

## 2/13/2024

Matt Williams, P.E.
Assistant Director, Public Works Engineering
Department of Public Works Engineering
100 Third Street
Castle Rock, CO 80104

Subject: Request for Construction Closure of Roxborough Park Road

Dear Mr. Williams:

As part of the ongoing grading and construction activities related to the buildout of Filing 7A, Sterling Ranch is requesting an extended construction closure of Roxborough Park Road in order to allow for the re-alignment of the roadway connection to Waterton Road as well as underground utility improvements, and adjacent grading/floodplain improvements to East Willow Creek. Below are the key details of the requested closure:

- Extents:
  - o Southern Boundary: Intersection of Waterton and Roxborough Park Road
  - Northern Boundary: Crossing of the PSCO Easement (State Parcel Number 2229-303-00-002) and Roxborough Park Road
- Duration: until February 2025\*

\*if work is able to be completed earlier, then Sterling Ranch will work with Douglas County to re-open the roadway as quickly & safely as possible.

A vicinity map graphic has been included on the next page illustrating this area. The extents of this closure will be fronting solely on land owned by Sterling Ranch, LLC. All other users along this vicinity of Roxborough Park Road are north of the PSCO Easement crossing. These users will have more-direct access to Titan Road to the north. Based on the magnitude of these improvements and the minimal traffic utilizing Roxborough Park Road, a construction closure will allow for the safest and most-efficient delivery of these upgrades.



Vicinity Map

The existing alignment of Roxborough Park Road currently intersects with Waterton Road at an angle of approximately 20°. This existing intersection is shown in Figure 1. The Douglas County Roadway Design and Technical Criteria Manual, Section 4.9, requires roadway alignments to make an intersection at a right-angle, with a deflection angle of no more than 10°. As a part of the development of Filing 7A, Sterling Ranch will be required to re-align Roxborough Park Road to meet the Douglas County standard. This proposed re-alignment is shown in Figure 2.

This proposed re-alignment will shift the intersection location on Waterton Road approximately 450' west from the existing intersection location. The re-alignment will involve constructing a new crossing of the East Willow Creek drainageway. As a part of the new crossing, multiple improvements will be made to the channel and floodplain to promote more efficient flow and protect the waterway against erosion. Existing rills and gullies that are currently scarring the landscape will be repaired.

The existing roadway crossing utilizes an existing old 96" corrugated metal pipe to allow water to pass under Roxborough Park Road. The re-alignment will replace this aging pipe with two brand-new reinforced concrete box culverts, which will greatly improve flow conditions.

The proposed re-alignment will also contain multiple underground utility improvements including: new storm sewer, sanitary sewer, water main, and dry utility infrastructure. These utility improvements will provide improved service to current and future users in the vicinity.

Lastly, a new detention pond will be constructed in the location of the old existing intersection. This detention pond will capture developed flows and release them at a controlled rate to further improve the drainage conditions of this area. An illustration of these improvements has been shown in Figure 3.

Given the size and scope of these improvements, Sterling Ranch and their contractors in the field will not be able to maintain traffic flow along the old existing Roxborough Park Road in any interim phase of construction. It is anticipated that earthwork & excavation crews will start activities in this area by grading out the improvements to East Willow Creek and future detention pond – both of which are in direct conflict with the existing location of the roadway. Pipe-work is anticipated to follow in the construction sequence, and multiple of the underground utility improvements are in conflict with the existing location of the roadway. An illustration of some of these proposed improvements, and their location with respect to the old existing alignment of Roxborough, are shown in Figure 3.

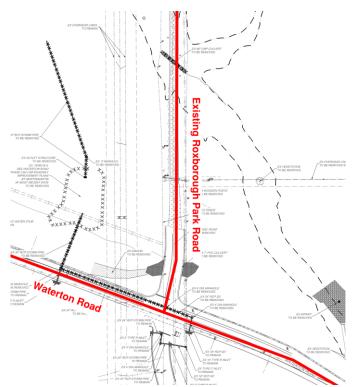


Figure 1: Existing Alignment of Roxborough Park Road

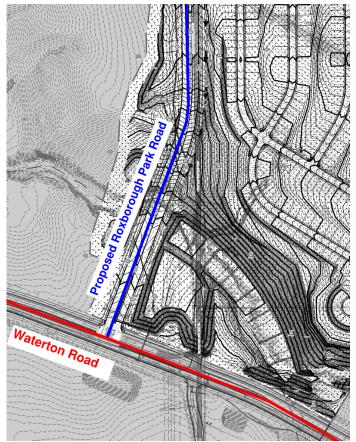


Figure 2: Proposed Re-Alignment of Roxborough Park Road.

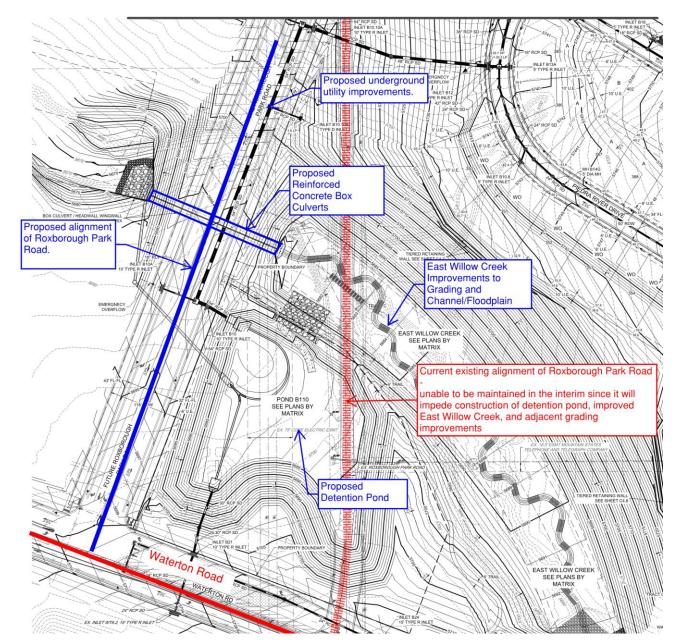


Figure 3: Summary of Improvements Associated with Re-Alignment of Roxborough Park Road

During the planning of this anticipated construction closure, Sterling Ranch has been in-contact with emergency services including: West Metro Fire Station 15 (south of this closure on Roxborough Park Road), Douglas County Dispatch, Jefferson County Dispatch, and the Douglas County Sheriff's Office Patrol Division – to ensure that these services are aware of the requested closure and are able to provide direct and timely responses to users in the area.

In order to ascertain the traffic volume on Roxborough Park Road, 3 days of traffic counts were performed. These counts were conducted from January 17-19, 2024 (Wednesday through Friday). At this time, the Douglas County Schools were in session. Outside temperatures were in the high-40s and partly sunny - the roadways were clear.

The counts were conducted in 4 locations:

- South of the intersection of Titan & Roxborough
- At the driveway entrance to the Sterling Ranch Community Authority Board (CAB) facilities.
- South of the Xcel Power Lines that cross Roxborough.
- North of the intersection of Waterton & Roxborough.

The traffic counts were conducted using video technology, allowing the ability to isolate light vehicles and heavy construction traffic related to the construction activities of Filing 7A. Additionally, a count location was placed at the driveway to the Sterling Ranch Community Authority Board (CAB) facilities. This location allows us to have an idea of what traffic is generated by Sterling Ranch-related operations.

The full count data, showing both directional and daily volumes have been included as attachments to this letter.

The data indicates that daily volumes are very low from an overall standpoint: Upon further interpretation, it can be inferred that construction vehicles and CAB traffic account for approximately 50%-60% of these volumes.

South of Titan Road			
Day	Light Vehicles	Heavy + Construction Vehicles	Total
1	165	27	192
2	144	24	168
3	152	22	174
Average	154	24	178

On CAB Driveway			
Day	Light Vehicles	Heavy + Construction Vehicles	Total
1	72	25	97
2	58	17	75
3	70	18	88
Average	67	20	87

South of Xcel Electric Lines			
Day	Light Vehicles	Heavy + Construction Vehicles	Total
1	149	23	172
2	119	31	150
3	116	19	135
Average	128	24	152

North of Waterton Road			
Day	Light Vehicles	Heavy + Construction Vehicles	Total
1	151	32	183
2	118	32	150
3	124	20	144
Average	131	28	159



Roxborough Park Road



Titan Road



Waterton Road

\*pictures taken during count period

The number of vehicles utilizing Roxborough Park Road are very low; no other landowners front the length of the proposed closure other than Sterling Ranch, LLC; and all other users in the immediate vicinity of this closure have closer and more-direct access to Titan Road. This will minimize the inconvenience of the closure. The improvements to Roxborough Park Road will provide many needed benefits to the roadway and the adjacent East Willow Creek drainageway/floodplain. This extended closure will allow Sterling Ranch to accomplish these upgrades in the safest and most efficient manner possible - and allow traffic circulation to resume upon their completion.

On behalf of Sterling Ranch, LLC, I would like to thank you for your partnership and your consideration. If you have any additional questions, please contact me at <a href="mailto:kevin.johnk@sterlingranchcolorado.com">kevin.johnk@sterlingranchcolorado.com</a> or at (720)224-2423.

Sincerely,		
Kevin Johns	2/13/2024	
Kevin Johnk, Director of Engineering	(Date)	
Sterling Ranch, LLC		
Attachments:		

Daily Counts on Roxborough Road

Directional Counts on Roxborough Road

