

THE MARYLAND ZOO IN BALTIMORE

PERIMETER GATE REPORT

SEPTEMBER 2021



EXISTING GATES

GATE #	GATE NAME	GATE TYPE			GATE CONDITION			SITE CONDITION			Next Steps		
		SLIDE	SWING	DOUBLE SWING	GOOD	FAIR	POOR	GOOD	FAIR	POOR	NO WORK	UPGRADES	NEW GATE
1	Vet Hospital Gate	x			x					x		x	
2	Eagle Gate			x			x	x				x	x
3	Comfort Station Vehicle Gate			x			x			x		x	x
4	Boat Lake Entrance Gate			x	x			x				x	
5	Lake Side Lower Gate			x		x				x		x	
6	Lake Side Gate			x	x					x		x	
7	Waterfowl Gate	x					x			x		x	x
8	Tram Swing Gate		x		x			x				x	
9	Tram Pedestrian Gate		x			x		x				x	?
9A	BGE Transformer			x	x			x				x	
10	Mansion House Steps Slide	x				x		x				x	
11	Mansion House Steps Pedestrian Gate		x			x		x				x	
12	Development Gate			x			x	x				x	x
13	Finance Pedestrian Gate		x			x		x			x		
14	Maryland Building Parking Lot Gate	x			x			x				x	
15	Education Gate	x			x				x			x	
16	Polar Bear Tram Gate			x	x			x			x		
17	Rhino Gate			x			x	x				x	x
18	Antelope Slide Gate	x				x		x				x	
19	African Watering Hole Gate			x			x	x				x	x
20	Penguin Education Gate			x			x			x		x	x
21	Elephant Gate	x				x				x		x	
22	Hay Building Gate			x	x			x			x		
23	Maintenance Gate	x			x				x			x	
23A	No Name			x	x			x			x		
24	Blacksmith Gate			x		x			x			x	
25	Giraffe/Clipper Esplanade Gate			x		x			x			x	
26	Siberia/Train Station Vehicle Gate	x				x		x				x	
27	Siberia/Trash Dumpster Gate			x		x		x				x	
28	Maryland Wilderness/Parkdale Road Gate			x			x	x					x

PROJECT INTRODUCTION

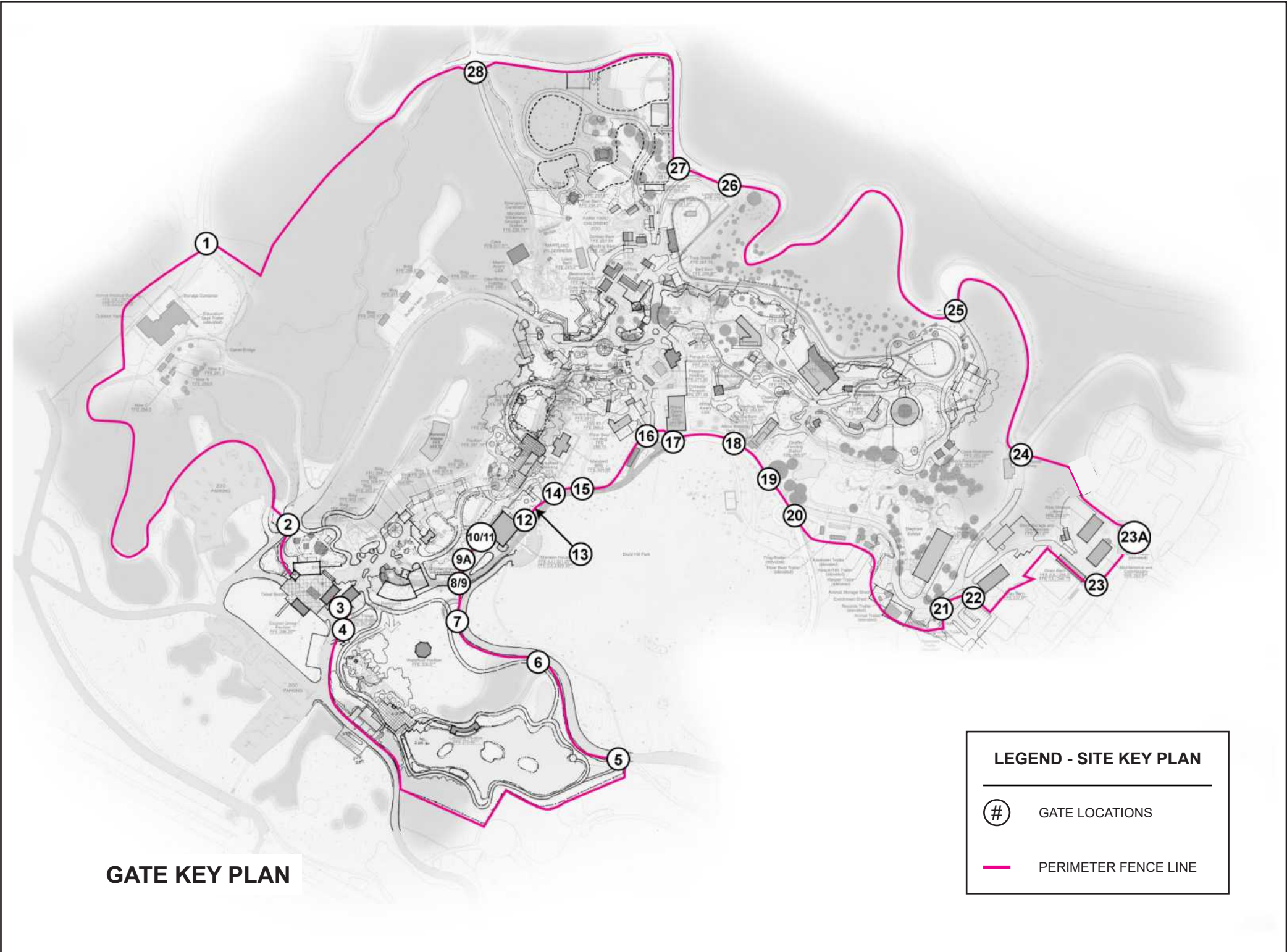
The Maryland Zoo in Baltimore (MZB) has 30 perimeter gates in 3.25 miles of perimeter fence. The gates were constructed at various times and are in different conditions based on age, use, and original construction. Some are damaged or have numerous problems, so a complete replacement might be needed for these gates while other gates need very minor adjustments or none at all.

The gates are spread out along the whole perimeter of the Zoo and are used for general service, construction access, daily staff work, and for guest entrance to the Zoo. The design team and the Zoo have documented the gates and surrounding area and, based on conditions of each gate and surrounding areas, a list of specific tasks has been generated. The gates and adjacent fencing will need to meet all the latest USDA and MZB/AZA standards. The Zoo has a standard Zoo gates and perimeter fence sheet that is included in this report and is available as a full-size PDF file for your use. In addition to upgrading the gates and surrounding area. Some specific requirements are listed in the work required section for each gate such as providing new or replacing old call boxes or gate operators. New gates that are being replaced completely should follow the design provided in the Zoo Standard sheet and should include new footers and asphalt or concrete paving to complete the work.

Prior to starting construction MZB will remove or prune trees and or clean up vegetation adjacent to the construction site. Contractor will need to coordinate work with MZB prior to starting. Some temporary fencing might be required to maintain a fully enclosed perimeter during construction of new gates and should be included in the scope of work by the contractor.

General Note:

- Use Miller strip on all automatic sliding gates. Coordinate product with Zoo and gate type.
- See page 58 for Zoo gates and perimeter fence sheet.



#1 VET HOSPITAL GATE

Location: West End Of Zoo Near Animal Medical Bldg.
Gate Connects Druid Hill Park And Zoo Service Road.

EXISTING GATE CONDITIONS

- | | |
|------------------|---------------------------|
| • Gate Condition | Good, Slide, 25 Ft Length |
| • Signage | Outdated |
| • Usage | High |
| • Call Box | Outdated |
| • Activation | Automatic |
| • Fabric | Chain-link |

NOTES

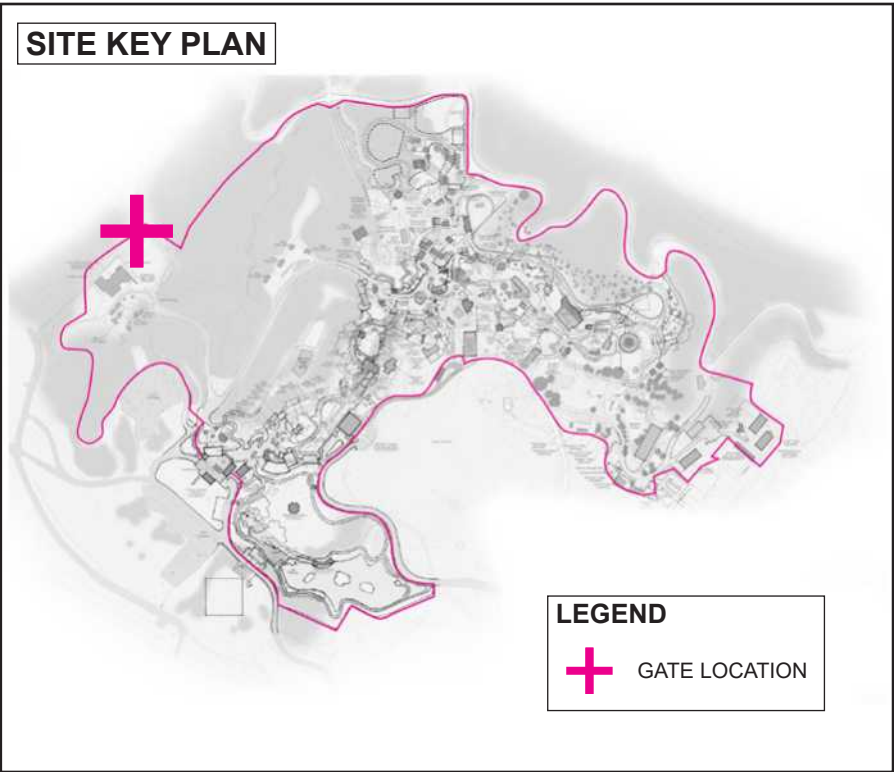
- Gate condition is good. It is a functioning automatic sliding gate that has been replaced recently.
- Call-box is outdated, new call-box necessary.
- Signs are outdated, new signage necessary.

EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Poor |
| • Footers | Poor |
| • Vegetation | Fair |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | Good |

NOTES

- Site is in poor condition and should be repaved for safety and longevity.
- Large cracks are forming in the paving.
- High levels of herbaceous ruderals
- Concrete footers from old gate are visible and exposed.
- Old footers should be removed, and area on either side of gate should be repaved.



Elevation view of automatic sliding gate.



Detail view of outdated call box - rusty and in poor condition.



Existing retaining wall with missing cap blocks.

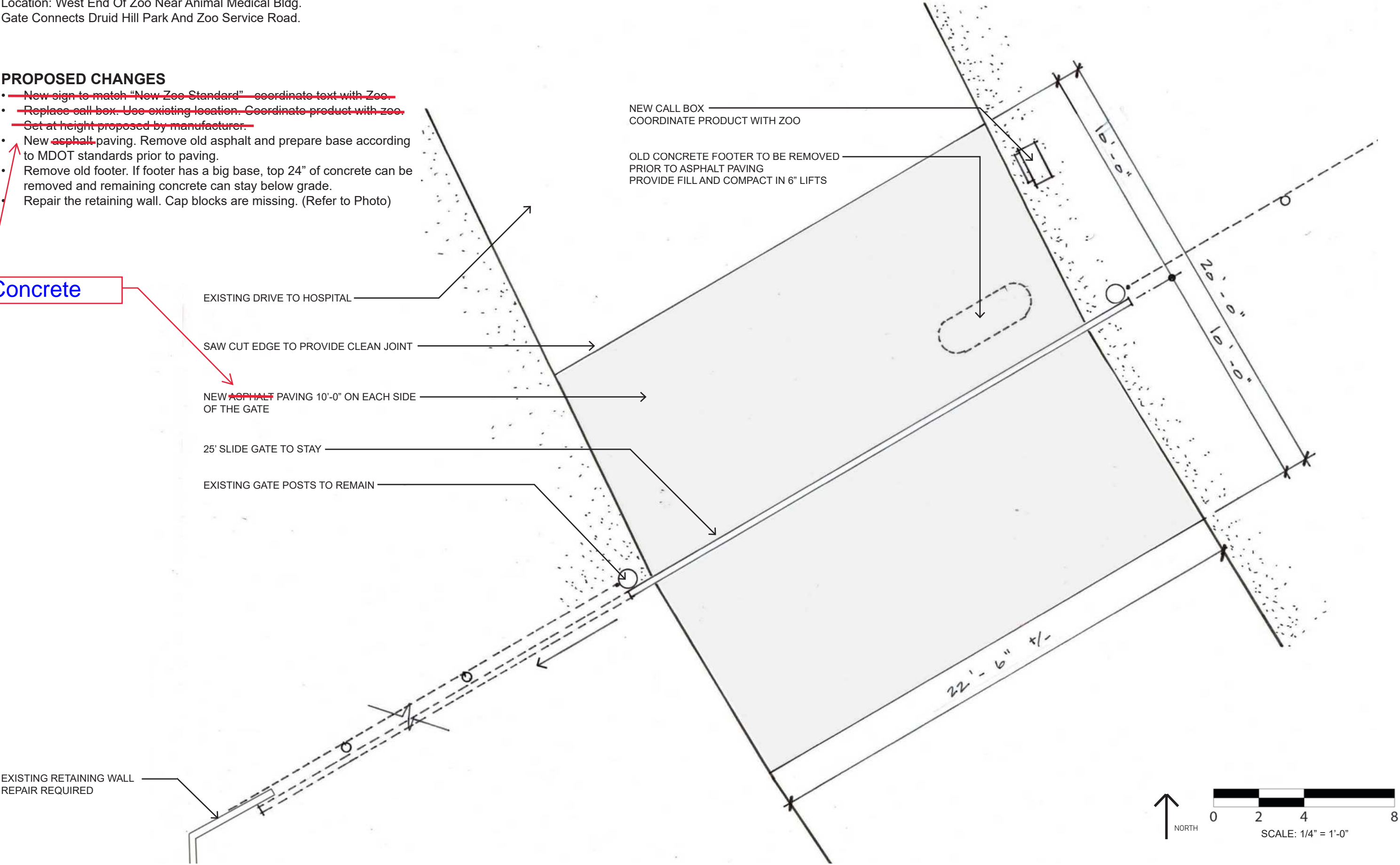
#1 VET HOSPITAL GATE

Location: West End Of Zoo Near Animal Medical Bldg.
Gate Connects Druid Hill Park And Zoo Service Road.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- ~~Replace call box. Use existing location. Coordinate product with zoo.~~
- ~~Set at height proposed by manufacturer.~~
- New ~~asphalt~~ paving. Remove old asphalt and prepare base according to MDOT standards prior to paving.
- Remove old footer. If footer has a big base, top 24" of concrete can be removed and remaining concrete can stay below grade.
- Repair the retaining wall. Cap blocks are missing. (Refer to Photo)

Concrete



#2 EAGLE GATE

Located On South West End Of Park.
Connects Pedestrian Sidewalk, Druid Hill Park, And Zoo Service Road.

EXISTING GATE CONDITIONS

- | | |
|------------------|-------------------------------------|
| • Gate Condition | Poor, Double Swing, 20 Ft In Length |
| • Signage | Outdated |
| • Lights | N/A |
| • Call Box | None, Item Desired |
| • Activation | Manual |
| • Fabric | Chain-Link |
| • Usage | Medium |

NOTES

- High use gate that needs a replacement. Desiring automatic sliding gate that will slide toward the right (from interior view).
- Gate is not sturdy enough for high use.
- Needs ring loop, call box, and FOB reader.
- Signs are outdated, new signage necessary.

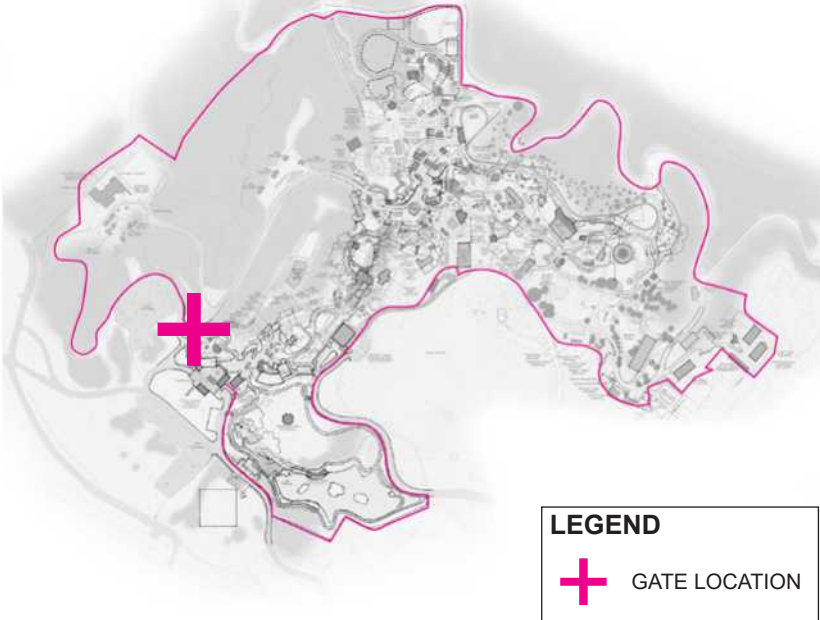
EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- Area on the inside of the Zoo was paved in August 2021. New paving only needed on the outside of the new gate (slider or pivot gate).

SITE KEY PLAN



Elevation view of double swing manual gate needing full replacement.



Additional elevation view, with ticketing hut.



Close view of ticketing hut.

#2 EAGLE GATE

Located On South West End Of Park.
Connects Pedestrian Sidewalk, Druid Hill Park, And Zoo Service Road.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" - coordinate text with Zoo.~~
- Replace chain link fencing on both ends of Gate 2. Provide approximately 50'-0" of fencing.
- ~~Add a call box and FOB reader. Coordinate product with zoo. Set at height proposed by manufacturer.~~
- Regrade area at north west end of Gate 2. Regrade in order that the gate can slide open unobstructed.
- New 7' wide (curb to fence) ~~asphalt~~ pavement. Start from bollards and pave towards Eagle gate (120' of pavement). Remove existing pavement in that zone and repave.

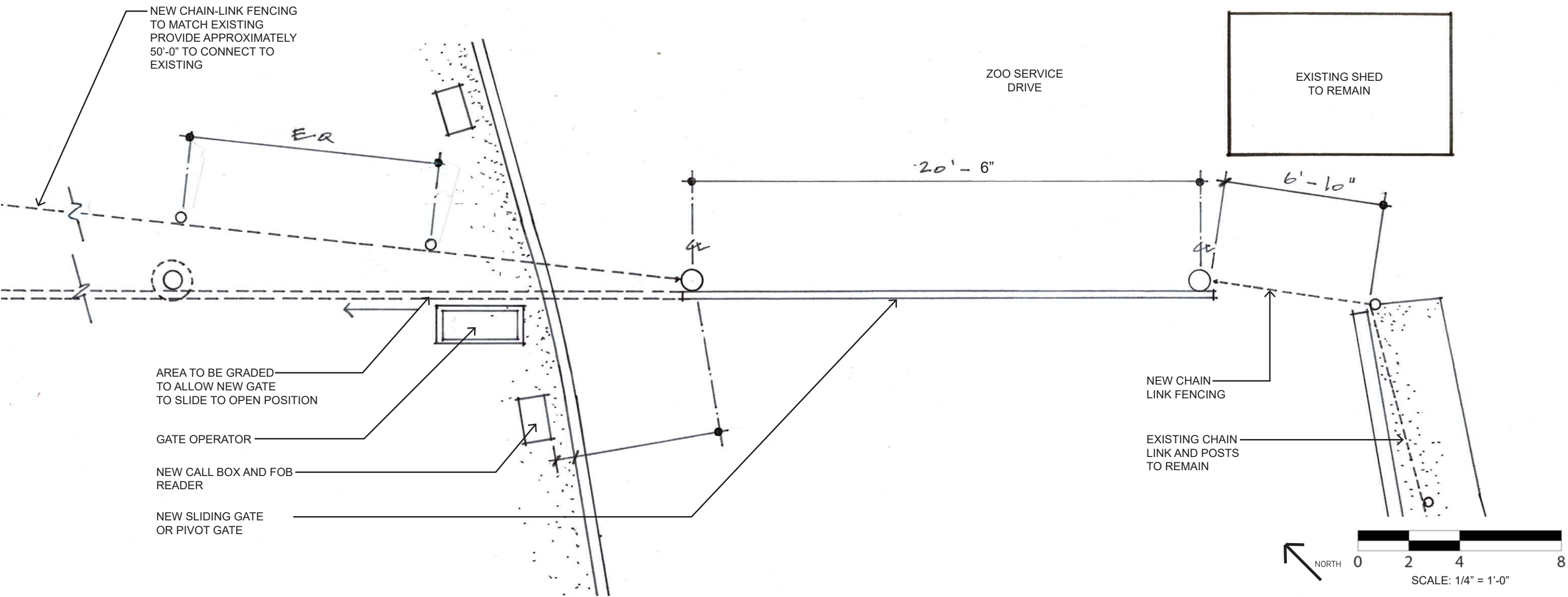
concrete paving. extent to be confirmed during walkthrough

GATE OPTIONS

- Remove old gate and replace with 20'-0" slide gate with electronic operator. Construct according to specifications provided at the end of this report.
- OR use 20'-0" by 8'-0" vertical pivot gate (Refer to Photo)



Vertical pivot gate



#3 COMFORT STATION VEHICLE

Location: South West End Of Zoo.
Connects Guest Access Road And Zoo Service Road.

EXISTING GATE CONDITIONS

- | | |
|------------------|-------------------------------------|
| • Gate Condition | Poor, Double Swing, 10 Ft In Length |
| • Signage | Outdated |
| • Usage | Medium-High |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Mesh On Chain-link |

NOTES

- Gate in poor condition and replacement with single leaf swing gate is desired.
- Signs are outdated, new signage necessary.

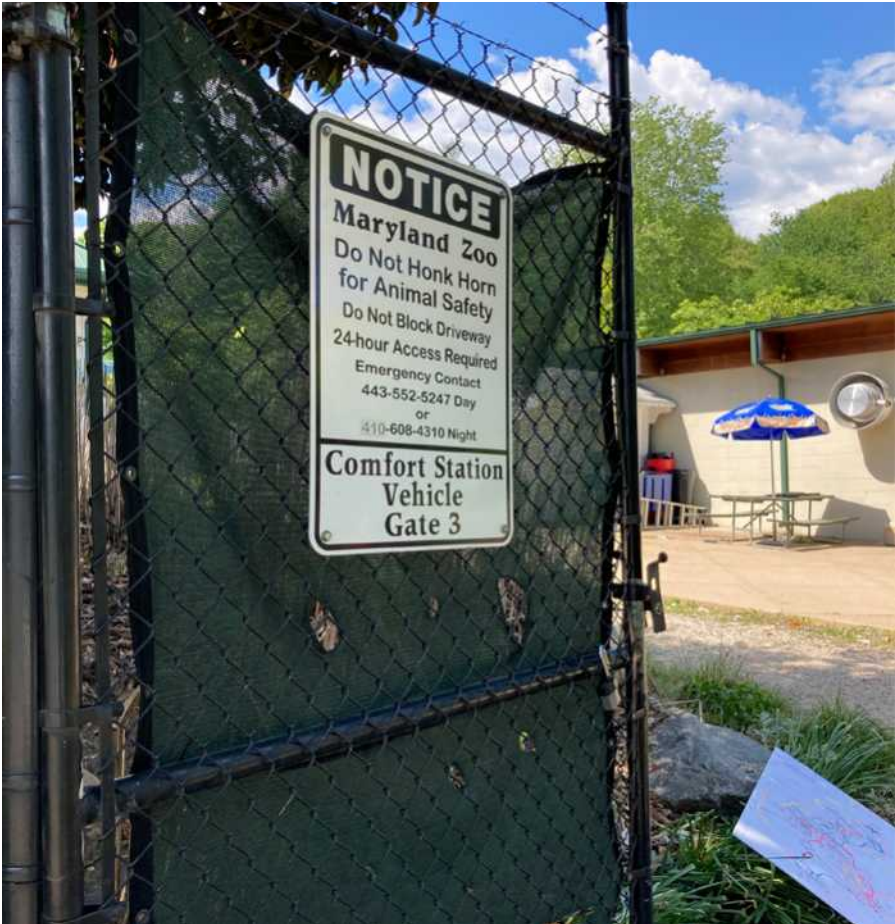
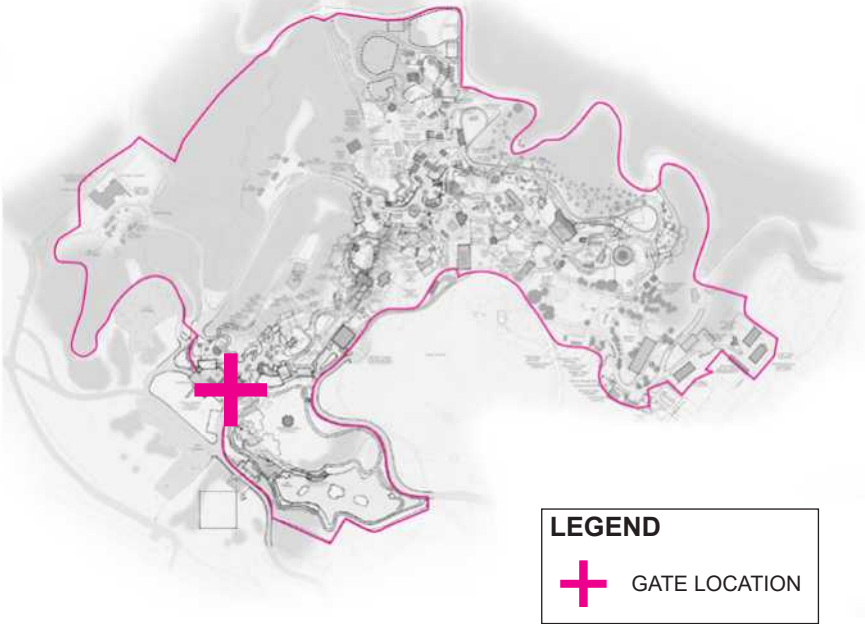
EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Poor |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- Site conditions are poor. Paving is inconsistent and has compressed earth instead of concrete in some areas. Major repaving of area is necessary.

SITE KEY PLAN



Close view of Gate 3, outdated sign.



Elevation of double swing Gate 3.

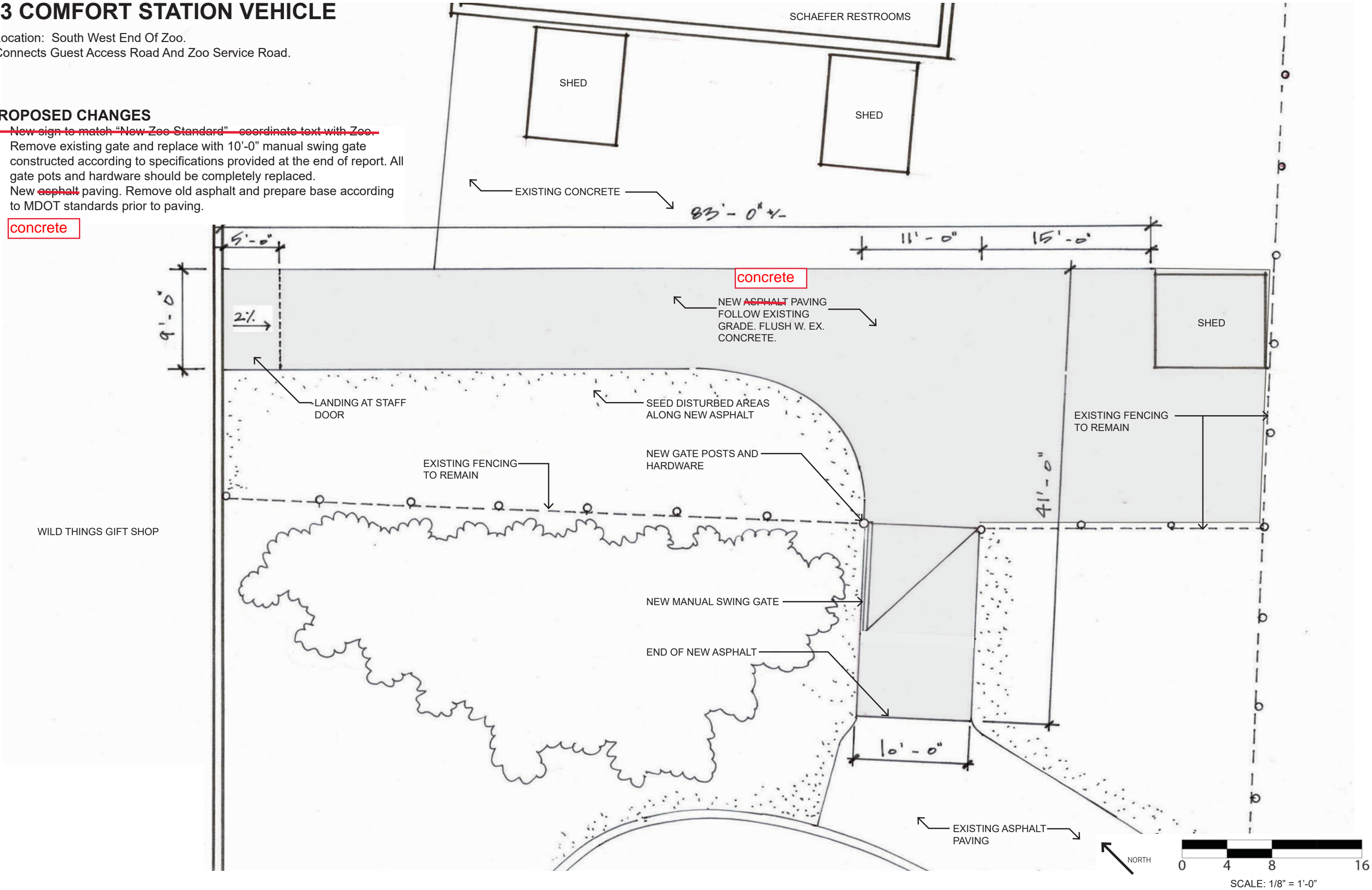
#3 COMFORT STATION VEHICLE

Location: South West End Of Zoo.
Connects Guest Access Road And Zoo Service Road.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- Remove existing gate and replace with 10'-0" manual swing gate constructed according to specifications provided at the end of report. All gate pots and hardware should be completely replaced.
- New ~~asphalt~~ paving. Remove old asphalt and prepare base according to MDOT standards prior to paving.

concrete



#4 BOAT LAKE ENTRANCE

Location: South West End Of Zoo.
Gate Connects Guest Access Road And Zoo Service Road

EXISTING GATE CONDITIONS

- | | |
|------------------|-------------------------------------|
| • Gate Condition | Good, Double Swing, 15 Ft In Length |
| • Signage | Outdated |
| • Lights | N/A |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chain-link |
| • Usage | Low |

NOTES

- Gate is in good condition.
- Signs are outdated, new signage necessary.

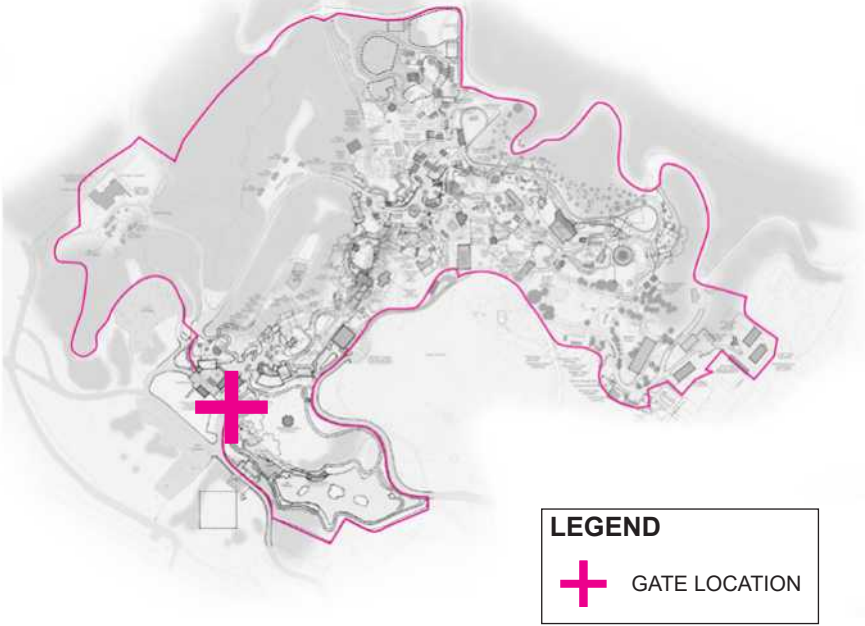
EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- N/A

SITE KEY PLAN



Elevation view of Gate 4, outdated sign.



Elevation of double swing Gate 4.

#4 BOAT LAKE ENTRANCE

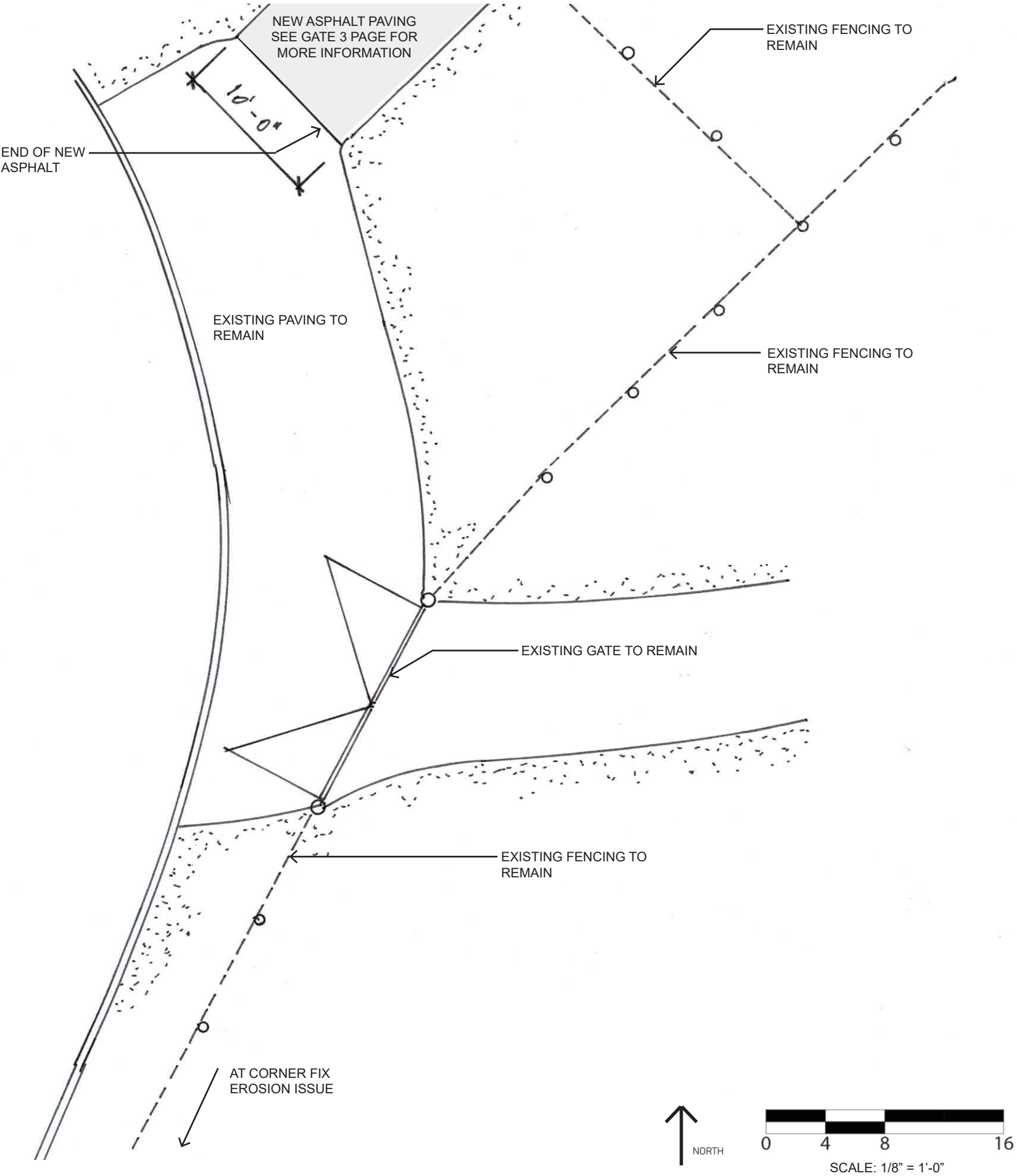
Location: South West End Of Zoo.
Gate Connects Guest Access Road And Zoo Service Road

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~



From the curb to two feet past the chain link fence create a 3' wide boulder drainage strip.
Use a mix of round boulders 12" to 14" dia maximum size, down to round boulders 6" to 8" dia.



#5 LAKESIDE LOWER GATE

Location: South End Of Park, Western Tip Of Lake.
Connects Druid Hill Park And Pedestrian Pathway.

EXISTING GATE CONDITIONS

- | | |
|------------------|---------------------------------------|
| • Gate Condition | Fair, Double Swing, 16.5 Ft In Length |
| • Signage | Outdated |
| • Usage | Low |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chain-link |

NOTES

- Signs are outdated, new signage necessary.
- Gate is set too high, should be 2 inches above grade.

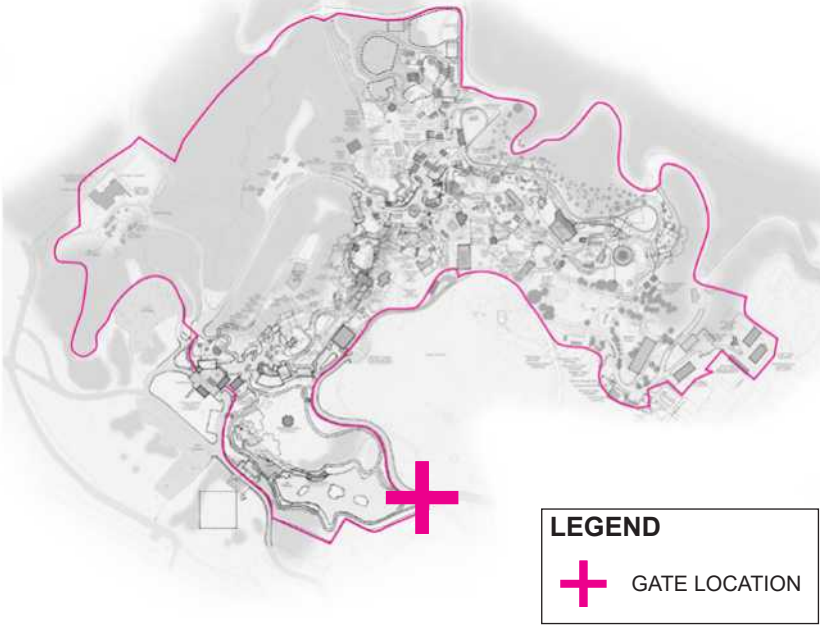
EXISTING SITE CONDITIONS

- | | |
|-----------------|-----------|
| • Paving | Poor |
| • Footers | N/A |
| • Vegetation | Overgrown |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | Good |

NOTES

- No repaving necessary, but site could benefit from cleaning.

SITE KEY PLAN



LEGEND

 GATE LOCATION



Close view of vegetation at Gate 5.



Close view of outdated sign at Gate 5.



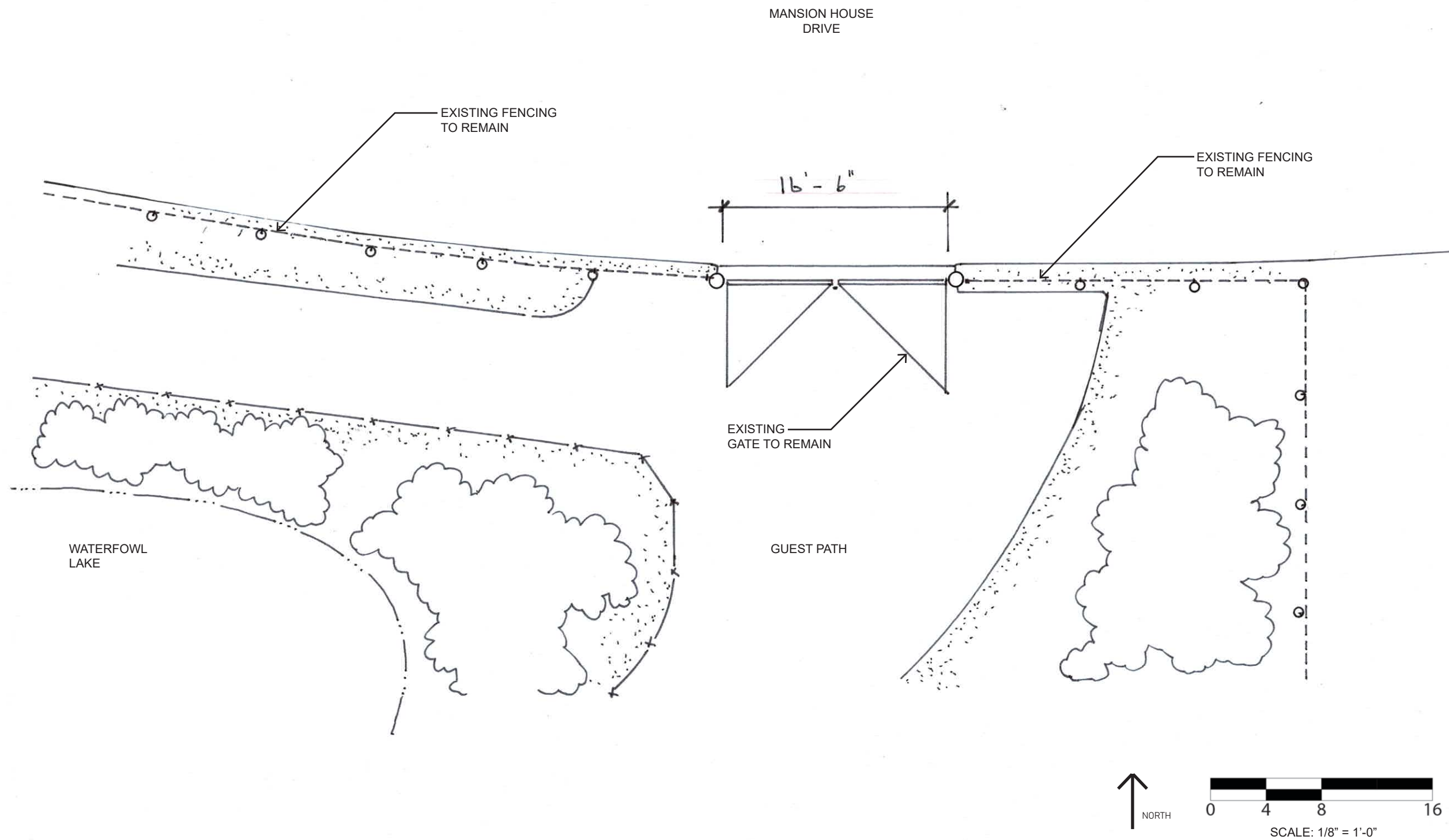
Perspective view at Gate 5, overgrown vegetation below.

#5 LAKESIDE LOWER GATE

Location: South End Of Park, Western Tip Of Lake.
Connects Druid Hill Park And Pedestrian Pathway.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- Reset gate so that it sits 2 inches above gravel of pavement.
- Site should be cleaned of vegetation. Remove overgrown grass and vegetation within 20 ft of gate.



#6 LAKESIDE GATE

Location: North-East Tip Of Zoo Lake.
Connects Guest Access Roads And Pedestrian Pathway Around Lake Perimeter.

EXISTING GATE CONDITIONS

- | | |
|------------------|----------------------------------|
| • Gate Condition | Good, Double Swing, 16 Ft Length |
| • Signage | Outdated |
| • Usage | Low |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chain-link |

NOTES

- Gate in good condition.
- Signs are outdated, new signage necessary.

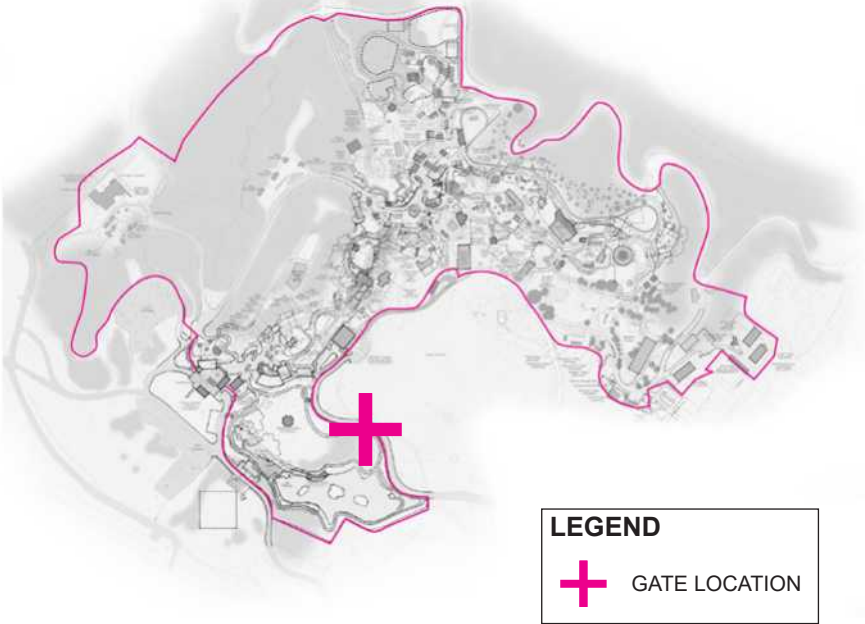
EXISTING SITE CONDITIONS

- | | |
|-----------------|-------|
| • Paving | Poor |
| • Footers | N/A |
| • Vegetation | Clear |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | Good |

NOTES

- Paving is cracking and uneven, needs major repaving.
- Please cut curb and repave area interior to the fence.

SITE KEY PLAN



Elevation of Gate 6, outdated sign.



View of paving at Gate 6, broken and uneven.

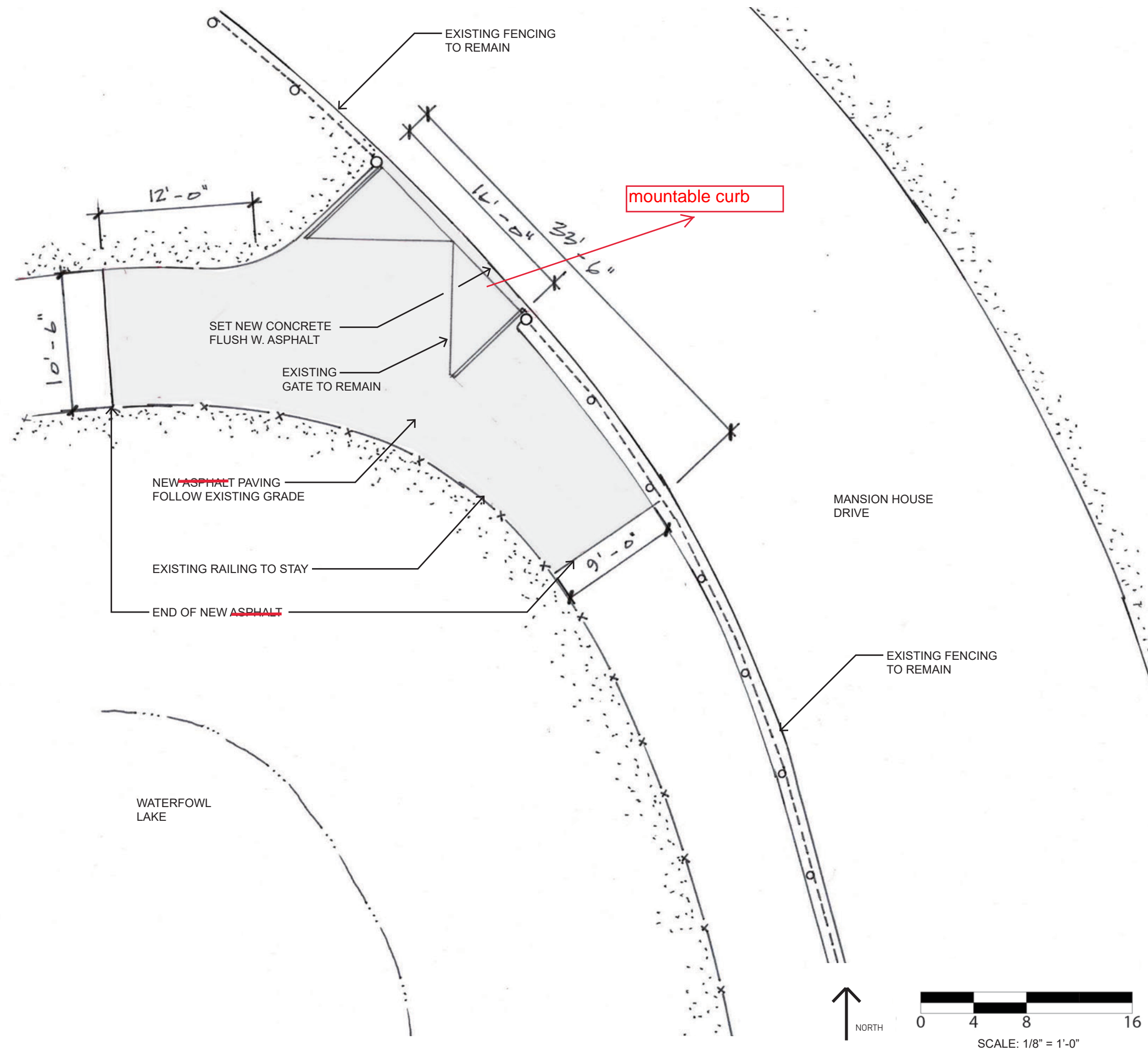
#6 LAKESIDE GATE

Location: North-East Tip Of Zoo Lake.
Connects Guest Access Roads And Pedestrian Pathway Around Lake Perimeter.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- New ~~asphalt~~ paving. Remove old asphalt and prepare base according to MDOT standards prior to paving.

Concrete not asphalt



#7 WATERFOWL GATE

Location: South End Of Park Near Waterfowl Pavilion And Lake.
Connects Parking Lot With Lakeside Grove And Grassy Hill.

EXISTING GATE CONDITIONS

• Gate Condition	Poor, Sliding, 19.5 Ft In Length
• Signage	Outdated
• Usage	High
• Call Box	N/A
• Activation	Manual
• Fabric	Chain-link

NOTES

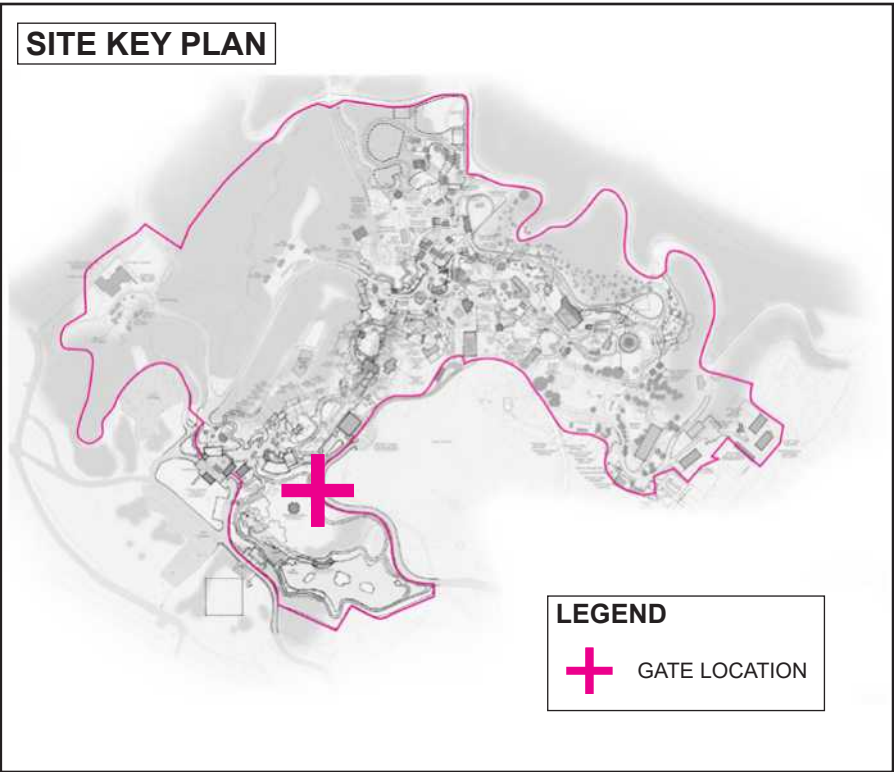
- Gate condition poor. Manual sliding gate, total replacement. Gate should be replaced with electric sliding gate. End posts of old gate should be removed.
- Signs are outdated, new signage necessary.

EXISTING SITE CONDITIONS

• Paving	Poor
• Footers	N/A
• Vegetation	Poor
• Erosion	N/A
• Retaining	N/A
• Existing Road	Good

NOTES

- Total repaving necessary.
- Maple tree located interior left of gate (from interior view). Tree should be protected during construction.
- Ginkgo biloba needs to be protected, located interior right of gate (from interior view).
- Remove footers from old gate posts.



Site view of Gate 7, with tree to protect.



Elevation of slider at Gate 7.



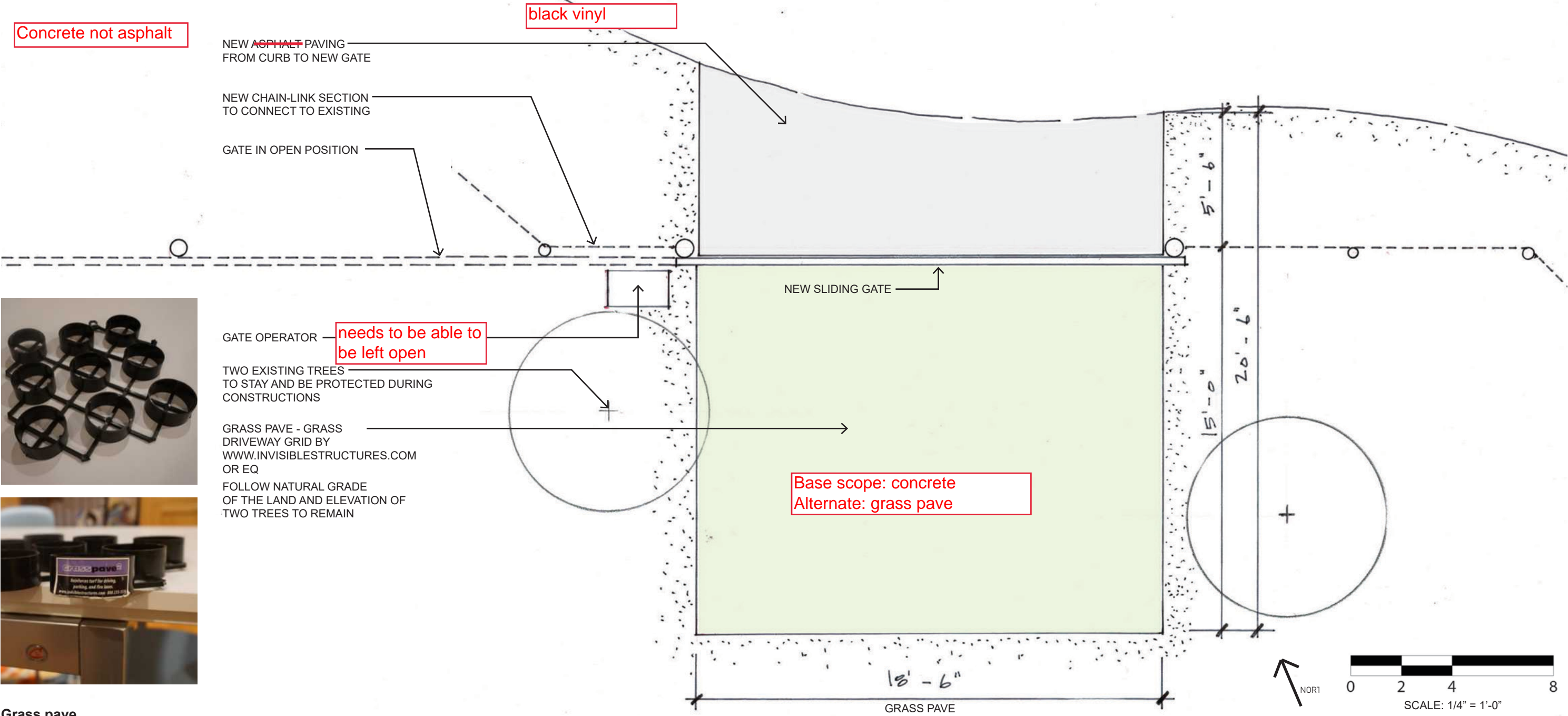
Tree to be protected at Gate 7 site.

#7 WATERFOWL GATE

Location: South End Of Park Near Waterfowl Pavilion And Lake.
Connects Parking Lot With Lakeside Grove And Grassy Hill.

PROPOSED CHANGES

- ~~New sign to match "new zoo standard" coordinate text with zoo.~~
- New ~~asphalt~~ paving. Remove old asphalt and prepare base according to MDOT standards prior to paving.
- ~~For new paving below gate, use grass pave. Prepare according to manufacturer instructions.~~
- Remove old gate and replace with 20'-0" slide gate with electronic operator. Construct according to zoo specifications provided at the end of this report. Add electronic gate operator to the left (interior view).



Grass pave

#8/9 TRAM GATES

Location: Southern End Of Zoo, Near Mansion House.
Connects Tramp Loop And Guest Access Roads.

EXISTING GATE CONDITIONS

Info	Gate 8	Gate 9
Gate Condition	Good, Single Swing	Good, single swing 12 ft
Signage	Outdated	Outdated
Usage	High	High
Call Box	N/A	N/A
Activation	Electric	Electric
Fabric	Chain-Link	Chain-link

NOTES

- Gate 8
 - Signs are outdated, new signage necessary.
- Gate 9
 - Signs are outdated, new signage necessary.

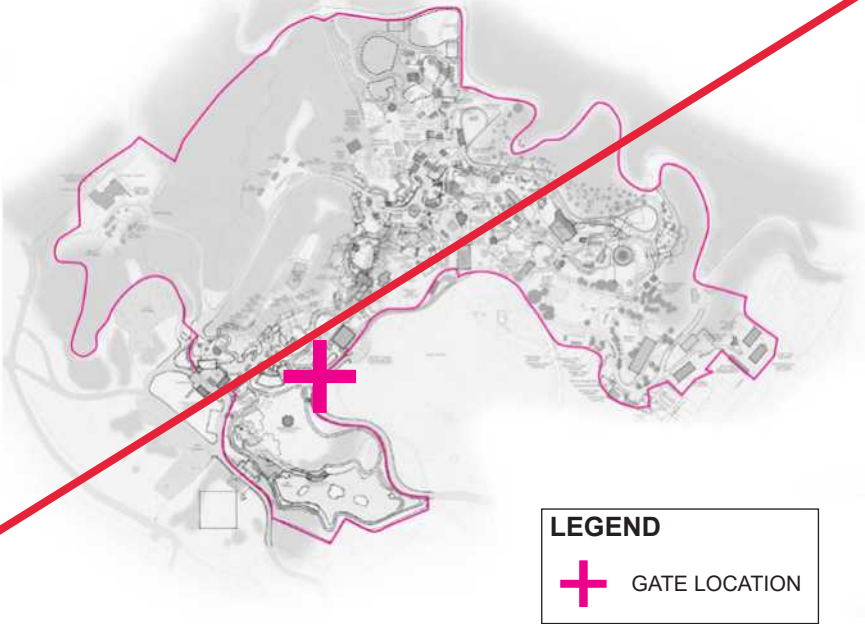
EXISTING SITE CONDITIONS

Paving	Good
Footers	N/A
Vegetation	N/A
Erosion	N/A
Retaining	N/A
Existing Road	N/A

NOTES

- Use will change to Low if tram is not running. Gates are currently broken and manually operated.

SITE KEY PLAN



Elevation of Gate 8, recently replaced.



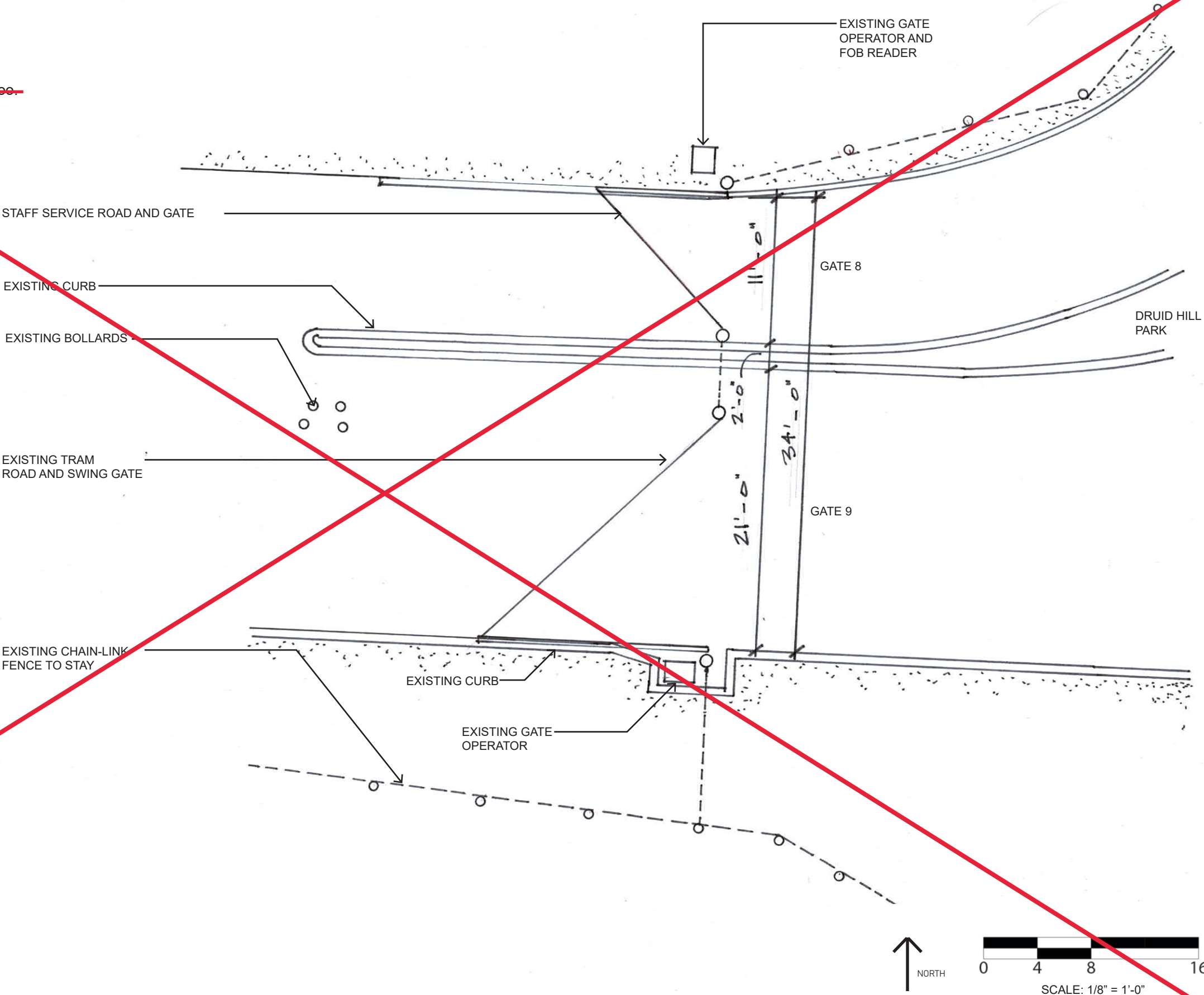
Elevation of Gate 9, recently replaced.

#8/9 TRAM SWING GATE

Location: Southern End Of Zoo, Near Mansion House.
Connects Tramp Loop And Guest Access Roads.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~



#9A BGE TRANSFORMER GATE

Location: Southern End Of Zoo, Near Mansion House.
Connects Druid Hill Park With Baltimore Gas And Electric Transformer.

EXISTING GATE CONDITIONS

- | | |
|------------------|-------------------------------------|
| • Gate Condition | Good, Double Swing, 12 Ft In Length |
| • Signage | Outdated |
| • Usage | Low |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chain-link |

NOTES

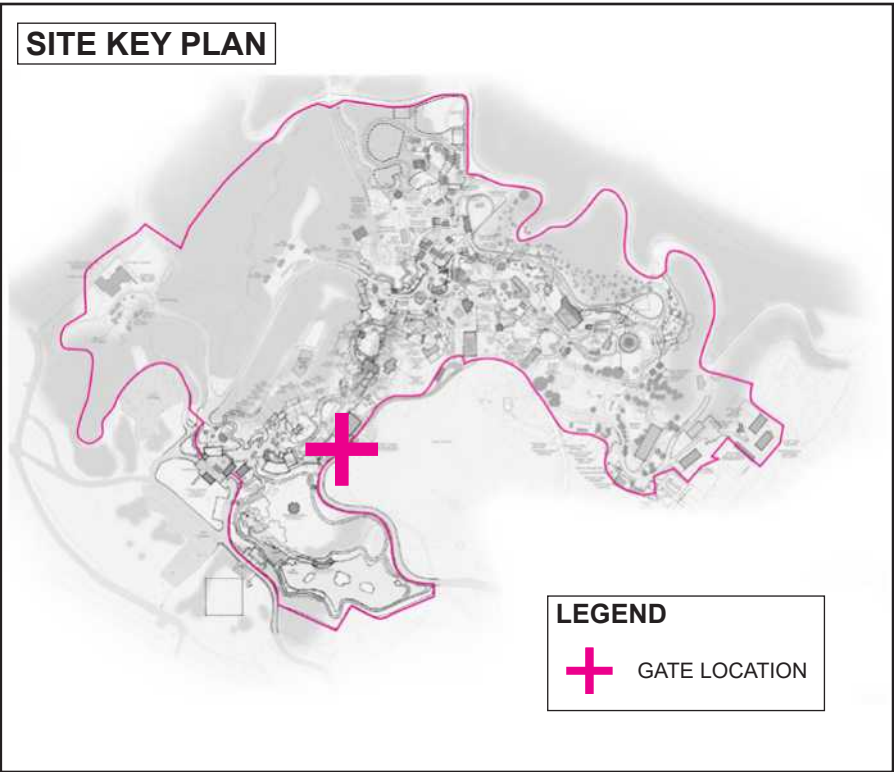
- Signs are outdated, new signage necessary.
- Adjust gates. See Photo #3 for gate misalignment.

EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- None



View of Gate 9A with opposing transformer.



Additional view of Gate 9A with BGE transformer.



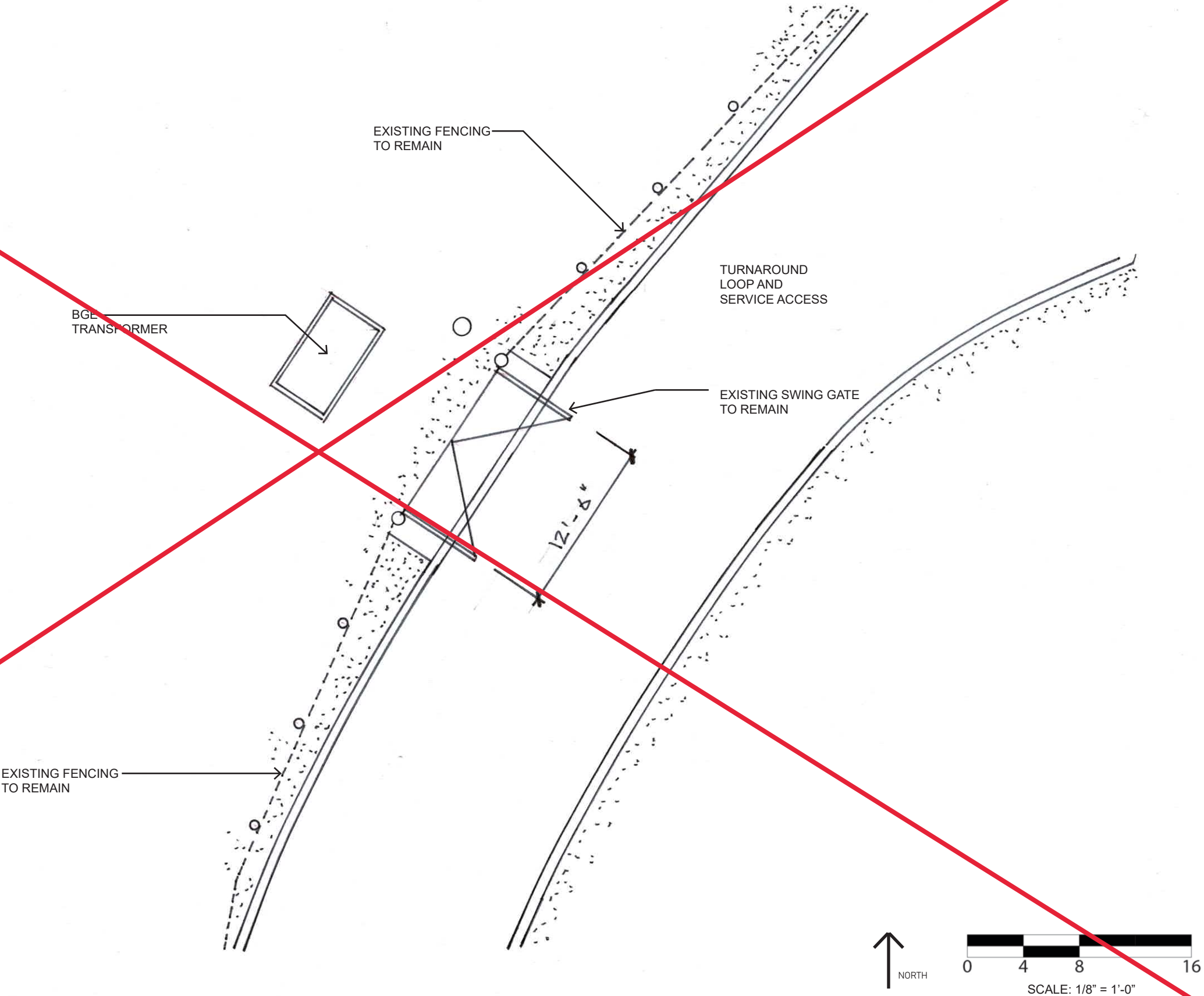
Transformer by Baltimore Gas and Electric (BGE).

#9A BGE TRANSFORMER GATE

Location: Southern End Of Zoo, Near Mansion House.
Connects Druid Hill Park With Baltimore Gas And Electric Transformer.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~



#10/11 MANSION HOUSE STEPS SLIDE GATE

Location: Southwest In The Zoo, Near Mansion House.
Connects Pedestrian Access Area With Stairs.

EXISTING GATE CONDITIONS

•	Info	Gate 10	Gate 11
•	Gate Condition	Fair, Slider, 10 Ft	Fair, Single Swing, 5 Ft
•	Signage	Outdated	Outdated
•	Usage	Medium	High
•	Call Box	N/A	None, Item Desired
•	Activation	Manual	Electric, Broken
•	Fabric	Chain-Link	Chain-Link

NOTES

- **Gate 10**
 - Signs are outdated, new signage necessary.
 - The manual slider has a broken roller.
 - Wheel missing from gate slider.
- **Gate 11**
 - Electric coupling is broken.
 - Signs are outdated, new signage necessary.
 - Call box is not available on site, but the item is desired.



Elevation view of Gate 10, outdated sign.

EXISTING SITE CONDITIONS

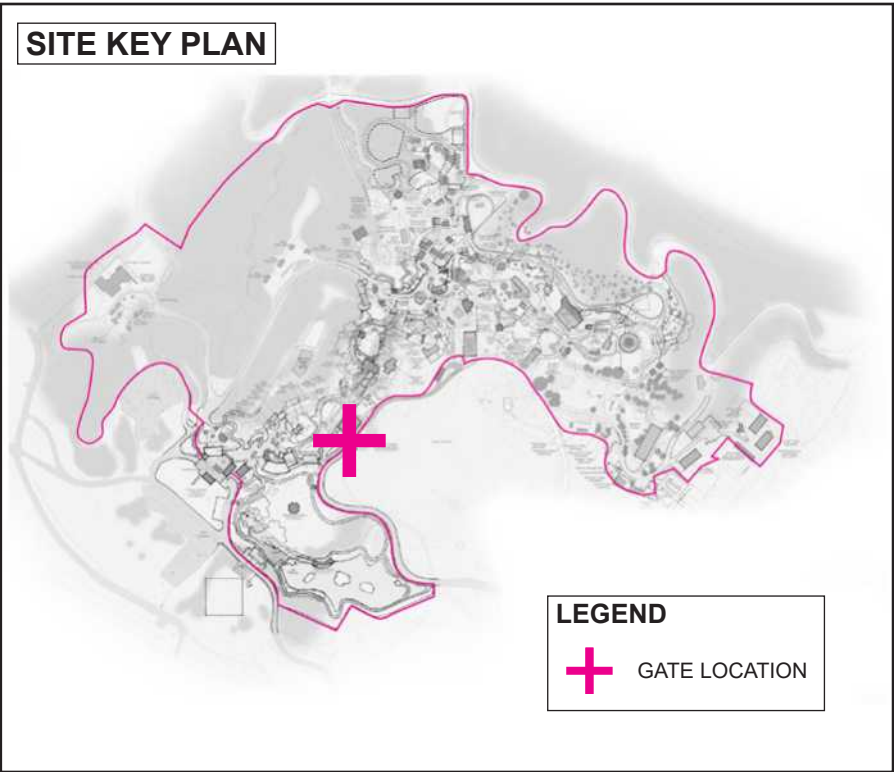
•	Info	Gate 10	Gate 11
•	Paving	Good	Good
•	Footers	N/A	N/A
•	Vegetation	N/A	N/A
•	Erosion	N/A	N/A
•	Retaining	N/A	N/A
•	Existing Road	N/A	N/A

NOTES

- None.



Elevation of slide Gate 11.



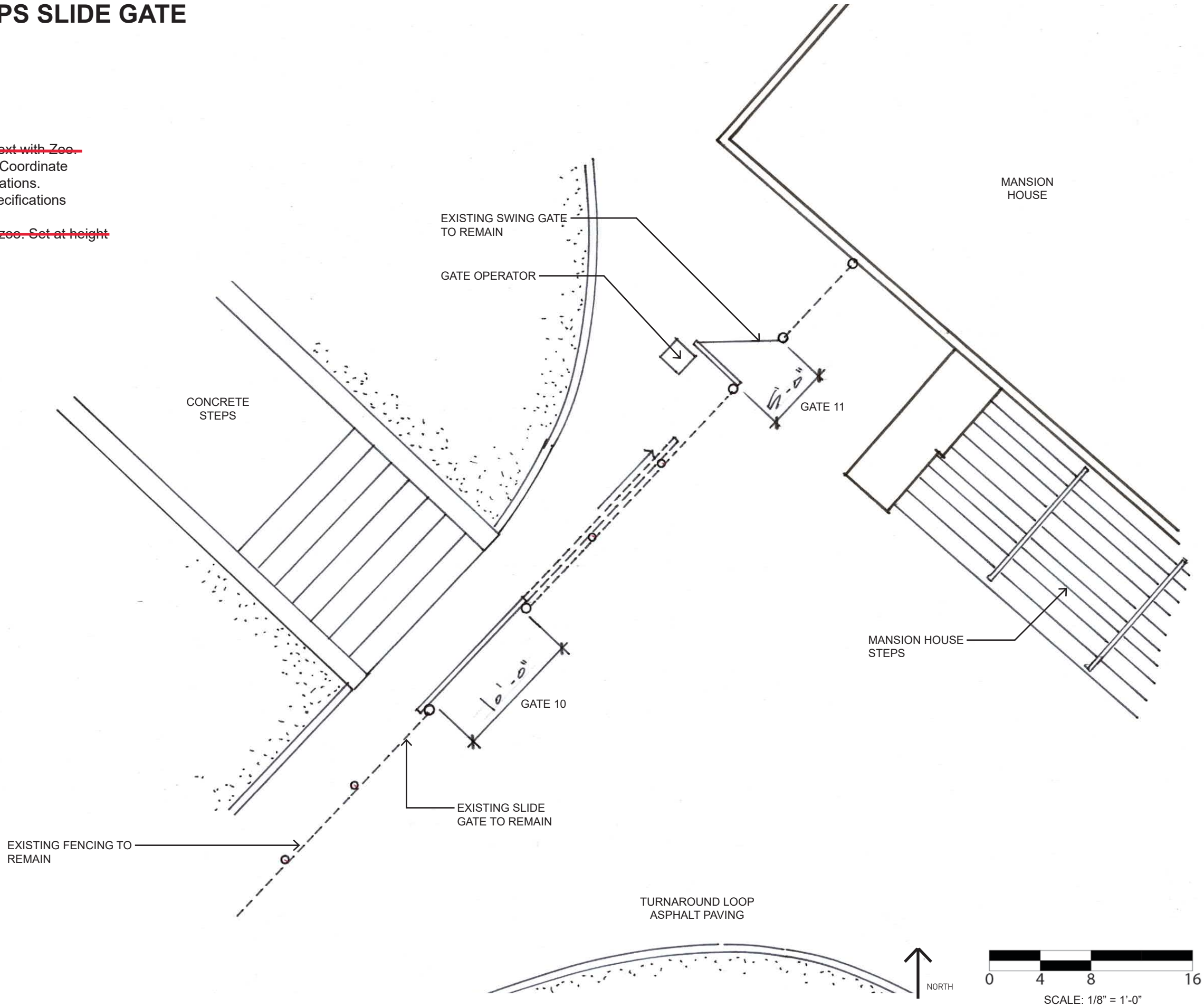
Gate 11 electrical cables are damaged.

#10/11 MANSION HOUSE STEPS SLIDE GATE

Location: Southwest In The Zoo, Near Mansion House.
Connects Pedestrian Access Area With Stairs.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- Gate 10:** Replace broken roller on manual slide gate. Coordinate product with zoo, prepare using manufacturer specifications.
- Gate 11:** Repair electric coupling mechanism. Use specifications provided by manufacturer.
- ~~Add call box. Coordinate placement and product with zoo. Set at height proposed by manufacturer.~~



#12 DEVELOPMENT GATE

Location: South In Zoo, Just North Of Mansion House.
Connects Vehicular Access With Mansion Zone.

EXISTING GATE CONDITIONS

- | | |
|------------------|-------------------------------------|
| • Gate Condition | Poor, Double Swing, 12 Ft In Length |
| • Signage | Outdated |
| • Usage | Medium, High During Events |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chain-link |

NOTES

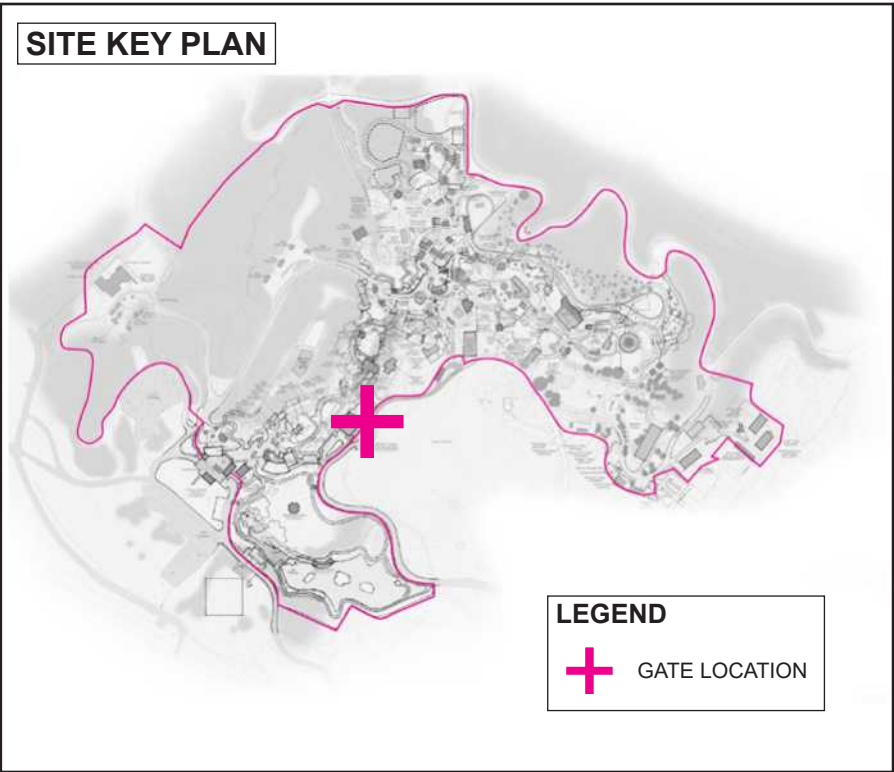
- This gate is outdated and needs a skirt to match the slope. Current gate build is not efficient, gets caught on pavement.
- Keep the two support posts and use these as base for manual slide gate attachment.
- Signs are outdated, new signage necessary.

EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- None



Close view of Gate 12, outdated sign.



Elevation of double swing Gate 12.



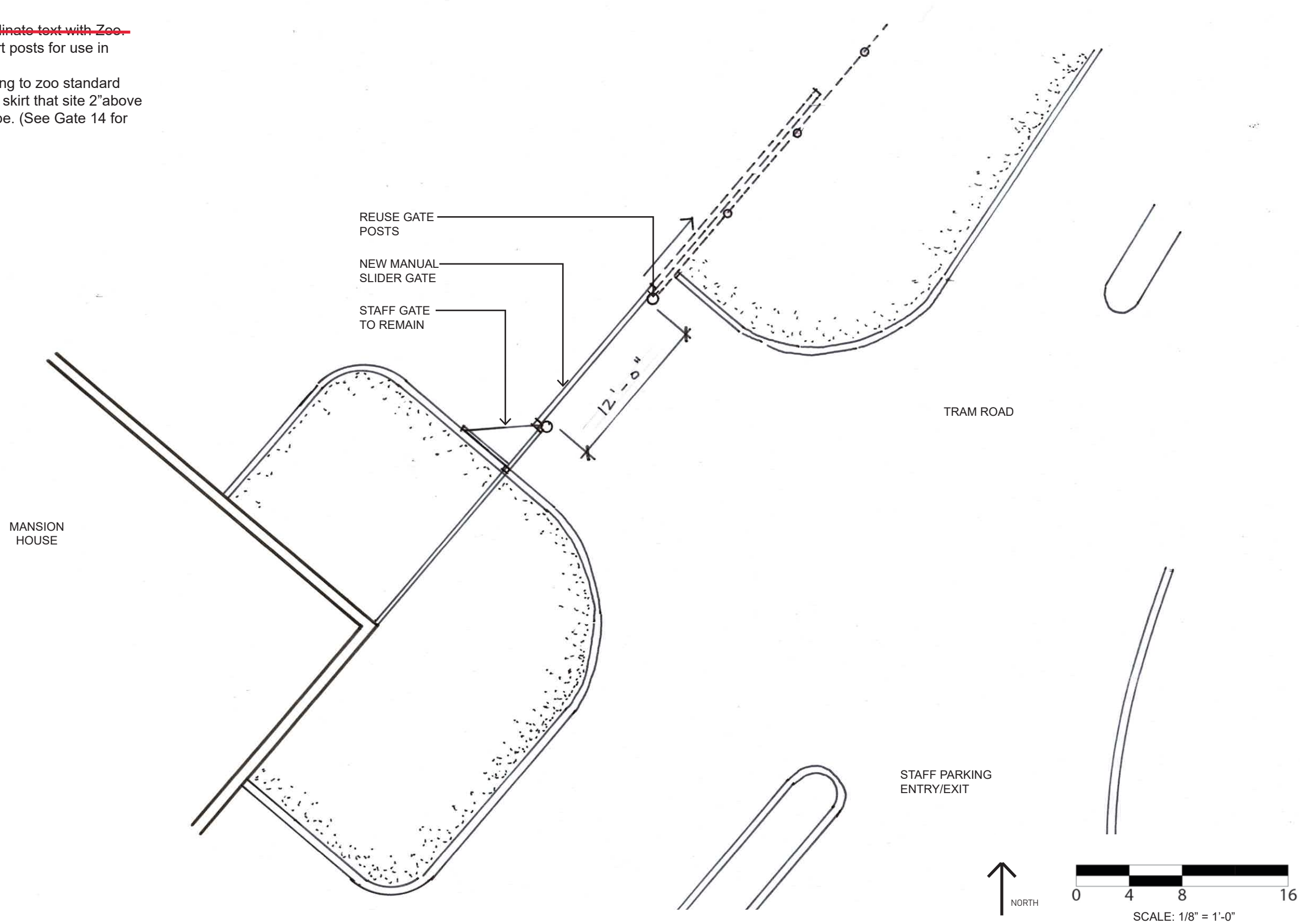
Perspective view of Gate 12. Connects to planting beds.

#12 DEVELOPMENT GATE

Location: South In Zoo, Just North Of Mansion House.
Connects Vehicular Access With Mansion Zone.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- Remove existing gate and keep the two support posts for use in replacement build.
- Build manual slide gate, 12 ft in length, according to zoo standard specifications. Gate should have a sheet metal skirt that sits 2" above grade when gate is closed. Skirt will match slope. (See Gate 14 for reference).
- Match skirt on Gate #14.



#13 FINANCE PEDESTRIAN GATE

Location: Just North Of Mansion House On A Stretch Of Fence That Is Heavily Wooded.

EXISTING GATE CONDITIONS

- | | |
|------------------|--|
| • Gate Condition | Not In Use, Single Swing, 5 Ft 6 In Length |
| • Signage | N/A |
| • Usage | Not Operational |
| • Call Box | N/A |
| • Activation | N/A |
| • Fabric | N/A |
| • Usage | Low |

NOTES

- Gate is no longer in use but does not need to be removed. Gate in Fair condition.

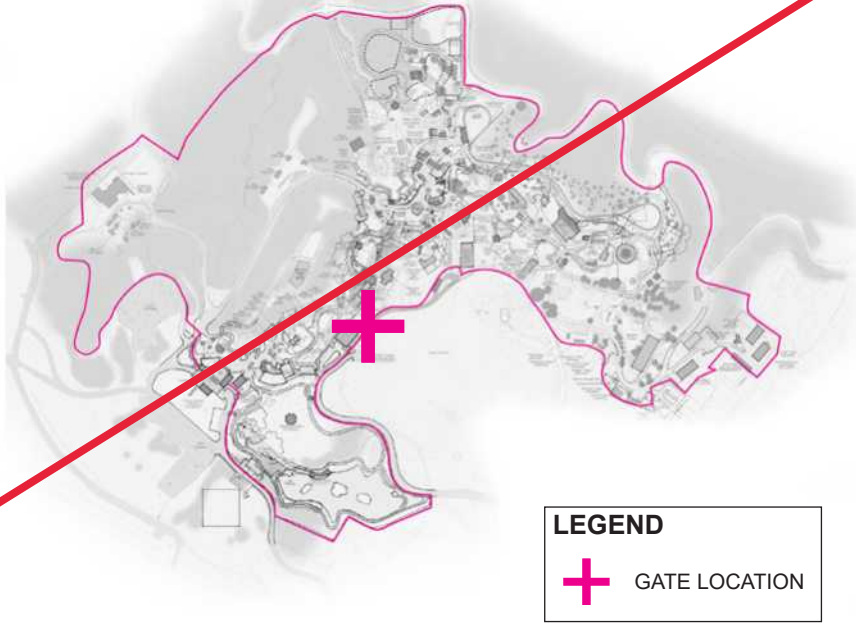
EXISTING SITE CONDITIONS

- | | |
|-----------------|-----------|
| • Paving | N/A |
| • Footers | N/A |
| • Vegetation | Overgrown |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |


NOTES

- None

SITE KEY PLAN



LEGEND

 GATE LOCATION



View of overgrown vegetation at Gate 13. No longer in use.

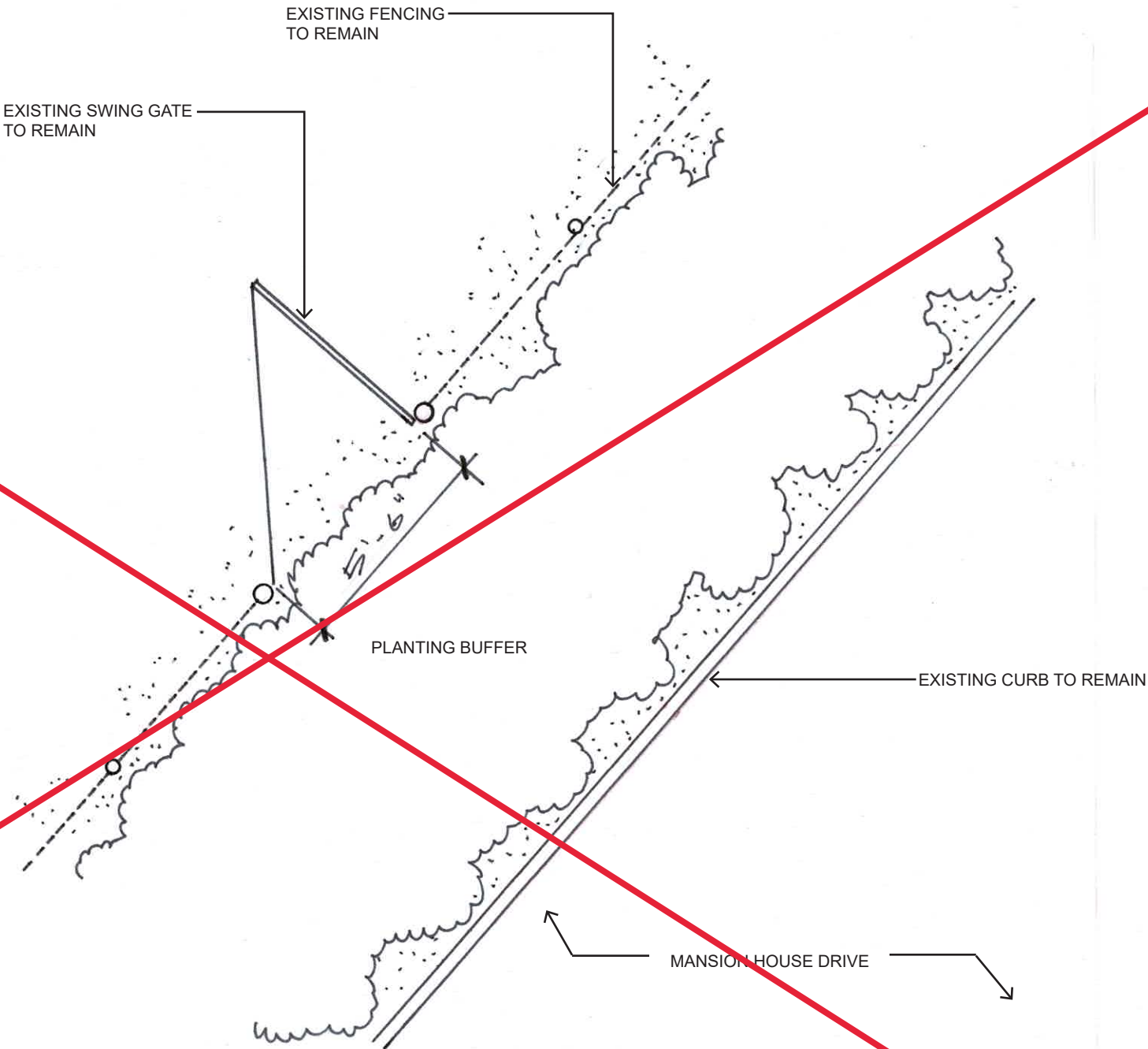
Elevation of single swing Gate 13.

#13 FINANCE PEDESTRIAN GATE

Location: Just North Of Mansion House On A Stretch Of Fence That Is Heavily Wooded.

PROPOSED CHANGES

- No proposed changes at this time.



#14 MARYLAND GATE

Location: Southern Area Of Zoo, Barely Southwest Of The Maryland House.
Connects Steps To Maryland House With Guest Access Roads And Staff Parking.

EXISTING GATE CONDITIONS

- | | |
|------------------|---|
| • Gate Condition | Good, Slide With Skirt, 27 Ft In Length |
| • Signage | Outdated |
| • Usage | High |
| • Call Box | None, Item Desired |
| • Activation | Electric |
| • Fabric | Chain-link |

EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

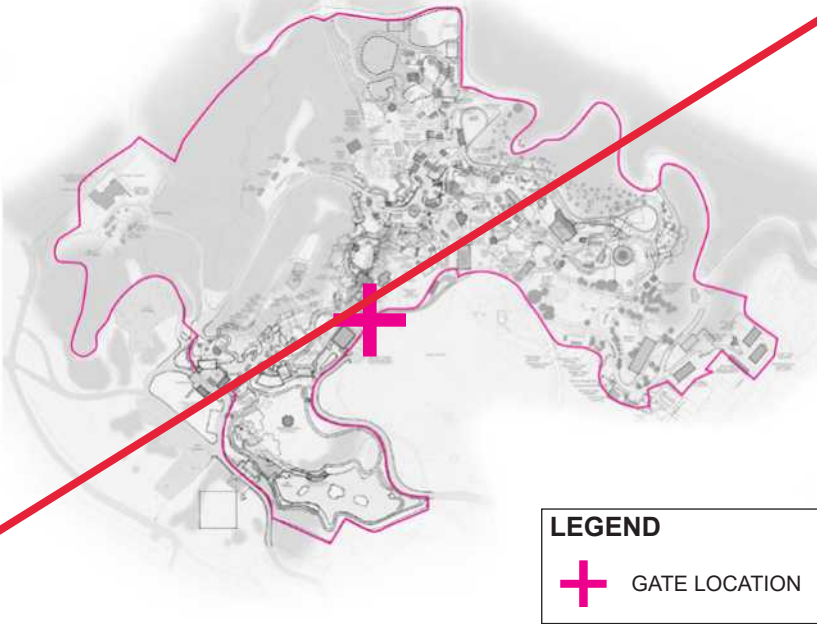
NOTES

- In very good condition. This slider gate with skirt should be model for other gates that are on a slope.
- Gate does not have a call box and this item is desired.
- Fob reader not available on the Zoo side. Coordinate with Zoo if one Fob is required.
- Signs are outdated, new signage necessary.

NOTES

- None

SITE KEY PLAN

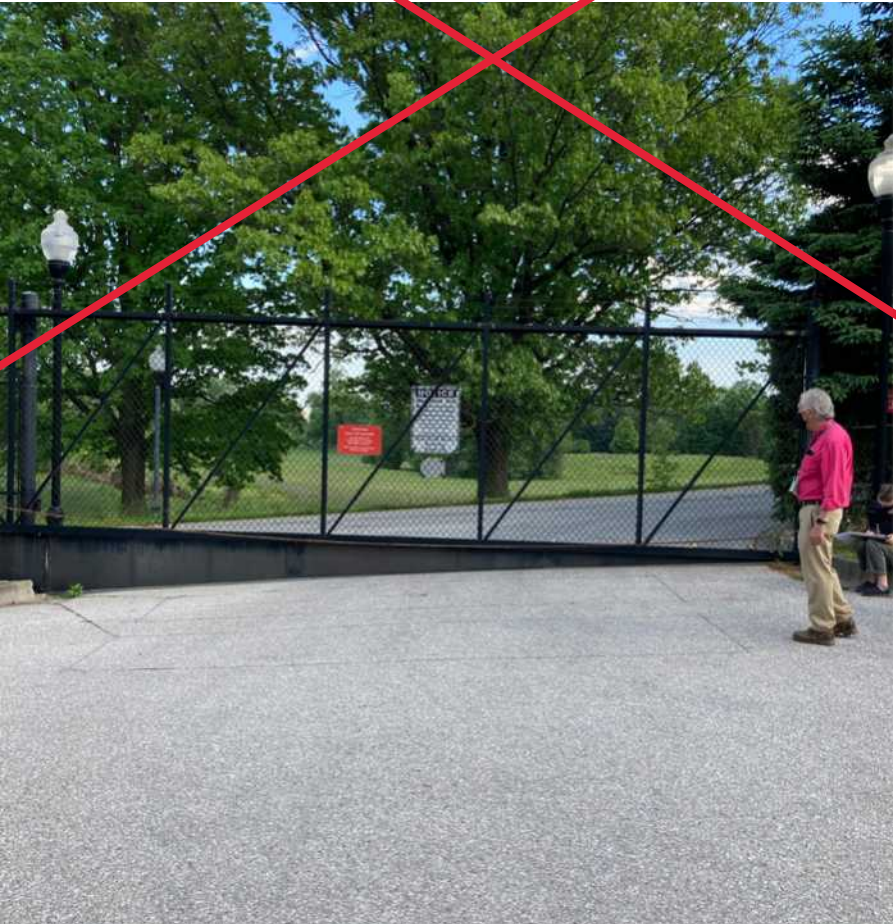


LEGEND

 GATE LOCATION



Close view of Gate 14, outdated sign.



Elevation of double swing Gate 14, skirt on bottom of slide gate.



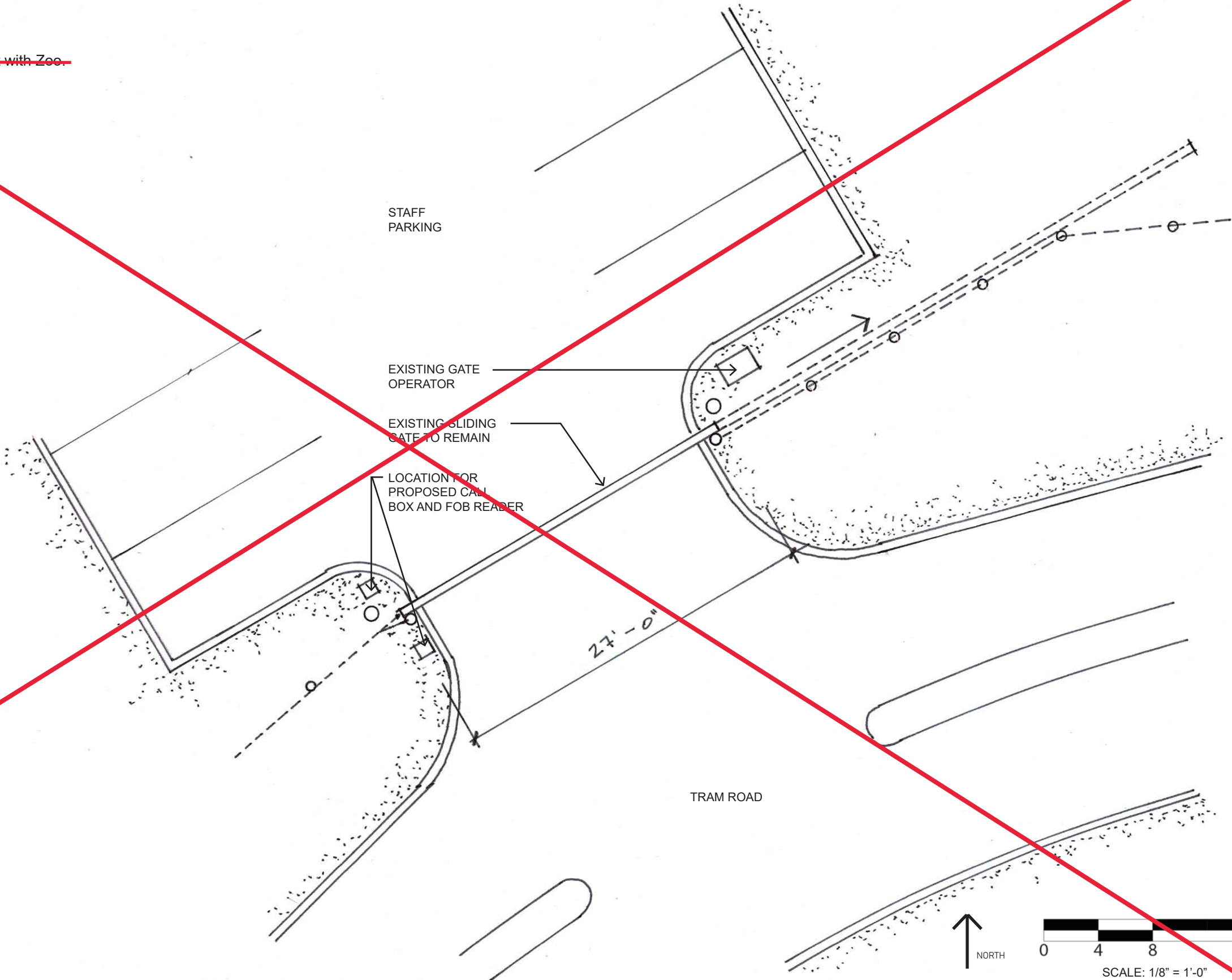
Close view of electronic coupling system at Gate 14.

#14 MARYLAND GATE

Location: Southern Area Of Zoo, Barely Southwest Of The Maryland House.
Connects Steps To Maryland House With Guest Access Roads And Staff Parking.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~



15 EDUCATION GATE

Location: South Area Of Zoo.
Connects Guest Access Roads With Zoo Service Road And Staff Sidewalk.

EXISTING GATE CONDITIONS

- | | |
|------------------|------------------------------|
| • Gate Condition | Good, Slide, 13 Ft In Length |
| • Signage | Outdated |
| • Usage | Low-Medium |
| • Call Box | N/A |
| • Activation | Electric |
| • Fabric | Chain-link |

NOTES

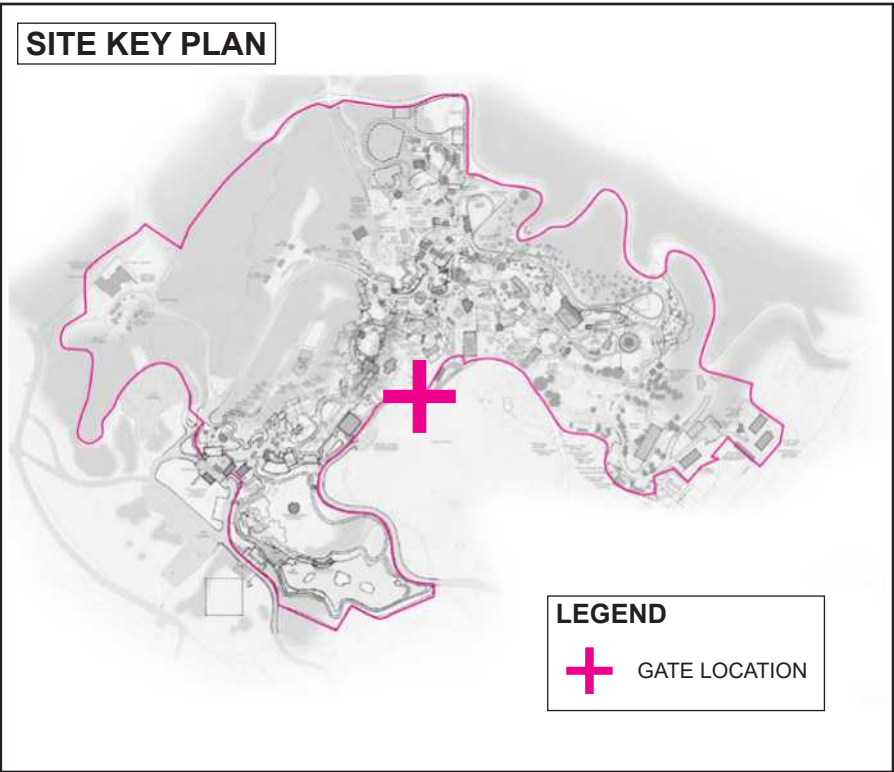
- Signs are outdated, new signage necessary.

EXISTING SITE CONDITIONS

- | | |
|-----------------|-------|
| • Paving | Fair |
| • Footers | N/A |
| • Vegetation | Clean |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- None



Elevation view of Gate 15. Set at an angle matching paving.



Perspective of Gate 15 with electronic coupling system.



FOB reader at Gate 15.

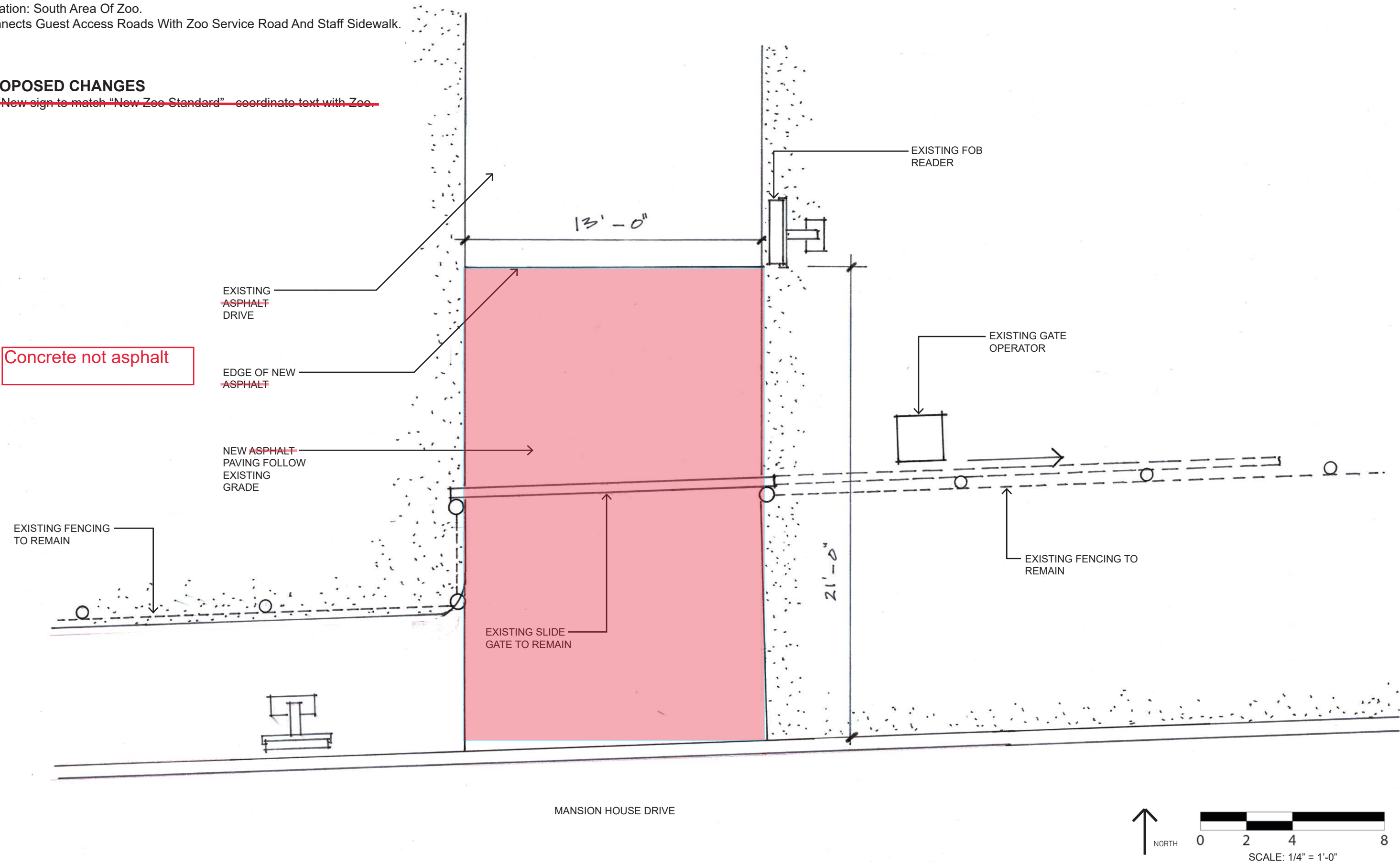
15 EDUCATION GATE

Location: South Area Of Zoo.
Connects Guest Access Roads With Zoo Service Road And Staff Sidewalk.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~

Concrete not asphalt



#16 POLAR BEAR TRAM GATE

Brand New, Main Gate.

EXISTING GATE CONDITIONS

• Gate Condition	Good, Double Swing, Length Unknown
• Signage	N/A
• Usage	High
• Call Box	N/A
• Activation	N/A
• Fabric	N/A

EXISTING SITE CONDITIONS

• Paving	Good
• Footers	N/A
• Vegetation	N/A
• Erosion	N/A
• Retaining	N/A
• Existing Road	N/A

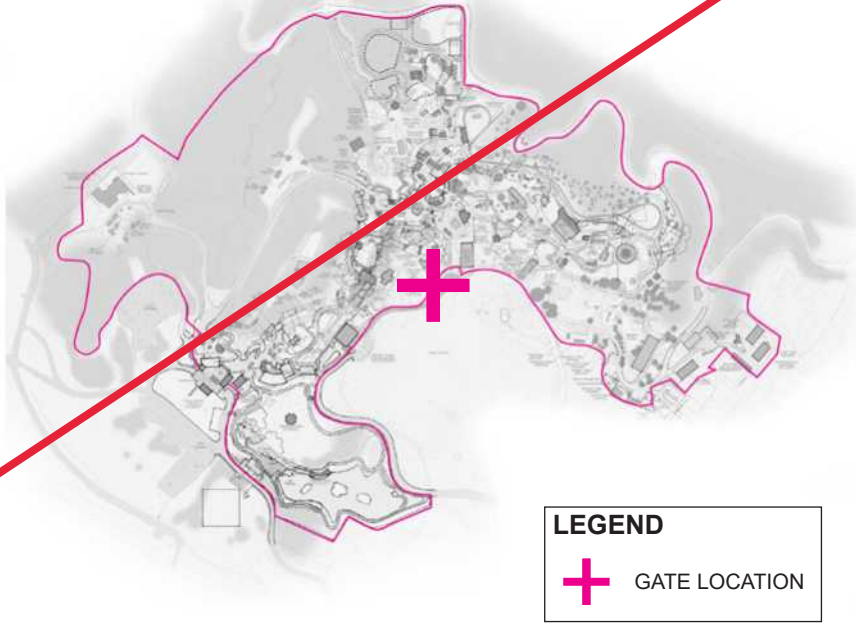
NOTES

- Use of gate will change to Low if tram is not running.

NOTES

- None

SITE KEY PLAN



View of sculpture on gate post.



Elevation of main Zoo gate.

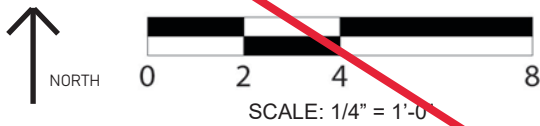
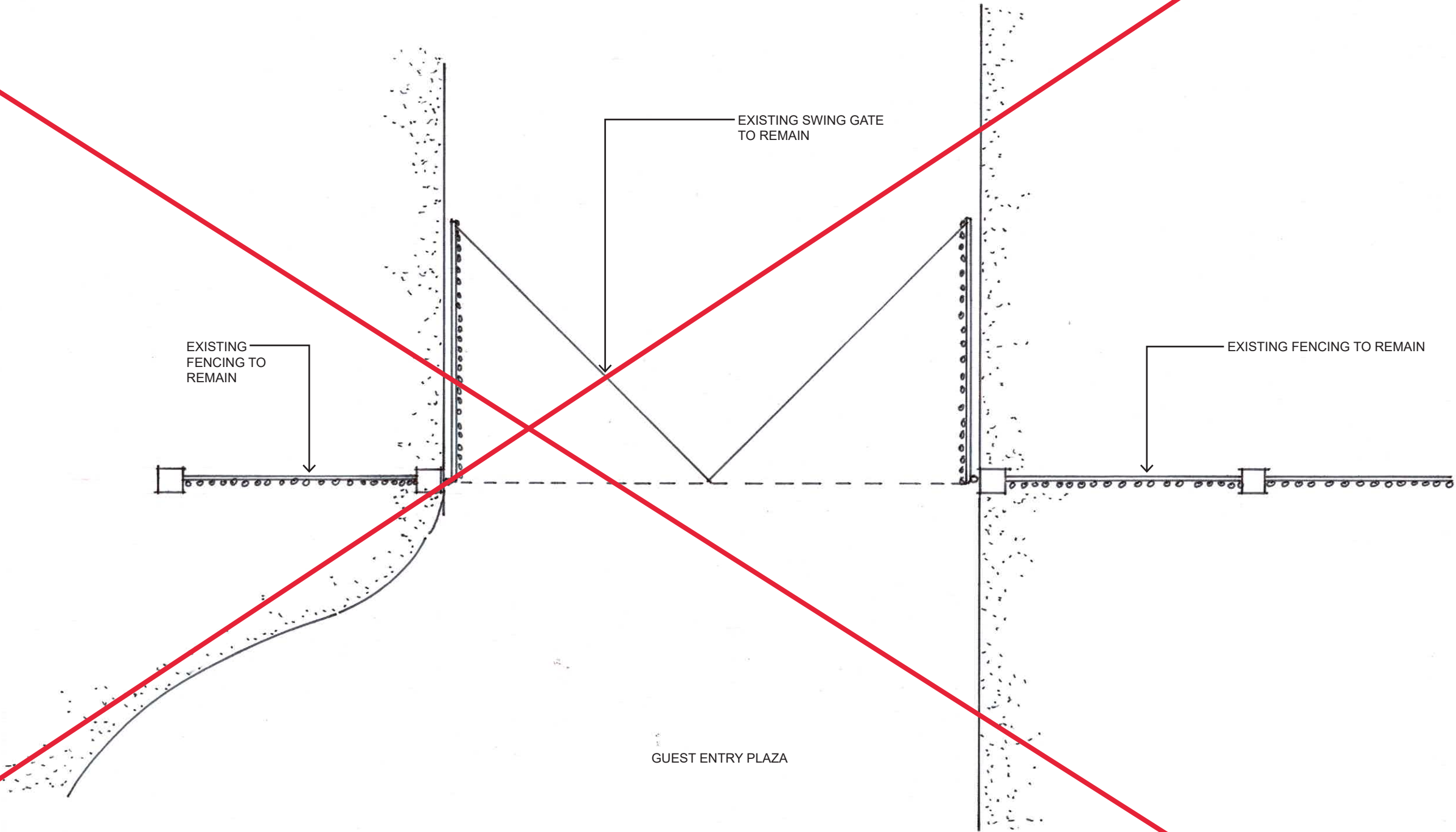


#16 POLAR BEAR TRAM GATE

Brand New, Main Gate.

PROPOSED CHANGES

- No proposed changes at this time.



#17 RHINO GATE

Location: Southeast In Zoo.
Connects Druid Hill Park And Zoo Service Roads.

EXISTING GATE CONDITIONS

- | | |
|------------------|---|
| • Gate Condition | Poor, Double Swing, 20.5 Ft In Length |
| • Signage | Outdated |
| • Usage | High |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chain-link With Vertical Plastic Strips |

NOTES

- Current gate in poor condition due to frequent use. Gate needs total rebuild.
- Signs are outdated, new signage necessary.

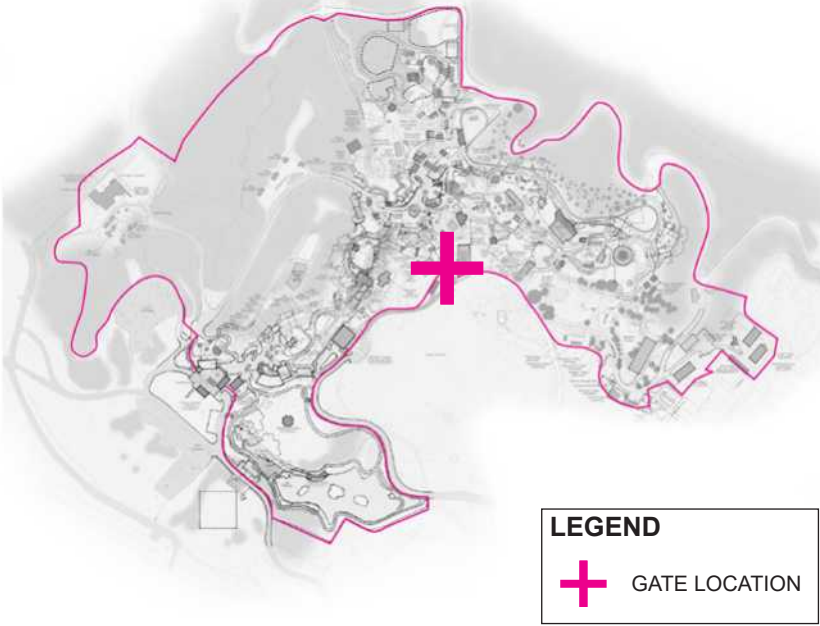
EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- None

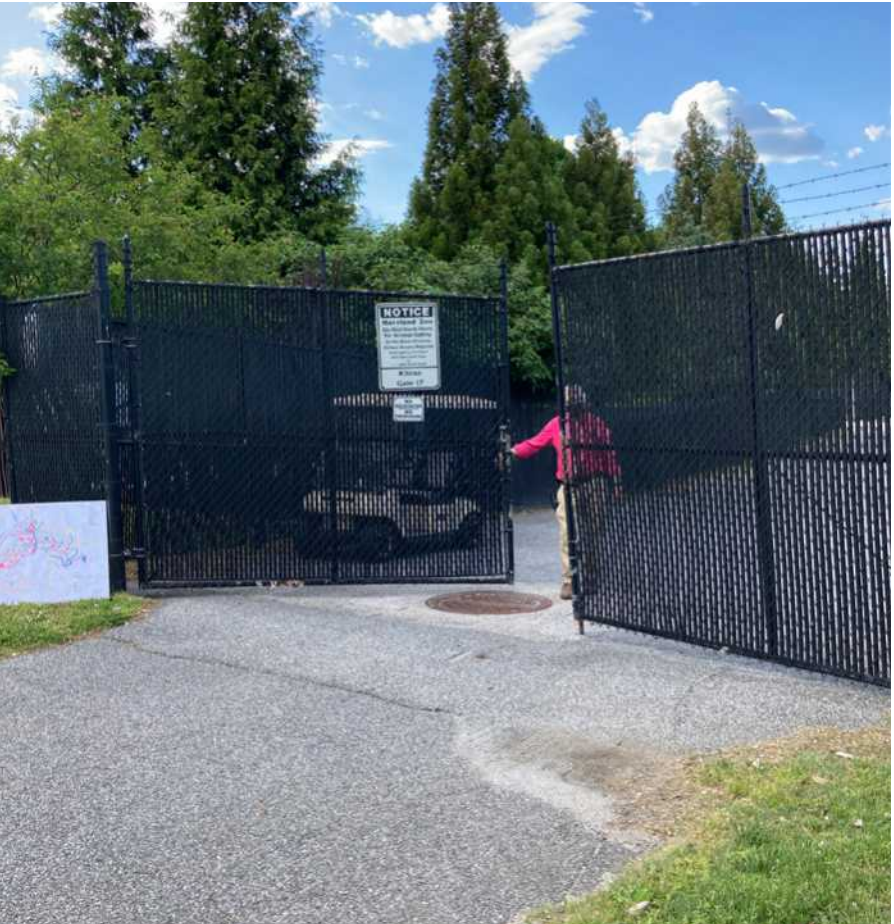
SITE KEY PLAN



Elevation of double swing Gate 17.



Elevation of double swing Gate 17.



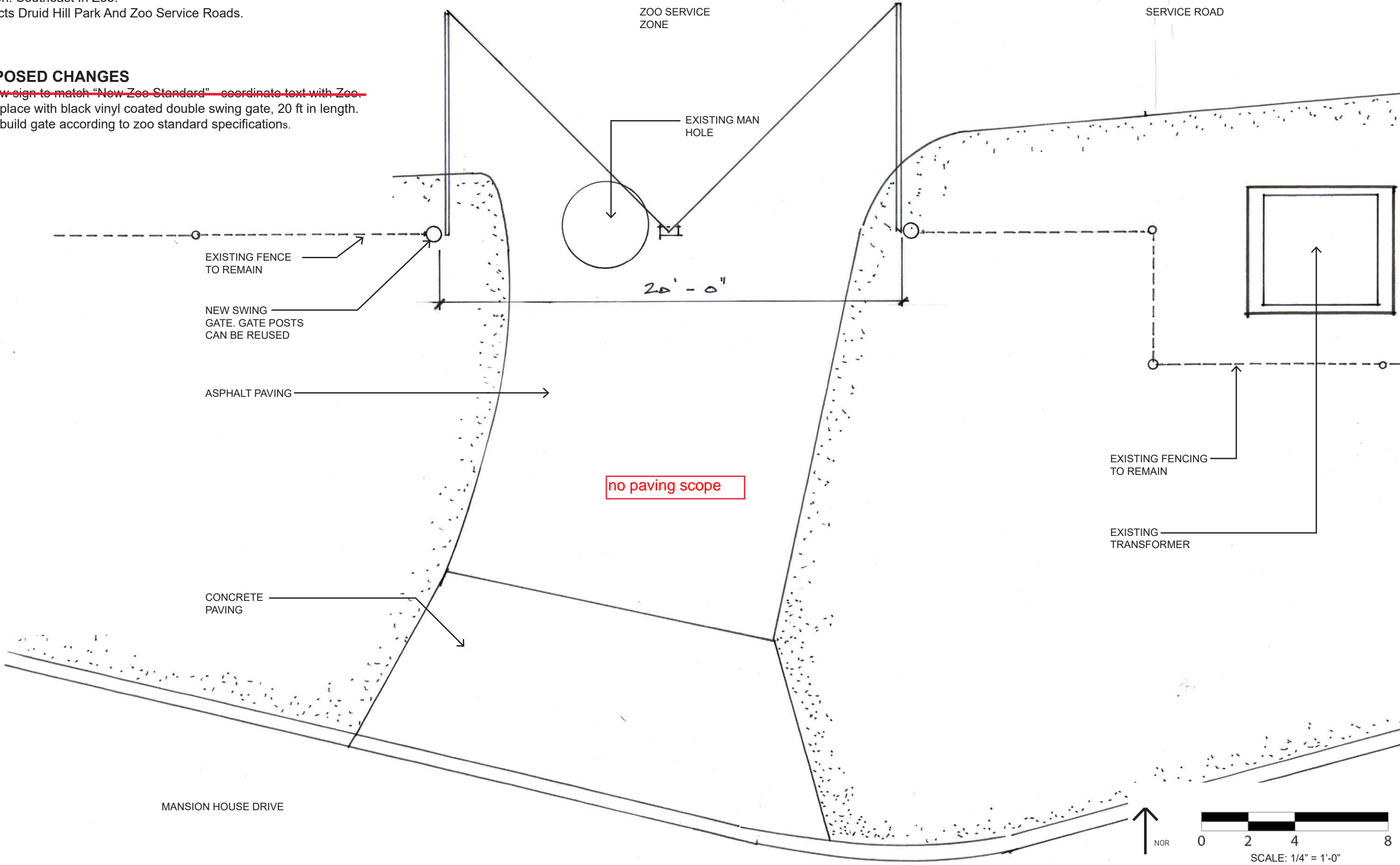
Perspective view of Gate 17, outdated sign to be replaced.

#17 RHINO GATE

Location: Southeast In Zoo.
Connects Druid Hill Park And Zoo Service Roads.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- Replace with black vinyl coated double swing gate, 20 ft in length.
Rebuild gate according to zoo standard specifications.



#18 ANTELOPE GATE

Location: Southern Crest Of Zoo, Near African Watering Hole Building.
Connects Druid Hill Park And Zoo Service Road.

EXISTING GATE CONDITIONS

- | | |
|------------------|-----------------------------|
| • Gate Condition | Fair, Slide, Length Unknown |
| • Signage | Outdated |
| • Usage | High |
| • Call Box | N/A |
| • Activation | Electric, Broken |
| • Fabric | Chain-link |

NOTES

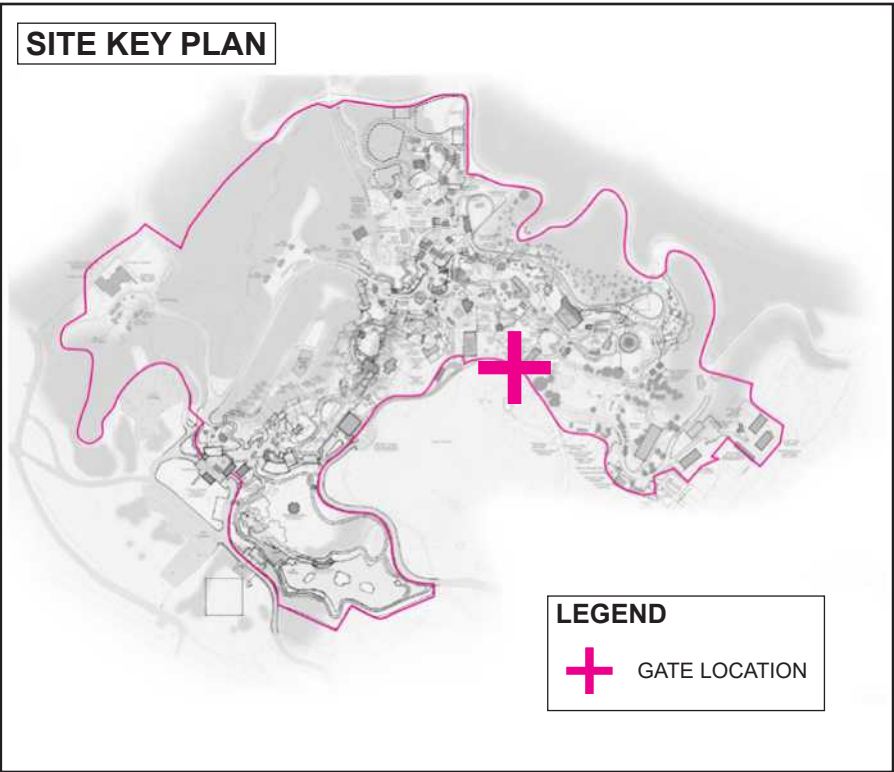
- Chain plate is broken (see image bottom right).
- Signs are outdated, new signage necessary.
- Electric mechanism needs to be repaired.
- Confirm gate has miller edge.

EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- None.



View of Gate 18 with electric slide opening.



Close up of electric coupling system.



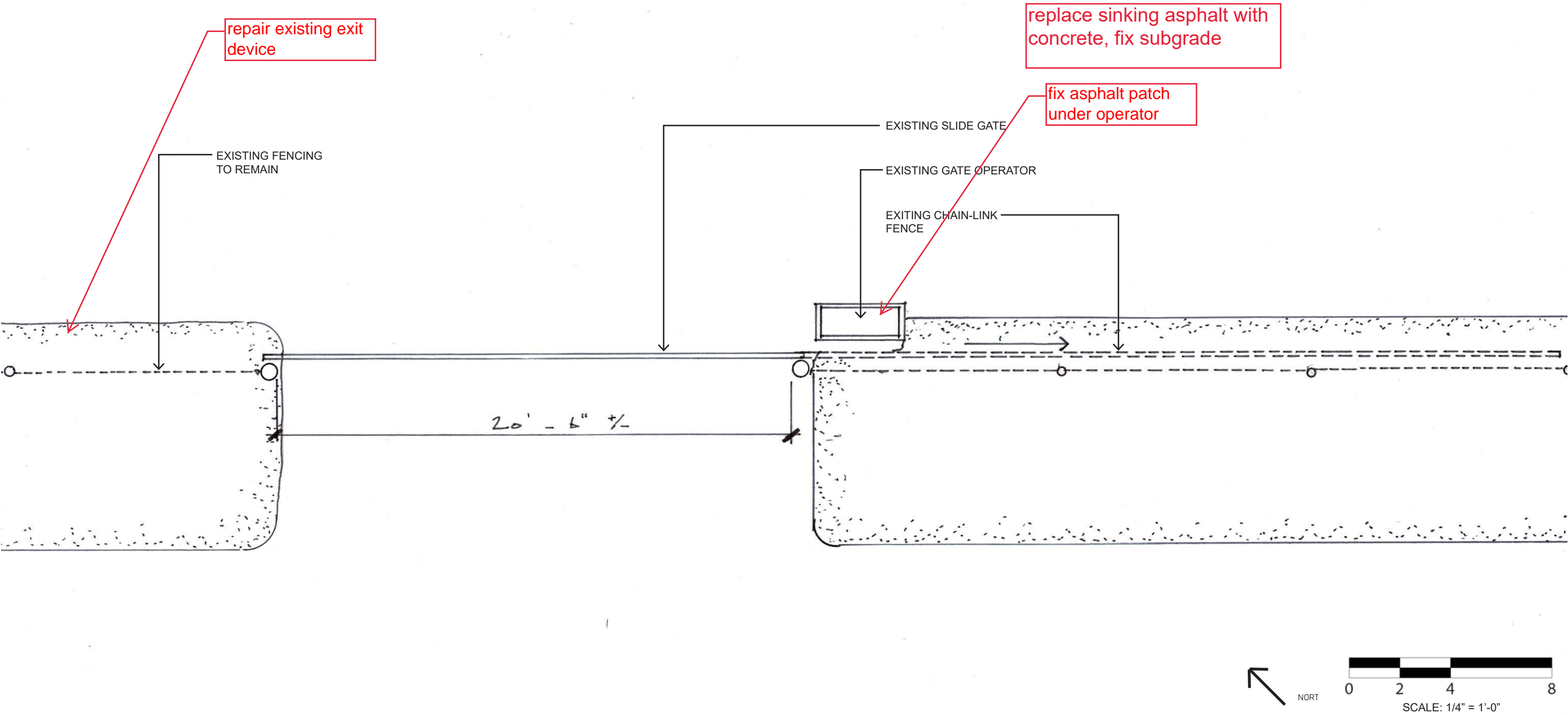
Broken chain-plate on Gate 18.

#18 ANTELOPE GATE

Location: Southern Crest Of Zoo, Near African Watering Hole Building.
Connects Druid Hill Park And Zoo Service Road.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- Replace chain plate. Construct replacement using manufacturer specifications. Coordinate with zoo for product information.
- Confirm gate has miller edge. If gate does not, add miller edge to gate.
- Electric gate mechanism broken. Repair according to manufacturer specifications. Coordinate product information with zoo.



#19 AFRICAN WATERING HOLE GATE

Location: South Crest Of Zoo, Near African Watering Hole Building.
Connects Druid Hill Park With Zoo Service Road.

EXISTING GATE CONDITIONS

- | | |
|------------------|----------------------------------|
| • Gate Condition | Poor, Double Swing, 16.5 Ft Long |
| • Signage | Outdated |
| • Usage | Medium |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chain-link |

NOTES

- Gate is in poor condition and needs full rebuild. Transition to slide gate is desired.
- Signs are outdated, new signage necessary.

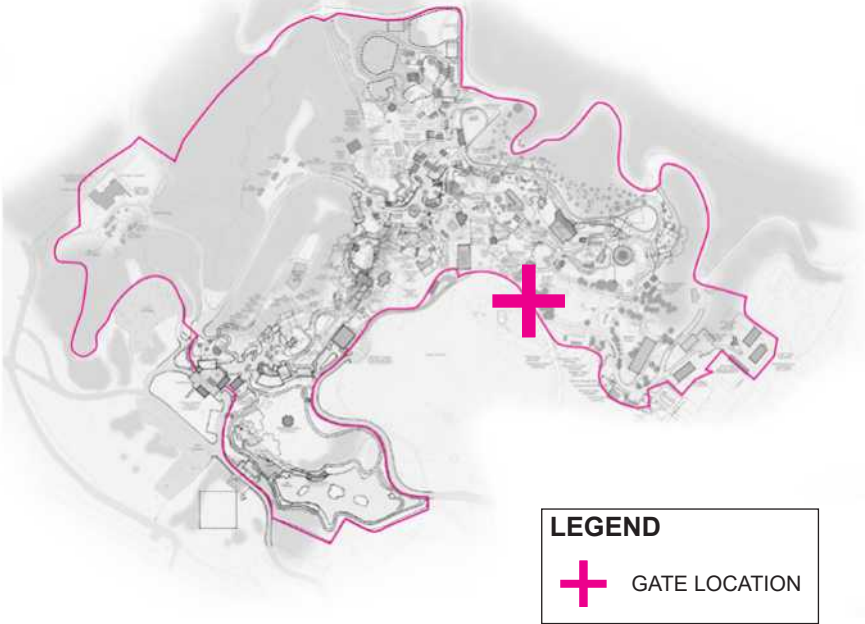
EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- None

SITE KEY PLAN



Elevation of Gate 19.



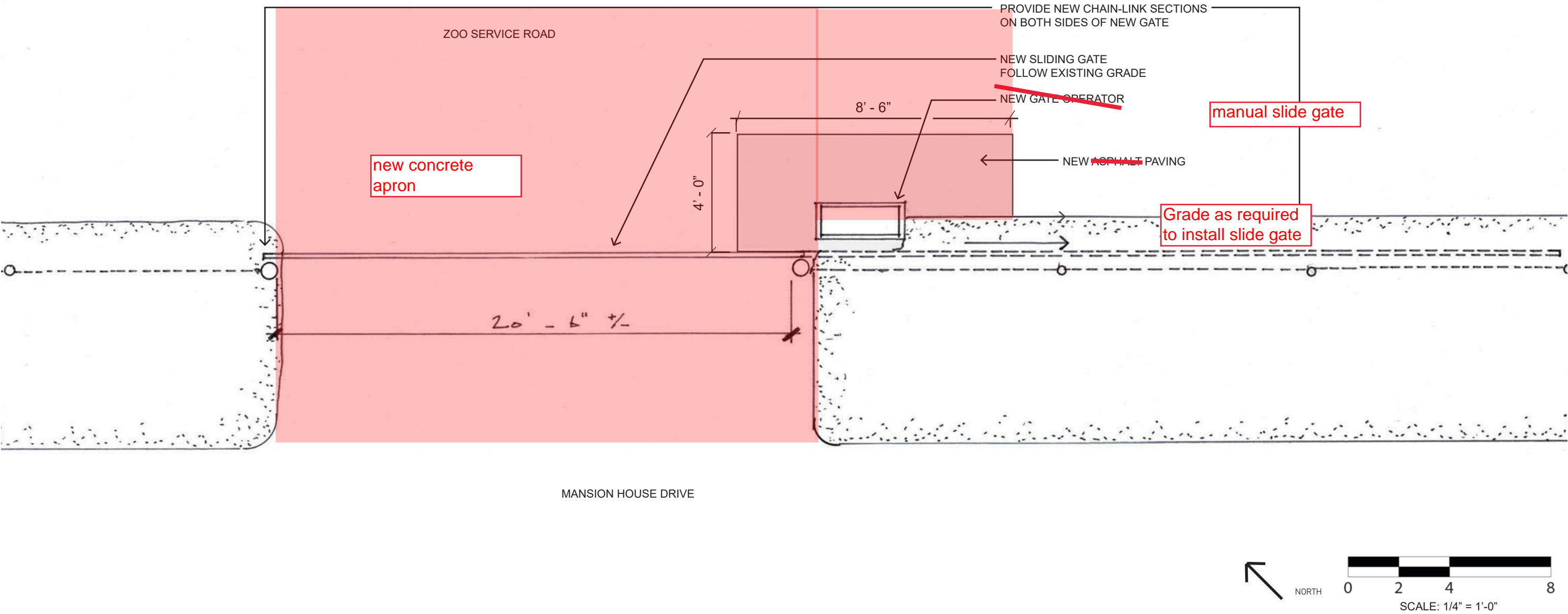
Additional elevation of Gate 19.

#19 AFRICAN WATERING HOLE GATE

Location: South Crest Of Zoo, Near African Watering Hole Building.
Connects Druid Hill Park With Zoo Service Road.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- Remove existing gate. Existing gate posts can be kept for transition to slide gate.
- Construct manual slide gate, 16.5 ft in length. Construct according to zoo standard specifications in attached design sheet.
- Construct manual slide gate, 16.5 ft in length. Construct according to zoo standard specifications in attached design sheet.



#20 PENGUIN EDUCATION GATE

Location: Southern Crest Of Zoo, Near Frog Trailer.
Connects Druid Hill Park With Zoo Service Roads.

EXISTING GATE CONDITIONS

• Gate Condition	Poor, Double Swing, 16 Ft In Length
• Signage	Outdated
• Usage	Medium
• Call Box	N/A
• Activation	N/A
• Fabric	Chain-link With Green Mesh Fabric

NOTES

- Gate condition poor for usage type. Rebuild to slide gate is necessary.
- Signs are outdated, new signage necessary.

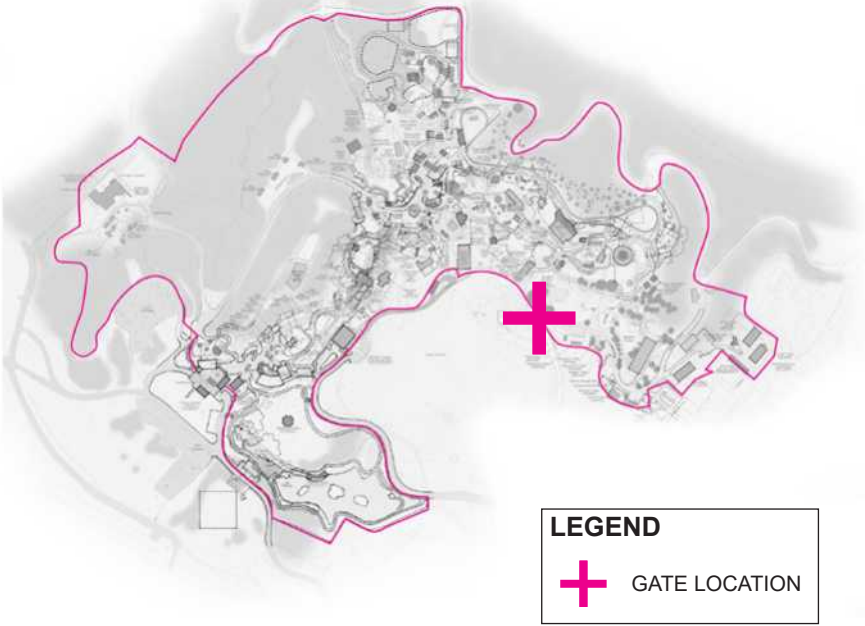
EXISTING SITE CONDITIONS

• Paving	Poor
• Footers	N/A
• Vegetation	N/A
• Erosion	N/A
• Retaining	N/A
• Existing Road	N/A

NOTES

- Paving in poor condition, needs major repaving on interior.
- Paving should go approximately 25 feet on either side from center of gate.

SITE KEY PLAN



Interior view of Gate 20.



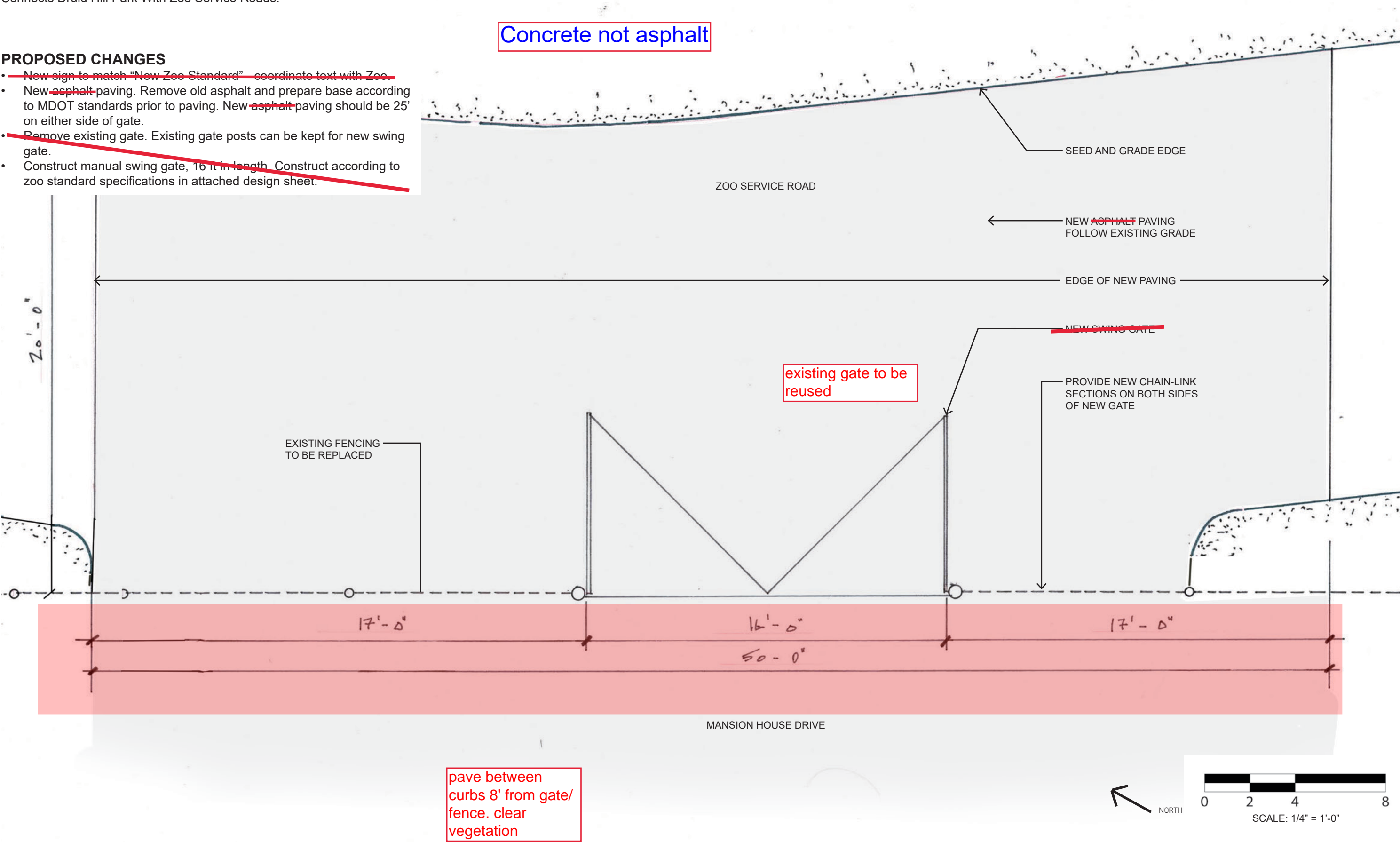
Exterior view of double swing Gate 20.

#20 PENGUIN EDUCATION GATE

Location: Southern Crest Of Zoo, Near Frog Trailer.
Connects Druid Hill Park With Zoo Service Roads.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- ~~New asphalt paving. Remove old asphalt and prepare base according to MDOT standards prior to paving. New asphalt paving should be 25' on either side of gate.~~
- ~~Remove existing gate. Existing gate posts can be kept for new swing gate.~~
- ~~Construct manual swing gate, 16 ft in length. Construct according to zoo standard specifications in attached design sheet.~~



#21 ELEPHANT GATE

Location: Southeastern Crest Of Zoo.
Connects Unspecified Staff Road With Zoo Service Roads.

EXISTING GATE CONDITIONS

- | | |
|------------------|-----------------------------------|
| • Gate Condition | Fair, Slide Gate, 18 Ft In Length |
| • Signage | Outdated |
| • Usage | High |
| • Call Box | Good |
| • Activation | Pressure/Metal Detection |
| • Fabric | Chain-link |

NOTES

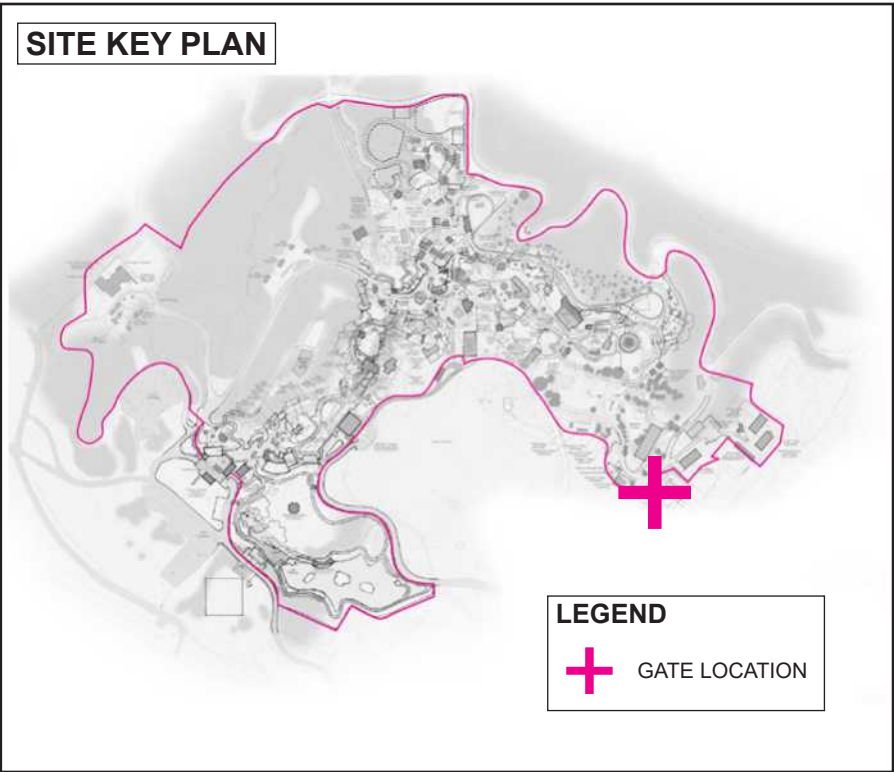
- Gate has missing guide wheel.

EXISTING SITE CONDITIONS

- | | |
|-----------------|----------------|
| • Paving | Poor |
| • Footers | N/A |
| • Vegetation | Ruderal Growth |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | Good |

NOTES

- Pavement in poor condition due to stormwater mismanagement.
- Paving in poor condition 20ft into the interior.
- Trench drain will mitigate stormwater issue, requesting NEENAH 14 in drain addition.



Close view of Gate 21, outdated sign.



Elevation of slide Gate 21.



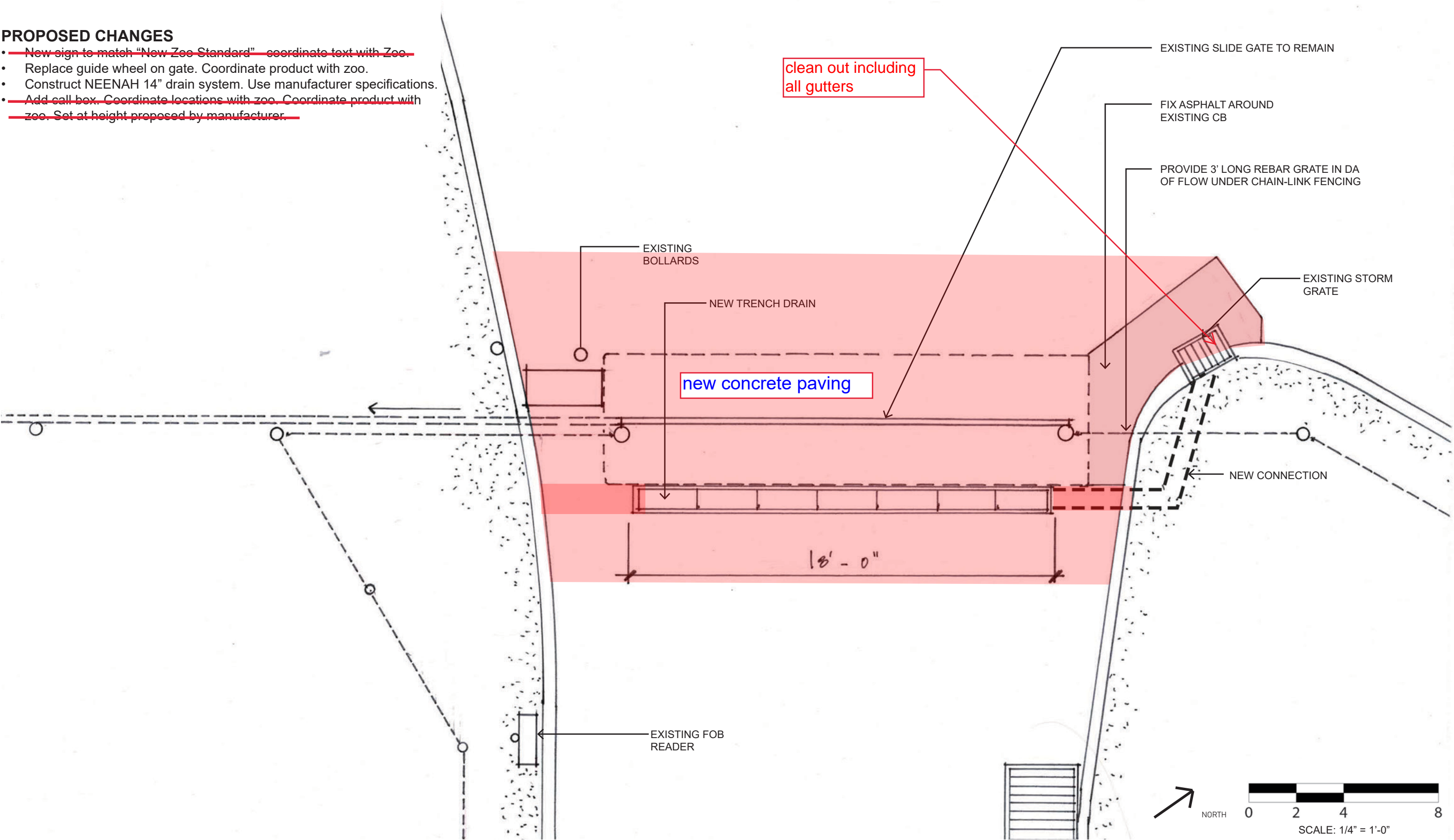
Curb detail view at Gate 21.

#21 ELEPHANT GATE

Location: Southeastern Crest Of Zoo.
Connects Unspecified Staff Road With Zoo Service Roads.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- Replace guide wheel on gate. Coordinate product with zoo.
- Construct NEENAH 14" drain system. Use manufacturer specifications.
- ~~Add call box. Coordinate locations with zoo. Coordinate product with zoo. Set at height proposed by manufacturer.~~



#22 HAY BUILDING GATE

Location: South Eastern Tip Of Zoo, Just West Of Hay Building.
Connects Unspecified Staff Road With Zoo Service Road.

EXISTING GATE CONDITIONS

- | | |
|------------------|-------------------------------------|
| • Gate Condition | Good, Double Swing, 21 Ft In Length |
| • Signage | Good |
| • Usage | High-Medium |
| • Call Box | N/A |
| • Activation | N/A |
| • Fabric | Chain-link |

NOTES

- None.

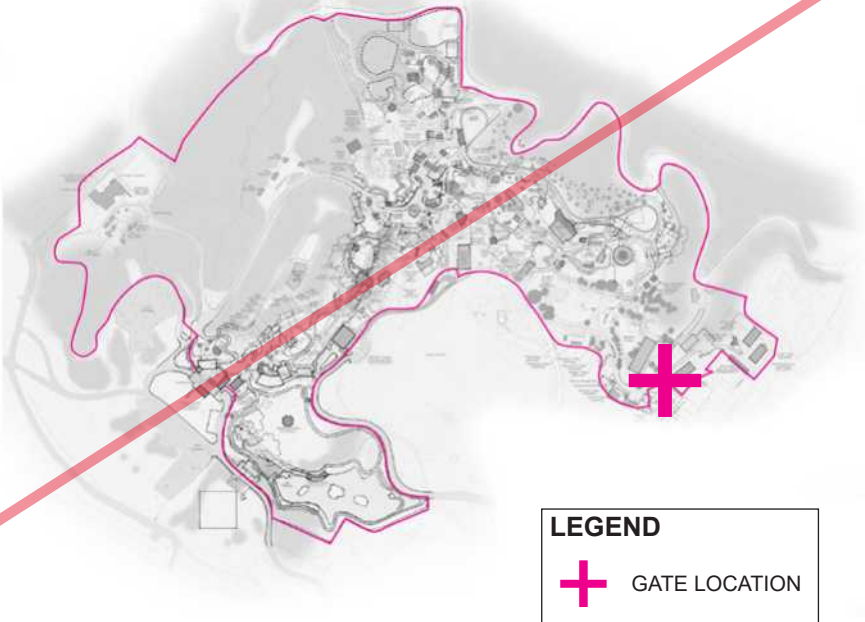
EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- None.

SITE KEY PLAN



Close view of Gate 22.



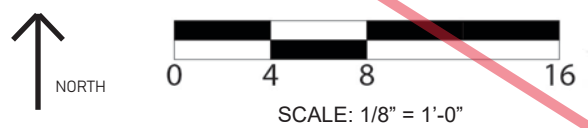
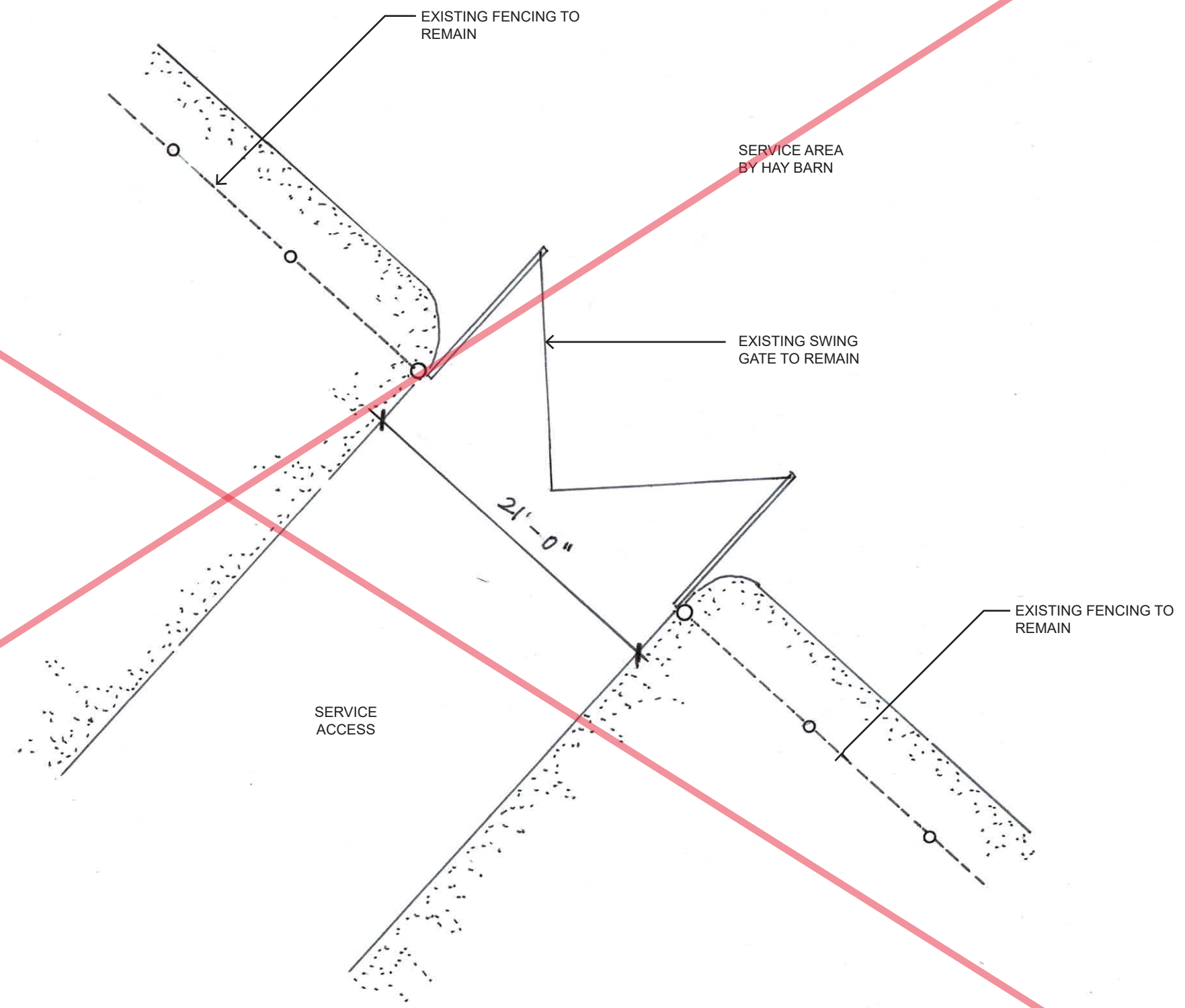
Additional view of Gate 22.

#22 HAY BUILDING GATE

Location: Southeastern Tip Of Zoo, Just West Of Hay Building.
Connects Unspecified Staff Road With Zoo Service Road.

PROPOSED CHANGES

- No proposed changes at this time.



#23 MAINTENANCE GATE

Location: Southeastern Crest Of Park, Just East Of Grain Barn.
Connects Unspecified Staff Road With Zoo Service Road.

EXISTING GATE CONDITIONS

- | | |
|------------------|-------------------------------|
| • Gate Condition | Good, Slider, 23 Ft In Length |
| • Signage | N/A |
| • Usage | Medium-High |
| • Call Box | Poor |
| • Activation | Electric |
| • Fabric | Chain-link |

NOTES

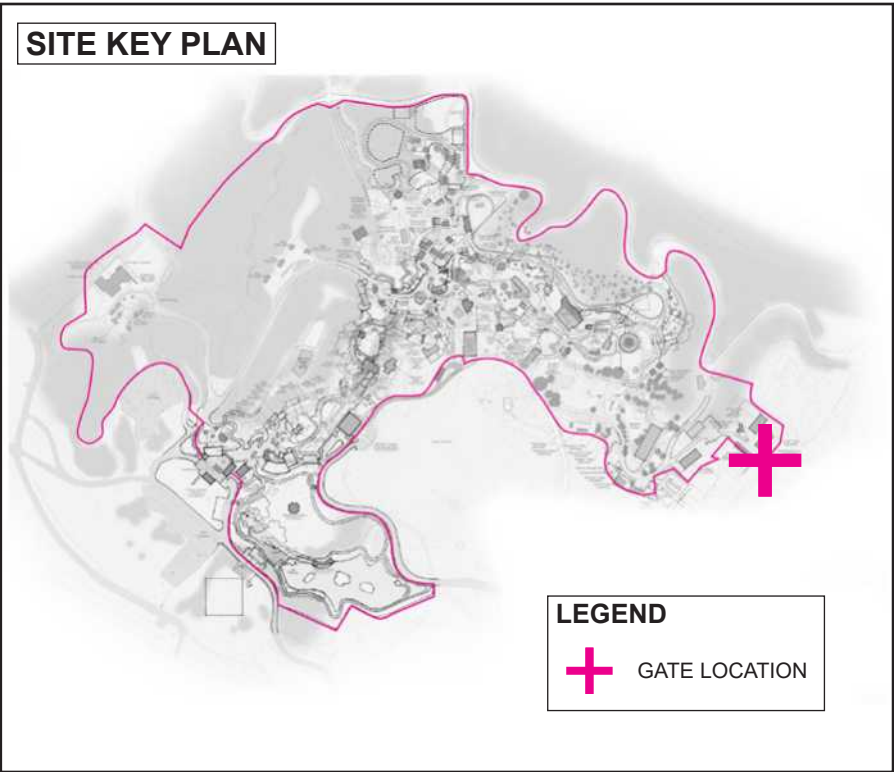
- Gate does not have a functioning call box and this item is desired.

EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Fair |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- Need patch in NEENAH drain, 1 piece 30in x 12in.
- Paving needs patching, cracked just exterior to gate.



Elevation of slide Gate 23.



Call box to be replaced.



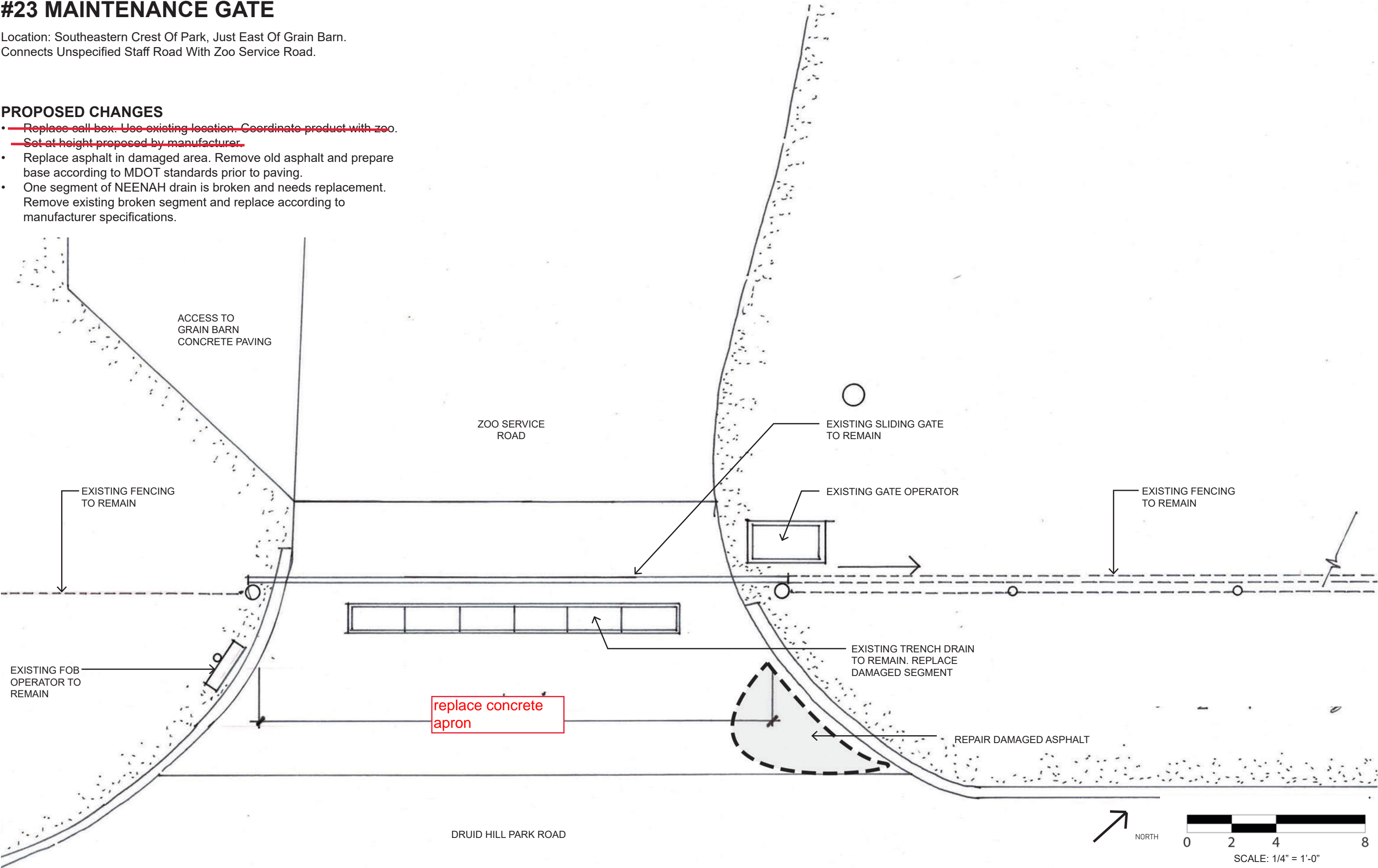
Damaged paving that needs patching.

#23 MAINTENANCE GATE

Location: Southeastern Crest Of Park, Just East Of Grain Barn.
Connects Unspecified Staff Road With Zoo Service Road.

PROPOSED CHANGES

- ~~Replace call box. Use existing location. Coordinate product with zoo.~~
~~Set at height proposed by manufacturer.~~
- Replace asphalt in damaged area. Remove old asphalt and prepare base according to MDOT standards prior to paving.
- One segment of NEENAH drain is broken and needs replacement. Remove existing broken segment and replace according to manufacturer specifications.



#23A GATE

Location: Easternmost Tip Of Zoo.
Connects Unspecified Staff Road With Zoo Service Road.

EXISTING GATE CONDITIONS

- | | |
|------------------|--------------------------------|
| • Gate Condition | Good, Slide, 20.5 Ft In Length |
| • Signage | Good |
| • Usage | Medium |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chain-link |

NOTES

- None.

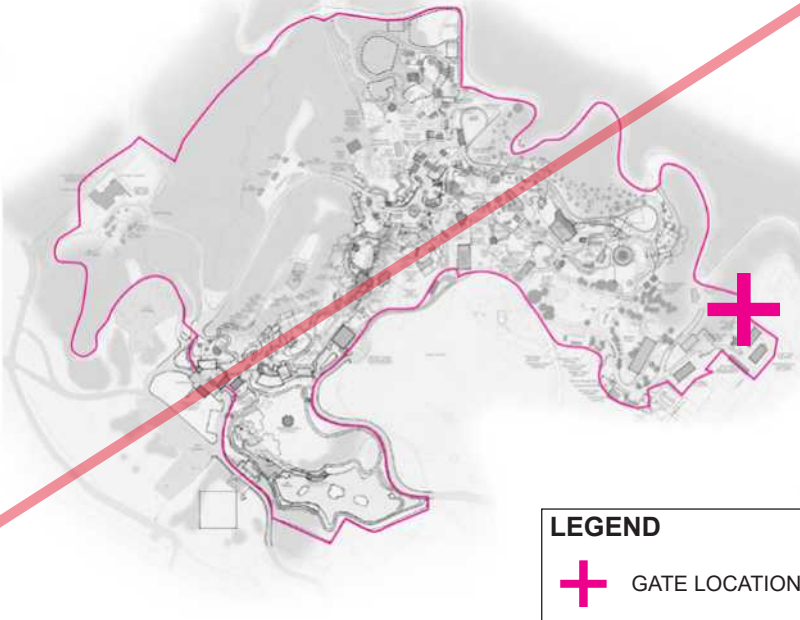
EXISTING SITE CONDITIONS

- | | |
|-----------------|----------------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | Ruderal Growth |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- None.

SITE KEY PLAN



Elevation of double swing Gate 23A.



Additional view of double swing Gate 23A.



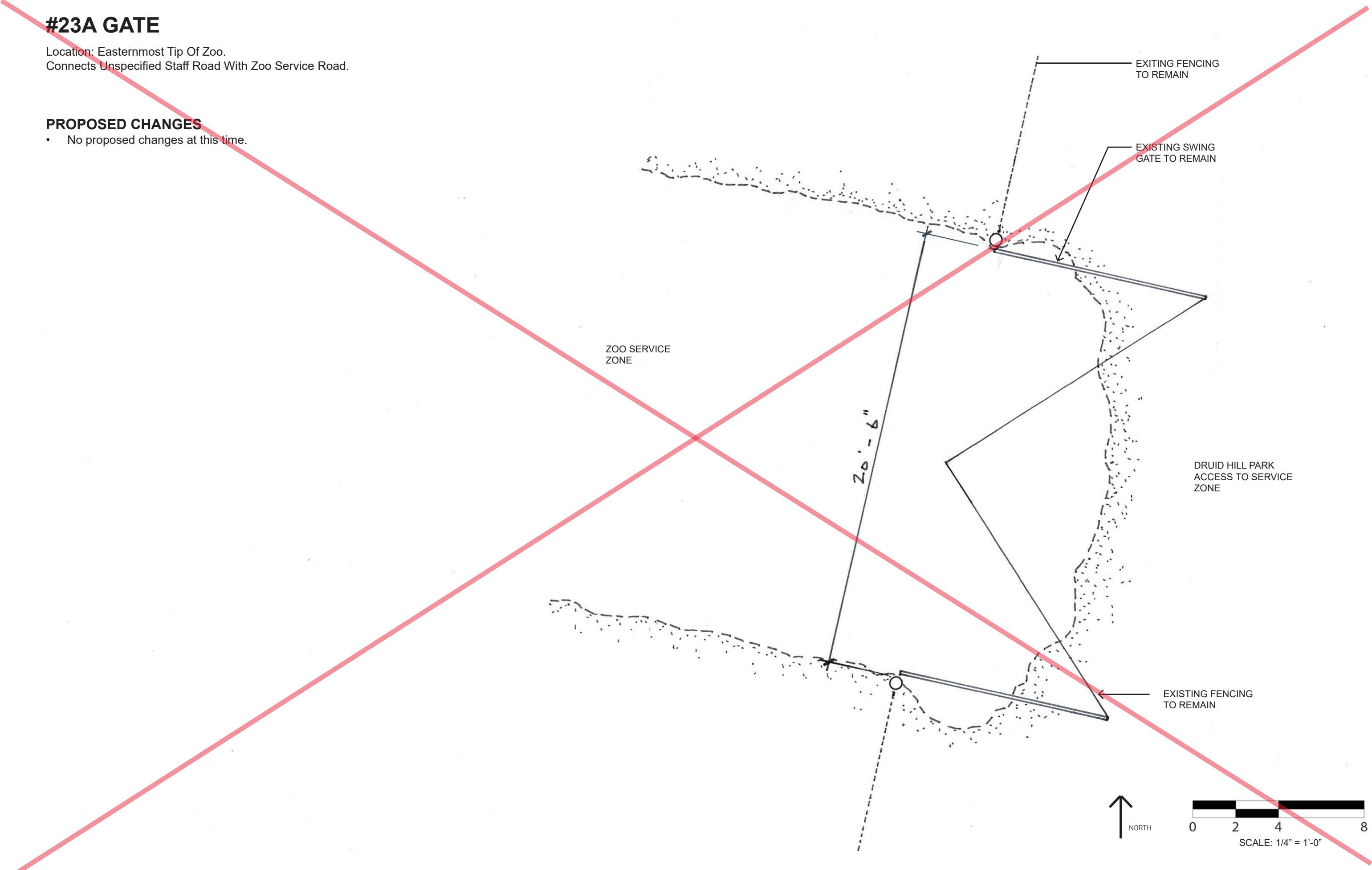
Overgrown vegetation at Gate 23A.

#23A GATE

Location: Easternmost Tip Of Zoo.
Connects Unspecified Staff Road With Zoo Service Road.

PROPOSED CHANGES

- No proposed changes at this time.



#24 BLACKSMITH GATE

Location: Eastern Edge Of Zoo.
Connects Druid Hill Park Roads With Zoo Service Roads.

EXISTING GATE CONDITIONS

• Gate Condition	Fair, Double Swing, 17 Ft In Length
• Signage	Outdated
• Usage	Medium
• Call Box	N/A
• Activation	Manual
• Fabric	Chain-link

NOTES

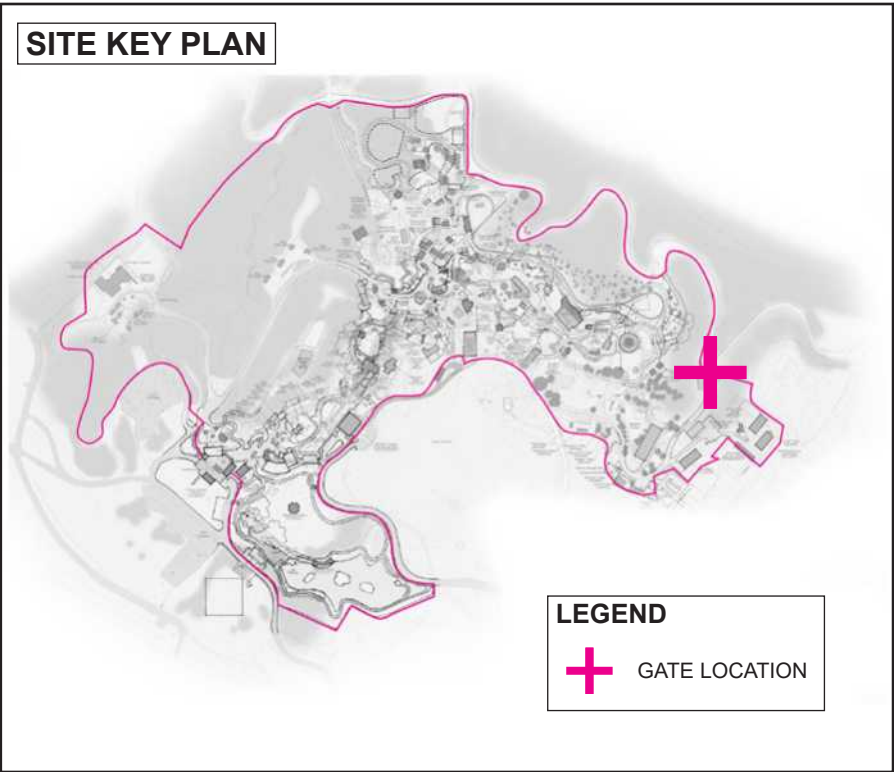
- Signs are outdated, new signage necessary.
- Gate does not have drop pin.

EXISTING SITE CONDITIONS

• Paving	Fair
• Footers	N/A
• Vegetation	Ruderal Growth
• Erosion	N/A
• Retaining	N/A
• Existing Road	N/A

NOTES

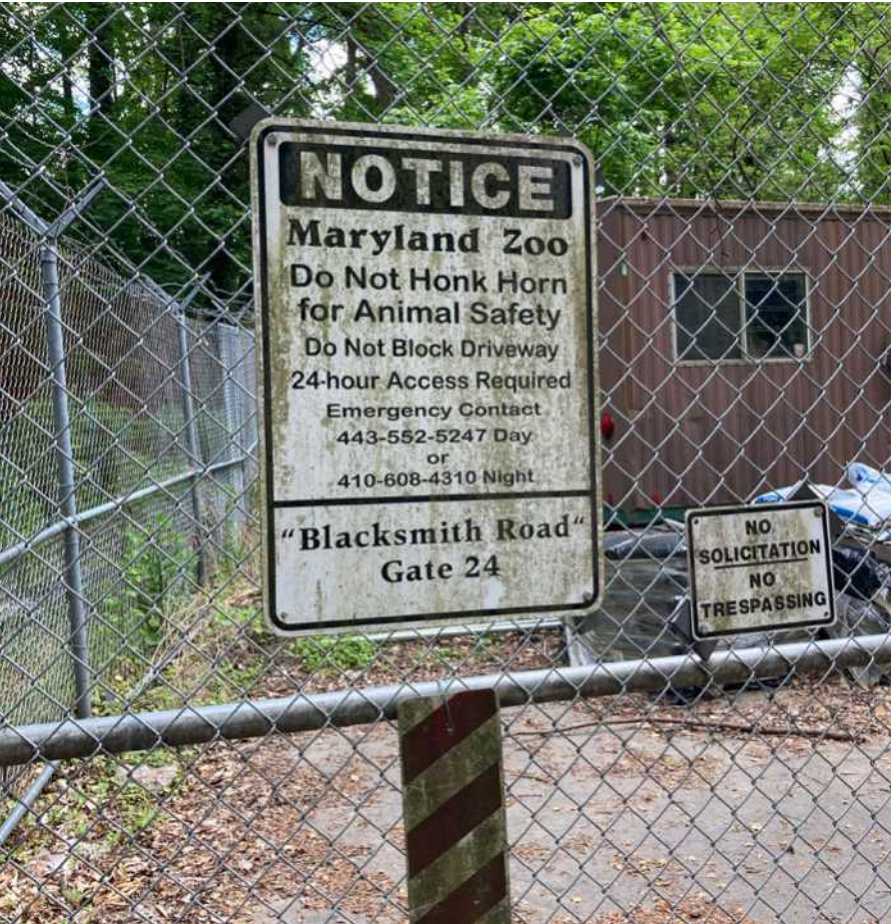
- Site has extensive ruderal growth and leaf debris build up.
- Possible candidate for leveling curb.
- Surrounding fencing barbed wire has deteriorated 40 ft to the left of gate (from interior view).



Gate 24, open. Ground slopes and may need a leveling curb.



Elevation of double swing Gate 24.



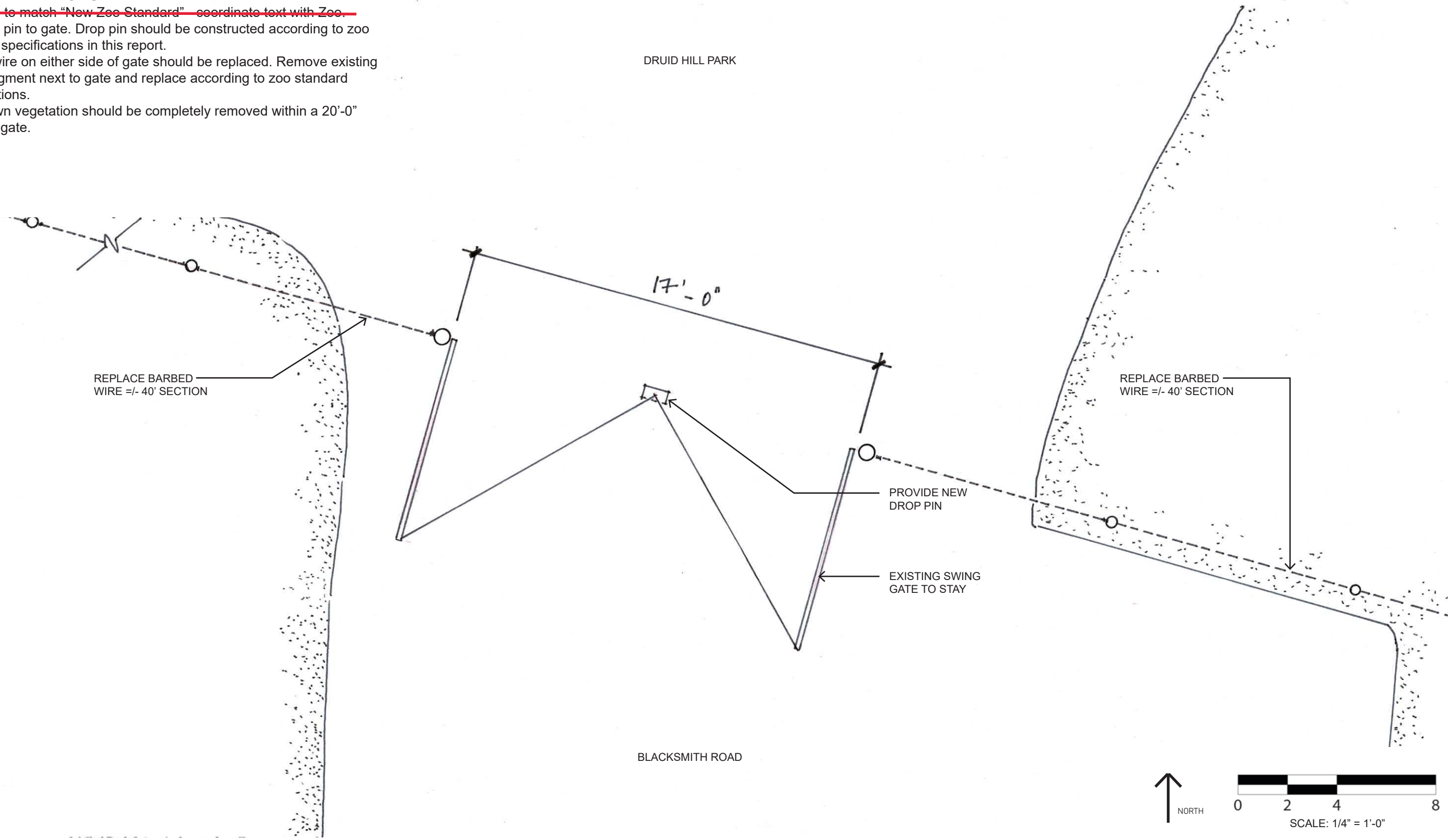
Close view of Gate 24, outdated sign.

#24 BLACKSMITH GATE

Location: Eastern Edge Of Zoo.
Connects Druid Hill Park Roads With Zoo Service Roads.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- Add drop pin to gate. Drop pin should be constructed according to zoo standard specifications in this report.
- Barbed wire on either side of gate should be replaced. Remove existing 40'-0" segment next to gate and replace according to zoo standard specifications.
- Overgrown vegetation should be completely removed within a 20'-0" radius of gate.



#25 GIRAFFE/CLIPPER ESPLANADE GATE

Location: North Eastern Crest Of Zoo.
Connects Druid Hill Park Roads With Zoo Service Roads.

EXISTING GATE CONDITIONS

- | | |
|------------------|-------------------------------------|
| • Gate Condition | Fair, Double Swing, 20 Ft In Length |
| • Signage | Outdated |
| • Usage | Medium |
| • Call Box | N/A |
| • Activation | N/A |
| • Fabric | N/A |

NOTES

- Gate is missing drop pin.
- Signs are outdated, new signage necessary.

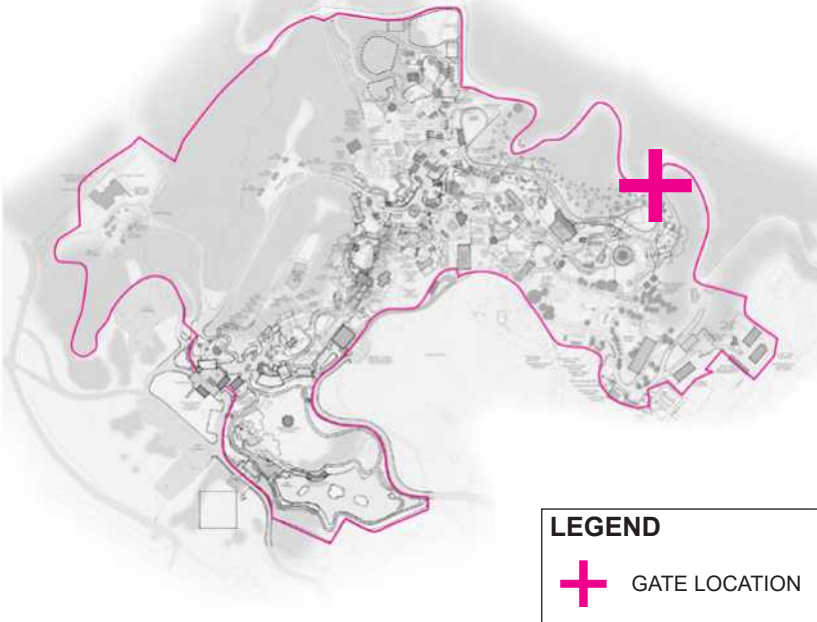
EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Fair |
| • Footers | N/A |
| • Vegetation | Poor |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- Unchecked tree growth. Princess tree (located exterior right of gate, from interior view) needs to be removed.
- Ruderal growth has left site messy with leaf debris.

SITE KEY PLAN



LEGEND

 GATE LOCATION



Elevation of double swing Gate 25.



Close view of Gate 25, outdated sign.



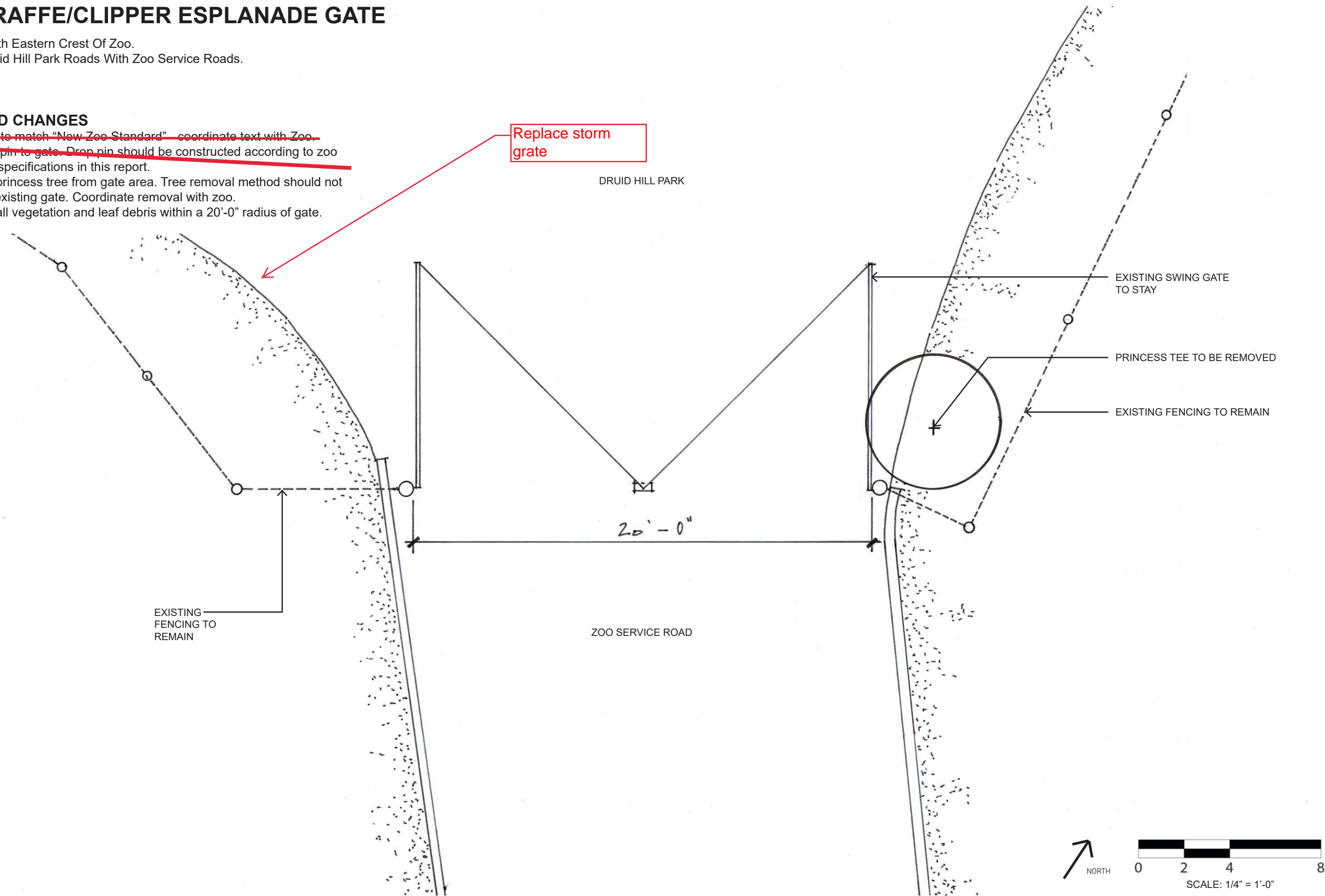
Additional view of Gate 25.

#25 GIRAFFE/CLIPPER ESPLANADE GATE

Location: North Eastern Crest Of Zoo.
Connects Druid Hill Park Roads With Zoo Service Roads.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- ~~Add drop pin to gate. Drop pin should be constructed according to zoo standard specifications in this report.~~
- Remove princess tree from gate area. Tree removal method should not damage existing gate. Coordinate removal with zoo.
- Remove all vegetation and leaf debris within a 20'-0" radius of gate.



#26 SIBERIAN/TRAIN STATION VEHICLE GATE

Location: Central Northern Crest Of Zoo.
Connects Druid Hill Park Roads With Zoo Service Roads.

EXISTING GATE CONDITIONS

- | | |
|------------------|--------------------------------|
| • Gate Condition | Fair, Sliding, 20 Ft In Length |
| • Signage | Outdated |
| • Usage | Medium |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chain-link |

NOTES

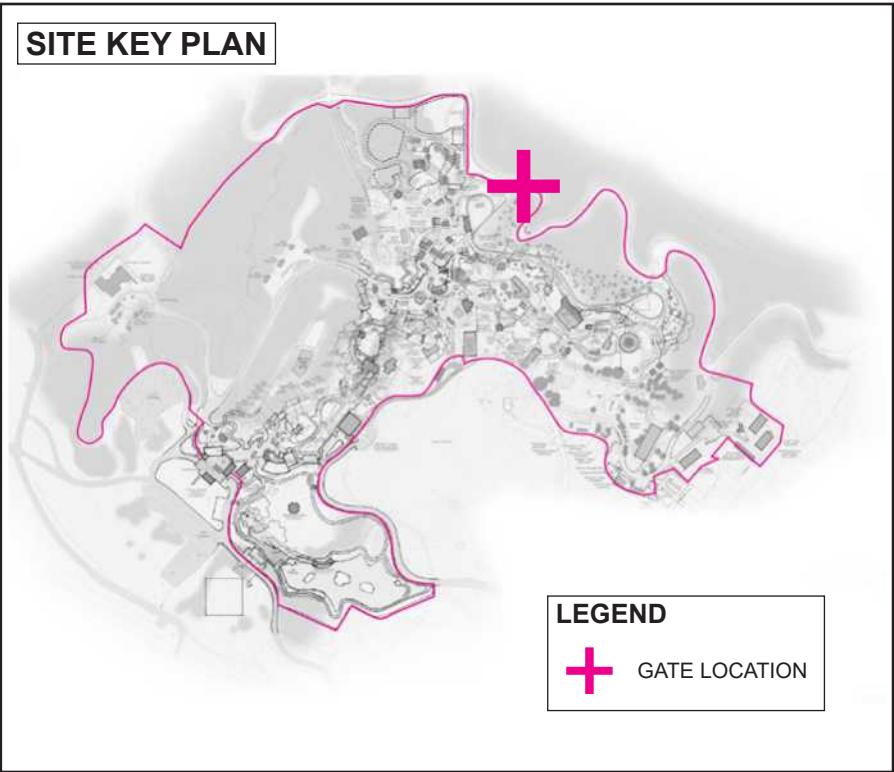
- Gate needs new locking mechanism. Employees need to reach hands through gap to unlock.
- Signs are outdated, new signage necessary.
- Paving leveling necessary

EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- None



Close view of Gate 26 lock. New locking system necessary.



Elevation of swing Gate 26, curb for leveling.



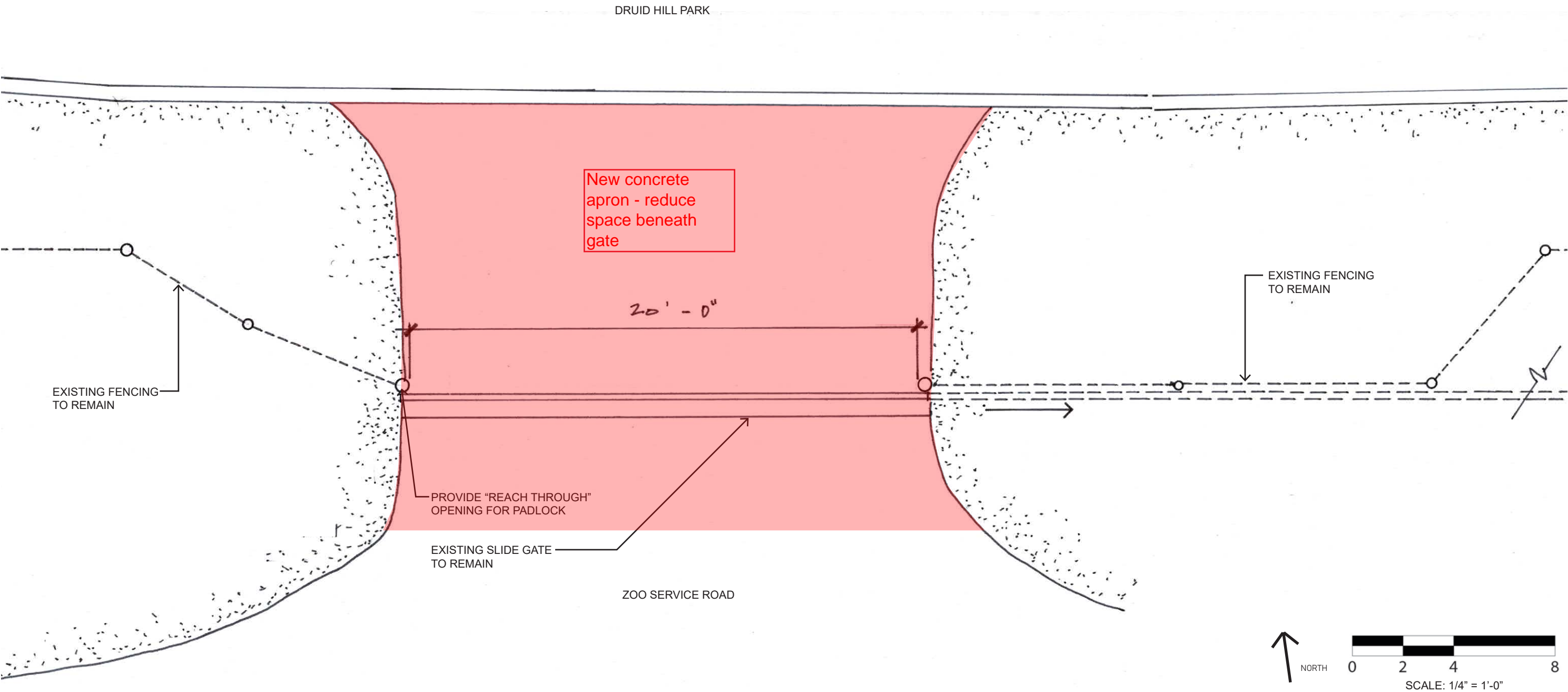
Fencing in disrepair, needs replacing.

#26 SIBERIAN/TRAIN STATION VEHICLE GATE

Location: Central Northern Crest Of Zoo.
Connects Druid Hill Park Roads With Zoo Service Roads.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- Add new locking mechanism to gate. Provide "reach through padlock" and coordinate product and placement with zoo.
- ~~Add gate skirt.~~



#27 SIBERIAN/TRASH DUMPSTER GATE

Location: Central Northern Crest Of Zoo.
Connects Druid Hill Park Roads With Zoo Service Roads.

EXISTING GATE CONDITIONS

- | | |
|------------------|---------------------------------------|
| • Gate Condition | Fair, Double Swing, 24.5 Ft In Length |
| • Signage | Outdated |
| • Usage | Medium |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chain-link |

NOTES

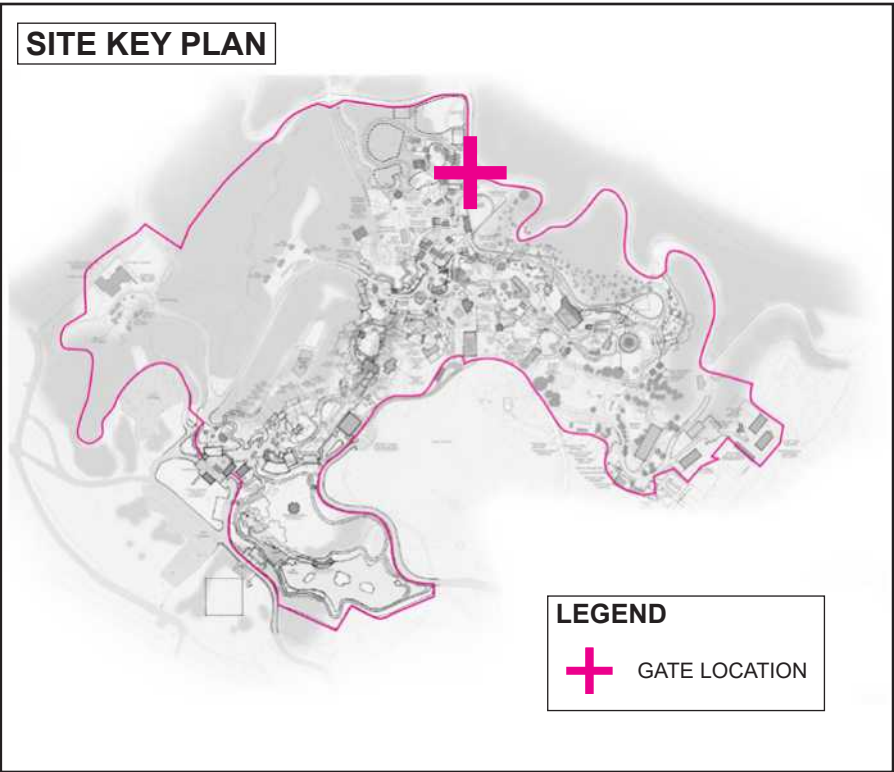
- Gate hinge top left (from exterior view) is in disrepair.
- Signs are outdated, new signage necessary. Needs 2 sets.

EXISTING SITE CONDITIONS

- | | |
|-----------------|-----------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | Overgrown |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |

NOTES

- Vegetation is very overgrown. Needs to be cleaned from the gate.



Close view of Gate 27 with vegetation to be cleared.



Top left gate hinge needs to be replaced.



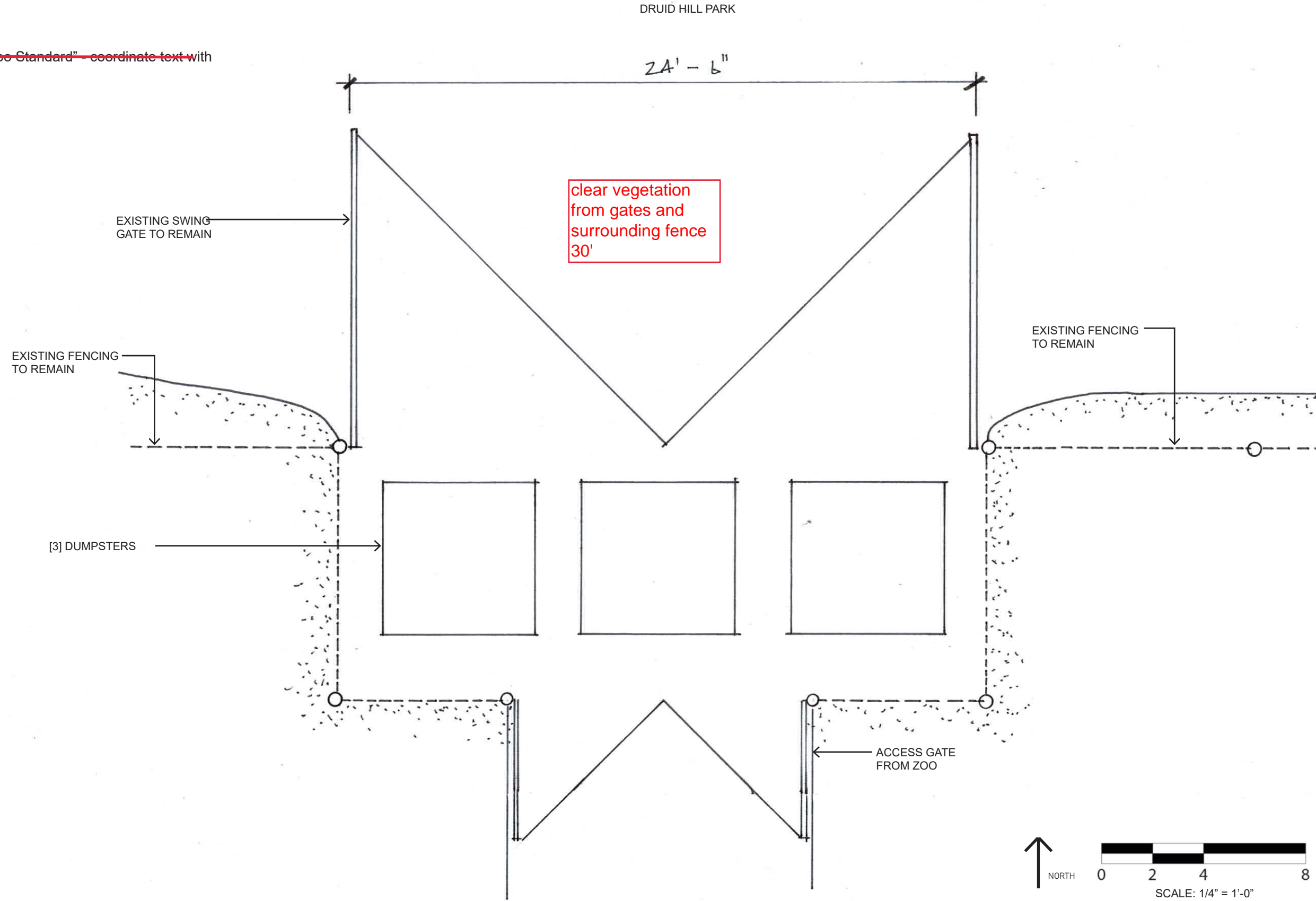
Elevation view of Gate 27.

#27 SIBERIAN/TRASH DUMPSTER GATE

Location: Central Northern Crest Of Zoo.
Connects Druid Hill Park Roads With Zoo Service Roads. Medium Use.

PROPOSED CHANGES

- Two sets new signs to match "New Zoo Standard" coordinate text with Zoo.



#28 MARYLAND WILDERNESS/PARKDALE ROAD GATE

Location: North Western Crest Of Zoo.
Connects Druid Hill Park Roads With Zoo Service Roads.

EXISTING GATE CONDITIONS

- | | |
|------------------|-----------------------------------|
| • Gate Condition | Poor, Double swing, 22' in length |
| • Signage | Outdated |
| • Usage | Low-Medium |
| • Call Box | N/A |
| • Activation | Manual |
| • Fabric | Chainlink |

NOTES

- Current gate in Poor condition

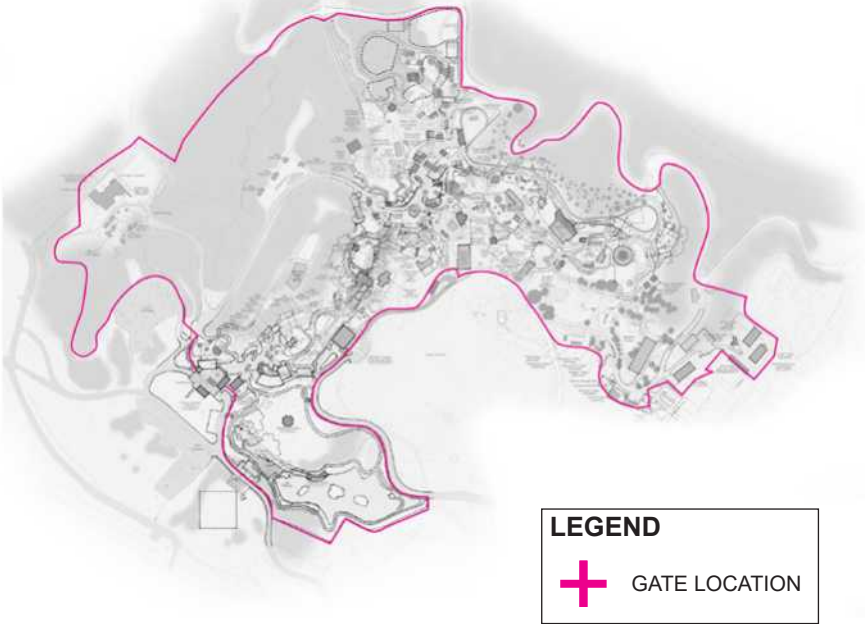
EXISTING SITE CONDITIONS

- | | |
|-----------------|------|
| • Paving | Good |
| • Footers | N/A |
| • Vegetation | N/A |
| • Erosion | N/A |
| • Retaining | N/A |
| • Existing Road | N/A |


NOTES

- None

SITE KEY PLAN



LEGEND

 GATE LOCATION



Exterior view of Gate 28.



Exterior view of double swing Gate 28.

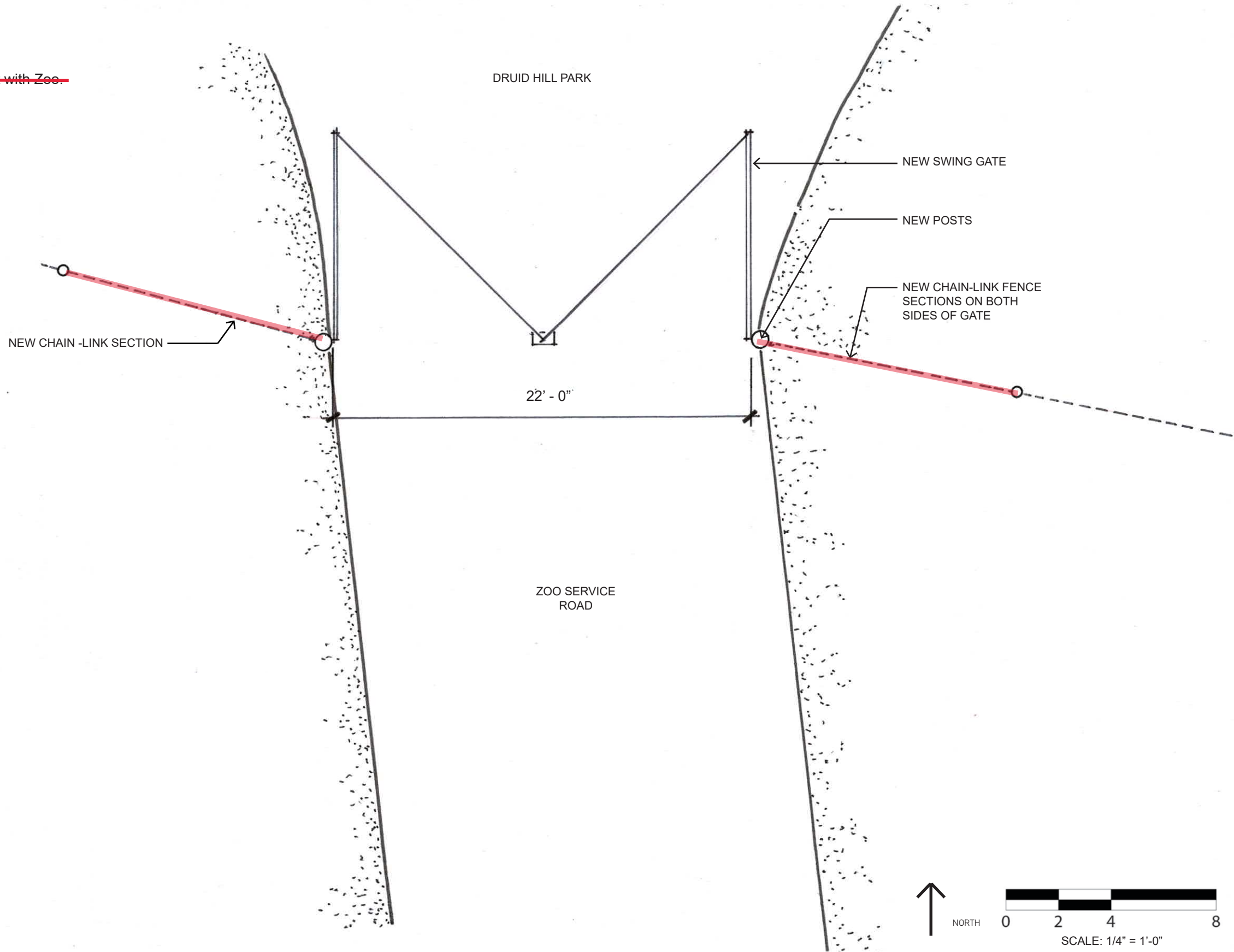
#28 MARYLAND WILDERNESS/PARKDALE ROAD GATE

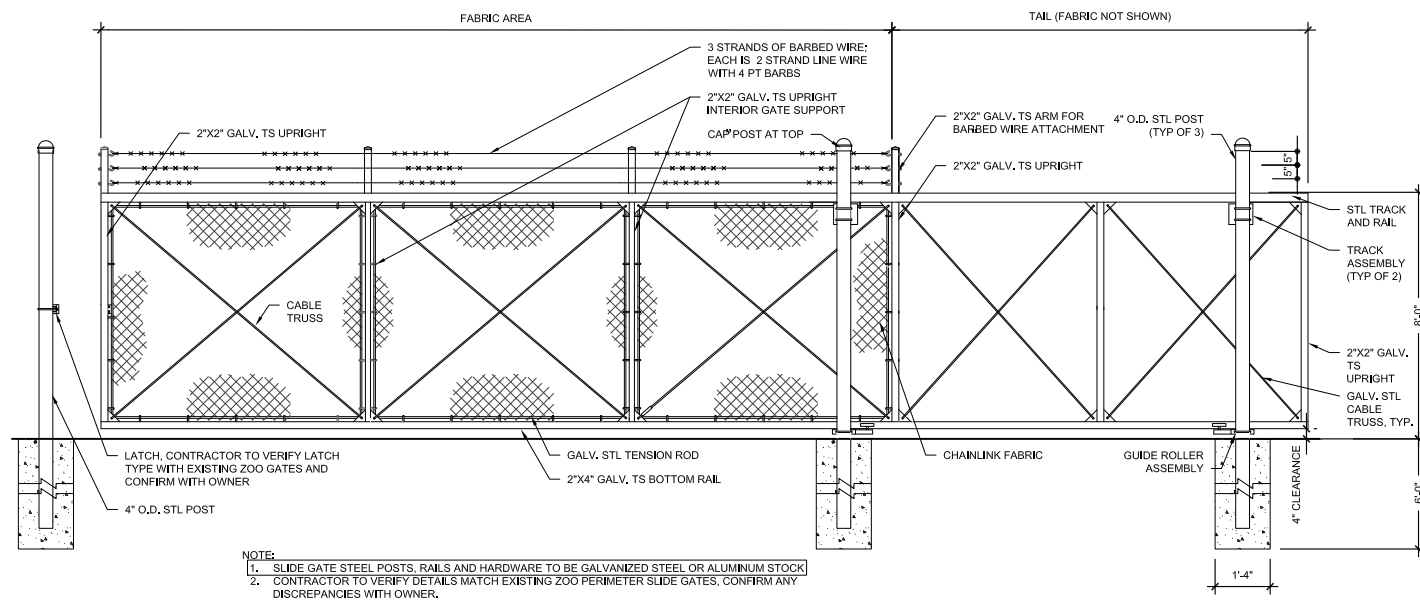
Location: North Western Crest Of Zoo.
Connects Druid Hill Park Roads With Zoo Service Roads.

PROPOSED CHANGES

- ~~New sign to match "New Zoo Standard" coordinate text with Zoo.~~
- New 22 ft black vinyl coated manual swing gate.
- Remove existing concrete footers.
- Patch asphalt where needed.

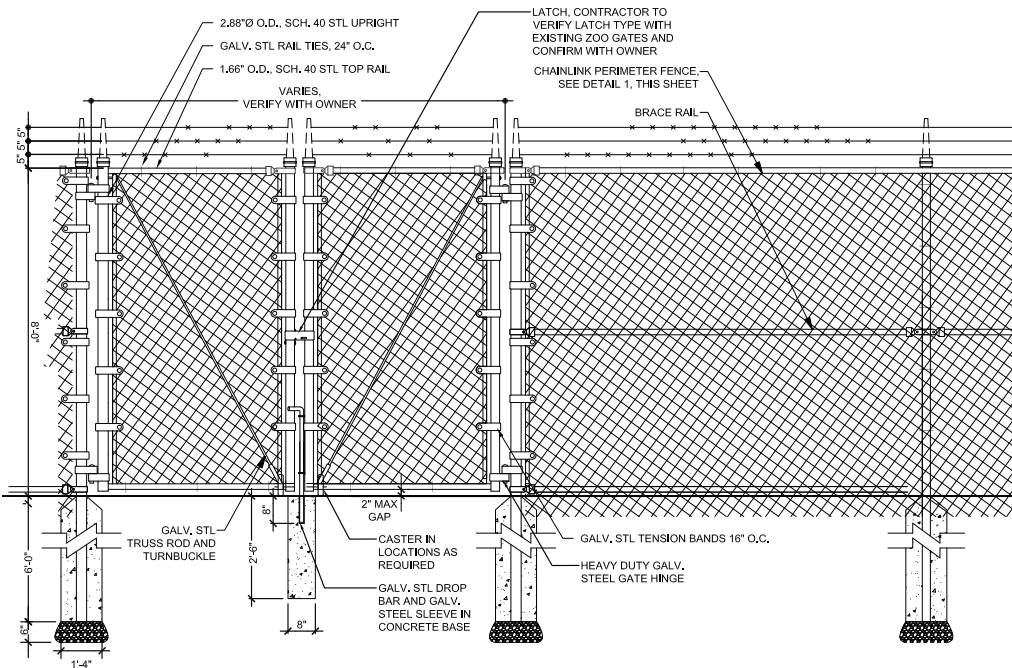
clean vegetation
30' radius of gate





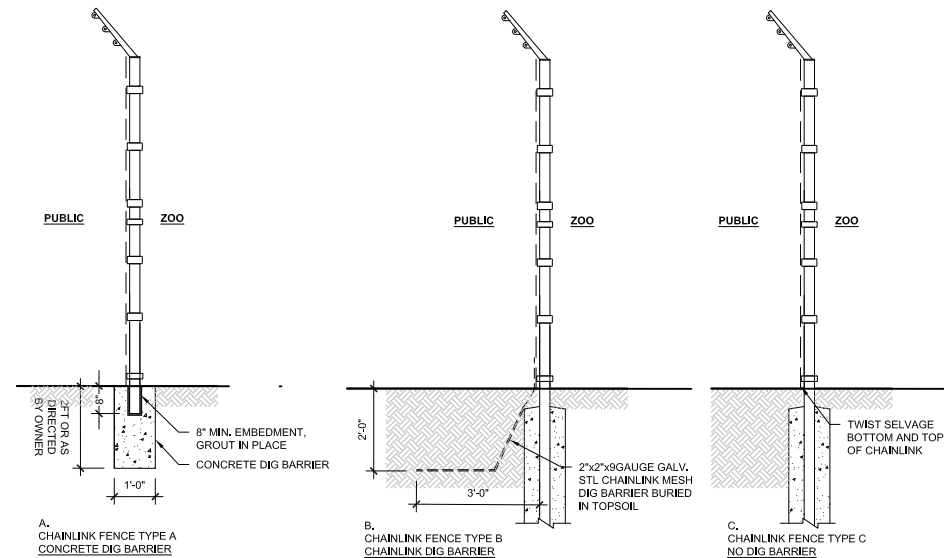
3 CHAINLINK PERIMETER CANTILEVER SLIDE GATE
DETAIL

1/2"=1'-0"



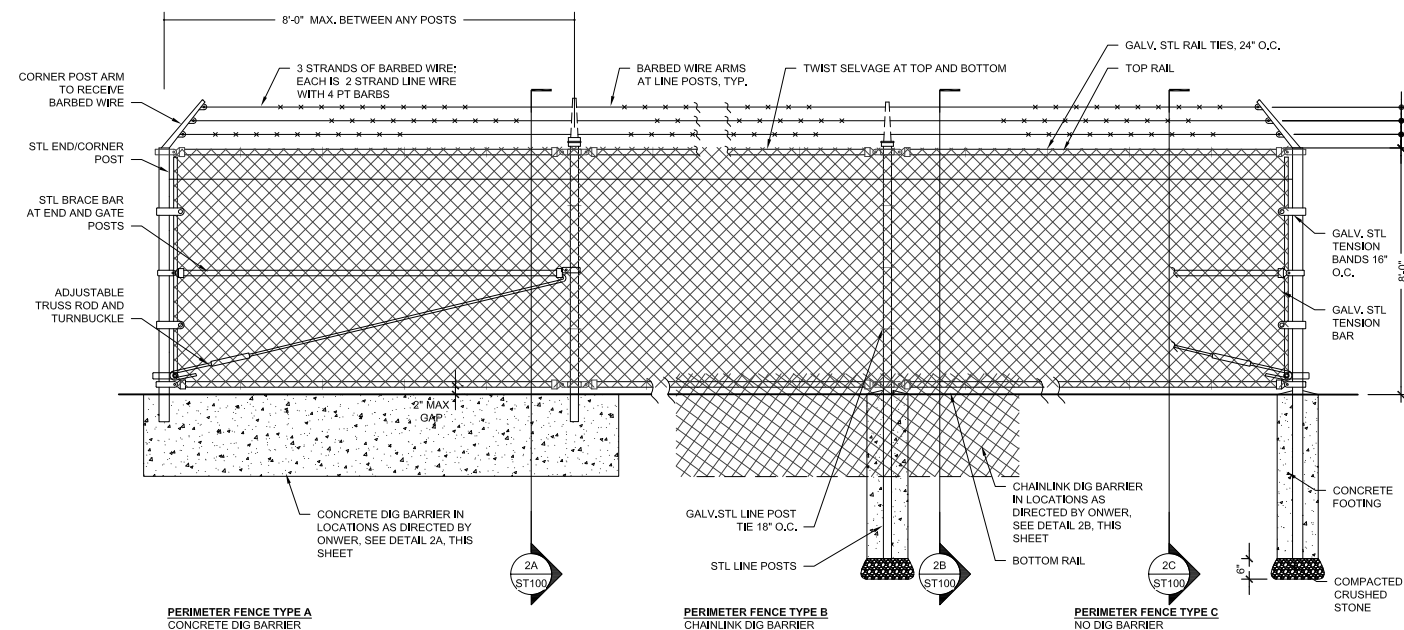
4 CHAINLINK PERIMETER SWING GATE
DETAIL

1/2"=1'-0"



2 CHAINLINK FENCE SECTION AND DIG BARRIER CONDITIONS
DETAIL

1/2"=1'-0"



CHAINLINK FENCE SPECIFICATIONS:

1. FENCE POSTS:
 - 1.1. TERMINAL POSTS: 3\"/>
2. FENCE RAILS:
 - 2.1. TOP RAIL: 1-5/8\"/>
3. FOOTINGS:
 - 3.1. TERMINAL POST FOOTERS: 12\"/>
4. MID RAIL MAY BE REQUIRED AT LOCATIONS, CONFIRM LOCATIONS WITH OWNER.
5. CONTRACTOR TO VERIFY DETAILS MATCH EXISTING ZOO PERIMETER FENCE, CONFIRM ANY DISCREPANCIES WITH OWNER.

1 CHAINLINK PERIMETER FENCE
DETAIL

1/2"=1'-0"

- GENERAL NOTES:
1. ALL STEEL POSTS, RAILS AND HARDWARE TO BE GALVANIZED STEEL AND BLACK VINYL COATED.
 2. CHAINLINK FABRIC: 2\"/>

