



**GREEN INTERNATIONAL AFFILIATES, INC.**

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August 28, 2017

Mr. Michael Kulesza, Chairman  
Zoning Board of Appeals  
Town of Norfolk  
One Liberty Lane  
Norfolk, MA 02056

**Subject: Responses to Comments from Peer Review  
for The Preserve at Abbyville/Abbyville  
Commons Comprehensive Plan  
Dated July 27, 2017**

Dear Chairman Kulesza:

In response to peer review comments prepared by BETA Group, Inc. (BETA) for the Board in a letter dated July 27, 2017, Green International Affiliates (Green), is pleased to submit the following responses on behalf of the Applicant and pertaining to the comprehensive plan for the The Preserve at Abbyville and Abbyville Commons projects in Norfolk, MA. Green identified the traffic-related comments, which here are repeated in bold and followed by the relevant response. The responses also take into account the following:

- Response to comments letter prepared by UCI, dated June 30, 2017.
- 'The Preserve at Abbyville' and 'Abbyville Commons', Norfolk, Massachusetts Site Plan Sets, prepared by United Consultants, Inc. revision date July 14, 2017.

The July 27, 2017 Beta comments are also in addition to those contained in the two July 21, 2017 comment letters related directly to the traffic impact studies completed for the proposed development.

- 2. The applicant has confirmed its intention to request that the Town accept the development right-of-ways and roadways at a future date, and has prepared & submitted a right-of-way/roadway summary table and development sketch that depicts the required and proposed right-of-way and roadway widths, as well as which roadways will be designated as one-way. ...**

**Response:** Comment noted; no response necessary at this time.

- 3. We will reserve additional comment [on roadway layout geometry for the internal roundabouts] until such time as we have had the opportunity to hear Green International's presentation at the August ZBA hearing, and will coordinate any resultant comments with the applicant/Green International.**

**Response:** Since the traffic reports and plans were first submitted and based on seeing the Beta comment, Green has conducted an analysis of internal turning movements of fire ladder trucks using AutoTurn software. As a result of our analysis, we have determined that the two circular intersections included in the initial plan submission could be modified to standard roundabout design without too much difficulty. We have provided to the site designer our recommended changes to these locations that would include splitter islands and center island apron. Fire apparatus has been tested with this design and is accommodated. Graphic depictions are attached while the site engineer will be submitting the revised plans under separate cover.

4. **The modifications to the roadways within the dead-end right of-ways conform to our recommendation, provided that the truck turning analysis verifies that the proposed roadways/cul-de-sacs can be accessed and negotiated by the applicable vehicle types and sizes. BETA suggests that various Town entities provide comment regarding the waiver requests for the right-of-way widths, with the observation that any such waivers should account for the realistic land area outside of the paved roadways that will be needed by the Town for regular access and maintenance, if the roads are ultimately to be accepted by the Town.**

**Response:** It is our understanding that the proposed design of the cul-de-sacs meet the town's subdivision design regulations. However, Green has evaluated the internal turning movements using an SU-30 AASHTO standard vehicle and a 40-foot-long fire ladder truck using the AutoTURN 10 simulation software for the cul-de-sacs and "horseshoe" type drives serving several or more homes. Based upon this analysis, Green has recommended relatively minor modifications noted below to the internal roadway geometry and provided these to the site designer. Graphic depictions are also attached.

Green Circle:

A fire ladder truck's wheel path just fits in this cul-de-sac as is currently drawn. There is some body overhang over the curb or driveways.

Thayer Circle:

At the corner of Lot #73, increase the cul-de-sac radius to 48', shift the center of the cul-de-sac to one foot closer to the southwest corner of the house at Lot #73, and use a fillet radius of 30' between the cul-de-sac and the tangent portion of roadway.

Daniel Drive:

At the corner of Lot #114, use a fillet radius of 35' between the cul-de-sac and the tangent portion of roadway.

At Lot #113 there is a 2.5' vehicle body overhang at the driveway; the wheel path remains within the roadway.

Waite Circle:

At the corner of Lot #104, use a fillet radius of 35' between the cul-de-sac and the tangent portion of roadway.

Horseshoes at Lots #52-55, Lots #56-58:

The outer corner path radius of the fire ladder truck's tightest turn is about 44' (for an 88.1' diameter). Hence, the radius of the horseshoes need to be at least 44.1' wide unless they are reconfigured to significantly flatten out the curves.

As indicated above, the revised plans will be submitted under separate cover from the site engineer.

5. **With the lack of pedestrian and bicycle facilities provided along Park Street between Bush Pond Road and Lawrence Street combined with the high number of vehicles traveling faster than the posted speed limit (85th percentile speeds up to 8 mph above posted speed limit), it is recommended that the Applicant coordinate with the Norfolk Planner, Director of Public Works, and Police Department in determining speed reduction measures that should be considered.**

**Response:** The applicant will review with Town officials potential actions that could be considered along Park Street in this specific area.

Mr. Michael Kulesza, Chairman  
August 28, 2017

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Again, we believe all pertinent traffic related questions, comments and requests have been responded to in a sufficient manner. Should the Board have any further questions, we would be happy to discuss.

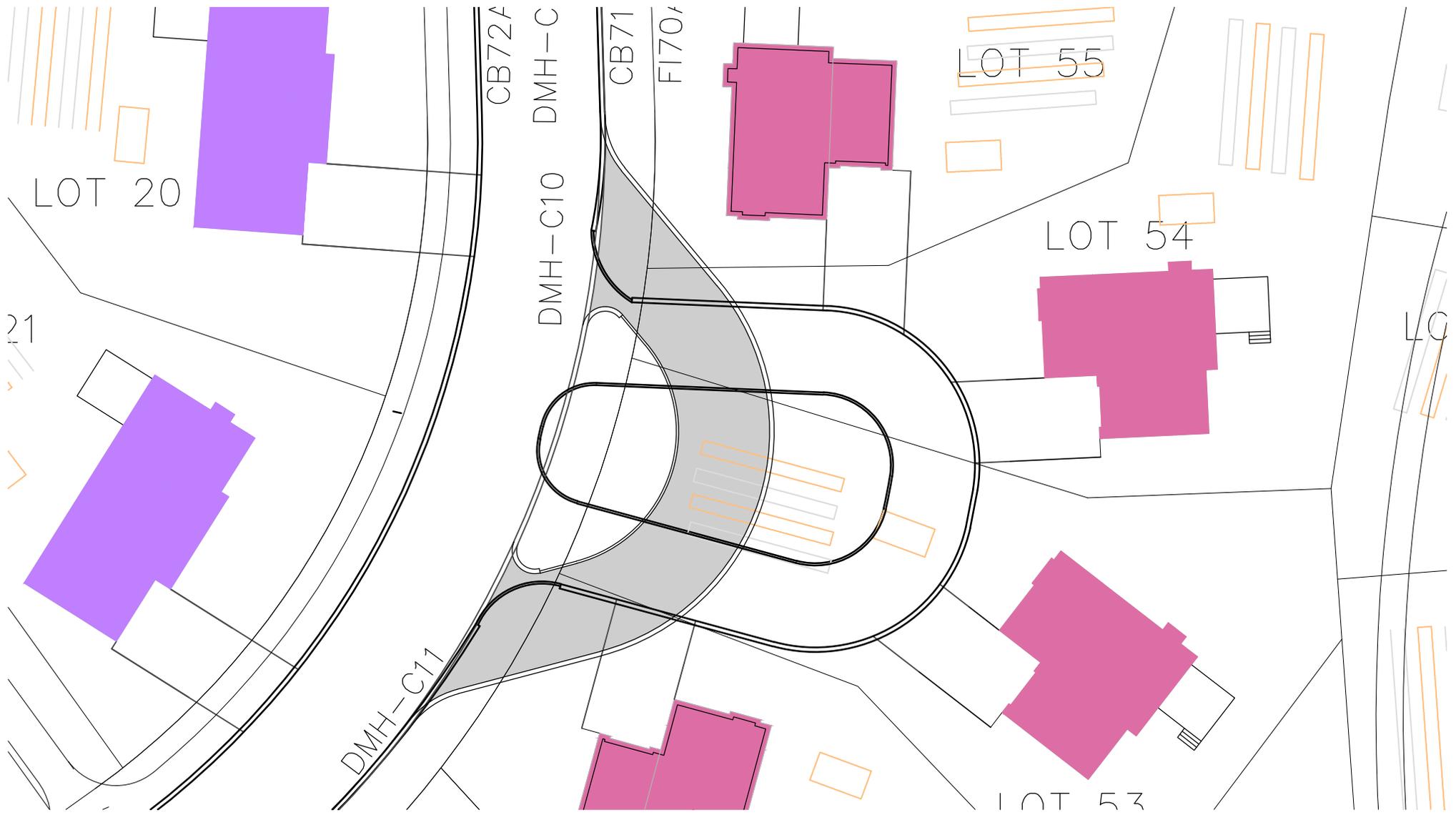
Sincerely,  
**GREEN INTERNATIONAL AFFILIATES, INC.**

*William J Scully*

William J. Scully, P.E.  
Director of Transportation Planning

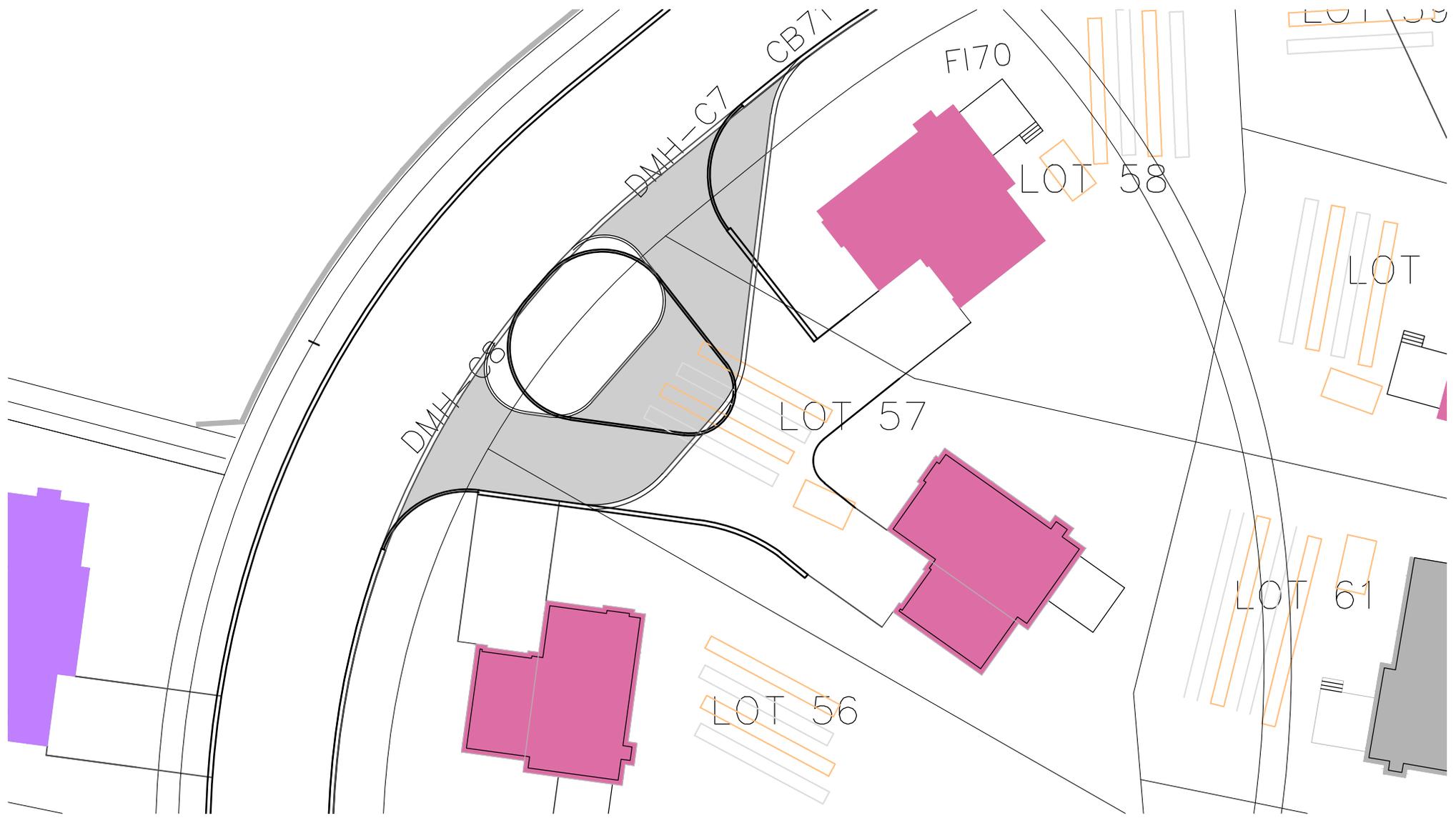
Cc: T. DiPlacido  
J. Smolak  
Beta Engineering

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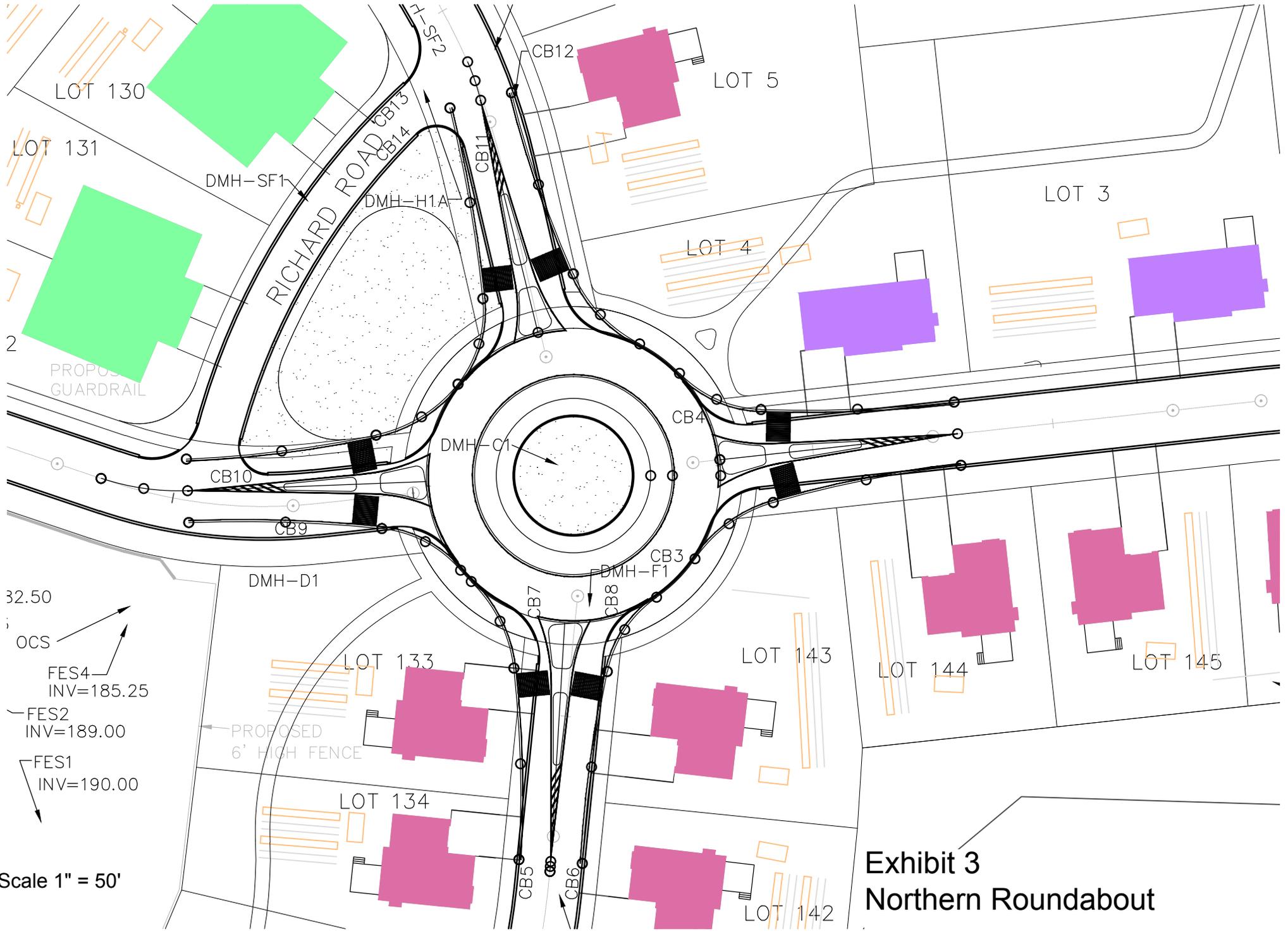
Scale 1" = 30'

Exhibit 1  
Lots 52-55 Access

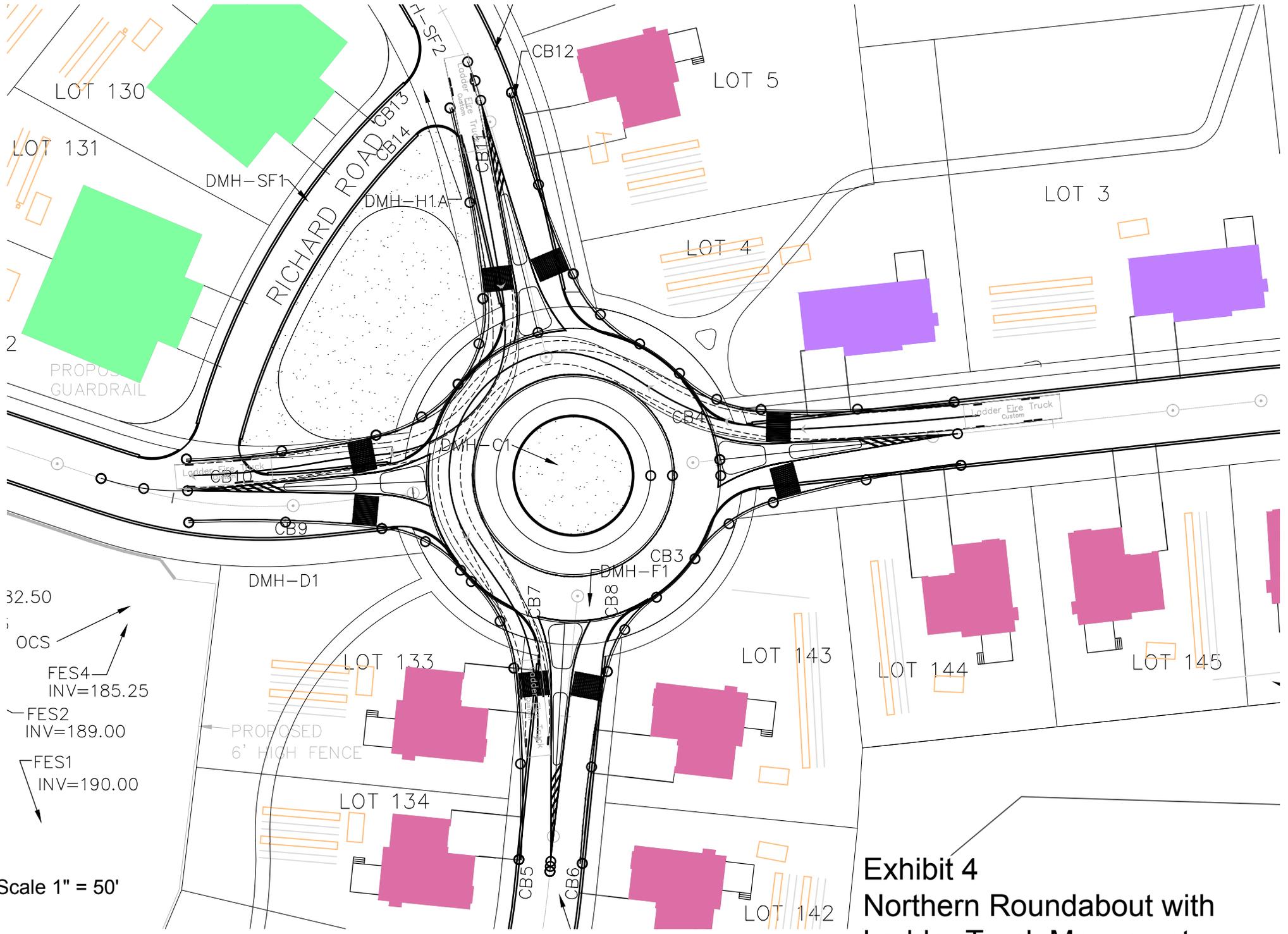


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Exhibit 2  
Lots 56-58 Access



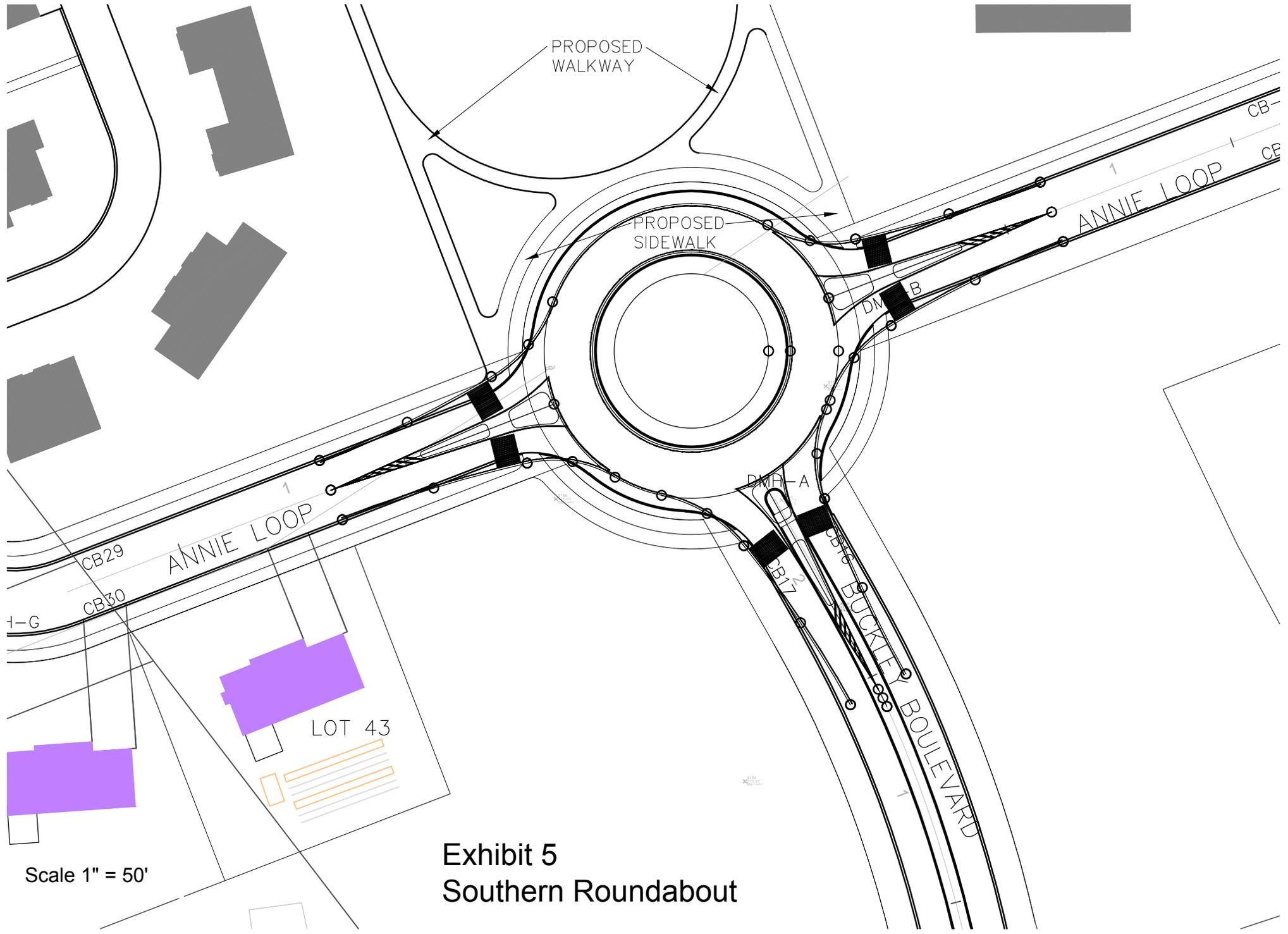
**Exhibit 3**  
Northern Roundabout



32.50  
 OCS  
 FES4  
 INV=185.25  
 FES2  
 INV=189.00  
 FES1  
 INV=190.00

Scale 1" = 50'

**Exhibit 4**  
**Northern Roundabout with**  
**Ladder Truck Movements**



PROPOSED WALKWAY

PROPOSED SIDEWALK

ANNIE LOOP

ANNIE LOOP

BUCKLEY BOULEVARD

LOT 43

Scale 1" = 50'

### Exhibit 5 Southern Roundabout