



Cottonwood Municipal Airport
MASTER PLAN UPDATE

Master Plan Advisory Committee
Meeting #3

AGENDA

- Team Reintroductions
- Airport Master Planning Process
- Recap: Forecasts & Facility Requirements
- Recap: Runway Alternatives
- Apron Development Alternatives
- Hangar Development Alternatives
- Project Phasing
- Next Steps

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TEAM REINTRODUCTIONS

Consultant

Kimley»Horn

Colin Wheeler – Project Manager

John Coliton – Deputy Project Manager

Airport / City of Cottonwood



Ron Corbin – Cottonwood City Manager

Rudy Rodriguez – Cottonwood Deputy City Manager

Jeffrey Cook – Contract/Purchasing Administrator

Master Planning Advisory Committee

- Tina Andres - Experimental Aircraft Association, Verde Valley Chapter
- Brenda Clouston - Owner, Colt Grill
- Scott Ellis - Community Development Director, City of Cottonwood
- Tosca Henry - Council Member, City of Cottonwood
- Tricia Lewis - Tourism & Economic Development Director, City of Cottonwood
- Jim Millis - President, Cottonwood Ranch HOA
- Jim Moeny - Chair, Cottonwood Airport Commission
- Christian Oliva del Rio - President/CEO, Cottonwood Chamber of Commerce
- Vernon Reed - Experimental Aircraft Association, Verde Valley Chapter
- Rob Sweeney - Interim Town Manager, Town of Clarkdale

RECAP: ADVISORY COMMITTEE ROLE & OBJECTIVES

- Provide local and technical expertise
- Facilitate a variety of viewpoints
- Provide individual perspectives on issues
- Review and provide comment on project deliverables



Source: Cottonwood Municipal Airport, 2020.

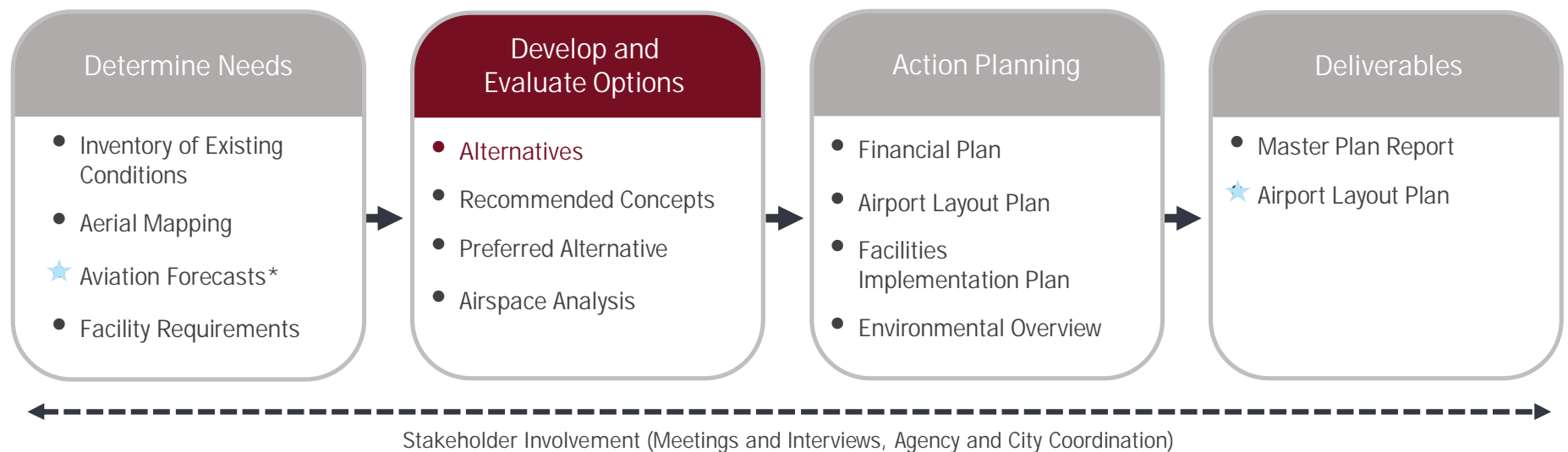
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AIRPORT MASTER PLANNING PROCESS



★ Requires FAA / ADOT Approval

* Aviation activity forecasts were submitted and approved by the FAA in December 2020.

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RECAP: AVIATION DEMAND FORECASTS

Year	Based Aircraft	GA Operations*
2019	64	18,800
2024	69	20,398
2029	75	22,132
2034	82	24,013
2039	89	26,054
AAGR 2019 - 2039	1.64%	1.64%

Sources:

FAA Terminal Area Forecast (issued January 2020).
 FAA Traffic Flow Management System Counts database.
 Cottonwood Municipal Airport Management.
 Kimley-Horn, 2020.

Note: AAGR = Average annual growth rate.

**Based on new operations monitoring equipment (Virtower):*

- Approximately 39,900 annual aircraft operations in 2019
 - 55,300 annual operations are estimated by 2039

RECAP: CRITICAL AIRCRAFT FORECASTS

Existing

ARC:
A-I Small

Cessna Skyhawk 172



Piper Malibu Meridian



Future

ARC:
B-I Small

Cessna Citation I



Beechcraft King Air 90



Piper Cheyenne II



RECAP: FACILITY REQUIREMENTS

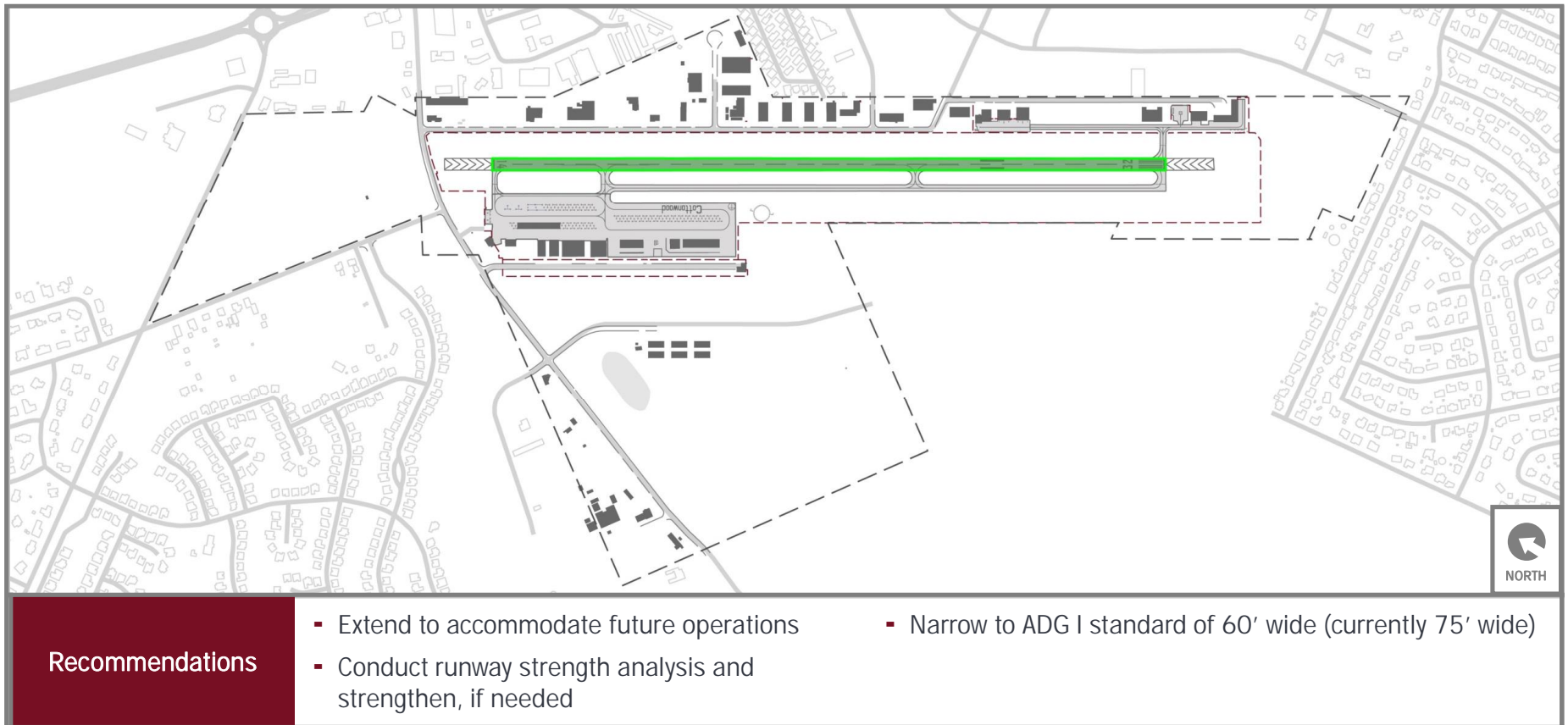
Focus Areas

- Runway length, width, and strength
- Taxiway system
- Runway, taxiway, and taxilane safety areas
- Aircraft parking apron

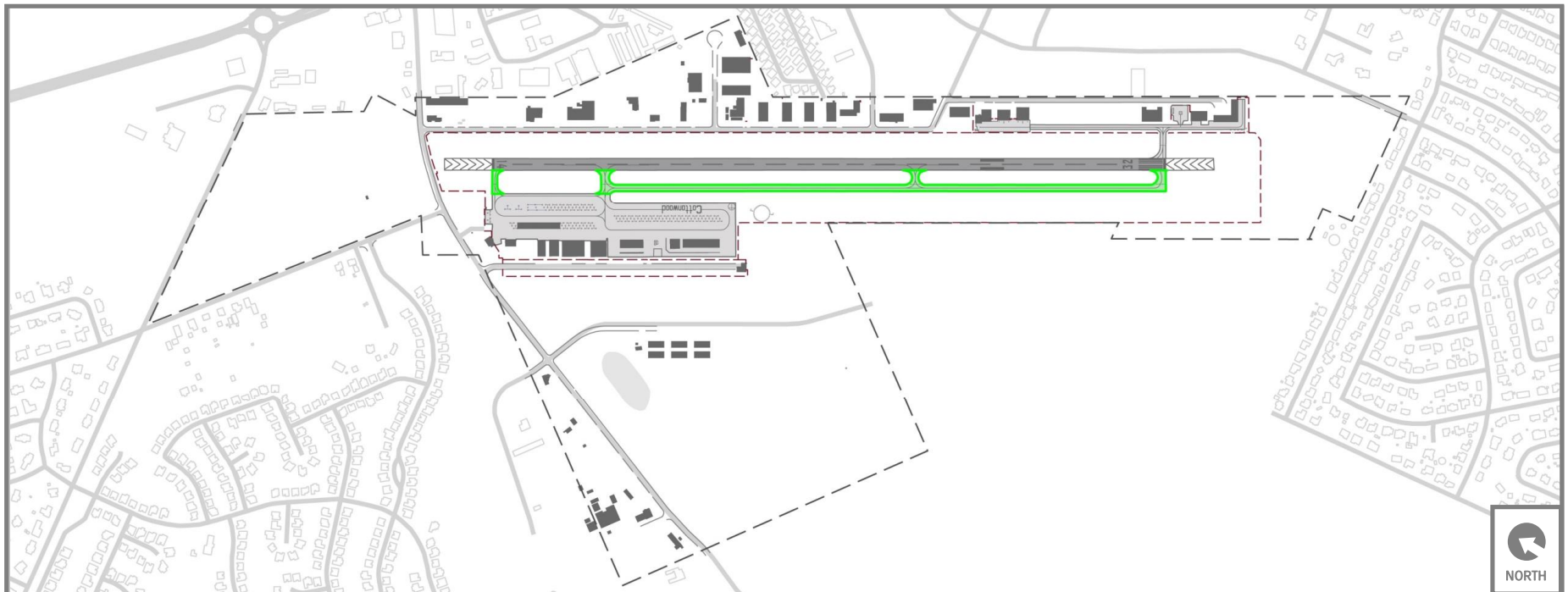


Source: Kimley-Horn, 2021.

RUNWAY LENGTH, WIDTH & STRENGTH



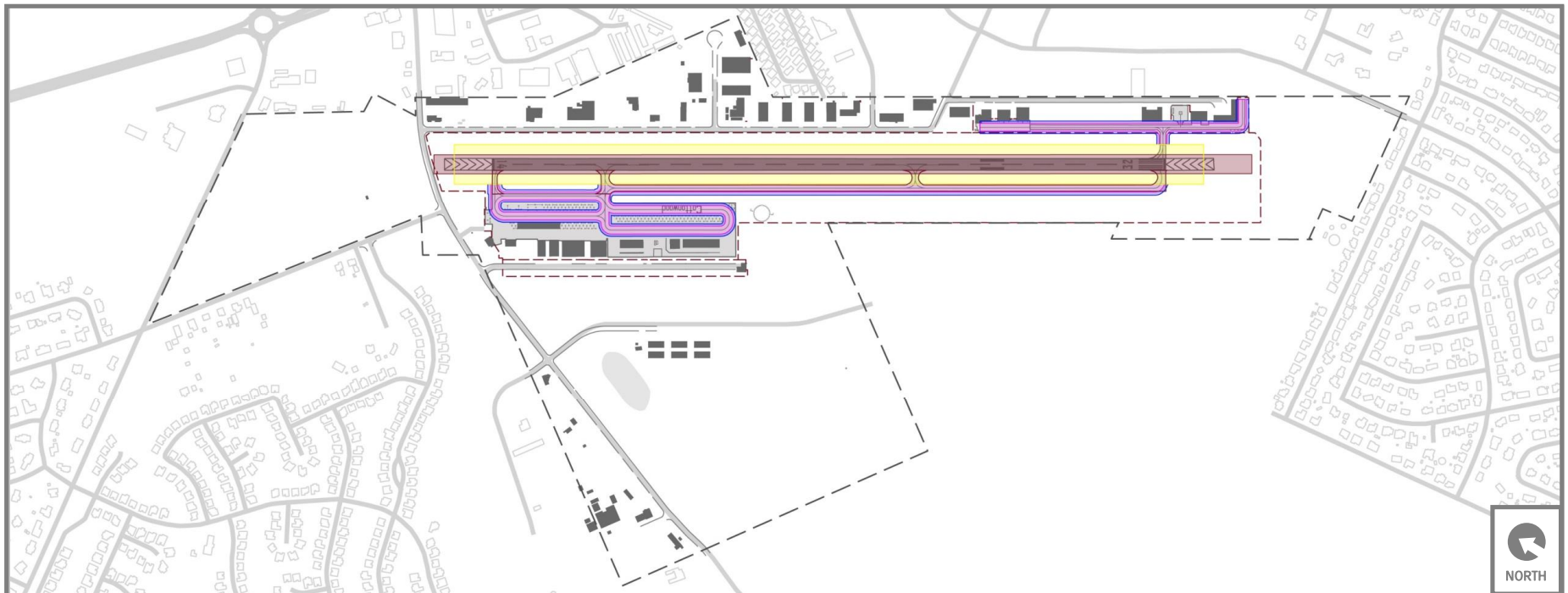
TAXIWAY SYSTEM



Recommendations

- Provide a full-length parallel taxiway (Taxiway A)
- Provide additional taxiway connectors to increase airfield efficiency
- Provide a run-up area
- Standardize taxiway geometry (width, fillets)

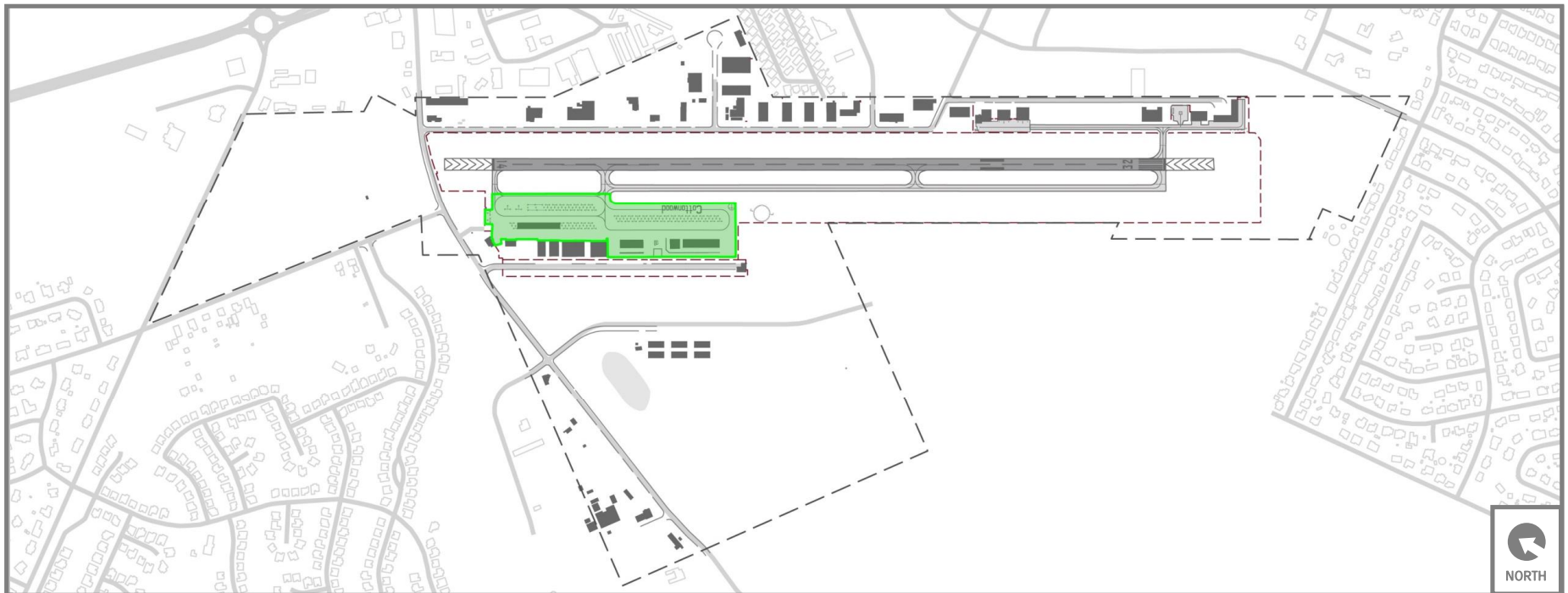
RUNWAY, TAXIWAY & TAXILANE SAFETY AREAS



Recommendations

- Mitigate nonstandard runway safety area (RSA) on Runway 14 end
- Mitigate obstructions to runway and taxiway safety areas (power control units, aircraft hangars, helicopter parking area, and tie-downs)

AIRCRAFT PARKING APRON



Recommendations

- Reconfigure to accommodate TDG II standards
- Provide additional aircraft storage space (approximately 36,000 SF)
- Relocate and standardize helicopter parking area
- Relocate T-shade
- Relocate fuel tanks

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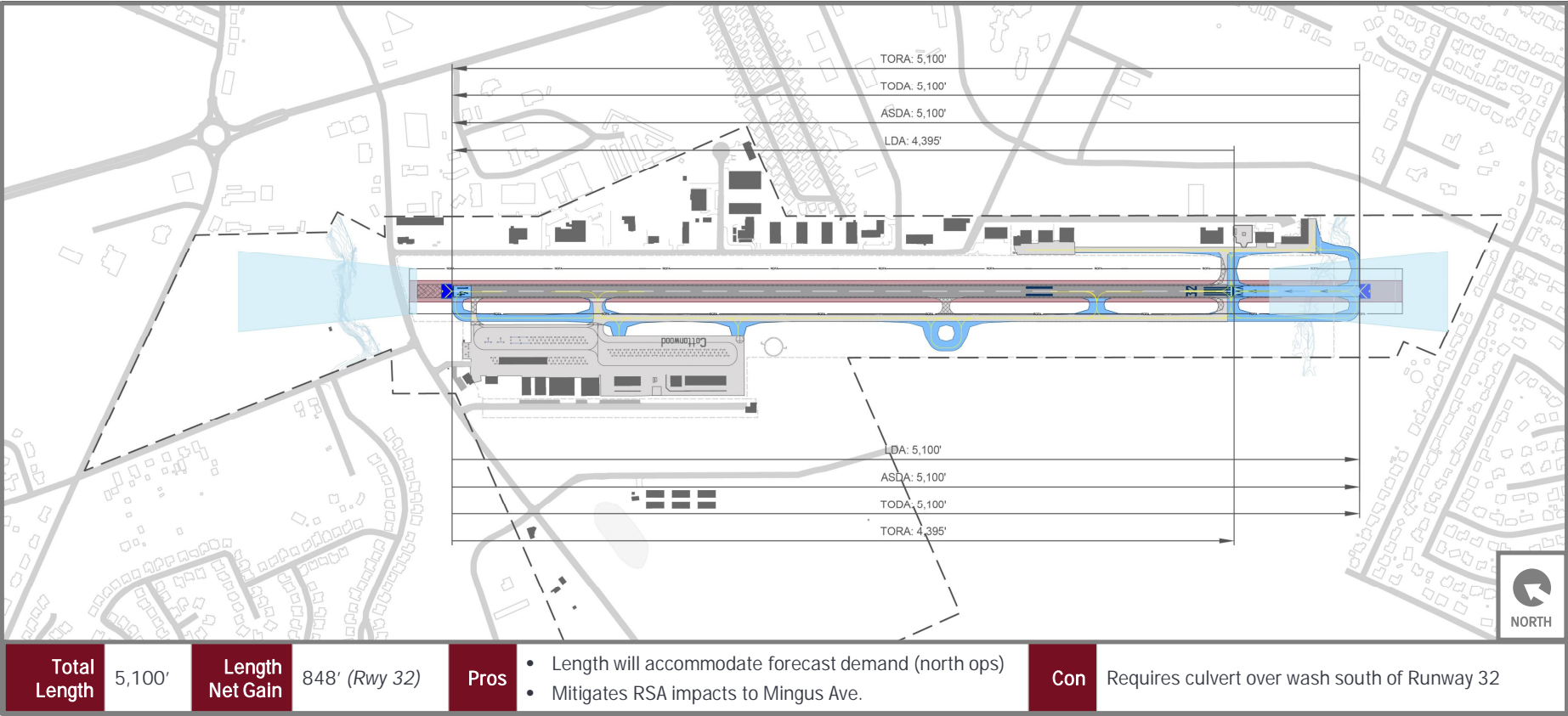
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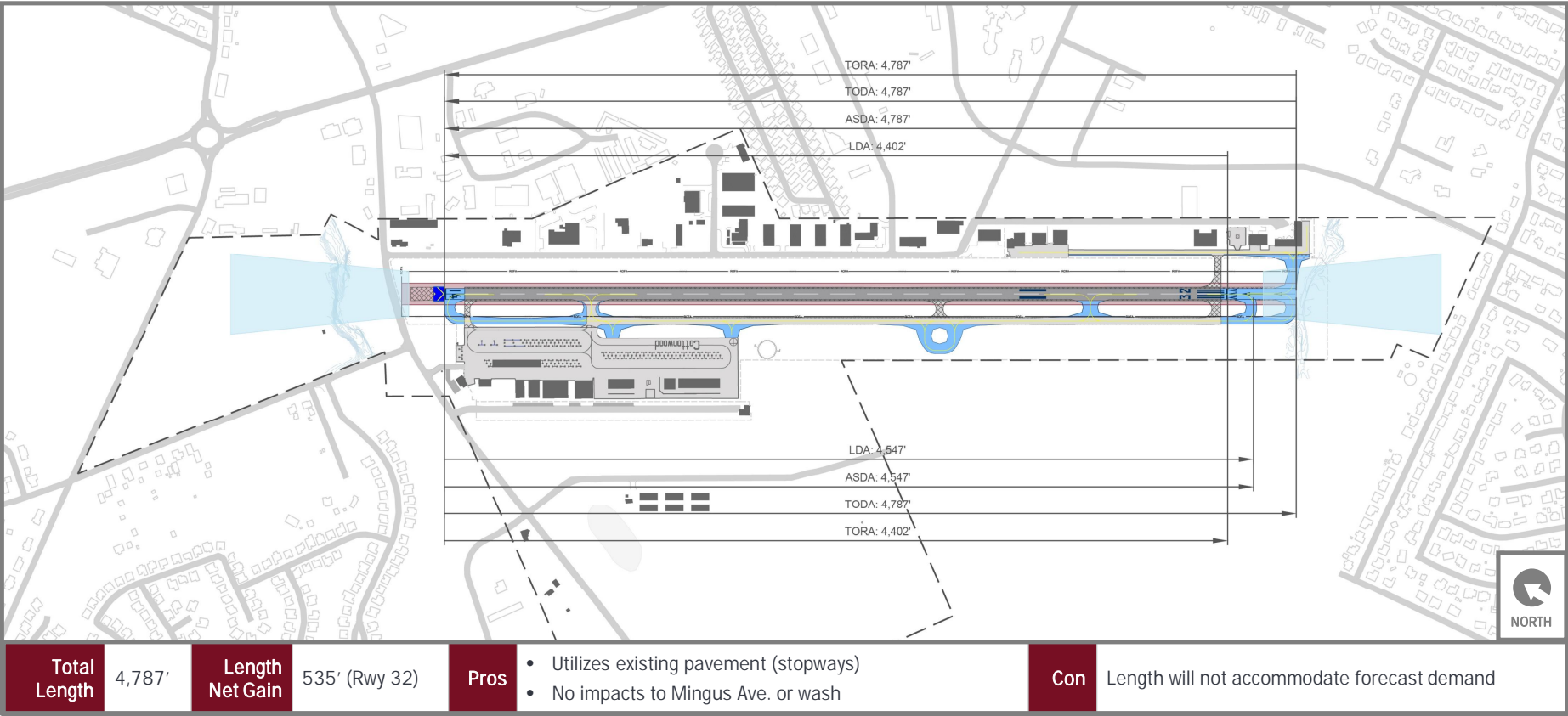
RECAP: RUNWAY ALTERNATIVES

- Runway length analysis recommendation:
5,100 feet
- Standard runway width (B-II Small): 60 feet
- Recommended alternative will influence:
 - Taxiway geometry
 - Aircraft parking aprons and hangars
 - Support facilities
- Considerations:
 - Airport property boundary
 - FAA design and safety standards
 - Compatible land uses:
 - Mingus Ave. north of Runway 14 end
 - Wash south of Runway 32 end
 - Residential land uses south of Airport

RUNWAY ALTERNATIVE: SOUTHERN EXTENSION WITH DECLARED DISTANCES



RUNWAY ALTERNATIVE: MAXIMUM BUILD-OUT WITH NO IMPACTS TO MINGUS AVE OR WASH



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APRON DEVELOPMENT ALTERNATIVES

Objectives

- Mitigate penetrations to taxiway safety areas
- Enhance safety and efficiency of apron circulation for aircraft, ground vehicles, and pedestrians
- Accommodate critical aircraft and forecast demand

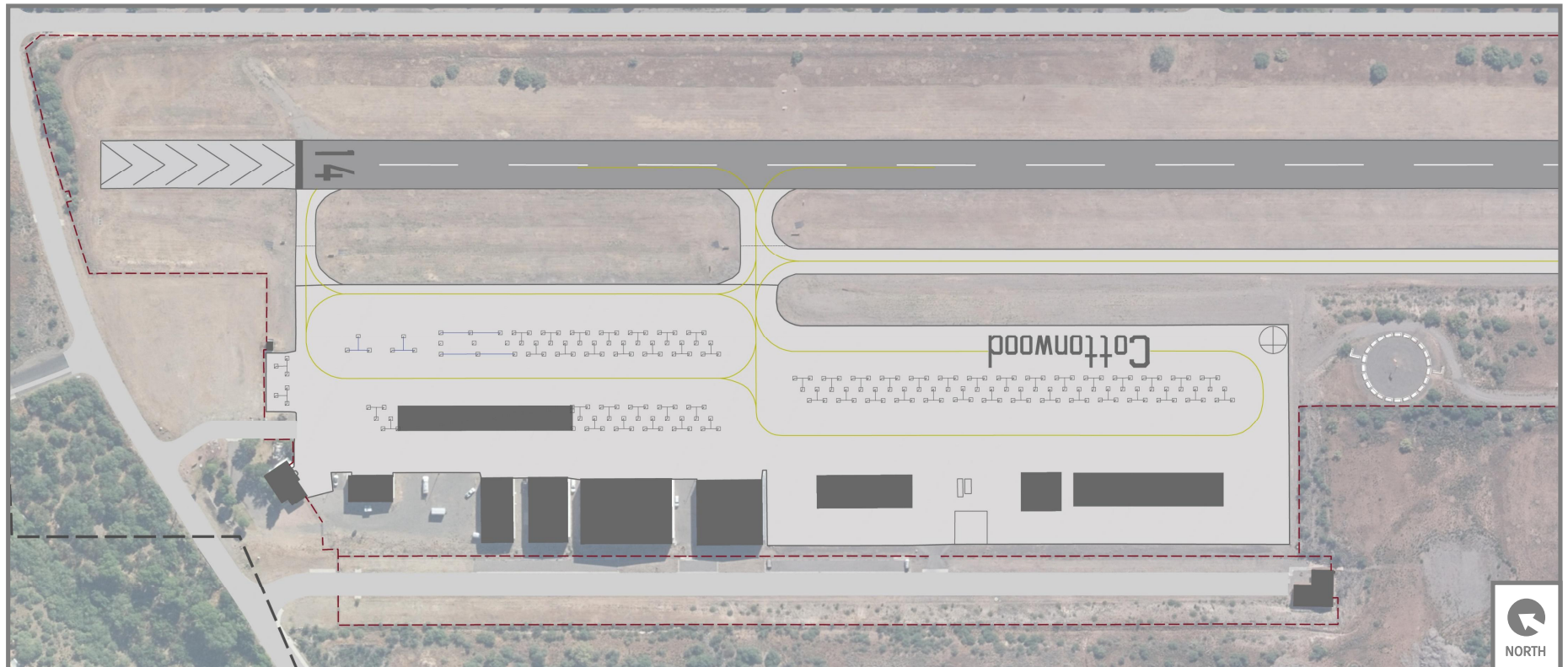
Considerations

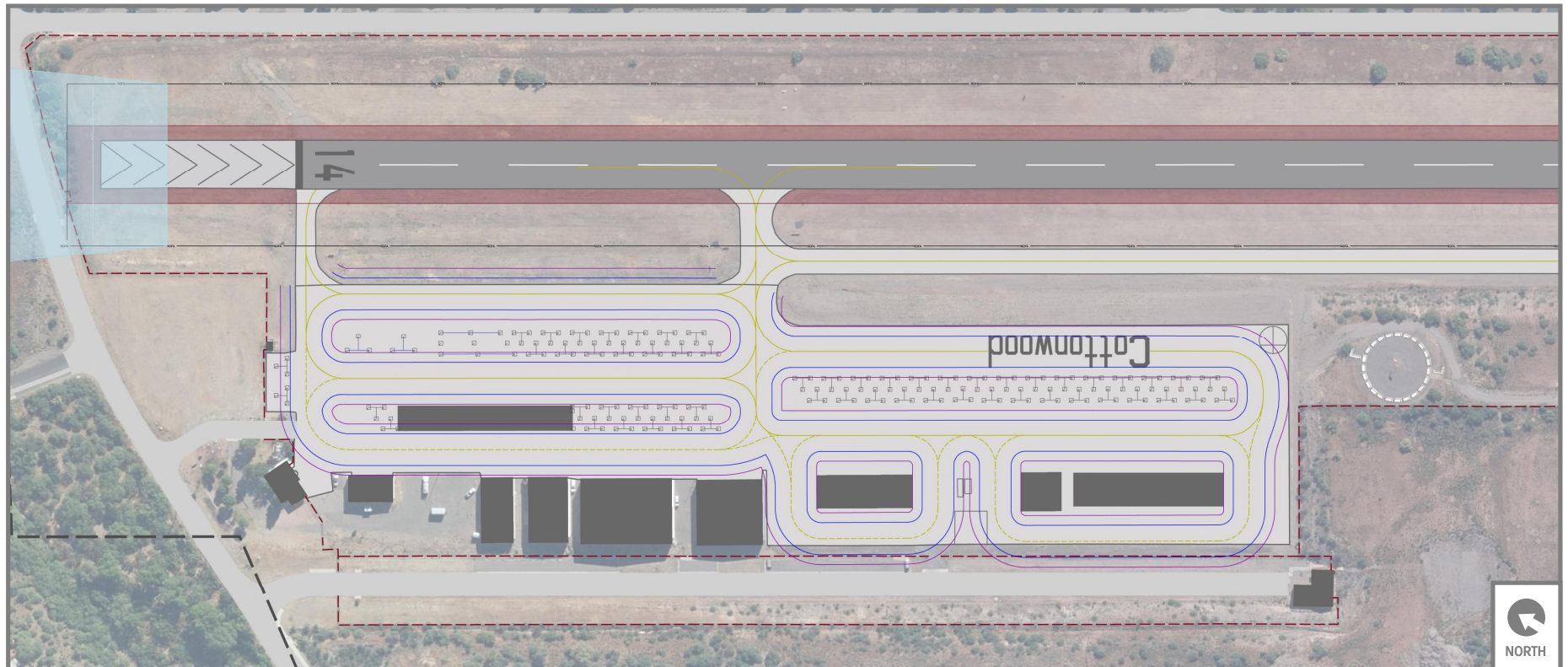
- FAA design and safety standards
- Operational needs of Airport users
- Recommended alternative for Runway 14-32

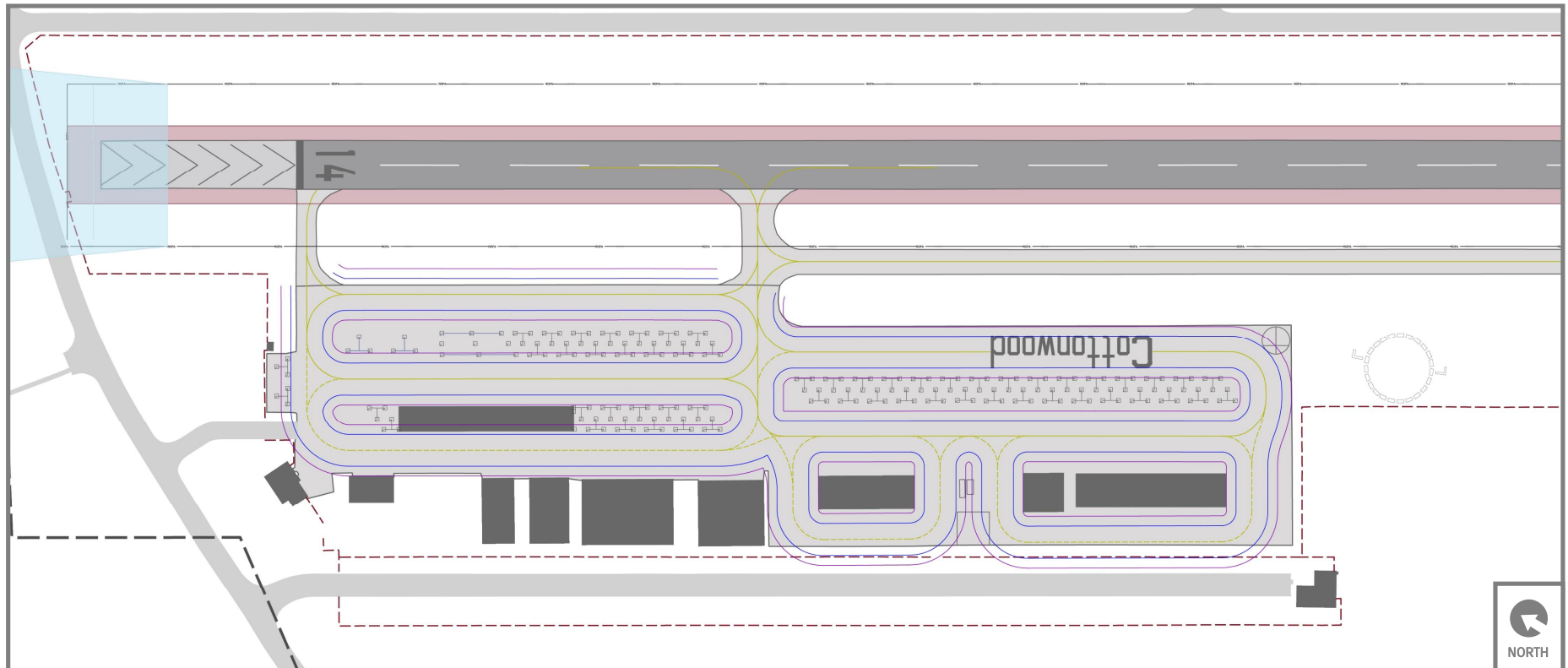


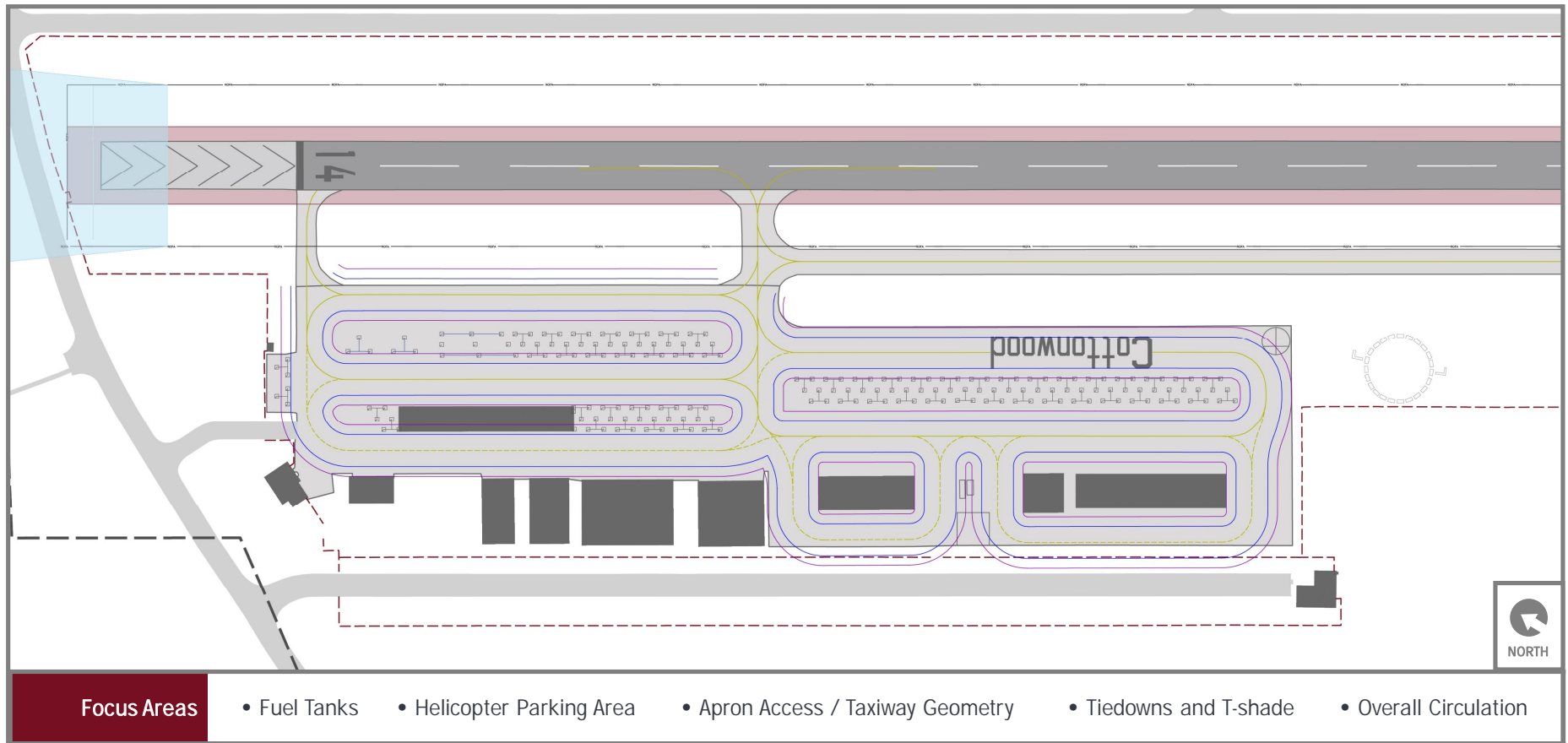
Source: Kimley-Horn, 2021.

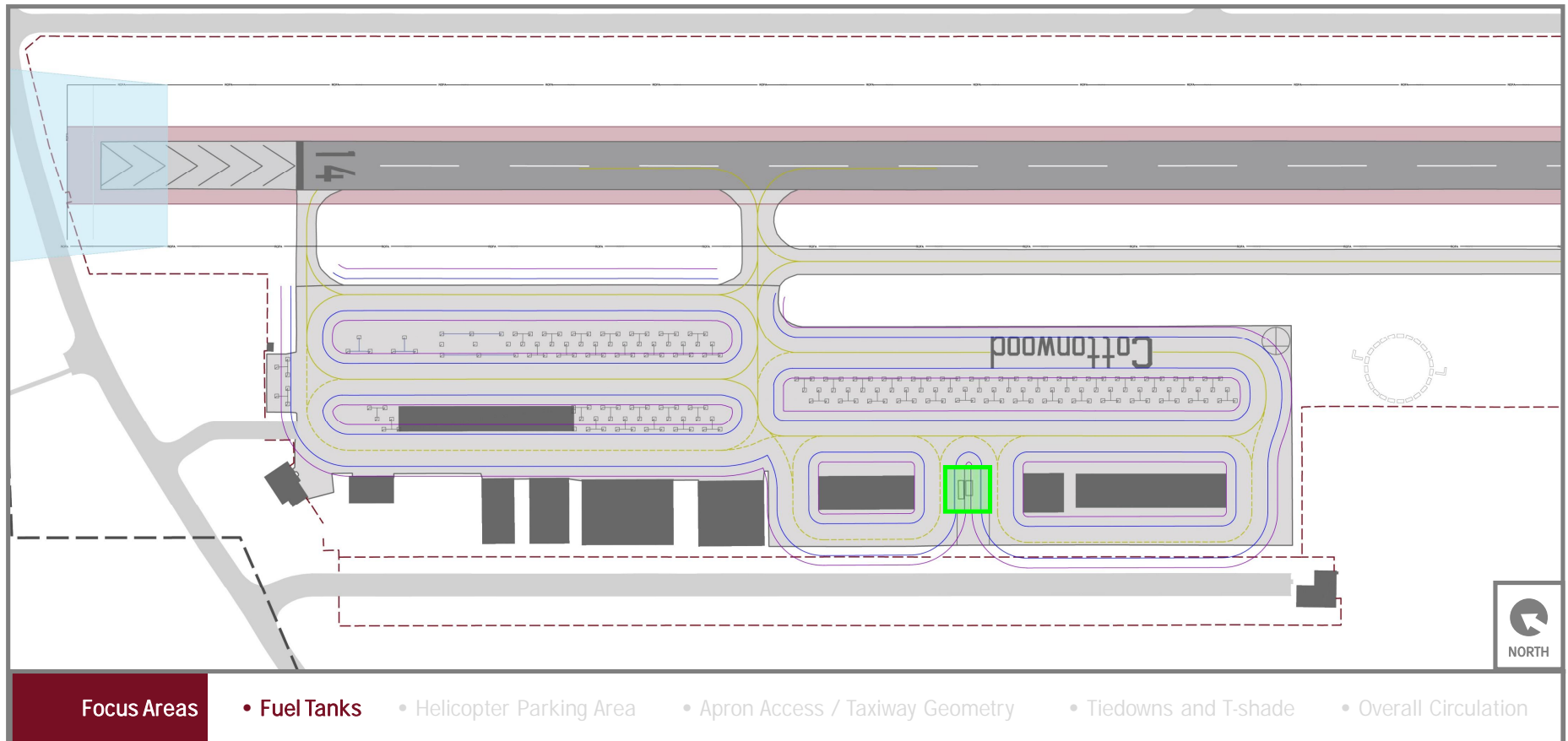


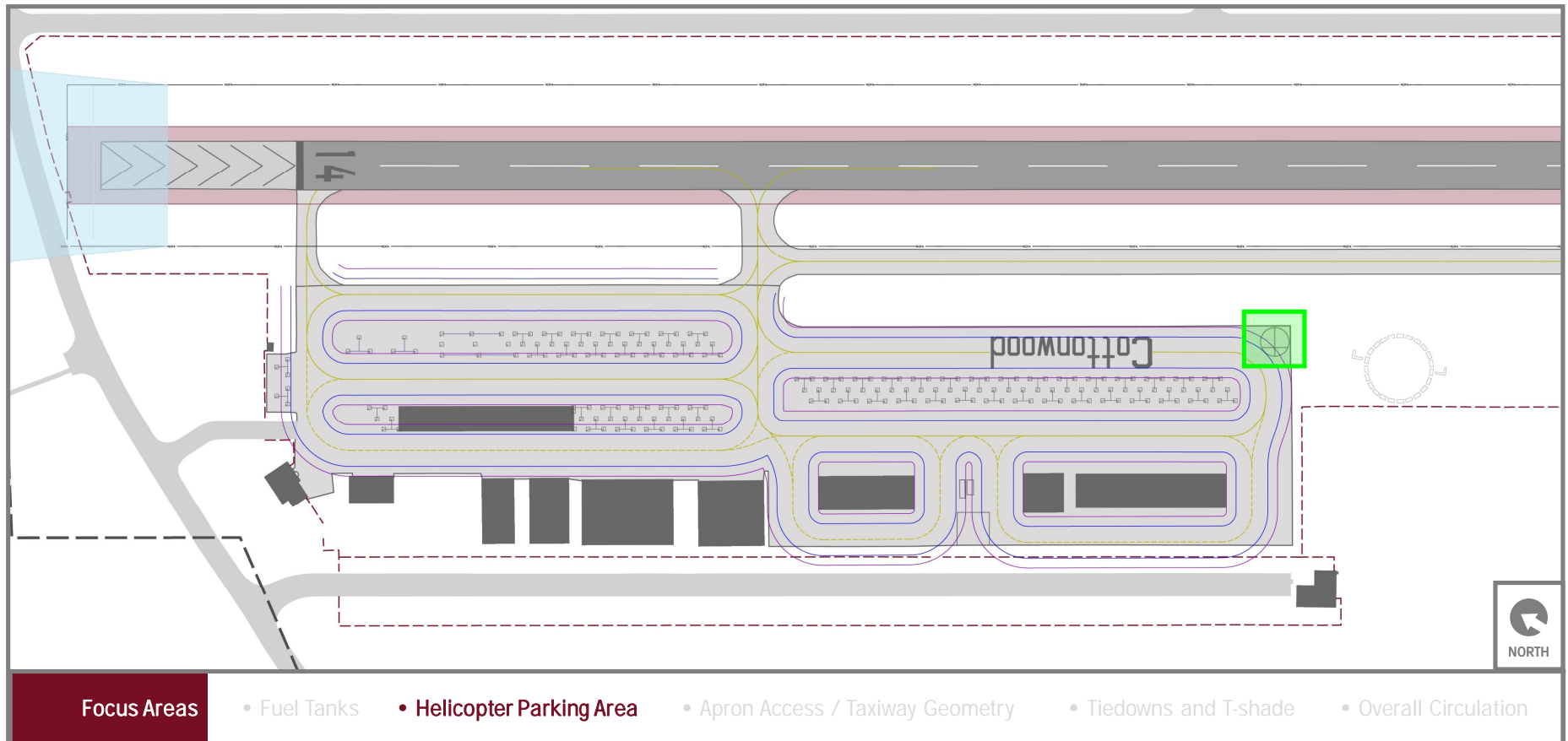


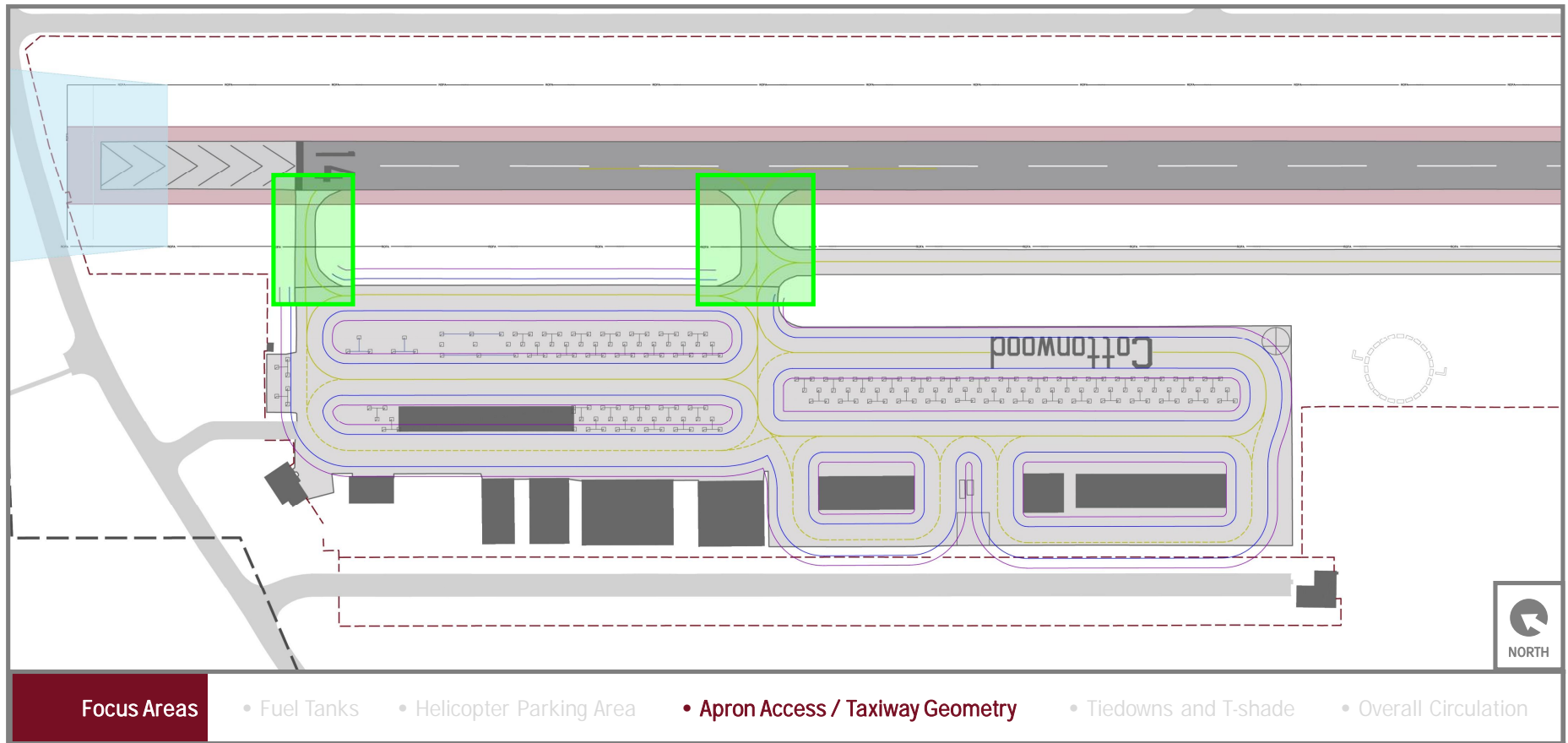


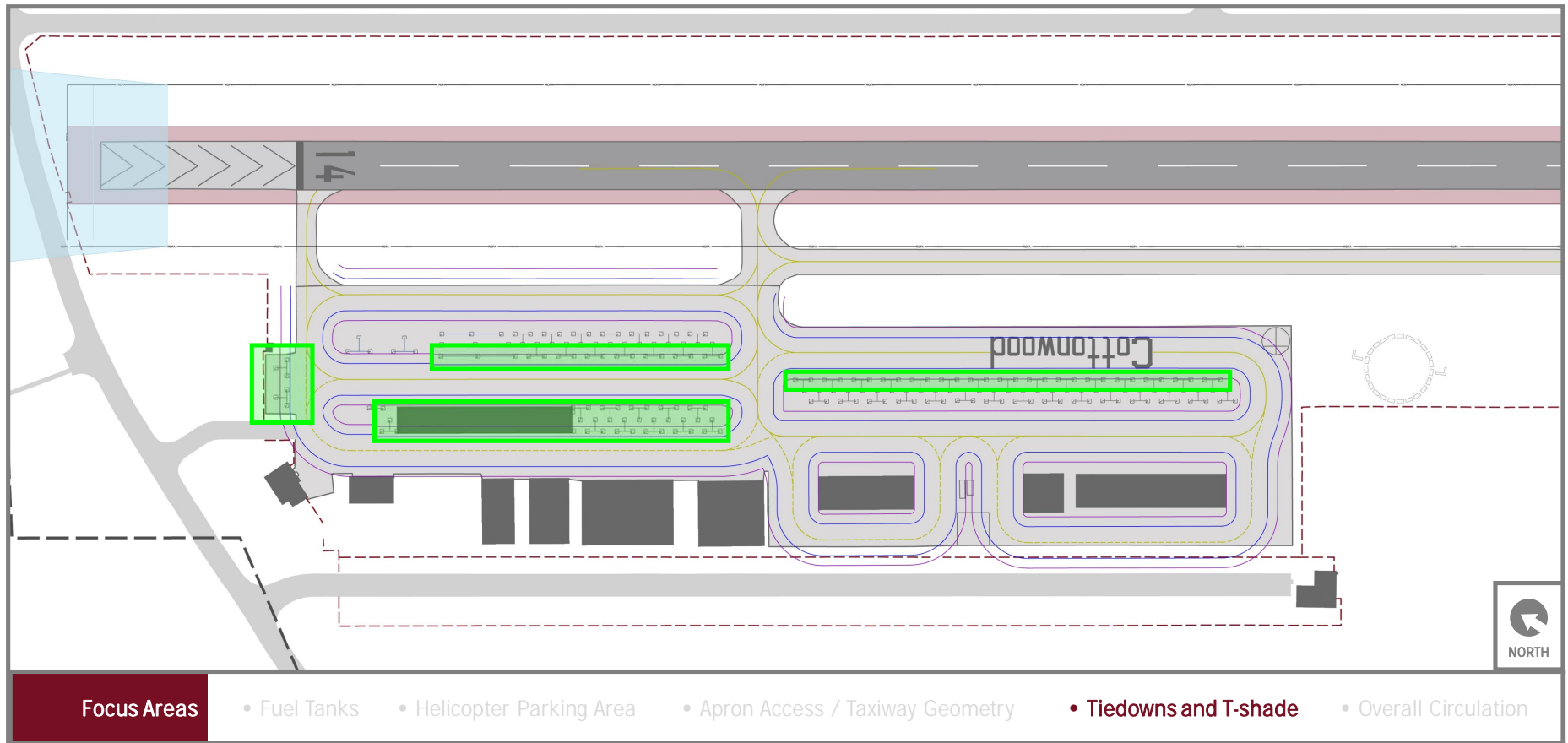


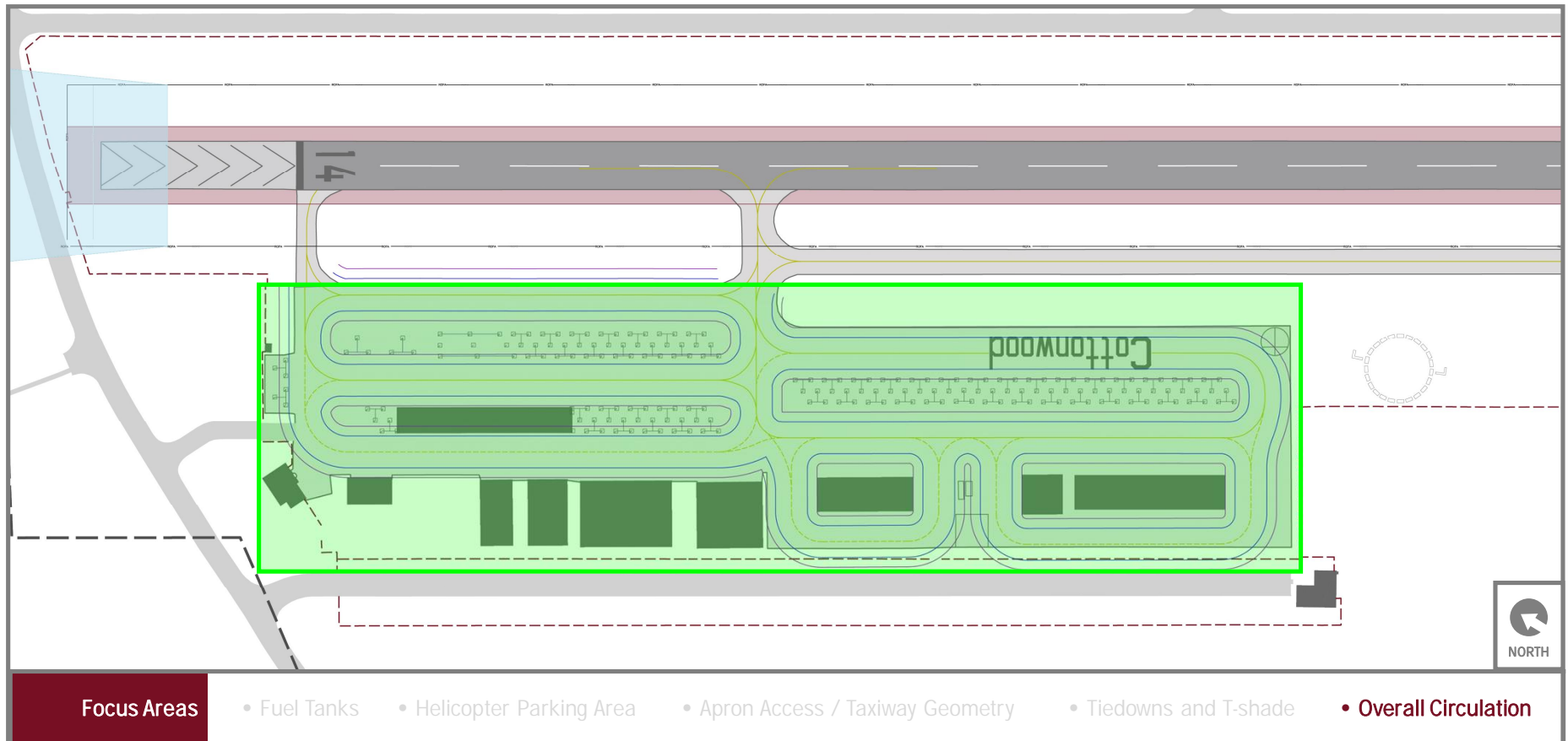


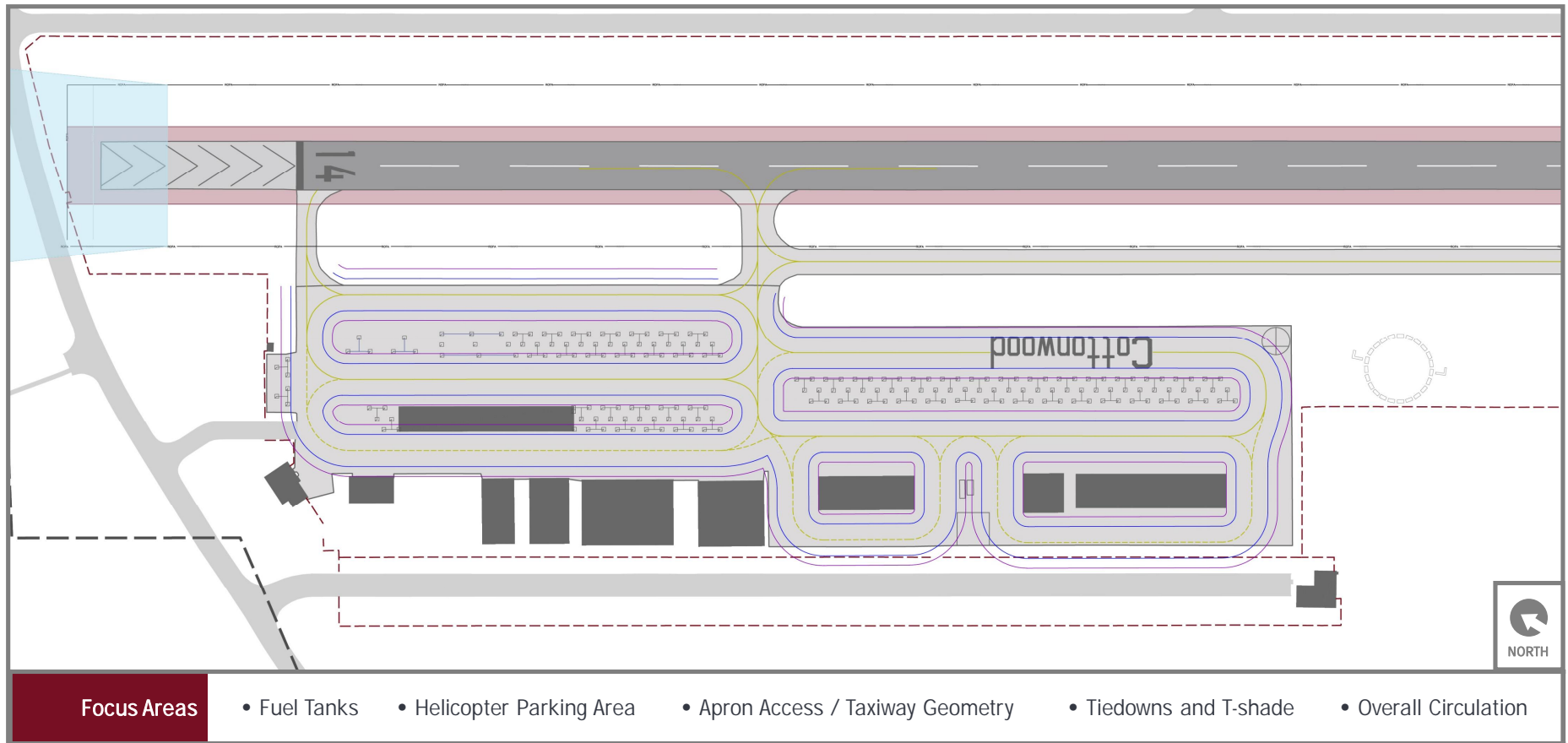


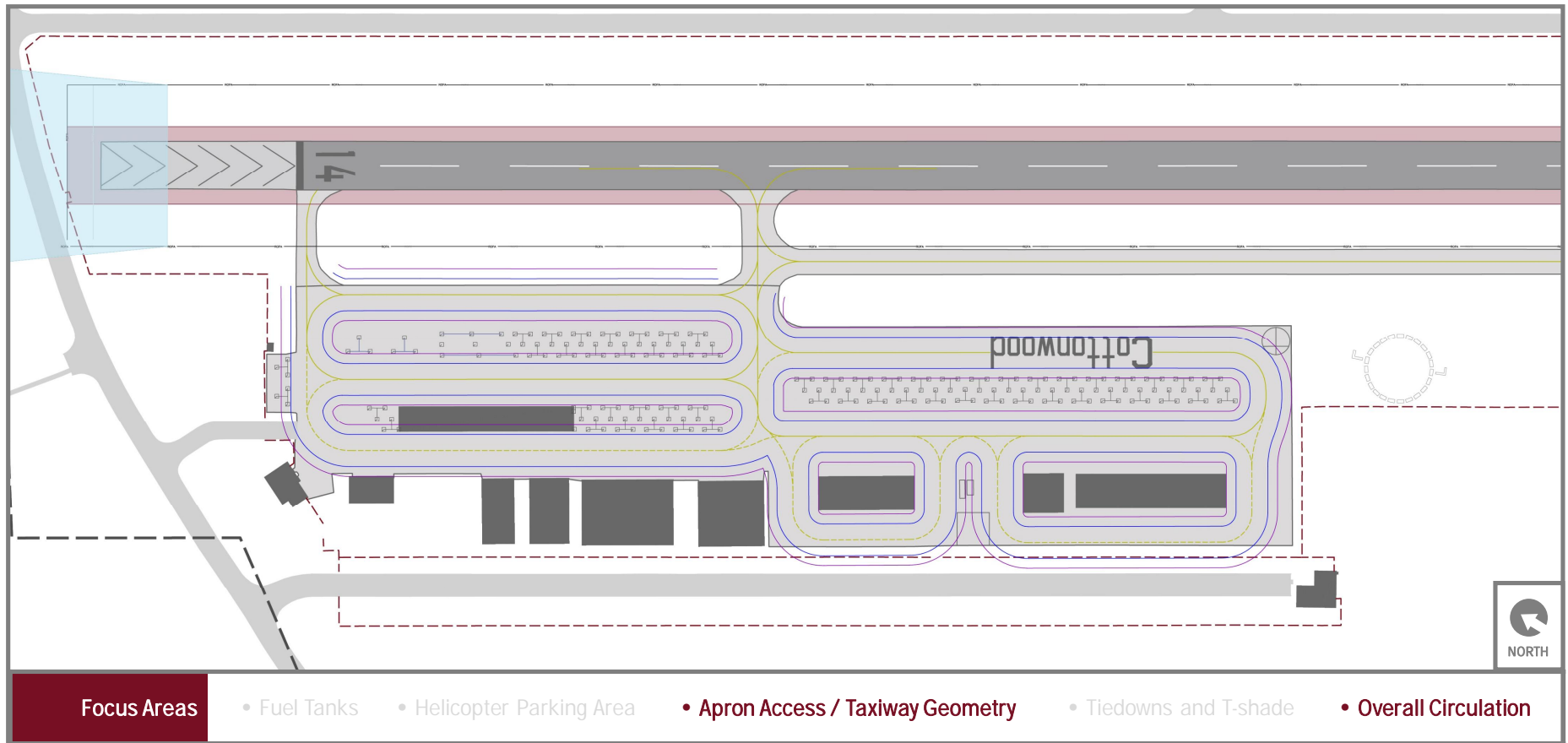


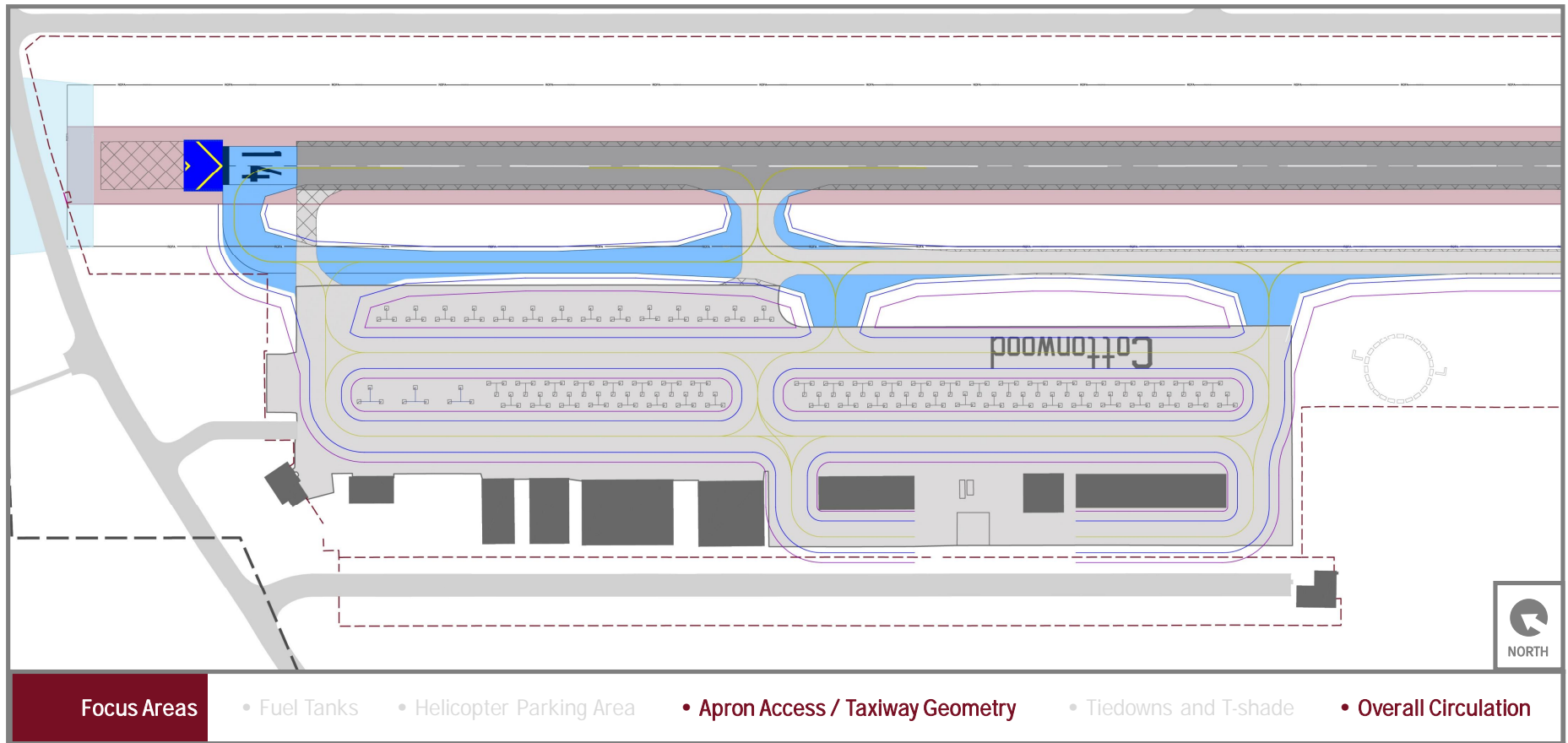




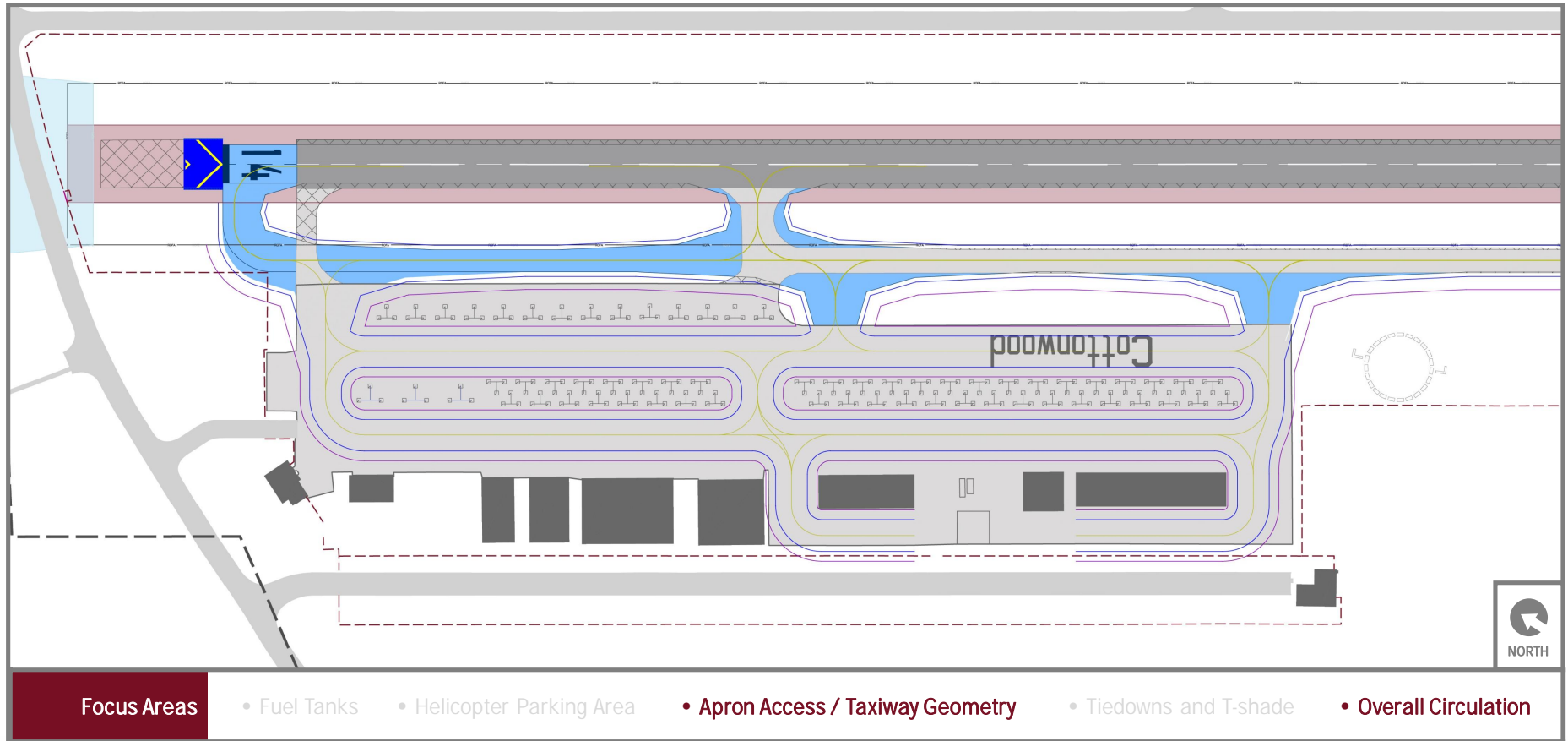




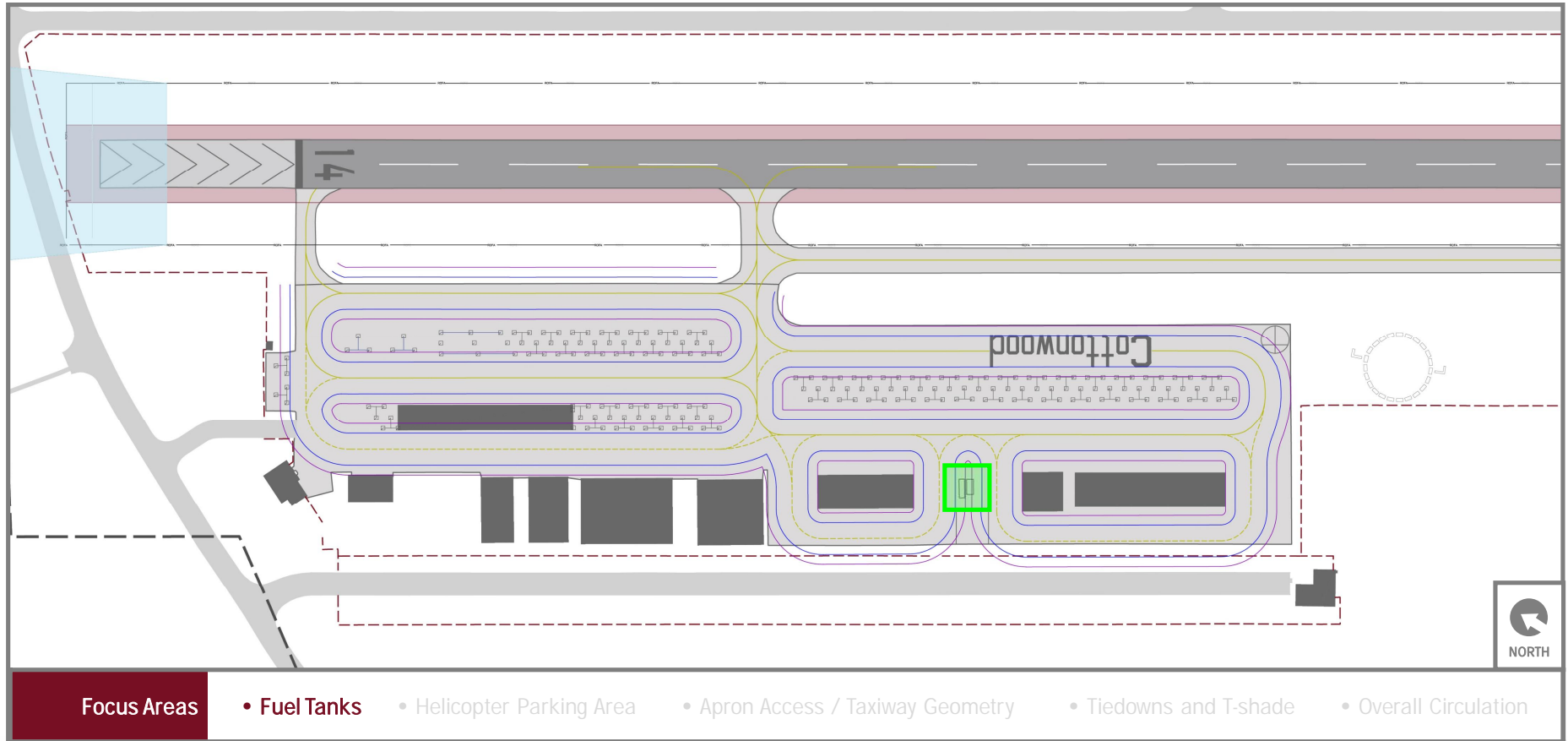




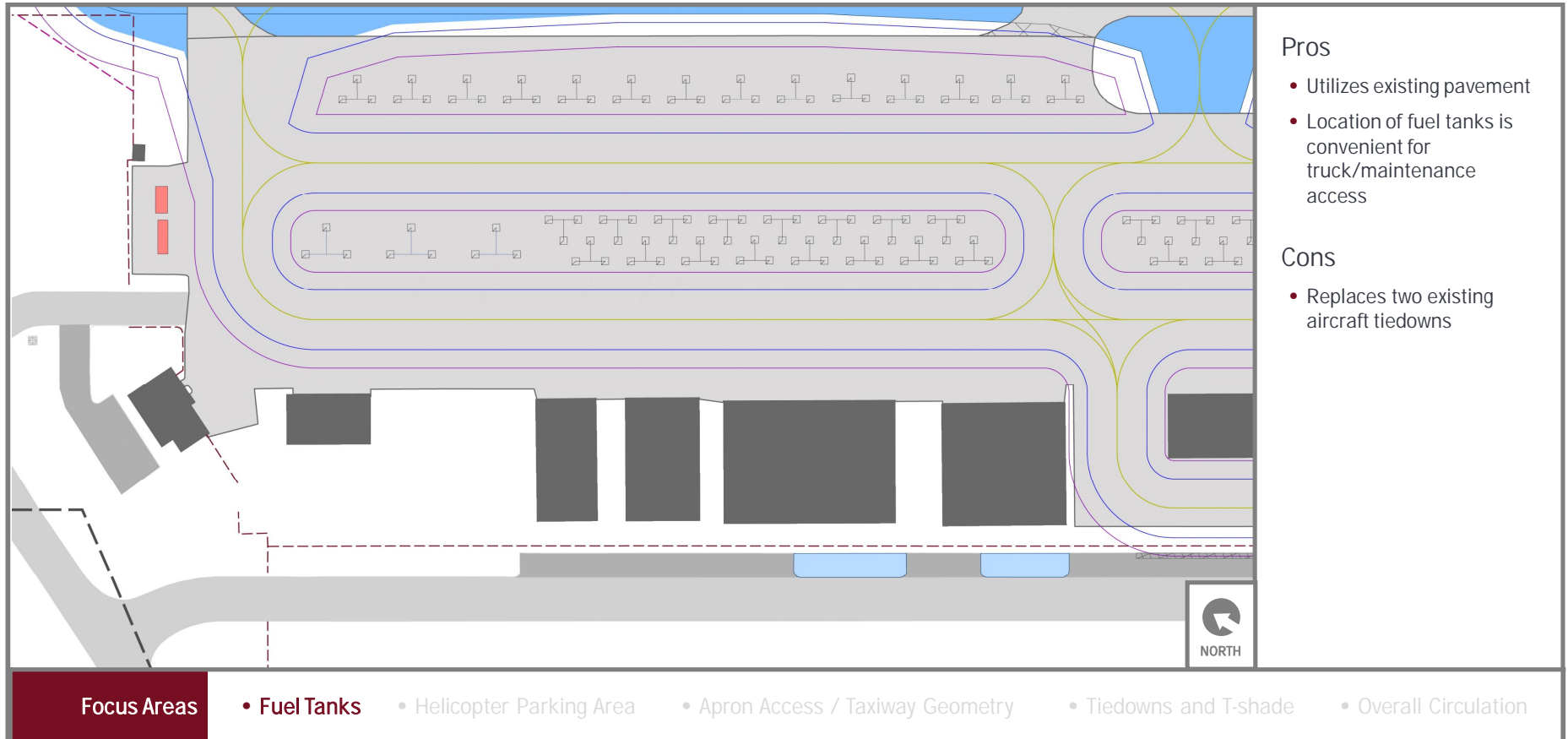
APRON ALTERNATIVES: BASE APRON CONFIGURATION



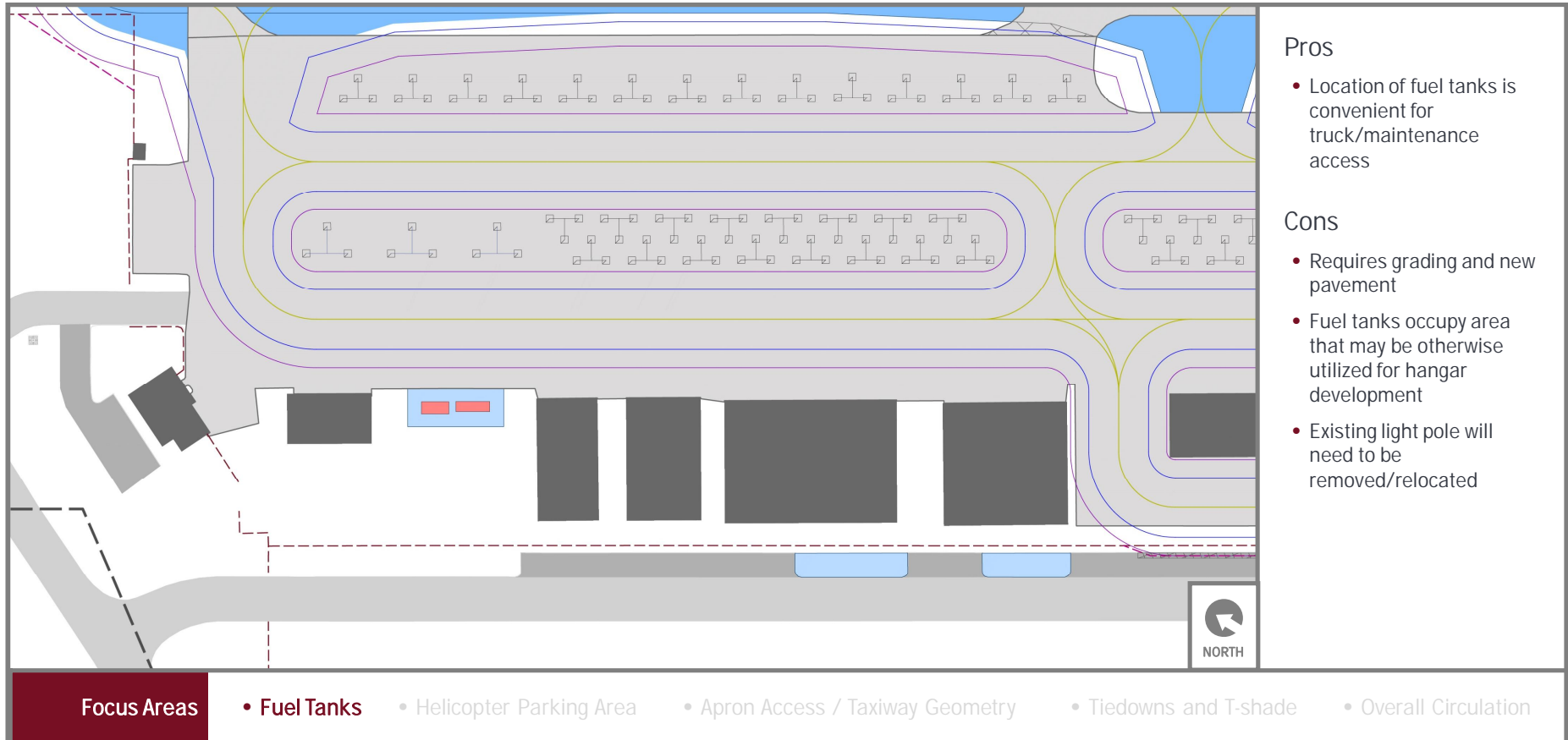
APRON ALTERNATIVES: FUEL TANKS



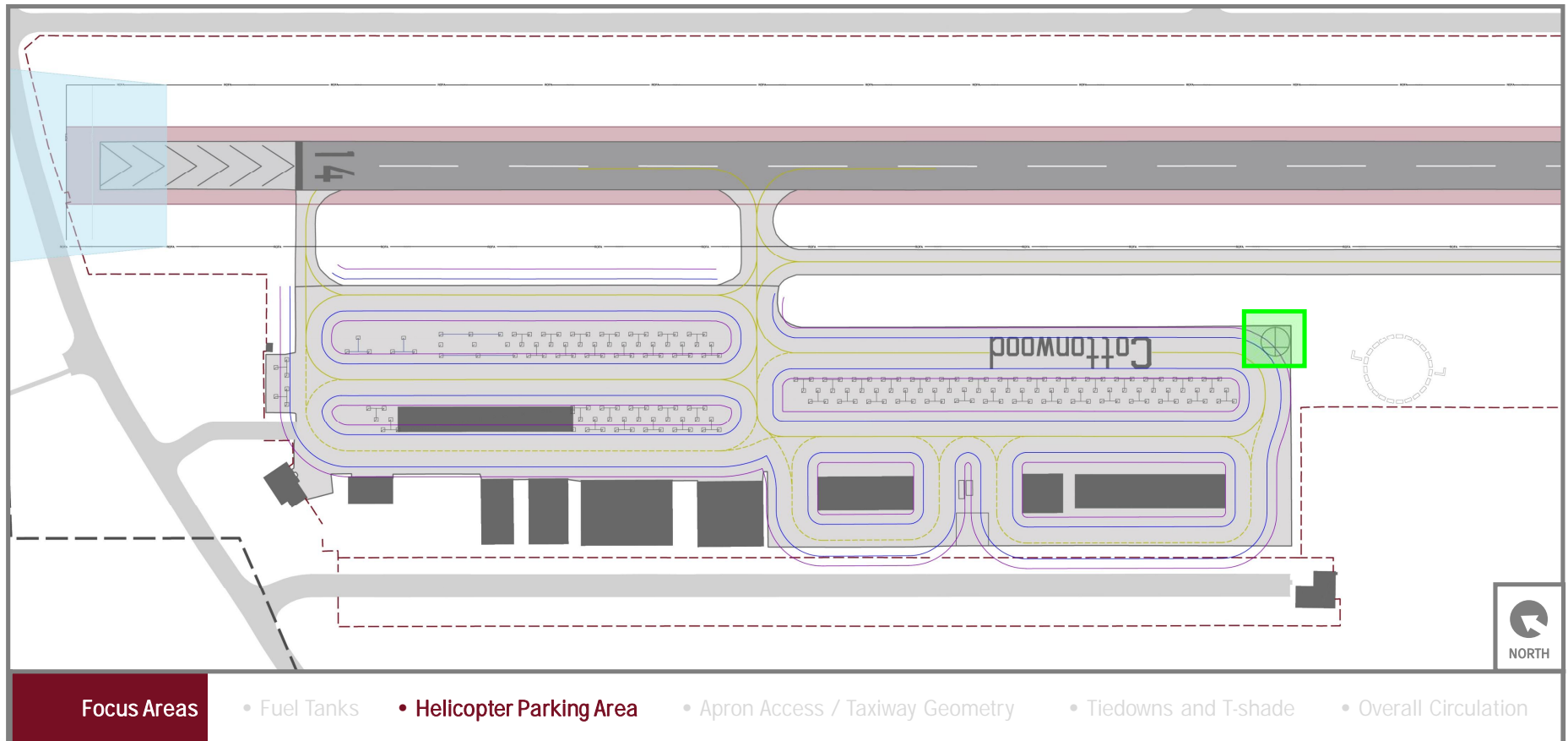
APRON ALTERNATIVES: FUEL TANKS - ALTERNATIVE 1



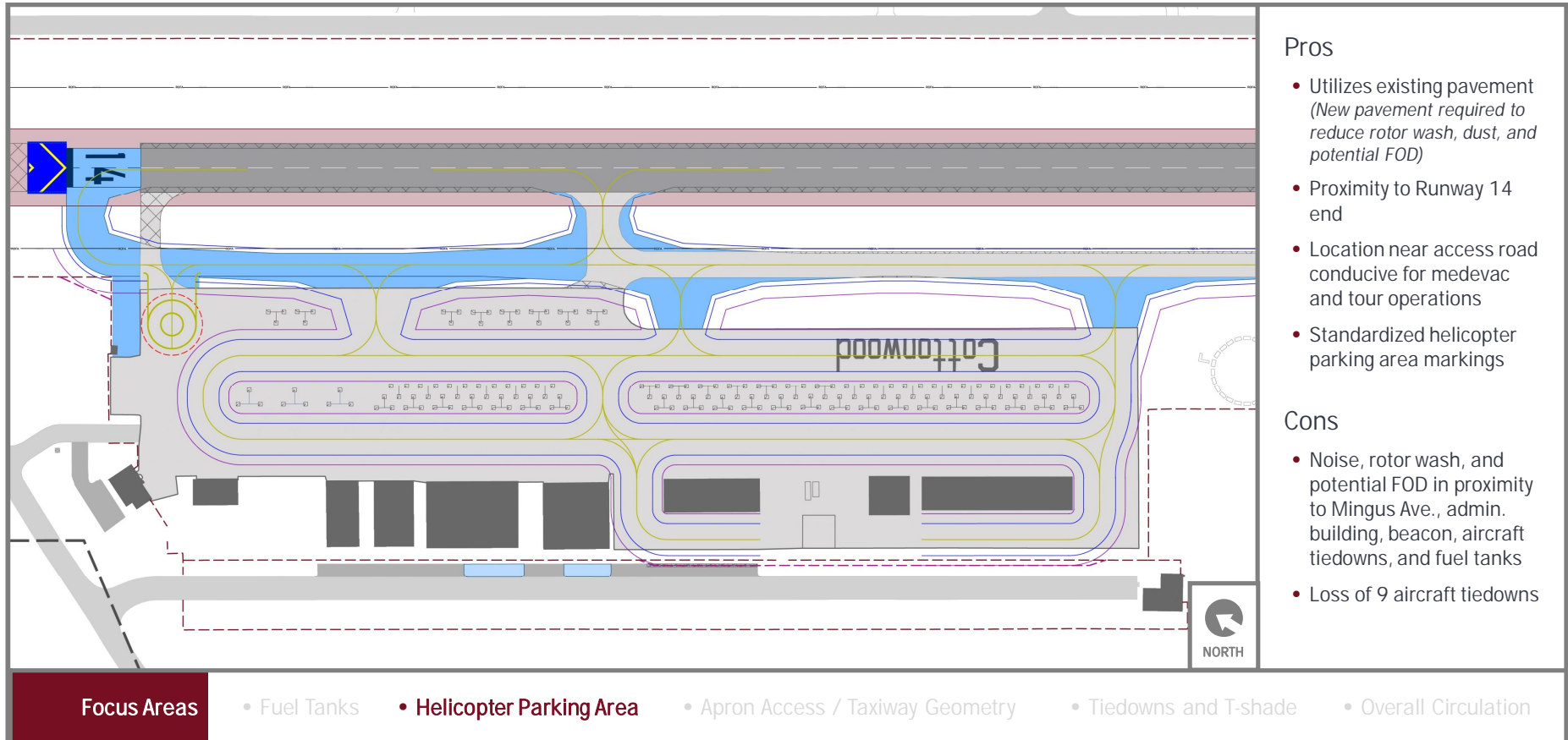
APRON ALTERNATIVES: FUEL TANKS - ALTERNATIVE 2



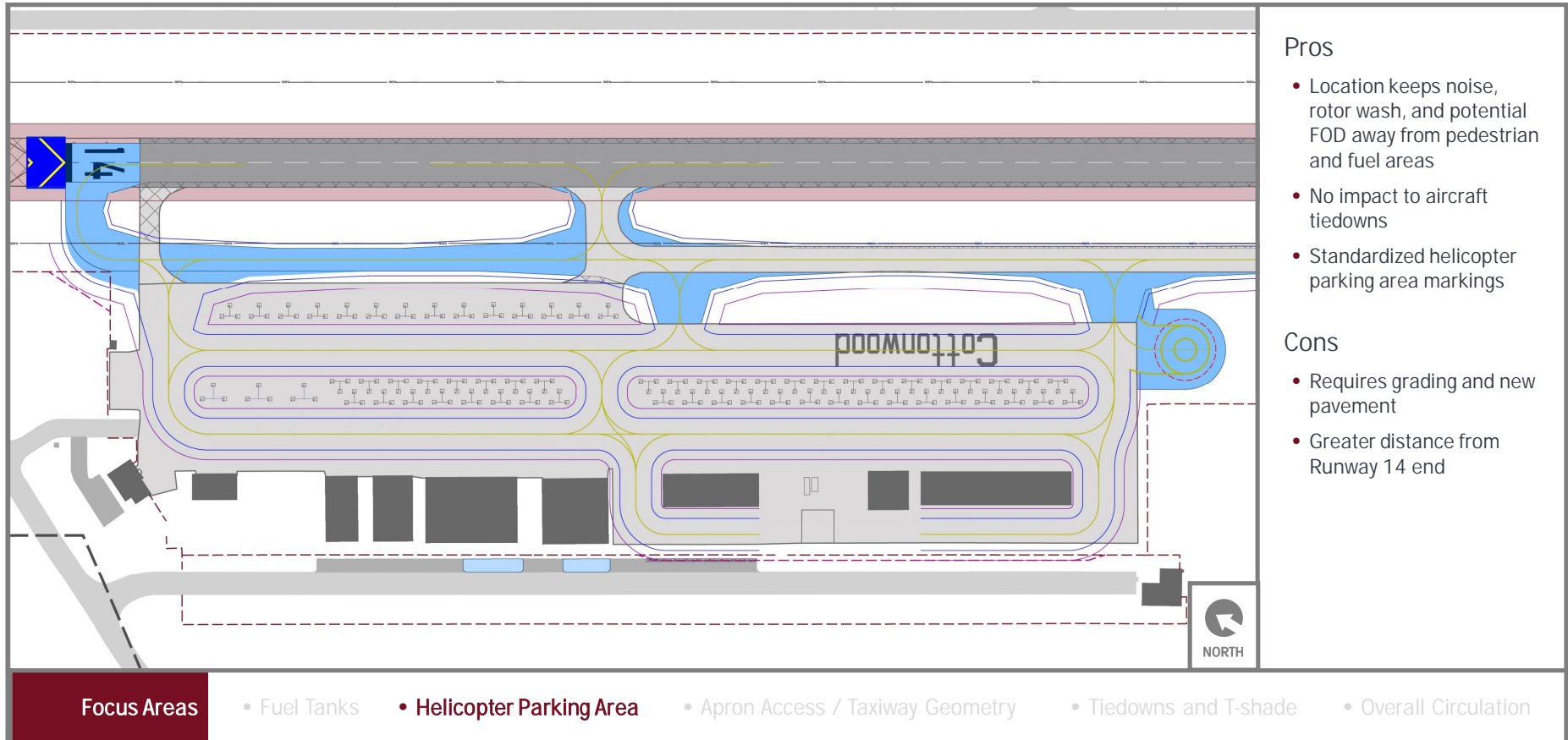
APRON ALTERNATIVES: HELICOPTER PARKING AREA



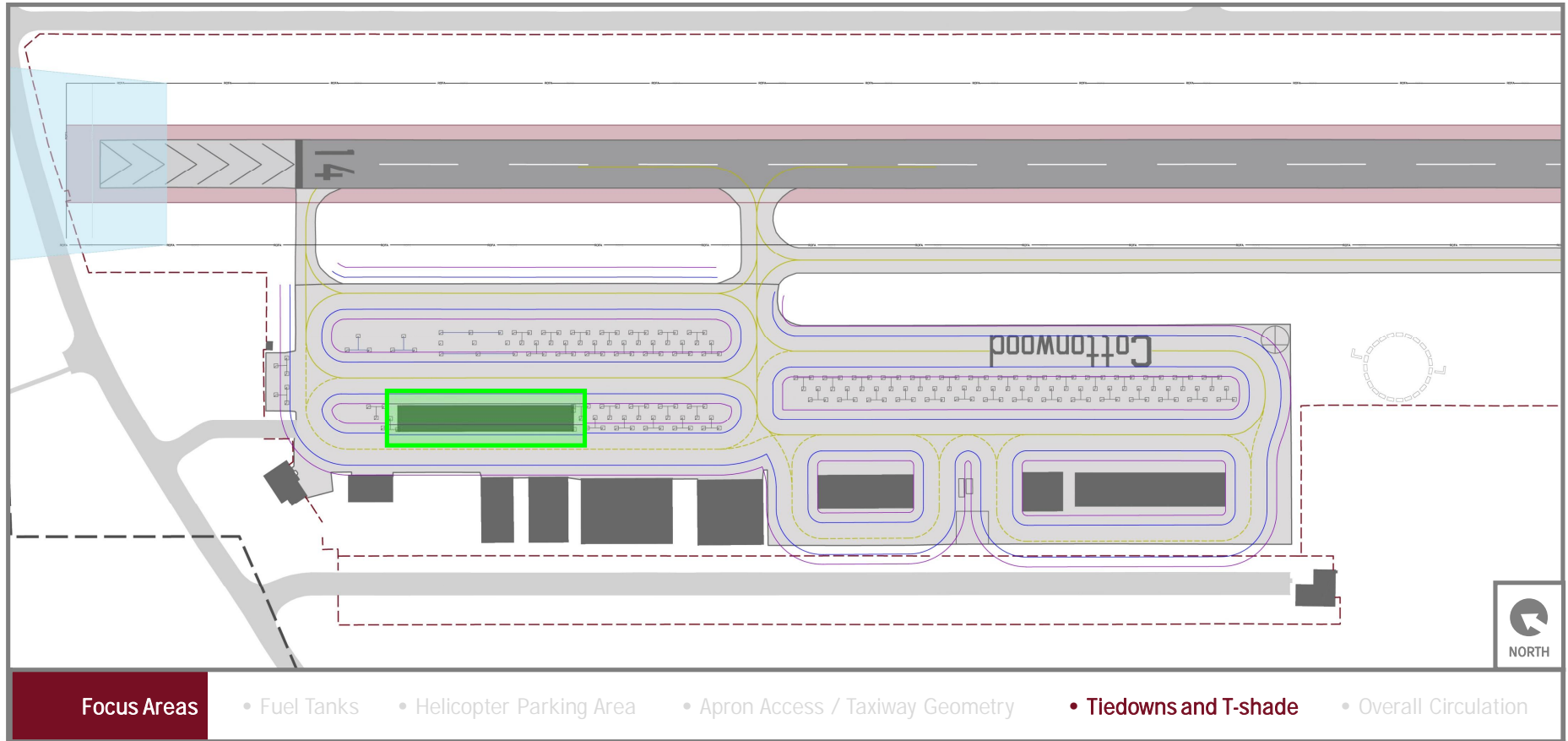
APRON ALTERNATIVES: HELICOPTER PARKING AREA - ALTERNATIVE 1



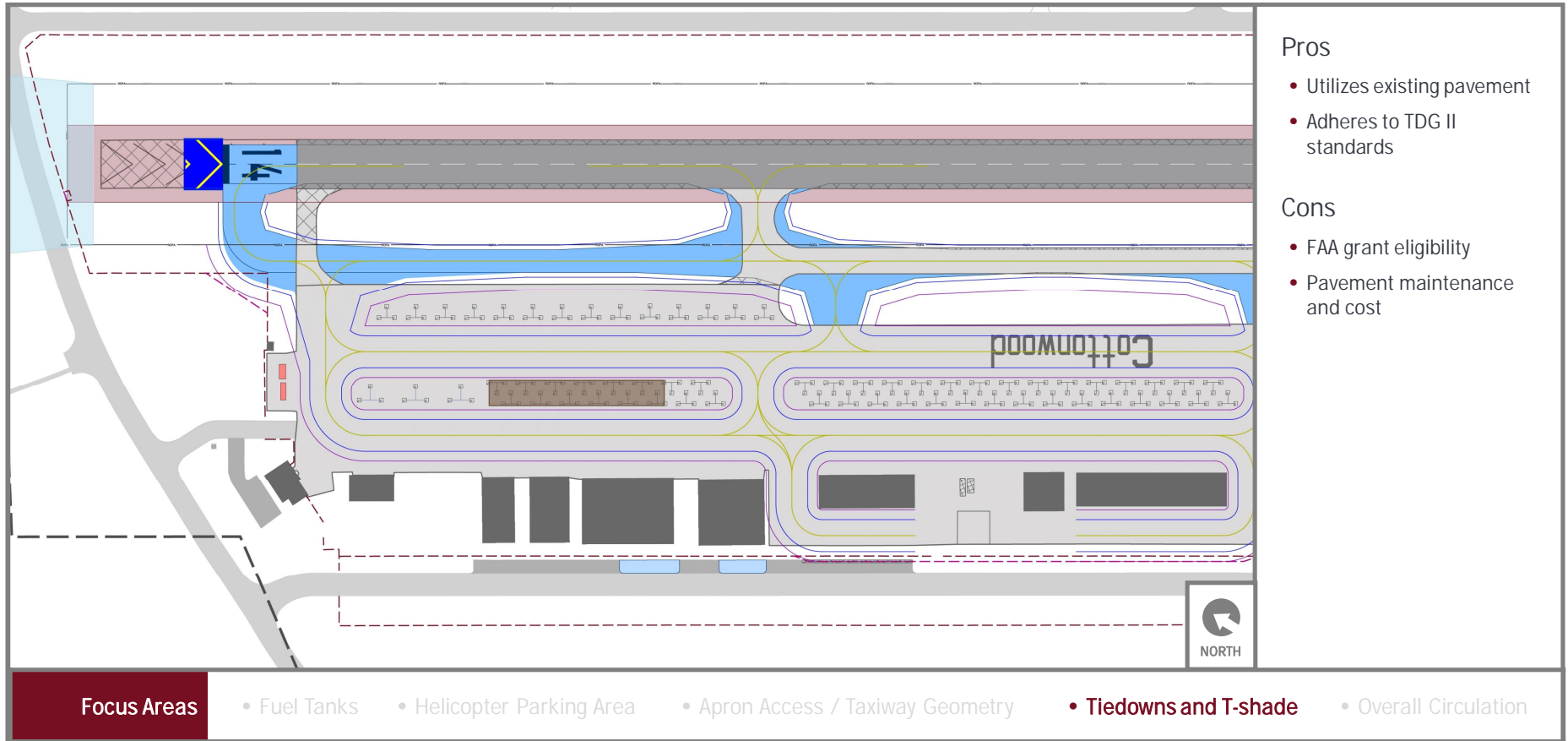
APRON ALTERNATIVES: HELICOPTER PARKING AREA - ALTERNATIVE 2



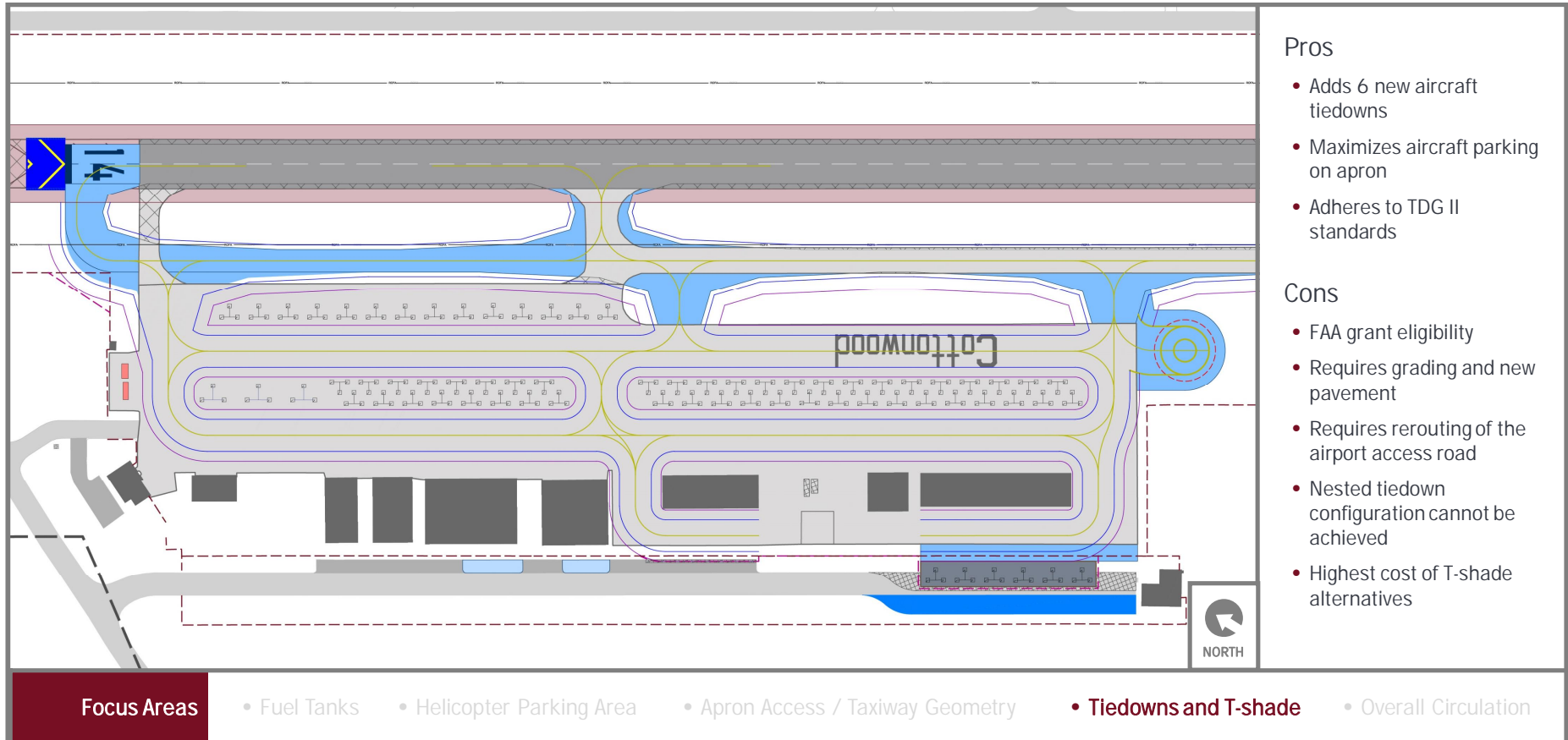
APRON ALTERNATIVES: T-SHADE RELOCATION



APRON ALTERNATIVES: T-SHADE RELOCATION - ALTERNATIVE 1



APRON ALTERNATIVES: T-SHADE RELOCATION - ALTERNATIVE 2



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HANGAR DEVELOPMENT ALTERNATIVES

Objectives

- Accommodate forecast demand for aircraft storage space (approximately 36,000 SF)
- Enhance safety and efficiency of apron circulation for aircraft, ground vehicles, and pedestrians
- Earmark land for future hangar/apron development

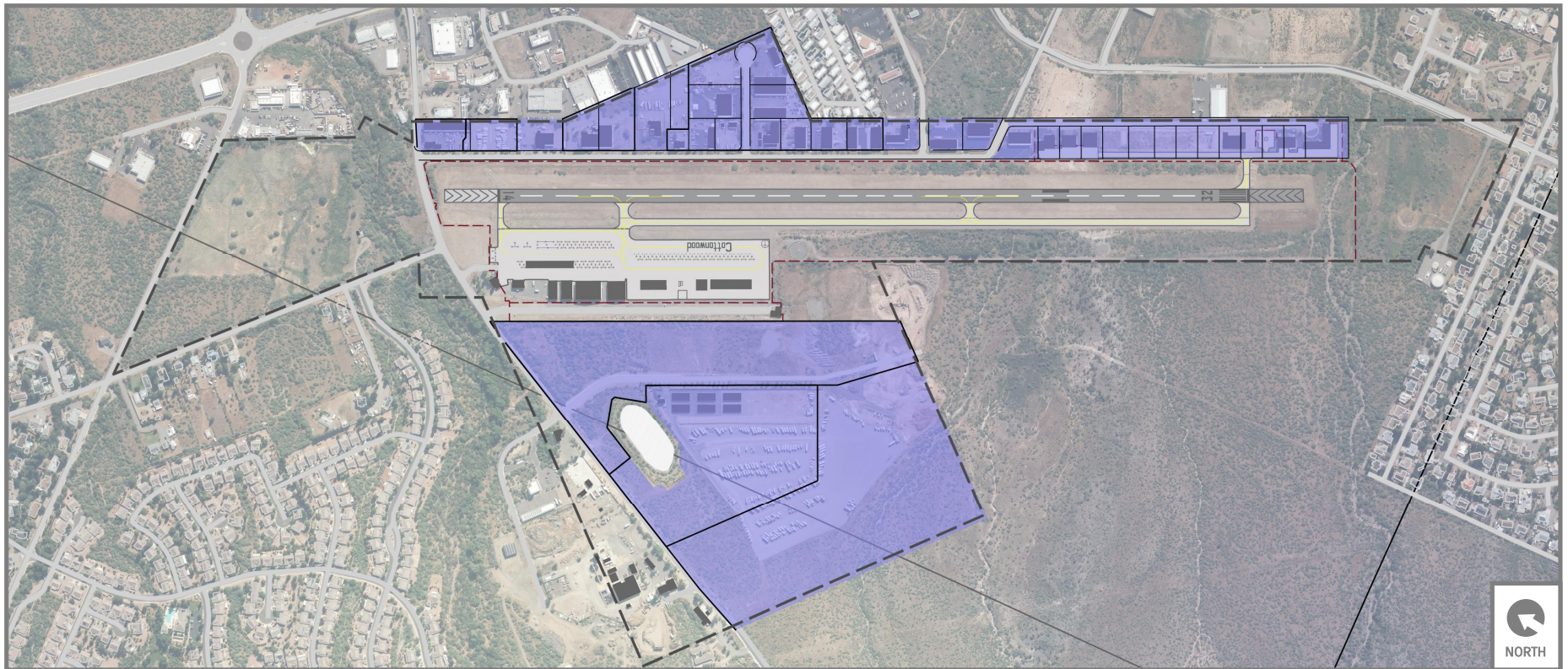
Considerations

- FAA design and safety standards
- Operational needs of Airport users
- Apron development alternatives
- Available space for development (e.g., Airport property boundary, BRL, Airport leaseholds)

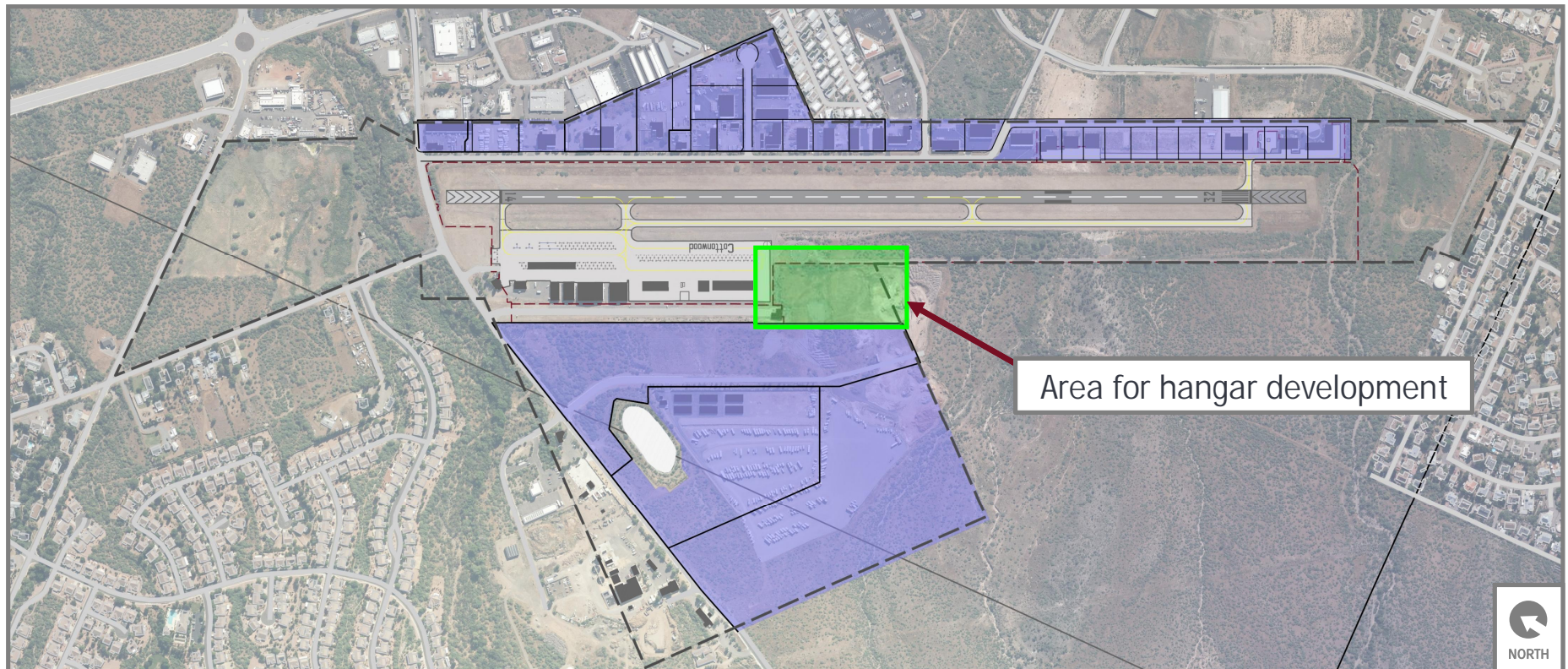


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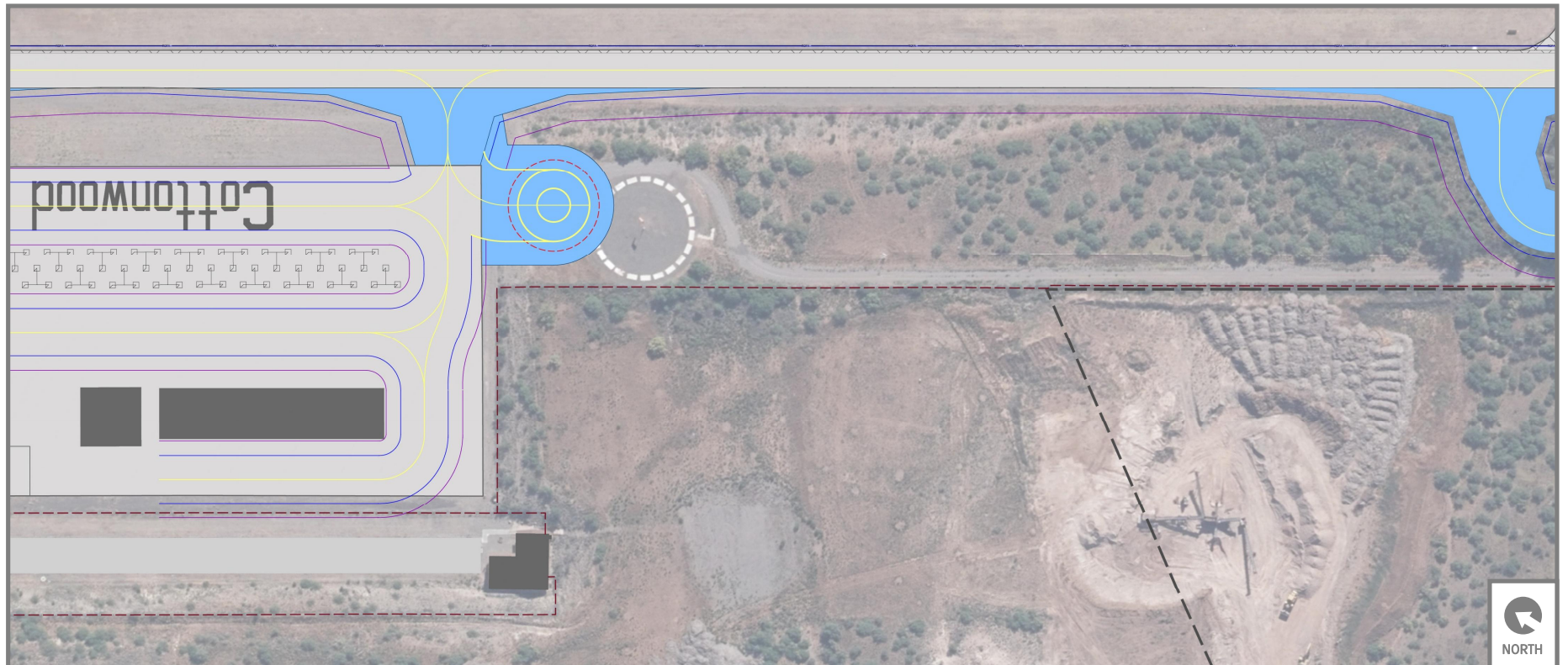
AIRPORT LEASEHOLDS

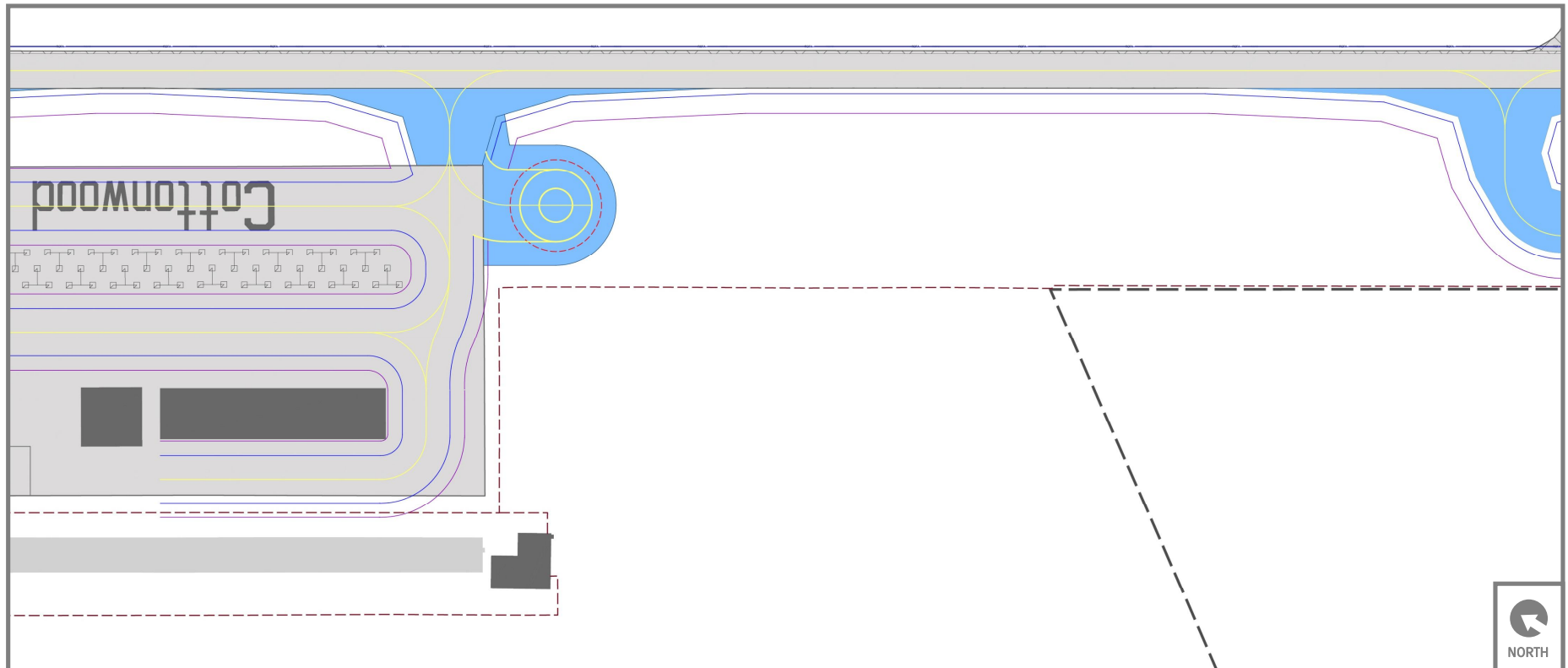


AIRPORT LEASEHOLDS

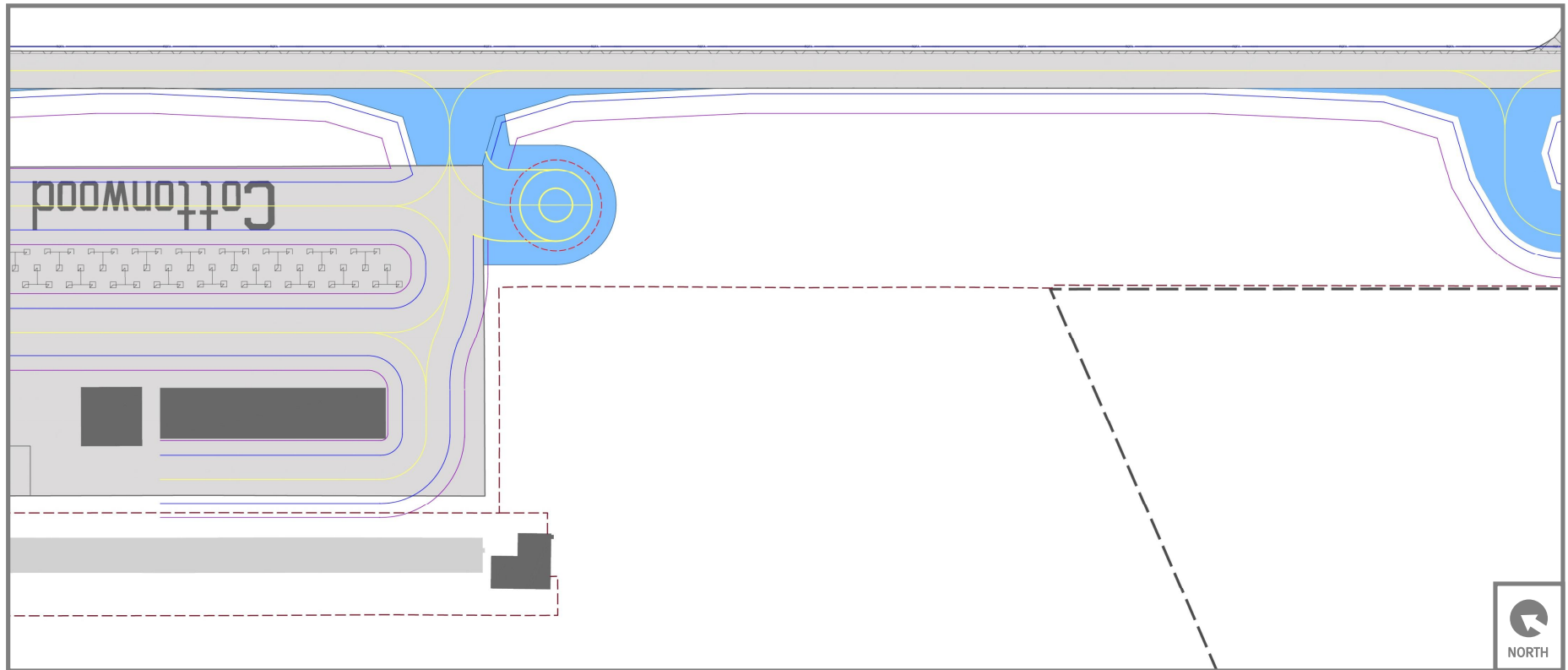




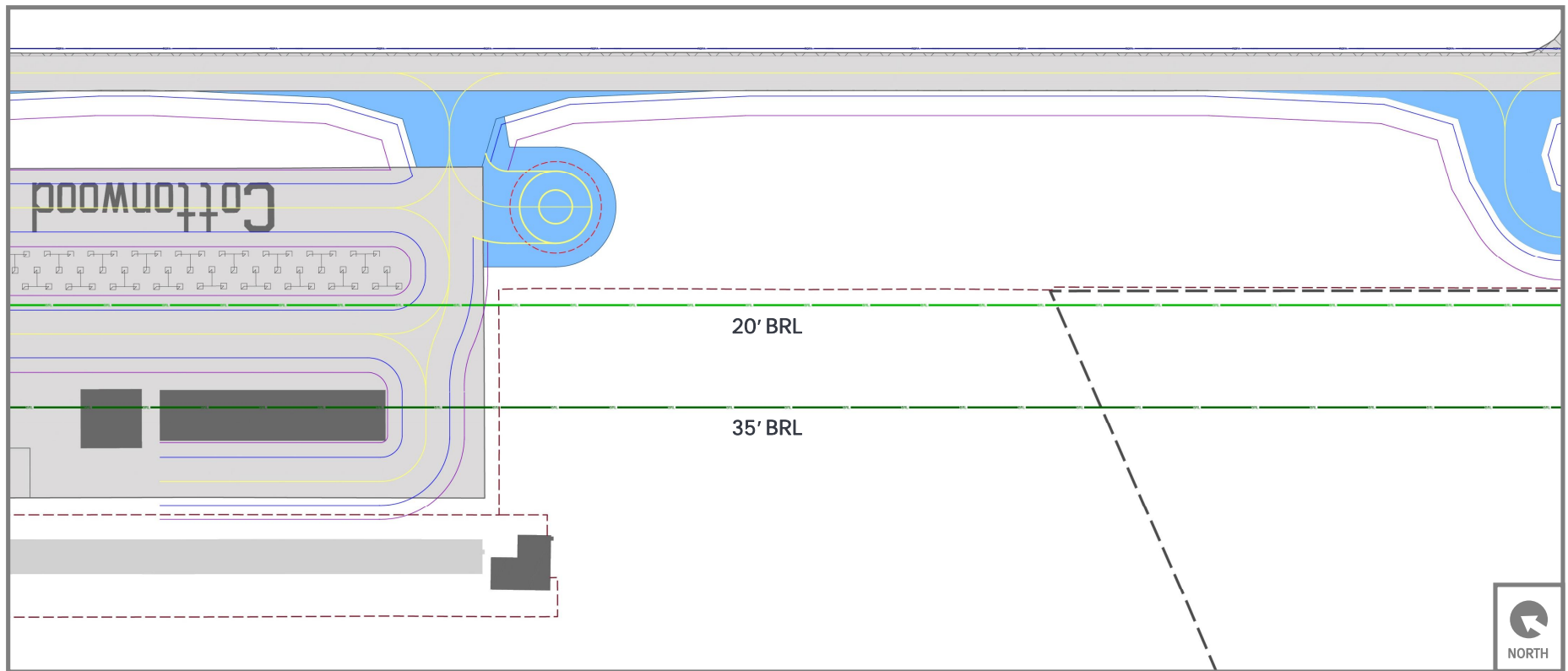




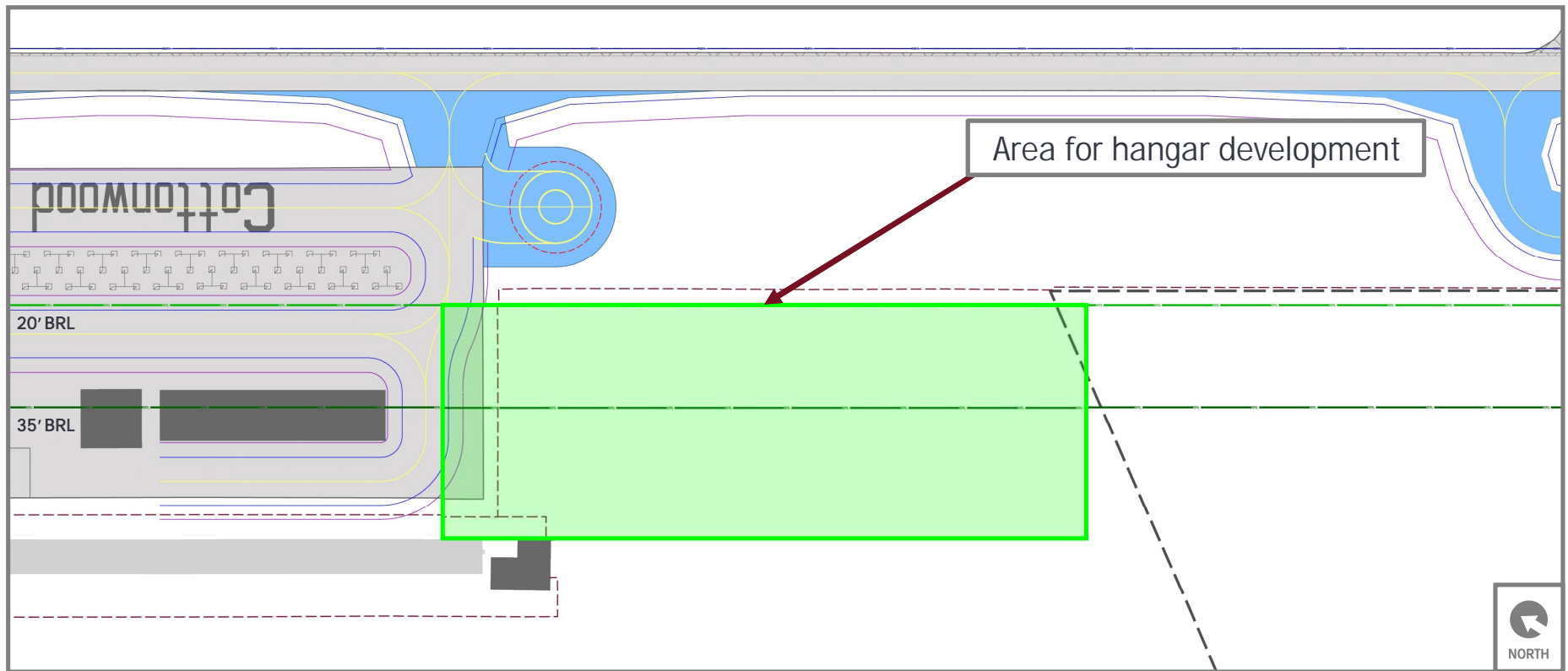
BUILDING RESTRICTION LINE (BRL)

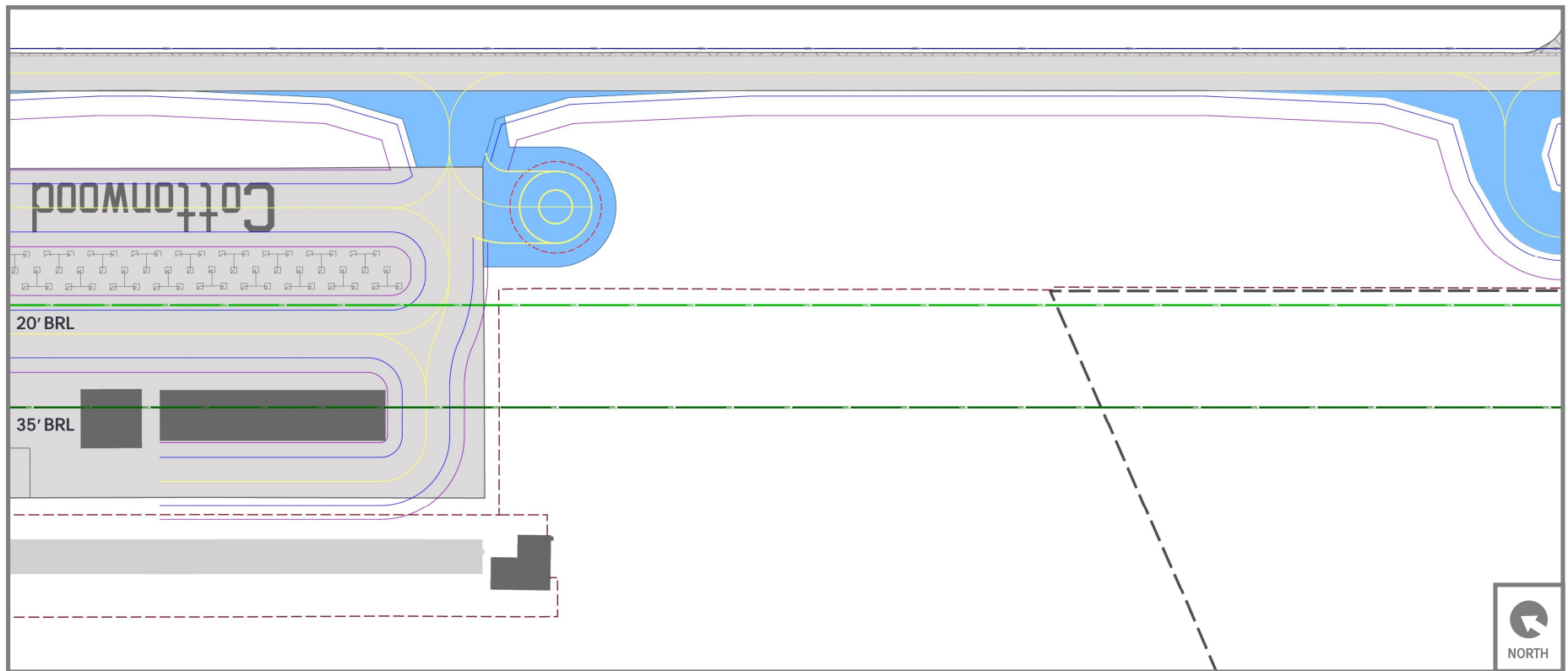


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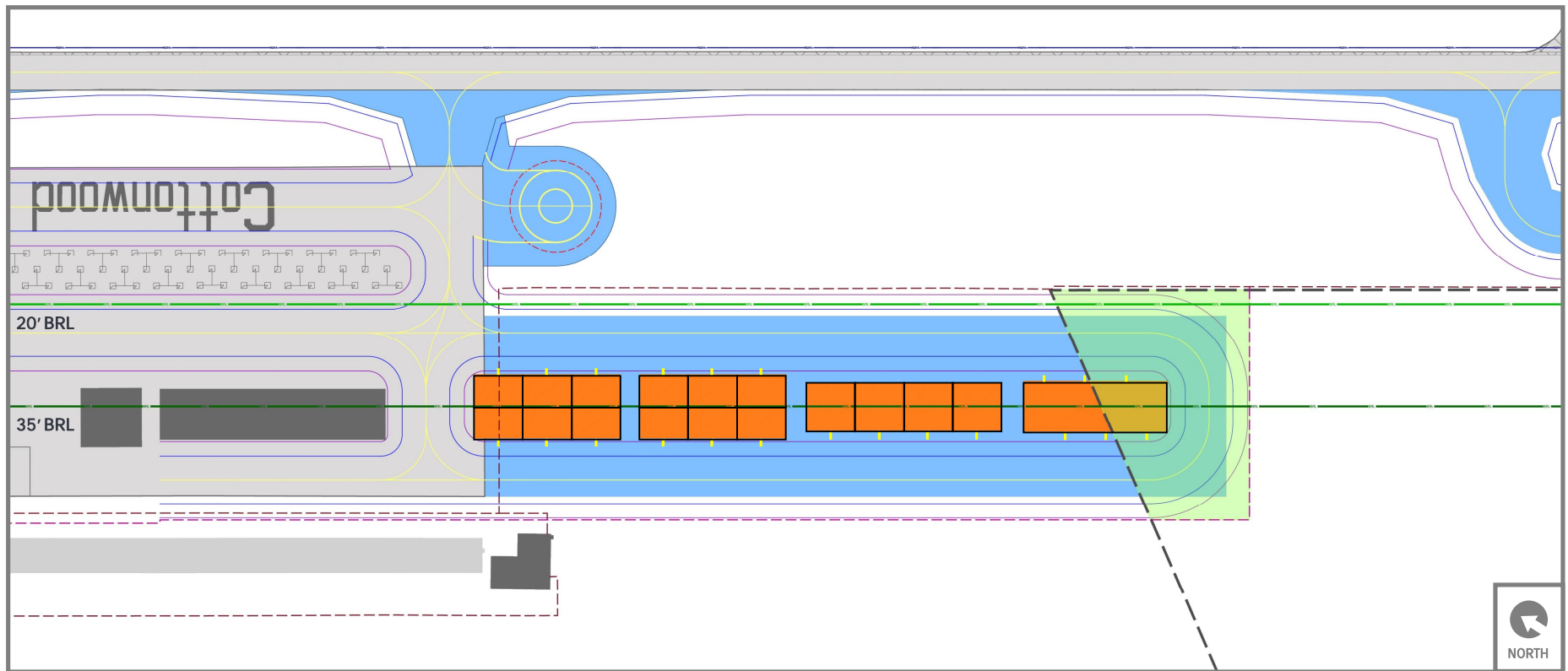


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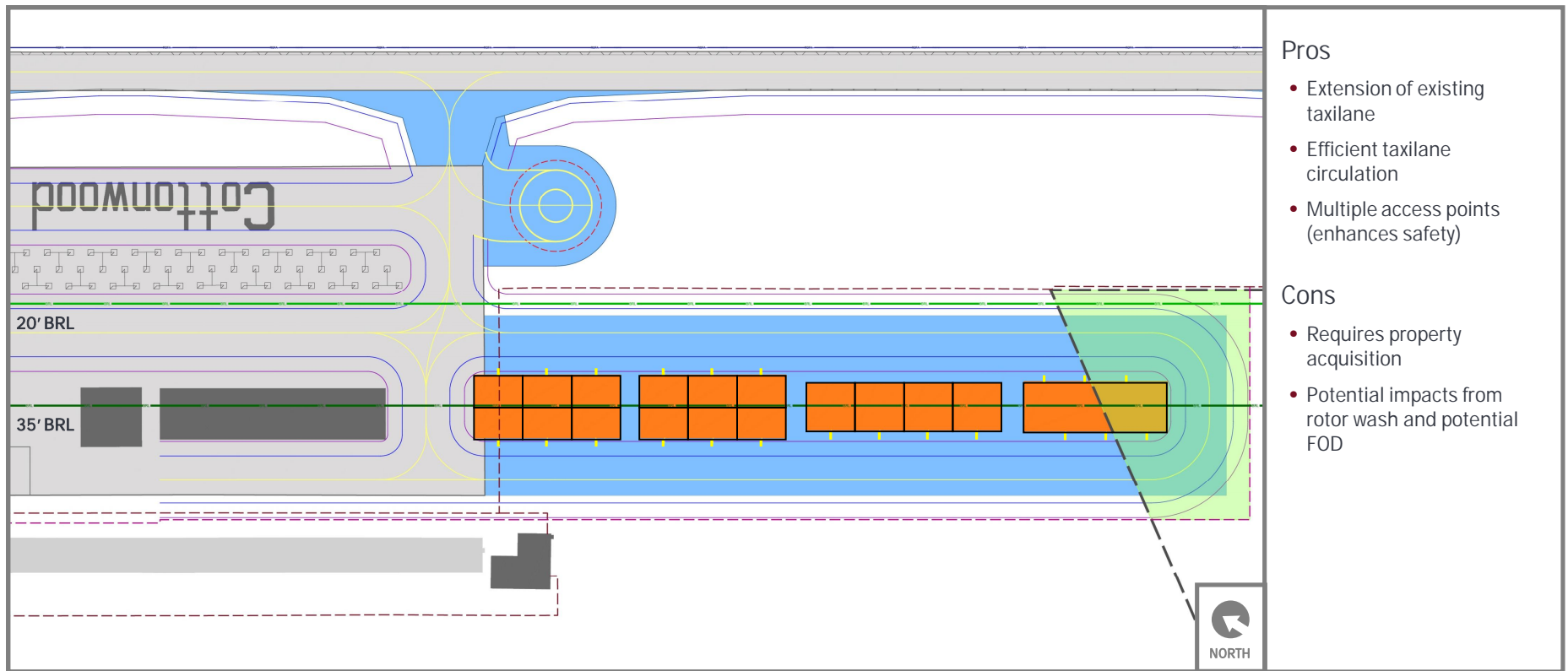




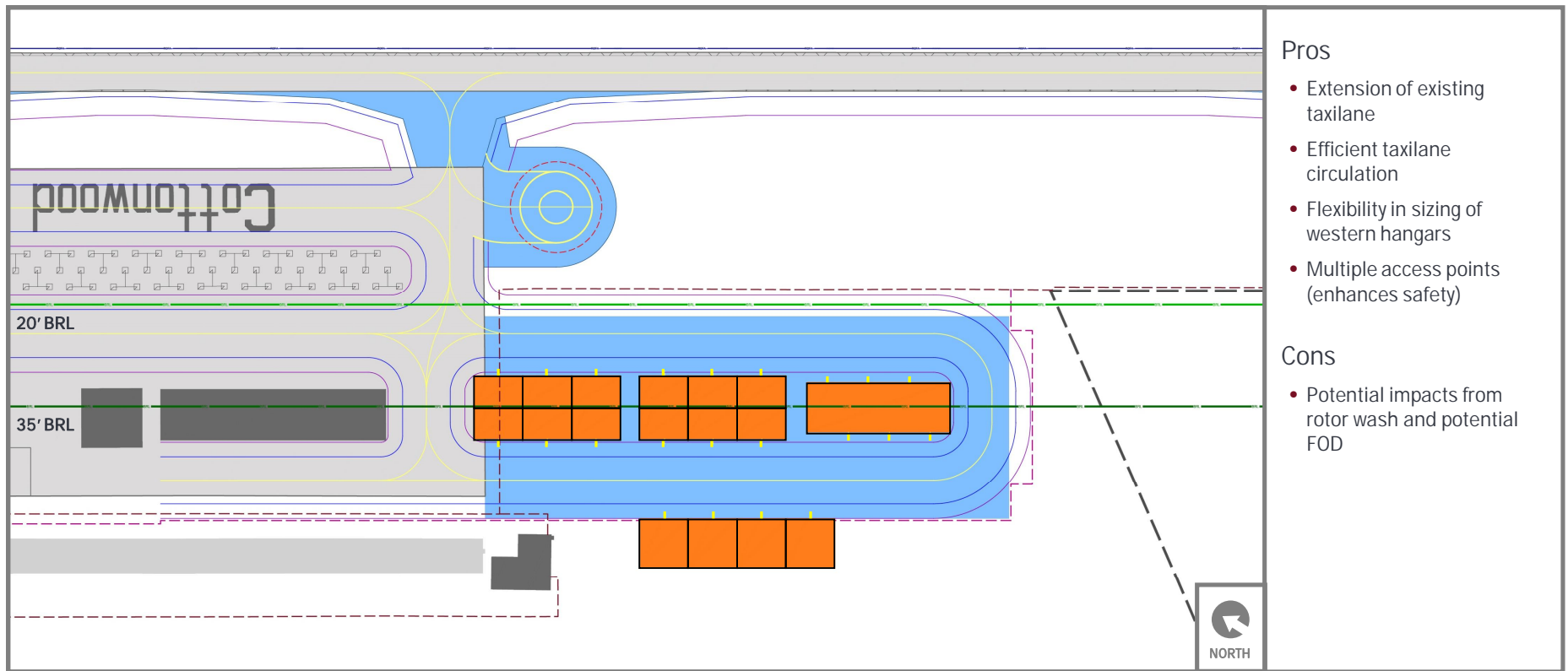
HANGAR DEVELOPMENT ALTERNATIVES: ALTERNATIVE 1



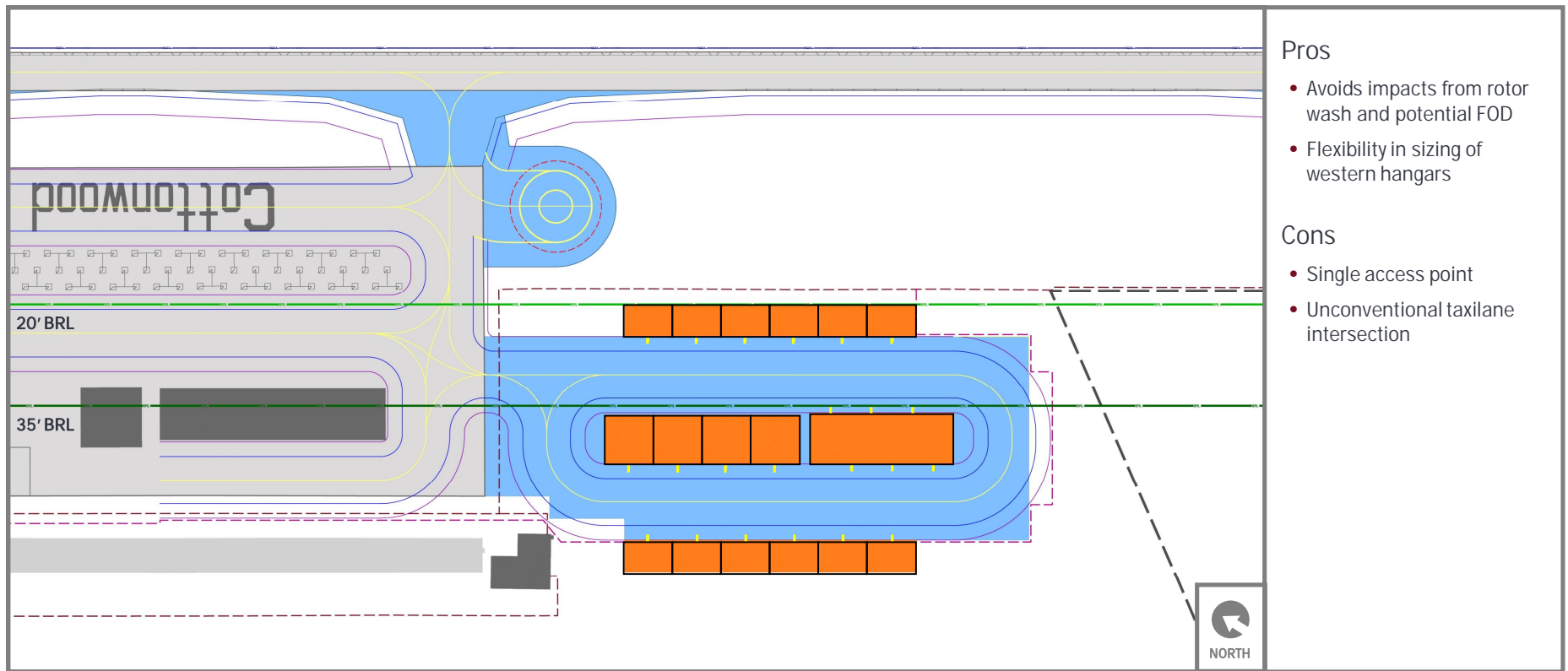
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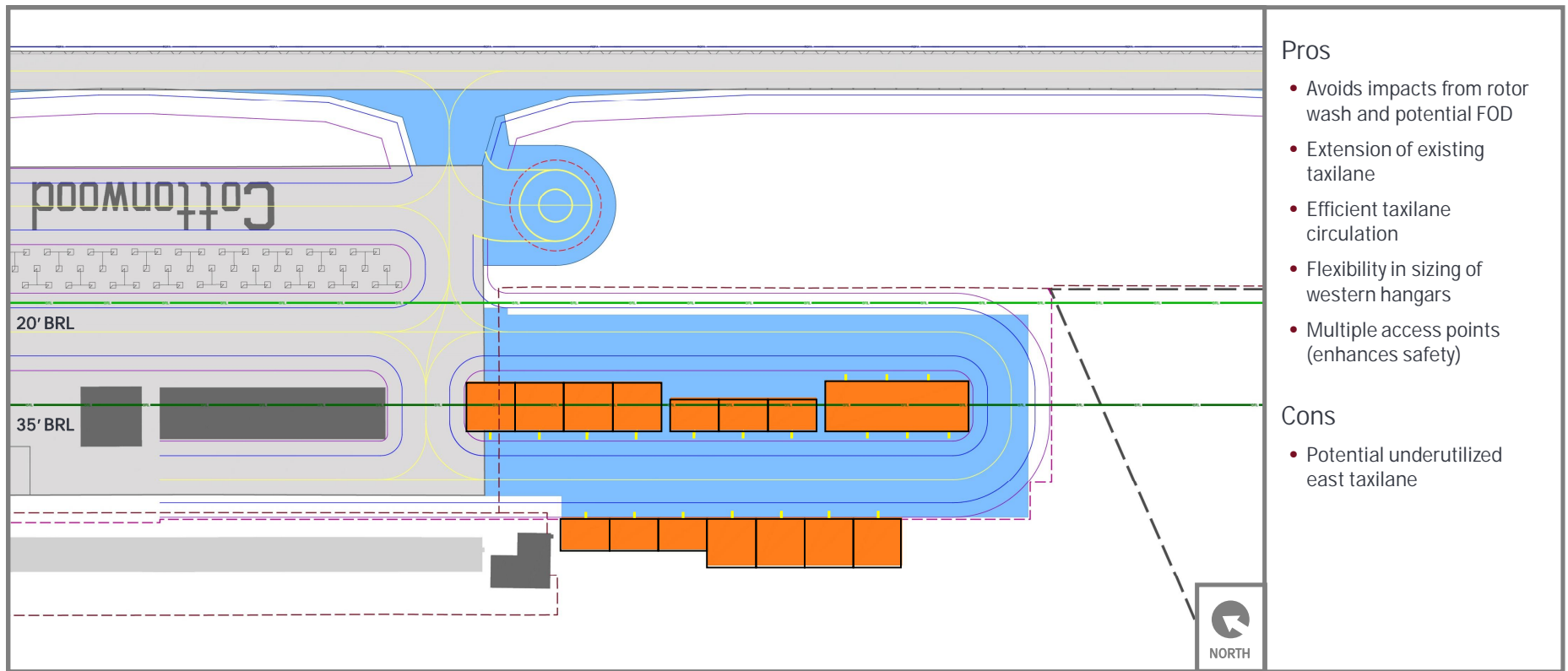
HANGAR DEVELOPMENT ALTERNATIVES: ALTERNATIVE 2



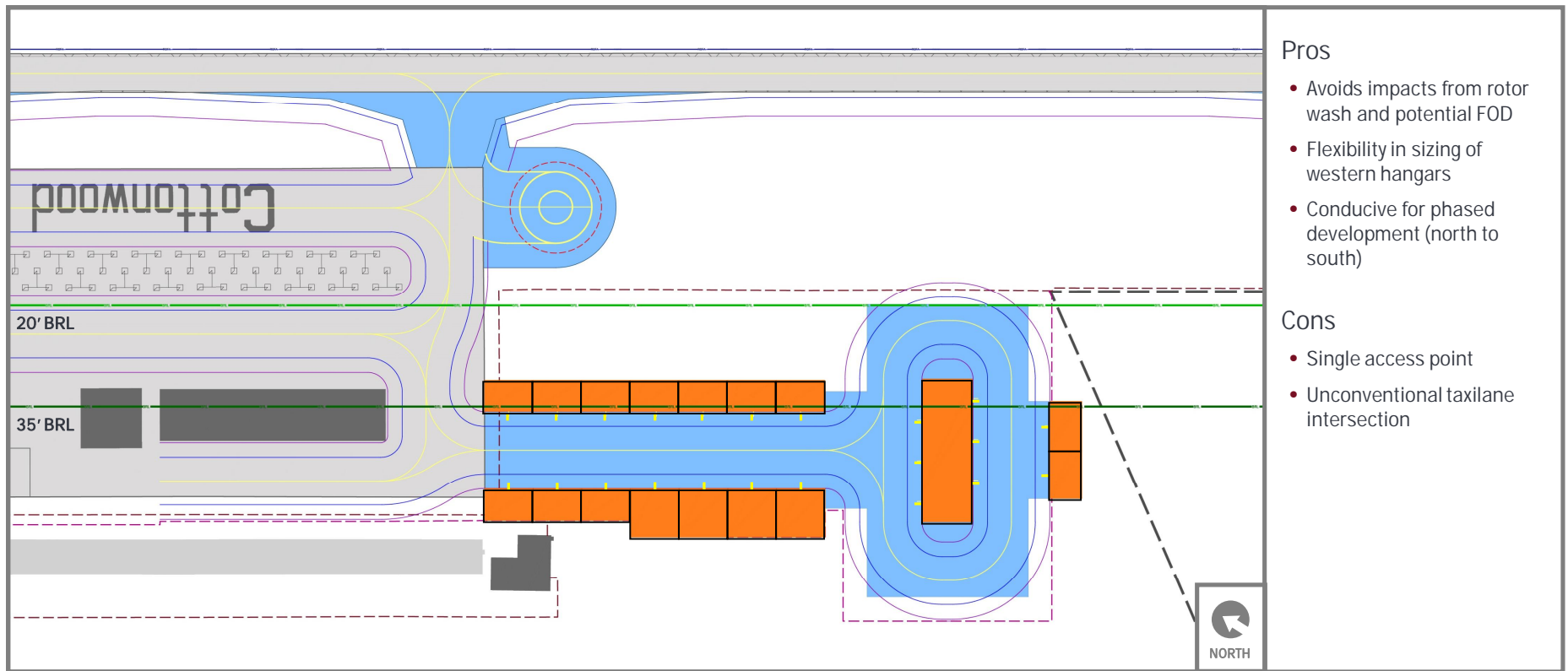
HANGAR DEVELOPMENT ALTERNATIVES: ALTERNATIVE 3



HANGAR DEVELOPMENT ALTERNATIVES: ALTERNATIVE 4



HANGAR DEVELOPMENT ALTERNATIVES: ALTERNATIVE 5



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PROJECT PHASING

Recommended Projects

- **Taxiway A reconstruction** and extension (includes associated taxiway connectors)*
- **Runway 14-32 extension**, narrowing, and strengthening*
- **Run-up area** construction*
- **Helicopter parking area** relocation*
- **Fuel tank** relocation
- **T-shade** relocation
- **Hangar** development

**Project eligible for FAA funding*

Discussion

- Near term (0-5 years)
 - Taxiway A reconstruction and extension
- Intermediate term (6-10 years)
- Long term (11-20 years)

CJ31 **May scrap depending on time**
Coliton, John, 11/15/2021

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NEXT STEPS

- Send draft Master Plan chapters for PAC review
- Integrate input/feedback into development alternatives
- Draft Alternatives working paper
- Meet with FAA to discuss Recommended Development Plan (RDP)
- Draft Implementation and Financial Analysis working paper
- Draft Airport Layout Plan (ALP)
- Ongoing Stakeholder Involvement - **PAC Meeting and Public Information Meeting:** Est. February 2022

QUESTIONS / COMMENTS

Please send additional questions and comments to:

colin.wheeler@kimley-horn.com

john.coliton@kimley-horn.com



THANK YOU!

Kimley»Horn

