VA | U.S. Department of Veterans Affairs
Veterans Health Administration

PROJECT NAME:

CONSTRUCT NEW SPS

SITE ADDRESS:

2501 WEST 22ND STREET. SIOUX FALLS, SD 57105

VA PROJECT NUMBER:

438-460

OWNER AND CONSULTANTS:

VA COR:

CONTACT: Brooke White
ADDRESS: 2501 WEST 22ND STREET, BUILDING 17
SIOUX FALLS, SD 57105
PHONE: 605.336.3230 EX 7693

ARCHITECT:

NAME: ANDERSON ENGINEERING OF MN, LLC
ADDRESS: 13605 1ST AVE NORTH, SUITE 100
PLYMOUTH, MN 55441
CONTACT: Giovanni Barbari
PHONE: 763-412-4000

CIVIL ENGINEER:

NAME: ANDERSON ENGINEERING OF MN, LLC
ADDRESS: 13605 1ST AVE NORTH, SUITE 100
PLYMOUTH, MN 55441
CONTACT: EDWIN BRODMARKLE
PHONE: 763-412-4000

LANDSCAPE ARCHITECTURE:

NAME: ANDERSON ENGINEERING OF MN, LLC
ADDRESS: 13605 1ST AVE NORTH, SUITE 100
PLYMOUTH, MN 55441
CONTACT: CURT CLAEYS
PHONE: 763-412-4000

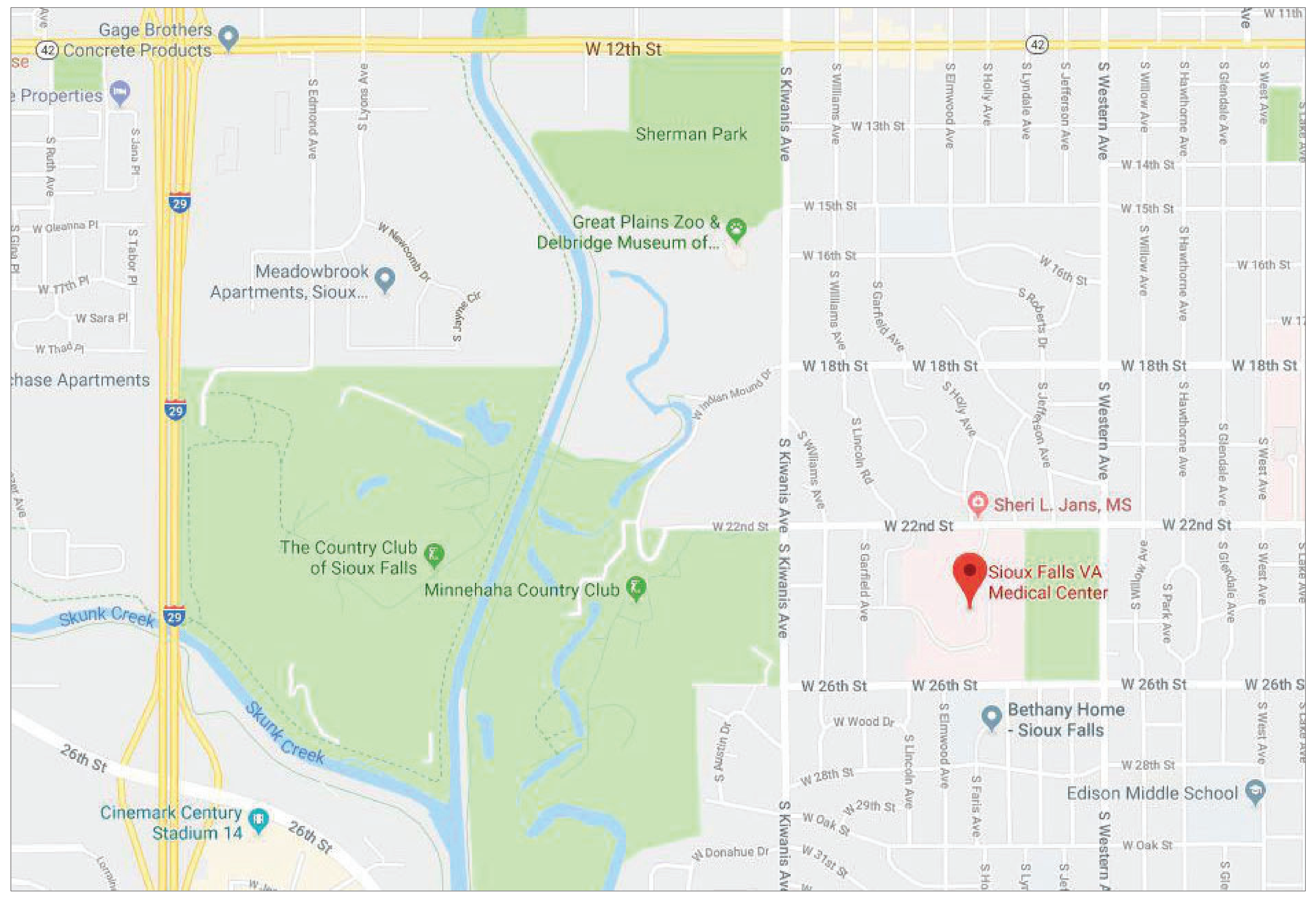
STRUCTURAL ENGINEER:

NAME: IMEG Corp.
ADDRESS: 1410 WEST RUSSELL STREET
SIOUX FALLS, SD 57104
CONTACT: Michael Merron
PHONE: 605.331.2505

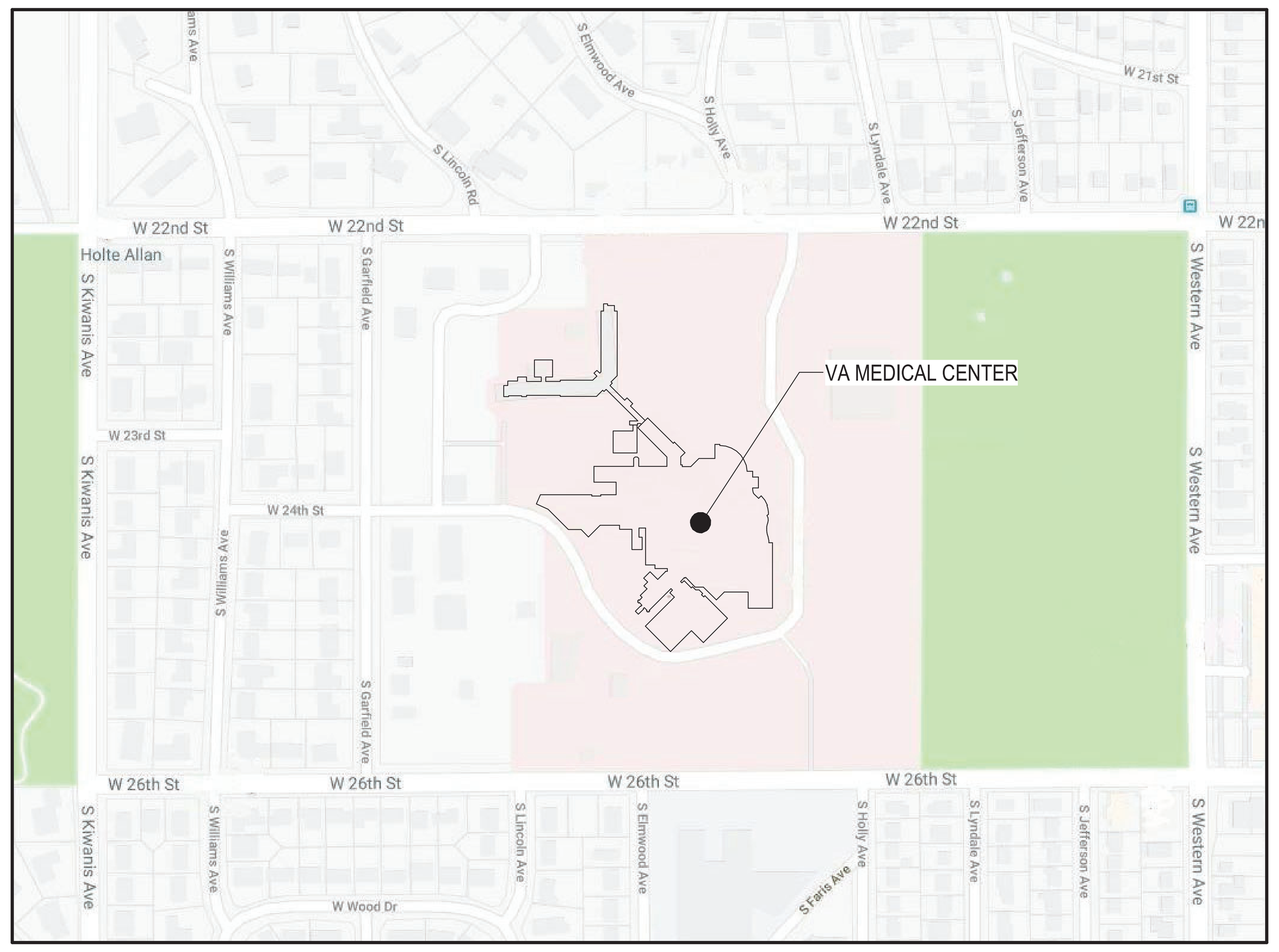
MECH/ELEC/PLUMB/FIRE ENGINEER:

NAME: IMEG Corp.
ADDRESS: 2882 106TH STREET
DES MOINES, IA 50322
CONTACT: Eric Henderson
PHONE: 630.717.2433

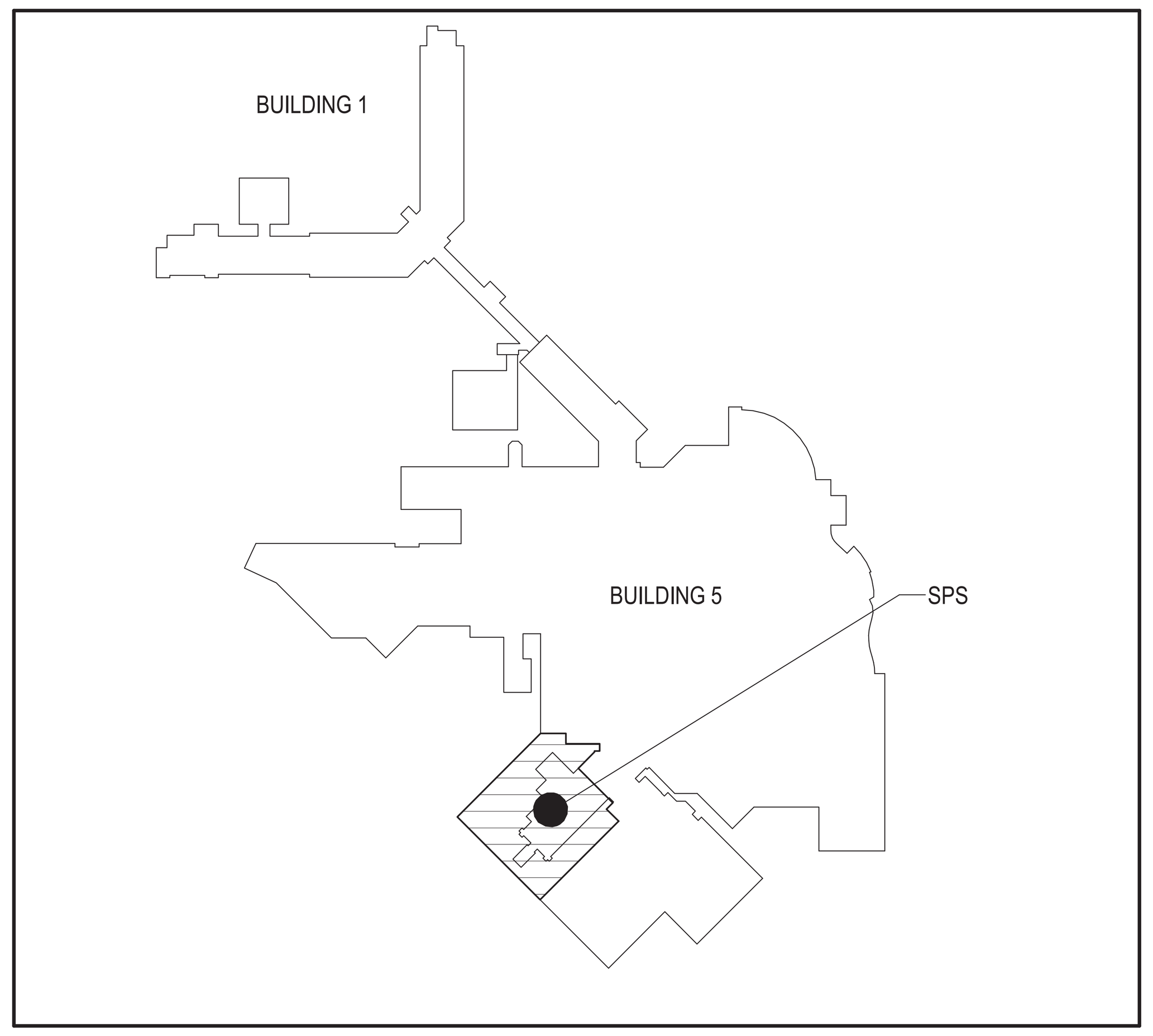
VICINITY MAP:



SITE LOCATION MAP:



KEY PLAN:



Revisions:	Date:

CONSULTANT

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 # 16584

STAMP

REGISTERED PROFESSIONAL ARCHITECT
REG. NO. 9335
THOMAS A. OLESAK
SOUTH DAKOTA
DATE: 08/04/2022
License # 9335

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title	Phase	Project Title	Project Number
COVER SHEET	BID DOCUMENTS	CONSTRUCT NEW SPS	438-460
			Building Number: 5
Approved:	FULLY SPRINKLERED	Location: Sioux Falls, SD.	Drawing Number
		Issue Date: 08/04/2022; Checked: Checker; Drawn: Author	GI000

VA FORM 08 - 6231

C:\Users\Public\Documents\Revit Projects\16584-R21_gbarbari@ae-mn.com.rvt

7/7/2023 1:29:16 PM

SHEET ABBREVIATION AND NUMBERING

DISCIPLINE DESIGNATOR | SHEET TYPE DESIGNATOR | FLOOR LEVEL | SHEET GROUPING | ZONE NUMBER

AE 1 1 1 - 01

AE 111-01
ARCHITECTURAL ELEMENTS, PLAN, FIRST LEVEL, FLOOR PLAN, ZONE 1

DISCIPLINE DESIGNATOR | SHEET TYPE DESIGNATOR | SHEET GROUPING

AF 6 7 0

AF 670
ARCHITECTURAL FINISHES, FINISH SCHEDULE

DISCIPLINE DESIGNATOR | SHEET TYPE DESIGNATOR | FLOOR LEVEL | SHEET GROUPING | ZONE NUMBER

QH 1 1 0 - 01

QH110-01
EQUIPMENT HOSPITAL, PLAN, FIRST LEVEL, ZONE 1

DISCIPLINE DESIGNATOR | SHEET TYPE DESIGNATOR | SHEET GROUPING

AE 5 1 2

AE 501
ARCHITECTURAL ELEMENTS, EXTERIOR PLAN DETAILS

DISCIPLINE DESIGNATOR

GC - GENERAL CONTRACT
GI - GENERAL INFORMATION
AC - ARCHITECTURAL RCP
AD - ARCHITECTURAL DEMOLITION
AS - ARCHITECTURAL SITE
AE - ARCHITECTURAL ELEMENTS
AF - ARCHITECTURAL FINISHES
IF - INTERIOR FURNISHINGS
QC - EQUIPMENT LAUNDRY
QF - EQUIPMENT FOOD SERVICE
QH - EQUIPMENT HOSPITAL
QL - EQUIPMENT LABORATORY

SHEET TYPE DESIGNATOR

0 - GENERAL
1 - PLANS
2 - ELEVATIONS
3 - SECTIONS
4 - LARGE SCALE VIEWS
5 - DETAILS
6 - SCHEDULES & DIAGRAMS

FLOOR LEVEL

PLANS ONLY

0 - LOWER LEVEL
1 - FIRST LEVEL
2 - SECOND LEVEL
3 - THIRD LEVEL
4 - FOURTH LEVEL

SHEET GROUPING

GENERAL:
00-10 - TITLE SHEET, NOTES, ABBREVIATIONS, SYMBOLS, SCHEDULES

PLANS:
1 - LEVEL FLOOR PLAN
2 - DIMENSION PLAN

ELEVATIONS:
01-10 - EXTERIOR ELEVATIONS
11-19 - INTERIOR ELEVATION

SECTIONS:
01-10 - BUILDING SECTIONS
11-19 - WALL SECTIONS
20-29 -STAIR SECTIONS & PLANS

DETAILS:
01-19 - EXTERIOR PLAN DETAILS
20-29 - EXTERIOR SECTION DETAILS
30-39 - ROOF DETAILS
40-49 - INTERIOR PLAN DETAILS
50-59 - INTERIOR SECTION DETAILS
60-69 - CEILING DETAILS

	NOT ISSUED
■	ISSUED
R	ISSUED FOR REFERENCE ONLY
N	ISSUED AS NOTED

SHEET INDEX - GENERAL

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
GI000	COVER SHEET	■
GI001	SHEET INDEX	■
GI002	ABBREVIATIONS	■
GI101	GROUND LEVEL LIFE SAFETY PLAN	■
GI111	INTERSTITIAL/FIRST LEVEL LIFE SAFETY PLAN	■
GC101	GROUND LEVEL INFECTION CONTROL & LIFE SAFETY PLAN	■
GC111	FIRST LEVEL INFECTION CONTROL & PHASING PLAN	■

SHEET INDEX - CIVIL

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
VB101	SITE SURVEY & MAPPING	■
CD101	DEMOLITION PLAN	■
CS101	SITE LAYOUT PLAN	■
CG101	GRADING PLAN	■
CG102	EROSION CONTROL PLAN	■
CU101	UTILITY PLAN	■
CU102	UNDERDRAIN PLAN	■
CU103	SANITARY SEWER PLAN AND PROFILE	■
CU104	STORM SEWER PLAN AND PROFILE	■
CU105	STORM SEWER PLAN AND PROFILE	■
CU106	WATER LINE PLAN AND PROFILE	■
CP101	PAVING & JOINT LAYOUT PLAN	■
C-501	RAMP SITE DETAILS	■
C-502	STAIRS SITE DETAILS	■
C-503	RETAINING WALL SITE DETAILS	■
C-504	CIVIL DETAILS	■
C-505	CIVIL DETAILS	■
C-506	CIVIL DETAILS	■
C-507	CIVIL DETAILS	■
LP101	PLANTING PLAN	■
LP501	PLANTING DETAILS	■
LF101	SITE FURNISHINGS PLAN	■
LF501	SITE FURNISHINGS DETAILS	■
LF502	SITE FURNISHINGS DETAILS	■
IR101	IRRIGATION PLAN	■
IRS01	IRRIGATION DETAILS	■
IRS02	IRRIGATION DETAILS	■
IRS03	IRRIGATION DETAILS	■
IRS04	IRRIGATION DETAILS	■

SHEET INDEX - STRUCTURAL

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
SG000	GENERAL NOTES	■
SG001	TESTING SCHEDULES	■
SB100	PIPE BASEMENT FOUNDATION PLAN	■
SB101	GROUND LEVEL FOUNDATION PLAN	■
SB102	GROUND LEVEL COLUMN LOADS	■
SB103	ENLARGED PLANS	■
SB200	SECTIONS - FOUNDATION	■
SB201	SECTIONS - FOUNDATION	■
SF102	FIRST FLOOR & ROOF FRAMING PLAN	■
SF103	ROOF FRAMING PLAN	■
SF210	SECTIONS - FLOOR	■
SF220	SECTIONS - ROOF	■
SF221	SECTIONS - ROOF	■
SF230	BRACE FRAME ELEVATIONS & SECTIONS	■

SHEET INDEX - HAZARDOUS MATERIALS

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
HA101	ASBESTOS CONTAINING MATERIALS	■
HA102	LEAD CONTAINING MATERIAL	■

SHEET INDEX - ARCHITECTURAL

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
AD101	GROUND LEVEL DEMOLITION PLAN	■
AD111	INTERSTITIAL/FIRST LEVEL DEMOLITION PLAN	■
AD520	DEMOLITION WALL SECTIONS AND DETAILS	■
AE101	GROUND LEVEL FLOOR PLAN	■
AE102	GROUND LEVEL DIMENSION PLAN	■
AE111	INTERSTITIAL/FIRST LEVEL FLOOR PLAN	■
AE112	INTERSTITIAL/FIRST LEVEL DIMENSION PLAN	■
AC101	GROUND LEVEL REFLECTED CEILING PLAN	■
AC111	INTERSTITIAL/FIRST LEVEL REFLECTED CEILING PLAN	■
AE121	ROOF PLAN	■
AE201	EXTERIOR ELEVATIONS	■
AE211	INTERIOR ELEVATIONS	■
AE212	INTERIOR ELEVATIONS	■
AE301	BUILDING SECTIONS	■
AE302	BUILDING SECTIONS	■
AE311	WALL SECTIONS	■
AE312	WALL SECTIONS	■
AE313	WALL SECTIONS	■
AE314	WALL SECTIONS	■
AE320	STAIR SECTIONS AND ENLARGED PLANS	■
AE321	STAIR SECTIONS AND ENLARGED PLANS	■
AE322	STAIR SECTIONS - PARTITIONS AT EXISTING STAIR	■
AE411	ENLARGED PLANS & INTERIOR ELEVATIONS	■
AE412	ENLARGED PLANS & INTERIOR ELEVATIONS	■
AE413	ENLARGED PLAN, SECTIONS AND DETAILS - CART WASH	■
AE501	EXTERIOR PLAN DETAILS	■
AE502	EXTERIOR PLAN DETAILS	■
AE503	EXTERIOR PLAN DETAILS	■
AE520	EXTERIOR SECTION DETAILS	■
AE521	EXTERIOR SECTION DETAILS	■
AE530	ROOF DETAILS	■
AE531	ROOF DETAILS	■
AE540	INTERIOR PLAN DETAILS	■
AE541	INTERIOR PLAN DETAILS	■
AE542	INTERIOR PLAN DETAILS	■
AE543	INTERIOR PLAN DETAILS	■
AE550	INTERIOR SECTION DETAILS	■
AE551	INTERIOR SECTION DETAILS	■
AE552	INTERIOR SECTION DETAILS	■
AE560	CEILING DETAILS	■
AE601	INTERIOR PARTITION TYPES AND DETAILS	■
AE602	DOOR SCHEDULE AND ELEVATIONS, CAST STONE PROFILES AND WINDOW TYPES	■
AE640	MOUNTING HEIGHTS	■

SHEET INDEX - INTERIOR

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
AF101	FINISH PLANS	■
AF102	GROUND LEVEL WALL PROTECTION PLAN	■
AF600	ROOM FINISH SCHEDULE AND INTERIOR FINISH DETAILS	■
AW101	GROUND LEVEL WAYFINDING PLAN	■
AW601	WAYFINDING MESSAGE SCHEDULES & SIGNAGE DETAILS	■

SHEET INDEX - EQUIPMENT

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
QH101	GROUND LEVEL EQUIPMENT PLAN & SCHEDULE	■
QH411	ENLARGED EQUIPMENT PLAN & SCHEDULE	■

SHEET INDEX - FIRE PROTECTION

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
FP000	FIRE PROTECTION COVERSHEET	■
FP101	GROUND LEVEL FLOOR PLAN - FIRE PROTECTION	■
FP111	INTERSTITIAL/FIRST LEVEL FLOOR PLAN - FIRE PROTECTION	■
FP400	FIRE PROTECTION DETAILS	■
FPD101	GROUND LEVEL DEMOLITION PLAN - FIRE PROTECTION	■

SHEET INDEX - MECHANICAL

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
MC000	CONTROLS COVERSHEET	■
MC101	GROUND LEVEL FLOOR PLAN - CONTROLS	■
MC102	FIRST LEVEL FLOOR PLAN - ROOM PRESSURIZATION PLAN	■
MC111	INTERSTITIAL/FIRST LEVEL FLOOR PLAN - CONTROLS	■
MC121	ROOF PLAN - CONTROLS	■
MC400	CONTROL DIAGRAMS	■
MC401	CONTROL DIAGRAMS	■
MC402	CONTROL DIAGRAMS	■
MC403	CONTROL DIAGRAMS	■
MC404	CONTROL DIAGRAMS	■
MP000	PIPING COVERSHEET	■
MP091	PIPE BASEMENT FLOOR PLAN - PIPING	■
MP101	GROUND LEVEL FLOOR PLAN - PIPING	■
MP111	INTERSTITIAL/FIRST LEVEL FLOOR PLAN - PIPING	■
MP121	ROOF PLAN - PIPING	■
MP400	PIPING DETAILS	■
MP401	PIPING DETAILS	■
MP500	STEAM FLOW DIAGRAM	■
MP501	HEATING WATER FLOW DIAGRAM	■
MP502	CHILLED WATER FLOW DIAGRAM	■
MP600	PIPING SCHEDULES	■
MPD091	PIPE BASEMENT DEMOLITION PLAN - PIPING	■
MPD101	GROUND LEVEL FLOOR DEMOLITION PLAN - PIPING	■
MPD111	FIRST LEVEL DEMOLITION PLAN - PIPING	■
MPD151	FIFTH LEVEL DEMOLITION PLAN - PIPING	■
MV000	VENTILATION COVERSHEET	■
MV091	PIPE BASEMENT FLOOR PLAN - VENTILATION	■
MV101	GROUND LEVEL FLOOR PLAN - VENTILATION	■
MV111	INTERSTITIAL/FIRST LEVEL FLOOR PLAN - VENTILATION	■
MV121	ROOF PLAN - VENTILATION	■
MV300	VENTILATION ENLARGED PLANS	■
MV301	VENTILATION ENLARGED PLANS	■
MV400	VENTILATION DETAILS	■
MV401	VENTILATION DETAILS	■
MV402	VENTILATION DETAILS	■
MV600	VENTILATION SCHEDULES	■
MVD091	PIPE BASEMENT DEMOLITION PLAN - VENTILATION	■
MVD102	GROUND LEVEL FLOOR DEMOLITION PLAN - VENTILATION	■
MVD112	FIRST LEVEL DEMOLITION PLAN - VENTILATION	■

SHEET INDEX - PLUMBING

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
PL000	PLUMBING COVERSHEET	■
PL100	PIPE BASEMENT AND UNDERFLOOR - PLUMBING	■
PL101	GROUND LEVEL FLOOR PLAN - PLUMBING	■
PL111	INTERSTITIAL/FIRST LEVEL FLOOR PLAN - PLUMBING	■
PL121	ROOF PLAN - PLUMBING	■
PL300	PLUMBING ENLARGED PLANS	■
PL400	PLUMBING DETAILS	■
PL401	PLUMBING DETAILS	■
PL500	PLUMBING FLOW DIAGRAMS	■
PL600	PLUMBING MATERIAL LISTS	■
PLD100	PIPE BASEMENT DEMOLITION PLAN - PLUMBING	■
PLD101	GROUND LEVEL FLOOR DEMOLITION PLAN - PLUMBING	■
PLD111	FIRST LEVEL DEMOLITION PLAN - PLUMBING	■

SHEET INDEX - ELECTRICAL

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
E000	ELECTRICAL COVERSHEET	■
E400	ELECTRICAL DETAILS	■
E401	ELECTRICAL DETAILS	■
E402	ELECTRICAL DETAILS	■
E500	ELECTRICAL ONE-LINE DIAGRAMS	■
E501	ELECTRICAL ONE-LINE DIAGRAMS	■
E600	ELECTRICAL SCHEDULES	■
E601	ELECTRICAL SCHEDULES	■
ED101	GROUND LEVEL FLOOR DEMOLITION PLAN - ELECTRICAL	■
ED121	ROOF DEMOLITION PLAN - ELECTRICAL	■
EL101	GROUND LEVEL FLOOR PLAN - LIGHTING	■
EL111	INTERSTITIAL/FIRST LEVEL FLOOR PLAN - LIGHTING	■
EP101	GROUND LEVEL FLOOR PLAN - POWER	■
EP102	PARTIAL GROUND LEVEL FLOOR PLAN - POWER	■
EP111	INTERSTITIAL/FIRST LEVEL FLOOR PLAN - POWER	■
EP121	ROOF PLAN - POWER	■
EP151	FIFTH LEVEL FLOOR PLAN - POWER	■
ES-100	NEW ELECTRICAL SITE PLAN	■
FA001	ELECTRICAL FIRE ALARM COVERSHEET	■
FA101	GROUND LEVEL FLOOR PLAN - FIRE ALARM	■
FA111	INTERSTITIAL/FIRST LEVEL FLOOR PLAN - FIRE ALARM	■

SHEET INDEX - TECHNOLOGY

SHEET NO.	SHEET TITLE	BID DOCUMENTS 08/04/2022
T000	TECHNOLOGY COVERSHEET	■
T101	GROUND LEVEL FLOOR PLAN - TECHNOLOGY	■
T400	TECHNOLOGY DETAILS	■
T500	TECHNOLOGY RISER DIAGRAMS	■
T600	TECHNOLOGY SCHEDULES	■
TD101	GROUND LEVEL FLOOR DEMOLITION PLAN - TECHNOLOGY	■

Revisions:	Date:

CONSULTANT

IMEG

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 # 16584

STAMP

REGISTERED PROFESSIONAL ENGINEER — THOMAS A. OLESAK — SOUTH DAKOTA — ARCHITECT

DATE: 08/04/2022
License # 9335

Office of Construction and Facilities Management

VA | U.S. Department of Veterans Affairs

Drawing Title: SHEET INDEX

Approved:

Phase: BID DOCUMENTS

FULLY SPRINKLERED

Project Title: CONSTRUCT NEW SPS

Location: Sioux Falls, SD.

Issue Date: 08/04/2022

Checked: Checker

Drawn: Author

Project Number: 438-460

Building Number: 5

Drawing Number: GI001

7/7/2023 1:29:29 PM

C:\Users\Public\Documents\Revit Projects\16584-R21_jbarbat@ae-mn.com.rvt

VA FORM 08 - 6231

ARCHITECTURAL ABBREVIATIONS

A/C	AIR CONDITION
A/C UNIT	AIR CONDITIONING UNIT
A/E	ARCHITECT/ENGINEER
AAMA	AMERICAN ARCHITECTURAL MANUFACTURERS ASSN
AAP	ALARM ANNUNCIATOR PANEL
AB	ANCHOR BOLT
ABC	AGGREGATE BASE COURSE
ACC	ACCESSIBLE
ACI	AMERICAN CONCRETE INSTITUTE
ACT	ACOUSTICAL CEILING TILE
ACS DR	ACCESS DOOR
ACS FLR	ACCESS FLOOR
ACS PNL	ACCESS PANEL
ACST	ACOUSTIC
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
ADC	AUTOMATIC DOOR CLOSER
ADDL	ADDITIONAL
ADDN	ADDITION
ADH	ADHESIVE
ADJ	ADJACENT, ADJOINING, OR ADJUSTABLE
ADMIN	ADMINISTRATION
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFS	ABOVE FINISHED SLAB
AGC	ASSOCIATED GENERAL CONTRACTORS
AGGR	AGGREGATE
AHJ	AUTHORITY HAVING JURISDICTION
AHR	ANCHOR
AHU	AIR HANDLING UNIT
AIA	AMERICAN INSTITUTE OF ARCHITECTS
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ALT NO	ALTERNATE NUMBER
ALUM	ALUMINUM
AMT	AMOUNT
ANOD	ANODIZE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ANT	ANTENNA
AP	ACCESS PANEL
APA	AMERICAN PLYWOOD ASSOCIATION
APC	ARCHITECTURAL PRECAST CONCRETE
APPD	APPROVED
APPROX	APPROXIMATE
AR	AS REQUIRED
ARCH	ARCHITECT
ASB	ASBESTOS
ASI	ARCHITECT'S SUPPLEMENTAL INSTRUCTION
ASKLR	AUTOMATIC SPRINKLER
ASPH	ASPHALT
ASSN	ASSOCIATION
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATCH	ATTACHMENT
ATM	AUTOMATIC TELLER MACHINE
AUTO	AUTOMATIC
AUX	AUXILIARY
AV	AUDIO VISUAL
AVG	AVERAGE
AW	ACID WASTE
AWI	ARCHITECTURAL WOODWORKING INSTITUTE
AWPA	AMERICAN WOOD PRESERVERS' ASSOCIATION
AWS	AMERICAN WELDING SOCIETY
B PL	BASE PLATE
BAT	BATTEN
BD	BOARD
BD FT	BOARD FEET (FOOT)
BEV	BEVEL
BHMA	BUILDER'S HARDWARE MANUFACTURER'S ASSOCIATION
BI FLD DR	BIFOLDING DOORS
BITUM	BITUMINOUS
BKG	BACKING
BLD	BUILD
BLDG	BUILDING
BM	BEAM OR BENCHMARK
BOT	BOTTOM
BRCG	BRACING
BRDG	BRIDGING
BRDG JST	BRIDGING JOIST
BRG	BEARING
BRG PL	BEARING PLATE
BRKT	BRACKET
BRZ	BRONZE
BSMT	BASEMENT
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
C CONC	CAST CONCRETE
C TO C	CENTER TO CENTER
CAB	CABINET
CAC	CEILING ATTENUATION CLASS
CB	CATCH BASIN OR CORNER BEAD
CBB	CEMENTITIOUS (BACKER) BOARD
CCD	CONSTRUCTION CHANGE DIRECTIVE
CCTV	CLOSED CIRCUIT TELEVISION
CCW	COUNTERCLOCKWISE
CD	CONSTRUCTION DOCUMENTS OR CONTRACT DOCUMENTS
CEM	CEMENT
CEM PLAS	CEMENT PLASTER
CER	CERAMIC
CF	CONTRACTOR FURNISHED
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED
CF/OI	CONTRACTOR FURNISHED/OWNER INSTALLED
CFLG	COUNTERFLASHING
CFMF	COLD-FORMED METAL FRAMING
CG	CORNER GUARD
CGSFU	CERAMIC GLAZED STRUCTURAL FACING UNITS
CH	COAT HOOK
CHEM	CHEMICAL
CHFR	CHAMFER
CHK	CHECK
CI	CAST IRON
CIP	CAST-IN-PLACE
CIR	CIRCLE
CIRC	CIRCULAR
CJ	CONSTRUCTION JOINT OR CONTROL JOINT
CL	CENTER LINE
CLDG	CLADDING
CLG	CEILING
CLR	CLEAR
CM	CONSTRUCTION MANAGEMENT
CMU	CONCRETE MASONRY UNIT
CNR	CORNER
CNTR	COUNTER
CRTP	COUNTERTOP
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COL	COLUMN
COM	COMMON
COMB	COMBINATION, COMBINED
COMM	COMMUNICATION
COMP	COMPONENT
CONC	CONCRETE
CONC FLR	CONCRETE FLOOR
COND	CONDENSER OR CONDITION
CONF	CONFERENCE
CONN	CONNECT
CONSTR	CONSTRUCTION
CONT	CONTINUE
CONTR	CONTRACTOR
COORD	COORDINATE
CORR	CORRIDOR
CPM	CRITICAL PATH METHOD
CPRS	COMPRESSIBLE
CR	CARD READER
CRS	COLD ROLLED STEEL
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
CSB	CONCRETE SPLASH BLOCK
CSG	CASING
CSI	CONSTRUCTION SPECIFICATIONS INSTITUTE
CSK	COUNTER SUNK
CSMT	CASEMENT
CSWK	CASEWORK
CTG	COATING
CTR	CENTER
CTRL	CONTROL
CTV	CABLE TELEVISION
CU FT	CUBIC FEET
CU IN	CUBIC INCH
CU YD	CUBIC YARD
CURT	CURTAIN
CYL	CYLINDER
CYL L	CYLINDER LOCK
D	DEPTH OR PENNY (NAIL)
DAT	DATUM
DBL	DOUBLE
DBL GLZ	DOUBLE GLAZE
DCS	DIAPER CHANGING STATION
DP	DECORATIVE PANEL
DEG	DEGREE
DEL	DELETE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIFF	DIFFERENCE OR DIFFUSER
DIM	DIMENSION
DIR	DIRECTION
DISP	DISPENSER
DIST	DISTANCE
DIV	DIVIDE OR DIVISION
DL	DEAD LOAD
DOC	DOCUMENT
DR	DOOR, DRAIN, DRESSING ROOM, OR DRIVE
DR CL	DOOR CLOSER
DR FR	DOOR FRAME
DR OPNG	DOOR OPENING
DS	DOWNSPOUT
DSGN	DESIGN
DW	DISHWASHER
DWG	DRAWING
E	EAST
EA	EACH
EFF	EFFICIENCY
EFS	EXTERIOR FINISH SYSTEM
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELAST	ELASTOMERIC
ELEC	ELECTRIC
ELEC DR OP	ELECTRIC DOOR OPENER
ELEV	ELEVATOR
EMER	EMERGENCY
EMER SHR	EMERGENCY SHOWER
ENCL	ENCLOSURE
ENGR	ENGINEER
ENVIR	ENVIRONMENT
EO	ELECTRICAL OUTLET
EPA	ENVIRONMENTAL PROTECTION AGENCY
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
EPO	EMERGENCY POWER OFF
EPS	EXPANDED POLYSTYRENE BOARD (INSULATION)
EQ	EQUAL
EQL SP	EQUALLY SPACED
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ERD	EXISTING ROOF DRAIN
ESC	ESCAPE OR ESCUTCHEON
ESMT	EASEMENT
ESP	ESPECIALLY
EST	ESTIMATE
ETC	AND SO FORTH OR ET CETERA
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EWS	EYE WASH STATION
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION OR EXPOSED
EXP BT	EXPANSION BOLT
EXST GR	EXISTING GRADE
EXT	EXTERIOR, EXTERNAL, OR EXTINGUISHER
EXT GR	EXTERIOR GRADE
F	FAHRENHEIT OR FEMALE
FA	FIRE ALARM
FAB	FABRIC
FAC	FACTOR
FACIL	FACILITY
FAS	FASCIA
FAS BD	FASCIA BOARD
FCU	FAN COIL UNIT
FCO	FLOOR CLEANOUT
FCTY	FACTORY
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FACE
FF EL	FINISH FLOOR ELEVATION
FF&E	FURNITURE, FIXTURE, AND EQUIPMENT
FHC	FIRE HOSE CABINET
FHP	FULL HEIGHT PARTITION
FIG	FIGURE
FIL	FILLET
FIN	FINISH
FIN FLR	FINISH FLOOR
FIN GR	FINISH GRADE
FIN WD	FINISH WOOD
FIXT	FIXTURE
FL	FLOORLINE
FLASH	FLASHING
FLDG	FOLDING
FLEX	FLEXIBLE
FLG	FLOORING
FLR	FLOOR
FLR FIN	FLOOR FINISH
FLR SK	FLOOR SINK
FLUOR	FLUORESCENT
FLUOR FIX	FLUORESCENT FIXTURE
FM	FACTORY MUTUAL
FM-G	FACTORY MUTUAL GLOBAL
FO	FINISHED OPENING
FOC	FACE OF CONCRETE OR FACE OF CURB
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF SLAB OR FACE OF STUD
FOUNT	FOUNTAIN
FOW	FACE OF WALL
FP	FIRE PROTECTION OR FIREPROOF
FR	FIRE RATING, FIRE RESISTANT, OR FRAME
FR SNK	FLUSHING RIM SINK
FREQ	FREQUENCY
FRMG	FRAMING
FRP	FIBERGLASS REINFORCED PLASTIC
FRZ	FREEZER
FS	FEDERAL SPECIFICATION
FSB	FOLDING SHOWER BENCH
FSTNR	FASTENER
FT	FEET OR FOOT
FTG	FOOTING
FURG	FURRING
FURN	FURNISH OR FURNITURE
FUT	FUTURE
FVC	FIRE VALVE CABINET
GA	GAGE OR GYPSUM ASSOCIATION
GAL	GALLON
GALV	GALVANIC OR GALVANIZED
GALV STL	GALVANIZED STEEL
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GD	GUARD
GDR	GUARD RAIL
GEN	GENERAL OR GENERATOR
GFRC	GLASS-FIBER-REINFORCED CONCRETE
GFRG	GLASS-FIBER-REINFORCED GYPSUM
GFRP	GLASS-FIBER-REINFORCED PLASTIC
GI	GALVANIZED IRON
GL	GLASS
GL BLK	GLASS BLOCK
GLU LAM	GLUED LAMINATED WOOD
GP	GRAB BAR
GR FL	GROUND FLOOR
GRAN	GRANITE
GRTG	GRATING
GSB	GYPSUM SHEATHING BOARD
GSM	GALVANIZED SHEET METAL
GSU	GLAZED STRUCTURAL UNIT
GT	GROUT
GUAR	GUARANTEE
GUT	GUTTER
GYP	GYPSUM
GYP BD	GYPSUM BOARD
GYP PLAS	GYPSUM PLASTER
H	HIGH OR HUMIDISTAT
HAZ MAT	HAZARDOUS MATERIALS
HB	HOSE BIBB
HC	HOLLOW CORE
HCWD	HOLLOW CORE WOOD DOOR
HDBD	HARDBOARD
HDO	HIGH DENSITY OVERLAY
HDR	HEADER
HDW	HARDWARE
HDWD	HARDWOOD
HEPA	HIGH EFFICIENCY PARTICULATE AIR (FILTER)
HEX	HEXAGON
HGR	HANGER
HM	HOLLOW METAL
HMD	HOLLOW METAL DOOR
HMDF	HOLLOW METAL DOOR AND FRAME
HMF	HOLLOW METAL FRAME
HNDRL	HANDRAIL
HO	HOLD OPEN
HORIZ	HORIZONTAL
HOSP	HOSPITAL
HP	HIGH PRESSURE
HPD	HYGIENE PRODUCT DISPOSAL
HPDL	HIGH PRESSURE DECORATIVE LAMINATE
HQ	HEADQUARTERS
HS	HEAT-STRENGTHENED (GLASS) OR HIGH STRENGTH
HSE	HOUSE
HSKPG	HOUSEKEEPING
HST	HOIST
HSS	HOLLOW STRUCTURAL STEEL
HT	HEIGHT
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
HVY	HEAVY
HW	HOT WATER
HYD	HYDRANT
HYDR	HYDRAULIC
IAQ	INDOOR AIR QUALITY
IBC	INTERNATIONAL BUILDING CODE
IC	INFECTION CONTROL
ICW	INFECTION CONTROL WALL
ID	INSIDE DIAMETER
ID NO	IDENTIFICATION NUMBER
ILLUM	ILLUMINATION
INCL	INCLUDED
IND	INDEPENDENT OR INDUSTRIAL
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
INTL	INTERNATIONAL
IWH	INSTANTANEOUS WATER HEATER
JAN	JANITOR
KD	KILN DRIED OR KNOCKED DOWN
KIT	KITCHEN
KO	KNOCKOUT
KPL	KICKPLATE
∟	ANGLE
LAB	LABORATORY
LAD	LADDER
LAM	LAMINATE
LAM GL	LAMINATED GLASS
LAU	LAUNDRY
LAV	LAVATORY
LBR	LUMBER
LBS	POUND
LCS	LOCKABLE CHARTING STATION/MED CABINET
LD BRG	LOAD-BEARING
LDR	LEADER
LED	LIGHT EMITTING DIODE
LF	LINEAR FEET (FOOT)
LIB	LIBRARY
LIN	LINEAR
LIQ	LIQUID
LKR	LOCKER
LKR RM	LOCKER ROOM
LL	LEAD LINED
LMST	LIMESTONE
LRG	LARGE
LRV	LOUVERED ROOF VENT
LS	LIGHT SWITCH
LT	LIGHT
LT GA	LIGHT GAGE
LT WT	LIGHTWEIGHT
LTG	LIGHTING
LTNG	LIGHTNING
LVD	LOUVERED
LVR	LOUVER
LWC	LIGHTWEIGHT CONCRETE
LWIC	LIGHTWEIGHT INSULATING CONCRETE
LYR	LAYER
MACH	MACHINE
MACH RM	MACHINE ROOM
MAINT	MAINTENANCE
MAN	MANUAL
MATL	MATERIAL
MATV	MASTER ANTENNA TELEVISION SYSTEM
MAX	MAXIMUM
MBD	MARKER BOARD
MCB	METAL CORNER BEAD
MD	DECK
ME	MECHANICAL ENGINEER
MEAS	MEASURE
MECH	MECHANICAL
MECH RM	MECHANICAL ROOM
MED	MEDICAL, MEDIUM
MEK	METHYL ETHYL KETONE
MEMB	MEMBRANE
MEMO	MEMORANDUM
MEZZ	MEZZANINE
MF	MILL FINISH
MFD	MANUFACTURED
MFG	MANUFACTURING
MFR	MANUFACTURER
MFR REC	MANUFACTURER'S RECOMMENDATION
MGT	MANAGEMENT
MIC	MICROPHONE
MID	MIDDLE
MIL STD	MILITARY STANDARD
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MIT	MITER
MKR	MARKER
ML	METAL LATH
MLDG	MOLDING (MOULDING)
MLWK	MILLWORK
mm	MILLIMETER
MO	MASONRY OPENING
MOD	MODEL, MODIFY OR MODULE
MOD BIT	MODIFIED BITUMEN
MON	MONITOR
MOPR	MOP RACK
MR	MOISTURE RESISTANT
MS	MOP SINK
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MULL	MULLION
MW	MICROWAVE
MWP	MEMBRANE WATERPROOFING
N	NORTH
NA	NOT APPLICABLE
NAT	NATURAL
NATL	NATIONAL
NC	NOISE CRITERIA OR NURSE CALL
NCOMBL	NONCOMBUSTIBLE
NEC	NATIONAL ELECTRICAL CODE
NEG	NEGATIVE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSN
NEUT	NEUTRAL
NFC	NATIONAL FIRE CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NR	NOISE REDUCTION
NRC	NOISE REDUCTION COEFFICIENT
NRCA	NATIONAL ROOFING CONTRACTORS ASSOCIATION
NRP	NONREMOVABLE
NS	NARROW STILE
NUM	NUMERAL
O/O	OUT TO OUT
O	OXYGEN
OA	OUTSIDE AIR OR OVERALL
OC	ON CENTER
OCC	OCCUPY
OCT	OCTAGON
OD	OUTSIDE DIAMETER, OUTSIDE DIMENSION
OD	OUTSIDE DIAMETER/OUTSIDE DIMENSION
OF/CI	OWNER FURNISHED/CONTRACTOR INSTALLED
OFD	OVERFLOW DRAIN
OFF	OFFICE
OF/OI	OWNER FURNISHED/OWNER INSTALLED
OH	OVERHANG
OH DR	OVERHEAD (COILING) DOOR
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OPR	OPERABLE
OPT	OPTIONAL
OR	OPERATING ROOM OR OUTSIDE RADIUS
ORD	ORDNANCE OR OVERFLOW ROOF DRAIN
ORG	ORGANIC
ORIG	ORIGINAL
ORN	ORNAMENTAL
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINSTRATION
OUT	OUTLET
OZ	OUNCE
P	PAINT
PAR	PARALLEL OR PARAPET
PARA	PARAGRAPH
PART	PARTIAL
PAT	PATTERN
PB	PUSHBUTTON
PBD	PARTICLEBOARD
PC	PIECE, POLYCARBONATE OR PORTLAND CEMENT
PCA	PORTLAND CEMENT ASSOCIATION
PCC	PRECAST CONCRETE
PCCP	CONCRETE PAVEMENT
PCD	PAPER CUP DISPENSER
PCF	POUNDS PER CUBIC FOOT
PCP	PORTLAND CEMENT PLASTER
PCT	PRIVACY CURTAIN TRACK
PED	PEDESTAL
PEN	PENETRATE
PEND	PENDANT
PERF	PERFORATED
PERIM	PERIMETER
PERP	PERPENDICULAR
PHAR	PHARMACY
PHOTO	PHOTOGRAPH
PKG	PACKAGE
PL	PROPERTY LINE
PL GL	PLATE GLASS
PLAM	PLASTIC LAMINATE
PLAS	PLASTER OR PLASTIC
PLBG	PLUMBING
PLYWD	PLYWOOD
PMTL	PAINTED METAL
PNEU	PNEUMATIC
PNL	PANEL
PO	POST OFFICE, PURCHASE ORDER
POLY	POLYETHYLENE (PLASTIC)
PP	PUSH PLATE
PR	PAIR
PRCST	PRECAST
PREFAB	PREFABRICATE
PREFIN	PREFINISH
PRELIM	PRELIMINARY
PREP	PREPARATION
PRESS	PRESSURE
PREV	PREVIOUS
PRKG	PARKING
PRMLD	PREMOLDED
PROJ	PROJECT
PROP	PROPERTY
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PORCELAIN TILE OR PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PTN	PARTITION
PTS	PNEUMATIC TUBE STATION
PVC	POLYVINYL CHLORIDE (PLASTIC)
PVG	PAVING
PWR	POWER
QA	QUALITY ASSURANCE
QC	QUALITY CONTROL
QRY	QUARRY
QTR	QUARTER
QTY	QUANTITY
QUAD	QUADRANT
QUAL	QUALITY
R	RADIUS OR RISER
RA	RETURN AIR
RAD	RADIATOR
RBM	REINFORCED BRICK MASONRY
RBR	RUBBER
RC	REMOTE CONTROL
RCP	REFLECTED CEILING PLAN
RCVR	RECEIVER
RD	ROAD OR ROOF DRAIN
REC	RECESSED
RECD	RECEIVED
RECPT	RECEPTACLE
RECT	RECTANGLE
REF	REFERENCE OR REFRIGERATOR
REFR	REFRACTORY, REFRIGERATION
REG	REGISTER
REINF	REINFORCE
REP	REPAIR
REPL	REPLACE
REQ	REQUIRE
REQD	REQUIRED
RET	RETURN
REV	REVISION
RFG	ROOFING
RFI	REQUEST FOR INFORMATION
RFP	REQUEST FOR PROPOSAL
RFS	ROOM FINISH SCHEDULE
RL	ROOF LEADER
RLG	RAILING
RM	ROOM
RM LT	NURSE CALL LIGHT/ROOM LIGHT
RND	ROUND
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RS	ROUGH SAWN
RSV	RESILIENT SHEET VINYL
RT	RIGHT
RV	ROOF VENT
RVS	REVERSE
RWL	RAIN WATER LEADER
S	SOLID SURFACE
SA	SUPPLY AIR
SALV	SALVAGE
SAMP	SAMPLE
SAN	SANITARY
SB	SPLASH BLOCK
SBS	STYRENE BUTADIEN STYRENE
SBSTR	SUBSTRATE
SC	SHARPS CONTAINER
SCH	SCHOOL
SCHED	SCHEDULE
SCHEM	SCHEMATIC
SCP	SCUPPER
SCRN	SCREEN
SCT	SHOWER CURTAIN TRACK
SCWD	SOLID CORE WOOD DOOR
SD	SMOKE DETECTOR/SOAP DISPENSER
SDG	SIDING
SECT	SECTION
SEG	SEGMENT
SEL	SELECT
SEP	SEPARATE
SF	SQUARE FOOT (FEET)
SFTWD	SOFTWOOD
SGD	SLIDING GLASS DOOR
SGL	SINGLE
SHR	SHOWER
SHR HD	SHOWER HEAD
SHRD	SHOWER DRAIN
SHT	SHEET
SHTHG	SHEATHING
SHV	SHELVING
SIM	SIMILAR
SJ	SCORED JOINT
SJI	STEEL JOIST INSTITUTE
SK	SKETCH
SKLT	SKYLIGHT
SLDG	SLIDING
SLNT	SEALANT
SM	SHEET METAL
SMK	SMOKE
SND INS	SOUND INSULATION
SPEC	SPECIFICATION
SPKLR	SPRINKLER
SPKR	SPEAKER
SPLY	SUPPLY
SPR	SINGLE PLY ROOF SYSTEM
SQ	SQUARE
SQ IN	SQUARE INCH
SQ YD	SQUARE YARD
SST	STAINLESS STEEL
ST	STAIRS OR STREET
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STIF	STIFFENER
STL JST	STEEL JOIST
STL LNTL	STEEL LINTEL
STL PL	STEEL PLATE
STL RF DK	STEEL ROOF DECK
STL TB	STEEL TUBE
STL TR	STEEL TRUSS
STNLS	STAINLESS
STOR	STORAGE
STR	STRINGERS
STRUCT	STRUCTURAL
STRUCT STL	STRUCTURAL STEEL
SUB	SUBSTITUTE
SURF	SURFACE
SUSP	SUSPEND
SUSP CLG	SUSPENDED CEILING
SW	SWITCH
SWDR	SWING DOOR
SYM	SYMBOL
SYNTH	SYNTHETIC
SYS	SYSTEM
T	TREAD OR THERMOSTAT
T&M	TIME AND MATERIALS
TB	TOWEL BAR
TBD	TACK BOARD
TECH	TECHNICAL
TEL	TELEPHONE
TEMP	TEMPERATURE OR TEMPORARY
THERM	THERMAL
THK	THICKNESS
THRES	THRESHOLD
THRU	THROUGH
THRUOUT	THROUGHOUT
TMPD	TEMPERED
TMPD GL	TEMPERED GLASS
TN	TRUE NORTH
TO	TOP OF ___
TO FDN	TOP OF FOUNDATION
TOB	TOP OF BEAM
TOM	TOP OF MASONRY
TOP	TOP OF PARAPET
TOS	TOP OF STEEL
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TRANS	TRANSOM
TRTD	TREATED
TS	TUBE STEEL
TSTAT	THERMOSTAT
TV	TELEVISION
TYP	TYPICAL
U	HEAT TRANSFER COEFFICIENT
UC	UNDERCUT
UGND	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
ULT	ULTIMATE
UNFIN	UNFINISH
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
UR	URINAL
UTIL	UTILITY
UV	ULTRAVIOLET
VAC	VACUUM
VAR	VARIES
VEH	VEHICLE
VENT	VENTILATION
VERT	VERTICAL
VEST	VESTIBULE
VFD	VARIABLE FREQUENCY DRIVE
VIC	VICINITY
VID	VIDEO
VIF	VERIFY IN FIELD
VNR	VENEER
VOC	VOLATILE ORGANIC COMPOUND
VOL	VOLUME
VR	VAPOR RETARDER
VTR	VENT THROUGH ROOF
W/	WITH
W/O	WITHOUT
WBL	WOOD BLOCKING
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WF	WIDE FLANGE
WFR	WOOD FRAME
WFS	WOOD FURRING STRIPS
WH	WATER HEATER
WHSE	WAREHOUSE
WP	WATERPROOFING
WPM	WATERPROOF MEMBRANE
WR	WEATHER RESISTANT
WS	WEATHERSTRIP OR WALL SCONCE
WSCT	WAINSCOT
WT	WEIGHT OR WINDOW TREATMENT
X BRACE	CROSS BRACE
XPS	EXTRUDED POLYSTYRENE BOARD
YD	YARD

Revisions:	Date:

CONSULTANT

IMEG

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 # 16584

STAMP

REGISTERED PROFESSIONAL ENGINEER — THOMAS A. OLESAK — SOUTH DAKOTA

DATE: 08/04/2022
License # 9335

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ABBREVIATIONS

Approved:

Phase: BID DOCUMENTS

FULLY SPRINKLERED

Project Title: CONSTRUCT NEW SPS

Location: Sioux Falls, SD.

Issue Date: 08/04/2022

Checked: Checker

Drawn: Author

Project Number: 438-460

Building Number: 5

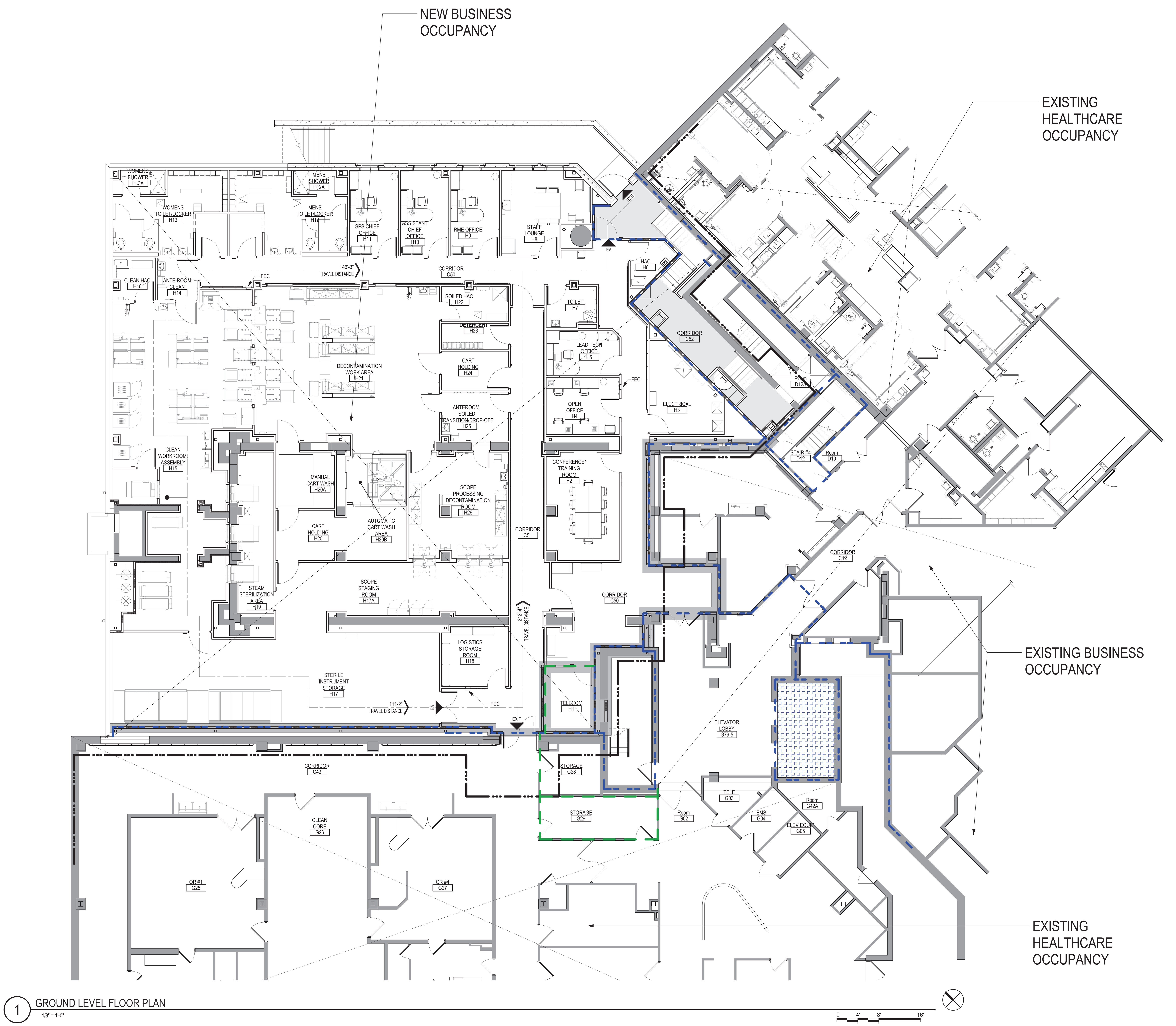
Drawing Number: GI002

7/7/2023 1:29:31 PM

C:\Users\PUblic\Documents\Revit Projects\16584-R21_gbarbair@ae-mn.com.rvt

VA FORM 08 - 6231

1	2	3	4	5	6	7	8	9	10



1 GROUND LEVEL FLOOR PLAN
1/8" = 1'-0"

CODE SUMMARY

PROJECT DESCRIPTION
ADDITION TO AND REMODELING OF BUILDING 5 FOR STERILE PROCESSING SERVICE LINE.

GENERAL TYPE OF PROJECT	YES	NO
NEW BUILDING		●
ADDITION	●	
REMODEL	●	

PHYSICAL SECURITY AND RESILIENCY CLASSIFICATION OF PROJECT		
MISSION CRITICAL (MC)	●	
LIFE-SAFETY PROTECTED (LSP)		
LIFE-SAFETY PROTECTED (LSP) WITH MC UTILITIES / SYSTEMS REDUNDANCIES		

AUTHORITIES HAVING JURISDICTION (AHJ's)	YES	NO
THE JOINT COMMISSION (TJC)	●	
VETERANS ADMINISTRATION (VA)	●	
		●

APPLICABLE REGULATIONS
2021 NFPA 101 (LIFE SAFETY CODE)
2018 IBC
ABA STANDARDS (2015) (ABAAS)
VA BARRIER FREE DESIGN STANDARD (PG-18-13)
NFPA NATIONAL FIRE CODES (EXCEPTION: NFPA 5000 & 900)
2018 FGI GUIDELINES
OSHA STANDARDS
VA SEISMIC DESIGN REQUIREMENTS H-18-8
NATIONAL ELECTRIC CODE (NEC)
ASHRE 90.1
ASME BOILER AND PRESSURE VESSEL CODE
ASME CODE FOR PRESSURE PIPING
BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, AMERICAN CONCRETE INSTITUTE AND COMETARY (ACI 318)
MANUAL OF STEEL CONSTRUCTION, LOAD AND RESISTANCE FACTOR DESIGN SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
ENERGY POLICY ACT OF 2005 (EPAct)
DOE INTERIM FINAL RULE: ENERGY CONSERVATION STANDARDS FOR NEW FEDERAL, COMMERCIAL AND MULTI-FAMILY HIGH-RISE RESIDENTIAL BUILDINGS AND NEW LOW-RISE RESIDENTIAL BUILDINGS, 10 CFR PARTS 433,434 AND 435
FEDERAL LEADERSHIP IN HIGH PERFORMANCE AND SUSTAINABLE BUILDINGS: MEMORANDUM OF UNDERSTANDING (MOU)
EXECUTIVE ORDER 13834
THE PROVISIONS FOR CONSTRUCTION AND SAFETY SIGNS. STATED IN THE GENERAL REQUIREMENTS SECTION 01010 OF THE VA MASTER CONSTRUCTION SPECIFICATION
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY - ASHRAE STANDARD 62.1-2004
SAFETY STANDARD FOR REFRIGERATION SYSTEMS - ASHRAE STANDARD 15 -2007
VA FIRE PROTECTION DESIGN MANUAL
VA PHYSICAL SECURITY AND RESILIENCY DESIGN MANUAL (2015)
VA DIRECTIVES, DESIGN MANUALS, MASTER SPECIFICATIONS, VA NATIONAL CAD STANDARD APPLICATION GUIDE, AND OTHER GUIDANCE ON THE TECHNICAL INFORMATION LIBRARY (TIL)

OCCUPANCY CLASSIFICATION(S)				
OCCUPANCIES	(LSC CH 12-42)	BUSINESS	YES	NO
CHANGE OF OCCUPANCY?	(If Remodeling)			●
SEPARATED OCCUPANCIES?	2021 LSC (TABLE 6.1.14.1)		●	
FIRE BARRIER RATING(S)	(Section 8.3)	SEE LIFE SAFETY PLANS		

TYPE(S) OF CONSTRUCTION		
CONSTRUCTION TYPE(S)	(NAPA 220 TABLE 4.1.1)	II (222)
AREA SEPARATIONS / FIRE WALLS		SEE LIFE SAFETY PLANS

EGRESS	YES	NO
AREAS OF REFUGE REQUIRED		●
ACCESSIBLE MEANS OF EGRESS ("MOE") REQUIRED		
ELEVATOR REQUIRED AS MEANS OF EGRESS		
MEANS OF EGRESS CAPACITY (width in inches)	(Input)	

PLUMBING FIXTURES	PROVIDED	RQD	FACTOR (IBC CH 29)
TOILETS	5	2 M, 2 F	1/25 for first 50 occupants, then 1/50
URINALS	0	--	--
LAVATORIES	5	3	1/40 for first 80 occupants, then 1/80
DRINKING FOUNTAINS	1	1	1/100 occupants. 50% may be vending
SERVICE SINKS	3	1	--

FIRE-RESISTIVE REQUIREMENTS	RATING (HRS)	TEST
STRUCTURAL FRAME		
COLUMNS	2HR	ASTM E119
GIRDERS	2HR	ASTM E119
TRUSSES	2HR	ASTM E119
BEARING WALLS		
EXTERIOR BEARING WALLS	2HR	ASTM E119
INTERIOR BEARING WALLS	2HR	ASTM E119
NON-BEARING WALLS AND PARTITIONS		
EXTERIOR	0HR	NA
INTERIOR	See Life Safety Plans	
FLOOR CONSTRUCTION		
FLOOR/CEILING ASSEMBLY	2HR	ASTM E119
PRIME & SEC. FLOOR BEAMS, JOISTS	1HR	ASTM E119
ROOF CONSTRUCTION		
ROOF/CEILING ASSEMBLY	2HR	ASTM E119
PRIME & SEC. ROOF BEAMS, JOISTS	2HR	ASTM E119
OTHER		
SHAFTS AND EXIT PASSAGEWAYS	2HR	ASTM E119
EXTERIOR DOORS AND WINDOWS	0HR	NA

MISCELLANEOUS		YES	NO
FIRE RESISTIVE CORRIDORS?			●
SMOKE TIGHT CORRIDORS (SMOKE PARTITIONS)			●
INCIDENTAL USE AREA RATING(S)		SEE PLANS	
INTERIOR FINISHES CLASSIFICATION	EXITS	A or B	
	EXIT ACCESS CORRIDORS	A or B	
	OTHER SPACES	A, B or C	

ADDITIONAL NOTES
--

LIFE SAFETY SYMBOLS

Symbol	Description	Symbol	Description
	SMOKE TIGHT ASSEMBLY		1 HOUR FIRE & SMOKE BARRIER
	1 HOUR FIRE BARRIER		2 HOUR FIRE & SMOKE BARRIER
	2 HOUR FIRE BARRIER		3 HOUR FIRE & SMOKE BARRIER
	3 HOUR FIRE BARRIER	TRAVEL DISTANCE 100'-10"	TRAVEL DISTANCE
EXIT	EXIT	ED	EXIT DISCHARGE
HE	HORIZONTAL EXIT	EA	EXIT ACCESS
FE	FIRE EXTINGUISHER	FEC	FIRE EXTINGUISHER CABINET
	LIMITS OF CONSTRUCTION		OCCUPANCY SEPARATION
	SMOKE COMPARTMENT BOUNDARY		HEALTH CARE SUITE
	SHAFT ADJACENT SYMBOLS SHOW PARTITION RATING AND DAMPER REQUIREMENTS		
	HAZARDOUS USE ADJACENT SYMBOLS SHOW PARTITION RATING. OPENINGS REQUIRE CLOSER & LATCH		
	EXIT PASSAGEWAY RATE AS STAIR ALL OPENINGS TO BE RATED AS STAIR SHAFT		
	CORRIDOR WALLS TO LIMIT THE TRANSFER OF SMOKE		
	ADJUNCT CORRIDOR or PSYCHIATRIC AREA or CONSTRUCTED WITH MIN. 4'-0" CLEAR WITH (PER CHAPTER 19)		

NOTE: NOT ALL SYMBOLS MY BE USED ON EACH PLAN

0 4' 8' 16'

Revisions:	Date:

CONSULTANT
IMEG

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 # 16584

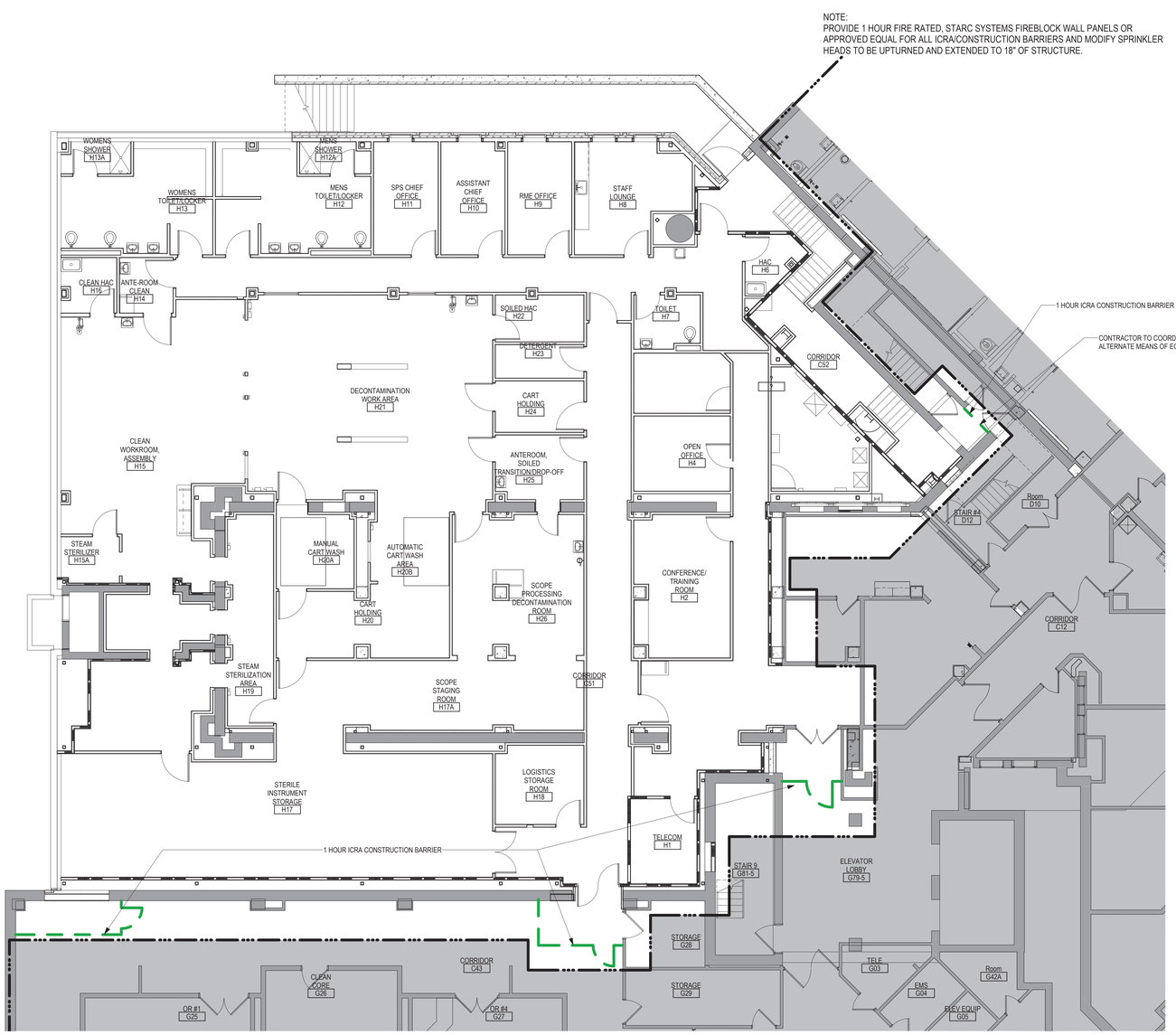
STAMP
REGISTERED PROFESSIONAL ARCHITECT — THOMAS A. OLESAK — SOUTH DAKOTA
DATE: 08/04/2022
License # 9335

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title	Phase	Project Title	Project Number
GROUND LEVEL LIFE SAFETY PLAN	BID DOCUMENTS	CONSTRUCT NEW SPS	438-460
			Building Number: 5
Approved:	FULLY SPRINKLERED	Location: Sioux Falls, SD.	Drawing Number: GI101
		Issue Date: 08/04/2022 · Checked: Checker · Drawn: Author	

7/7/2023 1:29:44 PM
C:\Users\Public\Documents\Revit Projects\16584-R21_gbarbat@ae-mn.com.rvt



1 GROUND LEVEL FLOOR PLAN
1/8" = 1'-0"

0 4' 8' 16'

INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES

1. SEE SPEC SECTION 01 35 26 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION

2. THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION AREA PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND DUCT TAPE DURING OPERATIONS, WHERE PERMITTED BY CLASS. ICRA - CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS.

3. PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA.

4. AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA "INFECTION CONTROL CONSTRUCTION PERMIT" TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.

5. CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIER(S) FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND TERMINATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER, SEE DETAIL(S). TAPE, MUD, SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.

6. CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 AM AND AFTER 8:00 PM OR DIRECTED BY COR

7. DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS, MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 5000 SF, AND (3) THREE FOR AREAS BETWEEN 5000 SF AND 10000 SF.

8. LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.

9. THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE COMPETENT PERSON SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (15) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.

10. PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER/APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

CONSTRUCTION PHASING GENERAL NOTES

1. THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INVOLVE MULTIPLE LOCATION AREAS. SEE SPECIFICATIONS SECTION 01 00 00 1.6.G PHASING.

2. THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.

3. THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNER.

4. THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES, OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNER'S PERSONNEL FOR ALL PHASES OF THE WORK.

5. THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN DRAWING(S) AND CONSTRUCTION PHASING DESCRIPTION.

6. THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.

7. BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.

8. ANY ICRA / CONSTRUCTION BARRIERS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.

9. THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.

10. FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.

11. ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.

12. THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.

13. THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS' TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOW-ON PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET, PAINTING BUT NOT SANDING WALL COVERING, ELECTRICAL TRIM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	• MECHANICAL SPACES: AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES. • ENGINEERING OR EMS OFFICE/WORK AREAS • OFFICE AREAS: AREAS NOT ATTACHED TO/ADJOINING PATIENT CARE AREAS, NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS. • PUBLIC CORRIDORS: SPACES NOT ON OR DIRECTLY ATTACHED TO PATIENT UNITS OR TREATMENT LOCATIONS.
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST. INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLING, ACCESS TO CHASE SPACES, CUTTING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED, FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK	• OUTPATIENT AREAS: 1. PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS 2. BEHAVIORAL/MENTAL HEALTH AREAS 3. EXTENDED CARE / REHAB CLINIC AREAS 4. COMMUNITY BASED OUT PATIENT CLINICS (CBOC'S)
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALLCOVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILINGS, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	• IN-PATIENT UNITS: 1. INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT.; NURSING UNITS; RADIOLOGY/MRI/CT/ULTRASOUND; NUCLEAR MEDICINE; CAFETERIA/KITCHEN/CANTEEN; LABORATORIES; RADIATION / ONCOLOGY; DIALYSIS
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.	GROUP 4 HIGHEST RISK	• ICU/SICU • OR/PACU/ENDOSCOPY • GI • STERILE PROCESSING SERVICES (SPS) • PHARMACY • CATH LAB

CLASS I	KEEP AREAS FREE OF DEBRIS, TRASH EXECUTE WORK TO MINIMIZE OF DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM) IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING.)
CLASS II	SAME AS CLASS I PLUS: 1. ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING. 3. BLOCK OFF AND SEAL AIR VENTS 4. SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE. 5. CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION 6. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER; TAPE COVERING UNLESS SOLID LID. 7. WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA. 8. PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS. 9. REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA
CLASS III	SAME AS CLASS I AND II PLUS: 1. ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION 2. COMPLETE CRITICAL BARRIERS (I.E. SHEETROCK, PLYWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS; MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED 3. MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED. 5. CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY 6. DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE & HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST. DEBRIS. 7. VACUUM WORK WITH HEPA FILTERED VACUUM. 8. WET MOP AREA WITH CLEANER/DISINFECTANT. 9. MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE. 10. DISPLAY ICRA AT SITE 11. SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.
CLASS IV	SAME AS CLASS I, II AND III PLUS: 1. INSPECT ADJACENT AREAS FOR DUST MIGRATION. TAKE IMMEDIATE CORRECTIVE AS NEEDED 2. USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION 3. CONSTRUCT ANTE ROOM; ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE

INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE - ALL:
CONSTRUCTION PROJECT ACTIVITY TYPE - D
INFECTION CONTROL RISK GROUP - GROUP 4: HIGH RISK
CONTROL PROCEDURE CLASS - IV

Revisions:	Date:

CONSULTANT
IMEG

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 # 16584

STAMP
REGISTERED PROFESSIONAL ENGINEER THOMAS A. OLESAK NORTH DAKOTA
DATE: 08/04/2022
License # 9335

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

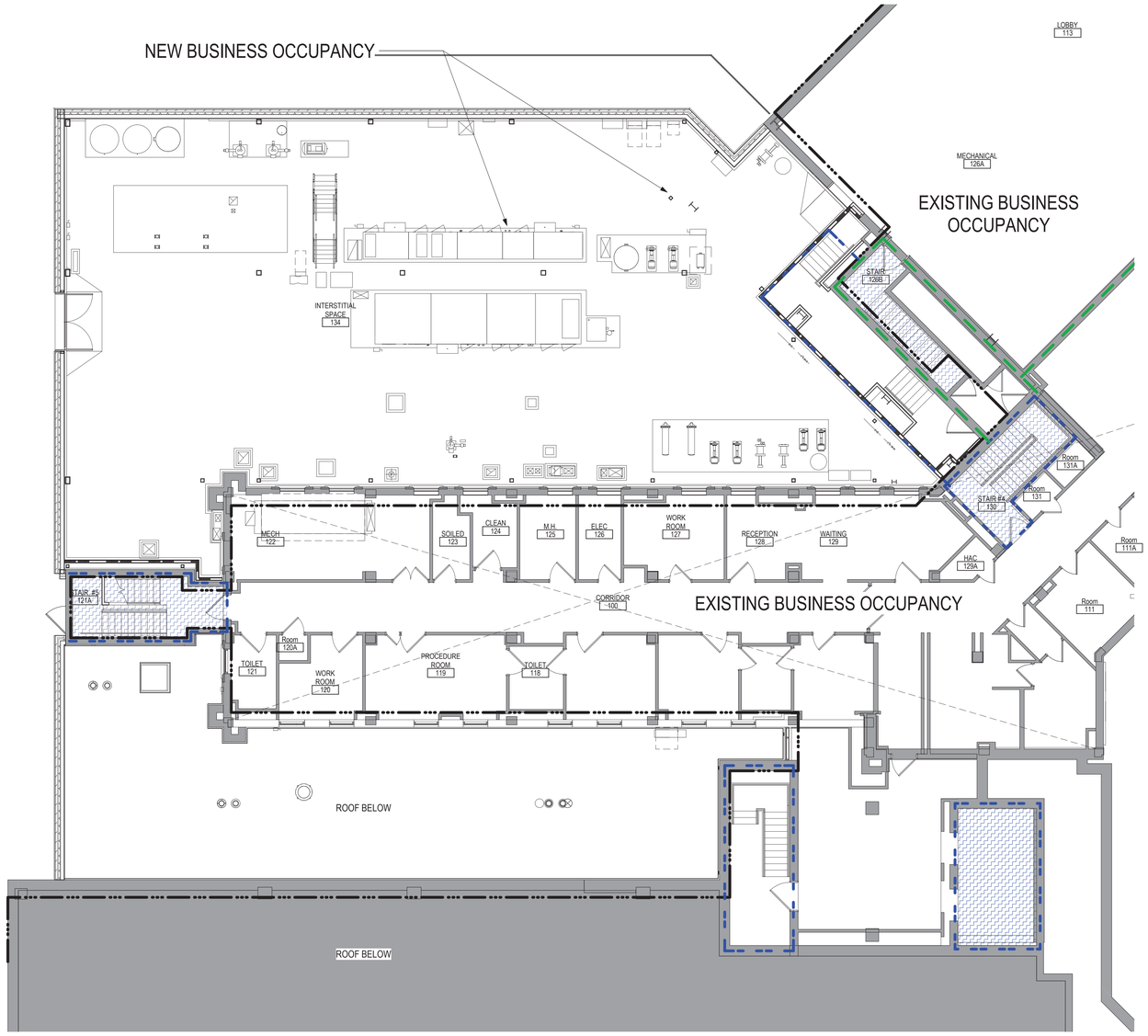
Drawing Title: GROUND LEVEL INFECTION CONTROL & LIFE SAFETY PLAN
Approved:

Phase: BID DOCUMENTS
FULLY SPRINKLERED

Project Title: CONSTRUCT NEW SPS
Location: Sioux Falls, SD.
Issue Date: 08/04/2022
Checked: Checker
Drawn: Author

Project Number: 438-460
Building Number: 5
Drawing Number: GC101

C:\Users\PublicDocuments\Revit Projects\16584-R21_gbarbeau@ae-mn.com.rvt
7/7/2023 1:20:09 PM
VA FORM 08 - 6231



1 INTERSTITIAL / FIRST LEVEL LIFE SAFETY PLAN

1/8" = 1'-0"

CODE SUMMARY

PROJECT DESCRIPTION

ADDITION TO AND REMODELING OF BUILDING 5 FOR STERILE PROCESSING SERVICE LINE.

GENERAL TYPE OF PROJECT	YES	NO
NEW BUILDING		●
ADDITION	●	
REMODEL	●	

PHYSICAL SECURITY AND RESILIENCY CLASSIFICATION OF PROJECT		
MISSION CRITICAL (MC)	●	
LIFE-SAFETY PROTECTED (LSP)		
LIFE-SAFETY PROTECTED (LSP) WITH MC UTILITIES / SYSTEMS REDUNDANCIES		

AUTHORITIES HAVING JURISDICTION (AHJ's)	YES	NO
THE JOINT COMMISSION (TJC)	●	
VETERANS ADMINISTRATION (VA)	●	
		●

APPLICABLE REGULATIONS

- 2021 NFPA 101 (LIFE SAFETY CODE)
- 2018 IBC
- ABA STANDARDS (2015) (ABAAS)
- VA BARRIER FREE DESIGN STANDARD (PG-18-13)
- NFPA NATIONAL FIRE CODES (EXCEPTION: NFPA 5000 & 900)
- 2018 FGI GUIDELINES
- OSHA STANDARDS
- VA SEISMIC DESIGN REQUIREMENTS H-18-8
- NATIONAL ELECTRIC CODE (NEC)
- ASHRE 90.1
- ASME BOILER AND PRESSURE VESSEL CODE
- ASME CODE FOR PRESSURE PIPING
- BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, AMERICAN CONCRETE INSTITUTE AND COMETARY (ACI 318)
- MANUAL OF STEEL CONSTRUCTION. LOAD AND RESISTANCE FACTOR DESIGN SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
- ENERGY POLICY ACT OF 2005 (EPAct)
- DOE INTERIM FINAL RULE: ENERGY CONSERVATION STANDARDS FOR NEW FEDERAL, COMMERCIAL AND MULTI-FAMILY HIGH-RISE RESIDENTIAL BUILDINGS AND NEW LOW-RISE RESIDENTIAL BUILDINGS, 10 CFR PARTS 433,434 AND 436
- FEDERAL LEADERSHIP IN HIGH PERFORMANCE AND SUSTAINABLE BUILDINGS: MEMORANDUM OF UNDERSTANDING (MOU)
- EXECUTIVE ORDER 13834
- THE PROVISIONS FOR CONSTRUCTION AND SAFETY SIGNS. STATED IN THE GENERAL REQUIREMENTS SECTION 01010 OF THE VA MASTER CONSTRUCTION SPECIFICATION
- VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY - ASHRAE STANDARD 62.1-2004
- SAFETY STANDARD FOR REFRIGERATION SYSTEMS - ASHRAE STANDARD 15 -2007
- VA FIRE PROTECTION DESIGN MANUAL
- VA PHYSICAL SECURITY AND RESILIENCY DESIGN MANUAL (2015)
- VA DIRECTIVES, DESIGN MANUALS, MASTER SPECIFICATIONS, VA NATIONAL CAD STANDARD APPLICATION GUIDE, AND OTHER GUIDANCE ON THE TECHNICAL INFORMATION LIBRARY (TIL)

OCCUPANCY CLASSIFICATION(S)				
OCCUPANCIES	(LSC CH 12-42)	BUSINESS	YES	NO
CHANGE OF OCCUPANCY?	(If Remodeling)			●
SEPARATED OCCUPANCIES?	2021 LSC (TABLE 6.1.14.1)		●	
FIRE BARRIER RATING(S)	(Section 8.3)	SEE LIFE SAFETY PLANS		

TYPE(S) OF CONSTRUCTION		
CONSTRUCTION TYPE(S)	(NAPA 220 TABLE 4.1.1)	II (222)
AREA SEPARATIONS / FIRE WALLS		SEE LIFE SAFETY PLANS

EGRESS	YES	NO
AREAS OF REFUGE REQUIRED		●
ACCESSIBLE MEANS OF EGRESS ("MOE") REQUIRED		
ELEVATOR REQUIRED AS MEANS OF EGRESS		
MEANS OF EGRESS CAPACITY (width in inches)	(Input)	

PLUMBING FIXTURES	PROVIDED	RQD	FACTOR (IBC CH 29)
TOILETS	5	2 M, 2 F	1/25 for first 50 occupants, then 1/50
URINALS	0	--	--
LAVATORIES	5	3	1/40 for first 80 occupants, then 1/80
DRINKING FOUNTAINS	1	1	1/100 occupants; 50% may be vending
SERVICE SINKS	3	1	--

FIRE-RESISTIVE REQUIREMENTS	RATING (HRS)	TEST
STRUCTURAL FRAME		
COLUMNS	2HR	ASTM E119
GIRDERS	2HR	ASTM E119
TRUSSES	2HR	ASTM E119
BEARING WALLS		
EXTERIOR BEARING WALLS	2HR	ASTM E119
INTERIOR BEARING WALLS	2HR	ASTM E119
NON-BEARING WALLS AND PARTITIONS		
EXTERIOR	0HR	NA
INTERIOR	See Life Safety Plans	
FLOOR CONSTRUCTION		
FLOOR/CEILING ASSEMBLY	2HR	ASTM E119
PRIME & SEC. FLOOR BEAMS, JOISTS	1HR	ASTM E119
ROOF CONSTRUCTION		
ROOF/CEILING ASSEMBLY	2HR	ASTM E119
PRIME & SEC. ROOF BEAMS, JOISTS	2HR	ASTM E119
OTHER		
SHAFTS AND EXIT PASSAGEWAYS	2HR	ASTM E119
EXTERIOR DOORS AND WINDOWS	0HR	NA

MISCELLANEOUS		YES	NO
FIRE RESISTIVE CORRIDORS?			●
SMOKE TIGHT CORRIDORS (SMOKE PARTITIONS)			●
INCIDENTAL USE AREA RATING(S)		SEE PLANS	
INTERIOR FINISHES CLASSIFICATION	EXITS	A or B	
	EXIT ACCESS CORRIDORS	A or B	
	OTHER SPACES	A, B or C	

ADDITIONAL NOTES

--

LIFE SAFETY SYMBOLS

	SMOKE TIGHT ASSEMBLY		1 HOUR FIRE & SMOKE BARRIER
	1 HOUR FIRE BARRIER		2 HOUR FIRE & SMOKE BARRIER
	2 HOUR FIRE BARRIER		3 HOUR FIRE & SMOKE BARRIER
	3 HOUR FIRE BARRIER	TRAVEL DISTANCE 100'-10"	TRAVEL DISTANCE
EXIT	EXIT	ED	EXIT DISCHARGE
HE	HORIZONTAL EXIT	EA	EXIT ACCESS
FE	FIRE EXTINGUISHER	FEC	FIRE EXTINGUISHER CABINET
	LIMITS OF CONSTRUCTION		OCCUPANCY SEPARATION
	SMOKE COMPARTMENT BOUNDARY		HEALTH CARE SUITE

- SHAFT — ADJACENT SYMBOLS SHOW PARTITION RATING AND DAMPER REQUIREMENTS
- HAZARDOUS USE — ADJACENT SYMBOLS SHOW PARTITION RATING. OPENINGS REQUIRE CLOSER & LATCH
- EXIT PASSAGEWAY — RATE AS STAIR. ALL OPENINGS TO BE RATED AS STAIR SHAFT
- CORRIDOR — WALLS TO LIMIT THE TRANSFER OF SMOKE
- ADJUNCT CORRIDOR or PSYCHIATRIC AREA or CONSTRUCTED WITH MIN. 4'-0" CLEAR WITH (PER CHAPTER 19)

NOTE: NOT ALL SYMBOLS MY BE USED ON EACH PLAN

Revisions:	Date:

CONSULTANT

IMEG

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 # 16584

STAMP

REGISTERED PROFESSIONAL ENGINEER — THOMAS A. OLESAK — SOUTH DAKOTA

DATE: 08/04/2022
License # 9335

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: INTERSTITIAL/FIRST LEVEL LIFE SAFETY PLAN

Approved:

Phase: BID DOCUMENTS

FULLY SPRINKLERED

Project Title: CONSTRUCT NEW SPS

Location: Sioux Falls, SD.

Issue Date: 08/04/2022

Checked: Checker

Drawn: Author

Project Number: 438-460

Building Number: 5

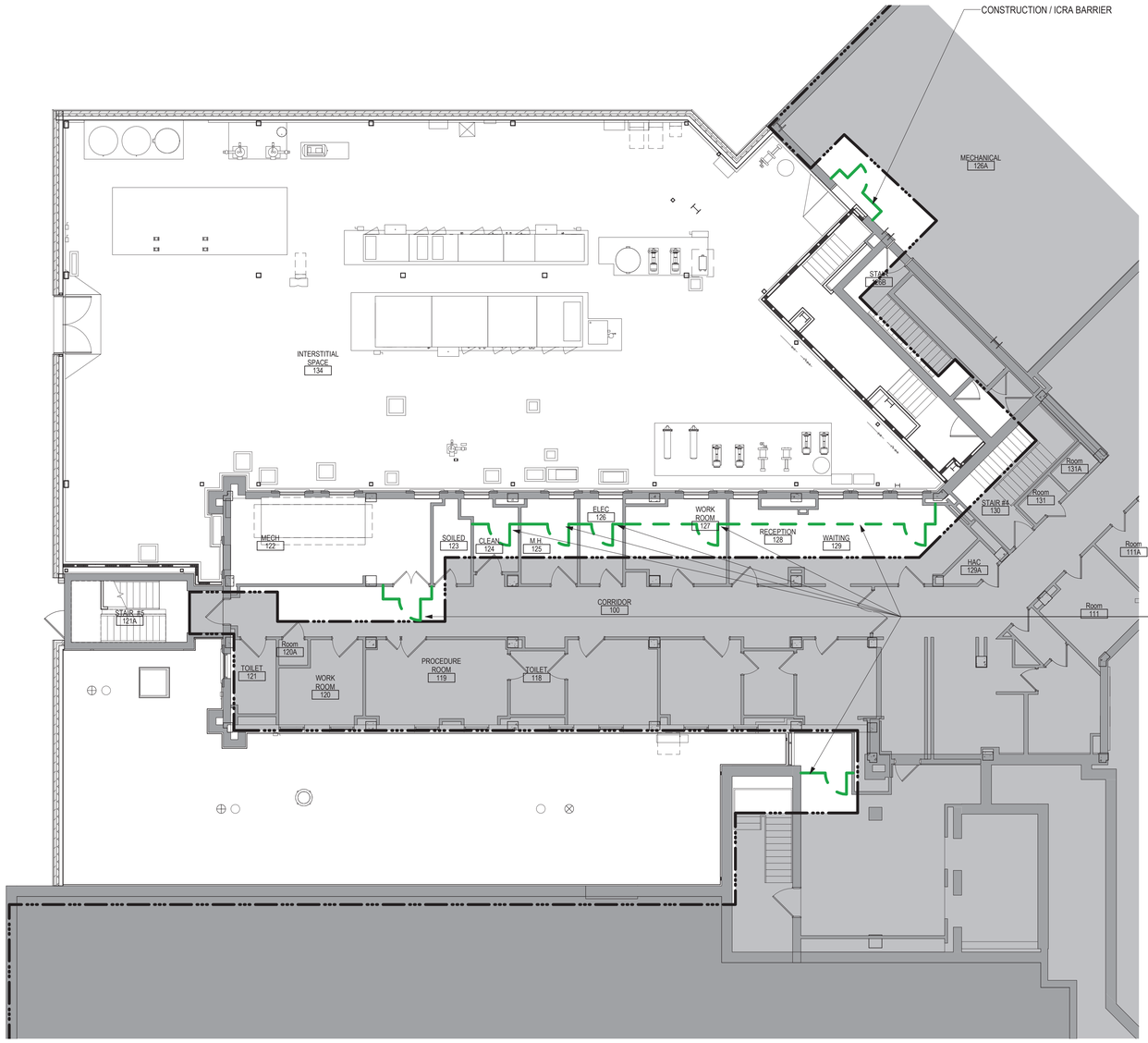
Drawing Number: GI111

C:\Users\Public\Documents\Revit Projects\16584-R21_gbehrsel@ae-mn.com.rvt

7/7/2023 1:29:48 PM

VA FORM 08 - 6231

NOTE:
PROVIDE 1 HOUR FIRE RATED, STARC SYSTEMS FIREBLOCK WALL PANELS OR APPROVED EQUAL FOR ALL ICRA/CONSTRUCTION BARRIERS AND MODIFY SPRINKLER HEADS TO BE UPTURNED AND EXTENDED TO 18" OF STRUCTURE.



1 FIRST LEVEL ICRA, CONSTRUCTION BARRIER & PHASING PLAN
1/8" = 1'-0"

0 4' 8' 16'

INFECTION CONTROL & CONSTRUCTION BARRIER GENERAL NOTES

1. SEE SPEC SECTION 01 35 26 SAFETY REQUIREMENTS FOR ADDITIONAL INFORMATION

2. THE INTENT OF INFECTION CONTROL ISOLATION IS TO CONTAIN DUST AND PARTICULATE MATTER TO THE CONSTRUCTION AREA. CONSTRUCTION AREA PERIMETER NEEDS TO BE SEALED COMPLETELY WITH SHEET PLASTIC AS SPECIFIED AND DUCT TAPE DURING OPERATIONS, WHERE PERMITTED BY CLASS. ICRA - CONSTRUCTION BARRIER TO BE PROVIDED AS SPECIFIED AND LISTED IN ICRA CLASS.

3. PROVIDE NEGATIVE PRESSURE MONITORS DURING CONSTRUCTION OPERATIONS AS SPECIFIED. MONITOR TO MEASURE PRESSURE DIFFERENTIAL BETWEEN CONSTRUCTION AREA AND ADJACENT CORRIDOR OR ROOM AS DIRECTED BY VA.

4. AS CONSTRUCTION PROGRESSES, FROM TYPE D TO TYPE C AND THEREON, PROVIDE A REQUEST VIA "INFECTION CONTROL CONSTRUCTION PERMIT" TO THE VA INFECTION CONTROL NURSE. UPON AUTHORIZATION, PROCEED TO NEXT TYPE OF CONSTRUCTION. PROVIDE AT LEAST TEN (10) WORKING DAYS NOTICE FOR EACH PERMIT.

5. CONSTRUCT IC (INFECTION CONTROL) CONSTRUCTION BARRIER(S) FROM FLOOR TO DECK/FLOOR ABOVE. EXCEPTION: IF BARRIER IS ADJACENT TO SMOKE, FIRE, OR EXISTING WALL CONSTRUCTION WHICH WILL NOT BE DEMOLISHED AND TERMINATES TO FLOOR/DECK ABOVE, THEN CONSTRUCT DUST PROOF IC BARRIER, SEE DETAIL(S). TAPE, MUD, SAND JOINTS AND PAINT ON NON-CONSTRUCTION SIDE OF BARRIER.

6. CONTROL BARRIERS ARE TO BE INSTALLED AND REMOVED ONLY BEFORE 7:00 AM AND AFTER 8:00 PM OR DIRECTED BY COR

7. DURING CONSTRUCTION OPERATIONS IN EACH ENCLOSED AREA PROVIDE NEGATIVE PRESSURE MONITORS, MINIMUM (1) ONE IN AREAS LESS THAN 1000 SF, (2) TWO MINIMUM IN AREAS BETWEEN 1000 SF AND 5000 SF, AND (3) THREE FOR AREAS BETWEEN 5000 SF AND 10000 SF.

8. LIFE SAFETY EGRESS IS TO BE MAINTAINED AT ALL TIMES.

9. THE CONTRACTOR SHALL PROVIDE ENOUGH NEGATIVE AIR MACHINES TO COMPLETELY EXCHANGE THE REGULATED AREA AIR VOLUME (4) FOUR ACTUAL TIMES PER HOUR. THE COMPETENT PERSON SHALL DETERMINE THE NUMBER OF UNITS NEEDED FOR EACH REGULATED AREA BY DIVIDING THE CUBIC FEET IN THE REGULATED AREA BY (15) FIFTEEN AND THEN DIVIDING THAT RESULT BY THE ACTUAL CUBIC FEET PER MINUTE (CFM) FOR EACH UNIT TO DETERMINE THE NUMBER OF UNITS NEEDED TO EFFECT (4) FOUR AIR CHANGES PER HOUR. PROVIDE A STANDBY UNIT IN THE EVENT OF MACHINE FAILURE AND/OR EMERGENCY IN AN ADJACENT AREA.

10. PRIOR TO ANY REMOVAL OF SMOKE BARRIER FIRE RATED PARTITIONS, CONSTRUCT NEW SMOKE BARRIER/APPROPRIATE FIRE RATED PARTITIONS PER PLANS OR CONSTRUCT INFECTION CONTROL BARRIER TO ACT AS SMOKE BARRIER.

CONSTRUCTION PHASING GENERAL NOTES

1. THE WORK UNDER THIS CONTRACT SHALL BE DIVIDED INTO PHASES. A PHASE CAN INVOLVE MULTIPLE LOCATION AREAS. SEE SPECIFICATIONS SECTION 01 00 00 1.6.G PHASING.

2. THE GENERAL CONTRACTOR SHALL COORDINATE ALL PHASING AND SEQUENCING WITH ALL TRADES AND THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE A WRITTEN NARRATIVE TO OUTLINE CONSTRUCTION PHASING AND SEQUENCE PLANS, VALIDATING AND ELABORATING ON THIS PHASING DESCRIPTION.

3. THE GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH THE OWNER SO WORK MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT, OR OTHER CONTRACTS ON THE PROJECT SITE OR WORK BY OWNER.

4. THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE SHALL INDICATE THE SEQUENCE, COMMENCEMENT AND COMPLETION DATES, OWNER INSPECTION AND APPROVAL DATES AND MOVE-OUT AND MOVE-IN DATES OF OWNER'S PERSONNEL FOR ALL PHASES OF THE WORK.

5. THE GENERAL CONTRACTOR SHALL PERFORM THE WORK IN EACH PHASE IN THE SEQUENCE SHOWN ON THE PHASING PLAN DRAWING(S) AND CONSTRUCTION PHASING DESCRIPTION.

6. THE GENERAL CONTRACTOR MUST COMPLETE ALL WORK IN EACH PHASE WITH THE VA INSPECTING AND ACCEPTING THE WORK PRIOR TO VA OCCUPANCY AND THE CONTRACTOR PROCEEDING TO THE NEXT SCHEDULED PHASE. UPON COMPLETION OF A PARTICULAR PHASE, THE ENTIRE AREA COVERED BY THAT PHASE CAN BE OCCUPIED BY THE VA PERSONNEL WITH ALL SYSTEMS FUNCTIONING PROPERLY.

7. BEFORE COMMENCING WORK ON EACH SUCCESSIVE PHASE, THE GENERAL CONTRACTOR SHALL SUBMIT AN UPDATED COPY OF THE SCHEDULE.

8. ANY ICRA / CONSTRUCTION BARRIERS CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE START OF DEMOLITION MUST REMAIN IN PLACE UNTIL THE COMPLETION OF THAT PHASE OR SUBSEQUENT PHASE WHERE REQUIRED.

9. THE CONTRACTOR SHALL PERFORM ALL WORK ADJACENT TO VA OCCUPIED AREAS IN SUCH A MANNER TO ENSURE THE CONTINUOUS AND UNINTERRUPTED USE OF ALL OCCUPIED AREAS, INCLUDING THE APPLICABLE MECHANICAL AND ELECTRICAL SYSTEMS SERVING THESE AREAS.

10. FOR ADDITIONAL NOTES AND INFORMATION REFER TO INFECTION CONTROL DRAWING(S) AND DEMOLITION PLANS.

11. ANY INFORMATION REGARDING SEQUENCING PROVIDED IN THE DOCUMENTS IS FOR ARCHITECT-OWNER PLANNING PURPOSES ONLY.

12. THE CONTRACTOR DURING CONSTRUCTION SHALL MAINTAIN REQUIRED MEANS OF EGRESS THROUGHOUT ALL PHASING.

13. THE CONTRACTOR SHALL PLAN FOR A MINIMUM OF 4 WEEKS' TIME BETWEEN PHASES TO ALLOW THE VA TO OCCUPY THE NEWLY ACCEPTED SPACE AND VACATE THE FOLLOW-ON PHASES. THE VA WILL ACCELERATE THIS TIME WHEN POSSIBLE AND WILL NOTIFY THE CONTRACTOR IF THIS OCCURS.

CONSTRUCTION INFECTION CONTROL RISK ASSESSMENT (ICRA)

TYPE A	INSPECTIONS AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT NOT LIMITED TO, REMOVAL OF CEILING TILES FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET, PAINTING BUT NOT SANDING WALL COVERING, ELECTRICAL TRIM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILINGS OTHER THAN FOR VISUAL INSPECTION.	GROUP 1 LOW RISK	• MECHANICAL SPACES: AREAS NOT DIRECTLY ADJACENT TO PATIENT CARE, INCLUDING INTERSTITIAL SPACES. • ENGINEERING OR EMS OFFICE/WORK AREAS • OFFICE AREAS: AREAS NOT ATTACHED TO/ADJOINING PATIENT CARE AREAS, NOT USED FOR PATIENT INTERVIEWS, EVALUATIONS OR EXAMINATIONS. • PUBLIC CORRIDORS: SPACES NOT ON OR DIRECTLY ATTACHED TO PATIENT UNITS OR TREATMENT LOCATIONS.
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST. INCLUDES, BUT IS NOT LIMITED TO, INSTALLATION OF TELEPHONE AND COMPUTER CABLING, ACCESS TO CHASE SPACES, CUTTING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED. FLOOR COVERING REMOVAL (WITHOUT SANDING OR GRINDING).	GROUP 2 MEDIUM RISK	• OUTPATIENT AREAS: 1. PRIMARY CARE OR SPECIALTY CARE CLINIC AREAS 2. BEHAVIORAL/MENTAL HEALTH AREAS 3. EXTENDED CARE / REHAB CLINIC AREAS 4. COMMUNITY BASED OUT PATIENT CLINICS (CBOC'S)
TYPE C	ANY WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO, SANDING OF WALL FOR PAINTING OR WALLCOVERING, REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK, NEW WALL CONSTRUCTION, MINOR DUCTWORK OR ELECTRICAL WORK ABOVE CEILINGS, MAJOR CABLING ACTIVITIES, AND ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT. FLOOR COVERING REMOVAL (WITH SANDING OR GRINDING).	GROUP 3 HIGH RISK	• IN-PATIENT UNITS: 1. INCLUDING, BUT NOT LIMITED TO: EMERGENCY DEPT.; NURSING UNITS; RADIOLOGY/MRI/CT/ULTRASOUND; NUCLEAR MEDICINE; CAFETERIA/KITCHEN/CANTEEN, LABORATORIES; RADIATION / ONCOLOGY; DIALYSIS
		GROUP 4 HIGHEST RISK	• ICU/SICU • OR/PACU/ENDOSCOPY • GI • STERILE PROCESSING SERVICES (SPS) • PHARMACY • CATH LAB
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS. INCLUDES, BUT IS NOT LIMITED TO, ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS, REQUIRE HEAVY DEMOLITION OR REMOVAL OF A COMPLETE CEILING SYSTEM, FLOORING AND NEW CONSTRUCTION.		

CLASS I	KEEP AREAS FREE OF DEBRIS, TRASH EXECUTE WORK TO MINIMIZE OF DUST MIGRATION (E.G. WET MOPPING, HEPA VACUUM) IMMEDIATELY REPLACE ANY CEILING TILE DISPLACED FOR VISUAL INSPECTION (INVOLVING MINOR DEMOLITION IN MAINTENANCE OR REMODELING.)
CLASS II	SAME AS CLASS I PLUS: 1. ESTABLISH MATERIAL AND DEBRIS ROUTE USING NON-PATIENT/VISITOR PATHWAY 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING OR DRILLING. 3. BLOCK OFF AND SEAL AIR VENTS 4. SEAL UNUSED DOORS WITH PLASTIC SHEATHING AND DUCT TAPE. 5. CREATE BARRIERS AS DEFINED BY INFECTION PREVENTION 6. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINER; TAPE COVERING UNLESS SOLID LID. 7. WET MOP AND/OR VACUUM WITH HEPA FILTERED VACUUM BEFORE LEAVING WORK AREA. 8. PLACE STICKY MAT AT ALL WORK AREA ENTRANCES AND EXITS. 9. REMOVE OR ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA
CLASS III	SAME AS CLASS I AND II PLUS: 1. ISOLATE HVAC SYSTEM IN CONSTRUCTION AREA TO PREVENT DUCT SYSTEM CONTAMINATION 2. COMPLETE CRITICAL BARRIERS (I.E. SHEETROCK, PLYWOOD, PLASTIC) AT ALL CONSTRUCTION ENTRIES AND EXITS; MONITOR FOR SEAL AND TAKE IMMEDIATE CORRECTIVE ACTION AS NEEDED 3. MAINTAIN AND MONITOR NEGATIVE AIR PRESSURE WITHIN CONSTRUCTION SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. REMOVE OR ISOLATE HVAC SYSTEMS IN AREA WHERE WORK IS BEING PERFORMED. 5. CHECK AND REPLACE AIR FILTERS AS NEEDED REGULARLY 6. DO NOT REMOVE BARRIERS FROM WORK SITE UNTIL PROJECT IS COMPLETE & HAS BEEN THOROUGHLY CLEANED; REMOVE BARRIERS CAREFULLY TO MINIMIZE SPREADING DUST. DEBRIS. 7. VACUUM WORK WITH HEPA FILTERED VACUUM. 8. WET MOP AREA WITH CLEANER/DISINFECTANT. 9. MITIGATE VIBRATION AND NOISE TO LOWEST IMPACT WHERE POSSIBLE. 10. DISPLAY ICRA AT SITE 11. SEAL HOLES, PIPES, CONDUITS AND PUNCTURES.
CLASS IV	SAME AS CLASS I, II AND III PLUS: 1. INSPECT ADJACENT AREAS FOR DUST MIGRATION; TAKE IMMEDIATE CORRECTIVE AS NEEDED 2. USE HEPA VACUUM IN AREA PRIOR TO START OF CONSTRUCTION 3. CONSTRUCT ANTE ROOM; ALL PERSONNEL MUST ENTER THROUGH IT TO BE VACUUMED USING HEPA VACUUM BEFORE LEAVING OR TO DON/DOFF PPE

INFECTION CONTROL RISK ASSESSMENT (ICRA) BY PROJECT AREA USE AND PHASE

PHASE - ALL:
CONSTRUCTION PROJECT ACTIVITY TYPE - D
INFECTION CONTROL RISK GROUP - GROUP 4: HIGH RISK
CONTROL PROCEDURE CLASS - IV

Revisions:	Date:

CONSULTANT
IMEG

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 # 16584

STAMP
REGISTERED PROFESSIONAL ARCHITECT THOMAS A. OLESAK MINNESOTA
DATE: 08/04/2022
License # 9335

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRST LEVEL INFECTION CONTROL & PHASING PLAN
Approved:

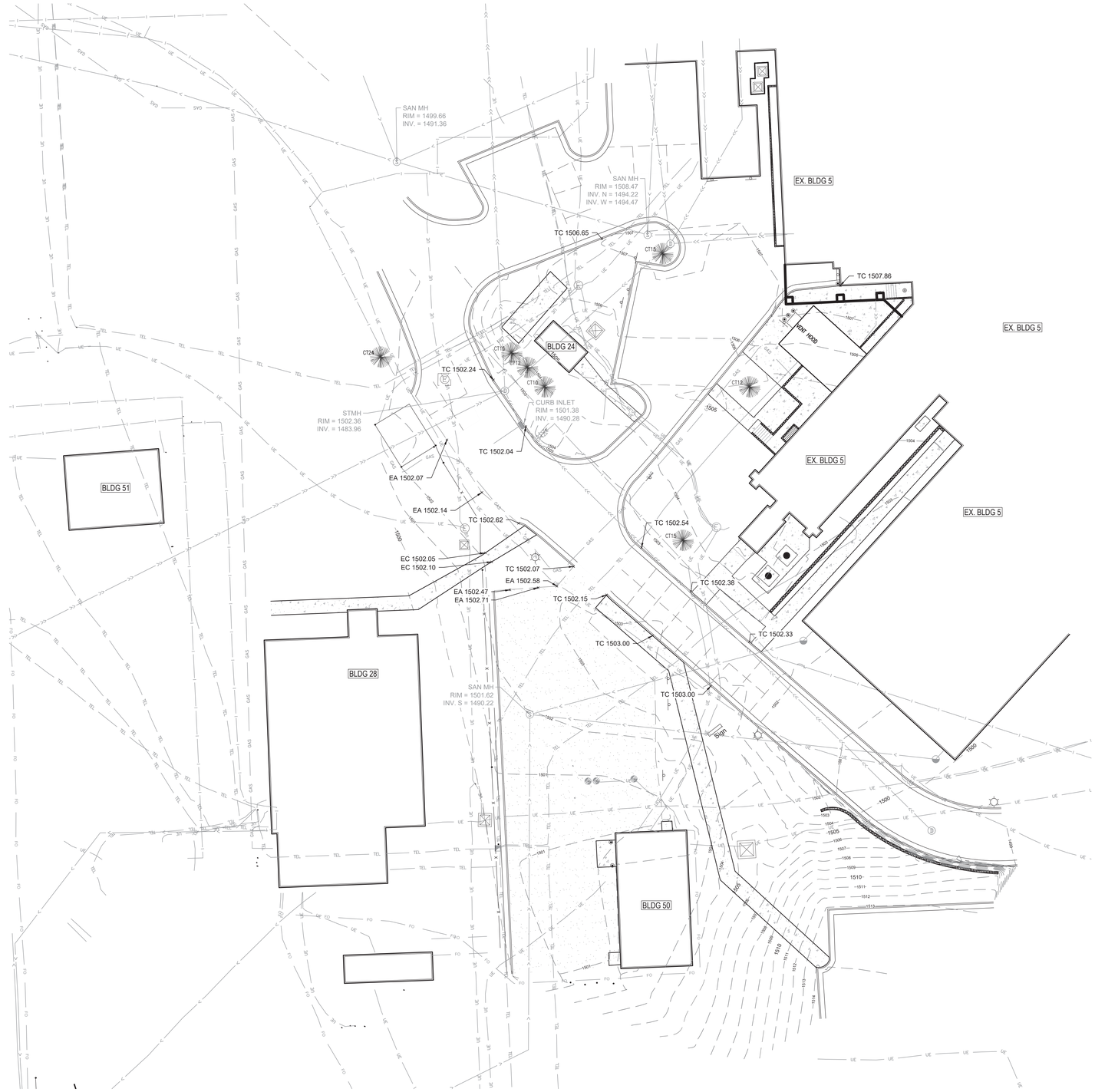
Phase: BID DOCUMENTS
FULLY SPRINKLERED

Project Title: CONSTRUCT NEW SPS
Location: Sioux Falls, SD.
Issue Date: 08/04/2022
Checked: Checker
Drawn: Author

Project Number: 438-460
Building Number: 5
Drawing Number: GC111

C:\Users\Public\Documents\Revit Projects\16584-R21_gbarbati@ae-mn.com.rvt
7/7/2023 1:29:13 PM

VA FORM 08 - 6231



LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING BUILDING
- EXISTING RETAINING WALL
- EXISTING CONCRETE WALK
- EXISTING ASPHALT PAVEMENT
- EXISTING JOINTS IN CONCRETE PAVEMENT
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING FENCE
- EXISTING GAS MAIN
- EXISTING OVERHEAD WIRES
- EXISTING TELEPHONE
- EXISTING UNDERGROUND ELECTRIC
- EXISTING HYDRANT AND GV
- EXISTING SANITARY MANHOLE
- EXISTING STORM SEWER INLET
- EXISTING TREE

SPOT ELEVATION KEY

EA	EDGE OF ASPHALT
EC	EDGE OF CONCRETE
TC	TOP OF CURB

N W E S

0 20 40
SCALE IN FEET

Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

STAMP

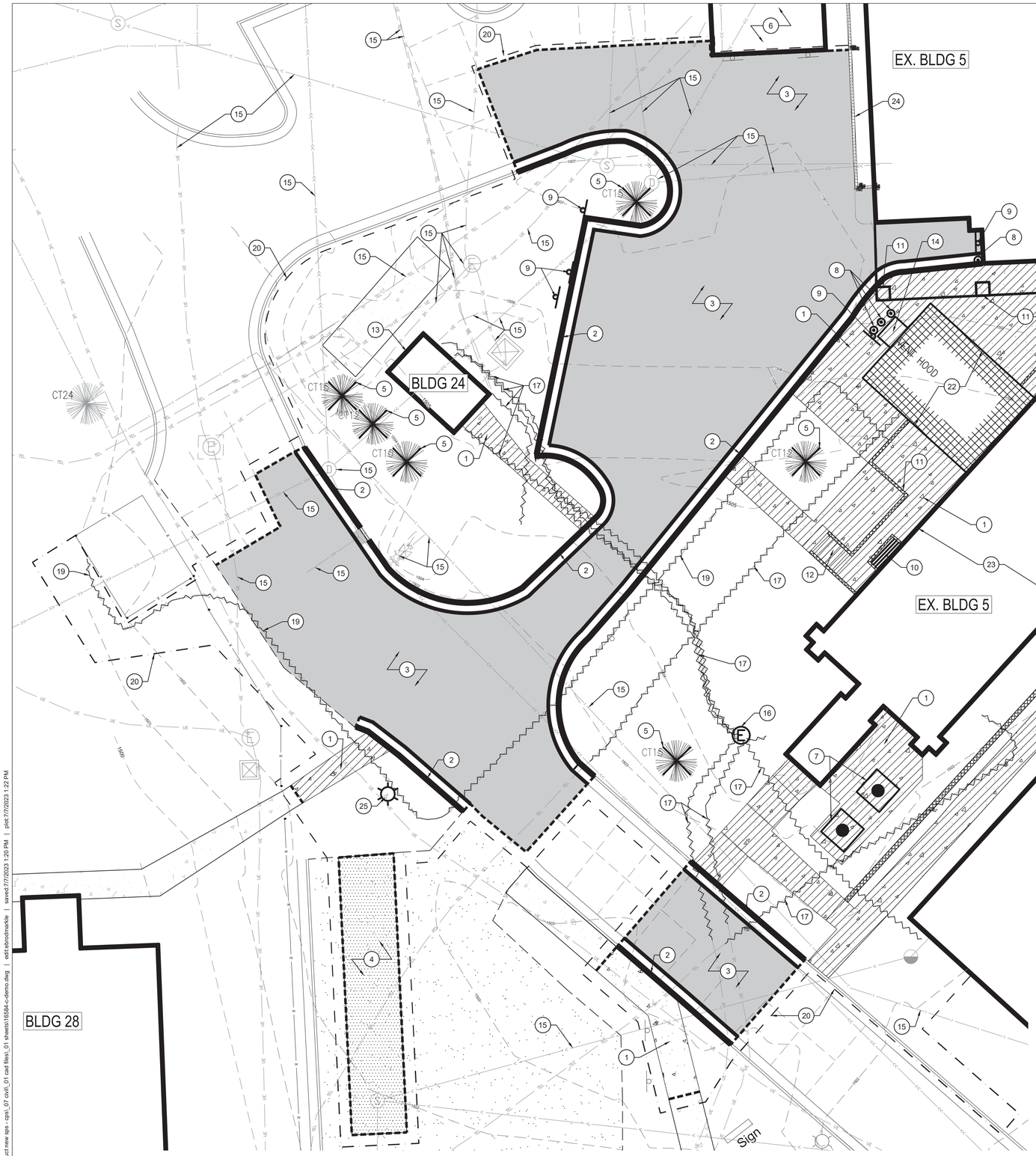
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title	SITE SURVEY & MAPPING
Phase	BID DOCUMENTS
Project Title	CONSTRUCT NEW SPS
Project Number	438-460
Building Number	5
Approved: Project Director	SIOUX FALLS VA HEALTH CARE SYSTEM
Location	SIOUX FALLS, SOUTH DAKOTA
Drawing Number	VB101
Issue Date	08/04/2022
Checked	EB
Drawn	AB

File Path: y:\16500\16584 va sioux falls - construct new sps - cpis_08 survey_01 cad files_01 sheets\16584-v-ex cond.dwg | edit.sbrodsmarkle | saved:8/3/2022 10:08 AM | plot:7/7/2023 1:22 PM

VA FORM 08 - 6231



LEGEND

- PROPERTY LIMITS
- CONSTRUCTION LIMITS
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING FENCE
- EXISTING GAS MAIN
- EXISTING OVERHEAD WIRES
- EXISTING TELEPHONE
- EXISTING UNDERGROUND ELECTRIC
- EXISTING HYDRANT AND GV
- EXISTING SANITARY MANHOLE
- EXISTING STORM SEWER INLET
- REMOVE EXISTING UTILITY LINE
- REMOVE EXISTING BUILDING STRUCTURE
- REMOVE EXISTING ASPHALT PAVEMENT
- REMOVE EXISTING CONCRETE PAVEMENT
- REMOVE EXISTING CONCRETE WALK
- REMOVE EXISTING RETAINING WALL
- SAWCUT EXISTING PAVEMENT
- REMOVE EXISTING CONCRETE C&G
- REMOVE TREE

KEYNOTES

1. REMOVE CONCRETE SIDEWALK / STOOPS AND AGGREGATE BASE COURSE, TYP.
2. REMOVE CURB AND GUTTER AND AGGREGATE BASE COURSE, TYP.
3. REMOVE CONCRETE PAVEMENT AND AGGREGATE BASE COURSE
4. REMOVE ASPHALT PAVEMENT AND AGGREGATE BASE COURSE
5. CLEAR AND GRUB EXISTING TREE
6. RECYCLING CENTER (DO NOT DISTURB)
7. SALVAGE EXISTING MECHANICAL EQUIPMENT, REMOVE EXISTING CONCRETE PAD (SEE MECHANICAL PLANS)
8. REMOVE BOLLARD, TYP.
9. REMOVE SIGN, TYP.
10. REMOVE FRAME AND GRATE
11. REMOVE CONCRETE RETAINING WALL / COLUMNS (SEE ARCHITECTURAL & STRUCTURAL)
12. REMOVE CONCRETE STAIRS AND HANDRAIL
13. EXISTING ELECTRICAL BUILDING - DO NOT DISTURB
14. REMOVE VENT HOOD (SEE MECHANICAL PLANS)
15. EXISTING UTILITY - DO NOT DISTURB
16. REMOVE ELECTRICAL MANHOLE (SEE ELECTRICAL PLANS)
17. REMOVAL AND RELOCATION OF ELECTRICAL AND COMMUNICATION UTILITIES (SEE ELECTRICAL PLANS)
18. REMOVE SEGMENTAL BLOCK RETAINING WALL
19. REMOVE OXYGEN LINE (SEE MECHANICAL PLANS)
20. PROJECT LIMITS
21. REMOVE EXISTING DRAIN, CAP WITH MJ CAP
22. REMOVE BUILDING (SEE ARCHITECTURAL PLANS)
23. EXISTING BUILDING TO REMAIN
24. EXISTING RETAINING WALL TO REMAIN
25. REMOVE LIGHT POLE (SEE ELECTRICAL PLAN)

GENERAL DEMOLITION NOTES

1. SEE ARCHITECTURE FOR DEMOLITION OF BUILDING.
2. OWNER SHALL HAVE FIRST RIGHTS TO ALL SALVAGED MATERIALS. COORDINATE WITH OWNER AND TRANSPORT SALVAGED ITEMS TO THE OWNER DESIGNATED STORAGE AREA, IF OWNER RETAINED. ALL OTHER ITEMS SHALL BE HAULED AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.
3. FINAL GRADES SHALL BE AS SHOWN ON GRADING PLAN.
4. IF ANY OTHER UTILITIES ARE ENCOUNTERED BUT NOT SHOWN ON THIS PLAN, CONTACT THE OWNER AND UTILITY COMPANY IMMEDIATELY.
5. COORDINATE ALL DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS WITH THE OWNER.
6. CONTRACTOR SHALL MAINTAIN EXISTING UTILITIES AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. ANY DISRUPTION IN SERVICE SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY & NOTIFY COR OF DISRUPTION. CONTRACTOR SHALL PROVIDE A METHOD OF TEMPORARY SERVICE DURING PERIODS OF DISRUPTION.
7. ALL EROSION CONTROL BMPs SHALL BE IN PLACE PRIOR TO DEMOLITION.
8. DO NOT DISTURB ANY STRUCTURES NOT DESIGNATED TO BE REMOVED.
9. REMOVE ALL TOPSOIL WITHIN GRADING LIMITS AND TEMPORARILY STOCKPILE FOR SPREADING AT COMPLETION OF PROJECT.
10. CONTRACTOR SHALL REMOVE ALL UTILITIES DESIGNATED FOR REMOVAL ON THIS PLAN AND ANY DISCOVERED ABANDONED UTILITIES. ALL PIPES OR CONDUITS TO BE ABANDONED SHALL BE PLUGGED FOR A MINIMUM DISTANCE OF 12" WITH CONCRETE.
11. ALL CONCRETE PAVEMENT SHALL BE SAWCUT OR REMOVED BY FULL PANELS TO THE NEAREST JOINT.

N

0 10' 20'

Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: DEMOLITION PLAN

Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM

Phase: BID DOCUMENTS

FULLY SPRINKLERED

Project Title: CONSTRUCT NEW SPS

Location: SIOUX FALLS, SOUTH DAKOTA

Issue Date: 08/04/2022 | Checked: EB | Drawn: AB

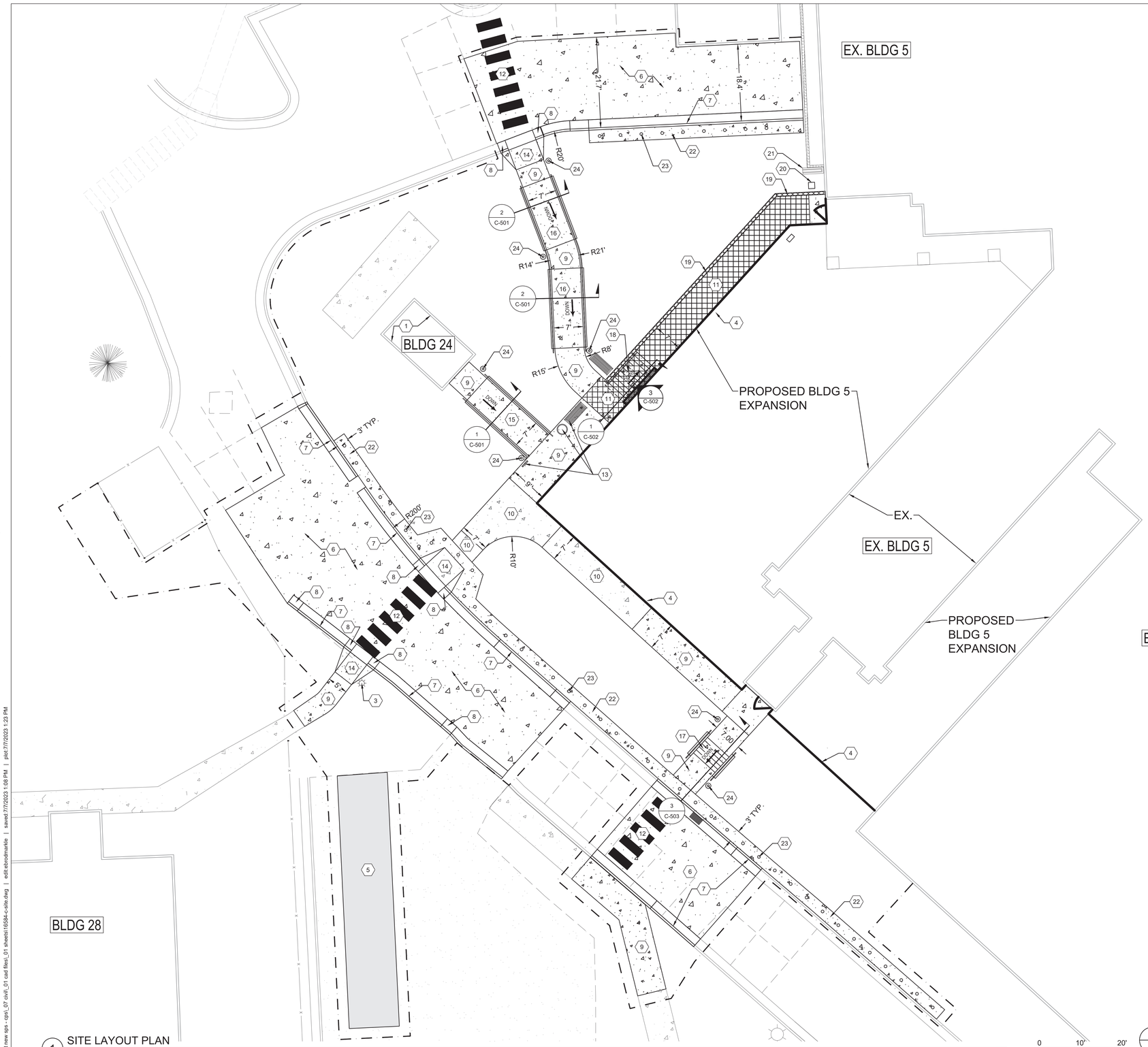
Project Number: 438-460

Building Number: 5

Drawing Number: CD101

File Path: y:\16500\16584 sx sioux falls - construct new sps - cpt_07 civil_01 cad files_01 sheets\16584-c-demo.dwg | edit:bhodmarkle | saved:7/7/2023 1:20 PM | plot:7/7/2023 1:22 PM

VA FORM 08 - 6231



1 SITE LAYOUT PLAN
SCALE: 1" = 10' (30" x 42" PAPER SIZE)

LEGEND

- PROPERTY LIMITS
- CONSTRUCTION LIMITS
- ADJACENT PROPERTY
- BUILDING SETBACKS
- PARKING SETBACK
- DRAINAGE AND UTILITY EASEMENT
- PROPOSED CONCRETE C&G
- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED HEATED CONCRETE PAVEMENT
- PROPOSED RETAINING WALL
- NO PARKING ZONE
- HANDICAP STALL DESIGNATION
- 16 NUMBER OF PARKING STALLS IN SECTION

KEYNOTES

1. PROTECT EXISTING ELECTRICAL BUILDING TO REMAIN
2. NO UTILITIES ON SITE PLAN
3. RELOCATED LIGHT POLE - SEE ELECTRICAL, ES100
4. NEW BUILDING - SEE ARCHITECTURAL
5. ASPHALT PAVEMENT - SEE DETAILS 5 & 6 / C-504
6. CONCRETE PAVEMENT - SEE DETAIL 4 / C-504
7. CONCRETE CURB, TYP. - SEE DETAILS 1 & 2 / C-504
8. CONCRETE CURB TAPER, TYP. - SEE DETAIL 3 / C-504
9. CONCRETE SIDEWALK - SEE DETAIL 8 / C-504
10. REINFORCED CONCRETE SIDEWALK - SEE DETAIL 8 / C-504
11. HEATED CONCRETE SIDEWALK - SEE CP101 AND DETAIL 4 / C-507
12. CROSSWALK STRIPING, TYP. - SEE DETAIL 3 / C-505
13. SITE FURNISHINGS - SEE LF101
14. ABA SIDEWALK RAMP, TYP. - SEE DETAIL 7 / C-504
15. RAMP # 1 - SEE DETAIL 1 / C-501
16. RAMP # 2 - SEE DETAIL 2 / C-501
17. CONCRETE STAIRS #1 - SEE DETAIL 3 / C-503
18. CONCRETE STAIRS #2 - SEE DETAIL 1 / C-502
19. CONCRETE RETAINING WALL W/ GUARDRAIL - SEE DETAILS 1 & 2 / C-503
20. SNOW MELT PIPING MANIFOLD VALVE BOX (SEE MECHANICAL)
21. SPLASH BLOCK FOR FIRE SPRINKLER DRAIN - SEE DETAIL 5 / C-507
22. BOLLARD CONCRETE FOUNDATION, TYP. - SEE LF502 & ELECTRICAL PLANS
23. BOLLARD, TYP. - SEE LF101 FOR TYPE
24. LIGHTED BOLLARD, TYP. - SEE LF101AND ELECTRICAL

NOTES
1. DIMENSIONS ARE TO FACE OF CURB UNLESS SPECIFIED OTHERWISE.
2. SEE CP101 - PAVING & JOINT LAYOUT PLAN FOR EXTENTS OF DIFFERENT CONCRETE PAVEMENTS.
3. CONTRACTOR MUST CONFIRM FLOOR ELEVATIONS BEFORE STARTING DEMOLITION WORK. REPORT ANY DISCREPANCIES TO COR.

Revisions:	Date:

CONSULTANTS

IMEG ECdesign

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

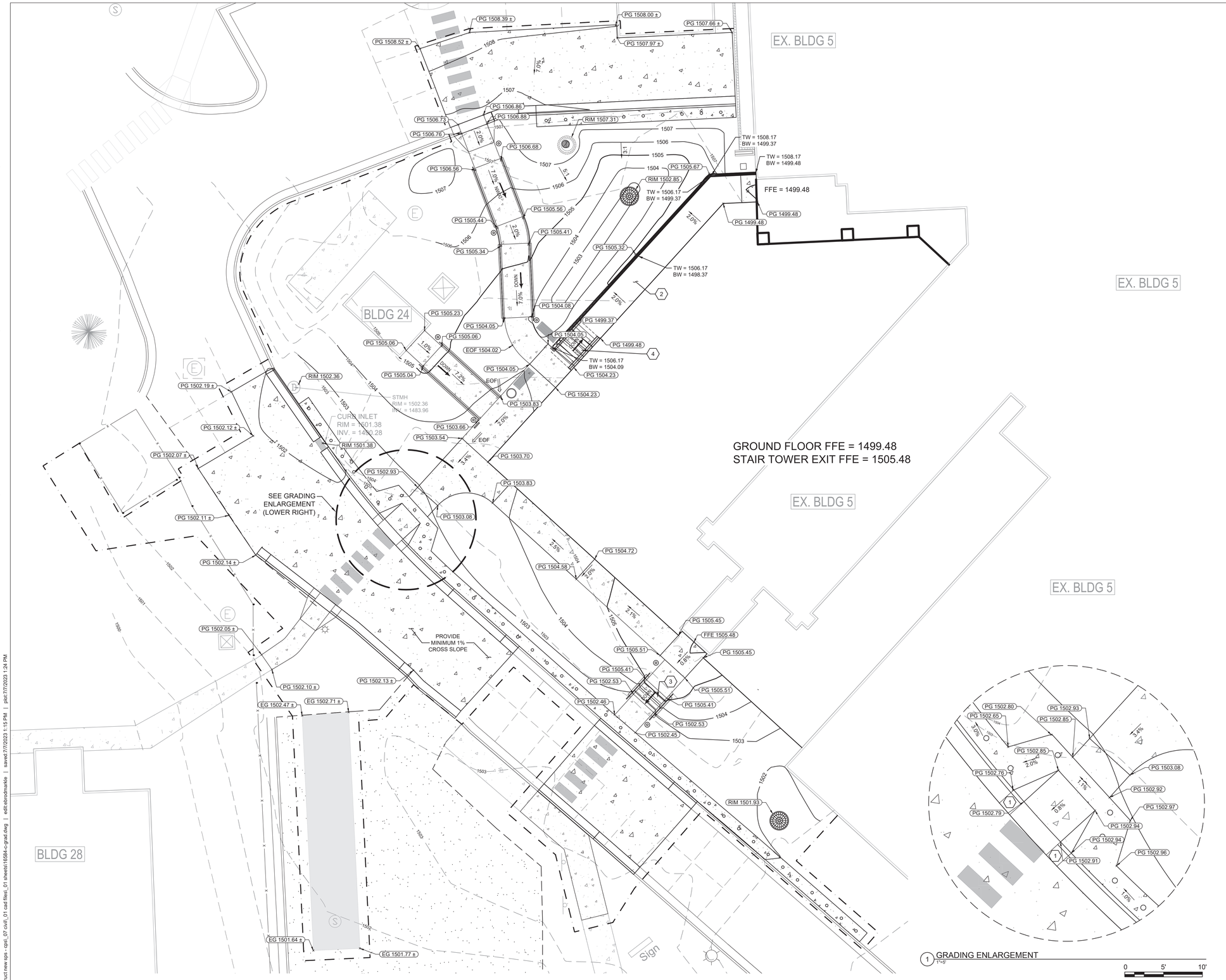
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: SITE LAYOUT PLAN	Phase: BID DOCUMENTS	Project Title: CONSTRUCT NEW SPS	Project Number: 438-460
Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM	FULLY SPRINKLERED	Location: SIOUX FALLS, SOUTH DAKOTA	Building Number: 5
		Issue Date: 08/04/2022 / Checked: EB / Drawn: JD	Drawing Number: CS101

File Path: y:\16500\16584 va sioux falls - construct new sps - cpci_07 civil_01 cad files_01 sheets\16584-c-site.dwg | edit:dbrodmarkle | saved:7/7/2023 1:08 PM | plot:7/7/2023 1:23 PM

VA FORM 08 - 6231



LEGEND

- PROPERTY LIMITS
- CONSTRUCTION LIMITS
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- EXISTING SPOT ELEVATION
- DRAINAGE ARROW
- PROPOSED RETAINING WALL
- PROPOSED CONCRETE C&G
- EXISTING FACE OF BUILDING
- PROPOSED FACE OF BUILDING

SPOT ELEVATION KEY

PG	PROPOSED GRADE
±	MATCH EXISTING GRADE
TC	TOP OF CURB
FL	FLOW LINE
FFE	FINISHED FLOOR ELEVATION
TW	TOP OF WALL
BW	BOTTOM OF WALL
RIM	RIM ELEVATION

KEYNOTES

1. TAPER TO ZERO HEIGHT CURB. SEE DETAIL 3 / C-504
2. HEATED CONCRETE SIDEWALK - SEE CP101 AND DETAIL 4 / C-507
3. CONCRETE STAIRS #1 - SEE DETAIL 3 / C-503
4. CONCRETE STAIRS #2 - SEE DETAIL 1 / C-502

Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

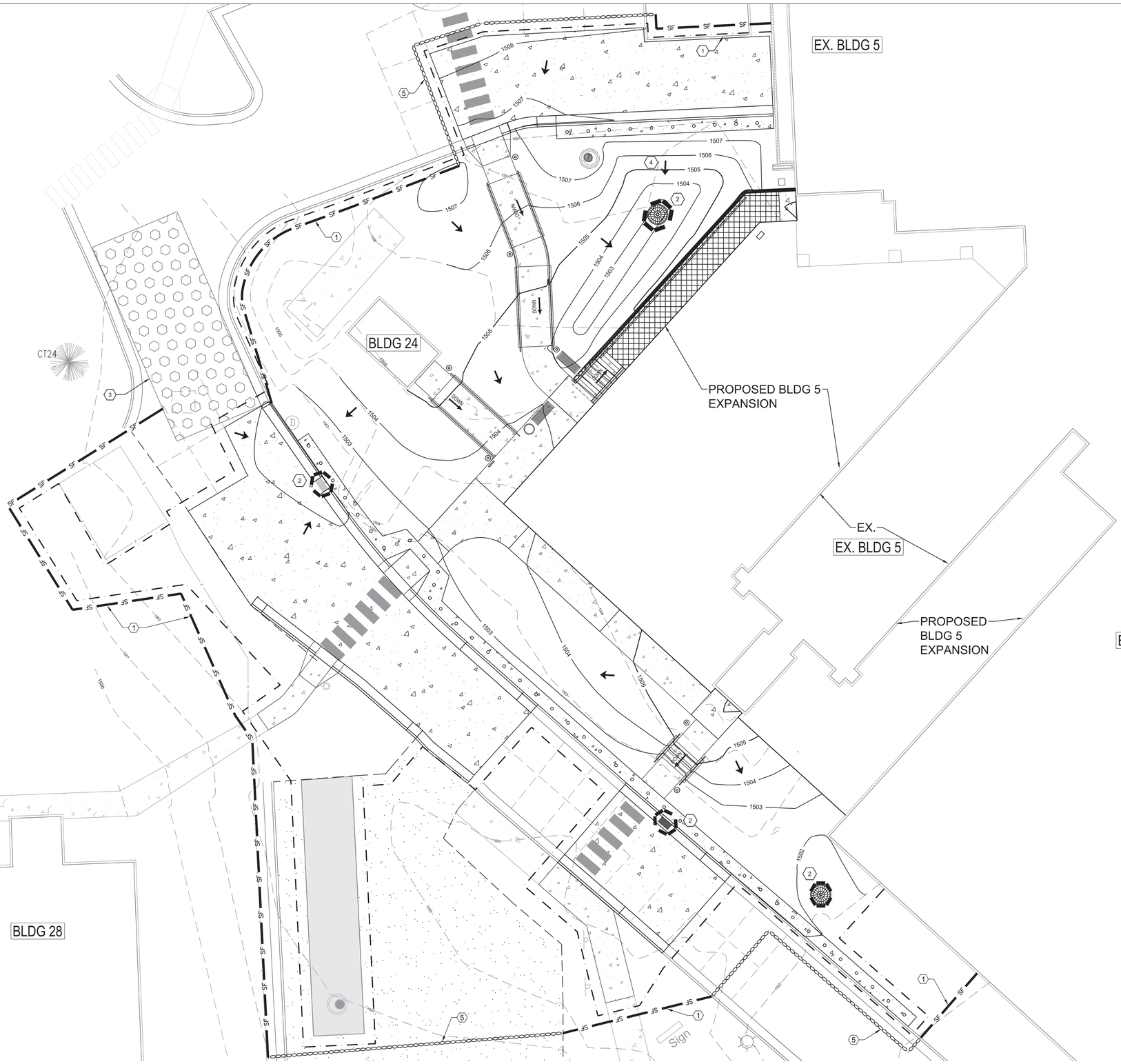
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: GRADING PLAN	Phase: BID DOCUMENTS	Project Title: CONSTRUCT NEW SPS	Project Number: 438-460
Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM	FULLY SPRINKLERED	Location: SIOUX FALLS, SOUTH DAKOTA	Building Number: 5
		Issue Date: 08/04/2022 / Checked: EB / Drawn: JD	Drawing Number: CG101

File Path: y:\16500\16584 va sioux falls - construct new sps - cpss_07 civil_01 cad files_01 sheets\16584-c-grad.dwg | edit:ebrodmarkle | saved:7/7/2023 1:15 PM | plot:7/7/2023 1:24 PM

VA FORM 08 - 6231



LEGEND

- PROPERTY LIMITS
- CONSTRUCTION LIMITS
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED CONCRETE C&G
- DRAINAGE ARROW
- INLET PROTECTION (SEE SHEET C-506)
- SILT FENCE (SEE SHEET C-506)
- ROCK CONSTRUCTION ENTRANCE (SEE SHEET C-506)
- BIOROLL EROSION CONTROL

KEY NOTES

1. INSTALL & MAINTAIN SILT FENCE PERIMETER SEDIMENT PROTECTION IN TURF AREAS. USE BIO-ROLLS AS NEEDED IN PAVED AREAS FOR PHASING PURPOSES. SEE DETAIL 4 / C-506
2. INSTALL AND MAINTAIN INLET SEDIMENT PROTECTION. SEE DETAIL 3 / C-506
3. INSTALL TEMP ROCK ENTRANCE AT CONSTRUCTION INGRESS & EGRESS LOCATION(S) PRIOR TO EXCAVATION & TO BE MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. SEE DETAIL 2 / C-506
4. AREAS WITH SLOPES 4:1 OR STEEPER TO HAVE EROSION CONTROL BLANKET & SEED INSTALLED. SEE DETAIL 7 / C-506
5. SEDIMENT CONTROL WATTLE OR APPROVED EQUAL FOR EROSION CONTROL OVER EXISTING PAVEMENT SURFACE. SEE DETAIL 5 / C-506

NOTES:

1. CONCRETE WASHOUT AREA TO BE ESTABLISHED BY CONTRACTOR.
2. INSTALL TEMPORARY VEHICLE TRACKING CONTROL AT ALL LOCATIONS WHERE VEHICLES ENTER FROM PAVEMENT INTO CONSTRUCTION SITE. CONTRACTOR TO CLEAN PAVEMENTS OF SEDIMENTS AND MUD THAT IS NOT CONTROLLED BY VEHICLE TRACKING.
3. TEMPORARY EROSION CONTROL DEVICES TO BE REMOVED BY CONTRACTOR WHEN SITE IS STABILIZED.
4. CONTRACTOR TO SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION WITH NON-IRRIGATED SEED MIXES. SEE LANDSCAPE PLAN LP101.
5. SEDIMENT CONTROL WATTLE SHALL BE MADE FROM WEED-FREE STRAW, EXCELSIOR, COCONUT HUSK, OR YARD COMPOST.
6. INSTALL SEDIMENT FILTERING DEVICES AT STORM DRAIN INLETS. INLET PROTECTION SHALL BE A BMP CONSISTING OF A FILTERING DEVICE PLACED IN THE MANHOLE THAT INCLUDES AN OVERFLOW FEATURE THAT ALLOWS TO BMP TO DRAIN WHEN PLUGGED OR FULL AND PREVENTS PONDING AT THE CURB INLETS. BASIS OF DESIGN IS FLEXSTORM INLET FILTERS.

EROSION CONTROL / STORM WATER POLLUTION CONTROL:

- THE CONTRACTOR IS NOT REQUIRED TO OBTAIN COVERAGE UNDER THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES GENERAL STORM WATER CONSTRUCTION PERMIT AS THE PROJECT WILL DISTURB LESS THAN 1 ACRE OF LAND AREA. CONTACT SOUTH DAKOTA DENR AT 1-800-737-8678 FOR INFORMATION.
- THE CONTRACTOR SHALL ALSO COMPLY WITH ANY CITY OF SIOUX FALLS EROSION AND SEDIMENT CONTROL REQUIREMENTS. CONTACT THE CITY OF SIOUX FALLS ENGINEERING DEPARTMENT AT 605-367-8601 FOR INFORMATION.
- THE CONTRACTOR SHALL NOT BEGIN ANY SURFACE REMOVAL OR EXCAVATION UNTIL EROSION CONTROL MEASURES ARE IN PLACE FOR THE PHASE OF WORK BEING COMPLETED. EROSION CONTROL MEASURES SHALL PROCEED IN AN ORDERLY AND PROGRESSIVE MANNER AHEAD OF EXCAVATION WORK.
- THE CONTRACTOR IS ADVISED THAT SEVERAL AGENCIES INCLUDING THE OWNER HAVE THE AUTHORITY TO "STOP WORK" IF THE POLLUTION PREVENTION CONTROL IS NOT IMPLEMENTED OR IS NOT EFFECTIVE IN PREVENTION OF ENVIRONMENTAL DAMAGE FROM CONSTRUCTION ACTIVITIES. NO COMPENSATION WILL BE FORTHCOMING FOR "LOST TIME" DUE TO A "STOP WORK" ORDER.
- LOCATIONS FOR THE EROSION CONTROL MEASURES ARE RECOMMENDED ON THE PLANS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE DEVICES AND LOCATIONS NECESSARY FOR EFFECTIVE POLLUTION CONTROL IN ACCORDANCE WITH CITY, STATE, AND FEDERAL POLLUTION CONTROL REQUIREMENTS.
- ALL STORM DRAIN INLETS SHALL BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED.
- THE CONTRACTOR SHALL FOLLOW THIS EROSION CONTROL PLAN TO ADDRESS POTENTIAL RUNOFF OF SURFACE WATERS CONTAINING SEDIMENT TO WATERS OF THE STATE. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION OF THIS PLAN. THIS PLAN, AS WELL AS IMPLEMENTATION, IS DESIGNED TO MINIMIZE THESE IMPACTS AND ADDRESS POTENTIAL PROBLEMS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO STORM SEWER, ADJACENT WATERWAYS, WETLANDS, ETC., RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
- THE CONTRACTOR WILL BE REQUIRED TO FIND AN APPROPRIATE LOCATION FOR CONCRETE WASHOUT. THE LOCATION WILL REQUIRE APPROPRIATE CONTAINMENT FOR THE WASHOUT OPERATIONS.
- THE CONTRACTOR, AND / OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHT OF WAYS.
- SILT FENCE AND/OR WATTLES SHALL BE INSTALLED AS SHOWN ON THE DRAWING. IN LOCATION(S) WHERE HEAVY SEDIMENT TRANSPORT IS EXPECTED, A DOUBLE LAYER OF SILT FENCE OR PYRAMID OF WATTLES SHALL BE INSTALLED.

INSPECTION AND MAINTENANCE:

- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL AND WATER POLLUTION CONTROL DEVICES ONCE A WEEK AND WITHIN 24 HOURS OF EVERY RAINFALL GREATER THAN 1/2 INCH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE, TO INCLUDE BUT NOT BE LIMITED TO: REPAIR, RESET, MUCKING, REPLACEMENT, OF ALL TEMPORARY EROSION CONTROL AND WATER POLLUTION CONTROL DEVICES UNTIL PERMANENT EROSION CONTROL IS ESTABLISHED AND THE PROJECT HAS BEEN COMPLETED AND ACCEPTED. MAINTENANCE OF EROSION CONTROL AND WATER POLLUTION CONTROL DEVICES SHALL BE INCIDENTAL AND CONSIDERED PART OF THE UNIT COST.
- CONSTRUCTION SITE VEHICLE EXIT LOCATIONS MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING ONTO PAVED SURFACES. TRACKED SEDIMENT MUST BE REMOVED FROM ALL OFF-SITE ROADS, WITHIN 24 HOURS OF DISCOVERY. CONSTRUCTION SITE VEHICLE EXIT LOCATIONS SHALL BE RELOCATED AS NECESSARY DEPENDENT UPON PHASING.
- ALL SILT FENCES MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/3 OF THE HEIGHT OF THE FENCE. THESE REPAIRS MUST BE MADE WITHIN 24 HOUR OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
- TEMPORARY DRAINAGE DURING CONSTRUCTION IS THE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL BE AWARE OF EXISTING DRAINAGE CONDITIONS AND FACILITIES, AND SHALL PROVIDE FOR DRAINAGE AND EROSION CONTROL DURING ALL PHASES OF CONSTRUCTION. DAMAGE CAUSED BY IMPROPER TEMPORARY DRAINAGE FACILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

Revisions:	Date:

CONSULTANTS

IMEG

EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

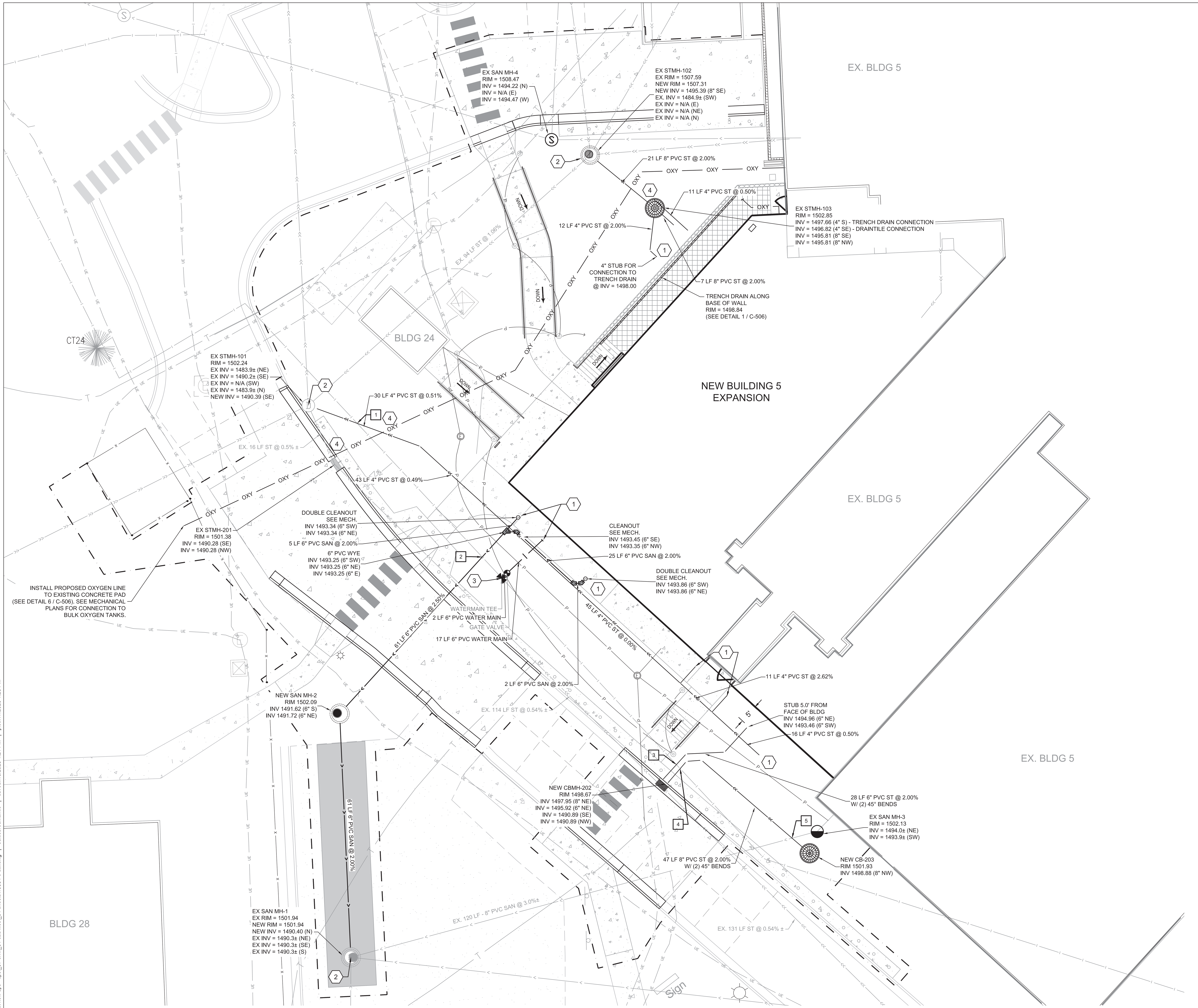
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: EROSION CONTROL PLAN	Phase: BID DOCUMENTS	Project Title: CONSTRUCT NEW SPS	Project Number: 438-460
Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM	FULLY SPRINKLERED	Location: SIOUX FALLS, SOUTH DAKOTA	Building Number: 5
		Issue Date: 08/04/2022 / Checked: EB / Drawn: JD	Drawing Number: CG102

File Path: y:\16500\16584 va sioux falls - construct new sps - cpsl_07 civil_01 cad files_01 sheets\16584-c-eros.dwg | edit:abenson | saved:7/19/2022 3:31 PM | plot:7/7/2023 1:25 PM

VA FORM 08 - 6231



LEGEND

- PROJECT LIMITS
- CROSSING PIPE ID
- EX. WATER MAIN
- EX. SANITARY SEWER
- EX. STORM SEWER
- EX. UNDERGROUND ELECTRIC
- PROPOSED POWER LINE
- PROPOSED OXYGEN LINE
- PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED STORM DRAINTILE

KEYNOTES

1. STUB 5.0' FROM PROPOSED FACE OF BLDG FOR CONNECTION TO PROPOSED UNDERDRAIN SYSTEM
2. LOWER RIM & CORE DRILL EXISTING MANHOLE
3. WET TAP EXISTING WATER MAIN
4. DEFLECT OXYGEN LINE TO MAINTAIN 1' CLEARANCE BETWEEN UTILITIES

UTILITY NOTES:

1. ASSUMED 7.5' COVER FOR EXISTING SANITARY SEWER & WATERMAIN UTILITIES WHERE DEPTH IS UNKNOWN. CONTRACTOR TO FIELD VERIFY LOCATION AND INVERT ELEVATION OF EXISTING UTILITIES AT CROSSING AREAS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER/COR OF ANY DISCREPANCIES.
2. CONTRACTOR TO ENSURE CONCRETE REMAINS BELOW BOTTOM FLANGE OF FIRE HYDRANT. CONTRACTOR TO ENSURE FIRE HYDRANT DRAIN IS NOT BLOCKED BY CONCRETE BOLLARD FOUNDATION. ROTATE FIRE HYDRANT HEAD AS NECESSARY TO ALLOW EMERGENCY ACCESS BETWEEN BOLLARDS. CONTRACTOR SHALL CONFIRM LOCATION OF BOLLARDS AROUND FIRE HYDRANT WITH COR PRIOR TO PLACEMENT.
3. CONNECT OXYGEN LINE TO MANIFOLD AT BULK TANK (FIELD VERIFY LOCATION). REFER TO BULK TANK MANUFACTURER'S INSTRUCTIONS FOR CONNECTION. MINIMIZE OXYGEN SERVICE SHUTDOWN (MAX. 2 HOURS), COORDINATE WITH COR. REFER TO MECHANICAL FOR TESTING AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FITTINGS AND PROVIDING CONNECTION TO THE MANIFOLD.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FITTINGS AND PROVIDING CONNECTION TO THE MANIFOLD.
5. DRAIN VALVES MUST BE PROVIDED AT LOW POINTS IN OXYGEN LINE ENCASEMENT.

CROSSING PIPES TABLE

#	PIPE 1	PIPE 2	SEPARATION	NOTES
1	4" UNDERDRAIN INV: 1490.46'	EX. 8" WATER MAIN INV: 1495.42'	4.46'	ASSUMED 7.5' COVER FOR EXISTING UTILITIES, FIELD VERIFY LOCATION OF EX. WATER MAIN
2	6" SANITARY SEWER INV: 1493.02'	EX. 8" WATER MAIN INV: 1495.74'	2.22'	ASSUMED 7.5' COVER FOR EXISTING UTILITIES, FIELD VERIFY LOCATION OF EX. WATER MAIN
3	6" STORM SEWER INV: 1493.03'	EX. 8" WATER MAIN INV: 1495.18'	1.65'	ASSUMED 7.5' COVER FOR EXISTING UTILITIES, FIELD VERIFY LOCATION OF EX. WATER MAIN
4	8" STORM SEWER INV: 1498.05'	EX. 8" WATER MAIN INV: 1495.16'	2.22'	ASSUMED 7.5' COVER FOR EXISTING UTILITIES, FIELD VERIFY LOCATION OF EX. WATER MAIN
5	8" STORM SEWER INV: 1497.77'	EX. 8" SANITARY SEWER INV: 1493.73'	3.37'	ASSUMED 7.5' COVER FOR EXISTING UTILITIES, FIELD VERIFY LOCATION OF EX. SAN.

Revisions: | Date:

CONSULTANTS

IMEG | EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: UTILITY PLAN

Approved: Project Director

SIOUX FALLS VA HEALTH CARE SYSTEM

Phase: BID DOCUMENTS

FULLY SPRINKLERED

Project Title: CONSTRUCT NEW SPS

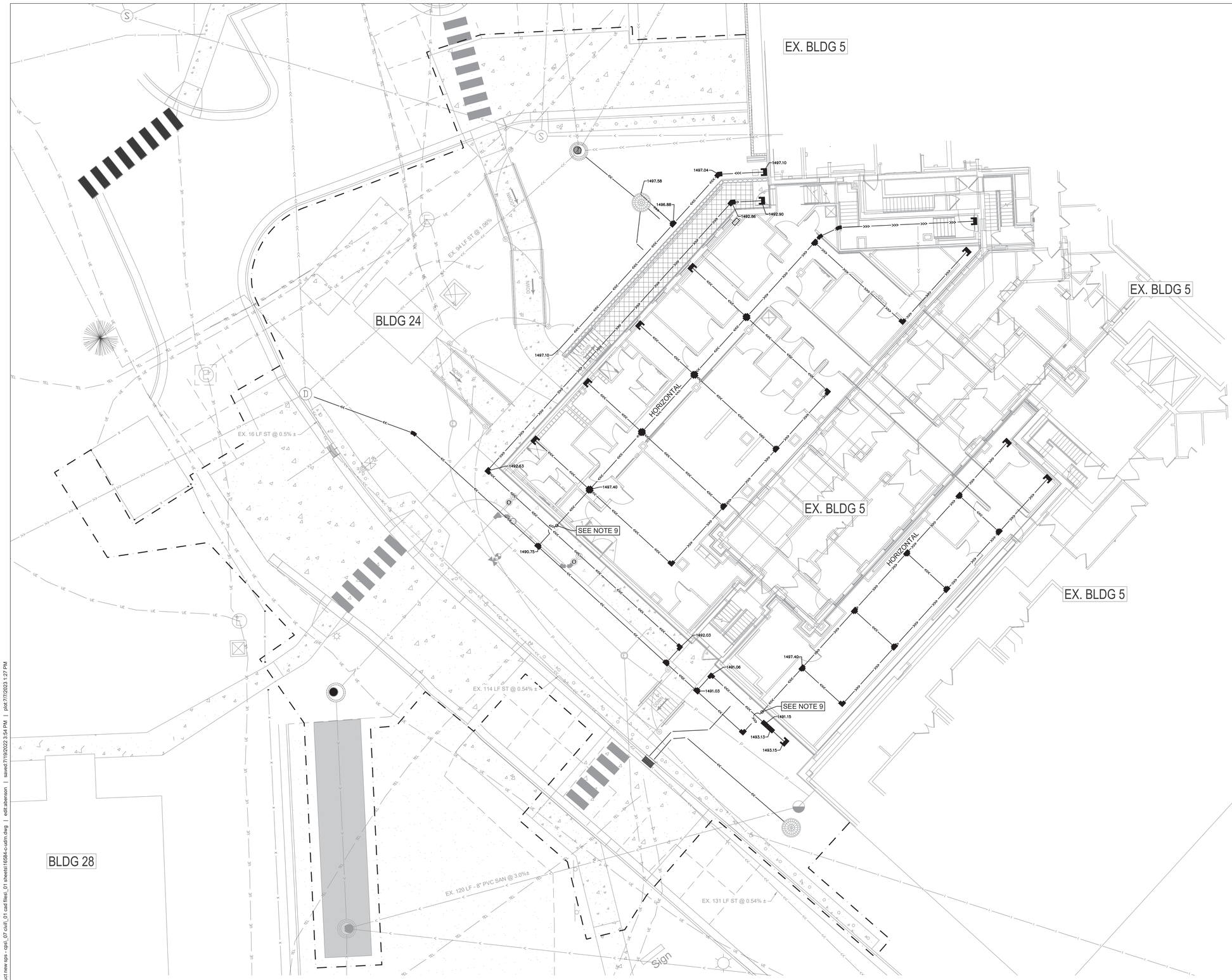
Location: SIOUX FALLS, SOUTH DAKOTA

Issue Date: 08/04/2022 | Checked: EB | Drawn: AB

Project Number: 438-460

Building Number: 5

Drawing Number: CU101



LEGEND

- PERFORATED UNDERDRAIN
- SOLID UNDERDRAIN
- 4" PVC CROSS
- 4" PVC CAP
- 4" PVC TEE
- 4" PVC 90° BEND
- 4" PVC 22.5° BEND
- 4" PVC 45° BEND
- 4" PVC WYE
- 4" PVC 45° VERTICAL BEND
- PIPE CROSSING (NOT CONNECTED)

UNDERDRAIN NOTES:

1. SLAB UNDERDRAIN SHALL BE CONSTRUCTED FLAT (HORIZONTAL)
2. ALL ELEVATIONS ARE INVERT ELEVATIONS AND ARE APPROXIMATE
3. COORDINATE ALL UNDERGROUND DRAINAGE PIPING WITH ALL OTHER EXISTING AND PROPOSED SITE UTILITIES
4. ALL PVC FOUNDATION DRAIN AND STORM SEWER ELEMENTS SHALL BE INSTALLED AS PER DETAILS AND SPECIFICATIONS
5. INSTALL PVC CAPS AT THE END OF ALL PIPE FOR UNDERDRAIN SYSTEM
6. ADDITIONAL VERTICAL BENDS MAY BE NECESSARY IF CONTRACTOR CONSTRUCTS UNDERDRAIN AT MINIMUM SLOPE / ELEVATION
7. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION OF THE PROPOSED UTILITY
8. CONTRACTOR SHALL VERIFY THAT ALL FOUNDATION DRAINS WILL BE DEEPER THAN EXISTING FOOTINGS PRIOR TO INSTALLATION. UNDERDRAIN TO BE INSTALLED BY MECHANICAL/STRUCTURAL.
9. CONNECT UNDERDRAIN TO EXTERIOR DRAINAGE - SEE CU101
10. UNDERDRAIN SHOWN SCHEMATICALLY FOR REFERENCE ONLY. SEE MECHANICAL & STRUCTURAL PLANS FOR PLACEMENT DETAILS

N

0 10' 20'

Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

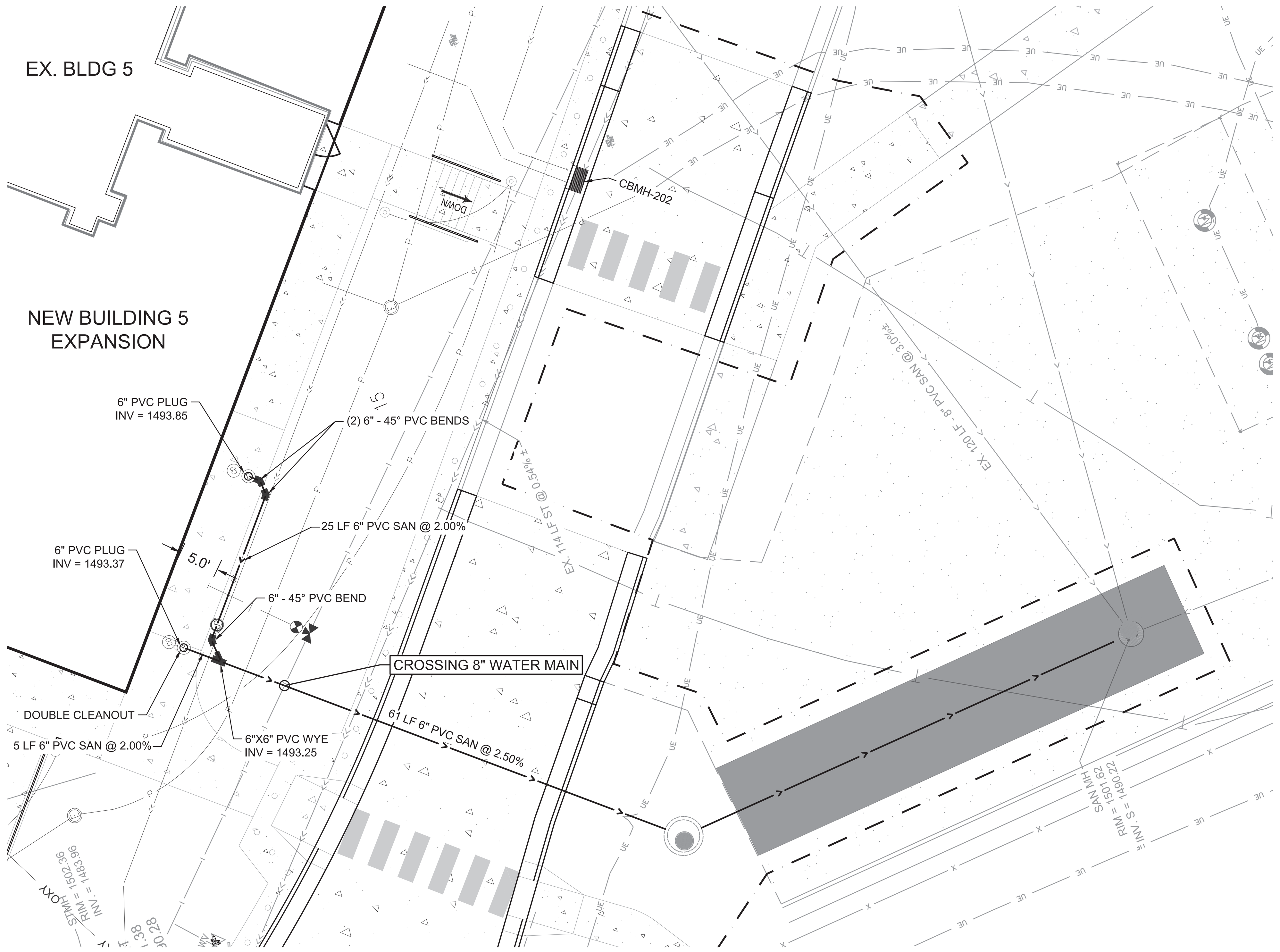
Office of Construction and Facilities Management

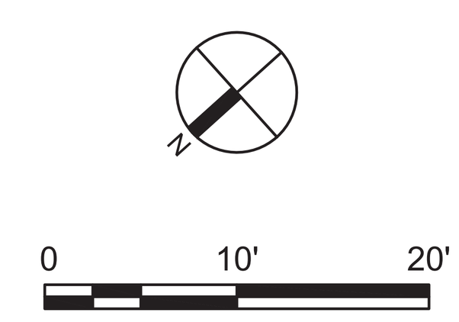
VA U.S. Department of Veterans Affairs

Drawing Title: UNDERDRAIN PLAN	Phase: BID DOCUMENTS	Project Title: CONSTRUCT NEW SPS	Project Number: 438-460
			Building Number: 5
Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM		Location: SIOUX FALLS, SOUTH DAKOTA	Drawing Number: CU102
	FULLY SPRINKLERED	Issue Date: 08/04/2022 / Checked: EB / Drawn: AB	

File Path: y:\16500\16584 va sioux falls - construct new sps - cpnt_07 civil_01 cad files_01 sheets\16584-c-cdm.dwg | edit.abenson | saved:7/19/2022 3:54 PM | plot:7/7/2023 1:27 PM

VA FORM 08 - 6231



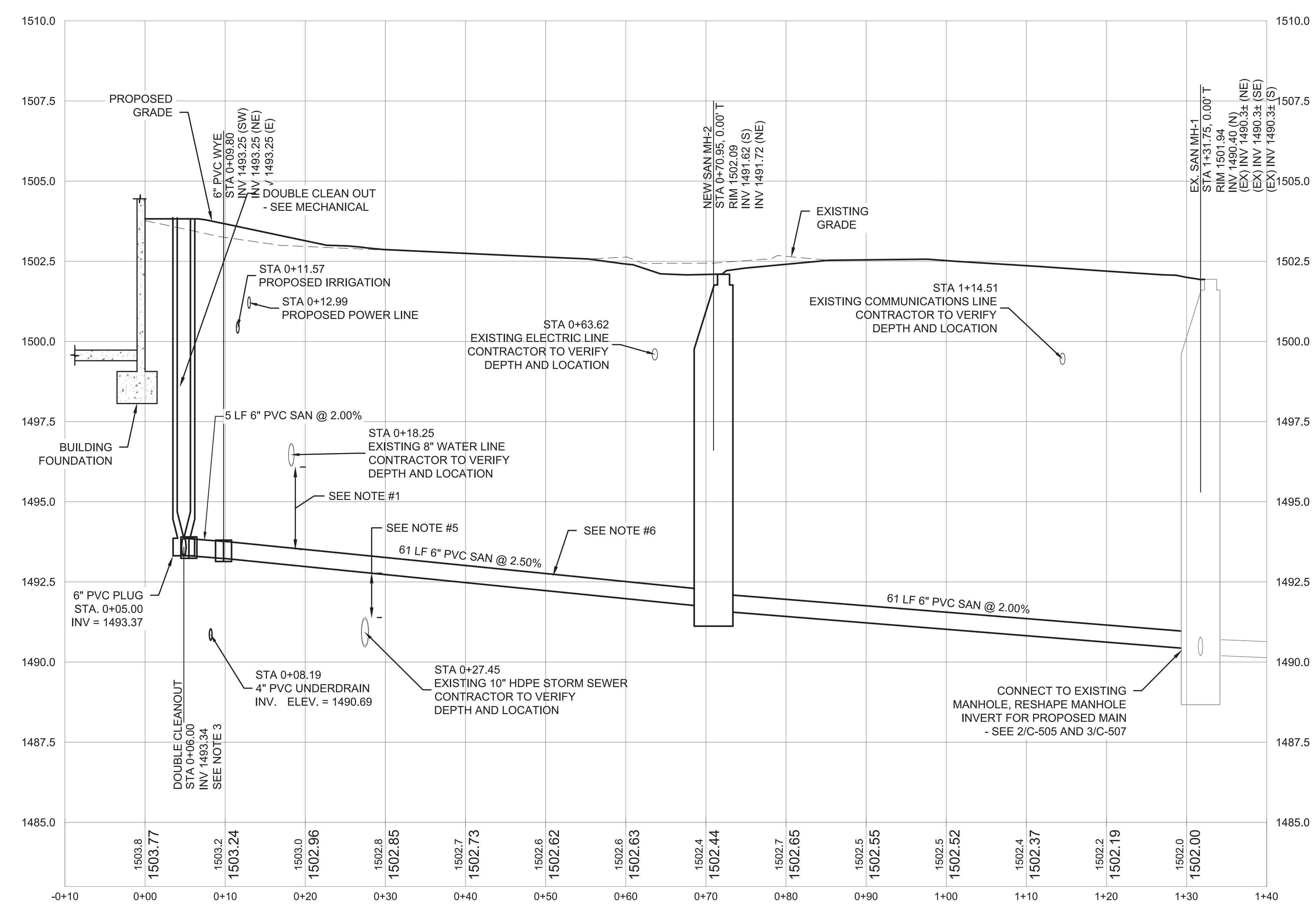


LEGEND

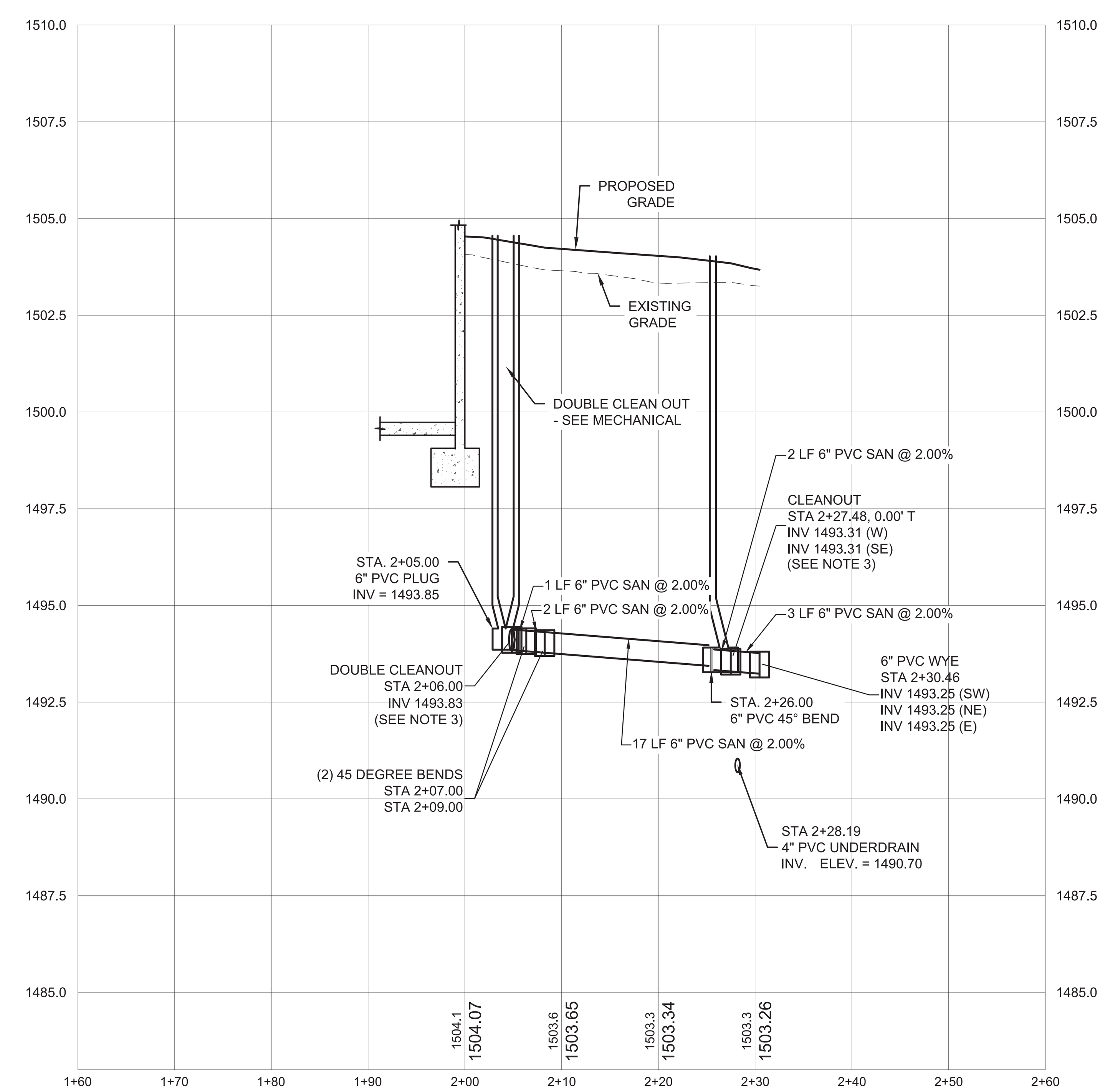
- PROJECT LIMITS
- CROSSING PIPE
- EX. WATER MAIN
- EX. SANITARY SEWER
- EX. STORM SEWER
- EX. UNDERGROUND ELECTRIC
- PROPOSED POWER LINE
- PROPOSED OXYGEN LINE
- PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED STORM DRAINTILE

NOTE:
1. IF LESS THAN 18" OF VERTICAL CLEARANCE IS PROVIDED BETWEEN WATER MAIN AND STORM / SANITARY SEWER OR IF WATER MAIN IS BENEATH STORM / SANITARY SEWER, ENCASE AS PER SDDENR REQUIREMENTS - SEE 7/C-507
2. SEE 2/C-505 FOR MANHOLE DETAIL.
3. SEE MECHANICAL FOR CLEAN OUT DETAIL.
4. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION OF THE PROPOSED UTILITY AND ORDERING MATERIALS
5. MAINTAIN A MINIMUM OF 1' VERTICAL SEPARATION BETWEEN SANITARY AND STORM SEWER.
6. CONTRACTOR MAY REVISE SLOPE OF SANITARY SERVICE FROM BUILDING TO MANHOLE TO MAINTAIN CLEARANCES SHOWN IN NOTE 1 AND NOTE 5. MAINTAIN A MINIMUM OF 2% SLOPE ON ALL SANITARY SEWER SERVICE AND MAINS OUTSIDE OF BUILDING.
7. SEE 2/C-507 FOR TRENCH DETAIL.
8. CONTRACTOR IS RESPONSIBLE FOR ALL BYPASS PUMPING IN ACCORDANCE WITH CITY OF SIOUX FALLS REQUIREMENTS WHICH INCLUDES A BYPASS PUMPING PLAN.
9. ONLY IRRIGATION MAINLINE IS SHOWN, IRRIGATION LATERALS ARE NOT SHOWN.

PROFILE VIEW OF SANITARY SEWER #1



PROFILE VIEW OF SANITARY SEWER #2



Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: SANITARY SEWER PLAN AND PROFILE

Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM

Phase: BID DOCUMENTS

FULLY SPRINKLERED

Project Title: CONSTRUCT NEW SPS

Location: SIOUX FALLS, SOUTH DAKOTA

Issue Date: 08/04/2022 | Checked: EB | Drawn: AB

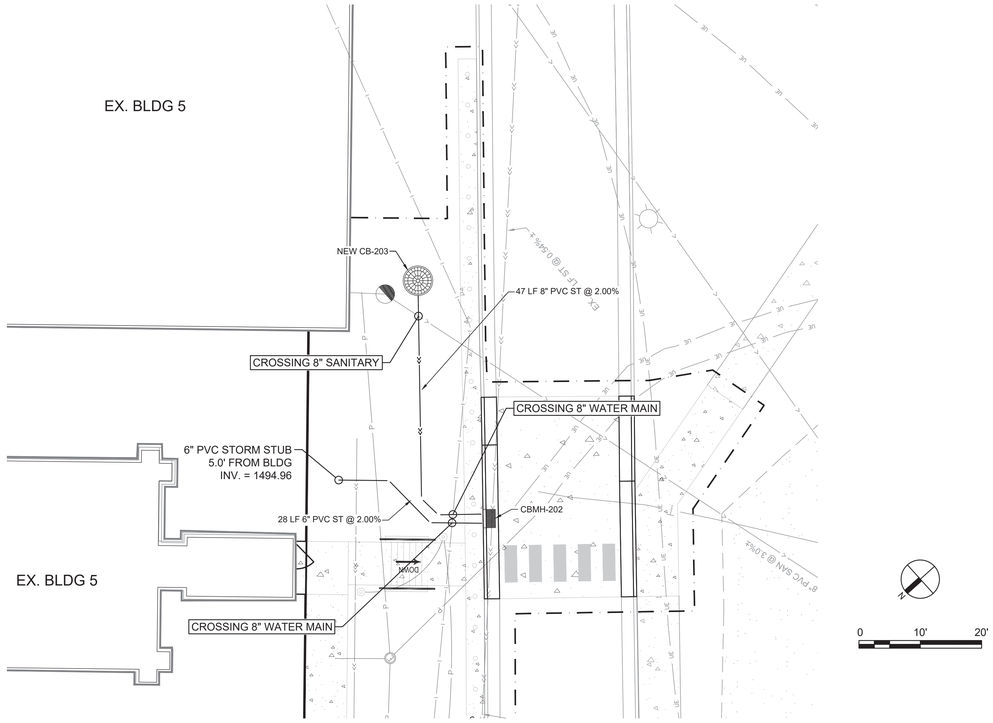
Project Number: 438-460

Building Number: 5

Drawing Number: CU103

VA FORM 08 - 6231

File Path: y:\16500\16584 va sioux falls - construct new sps - cpi_07 civil_01 cad files_01 sheets\16584-c-utl-pp.dwg | edit:abenson | saved:7/19/2022 5:12 PM | plot:7/7/2023 1:28 PM

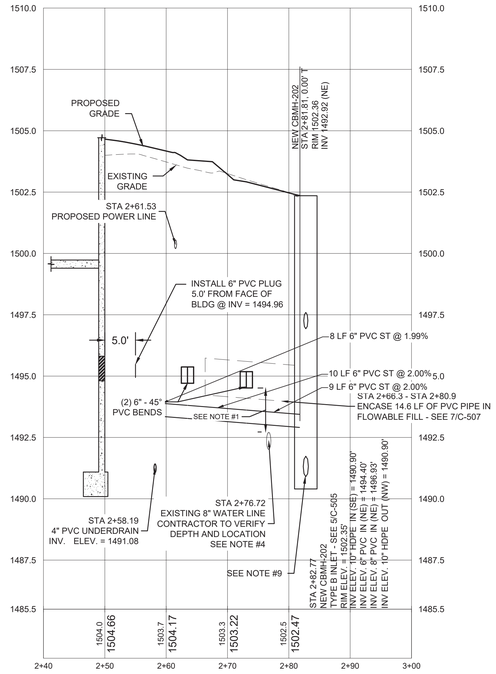


LEGEND

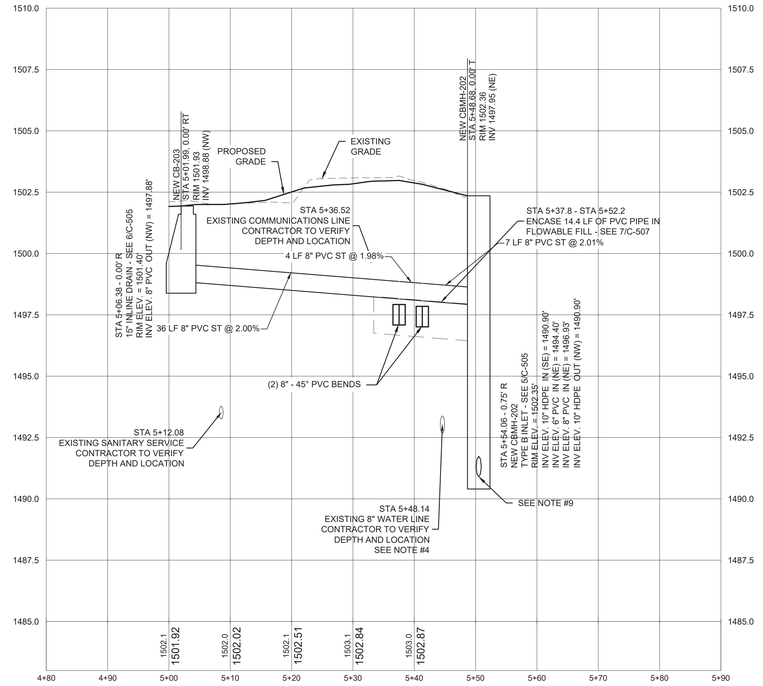
- PROJECT LIMITS
- CROSSING PIPE
- EX. WATER MAIN
- EX. SANITARY SEWER
- EX. STORM SEWER
- EX. UNDERGROUND ELECTRIC
- PROPOSED POWER LINE
- PROPOSED OXYGEN LINE
- PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED STORM DRAINTILE

NOTE:
1. IF LESS THAN 18" OF VERTICAL CLEARANCE IS PROVIDED BETWEEN WATER MAIN AND STORM / SANITARY SEWER OR IF WATER MAIN IS BENEATH STORM / SANITARY SEWER, ENCASE AS PER SDDENR REQUIREMENTS - SEE 7/C-507
2. SEE 2/C-505 FOR MANHOLE DETAIL.
3. SEE MECHANICAL FOR CLEAN OUT DETAIL.
4. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION OF THE PROPOSED UTILITY AND ORDERING MATERIALS
5. MAINTAIN A MINIMUM OF 1' VERTICAL SEPARATION BETWEEN SANITARY AND STORM SEWER.
6. CONTRACTOR MAY REVISE SLOPE OF SANITARY SERVICE FROM BUILDING TO MANHOLE TO MAINTAIN CLEARANCES SHOWN IN NOTE 1 AND NOTE 5. MAINTAIN A MINIMUM OF 2% SLOPE ON ALL SANITARY SEWER SERVICE AND MAINS OUTSIDE OF BUILDING.
7. SEE 2/C-507 FOR TRENCH DETAIL.
8. CONTRACTOR IS RESPONSIBLE FOR ALL BYPASS PUMPING IN ACCORDANCE WITH CITY OF SIOUX FALLS REQUIREMENTS WHICH INCLUDES A BYPASS PUMPING PLAN.
9. ELEVATIONS OF PROPOSED STORM SEWER INLET ARE APPROXIMATE AND ARE BASED ON OWNER'S BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY EXACT LOCATION, DEPTH, AND SIZE OF EXISTING STORM SEWER. CONNECT EXISTING PIPING TO PROPOSED INLET BOX.
10. ONLY IRRIGATION MAINLINE IS SHOWN, IRRIGATION LATERALS ARE NOT SHOWN.

PROFILE VIEW OF STORM SEWER #1



PROFILE VIEW OF STORM SEWER #3



Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

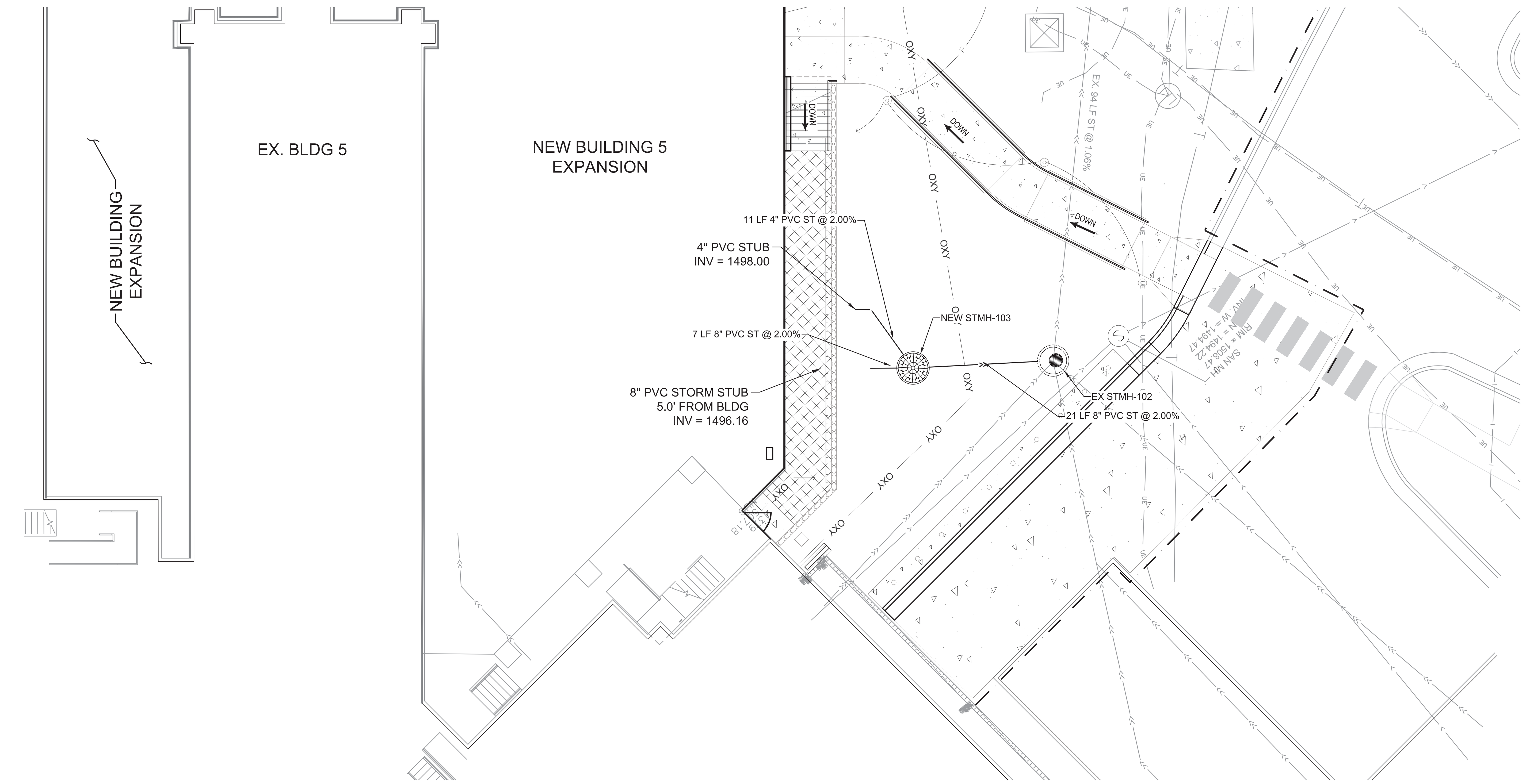
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title	STORM SEWER PLAN AND PROFILE
Phase	BID DOCUMENTS
Project Title	CONSTRUCT NEW SPS
Project Number	438-460
Building Number	5
Approved: Project Director	SIOUX FALLS VA HEALTH CARE SYSTEM
Location	SIOUX FALLS, SOUTH DAKOTA
Issue Date	08/04/2022
Checked	EB
Drawn	AB
Drawing Number	CU104

File Path: y:\16500\16584 va sioux falls - construct new sps - rpts_07 civil_01 cad files_01 sheets\16584-c-util-pp.dwg | edit:abenson | saved:7/19/2022 5:12 PM | plot:7/7/2023 1:28 PM

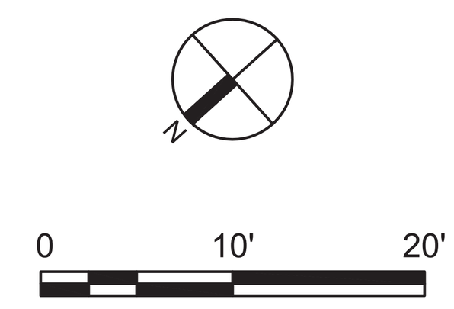
VA FORM 08 - 6231



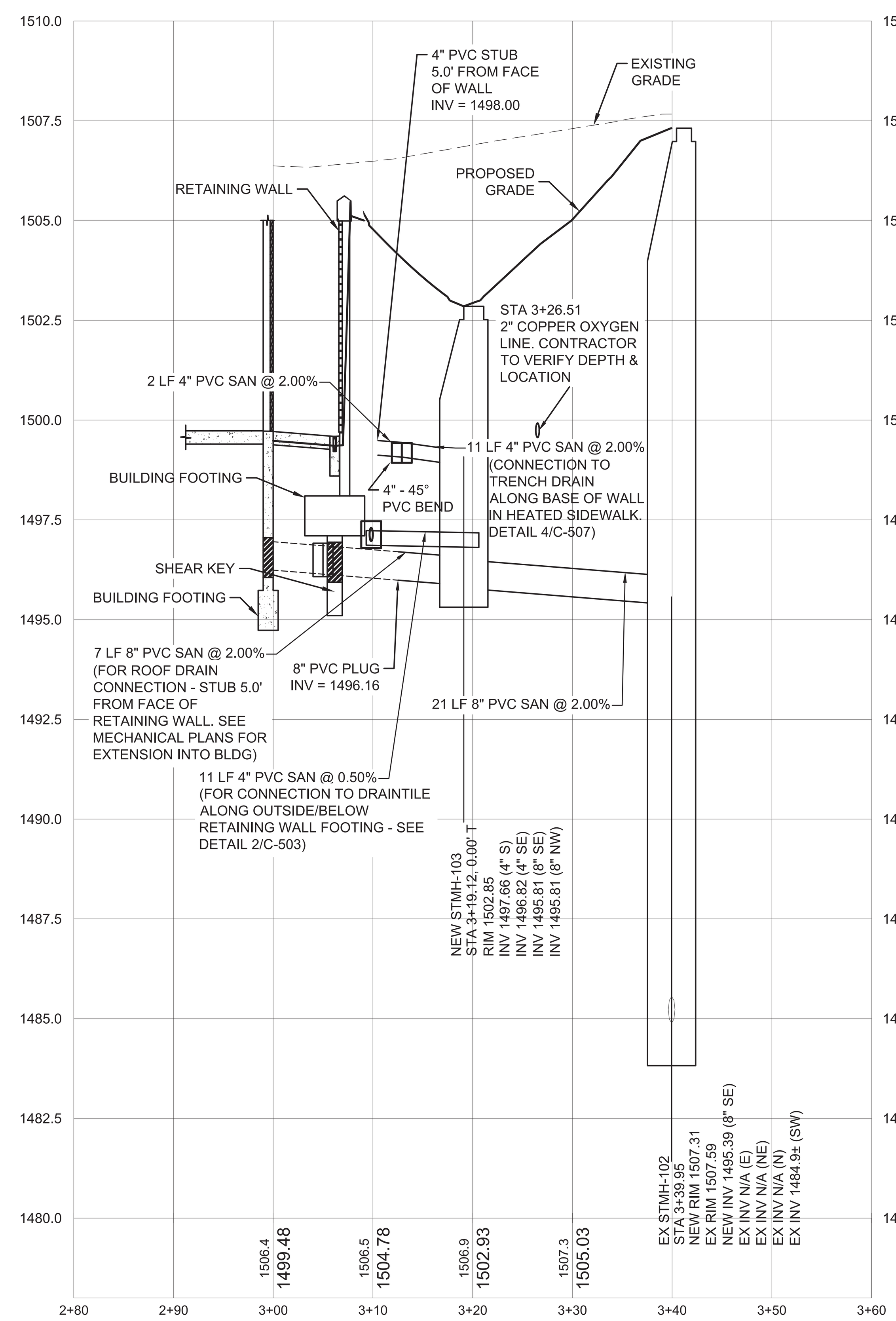
LEGEND

— — —	PROJECT LIMITS
	CROSSING PIPE
	EX. WATER MAIN
	EX. SANITARY SEWER
	EX. STORM SEWER
UE	EX. UNDERGROUND ELECTRIC
P	PROPOSED POWER LINE
OXY	PROPOSED OXYGEN LINE
W	PROPOSED WATER MAIN
	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
	PROPOSED STORM DRAINTILE

NOTE:
1. IF LESS THAN 18" OF VERTICAL CLEARANCE IS PROVIDED BETWEEN WATER MAIN AND STORM / SANITARY SEWER OR IF WATER MAIN IS BENEATH STORM / SANITARY SEWER, ENCASE AS PER SDDENR REQUIREMENTS - SEE 7/C-507
2. SEE SHEET 1/C-505 FOR AREA INLET DETAIL.
3. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION OF THE PROPOSED UTILITY AND ORDERING MATERIALS.
4. MAINTAIN A MINIMUM OF 1' VERTICAL SEPARATION.SEE 2/C-507 FOR TRENCH DETAIL.
5. ONLY IRRIGATION MAINLINE IS SHOWN, IRRIGATION LATERALS ARE NOT SHOWN.



PROFILE VIEW OF STORM SEWER #2



Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

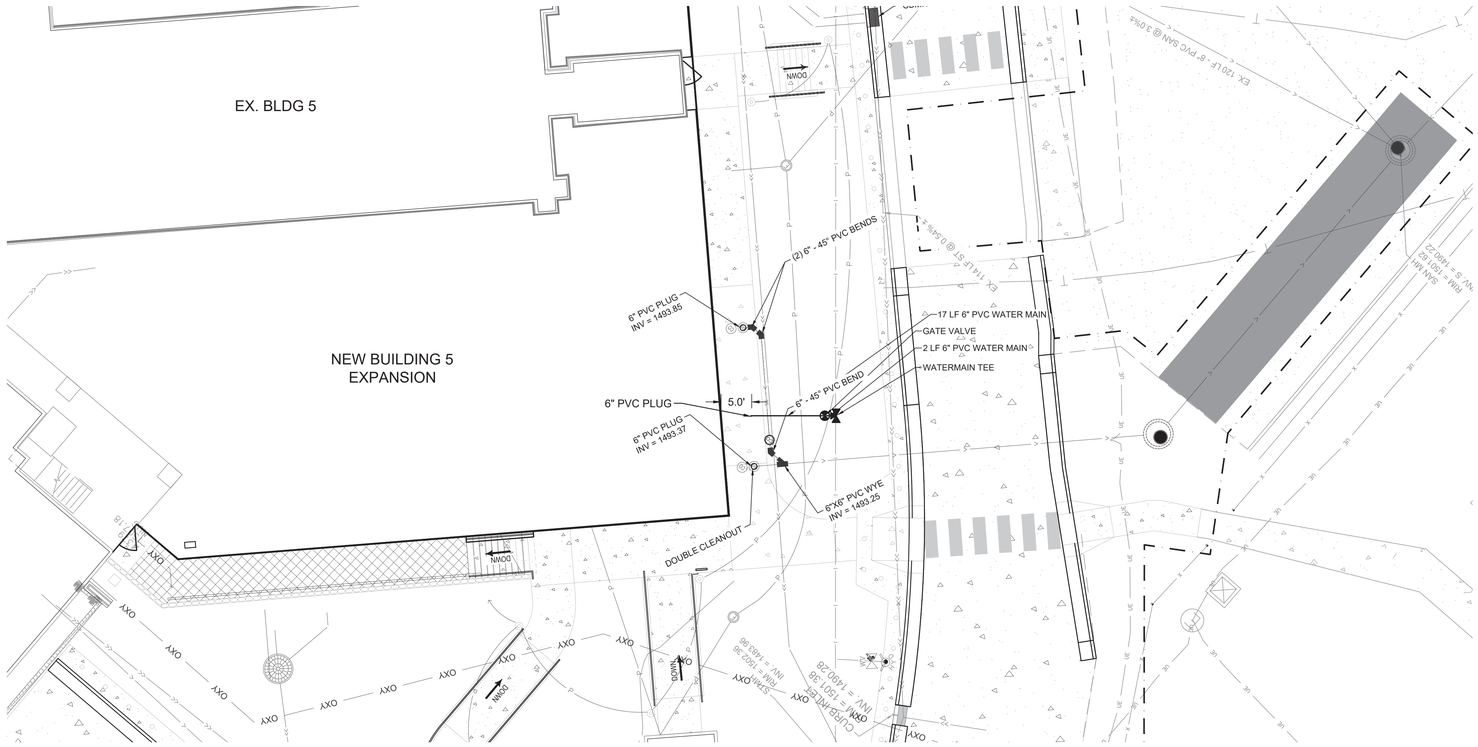
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title	Phase	Project Title	Project Number
STORM SEWER PLAN AND PROFILE	BID DOCUMENTS	CONSTRUCT NEW SPS	438-460
			Building Number: 5
Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM	FULLY SPRINKLERED	Location: SIOUX FALLS, SOUTH DAKOTA	Drawing Number: CU105
		Issue Date: 08/04/2022; Checked: EB; Drawn: AB	

VA FORM 08 - 6231

File Path: y:\16500\16584 va sioux falls - construct new sps - cpd_07 civil_01 cad files_01 sheets\16584-c-utl-pp.dwg | edit:abenson | saved:7/19/2022 5:12 PM | plot:7/7/2023 1:28 PM

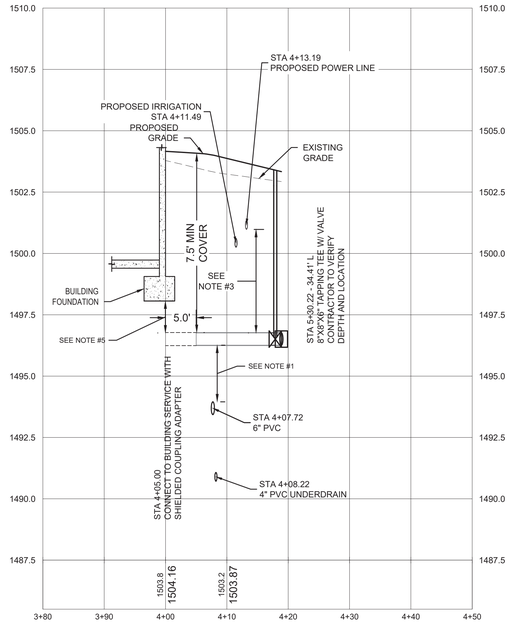


LEGEND

- PROJECT LIMITS
- CROSSING PIPE
- EX. WATER MAIN
- EX. SANITARY SEWER
- EX. STORM SEWER
- EX. UNDERGROUND ELECTRIC
- PROPOSED POWER LINE
- PROPOSED OXYGEN LINE
- PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED STORM DRAINTILE

NOTE:
1. IF LESS THAN 18" OF VERTICAL CLEARANCE IS PROVIDED BETWEEN WATER MAIN AND STORM / SANITARY SEWER OR IF WATER MAIN IS BENEATH STORM / SANITARY SEWER, ENCASE AS PER SDDENR REQUIREMENTS - SEE 7/C-507
2. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION OF THE PROPOSED UTILITY AND ORDERING MATERIALS
3. MAINTAIN A MINIMUM OF 1' VERTICAL SEPARATION.WATER SERVICE MUST BE LAID FLAT TO ENSURE VALVE AND VALVE BOX ARE VERTICAL - COORDINATE ELEVATION OF CONNECTION WITH MECHANICAL CONTRACTOR.
4. SEE 2/C-507 FOR TRENCH DETAIL.
5. ENCASE WATER MAIN IN 6" OF FLOWABLE FILL FOR 3' EACH SIDE OF FOOTING IF SEPARATION IS < 1'.
6. ONLY IRRIGATION MAINLINE IS SHOWN, IRRIGATION LATERALS ARE NOT SHOWN.

PROFILE VIEW OF WATER LINE #1



Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

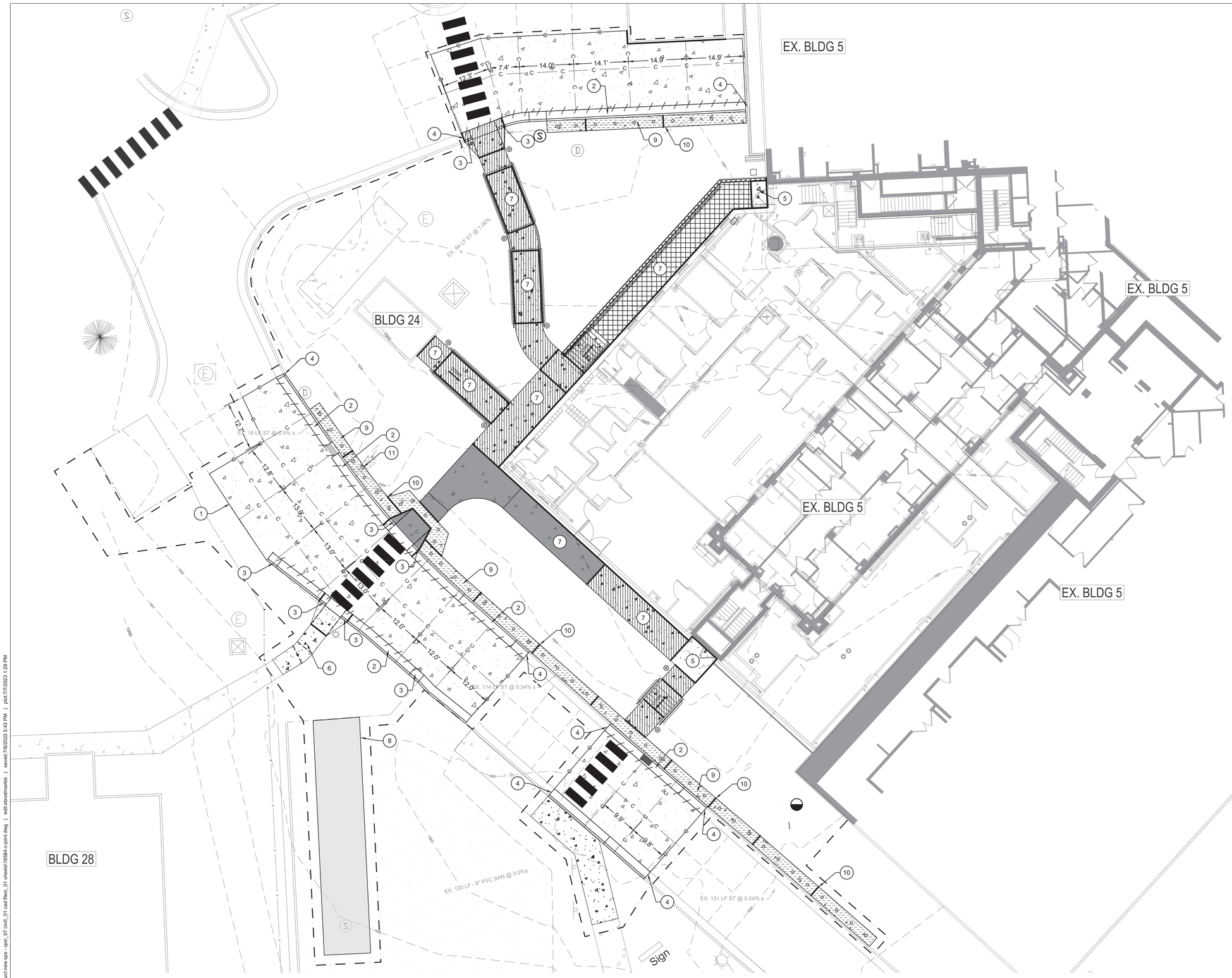
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title	WATER LINE PLAN AND PROFILE
Phase	BID DOCUMENTS
Project Title	CONSTRUCT NEW SPS
Project Number	438-460
Building Number	5
Approved: Project Director	SIOUX FALLS VA HEALTH CARE SYSTEM
Location	SIOUX FALLS, SOUTH DAKOTA
Drawing Number	CU106
Issue Date	08/04/2022
Checked	EB
Drawn	AB

File Path: y:\16500\16584 va sioux falls - construct new sps - cpa_07 civil_01 cad files_01 sheets\16584-c-cd-pp.dwg | edit:abenson | saved:7/19/2022 5:12 PM | plot:7/7/2023 1:28 PM

VA FORM 08 - 6231



LEGEND

- CURB CONSTRUCTION JOINT
- DOWELED CONSTRUCTION / CONTRACTION JOINT
- ISOLATION JOINT
- CONTRACTION JOINT FOR SIDEWALK (SEE 1/C-507)
- REINFORCED CONCRETE SIDEWALK (SEE 8/C-504)
- CONCRETE PAVEMENT (SEE 4/C-504)
- STANDARD CONCRETE SIDEWALK (SEE D8/C-504 AND 10/C-504)
- HEATED CONCRETE SIDEWALK AND STAIRS (SEE 4/C-507 AND MECHANICAL)
- CONCRETE BOLLARD FOUNDATION (SEE LF502)

KEYNOTES

1. THICKENED PAVEMENT EDGE, TYP. - SEE 1/C-507
2. 30" WIDE STANDARD CURB AND GUTTER - SEE 1/C-504
3. CURB TAPER - 3/C-504
4. CURB ISOLATION JOINT - SEE 2/C-504
5. CONCRETE SLAB STOOP - SEE STRUCTURAL
6. EQUALLY SPACED CONTRACTION JOINTS THIS AREA (6' PREFERRED); 4' MIN., 6' MAX. FOR NEW SIDEWALK
7. EQUALLY SPACED CONTRACTION JOINTS THIS AREA (7' PREFERRED); 5' MIN., 8' MAX. FOR NEW SIDEWALK
8. SEE 6/C-504 FOR ASPHALT ABUTMENT DETAIL
9. EQUALLY SPACED CONTRACTION JOINTS THIS AREA (3' PREFERRED); 1" MIN., 5' MAX. FOR NEW SIDEWALK
10. ISOLATION JOINTS IN CONCRETE BOLLARD FOUNDATION SHALL BE FULL-DEPTH
11. ISOLATION JOINT AROUND FIRE HYDRANT SHALL BE DOUBLE WIDTH (2 LAYERS) AND SHALL BE THE FULL DEPTH OF THE BOLLARD FOUNDATION

NOTES
1. CONTRACTOR TO PROVIDE JOINTING PLAN TO COR FOR APPROVAL PRIOR TO INSTALLATION OF CONCRETE SIDEWALKS.
2. CONTRACTION JOINTS SHALL CONFORM TO DETAIL (SEE 1/C-507)

Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

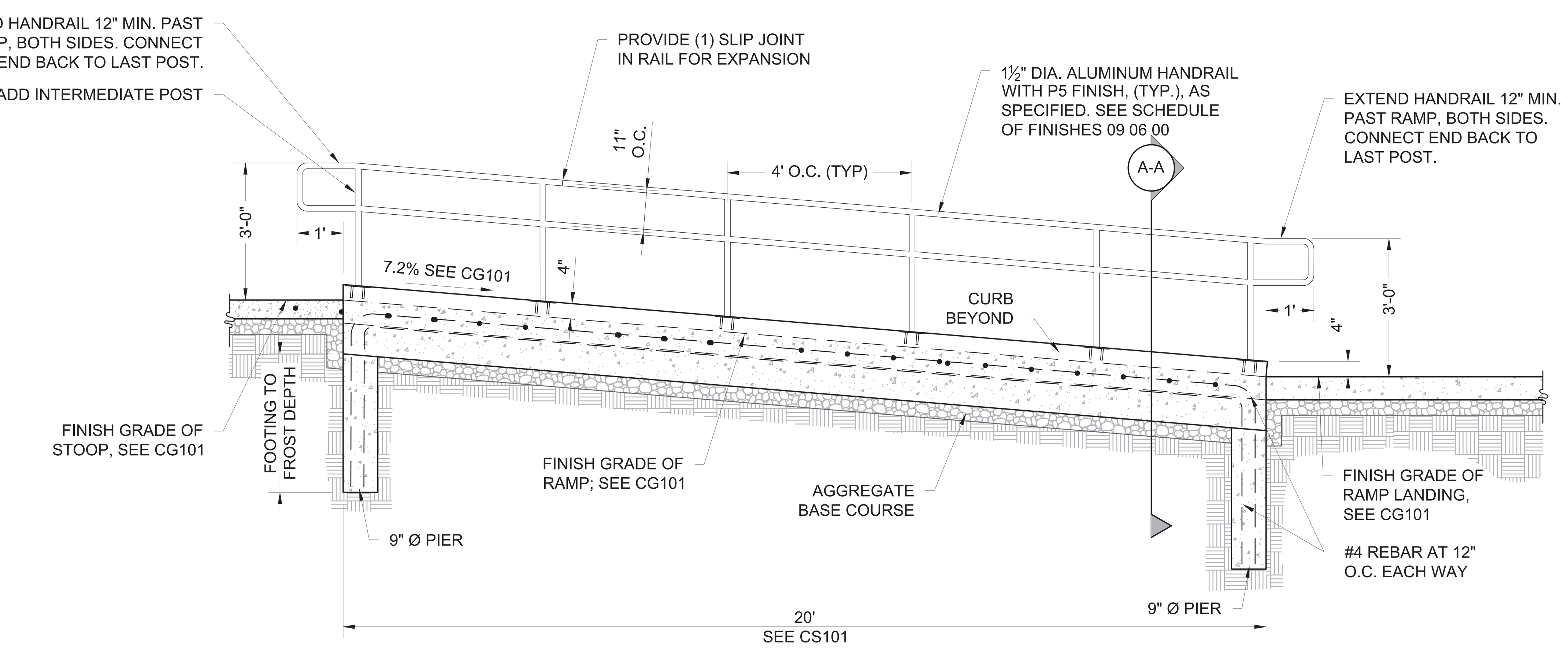
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

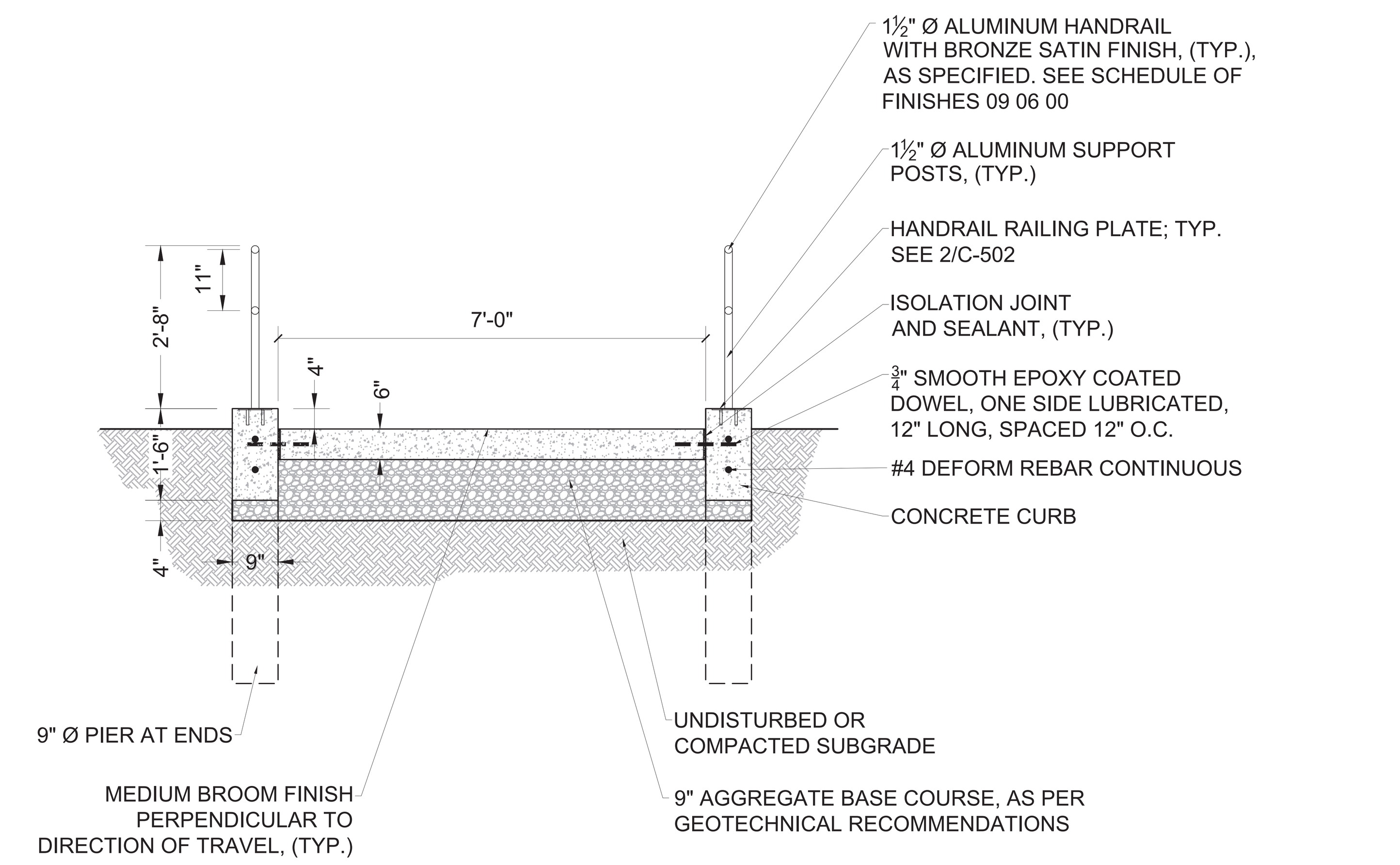
Drawing Title	PAVING & JOINT LAYOUT PLAN
Phase	BID DOCUMENTS
Project Title	CONSTRUCT NEW SPS
Project Number	438-460
Approved: Project Director	SIOUX FALLS VA HEALTH CARE SYSTEM
	FULLY SPRINKLERED
Location	SIOUX FALLS, SOUTH DAKOTA
Building Number	5
Issue Date	08/04/2022
Checked	EB
Drawn	AB
Drawing Number	CP101

File Path: y:\16500\16584 va sioux falls - construct new sps - cpn_07 civil_01 cad files_01 sheets\16584-c-joint.dwg | edit:abrodmarkle | saved:7/6/2023 5:43 PM | plot:7/7/2023 1:29 PM

VA FORM 08 - 6231

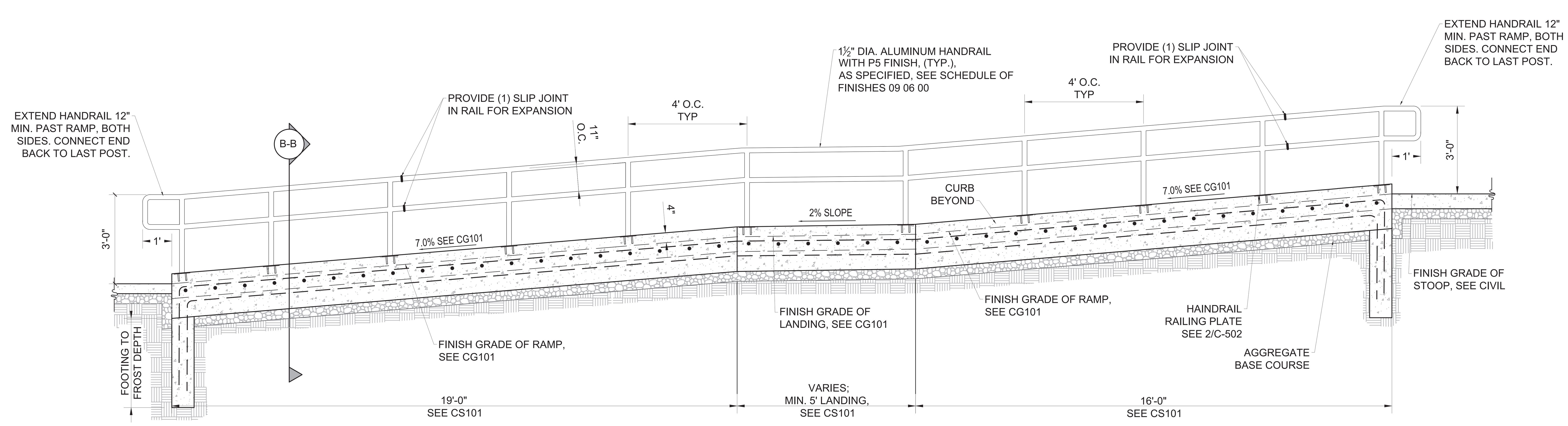


RAMP #1
SECTION-ELEVATION 'A'

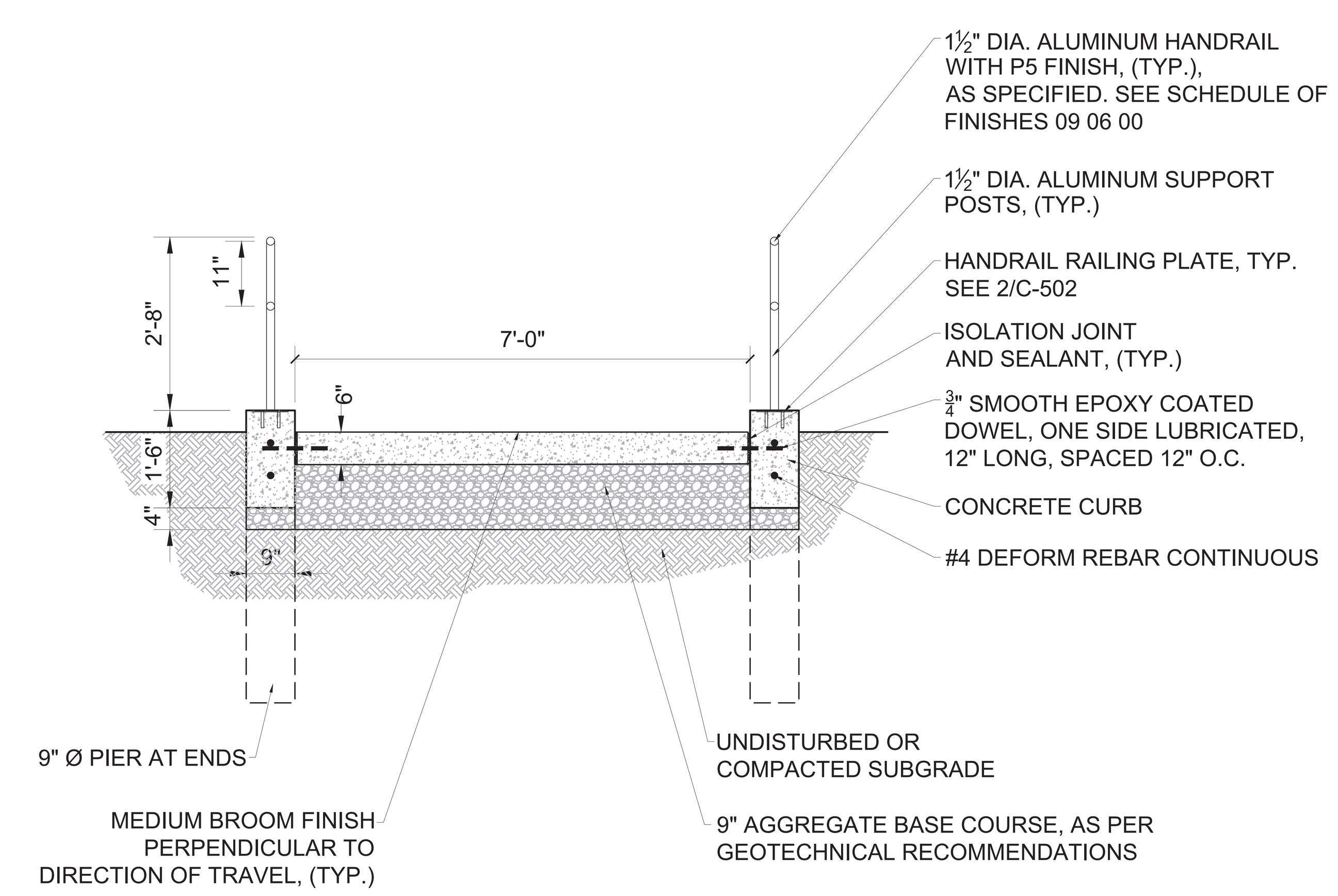


SECTION A-A

1 RAMP #1 DETAIL
SCALE: 1/2" = 1'-0" (30" x 42" PAPER SIZE)



RAMP #2
SECTION-ELEVATION 'B'



SECTION B-B

2 RAMP #2 DETAIL
SCALE: 1/2" = 1'-0" (30" x 42" PAPER SIZE)

File Path: y:\16500\16584 va sioux falls - construct new sps - cpd_06 iei_01 cad files_01 sheets\16584-c-det.dwg | edit:ebrodmarkle | saved:7/7/2023 1:12 PM | plot:7/7/2023 1:30 PM

Revisions: | Date:

CONSULTANTS
IMEG
EC design

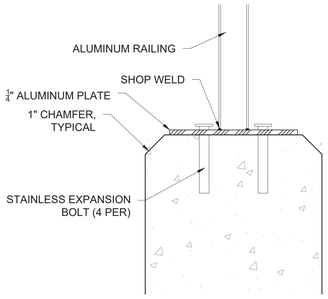
ARCHITECT/ENGINEER OF RECORD
ANDERSON
13605 1st Ave. N. #100 Plymouth, MN 55441
P 763.412.4000 | F 763.412.4090 | ae-mn.com
Anderson Engineering of Minnesota, LLC | Proj # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

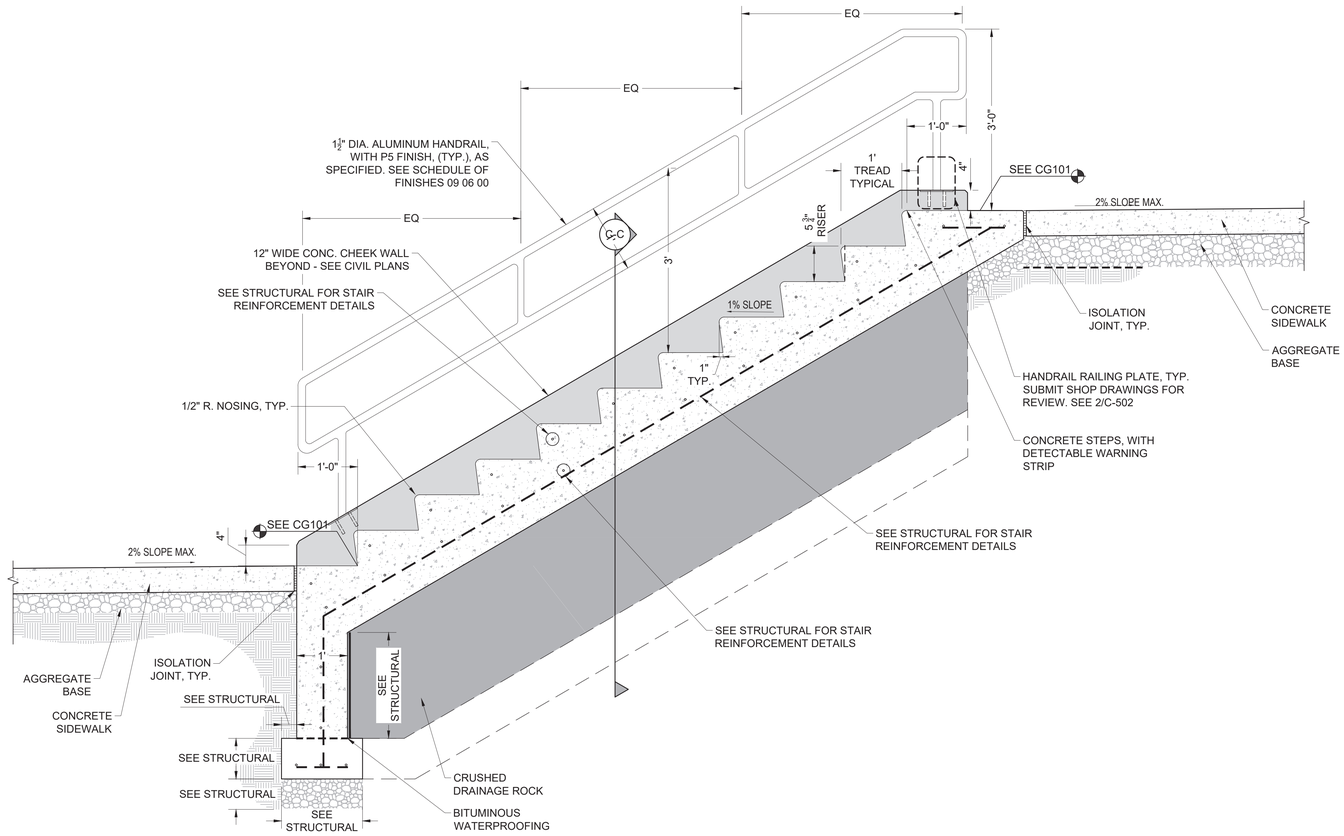
Drawing Title: RAMP SITE DETAILS	Phase: BID DOCUMENTS	Project Title: CONSTRUCT NEW SPS	Project Number: 438-460
			Building Number: 5
Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM	FULLY SPRINKLERED	Location: SIOUX FALLS, SOUTH DAKOTA	Drawing Number: C-501
		Issue Date: 08/04/2022 · Checked: EB · Drawn: AB	

VA FORM 08 - 6231



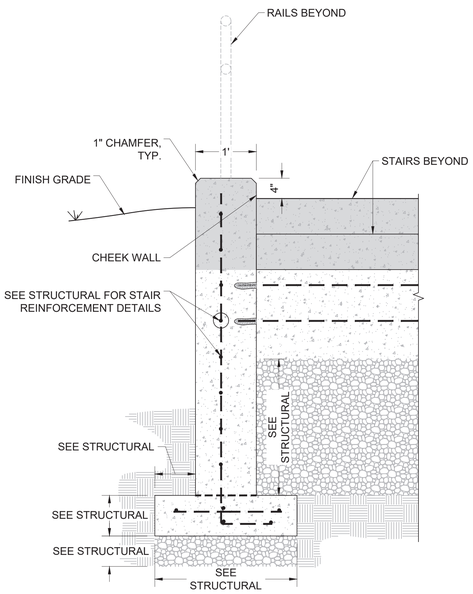
2 ENLARGED RAILING PLATE DETAIL

SCALE: 1" = 3" (30" x 42" PAPER SIZE)

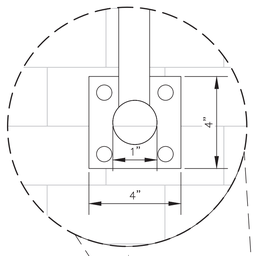


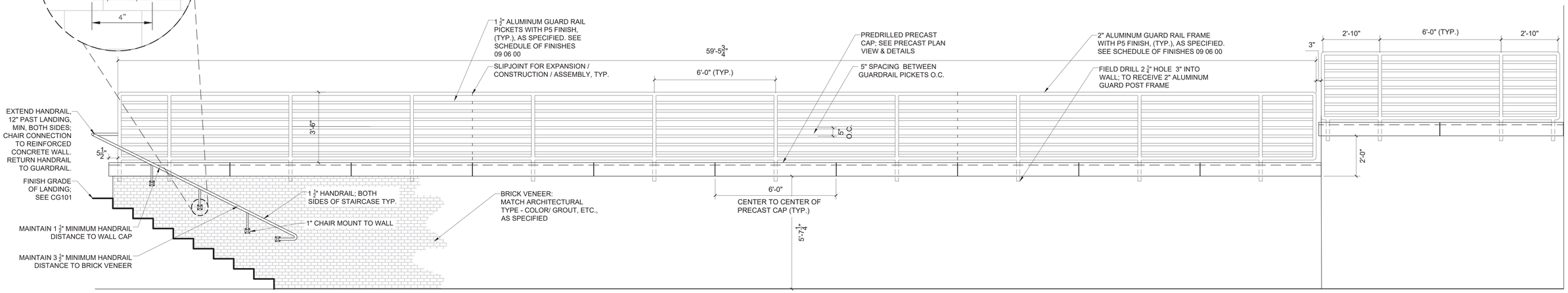
1 CONCRETE STAIR #2 DETAIL

SCALE: 1" = 1'-0" (30" x 42" PAPER SIZE)



SECTION C-C





3 CONCRETE STAIR #2 ELEVATION

SCALE: 1" = 1'-0" (30" x 42" PAPER SIZE)

Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

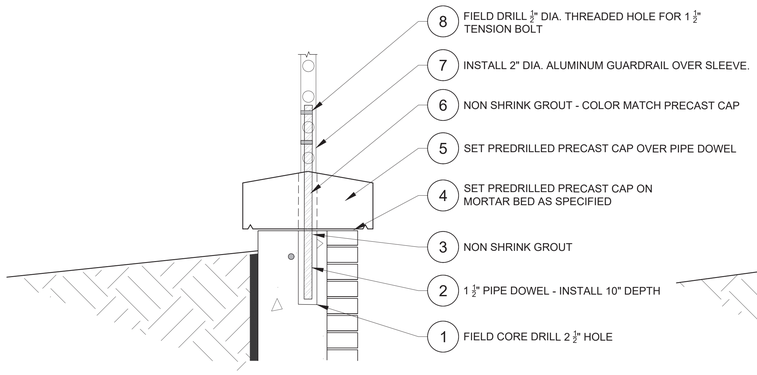
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

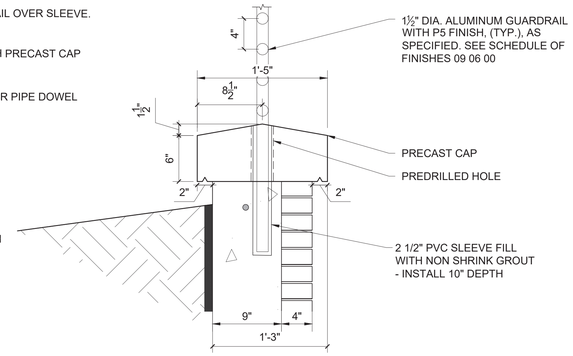
Drawing Title	STAIRS SITE DETAILS
Approved: Project Director	SIOUX FALLS VA HEALTH CARE SYSTEM
Phase	BID DOCUMENTS
	FULLY SPRINKLERED
Project Title	CONSTRUCT NEW SPS
Location	SIOUX FALLS, SOUTH DAKOTA
Issue Date	08/04/2022
Checked	EB
Drawn	AB
Project Number	438-460
Building Number	5
Drawing Number	C-502

File Path: y:\16500\16584 va sioux falls - construct new sps - cpst_06 lai_01 cad files_01 sheets\16584-l-det.dwg | edit:dbrodmarkle | saved:7/7/2023 1:12 PM | plot:7/7/2023 1:30 PM

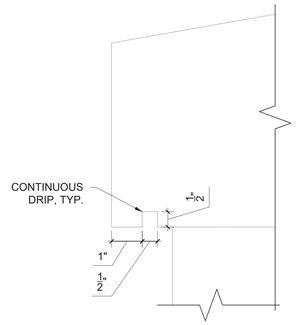
VA FORM 08 - 6231



PRECAST CAP INSTALLATION

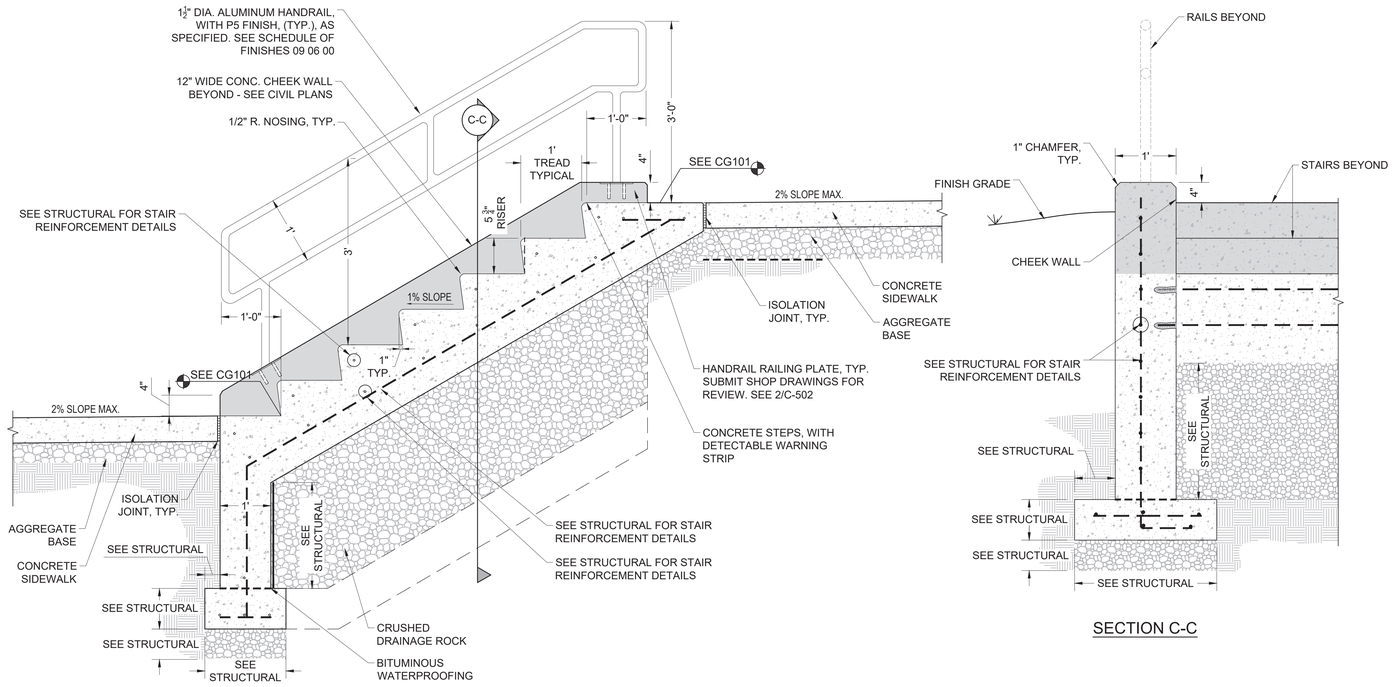


ENLARGED CAP AND RAIL DETAIL



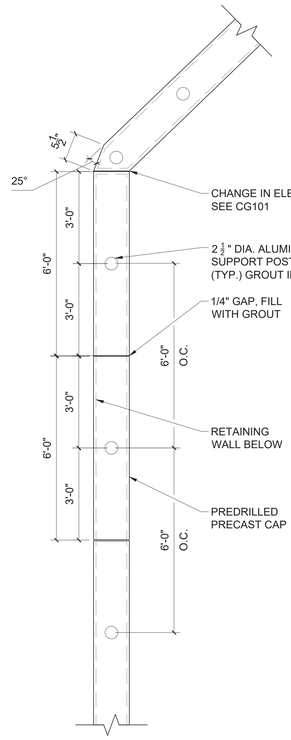
DRIP EDGE
N.T.S

1 RETAINING WALL PRECAST CAP & RAIL DETAIL
SCALE: 1" = 8" (30" x 42" PAPER SIZE)

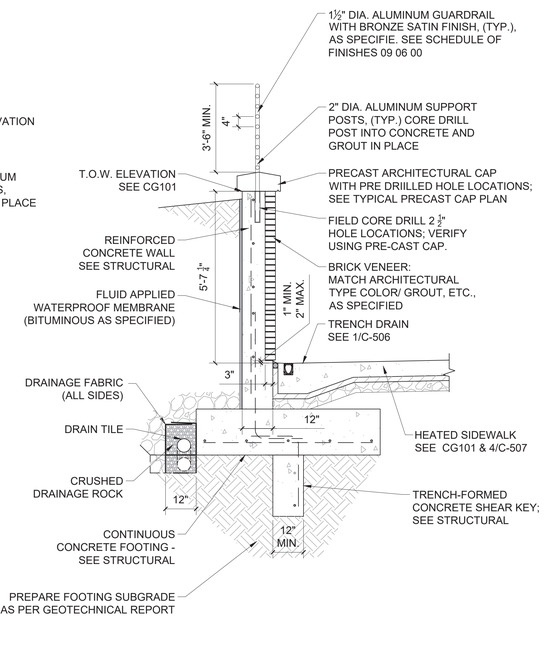


SECTION C-C

3 CONCRETE STAIR #1 DETAIL
SCALE: 1" = 1'-0" (30" x 42" PAPER SIZE)



PRECAST CAP PLAN VIEW



SECTION ELEVATION VIEW

2 RETAINING WALL WITH GUARDRAIL
SCALE: 1" = 1'-0" (30" x 42" PAPER SIZE)

Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

Office of Construction and Facilities Management

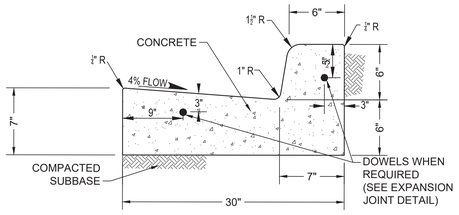
VA U.S. Department of Veterans Affairs

Drawing Title: RETAINING WALL SITE DETAILS	Phase: BID DOCUMENTS
Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM	FULLY SPRINKLERED

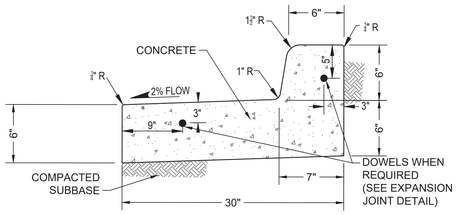
Project Title: CONSTRUCT NEW SPS		Project Number: 438-460
		Building Number: 5
Location: SIOUX FALLS, SOUTH DAKOTA		Drawing Number: C-503
Issue Date: 08/04/2022	Checked: EB	Drawn: AB

File Path: y:\16500\16584 va sioux falls - construct new sps - cpnt_06 ial_01 cad files_01 sheets\16584-l-detl.dwg | edit:ebrodmarkle | saved:7/7/2023 1:12 PM | plot:7/7/2023 1:30 PM

VA FORM 08 - 6231

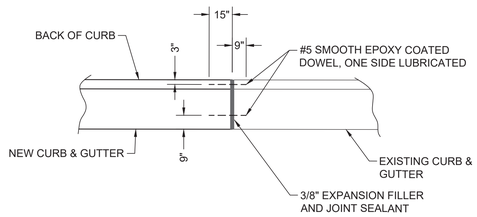


30" WIDE STANDARD CURB AND GUTTER
NTS

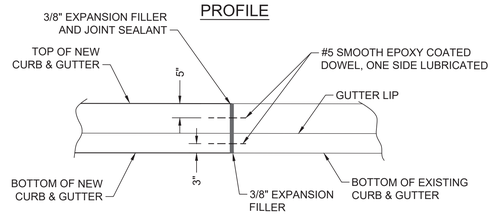


30" WIDE TIP-OUT CURB AND GUTTER
NTS

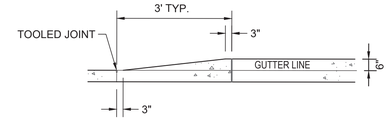
1 30" CURB TYPICAL SECTIONS
SCALE: NTS



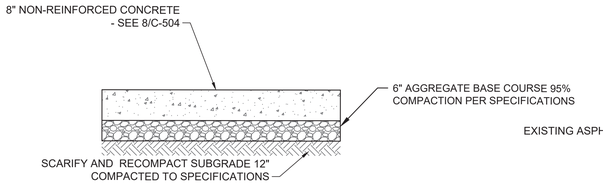
PROFILE



2 CURB AND GUTTER ISOLATION (EXPANSION) JOINT
SCALE: NTS

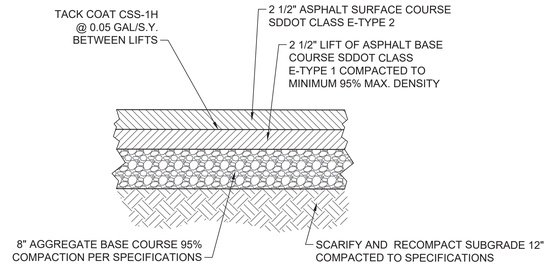


3 CURB TAPER DETAIL
SCALE: NTS

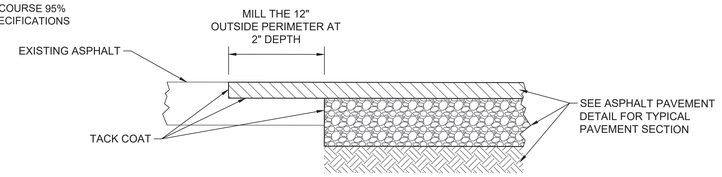


NOTE: IF CONTRACTOR OPTS TO DRIVE OVER BASE COURSE WITH CONSTRUCTION TRAFFIC PRIOR TO PAVEMENT PLACEMENT ADDITIONAL BASE COURSE WILL LIKELY BE NECESSARY. IF RUTTING OCCURS, BASE COURSE SHOULD BE REMOVED, SUBGRADE SHAPED AND COMPACTED AND BASE COURSE REINSTALLED.

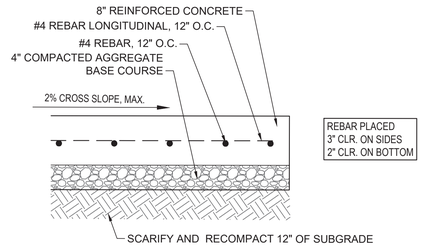
4 CONCRETE PAVEMENT DETAIL
SCALE: NTS



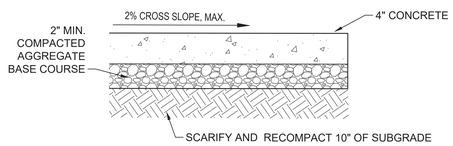
5 ASPHALT PAVEMENT DETAIL
SCALE: NTS



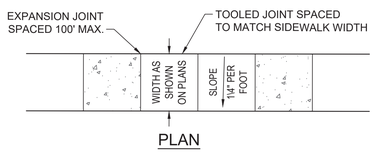
6 ASPHALT ABUTMENT DETAIL
SCALE: NTS



REINFORCED SECTION

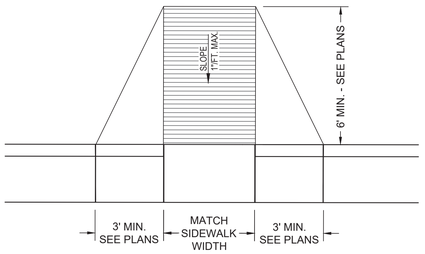


NON-REINFORCED SECTION



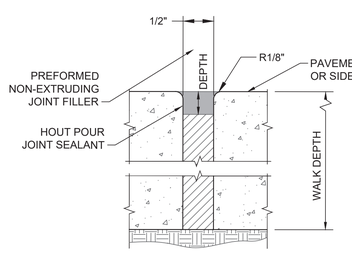
PLAN

8 SIDEWALK DETAIL
SCALE: NTS

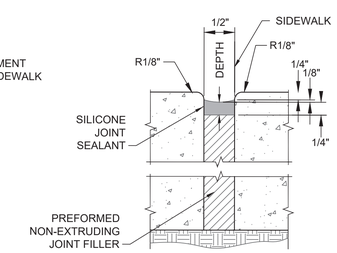


NOTES:
1. SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY A COARSE BROOMING AND TINING, TRANSVERSE TO THE SLOPE OF THE RAMP.
2. CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP, FREE OF SAGS AND SHORT GRADE CHANGES.
3. THE NORMAL GUTTER LINE PROFILE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP OPENING.
4. CROSS SLOPES SHALL NOT EXCEED 2%.

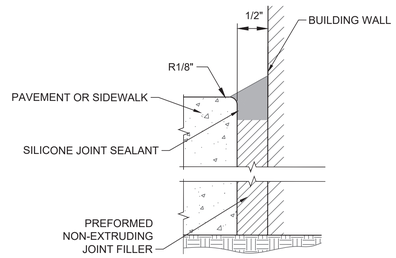
7 ABA CURB RAMPS
SCALE: NTS



PAVEMENT ISOLATION JOINT W/ HOT POUR SEALANT



SIDEWALK OR PAVEMENT ISOLATION JOINT WITH SILICONE SEALANTS



BUILDING ISOLATION JOINT

10 SIDEWALK OR PAVEMENT ISOLATION (EXPANSION) JOINT DETAILS
SCALE: NTS

Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

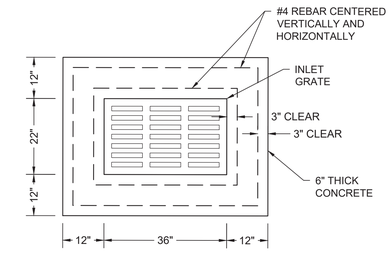
Office of Construction and Facilities Management

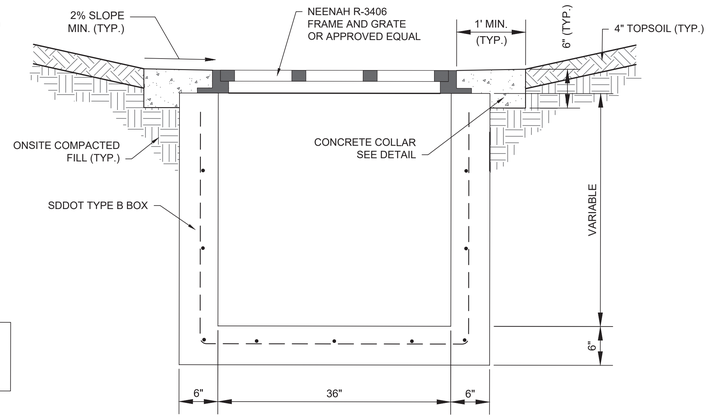
VA U.S. Department of Veterans Affairs

Drawing Title	CIVIL DETAILS
Phase	BID DOCUMENTS
Project Title	CONSTRUCT NEW SPS
Project Number	438-460
Building Number	5
Approved: Project Director	SIOUX FALLS VA HEALTH CARE SYSTEM
Location	SIOUX FALLS, SOUTH DAKOTA
Drawing Number	C-504
Issue Date	08/04/2022
Checked	EB
Drawn	AB

File Path: y:\16500\16584 va sioux falls - construct new sps - csps_07 civil_01 cad files_01 sheets\16584-c-cdet.dwg | xavied.7/6/2023 5:19 PM | pat.7/7/2023 1:31 PM | edt/ebrodmarkle

VA FORM 08 - 6231

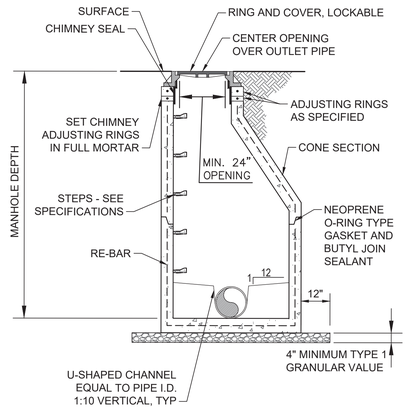


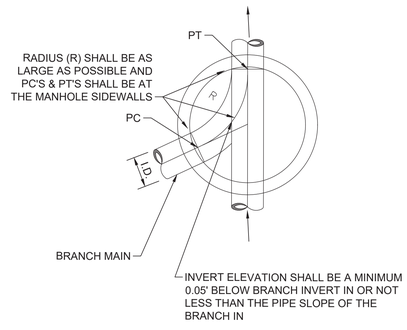


GENERAL NOTES:
1. CONCRETE SHALL BE CAST IN PLACE AND 4000 PSI.
2. COLLAR SHALL PROVIDE POSITIVE DRAINAGE TO INLET IN ALL DIRECTIONS, MIN. 2%, TRANSITION TO ADJACENT PAVEMENT.
3. ALL REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.

NEENAH R-3406 FRAME AND GRATE FOR AREA STORM INLET
N.T.S.

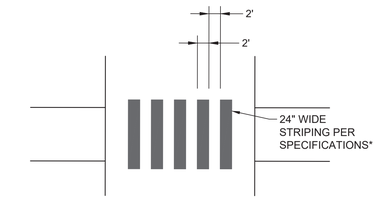
1 AREA INLET
SCALE: NTS





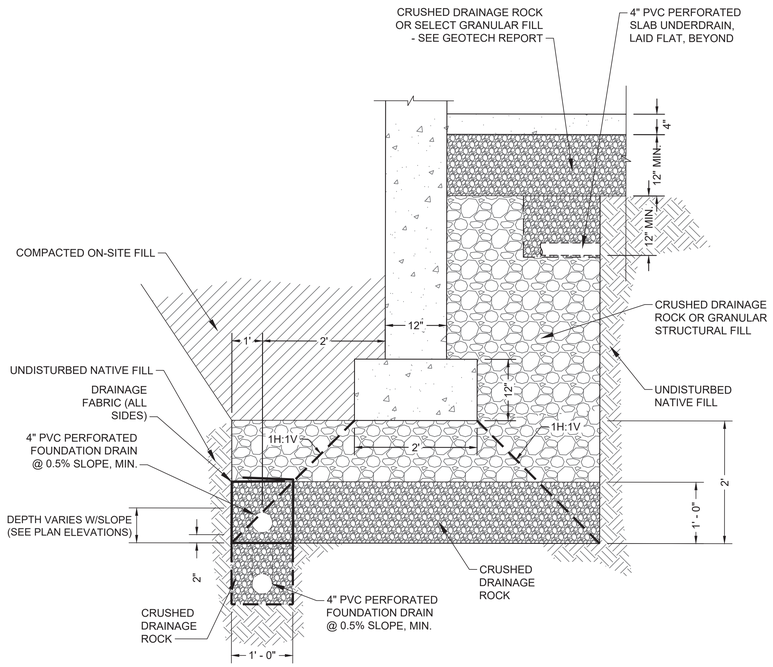
NOTES:
1. PC'S & PT'S ARE TO BE WITHIN THE MANHOLE.
2. ALL INVERTS TO BE U-SHAPED CHANNEL EQUAL TO PIPE I.D. AND SHALL BE CONSTRUCTED WITH SWEEPS.
3. A MINIMUM RADIUS (R) OF 2.5 TIMES THE I.D. OF THE BRANCH MAIN IS REQUIRED FOR ALL SWEEPS. IF THE 2.5 TIMES THE I.D. OF THE BRANCH CAN'T BE MET, A LARGER DIAMETER MANHOLE SHALL BE REQUIRED. MANHOLE PIPE CONNECTOR SHALL BE A RESILIENT WATERTIGHT SEAL.

2 SANITARY SEWER MANHOLE
SCALE: NTS

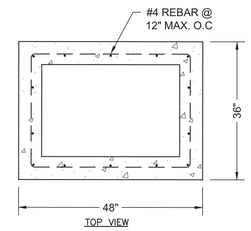


* CROSSWALK WIDTH TO MATCH ADJACENT SIDEWALK OR PATH WIDTH, BUT NOT LESS THAN 6' MEASURED BETWEEN LINES.

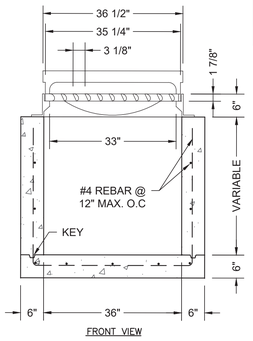
3 CROSSWALK DETAIL
SCALE: NTS

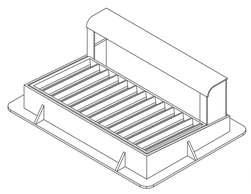


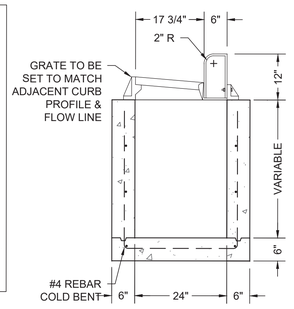
4 FOUNDATION DRAIN DETAIL
SCALE: NTS

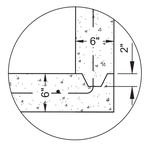


GENERAL NOTES:
1. CONCRETE SHALL HAVE 4000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. ALL STRUCTURAL JOINTS SHALL BE KEYED & WATER TIGHT.
3. EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60, CUT AND BEND BARS AS REQUIRED TO PLACE PIPE(S) THRU DROP INLET WALL.
4. PRECASTING OF TYPE "B" INLETS MAY BE PERMISSIBLE PRIOR TO RECASTING, THE CONTRACTOR SHALL SUBMIT DETAILS TO ENGINEER FOR APPROVAL.
5. MAXIMUM PIPE DIAMETER SHOULD NOT EXCEED 21 INCHES ON THE 3 FOOT WIDE SIDE OF THE TYPE "B" INLET.
6. IN SITUATIONS WHERE MULTIPLE INLETS ARE TO BE CONSTRUCTED ADJACENT TO ONE ANOTHER, THE COMMON INLET WALL SHALL BE CONSTRUCTED 12 INCHES THICK WITH THE EQUIVALENT AMOUNT OF REBAR AS IS REQUIRED FOR EACH INLET INDIVIDUALLY. THE CONVEYANCE OF STORM WATER THRU THE COMMON WALL SHALL BE BY INSTALLING THE APPROPRIATELY SIZED REINFORCED CONCRETE PIPE.





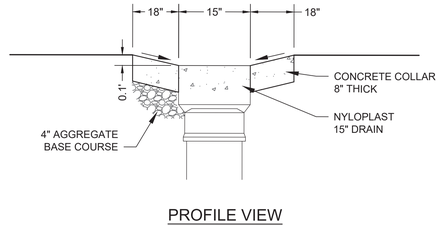




NOTE: BOX MANHOLE, TYPE ``B" DETAILS

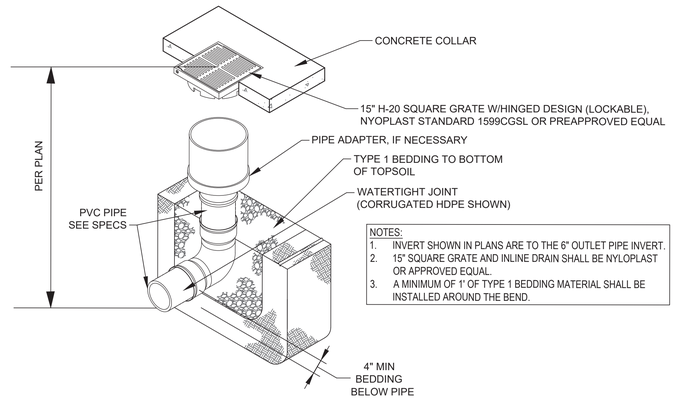
NEENAH R-3067 (V CURB INLET, FLOW-RIGHT SHOWN)

5 TYPE B INLET DETAIL
SCALE: NTS



PROFILE VIEW

PLAN VIEW



NOTES:
1. INVERT SHOWN IN PLANS ARE TO THE 6" OUTLET PIPE INVERT.
2. 15" SQUARE GRATE AND INLINE DRAIN SHALL BE NYLOPLAST OR APPROVED EQUAL.
3. A MINIMUM OF 1' OF TYPE 1 BEDDING MATERIAL SHALL BE INSTALLED AROUND THE BEND.

6 NYLOPLAST 15" SQUARE GRATE INLINE DRAIN
SCALE: NTS

Revisions:	Date:

CONSULTANTS

IMEG EC design

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

Office of Construction and Facilities Management

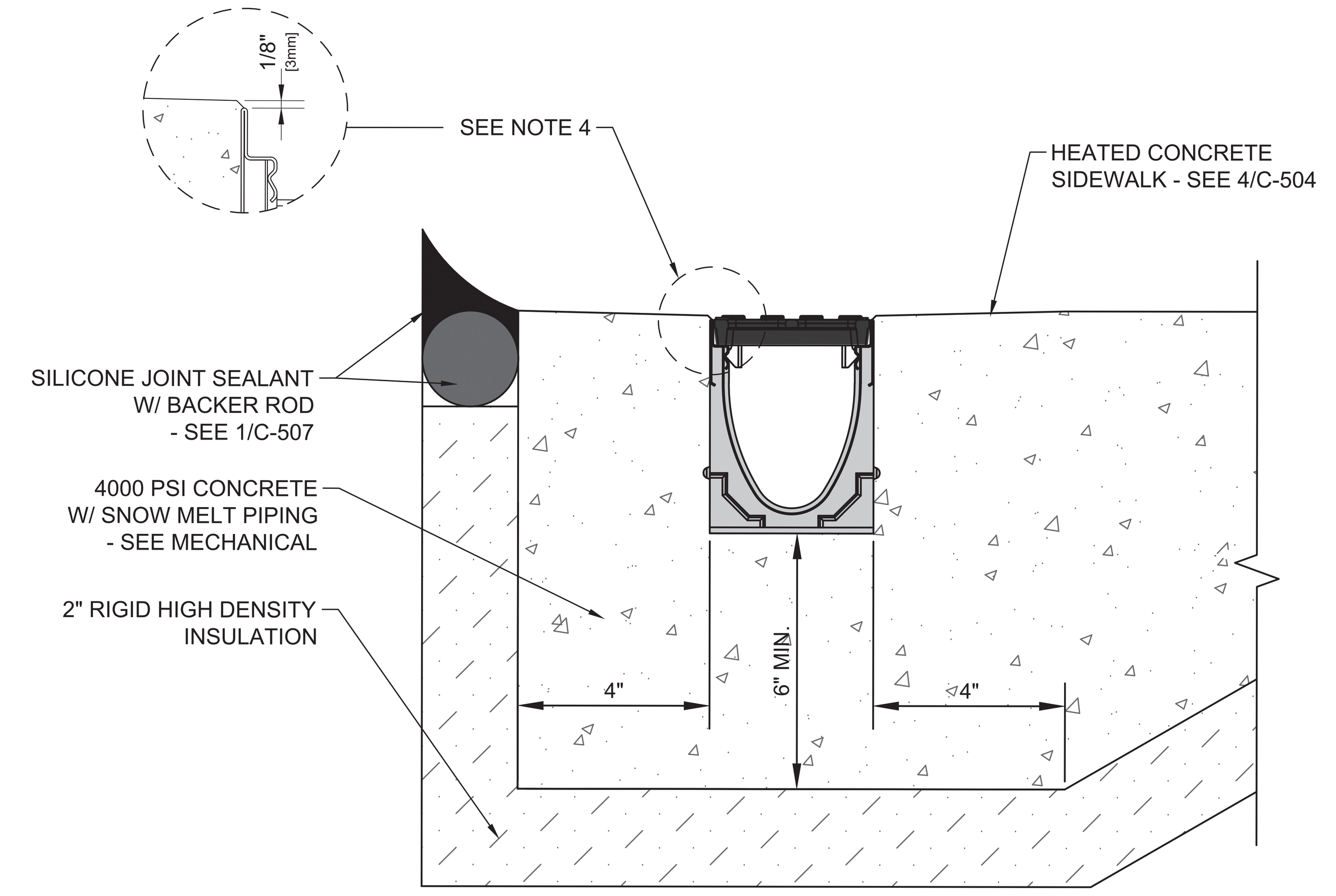
VA U.S. Department of Veterans Affairs

Drawing Title: CIVIL DETAILS	Phase: BID DOCUMENTS
Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM	FULLY SPRINKLERED

Project Title: CONSTRUCT NEW SPS		Project Number: 438-460
		Building Number: 5
Location: SIOUX FALLS, SOUTH DAKOTA		Drawing Number: C-505
Issue Date: 08/04/2022	Checked: EB	Drawn: AB

File Path: y:\16500\16584 va sioux falls - construct new sps - cpci_07 civil_01 cad files_01 sheets\16584-c-det.dwg | edit:ebrodmarkle | saved:7/6/2023 5:19 PM | plot:7/7/2023 1:31 PM

VA FORM 08 - 6231



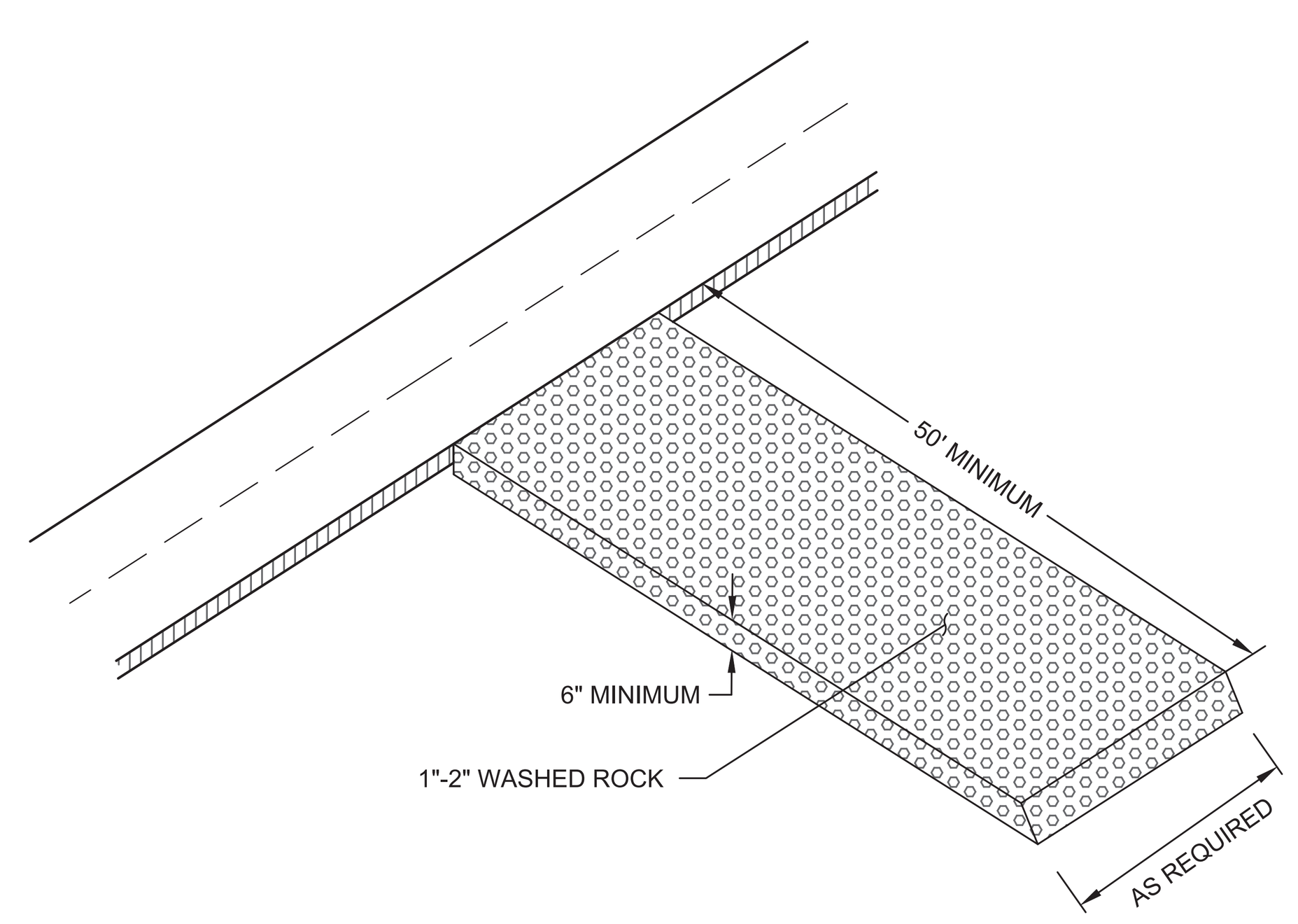
NOTES:

1. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" ABOVE THE TOP OF THE CHANNEL EDGE.
2. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
3. THE SYSTEM SHALL BE 4" NOMINAL INTERNAL WIDTH WITH A 5.1" OVERALL WIDTH AND A BUILT-IN SLOPE OF 0.5%. CHANNEL INVERT SHALL HAVE DEVELOPED "V" SHAPE. ALL CHANNELS SHALL BE INTERLOCKING WITH A MALE/FEMALE JOINT.
4. THE COMPLETE DRAINAGE SYSTEM SHALL BE BY ACO POLYMER PRODUCTS, INC. OR APPROVED EQUAL.
5. CHANNELS SHALL BE MANUFACTURED FROM POLYESTER RESIN POLYMER CONCRETE WITH AN INTEGRALLY CAST-IN STAINLESS STEEL EDGE RAIL. MINIMUM PROPERTIES OF POLYMER CONCRETE WILL BE AS FOLLOWS:

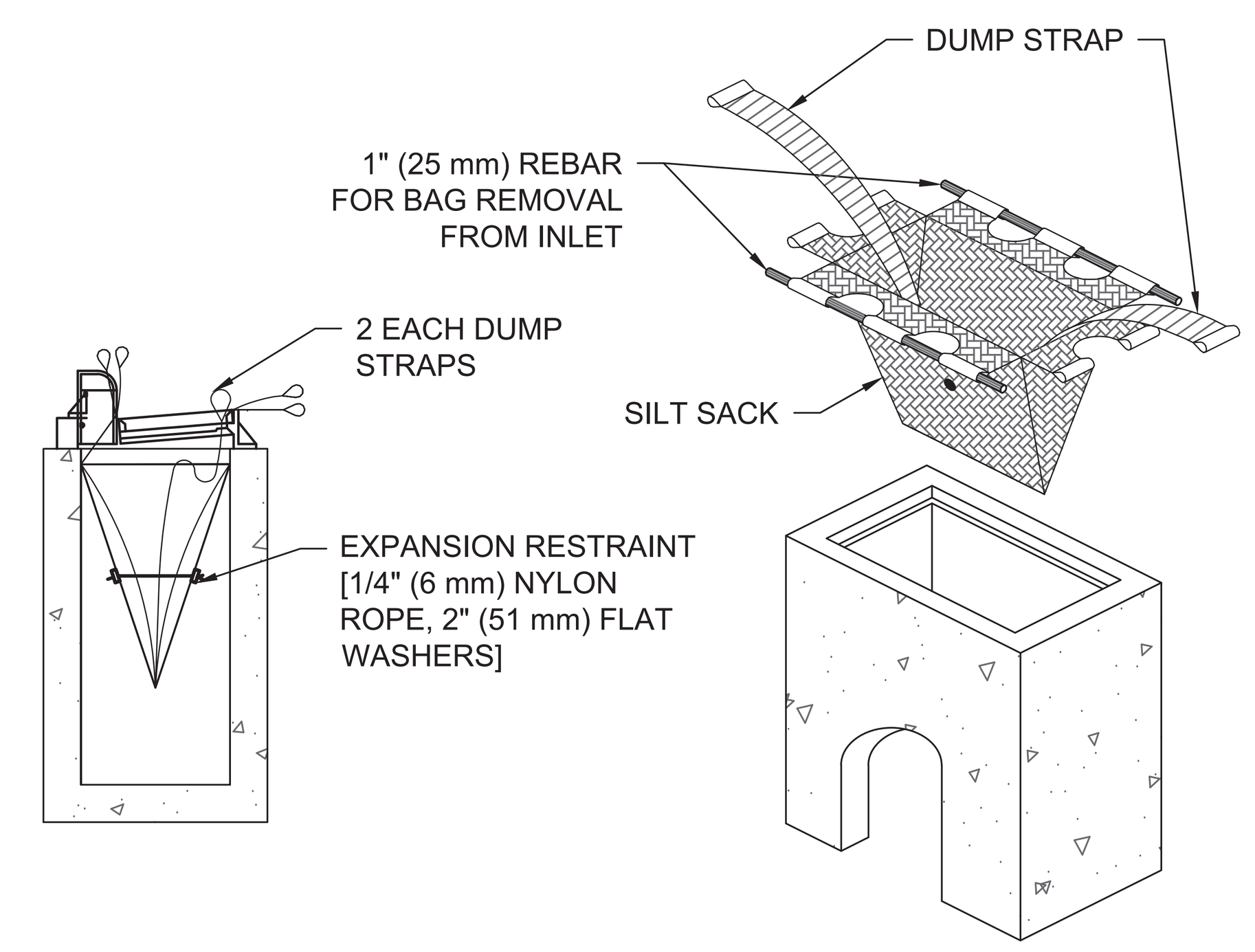
COMPRESSIVE STRENGTH:	14,000 PSI
FLEXURAL STRENGTH:	4,000 PSI
TENSILE STRENGTH:	1,500 PSI
WATER ABSORPTION:	0.07%
FROST PROOF	YES
DILUTE ACID AND ALKALI RESISTANT	YES
B117 SALT SPRAY TEST COMPLIANT	YES

6. FOLLOW SEALANT MANUFACTURER'S RECOMMENDATIONS FOR 2" WIDE JOINT.

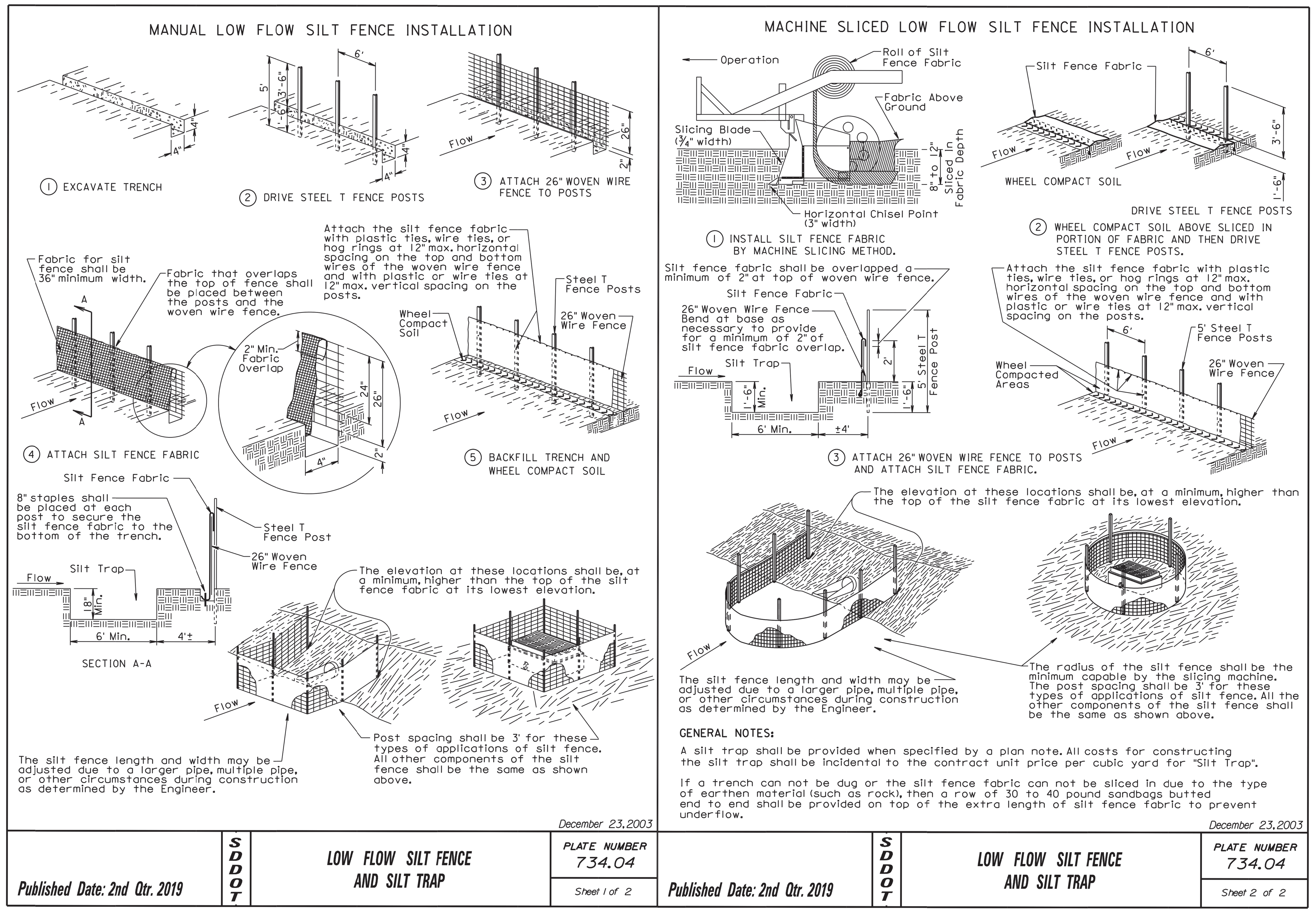
1 TRENCH DRAIN DETAIL
SCALE: NTS



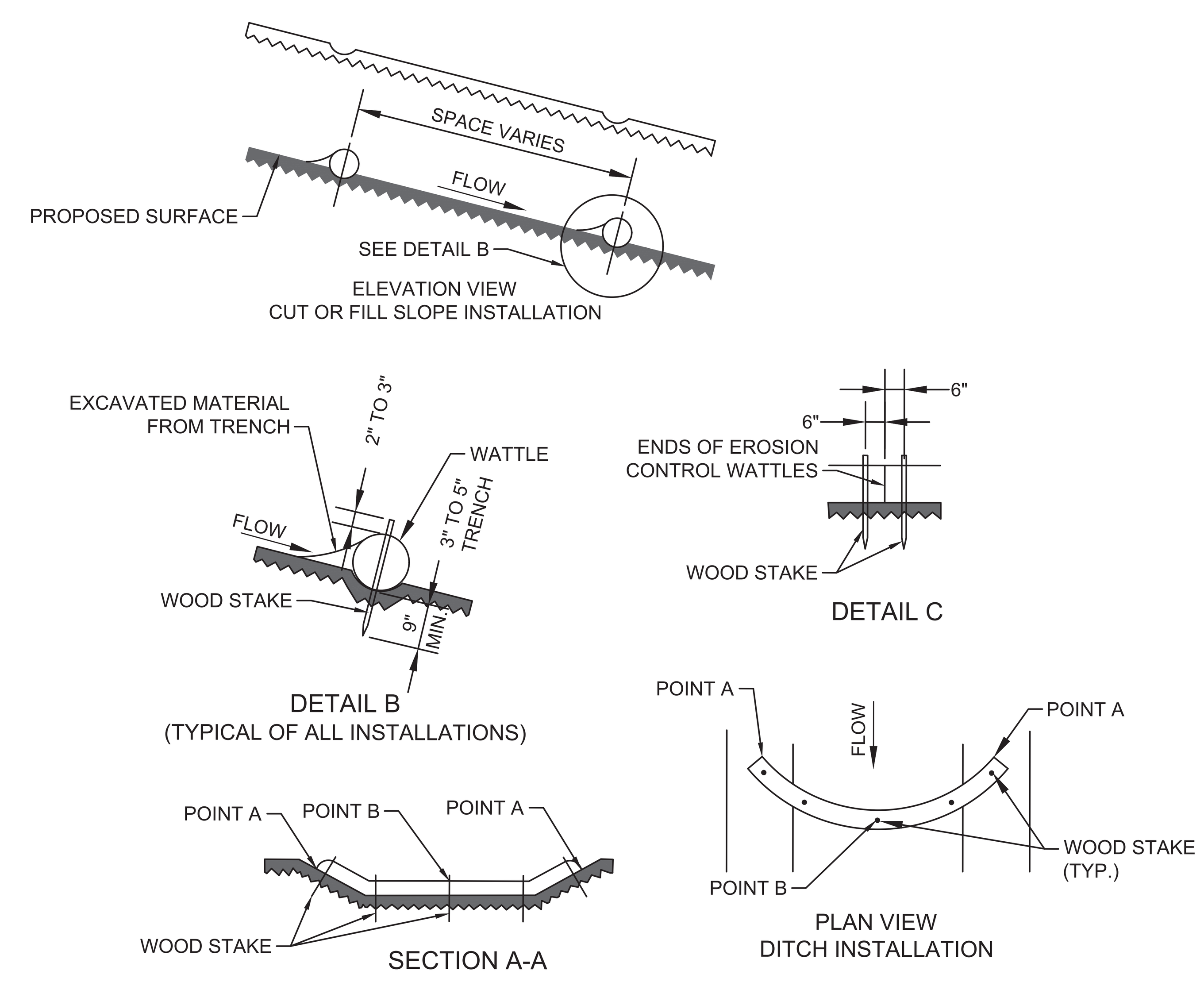
2 ROCK CONSTRUCTION ENTRANCE DETAIL
SCALE: NTS



3 INLET PROTECTION DETAIL
SCALE: NTS



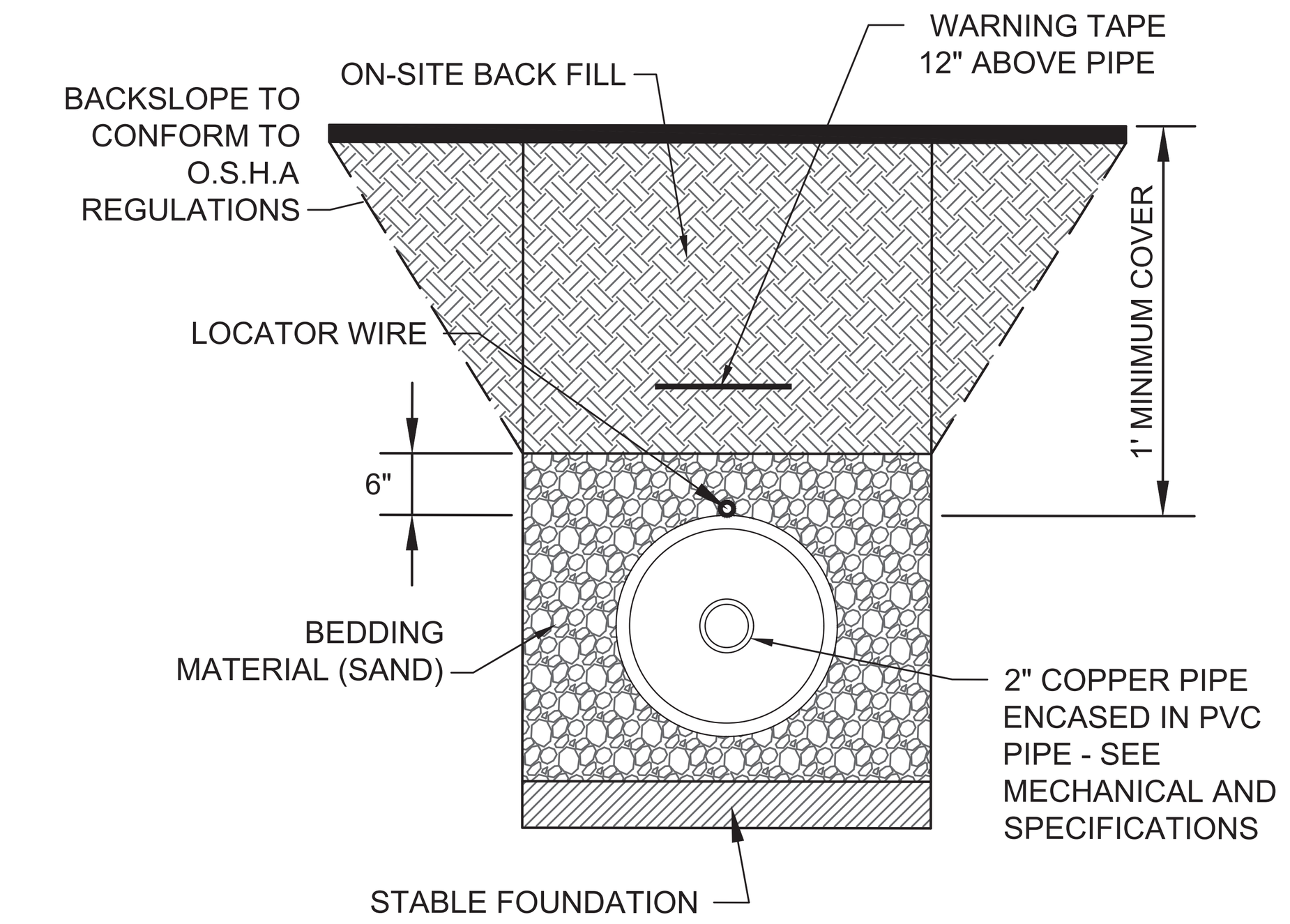
4 SILT FENCE DETAILS
SCALE: NTS



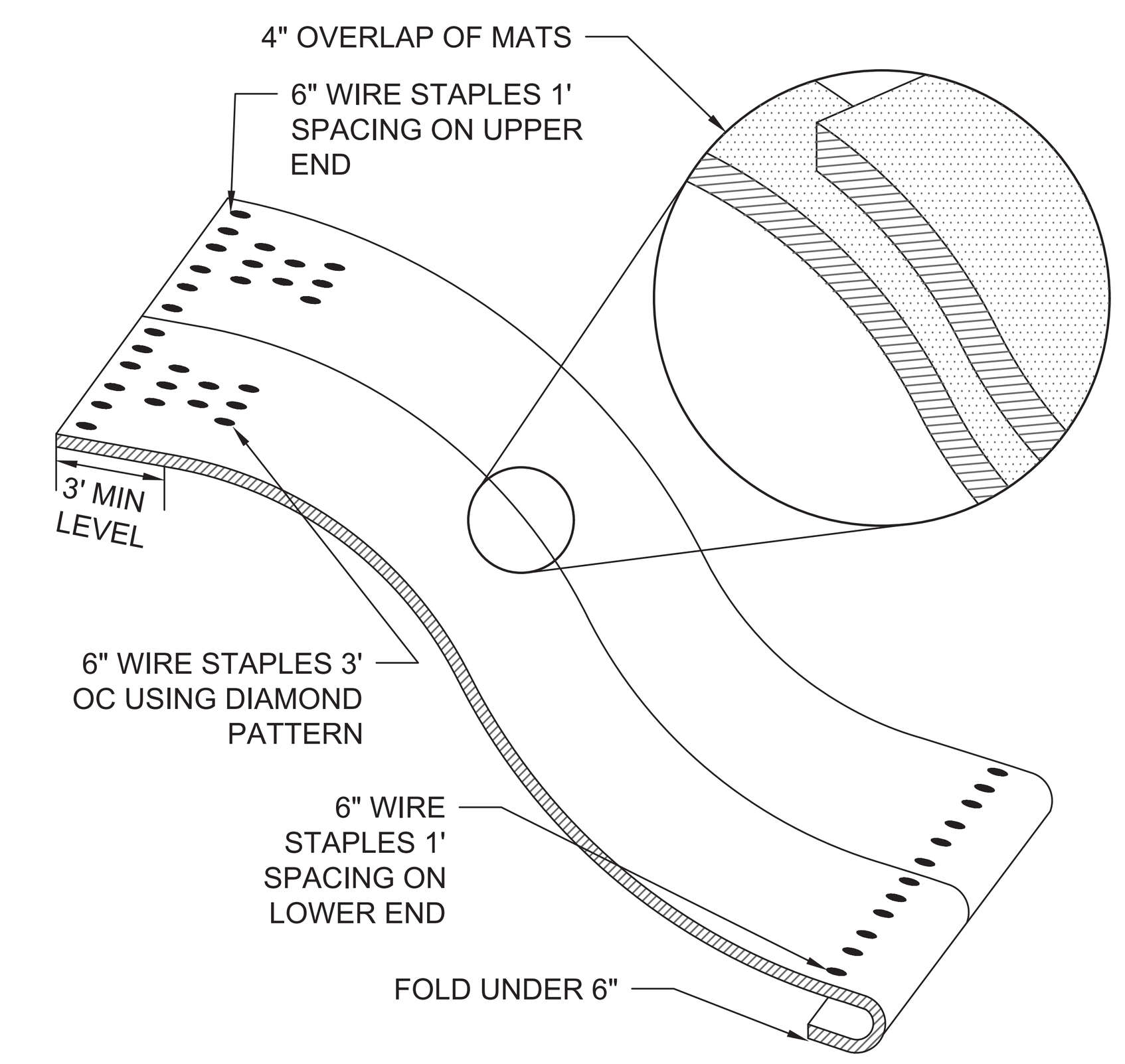
GENERAL NOTES:

1. AT CUT OR FILL SLOPE INSTALLATIONS WATTLES SHALL BE INSTALLED ALONG THE CONTOUR AND PERPENDICULAR TO THE WATER FLOW.
2. AT DITCH INSTALLATIONS, POINT "A" MUST BE HIGHER THAN POINT "B" SO THAT WATER FLOWS OVER THE WATTLE AND NOT AROUND THE ENDS.
3. THE CONTRACTOR SHALL DIG A 3" TO 5" TRENCH, INSTALL THE WATTLE TIGHTLY IN THE TRENCH SO THAT DAYLIGHT CAN NOT BE SEEN UNDER THE WATTLE, AND THEN COMPACT THE SOIL EXCAVATED FROM THE TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. SEE DETAIL B.
4. THE STAKES SHALL BE 1"X2" OR 2"X2" WOOD STAKES. HOWEVER, OTHER TYPES OF STAKES SUCH AS REBAR MAY BE USED. THE STAKES SHALL BE PLACED 6" FROM THE ENDS OF THE WATTLES AND THE SPACING OF THE STAKES ALONG THE WATTLES SHALL BE 3' TO 4'.
5. WHERE INSTALLING RUNNING LENGTHS OF WATTLES, THE CONTRACTOR SHALL BUTT THE SECOND WATTLE TIGHTLY AGAINST THE FIRST AND SHALL NOT OVERLAP THE ENDS. SEE DETAIL C.

5 SEDIMENT CONTROL WATTLE
SCALE: NTS



6 OXYGEN LINE TRENCH DETAIL
SCALE: NTS



7 EROSION CONTROL BLANKET
SCALE: NTS

Revisions:	Date:

CONSULTANTS

IMEG ECdesign

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 # 16584

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 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

EDWIN J. BRODMARKLE, PE
DATE: 2022.08.04 LICENSE NO: 55409

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: CIVIL DETAILS	Phase: BID DOCUMENTS	Project Title: CONSTRUCT NEW SPS	Project Number: 438-460
			Building Number: 5
Approved: Project Director: SIOUX FALLS VA HEALTH CARE SYSTEM	FULLY SPRINKLERED	Location: SIOUX FALLS, SOUTH DAKOTA	Drawing Number: C-506
		Issue Date: 08/04/2022 · Checked: EB · Drawn: AB	

VA FORM 08 - 6231

File Path: y:\16500\16584 va sioux falls - construct new sps - cpd_07 civil_01 cad files_01 sheets\16584-c-det.dwg | edit:ebrodmarkle | saved:7/6/2023 5:19 PM | plot:7/7/2023 1:31 PM