

ESTIMATE OF QUANTITIES

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
621E0060	6' Chain Link Fence with Top Rail	2,696	Ft
621E0420	Single Vehicular Swing Gate	1	Each
621E0450	Double Vehicular Sliding Gate	1	Each

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and/or Special Provisions as included in this Proposal.

WORK DESCRIPTION

Work on this project includes installation of chain link fence at the Faith Maintenance Yard

CHAIN LINK FENCE

The north gate shall be a 12' vehicular swing gate and the east gate shall be a 30' sliding gate.

Barbed wire shall be installed on top of the chain link fence as per standard plate 621.04.

All costs associated with this work shall be incidental to the contract unit price per foot for "6' Chain Link Fence with Top Rail".

TABLE OF FENCE QUANTITIES

Side	6' Chain Link Fence with Top Rail	Vehicular Sliding Gate	Vehicular Swing Gate
	(Ft)	(Each)	(Each)
West	872		
South	499		
East	839	1	
North	486		1
Sum	2696	1	1

WASTE DISPOSAL SITE

The Contractor will be required to furnish a site(s) for the disposal of construction/demolition debris generated by this project.

Construction/demolition debris may not be disposed of within the State ROW.

The waste disposal site(s) shall be managed and reclaimed in accordance with the following from the General Permit for Highway, Road, and Railway Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Environment and Natural Resources.

The waste disposal site(s) shall not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements shall apply:

- Construction/demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction/demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of fences, gates, and placement of a sign or signs at the entrance to the site stating "No Dumping Allowed".
- Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period of time not to exceed the duration of the project. Prior to project completion, the waste shall be removed from view of the ROW or buried and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) shall be incidental to the various contract items.

TRAFFIC CONTROL – GENERAL NOTES

- Unless otherwise stated in these plans, no work will be allowed during hours of darkness. Hours of darkness are defined, as ½ hour after sunset until ½ hour before sunrise.
- Storage of vehicles and equipment shall be as near the right-of-way as possible. Contractor's employees should mobilize at a location off the right-of-way and arrive at the work sites in a minimum number of vehicles necessary to perform the work. Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage of the vegetation, surfacing, embankment, delineators, and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.
- All materials and equipment shall be stored a minimum distance of 30' from the traveled way during nonworking hours.
- Vehicles working in traffic or alongside traffic shall be equipped with a flashing amber light visible from all directions. The amber light shall be mounted on the uppermost part of the contractor's vehicle. Lights must have peak intensity within the range of 40 to 400 candelas and must flash at 75 ± 15 flashes per minute. Vehicle flasher/hazard lights are not acceptable. All haul trucks shall be equipped with a second flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights shall be incidental to the various related contract bid items.
- A 2 week advanced notice of work is required. DOT will provide all necessary traffic control for the project.

SOUTH DAKOTA ONE CALL

The Contractor shall notify South Dakota One Call at 1-800-781-7474 prior to any work on project as utilities may be encountered.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	410D364	2	6

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	410D364	3	6

Plotting Date: 01/14/2014

Chain Link Fence Layout



6' Chain Link Fence

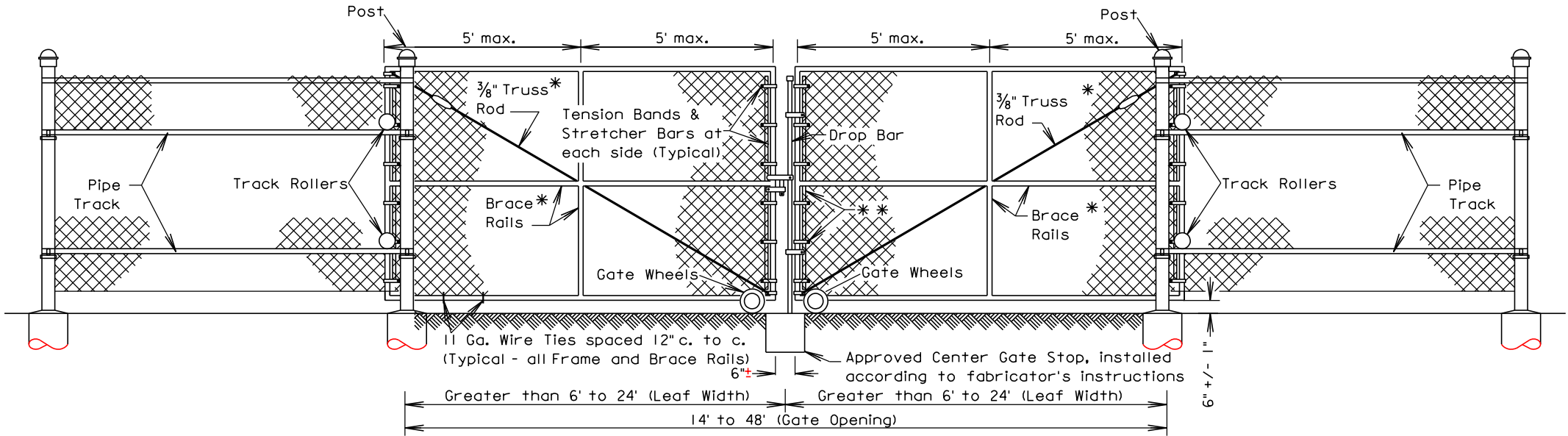
PLOT SCALE - 1:181.157

PLOTTED FROM - TRBEINT13

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	410D364	4	6

Plotting Date: 12/23/2013

SLIDING GATES FOR CHAIN LINK FENCE



VEHICULAR SLIDING GATE

Gate Opening		Frame Pipe Nominal	Brace Rail - Pipe Nominal
Width ¹	Height ²		
3' to 8'	3' to 6'	1.50"	1.50"
>8' to 23'	6'	1.90"	1.50"
>8' to 23'	> 6' to 12'	1.90"	1.90"

Gate Opening Width ¹	Post		Concrete Footing	
	Round Pipe Nominal	Roll Formed Steel	Depth	Diameter
3' to 6'	3.00"	3.50"X3.50"	36"	12"
> 6' to 13'	4.00"	—	42"	12"
> 13' to 18'	6.625"	—	48"	18"
> 18' to 23'	8.625"	—	48"	24"

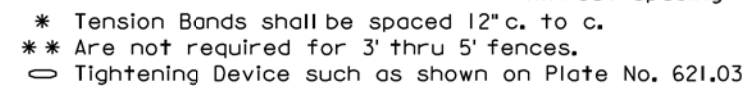
NOTE: Gate frames may be constructed of bent or welded steel tubing installed according to fabricator's instructions and subject to the Engineer's approval.

The sliding gate hardware shall be as per the fabricator's recommendations and subject to the Engineer's approval.

- * Are not required for gates 3' to 5' height or 5' or less in width.
- * * Tension Bands shall be spaced 12" c. to c.
- Tightening Device such as shown on standard plate 621.03
 - 1 Leaf width for Vehicular Sliding Gate
 - 2 Shall coincide with fence height

PLOT NAME - 3

FILE - ... \DESIGN\SLIDING_GATE_DESIGN.DGN



GENERAL NOTES:

Specific details of manufacture of component parts of the complete fence construction shall be subject to the approval of the Engineer. Commercially available items produced specifically for the use intended shall be used wherever possible in the construction of the fence.

"H" (Height of Fabric) shall be as shown on the Plans. Fabric is available in the the following heights; 36", 42", 48", 60", 72", 84", 96", 108", 120", & 144". Fabric heights 60 inches and under shall be knuckled at both selvages. Fabric heights 72 inches and over shall be knuckled at one selvaqe and twisted at the other selvaqe.

Chain Link Fabric shall be 2" mesh, No. 9 gage galvanized wire securely fastened to Tension Wire, Line Post, Rails, Braces and Stretcher Bars spaced as shown hereon.

Fence may be constructed with either Round Pipe, "C" Section, "H" Beam, or roll Formed Steel components as shown in the table above. Line post may be Round Pipe, "C" Section, or "H" Beam. The Corner Post and Rails shall be either Round Pipe or Roll Formed Steel. The type of components used shall have prior approval by the Engineer before construction.

Where fence must cross small bodies of water (such as drainage areas or ponds) that could freeze during the winter, use 11 gage Hog Rings. Provide only two ties per Tension Wire and Top Rail between line posts.

A suitable method of rail splicing shall be used to allow for expansion and contraction while maintaining proper position of the Top Rail.

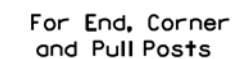
March 31, 2000

CHAIN LINK FENCE WITH TOP RAIL

PLATE NUMBER
621.01

Sheet 1 of 1

Published Date: 4th Qtr. 2013



For Line Posts

Typical Post Tops
(Shown for example only)



Brace Bands

Tension Bands

NOTE: Bands shall be rectangular for "C" Section and "H" Beam Posts.



11 Co. Tightener

Tightening Devices



Offset Tip

Rail Ends

March 31, 2000

Published Date: 4th Qtr. 2013

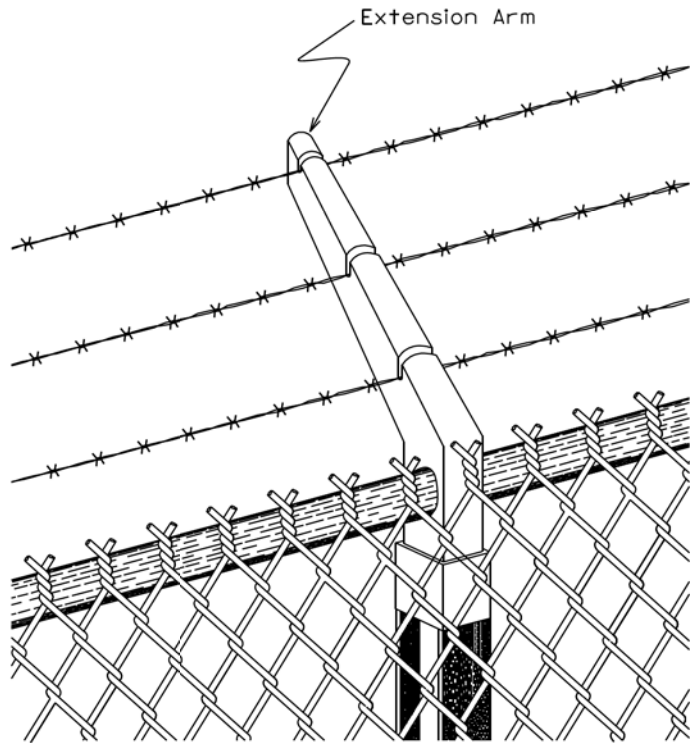
HARDWARE FOR CHAIN LINK FENCE

PLATE NUMBER
621.03

Sheet 1 of 1

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	410D364	6	6

Plotting Date: 12/23/2013



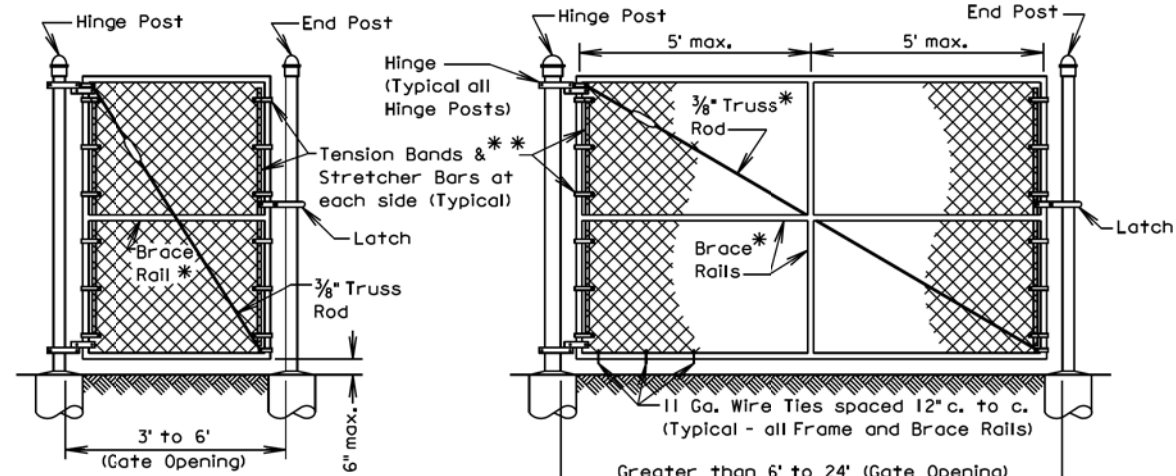
GENERAL NOTES:

Extension arms shall be hot dipped galvanized. End and corner arms shall be malleable iron. Intermediate arms may be pressed steel. Arms shall have sealed caps and three slots to accommodate the barbed wires. The top wire shall be 12 inches above the fabric and 12 inches out from the fence line at an angle of approximately 45°. Adjustable arms may be used. Barbed wire shall be two strand 12½ gauge wire with four point round bars spaced on 5 inch centers.

Extra payment will not be made for extension arms with barbed wire. Extension arms with barbed wire shall be incidental to the respective "Chain Link Fence" bid item. When extension arms with barbed wire are attached to gates, the payment for the extension arms with barbed wire shall be incidental to the respective "Gate" bid item.

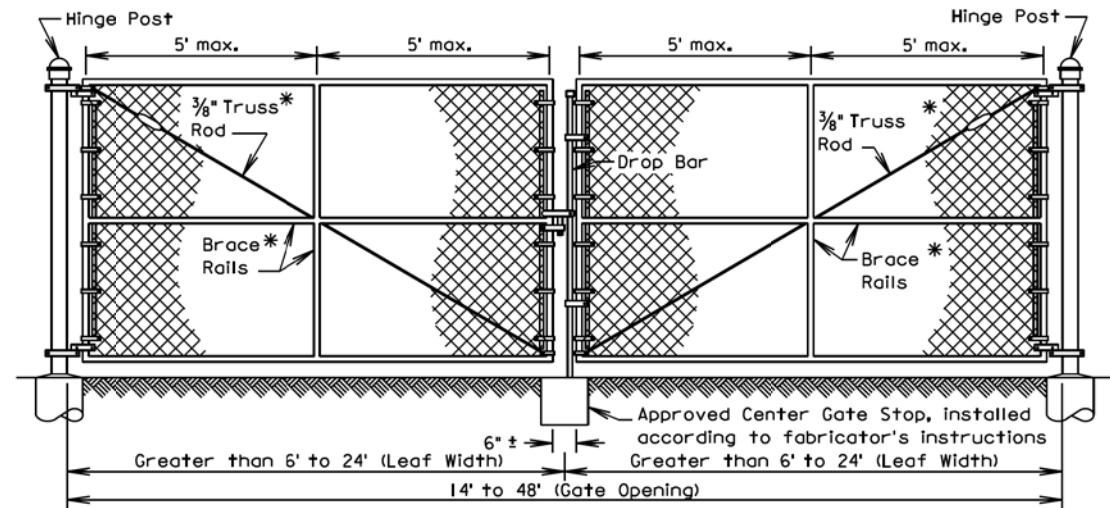
March 31, 2000

Published Date: 4th Qtr. 2013	S D D O T	BARBED WIRE TOP FOR CHAIN LINK FENCE	PLATE NUMBER 621.04
			Sheet 1 of 1



PEDESTRIAN SWING GATE

SINGLE VEHICULAR SWING GATE



DOUBLE VEHICULAR SWING GATE

Gate Opening		Frame Pipe Nominal	Brace Rail - Pipe Nominal
Width ¹	Height ²		
3' to 8'	3' to 6'	1.50"	1.50"
>8' to 23'	6'	1.90"	1.50"
>8' to 23'	> 6' to 12'	1.90"	1.90"

Gate Opening Width ¹	Hinge Post		Concrete Footing	
	Round Pipe Nominal	Roll Formed Steel	Depth	Diameter
3' to 6'	3.00"	3.50"x3.50"	36"	12"
> 6' to 13'	4.00"	—	42"	12"
> 13' to 18'	6.625"	—	48"	18"
> 18' to 23'	8.625"	—	48"	24"

NOTE: Gate frames may be constructed of bent or welded steel tubing installed according to fabricator's instructions and subject to the Engineer's approval.

- * Are not required for gates 3' to 5' height or 5' or less in width.
- * Tension Bands shall be spaced 12" c. to c.
- Tightening Device such as shown on standard plate 621.03
- 1 Leaf width for Double Vehicular Swing Gate
- 2 Shall coincide with fence height

September 14, 2001

Published Date: 4th Qtr. 2013	S D D O T	SWING GATES FOR CHAIN LINK FENCE	PLATE NUMBER 621.10
			Sheet 1 of 1