



MICHIGAN
HORSE
TRAILS
ASSOCIATION

EQUESTRIAN AMENITIES DESIGN GUIDE



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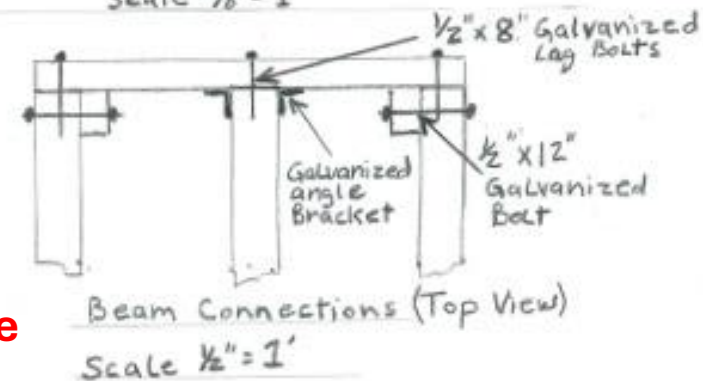
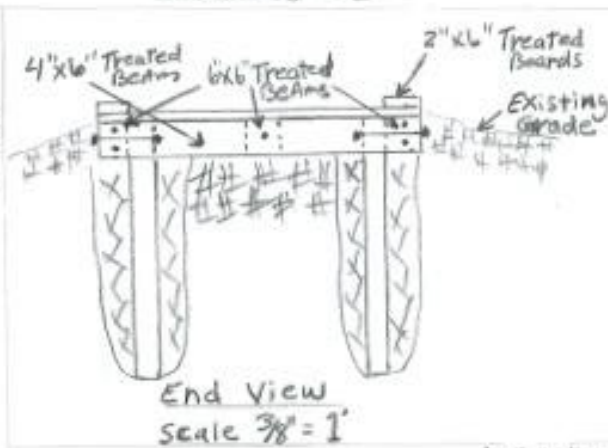
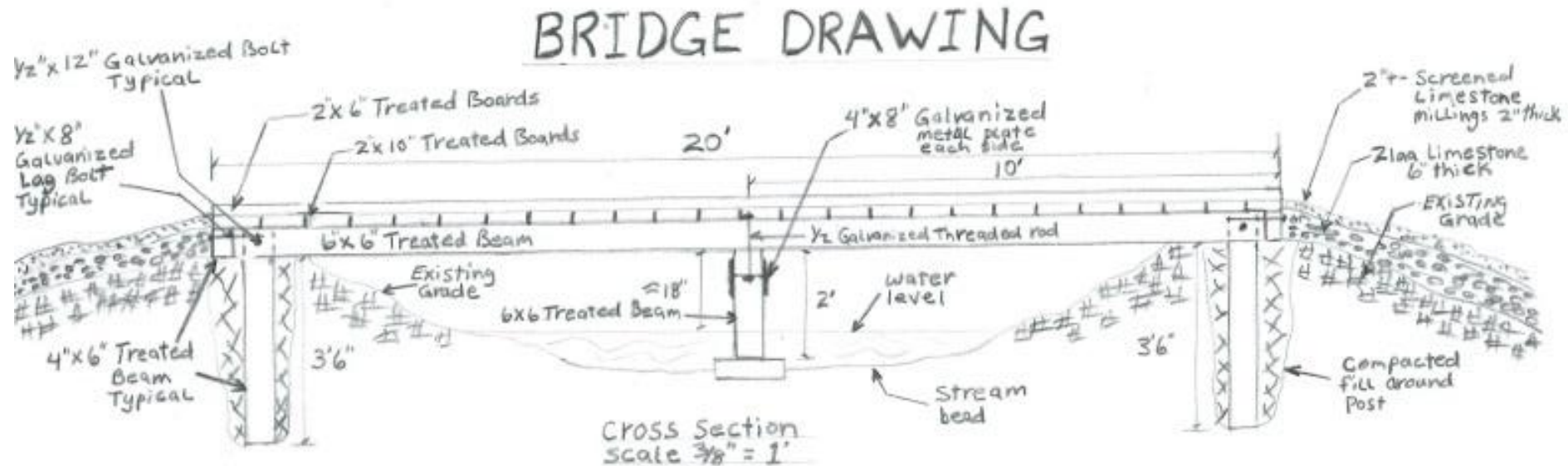
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Ortonville Bridge



Material List:

1. 3-6'x6"x20' Treated Beams
2. 2-4'x6"x8' Treated Beams
3. 1-4'x6"x10' Treated Beam
4. 1-6'x6"x12' Treated Beam
5. 13-2'x10"x10' Treated Boards
6. 4-2'x6"x10' Treated Boards
7. 5-1'x2"x10' Treated Boards
8. 4-6'x6" Angle Brackets (Galv)
9. 4-4'x8" Metal Plates (Galv)
10. 10-1/2"x8" Galv. Lag Bolts
11. 4-1/2"x12" Galv. Bolts
12. 24-1/2" Galv. Washers
13. 2-1/2"x14" Galv. Threaded Rod
14. ≈275-3 1/2" 10 Gauge Star drive Coated Screws

Date: 12-18-24 SC

Note: Drawing not to Scale



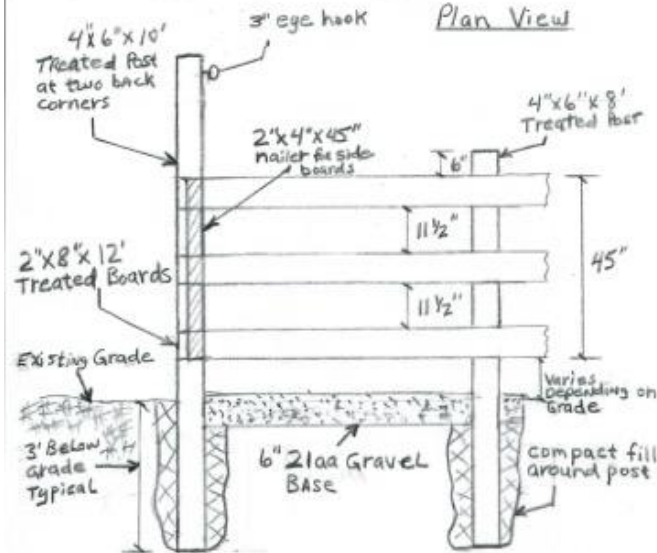
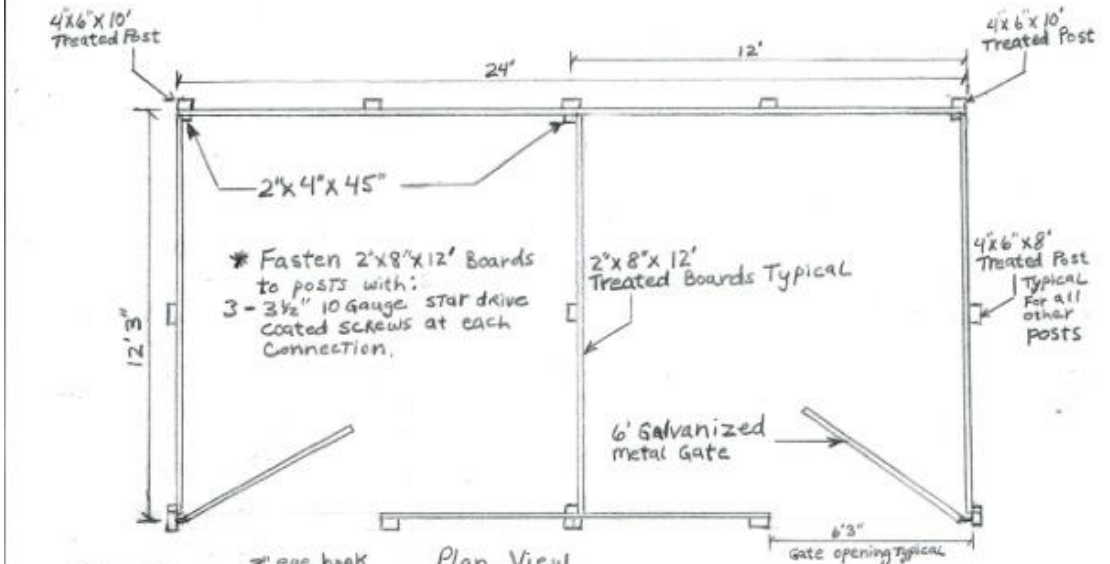
Ortonville Bridge



Ortonville Corrals



HORSE CORRAL DRAWING



Scale 1/4" = 1'

Material List

1. 2 - 4"x6"x10' Treated Posts
2. 11 - 4"x6"x8' Treated Posts
3. 18 - 2"x8"x12' Treated Boards
4. 3 - 2"x4"x8' Treated Board
5. 1-5LB Box 3 1/2" 10 Gauge star drive coated screws
6. 2 - 6' Galvanized metal Gates
7. 2 - 3" eye hooks

Note: Drawing not to Scale

Scale 3/8" = 1'

Date: 6-5-2024 SC

Ortonville Corral Pictures 1 of 2



Ortonville Corral Pictures 2 OF 2



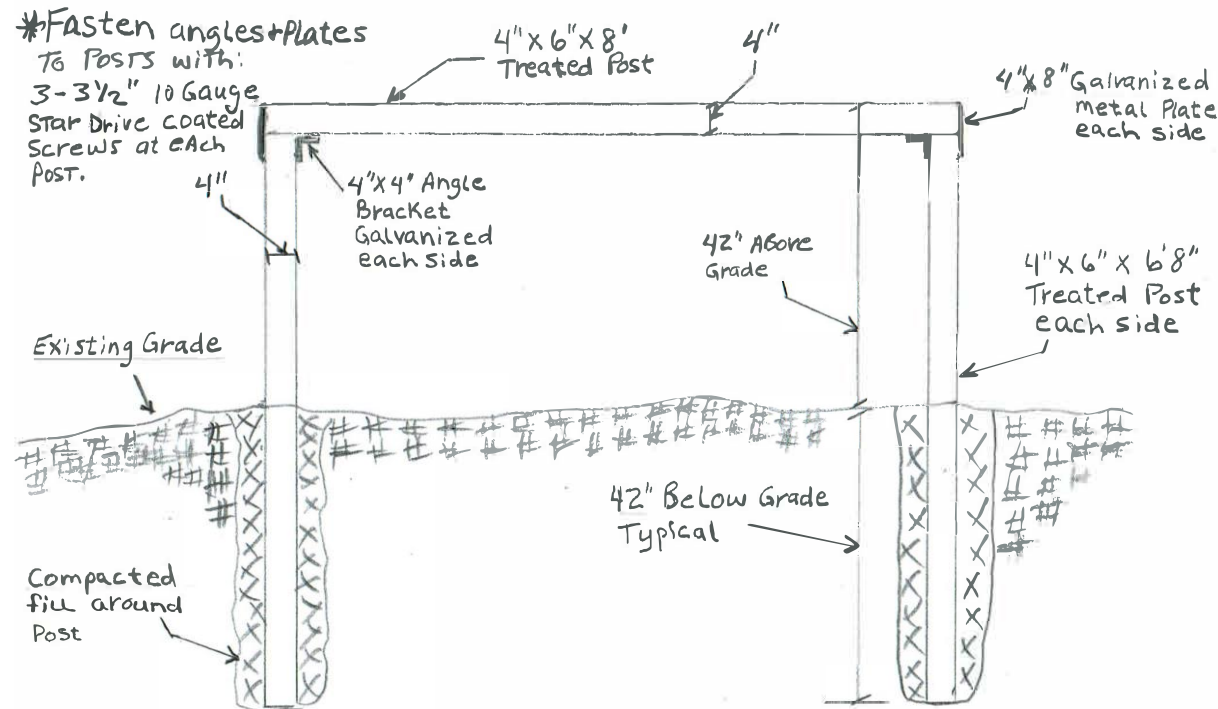
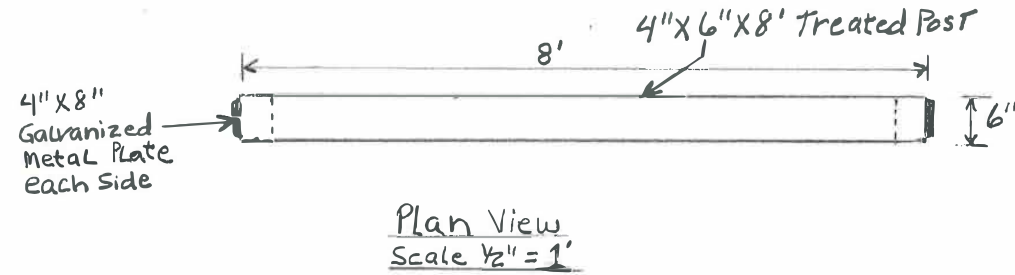
Fort Custer Corrals

Gate and Heavy-Duty Tarp cover from Shelter Logic



Ortonville Hitching Post

Hitching Post Drawing



Material List

1. 3 - 4' X 6' X 8' Treated Post
2. 2 - 4' X 4' Galvanized Angle Bracket
3. 2 - 4' X 8' Galvanized Metal Plate
4. 24 - 3 1/2" 10 Gauge Star Drive Coated screws

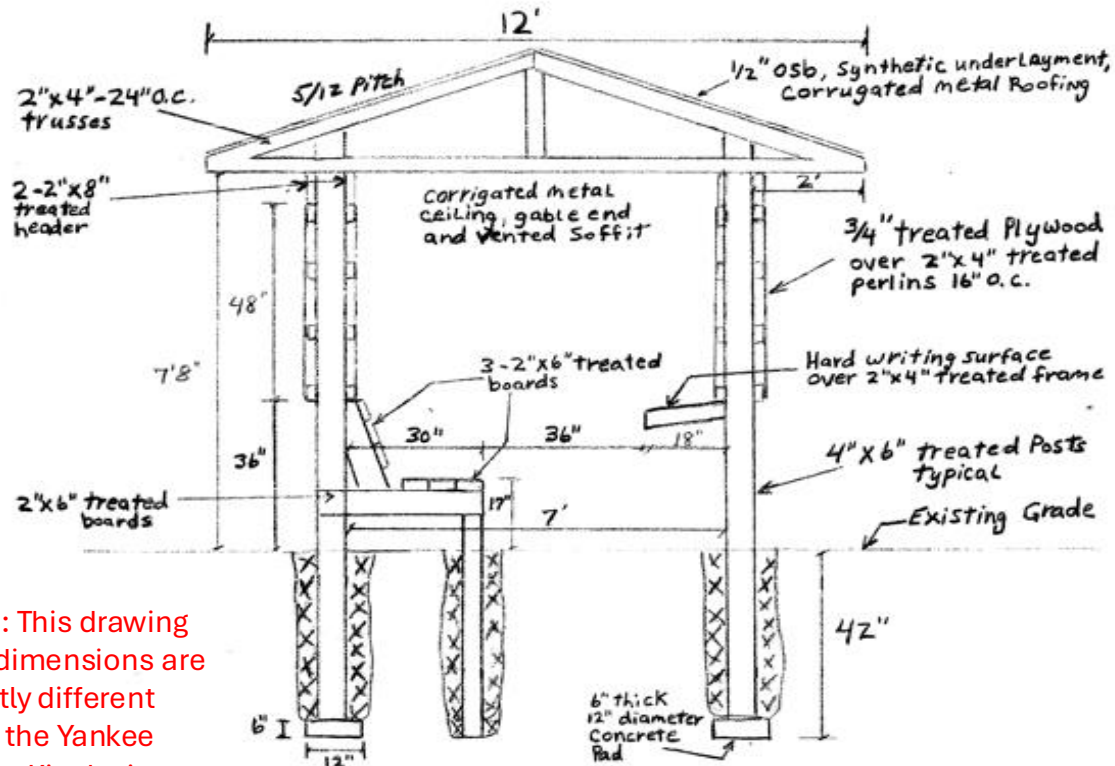
Note: Drawing not to Scale

Date: 11-22-24 SC

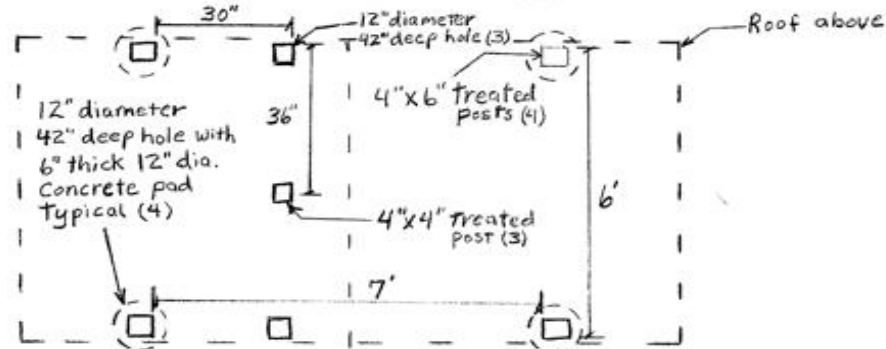
Ortonville Hitching Post



Kiosk Drawing



cross section scale: 3/8"=1'



Foundation Plan scale: 3/8"=1'

Date: 1-25-25 SC

KIOSK Material List and Estimate

Cost of materials based on online research January 25th, 2025

		Price	TOTAL
1.	8' metal roof ridge vent	10'	45.51
2.	14' Metals Ridge vent closure strips	2"x3'	5.42x5
3.	6 - 36"x8' Corrugated metal roof panel	red	43.01x6
4.	2 - 3' inside closure strip foam small rib roof	4 pack	6.82x2
5.	1 1/2 "wood screws #10 galvanized (Metal Roof)	250 in box	34.47
6.	91 SQ FT synthetic underlayment	4'x250'	69.97
7.	T50 3/8" Leg x 3/8" 506IP galvanized staples	5,000	12.97
8.	4 - 1/2" 4'x8' OSB		14.88x4
9.	5# box 2 1/2" 8D galvanized nails		23.98
10.	4 - 12' Common Trusses with 5/12 pitch		48.99x4
11.	2 - 12' End Frame Trusses with 5/12 pitch		54.99x2
12.	26' metal gable rake flashing	10'	39.45x3
13.	14' metal eaves flashing	10'	24.13x2
14.	26' metal fascia on gable ends	2'	20.48x3
15.	14' metal fascia on sides	12'	20.48x2
16.	2' wide vented soffit (14')	12'x11.5"	17.43x3
17.	30' SQ FT corrugated metal siding for gable	3'x8'	41.47x2
18.	64 SQ FT metal non vent ceiling material	16"x144"	27.48x3
19.	4 - 3/4" 4'x8' treated plywood		50.38x4
20.	26 - 2"x4"x8' treated boards		5.78x26
21.	2 - 2"x10"x8' treated boards		15.98x2
22.	4 - 2"x8"x8' treated boards		11.48x4
23.	3 - 2"x6"x12' treated boards		13.48x3
24.	3 - 2"x6"x 8' treated boards		8.78x3
25.	1 - 4'x4' hard surface board for writing (Formica)		48.38
26.	8 - 1/2"x10" galvanized bolts	10 Pack	39.35
27.	16 - 1/2" galvanized washers		.45x16
28.	8 - 1/2" galvanized nuts		.55x8
29.	4 - 4"x6"x14' treated posts	16'	40.98x4
30.	2 - 4"x4"x10' treated posts		27.58x2
31.	8 - 80# bags of Concrete		5.98x8
32.	2 - 5# box nails 3 1/2 "galvanized		24.23x2
33.	2 - 5# box 3 1/2" 10 gauged star drive coated screws		29.97x2
Total estimate.			\$2,308.95

Note: This drawing and dimensions are slightly different from the Yankee Spring Kiosk pictures

Note: Drawings not to scale

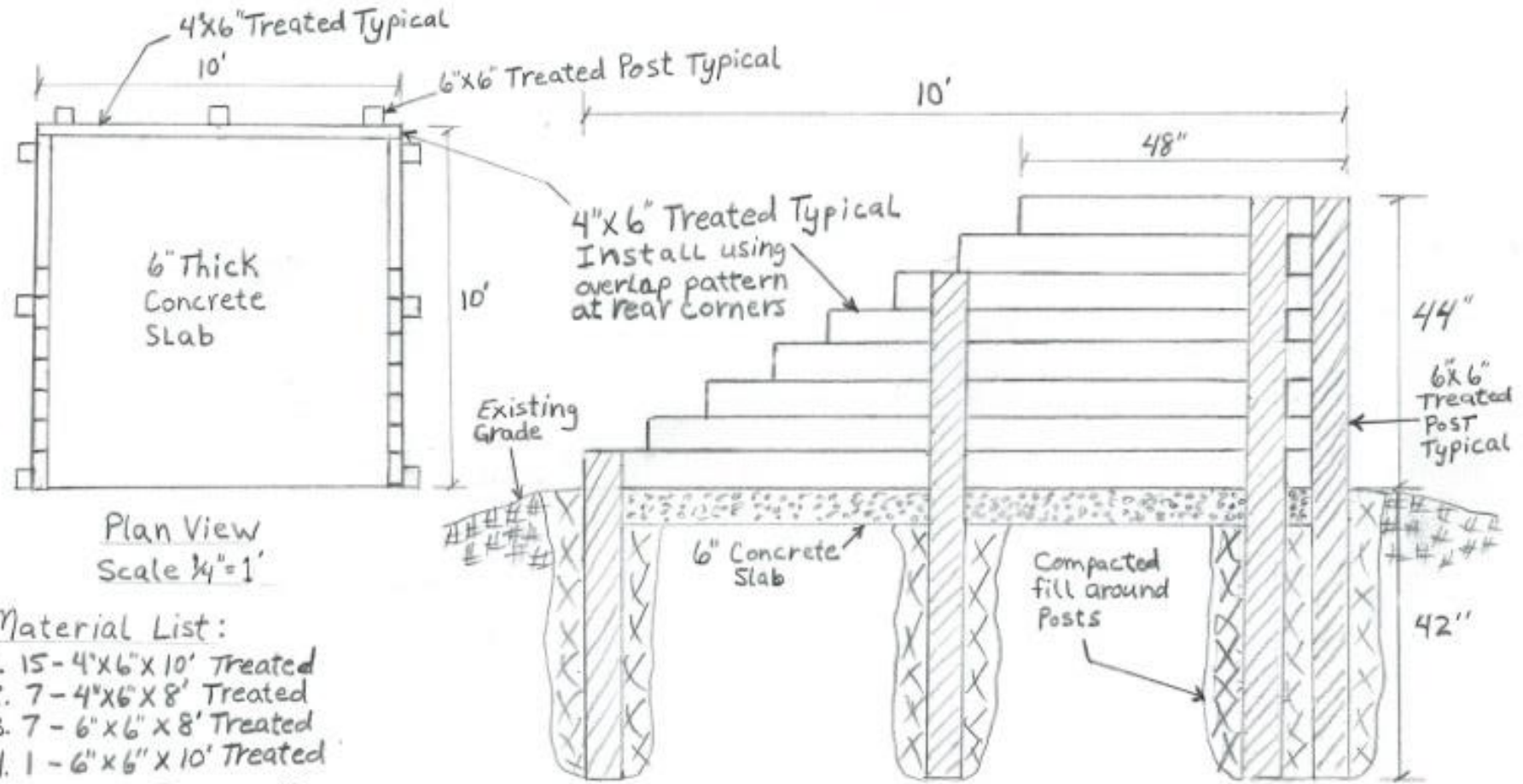


Yankee Springs Kiosk



Ortonville Manure Bunker

MANURE BUNKER DRAWING



Plan View
Scale 1/4" = 1'

Material List:

1. 15 - 4'x6"x10' Treated
2. 7 - 4'x6"x8' Treated
3. 7 - 6'x6"x8' Treated
4. 1 - 6'x6"x10' Treated
5. ≈ 240 - Fasten Master
8" Timber Loc
Hex Head Screws
or Equivalent
6. ≈ 2 yds of concrete
7. 2 - 2'x6"x12' > Form material
2 - 2'x6"x10'

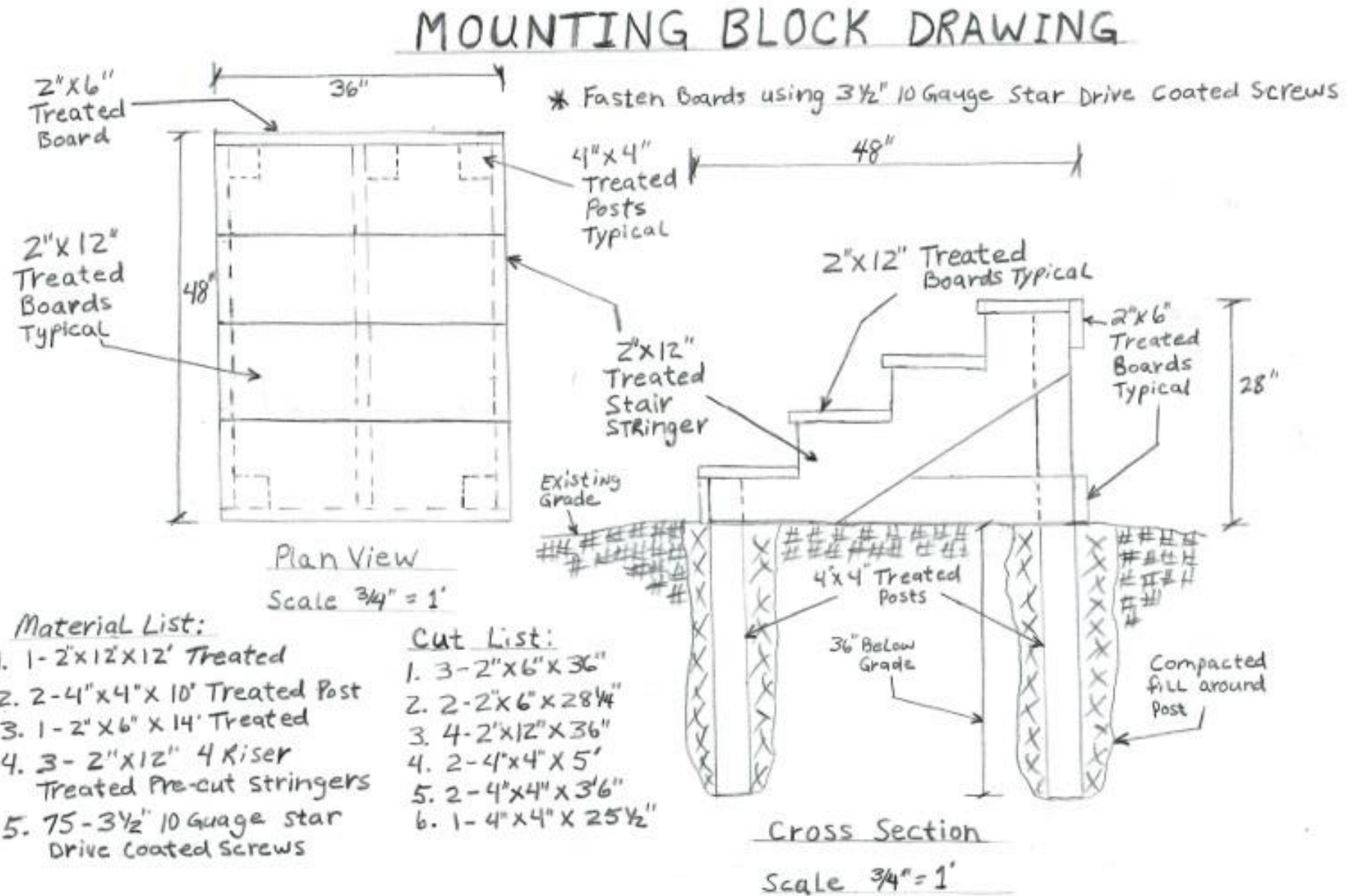
Cross Section
Scale 1/2" = 1'

Note: Manure Bunker size can be modified to your specific situation. Materials should be used for durability and longevity

Note: Drawing not to Scale

Date: 11-25-24 SC

Ortonville Mounting Block



Note: Drawing not to Scale

Date: 11-23-24 SC

Ortonville Mounting Block



Waterloo Mounting Blocks

Waterloo 5 Riser Mounting Block Materials:

1. 5 - 4"x6"x10' Treated posts
2. 2 - 4"x6"x8' Treated posts
3. 8 - 5/4"x6"x16' Treated deck boards
4. 9 - 2"x6"x12' Treated boards
5. 3 - 2"x6"x10' Treated boards
6. 1 - 2"x8"x10' Treated board
7. 34 - 2"x2"x42" Treated wood balusters
8. 5 - 5 Riser treated stringers

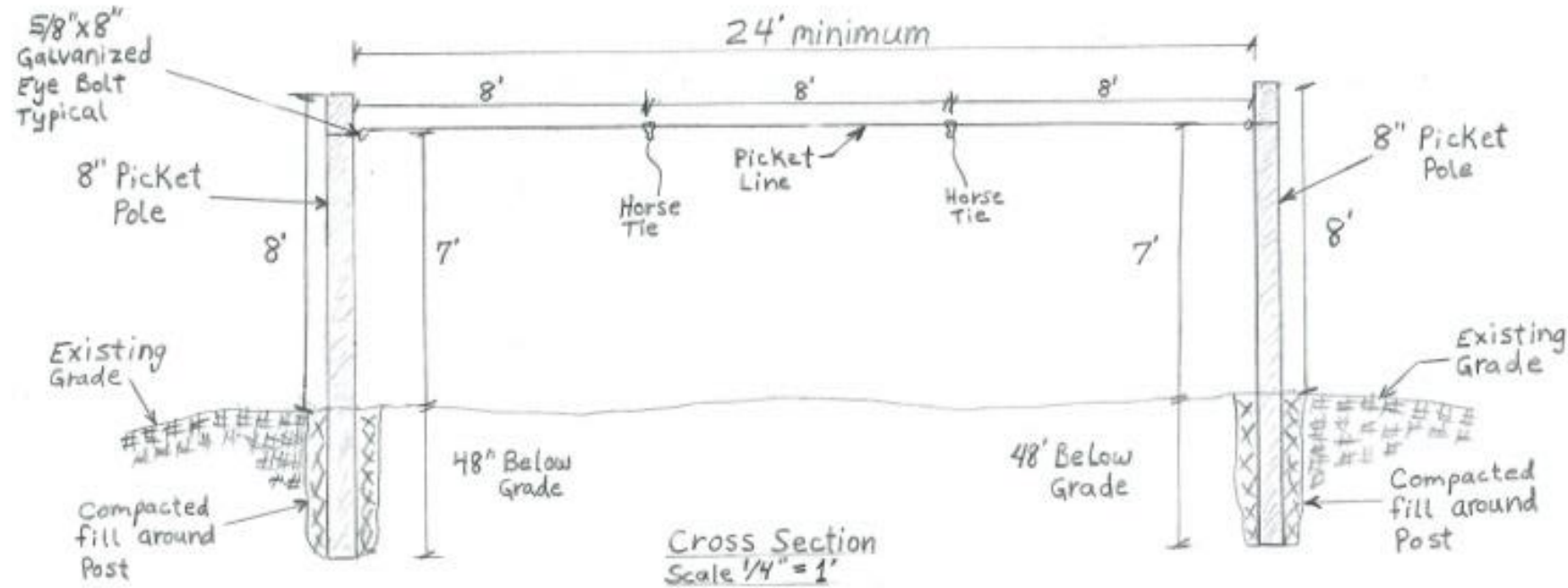


Waterloo 4 Riser Mounting Block Materials:

1. 4 - 4"x6"x10' Treated posts
2. 3 - 4"x6"x8' Treated posts
3. 9 - 5/4"x6"x16' Treated deck boards
4. 6 - 2"x6"x12' Treated boards
5. 4 - 2"x6"x10' Treated boards
6. 1 - 2"x8"x10' Treated board
7. 35 - 2"x2"x42" Treated wood balusters
8. 5 - 4 Riser treated stringers



PICKET POLE DRAWING



Material List:

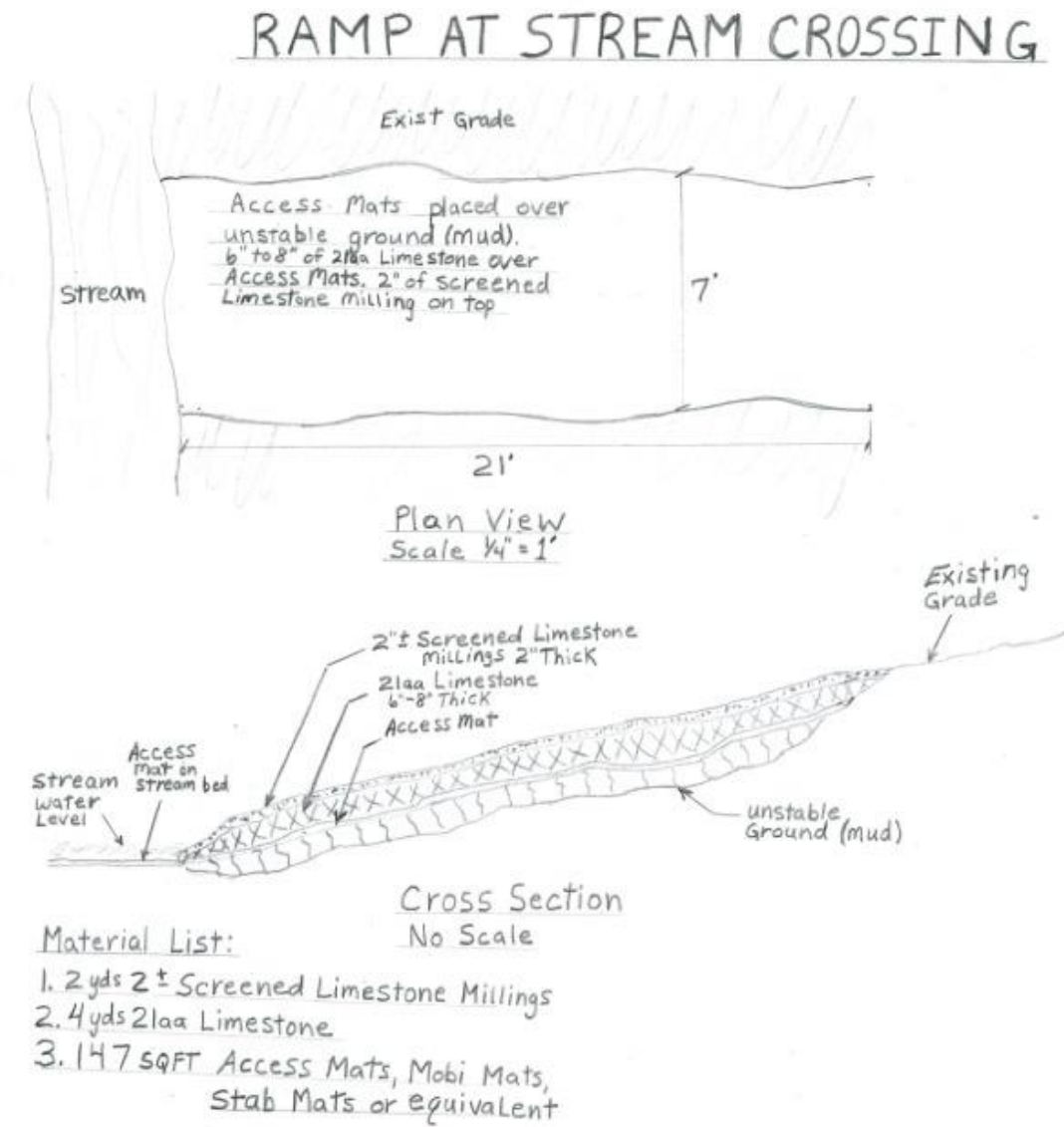
1. 2- 8"x8"x12' Treated Post
or 8" Diameter Treated Pole
2. 2- 5/8" x 8" Galvanized Eye Bolt

Note: It is recommended that horses are tied at least 8' from the picket poles and at least 8' from another horse. Drawing designed for two horses between picket poles.

Note: Drawing not to Scale

Date: 11-26-24 SC

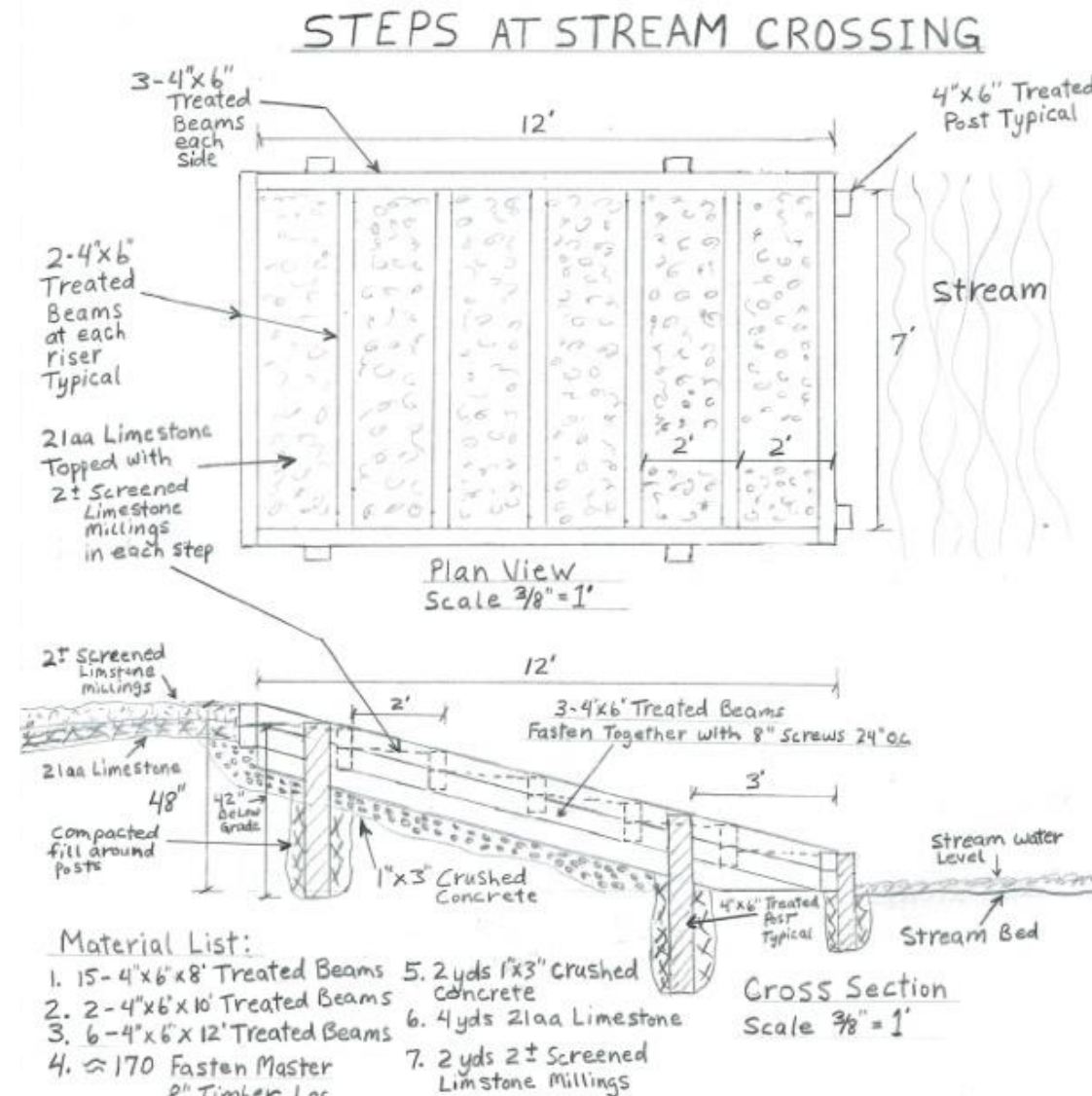
Ortonville Ramp at Stream Crossing



Note: Drawing not to Scale

Date: 11-27-24 Sc

Ortonville Steps at Stream Crossing

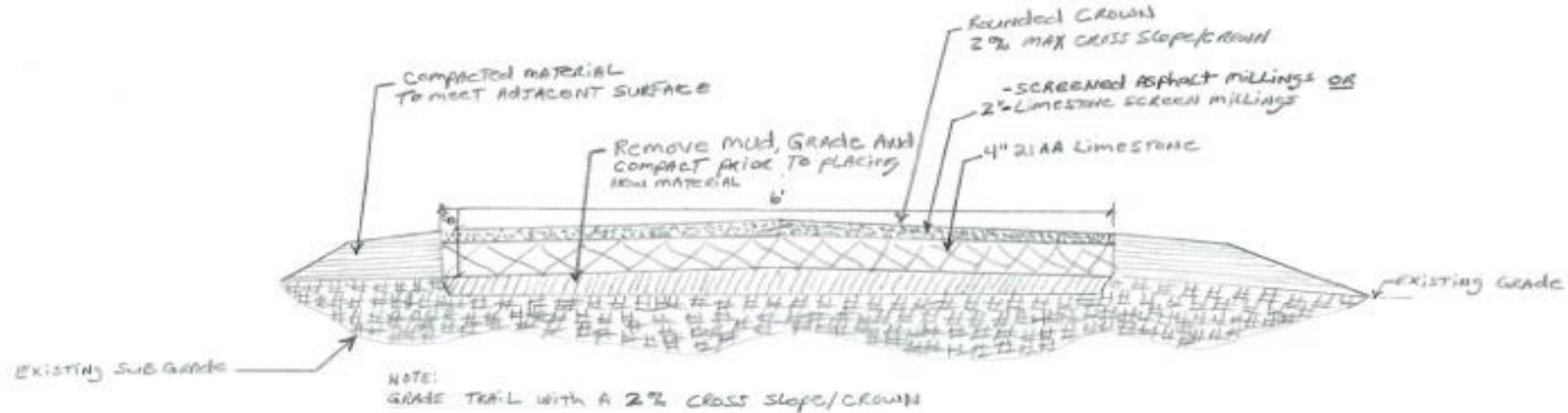


Note: Drawing not to Scale

Note: Step design should be modified to your specific situation. However, the materials and construction methods should be used for durability and longevity.

Date: 11-27-24 SC

TYPICAL CROSS SECTION FOR TRAIL REPAIRS



SECTION:

TYPICAL TRAIL CROSS SECTION

NO SCALE

Ortonville Recreation Area Equestrian Trail Improvements

Ortonville Recreation Area Equestrian Trail Improvements

