

MILITARY VEHICLE COMPOUND, FENCING AND SITE IMPROVEMENTS

JEFFERSON BARRACKS

ST. LOUIS, MISSOURI

OWNER: STATE OF MISSOURI
MIKE KEHOE,
GOVERNOR

MISSOURI NATIONAL GUARD
OFFICE OF THE ADJUTANT GENERAL
FACILITIES MANAGEMENT OFFICE

PROJECT
MANAGEMENT: OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DESIGNER: MITCH STROTHER PE
MISSOURI ARMY NATIONAL GUARD

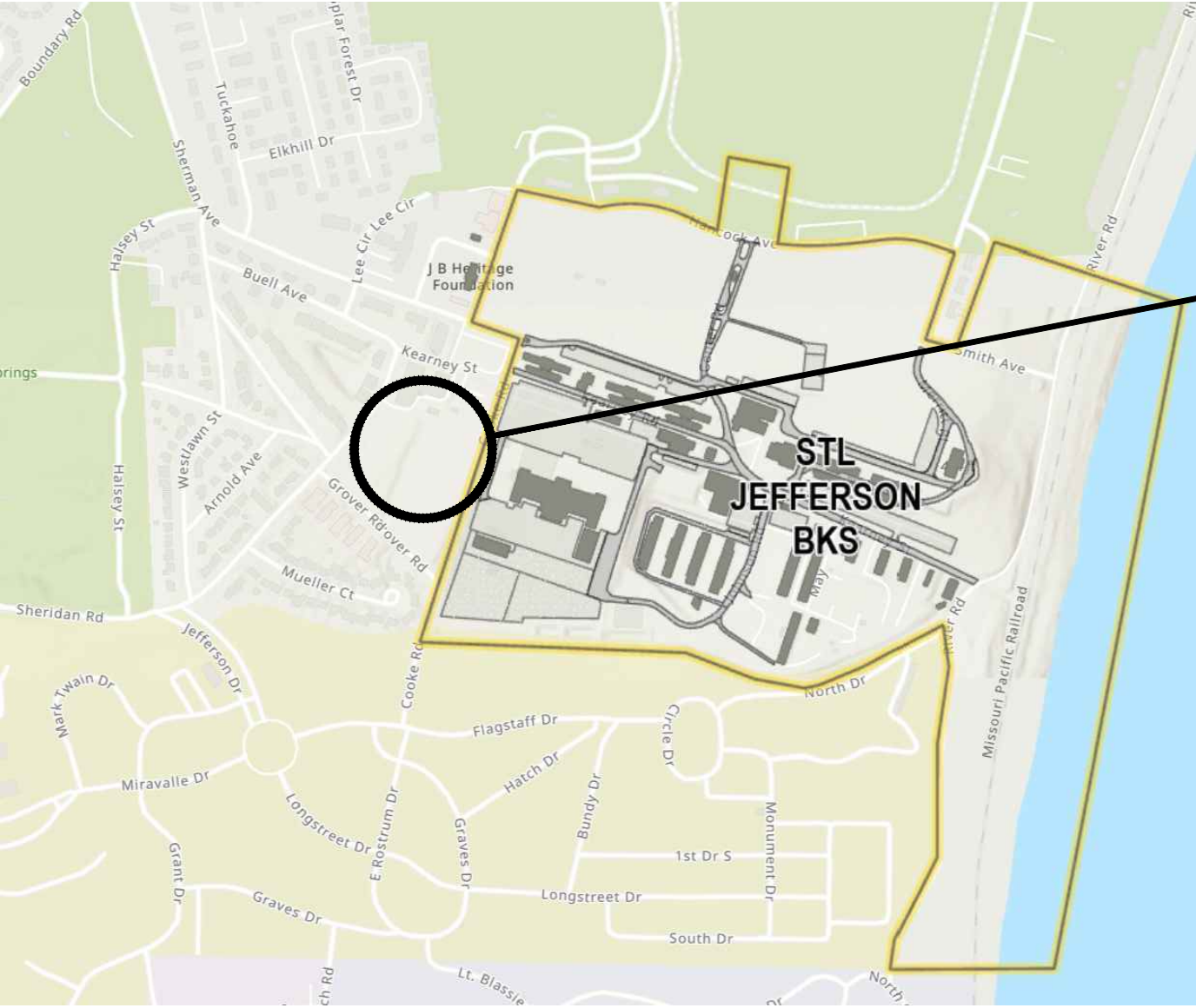
PROJECT NUMBER: T2504-01

SITE NUMBER: 6303
ASSET NUMBER: 8136303050



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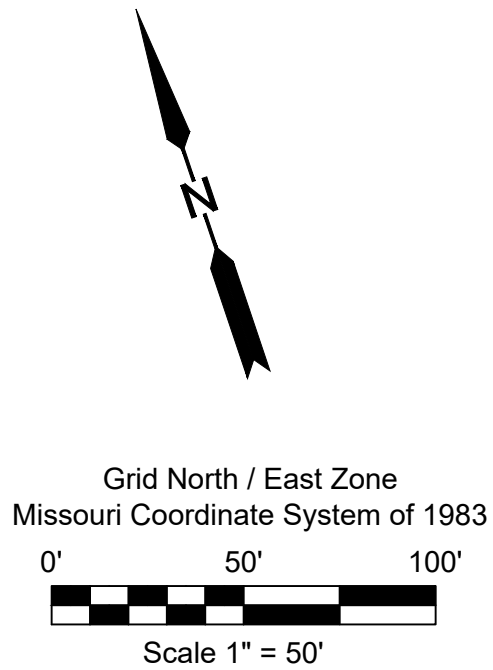


PROJECT LOCATION
ADDRESS:
74 KEARNEY STREET
ST. LOUIS, MO 63125

COORDINATES:
38.504, -90.285

SHEET NUMBER:

G-001

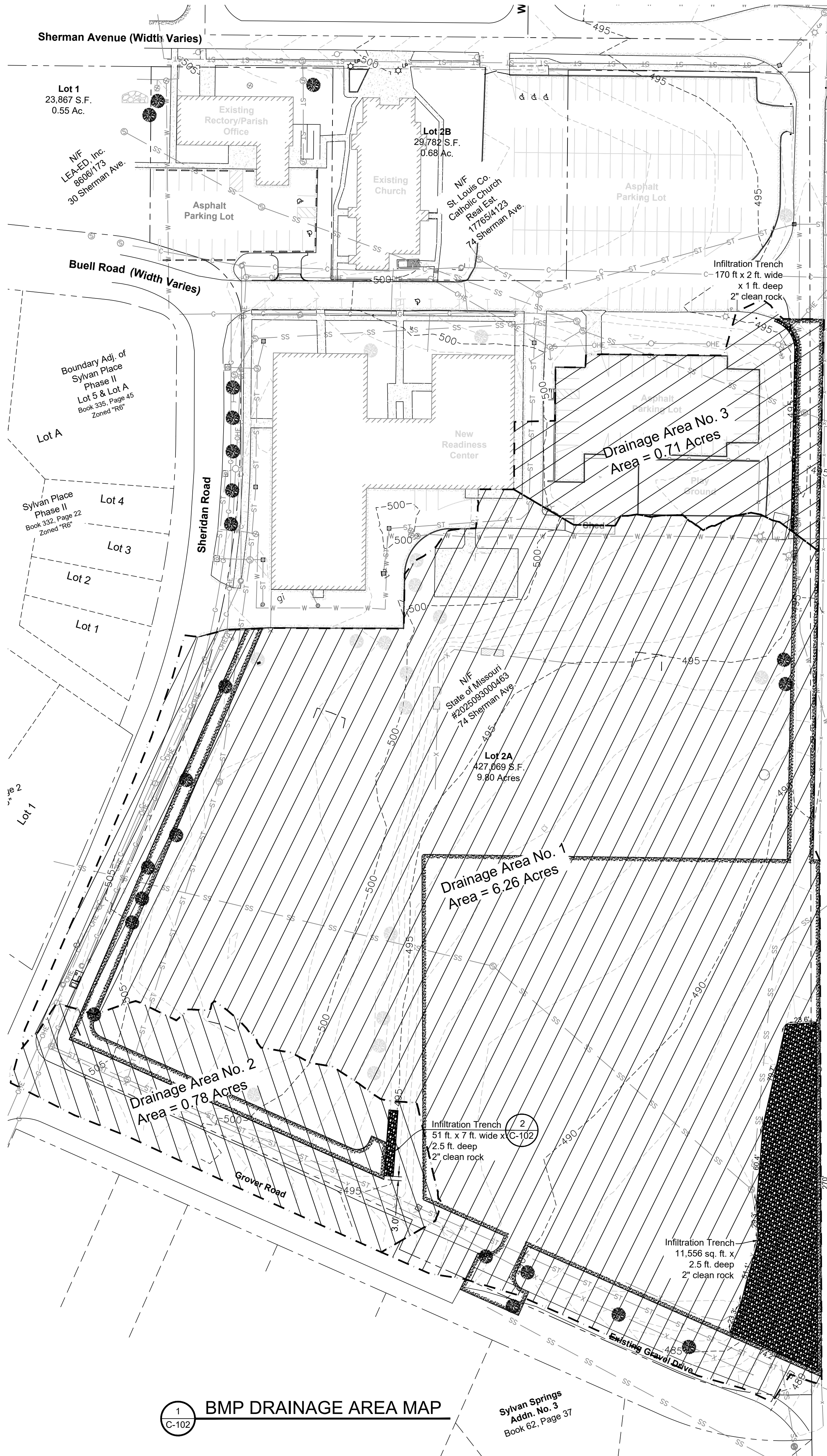


1. EXISTING UTILITIES DEPICTED ON THESE PLANS ARE BASED ON UTILITIES VISIBLE DURING THE SITE SURVEY AND/OR PER AVAILABLE SURVEYS AND RECORDS; THEREFORE, LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES, THE EXISTENCE OF WHICH, AT PRESENT, IS NOT KNOWN. VERIFICATION OF THE LOCATIONS OF UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, UTILITY LOCATES WILL BE REQUIRED PRIOR TO CONSTRUCTION. CONTACT THE MISSOURI ONE CALL SYSTEM AT 1-800-DIG-RITE (1-800-344-7483) PRIOR TO EXCAVATION OR DEMOLITION.
2. HORIZONTAL & VERTICAL CONTROL WERE DERIVED FROM THE MISSOURI DEPARTMENT OF TRANSPORTATION'S REAL-TIME NETWORK. THE HORIZONTAL CONTROL IS UTILIZING THE MISSOURI STATE PLANE COORDINATE SYSTEM, EAST ZONE, CONVERTED TO U.S. SURVEY FEET AND THE VERTICAL CONTROL IS BASED FROM NAVD88 DATUM.
3. THE STORM & SANITARY SEWER LINE IS SHOWN PER "ME 1" DRAWING BY HARRY C. LEPIQUE ARCHITECT DATED 09-24-1964. THIS LINE HAS NOT BEEN FIELD VERIFIED.
4. ALL TREES LEFT IN PLACE NEAR THE PERIMETER FENCE WILL HAVE ALL BRANCHES REMOVED TO A HEIGHT OF 10 FEET ABOVE GROUND FOR VISIBILITY AND LINE OF SITE.
5. CONTRACTOR SHALL REMOVE ALL ITEMS LISTED AS "TO BE REMOVED" AND LEGALLY DISPOSE OF OFF-SITE.
6. THE 12" HOLLY TREE IS LOCATED ON THE ADJACENT PROPERTY. CONTRACTOR SHALL COORDINATE TREE REMOVAL WITH OWNER.
7. CONTRACTOR SHALL SAW-CUT AND REMOVE EXISTING CONCRETE SIDEWALK/PAVING IN AREAS DEPICTED ON THIS SHEET. CONTRACTOR SHALL REPLACE CONCRETE WITH TOPSOIL THEN SEED AND STRAW.

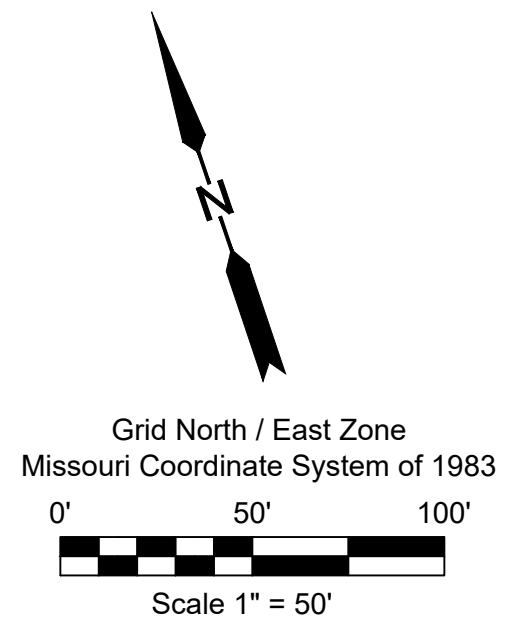
ALTERNATE NO. 1 - 820 SF CONCRETE SIDEWALK/PAVEMENT, AND 90 LF CONCRETE CURB

LEGEND	
MAJOR CONTOUR	-----930-----
MINOR CONTOUR	
EXISTING CHAIN LINK FENCE	-----X-----X-----
PROPERTY LINE	-----
OVERHEAD ELECTRIC LINE	-----OHE-----
UNDERGROUND ELECTRIC LINE	-----UGE-----UGE-----
SANITARY SEWER LINE	-----SS-----SS-----
WATER LINE	-----W-----W-----W-----
STORM SEWER LINE	-----ST-----ST-----ST-----
GAS LINE	-----G-----G-----
COMMUNICATION LINE	-----C-----C-----
STORM INLET	
SANITARY SEWER MANHOLE	
COMMUNICATION MANHOLE	
GAS VALVE	
WATER VALVE	
FIRE HYDRANT	
LIGHT POLE	
UTILITY POLE & GUY WIRE	
CONTROL MARK	
TREE (TO REMAIN)	
TREE (TO BE REMOVED)	
TO BE REMOVED	
	TBR

MSD Project No.: 26MSD-00227
SD Base Map No.: 29H2



NIF
State of Missouri
#202000000453
21 Center Dr.



Stormwater Calculations - Differential Flow
by: Mitch Strother, PE
6/20/2026

NAME	AREA (SQ. FT.)	AREA (ACRES)	POST CONSTRUCTION					DIFFERENTIAL FLOW (CFS)
			POST CONSTRUCTION AREA OF IMPERVIOUS AREA OF IMPERVIOUS (ACRES)	POST CONSTRUCTION IMPERVIOUS FLOW 3.54XACRES (CFS)	POST CONSTRUCTION AREA OF PERVIOUS AREA OF PERVIOUS (ACRES)	POST CONSTRUCTION PERVIOUS FLOW 1.70XACRES (CFS)	POST CONSTRUCTION COMBINED FLOW (CFS)	
DRAINAGE NO. 1	272,663	6.26	2.42	8.56	3.84	6.53	15.09	
DRAINAGE NO. 2	34,121	0.78	0.08	0.29	0.70	1.19	1.48	
DRAINAGE NO. 3	30,839	0.71	0.39	1.38	0.32	0.54	1.92	
TOTALS:	337,623	7.75	2.89	10.23	4.86	8.26	18.50	

NAME	AREA (SQ. FT.)	AREA (ACRES)	PRE-CONSTRUCTION					DIFFERENTIAL FLOW (CFS)
			PRE-CONSTRUCTION AREA OF IMPERVIOUS AREA OF IMPERVIOUS (ACRES)	PRE-CONSTRUCTION IMPERVIOUS FLOW 3.54XACRES (CFS)	PRE-CONSTRUCTION AREA OF PERVIOUS AREA OF PERVIOUS (ACRES)	PRE-CONSTRUCTION PERVIOUS FLOW 1.70XACRES (CFS)	PRE-CONSTRUCTION COMBINED FLOW (CFS)	
DRAINAGE NO. 1	24,993	0.57	0.13	0.44	6.13	10.43	10.87	4.22
DRAINAGE NO. 2	19,442	0.45	0.00	0.00	0.78	1.33	1.33	0.15
DRAINAGE NO. 3	24,700	0.57	0.36	1.26	0.35	0.60	1.86	0.06
TOTALS:	69,135	1.59	0.48	1.70	7.27	12.36	14.06	4.43

TOTAL DIFFERENTIAL FLOW = 4.43 C.F.S. = INCREASE IN FLOW

TOTAL POST CONSTRUCTION FLOW = 18.50 CFS
TOTAL PRE-CONSTRUCTION FLOW = 14.06 CFS
TOTAL PROJECT FLOW DIFFENTIAL = 4.43 CFS

ST. BERNADETTE INFILTRATION TRENCH CALCULATIONS
40% Void Ratio Rock Catchment/Trench Calculations
Calculated By: Mitch Strother, P.E.
6/20/2026

Calculate the amount of water storage needed for the proposed
additional impervious surface or other changes using the APWA MARC
manual section 6.2 shortcut method

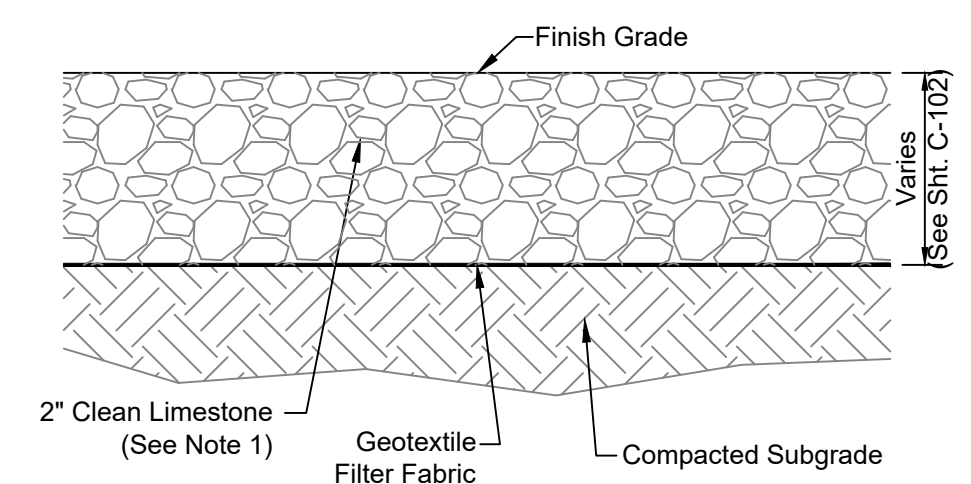
(DRAINAGE NO. 1) AREA OF IMPERVIOUS MVC DRAINING TO SOUTHEAST CORNER OF MVC		
IMPERVIOUS AREA =	113,519 Sq. Ft.	Credit Area
WQv = P x Rv = Water Quality Volume		
P =	1.37 inches	
Rv = 0.05 + 0.009 x I		
I =	90 Percent Imperviousness	
Rv =	0.86	
WQv =	1.1782 inches	
WQv =	0.0982 feet	
Percent Voids in Rock Infiltration Trench = 40%		
Catch Volume w/40% Voids = Addition Area X WQV/Percent Voids =	27,864.18 Cubic Feet	
Proposed Area of 40% Void Rock =	11,556.00 Square Feet	
Depth of 40% Voids Rock Required =	2.41 Feet	
Use Rock Catch Infiltration Trench in Southeast Corner of MVC =	2.50 ft. deep x 11,556 square Feet = 28,890 Cubic Feet	

(DRAINAGE NO. 2) AREA OF IMPERVIOUS AGGREGATE DRIVE ALONG WEST & SOUTH SIDE		
IMPERVIOUS AREA =	3,610 Sq. Ft.	Credit Area
WQv = P x Rv = Water Quality Volume		
P =	1.37 inches	
Rv = 0.05 + 0.009 x I		
I =	90 Percent Imperviousness	
Rv =	0.86	
WQv =	1.1782 inches	
WQv =	0.0982 feet	
Percent Voids in Rock Infiltration Trench = 40%		
Catch Volume w/40% Voids = Addition Area X WQV/Percent Voids =	886.10 Cubic Feet	
Proposed Area of 40% Void Rock =	357.00 Square Feet - 51' long x 7' wide	
Depth of 40% Voids Rock Required =	2.48 Feet Deep	
Rock Infiltration Trench =	2.50 ft. deep x 51' long x 7' wide = 892.5 Cubic Feet	

(DRAINAGE NO. 3) AREA OF IMPERVIOUS INCREASED WIDTH OF DRIVE EAST SIDE		
IMPERVIOUS AREA =	1,444 Sq. Ft.	Credit Area
WQv = P x Rv = Water Quality Volume		
P =	1.37 inches	
Rv = 0.05 + 0.009 x I		
I =	90 Percent Imperviousness	
Rv =	0.86	
WQv =	1.1782 inches	
WQv =	0.0982 feet	
Percent Voids in Rock Infiltration Trench = 40%		
Catch Volume w/40% Voids = Addition Area X WQV/Percent Voids =	354.44 Cubic Feet	
Proposed Area of 40% Void Ratio 2" Clean Rock =	340 Square Feet - 170' long x 2' wide	
Depth of 40% Voids Rock Required =	1.04 Feet Deep	
Rock Infiltration Trench =	1 ft. deep x 170' long x 2' wide = 340 Cubic Feet	

GENERAL NOTES:

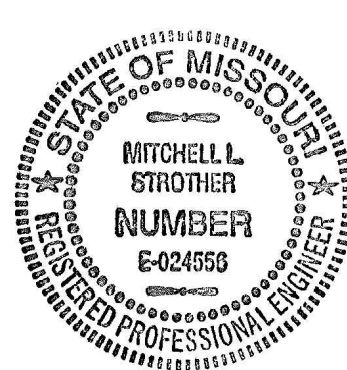
- CONSTRUCTION SITE RUNOFF SHALL NOT FLOW INTO BMP AREAS. ALL STORMWATER FLOW TO BMP AREAS SHALL BE DIVERTED, PLUGGED OR DISCONNECTED UNTIL THE CONSTRUCTION SITE IS STABLE AND THE MSD INSPECTOR PROVIDES APPROVAL TO PLACE THE BMP ON-LINE.
- TO PREVENT CONSTRUCTION SEDIMENT FROM CLOGGING INFILTRATION TRENCH, AT NO TIME MAY CONSTRUCTION SEDIMENT ENTER THESE FACILITIES. ADDITIONALLY, THESE FACILITIES SHALL NOT BE CONSTRUCTED UNTIL THE SURROUNDING AREA THAT DRAINS TO THEM IS FULLY STABLE/ESTABLISHED.
- MSD SHOP DRAWING SUBMITTAL REQUIRED FOR BMP (INFILTRATION TRENCH) AND ITS COMPONENTS PRIOR TO CONSTRUCTION. MSD CONTACT: PLEASE CONTACT THE DISTRICT'S CONSTRUCTION MANAGEMENT DIVISION AT (314) 335-2072 FOR QUESTIONS.
- ANY FUTURE LAND DISTURBANCE AND/OR INCREASE IN IMPERVIOUS AREA ON THIS SITE MAY REQUIRE ADDITIONAL STORMWATER MANAGEMENT PER MSD REGULATIONS IN PLACE AT THAT TIME (INCLUDING TOTAL LAND DISTURBANCE AND/OR IMPERVIOUSNESS ADDED ON THIS PLAN.)



- NOTES:
- CONTRACTOR SHALL EXCAVATE TO A DEPTH DEPICTED ON SHEET C-102, PLACE 2" CLEAN LIMESTONE ON GEOTEXTILE FILTER FABRIC. GEOTEXTILE SHALL BE LINQ 180EX 8oz. NON-WOVEN OR APPROVED EQUAL.
 - REMOVE BRUSH AND ROOTS BEFORE INSTALLING GEOTEXTILE.

2 INFILTRATION TRENCH
C-102
SCALE: 1" = 1'

LEGEND	
MAJOR CONTOUR	-----930-----
MINOR CONTOUR	-----
EXISTING CHAIN LINK FENCE	---X---X---
PROPERTY LINE	-----
OVERHEAD ELECTRIC LINE	---OHE---
UNDERGROUND ELECTRIC LINE	---UGE---UGE---
SANITARY SEWER LINE	---SS---SS---
WATER LINE	---W---W---
STORM SEWER LINE	---ST---ST---ST---
GAS LINE	---G---G---
COMMUNICATION LINE	---C---C---
STORM INLET	⊠
SANITARY SEWER MANHOLE	⊙
COMMUNICATION MANHOLE	⊙
GAS VALVE	⊙
WATER VALVE	⊙
FIRE HYDRANT	⊙
LIGHT POLE	⊙
UTILITY POLE & GUY WIRE	⊙
CONTROL MARK	⊙
TREE (TO REMAIN)	⊙
TREE (TO BE REMOVED)	⊙
TO BE REMOVED	TBR



MITCHELL L. STROTHER
PROFESSIONAL ENGINEER - E-024556



OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI
NATIONAL GUARD
FACILITIES DIVISION
6819A N. BOUNDARY ROAD
JEFFERSON CITY, MO 65101
PHONE: 573-638-9500, EXT. 37015

MILITARY VEHICLE
COMPOUND,
FENCING AND SITE
IMPROVEMENTS

JEFFERSON BARRACKS
74 KEARNEY ST.
ST. LOUIS CO., MO

PROJECT # T2504-01
SITE # 6303
ASSET # 8136303050

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 07/01/2026

CAD DWG FILE: T250401
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

SHEET TITLE:

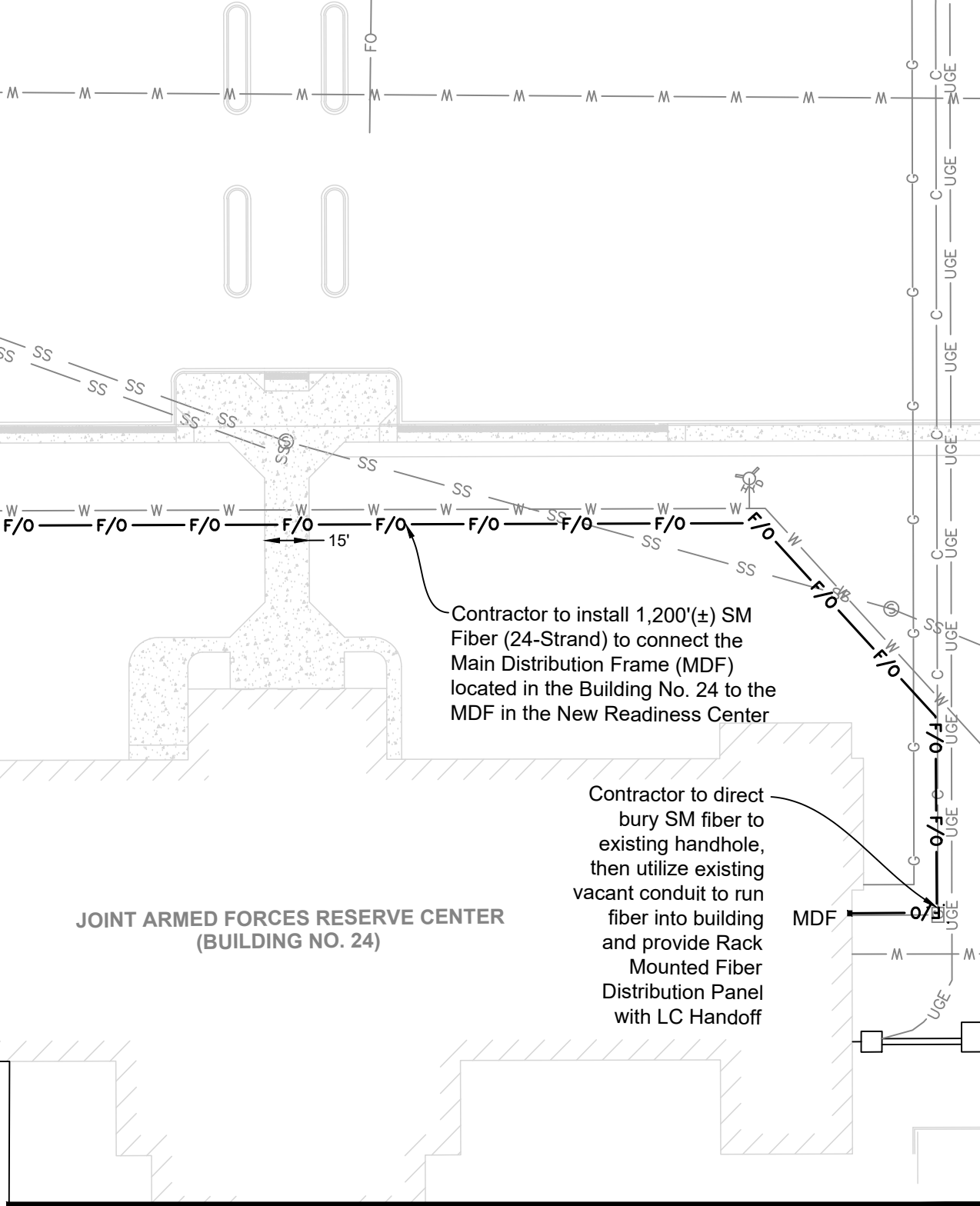
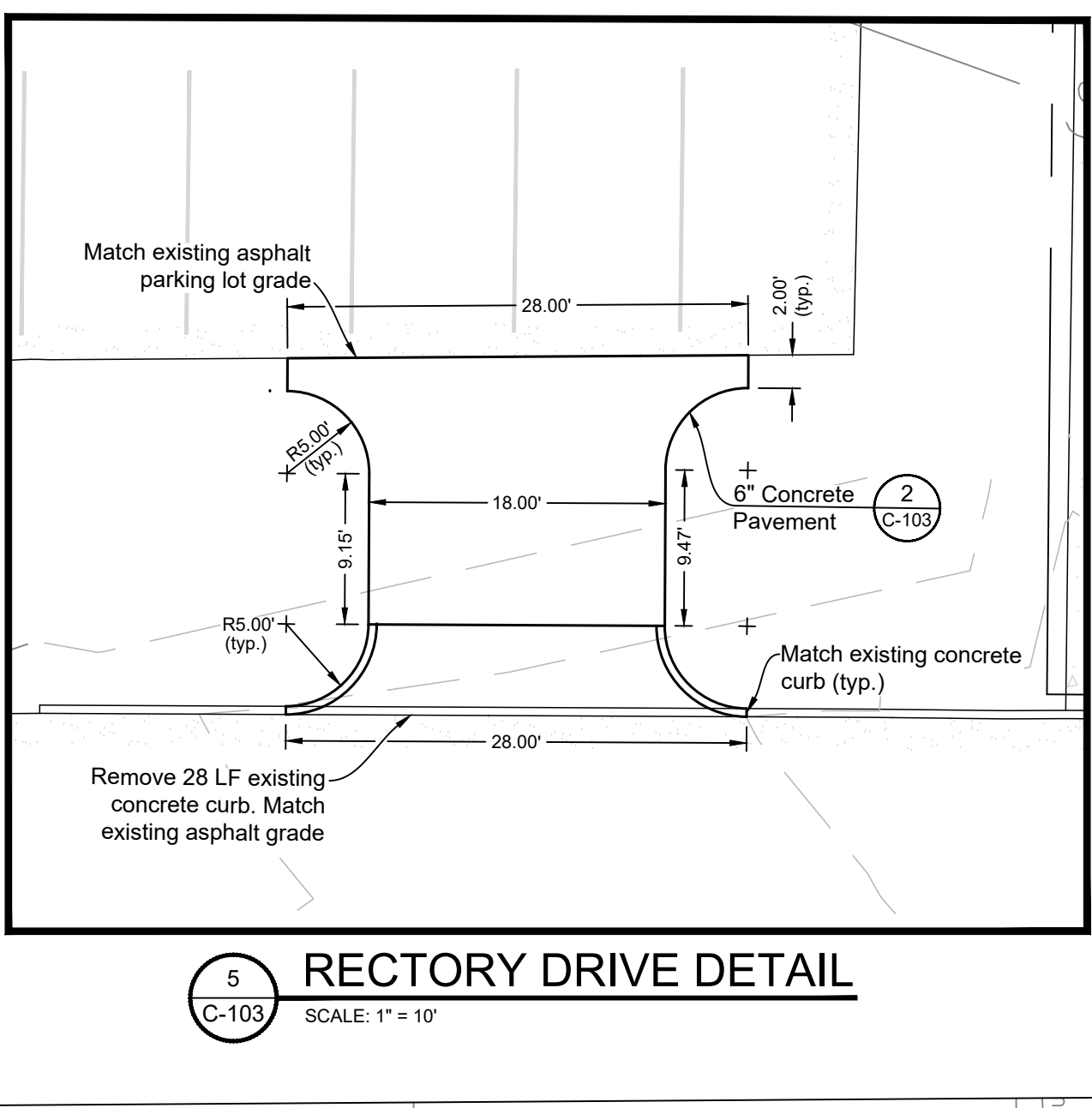
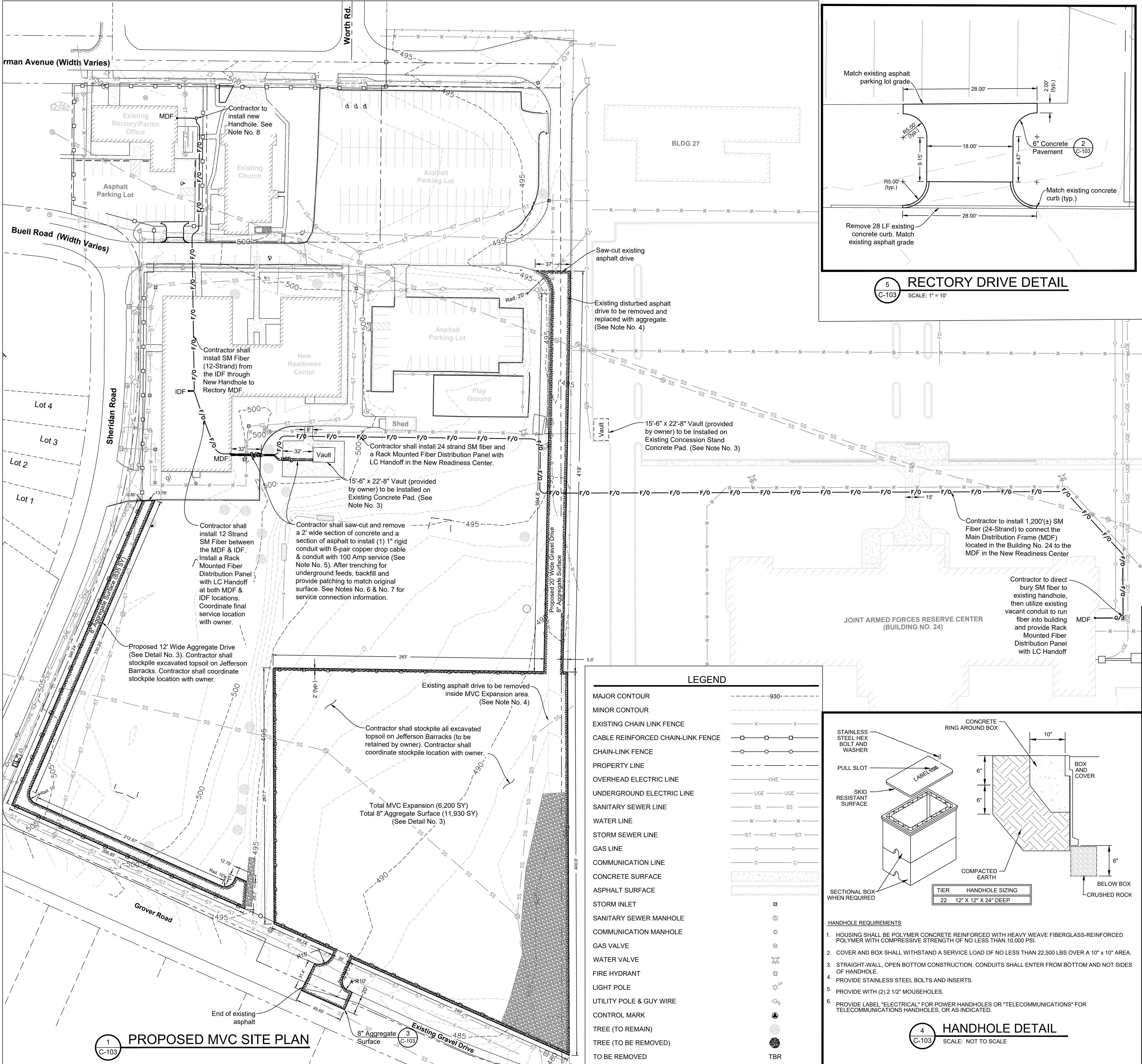
BMP DRAINAGE
AREA MAP

SHEET NUMBER:

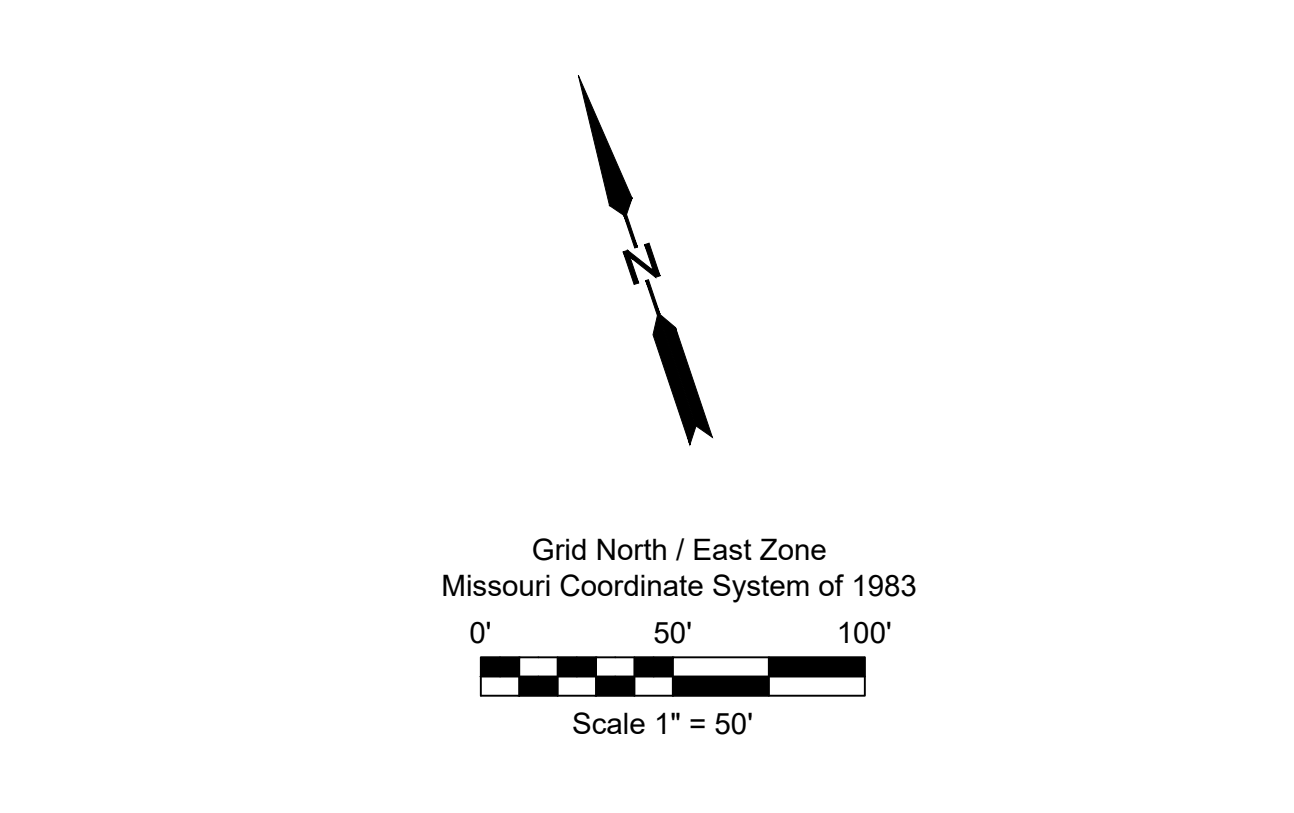
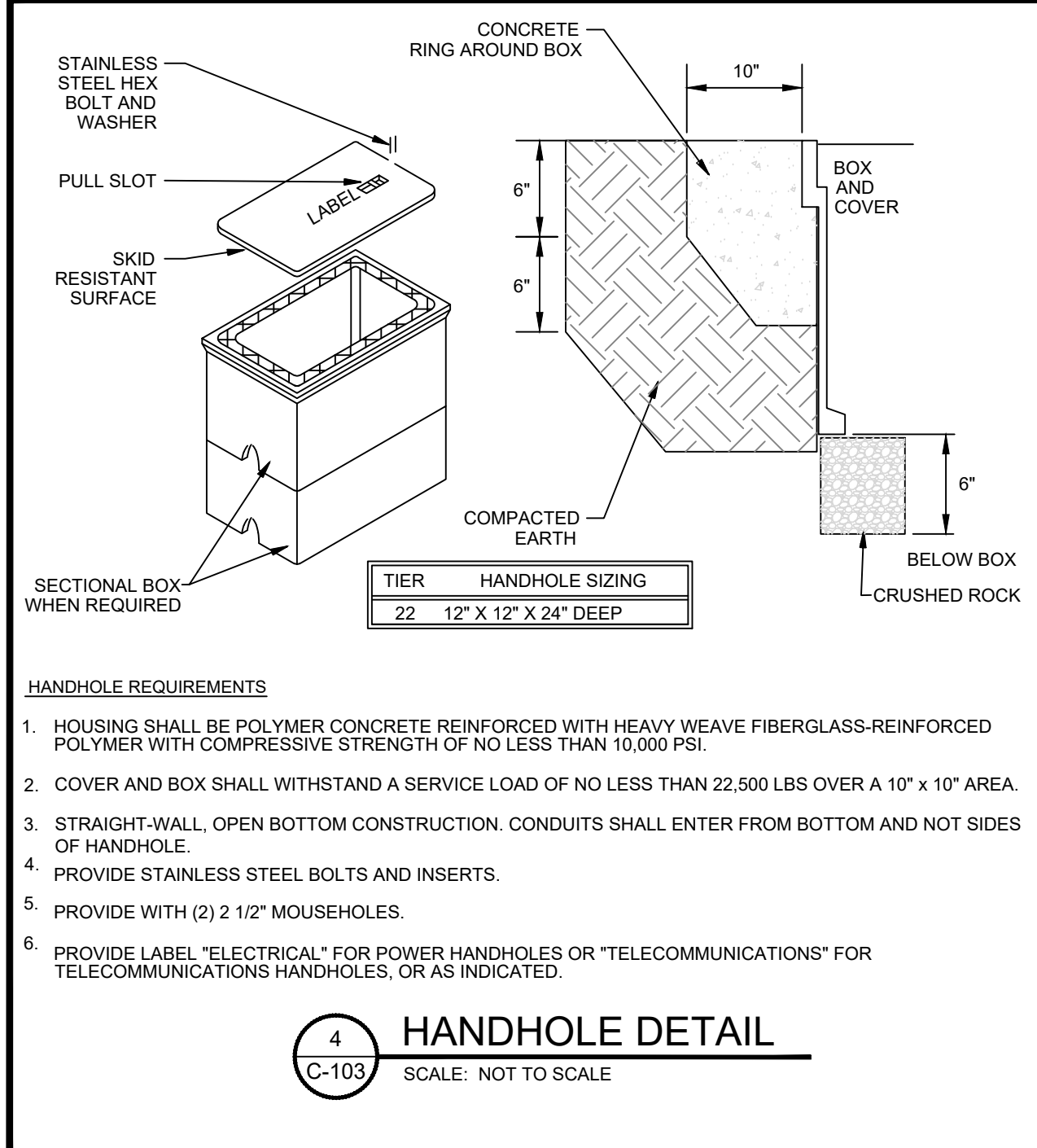
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SHEET: 3 OF 15
DATE: 07/01/2026

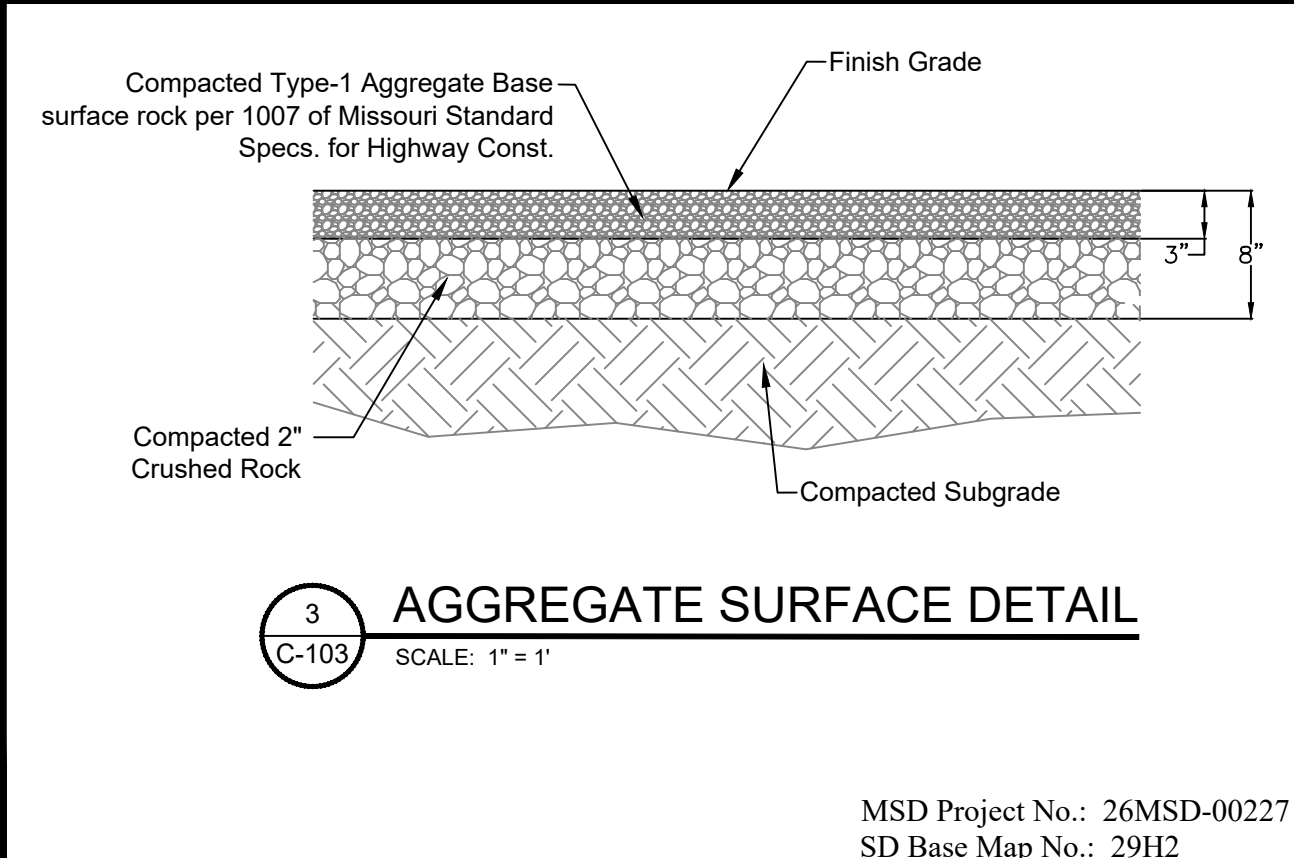
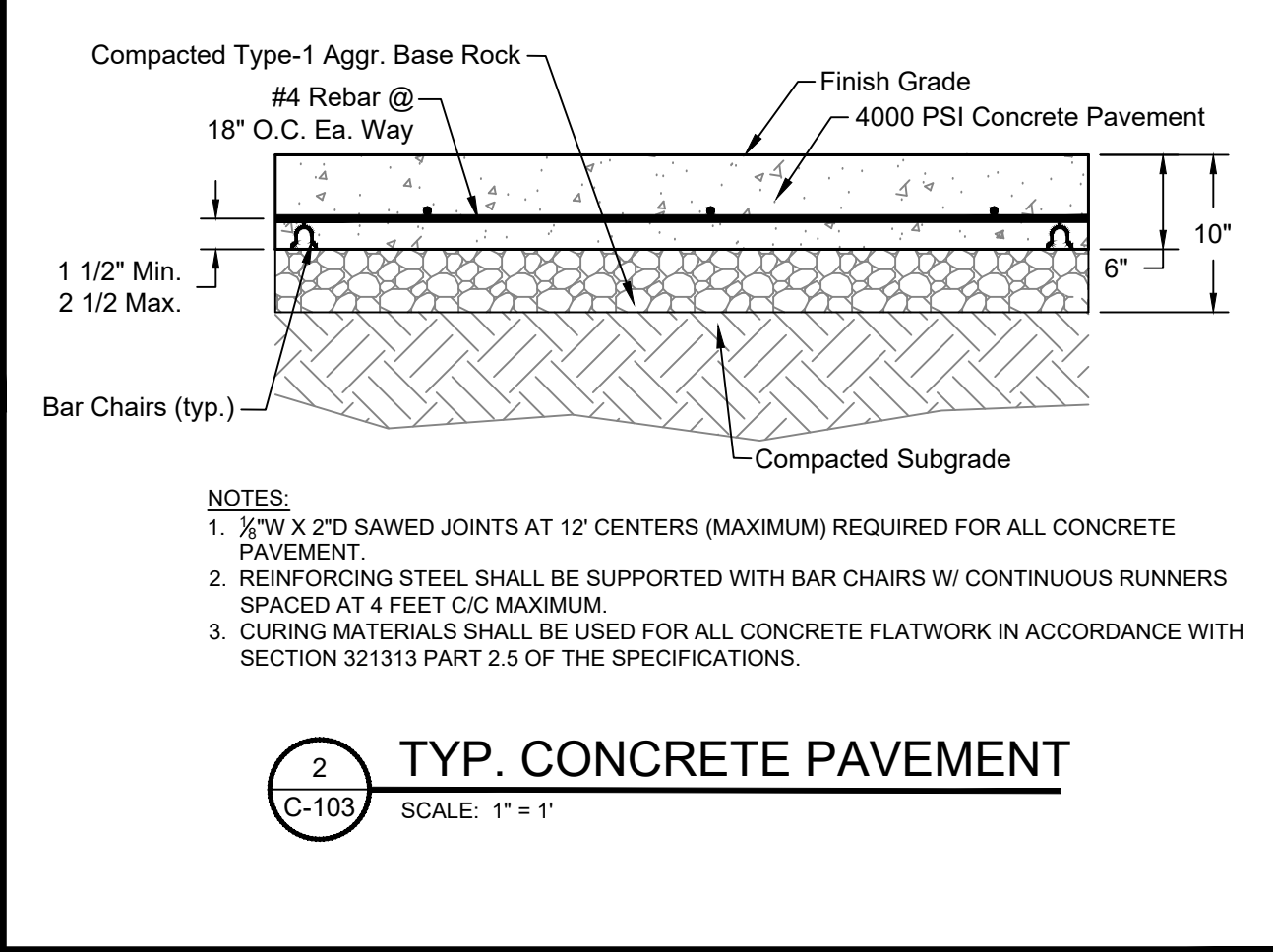
MSD Project No.: 26MSD-00227
SD Base Map No.: 29H2



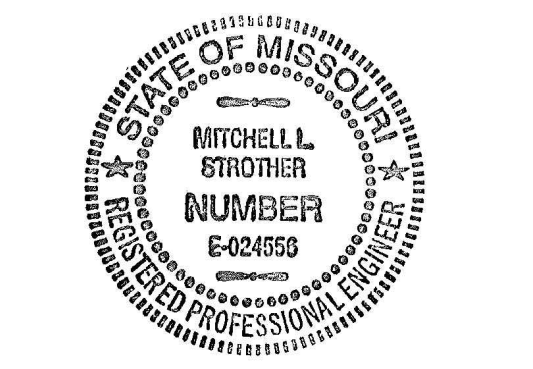
LEGEND	
MAJOR CONTOUR	--- -930---
MINOR CONTOUR	--- -930---
EXISTING CHAIN LINK FENCE	X X
CABLE REINFORCED CHAIN-LINK FENCE	□ □ □
CHAIN-LINK FENCE	○ ○ ○
PROPERTY LINE	---
OVERHEAD ELECTRIC LINE	-OHE-
UNDERGROUND ELECTRIC LINE	-UGE- UGE
SANITARY SEWER LINE	-SS- SS
WATER LINE	-W- W W
STORM SEWER LINE	-ST- ST ST
GAS LINE	-G- G C
COMMUNICATION LINE	-C- C C
CONCRETE SURFACE	■
ASPHALT SURFACE	■
STORM INLET	⊕
SANITARY SEWER MANHOLE	⊙
COMMUNICATION MANHOLE	⊙
GAS VALVE	⊙
WATER VALVE	⊙
FIRE HYDRANT	⊙
LIGHT POLE	⊙
UTILITY POLE & GUY WIRE	⊙
CONTROL MARK	⊙
TREE (TO REMAIN)	⊙
TREE (TO BE REMOVED)	⊙
TO BE REMOVED	⊙



- GENERAL NOTES:
- EXISTING UTILITIES DEPICTED ON THESE PLANS ARE BASED ON UTILITIES VISIBLE DURING THE SITE SURVEY, AVAILABLE SURVEYS AND RECORDS; THEREFORE, LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES. THE EXISTENCE OF WHICH, AT PRESENT, IS NOT KNOWN. VERIFICATION OF THE LOCATIONS OF UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, UTILITY LOCATES WILL BE REQUIRED PRIOR TO CONSTRUCTION. CONTACT THE MISSOURI ONE CALL SYSTEM AT 1-800-DIG-RITE (1-800-344-7483) PRIOR TO EXCAVATION OR DEMOLITION.
 - CONTRACTOR SHALL COORDINATE WITH OWNER AND PROVIDE REASONABLE ACCESS TO PARKING AND BUILDING THROUGHOUT THE PROJECT DURATION.
 - CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING CONCESSION STAND. CONTRACTOR SHALL INFILL CONCRETE BLOCKS ON EXISTING PAD, RELOCATE EXISTING VAULT (APPROX. 41,000 LBS.) FROM JEFFERSON BARRACKS SITE AND INSTALL VAULT ON CONCESSION STAND PAD. CONTRACTOR SHALL PROVIDE ELECTRICAL AND COMMUNICATION SERVICE TO THE VAULT AS SHOWN ON THIS SHEET.
 - CONTRACTOR SHALL EXCAVATE 8" OF EXISTING ASPHALT/CONCRETE DRIVE AND REPLACE WITH AGGREGATE. SEE DETAIL NO. 3 ON THIS SHEET. CONTRACTOR SHALL STOCKPILE ALL ASPHALT MILLINGS ON JEFFERSON BARRACKS (MILLINGS SHALL BE RETAINED BY THE OWNER). COORDINATE STOCKPILE LOCATION WITH OWNER.
 - CONTRACTOR SHALL SIZE AND INSTALL ALL WIRING, CONDUIT, ETC. PER LATEST EDITION OF NEC GUIDELINES.
 - ELECTRIC SERVICE FOR VAULT WILL CONNECT TO THE EXISTING WEATHERPROOF JUNCTION BOX ON EXTERIOR OF VAULT, CONNECTION INSIDE NEW READINESS CENTER WILL BE BY OTHERS; COORDINATE FINAL LOCATION WITH OWNER.
 - TELECOMMUNICATION SERVICE WILL CONNECT TO EXISTING WEATHERPROOF JUNCTION BOX ON THE EXTERIOR OF VAULT, CONNECTION TO MDF INSIDE THE NEW READINESS CENTER WILL BE BY OTHERS; COORDINATE FINAL LOCATION WITH OWNER.
 - CONTRACTOR SHALL TERMINATE SM FIBER IN RECTORY WITH A RACK MOUNTED FIBER DISTRIBUTION PANEL WITH LC HANDOFF. COORDINATE FINAL LOCATION IN RECTORY WITH OWNER. SEE HANDHOLE DETAIL (NO. 4) ON THIS SHEET.



STATE OF MISSOURI
MIKE KEHOE,
GOVERNOR



MITCHELL L. STROTHER
PROFESSIONAL ENGINEER - E-024556



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REVISION:
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CAD DWG FILE: T250401
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

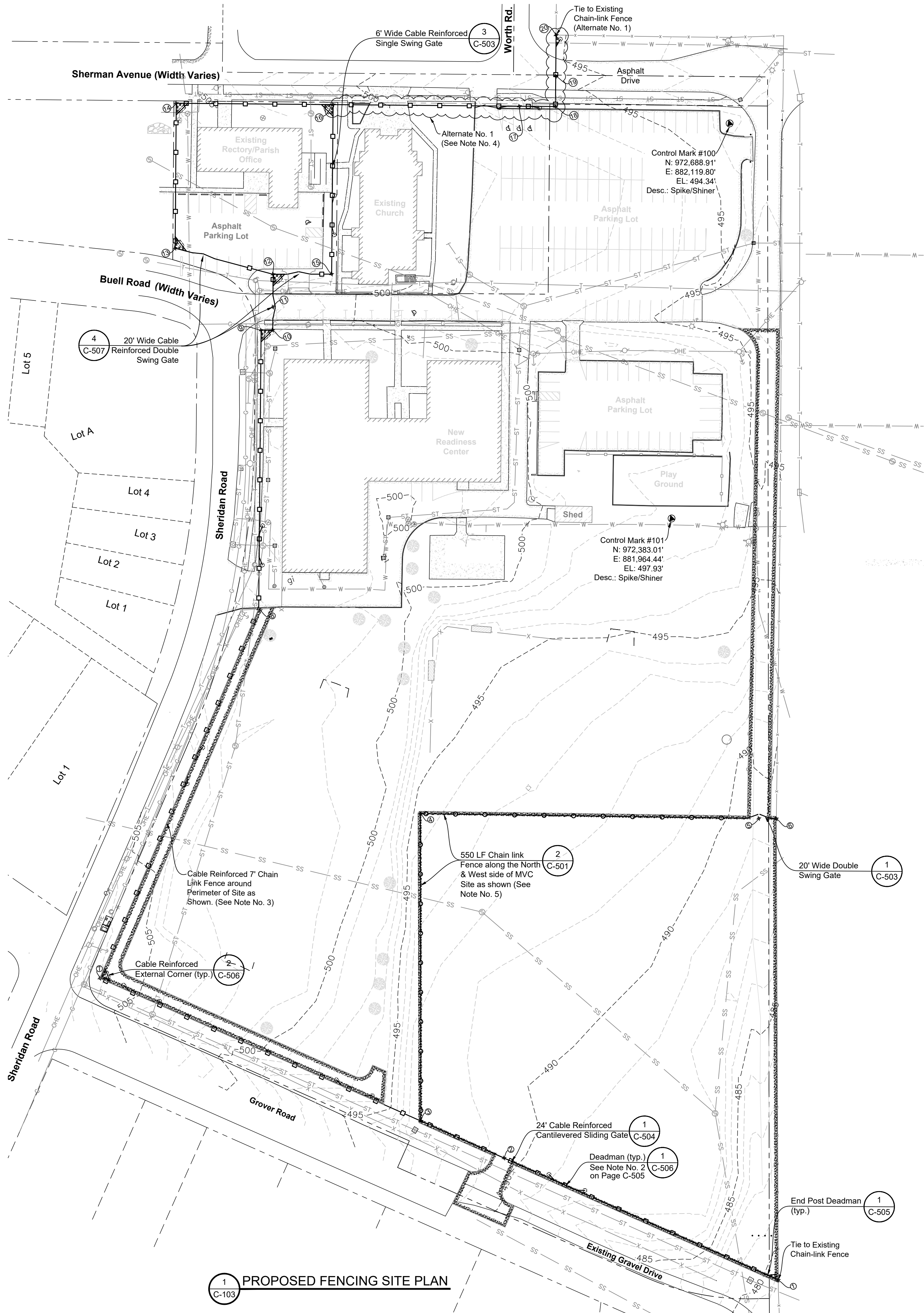
SHEET TITLE:
**MVC & VAULT
SITE PLAN**

SHEET NUMBER:

C-103

SHEET: 4 OF 15
DATE: 07/01/2026

MSD Project No.: 26MSD-00227
SD Base Map No.: 29H2

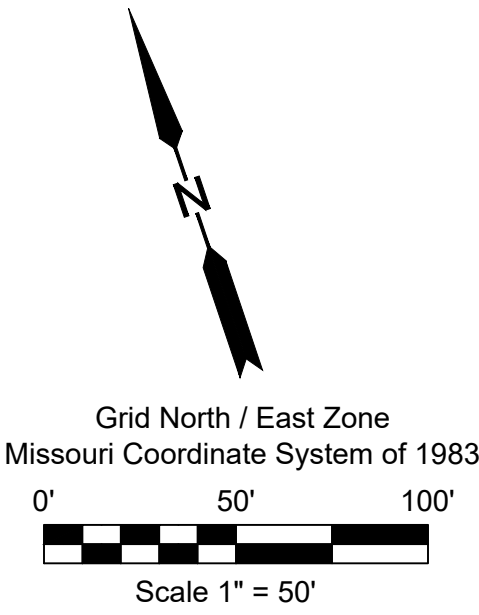


1 C-103 PROPOSED FENCING SITE PLAN

FENCE POINTS			
Point	Northing	Easting	Desc.
01	971733.52'	881843.07'	ENDFCE
02	971907.87'	881653.10'	CLENT
03	971960.81'	881595.41'	FCEINT
04	972211.32'	881679.09'	FCECOR
05	972114.84'	881953.50'	CLENT
06	972109.84'	881967.71'	ENDFCE
07	972164.86'	881373.08'	FCECOR
08	972422.11'	881603.31'	FCECOR
09	972648.63'	881681.57'	FCECOR
10	972645.49'	881691.05'	FCECOR
11	972664.24'	881697.50'	CLENT
12	972690.86'	881706.64'	FCECOR
13	972738.95'	881633.97'	FCECOR
14	972856.67'	881674.50'	FCECOR
15	972675.02'	881754.36'	FCECOR
16	972812.67'	881801.90'	FCECOR
17	972760.41'	881953.23'	DEADMAN
18	972750.29'	881982.52'	FCECOR
19	972775.10'	881991.10'	FCE
20	972808.33'	882002.56'	ENDFCE

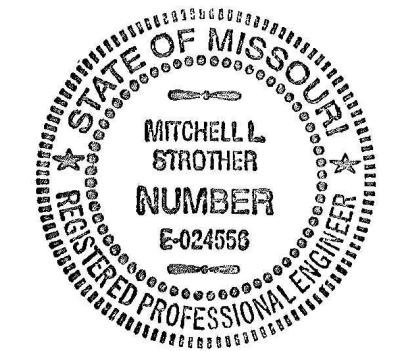
CLENT = Centerline Entrance
DEADMAN = Cable Reinforced Deadman
ENDFCE = End of Fence
FCE = CL Fence
FCECOR = Fence Corner
FCEINT = Fence Intersection

LEGEND	
MAJOR CONTOUR	----- -930-----
MINOR CONTOUR	----- -930-----
EXISTING CHAIN LINK FENCE	----- X----- X-----
CABLE REINFORCED CHAIN-LINK FENCE	----- []----- []-----
CHAIN-LINK FENCE	----- []----- []-----
PROPERTY LINE	----- -930-----
OVERHEAD ELECTRIC LINE	----- OHE-----
UNDERGROUND ELECTRIC LINE	----- UGE----- UGE-----
SANITARY SEWER LINE	----- SS----- SS-----
WATER LINE	----- W----- W-----
STORM SEWER LINE	----- ST----- ST-----
GAS LINE	----- G----- G-----
COMMUNICATION LINE	----- T----- T-----
CONCRETE SURFACE	----- []----- []-----
ASPHALT SURFACE	----- []----- []-----
STORM INLET	----- []----- []-----
SANITARY SEWER MANHOLE	----- []----- []-----
COMMUNICATION MANHOLE	----- []----- []-----
GAS VALVE	----- []----- []-----
WATER VALVE	----- []----- []-----
FIRE HYDRANT	----- []----- []-----
LIGHT POLE	----- []----- []-----
UTILITY POLE & GUY WIRE	----- []----- []-----
CONTROL MARK	----- []----- []-----
TREE (TO REMAIN)	----- []----- []-----



GENERAL NOTES:

- EXISTING UTILITIES DEPICTED ON THESE PLANS ARE BASED ON UTILITIES VISIBLE DURING THE SITE SURVEY, AVAILABLE SURVEYS AND RECORDS; THEREFORE, LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES, THE EXISTENCE OF WHICH, AT PRESENT, IS NOT KNOWN. VERIFICATION OF THE LOCATIONS OF UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, UTILITY LOCATES WILL BE REQUIRED PRIOR TO CONSTRUCTION. CONTACT THE MISSOURI ONE CALL SYSTEM AT 1-800-DIG-RITE (1-800-344-7483) PRIOR TO EXCAVATION OR DEMOLITION.
- HORIZONTAL & VERTICAL CONTROL WERE DERIVED FROM THE MISSOURI DEPARTMENT OF TRANSPORTATION'S REAL-TIME NETWORK. THE HORIZONTAL CONTROL IS UTILIZING THE MISSOURI STATE PLANE COORDINATE SYSTEM, EAST ZONE, CONVERTED TO U.S. SURVEY FEET AND THE VERTICAL CONTROL IS BASED FROM NAVD88 DATUM.
- CONTRACTOR SHALL INSTALL APPROXIMATELY 1760 LF OF CABLE REINFORCED 7" CHAIN LINK FENCE WITH DOUBLE EXTENSION ARMS IN ALL AREAS NOTED AS "PROPOSED CABLE REINFORCED CHAIN-LINK FENCE", AND GATES AS SHOWN.
- ALTERNATE NO. 1 CONSISTS OF 254 LF OF CABLE REINFORCED CHAIN-LINK FENCE, DEADMAN, AND END POST DEADMAN.
- CONTRACTOR SHALL INSTALL 7" CHAIN-LINK FENCE WITH WITH SINGLE EXTENSION ARM ALONG THE NORTH AND WEST SIDES OF THE PROPOSED MVC SITE AS SHOWN.



MITCHELL L. STRETCHER
PROFESSIONAL ENGINEER - E-024556



OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
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JEFFERSON CITY, MO 65101
PHONE: 573-638-9500, EXT. 37015

MILITARY VEHICLE
COMPOUND,
FENCING AND SITE
IMPROVEMENTS

JEFFERSON BARRACKS
74 KEARNEY ST.
ST. LOUIS CO., MO

PROJECT # T2504-01
SITE # 6303
ASSET # 8136303050

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/01/2026

CAD DG FILE: T250401
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

SHEET TITLE:

FENCING
SITE PLAN

SHEET NUMBER:

C-104

SHEET: 5 OF 15
DATE: 07/01/2026



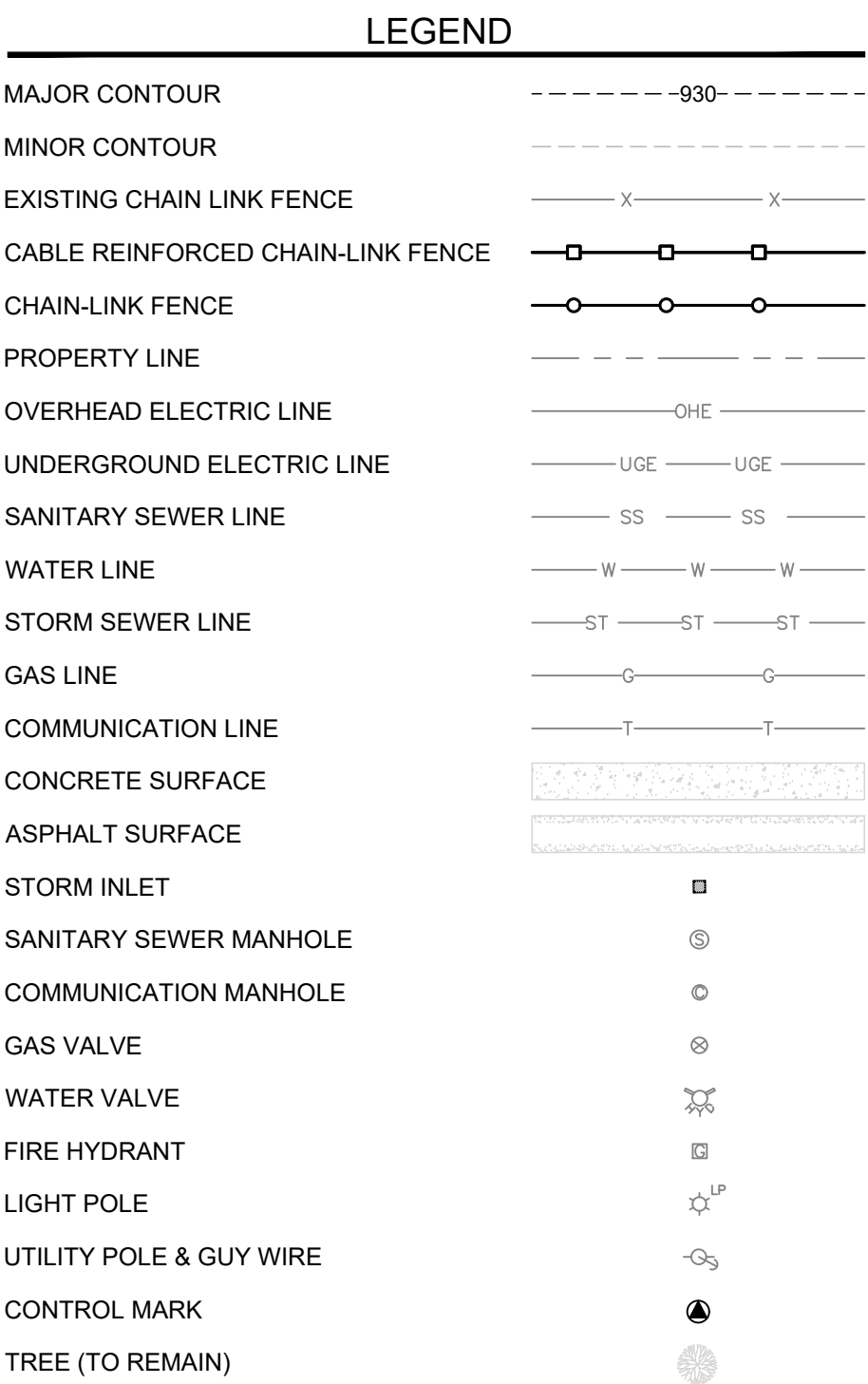
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**JEFFERSON BARRACKS
74 KEARNEY ST.
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DATE: _____
ISSUE DATE: 07/01/2026

C-105

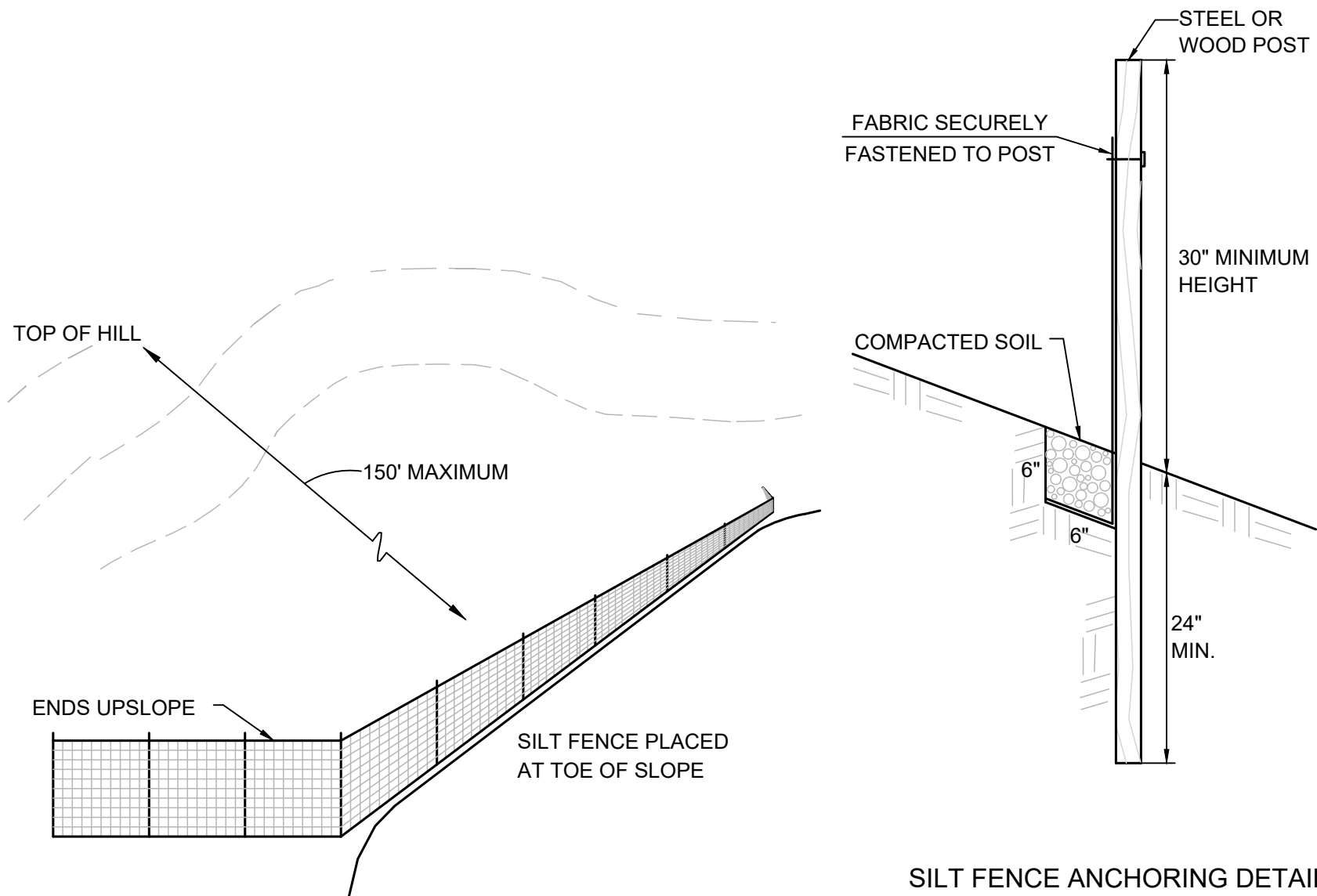
MSD Project No.: 26MSD-00227
SD Base Map No.: 29H2



GRADE/LAYOUT POINTS					
Point	Northing	Easting	Elev.	Desc.	
21	971884.95	881598.41	491.02	EOA	
22	971907.28	881620.52	491.35	EOA	
23	971919.35	881629.43	0.00	15 RAD	
24	971909.23	881640.49	490.90	EOG - PT	
25	971911.30	881644.22	490.95	EOG	
26	971899.73	881658.95	490.25	EOG	
27	971898.64	881660.20	490.20	EOG	
28	971876.90	881651.57	0.00	10 RAD	
29	971869.52	881644.80	489.90	EOG - PC	
30	971866.13	881648.49	489.80	EOG	
31	971851.38	881634.99	489.70	EOG	
32	971786.98	881786.30	0.00	EOR	
33	971805.10	881801.01	0.00	EOR	
34	971847.46	881829.51	0.00	EOR	
35	971875.57	881837.71	0.00	EOR	
36	971861.02	881861.02	0.00	EOR	
37	971999.12	881903.06	0.00	EOR	
38	971993.09	881925.89	0.00	EOR	
39	971736.78	881841.00	0.00	EOR	
40	971962.92	881812.15	489.00	PG	
41	972100.33	881943.25	489.00	PG	
42	972058.53	881928.74	489.00	PG	
43	972100.04	881944.74	488.55	EOG	
44	972107.11	881963.61	489.45	EOG	
45	972500.14	882054.00	0.00	25 RAD	
46	972491.71	882077.83	494.15	EOG - PT	
47	972520.01	882069.45	0.00	EOA - PC	
48	972507.93	882104.59	0.00	EOA	
49	972683.92	881742.31	503.76	EOC	
50	972682.05	881741.61	503.96	EOA - EOC	
51	972678.91	881735.32	503.10	EOC-PT	
52	972669.95	881732.26	501.87	EOC-PC	
53	972670.33	881735.32	501.87	5 RAD	
54	972663.60	881735.38	501.15	TOC	
55	972692.66	881715.71	504.16	EOA-EOC	
56	972690.77	881715.06	503.96	COCC	
57	972686.04	881713.45	0.00	5 RAD	
58	972684.42	881718.18	503.34	EOC-PT	
59	972675.76	881715.23	502.31	EOC-PC	
60	972677.37	881710.49	0.00	5 RAD	
61	972672.64	881708.99	502.98	TOC	
62	972670.00	881740.00	0.00	5 RAD	
63	972422.92	881603.59	501.87	EOA-EOG	
64	972419.10	881616.72	501.64	EOA-EOG	
65	972173.04	881396.51	505.78	EOG-PC	
66	972166.37	881403.96	0.00	10 RAD	
67	972159.01	881397.20	505.51	EOG-PT	
68	972015.21	881553.89	497.02	EOG-PC	
69	972022.58	881560.65	0.00	EOG-PT	
70	972022.58	881560.65	0.00	EOG-PT	
71	972039.50	881514.40	496.68	COG	
72	972010.88	881580.79	496.13	COG	
73	971984.42	881569.68	495.80	COG	

COC = Corner of Concrete
COG = Corner of Gravel
EOA = Edge of Existing Asphalt
EOC = Edge of Concrete
EOG = Edge of Gravel
EOR = Edge of Riprap
PC = Point of Curvature
PG = Proposed Grade
PT = Point of Tangency
RAD = Radius Point
TOC = Top of Curb

1. EXISTING UTILITIES DEPICTED ON THESE PLANS ARE BASED ON UTILITIES VISIBLE DURING THE SITE SURVEY, AVAILABLE SURVEYS AND RECORDS; THEREFORE, LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES, THE EXISTENCE OF WHICH, AT PRESENT, IS NOT KNOWN. VERIFICATION OF THE LOCATIONS OF UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, UTILITY LOCATES WILL BE REQUIRED PRIOR TO CONSTRUCTION. CONTACT THE MISSOURI ONE CALL SYSTEM AT 1-800-DIG-RITE (1-800-344-7483) PRIOR TO EXCAVATION OR DEMOLITION.
2. HORIZONTAL & VERTICAL CONTROL WERE DERIVED FROM THE MISSOURI DEPARTMENT OF TRANSPORTATION'S REAL-TIME NETWORK. THE HORIZONTAL CONTROL IS UTILIZING THE MISSOURI STATE PLANE COORDINATE SYSTEM, EAST ZONE, CONVERTED TO U.S. SURVEY FEET AND THE VERTICAL CONTROL IS BASED FROM NAVD83 DATUM.
3. ADJUST TO GRADE ANY STRUCTURES WITHIN THE PROPOSED GRADING/RESURFACING AREAS.
4. PROPOSED GRADES WERE DESIGNED TO BE 0.2' HIGHER THAN THE EXISTING ELEVATIONS INSIDE THE PROPOSED CHAIN LINK FENCING AROUND THE PROPOSED MVC (EXCEPT THE AREA WITH PROPOSED CONTOURS). THE 2' WIDE GRAVEL SURFACE OUTSIDE OF THE PROPOSED MVC FENCE ON THE NORTHERLY AND WESTERLY SIDES WILL BE USED TO SLOPE TO EXISTING GRADE.
5. ALL EXISTING UTILITIES LOCATED IN 20' WIDE GRAVEL DRIVE SHALL REMAIN UNDISTURBED UNLESS NOTED OTHERWISE.
6. THE EXISTING TOP OF CURB ON THE NORTH SIDE OF KEARNEY STREET IS 0.16' HIGHER THAN THE EXISTING ASPHALT ON BOTH SIDES OF THE PROPOSED CONCRETE DRIVE. CONTRACTOR SHALL MATCH TOP OF CURB AND EXISTING ASPHALT GRADES IN THIS AREA.



1. FABRIC FENCES MAY BE CONSTRUCTED WITH SUPPORTING FENCES, SUCH AS SNOW FENCES OR WIRE MESH FENCES. THE SUPPORTING FENCES SHALL BE STRONG ENOUGH TO WITHSTAND THE LOAD FROM POND WATER AND TRAPPED SEDIMENT. THE SUPPORT POSTS SHALL BE SPACED AT 10 FEET OR LESS, AND SHALL BE PLACED OR DRIVEN AT LEAST 2 FEET INTO THE GROUND. POSTS SHALL BE 4-INCH DIAMETER WOOD POSTS OR STEEL POSTS.

WHEN A FABRIC FENCE IS INSTALLED WITHOUT A SUPPORTING FENCE, THE POSTS SHALL BE SPACED AT 4 FEET OR LESS. POSTS SHALL BE SPACED OR DRIVEN AT LEAST 2 FEET INTO THE GROUND. POSTS SHALL BE 2-INCH SQUARE OR HEAVIER WOOD POSTS OR STANDARD STEEL POSTS.

2. A TRENCH FOR ANCHORING THE FABRIC SHALL BE DUG ALONG THE UPSLOPE SIDE OF THE POSTS. THE TRENCH SHALL BE AT LEAST 6 INCHES WIDE AND 6 INCHES DEEP. THE FABRIC SHALL BE LAID IN THE TRENCH, WHICH THEN SHALL BE BACKFILLED AND COMPACTED TO PREVENT WATER AND SEDIMENT FROM PASSING UNDERNEATH THE FABRIC FENCE.

3. THE FILTER FABRIC SHALL BE FURNISHED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE SILT FENCE TO AVOID SPLICES. WHEN SPLICES ARE NECESSARY, THE FABRIC SHALL BE SPLICED AT A SUPPORT POST WITH A MINIMUM 6-INCH OVERLAP, FOLDED OVER, AND SECURELY FASTENED.

4. THE SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF POLYPROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN UNIFORM IN TEXTURE AND APPEARANCE AND FREE FROM DEFECTS, FLAWS, OR TEARS THAT WOULD AFFECT ITS PHYSICAL PROPERTIES. WHEN INSTALLING FABRIC FOR SILT FENCES, FOLLOW MANUFACTURER'S RECOMMENDATIONS.

C-105 SCALE: 1" = 1'



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MILITARY VEHICLE
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IMPROVEMENTS

JEFFERSON BARRACKS
74 KEARNEY ST.
ST. LOUIS CO., MO

PROJECT #: T2504-01
SITE #: 6303
ASSET #: 8136303050

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/01/2026

CAD DWG FILE: MVC-BASE-FINAL
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

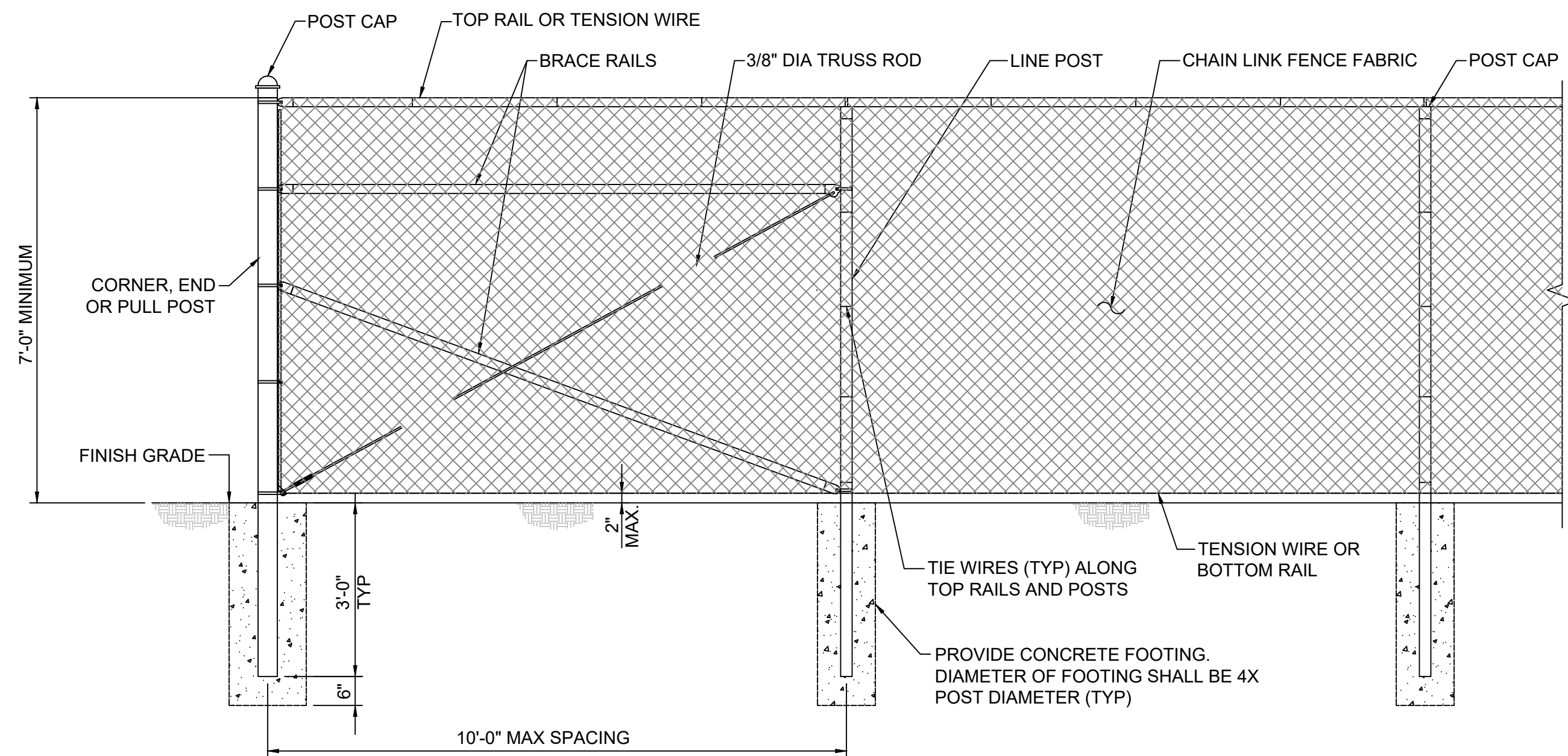
SHEET TITLE:

**CHAIN LINK FENCE
DETAILS**

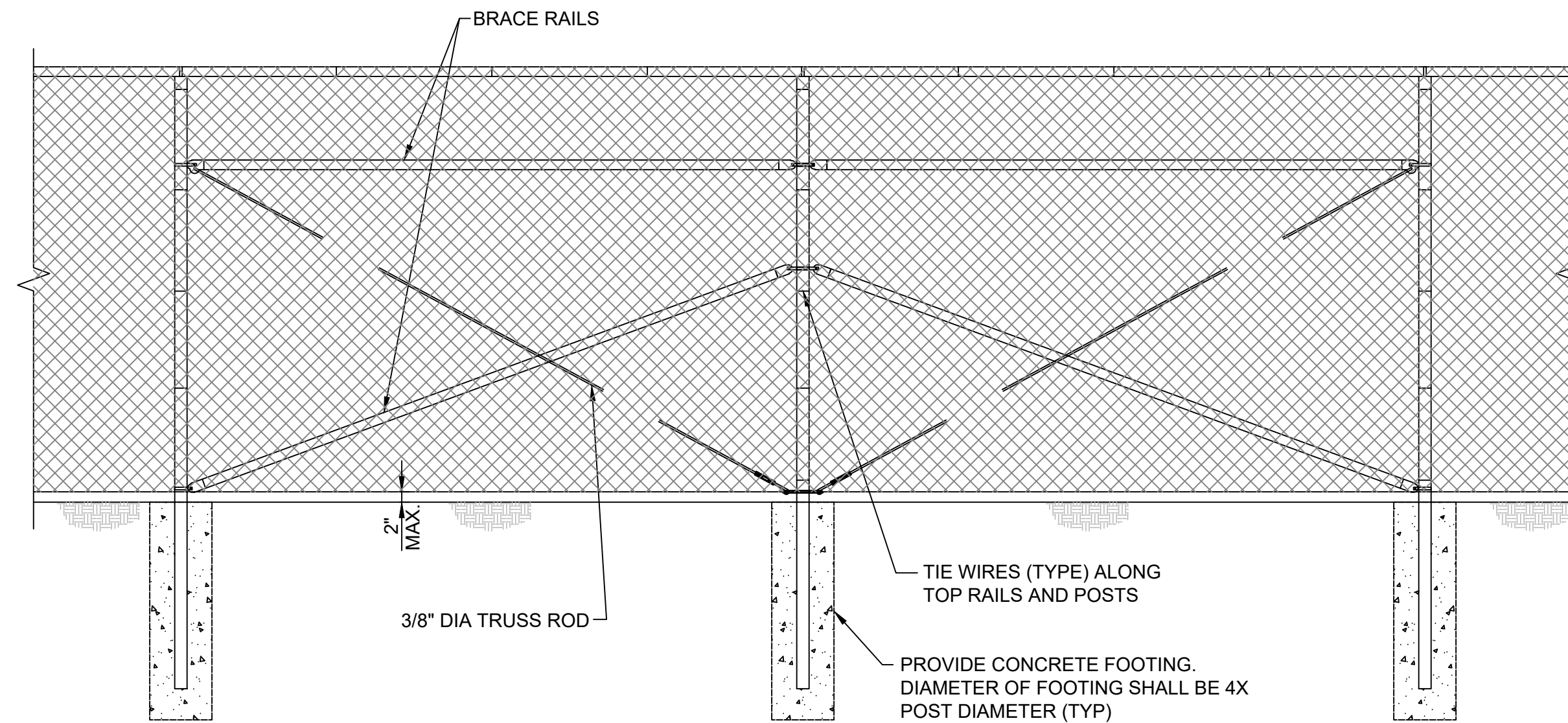
SHEET NUMBER:

C-501

SHEET: 7 OF 15
DATE: 07/01/2026



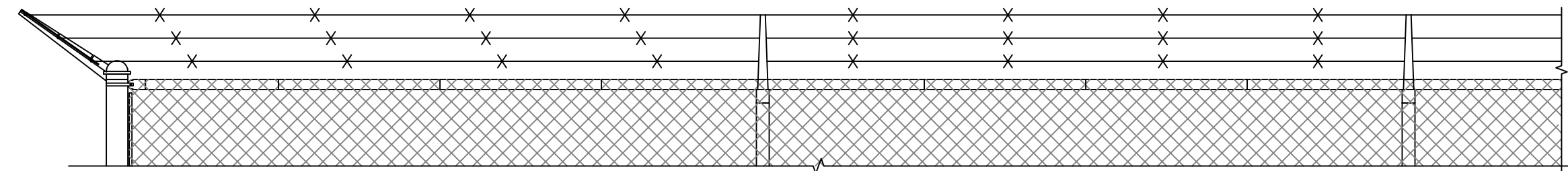
1
C-501
TYPICAL FENCE AND CORNER PANEL ELEVATION
SCALE: 1" = 1'-0"



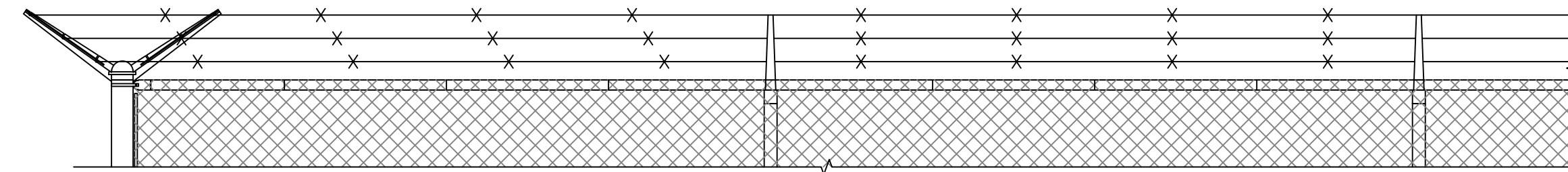
2
C-501
TYPICAL FENCE AND BRACED PANEL ELEVATION
SCALE: 1" = 1'-0"

NOTES:

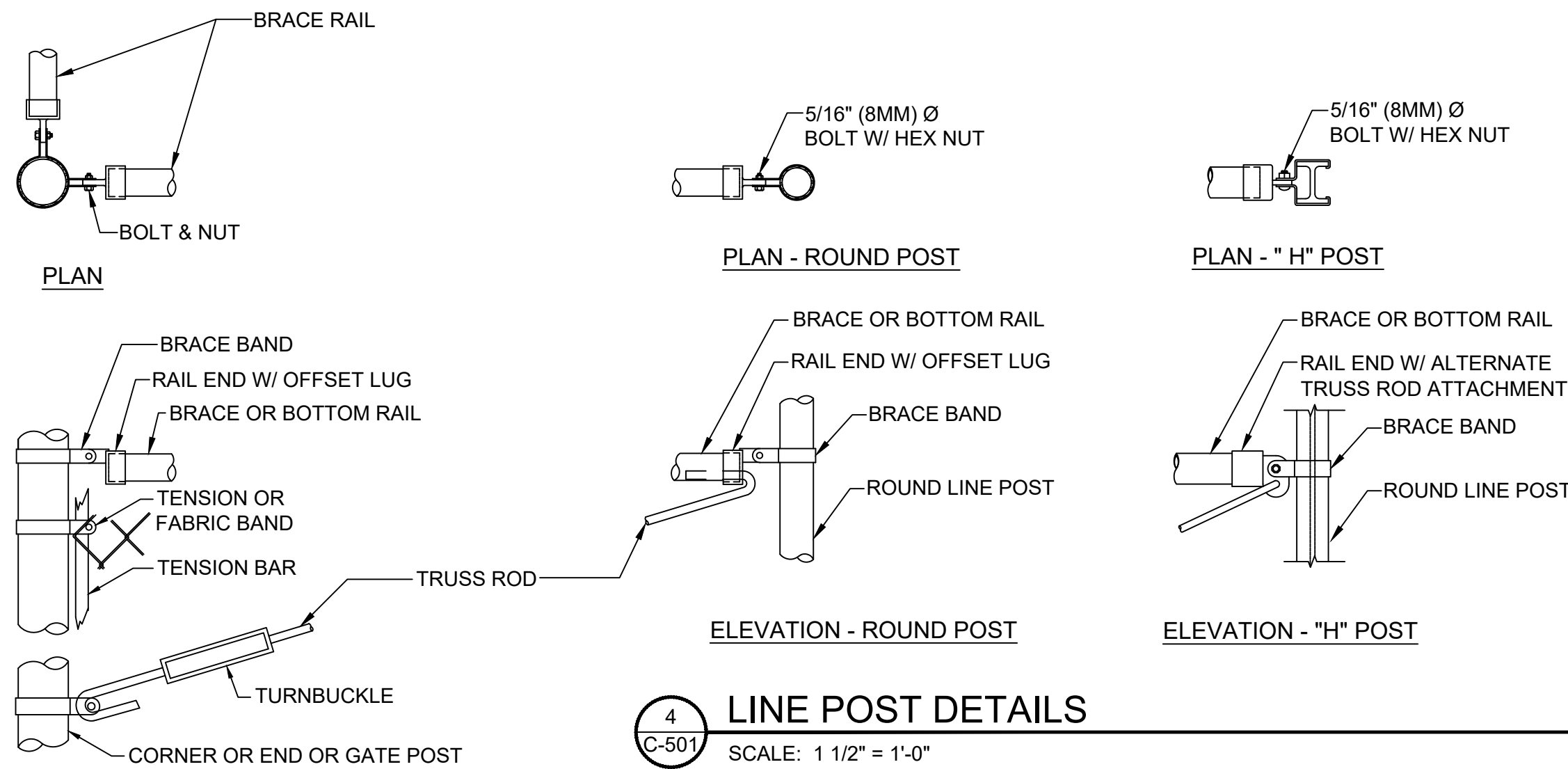
1. A BOTTOM RAIL CAN BE ADDED FOR SECURITY, IT SHALL BE INSTALLED APPROX 3" ABOVE GRADE (A MINIMUM OF 2" AND A MAXIMUM OF 4")
HARDWARE SHALL BE WELDED OR SHOT NAILED TO POSTS AND RAILS IN ORDER TO SECURE IN PLACE. ATTACH FABRIC TO NEW BOTTOM RAIL TO ELIMINATE
POSSIBILITY OF PEELING UP FABRIC.
2. SOME LOCATIONS MAY REQUIRE 8' OF FABRIC.



3
C-501
TYPICAL 3 STRAND BARBED WIRE AND SINGLE EXTENSION ARM
SCALE: 1" = 1'-0"

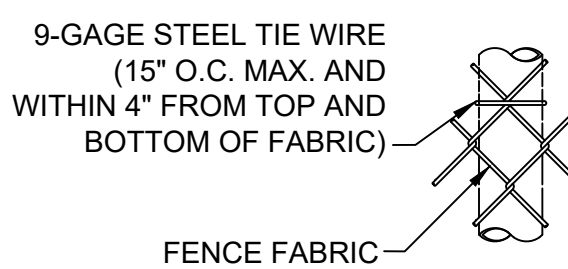
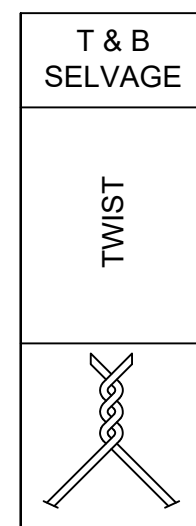


4
C-501
TYPICAL 6 BARBED WIRE AND DOUBLE EXTENSION ARM
SCALE: 1" = 1'-0"

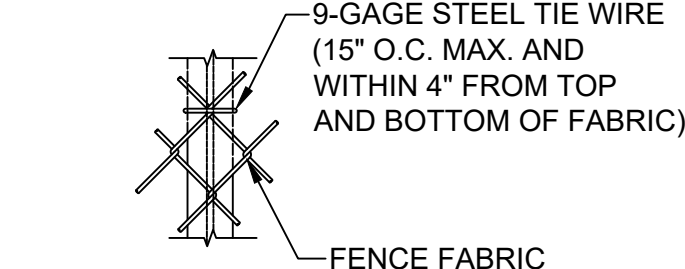
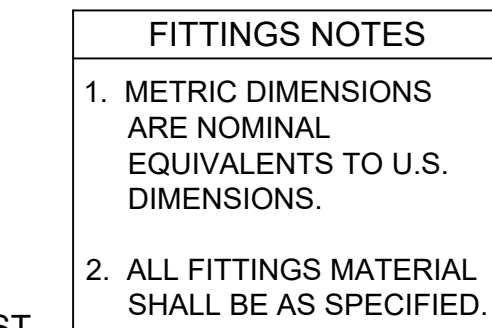


4
C-501
LINE POST DETAILS
SCALE: 1 1/2" = 1'-0"

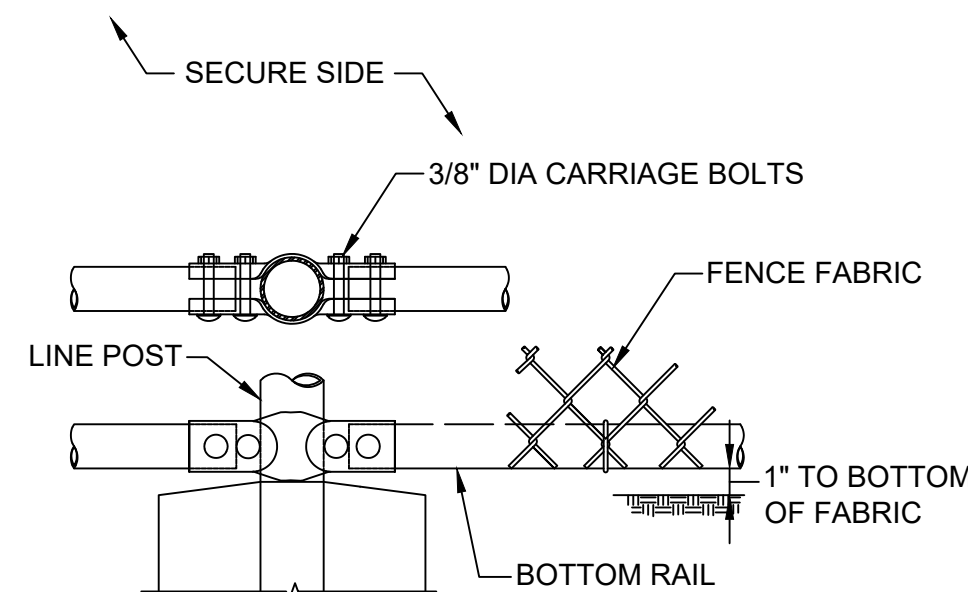
5
C-501
CORNER OR END POSTS
SCALE: 1 1/2" = 1'-0"



ELEVATION - ROUND POST



ELEVATION - "H" POST



BOTTOM RAIL OPTION

FITTINGS NOTES

1. METRIC DIMENSIONS ARE NOMINAL EQUIVALENTS TO U.S. DIMENSIONS.
2. ALL FITTINGS MATERIAL SHALL BE AS SPECIFIED.

GENERAL NOTE:

DETAILS AND NOTES ON THIS SHEET WERE DERIVED FROM THE UNIFIED FACILITIES CRITERIA 4-022-03 SECURITY ENGINEERING, FENCES, GATES AND GUARD FACILITIES DEFINITIVE DRAWINGS FOR SECURITY FENCING, GATES AND CABLING, DRAWING NUMBER UFC-700.

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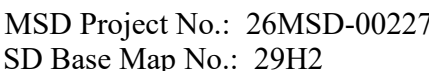
JEFFERSON BARRACKS
74 KEARNEY ST.
ST. LOUIS CO., MO

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/01/2026

SHEET TITLE:

SHEET NUMBER:

SHEET: 8 OF 15
DATE: 07/01/2026





MITCHELL L. STROTHER
PROFESSIONAL ENGINEER - E-024556



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MILITARY VEHICLE
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JEFFERSON BARRACKS
74 KEARNEY ST.
ST. LOUIS CO., MO

PROJECT #: T2504-01
SITE #: 6303
ASSET #: 8136303050

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/01/2026

CAD DWG FILE: MVC-BASE-FINAL
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

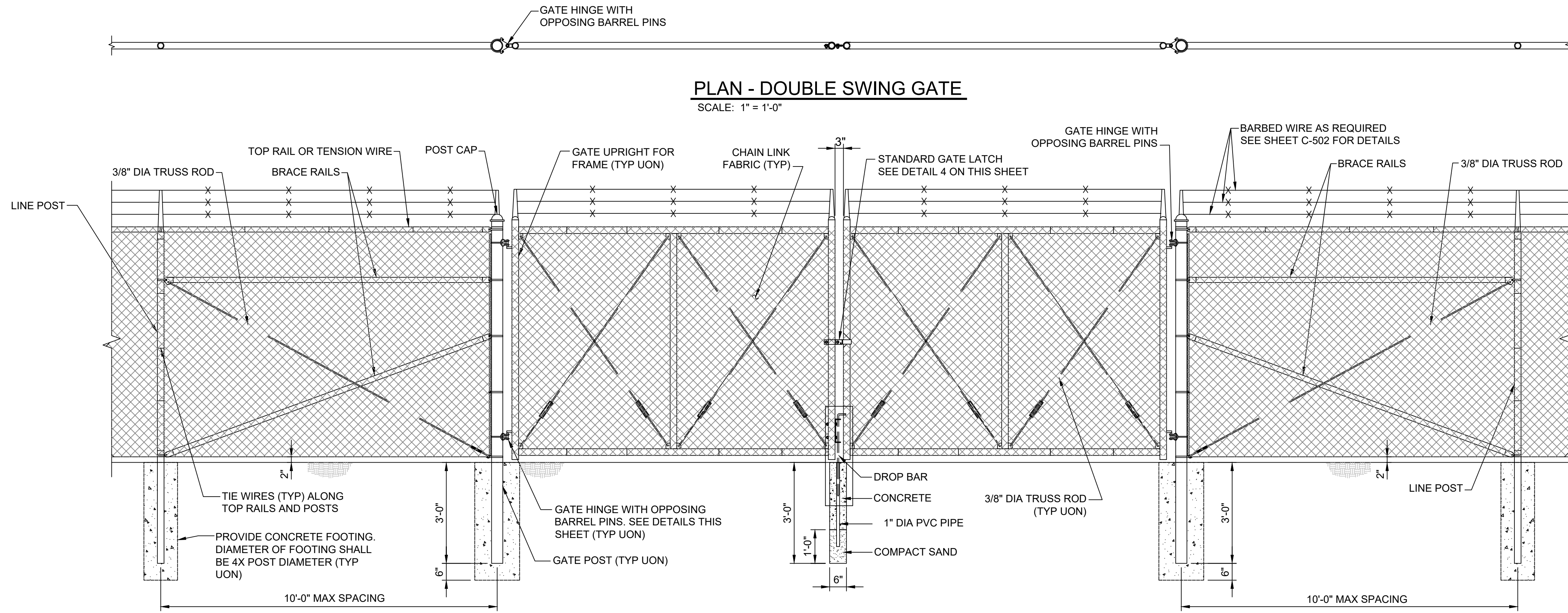
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CHAIN LINK FENCE
SWING GATE &
DETAILS

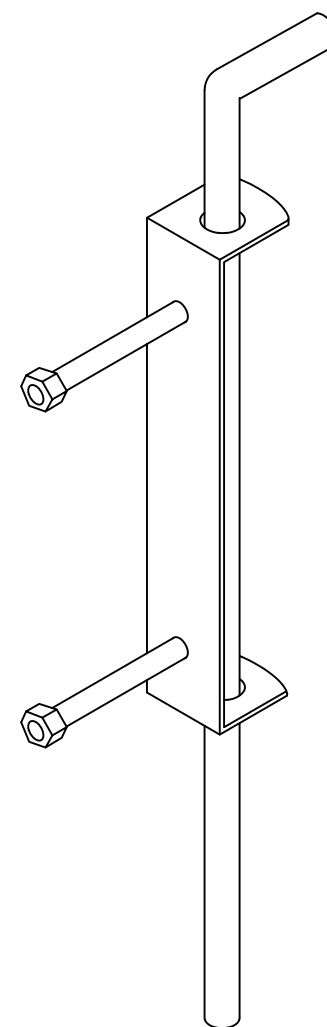
SHEET NUMBER:

C-503

SHEET: 9 OF 15
DATE: 07/01/2026

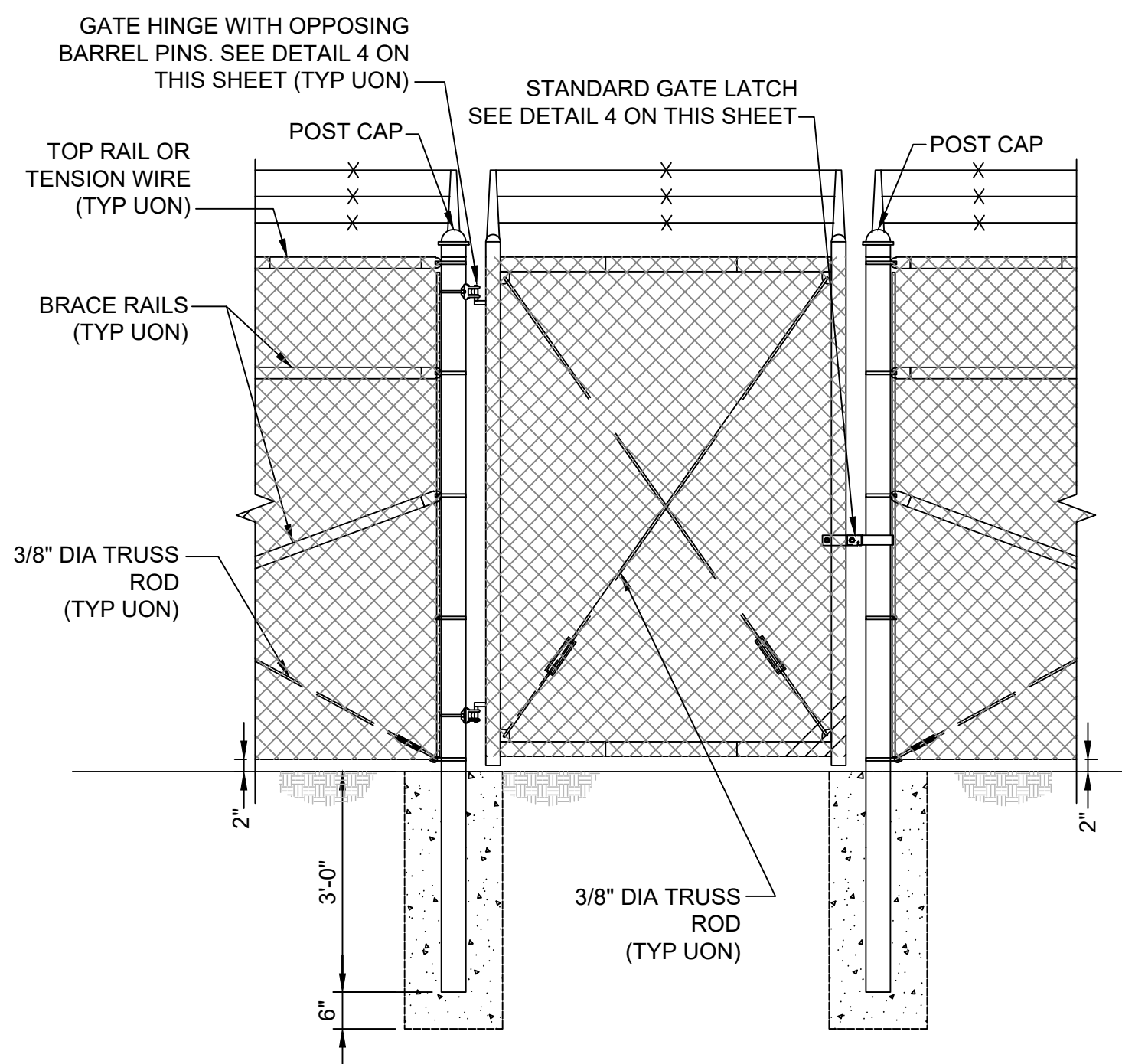


2
C-503
DROP BAR DETAIL
NOT TO SCALE



1
C-503
TYPICAL DOUBLE SWING GATE
SCALE: 1/2" = 1'-0"

PLAN - SINGLE SWING GATE
SCALE: 1" = 1'-0"



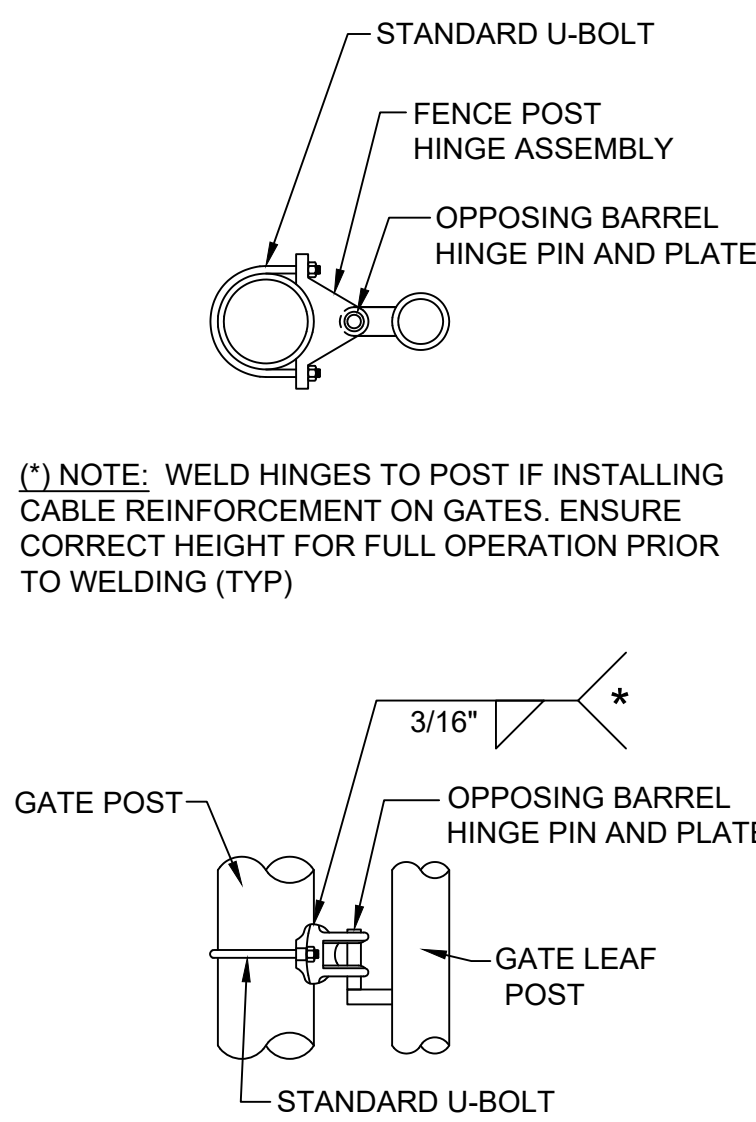
3
C-503
TYPICAL SINGLE SWING GATE
SCALE: 1/2" = 1'-0"

SINGLE OR DOUBLE LEAF GATES		
NOM HEIGHT (H)	UPRIGHT HT (U)	FRAME HT (F)
NOM HT INCLUDING BARBED WIRE	ACTUAL DIM	ACTUAL DIM
8'-0" (2438MM)	7'-10" (2388MM)	6'-8 1/2" (2045MM)

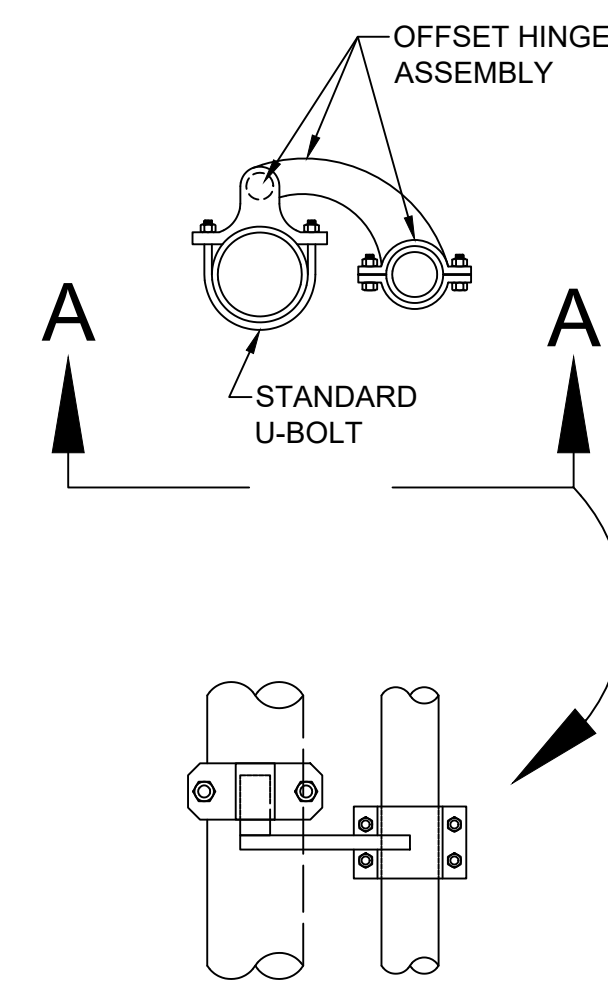
SINGLE LEAF GATES		
OPENING	GATE POST	HINGE SPACE (S)
FACE TO FACE	SQUARE & ROUND SIZES	POST TO UPRIGHT
3'-0" (914MM) THROUGH	2.5" (63.5MM) SQ x 3/16"th OR 2.875" (73MM) OD	FOR SQUARE & ROUND GATE POSTS: 2 1/4" (57MM)
6'-0" (1829MM) THROUGH	4" (102MM) SQ x 3/16"th OR 4" (102MM) OD	FOR SQUARE & ROUND GATE POSTS: 2 1/4" (57MM)
12'-0" (3657MM) THROUGH	6" (153MM) SQ x 3/16"THC OR 6.625" (168MM) OD	FOR SQUARE & ROUND GATE POSTS: 2 1/4" (57MM)
19'-0" (5790MM) THROUGH	8" (203MM) SQ x 1/4"th OR 8.625" (219MM) OD	FOR SQUARE & ROUND GATE POSTS: 2 1/4" (57MM)

GATE POSTS AND FOUNDATIONS: GATE [POSTS SIZE AND ASSOCIATED FOOTING DIAMETER TO BE DETERMINED BY MANUFACTURE, BASED ON LEAF WEIGHT & DIMENSION, BUT NOT LESS THAN DIAMETER SHOWN ON THESE DRAWINGS. MINIMUM FOOTING DIAMETERS (TO BE FILLED W/ 4000 PSI CONC.): 40" Ø FOR 8" POST; 36" Ø FOR 6" POST; 24" Ø FOR 4" POST; OTHER SIZES TO BE DESIGNED BY MFR OR KTR. NO FOOTING WIDTH SHALL BE LESS THAN 4(X) THE POST WIDTH.

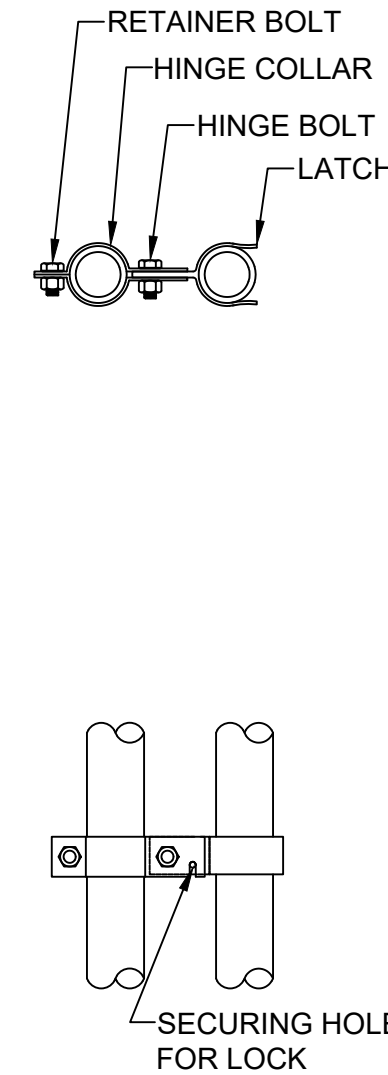
NOTE: IF GATE HINGES ARE NOT OPPOSING (AS SHOWN ABOVE) OR LEAF IS NOT LOCKED MECHANICALLY TO THE HINGES, WELD AN ANGLE, PLATE, OR BLOCK ABOVE HINGE TO RESTRICT LEAF FROM BEING REMOVED OR LIFTED OFF. RESTRICTION SHALL NOT HINDER OPERATION OF GATE.



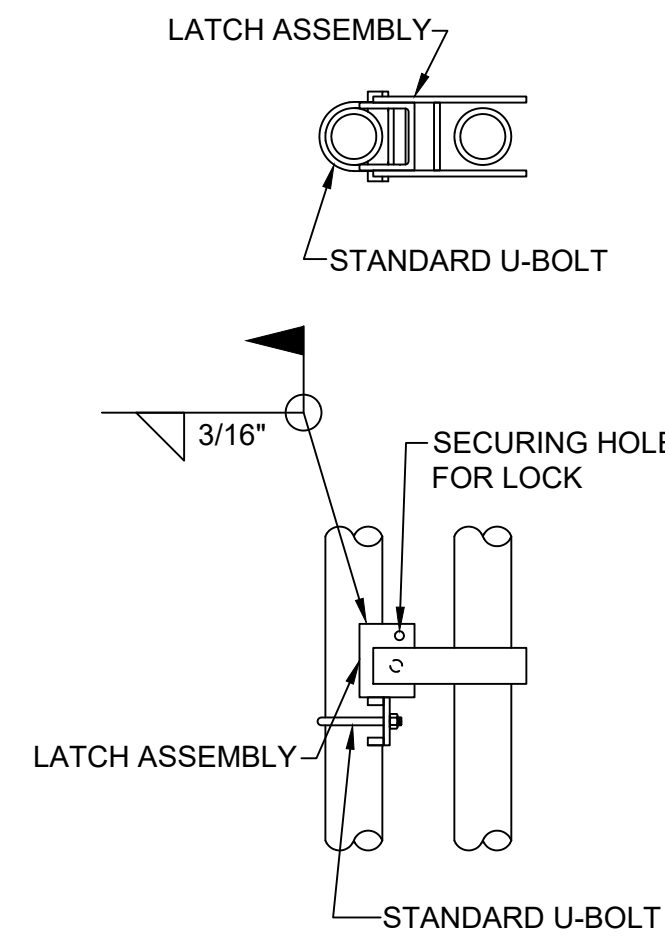
GATE HINGE DETAIL



OFFSET HINGE DETAIL



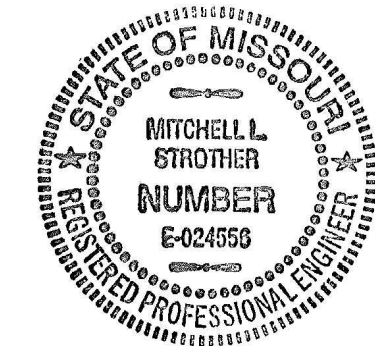
GATE LATCH DETAIL



FULCRUM LATCH DETAIL

4
C-503
HINGE AND LATCH DETAILS
SCALE: 1 1/2" = 1'-0"

GENERAL NOTE:
DETAILS AND NOTES ON THIS SHEET WERE DERIVED FROM THE UNIFIED FACILITIES CRITERIA 4-022-03 SECURITY ENGINEERING, FENCES, GATES AND GUARD FACILITIES DEFINITIVE DRAWINGS FOR SECURITY FENCING, GATES AND CABLING, DRAWING NUMBER UFC-702.



MITCHELL L. STROTHER
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74 KEARNEY ST.
ST. LOUIS CO., MO

PROJECT #: T2504-01
SITE #: 6303
ASSET #: 8136303050

REVISION: _____
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ISSUE DATE: 07/01/2026

CAD DWG FILE: MVC-BASE-FINAL
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

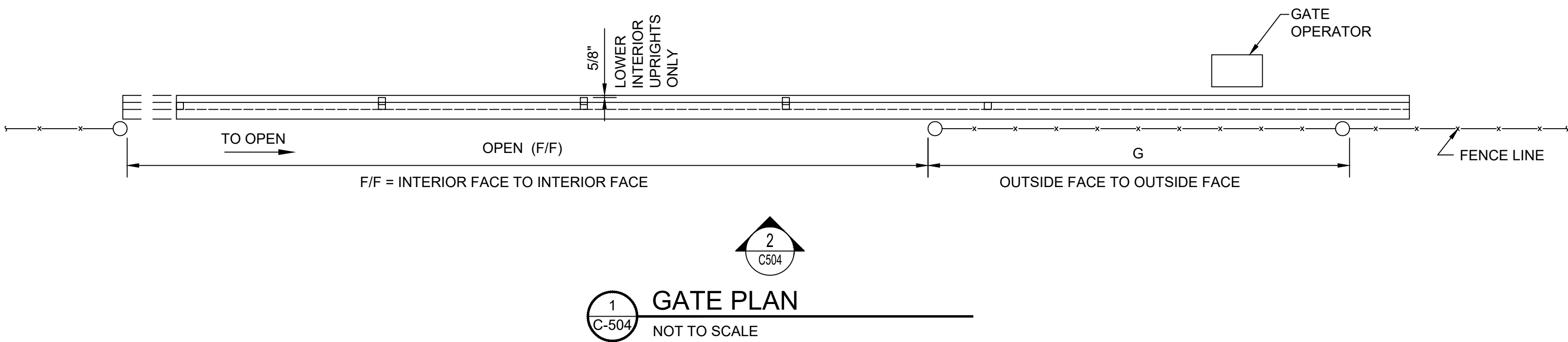
SHEET TITLE:

CHAIN LINK CANTILEVERED GATE DETAILS

SHEET NUMBER:

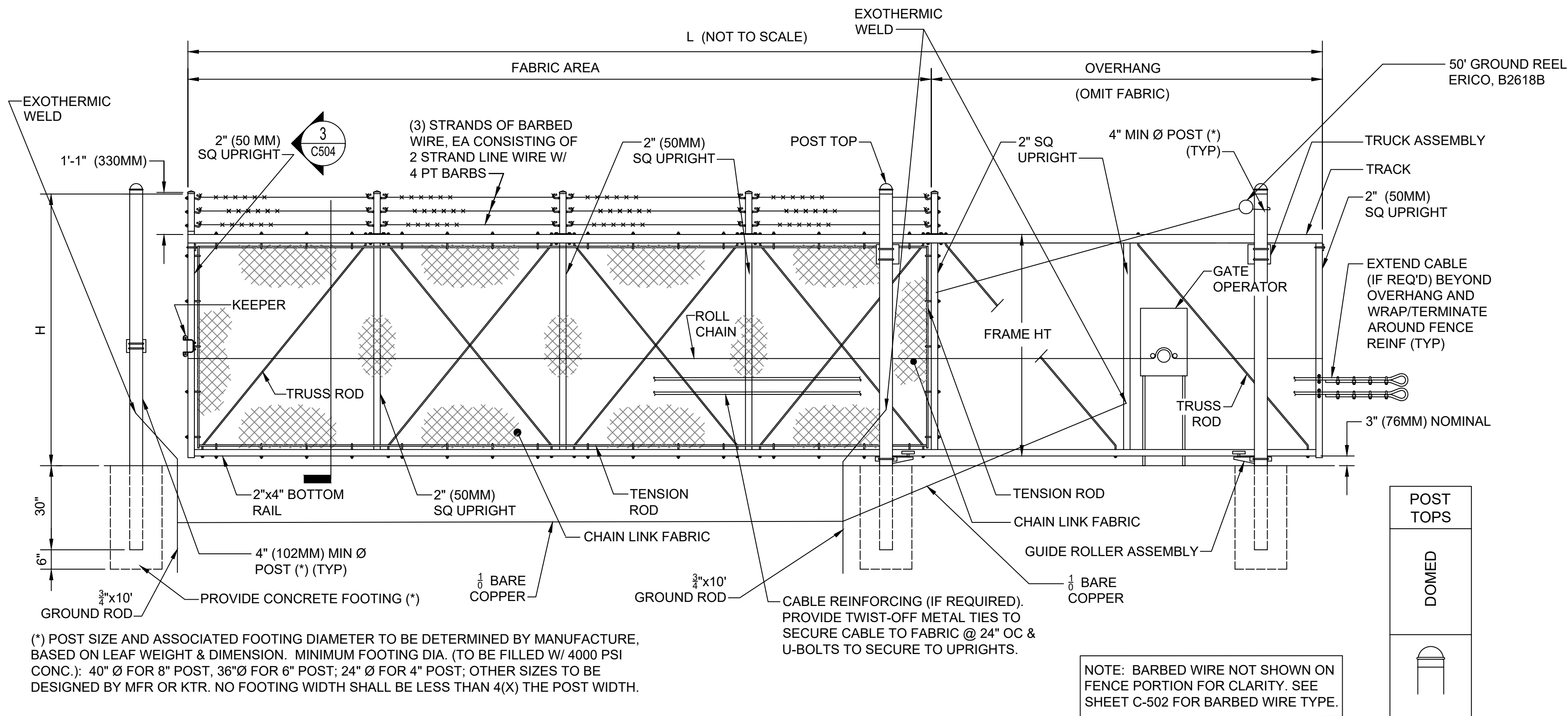
C-504

SHEET: 10 OF 15
DATE: 07/01/2026

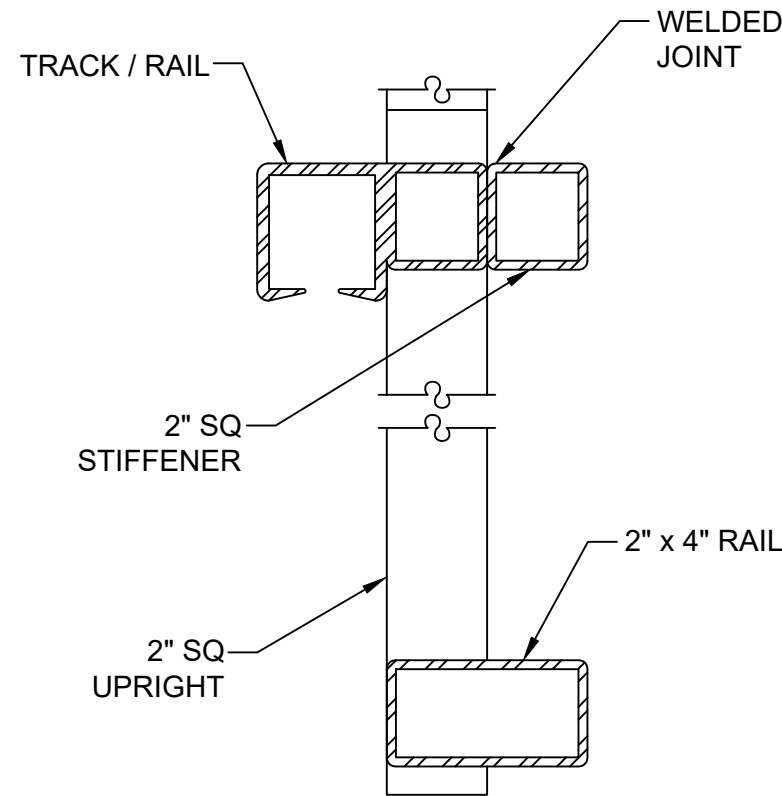


SAMPLING OF SIZES:

OPENING (F/F)	NOMINAL HEIGHT (H)	LENGTH (L)	GATE POSTS (G)	BAYS / OVERHANG
37'-0"	8'-0"	53'-3"	16'-0"	5 (FABRIC) / 2 (W/O)
30'-0"	8'-0"	42'-3"	12'-0"	4 (FABRIC) / 2 (W/O)
24'-0"	8'-0"	36'-3"	12'-0"	3 (FABRIC) / 2 (W/O)

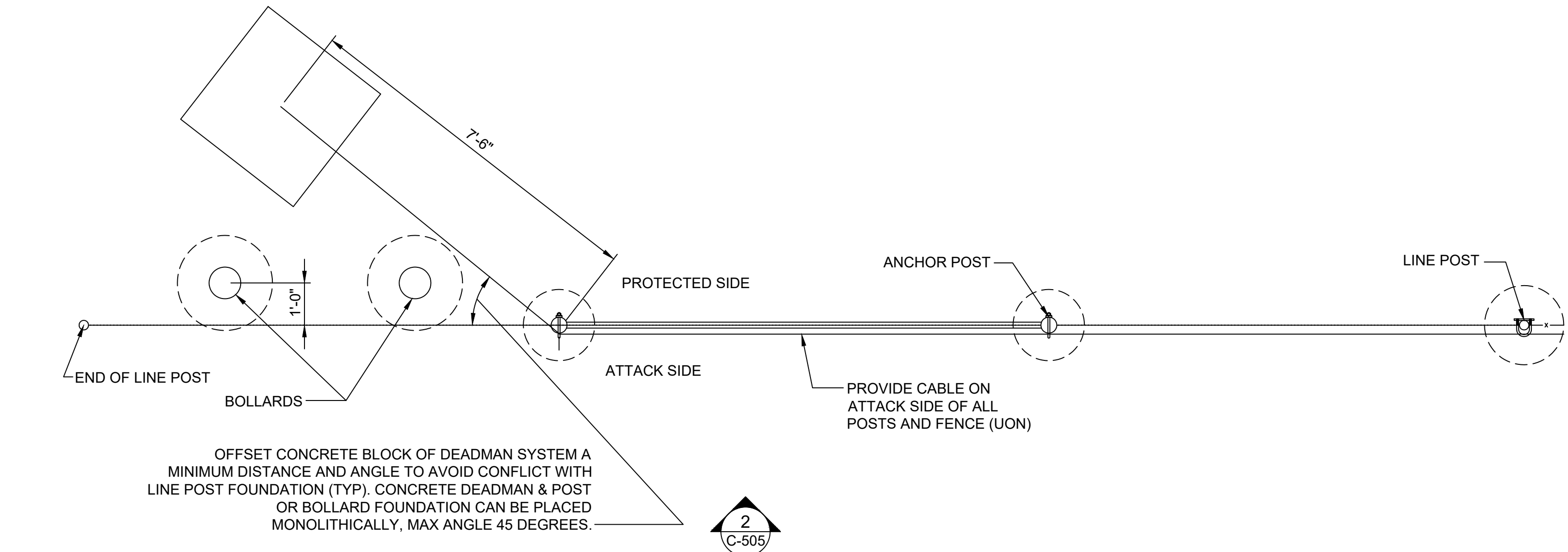


2 TYPICAL SINGLE CANTILEVERED SLIDING GATE ELEVATION
C-504 NOT TO SCALE



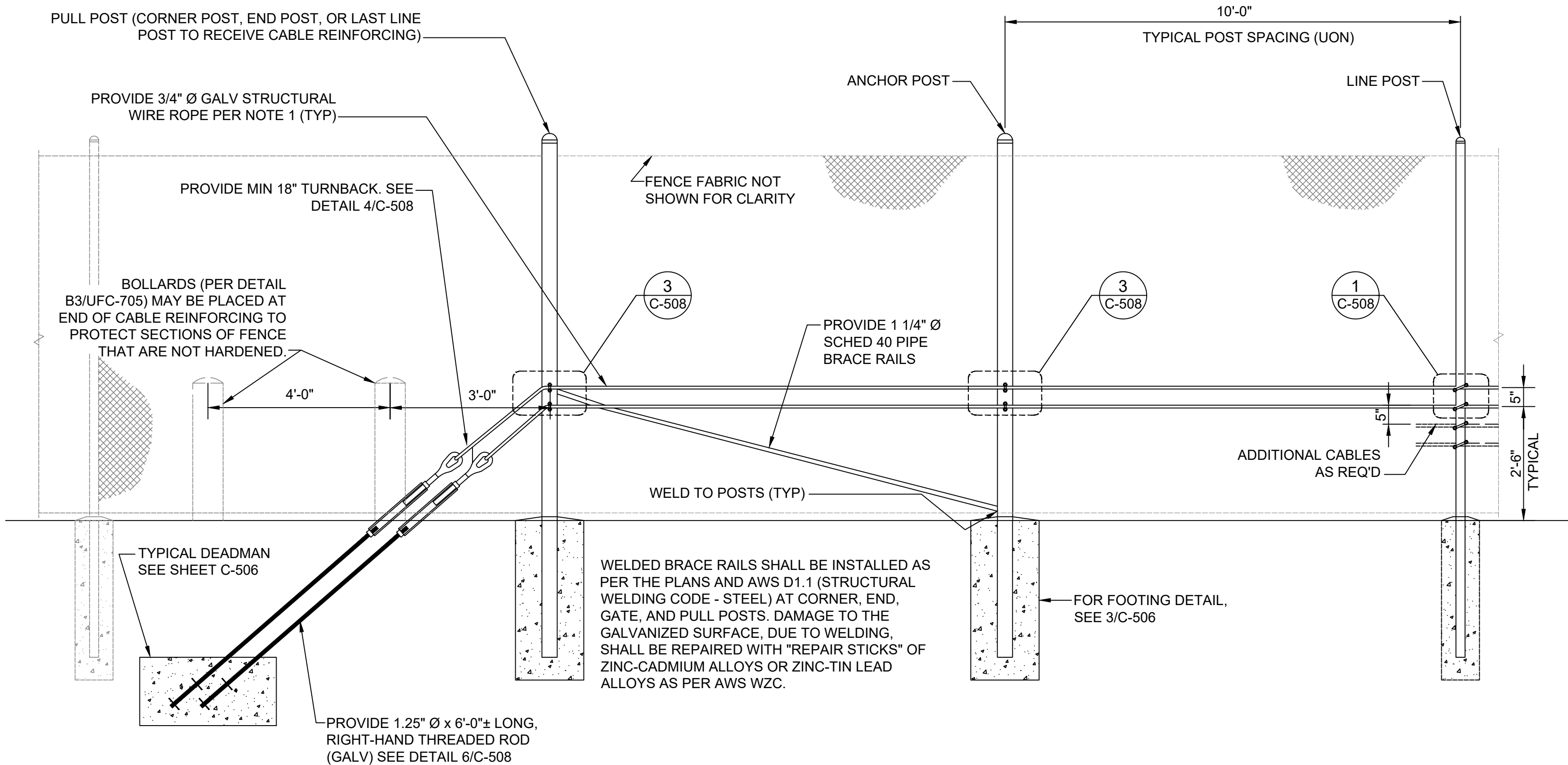
3 SECTION (TYP.)
C-504 NOT TO SCALE

GENERAL NOTE:
DETAILS AND NOTES ON THIS SHEET WERE DERIVED FROM THE UNIFIED FACILITIES CRITERIA 4-022-03 SECURITY ENGINEERING, FENCES, GATES AND GUARD FACILITIES DEFINITIVE DRAWINGS FOR SECURITY FENCING, GATES AND CABLING, DRAWING NUMBER UFC-703.



1
C-505
END POST DEADMAN AND LINE POST LAYOUT (PLAN VIEW)
SCALE: 1/2" = 1'-0"

NOTE: FOR RETROFITTING OF EXIST CLF, CABLE CAN BE PLACED ON THE ATTACK SIDE OF THE FENCE FABRIC. FOR NEW CONSTRUCTION, CABLE SHALL BE INSTALLED ON ATTACK SIDE OF POST, BETWEEN POST AND FABRIC.



2
C-505
TYPICAL END POST DEADMAN AND LINE POST LAYOUT
SCALE: 1/2" = 1'-0"

MODIFICATIONS TO TYPICAL DESIGN:

NOTE FOR CONTRACTOR: IF LARGER DESIGN THREATS OR CUSTOMER REQUESTS INDICATE A NEED FOR GREATER SECURITY, MORE 3/4" Ø CABLES CAN BE UTILIZED OR THE CABLES CAN BE UPGRADED TO 1" Ø BOTH SCENARIOS REQUIRE THE DEADMAN (WHICH WILL NEED TO BE LARGER) TO BE DESIGNED BY A PROFESSIONAL ENGINEER TO SATISFY THE CRITERIA OUTLINED IN REINF NOTE 18 ON THIS SHEET. FOR BIDDING PURPOSES, ESTABLISH A UNIT COST FOR ADDITIONAL EXCAVATION AND NEW CONCRETE PER CUBIC FOOT.
If 1" Ø CABLE IS USED, SPECIFICATIONS SHALL MATCH REINF NOTE 1 ON THIS SHEET, EXCEPT THE CABLE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 70,000 POUNDS (35 TONS). OTHER COMPONENTS, SUCH AS EYEBOLTS, U-BOLTS, ROPE CLIPS, THIMBLES, AND OTHER ASSOCIATED HARDWARE SHALL BE SIZED ACCORDINGLY.

GENERAL NOTES:

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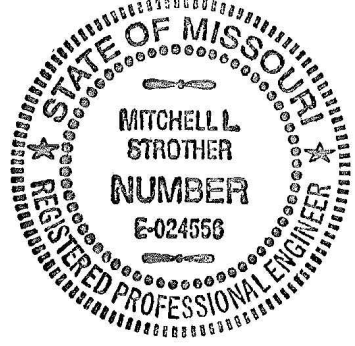
REINFORCING NOTES:

- REINFORCING CABLES SHALL BE U.S. DOMESTIC MINIMUM 3/4" Ø 6 x 19 CLASS WIRE ROPE, REGULAR LAY, EXTRA IMPROVED PLOW STEEL (EIP), INDEPENDENT WIRE ROPE CORE (IWRC), CONFORMING TO ASTM A1023 AND GALVANIZED IN ACCORDANCE WITH ASTM A475 CLASS A, & HAVE A MINIMUM BREAKING STRENGTH OF 40,000 POUNDS (20 TONS). CABLES WITH A BLACK VINYL COATING, SHALL NO BE IMPREGNATED.
- CABLES SHALL BE CONTINUOUS FROM DEADMAN TO DEADMAN. SHALL BE INSTALLED BETWEEN FENCE POST AND FENCE FABRIC AS PER PLANS. U-BOLTS SHALL BE INSTALLED PERPENDICULAR TO THE LAY OF THE STRANDS OF THE WIRE ROPE AND SHALL BE TIGHTENED AFTER SAG IN CABLE BARRIER HAS BEEN REMOVED. UNLESS INDICATED OTHERWISE, CONCRETE DEADMAN SPACING SHALL BE AT MAXIMUM 200' INTERVALS & TURNING POINTS (EXTERNAL CORNERS).
- WIRE ROPE ENDS SHALL TERMINATE AROUND TURNBUCKLES, GATE POSTS OR EXTRA HEAVY-DUTY WIRE ROPE THIMBLES (AT GATES). THESE TERMINATIONS REQUIRE 18" MINIMUM OF ROPE FOR TURN BACK AND A MINIMUM OF (4) - CLIPS EACH (EQUAL SPACING).
- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS.
- DEADMEN SHALL BE INSTALLED ON THE SECURED SIDE (INTERIOR) OF THE FENCE; WHILE CABLES SHALL BE INSTALLED ON THE EXTERIOR SIDE OF POST.
- PROVIDE NECESSARY SLACK IN CABLES (GATES ONLY) TO ALLOW FOR FULL SWING OF ALL GATE LEAVES.
- OFFSET DEADMAN SYSTEMS FROM FENCELINE (PLAN VIEW) TO AVOID CONFLICT WITH EXISTING FENCE POSTS.
- ALLOW EPOXY ANCHOR BOLTS (MIN 2 DAYS) & CONCRETE DEADMEN (MIN 7 DAYS) TO CURE, PRIOR TO APPLYING LOADS (INSTALLING TURNBUCKLES & STRAIGHTENING CABLES).
- ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.1. ALL WELD MATERIAL SHALL BE E70XX ELECTRODES.
- STRUCTURAL STEEL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NINTH EDITION OF THE AISC "MANUAL OF STEEL CONSTRUCTION FOR ALLOWANCE STRESS DESIGN."
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 AND SHALL HAVE A MINIMUM YIELD STRESS OF 36,000 psi.
- ALL STRUCTURAL STEEL MEMBERS AND HARDWARE USED IN CABLE ANCHORING SYSTEM SHALL BE HOT-DIPPED GALVANIZED. ANY AREAS WHERE COATING IS DAMAGES OR REMOVED SHALL BE COVERED WITH A ZINC RICH COMPOUND.
- TURNBUCKLES SHALL BE 1 1/2"x18", TYPE I, GALVANIZED IN ACCORDANCE WITH ASTM F1145.
- WIRE ROPE CLAMPS SHALL BE TYPE I, GALVANIZED, AND CONFORM TO FS FF-C-450.
- ALL THREADED RODS, U-BOLTS, AND BOLTS SHALL CONFORM TO ASTM A307 AND SHALL BE INSTALLED WITH F844 WASHERS AND A563 NUTS. ENTIRE BOLT ASSEMBLY SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153. INSTALL AT LEAST TWO COATS, 4 MILS MIN TOTAL THICKNESS.
- ZINC RICH COMPOUND FOR REPAIRS SHALL BE 95% METALLIC ZINC, BY WEIGHT IN DRIED FILM; INSTALL AT LEAST TWO COATS, 4 MILS MIN TOTAL THICKNESS.
- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI. THE MINIMUM CONCRETE COVER SHALL BE 3", UNLESS OTHERWISE NOTED.
- DESIGN CRITERIA:
UFC 4-022-03 "SECURITY ENGINEERING: FENCES, GATES AND GUARD FACILITIES"
UFC 4-022-02 "SELECTION AND APPLICATION OF VEHICLE BARRIERS"
- AT CABLE REINFORCING GATES, PROVIDE TWIST-OFF METAL TIES TO SECURE CABLE TO GATE FABRIC @ 24" OC & U-BOLTS TO SECURE TO GATE UPRIGHTS. MODIFY AS NEEDED TO FACILITATE OPERATION OF GATE

LAYOUT OF REINFORCING:

DESIGNER OF RECORD TO LOCATE DEADMEN ON SITE PLANS, SATISFYING SPACING CRITERIA, OVERLAPS, AND FENCE CORNERS / TURNING POINTS. AT GATES IT IS DESIRABLE TO HAVE TRAFFIC ON EITHER SIDE OF A MEDIAN TO OPERATE AND PROTECT INDEPENDENTLY (NOT UTILIZING THE SAME DEADMAN SYSTEMS). THEREFORE, DEADMEN SHOULD BE PLACED IN THE MEDIAN TO ANCHOR THE GATE REINFORCING FOR EACH SIDE OF THE ROAD. IF THERE IS NO PHYSICAL MEDIAN (MERELY PAINTED LINES), LIMITED ROOM, OR UTILITY CONFLICTS THAT DO NOT ALLOW FOR DEADMEN PLACEMENT BETWEEN GATES, ENSURE THAT THE CABLING FOR BOTH GATES ARE CONNECTED - EITHER DIRECTLY OR VIA AN INTERMEDIATE CABLE WHICH CREATES AN INTEGRAL CABLE SYSTEM ACROSS THE ENTIRE GATE AREA.

STATE OF MISSOURI
MIKE KEHOE,
GOVERNOR



MITCHELL L. STROTHER
PROFESSIONAL ENGINEER - E-024556



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JEFFERSON CITY, MO 65101
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MILITARY VEHICLE
COMPOUND,
FENCING AND SITE
IMPROVEMENTS

JEFFERSON BARRACKS
74 KEARNEY ST.
ST. LOUIS CO., MO

PROJECT #: T2504-01
SITE #: 6303
ASSET #: 8136303050

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/01/2026

CAD DWG FILE: MVC-BASE-FINAL
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

SHEET TITLE:

TYPICAL CABLE
REINFORCED
CHAIN LINK

SHEET NUMBER:

C-505

SHEET: 11 OF 15
DATE: 07/01/2026

MSD Project No.: 26MSD-00227
SD Base Map No.: 29H2

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JEFFERSON CITY, MO 65101
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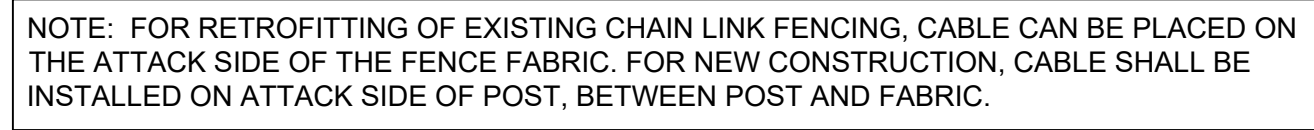
**JEFFERSON BARRACKS
74 KEARNEY ST.
ST. LOUIS CO., MO**

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/01/2026

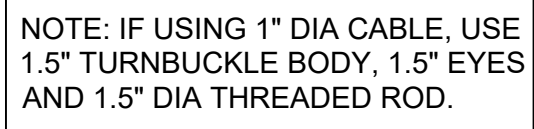
CABLE REINFORCED CHAIN LINK FENCE-DEADMAN & LINE POST

C-506

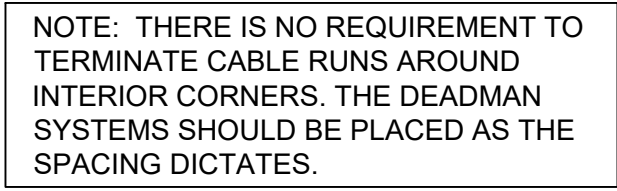
MSD Project No.: 26MSD-00227
SD Base Map No.: 29H2



1 DEADMAN
C-506 SCALE: 1/2" = 1'-0"



3 TYPICAL D
C-506 SCALE: 1/2" = 1'-0"



4 TURNING
C-506 NOT TO SCALE

GENERAL NOTE:
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MILITARY VEHICLE
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IMPROVEMENTS

JEFFERSON BARRACKS
74 KEARNEY ST.
ST. LOUIS CO., MO

PROJECT #: T2504-01
SITE #: 6303
ASSET #: 8136303050

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/01/2026

CAD DWG FILE: MVC-BASE-FINAL
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

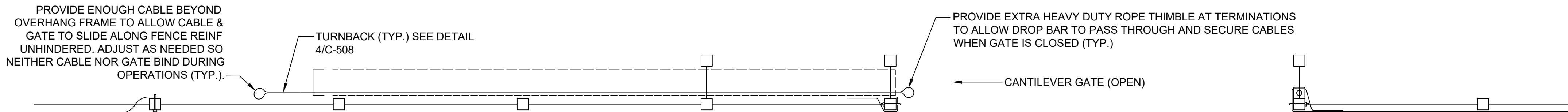
SHEET TITLE:

**CABLE REINFORCED
CHAIN LINK FENCE -
GATE DETAILS**

SHEET NUMBER:

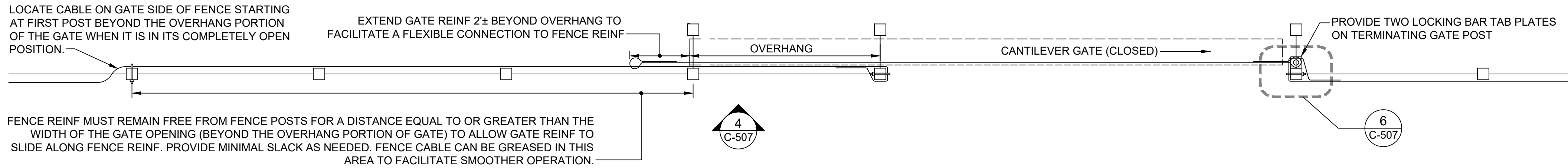
C-507

SHEET: 13 OF 15
DATE: 07/01/2026



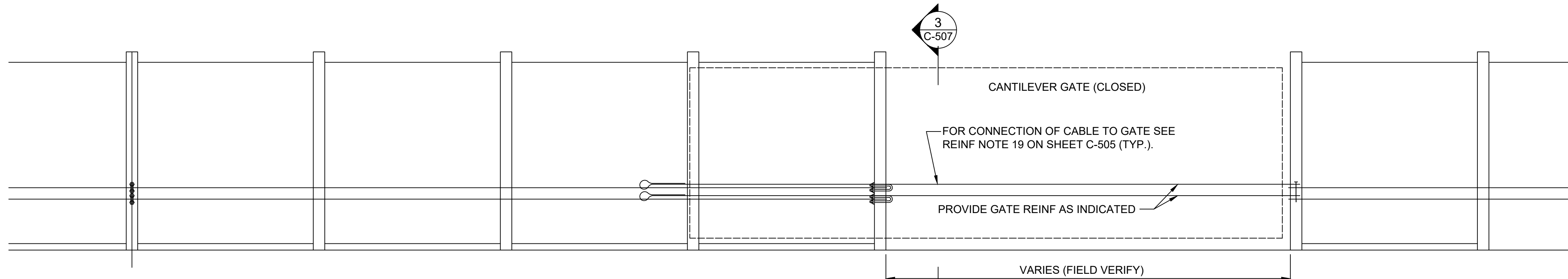
PLAN VIEW (GATE OPEN)

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



PLAN VIEW (GATE CLOSED)

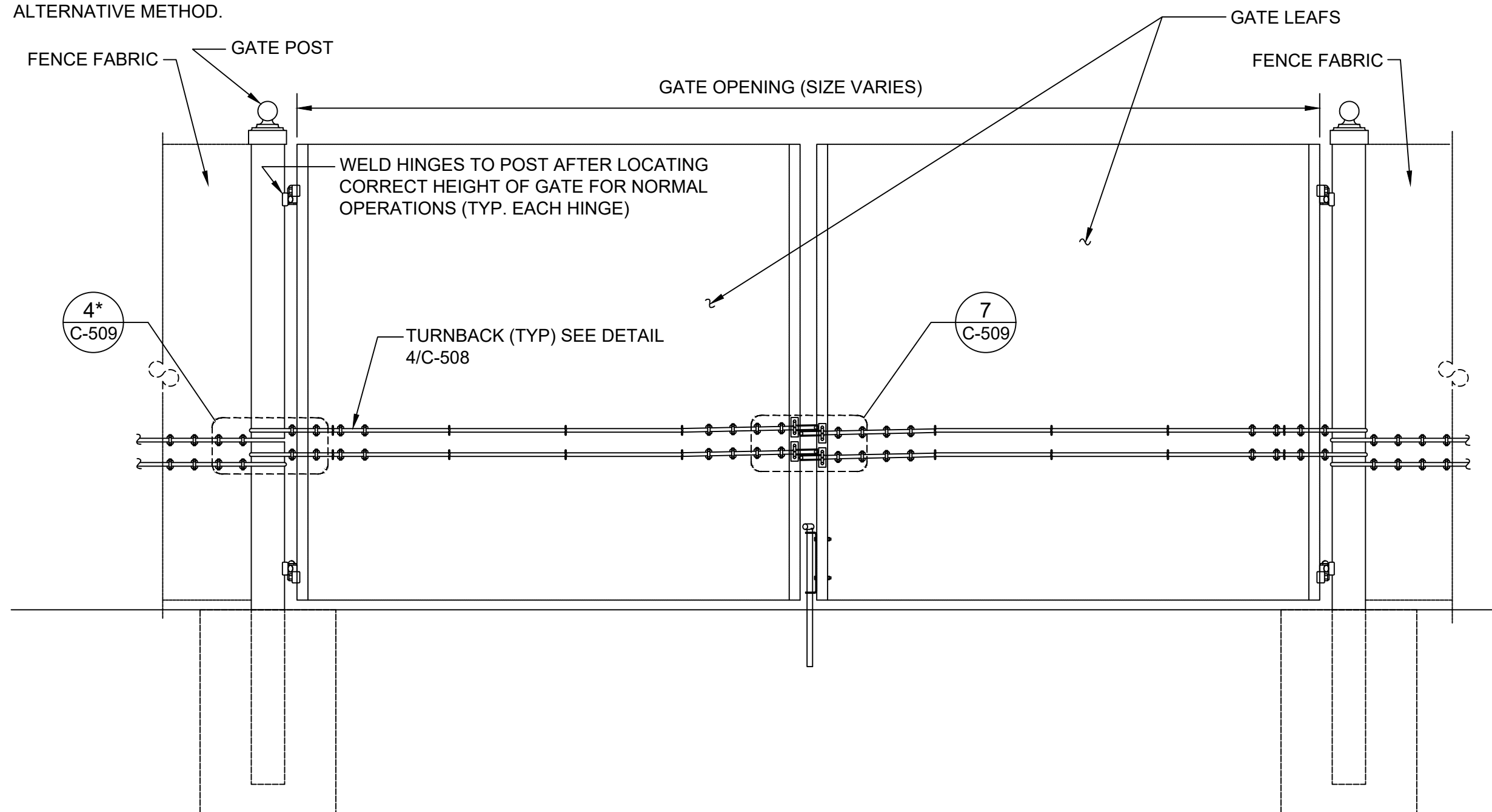
SCALE: 1/2" = 1'-0"



2 CABLE REINFORCING CANTILEVER SLIDE GATE (ELEVATION)

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

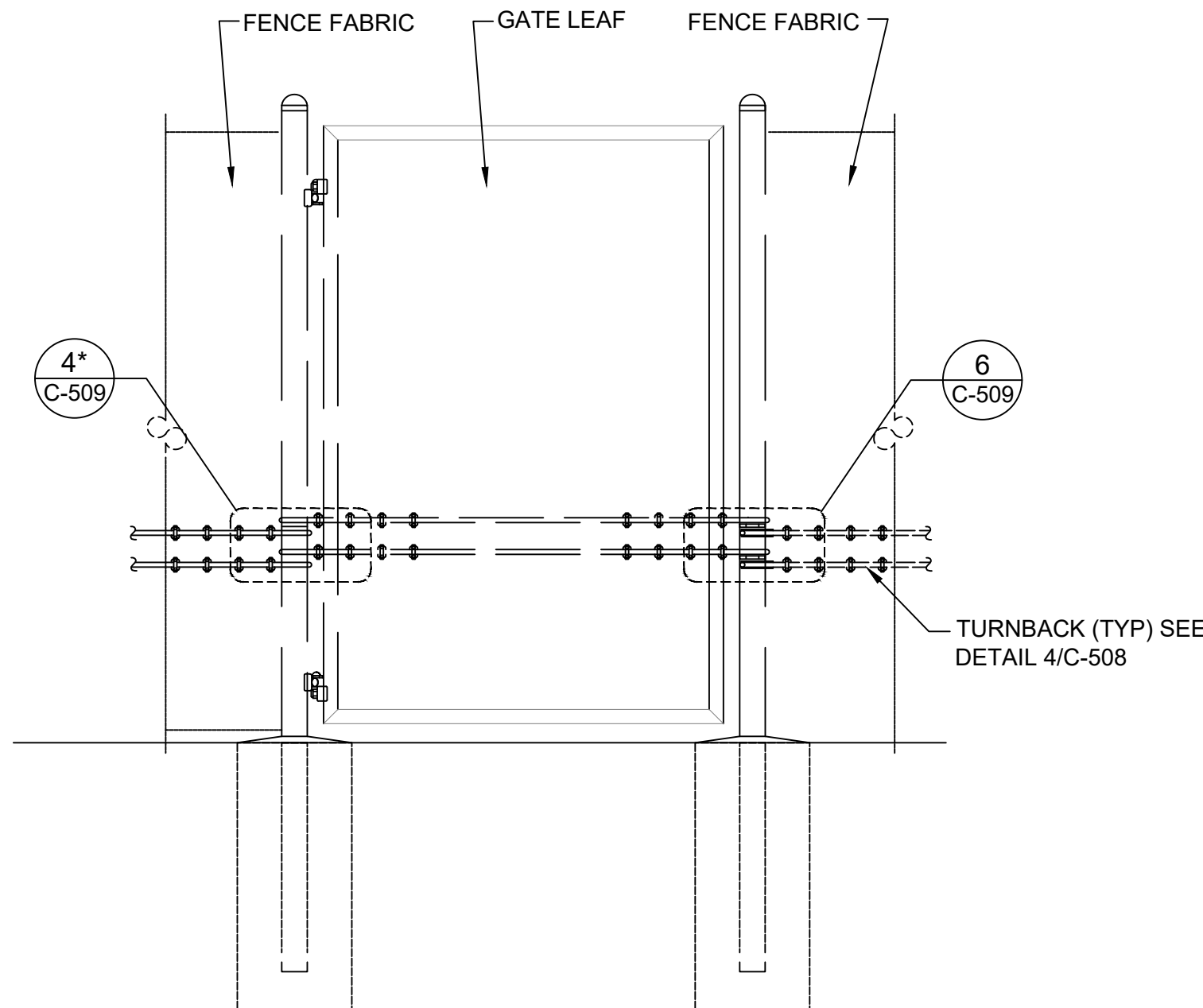
*NOTE: SEE DETAIL 1 ON SHEET C-509 FOR ALTERNATIVE METHOD.



4 CABLE REINFORCING FOR DOUBLE SWING GATE (ELEVATION)

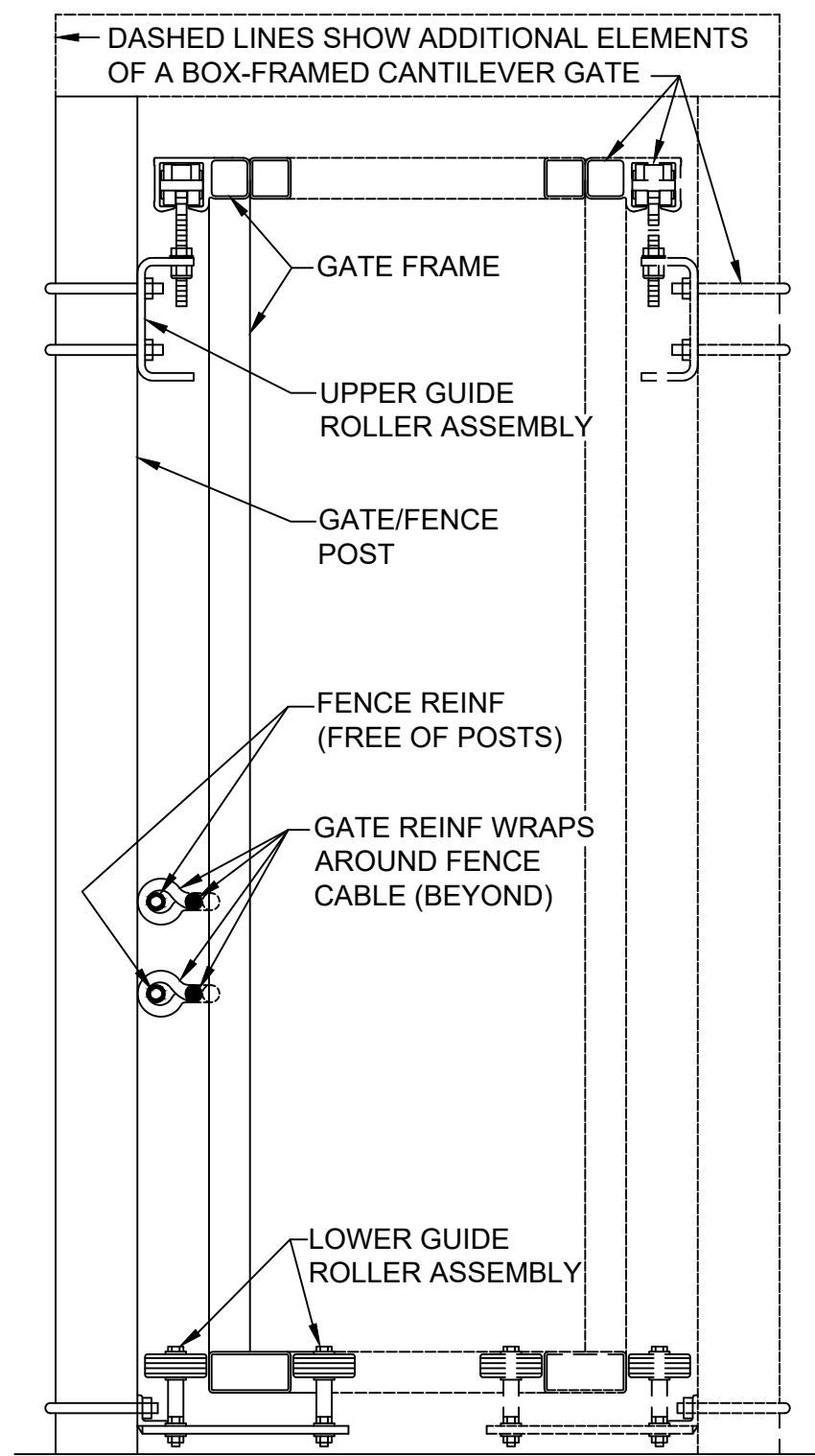
SCALE: 1/2" = 1'-0"

*NOTE: SEE DETAIL 1 ON SHEET C-509 FOR ALTERNATIVE METHOD.



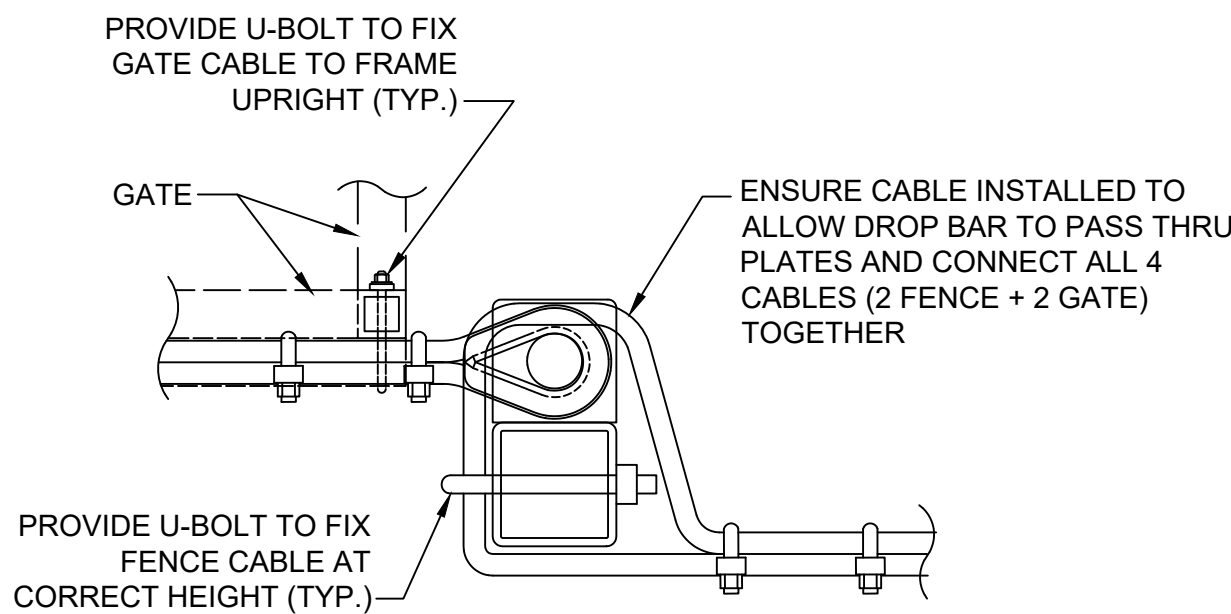
5 CABLE REINFORCING FOR SINGLE SWING GATE (ELEVATION)

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



3 GATE SECTION

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



6 GATE SECTION

NOT TO SCALE

GENERAL NOTE:

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IMPROVEMENTS

JEFFERSON BARRACKS
74 KEARNEY ST.
ST. LOUIS CO., MO

PROJECT #: T2504-01
SITE #: 6303
ASSET #: 8136303050

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/01/2026

CAD DWG FILE: MVC-BASE-FINAL
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

SHEET TITLE:

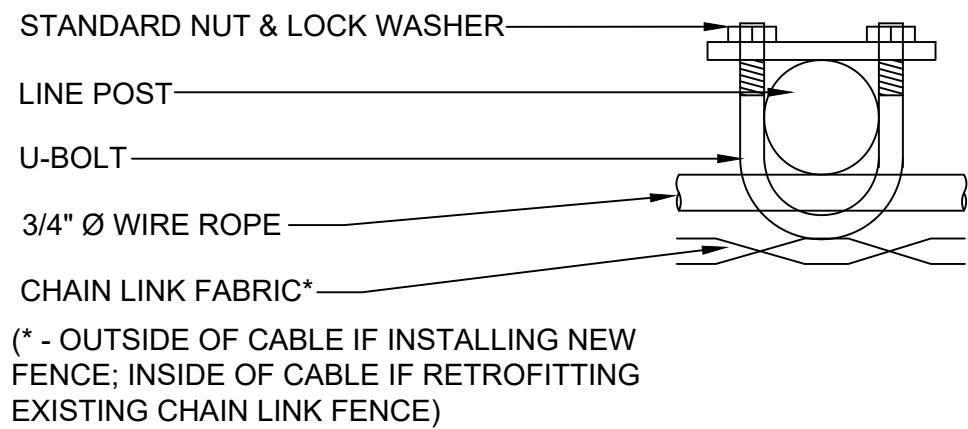
CABLE REINFORCING DETAILS

SHEET NUMBER:

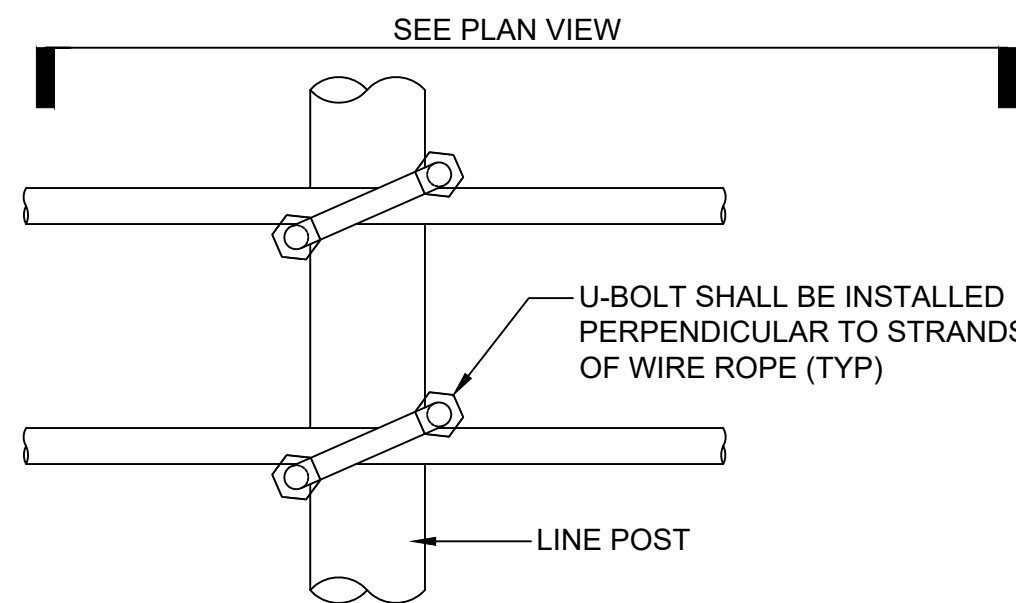
C-508

SHEET: 14 OF 15
DATE: 07/01/2026

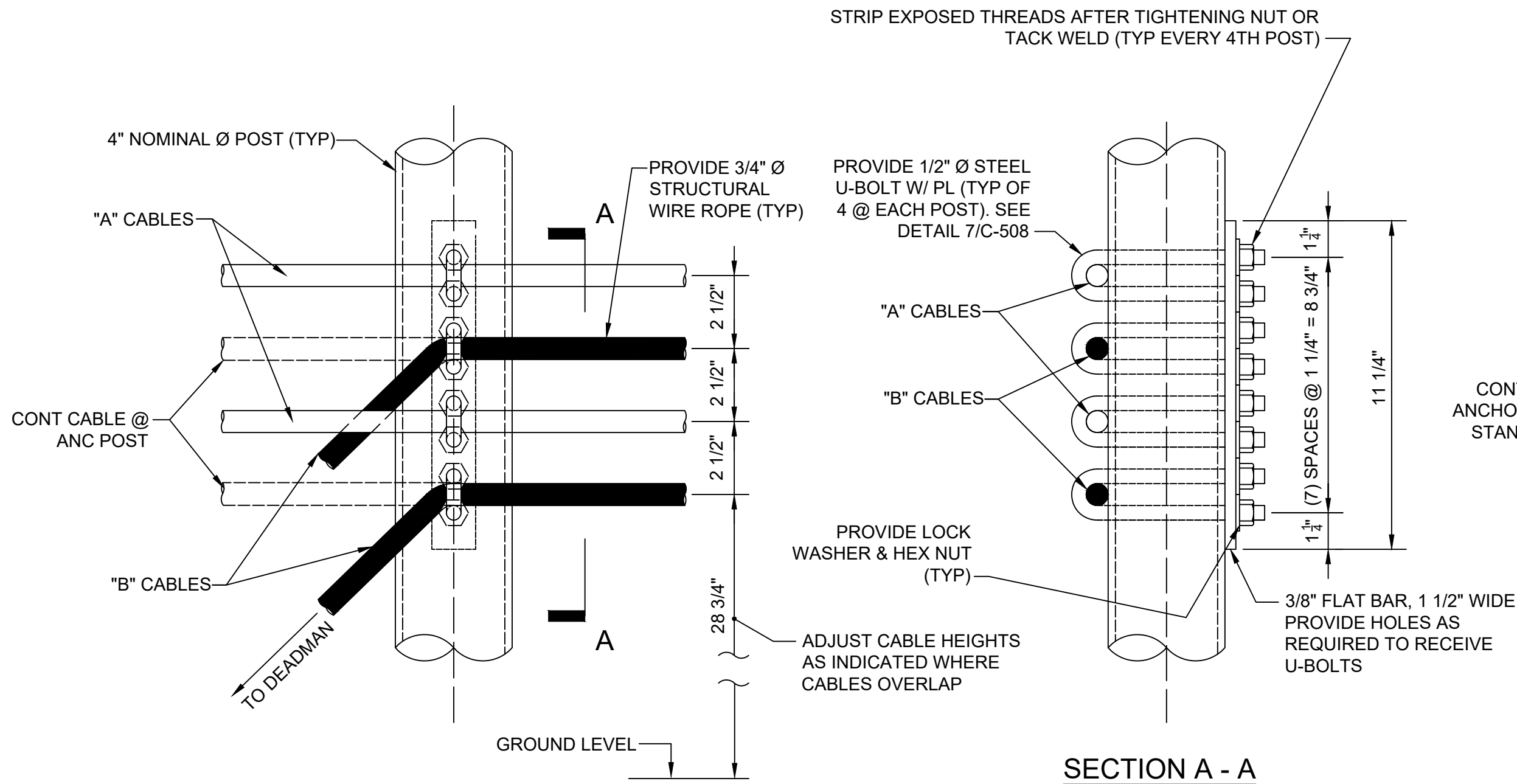
MSD Project No.: 26MSD-00227
SD Base Map No.: 29H2



PLAN VIEW
SCALE: 3" = 1'-0"

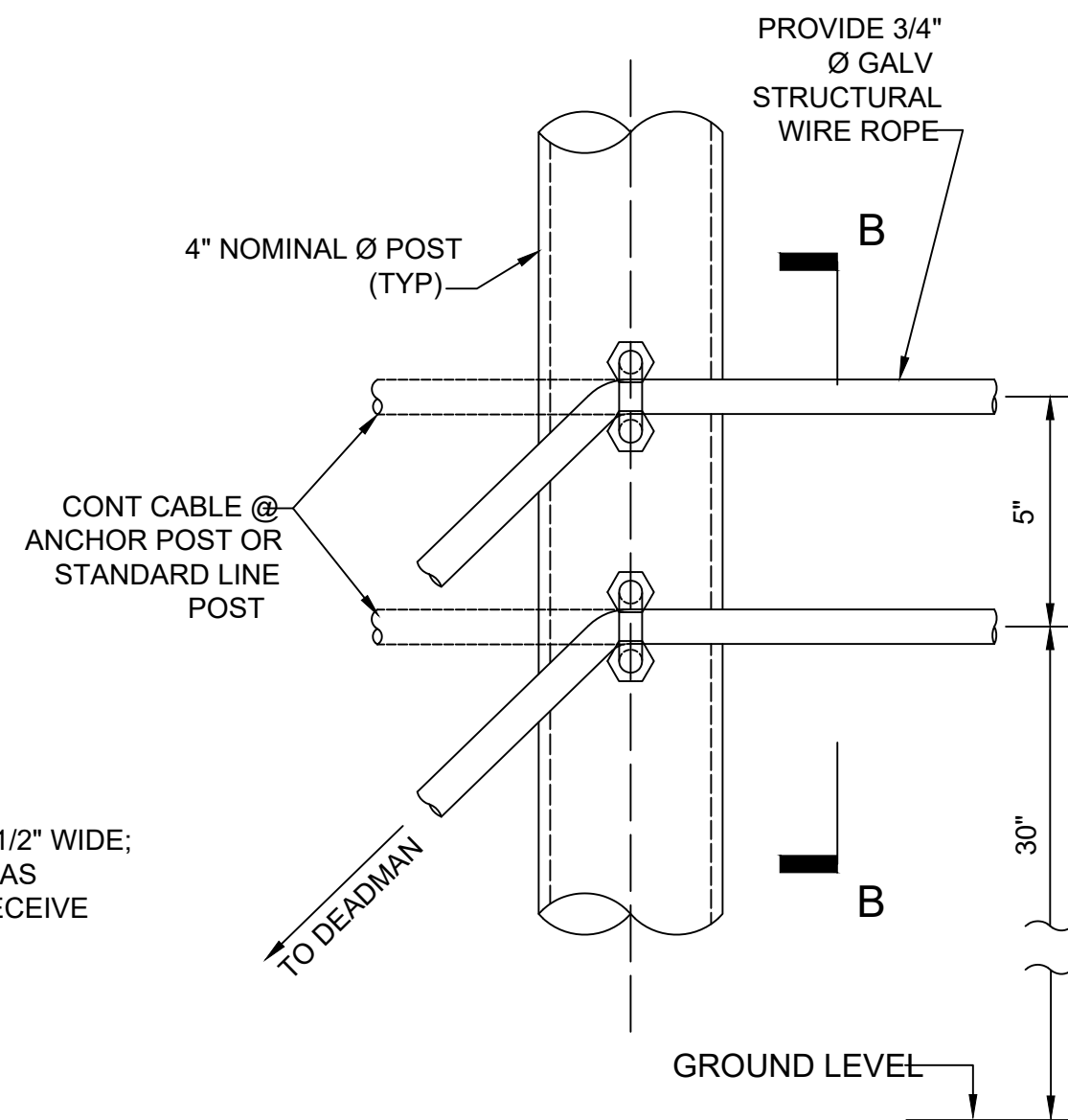


1 LINE POST DETAIL (CLF ONLY)
SCALE: 3" = 1'-0"

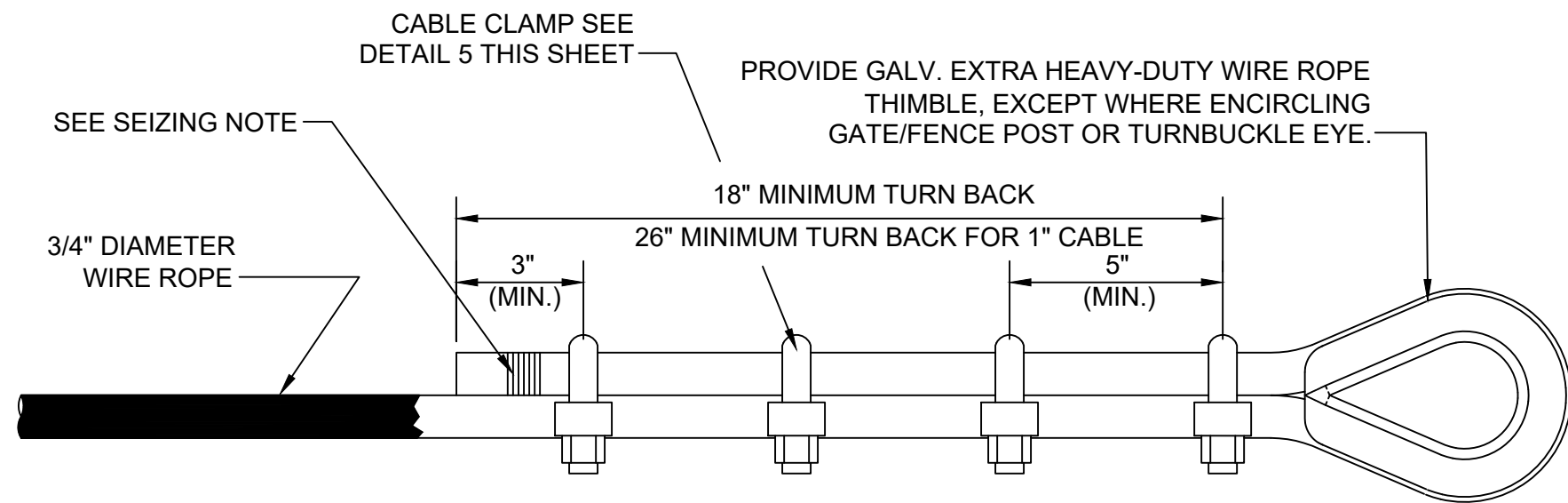
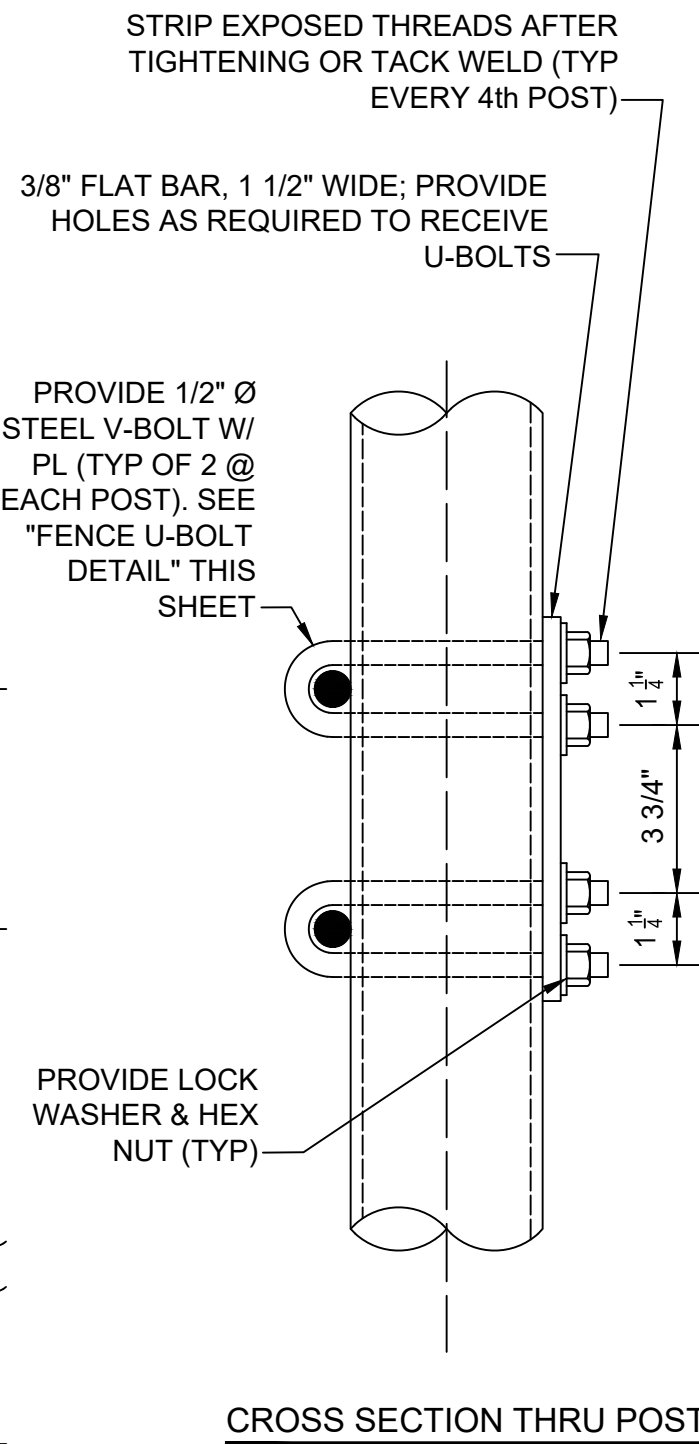


2 CABLE ANCHORAGE DETAIL @ PULL & ANCHOR POST W/ OVERLAPPING CABLES
SCALE: 3" = 1'-0"

NOTE: USE THIS DETAIL FOR ORNAMENTAL LINE POSTS.
OPTIONAL REPLACEMENT OF DETAIL 1 THIS SHEET
FOR CLF LINE POST.



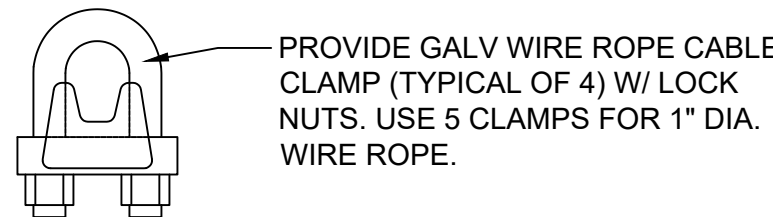
3 CABLE ANCHORAGE DETAIL @ PULL & ANCHOR POST
SCALE: 3" = 1'-0"



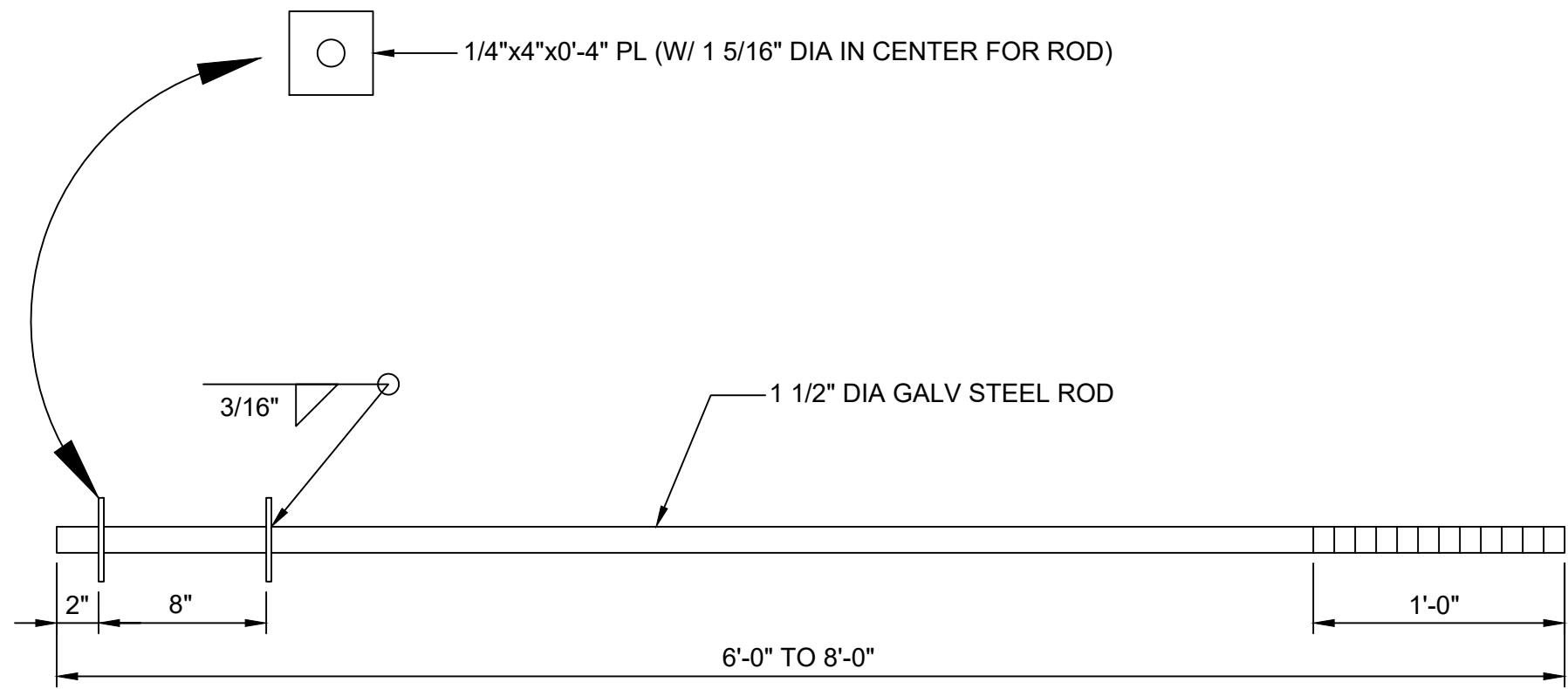
ORNAMENTAL FENCE NOTE: STRIP VINYL COATING OFF WIRE ROPE IN AREA OF CLIPS AND THIMBLE (APPROX. LAST 4'-6").
NOTE (ALL FENCE TYPES): INSTALL SADDLE OF CLIPS ON LIVE SIDE (AS SHOWN). SEIZE CUT END OF WIRE ROPE, AND TORQUE NUTS PER MANUFACTURER'S RECOMMENDATIONS (TYP).

SEIZING NOTE: WIND SEIZING WIRE IN A TIGHT SPIRAL AROUND THE ROPE END TO A 1" LENGTH OF SEIZING. TWIST THE TWO ENDS OF THE SEIZING WIRE AT THE CENTER OF THE SEIZING LENGTH. USE ZINC COATED STEEL WIRE.

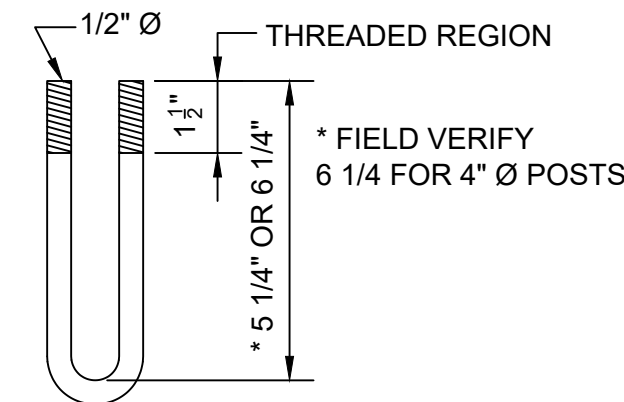
4 TURNBACK AND CLAMP DETAIL
SCALE: 3" = 1'-0"



5 CLAMP DETAIL
NOT TO SCALE



6 DEADMAN ANCHOR ROD
SCALE: 1 1/2" = 1'-0"



7 FENCE U-BOLT DETAIL
SCALE: 3" = 1'-0"

GENERAL NOTE:
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MILITARY VEHICLE
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JEFFERSON BARRACKS
74 KEARNEY ST.
ST. LOUIS CO., MO

PROJECT #: T2504-01
SITE #: 6303
ASSET #: 8136303050

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/01/2026

CAD DWG FILE: MVC-BASE-FINAL
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

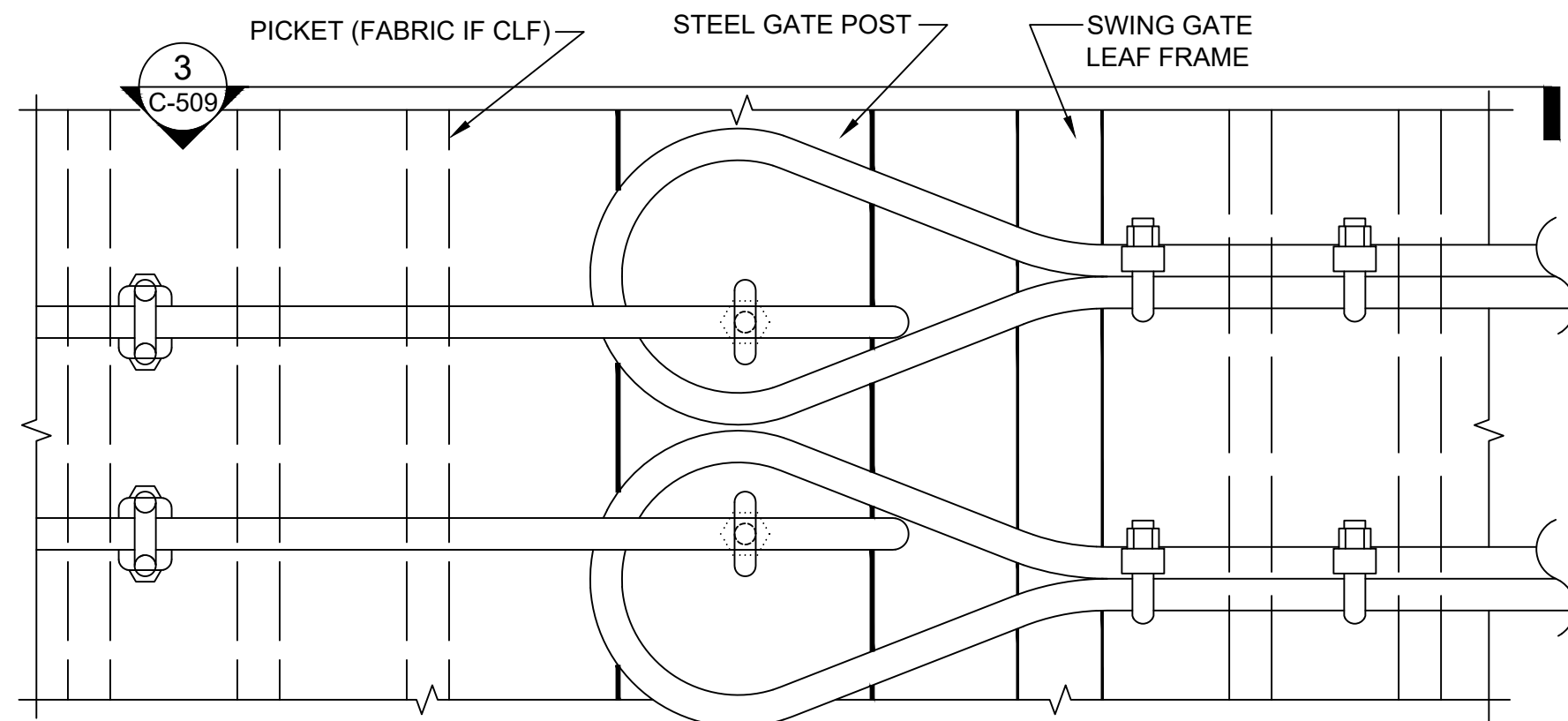
SHEET TITLE:

CABLE REINFORCING DETAILS (CONTD)

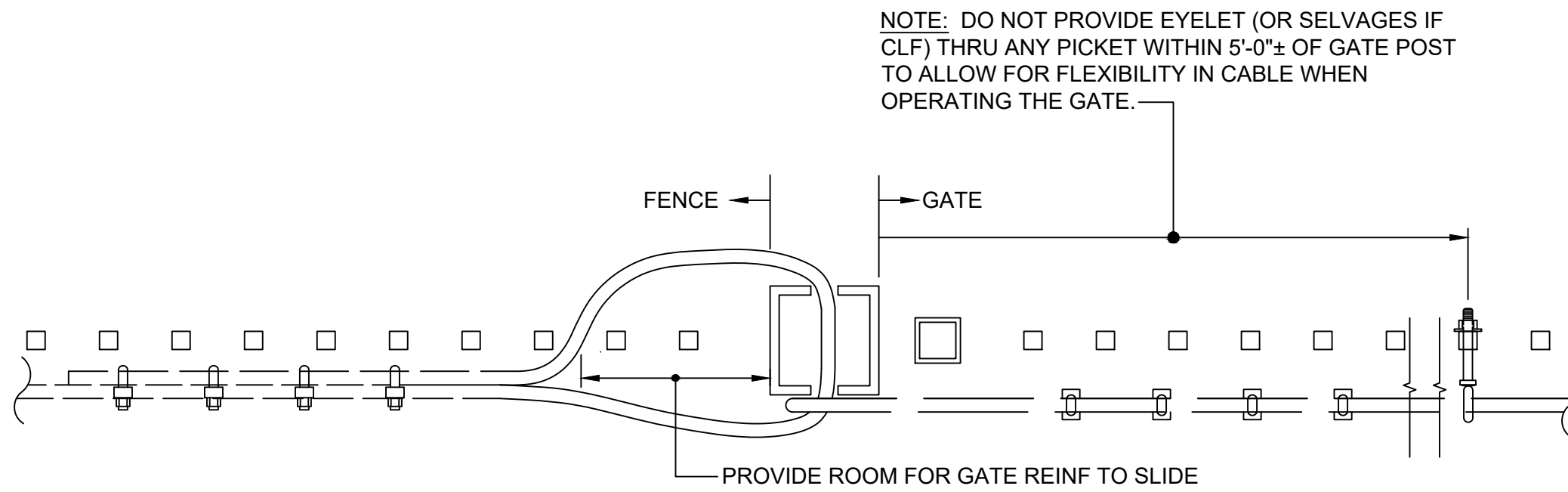
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C-509

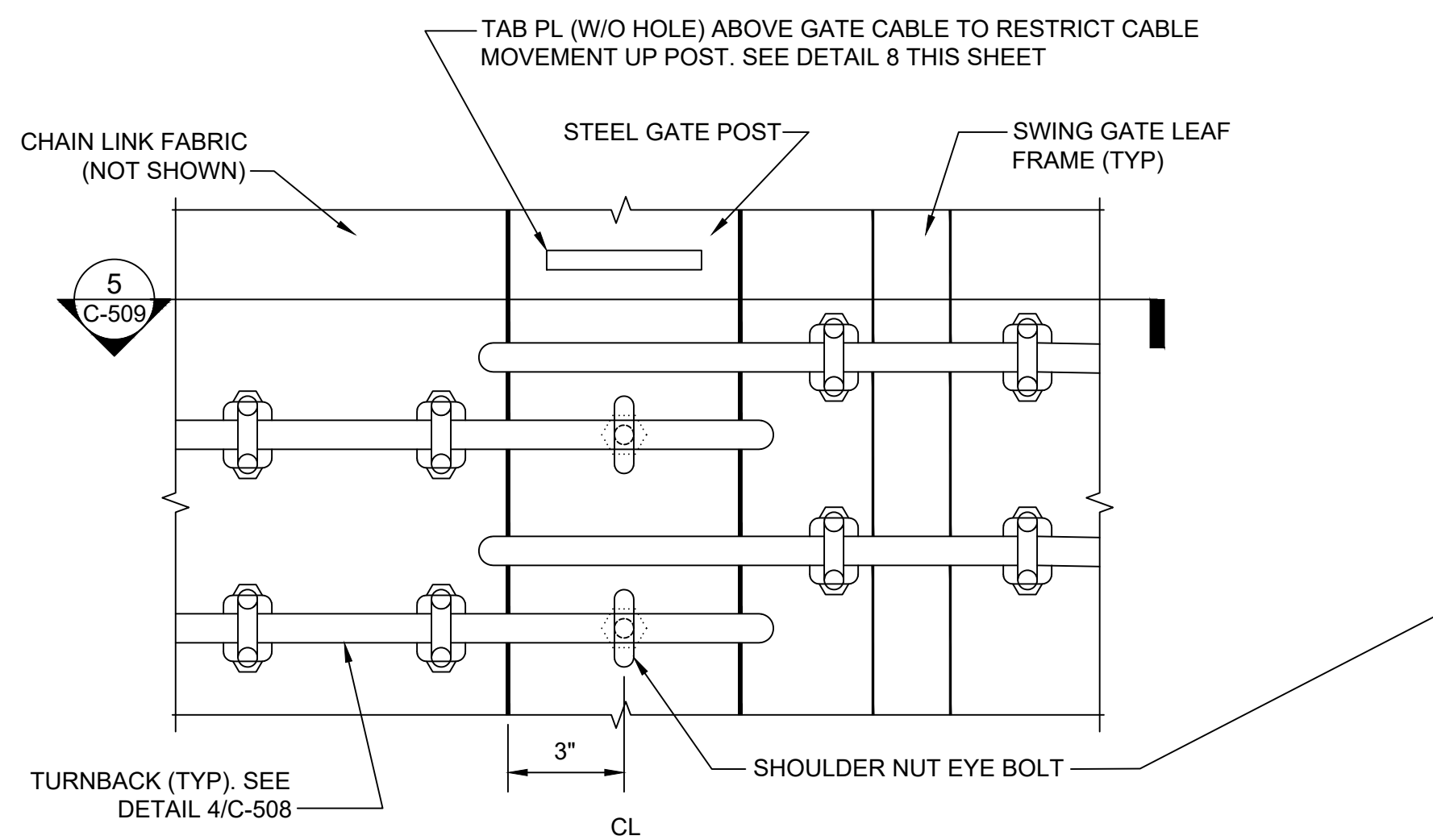
SHEET: 15 OF 15
DATE: 07/01/2026



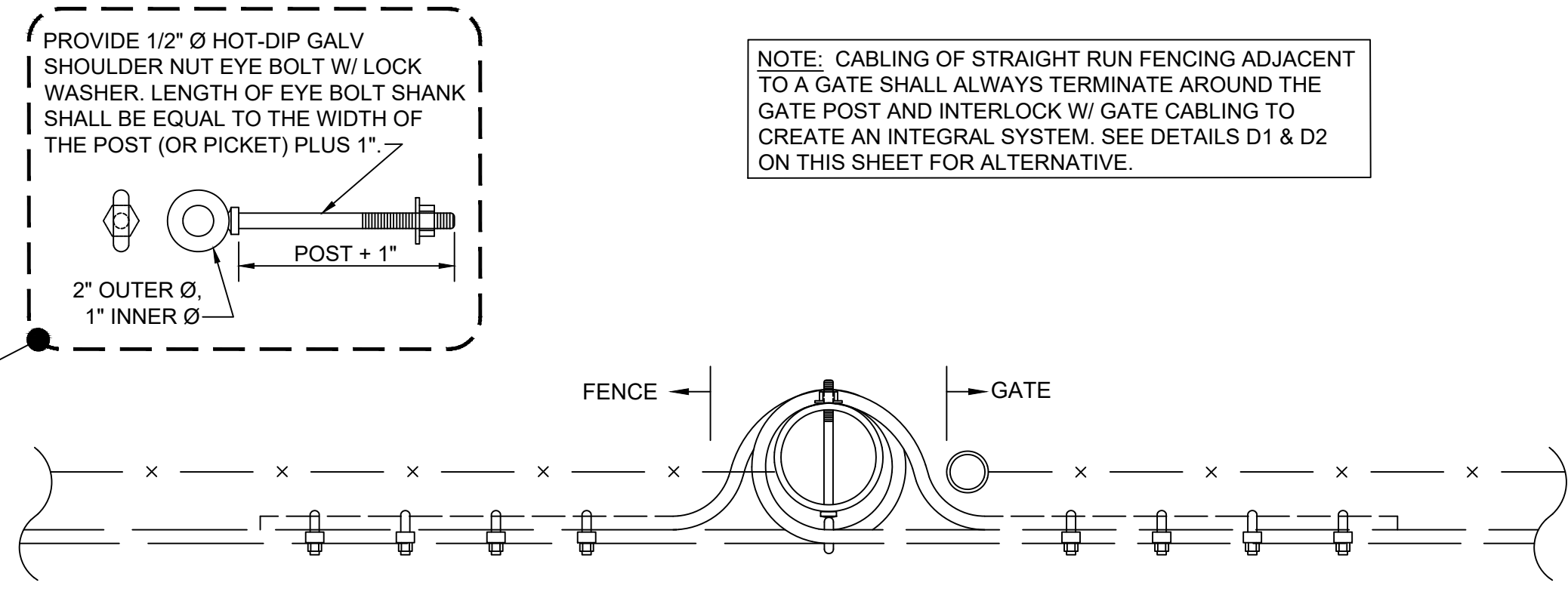
1 GATE POST DETAIL
SCALE: 3" = 1'-0"



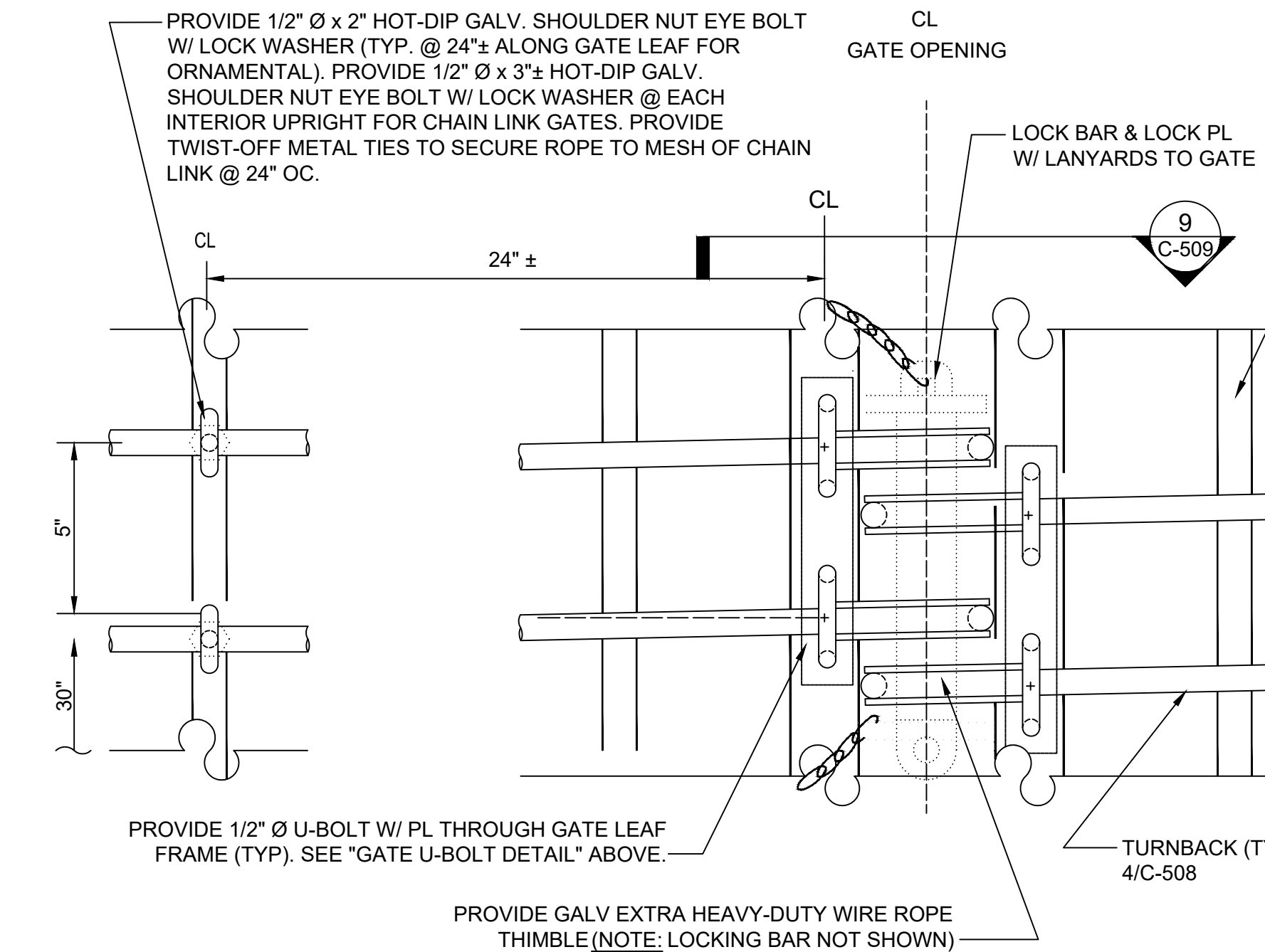
2 ALTERNATIVE CABLE LASHING - ORNAMENTAL SHOWN (CLF SIMILAR)
SCALE: 3" = 1'-0"



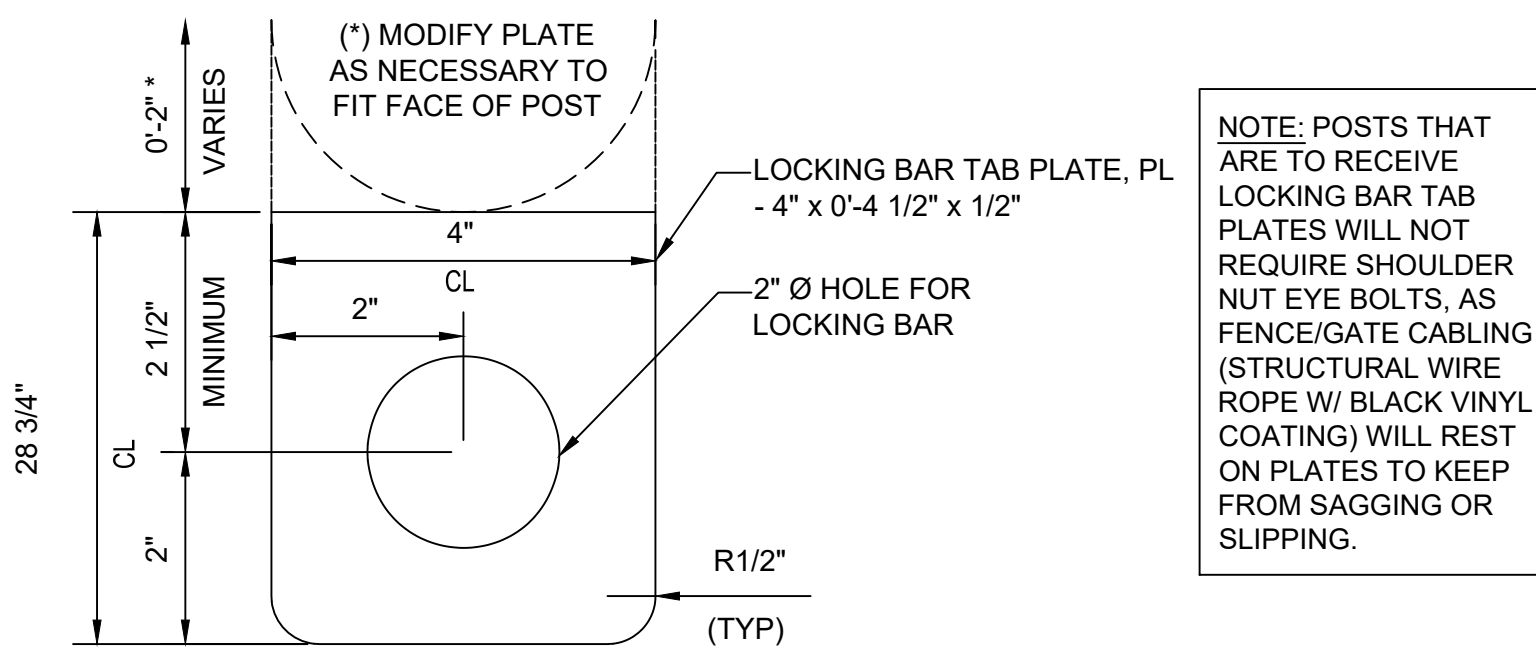
3 GATE POST DETAIL
SCALE: 3" = 1'-0"



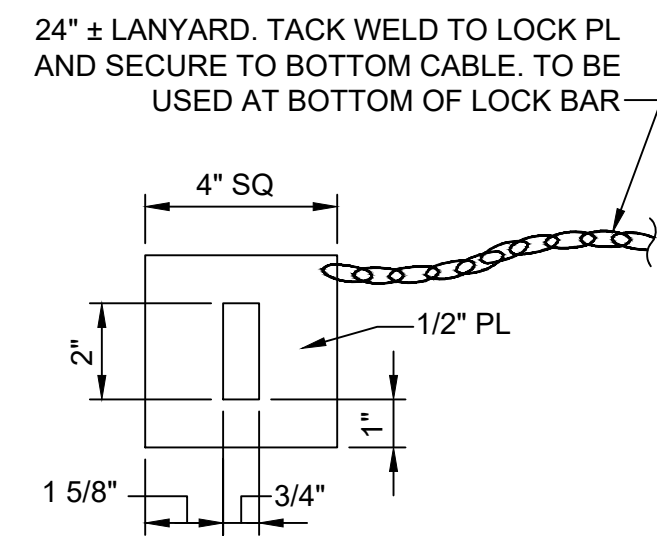
4 SECTION
SCALE: 1 1/2" = 1'-0"



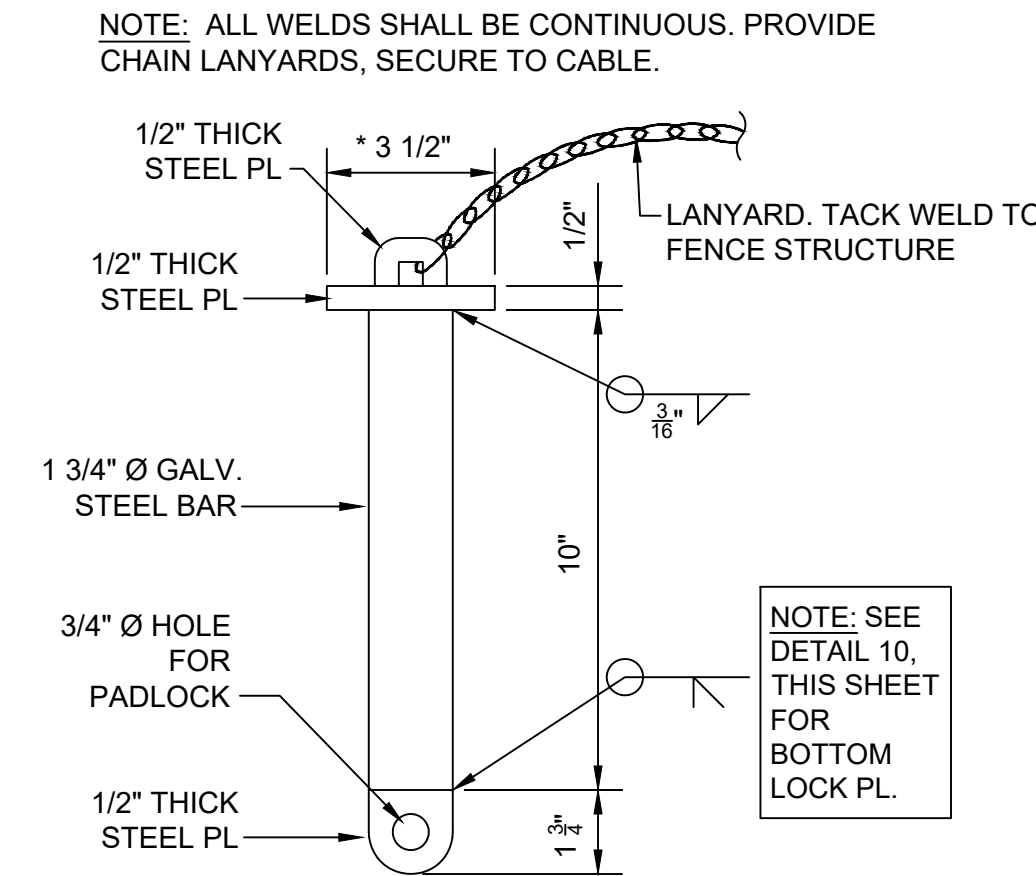
5 DOUBLE GATE LEAF LOCK DETAIL
SCALE: 3" = 1'-0"



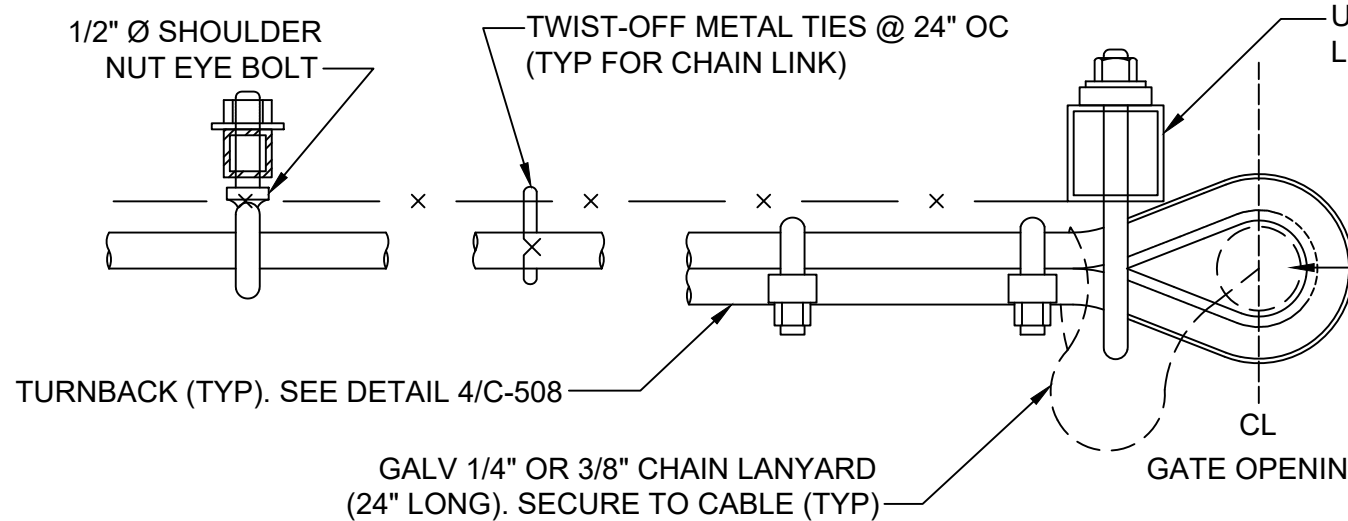
6 LOCKING BAR TAB PLATE DETAIL
SCALE: 6" = 1'-0"



7 LOCK PLATE
SCALE: 3" = 1'-0"

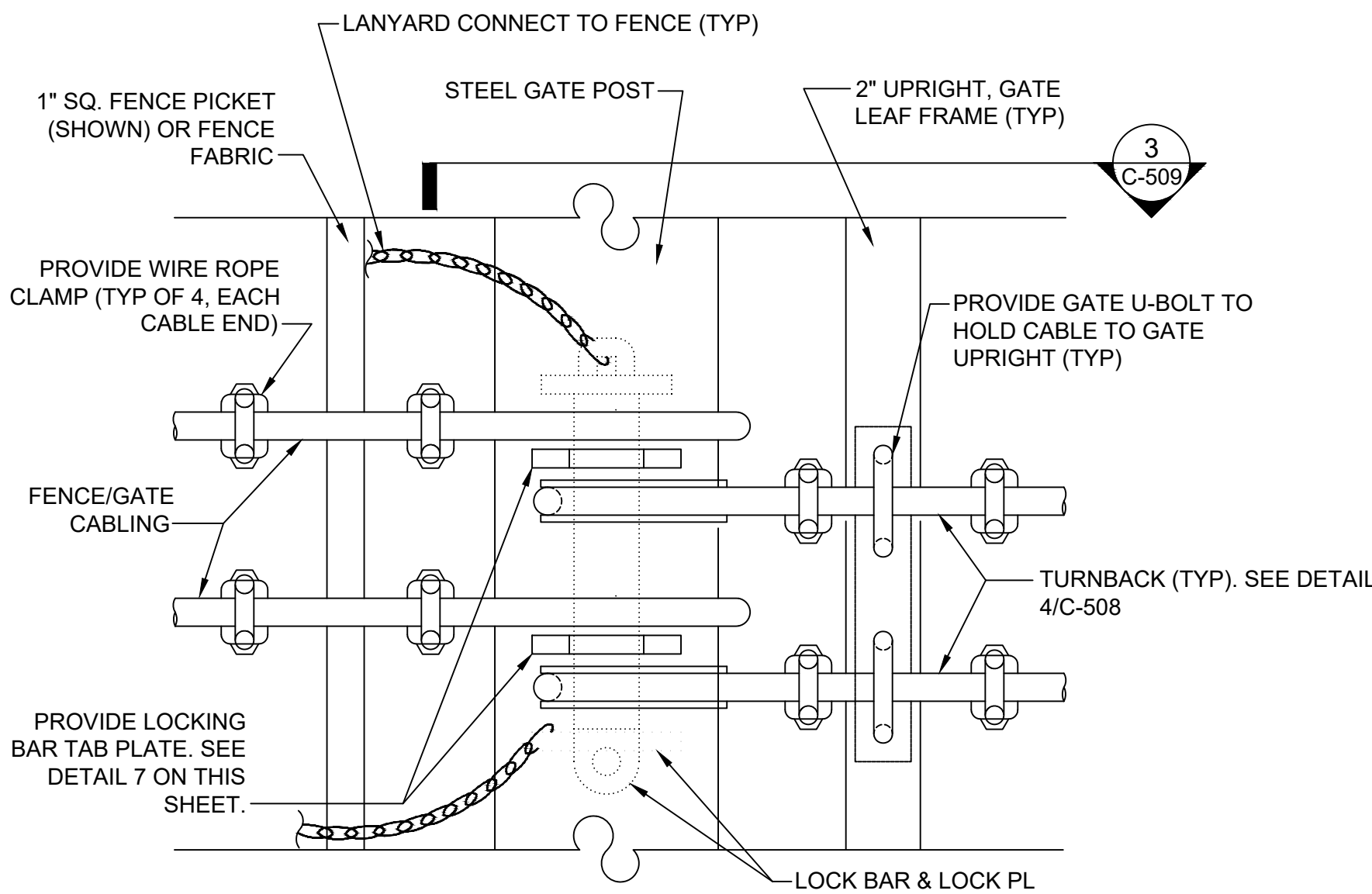


8 LOCK BAR DETAIL
SCALE: 3" = 1'-0"



9 SECTION
SCALE: 3" = 1'-0"

3 PERSONNEL GATE POST SECTION
SCALE: 3" = 1'-0"



10 PERSONNEL GATE POST DETAIL (TYP.)
SCALE: 3" = 1'-0"

GENERAL NOTE:
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DEFINITIVE DRAWINGS FOR SECURITY FENCING, GATES AND CABLING, DRAWING
NUMBER UFC-714.