

**General conditions notes:**

**Base bid** includes crossing locations #2-#10 and #12  
**Alternate #1** includes crossing locations #1 and #11  
**Alternate #2** includes any required asphalt repair expected at locations in the base bid. The amount of repair will be based on how precisely asphalt is cut and removed. No asphalt repair is expressly required. It is acceptable to the Zoo to use concrete to patch sides of pathway to align with existing path edge beyond the 6" noted in the detail. Long edges

Contractors can arrange to use Service Gates 1-12 shown on the site plan below for vehicle access and material delivery as needed.

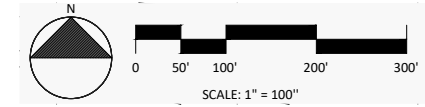
Public restrooms on site are available for contractor use as required. Arrangements can be made for temporary portable facilities supplied by the contractor should the contractor prefer.

The Zoo's goal is to complete this work before the end of the year.

No special concrete color or stamping is required.

Dig permits will be required from both the and the Zoo Facilities Department.

### Train Detectable Warning Strip Installation





Proudly Made in  
the U.S.A. 

In stock colors

White  
37875

Brick Red  
20109

Yellow  
33538

Blue  
15187

Safety Red  
31350

Seattle Yellow  
23594

Black  
37038

Dark Gray  
36081

Clay Red  
22144

**Sizes: 2'x3' and 2'x4'**  
**Color: Yellow #33538**  
**2.35" o.c. dome spacing**

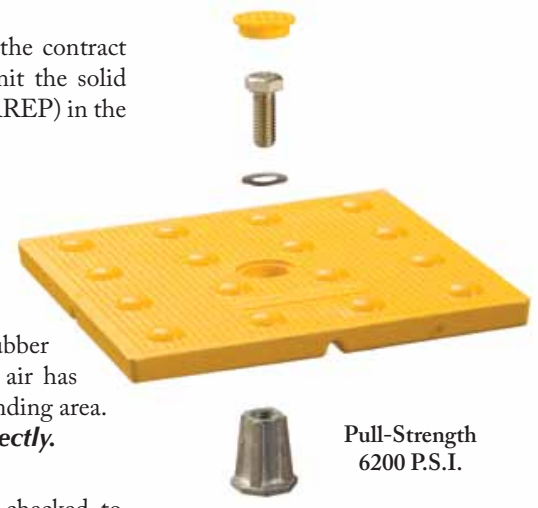
**US Patents\***  
[\\*www.adatile.com/patents](http://www.adatile.com/patents)

# CAST-IN-PLACE REPLACEABLE TACTILE

## Installation Procedure

Be sure to read and understand all of these instructions before you begin.

- A.** The physical characteristics of the concrete shall be as specified in the contract documents while maintaining a slump range of 4-7 inches to permit the solid placement of the ADA Cast-In-Place Replaceable Tactile Unit (ADAREP) in the wet cement.
- B.** The concrete shall be poured and finished level, true and smooth to the required dimensions prior to the placement of the ADAREP unit.
- C.** Place the ADAREP unit 6-8 inches from the curb line. Working in a grid pattern, tamp the ADAREP unit into the wet concrete using a rubber mallet and a piece of wood. Continue this process until all of the air has been released, and the ADAREP unit surface is flush with the surrounding area. **IMPORTANT: Avoid striking the surface of the ADAREP unit directly.**
- D.** Following the placement, the ADAREP unit elevation should be checked to the adjacent surface with a straight edge. The ADAREP unit elevation should be consistent with the Contract Drawings and Specifications. Any required adjustments must be made prior to the time when the concrete begins to set.
- E.** **IMPORTANT NOTICE TO INSTALLER:** To allow for expansion and contraction, after tile is installed, use a 1/4" finish edge trowel around entire perimeter. On a continuous run, be sure to space each unit 1/8" apart.
- F.** When you are confident that the ADAREP unit is in place and no further adjustments are needed, place a cinder block on both ends, if necessary, to hold the ADAREP unit in place while the concrete sets.
- G.** During and after the ADAREP unit installation, as well as the concrete curing stage, no walking or external forces can be placed on the ADAREP unit. The area must be protected from pedestrian traffic until concrete is cured. The ADAREP Warning Surface will be ready for pedestrian traffic within 2-4 hours.
- H.** Be sure to remove plastic protective covering from the face of the ADAREP Unit once the concrete is cured.



**PRODUCT SIZES**  
2'x3' 2'x4' 2'x5'  
3'x4' 3'x5'

**APPLICATION**  
Fresh Pour  
Concrete Ramps  
& Replacement

\*Not recommended or warranted for asphalt installation.

**Do not cut Cast-In-Place Replaceable Tactile. Use an appropriate sized tactile or Radius Tactile to fit the requirement. Contact manufacturer for more details.**

## PHYSICAL CHARACTERISTICS

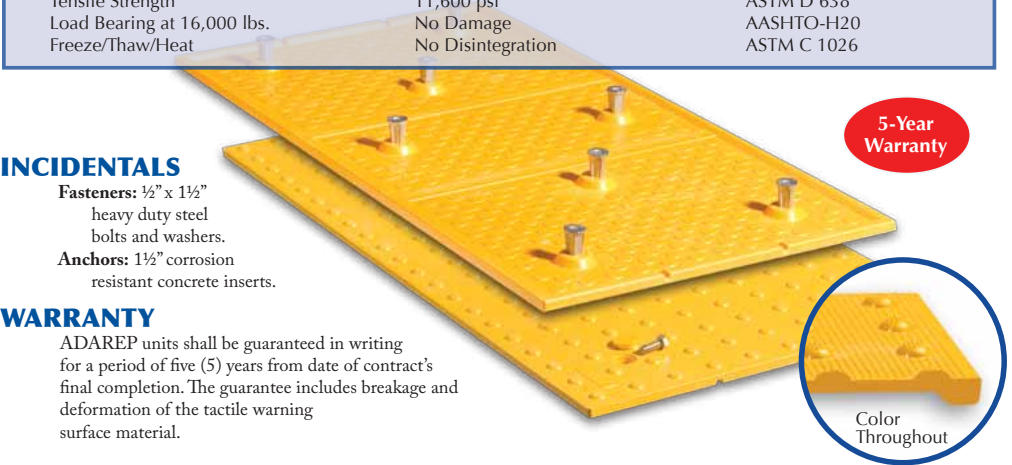
Compressive Strength	28,900 psi	ASTM D 695
Flexural Strength	29,300 psi	ASTM D 790
Water Absorption	.07%	ASTM D 570
Slip Resistance	1.18 Dry, 1.05 Wet	ASTM C 1028
Flame Spread Index	20	ASTM E 84
Salt Spray	No Change (200 hours)	ASTM B 117
Chemical Stain Testing	No Deterioration	ASTM 1308
Abrasion Resistance	549	ASTM C 501
Accelerated Weathering	Delta E<5.0 (2,000 hours)	ASTM G 155
Tensile Strength	11,600 psi	ASTM D 638
Load Bearing at 16,000 lbs.	No Damage	AASHTO-H20
Freeze/Thaw/Heat	No Disintegration	ASTM C 1026

## INCIDENTALS

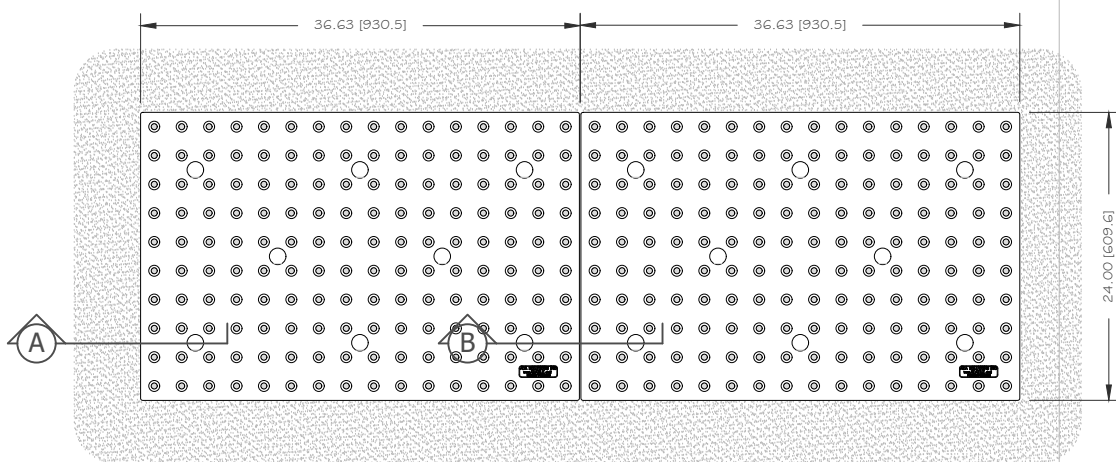
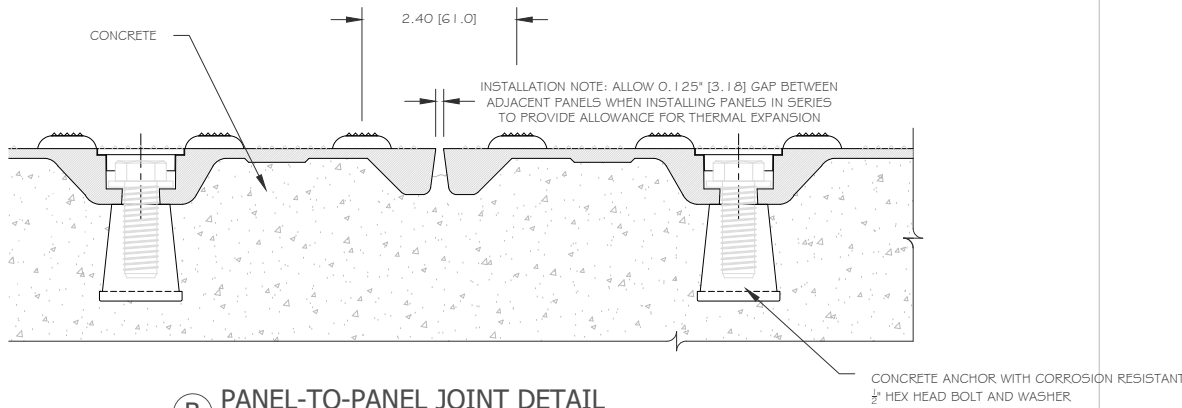
**Fasteners:** ½" x 1½" heavy duty steel bolts and washers.  
**Anchors:** 1½" corrosion resistant concrete inserts.

## WARRANTY

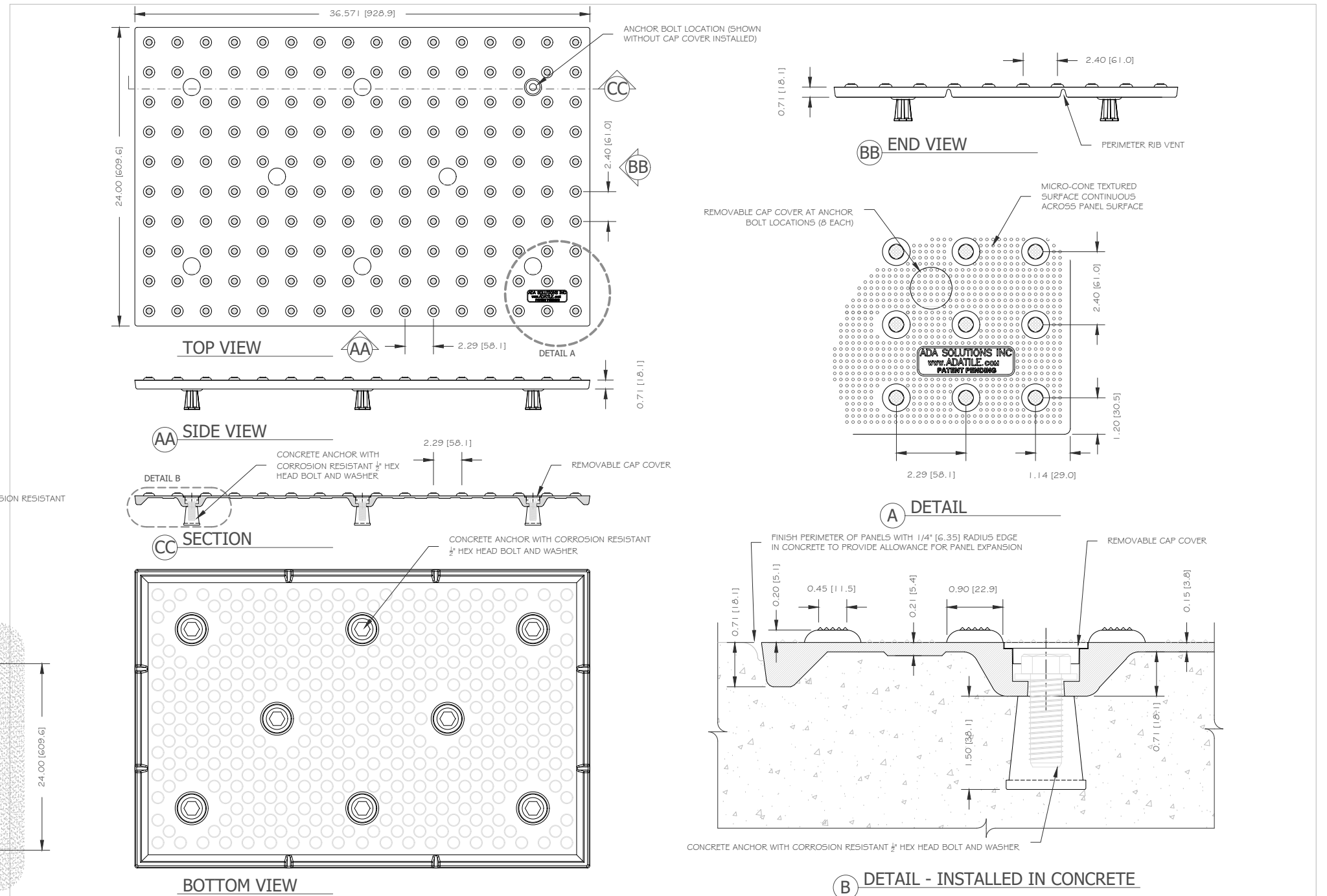
ADAREP units shall be guaranteed in writing for a period of five (5) years from date of contract's final completion. The guarantee includes breakage and deformation of the tactile warning surface material.



WWW.ADATILE.COM • 800-372-0519



TOP VIEW - MULTIPLE PANEL INSTALLATION



BOTTOM VIEW

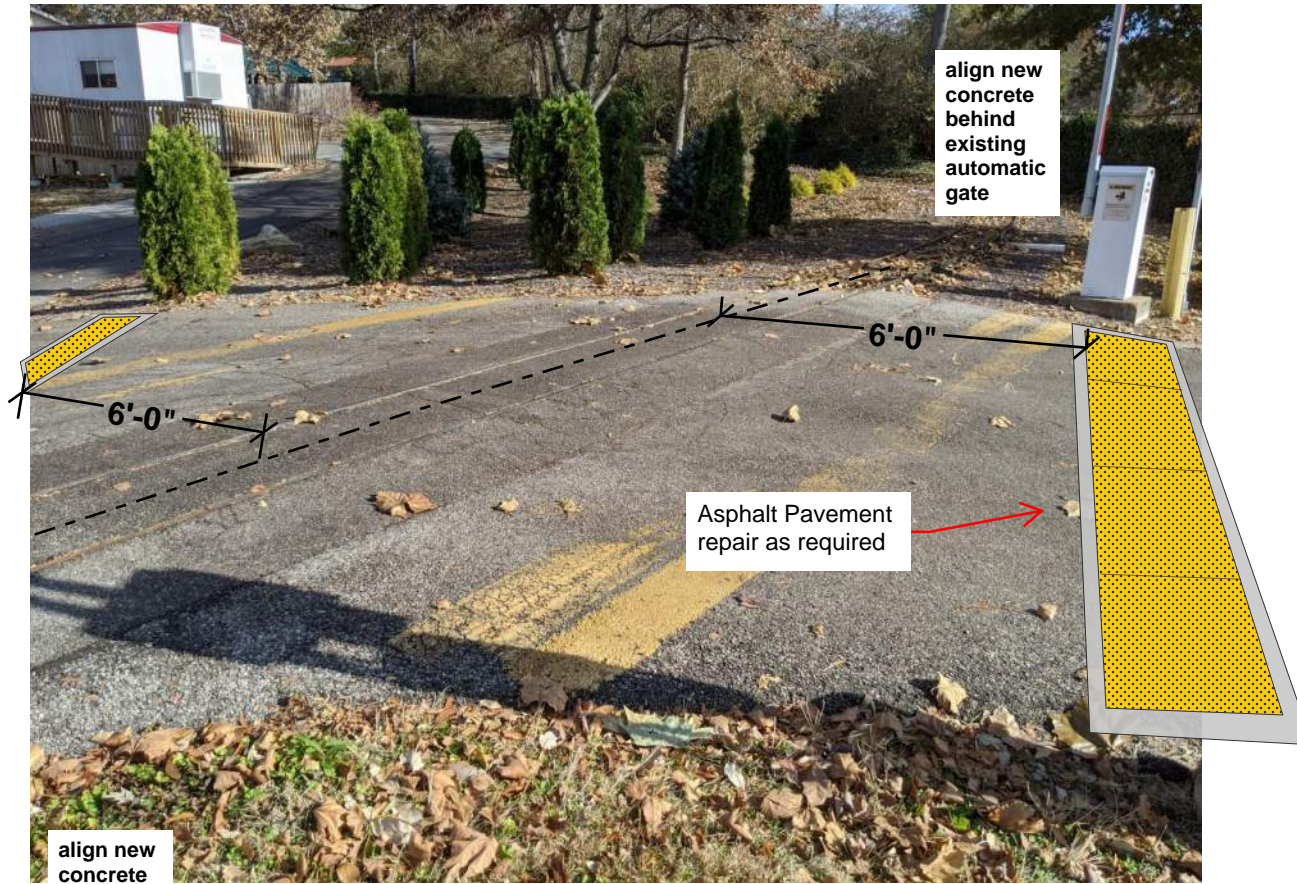
DETECTABLE WARNING SURFACE PANEL  
**Cast-In-Place Replaceable 24" x 36"**  
 PART SIZE: 24" (609.6 MM) X 36.57" (928.8 MM)  
 2.29" (58.1 MM) x 2.40" (60.96 MM) IN-LINE TRUNCATED DOME SPACING

DIVISION TACTILE WALKING SURFACE INDICATORS		WEBSITE ADATILE.COM
MATERIAL FIBERGLASS REINFORCED POLYMER COMPOSITE SMC		PHONE 1-800-372-0519
DRAWING NUMBER ADA-REP2-2436 Page 1 of 2	DATE 2023-08-18	DRAWING UNITS INCHES [MM]
		EMAIL INFO@ADATILE.COM

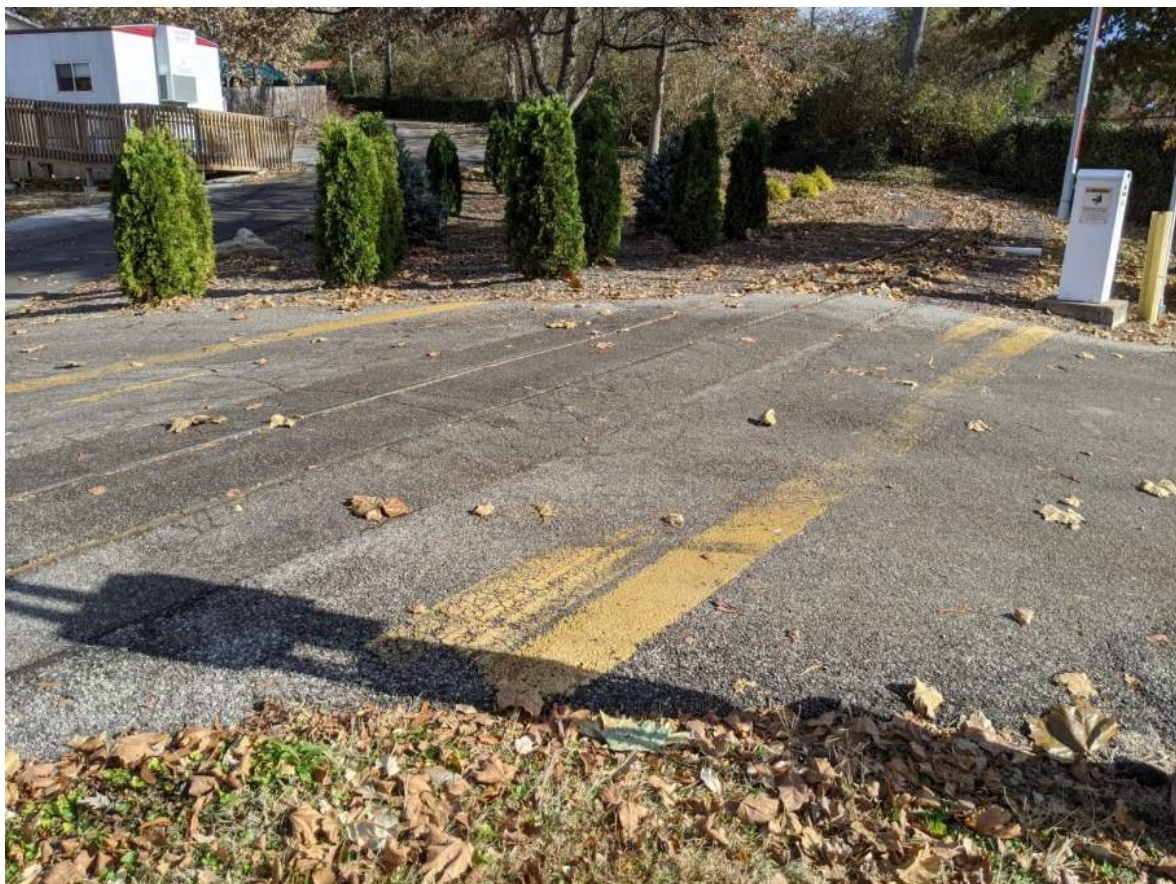




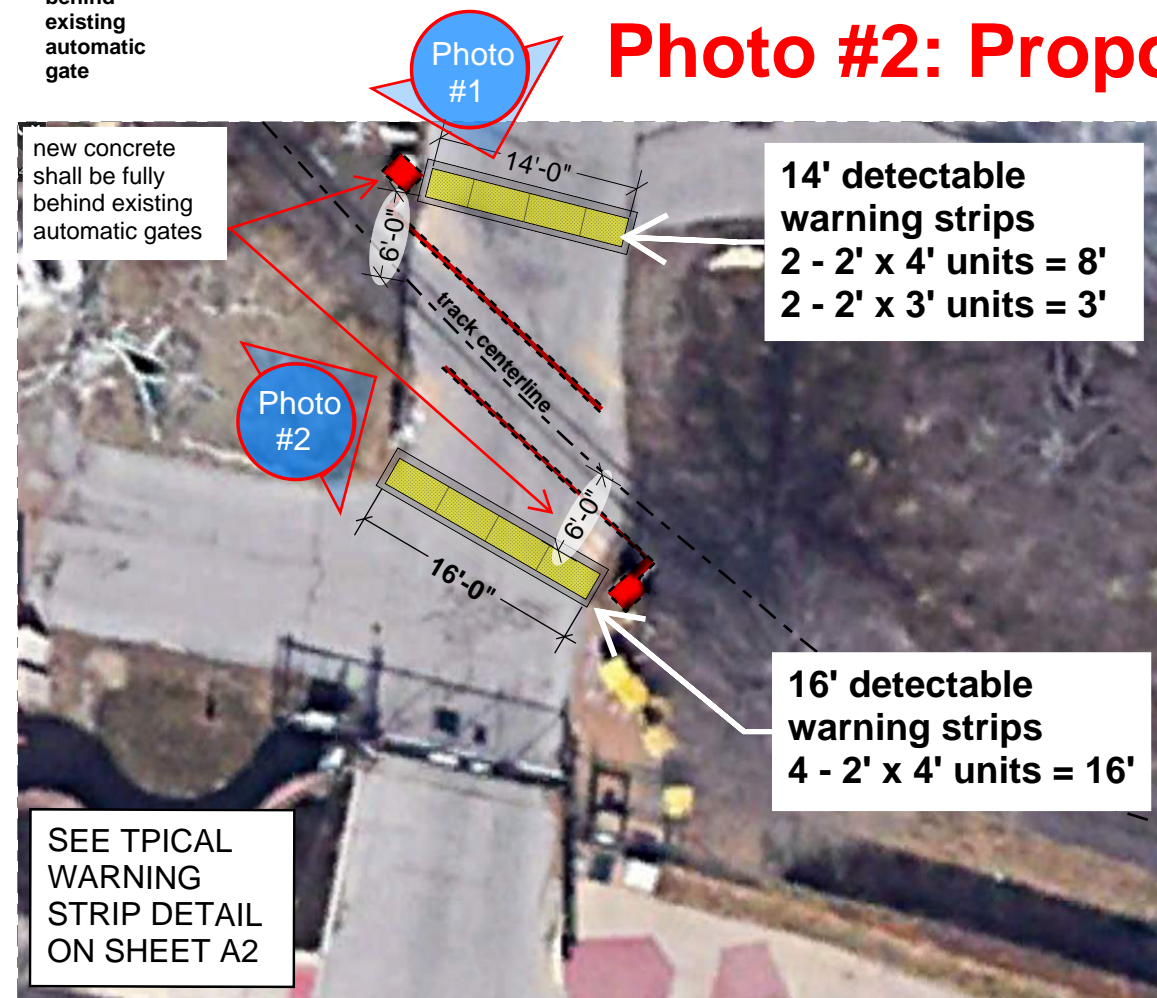
**Photo #1: Existing**



**Photo #2: Proposed**



**Photo #2: Existing**



**Aerial Image Proposed Sketch (no scale)**



**#1**

Alternate #1

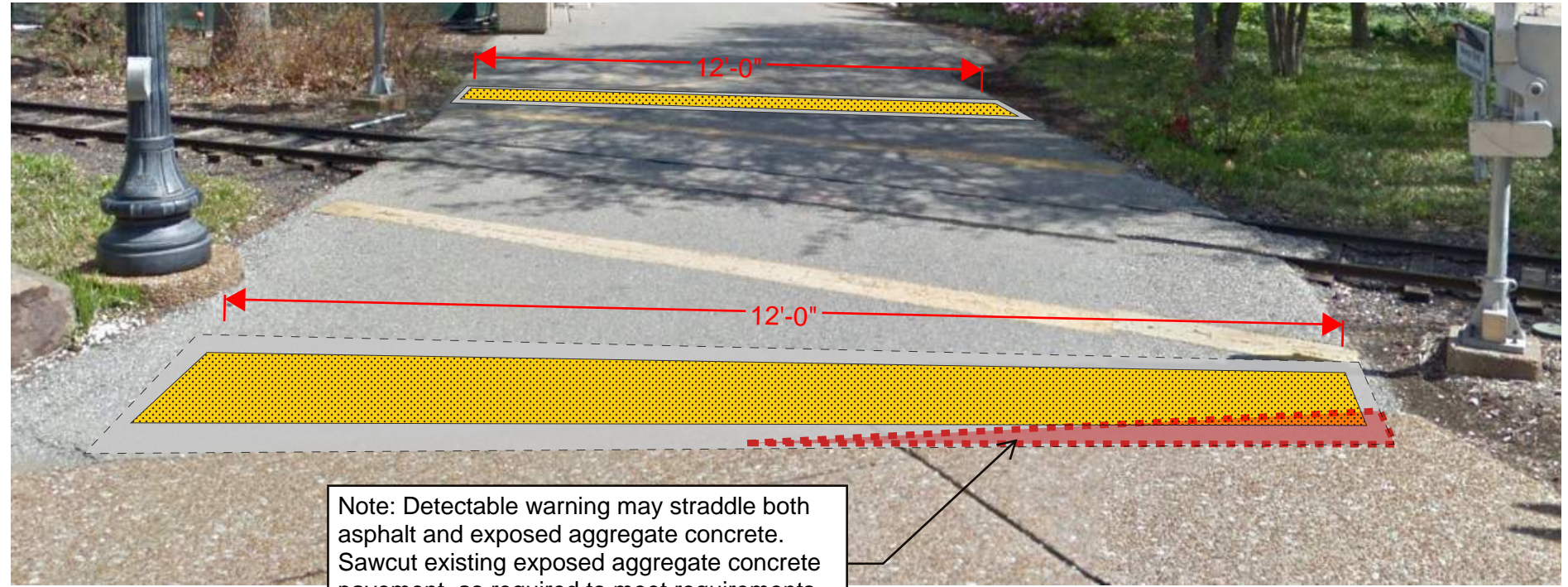
SHEET NO.

**A3**





**Photo #1: Existing**

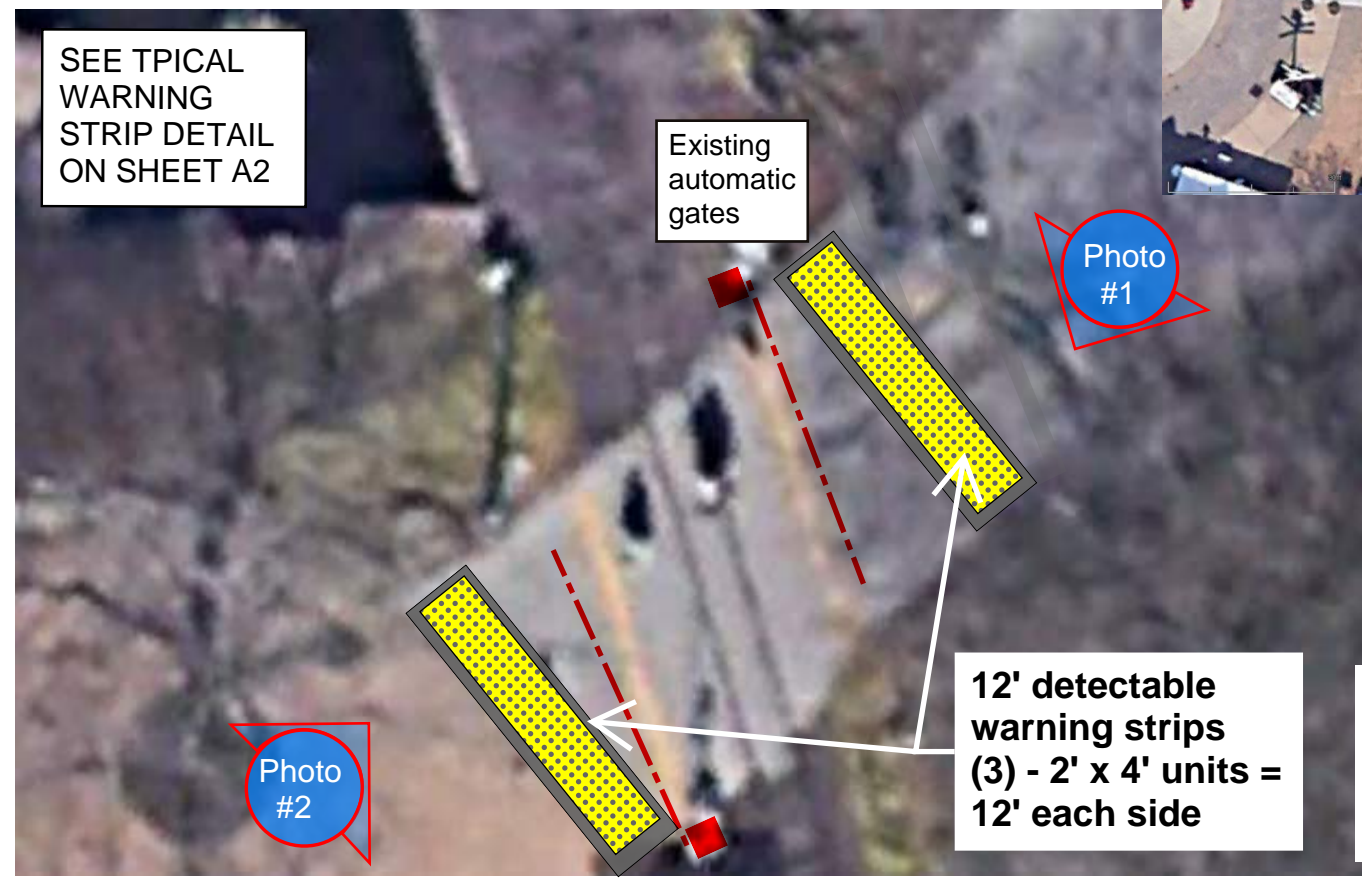


Note: Detectable warning may straddle both asphalt and exposed aggregate concrete. Sawcut existing exposed aggregate concrete pavement as required to meet requirements of Typical Warning Strip detail on sheet A2.

**Photo #2: Proposed**



**Photo #2: Existing**



SEE TYPICAL WARNING STRIP DETAIL ON SHEET A2

Existing automatic gates

Photo #1

Photo #2

12' detectable warning strips (3) - 2' x 4' units = 12' each side

#2

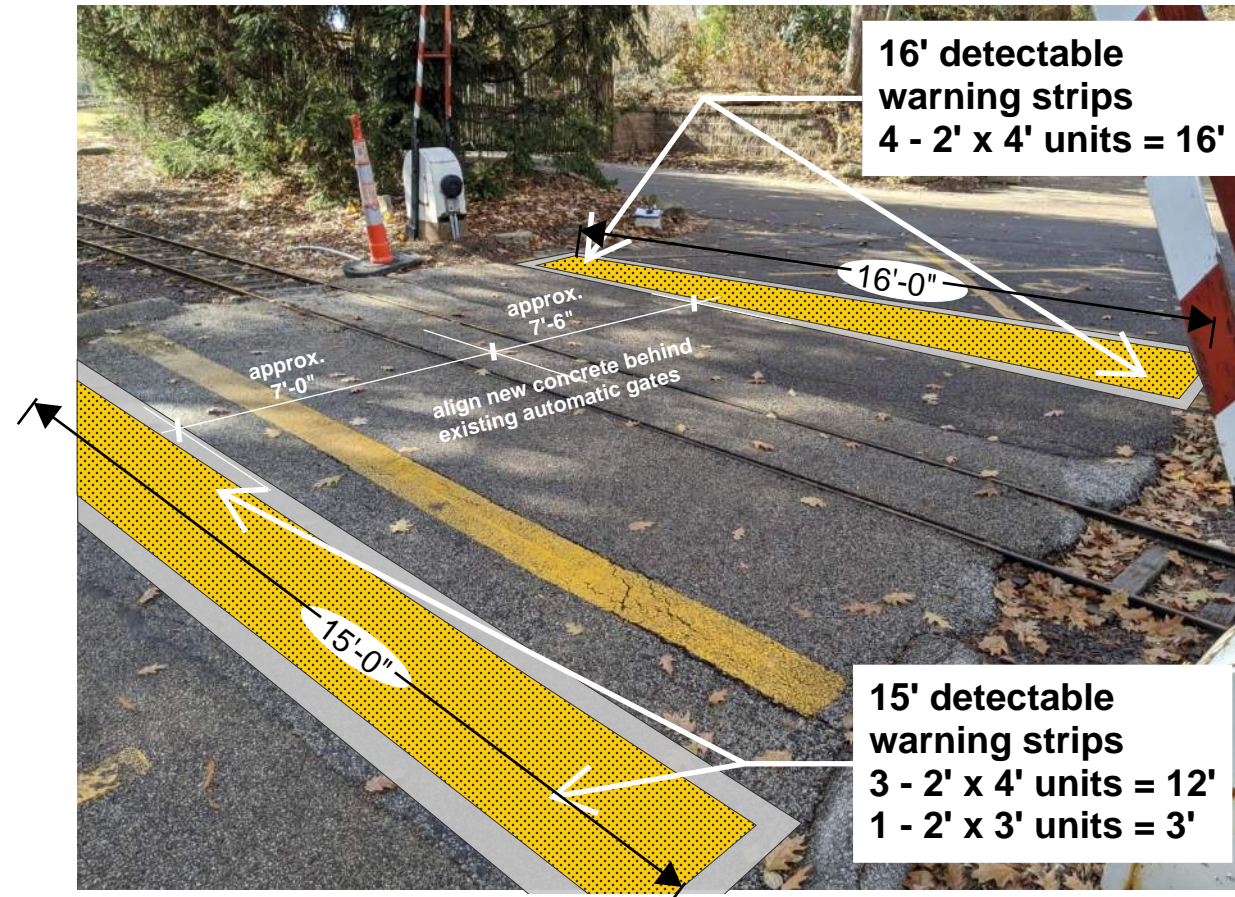


SHEET NO.  
**A4**

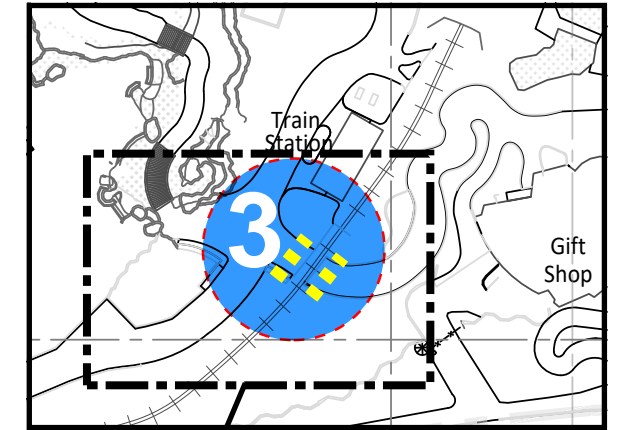
**Aerial Image Proposed Sketch (no scale)**



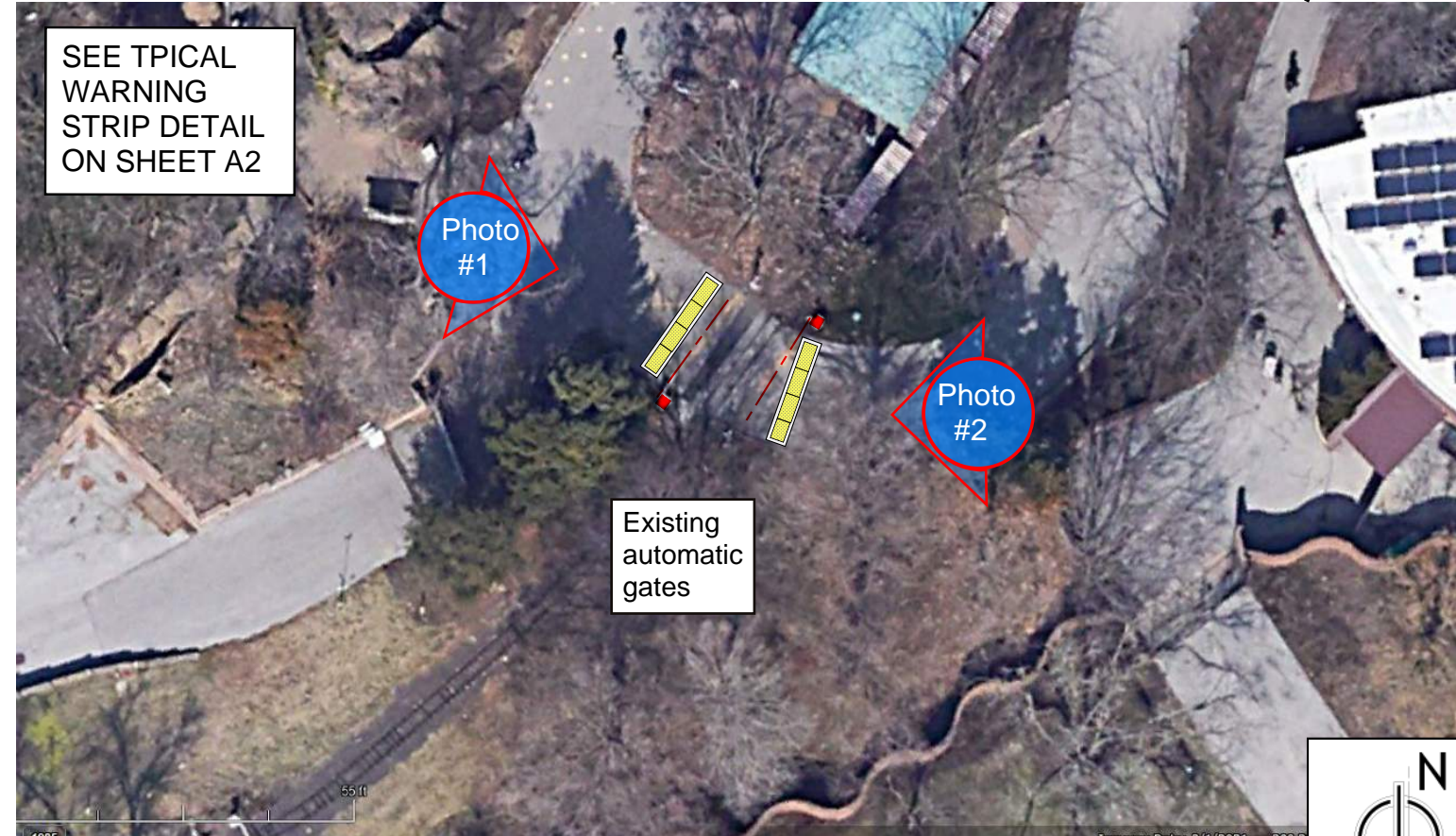
**Photo #1: Existing**



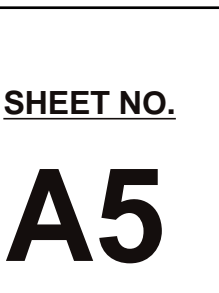
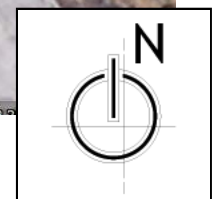
**Photo #3: Proposed**

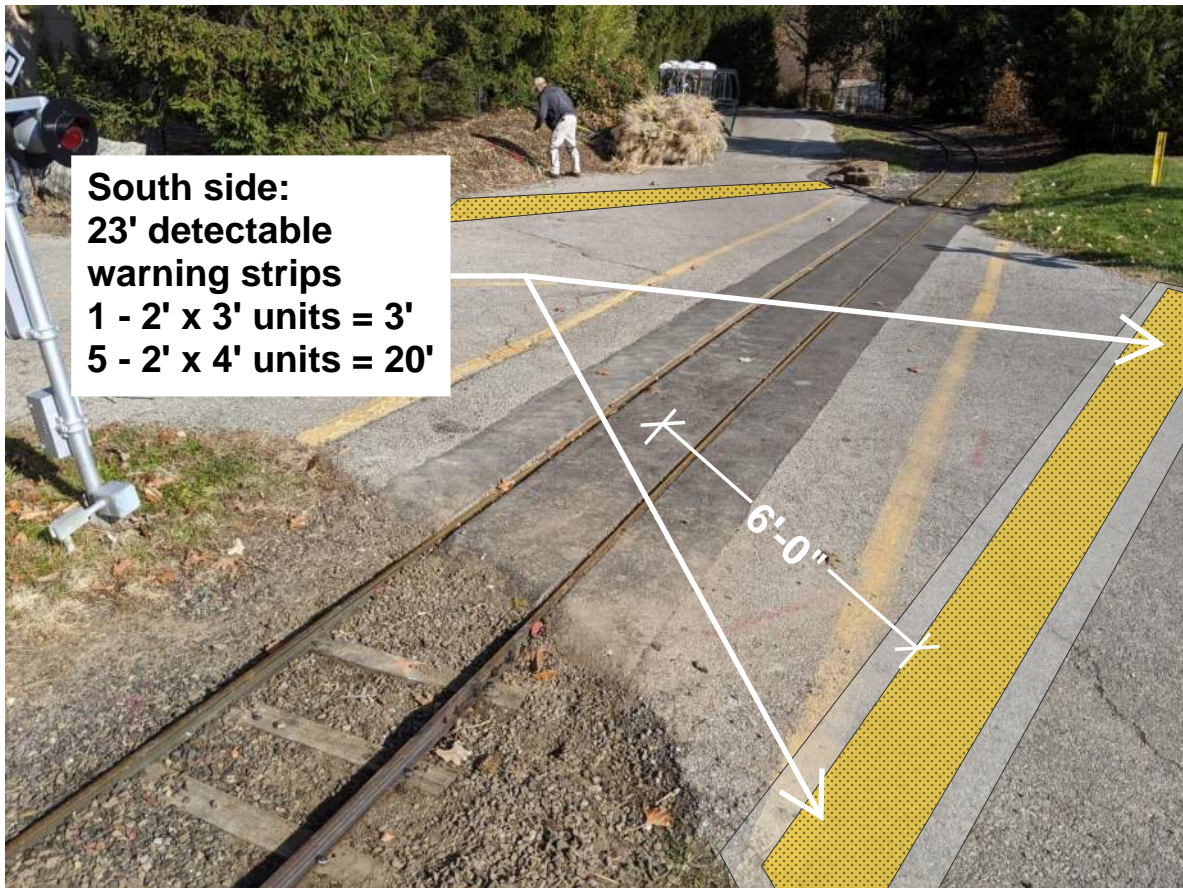


**Photo #2: Existing**

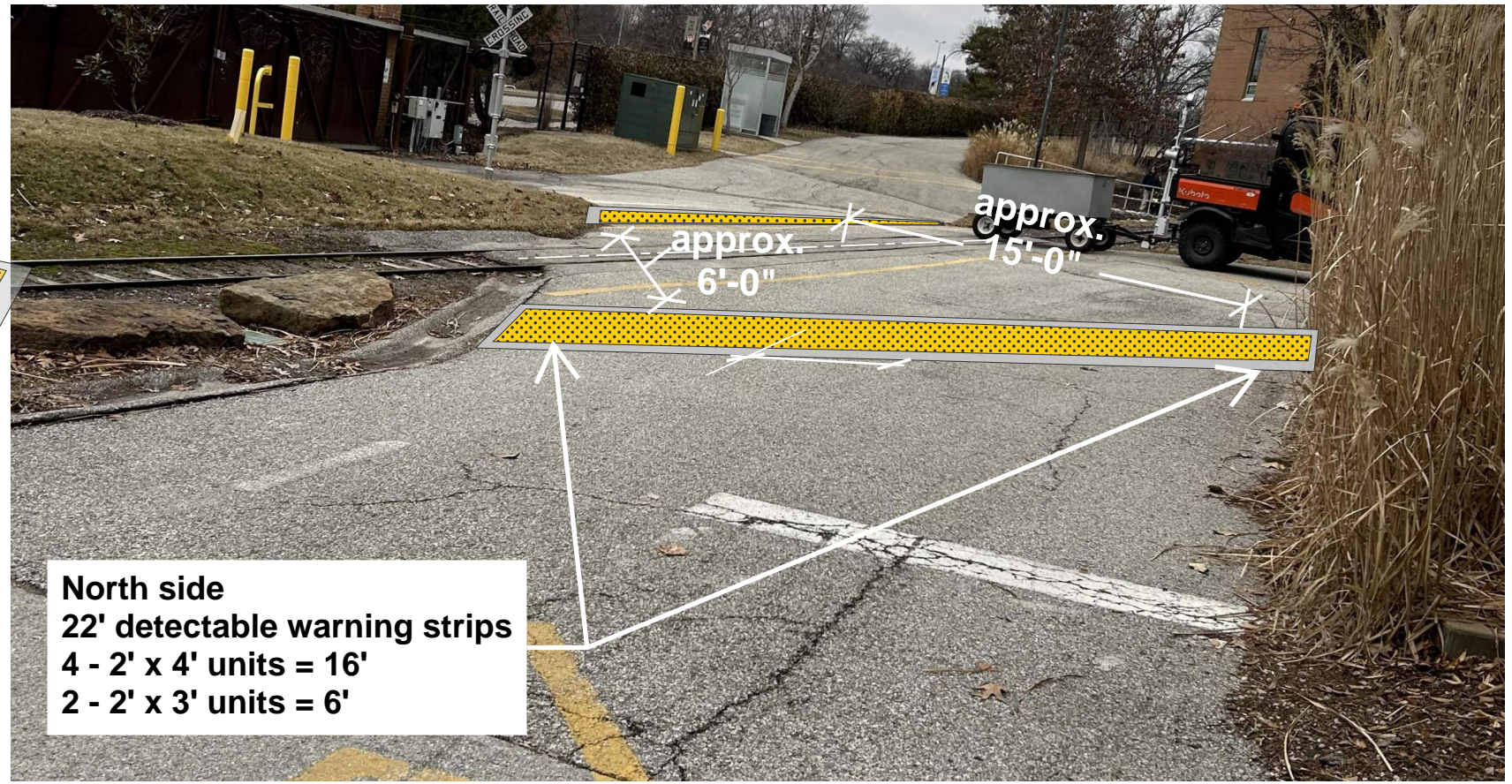


**Aerial Image Proposed Sketch (no scale)**





**Photo #1: Proposed**



**Photo #2: Proposed**

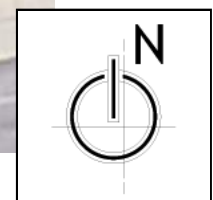
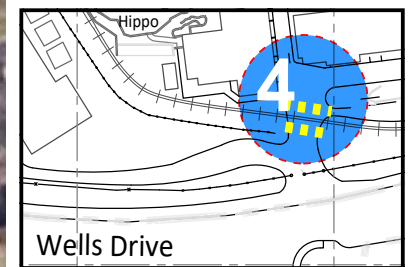


**Photo #1: Existing**



**Aerial image: Proposed Plan Sketch**

**#4**



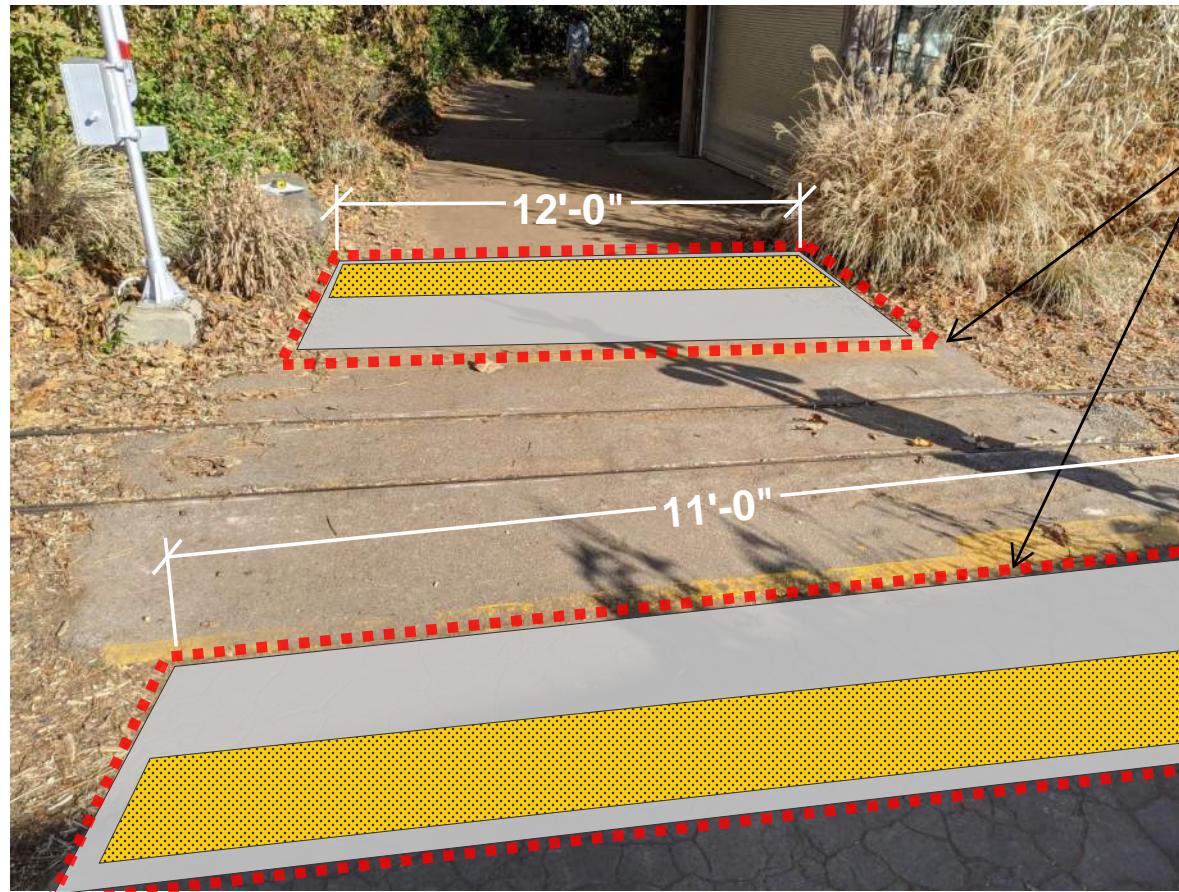
SHEET NO.

**A6**





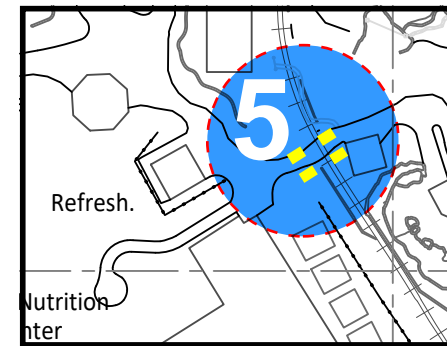
**Photo #1: Existing**



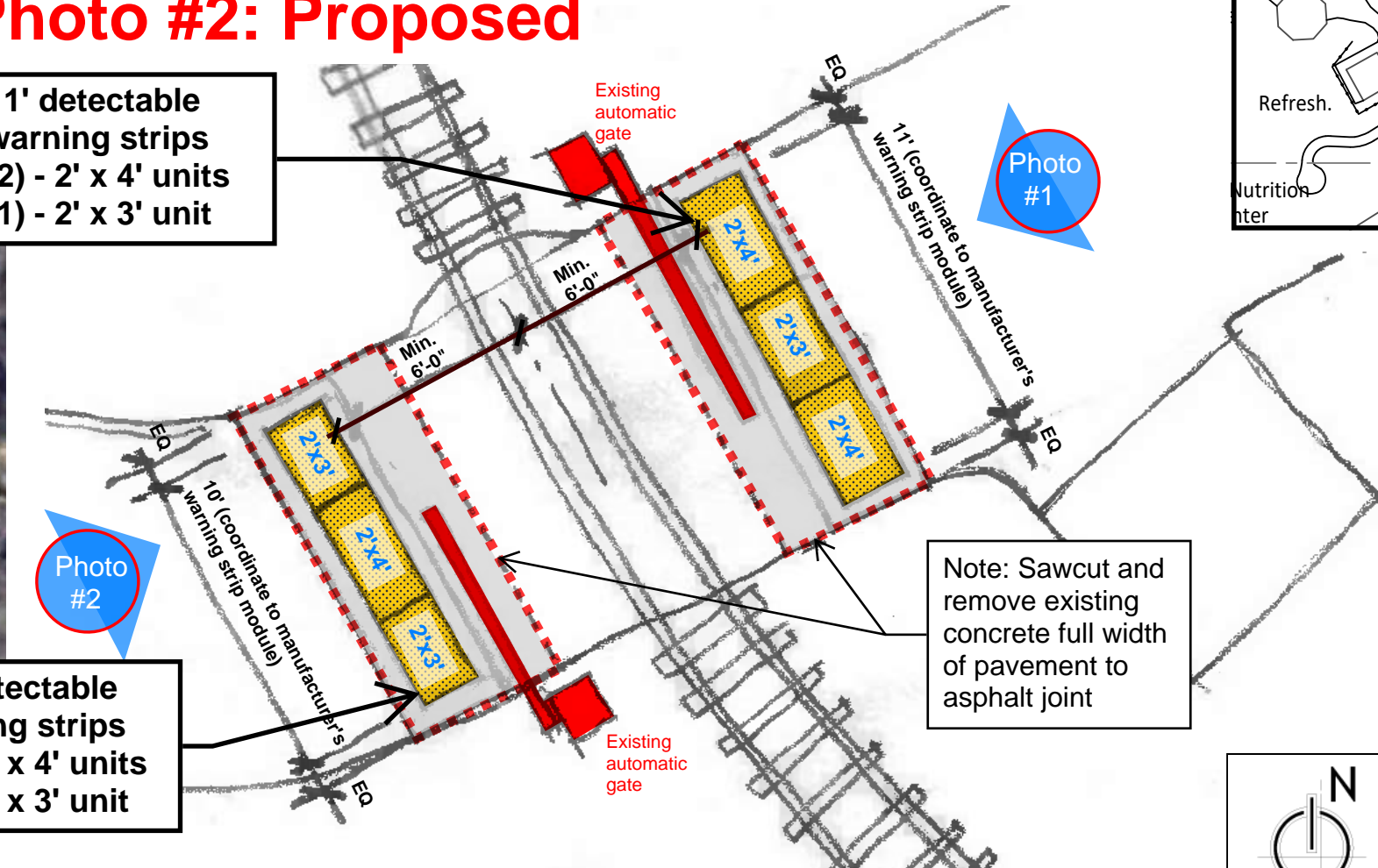
**Photo #2: Proposed**

Sawcut and remove existing concrete full width of pavement to asphalt joint

SEE TYPICAL WARNING STRIP DETAIL ON SHEET A2



**Aerial Image with Proposed Plan**



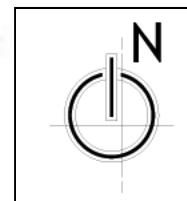
**Proposed Plan Sketch (no scale)**

11' detectable warning strips  
(2) - 2' x 4' units  
(1) - 2' x 3' unit

10' detectable warning strips  
(1) - 2' x 4' units  
(2) - 2' x 3' unit

Note: Sawcut and remove existing concrete full width of pavement to asphalt joint

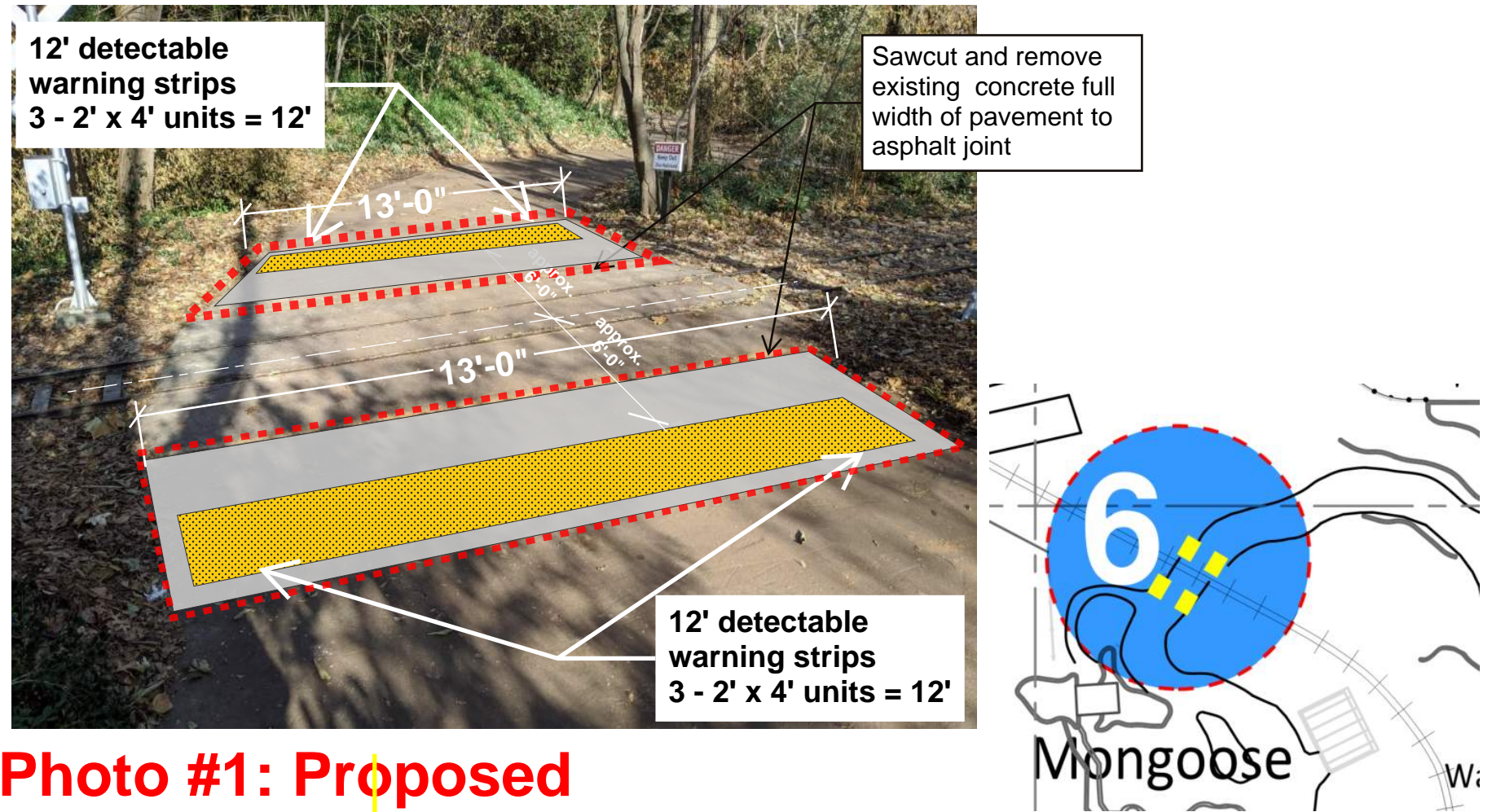
**#5**



SHEET NO.  
**A7**



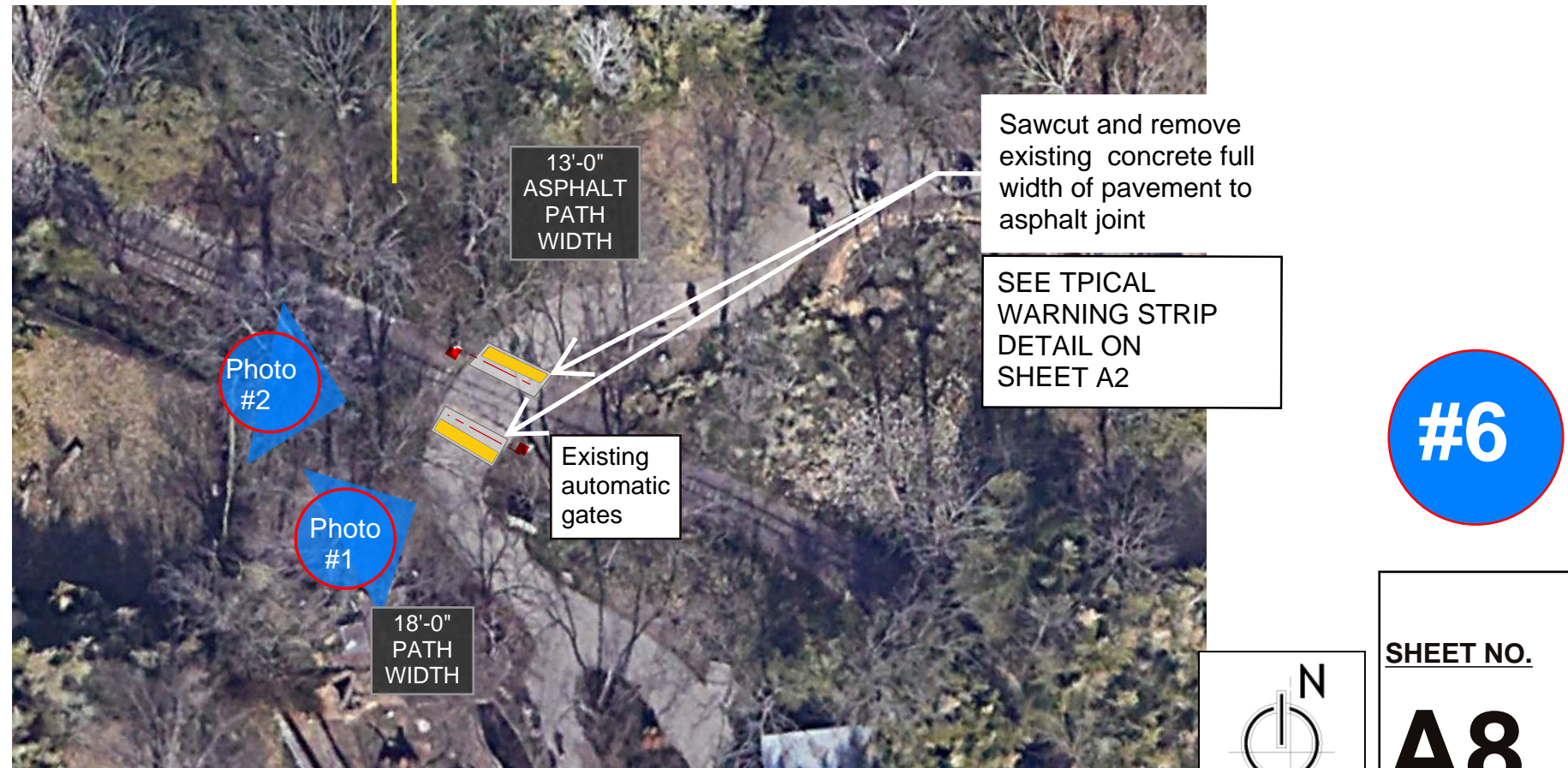
**Photo #1: Existing**



**Photo #1: Proposed**



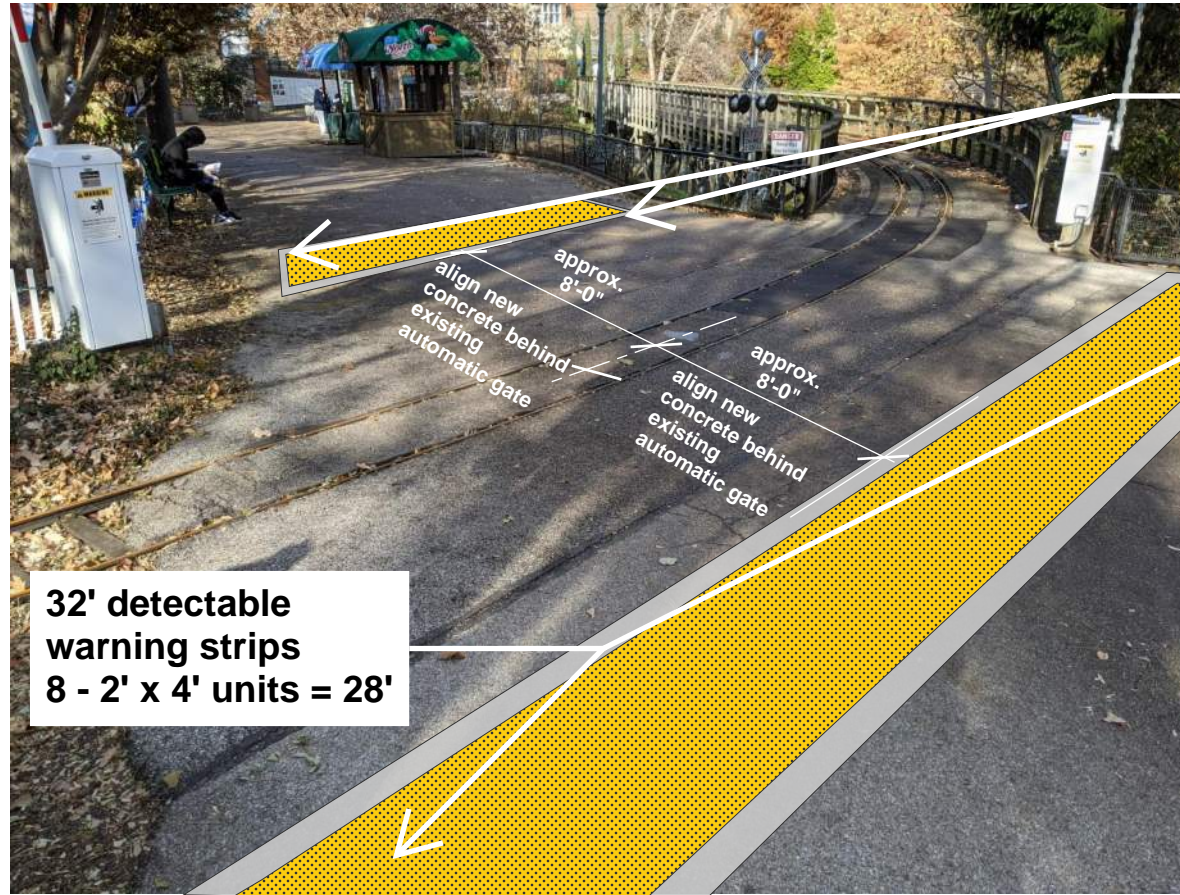
**Photo #2: Existing**



**Aerial Photo: Proposed**



**Photo #1: Existing**



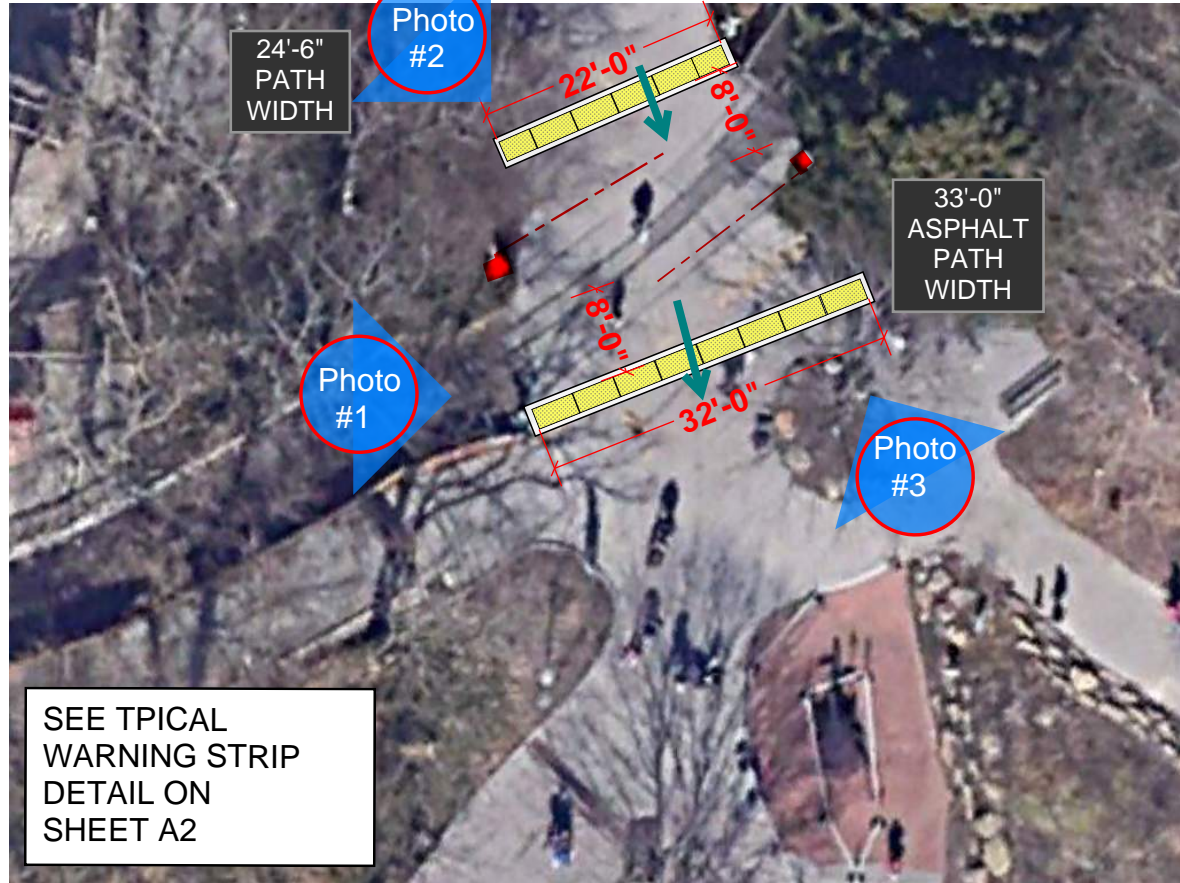
**32' detectable warning strips**  
8 - 2' x 4' units = 28'

**22' detectable warning strips**  
4 - 2' x 4' units = 16'  
2 - 2' x 3' units = 6'

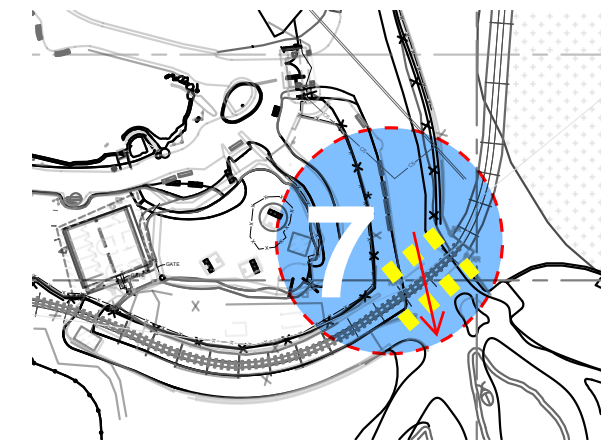
**Photo #3: Proposed**



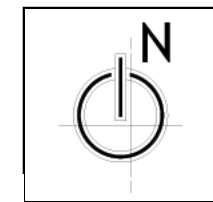
**Photo #2: Existing**



SEE TYPICAL WARNING STRIP DETAIL ON SHEET A2



**#7**

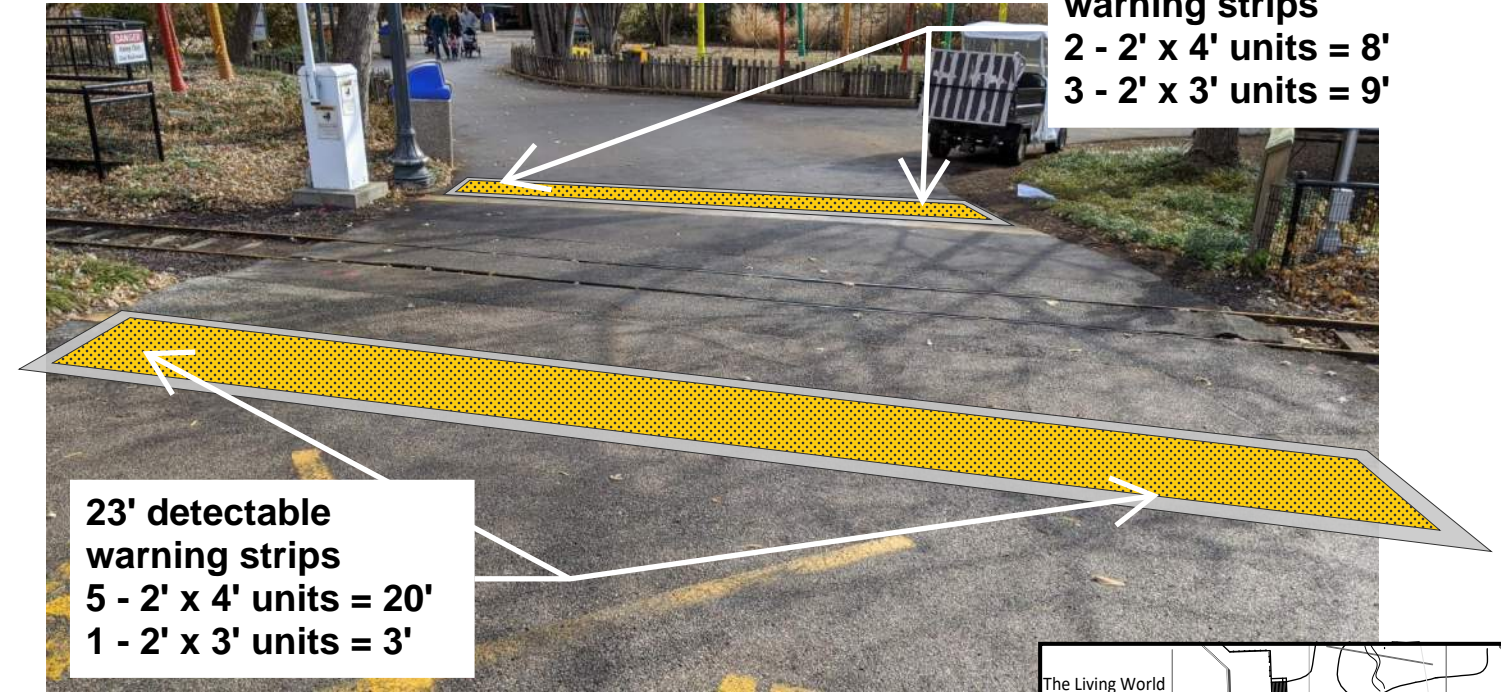


SHEET NO.  
**A9**

**Aerial image: Proposed Plan Sketch**



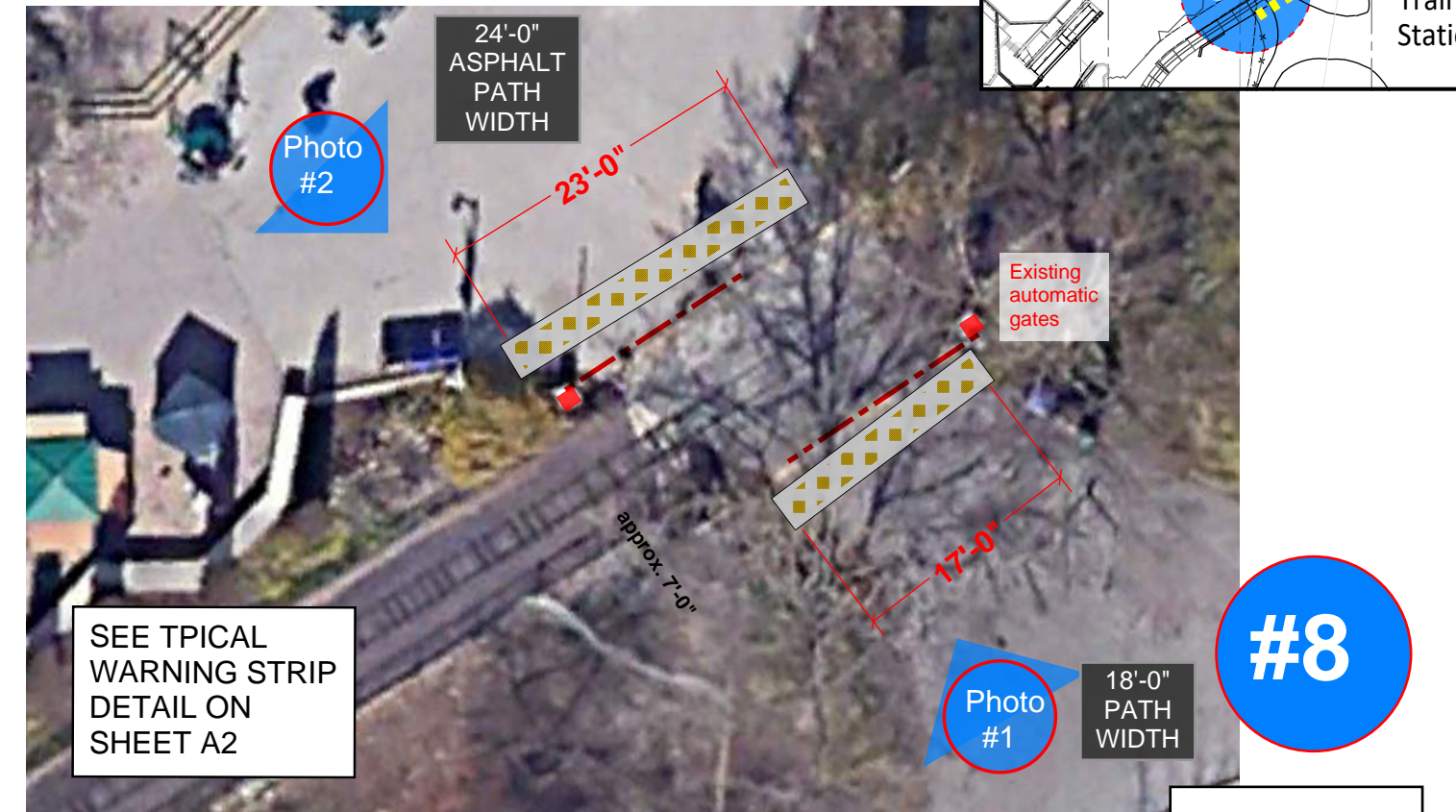
**Photo #1: Existing**



**Photo #2: Proposed**



**Photo #2: Existing**



**Aerial image: Proposed Plan**



SHEET NO.  
**A10**

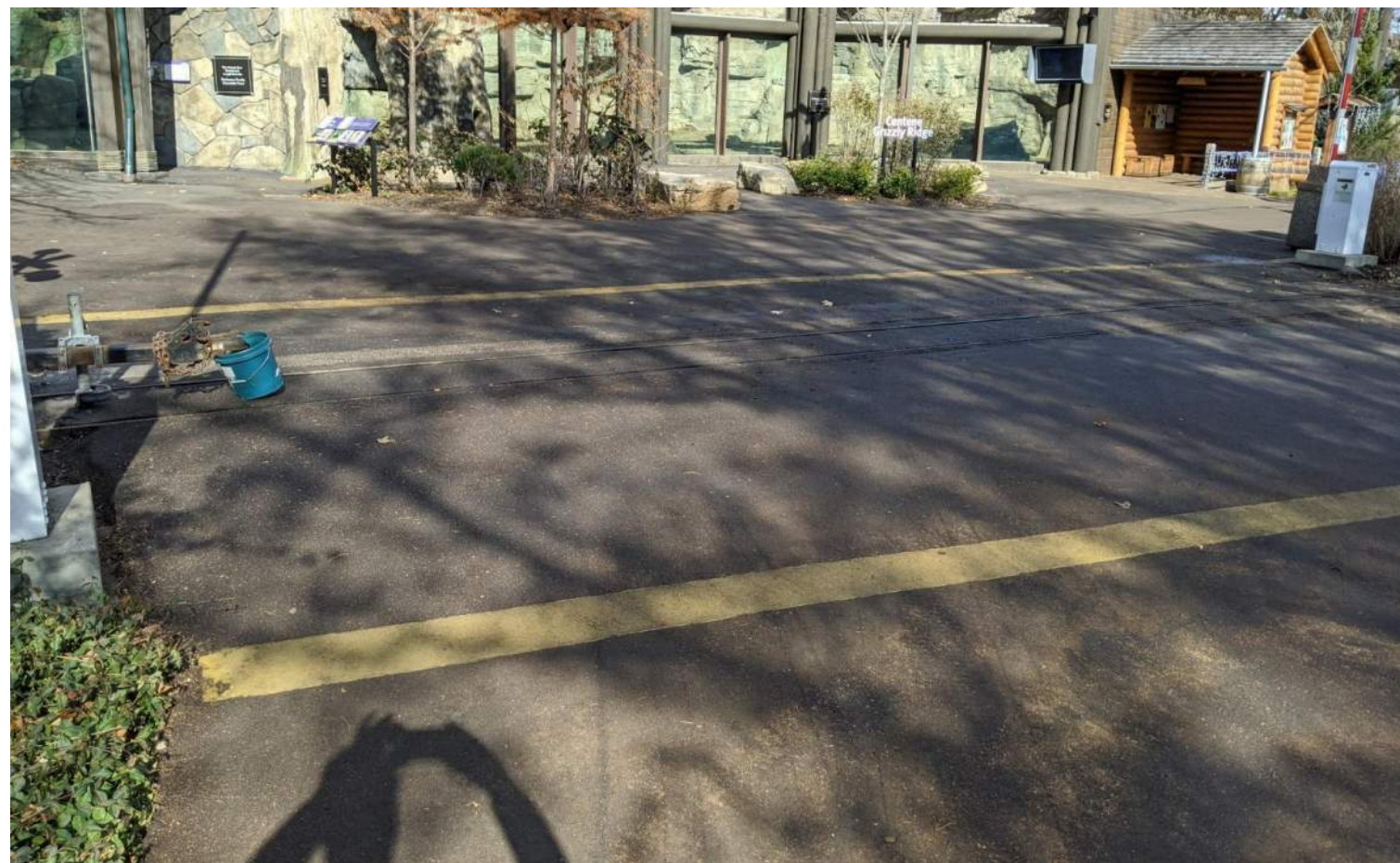


**Photo #1: Existing**

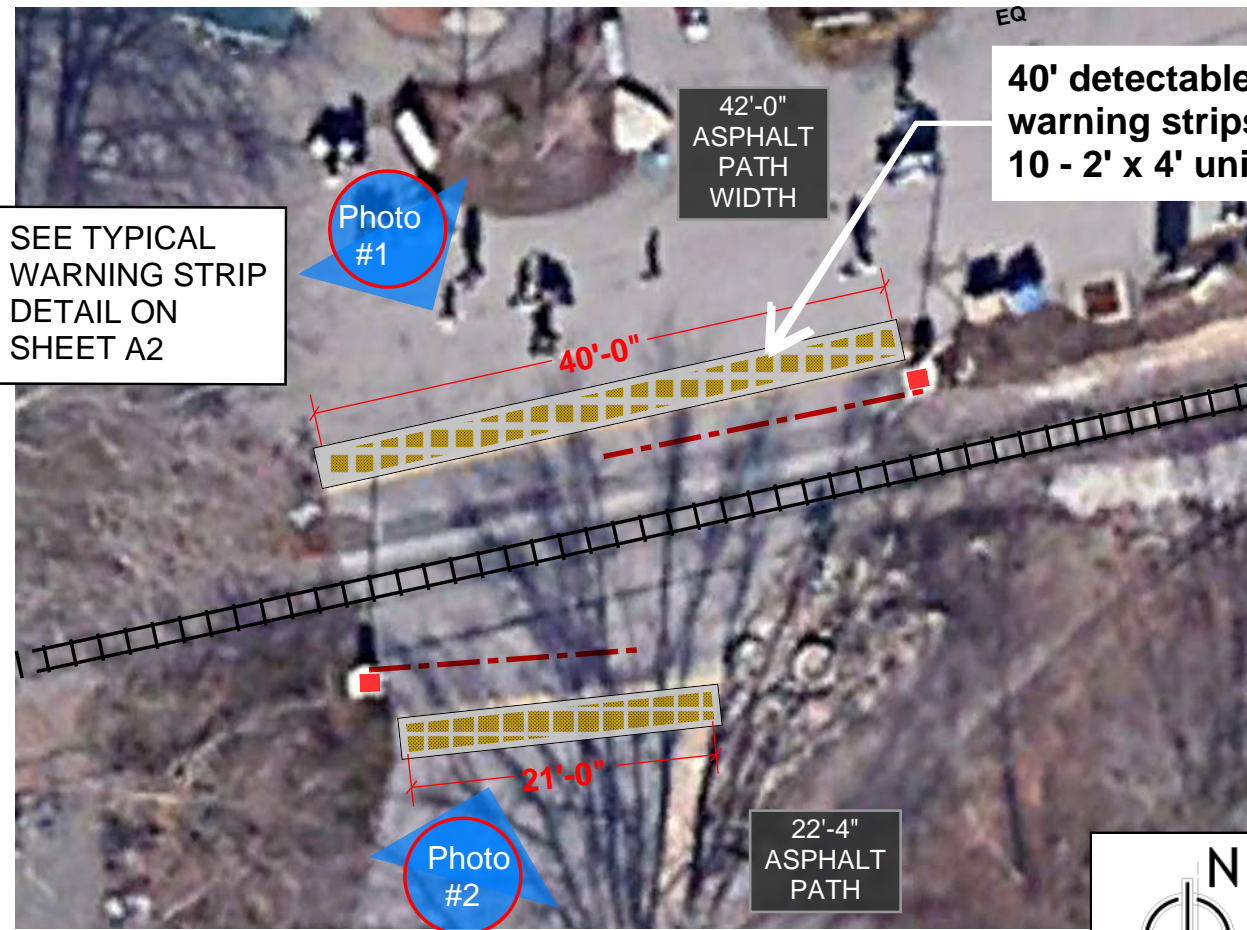


21' detectable warning strips  
 3 - 2' x 4' units = 12'  
 3 - 2' x 3' units = 9'

**Photo #2: Proposed**



**Photo #2: Existing**



SEE TYPICAL WARNING STRIP DETAIL ON SHEET A2

Photo #1

42'-0" ASPHALT PATH WIDTH

40' detectable warning strips  
 10 - 2' x 4' units = 40'

40'-0"

Photo #2

22'-4" ASPHALT PATH



#9



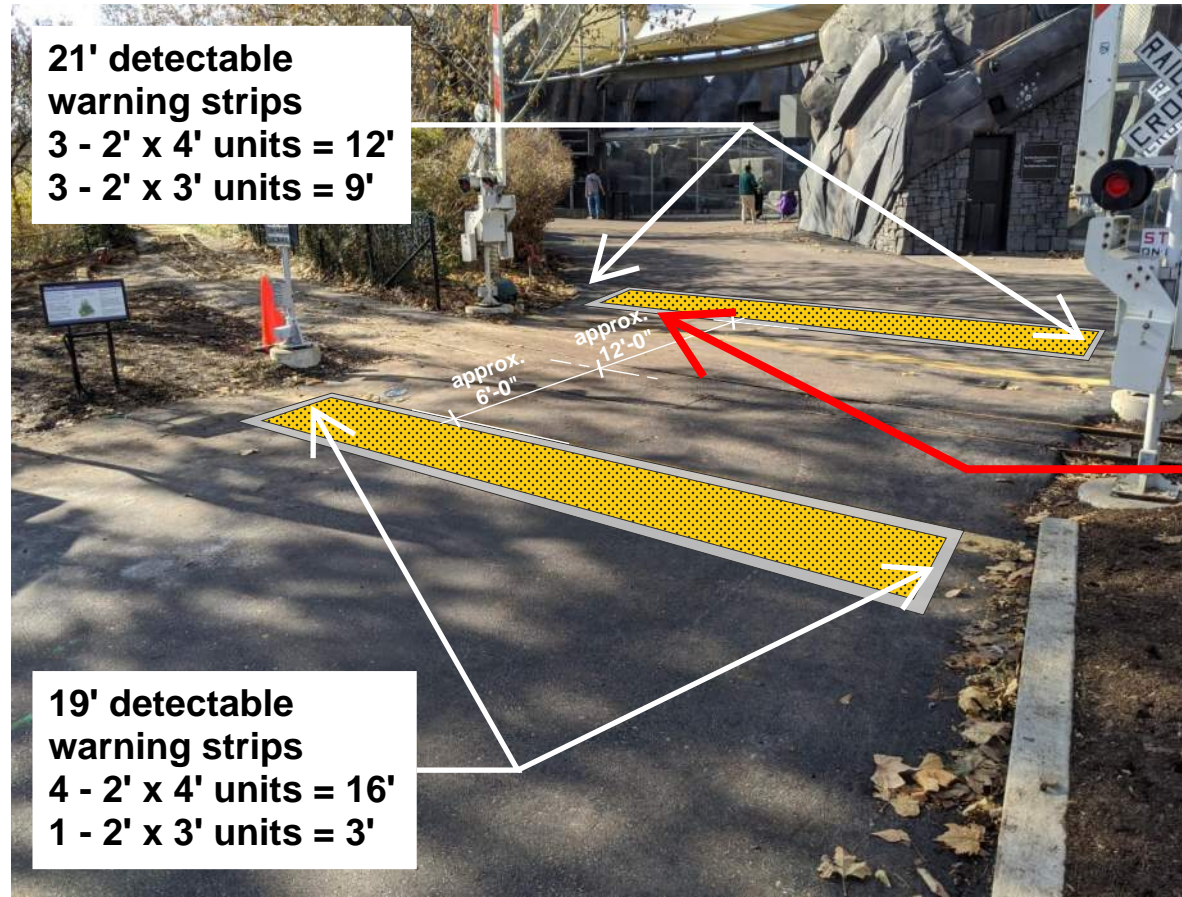
SHEET NO.

**A11**

**Aerial image: Proposed Plan**



**Photo #1: Existing**

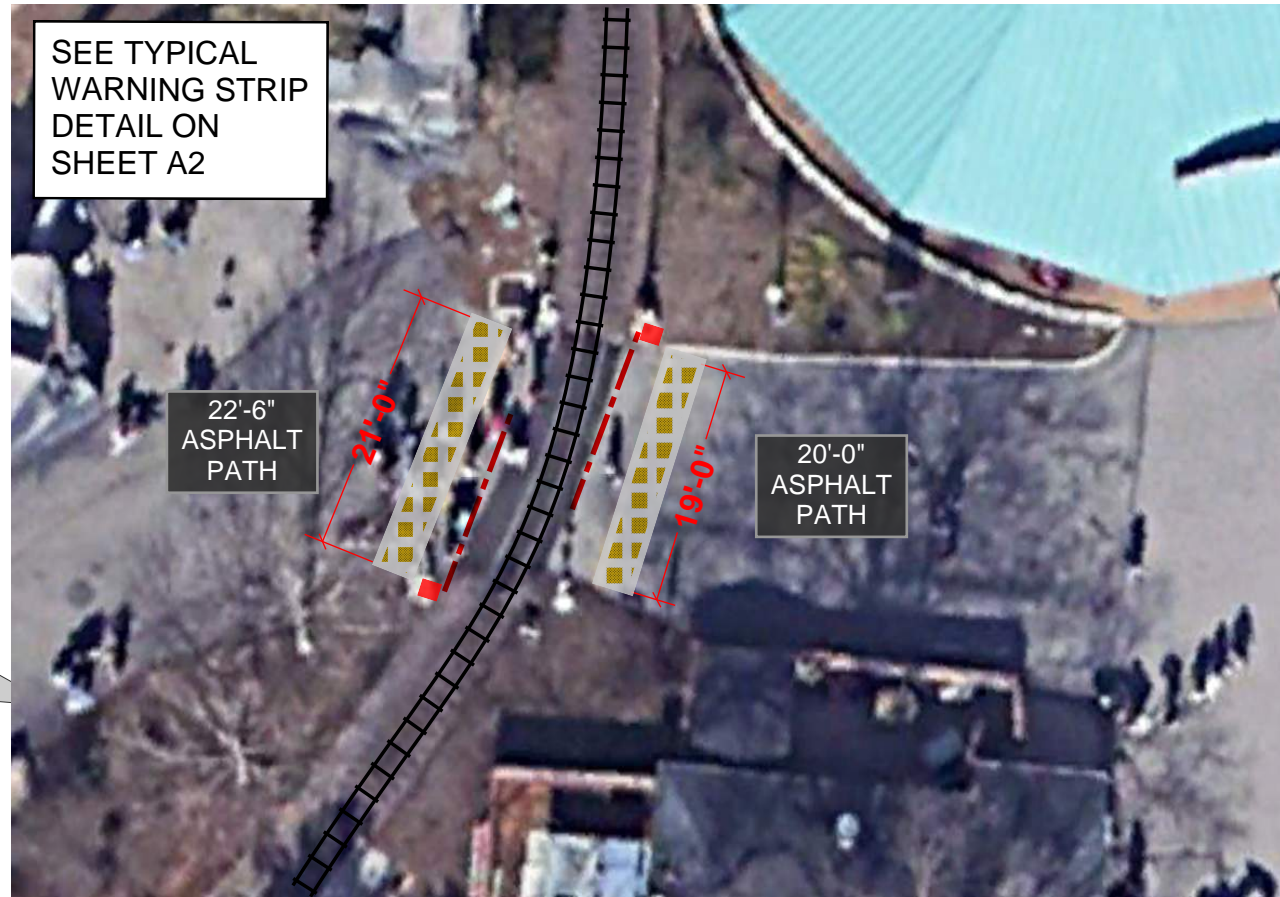


Clear existing inlet when locating Detectable Warning Strip

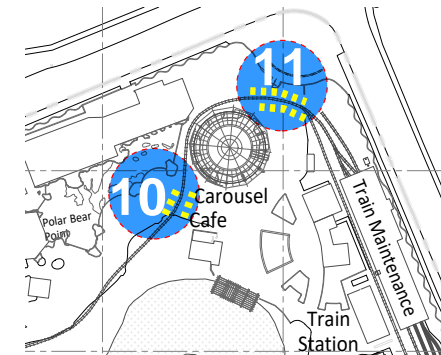
**Photo #1: Proposed**



**Photo #2: Proposed**



**Aerial image: Proposed Plan**

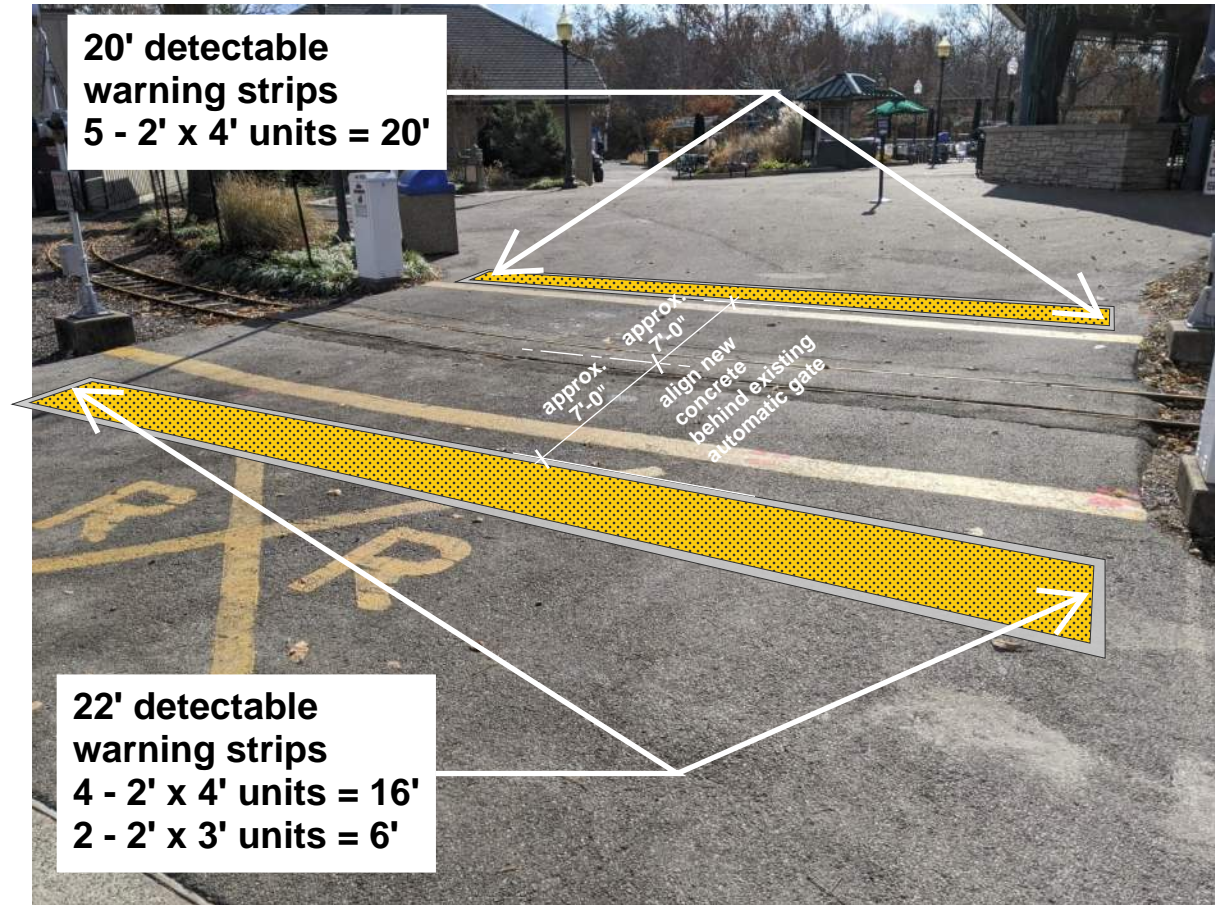


#10

SHEET NO.  
**A12**



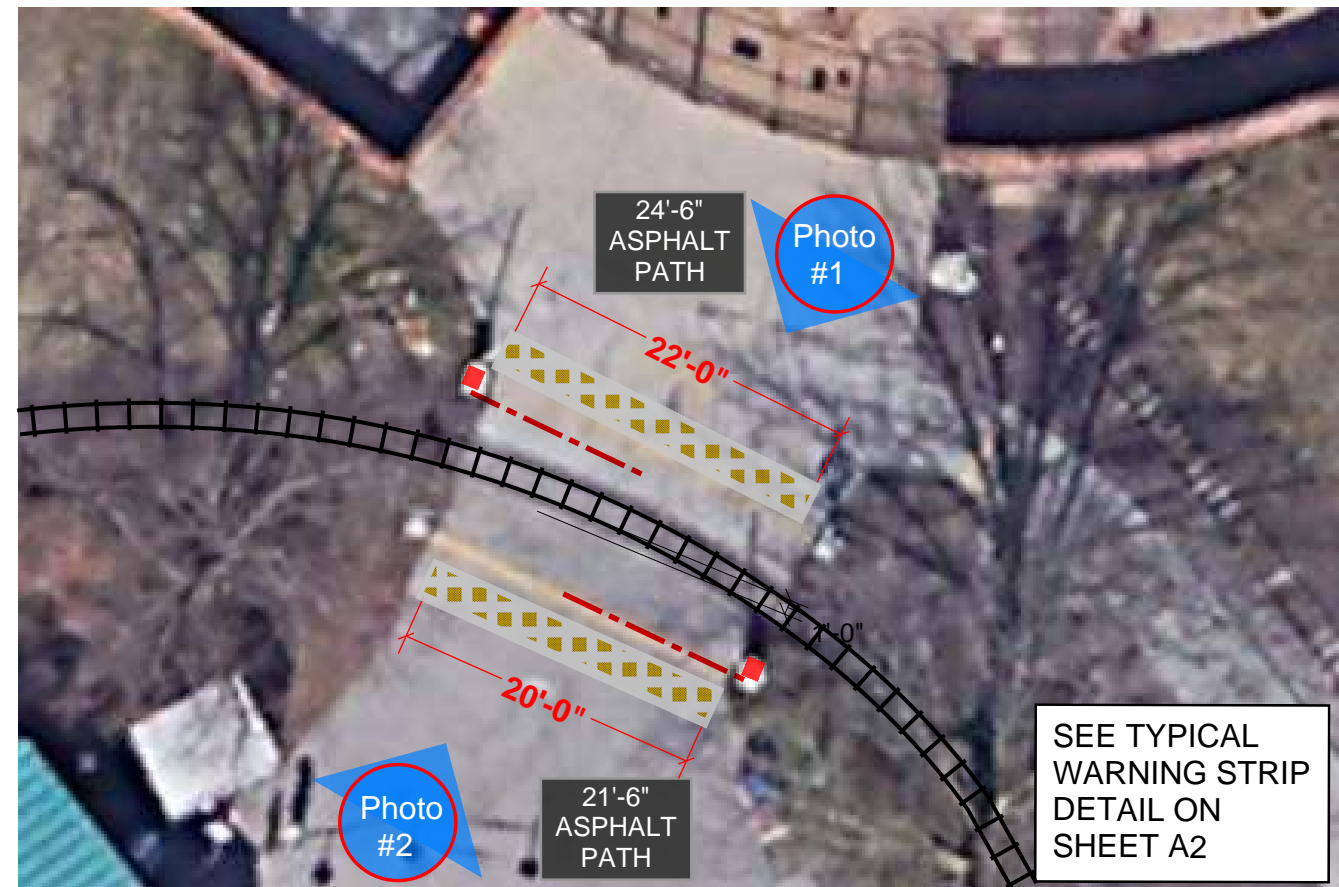
**Photo #1: Existing**



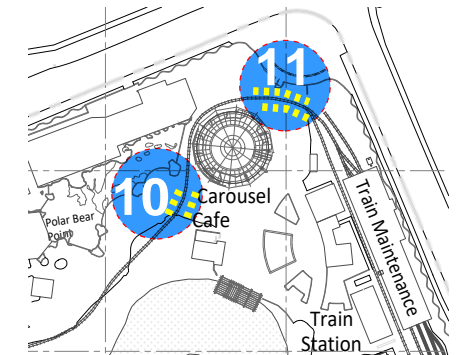
**Photo #2: Proposed**



**Photo #2: Existing**



**Aerial image Proposed Plan**

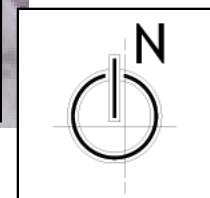


**#11**

**Alternate #1**

**SHEET NO.**

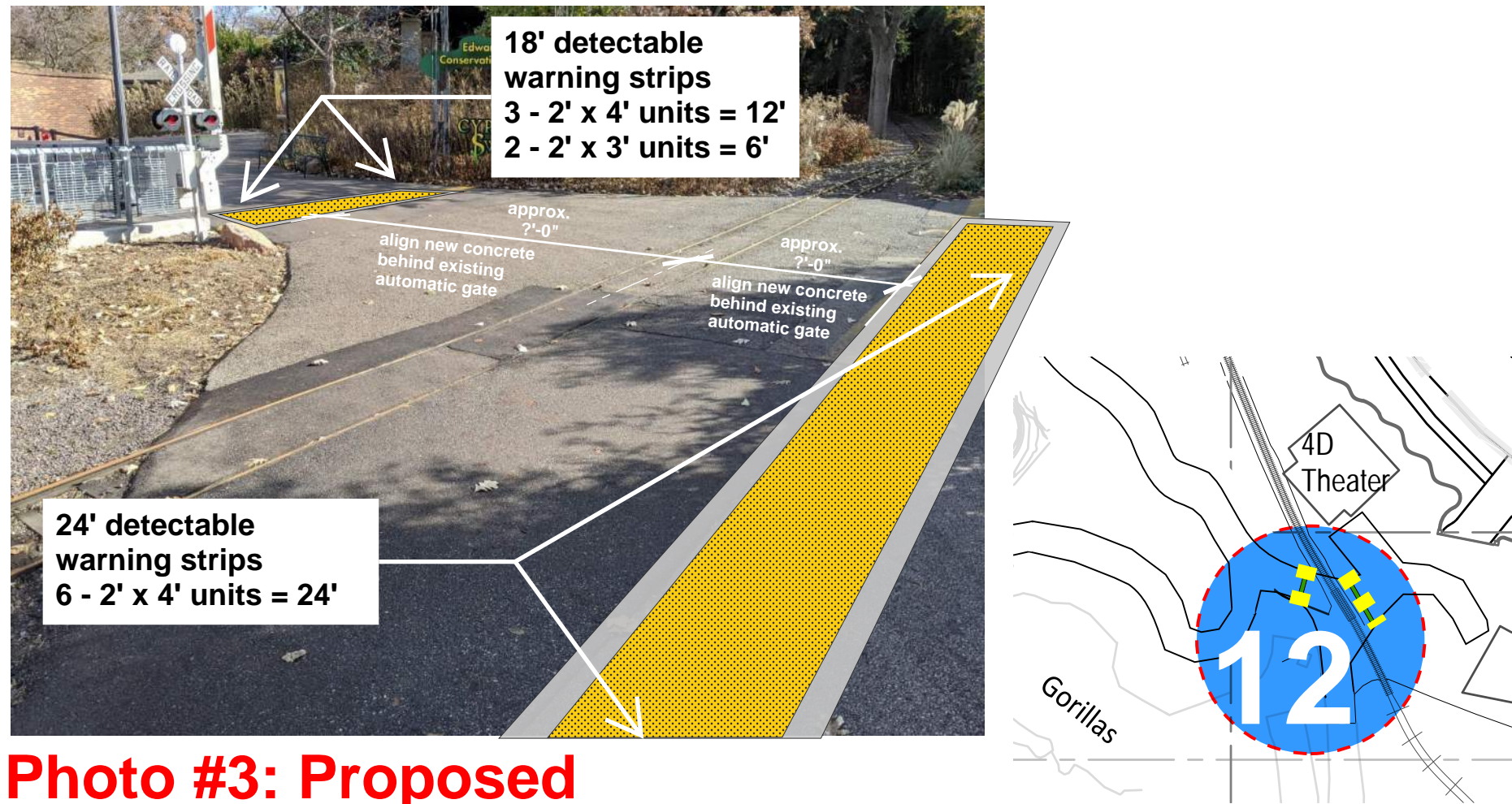
**A13**



SEE TYPICAL WARNING STRIP DETAIL ON SHEET A2



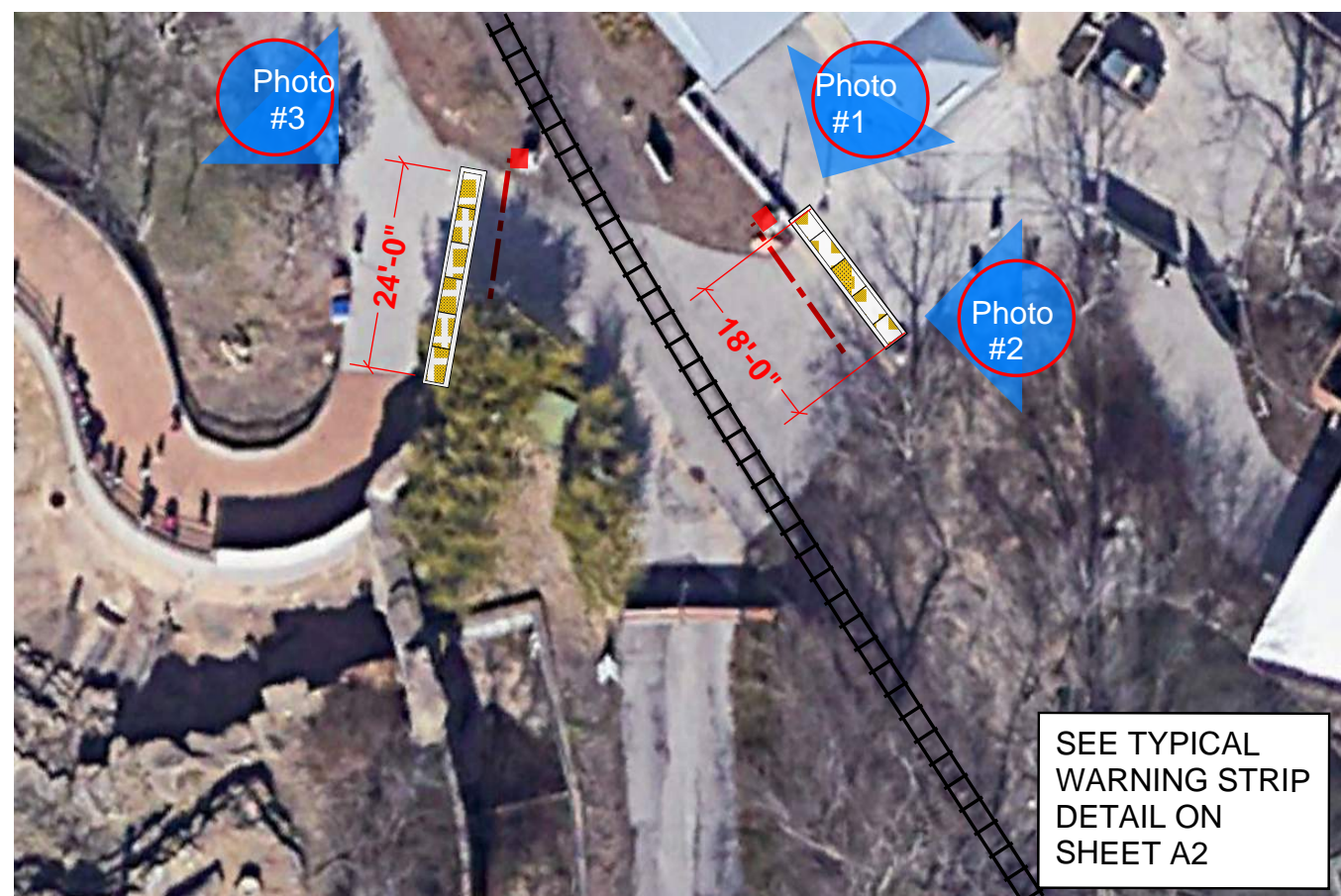
**Photo #1: Existing**



**Photo #3: Proposed**

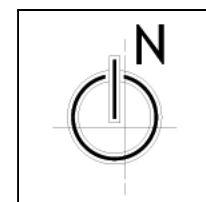


**Photo #2: Existing**



**Aerial image: Proposed Plan**

#12



SHEET NO.  
**A14**