAME NAMING

NOTE: ACTUAL FRAMES MAY VARY FROM DESCRIPTIONS BELOW. REFER TO FRAME TYPE ELEVATIONS

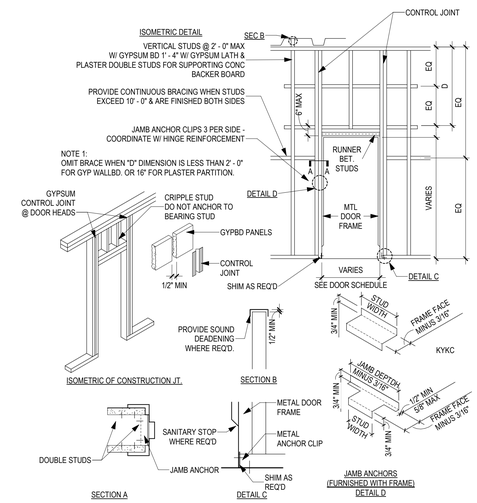
HMS-2

FRAME PREFIXES

AL-	ALUMINUM
AL-BL-	ALUMINUM BORROWED LIGHT
AL-SL-	ALUMINUM SLIDING
AL-R-	ALUMINUM REVOLVING
CW##	CURTAINWALL
HMM-	HOLLOW METAL MASONRY
HMM-BL-	HMM BORROWED LIGHT
HMM-DE-	HMM DOUBLE EGRESS
HMS-	HOLLOW METAL STUD
HMS-BL-	HMS BORROWED LIGHT
HMS-DE-	HMS DOUBLE EGRESS
OC-	OVERHEAD COILING
OS-	OVERHEAD SECTIONAL
VL-	VERTICAL LIFT
WD-	WOOD
WD-BL-LIGHT	WOOD BORROWED
WDP-	WOOD POCKET

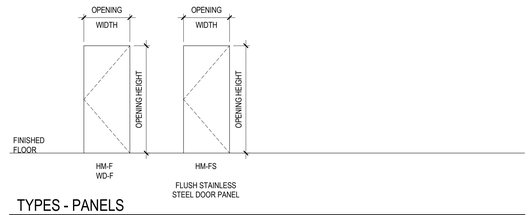
FRAME SUFFIXES

0	FRAMED-CASED OPENING
1	DOOR ONLY
2	SIDELIGHT(S) 1 SIDE
3	SIDELIGHT(S) 1 SIDE W/HORIZONTAL
4	SIDELIGHT(S) BOTH SIDES
5	SIDELIGHT(S) BOTH SIDES W/HORIZONTAL
6	DOOR W/TRANSOM
7	DOOR W/TRANSOM W/SIDELIGHT(S) 1 SIDE
8	TRANSOM W/SIDELIGHT(S) 1 SIDE W/HORIZONTAL
9	TRANSOM W/SIDELIGHT(S) BOTH SIDES
10	TRANSOM W/SIDELIGHT(S) BOTH SIDES W/HORIZONTAL
11	FULL WIDTH TRANSOM W/SIDELIGHT(S) 1 SIDE
1X1	1 LIGHT WIDE AND 1 LIGHT HIGH
2X2	2 LIGHTS WIDE AND 2 LIGHTS HIGH
3X3	3 LIGHTS WIDE AND 3 LIGHTS HIGH (NOTE: OTHER COMBINATIONS POSSIBLE)
OX	FIXED PANEL, ACTIVE PANEL
OXO	FIXED PANEL, ACTIVE PANEL, FIXED PANEL
OXX	FIXED, ACTIVE, ACTIVE
OXXO	FIXED, ACTIVE, ACTIVE, FIXED
OXXXXO	FIXED, ACTIVE, ACTIVE, ACTIVE, ACTIVE, FIXED

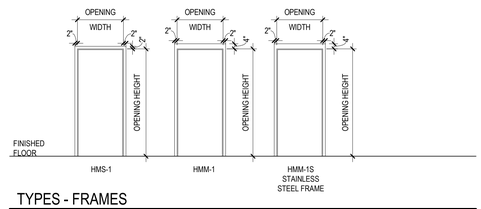


TYPICAL PARTITION CONTROL JOINT FRAMING AT DOORS

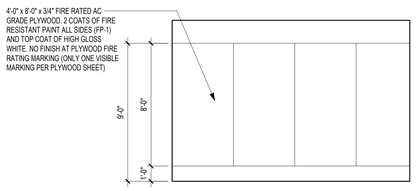
1 1/2" = 1'-0"



TYPES - PANELS

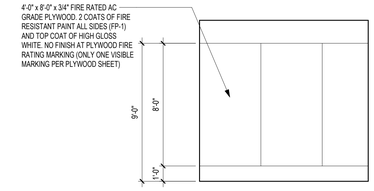


TYPES - FRAMES



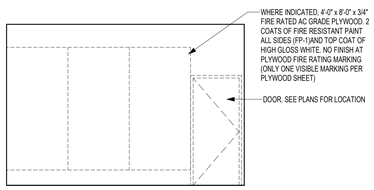
2 INTERIOR ELEVATION - TYPICAL TELECOM ROOM - BACK

1/4" = 1'-0"



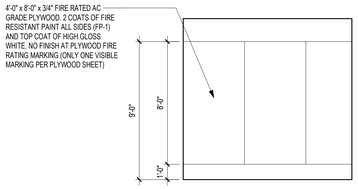
3 INTERIOR ELEVATION - TYPICAL TELECOM ROOM - SIDE 1

1/4" = 1'-0"



5 INTERIOR ELEVATION - TYPICAL TELECOM ROOM - FRONT

1/4" = 1'-0"



4 INTERIOR ELEVATION - TYPICAL TELECOM ROOM - SIDE 2

1/4" = 1'-0"

No	REVISION	DATE

CONSULTANT

SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

Name:

Typed or Printed Name: Tom Olesak

Date: 03/30/2022 License Number: MN# 18157

DRAWING TITLE: **DOOR SCHEDULE AND ELEVATIONS**

PROJECT TITLE: **EHRM INFRASTRUCTURE UPGRADES**

DATE: 03/30/2022
PLOT SCALE:
PROJECT NO: 656-21-235
BUILDING No: GENERAL
CHECKED BY: EM
DRAWN: EM, BW
DRAWING NO: AS602
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303
FULLY SPRINKLERED
DWG OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

4/21/2022 4:01:19 PM
C:\Users\Public\Documents\Revit Projects\16305-0-Campus-R21_EMarkfort.rvt

ST CLOUD EHRM INFRASTRUCTURE UPGRADES
ST. CLOUD, MN

DRAWING SYMBOLS

X FOUNDATION PLAN XXXXX
- DRAWING NUMBER
- DRAWING NAME
- SECTION OR DETAIL DESCRIPTION

1 NEW COLUMN NUMBER
A EXISTING COLUMN NUMBER

24 SECTION NUMBER
S400 SHEET NUMBER

24 SECTION NUMBER
S400 SHEET NUMBER

2 ELEVATION NUMBER
S400 SHEET NUMBER

REVISION AREA CLOUDED

▨	CONCRETE
▨	FACE BRICK
▨	CONCRETE BLOCK
☒	WOOD BLOCKING
▦	EARTH/ COMPACT FILL
▨	STEEL
—×—×—×—	WELDED WIRE FABRIC
S---------S	STEPPED FOOTING LOCATION
✳	JOIST BOT. CHORD EXTENSION
○	JOIST BOLTED CONNECTION PER OSHA REQUIREMENTS
S	BEAM SPLICE LOCATION
▶	BEAM MOMENT CONNECTION
◐	ELEVATION OR WORK POINT

ABBREVIATIONS

A	
A.B.	ANCHOR BOLT
ADD'L	ADDITIONAL
ALT	ALTERNATE
ARCH.	ARCHITECT(URAL)
B	
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
BOT.	BOTTOM
BRG.	BEARING
BTWN.	BLOCKING
C	
C.I.P.	CAST IN PLACE
C.J.	CONTROL JOINT
CL.	CENTER LINE
CLR.	CLEAR(ANCE)
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
COMP.	COMPOSITE
CONC.	CONCRETE
CONN.	CONNECTION
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
COORD.	COORDINATE
CTRD.	CENTERED
D	
DBL.	DOUBLE
DIA.	DIAMETER
DIAG.	DIAGONAL
D.L.	DEAD LOAD
DO.	DITTO
DTL.	DETAIL
DWG.	DRAWING
E	
E	EAST
EA.	EACH
ELEV.	ELEVATION
EMBED.	EMBEDMENT
EQ.	EQUAL
EXIST.	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
F	
FAB.	FABRICATE(OR)
FD.	FLOOR DRAIN
FNDN.	FOUNDATION
FTG.	FOOTING
G	
GA.	GAGE, GAUGE
GALV.	GALVANIZED
G.C.	GENERAL CONTRAT(OR)
H	
HORIZ.	HORIZONTAL
HK.	HOOK
H.S.	HEADED STUDS
H.S.S.	HOLLOW STRUCT. STEEL
I	
INFO.	INFORMATION
J	
JBE.	JOIST BEARING ELEVATION
JST.	JOIST
JT.	JOINT
K	
K	KIP
K.O.	KNOCK-OUT
K.S.I.	KIPS PER SQ. INCH
L	
L.L.	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
M	
MAS.	MASONRY
MATL.	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MEZZ.	MEZZANINE
MFG.	MANUFACTURE(R)
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
N	
N	NORTH
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE
O	
o.c.	ON CENTER(S)
O.H.	OVERHEAD
OPNG.	OPENING
OPP.	OPPOSITE
P	
P.C.	PRECAST CONCRETE
PERIM.	PERIMETER
PL.	PLATE
PLF	POUNDS PER LINEAR FOOT
PROJ.	PROJECT
PSF.	POUNDS PER SQ. FOOT
PSI.	POUNDS PER SQ. INCH
Q	
QTY.	QUANTITY
R	
RAD.	RADIUS
R.D.	ROOF DRAIN
REINF.	REINFORCE(D), (ING)
REQ'D.	REQUIRED
REV.	REVISION, REVISE(D)
S	
S	SOUTH
SCHED.	SCHEDULE
SIM.	SIMILAR
SJI	STEEL JOIST INSTITUTE
SPA.	SPACE(S)
SQ.	SQUARE
STD.	STANDARD
STL.	STEEL
STRUCT.	STRUCTURAL
T	
TBE.	TOP OF BEAM ELEVATION
TDE.	TOP OF DECK ELEVATION
TEMP.	TEMPORARY
TFE.	TOP OF FOOTING ELEVATION
TPE.	TOP OF PIER ELEVATION
TSE.	TOP OF SLAB ELEVATION
TYP.	TYPICAL
U	
U.N.O.	UNLESS NOTED OTHERWISE
V	
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
W	
W	WEST
w/	WITH
W.P.	WORK POINT
W.W.F.	WELDED WIRE FABRIC

SHEET INDEX

SHEET NUMBER	SHEET NAME
S100	TITLE SHEET
S101	STRUCTURAL NOTES
BUILDING 1	
1-S120	SECOND FLOOR PLAN
1-S130	COURTYARD ROOF PLAN
1-S400	ENLARGED PLANS
BUILDING 5	
5-S110	FIRST FLOOR PLANS
BUILDING 7	
7-S110	FIRST FLOOR PLANS
BUILDING 28	
28-S100	BASEMENT FLOOR PLAN
28-S110	FIRST FLOOR PLAN
28-S400	ENLARGED PLANS
DETAIL SHEETS	
S500	FOUNDATION DETAILS
S600	MASONRY DETAILS
S700	CONCRETE DETAILS
S800	LIGHT GAUGE DETAILS

3/28/2022 11:40:07 AM
C:\Users\jobrien\Documents\MN 1964 - SCVA Central_jobrienK6QEN.rvt

No	REVISION	DATE
1	Revision 1	Date 1

CONSULTANT
AST
7301 OHMS LANE SUITE #215 (952) 854-9302 TEL.
EDINA, MN 55439 ASTENG.COM
AST PROJECT NUMBER: MN 1964
SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle Omaha, NE 68134
Phone: 402.991.5520 www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # CA 1377

STAMP
REGISTRATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: Zachary D. Craig
SIGNATURE: [illegible]
DATE: 3/30/2022 LICENSE #:57219

DRAWING TITLE: TITLE SHEET
PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
DATE: 03/30/2022
PLOT SCALE
PROJECT NO. 656-21-235
BUILDING No: CAMPUS
CHECKED BY: ZDC
DRAWN: JRO
DRAWING NO. S100
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303
FULLY SPRINKLERED
DWG. OF

VA
U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

I. DESIGN DATA

A. BUILDING CODE

1. INTERNATIONAL BUILDING CODE 2018 EDITION WITH STATE AND LOCAL AMENDMENTS

B. DESIGN LOADS/DESIGN CRITERIA

1. WIND LOAD
   BASIC WIND SPEED (3-SECOND GUST) ----------Vult = 120 MPH, RISK CATEGORY II
   ----------Vasd = 93 MPH
   EXPOSURE ---------- C
   INTERNAL PRESSURE COEFFICIENTS, GC_{pi} ----------+/-0.18

2. ROOF LOADS
   LIVE LOAD (L.L.) ----------20 PSF**

3. ROOF SNOW LOAD
   GROUND SNOW LOAD, Pg ----------50 PSF
   FLAT-ROOF SNOW LOAD, Pf ----------46 PSF
   SLOPED ROOF SNOW LOAD Ps ----------1.0
   SNOW EXPOSURE FACTOR, Ce ----------1.0
   SNOW LOAD IMPORTANCE FACTOR, I ----------1.2
   THERMAL FACTOR, Ct ----------1.1

4. FLOOR LOADS
   DEAD LOAD (SUPERIMPOSED) ----------15 PSF

5. MECHANICAL EQUIPMENT ROOM
   LIVE LOAD (L.L.) ----------150 PSF

6. SEISMIC DESIGN DATA
   SEISMIC IMPORTANCE FACTOR ----------1.5
   RISK CATEGORY ----------IV
   MAPPED SPECTRAL RESPONSE ACCELERATIONS
   ----------0.060 S_S
   ----------0.021 S_1
   SPECTRAL RESPONSE COEFFICIENTS
   ----------0.064 S_{DS}
   ----------0.034 S_{D1}
   SITE CLASS ----------D
   SEISMIC DESIGN CATEGORY ----------A

7. DEFLECTION CRITERIA
   ALL MEMBERS SUPPORTING MASONRY ARE DESIGNED FOR A MAXIMUM DEAD LOAD PLUS LIVE LOAD DEFLECTION OF SPAN/600 OR 0.3 INCHES, WHICHEVER IS LESS.
   ALL PERIMETER MEMBERS ARE DESIGNED FOR A MAXIMUM LIVE LOAD DEFLECTION OF 0.5 INCHES UNLESS NOTED OTHERWISE ON PLANS.

   * REDUCED PER IBC, SEC. 1607.10
   ** PLUS SNOW ACCUMULATION AS REQUIRED BY IBC, CHAPTER 16, SECTION 1608.

C. ALTERNATE DESIGNS
   ALTERNATE STRUCTURAL SYSTEMS & DETAILS WILL ONLY BE CONSIDERED PROVIDED THEY ARE SUBMITTED WITH CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT. THE CALCULATIONS MUST SHOW THE EQUIVALENCY OF THE ALTERNATE. ACCEPTANCE OF THE ALTERNATE BY THE ENGINEER OF RECORD MUST BE IN WRITING.

D. FUTURE EXPANSION
   THIS PROJECT IS NOT DESIGNED FOR FUTURE EXPANSION.

E. GENERAL NOTES

1. IN ALL CASES WHERE A CONFLICT MAY OCCUR, SUCH AS BETWEEN REQUIREMENTS IN THE SPECIFICATION AND REQUIREMENTS ON THE DRAWINGS, THE STRUCTURAL ENGINEER OF RECORD SHALL BE IMMEDIATELY NOTIFIED IN WRITING AND THE STRUCTURAL ENGINEER OF RECORD SHALL INTERPRET THE INTENT OF THE CONTRACT DOCUMENT.

2. IN NO CASE, SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE STRUCTURAL DRAWINGS.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOBSITE AND TO CROSS CHECK ALL DETAILS AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH RELATED REQUIREMENTS ON THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND CIVIL DRAWINGS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.

4. IN EXISTING FACILITIES, ALL EXISTING CONDITIONS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY EXISTING CONDITIONS THAT DIFFER FROM THOSE SHOWN ON THE STRUCTURAL DRAWINGS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE STRUCTURAL ENGINEERING (IN WRITING).

F. REFERENCE STANDARDS – SEE IBC CHAPTER 35 FOR ALL REFERENCE STANDARDS

II. SPECIAL INSPECTIONS

A. THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE "SPECIAL INSPECTIONS" DURING CONSTRUCTION. THE "SPECIAL INSPECTIONS" - REQUIRED IN ACCORDANCE W/ THE IBC, SECTIONS 1704 AND 1705 - ARE SUMMARIZED BELOW.

1. SECTION 1705.2 STEEL CONSTRUCTION
2. SECTION 1705.3 CONCRETE CONSTRUCTION
3. SECTION1705.4 MASONRY CONSTRUCTION
4. SECTION 1705.10 FABRICATED ITEMS

SEE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR INFORMATION REGARDING TESTING AND INSPECTION OF FIELD APPLIED FIREPROOFING AND ASSEMBLIES.

SPECIAL INSPECTOR SHALL SUBMIT AN INSPECTION PLAN THAT SUMMARIZES ALL THE INSPECTIONS THAT WILL BE PROVIDED FOR THE PROJECT PRIOR TO START OF CONSTRUCTION.

III. STRUCTURAL TESTS

A. THE OWNER SHALL EMPLOY ONE OR MORE TESTING AGENCIES TO PROVIDE STRUCTURAL TESTING DURING CONSTRUCTION. THE MINIMUM STRUCTURAL TESTING - REQUIRED IN ACCORDANCE W/ THE IBC IS SUMMARIZED BELOW.

1. CONCRETE CYLINDER COMPRESSION TESTING
2. MASONRY HOLLOW UNIT BLOCK COMPRESSIONS TESTS (UNIT STRENGTH METHOD)
3. ANCHORAGE ** POST-INSTALLED EXPANSION OR ADHESIVE ANCHORS

** WHEN DIRECTED BY THE STRUCTURAL ENGINEER OF RECORD TO PROVIDE POST-INSTALLED ANCHORAGES THE FOLLOWING GUIDELINES SHALL BE FOLLOWED:

1. A REPRESENTATIVE OF THE ANCHOR MANUFACTURER OR PROJECT SPECIAL INSPECTOR SHALL BE ON SITE TO OVERSEE THE INSTALLATION OF THE FIRST FOUR ANCHORS FOR EACH TYPE OF ANCHOR INSTALLED. THIS MEASURE SHALL BE TAKEN FOR EACH INSTALLER OF THE ANCHORS. THIS SERVICE IS TYPICALLY PROVIDED FOR FREE BY THE LOCAL HILTI REPRESENTATIVE.
2. THE FIRST FOUR ANCHORS SHALL BE TENSION TESTED ONCE INSTALLATION IS COMPLETE FOR 100% OF THE SERVICE LEVEL LOAD CAPACITY AS SPECIFIED BY THE STRUCTURAL ENGINEER OF RECORD.

IV. REQUIRED STRUCTURAL SUBMITTALS

A. THE REVIEW OF THE FOLLOWING SUBMITTALS IS INCLUDED IN THE STRUCTURAL ENGINEER OF RECORD'S (SEOR) SCOPE OF SERVICES. THE GENERAL CONTRACTOR SHALL PROVIDE THE ITEMS BELOW TO THE SEOR FOR REVIEW PRIOR TO CONSTRUCTION.

B. SHOP DRAWINGS SHALL BE ORIGINALS AND SHALL NOT BE CREATED, IN WHOLE OR IN PART, FROM THE ELECTRONIC STRUCTURAL CAD FILES OR REPRODUCTIONS OF THE STRUCTURAL DRAWINGS. REPRODUCING THE STRUCTURAL DRAWINGS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER IS A VIOLATION OF COPYRIGHT LAWS AND CODE OF STANDARD PRACTICE. SUBMITTALS NOT ADHERING TO THESE PROVISIONS WILL BE REJECTED WITHOUT REVIEW.

C. SHOP DRAWING PACKAGES MUST BE COMPLETE WHEN SUBMITTED AND MUST INCLUDE CERTIFIED CALCULATIONS IF REQUIRED. INCOMPLETE SHOP DRAWING PACKAGES WILL BE REJECTED WITHOUT REVIEW.

D. PRIOR TO SUBMITTING SHOP DRAWINGS TO SEOR, THE SHOP DRAWINGS MUST BE REVIEWED AND COORDINATED BY THE GENERAL CONTRACTOR.

E. ELECTRONIC VERSION IN PDF FORMAT OF ALL REQUIRED SHOP DRAWINGS AND CALCULATIONS MUST BE SUBMITTED BY THE SUPPLIER AND A MINIMUM OF 10 BUSINESS DAYS MUST BE PROVIDED FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD.

F. SEE THE APPROPRIATE MATERIALS SECTION ON THIS PAGE FOR ADDITIONAL INFORMATION ON EACH SUBMITTAL.

REQUIRED STRUCTURAL SUBMITTALS		
CATEGORY	ITEM	COMMENTS
SITE WORK		
	FINAL SITE GRADING PLAN	REFER TO GEOTECHNICAL REPORT
CONCRETE		
	FOUNDATION REINFORCING	
	INT. AND EXT. SLAB REINFORCING	
	FOUNDATION WALL REINFORCING	
	MIX DESIGNS FOR ALL CLASSES OF CONCRETE	
	MILL CERTS. FOR REINFORCING	
	POST-TENSIONED SHOP DRAWINGS & CALCULATIONS	PE CERTIFICATION REQUIRED
MASONRY		
	STEEL REINFORCING	

REQUIRED STRUCTURAL SUBMITTALS		
CATEGORY	ITEM	COMMENTS
	GROUT MIX DESIGN	
	MILL CERTS. FOR REINFORCING	
STEEL		
	CURRENT AISC OR ICC SHOP CERTIFICATION	
	ANCHOR BOLTS	
	METAL ROOF/FLOOR DECK	
	OPEN WEB STEEL JOISTS/JOIST GIRDERS	
	STRUCTURAL STEEL	
	STRUCTURAL STEEL EMBEDS	
	MILL CERTS. FOR STRUCTURAL STEEL	

V. SITE WORK

A. GEOTECHNICAL REPORT

1. FOUNDATIONS ARE DESIGNED BASED ON THE ASSUMED DESIGN INFORMATION OUTLINED IN THIS SECTION. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER, LICENSED IN THE STATE OF THE PROJECT, TO VISIT THE SITE AND CERTIFY IN WRITING THAT THE FOLLOWING ASSUMED DESIGN INFORMATION IS CORRECT.

2. DESIGN NET SOIL BEARING CAPACITY IS AS FOLLOWS:
   SPREAD FOOTINGS----------2500 PSF
   STRIP FOOTINGS ----------2500 PSF

3. ALLOWABLE PASSIVE PRESSURE 200 PSF

4. COEFFICIENT OF FRICTION 0.30

5. MINIMUM DEPTH FROM EXTERIOR GRADE TO BOTTOM OF BUILDING PERIMETER FOOTINGS SHALL BE 42". ALL OPEN AIR FOUNDATIONS HAVE A MINIMUM OF 42" FROST PROTECTION.

6. RESTRAINED FOUNDATION WALLS ARE DESIGNED FOR AN AT-REST EQUIVALENT FLUID PRESSURE OF 60 PSF/FT. THE BACKFILL MATERIAL SHALL CONSIST OF A WELL-COMPACTED, FREE-DRAINING SAND. SEE THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION ON MATERIAL GRADATION AND BACKFILL OPERATIONS.

7. UNRESTRAINED RETAINING WALLS ARE DESIGNED FOR AN ACTIVE EQUIVALENT FLUID PRESSURE OF 45 PSF/FT. THE BACKFILL MATERIAL SHALL CONSIST OF A WELL-COMPACTED, FREE-DRAINING SAND. SEE THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION ON MATERIAL GRADATION AND BACKFILL OPERATIONS.

8. SLABS ON GRADE ARE DESIGNED USING A MODULUS OF SUBGRADE REACTION OF 50 PCI.

VI. CONCRETE

A. CONCRETE MATERIAL PROPERTIES

1. CONCRETE PROPERTIES — STRENGTH (f'c @ 28 DAYS)
   FOOTINGS, PIERS, GRADE BEAMS----------3000 PSI
   BASEMENT, STEM AND RETAINING WALLS ----------4000 PSI
   INTERIOR SLAB ON GRADE ----------4000 PSI
   CONC. OVER METAL DECK----------3500 PSI

2. CYLINDER TESTING SHALL BE COMPLETED PER ACI-318, SECTION 5.6. TESTING REPORTS SHALL BE PROVIDED TO THE OWNER AND ENGINEER OF RECORD AT A MINIMUM. PREFERABLE DELIVERY METHOD IS VIA E-MAIL.

3. ALL EXTERIOR CONCRETE, PERMANENTLY EXPOSED TO WEATHER (DOES NOT APPLY TO BURIED FOUNDATIONS), SHALL BE AIR ENTRAINED TO GIVE THE CONCRETE AN AIR CONTENT OF 6% +/- 1 % BY VOLUME. NATURALLY OCCURRING AIR CONTENT SHALL NOT EXCEED 3% FOR NON-AIR ENTRAINED MIXES.

4. CONCRETE MIX DESIGNS & SUPPORTIVE DATA MUST BE SUBMITTED FOR APPROVAL ACCORDING TO ACI-318 SECTION 5.3, AND ACI-301, SECTION 1.5.

B. REINFORCING MATERIAL PROPERTIES

1. REINFORCING PROPERTIES — fy KSI — ASTM
   ALL BARS UNLESS NOTED ----------60 A615
   TIES & STIRRUPS ----------60 A615
   WELDED WIRE FABRIC (SMOOTH) ----------65 A185
   WELDABLE REBAR ----------60 A706

2. EPOXY COATING FOR REINFORCING SHALL CONFORM TO ASTM A-775 AND ACI-301 SECTION 3.2.

3. WHERE EPOXY COATED REINFORCING IS REQUIRED, ALL CHAIRS, SLAB BOLSTERS, SUPPORT BARS, AND SPACERS SHALL BE PLASTIC COATED OR EPOXY COATED.

4. SOFT METRIC BAR SIZES VS. INCH-POUND (U.S. SYSTEM OF MEASURES) BAR SIZE TABLE. AST DRAWINGS REFLECT THE U.S. SYSTEM OF MEASURE.

INCH-POUND BAR SIZE DESIGNATION	SOFT METRIC BAR SIZE DESIGNATION
#3	#10
#4	#13
#5	#16
#6	#19
#7	#22
#8	#25

C. CAST IN PLACE CONCRETE

1. ALL CONCRETE SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH IBC CHAPTER 19 & ACI-318.

2. ALL REINFORCING SHALL BE DETAILED, FABRICATED & PLACED IN ACCORDANCE WITH CRSI "MANUAL OF STANDARD PRACTICE." THE STEEL REINFORCING SUPPLIER SHALL SUBMIT SHOP DRAWINGS FOR ALL ELEMENTS & MEMBERS WITH REINFORCING FURNISHED BY THE SUPPLIER.

3. PER ACI 26.6.2.2, ALL REINFORCEMENT SHALL BE PLACED AND SUPPORTED PRIOR TO PLACING CONCRETE. "WET STICKING" OF REBAR, INCLUDING DOWELS IS PROHIBITED.

4. SPACING OF CONSTRUCTION OR CONTROL JOINTS IN WALLS EXPOSED TO VIEW SHALL NOT EXCEED 40 FEET UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. CUT HALF OF THE HORIZONTAL REINFORCING AT CONTROL JOINTS.

5. SLEEVES EMBEDDED IN SLABS AND WALLS SHALL BE LOCATED CLEAR BETWEEN REINFORCING BARS AND SHALL MAINTAIN CLEAR SPACING EQUAL TO THE DIAMETER OF THE LARGEST SLEEVE IN ANY DIRECTION. SLEEVE GROUPS THAT DO NOT COMPLY WITH THE ABOVE REQUIREMENTS SHALL BE CONSIDERED AS AN OPENING AND REINFORCED PER NOTE #5 BELOW.

6. UNLESS NOTED OTHERWISE ON THE DRAWINGS: PROVIDE EXTRA REINFORCING ON ALL SIDES OF ALL MISCELLANEOUS WALL AND SLAB OPENINGS EQUAL TO ONE HALF THE INTERRUPTED REINFORCING BARS EACH SIDE BUT NOT LESS THAN 2 - #5 FOR EACH LAYER OF REINF0RCEMENT. EXTEND BARS CLASS 'B' LAP LENGTH BUT NOT LESS THAN 2 FEET BEYOND EDGE OF OPENINGS. PROVIDE 2 - #4x4'-0" DIAGONAL BARS AT EACH CORNER FOR EACH LAYER OF REINFORCEMENT.

7. PROVIDE A 3/4" CHAMFER ON ALL EXPOSED CORNERS OF CONCRETE.

8. PROVIDE ISOLATION JOINTS AROUND COLUMNS AT SLAB ON GRADE AREAS.

9. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

	MINIMUM COVER (IN)
CONCRETE CAST AGAINST & PERMANENTLY EXPOSED TO EARTH	3
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#6 THRU #18 BARS	2
#5 & SMALLER BARS	1 ½
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
SLABS & WALLS:	
#14 & #18 BARS	1 ½
#11 & SMALLER BARS	¾
BEAMS & COLUMNS:	
PRIMARY REINFORCEMENT, TIES & STIRRUPS	1 ½

VII. MASONRY

A. MASONRY MATERIAL PROPERTIES

1. MASONRY PROPERTIES — STRENGTH (PSI) — ASTM
   HOLLOW MASONRY UNITS----------3250 C90-N,I
   UNIT MASONRY (ASSY, f'm) ----------2500
   BRICK MASONRY (ASSY., f'm) ----------1400 C216-SW
   MORTAR TYPE S (LOAD BRG.BLOCK ----------1800 C270
   GROUT (MIN) ----------2500 C476
   REINFORCING BARS ----------60,000 A615
   COLD DRAWN STEEL WIRE ----------70,000 A82

B. GENERAL MASONRY

1. DESIGN IS BASED ON VALUES AS PUBLISHED IN THE "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES" (ACI-530 / ASCE-5 / TMS-402).

2. ALL HOLLOW UNIT BLOCK COMPRESSION TEST STRENGTHS REQUIRED TO ACHIEVE THE f'm STATED ABOVE SHALL BE ACCORDING TO "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI-530.1 / ASCE-6 / TMS-602, SECTION 1.4) BASED ON STRENGTHS BY THE UNIT STRENGTH METHOD.

3. DESIGN IS BASED ON ENGINEERED MASONRY / ALLOWABLE STRESS DESIGN.

4. SHOP DRAWINGS SHALL BE SUBMITTED SHOWING CMU REINFORCEMENT SIZES, SPACING, LOCATIONS, QUANTITIES AND BENDING AND CUTTING SCHEDULES

5. BRICK TIES SHALL BE A MIN. OF 3/16" DIA. ADJUSTABLE RECTANGULAR WALL TIES AS MANUFACTURED BY DUR-O-WALL OR APPROVED EQUAL. PROVIDE ONE TIE FOR EACH 2.00 SQUARE FEET OF WALL AREA. TIE SPACING RECOMMENDATION IS 16" ON CENTER VERTICALLY & 18" ON CENTER HORIZONTALLY.

VIII. STEEL

A. STEEL MATERIAL PROPERTIES

1. STEEL PROPERTIES — STRENGTH (PSI) — ASTM
   STRUCTURAL WIDE FLANGE SHAPES ----------50,000 A992
   OTHER STRUCT. SHAPES
   & PLATES, ETC----------36,000 A36
   HIGH STRENGTH BOLTS, UNO ----------74,000 F3125 Gr. A325/F1852 (TC)
   ANCHOR RODS ----------36,000 F1554
   WELDING ELECTRODES ----------E70XX A233
   DECK WELDING ELECTRODES ----------360XX A233
   STRUCTURAL TUBES ----------46,000 A500 GRADE B
   HEADED STUDS, TYPE B (Fu=65,000) ----------51,000 AWS D1.1 CHAPTER 7
   EXPANSION BOLTS SHALL BE HILTI KWIK BOLT 3 OR PRE-APPROVED EQUAL.

2. SEE ITEM B.10 BELOW FOR ADDITIONAL REQUIREMENTS FOR SEISMIC FORCE RESISTING SYSTEMS.

B. STRUCTURAL STEEL

1. STRUCTURAL STEEL DESIGN & CONSTRUCTION SHALL CONFORM TO IBC CHAPTER 22, AISC "LOAD & RESISTANCE FACTOR DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" & AISC "CODE OF STANDARD PRACTICE," APPLY U.N.O.

2. STRUCTURAL STEEL SUPPLIER SHALL SUBMIT SHOP DRAWINGS FOR ALL MATERIAL SUPPLIED. IN ADDITION, THE STRUCTURAL STEEL SUPPLIER SHALL SUBMIT DRAWINGS AND CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT FOR ALL STAIRS, LADDERS, RAILINGS, CAP PLATES, BEARING PLATES, BASE PLATES, STIFFENERS, SPLICES, CONNECTIONS AND ANY OTHER COMPONENTS DESIGNED BY THE SUPPLIER.

3. STRUCTURAL STEEL SUPPLIER SHALL FURNISH BOLTS FOR OSHA CONNECTIONS (SEE DRAWINGS FOR DETAILS). BOLT HOLES IN BEAM TOP FLANGE SHALL BE MAXIMUM 9/16" DIA. FOR "K" SERIES JOISTS AND 13/16" DIA. FOR "LH" SERIES JOISTS.

4. PROVIDE PROTECTIVE ASPHALTIC COATING OR EQUAL AROUND STRUCTURAL STEEL BELOW GRADE.

5. CAMBERS SHOWN ON THE DRAWINGS REFLECT THE IN-PLACE, ERECTED BEAM SELF-WEIGHT CONDITIONS. CAMBERS SHALL BE INCREASED ACCORDINGLY BY STRUCTURAL STEEL SUPPLIER TO ACCOUNT FOR LOSS OF CAMBER DUE TO CAMBERING PROCESS, TRANSPORTATION AND HANDLING. BEAMS WITH CAMBER SHALL COMPLY WITH A CAMBER TOLERANCE OF –0",+ ½". SINGLE POINT CAMBERING IS NOT ALLOWED.

6. WHEN TENSION CONTROLLED BOLTS (ASTM F1852 AND SIMILAR) ARE USED IN CONNECTIONS FOR COMPOSITE FLOOR BEAMS, BOLTS SHALL BE ERECTED TO A SNUG-TIGHT (PER AISC) CONDITION PRIOR TO PLACING CONCRETE ON THE METAL DECK. AFTER THE CONCRETE IS PLACED AND THE BEAMS AND GIRDERS HAVE DEFLECTED, TENSION CONTROL BOLTS MAY BE TORQUED TO FINAL INSTALLATION SPECIFICATIONS.

7. THIS STRUCTURE IS A NON-SELF SUPPORTING STEEL FRAME REQUIRING INTERACTION WITH OTHER ELEMENTS TO PROVIDE THE REQUIRED STABILITY. THE STEEL ERECTOR SHALL PROVIDE TEMPORARY BRACING UNTIL FINAL STABILITY IS PROVIDED. AS A MINIMUM, TEMPORARY BRACING SHALL BE PROVIDED AT EACH GRID IN BOTH DIRECTIONS.

8. BOLTED CONNECTIONS SHALL BE 3/4" DIA., A325 BEARING-TYPE WITH THREADS INCLUDED IN THE SHEAR PLANE. INSTALL BOLTS IN PROPERLY ALIGNED HOLES AND TIGHTEN TO A SNUG-TIGHT CONDITION AS DEFINED BY THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" U.N.O.

9. BOLTED CONNECTIONS DEFINED ON THE DRAWINGS AS SLIP-CRITICAL OR THAT CALL FOR SLIP-CRITICAL BOLTING SHALL USE DIRECT TENSION INDICATING DEVICES / WASHERS TO ENSURE PROPER PRETENSION. ASTM F1852 BOLTS ALONE ARE NOT ACCEPTABLE AT THESE LOCATIONS UNLESS USED IN CONJUNCTION WITH DIRECT TENSION INDICATORS.

10. ROOF BEAMS ARE DESIGNED IN ACCORDANCE WITH AISC LRFD SPECIFICATION, CONTINUOUS BEAM PLASTIC DESIGN, LATEST EDITION.

C. STEEL ROOF DECK

1. ALL STEEL DECK SHALL BE DESIGNED & CONSTRUCTED IN ACCORDANCE WITH IBC CHAPTER 22, SECTION 2210 - COLD FORMED STEEL AND THE STEEL DECK INSTITUTE SPECIFICATIONS AND RECOMMENDATIONS, U.N.O.

2. THE STEEL DECK SUPPLIER SHALL SUBMIT SHOP DRAWINGS FOR ALL ELEMENTS & MEMBERS FURNISHED BY THE DECK SUPPLIER. DECK SUPPLIER SHALL SUBMIT ICC REPORTS SHOWING ALLOWABLE DIAPHRAGM SHEAR VALUES.

3. PRE-APPROVED DECK MANUFACTURERS ARE NUCOR/VULCRAFT/VERCO, WHEELING, AND CAN-AM. OTHER METAL DECK MANUFACTURERS MAY BE APPROVED PROVIDING THAT THE DECK SPECIFICATIONS MEET OR EXCEED THE SPECIFICATIONS OF THE PRE-APPROVED MANUFACTURERS. METAL DECK SIZE, GAGE AND TYPE ARE INDICATED ON THE DRAWINGS.

4. ROOF DECK SHALL BE CONTINUOUS OVER THREE SPANS MINIMUM. YIELD STRESS SHALL BE 50,000 PSI MINIMUM. ERECT IN ACCORDANCE WITH THE REPORT TO MEET THE REQUIRED SHEAR SPECIFIED ON THE DRAWINGS. CONNECTION TO FRAMING MEMBERS SHALL NOT BE LESS THAN THAT SHOWN ON DRAWINGS.

5. MINIMUM REQUIREMENTS FOR ROOF DECK FASTENING SHALL BE 5/8"∅ PUDDLE WELDS USING THE WELD PATTERN SHOWN ON THE DRAWINGS AND #10 TEK SCREW SIDE-LAP FASTENERS PER FASTENING DETAILS SHOWN ON THE DRAWINGS OR PRE-APPROVED EQUAL.

3/28/2022 11:40:15 AM

C:\Users\jobrien\Documents\MN 1964 - SCVA Central_jobrienKGOEN.rvt

No	REVISION	DATE

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
7301 OHMS LANE, SUITE #210, EDINA, MN 55439, (952) 854-9302 TEL, ASTENG.COM
AST PROJECT NUMBER: MN 1964
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520, www.specialtedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # CA 1377

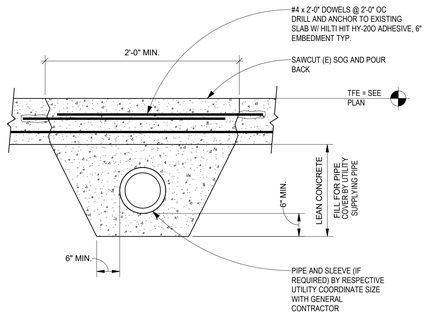
STAMP
REGISTRATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: Zachary D. Craig
SIGNATURE:
DATE: LICENSE #:57219

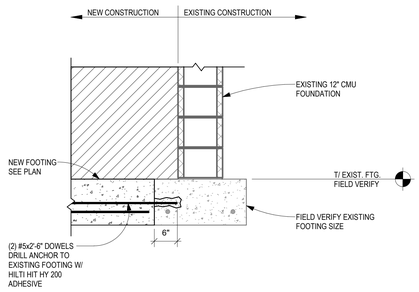
DRAWING TITLE: STRUCTURAL NOTES

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
DATE: 03/30/2022
PLOT SCALE:
PROJECT NO.: 656-21-235
BUILDING NO.: CAMPUS | ORIGINED BY: ZDC | DRAWN: JRO | DRAWING NO.: S101
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303
FULLY SPRINKLERED
DWG. OF

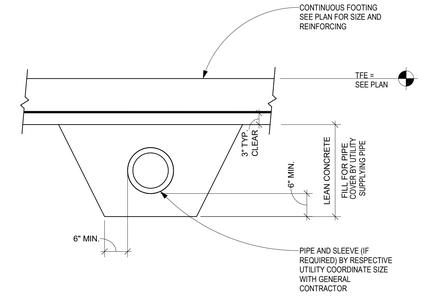
VA | U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



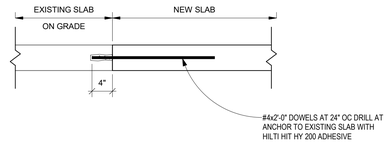
8 CONCRETE COVER FOR UTILITY PIPE
3/4" = 1'-0" (AST S1001a)



5 COLD CLIMATE STOOPS FOR CMU WALLS
3/4" = 1'-0" (AST S11021)

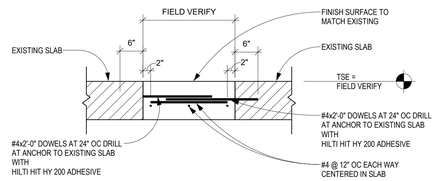


1 CONCRETE COVER FOR UTILITY PIPE
3/4" = 1'-0" (AST S1001a)

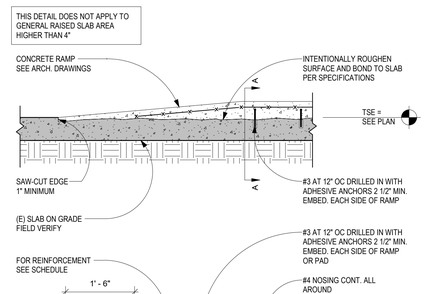


6 SECTION
1" = 1'-0" (AST S2049)

NOT USED



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

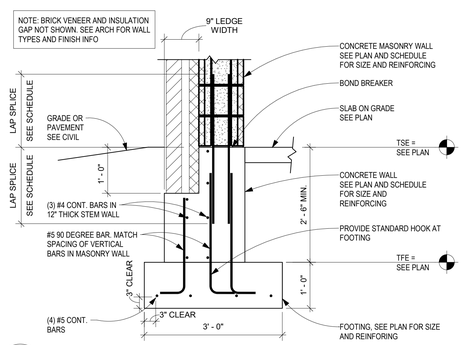


SECTION A-A

THICKNESS	REINFORCEMENT
≤ 3"	WWR 6x6 - W2.9xW2.9
≤ 4"	WWR 6x6 - W4.0xW4.0
≤ 6"	#3 AT 10" TOP EACH WAY
≤ 12"	#4 AT 12" TOP AND BOTTOM EACH WAY

7 TYPICAL HOUSE KEEPING PAD
3/4" = 1'-0"

3 SECTION
3/4" = 1'-0" (AST S1000b)



4 SECTION (SCREEN WALL)
3/4" = 1'-0" (AST S2036)

C:\Users\jobrien\Documents\MN 1964 - SCVA Central_jobrienK6QEN.rvt
3/28/2022 11:40:19 AM

No	REVISION	DATE

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
7301 OHMS LANE, SUITE #215, EDINA, MN 55439, (952) 854-9302 TEL., ASTENG.COM
AST PROJECT NUMBER: MN 1964
10360 Ellison Circle, Omaha, NE 68134, Phone: 402.991.5520, www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # CA 1377

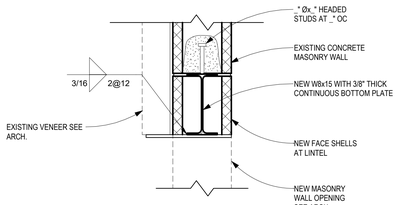
STAMP
REGISTRATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: Zachary D. Craig
SIGNATURE:
DATE: LICENSE #57219

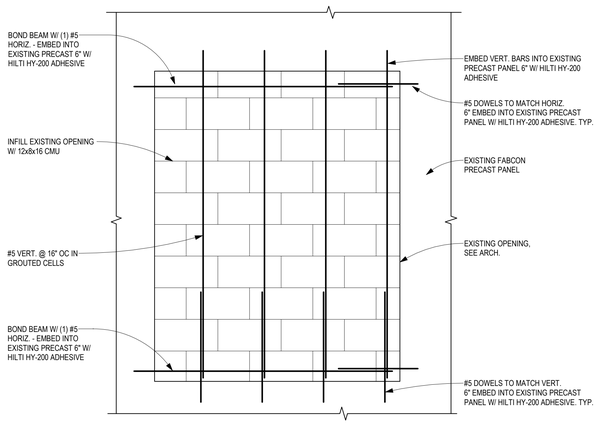
DRAWING TITLE: **FOUNDATION DETAILS**

PROJECT TITLE: **EHRM INFRASTRUCTURE UPGRADES**
DATE: 03/30/2022
PLOT SCALE
PROJECT NO.: 656-21-235
BUILDING NO.: CAMPUS | DESIGNED BY: ZDC | DRAWN: JRO | DRAWING NO.: S000
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303 | FULLY SPRINKLERED
DRG. OF

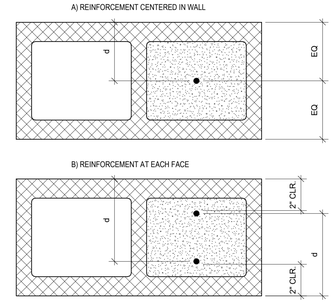
U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



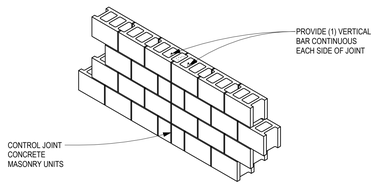
10 LINTEL BEAM OVER OPENING
1 1/2" = 1'-0" (AST S4038)



11 TYPICAL MASONRY WALL OPENING INFILL
1/2" = 1'-0" (\)

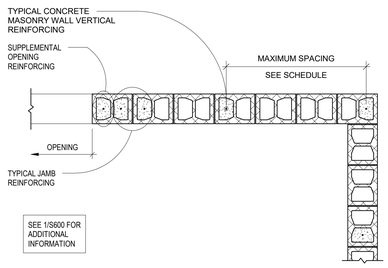


6 TYP. CMU WALL VERTICAL REINFORCEMENT PLACEMENT-SINGLE BLOCK
3" = 1'-0" (AST S4001a)

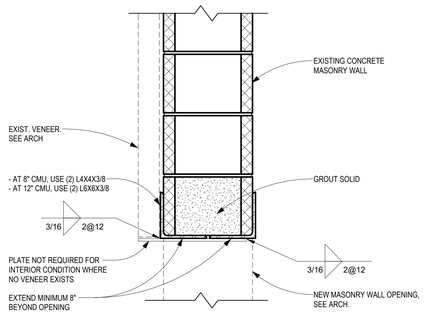


NOTE:
1. SEE GENERAL NOTES FOR CONCRETE MASONRY UNITS WALL CONTROL JOINT SPACING REQUIREMENTS. DO NOT CUT VERTICAL CONTROL JOINTS IN CONCRETE MASONRY UNITS WALLS.
2. DISCONTINUE HORIZONTAL WALL JOINT REINFORCING AT CONTROL JOINT TYPICAL DO NOT DISCONTINUE BOND BEAM REINFORCING.

7 TYPICAL CMU WALL CONTROL JOINT
1/2" = 1'-0" (AST S4001b)



8 TYP. CMU WALL VERTICAL REINFORCEMENT PLACEMENT-MULTIPLE BLOCKS
1/2" = 1'-0" (AST S4001d)



NOTE: DETAIL APPLIES FOR NEW OPENINGS THROUGH EXISTING CMU BLOCK THAT ARE 4'-0" WIDE OR LESS.

9 LINTEL BEAM OVER OPENING
1 1/2" = 1'-0" (AST S4037)

LINTEL SCHEDULE

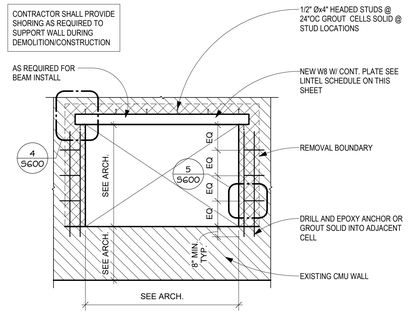
MARK	DESCRIPTION		REMARKS
	SIZE	BOTTOM PL. / CMU REINF.	
L1	8" DEEP CMU LINTEL	(2) #5 CONT. BOTTOM	8" BLOCK
L2	16" DEEP CMU LINTEL	(2) #5 CONT. BOTTOM	8" BLOCK

NOTE: SCHEDULE DOES NOT APPLY AT OPENINGS THROUGH EXISTING CMU. REF. DETAIL 3/S600 FOR OPENING SUPPORT AT EXISTING CMU

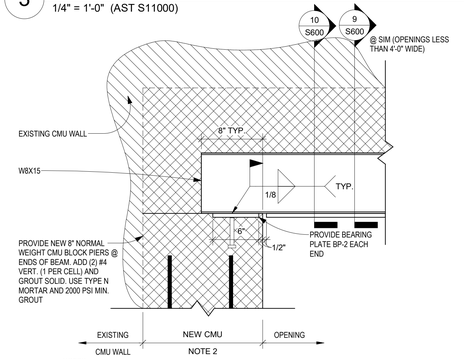
LOOSE BRICK SUPPORT LINTEL SCHEDULE

DESCRIPTION		REMARKS
SIZE	DESIGN SPAN	
L3 1/2"x3 1/2"x1/4"	0' < 3'-0"	USE L3"x1/4" AT VENEER < 4" WIDE
L5"x3 1/2"x1/4"	3'-0" < 6'-0"	TRIM OUTSTANDING LEG TO 2" AT VENEER < 4" WIDE
L6"x3 1/2"x3/8"	6'-0" < 8'-0"	TRIM OUTSTANDING LEG TO 2" AT VENEER < 4" WIDE

NOTE: SCHEDULE DOES NOT APPLY AT OPENINGS THROUGH EXISTING CMU. REF. DETAIL 9 & 10/S600 FOR BRICK SUPPORT AT EXISTING CMU/BRICK FACADE.

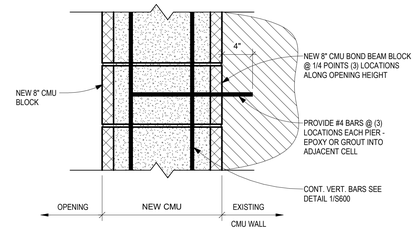


3 NEW LINTEL BEAM @ MASONRY
1/4" = 1'-0" (AST S11000)

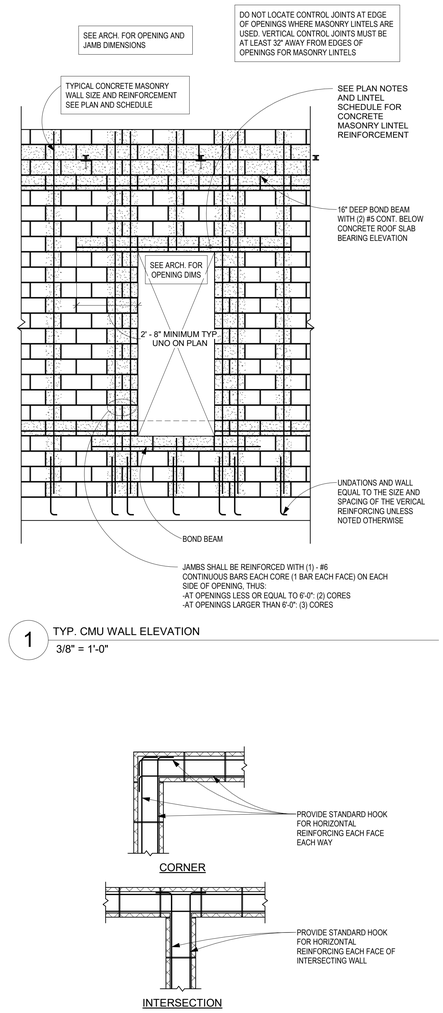


NOTES:
1. FOR OPENINGS 4'-0" WIDE OR LESS, (2) ANGLES PER DETAIL 9/S600 MAY BE USED IN LIEU OF THE WIDE FLANGE BEAM IN THIS DETAIL. STUD BEARING PLATE AT UNDERSIDE OF ANGLES STILL APPLIES.
2. NEW CMU JAMB ZONE SHALL BE 3 CORES WIDE FOR OPENINGS 6'-0" WIDE OR GREATER AND 2 CORES WIDE FOR OPENINGS LESS THAN 6'-0" WIDE. SEE DETAIL 1/S600 FOR BAR SIZE AND ADDITIONAL INFO.

4 LINTEL BEARING @ PIER
1 1/2" = 1'-0" (AST S11003)



5 NEW PIER REINFORCEMENT
1 1/2" = 1'-0" (AST S11004)



1 TYP. CMU WALL ELEVATION
3/8" = 1'-0"

2 TYP. BOND BEAM CORNER REINFORCEMENT
1/2" = 1'-0" (AST S4001c)

3/28/2022 11:40:24 AM

C:\Users\jobrien\Documents\MN 1964 - SCVA Central_jobrienK6QEN.rvt

No	REVISION	DATE

CONSULTANT
AST SES SPECIALIZED ENGINEERING SOLUTIONS
7301 OHMS LANE, SUITE #215, (952) 854-9302 TEL., EDINA, MN 55439, ASTENG.COM
AST PROJECT NUMBER: MN 1964
10360 Ellison Circle, Omaha, NE 68134, Phone: 402.991.5520, www.specialtiesdeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # CA 1377

STAMP
REGISTRATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: Zachary D. Craig
SIGNATURE:
DATE: LICENSE #57219

DRAWING TITLE: **MASONRY DETAILS**

PROJECT TITLE: **EHRM INFRASTRUCTURE UPGRADES**
DATE: 03/30/2022
PLOT SCALE:
PROJECT NO.: 656-21-235
BUILDING NO.: CAMPUS | DESIGNED BY: ZDC | DRAWN: JRO | DRAWING NO.: S600
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303 | FULLY SPRINKLERED
DRG OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

LAP SPLICE SCHEDULE FOR EPOXY-COATED GRADE 60 BARS

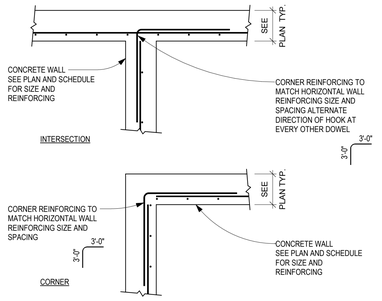
NOTES:
1. THESE TABLES ARE BASED ON THE FOLLOWING ASSUMPTION:
   A. CLEAR SPACING OF BARS ≥ d_b
   B. CLEAR COVER ≥ d_b
   C. STIRRUPS OR TIES PROVIDED THROUGHOUT DEVELOPMENT LENGTH ≥ CODE MINIMUM OR
      1. CLEAR SPACING OF BARS ≥ $2d_b$
      2. CLEAR COVER ≥ d_b
2. FOR OTHER CASES, MULTIPLY LENGTHS SHOWN BY 1.5.
3. FOR TOP BAR SPLICES, MULTIPLY LENGTHS SHOWN BY 1.3. TOP BARS ARE SUCH THAT 12" OR MORE OF FRESH CONCRETE IS CAST BELOW THE SPLICE OR DEVELOPMENT LENGTH.
4. FOR LIGHTWEIGHT CONCRETE, MULTIPLY LENGTHS SHOWN BY 1.3.
5. FOR HIGHER GRADE STEEL, MULTIPLY LENGTHS SHOWN BY A RATIO OF HIGHER fy (KSI) OVER 60 (KSI). ALL OTHER FACTORS LISTED STILL APPLY.
6. FOR COMPRESSION LAP SPLICE USE $(0.0009fy-24)d_b$

CLASS 'A' TENSION LAP SPLICE

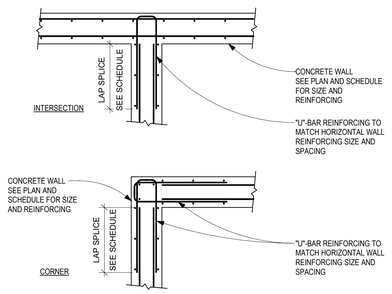
BAR SIZE	fc (psi)							
	3000	3500	4000	5000	6000	7000	8000	10000
#3	2'-1"	1'-11"	1'-10"	1'-8"	1'-6"	1'-5"	1'-4"	1'-2"
#4	2'-9"	2'-7"	2'-5"	2'-2"	2'-0"	1'-10"	1'-9"	1'-6"
#5	3'-6"	3'-3"	3'-0"	2'-8"	2'-6"	2'-3"	2'-2"	1'-11"
#6	4'-2"	3'-10"	3'-7"	3'-3"	2'-11"	2'-9"	2'-7"	2'-3"
#7	6'-0"	5'-7"	5'-3"	4'-8"	4'-3"	4'-0"	3'-9"	3'-4"
#8	6'-11"	6'-5"	6'-0"	5'-4"	4'-11"	4'-6"	4'-3"	3'-9"
#9	7'-9"	7'-2"	6'-9"	6'-0"	5'-6"	5'-1"	4'-9"	4'-3"
#10	8'-7"	8'-0"	7'-5"	6'-8"	6'-1"	5'-8"	5'-3"	4'-9"
#11	9'-5"	8'-9"	8'-2"	7'-4"	6'-8"	6'-2"	5'-10"	5'-2"

CLASS 'B' TENSION LAP SPLICE

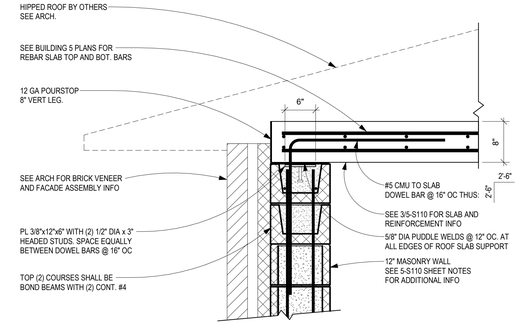
BAR SIZE	fc (psi)							
	3000	3500	4000	5000	6000	7000	8000	10000
#3	2'-9"	2'-6"	2'-4"	2'-1"	1'-11"	1'-9"	1'-8"	1'-6"
#4	3'-7"	3'-4"	3'-1"	2'-10"	2'-7"	2'-4"	2'-3"	2'-0"
#5	4'-6"	4'-2"	3'-11"	3'-6"	3'-2"	2'-11"	2'-9"	2'-6"
#6	5'-5"	5'-0"	4'-8"	4'-2"	3'-10"	3'-6"	3'-4"	3'-0"
#7	7'-10"	7'-3"	6'-9"	6'-1"	5'-7"	5'-2"	4'-10"	4'-4"
#8	8'-11"	8'-3"	7'-9"	6'-11"	6'-4"	5'-10"	5'-6"	4'-11"
#9	10'-1"	9'-4"	8'-9"	7'-10"	7'-1"	6'-7"	6'-2"	5'-6"
#10	11'-2"	10'-4"	9'-8"	8'-8"	7'-11"	7'-4"	6'-10"	6'-2"
#11	12'-3"	11'-4"	10'-8"	9'-6"	8'-8"	8'-1"	7'-6"	6'-9"



1 TYPICAL CONCRETE WALL CORNER REINFORCING
1/2" = 1'-0" (AST S2004a)



2 TYPICAL CONCRETE WALL CORNER REINFORCING
1/2" = 1'-0" (AST S2004b)



3 TOP OF WALL AT NEW APPENDAGE ROOM
1" = 1'-0" (AST S5048)

No	REVISION	DATE

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
7301 OHMS LANE, SUITE #215, (952) 854-9302 TEL., EDINA, MN 55439, ASTENG.COM
AST PROJECT NUMBER: MN 1964
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520, www.specialtiesdeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # CA 1377

STAMP
REGISTRATION

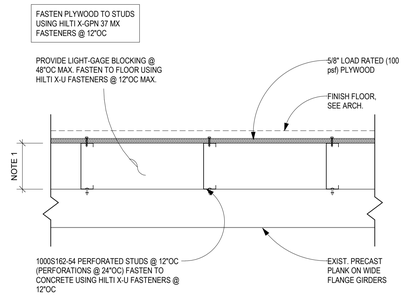
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: Zachary D. Craig
SIGNATURE:
DATE: LICENSE #57219

DRAWING TITLE: **CONCRETE DETAILS**

PROJECT TITLE: **EHRM INFRASTRUCTURE UPGRADES**
DATE: 03/30/2022
PLOT SCALE
PROJECT No.: 656-21-235
BUILDING No.: CAMPUS | CHECKED BY: ZDC | DRAWN: JRO | DRAWING NO.: S700
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303 | FULLY SPRINKLERED
DWG. OF

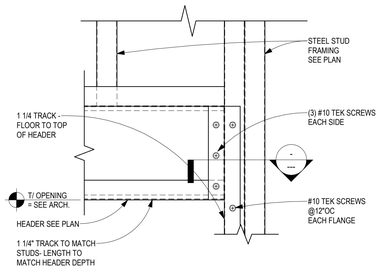
U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

3/28/2022 11:40:28 AM
C:\Users\jobrien\Documents\MN 1964 - SCVA Central_jobrienK6QEN.rvt

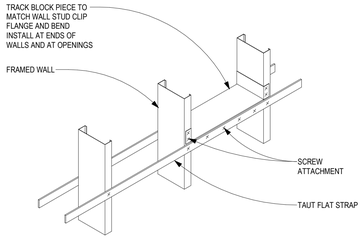


NOTE 1: COORDINATE WITH ARCH. DRAWINGS AND AS-BUILT CONDITIONS TO VERIFY THAT FINISHED FLOOR ELEVATIONS MATCH UP WITH EXISTING. DECREASE OR INCREASE PLATFORM STUD DEPTH AS REQUIRED

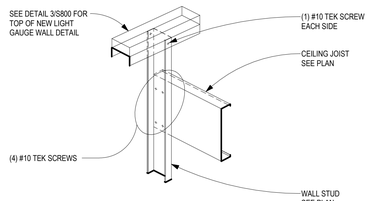
8 PLATFORM SECTION
1 1/2" = 1'-0" (AST S8203)



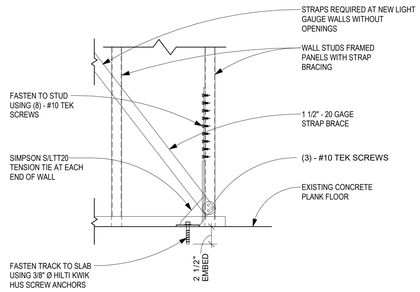
4 DETAIL
3" = 1'-0" (AST S8139)



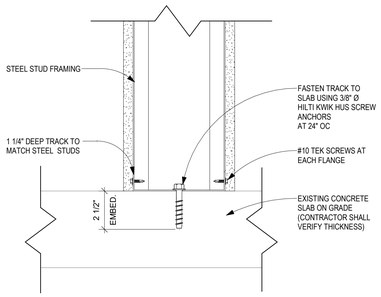
1 DETAIL
1" = 1'-0" (AST)



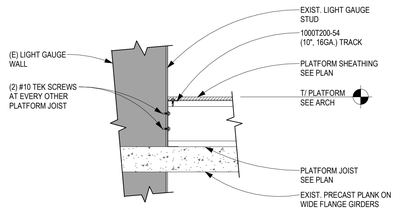
9 PLATFORM BEARING AT PARTIAL HEIGHT WALL
1" = 1'-0" (AST S8205)



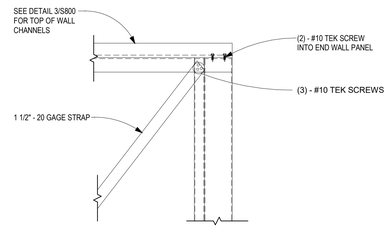
5 DETAIL - END WALL FRAME ANCHORAGE
1 1/2" = 1'-0"



2 DETAIL - STEEL TRACK TO EXISTING CONCRETE FLOOR
3" = 1'-0" (AST)

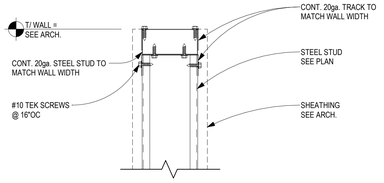


10 SECTION
1 1/2" = 1'-0" (AST S8213)

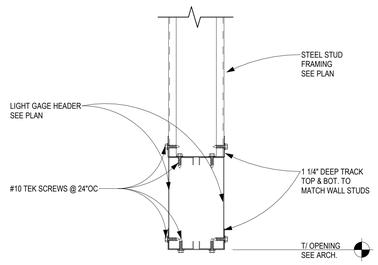


6 DETAIL - CENTER WALL TO END WALLS
1 1/2" = 1'-0"

TOP PLATE STUD AND TRACK SECTIONS SHALL BE CONTINUOUS. SPLICE ONLY AT LOCATIONS SHOWN ON PLAN



3 DETAIL
3" = 1'-0" (AST S8180)



7 DETAIL - LIGHT GAGE HEADER
3" = 1'-0" (AST S8138)

No	REVISION	DATE

CONSULTANT
AST SES SPECIALIZED ENGINEERING SOLUTIONS
7301 OHMS LANE, SUITE #215, EDINA, MN 55439 (952) 854-9302 TEL. ASTENG.COM
10360 Ellison Circle, Omaha, NE 68134 Phone: 402.991.5520 www.specialtredeng.com
AST PROJECT NUMBER: MN 1964

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # CA 1377

STAMP
REGISTRATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: Zachary D. Craig
SIGNATURE:
DATE: LICENSE #57219

DRAWING TITLE: LIGHT GAUGE DETAILS

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
DATE: 03/30/2022
PLOT SCALE:
PROJECT No.: 656-21-235
BUILDING No.: CAMPUS
CHECKED BY: ZDC
DRAWN: JRO
DRAWING NO.: S800
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303
FULLY SPRINKLERED
DWG. OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

3/28/2022 11:40:32 AM
C:\Users\jobrien\Documents\MN 1964 - SCVA Central_jobrienK6QEN.rvt

ELECTRICAL MISC SYMBOLS

PLAN SYMBOL	NAME
	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL
	BRANCH CIRCUIT CONCEALED IN FLOOR OR BELOW GRADE
	CLEARANCE SPACE
	CONDUIT BREAK
	CONDUIT DOWN
	CONDUIT STUB-OUT
	CONDUIT UP
	HOMERUN TO PANEL G = GFCI CIRCUIT (PART) = PARTIAL CIRCUIT

ELECTRICAL FIXTURE SYMBOLS

PLAN SYMBOL	NAME
P#	POWER POLE
	RECEPTACLE - DOUBLE DUPLEX - CONV
	RECEPTACLE - DOUBLE DUPLEX - EMERGENCY (RED) - CONV
	RECEPTACLE - DUPLEX - CONV
	RECEPTACLE - DUPLEX - EMERGENCY (RED) - CONV
S^T	TOGGLE DISCONNECT SWITCH

ELECTRICAL EQUIPMENT SYMBOLS

PLAN SYMBOL	NAME
	AUTOMATIC TRANSFER SWITCH
	DISTRIBUTION PANEL
	ENCLOSED CIRCUIT BREAKER - SURFACE
	LOW VOLTAGE PANEL
	PANELBOARD - SURFACE
	UPS CABINET

ELECTRICAL MISC SYMBOL LEGEND

PLAN SYMBOL	NAME	DESCRIPTION
12"x4" 12" LADDER	CABLE TRAY	PROVIDE CABLE TRAY AT LOCATIONS INDICATED ON PLANS. REFER TO FLOOR PLANS FOR TYPE DESIGNATION. COORDINATE MOUNTING WITH OTHER TRADES AND REQUIREMENTS IN SPECIFICATION. TYPE 'WIDTH x DEPTH", WIRE BASKET CABLE TRAY: PROVIDE CABLE TRAY IN DIMENSION INDICATED ON FLOOR PLANS. TYPE 'WIDTH LADDER', LADDER CABLE TRAY: PROVIDE CABLE TRAY IN DIMENSION INDICATED ON FLOOR PLANS.
XXX	LIGHTING CONTROL TAG	REFER TO LIGHTING CONTROL SCHEDULE FOR ADDITIONAL INFORMATION.

FIRE ALARM SYMBOL LEGEND

PLAN SYMBOL	NAME	DESCRIPTION
F CM	CONTROL MODULE - WALL	PROVIDE FIRE ALARM CONTROL MODULE CONNECTED TO FIRE ALARM SYSTEM. PROVIDE WITH SURFACE MOUNT CONDUIT AND BACKBOX WHERE ASSOCIATED EQUIPMENT IS EXPOSED OR INSTALLED IN UNFINISHED AREAS. CONCEAL ALL CONDUITS WITHIN WALLS OR ABOVE CEILING IN FINISHED AREAS.
FAPS	FIRE ALARM POWER SUPPLY/AMPLIFIER	CIRCUIT FIRE ALARM POWER SUPPLY / AMPLIFIER PANEL TO 20A 120V BRANCH CIRCUIT IN ASSOCIATED LIFE SAFETY BRANCH PANEL (INSTALL CIRCUIT BREAKER LOCK ON BRANCH BREAKER). REFER TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATION. COORDINATE EXACT QUANTITY AND LOCATIONS WITH MANUFACTURER SHOP DRAWINGS.
FS SD	SMOKE DAMPER OR FIRE/SMOKE DAMPER	CIRCUIT FIRE AND FIRE/SMOKE DAMPERS PROVIDED BY MECHANICAL CONTRACTOR TO 20A 120V BRANCH CIRCUITS IN ASSOCIATED LIFE SAFETY BRANCH PANEL (INSTALL CIRCUIT BREAKER LOCK ON BRANCH BREAKERS). EACH BRANCH CIRCUIT SHALL SERVE A MAXIMUM OF 20 DAMPERS. PROVIDE INDIVIDUAL CIRCUITS FOR EACH AIR HANDLING UNIT ZONE. REFER TO MECHANICAL PLANS FOR ASSOCIATED ZONES. CONTROL EACH DAMPER INDIVIDUALLY WITH ADDRESSABLE CONTROL MODULES FROM FIRE ALARM SYSTEM. LABEL EACH RELAY WITH THE NAME OF THE AIR HANDLING UNIT SERVING THE SMOKE ZONE AND WITH THE WORDS "SMOKE DAMPER CONTROL". PROVIDE SYSTEM DUCT SMOKE DETECTOR IN ACCESSIBLE LOCATION WITHIN 5 FEET OF THE DAMPER TO CONTROL DAMPER. DUCT DETECTOR MAY BE OMITTED WHERE THE DAMPER IS INSTALLED IN A CORRIDOR WALL OR CEILING AND IS CONTROLLED BY AN AREA SMOKE DETECTION SYSTEM INSTALLED IN THE CORRIDOR. PROVIDE REMOTE STATUS INDICATOR AND TEST STATION FOR DETECTOR AND COORDINATE ASSOCIATED MOUNTING LOCATION WITH OWNER. REFER TO LOW VOLTAGE FLOOR PLANS FOR DAMPER LOCATIONS.

DATA SYMBOL LEGEND

PLAN SYMBOL	NAME	DESCRIPTION
	COMMUNICATIONS OUTLET - CEILING	PROVIDE ONE (1) CATEGORY 6A NETWORK DATA CABLE FROM ASSOCIATED COMMUNICATIONS DISTRIBUTION ROOM TO APPROXIMATE LOCATION INDICATED ON FLOOR PLANS. TERMINATE CABLE WITH RJ45 CONNECTOR IN FACEPLATE, CENTERED IN CEILING TILE. PROVIDE WITH 15' OF CABLE SLACK AT LOCATION INDICATED. PROVIDE ROUGH-IN PER COMMUNICATIONS OUTLET DETAIL AT LOCATIONS INDICATED WITHIN GYP CEILINGS. PROVIDE SURFACE MOUNTED CONDUIT AND BACK BOX IN UNFINISHED AREAS. CABLE SHALL BE ROUTED WITHIN CABLE TRAY WHERE ABOVE ACCESSIBLE CEILINGS AND WITHIN CONDUIT IN UNFINISHED AREAS.
	COMMUNICATIONS OUTLET - WALL	GENERAL: PROVIDE COMMUNICATIONS OUTLET AS DESCRIBED IN THESE GENERAL NOTES AND NOTES BELOW FOR EACH OUTLET TYPE. REFER TO PLANS FOR OUTLET DESIGNATION AND QUANTITIES OF NETWORK VOICE/DATA CABLES TO BE PROVIDED TO OUTLET FROM ASSOCIATED NEAREST COMMUNICATIONS DISTRIBUTION ROOM. PROVIDE ROUGH-IN PER COMMUNICATIONS OUTLET DETAIL. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE SYSTEM PER SPECIFICATION SECTION 271500 INCLUDING, BUT NOT LIMITED TO INSTALLATION, CONFIGURATION, DEVICES, JACKS, INSERTS, FACEPLATES, AND CABLING. SUBMIT SHOP DRAWINGS FOR APPROVAL. COORDINATE EXACT FINAL LOCATION WITH ARCHITECTURAL INTERIOR ELEVATIONS PRIOR TO INSTALLATION. PROVIDE CABLING AS LISTED BELOW. OUTLETS WITH NO CABLING DESIGNATION SHALL BE EMPTY WITH A BLANK WALL PLATE. CABLING DESIGNATIONS ARE TYPICAL FOR ALL WALL, FLOOR, AND CEILING COMMUNICATIONS DEVICES. REFER TO SPECIFICATIONS FOR CABLING REQUIREMENTS FOR EACH TYPE. -D = ONE (1) DATA CABLE TYPE 'W', WALL PHONE: PROVIDE ONE (1) NETWORK VOICE CABLE, MOUNTED IN WALL PHONE MOUNTING BRACKET FACEPLATE, MOUNTED AT 48" AFF. COORDINATE MOUNTING LOCATION WITH OTHER TRADES AND FINAL EQUIPMENT SELECTION.
WAP	WIRELESS ACCESS POINT - CEILING	OWNER PROVIDED WIRELESS ACCESS POINT AT APPROXIMATE LOCATION INDICATED. PROVIDE ONE (1) CATEGORY 6A NETWORK DATA CABLE FROM ASSOCIATED COMMUNICATIONS DISTRIBUTION ROOM TO APPROXIMATE LOCATION INDICATED ON FLOOR PLANS, COILED ABOVE FINISHED CEILING. TERMINATE CABLE WITH RJ45 CONNECTOR WITHIN SURFACE MOUNT BOX. PROVIDE WITH 15' OF CABLE SLACK AT LOCATION INDICATED. PROVIDE ROUGH-IN PER COMMUNICATIONS OUTLET DETAIL AT LOCATIONS INDICATED WITHIN GYP CEILINGS. PROVIDE SURFACE MOUNTED CONDUIT AND BACK BOX IN UNFINISHED AREAS. CABLE SHALL BE ROUTED WITHIN CABLE TRAY WHERE ABOVE ACCESSIBLE CEILINGS AND WITHIN CONDUIT IN UNFINISHED AREAS. LOCATIONS SHOWN ARE PRELIMINARY. CONFIRM FINAL LOCATION WITH OWNER PRIOR TO PULLING CABLE.

ELECTRICAL FIXTURE SYMBOL LEGEND

PLAN SYMBOL	NAME	DESCRIPTION
	ELECTRICAL GROUND BAR	PROVIDE LENGTH AS REQUIRED TO ACCOMMODATE TERMINATIONS, MINIMUM 20" IN LENGTH. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
	RECEPTACLE - NEMA	PROVIDE ONE (1) 4" SQUARE, 2 1/8" DEEP JUNCTION BOX WITH 1 GANG TRIM RING. PROVIDE CONDUIT TO ELECTRICAL SOURCE SIZED AS INDICATED BELOW. REFER TO FLOOR PLANS FOR ELECTRICAL SOURCE AND NEMA DESIGNATION. PROVIDE DEVICE, FEEDER, AND CIRCUIT BREAKER AS LISTED BELOW: •NEMA 21-20 & L21-20: 4-#12, #12 GND IN 3/4" CONDUIT; 20A, 3 POLE CIRCUIT BREAKER •NEMA 21-30 & L21-30: 4-#10, #10 GND IN 3/4" CONDUIT; 30A, 3 POLE CIRCUIT BREAKER

ELECTRICAL EQUIPMENT SYMBOL LEGEND

PLAN SYMBOL	NAME	DESCRIPTION
DDC	DIRECT DIGITAL CONTROL SYSTEM CONTROL PANEL	CIRCUIT CONTROL PANEL TO 20A 120V BRANCH CIRCUIT IN LOCAL [EQUIPMENT] [NORMAL] BRANCH PANEL OF THE ASSOCIATED CONSTRUCTION PHASE. REFER TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATIONS. COORDINATE CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SELECTION AND PROVIDED NEMA 5-20 RECEPTACLE OR HARD-WIRED CONNECTION TO CABINET AS REQUIRED. PROVIDE ONE (1) NETWORK DATA CABLE FROM ASSOCIATED COMMUNICATIONS DISTRIBUTION ROOM.

LIGHTING DEVICE SYMBOLS

PLAN SYMBOL	NAME
S	LIGHT SWITCH

FIRE ALARM SYMBOLS

PLAN SYMBOL	NAME
F W	STROBE - WALL

ONE LINE SYMBOL

PLAN SYMBOL	NAME
	CONTINUATION
	GROUND BAR
	GROUNDING ELECTRODE

LOW VOLTAGE COORDINATION LEGEND

SYSTEMS	ROUGH-INS & PATHWAYS	CABLING & TERMINATIONS	DEVICES & EQUIPMENT	REMARKS
ACCESS CONTROL	CF / CI	CF / CI	CF / CI	2
FIRE ALARM	CF / CI	CF / CI	CF / CI	3
PUBLIC ADDRESS	CF / CI	CF / CI	CF / CI	4
SECURITY SURVEILLANCE (CCTV)	CF / CI	CF / CI	CF / CI	5
TELEVISION (CATV)	CF / CI	CF / CI	GF / GI	6
TEMPERATURE MONITORING	CF / CI	OF / OI	CF / CI	7
VOICE / DATA	CF / CI	CF / CI	GF / GI	1
WIRELESS ACCESS POINTS	CF / CI	CF / CI	GF / GI	1,8

COMMUNICATION SYMBOL LEGEND

PLAN SYMBOL	NAME	DESCRIPTION
	2 POST COMMUNICATIONS RACK	EXISTING 2 POST TELECOMMUNICATIONS RACK.
	4 POST COMMUNICATIONS RACK	PROVIDE 7'-0" TALL 45U, 4 POST TELECOMMUNICATIONS CHANNEL RACK AT APPROXIMATE LOCATIONS INDICATED ON FLOOR PLANS. PROVIDE MIGHTY MO 20 CABLE MANAGEMENT RACK 30" DEPTH, WHITE FINISH MODEL NUMBER: OR-MM2073038-W (OR PRIOR APPROVED EQUIVALENT) WITH VERTICAL CABLE MANAGEMENT OR-MM20VMD706 (OR PRIOR APPROVED EQUIVALENT). REFER TO FLOOR PLANS FOR DATA SWITCH ELECTRICAL SOURCE AND REQUIREMENTS. PROVIDE TELECOMMUNICATIONS RACK AND ALL ACCESSORIES PER SPECIFICATION SECTION 271100. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION, INCLUDING BUT NOT LIMITED TO: BRACKETS, MOUNTING FRAMES, HORIZONTAL AND VERTICAL WIRE MANAGEMENT, AND GROUNDING CONNECTIONS. PROVIDE WITH RACK MOUNTED PDU: APC AP8861 RPDU (OR PRIOR APPROVED EQUIVALENT); RACK PDU 2G, METERED; L21-20 PLUG; THREE PHASE;120/208V INPUT; 20A; ZERO U, 5.7 KW, 208V, (36) C13 & (6) C19 & (2) 5-20 OUTLETS; A-SIDE BLACK, B-SIDE WHITE OR OTHER DISTINCTIVE COLOR. WHERE INDICATED ON PLANS PROVIDE: EATON BLADE UPS ZC0517700110000 (OR PRIOR APPROVED EQUIVALENT), RACK-MOUNTED 5 KW, 6RU, 19" RACK-MOUNTABLE, 208V UNINTERRUPTIBLE POWER SUPPLY (UPS) WITH NEMA 20A L21-20P INPUT AND L21-20R OUTPUT. REFER TO VA OIT "INFRASTRUCTURE STANDARD FOR TELECOMMUNICATIONS SPACES VERSION 3.1" FOR ALL COMPONENT REQUIREMENTS. COORDINATE EXACT FINAL LOCATION WITH OWNER'S IT REPRESENTATIVE PRIOR TO INSTALLATION. PROVIDE ALL POWER CONNECTIONS INDICATED ON FLOOR PLANS AT FINAL RACK LOCATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
	COMMUNICATIONS CABINET	PROVIDE 7'-0" TALL 45U, TELECOMMUNICATIONS CABINET AT APPROXIMATE LOCATIONS INDICATED ON FLOOR PLANS. REFER TO FLOOR PLANS FOR DATA SWITCH ELECTRICAL SOURCE AND REQUIREMENTS. PROVIDE TELECOMMUNICATIONS CABINET AND ALL ACCESSORIES PER SPECIFICATION SECTION 271100. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION, INCLUDING BUT NOT LIMITED TO: BRACKETS, MOUNTING FRAMES, HORIZONTAL AND VERTICAL INTEGRATED WIRE MANAGEMENT, LASHING MANAGER, RADIUS DROPS, PDU BRACKETS, AND GROUNDING CONNECTIONS. TYPE: SERVER CABINET WITH VERTICAL EXHAUST DUCT PROVIDE TERAFRAME F-SERIES GEN 3 CABINET FF1N-111C-E52-B (OR PRIOR APPROVED EQUIVALENT). PROVIDE WITH ALL ACCESSORIES AS DEFINED IN OIT STANDARDS. TYPE: NETWORK CABINET WITH VERTICAL EXHAUST DUCT PROVIDE CHATSWORTH NF8N-115N-E52-1 (OR PRIOR APPROVED EQUIVALENT). PROVIDE WITH SIDE PANELS WITH BRUSH SEALED CABLE OPENINGS CHATSWORTH 39043-E63 (OR PRIOR APPROVED EQUIVALENT) ORDERED SEPERATELY FROM CABINET. PROVIDE WITH ALL ACCESSORIES AS DEFINED IN OIT STANDARDS. REFER TO VA OIT "INFRASTRUCTURE STANDARD FOR TELECOMMUNICATIONS SPACES VERSION 3.0" FOR ALL COMPONENT REQUIREMENTS. COORDINATE EXACT FINAL LOCATION WITH OWNER'S IT REPRESENTATIVE PRIOR TO INSTALLATION. PROVIDE ALL POWER CONNECTIONS INDICATED ON FLOOR PLANS AT FINAL CABINET LOCATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
	COMMUNICATIONS FIRE RATED PATHWAY - FLOOR	PROVIDE STI FIRESTOP EZ-PATH COMMUNICATIONS FIRE RATED PATHWAY THROUGH FLOOR AT LOCATIONS INDICATED ON FLOORPLANS. COORDINATE MOUNTING LOCATION WITH STRUCTURE, EQUIPMENT WITHIN ROOM, ACCESS TO EQUIPMENT, WALLS BELOW ROOM, AND OTHER TRADES. INSTALL PER MANUFACTURERS RECOMMENDATIONS. REFER TO FLOOR PLANS FOR PATHWAY TYPE AND QUANTITIES. PROVIDE PATHWAY TYPES AS INDICATED BELOW. (F1) - FULL KIT CATALOG # EZDP144FKS2 (1-4"x4" PATHWAY) (F2) - FULL KIT CATALOG # EZDG444S2 (4-4"x4" PATHWAYS) (F3) - FLOOR GRID CATALOG # EZG844 AND ONE (1) PATHWAY MODULE CATALOG # EZD444MBS2 (4-4"x4" PATHWAYS & 4-4"x4" SPACES) (F4) - FULL KIT CATALOG # EZDG844S2 (8-4"x4" PATHWAYS)
I	COMMUNICATIONS FIRE RATED PATHWAY – WALL	PROVIDE STI FIRESTOP EZ-PATH COMMUNICATIONS FIRE RATED PATHWAY AT LOCATIONS INDICATED ON FLOORPLANS. MOUNT PATHWAYS ABOVE ACCESSIBLE CEILING SPACES. COORDINATE MOUNTING HEIGHT WITH CABLE TRAY, TELECOMMUNICATION RACK HEIGHTS, CEILING, AND OTHER TRADES. INSTALL PER MANUFACTURERS RECOMMENDATIONS. COORDINATE REQUIRED WALL OPENING WITH STUD SPACING. REFER TO FLOOR PLANS FOR PATHWAY TYPE AND QUANTITIES. PROVIDE PATHWAY TYPES AS INDICATED BELOW. (A1) - FULL KIT CATALOG # EZDP133CWK (1-3"x3" PATHWAY) (A2) - FULL KIT CATALOG # EZDP233GK (2-3"x3" PATHWAYS) (A3) - FULL KIT CATALOG # EZDP333GK (3-3"x3" PATHWAYS) (A4) - FULL KIT CATALOG # EZDP433GK (4-3"x3" PATHWAYS) (A7) - FULL KIT CATALOG # EZDP733GK (7-3"x3" PATHWAYS) (A8) - TWO (2) FULL KIT CATALOG # EZDP433GK (8-3"x3" PATHWAYS) (STACKED) (B1) - FULL KIT CATALOG # EZD22 (1-2"x2" PATHWAY) (C1) - FULL KIT CATALOG # EZDP44S2 (1-4"x4" PATHWAY) (C2) - TWO (2) MODULE CATALOG # EZD44S2 & ONE (1) EZP544W (2-4"x4" PATHWAYS) (C3) - THREE (3) CATALOG # EZD44S2 & ONE (1) EZP544W (3-4"x4" PATHWAYS) (C4) - FOUR (4) CATALOG # EZD44S2 & ONE (1) EZP544W (4-4"x4" PATHWAYS) (REQUIRES 16" STUD SPACING) (C5) - FIVE (5) CATALOG # EZD44S2 & ONE (1) EZP544W (5-4"x4" PATHWAYS) (REQUIRES 24" STUD SPACING) PROVIDE STI FIRESTOP EZ-PATH CABLE SPILLWAY AT LOCATIONS INDICATED ON FLOORPLANS WITH SUBSCRIPT 'S'. PROVIDE ONE (1) SPILLWAY PER SLEEVE. REFER TO FLOORPLANS FOR SPILLWAY TYPE AND QUANTITIES. (A#S) - CATALOG NO. RCM33 (C#S) - CATALOG NO. EZRCM44S PROVIDE STI FIRESTOP EZ-PATH EXTENSION MODULES AT LOCATIONS INDICATED ON PLANS WITH SUBSCRIPT 'E'. PROVIDE ONE (1) EXTENSION MODULE PER SLEEVE. WHERE PATHWAY IS INDICATED WITH SUBSCRIPT 'EE', PROVIDE ONE (1) EXTENSION MODULES ON EACH END. REFER TO FLOORPLANS FOR EXTENSION MODULE TYPE AND QUANTITIES. (A#E) - CATALOG NO. EZD33E (C#E) - CATALOG NO. EZD44ES
	PLYWOOD BACKBOARD	PROVIDE 3/4" THICK X 4' WIDE X 8' HIGH A/C GRADE FIRE-RETARDANT TREATED PLYWOOD BACKBOARD AT APPROXIMATE LOCATION INDICATED. REFER TO FLOORPLANS FOR WIDTHS. CUT ADDITIONAL PLYWOOD TO FIT APPROXIMATE WIDTH INDICATED ON FLOORPLANS. MOUNT PLYWOOD VERTICALLY. BUTT ADJACENT SHEETS TIGHTLY, AND FORM SMOOTH GAP-FREE CORNERS AND JOINTS. PROVIDE WITH TWO (2) COATS OF WHITE PAINT ON ALL FACES AND EDGES. PROVIDE WITH LABEL ON EACH SHEET OF PLYWOOD WITH FIRE RATINGS, VISIBLE AFTER PAINTING. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
S	PUBLIC ADDRESS SPEAKER - CEILING	PROVIDE PUBLIC ADDRESS CEILING SPEAKER, FLUSH MOUNTED AT APPROXIMATE LOCATION INDICATED ON FLOOR PLANS, CENTERED WITHIN CEILING TILE. PROVIDE SPEAKER WITH INTEGRAL VOLUME CONTROL. PROVIDE ONE (1) 1" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE WHEN MOUNTED WITHIN AN INACCESSIBLE CEILING. PROVIDE CABLING FROM ASSOCIATED COMMUNICATIONS ROOM PUBLIC ADDRESS AMPLIFIER. PROVIDE PUBLIC ADDRESS CABLES, CONDUCTORS, BACK CAN, TILE BRIDGES, POWER AMPLIFIERS, AND SPEAKERS. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
	TELECOMMUNICATIONS GROUND BAR	PROVIDE LENGTH AS REQUIRED TO ACCOMMODATE TERMINATIONS, MINIMUM 10" IN LENGTH. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
	WALL MOUNT COMMUNICATIONS RACK	PROVIDE 48" TALL 26U WALL MOUNT TELECOMMUNICATIONS CABINET AT APPROXIMATE LOCATIONS INDICATED ON FLOOR PLANS. PROVIDE CUBE-IT WALL-MOUNT CABINET; GEN 3; 26U; #12-24 TAPPED RAILS; TEMPERED GLASS DOOR; GLACIER WHITE (OR PRIOR APPROVED EQUIVALENT). PROVIDE TWO (2) RACK MOUNTED POWER STRIPS WITH L5-20 INPUT AND 5-15 OUTPUT, 1RU AT EACH RACK; CHATSWORTH 12820-708 (OR PRIOR APPROVED EQUIVALENT). REFER TO FLOOR PLANS FOR DATA SWITCH ELECTRICAL SOURCE AND REQUIREMENTS. PROVIDE TELECOMMUNICATIONS RACK AND ALL ACCESSORIES PER SPECIFICATION SECTION 271200. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION, INCLUDING BUT NOT LIMITED TO: PLYWOOD BACKING, BRACKETS, MOUNTING FRAMES, HORIZONTAL AND VERTICAL WIRE MANAGEMENT, BRUSH KIT, FAN KIT, FRONT AND REAR RAIL KIT, FAN FILTER KIT, SHELF (TWO PER CABINET), AND GROUNDING CONNECTIONS. PROVIDE WITH CABINET MOUNTED UPS: EATON UPS (OR PRIOR APPROVED EQUIVALENT), 3 KW, 2RU, 19" RACK-MOUNTABLE, 208V UNINTERRUPTIBLE POWER SUPPLY (UPS) WITH NEMA 20A L5-20P INPUT AND L5-20R OUTPUT. REFER TO VA OIT "OIT DESIGN GUIDE FOR NATIONAL CEMETERY INSIDE PLANT TELECOMMUNICATIONS WALL-MOUNTED CABINET" FOR ALL COMPONENT REQUIREMENTS. COORDINATE EXACT FINAL LOCATION WITH OWNER'S IT REPRESENTATIVE PRIOR TO INSTALLATION. PROVIDE ALL POWER CONNECTIONS INDICATED ON FLOOR PLANS AT FINAL RACK LOCATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

OVERALL PHASING NOTES:

(NOTES SHALL APPLY TO OVERALL PROJECT PHASING)

PHASING SEQUENCE LISTED BELOW IS FOR INFORMATION ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING PROJECT SCHEDULE AND PHASING AND SHALL INCLUDE WORK REQUIRED TO ACCOMMODATE PHASING. SUBMIT PHASING PLAN TO OWNER FOR REVIEW AND APPROVAL AND COORDINATE WITH OWNER PRIOR TO BEGINNING CONSTRUCTION.

EXISTING ENTRANCE FACILITY ROOM: LOCATED IN BUILDING 04
EXISTING MAIN COMPUTER ROOMS: LOCATED IN BUILDINGS 04
NEW ENTRANCE FACILITY ROOM: LOCATED IN BUILDING 04

A. SITE FIBER TO BUILDINGS: CONSTRUCT REDUNDANT SITE FIBER LOOP FROM MAIN COMPUTER ROOM TO ALL BUILDINGS. MAINTAIN EXISTING FIBER PATHWAYS FROM THE EXISTING MAIN COMPUTER ROOM AS CURRENTLY CONSTRUCTED FOR THE B SIDE FIBER.
B. NEW TELECOMMUNICATIONS ROOMS AND RESUPPORTED EXISTING TELECOMMUNICATIONS ROOMS: CONSTRUCT NEW TELECOMMUNICATIONS ROOMS TO BE OPERATIONAL. RESUPPORT EXISTING TELECOMMUNICATIONS ROOMS TO REMAIN WITH NEW RACKS AND BACKBONE CABLING. PROVIDE NEW A/B POWER PANELS AND GROUNDING IN NEW AND EXISTING TO REMAIN ROOMS. POWER ALL TELECOMMUNICATIONS ROOM LOADS FROM THE NEW PANELS. ROUTE NEW PRIMARY AND REDUNDANT FIBER TO NEW TELECOMMUNICATIONS ROOMS AND EXISTING TO REMAIN TELECOMMUNICATIONS ROOMS, FROM THE MAIN COMPUTER ROOM. UPON ACTIVATION OF THESE NEW AND RESUPPORTED ROOMS, BOTH THE NEW AND EXISTING DISTRIBUTION NETWORKS WILL BE SIMULTANEOUSLY ACTIVE TO ALLOW FOR RE-CABLING THE PROGRESSIVE TRANSITION FROM THE EXISTING NETWORK TO THE NEW NETWORK FOR EACH AREA OUTLET INDIVIDUALLY.
C. EXISTING TELECOMMUNICATIONS ROOMS: MAINTAIN THE EXISTING TELECOMMUNICATIONS ROOMS AND EXISTING BACKBONE CABLING UNTIL THE AREA OUTLETS BEING SERVED BY EACH RESPECTIVE TELECOMMUNICATIONS ROOM HAS BEEN TRANSITIONED TO THE NEW TELECOMMUNICATIONS ROOM.
D. RE-CABLING: FOR NEW TELECOMMUNICATIONS ROOMS, PROVIDE NEW CABLES FROM THE EXISTING AREA OUTLETS TO THE NEW RACKS. REMOVE EXISTING CATEGORY 5E OR LOWER CABLING AFTER NEW CABLES HAVE BEEN PULLED TO THE OUTLETS TO MAINTAIN OPERATIONAL CAPABILITY OF THE SPACES TO THE GREATEST EXTENT POSSIBLE.
E. EXISTING CABLE REMOVAL: AFTER NEW CABLING HAS BEEN INSTALLED AND ACTIVATED, REMOVE EXISTING BACKBONE CABLING AND EXISTING AREA OUTLET CABLING FROM TELECOMMUNICATIONS ROOMS BEING ABANDONED. REMOVE UNUSED CABLING IN PREVIOUSLY ABANDONED TELECOMMUNICATIONS ROOMS.
F. INTERBUILDING BACKBONE: REPLACE THE EXISTING INTERBUILDING BACKBONE CABLING WITH NEW BACKBONE CABLING. REUSE THE EXISTING BACKBONE PATHWAYS FOR NEW BACKBONE CABLE INSTALLATION. SIDE A FIBER ROUTE SHALL UTILIZE EXISTING PATHWAYS. EXISTING FIBER UTILIZING EXISTING PATHWAYS SHALL NOT BE REMOVED UNTIL NEW FIBER ROUTE B IS COMPLETE AND NEW TELECOMMUNICATIONS ROOMS ARE ONLINE AND FUNCTIONING.
G. EXISTING TELECOMMUNICATIONS PROVIDER: REMOVE THE TELECOMMUNICATIONS PROVIDER CABLING TO THE EXISTING ENTRANCE FACILITY ROOM AND SUBSEQUENT EXISTING BACKBONE CABLING FROM THERE TO THE EXISTING MAIN COMPUTER ROOMS. COORDINATE WITH THE VA AND REMOVE/RELOCATE ANY REMAINING ITEMS FROM THE EXISTING MAIN COMPUTER ROOM. DEMOLISH THE EXISTING MAIN COMPUTER ROOM.
H. SERVER MIGRATION: WITH BOTH THE EXISTING AND NEW DISTRIBUTION NETWORKS BEING SIMULTANEOUSLY ACTIVE THROUGHOUT THE PROGRESSION OF RE-CABLINGS AND OUTLET TRANSITIONS, MIGRATION OF SERVERS FROM THE EXISTING SERVER ROOM TO THE NEW MAIN COMPUTER ROOM SHALL OCCUR BETWEEN THE TIME THAT THE NEW NETWORK IS ACTIVE (AND READY TO ACCEPT NEW CABLES), BUT BEFORE THE OLD NETWORK IS DEACTIVATED AND REMOVED. AT ALL TIMES, TWO (2) CORE SWITCHES NEED TO BE ACTIVE TO MAINTAIN UTILIZATION OF EXISTING SERVER ROOM AND NEW SERVER ROOM TO ACCOMMODATE PHASING OF SYSTEMS FROM OLD ROOM TO NEW ROOM.
I. NETWORK ELECTRONICS COORDINATION: CONSIDERING THE ABOVE PHASING, COORDINATION WILL BE REQUIRED BETWEEN THE VA AND CABLING CONTRACTOR IN ORDER TO PROPERLY SEQUENCE THE ACQUISITION, CONFIGURATION, AND ACTIVATION OF NETWORK ELECTRONICS IN COORDINATION WITH THE ACTIVATION OF EACH NEW NETWORK DISTRIBUTION POINT, ACTIVATION OF EACH RE-CABLED OUTLET, AND THE SUBSEQUENT DEACTIVATION OF BOTH EXISTING OUTLET CABLES AND EXISTING NETWORK DISTRIBUTION POINTS.

LEGEND: (LOW VOLTAGE COORDINATION LEGEND)
CF: CONTRACTOR FURNISHED
CI: CONTRACTOR INSTALLED
GF: GOVERNMENT FURNISHED
GI: GOVERNMENT INSTALLED

REMARKS: (LOW VOLTAGE COORDINATION LEGEND)
1. PATCH PANELS SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED PER SPECIFICATION. REFER TO TYPICAL COMMUNICATION TERMINATION DETAIL.
2. ACCESS CONTROL SYSTEM IS AN EXTENSION OF AN EXISTING AVIGILON SYSTEM. NEW DEVICES SHALL FUNCTION AS AN EXTENSION OF THE EXISTING SYSTEM.
3. FIRE ALARM SYSTEM IS AN EXTENSION OF AN EXISTING [MANUFACTURER MODEL] SYSTEM. NEW DEVICES SHALL FUNCTION AS AN EXTENSION OF THE EXISTING SYSTEM.
4. PUBLIC ADDRESS SYSTEM IS AN EXTENSION OF AN EXISTING [MANUFACTURER MODEL] SYSTEM. NEW DEVICES SHALL FUNCTION AS AN EXTENSION OF THE EXISTING SYSTEM.
5. PROVIDE VIDEO SURVEILLANCE FOR TELECOMMUNICATIONS ROOM AS PART OF AN APC NETBOTZ 750 (OR EQUIVALENT) ROOM MONITOR SYSTEM.
6. TELEVISION SYSTEM TO BE RECABLED WHERE EXISTING CABLING IS CATEGORY 5E OR BELOW OR WHERE EXISTING TELECOMMUNICATIONS ROOM IS BEING ABANDONED. NO NEW TELEVISION EQUIPMENT IS ANTICIPATED IN THIS CONTRACT.
7. PROVIDE TEMPERATURE AND HUMIDITY MONITORING FOR TELECOMMUNICATIONS ROOM AS PART OF AN APC NETBOTZ 750 (OR EQUIVALENT) ROOM MONITOR SYSTEM.
8. WIRELESS ACCESS POINTS TO BE RECABLED WHERE EXISTING CABLING IS CATEGORY 5E OR BELOW OR WHERE EXISTING TELECOMMUNICATIONS ROOM IS BEING ABANDONED. NO NEW WIRELESS ACCESS POINTS ARE ANTICIPATED IN THIS CONTRACT.

GENERAL NOTES: (LOW VOLTAGE COORDINATION LEGEND)
A. REFER TO SYMBOL LEGENDS AND SPECIFICATIONS FOR SPECIFIC REQUIREMENTS.
B. COORDINATE ROUGH-IN REQUIREMENTS WITH FINAL EQUIPMENT SELECTION FOR ALL SYSTEMS.
C. COORDINATE ROUGH-IN REQUIREMENTS WITH OWNER FOR OWNER FURNISHED SYSTEMS.
D. CONDUITS SHALL ROUTE CONCEALED INSIDE WALL TO ABOVE NEAREST ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE INDICATED.
E. WHERE CABLING IS CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED, TERMINATE AND TEST ALL CABLING PER SPECIFICATION.

SECURITY SYMBOL LEGEND

PLAN SYMBOL	NAME	DESCRIPTION
AC	ACCESS CONTROL DEVICE	GENERAL: PROVIDE ACCESS CONTROL COMPONENTS AS DESCRIBED IN THESE GENERAL NOTES AND NOTES BELOW FOR EACH ACCESS CONTROLLED DEVICE TYPE AT DOORS INDICATED. REFER TO FLOOR PLANS FOR DEVICE DESIGNATION. PROVIDE ROUGH-INS PER ACCESS CONTROL ROUGH-IN DETAIL. DOOR ACCESS COMPONENTS SHALL BE RATED FOR CONTINUOUS OPERATION IN THEIR INSTALLED PROJECT CONDITIONS. COORDINATE REQUIRED CONDUITS TO DOOR FRAME AND WALL MOUNTED DEVICES WITH DOOR HARDWARE CONTRACTOR. PROVIDE SURFACE MOUNTED CONDUIT AND BACK BOX IN UNFINISHED AREAS. PROVIDE 20A 120V BRANCH CIRCUIT TO DOOR CONTROLLERS LOCATED WITHIN ACCESS CONTROL CABINET IN ASSOCIATED COMMUNICATIONS ROOM. PROVIDE FINAL CONNECTION OF 120V BRANCH CIRCUIT TO ALL POWER SUPPLIES REQUIRED FOR EACH DOOR FUNCTION. REFER TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATIONS. PROVIDE ACCESS CONTROL CABLING FROM DOOR CONTROLLER TO COMPONENTS REQUIRED BY THE DOOR HARDWARE SPECIFICATION INCLUDING BUT NOT LIMITED TO CARD READER, DOOR POSITION SWITCH, ELECTRIC STRIKE, ELECTRIFIED HINGE, DOOR RELEASE PUSH BUTTON, MAGNETIC LOCK, AND REQUEST TO EXIT. PROVIDE DOOR POSITION SWITCH AND REQUEST TO EXIT AT EACH ACCESS CONTROLLED DOOR, UNLESS PROVIDED BY DOOR HARDWARE CONTRACTOR. CONTRACTOR SHALL TERMINATE ACCESS CONTROL CABLING TO DEVICES AT DOOR LOCATION AND PROVIDE A 7'-0" PIGTAIL WITHIN COMMUNICATIONS ROOM AT ACCESS CONTROL CABINET WITH APPROPRIATE DEVICE LABEL FOR OWNER TERMINATION. COORDINATE ALL TERMINATION REQUIREMENTS AND EXACT LOCATION OF TERMINATIONS WITH OWNER'S ACCESS CONTROL MANAGER. CABLE SHALL BE ROUTED WITHIN CABLE TRAY WHERE ABOVE ACCESSIBLE CEILINGS AND WITHIN CONDUIT IN UNFINISHED AREAS. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE SYSTEM INCLUDING BUT NOT LIMITED TO INSTALLATION, CONFIGURATION, DEVICES, AND CABLING. WHERE DOOR IS ALSO SPECIFIED/SHOWN TO UTILIZE DOOR OPERATOR, PROVIDE INTERLOCK TO ALLOW AUTOMATIC DOOR OPENING FROM THE ACCESS CONTROL SYSTEM UPON SUCCESSFUL CARD READ. SUBMIT SHOP DRAWINGS FOR APPROVAL. PROVIDE FIRE ALARM SYSTEM CONNECTION FOR DOOR RELEASE UPON ALARM. INTEGRATE ACCESS CONTROL SYSTEM WITH DOOR OPERATORS, FIRE ALARM, WANDER PREVENTION, INFANT PROTECTION, INTERCOM, AND DOOR HARDWARE. REFER TO ACCESS CONTROL AND ARCHITECTURAL DOOR HARDWARE SPECIFICATIONS FOR COORDINATION OF FEATURES, DEVICES, AND CONNECTIONS REQUIRED.
CR	CREDENTIAL CARD READER	GENERAL: PROVIDE PROXIMITY CARD READER AS DESCRIBED IN THESE GENERAL NOTES AND NOTES BELOW FOR EACH CARD READER TYPE AT APPROXIMATE LOCATION INDICATED. REFER TO FLOOR PLANS FOR CARD READER DESIGNATION. PROVIDE ROUGH-IN PER ACCESS CONTROL ROUGH-IN DETAIL. WHERE SHOWN MOUNTED ON DOOR/WINDOW SYSTEM MULLION, PROVIDE MULLION MOUNT CARD READER SURFACE MOUNTED ON MULLION. CABLING SHALL BE ROUTED RECESSED WITHIN MULLION TO ACCESSIBLE CEILING SPACE. COORDINATE INSTALLATION WITH MULLION MANUFACTURER. CARD READERS SHALL BE RATED FOR CONTINUOUS OPERATION IN THEIR INSTALLED PROJECT CONDITIONS. SUBMIT SHOP DRAWINGS FOR APPROVAL. COORDINATE EXACT LOCATION OF CARD READER WITH ARCHITECT, ARCHITECTURAL INTERIOR ELEVATIONS, AND OTHER DOOR COMPONENTS INCLUDING BUT NOT LIMITED TO PUSH PLATE ACTUATORS, REQUEST TO EXIT PUSH BUTTONS, INTERCOM STATIONS, NURSE CALL CANCEL STATIONS, INTRUSION DETECTION KEYPADS, WANDER PREVENTION KEYPADS, AND INFANT PROTECTION KEYPADS. REFER TO ACCESS CONTROL SYMBOL LEGEND DESCRIPTION FOR CABLING AND ADDITIONAL REQUIREMENTS. TYPE 'KEYPAD', COMBINATION KEYPAD PROXIMITY CARD READER: PROVIDE COMBINATION KEYPAD PROXIMITY CARD READER PER SPECIFICATION.
KEYPAD ID	INTRUSION DETECTION SYSTEM - KEYPAD	PROVIDE KEYPAD FOR INTRUSION DETECTION SYSTEM AT APPROXIMATE LOCATION INDICATED ON FLOOR PLANS, MOUNTED AT 48" AFF. COORDINATE CABLING AND ROUGH-IN REQUIREMENTS WITH MANUFACTURER. PROVIDE CABLING TO INTRUSION DETECTION SYSTEM CONTROL PANEL PER MANUFACTURER INSTALLATION REQUIREMENTS. CABLE SHALL BE ROUTED WITHIN CABLE TRAY WHERE ABOVE ACCESSIBLE CEILINGS AND WITHIN CONDUIT IN UNFINISHED AREAS. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE SYSTEM INCLUDING BUT NOT LIMITED TO INSTALLATION, CONFIGURATION, DEVICES, ROUGH-INS, AND CABLING. SUBMIT SHOP DRAWINGS FOR APPROVAL. COORDINATE EXACT LOCATION OF KEYPAD WITH ENGINEER, ARCHITECT, AND ARCHITECTURAL INTERIOR ELEVATIONS.
MOTION ID	INTRUSION DETECTION SYSTEM - MOTION SENSOR	PROVIDE MOTION SENSOR COVERAGE OF SPACE INDICATED FOR INTRUSION DETECTION SYSTEM. EXACT QUANTITIES AND LOCATIONS OF DEVICES SHALL BE DETERMINED BY MANUFACTURER REQUIREMENTS. MOUNT DEVICES IN ACCESSIBLE LOCATIONS. PROVIDE BACK BOX AND CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING FOR CABLING AT LOCATIONS INDICATED WITHIN GYP CEILINGS OR WHERE EXPOSED WITHIN UNFINISHED AREAS. COORDINATE CABLING AND ROUGH-IN REQUIREMENTS WITH MANUFACTURER. PROVIDE CABLING TO INTRUSION DETECTION SYSTEM CONTROL PANEL PER MANUFACTURER INSTALLATION REQUIREMENTS. CABLE SHALL BE ROUTED WITHIN CABLE TRAY WHERE ABOVE ACCESSIBLE CEILINGS AND WITHIN CONDUIT IN UNFINISHED AREAS. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE SYSTEM INCLUDING BUT NOT LIMITED TO INSTALLATION, CONFIGURATION, DEVICES, ROUGH-INS, AND CABLING. SUBMIT SHOP DRAWINGS FOR APPROVAL.
C	SECURITY SURVEILLANCE CAMERA - CEILING	PROVIDE POWER, ROUGH-INS, AND CABLING FOR POWER OVER ETHERNET (POE) SECURITY SURVEILLANCE CAMERA AS DESCRIBED IN THESE NOTES FOR EACH CAMERA AT APPROXIMATE LOCATIONS INDICATED. REFER TO VA OIT FOR ALL SECURITY COMPONENT REQUIREMENTS. SECURITY SURVEILLANCE COMPONENTS SHALL BE RATED FOR CONTINUOUS OPERATION IN THEIR INSTALLED PROJECT CONDITIONS. PROVIDE NETBOTZ IT SECURITY AND PROTECTION SYSTEM (OR PRIOR APPROVED EQUIVALENT) FOR INSTALLATION IN TELECOMMUNICATIONS ROOMS INDICATED. PROVIDE NETBOTZ CAMERA POD 165 (OR PRIOR APPROVED EQUIVALENT) AND ASSOCIATED CEILING MOUNT APPARATUS FOR INSTALLATION WHERE INDICATED ON PLANS. PROVIDE NETBOTZ RACK MONITOR 750 (OR PRIOR APPROVED EQUIVALENT) AND ALL ASSOCIATED ASSEMBLY AND INSTILLATION EQUIPMENT REQUIRED PER MANUFACTURER SPECIFICATIONS. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE SYSTEM INCLUDING BUT NOT LIMITED TO INSTALLATION, CONFIGURATION, DEVICES, AND CABLING. SUBMIT SHOP DRAWINGS FOR APPROVAL. COORDINATE EXACT MOUNTING LOCATION WITH OWNER PRIOR TO INSTALLATION. COORDINATE WITH MECHANICAL EQUIPMENT MONITORING SENSOR TECHNOLOGY TO ENSURE CROSS FUNCTIONALITY OF MECHANICALLY SPECIFIED DEVICES TO THIS SYSTEM.
C	SECURITY SURVEILLANCE CAMERA - WALL	PROVIDE POWER, ROUGH-INS, AND CABLING FOR POWER OVER ETHERNET (POE) SECURITY SURVEILLANCE CAMERA AS DESCRIBED IN THESE NOTES FOR EACH CAMERA AT APPROXIMATE LOCATIONS INDICATED. REFER TO VA OIT FOR ALL SECURITY COMPONENT REQUIREMENTS. SECURITY SURVEILLANCE COMPONENTS SHALL BE RATED FOR CONTINUOUS OPERATION IN THEIR INSTALLED PROJECT CONDITIONS. PROVIDE NETBOTZ IT SECURITY AND PROTECTION SYSTEM (OR PRIOR APPROVED EQUIVALENT) FOR INSTALLATION IN TELECOMMUNICATIONS ROOMS INDICATED. PROVIDE NETBOTZ CAMERA POD 165 (OR PRIOR APPROVED EQUIVALENT) AND ASSOCIATED WALL MOUNT APPARATUS FOR INSTALLATION WHERE INDICATED ON PLANS. PROVIDE NETBOTZ RACK MONITOR 750 (OR PRIOR APPROVED EQUIVALENT) AND ALL ASSOCIATED ASSEMBLY AND INSTILLATION EQUIPMENT REQUIRED PER MANUFACTURER SPECIFICATIONS. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE SYSTEM INCLUDING BUT NOT LIMITED TO INSTALLATION, CONFIGURATION, DEVICES, AND CABLING. SUBMIT SHOP DRAWINGS FOR APPROVAL. COORDINATE EXACT MOUNTING LOCATION WITH OWNER PRIOR TO INSTALLATION. COORDINATE WITH MECHANICAL EQUIPMENT MONITORING SENSOR TECHNOLOGY TO ENSURE CROSS FUNCTIONALITY OF MECHANICALLY SPECIFIED DEVICES TO THIS SYSTEM.

SECURITY SYMBOLS

PLAN SYMBOL	NAME
AC	ACCESS CONTROL PANEL
DA	DURESS ALARM CONTROL PANEL

LIGHTING FIXTURE SYMBOLS

PLAN SYMBOL	NAME
	EMERGENCY HATCH
	INDUSTRIAL STRIP LIGHT

ELECTRICAL DEMOLITION GENERAL NOTES:

(ELECTRICAL DEMOLITION NOTES APPLY TO ALL ELECTRICAL DEMOLITION PLANS AND ALL ELECTRICAL DEMOLITION WORK)

A. THE INTENT OF THE DEMOLITION DRAWINGS IS TO DEFINE THE SCOPE OF ELECTRICAL DEMOLITION WORK. PROVIDE DEMOLITION FOR ITEMS AS SHOWN.
B. ITEMS INDICATED WITH A SUBSCRIPT 'E' SHALL BE EXISTING TO REMAIN (E-EXISTING). ITEMS INDICATED WITH A SUBSCRIPT 'D' OR SHOWN DASHED SHALL BE REMOVED (D-DEMOLITION). ITEMS INDICATED WITH A SUBSCRIPT 'R' SHALL BE REMOVED, STORED, AND REINSTALLED PER NEW WORK (R-RELOCATION).
C. THESE DRAWINGS DO NOT IDENTIFY EACH INDIVIDUAL ITEM TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ITEMS WHICH MUST BE REMOVED TO FACILITATE NEW CONSTRUCTION. SEE ARCHITECTURAL PLANS FOR EXACT LIMITS OF DEMOLITION AND CONSTRUCTION. THESE PLANS ARE BASED ON PAST PROJECT DRAWINGS AND SITE OBSERVATIONS. THE DRAWINGS ARE PROVIDED TO THE CONTRACTOR AS AN AID IN DETERMINING THE EXTENT OF WORK REQUIRED FOR DEMOLITION AND TO PROVIDE GENERAL INFORMATION ABOUT EXISTING SYSTEMS. THESE DRAWINGS MAY NOT BE ACCURATE IN ALL AREAS. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS AND IS ENCOURAGED TO REVIEW FACILITY DRAWINGS PRIOR TO THE BID SUBMITTAL.
D. THE OWNER SHALL HAVE FIRST SALVAGE RIGHTS TO ALL ITEMS REMOVED. IF OWNER REFUSES SALVAGE, CONTRACTOR IS RESPONSIBLE FOR THE LEGAL AND RESPONSIBLE DISPOSAL.
E. WHERE EXISTING WALLS ARE TO BE REMOVED, ALL ASSOCIATED TELECOMMUNICATIONS EQUIPMENT SHALL BE REMOVED. SEE ARCHITECTURAL DRAWINGS FOR WALLS TO BE REMOVED. ABANDON CONCEALED CONDUITS WHERE WALLS ARE NOT REMOVED. CONCEALED CONDUITS MAY BE REUSED WHERE AVAILABLE. WHERE EXISTING CABLING IS TO BE DEMOLISHED AND NOT REUSED, REMOVE CABLES AND ASSOCIATED ACCESSIBLE RACEWAYS/CONDUIT BACK TO THE SOURCE. WHERE EXISTING CONDUITS TO BE DEMOLISHED ARE EMBEDDED IN CONCRETE FLOORS OR WALLS, CONDUITS MAY BE ABANDONED IN PLACE. EXISTING CABLES SHALL BE REMOVED BACK TO SOURCE AND CONDUITS SHALL BE CUT AT SURFACE OF CONCRETE AND FILLED. EXISTING BACK BOXES AND CONDUITS REMAINING FROM DEVICES BEING REMOVED MAY BE UTILIZED FOR NEW DEVICES WHERE LOCATIONS PERMIT. REMOVE AND PATCH WHERE BOXES ARE NOT REUSED.
F. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL ELECTRICAL DEMOLITION ITEMS. DISCONNECT AND REMOVE ELECTRICAL DEVICES, EQUIPMENT AND ASSOCIATED WIRING AS REQUIRED TO ACCOMMODATE NEW WORK. IF THE CONTRACTOR IS UNCLEAR REGARDING A SPECIFIC ITEM TO REMAIN OR BE REMOVED, THE CONTRACTOR SHALL SEEK CLARIFICATION FROM THE ARCHITECT.
G. SYSTEMS SERVING ADJACENT AREAS AND ITEMS THAT REMAIN SHALL BE MAINTAINED AT ALL TIMES. MODIFY SYSTEMS AS REQUIRED THROUGHOUT CONSTRUCTION TO MAINTAIN CONTINUITY OF SERVICE. DO NOT INTERRUPT SERVICE WITHOUT OWNER'S PRIOR WRITTEN APPROVAL. LIMIT DURATION OF INTERRUPTION ONLY TO THE TIME NECESSARY FOR DISCONNECTION AND IMMEDIATE RECONNECTION. INTERRUPTION TO SERVICE DEEMED BY OWNER AS ESSENTIAL MAY REQUIRE PREMIUM TIME AND SHALL BE INCLUDED WITH THE BID. EXTREME CARE SHALL BE TAKEN BY THE CONTRACTOR TO IDENTIFY EXISTING SYSTEM COMPONENTS ASSOCIATED WITH THESE SERVICES. APPROPRIATE METHODS OF MARKING THESE SHALL OCCUR TO ELIMINATE THE POSSIBILITY OF ACCIDENTAL INTERRUPTION. FOR CONDUIT AND CABLING THAT CAN REMAIN, PROVIDE SUPPORT AS REQUIRED. RELOCATE EXISTING JUNCTION BOXES THAT BECOME INACCESSIBLE DUE TO NEW WORK.
H. COORDINATE DEMOLITION WITH THE WORK OF OTHER TRADES. PROVIDE TEMPORARY SERVICES AS REQUIRED TO ALLOW THE WORK OF OTHER TRADES TO PROCEED.
I. PROTECT EXISTING TELECOMMUNICATIONS EQUIPMENT THAT REMAINS. IF DAMAGED OR DISTURBED IN THE COURSE OF THE WORK, REMOVE DAMAGED PORTIONS AND INSTALL NEW PRODUCTS OF EQUAL CAPACITY, QUALITY, AND FUNCTIONALITY.
J. PATCH AND REPAIR OPENINGS IN EXISTING WALLS AND FLOORS RESULTANT FROM SPECIFIED ELECTRICAL DEMOLITION. PATCH SHALL MATCH EXISTING CONSTRUCTION, FIRE RATING, AND FINISH. SEE ARCHITECTURAL SPECIFICATIONS FOR MEANS AND METHODS.
K. THIS PROJECT WILL BE PHASED. SEE PROJECT MANUAL AND ARCHITECTURAL PLANS FOR DETAILS. SYSTEM SERVICES TO AREAS NOT IN THE CURRENT PHASE OF CONSTRUCTION SHALL BE MAINTAINED AT ALL TIMES.
L. WHERE DEMOLITION OF EQUIPMENT INVOLVES REMOVAL OF EQUIPMENT LOCATED ON CONCRETE HOUSEKEEPING PADS, PADS SHALL ALSO BE REMOVED AND FLOOR/GRADE SHALL BE FINISHED TO MATCH ADJACENT SURFACE.
M. ALL UNLABELED TELECOMMUNICATIONS DEVICES SHALL BE TRACED AS NEEDED WITH A LABEL PROVIDED.
N. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT OF ALL CABLING, PATHWAYS, AND SYSTEMS LOCATED ABOVE CEILING THAT ARE REQUIRED TO BE MODIFIED AS A PART OF THE PROJECT. CONTRACTOR SHALL REPLACE ANY ITEMS DAMAGED FROM TEMPORARY SUPPORT.
O. EXISTING ANALOG DEVICES ACTIVELY SERVING EQUIPMENT SHALL BE EXISTING TO REMAIN REGARDLESS IF SHOWN AS BEING REMOVED. CONNECTIONS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING. THE CONTRACTOR SHALL FIELD VERIFY DURING CONSTRUCTION.
   a. FAX, ELEVATORS, PATIENT TELEPHONES, BLUE PHONES, CODE BLUE DEVICES, FIRE ALARM, MEDICAL ANALOG EQUIPMENT, PANIC DURESS, ETC.
P. WITHIN EXISTING SPACES THAT ARE TO BE DEMOLISHED TO BE CONVERTED INTO A TR OR MCR, REROUTE ANY EXISTING LOW VOLTAGE CABLING OUTSIDE THE ROOM. SPLICE AND EXTEND CONDUCTORS AS REQUIRED. REPLACE ANY CATEGORY CABLES NEEDING TO BE REROUTED.
Q. ALL CATEGORY 5E AND LOWER DATA CABLES THAT ARE REMOVED FROM THE RACK ARE TO BE REMOVED ENTIRELY TO THE WORK AREA. THE WORK AREA WALL PLATES AND JACKS ARE ALSO PART OF THE DEMOLITION. OLD DATA CABLES CANNOT BE DOMOLISHED UNTIL NEW CAT6A CABLES HAVE BEEN INSTALLED AND THE CLIENT IS ACTIVELY USING THE NEW DATA DROP. SEE THE SEQUENCING NOTES FOR ADDITIONAL DETAIL.
R. FIBER CABLES THAT ARE IN TRS TO BE DEMOLISHED ARE TO BE REMOVED ENTIRELY BACK TO THE SERVER ROOM. ANY CODUIT USED BY THE EXISTING FIBER WILL REMAIN AND POTENTIALLY BE USED BY NEW FIBER PULLS. FIBER IN TRS THAT WILL NOT RELOCATE IS TO REMAIN AS EXISTING. B SIDE FIBER TO NEW TR LOCATIONS MAY REUSE PREVIOUS FIBER PATHS TO THE NEW TR ROOM. ADDITIONAL CONDUIT MAY BE NEEDED TO GET THE FIBER TO THE NEW TR.

TECHNOLOGY PHASING NOTES:

1. REFER TO SPECIFICATIONS APPENDIX A-B FOR ADDITIONAL PHASING INFORMATION.

TELECOMMUNICATIONS GENERAL NOTES:

(GENERAL NOTES SHALL APPLY TO ALL SHEETS)

A. REFER TO VA OIT "INFRASTRUCTURE STANDARD FOR TELECOMMUNICATIONS SPACES VERSION 3.1" FOR ADDITIONAL REQUIREMENTS INCLUDING MANUFACTURER AND MODEL NUMBERS FOR THE BASIS OF DESIGN EQUIPMENT. ALL EQUIPMENT PROVIDED AS PART OF THIS PROJECT MUST BE EQUIVALENT TO THE BASIS OF DESIGN EQUIPMENT LISTED.
B. FOR ALL CONDUIT AND OTHER ITEMS PENETRATING A FIRE RATED WALL, PROVIDE UL LISTED THROUGH PENETRATION FIRE STOPPING SYSTEM, INSTALLED BY A CERTIFIED INSTALLER, THAT IS SPECIFIC TO THE WALL CONSTRUCTION ASSEMBLY AND COMPLIANT WITH ASTM E814. INSTALL SYSTEM IN STRICT COMPLIANCE WITH THE FIRE STOPPING MANUFACTURER'S U.L. APPROVED DETAIL. WHERE EXISTING WALLS ARE BEING UPGRADED TO FIRE RATED WALLS OR THE FIRE RATING IS BEING MODIFIED, PROVIDE U.L. LISTED THROUGH PENETRATION FIRE STOPPING SYSTEM FOR ALL NEW AND EXISTING PENETRATIONS. REFER TO THE ARCHITECTURAL LIFE SAFETY PLANS FOR LOCATIONS OF FIRE RATED WALLS.
C. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO INDEPENDENTLY SUPPORT ALL EXISTING TO REMAIN CABLING.
D. PROVIDE ONE (1) CATEGORY 6A CABLE TO EACH UPS WITHIN PROJECT. CENTRALIZED UPS'S ARE SHOWN ON THE ELECTRICAL DRAWING SET AND RACK MOUNTED UPS'S ARE SHOWN ON THE TELECOMMUNICATIONS ROOM RACK ELEVATIONS FOR EACH ROOM. UPS'S SHALL BE CONNECTED TOGETHER IN A CENTRALIZED UPS MONITORING SYSTEM.
E. PROVIDE ONE (1) CATEGORY 6A CABLE TO EACH NEW PANELBOARD, DISTRIBUTION BOARD, AND SWITCHBOARD WITHIN PROJECT. PANELS SHALL BE CONNECTED TOGETHER IN A CENTRALIZED ELECTRICAL METERING SYSTEM.
F. ALL CABLING, CONDUITS, CHASEWAYS, PANELS, BOXES AND EQUIPMENT ARE TO BE LABELED UTILIZING THE LATEST IN BICSI/TIA STANDARDS.
G. ALL NEW CONSTRUCTION TRS ARE TO GET NEW ACCESS CONTROL PANELS FROM THE CURRENT VENDOR. THE CONTRACTOR WILL COORDINATE THE INSTALLATION OF THE NEW AC PANEL BY THE VENDOR WITH THE VA COR INTO THE NEW TR. THE CONTRACTOR IS TO REMOVE AND RE-USE CARD READERS AND KEYPADS FROM DECOMMISSIONED TRS FOR NEW CONSTRUCTION TRS WHEREVER POSSIBLE.
H. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE ALL ENTRANCE, BACKBONE, AND HORIZONTAL CABLING IS TERMINATED EACH END, TESTED, AND LABELED PER SPECIFICATIONS. FIBER OPTIC CABLING SHALL BE TERMINATED WITHIN RACK MOUNT FIBER ENCLOSURES EACH END. EXACT PART AND MODEL NO WILL NOT BE IDENTIFIED WITHIN RACK ELEVATIONS OR SCHEMATICS. REFER TO SPECIFICATIONS. UTP CABLING SHALL BE TERMINATED EACH END ON SPECIFIED CAT 6A PATCH PANELS WITHIN THE TRS AND SPECIFIED CAT 6A JACKS AT THE USER OUTLET.
I. CABLE QUANTITIES INDICATED FOR EACH BUILDING ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND READINESS INFRASTRUCTURE SELF-ASSESSMENTS PROVIDED BY THE VA. SOME LOCATIONS WERE UNABLE TO BE SURVEYED FOR EXISTING COMMUNICATIONS OUTLETS AND CABLING DUE TO PATIENT CARE. CONTRACTOR SHALL ACCOUNT FOR ADDITIONAL CABLES REQUIRED. CONTRACTOR SHALL ACCOUNT FOR AN ADDITIONAL 20% OF CABLES, DEVICES, AND PATCH PANELS INDICATED ON DRAWINGS IN ORDER TO ACCOMMODATE THE FULL SCOPE OF THE PROJECT WITHIN BASE BID.
J. EXISTING CEILINGS THROUGHOUT CORRIDORS AND ROOMS WITH EXISTING CABLING MAY NEED TO BE REMOVED AND REPLACED TO ACCOMMODATE CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR IDENTIFICATION OF SCOPE OF WORK ASSOCIATED WITH THIS REMOVAL AND INSTALLATION WITHIN BASE BID. WHERE EXISTING CEILINGS ARE LAYIN TILE, GRID SYSTEM MAY REMAIN IN PLACE AND ONLY THE EXISTING TILES WILL REQUIRE REMOVAL AND REPLACEMENT. EXISTING CEILING MOUNTED COMPONENTS SHALL BE TEMPORARILY SUPPORTED AND BE REINSTALLED IN NEW CEILINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR COST OF REPLACEMENT OF CEILING ELEMENTS THAT ARE DAMAGED OR DESTROYED DURING THE PROJECT. REFER TO ARCHITECTURAL DRAWINGS FOR FURTHER INFORMATION. COORDINATE WITH OWNER FOR PROCUREMENT OF REPLACEMENT CEILING TILES OR OTHER ELEMENTS.
K. ALL DECOMMISSIONED TR EQUIPMENT (RACKS, CABLE TRAY, SECURITY CAMERAS, CARD READERS, GROUND BUS BARS, HVAC SPLIT SYSTEMS) SHALL BE MOVED AND INSTALLED INTO NEW CONSTRUCTION TRS AS NEEDED. EXCESS TR EQUIPMENT IS TO BE RETURNED TO THE VA.
L. ALL EXISTING VOICE CABLES AND WALL FIELD EQUIPMENT ARE TO REMAIN IN SERVICE AS IS.
M. ALL 2 POST RACKS TO BE REPLACED WITH 4 POST RACKS UNLESS OTHERWISE SPECIFIED IN SHEET NOTES. THE 4 POST RACK IS SPECIFIED IN THE OIT INFRASTRUCTURE STANDARD 3.1 DOCUMENT.

WORK RESTRICTION NOTES:

(GENERAL NOTES SHALL APPLY TO ALL SHEETS)

1. WORK RESTRICTIONS IN OPERATIONAL ROOMS: WORK WITHIN EXISTING ROOMS (ENTRANCE FACILITY, MAIN COMPUTER ROOMS, TELECOMMUNICATIONS ROOMS) SHALL REQUIRE THE PRESENCE OF A VA ESCORT WHILE THE EXISTING ROOM IS STILL OPERATIONAL AND ACTIVE. WORK WITHIN NEW ROOMS (ENTRANCE FACILITY, MAIN COMPUTER ROOM, TELECOMMUNICATIONS ROOMS) SHALL REQUIRE THE PRESENCE OF A VA ESCORT ONCE THE NEW ROOM BECOMES OPERATIONAL AND ACTIVE.
2. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR WORK RESTRICTIONS WITHIN EACH BUILDING FOR TIME OF DAY AVAILABILITY OF SPACES AND LEVEL OF INFECTION CONTROL REQUIRED BY THE CONTRACTOR. CONTRACTOR SHALL ACCOUNT FOR OFF HOURS WORK REQUIRED.

ELECTRICAL ABBREVIATIONS

ABBREVIATION	DESCRIPTION
##"	MOUNTING HEIGHT TO CENTERLINE (ABOVE FINISHED FLOOR)
A	AMPERE
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AL	ALUMINUM
AT	AMPERE TRIP
C	CEILING
CB	CIRCUIT BREAKER
CCT	COLOR TEMP CONTROL
CU	COPPER
D	DATA (WHEN APPLIED TO COMMUNICATIONS OUTLET)
D	DEMO (WHEN APPLIED TO EXISTING/DEMO ITEMS)
E	EXISTING
EO	ELECTRICALLY OPERATED
ERMS	ENERGY REDUCING MAINTENANCE SWITCH
F	FUSE
FLA	FULL LOAD AMPS
G, GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFA	GROUND FAULT ALARM
GFP	GROUND FAULT PROTECTION
HP	HORSEPOWER
KAIC	KILOAMPERE INTERRUPTING CAPACITY
KVA	KILOVOLT AMPERE
KW	KILOWATT
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MO	MANUALLY OPERATED
NC	NORMALLY CLOSED
NF	NON-FUSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
P	POLES
PART	PARTIAL
R	RELOCATE
SCCR	SHORT CIRCUIT CURRENT RATING
SPD	SURGE PROTECTIVE DEVICE
ST	SHUNT TRIP
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOICE
W	WALL PHONE
W	WIRE
WR	WEATHER RESISTANT
XFMR	TRANSFORMER
ZSI	ZONE SELECTIVE INTERLOCKING

REFER TO OTHER SCHEDULES AND NOTES FOR ADDITIONAL ABBREVIATIONS.

5/11/2022 2:48:23 PM
BIM 360://21102.001 - VA St Cloud EHRM Infrastructure Upgrades/656-235.B00.T_R21.rvt

No	REVISION	DATE

CONSULTANT
SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle
Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP
REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Nathan Timm
BICSI ID # 346555
EXPIRES 12-31-23
Nathan M. Timm

DRAWING TITLE: TELECOM SYMBOLS AND ABBREVIATIONS
PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
DATE: 03/30/2022
PLOT SCALE
PROJECT NO. 656-21-235
BUILDING No CAMPUS | CHECKED BY KSB | DRAWN SSK | DRAWING NO. T000
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303 | FULLY SPRINKLERED | DWG. OF

VA
U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

TELECOMMUNICATIONS ROUTING SCHEMATIC GENERAL NOTES:

A. UTILIZE CONDUITS, SLEEVES, J-HOOKS, AND CABLE TRAY INDICATED PER PLANS FOR ROUTING AND SUPPORTING COMMUNICATIONS CABLING.
B. COORDINATE PROJECT PHASING WITH OWNER AND ARCHITECTURAL DOCUMENTS.
C. CABLES ROUTING THRU OCCUPIED AREAS SHALL BE COORDINATED WITH ARCHITECT PRIOR TO WORK BEING STARTED.
D. UTILIZE CORRIDORS FOR ROUTING COMMUNICATIONS CABLING.
E. COORDINATE OPENINGS THRU FLOORS AND CEILINGS WITH STRUCTURAL.
F. VERTICAL ROUTED CABLES SHALL BE SUPPORTED AT 18" ON CENTER WHERE EXPOSED.
G. COORDINATE TELECOMMUNICATIONS INFRASTRUCTURE AND TELECOMMUNICATIONS RACK LAYOUT WITH OWNER'S ISIT REPRESENTATIVE.
H. ALL CABLEING, CONDUITS, SLEEVES, CABLE TRAYS AND EQUIPMENTS ARE TO BE LABELED UTILIZING THE LATEST BICSI/TIA STANDARDS.

TELECOMMUNICATIONS ROUTING SCHEMATIC SHEET NOTES:

1. EXISTING FIBER BACKBONE IN ROOM.
2. EXISTING COPPER BACKBONE IN ROOM.
3. EXISTING FIBER ENTRANCE BACKBONE PROVIDED BY TELECOMMUNICATIONS COMPANY.
4. REFER TO TYPICAL COMMUNICATION TERMINATION - VOICE (PATCH PANELS) DETAIL ON SHEET T804. (TYPICAL)
5. REFER TO TYPICAL COMMUNICATION TERMINATION - DATA (PATCH PANELS) DETAIL ON SHEET T804. (TYPICAL)
6. TELECOMMUNICATIONS GROUND BAR, LENGTH AS REQUIRED FOR TERMINATIONS. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
7. BOND TO CABLE TRAY, TELECOM RACK, RACK MOUNTED EQUIPMENT VIA RACK BONDING BUSBAR, LOW VOLTAGE CABINETS, VOICE/DATA/CATV SERVICE DEMARCS, AND GROUND BARS OF PANELBOARDS LOCATED IN TELECOMMUNICATIONS SPACES WITH #6 COPPER IN ONE (1) 3/4" CONDUIT.
8. PROVIDE #3/0 COPPER IN 1" PVC CONDUIT FROM GROUND BAR TO TELECOMMUNICATIONS MAIN GROUND BAR LOCATED IN MAIN SERVER ROOM 185 IN BUILDING 4. (TYPICAL)
9. EXISTING TELECMMUNICATIONS GROUND BAR.
10. EXISTING COPPER ENTRENCE EQUIPMENT.
11. NEW TELECOMMUNICATIONS ROOM.
12. PROVIDE FIBER OPTIC BACKBONE CABLING TO MATCH NUMBER OS STRANDS PROVIDED BY TELECOMMUNICATIONS COMPANY.
13. BOND TELECOMMUNICATIONS GROUNDING RISER TO ELECTRICAL GROUNDING RISER WITH #3/0 COPPER IN ONE (1) 1" CONDUIT. GROUNDING RISER SHALL ONLY BE BONDED TOGETHER AT THIS LOCATION.
14. EXISTING MAIN TELECOMMUNICATIONS GROUND BAR.

WIRE, CONDUIT, ROUTE - LEGEND

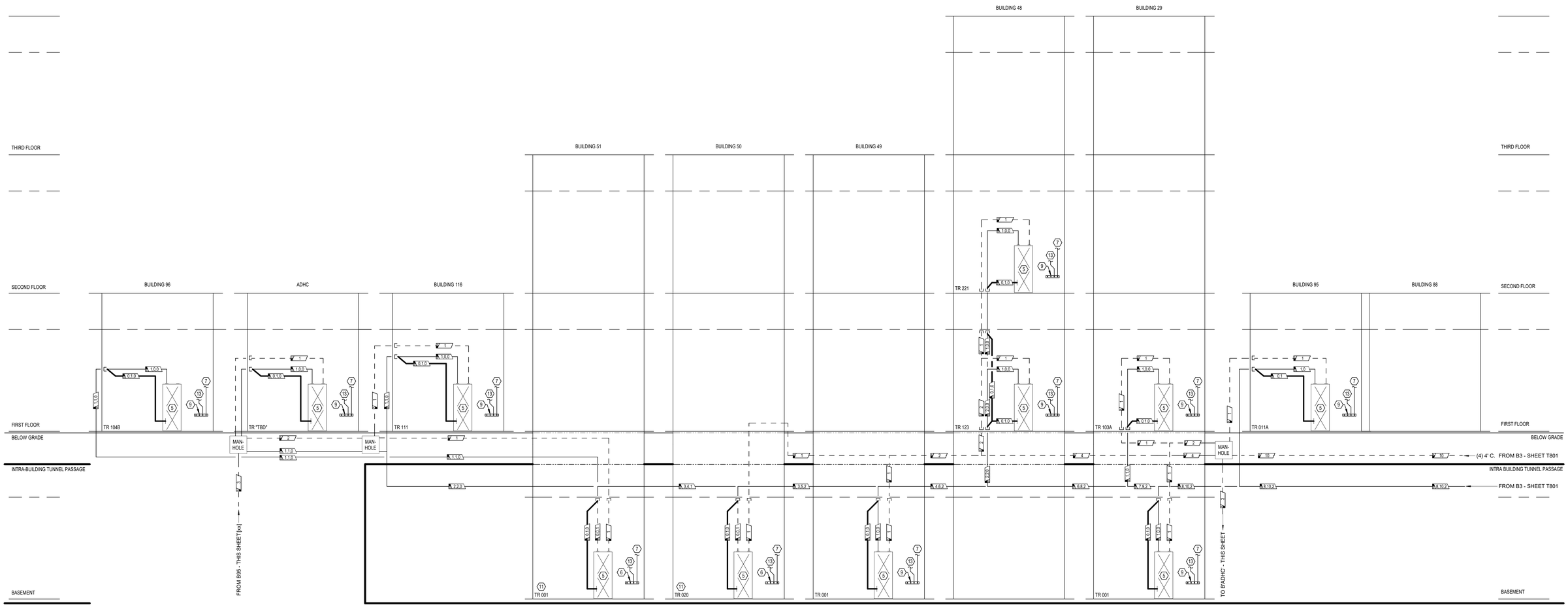
WIRE		
X	(#) MULTIPLE OF	(1) **EXISTING** CURRENT BUILDING FIBER (12 STRAND)
Y	(#) MULTIPLE OF	(1) **NEW** 50 PAIR COPPER CONDUCTOR
Z	(#) MULTIPLE OF	(1) **NEW** 24 STRAND OS2 FIBER

CONDUIT
EXISTING CONDUIT PATHWAY
NEW CONDUIT PATHWAY, SIZED PER SHEET TS001

FIBER ROUTE
A-SIDE FIBER ROUTE
B-SIDE FIBER ROUTE

XYZ	6.6.0	• **B-SIDE** FIBER ROUTE • EXISTING CONDUIT PATHWAY CARRYING: (6) **EXISTING** CURRENT BUILDING FIBER + (6) **NEW** 50 PAIR COPPER CONDUCTOR + (0) **NEW** 24 STRAND OS2 FIBER
XYZ	0.5.5	• **B-SIDE** FIBER ROUTE • **NEW** CONDUIT PATHWAY CARRYING: (0) **EXISTING** CURRENT BUILDING FIBER + (5) **NEW** 50 PAIR COPPER CONDUCTOR + (5) **NEW** 24 STRAND OS2 FIBER
2	4	• **A-SIDE** FIBER ROUTE • **NEW** CONDUIT PATHWAY CARRYING: (4) **NEW** 24 STRAND OS2 FIBER (NOTE 1)

A. A-SIDE FIBER ROUTE WILL BE NEW CONSTRUCTION IN NEW CONDUIT. A-SIDE FIBER ROUTE WILL CONSIST OF (1) NEW 24 STRAND OS2 FIBER ONLY.



1 TELECOMMUNICATIONS ROUTING SCHEMATIC 1
1/8" = 1'-0"

5/11/2022 2:48:42 PM

BIM 360://211102.001 - VA St Cloud EHRM Infrastructure Upgrades/656-235 B00 T_R21.rvt

No	REVISION	DATE

CONSULTANT
AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP
REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Nathan Timm
BICSI ID # 346555
EXPIRES 12-31-23
Nathan M. Timm

DRAWING TITLE: TELECOMMUNICATION ROUTING SCHEMATIC

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
DATE: 03/30/2022
PLOT SCALE:
PROJECT NO.: 656-21-235
BUILDING No: CAMPUS | CHECKED BY: KSB | DRAWN: SSK | DRAWING NO.: T800
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303 | FULLY SPRINKLERED
DRG OF

VA | U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

TELECOMMUNICATIONS ROUTING SCHEMATIC SHEET NOTES:

1. EXISTING FIBER BACKBONE IN ROOM.
2. EXISTING COPPER BACKBONE IN ROOM.
3. EXISTING FIBER ENTRANCE BACKBONE PROVIDED BY TELECOMMUNICATIONS COMPANY.
4. REFER TO TYPICAL COMMUNICATION TERMINATION - VOICE (PATCH PANELS) DETAIL ON SHEET T804. (TYPICAL)
5. REFER TO TYPICAL COMMUNICATION TERMINATION - DATA (PATCH PANELS) DETAIL ON SHEET T804. (TYPICAL)
6. TELECOMMUNICATIONS GROUND BAR, LENGTH AS REQUIRED FOR TERMINATIONS. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
7. BOND TO CABLE TRAY, TELECOM RACK, RACK MOUNTED EQUIPMENT VIA RACK BONDING BUSBAR, LOW VOLTAGE CABINETS, VOICE/DATA/CATV SERVICE DEMARCS, AND GROUND BARS OF PANELBOARDS LOCATED IN TELECOMMUNICATIONS SPACES WITH #6 COPPER IN ONE (1) 3/4" CONDUIT.
8. PROVIDE #3/0 COPPER IN 1" PVC CONDUIT FROM GROUND BAR TO TELECOMMUNICATIONS MAIN GROUND BAR LOCATED IN MAIN SERVER ROOM 185 IN BUILDING 4. (TYPICAL)
9. EXISTING TELECMMUNICATIONS GROUND BAR.
10. EXISTING COPPER ENTRENCE EQUIPMENT.
11. NEW TELECOMMUNICATIONS ROOM.
12. PROVIDE FIBER OPTIC BACKBONE CABLING TO MATCH NUMBER OS STRANDS PROVIDED BY TELECOMMUNICATIONS COMPANY.
13. BOND TELECOMMUNICATIONS GROUNDING RISER TO ELECTRICAL GROUNDING RISER WITH #3/0 COPPER IN ONE (1) 1" CONDUIT. GROUNDING RISER SHALL ONLY BE BONDED TOGETHER AT THIS LOCATION.
14. EXISTING MAIN TELECOMMUNICATIONS GROUND BAR.

WIRE, CONDUIT, ROUTE - LEGEND

WIRE

X	(#) MULTIPLE OF	(1) **EXISTING** CURRENT BUILDING FIBER (12 STRAND)
Y	(#) MULTIPLE OF	(1) **NEW** 50 PAIR COPPER CONDUCTOR
Z	(#) MULTIPLE OF	(1) **NEW** 24 STRAND OS2 FIBER

CONDUIT
EXISTING CONDUIT PATHWAY
NEW CONDUIT PATHWAY, SIZED PER SHEET TS001

FIBER ROUTE
A-SIDE FIBER ROUTE
B-SIDE FIBER ROUTE

X,Y,Z	6,6,0	• **B-SIDE** FIBER ROUTE • EXISTING CONDUIT PATHWAY CARRYING: (6) **EXISTING** CURRENT BUILDING FIBER + (6) **NEW** 50 PAIR COPPER CONDUCTOR + (0) **NEW** 24 STRAND OS2 FIBER
X,Y,Z	0,5,5	• **B-SIDE** FIBER ROUTE • **NEW** CONDUIT PATHWAY CARRYING: (0) **EXISTING** CURRENT BUILDING FIBER + (5) **NEW** 50 PAIR COPPER CONDUCTOR + (5) **NEW** 24 STRAND OS2 FIBER
Z	4	• **A-SIDE** FIBER ROUTE • **NEW** CONDUIT PATHWAY CARRYING: (4) **NEW** 24 STRAND OS2 FIBER (NOTE 1)

A. A-SIDE FIBER ROUTE WILL BE NEW CONSTRUCTION IN NEW CONDUIT. A-SIDE FIBER ROUTE WILL CONSIST OF (1) NEW 24 STRAND OS2 FIBER ONLY.

1 TELECOMMUNICATIONS ROUTING SCHEMATIC 2

1/8" = 1'-0"

No	REVISION	DATE

CONSULTANT

SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP

REGISTERED COMMUNICATIONS DISTRIBUTION
BICSI
Nathan Timm
BICSI ID # 346555
Nathan M. Timm

DRAWING TITLE	TELECOMMUNICATION ROUTING SCHEMATIC
PROJECT TITLE	EHRM INFRASTRUCTURE UPGRADES
DATE:	03/30/2022
PLOT SCALE	
PROJECT NO.	656-21-235
BUILDING No	CAMPUS
CHECKED BY	KSB
DRAWN	SSK
DRAWING NO.	T801
LOCATION	VA MEDICAL CENTER ST.CLOUD, MN 56303 — FULLY SPRINKLERED
DWG. OF	

VA
U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

5/11/2022 2:48:45 PM

TELECOMMUNICATIONS ROUTING SCHEMATIC SHEET NOTES:

1. EXISTING FIBER BACKBONE IN ROOM.
2. EXISTING COPPER BACKBONE IN ROOM.
3. EXISTING FIBER ENTRANCE BACKBONE PROVIDED BY TELECOMMUNICATIONS COMPANY.
4. REFER TO TYPICAL COMMUNICATION TERMINATION - VOICE (PATCH PANELS) DETAIL ON SHEET T804. (TYPICAL)
5. REFER TO TYPICAL COMMUNICATION TERMINATION - DATA (PATCH PANELS) DETAIL ON SHEET T804. (TYPICAL)
6. TELECOMMUNICATIONS GROUND BAR, LENGTH AS REQUIRED FOR TERMINATIONS. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
7. BOND TO CABLE TRAY, TELECOM RACK, RACK MOUNTED EQUIPMENT VIA RACK BONDING BUSBAR, LOW VOLTAGE CABINETS, VOICE/DATA/CATV SERVICE DEMARCS, AND GROUND BARS OF PANELBOARDS LOCATED IN TELECOMMUNICATIONS SPACES WITH #6 COPPER IN ONE (1) 3/4" CONDUIT.
8. PROVIDE #3/0 COPPER IN 1" PVC CONDUIT FROM GROUND BAR TO TELECOMMUNICATIONS MAIN GROUND BAR LOCATED IN MAIN SERVER ROOM 185 IN BUILDING 4. (TYPICAL)
9. EXISTING TELECMMUNICATIONS GROUND BAR.
10. EXISTING COPPER ENTRENCE EQUIPMENT.
11. NEW TELECOMMUNICATIONS ROOM.
12. PROVIDE FIBER OPTIC BACKBONE CABLING TO MATCH NUMBER OS STRANDS PROVIDED BY TELECOMMUNICATIONS COMPANY.
13. BOND TELECOMMUNICATIONS GROUNDING RISER TO ELECTRICAL GROUNDING RISER WITH #3/0 COPPER IN ONE (1) 1" CONDUIT. GROUNDING RISER SHALL ONLY BE BONDED TOGETHER AT THIS LOCATION.
14. EXISTING MAIN TELECOMMUNICATIONS GROUND BAR.

WIRE, CONDUIT, ROUTE - LEGEND

WIRE

X	(#) MULTIPLE OF	(1) **EXISTING** CURRENT BUILDING FIBER (12 STRAND)
Y	(#) MULTIPLE OF	(1) **NEW** 50 PAIR COPPER CONDUCTOR
Z	(#) MULTIPLE OF	(1) **NEW** 24 STRAND OS2 FIBER

CONDUIT	FIBER ROUTE
EXISTING CONDUIT PATHWAY	**A-SIDE** FIBER ROUTE
NEW CONDUIT PATHWAY, SIZED PER SHEET TS001	**B-SIDE** FIBER ROUTE

B X,Y,Z	B 6,6,0	• **B-SIDE** FIBER ROUTE • EXISTING CONDUIT PATHWAY CARRYING: (6) **EXISTING** CURRENT BUILDING FIBER + (6) **NEW** 50 PAIR COPPER CONDUCTOR + (0) **NEW** 24 STRAND OS2 FIBER
B X,Y,Z	B 0,5,5	• **B-SIDE** FIBER ROUTE • **NEW** CONDUIT PATHWAY CARRYING: (0) **EXISTING** CURRENT BUILDING FIBER + (5) **NEW** 50 PAIR COPPER CONDUCTOR + (5) **NEW** 24 STRAND OS2 FIBER
A Z	A 4	• **A-SIDE** FIBER ROUTE • **NEW** CONDUIT PATHWAY CARRYING: (4) **NEW** 24 STRAND OS2 FIBER (NOTE 1)

A. A-SIDE FIBER ROUTE WILL BE NEW CONSTRUCTION IN NEW CONDUIT. A-SIDE FIBER ROUTE WILL CONSIST OF (1) NEW 24 STRAND OS2 FIBER ONLY.

1 TELECOMMUNICATIONS ROUTING SCHEMATIC 3

1/8" = 1'-0"

No	REVISION	DATE

CONSULTANT

SPECIALIZED ENGINEERING SOLUTIONS

10360 Ellison Circle
Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON

13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP

REGISTERED COMMUNICATIONS DISTRIBUTION Bicsi Nathan Timm BICSI ID # 346555 EXPIRES 12-31-23

Nathan M. Timm

DRAWING TITLE: TELECOMMUNICATION ROUTING SCHEMATIC

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

DATE: 03/30/2022

PLOT SCALE

PROJECT NO. 656-21-235

BUILDING No CAMPUS | CHECKED BY KSB | DRAWN SSK | DRAWING NO. T802

LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303 | FULLY SPRINKLERED | DWG. OF

VA | U.S. Department of Veterans Affairs | Veterans Health Administration | St. Cloud VA Health Care System

TELECOMMUNICATIONS ROUTING SCHEMATIC SHEET NOTES:

1. EXISTING FIBER BACKBONE IN ROOM.
2. EXISTING COPPER BACKBONE IN ROOM.
3. EXISTING FIBER ENTRANCE BACKBONE PROVIDED BY TELECOMMUNICATIONS COMPANY.
4. REFER TO TYPICAL COMMUNICATION TERMINATION - VOICE (PATCH PANELS) DETAIL ON SHEET T804. (TYPICAL)
5. REFER TO TYPICAL COMMUNICATION TERMINATION - DATA (PATCH PANELS) DETAIL ON SHEET T804. (TYPICAL)
6. TELECOMMUNICATIONS GROUND BAR, LENGTH AS REQUIRED FOR TERMINATIONS. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
7. BOND TO CABLE TRAY, TELECOM RACK, RACK MOUNTED EQUIPMENT VIA RACK BONDING BUSBAR, LOW VOLTAGE CABINETS, VOICE/DATA/CATV SERVICE DEMARCS, AND GROUND BARS OF PANELBOARDS LOCATED IN TELECOMMUNICATIONS SPACES WITH #6 COPPER IN ONE (1) 3/4" CONDUIT.
8. PROVIDE #3/0 COPPER IN 1" PVC CONDUIT FROM GROUND BAR TO TELECOMMUNICATIONS MAIN GROUND BAR LOCATED IN MAIN SERVER ROOM 185 IN BUILDING 4. (TYPICAL)
9. EXISTING TELECOMMUNICATIONS GROUND BAR.
10. EXISTING COPPER ENTRENCE EQUIPMENT.
11. NEW TELECOMMUNICATIONS ROOM.
12. PROVIDE FIBER OPTIC BACKBONE CABLING TO MATCH NUMBER OS STRANDS PROVIDED BY TELECOMMUNICATIONS COMPANY.
13. BOND TELECOMMUNICATIONS GROUNDING RISER TO ELECTRICAL GROUNDING RISER WITH #3/0 COPPER IN ONE (1) 1" CONDUIT. GROUNDING RISER SHALL ONLY BE BONDED TOGETHER AT THIS LOCATION.
14. EXISTING MAIN TELECOMMUNICATIONS GROUND BAR.

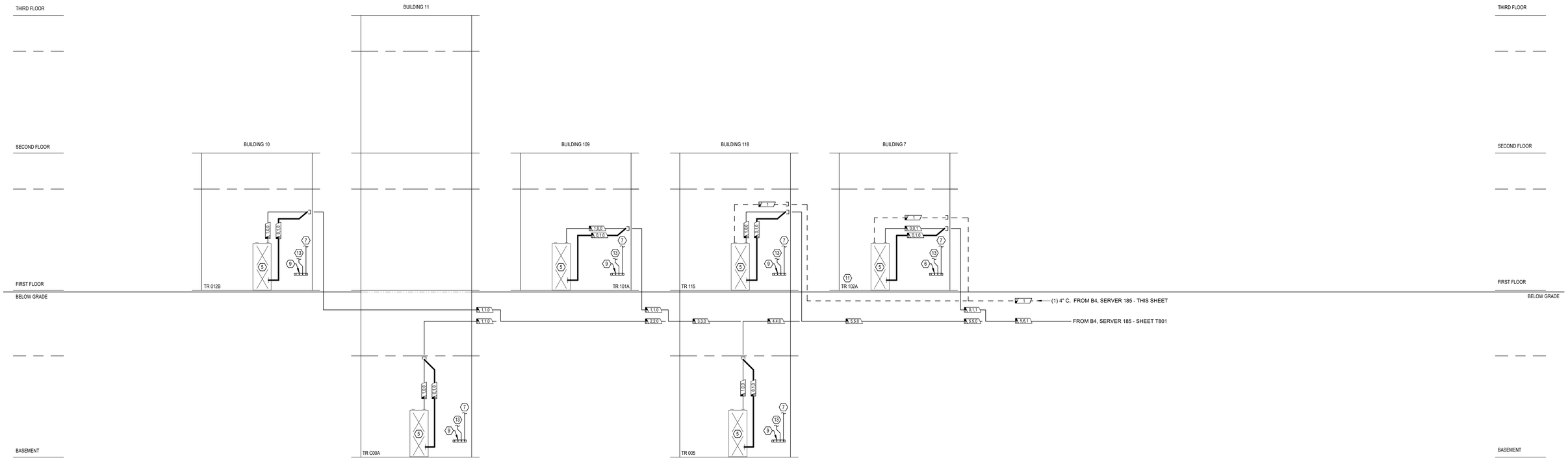
WIRE, CONDUIT, ROUTE - LEGEND

WIRE		
X	(#) MULTIPLE OF	(1) **EXISTING** CURRENT BUILDING FIBER (12 STRAND)
Y	(#) MULTIPLE OF	(1) **NEW** 50 PAIR COPPER CONDUCTOR
Z	(#) MULTIPLE OF	(1) **NEW** 24 STRAND OS2 FIBER

CONDUIT	FIBER ROUTE
EXISTING CONDUIT PATHWAY	**A-SIDE** FIBER ROUTE
NEW CONDUIT PATHWAY, SIZED PER SHEET TS001	**B-SIDE** FIBER ROUTE

X,Y,Z	6,6,0	• **B-SIDE** FIBER ROUTE • EXISTING CONDUIT PATHWAY CARRYING: (6) **EXISTING** CURRENT BUILDING FIBER + (6) **NEW** 50 PAIR COPPER CONDUCTOR + (0) **NEW** 24 STRAND OS2 FIBER
X,Y,Z	0,5,5	• **B-SIDE** FIBER ROUTE • **NEW** CONDUIT PATHWAY CARRYING: (0) **EXISTING** CURRENT BUILDING FIBER + (5) **NEW** 50 PAIR COPPER CONDUCTOR + (5) **NEW** 24 STRAND OS2 FIBER
2	4	• **A-SIDE** FIBER ROUTE • **NEW** CONDUIT PATHWAY CARRYING: (4) **NEW** 24 STRAND OS2 FIBER (NOTE 1)

A. **A-SIDE** FIBER ROUTE WILL BE NEW CONSTRUCTION IN NEW CONDUIT. A-SIDE FIBER ROUTE WILL CONSIST OF (1) NEW 24 STRAND OS2 FIBER ONLY.



1 TELECOMMUNICATIONS ROUTING SCHEMATIC 4

1/8" = 1'-0"

BIM 360://211102.001 - VA St Cloud EHRM Infrastructure Upgrades/656-235 B00 T_R21.rvt

5/11/2022 2:48:48 PM

No	REVISION	DATE

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134 | Phone: 402.991.5520 | www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

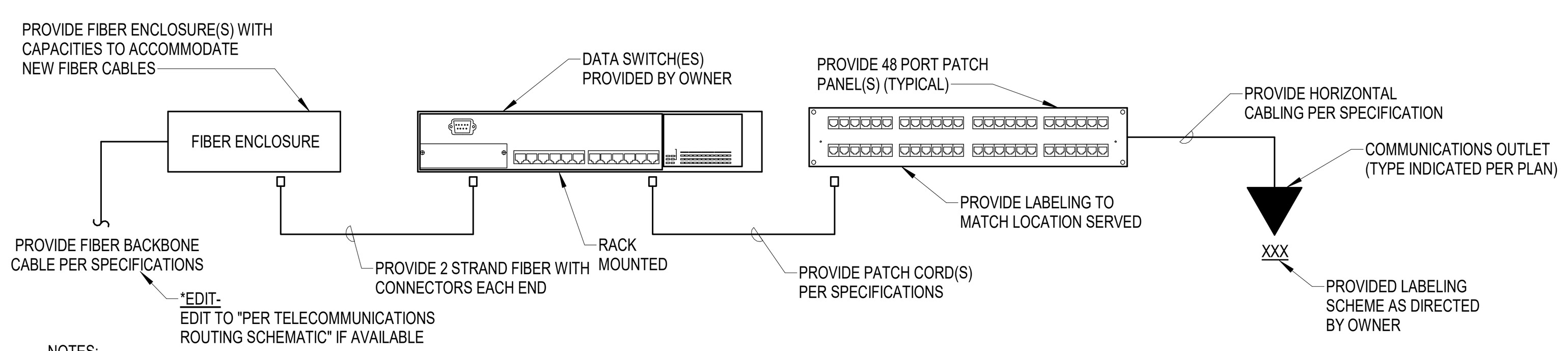
STAMP

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Nathan Timm
BICSI ID # 346555
EXPIRES 12-31-23
Nathan M. Timm

DRAWING TITLE: TELECOMMUNICATION ROUTING SCHEMATIC

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
DATE: 03/30/2022
PLOT SCALE:
PROJECT NO.: 656-21-235
BUILDING No: CAMPUS | CHECKED BY: KSB | DRAWN: SSK | DRAWING NO.: T803
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303 | FULLY SPRINKLERED
DWG OF

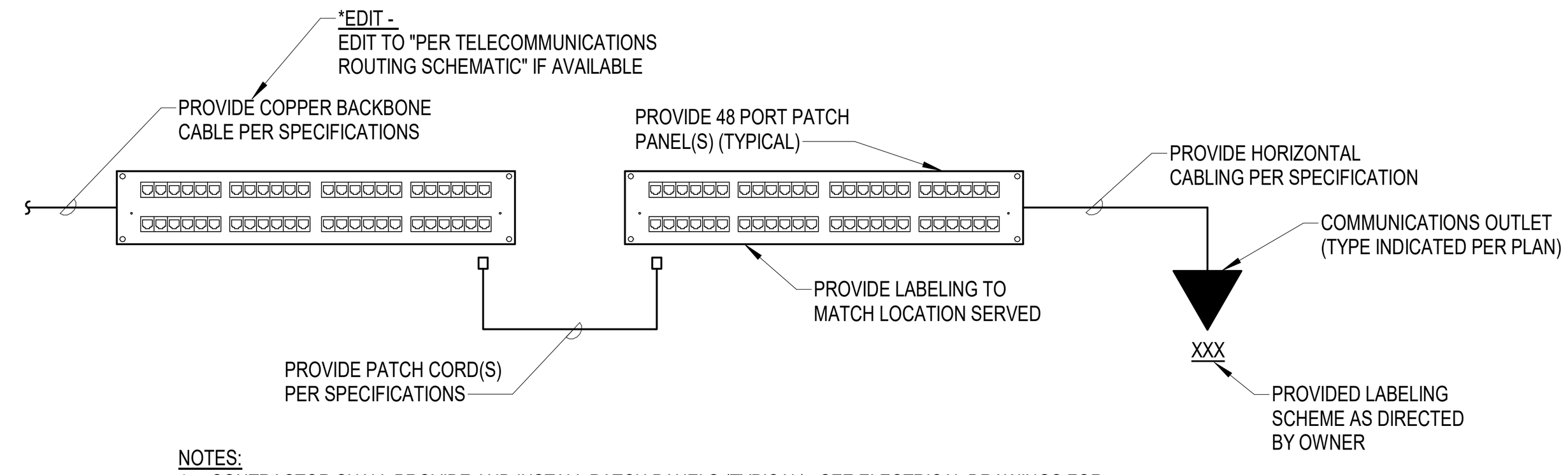
VA | U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System



NOTES:
1. CONTRACTOR SHALL PROVIDE AND INSTALL PATCH PANELS (TYPICAL). SEE ELECTRICAL DRAWINGS FOR COMMUNICATION DEVICES. CONTRACTOR IS RESPONSIBLE FOR DEVICE COUNT AND QUANTITY OF PATCH PANELS REQUIRED PLUS ONE (1) SPARE PATCH PANEL.
2. COORDINATE INSTALLATIONS WITH OWNER'S IS/IT REPRESENTATIVE.

8 TYPICAL COMMUNICATION TERMINATION - VOIP & DATA (PATCH PANELS)

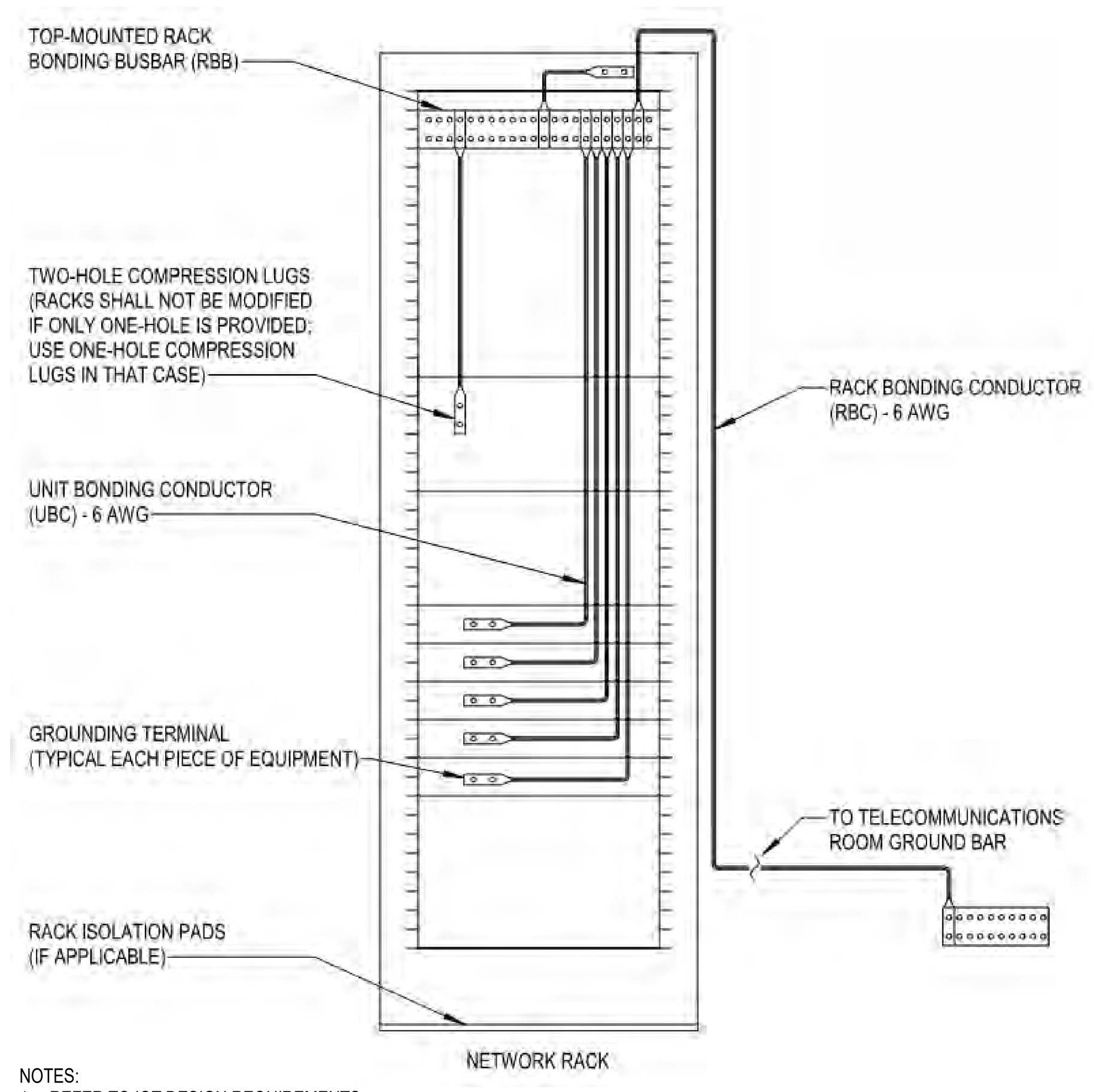
NOT TO SCALE



NOTES:
1. CONTRACTOR SHALL PROVIDE AND INSTALL PATCH PANELS (TYPICAL). SEE ELECTRICAL DRAWINGS FOR COMMUNICATION DEVICES. CONTRACTOR IS RESPONSIBLE FOR DEVICE COUNT AND QUANTITY OF PATCH PANELS REQUIRED PLUS ONE (1) SPARE PATCH PANEL.
2. COORDINATE INSTALLATIONS WITH OWNER'S IS/IT REPRESENTATIVE.

7 TYPICAL COMMUNICATION TERMINATION - VOICE (PATCH PANELS)

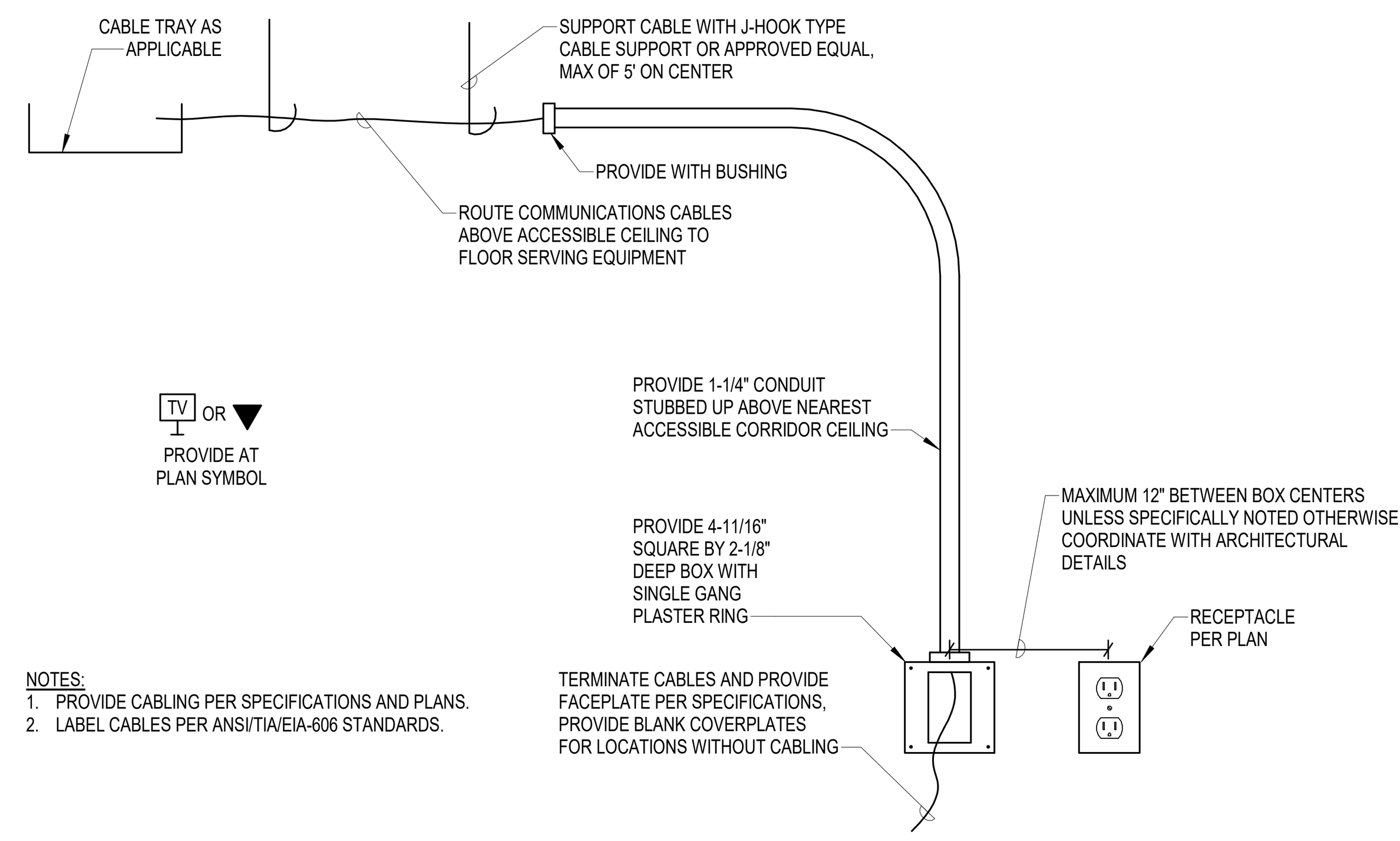
NOT TO SCALE



NOTES:
1. REFER TO IOT DESIGN REQUIREMENTS FOR DETAILS.

6 TELECOMMUNICATIONS RACK GROUNDING SCHEMATIC

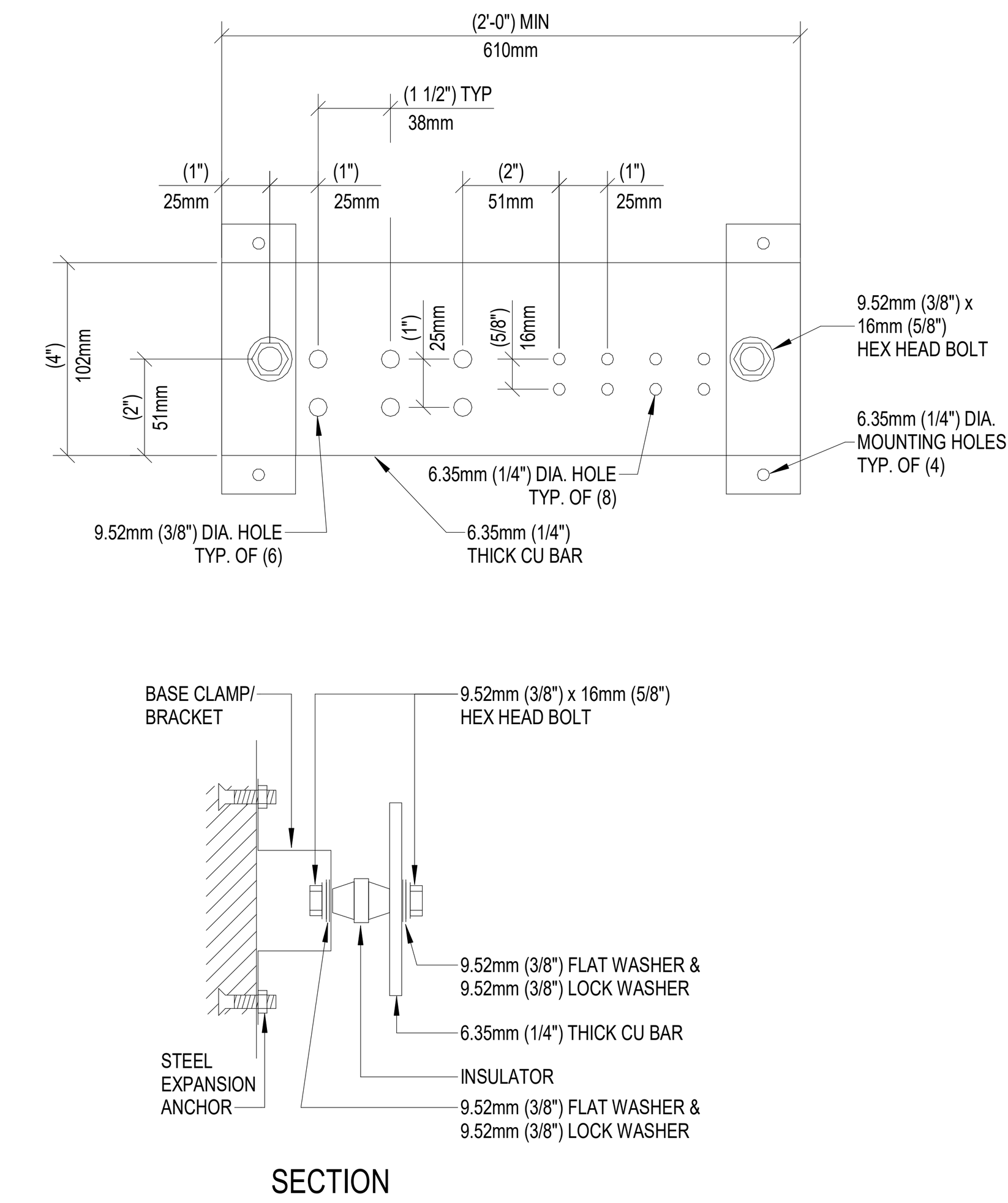
NOT TO SCALE



NOTES:
1. PROVIDE CABLING PER SPECIFICATIONS AND PLANS.
2. LABEL CABLES PER ANSI/TIA/EIA-606 STANDARDS.

5 COMMUNICATIONS OUTLET - STUB TO CORRIDOR

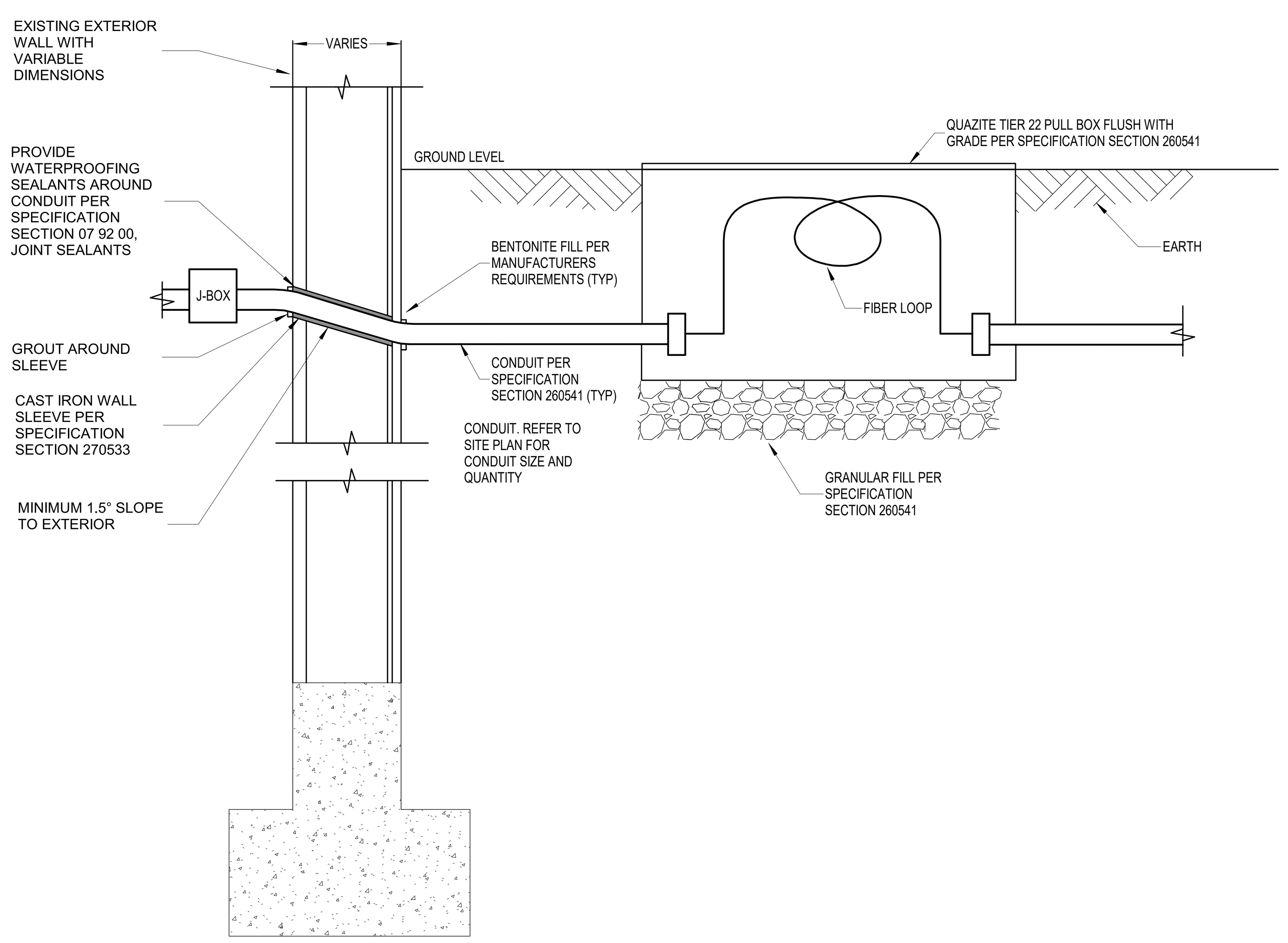
NOT TO SCALE



GENERAL NOTES:
1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. PROVIDE 1 MOUNTING POINT PER 305mm (12") OF BAR LENGTH.
3. HOLES MAY BE ADDED IF REQUIRED.

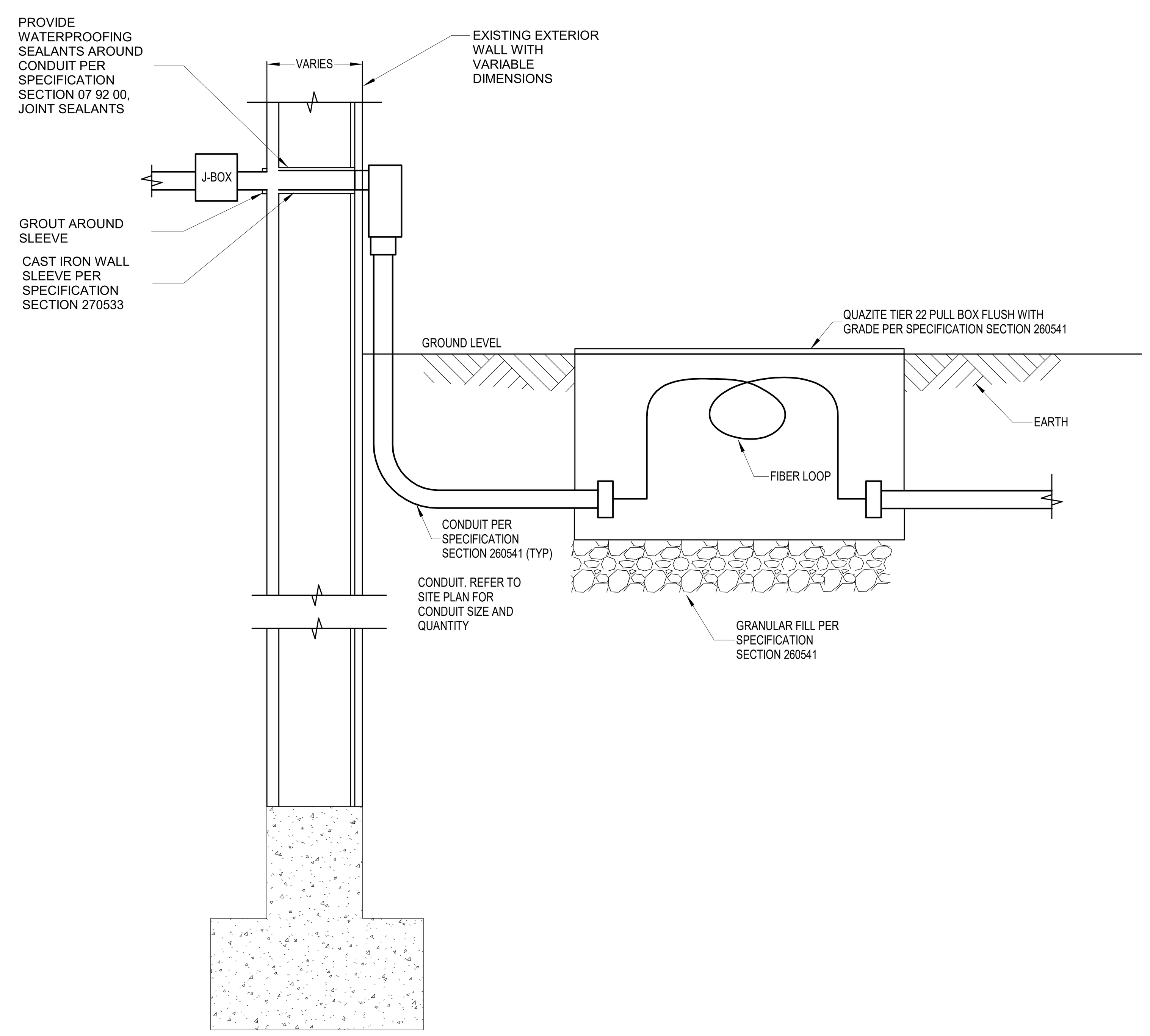
4 GROUND BAR DETAIL - SD260526-01

NOT TO SCALE



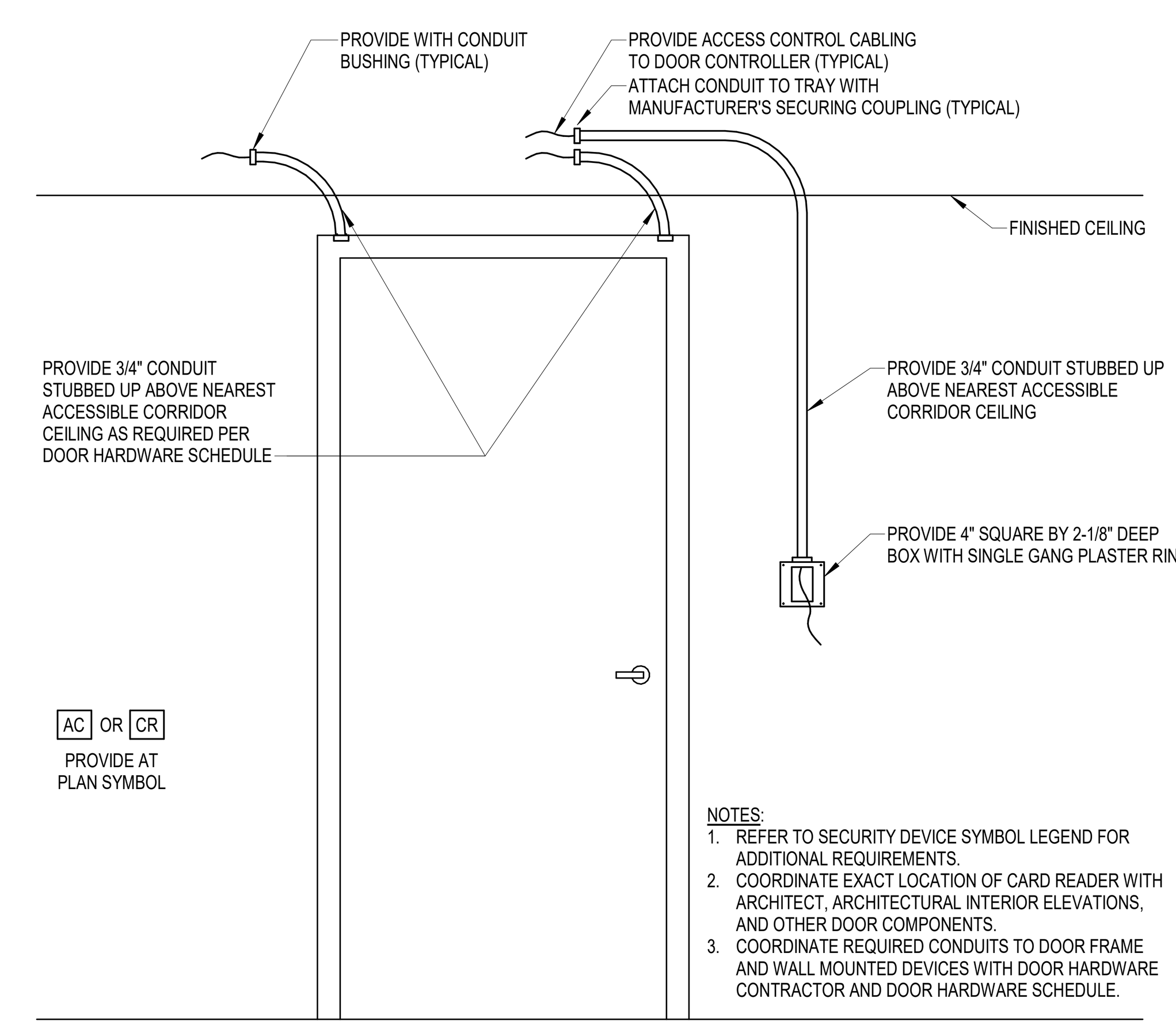
3 BUILDING CONDUIT PENETRATION DETAIL - UNDERGROUND

NOT TO SCALE



2 BUILDING CONDUIT PENETRATION DETAIL - ABOVE GROUND

NOT TO SCALE



NOTES:
1. REFER TO SECURITY DEVICE SYMBOL LEGEND FOR ADDITIONAL REQUIREMENTS.
2. COORDINATE EXACT LOCATION OF CARD READER WITH ARCHITECT, ARCHITECTURAL INTERIOR ELEVATIONS, AND OTHER DOOR COMPONENTS.
3. COORDINATE REQUIRED CONDUITS TO DOOR FRAME AND WALL MOUNTED DEVICES WITH DOOR HARDWARE CONTRACTOR AND DOOR HARDWARE SCHEDULE.

1 ACCESS CONTROL ROUGH-IN1

NOT TO SCALE

5/11/2022 2:48:50 PM

BIM 360://21102.001 - VA St Cloud EHRM Infrastructure Upgrades/656-235.B00.T_R21.rvt

No	REVISION	DATE

CONSULTANT

SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle
Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP

REGISTERED COMMUNICATIONS DISTRIBUTION
Bicsi
Nathan Timm
BICSI ID # 346555
EXPIRES 12-31-23
RCDD
[illegible]
Nathan M. Timm

DRAWING TITLE: TELECOMMUNICATION DETAILS

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES

DATE: 03/30/2022

PLOT SCALE

PROJECT NO. 656-21-235

BUILDING No CAMPUS | CHECKED BY KSB | DRAWN SSK | DRAWING NO. T804

LOCATION VA MEDICAL CENTER ST.CLOUD, MN 56303 | FULLY SPRINKLERED | DWG. OF

VA | U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

LEGEND

- EXISTING FIBER - INSIDE VFY EXIST
- EXISTING FIBER - OUTSIDE VFY EXIST
- FIBER ROUTE - INSIDE SEE TELECOM
- FIBER ROUTE - OUTSIDE SEE CIVIL
- BUILDING OUTLINE VFY EXIST
- CORRIDOR OUTLINE VFY EXIST

ELECTRICAL SUBSTATION

NSP ELECTRICAL FOR HWY DEPT

R 1636'
R 124'
R 670'
R 246'
492' - 0"

(1) 4" C.
(4) 4" C.
(5) 4" C. EXISTING
PULL BOX

TO 8TH ST EAST & WEST
TRAIL 1
TO 8TH ST WEST ONLY

1 SITE PLAN - ELECTRICAL
1" = 80'-0"

5/11/2022 2:48:54 PM

BIM 360://21102.001 - VA St Cloud EHRM Infrastructure Upgrades/656-235.B00 T_R21.rvt

No	REVISION	DATE

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Nathan Timm
BICSI ID # 346555
EXPIRES 12-31-23
Nathan M. Timm

DRAWING TITLE: TELECOMMUNICATION SITE PLAN

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
DATE: 03/30/2022
PLOT SCALE:
PROJECT NO: 656-21-235
BUILDING No: CAMPUS
CHECKED BY: KSB
DRAWN: SSK
DRAWING NO: TS001
LOCATION: VA MEDICAL CENTER ST CLOUD, MN 56303
FULLY SPRINKLERED
DWG OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

ELECTRICAL SYMBOL LIST

SYMBOL:	TAG:	DESCRIPTION:
	REFER TO LUMINAIRE SCHEDULE	LINEAR LUMINAIRES
		TROFFER
		WALL SCONCE LUMINAIRE
		DOWNLIGHT LUMINAIRE
		AIMABLE OR WALL WASH LUMINAIRE
		INDUSTRIAL LUMINAIRE
		WALL BRACKET LUMINAIRE
		POLE MOUNTED LUMINAIRE
		SINGLE FACE EXIT SIGN
		DOUBLE FACE EXIT SIGN
		WALL/CEILING EMERGENCY EXIT SIGN
		EMERGENCY UNIT

LUMINAIRE SYMBOL KEY

SYMBOL:	DESCRIPTION:
	NORMAL BRANCH LUMINAIRE
	[CRITICAL] BRANCH LUMINAIRE
	EMERGENCY **[LIFE SAFETY]** BRANCH LUMINAIRE **[UNSWITCHED FOR NIGHT LIGHT, UNLESS NOTED 'SE']**

ELECTRICAL ABBREVIATION KEY

ABBR:	DESCRIPTION:
AFF	ABOVE FINISHED FLOOR
C	CONDUIT
GFI	GROUND FAULT INTERRUPTER
N.C.	NORMALLY CLOSED
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
SV	SOLENOID VALVE
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED

ELECTRICAL SYMBOL LIST

SYMBOL:	TAG:	DESCRIPTION:
GB	GB	GROUND BUS
IBT	IBT	INTERSYSTEM BONDING TERMINATION
E E	ECONN	ELECTRICAL CONNECTION
J J	JB	JUNCTION BOX
	FB-# or PT-#	FLOOR BOX or POKE THROUGH
RI	RI-TECH	TECHNOLOGY OUTLET ROUGH-IN
RI	RI-TECH-C	TECHNOLOGY ROUGH-IN, CEILING
W/RI	RI-TECH-W	TECHNOLOGY ROUGH-IN, WALL PHONE
TV	RI-TV	TV ANTENNA OUTLET ROUGH-IN
	WM-#	MULTI OUTLET SYSTEM
	WW-#	ELECTRICAL WIREWAY w/ DEVICES SHOWN
DEM	DEM	ENERGY METER
DPM	DPM	DIGITAL POWER METER
ITDM	ITDM	IMPULSE-TOTALIZING DEMAND
EEM	EEM	EXTERNAL ENERGY METER
PQM	PQM	POWER QUALITY METER
CPC	CPC	CONTROL POWER CABINET
ES	ES	EMERGENCY STOP, N.C. CONTACT
EPO	EPO	EMERGENCY STOP, N.O. CONTACT
LA	FA-LA	LAMP ANNUNCIATOR
PB	PB	MOMENTARY PUSHBUTTON OPERATOR
	PANEL '###'	PANELBOARD - RECESS MOUNT
	PANEL '###'	PANELBOARD - SURFACE MOUNT
	MX-#/MS-# /CB-#/CS-#	MANUAL SWITCH / STARTER / COMBINATION STARTER/ CIRCUIT BREAKER. REFER TO DISC/STA SCHEDULE
	IPP-#	ISOLATED POWER PANEL
MG	MG	MASTER GROUND STATION MODULE
PM	PM	OPERATING ROOM POWER MODULE
RIM	RIM	REMOTE LINE ISOLATION MONITOR
RAS	RAS	REMOTE ANNUNCIATOR STATION
	IPC-#	INTEGRATED POWER CENTER
	TR-#/DTR-#	TRANSFORMER. REFER TO TRANSFORMER SCHEDULE
	MPC-#	PACKAGED POWER CENTER
	CB-#	CIRCUIT BREAKER - SURFACE MOUNTED. REFER TO DISC/STA SCHEDULE
	CB-#	CIRCUIT BREAKER - FLUSH MOUNTED. REFER TO DISC/STA SCHEDULE
	DS-#/FDS-#/DSS-#	DISCONNECT. REFER TO DISC/STA SCHEDULE
	MD-SD-#	MOBILE DIAGNOSTICS SERVICE DISCONNECT. REFER TO DISC/STA SCHEDULE
B B B B	BD-#	BUSWAY
	BCS-#	BUSS PLUG - COMBINATION STARTER. REFER TO DISC/STA SCHEDULE
	BP-#	BUSS PLUG - CIRCUIT BREAKER. REFER TO DISC/STA SCHEDULE
	BFP-#	BUSS PLUG - FUSIBLE DISCONNECT. REFER TO DISC/STA SCHEDULE
R #	BD-REC-#	BUSSWAY RECEPTACLE UNIT. REFER TO DISC/STA SCHEDULE

ELECTRICAL SYMBOL LIST

SYMBOL:	TAG:	DESCRIPTION:
	FAP-#	FIRE ALARM CONTROL PANEL
P	FA-110	FIRE FIGHTERS PHONE
SD	FA-120	FIRE ALARM SMOKE DETECTOR - CEILING MOUNTED
SD BT SD BR	FA-121	FIRE ALARM PROJECTED BEAM SMOKE DETECTOR
SD	FA-122	FIRE ALARM DUCT SMOKE DETECTOR
SD	FA-123	FIRE ALARM IN DUCT SMOKE DETECTOR
F	FA-130	FIRE ALARM MANUAL PULL STATION
FT	FA-131	FIRE ALARM MANUAL PULL STATION W/ COVER
H	FA-140	FIRE ALARM HEAT DETECTOR
HF	FA-141	HEAT DETECTOR - 200 DEGREE
HX	FA-142	HEAT DETECTOR - EXPLOSION PROOF
CO	FA-150	FIRE ALARM CARBON MONOXIDE/HEAT/SMOKE DETECTOR
FD	FA-151	FIRE ALARM FLAME DETECTOR
MM	FA-160	FIRE ALARM ADDRESSABLE MONITOR MODULE
AR P	FA-161	FIRE ALARM RELAY
SD B	FA-170	SMOKE DETECTOR - STAND ALONE
SD V	FA-171	SMOKE DETECTOR - STAND ALONE 177 CANDELA
V1 V3 V7 VH VS	FA-200	FIRE ALARM VISUAL NOTIFICATION DEVICE - WALL MOUNTED
V1 V3 V7 VH VS	FA-201	FIRE ALARM VISUAL NOTIFICATION DEVICE - CEILING MOUNTED
V W	FA-203	FIRE ALARM VISUAL NOTIFICATION DEVICE - WALL MOUNTED - WEATHERPROOF
A	FA-210	FIRE ALARM AUDIO NOTIFICATION DEVICE - WALL MOUNTED
A1 A3 A7 AH AS	FA-211	FIRE ALARM AUDIO/VISUAL NOTIFICATION DEVICE - WALL MOUNTED
A W	FA-212	FIRE ALARM AUDIO/VISUAL NOTIFICATION DEVICE - WALL MOUNTED - WEATHERPROOF
A	FA-230	FIRE ALARM AUDIO NOTIFICATION DEVICE - CEILING MOUNTED
A1 A3 A7 AH AS	FA-231	FIRE ALARM AUDIO/VISUAL NOTIFICATION DEVICE - CEILING MOUNTED
S	FA-232	FIRE ALARM CM LOUD SPEAKER
MH	FA-233	FIRE ALARM AUDIO NOTIFICATION DEVICE - WALL MOUNTED - MINI-HORN
RTS/I	FA-242	FIRE ALARM REMOTE INDICATOR AND TEST SWITCH
RI	FA-241	FIRE ALARM REMOTE INDICATOR
SD	FA-250	FIRE ALARM SMOKE DAMPER
ARD	FA-251	SMOKE OR FIRE DAMPER CONTROLLER
HD	FA-252	FIRE ALARM HOISTWAY DAMPER
HDS #	FA-253	FIRE ALARM HOISTWAY DAMPER SWITCH
SD	FA-254	FIRE ALARM SMOKE DAMPER WITH DUCT DETECTOR AND ADDRESSABLE RELAY
FS	FA-260	FIRE ALARM FLOW SWITCH TO MONITOR FIRE PROTECTION SYSTEM
MS	FA-261	FIRE ALARM MONITOR SWITCH TO MONITOR FIRE PROTECTION SYSTEM
PIV	FA-262	FIRE ALARM POST INDICATOR VALVE CONNECTION
EB	FA-263	FIRE ALARM ELECTRONIC BELL FOR SPRINKLER SYSTEM
DH	FA-270	FIRE ALARM ELECTROMAGNETIC DOOR HOLD DEVICE
DH PD	FA-272	FIRE ALARM HOLD OPEN OVERRIDE CONNECTION
IM	FA-280	ISOLATION MODULE
DB	DB	DOOR BELL
HD	HD	HAND DRYER
PP	PP	PUSH PAD

ELECTRICAL SYMBOL LIST

SYMBOL:	TAG:	DESCRIPTION:
O	REC-DUP-O	DUPLEX RECEPTACLE CONTROLLED BY OCCUPANCY
O	REC-QUAD-O	QUAD RECEPTACLE CONTROLLED BY OCCUPANCY
	REC-DUP	DUPLEX RECEPTACLE, 125V
	REC-DUP-GFI	DUPLEX GFI RECEPTACLE, 125V
G	REC-DUP-GFI-R	GROUND FAULT DEVICE
W	REC-DUP-WP	DUPLEX GFI WEATHERPROOF RECEPTACLE 125V
	REC-SIM-520R	SIMPLEX RECEPTACLE, 125V
	REC-TAMP	DUPLEX RECEPTACLE, TAMPER RESISTANT, 125V
	REC-TAMP-GFI	GFI DUPLEX RECEPTACLE, TAMPER RESISTANT, 125V
	REC-TAMP-QUAD	QUAD RECEPTACLE, TAMPER RESISTANT, 125V
	REC-QUAD	QUAD RECEPTACLE, 125V
	REC-QUAD-GFI	QUAD GFI RECEPTACLE, 125V
U	REC-QUAD-USB	QUAD RECEPTACLE, USB 125V
W	REC-QUAD-WP	QUAD GFI WEATHERPROOF RECEPTACLE, 125V
	REC-SIM-L21-20R	RECEPTACLE, LOCKING L21-20R,120/208V, 3PH

ELECTRICAL EQUIPMENT TAGS

TAG:	DESCRIPTION:
ACU-#	AUTONOMOUS CONTROL UNIT
ASSD-#	AIR SAMPLING SMOKE DETECTION
ATS-#	AUTOMATIC TRANSFER SWITCH, REFER TO TRANSFER SWITCH SCHEDULE
BAT-#	BATTERY RACK
C-#	GENERAL PURPOSE CONTACTOR
CGA-#	FIRE ALARM - GRAPHIC ANNUNCIATOR
CMD#	EMERGENCY COMMUNICATION MESSAGE DISPLAY
CR-#	CORD REEL
CT-#	CABLE TRAY
CUP-#	CUSTOM UTILITY PEDESTAL
DIM-#	DC DIMMING PANEL
DP-#	DISTRIBUTION PANEL
DR-#	DIMMING RACK
DT-#	GENERATOR DAY TANK
DTR-#	TRANSFORMER - DISTRIBUTION TYPE REFER TO TRANSFORMER SCHEDULE
FAA-#	FIRE ALARM - ANNUNCIATOR
GAP-#	GENERATOR ANNUNCIATOR PANEL
GCC-#	TEMP. GENERATOR/LOAD BANK CONNECTION CABINET
GCP-#	GENERATOR CONTROL PANEL
GEN-#	GENERATOR
GPS-#	GENERATOR PARALLELING AND DISTRIBUTION SWITCHBOARD
GRR-#	GENERATOR REMOTE RADIATOR
HH-#	HANDHOLE
HT-#	HEAT TAPE
INV-#	LIGHTING INVERTER
LC-#	LIGHTING CONTACTOR, REFER TO CONTACTOR SCHEDULE
LOC-#	LOCAL OPERATING CONSOLE
M-#	METER DISTRIBUTION CENTER
MC-#	EXTERIOR MOUNTED METERING CABINET
MCC-#	MOTOR CONTROL CENTER, REFER TO MOTOR CONTROL SCHEDULE
MH-#	MANHOLE
MPC-#	PACKAGED POWER CENTER
MTS-#	MANUAL TRANSFER SWITCH, REFER TO TRANSFER SWITCH SCHEDULE
MVSG-#	MEDIUM VOLTAGE SWITCHGEAR
MX-#	MANUAL SWITCH, REFER TO DISCONNECT AND STARTER SCHEDULE
NEP-#	FIRE ALARM - EXTENDER PANEL
PDU-#	POWER DISTRIBUTION UNIT
PS-#	PAD-MOUNT MEDIUM VOLTAGE SWITCH
R-#	RELAY
RA-ATS-#	REMOTE ANNUNCIATOR FOR ATS
SB-#	SWITCHBOARD
SC-#	SECTIONALIZING CABINET
SCP-#	FIREFIGHTERS SMOKE CONTROL PANEL
SG-#	SWITCHGEAR
SMP-#	SNOW MELT CONTROL PANEL
SMS-#	PAVEMENT MOUNTED DEICING CONTROLLER
SPD-#	SURGE PROTECTION DEVICE
TVA-#	TEXTURAL VISIBLE APPLIANCE
UD-#	UNDERFLOOR DUCT - TRENCH DUCT - CELLULAR FLOOR DUCT
UPS-#	UNINTERRUPTIBLE POWER SUPPLY
US-#	UNIT SUBSTATION
VCC-#	FIRE ALARM - VOICE COMMAND CENTER
VFD-#	VARIABLE FREQUENCY DRIVE - REFER TO VFD SCHEDULE
WD-#	WALL DUCT

ELECTRICAL SYMBOL LIST

SYMBOL:	TAG:	DESCRIPTION:
S	SW-1P	SWITCH - SINGLE POLE
D	SW-D-LED	DIMMER - LED
LS	SW-LS	DAYLIGHT LEVEL SENSOR
PC	SW-LS-PC	PHOTOCELL
OC D	SW-OC-D	OCCUPANCY SENSOR - DUAL TECHNOLOGY
OC D	SW-OC-D-W	OCCUPANCY SENSOR - DUAL TECHNOLOGY - WALL MOUNTED
S_O	SW-OC-P-O	SWITCH - OCCUPANCY SENSOR WALL SWITCH
OC P	SW-OC-P-P	OCCUPANCY SENSOR - PASSIVE INFRARED 360 DEGREE COVERAGE
OC P	SW-OC-P-W	OCCUPANCY SENSOR - PASSIVE INFRARED - WALL MOUNTED
SW	SW	WALL CONTROL STATION
TC	TC-#	TIME SWITCH
#B	SW-DCS	DIMMER CONTROL STATION
#B#F	SW-LCS	DIMMER CONTROL STATION WITH FADERS
S_{LV}	SW-LV	CENTRAL CONTROL - STATION
	LCS-#	LIGHTING CONTROL STATION
LCD	SW-LCD	LIGHTING CONTROL LCD STATION
NLC	SW-NLC	NURSE CALL LIGHTING CONTOLLER
ALCR	ALCR20	AUTOMATIC LOAD CONTROL RELAY
BCELTS	BCELTS	BRANCH CIRCUIT EMERGENCY LIGHTING TRANSFER SWITCH 20A

CONTRACTOR ABBREVIATION KEY

ABBR:	DESCRIPTION:
A.V.C.	AUDIO/VISUAL CONTRACTOR
C.C.	CIVIL CONTRACTOR
C.M.	CONSTRUCTION MANAGER
E.C.	ELECTRICAL CONTRACTOR
F.P.C.	FIRE PROTECTION CONTRACTOR
F.S.C.	FOOD SERVICE CONTRACTOR
G.C.	GENERAL CONTRACTOR
H.C.	HEATING CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
N.C.C.	NURSE CALL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
S.C.	SECURITY CONTRACTOR
T.C.	TECHNOLOGY CONTRACTOR
T.C.C.	TEMPERATURE CONTROLS CONTRACTOR
V.C.	VENTILATION CONTRACTOR

ELECTRICAL SHEET INDEX

0-GE000	ELECTRICAL COVERSHEET
0-GE400	ELECTRICAL COMMON DETAILS
0-GE600	ELECTRICAL COMMON SCHEDULES
01-E100	BASEMENT DEMOLITION - ELECTRICAL
01-E102	SECOND FLOOR DEMOLITION - ELECTRICAL
01-E200	BASEMENT - ELECTRICAL
01-E201	FIRST FLOOR - ELECTRICAL
01-E202	SECOND FLOOR - ELECTRICAL
01-E204	ROOF - ELECTRICAL
01-E300	ELECTRICAL ENLARGED PLANS
01-E301	ELECTRICAL ENLARGED PLANS
01-E400	ELECTRICAL ONE-LINE DIAGRAMS
01-E500	ELECTRICAL SCHEDULES
01-E501	ELECTRICAL SCHEDULES
02-E200	BASEMENT FLOOR PLAN - ELECTRICAL
02-E201	FIRST FLOOR PLAN - ELECTRICAL
02-E300	ELECTRICAL ENLARGED PLANS
02-E400	ELECTRICAL DIAGRAMS & SCHEDULE
03-E200	BASEMENT FLOOR PLAN - ELECTRICAL
03-E201	FIRST FLOOR - ELECTRICAL
03-E202	SECOND FLOOR - ELECTRICAL
03-E300	ELECTRICAL ENLARGED PLANS
03-E400	ELECTRICAL DIAGRAMS & SCHEDULES
04-E200	BASEMENT FLOOR PLAN - ELECTRICAL - EAST
04-E201	FIRST FLOOR PLAN - ELECTRICAL - EAST
04-E202	SECOND FLOOR PLAN - ELECTRICAL - EAST
04-E300	ELECTRICAL ENLARGED PLANS
04-E400	ELECTRICAL DIAGRAMS & SCHEDULES
05-E200	FIRST FLOOR PLAN - ELECTRICAL
05-E300	ELECTRICAL ENLARGED PLANS
05-E400	ELECTRICAL DIAGRAMS & SCHEDULES
07-E100	FIRST FLOOR DEMOLITION PLAN - ELECTRICAL
07-E200	FIRST FLOOR PLAN - ELECTRICAL
07-E300	ELECTRICAL ENLARGED PLANS
07-E500	ELECTRICAL ONE-LINE DIAGRAMS & SCHEDULES
08-E100	FIRST FLOOR DEMOLITION PLAN - ELECTRICAL
08-E201	FIRST FLOOR PLAN - ELECTRICAL
08-E300	ELECTRICAL ENLARGED PLANS
08-E400	ELECTRICAL ONE-LINE DIAGRAMS & SCHEDULE
09-E100	FIRST FLOOR DEMOLITION - ELECTRICAL
09-E200	BASEMENT - ELECTRICAL
09-E201	FIRST FLOOR - ELECTRICAL
09-E300	ELECTRICAL ENLARGED PLANS
09-E500	ELECTRICAL ONE-LINE DIAGRAMS
10-E200	BASEMENT - ELECTRICAL
10-E201	FIRST FLOOR - ELECTRICAL
10-E300	ELECTRICAL ENLARGED PLANS
10-E500	ELECTRICAL ONE-LINE DIAGRAMS & SCHEDULES
11-E200	BASEMENT - ELECTRICAL
11-E300	ELECTRICAL ENLARGED PLANS
11-E600	ELECTRICAL SCHEDULES
14-E101	FIRST FLOOR DEMOLITION - ELECTRICAL
14-E201	FIRST FLOOR - ELECTRICAL
14-E300	ELECTRICAL ENLARGED PLANS
14-E400	ELECTRICAL ONE-LINE DIAGRAMS &SCHEDULES
28-E200	BASEMENT - ELECTRICAL
28-E201	FIRST FLOOR - ELECTRICAL
28-E300	ELECTRICAL ENLARGED PLANS
28-E400	ELECTRICAL ONE-LINE DIAGRAMS & SCHEDULES
29-E200	BASEMENT - ELECTRICAL
29-E201	FIRST FLOOR - ELECTRICAL
29-E300	ELECTRICAL ENLARGED PLANS
48-E200	BASEMENT FLOOR PLAN - ELECTRICAL
48-E201	FIRST FLOOR PLAN - ELECTRICAL
48-E202	SECOND FLOOR PLAN - ELECTRICAL
48-E300	ELECTRICAL ENLARGED PLANS
48-E500	ELECTRICAL ONE-LINE DIAGRAMS & SCHEDULES
49-E200	BASEMENT - ELECTRICAL
49-E201	FIRST FLOOR - ELECTRICAL
49-E300	ELECTRICAL ENLARGED PLANS
49-E500	ELECTRICAL ONE-LINE DIAGRAMS AND SCHEDULES
50-E100	BASEMENT FLOOR PLAN - ELECTRICAL
50-E101	FIRST FLOOR PLAN - ELECTRICAL
50-E300	ENLARGED PLANS - ELECTRICAL
50-E500	ELECTRICAL ONE-LINE DIAGRAMS AND SCHEDULES
51-E100	BASEMENT FLOOR PLAN - ELECTRICAL
51-E101	FIRST FLOOR PLAN - ELECTRICAL
51-E300	ENLARGED PLANS - ELECTRICAL
51-E500	ELECTRICAL ONE-LINE DIAGRAMS AND SCHEDULES
95-E201	FIRST FLOOR PLAN - ELECTRICAL
96-E201	FIRST FLOOR PLAN - ELECTRICAL
109-E201	FIRST FLOOR PLAN - ELECTRICAL
111-E200	BASEMENT FLOOR PLAN - ELECTRICAL
111-E201	FIRST FLOOR PLAN - ELECTRICAL
111-E300	ELECTRICAL ENLARGED PLANS
112-E120	FIRST FLOOR DEMOLITION - ELECTRICAL
112-E201	FIRST FLOOR - ELECTRICAL
112-E300	ELECTRICAL ENLARGED PLANS
115-E201	FIRST FLOOR - ELECTRICAL
115-E300	ELECTRICAL ENLARGED PLANS
116-E201	FIRST FLOOR - ELECTRICAL
116-E300	ELECTRICAL ENLARGED PLANS
118-E200	BASEMENT - ELECTRICAL
118-E201	FIRST FLOOR - ELECTRICAL
118-E300	ELECTRICAL ENLARGED PLANS
118-E400	ELECTRICAL ONE-LINE DIAGRAMS
118-E500	ELECTRICAL SCHEDULES
97	

ELECTRICAL GENERAL NOTES:

1. ##-### INDICATES ELECTRICAL EQUIPMENT DEFINED IN ELECTRICAL SCHEDULES OR SPECIFICATION. REFER TO DRAWINGS CONTAINING ELECTRICAL SCHEDULES. PERMANENT NAMEPLATE SHALL MATCH FINAL EQUIPMENT NOMENCLATURE, NOT ELECTRICAL EQUIPMENT TAG NAME, REFER TO SPECIFICATIONS.
2. REFER TO SHEET E002 FOR LUMINAIRE SCHEDULE.
3. CONTRACTOR SHALL PROVIDE SURVEY OF UNDERGROUND UTILITIES FOR ALL FEEDER ROUTED UNDERGROUND.
4. REFER TO SHEET G1003 FOR ADDITIONAL GENERAL CONSTRUCTION NOTES.

LUMINAIRE KEY:

LUMINAIRE
F1 = FIXTURE TAG
1 = CIRCUIT NUMBER
a = SWITCH DESIGNATION
NL = SUBSCRIPT (IF APPLICABLE)
Z = ZONE DESIGNATION

*IF LABEL IS ORIENTED HORIZONTALLY A SLASH WILL SEPARATE THIS INFORMATION. EX: F1 / 1 / a / NL

DEVICE KEY:

DEVICE
A = MOUNTING (IF APPLICABLE)
1 = CIRCUIT NUMBER

*IF LABEL IS ORIENTED HORIZONTALLY A SLASH WILL SEPARATE THIS INFORMATION. EX: A / 1

ELECTRICAL MOUNTING SUBSCRIPT KEY:

A	MOUNT AT +6" TO CENTERLINE ABOVE COUNTER OR BACKSPLASH
C	MOUNT AT CEILING
H	MOUNT ORIENTED HORIZONTALLY
L	MOUNT IN CASEWORK
M	MOUNT IN MODULAR FURNITURE
R	MOUNT IN SURFACE RACEWAY
EWC	ELECTRIC WATER COOLER

ELECTRICAL INSTALLATION NOTES:

1. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ADA STANDARDS FOR ACCESSIBLE DESIGN. REFER TO THE ADA GUIDELINES FOR ALL CONFIGURATION DETAILS ON THIS PAGE FOR ADDITIONAL INFORMATION.
2. CIRCUIT NUMBERS ARE SHOWN FOR CIRCUIT IDENTIFICATION. CIRCUITING SHALL AGREE WITH NUMBERING ON THE PANEL PROVIDED. COMMON NEUTRALS MAY NOT BE USED FOR BRANCH CIRCUITS. BALANCE THE LOAD ON PANEL AS EVENLY AS POSSIBLE BETWEEN EACH PHASE.
3. FLUSH MOUNT ALL LIGHTING CONTROL DEVICES AT +42" FROM FLOOR (CENTERLINE DIMENSION), EXCEPT WHERE OTHERWISE NOTED. DEVICES MAY BE SURFACE MOUNTED WHEN CONDUIT IS SPECIFIED EXPOSED.
4. ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS. REFER TO DIVISION 7 FOR ADDITIONAL INFORMATION AND REQUIREMENTS SPECIFIC TO FIRESTOPPING. ALL FIRESTOP TO BE INSTALLED BY A CERTIFIED INSTALLER.
5. INSTALL ALL WALL MOUNTED FIRE ALARM NOTIFICATION DEVICES AT 90" ABOVE FINISHED FLOOR OR 6" BELOW THE CEILING, WHICHEVER IS LOWER, EXCEPT WHERE OTHERWISE NOTED. HEIGHT SHALL BE MEASURED TO THE TOP OF THE DEVICE.
6. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL CEILING MOUNTED DEVICES AND EQUIPMENT WITH LUMINAIRES, SPRINKLER, AND CEILING DIFFUSERS. CENTER ALL DEVICES IN CEILING TILE PATTERN. SMOKE DETECTORS AND OCCUPANCY/VACANCY SENSORS SHALL BE LOCATED NO CLOSER THAN 3 FEET TO AN AIR SUPPLY DIFFUSER OR RETURN GRILLE.
7. ELECTRICAL AND TECHNOLOGY EQUIPMENT SHALL BE MOUNTED TO AVOID IMPEDANCE OF, OPERATION OF, AND/OR ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF ELECTRICAL AND TELECOMMUNICATIONS EQUIPMENT, ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR, SHALL BE APPROVED IN ADVANCE BY THE OTHER CONTRACTOR.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
9. ALL WELDING SHALL BE ACCORDING TO AMERICAN WELDING SOCIETY STANDARDS. CONTRACTOR SHALL FURNISH TO THE ARCHITECT/ENGINEER CERTIFICATES QUALIFYING EACH WELDER, PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER RESERVES THE RIGHT TO REQUIRE QUALIFYING DEMONSTRATION, AT THE CONTRACTOR'S EXPENSE, OF ANY WELDERS ASSIGNED TO THE JOB.
10. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO THE WALLS, FLOORS, CEILINGS, AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS RESPONSIBLE FOR PATCHING TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING, AND FINISH.
11. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY AUDIO/VISUAL, AND OTHER ELECTRICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, OTHER THAN SPRINKLERS.
12. ELECTRICAL IDENTIFICATION. REFER TO SPECIFICATION SECTION 26 05 53 FOR COLOR/LABEL REQUIREMENTS FOR CONDUIT, BOX, CABLE/WIRE, AND EQUIPMENT. ALL CABLING, CIRCUITS, CONDUITS, CHASEWAYS, PANELS, BOXES AND EQUIPMENT ARE TO BE LABLED UTILIZING THE LATEST IN BICS/TIA STANDARDS.
13. CONTRACTOR SHALL PROVIDE WP LINKSEAL FOR ALL CONDUIT PENETRATIONS INTO BUILDINGS FROM BELOW GRADE.
14. CONTRACTOR SHALL ROUTE ALL CONDUIT EXPOSED ON ALL GYPBOARD/HARD CEILINGS IN IT ROOMS.
15. CONTRACTOR SHALL MAINTAIN FIRE RATING OF ALL EXISTING CEILINGS AND WALLS.
16. CONTRACTOR SHALL CONCEAL ALL NEW FEEDER CONDUITS ABOVE CEILINGS OUTSIDE OF IT ROOMS WHENEVER POSSIBLE. REPLACE ALL DAMAGED CEILING TILES TO ATTAIN AN INDISTINCT-ABLE DIFFERENCE IN THE CEILING APPEARANCE.
17. MOUNT ALL EXTERIOR RECEPTACLES AT 36" ABOVE GRADE.
18. PROVIDE UNSWITCHED NOT CONDUCTOR FOR BATTERY IN ALL 'AE' LIGHT FIXTURES.
19. UTILIZE EXISTING GROUNDING AND BONDING SYSTEM. COORDINATE ON SITE.
20. REFER TO MECHANICAL AND TECHNOLOGY SHEET FOR ADDITIONAL INFORMATION.

ELECTRICAL RENOVATION NOTES:

1. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS, EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS BEFORE PROCEEDING.
2. NOT ALL EXISTING EQUIPMENT, LUMINAIRES, AND CONDUIT ARE SHOWN. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS WITH NEW WORK BEFORE STARTING WORK.
3. FIELD VERIFY THE AVAILABLE CLEARANCES FOR CABLE TRAY, BUSWAY AND CONDUITS BEFORE FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS. [NTD: KEEP FOR WORK IN CONGESTED RENOVATIONS]
4. WHERE EXISTING ELECTRICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, CONDUIT, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING ELECTRICAL SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.

ELECTRICAL RENOVATION NOTES:

THESE NOTES APPLY TO ALL ELECTRICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, LIGHTING, POWER, AND SYSTEMS.

1. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS, EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS BEFORE PROCEEDING.
2. NOT ALL EXISTING EQUIPMENT, LUMINAIRES, AND CONDUIT ARE SHOWN. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS WITH NEW WORK BEFORE STARTING WORK.
3. FIELD VERIFY THE AVAILABLE CLEARANCES FOR CABLE TRAY, BUSWAY AND CONDUITS BEFORE FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS. **[NTD: KEEP FOR WORK IN CONGESTED RENOVATIONS]**
4. WHERE EXISTING ELECTRICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, CONDUIT, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING ELECTRICAL SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.

No	REVISION	DATE
	100% CD	03/30

CONSULTANT
SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle
Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

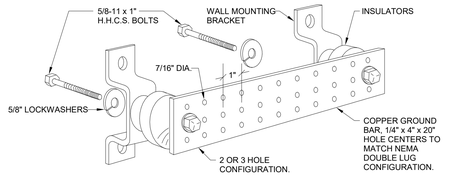
STAMP
ALEXANDER S. QUAST
LICENSED PROFESSIONAL ENGINEER
53095
STATE OF MINNESOTA
[illegible]
05-06-2022

DRAWING TITLE
ELECTRICAL COVERSHEET

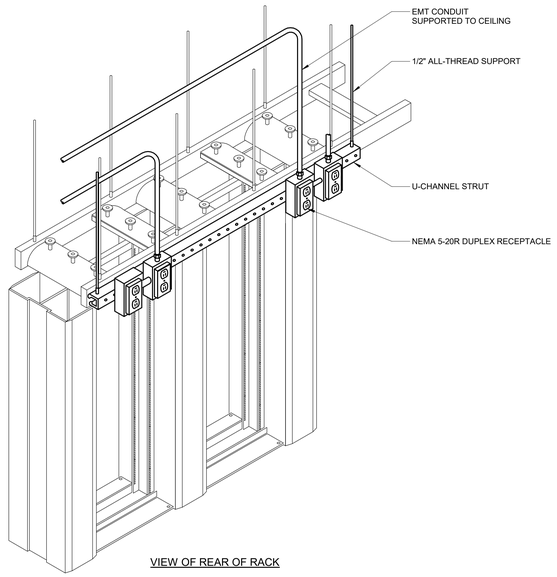
PROJECT TITLE
EHRM INFRASTRUCTURE UPGRADES

DATE: 03/30/2022
PLOT SCALE
PROJECT NO. 656-21-235
BUILDING No CAMPUS
CHECKED BY TBD
DRAWN GJL
DRAWING NO. 0-GE000
LOCATION VA MEDICAL CENTER ST.CLOUD, MN 56303
FULLY SPRINKLERED
DWG. OF

VA
U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

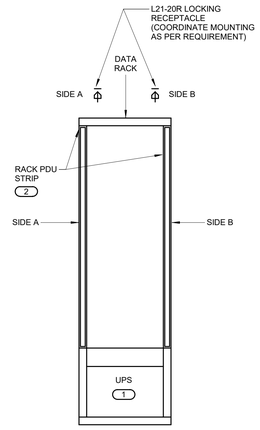


1 GROUNDING BAR DETAIL
NO SCALE

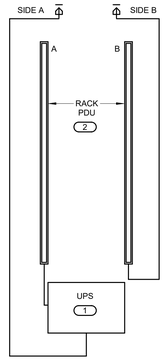


VIEW OF REAR OF RACK

2 RACK RECEPTACLE DETAIL
NO SCALE



RACK LAYOUT



ONE-LINE

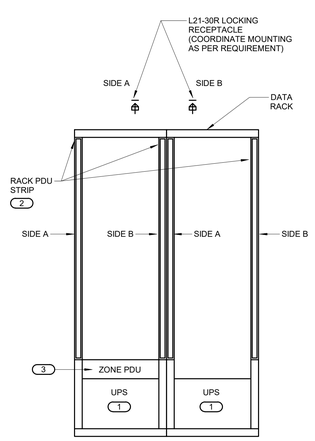
3 SINGLE RACK DETAIL
NO SCALE

SHEET NOTES:

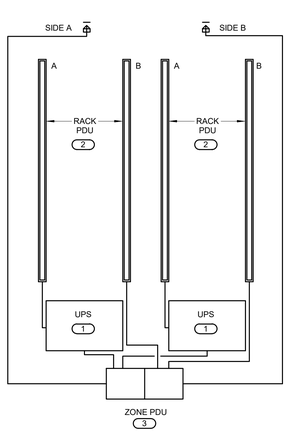
1. REFER TO TECHNOLOGY DRAWINGS FOR EXACT RACK LAYOUT AND ADDITIONAL INFORMATION.

KEYNOTES: (#)

1. PROVIDE EATON BLADE UPS, 5KW, 120/208V, 3-PHASE,4-WIRE RACK MOUNTED UPS FOR EACH RACK TOWER.
2. PROVIDE APC#AP8861 RPDU RACK PDU 2G WITH L21-20P CORD, (120/208V, 3-PHASE, 20A, ZERO U, 5.7 KW, 208V, (36) C13 (6) C19 (2) 5-20R OUTLETS. PROVIDE TWO PER RACK, MOUNTED PER MANUFACTURER'S REQUIREMENTS.
3. PROVIDE ONE RACK MOUNTED ZONE PDU UNIT. 30 AMP 3 PHASE, 120/208V, 5-WIRE WITH (4) L21-30R, (6) 5-20R AND TWO 10 POWER CORDS. ZONIT#ZPDS-208V-30A-L21-4L21-20R-CR.
4. PROVIDE TWO J-BOXES IN CEILING OVER THE CENTER RACK, IN LIEU OF RECEPTACLES . PROVIDE 1"C – 4#8, & 1#10 GND BACK TO A 60A/3P BREAKER IN THE PANEL FOR EACH J-BOX.
5. PROVIDE ONE RACK MOUNTED ZONE PDU UNIT. 60 AMP, 3 PHASE, 120/208V, 5 WIRE WITH (6) L21-20R AND TWO 10' POWER CORDS. ZONIT ZPDS-208V60A-HW-6L21-20R.

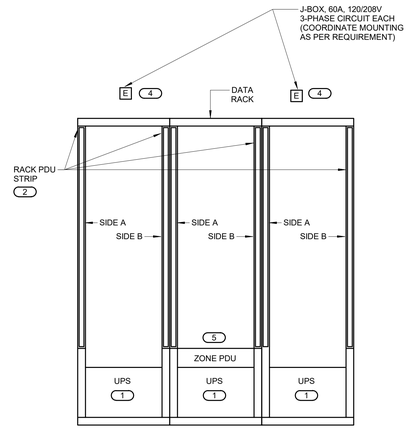


RACK LAYOUT

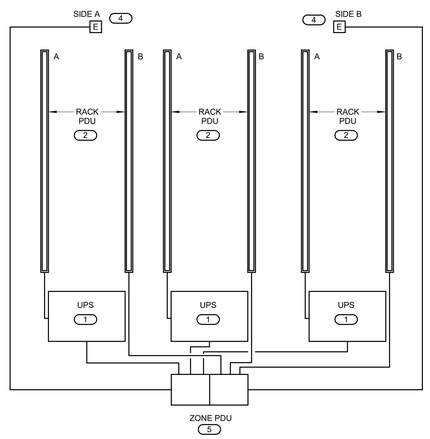


ONE-LINE

4 TWO RACK DETAIL
NO SCALE



RACK LAYOUT



ONE-LINE

5 THREE RACK DETAIL
NO SCALE

No	REVISION	DATE
	100% CD	03/30

CONSULTANT

AST SES SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle, Omaha, NE 68134
Phone: 402.991.5526
www.specialiseedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP

LICENSED PROFESSIONAL ENGINEER — 53035 — 05-06-2022

DRAWING TITLE: ELECTRICAL COMMON DETAILS

PROJECT TITLE: EHRM INFRASTRUCTURE UPGRADES
DATE: 03/30/2022
PLOT SCALE:
PROJECT NO: 656-21-235
BUILDING No: CAMPUS | CHECKED BY: TBD | DRAWN: GJL | DRAWING NO: 0-GE400
LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303 | FULLY SPRINKLERED
DWG. OF

U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System

5/6/2022 8:45:10 AM
BIM 360://21102.001 - VA St Cloud EHRM Infrastructure Upgrades/656-235.0.CAMPUS.E_R21.rvt

1 2 3 4 5 6 7 8 9 10

A B C D E F

5/6/2022 8:45:11 AM

BIM 360://21102.001 - VA St Cloud EHRM Infrastructure Upgrades/656-235.0.CAMPUS.E_R21.rvt

COPPER FEEDER SCHEDULE

EMT TYPE CONDUIT THREE PHASE, THREE WIRE AND GROUND FEEDER					EMT TYPE CONDUIT THREE PHASE, FOUR WIRE AND GROUND FEEDER				
DESIGNATION	AMPS	CONDUIT	CONDUCTOR	GROUND	DESIGNATION	AMPS	CONDUIT	CONDUCTOR	GROUND
20D	20	1/2"	3 #12	1 #12	20Y	20	1/2"	4 #12	1 #12
30D	30	1/2"	3 #10	1 #10	30Y	30	3/4"	4 #10	1 #10
40D	40	3/4"	3 #8	1 #10	40Y	40	1"	4 #8	1 #10
50D	50	3/4"	3 #8	1 #10	50Y	50	1"	4 #8	1 #10
60D	60	1"	3 #6	1 #10	60Y	60	1"	4 #6	1 #10
70D	70	1"	3 #4	1 #8	70Y	70	1-1/4"	4 #4	1 #8
80D	80	1"	3 #4	1 #8	80Y	80	1-1/4"	4 #4	1 #8
90D	90	1-1/4"	3 #3	1 #8	90Y	90	1-1/4"	4 #3	1 #8
100D	100	1-1/4"	3 #3	1 #8	100Y	100	1-1/4"	4 #3	1 #8
125D	125	1-1/4"	3 #1	1 #6	125Y	125	2"	4 #1	1 #6
150D	150	1-1/2"	3 #1/0	1 #6	150Y	150	2"	4 #1/0	1 #6
175D	175	1-1/2"	3 #2/0	1 #6	175Y	175	2"	4 #2/0	1 #6
200D	200	2"	3 #3/0	1 #6	200Y	200	2"	4 #3/0	1 #6
225D	225	2"	3 #4/0	1 #4	225Y	225	2-1/2"	4 #4/0	1 #4
250D	250	2-1/2"	3 #250	1 #4	250Y	250	2-1/2"	4 #250	1 #4
300D	300	2-1/2"	3 #350	1 #4	300Y	300	3"	4 #350	1 #4
400D	400	3"	3 #600	1 #3	400Y	400	3-1/2"	4 #600	1 #3
500D	500	(2) 2-1/2"	3 #250 EACH	1 #2 EACH	500Y	500	(2) 2-1/2"	4 #250 EACH	1 #2 EACH
600D	600	(2) 2-1/2"	3 #350 EACH	1 #1 EACH	600Y	600	(2) 3"	4 #350 EACH	1 #1 EACH
800D	800	(3) 2-1/2"	3 #300 EACH	1 #1/0 EACH	800Y	800	(3) 2-1/2"	4 #300 EACH	1 #1/0 EACH
1000D	1000	(3) 2-1/2"	3 #400 EACH	1 #2/0 EACH	1000Y	1000	(3) 3"	4 #400 EACH	1 #2/0 EACH
1200D	1200	(4) 2-1/2"	3 #350 EACH	1 #3/0 EACH	1200Y	1200	(4) 3"	4 #350 EACH	1 #3/0 EACH
1600D	1600	(5) 2-1/2"	3 #400 EACH	1 #4/0 EACH	1600Y	1600	(5) 3"	4 #400 EACH	1 #4/0 EACH
2000D	2000	(6) 2-1/2"	3 #400 EACH	1 #250 EACH	2000Y	2000	(6) 3"	4 #400 EACH	1 #250 EACH
2500D	2500	(7) 2-1/2"	3 #500 EACH	1 #350 EACH	2500Y	2500	(7) 3-1/2"	4 #500 EACH	1 #350 EACH
3000D	3000	(8) 3"	3 #500 EACH	1 #400 EACH	3000Y	3000	(8) 3-1/2"	4 #500 EACH	1 #400 EACH
4000D	4000	(11)...	3 #500 EACH	1 #500 EACH	4000Y	4000	(11) 3-1/2"	4 #500 EACH	1 #500 EACH

EMT TYPE CONDUIT THREE PHASE, FIVE WIRE AND GROUND FEEDER (200% NEUTRAL: 2 PARALLEL NEUTRAL CONDUCTORS)					SERVICE ENTRANCE PVC SCHED. 80 TYPE CONDUIT THREE PHASE, FOUR WIRE FEEDER				
DESIGNATION	AMPS	CONDUIT	CONDUCTOR	GROUND	DESIGNATION	AMPS	CONDUIT	CONDUCTOR	
100N	100	1-1/2"	5#3	1 #8	200S	200	2"	4 #3/0	
225N	225	2-1/2"	5#4/0	1 #6	400S	400	(2) 2"	4 #3/0 EACH	
400N	400	(2)2-1/2"	5#250 EACH	1 #3 EACH	600S	600	(2) 3"	4 #350 EACH	
600N	600	(2) 3-1/2"	5#500 EACH	1 #1 EACH	800S	800	(3) 3"	4 #300 EACH	
					1000S	1000	(3) 3"	4 #400 EACH	
					1200S	1200	(4) 3"	4 #350 EACH	
					1600S	1600	(5) 3"	4 #400 EACH	
					2000S	2000	(6) 3"	4 #400 EACH	
					2500S	2500	(7) 3-1/2"	4 #500 EACH	
					3000S	3000	(8) 3-1/2"	4 #500 EACH	
					4000S	4000	(11) 3-1/2"	4 #500 EACH	

LUMINAIRE SCHEDULE

(DESC) DOOR:
- FA - FLAT ALUMINUM
- FS - FLAT STEEL
- RA - REGRESSED ALUMINUM
- RS - REGRESSED STEEL

FINISH:
- PAF - PAINT AFTER FABRICATION
- CFSA - COLOR-FINISH SELECTION BY ARCHITECT

DISTRIBUTION:
- II - ANSI/IES TYPE 2 DISTRIBUTION
- III - ANSI/IES TYPE 3 DISTRIBUTION
- IV - ANSI/IES TYPE 4 DISTRIBUTION
- V - ANSI/IES TYPE 5 DISTRIBUTION

BEAMWIDTH:
- NSP - VERY NARROW SPOT
- SP - SPOT
- MD - MEDIUM
- WD - WIDE
- VWD - VERY WIDE
- WW - WALL WASH

(L/L) LENS/LOUVER:
- A - .125" ACRYLIC
- B - BAFFLE/LOUVER
- C - CLEAR ALZAK
- F - FROSTED ACRYLIC
- G - TEMPERED GLASS
- K - KSH12 .125" ACRYLIC
- K19 - KSH19 .156" ACRYLIC
- M - MATTE DIFFUSE CLEAR
- N - NONE
- P - POLYCARBONATE
- R - HIGH IMPACT DR ACRYLIC
- SS - SEMI-SPECULAR CLEAR
- O - OTHER (SEE DESCRIPTION)
- [DESIGN SPECIFIC BLANKS]

(TYPE) LIGHT SOURCE TECHNOLOGY:
- DLED - DYNAMIC TUNABLE LED
- LED - LIGHT EMITTING DIODE
- OLED - ORGANIC LED
- RGB - COLOR CHANGING LED
- RGBA - COLOR CHANGING + AMBER LED
- RGBW - COLOR CHANGING + WHITE LED
- RLED - RETROFIT LED
- TLED - TUBULAR LED LAMP
- WLED - WARM DIM LED
- O - OTHER (SEE DESCRIPTION)
- FL - FLUORESCENT
- CF - COMPACT FLUORESCENT
- HL - HALOGEN
- HIR - HALOGEN INFRARED
- IN - INCANDESCENT
- HS - HIGH PRESSURE SODIUM
- MH - METAL HALIDE
- SMH - SUPER METAL HALIDE
- PSMH - PULSE START METAL HALIDE
- CMH - CERAMIC METAL HALIDE
- XL - EXTENDED LIFE FLUORESCENT
- XLP - EXTENDED LIFE & OUTPUT FLUORESCENT
- CC - COLD CATHODE
- IND - INDUCTION
- O - OTHER (SEE DESC)

(MTG) MOUNTING:
- CL - CEILING SURFACE
- CV - COVE
- FR - FLANGED RECESSED
- O - OTHER (SEE DESCRIPTION)
- P - PERIMETER
- PL - POLE
- RE - RECESSED
- SP - SUSPENDED
- SU - SURFACE
- UC - UNDER CABINET
- WL - WALL

(WATT) PER: FIX - FIXTURE, FT - FOOT, LAMP

(TYPE) BALLAST/DRIVER:
- #BF - BALLAST FACTOR
- 0-10V - 0-10V DIMMING
- DALI - DIGITAL ADDRESSABLE
- DMX - DIGITAL MULTIPLEX
- EB - ELECTRONIC
- ELV - ELECTRONIC LOW VOLTAGE
- EM - EMERGENCY BATTERY
- HL - HIGH/LOW (100%/50%) STEP DIM
- HP - HIGH PERFORMANCE / LBF
- LINE - LINE VOLTAGE DIMMING
- ML - MULTI-LEVEL SWITCHING
- MV - MULTI-VOLTAGE ELECTRONIC
- REM - REMOTE
- O - OTHER (SEE DESCRIPTION)

CATALOG NUMBER SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. THE COMPLETE DESCRIPTION AND THE SPECIFICATION SHALL BE COORDINATED WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE FIRST MANUFACTURER LISTED IS THE BASIS OF DESIGN.

VERIFY AND COORDINATE ALL CEILING TYPES WITH LUMINAIRE MOUNTING AND TRIM REQUIREMENTS PRIOR TO THE RELEASE OF THE LUMINAIRE ORDER.
CONFIRM ALL COLORS AND FINISHES OF ALL LUMINAIRE COMPONENTS WITH ARCHITECT AND INTERIOR DESIGNER PRIOR TO THE RELEASE OF THE LUMINAIRE ORDER.
UNLESS INDICATED ON LIGHTING PLANS OR BELOW, REFER TO ARCHITECTURAL AND INTERIOR DESIGN ELEVATIONS, SECTIONS AND DETAILS FOR ALL SUSPENDED AND WALL MOUNTED LUMINAIRE MOUNTING HEIGHTS.

REFER TO SPECIFICATION SECTIONS LIGHTING [16510 26 51 00] [AND EMERGENCY LIGHTING EQUIPMENT 16535 26 52 00] FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
INTERIOR CORRELATED COLOR TEMPERATURE [2700, 3000, 3500, 4000/4100]K, COLOR RENDERING INDEX (CRI) AT OR ABOVE [80, 85, 90], UNLESS NOTED OTHERWISE.
EXTERIOR CORRELATED COLOR TEMPERATURE [2700, 3000, 3500, 4000/4100]K, COLOR RENDERING INDEX (CRI) AT OR ABOVE [80, 85, 90], UNLESS NOTED OTHERWISE.
[PROVIDE CHICAGO PLENUM CCEA FOR ALL RECESSED LUMINAIRES LOCATED IN PLENUM CEILINGS.]

				DIMENSIONS				WATT		LIGHT SOURCE TECHNOLOGY			BALLAST/DRIVER		
ITEM	DESCRIPTION	L/L	MTG	L	W	H	DIA.	MAX ANSI	PER	TYPE	QTY	MODEL/DELIVERED LUMENS (MIN)	VOLTS	TYPE	MANUFACTURER AND MODEL
A	ENCLOSED INDUSTRIAL WITH FIBERGLASS HOUSING, STAINLESS STEEL LATCHES, MOLDED IN PLACE GASKET, PEBBLED LENS, UL LISTED DAMP LOCATION. MOUNT AT 10'-0" A.F.F. UNLESS NOTED OTHERWISE.	A	CL/SP	4'-0"	0'-7"	0'-5"		20W	FIX	LED	1	2913	120V	0-10V	H.E. WILLIAMS 75 LITHONIA EQUAL
AE	ENCLOSED INDUSTRIAL WITH FIBERGLASS HOUSING, STAINLESS STEEL LATCHES, MOLDED IN PLACE GASKET, PEBBLED LENS, UL LISTED DAMP LOCATION WITH BATTERY BACKUP. MOUNT AT 10'-0" A.F.F. UNLESS NOTED OTHERWISE.	A	CL/SP	4'-0"	0'-7"	0'-5"		20W	FIX	LED	1	2913	120V	0-10V	H.E. WILLIAMS 75 LITHONIA EQUAL

No	REVISION	DATE
	100% CD	03/30

CONSULTANT

SPECIALIZED ENGINEERING SOLUTIONS
10360 Ellison Circle
Omaha, NE 68134
Phone: 402.991.5520
www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP

ALEXANDER S. QUAST
LICENSED PROFESSIONAL ENGINEER
53095
STATE OF MINNESOTA
[illegible]
05-06-2022

DRAWING TITLE
ELECTRICAL COMMON SCHEDULES

PROJECT TITLE
EHRM INFRASTRUCTURE UPGRADES

DATE: 03/30/2022

PLOT SCALE

PROJECT NO. 656-21-235

BUILDING No CAMPUS | CHECKED BY TBD | DRAWN GJL | DRAWING NO. 0-GE600

LOCATION
VA MEDICAL CENTER
ST.CLOUD, MN 56303
FULLY SPRINKLERED

DWG. OF

VA
U.S. Department of Veterans Affairs
Veterans Health Administration
St. Cloud VA Health Care System