



MAA Delivers: From Greenfield to Cargo Apron in Ten Months

Agenda

- History of Midfield Cargo
- Status in March of 2017
- Highflyer Requirements
- Long Term Development
- Design





Alex Ollerman, P.E. M.ASCE C.M.
Deputy Director of Engineering
MDOT MAA



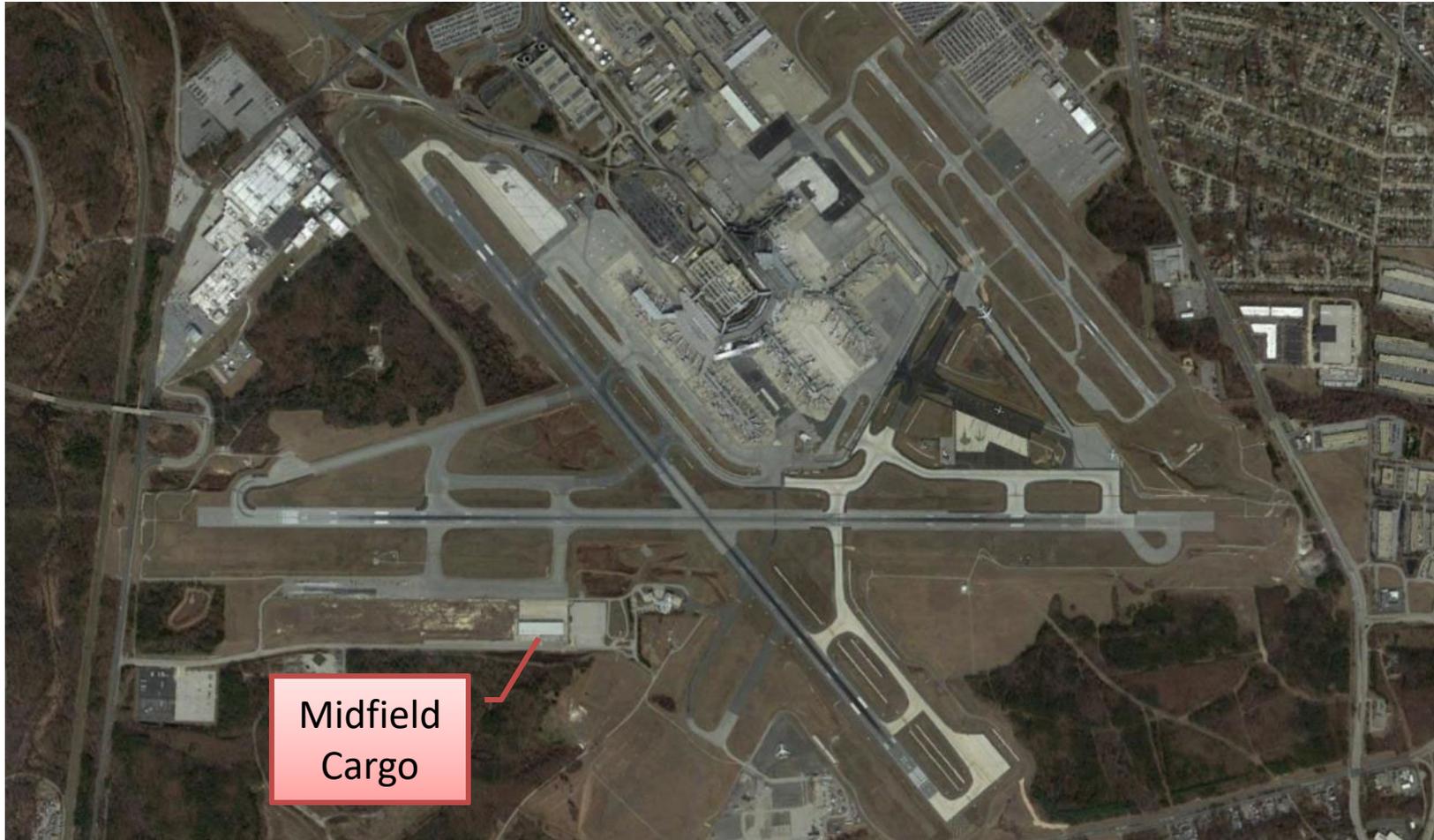
Maryland Aviation Administration



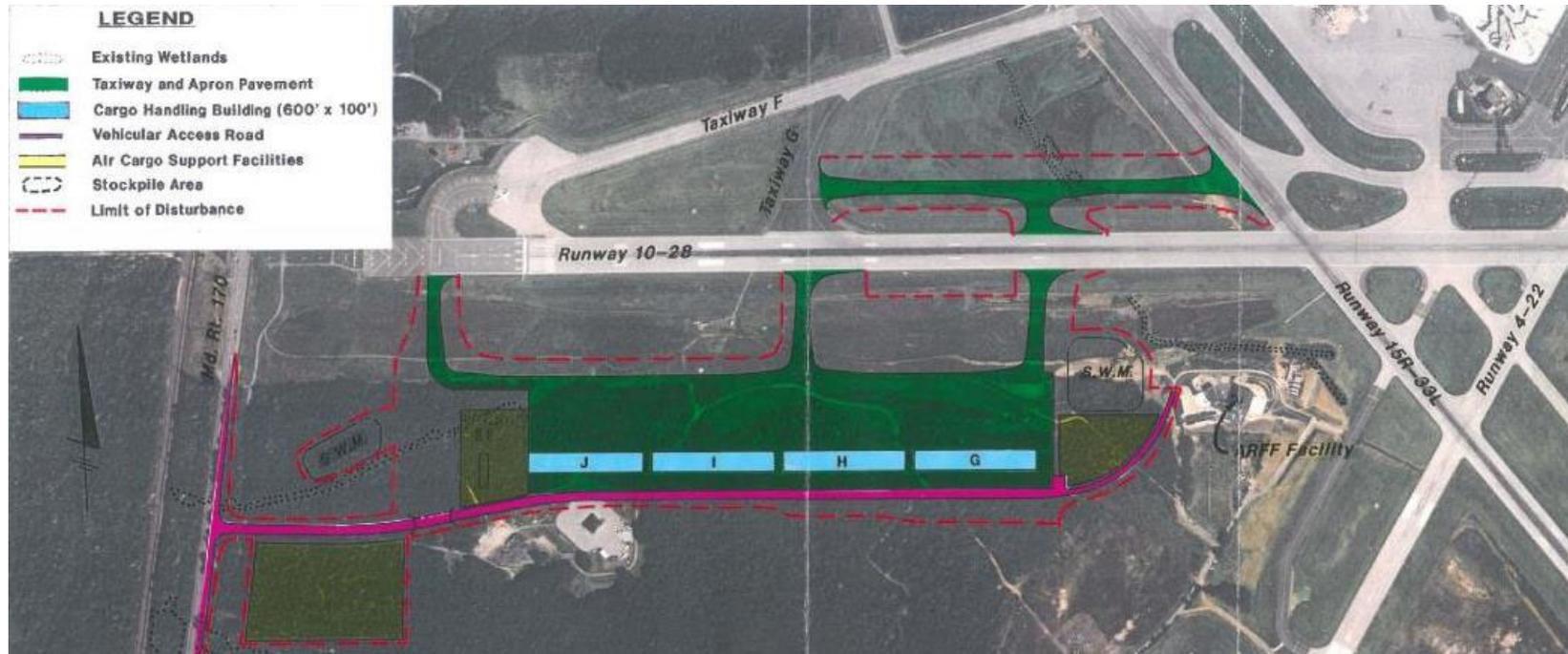
'be better'



History of Midfield Cargo



History of Midfield Cargo



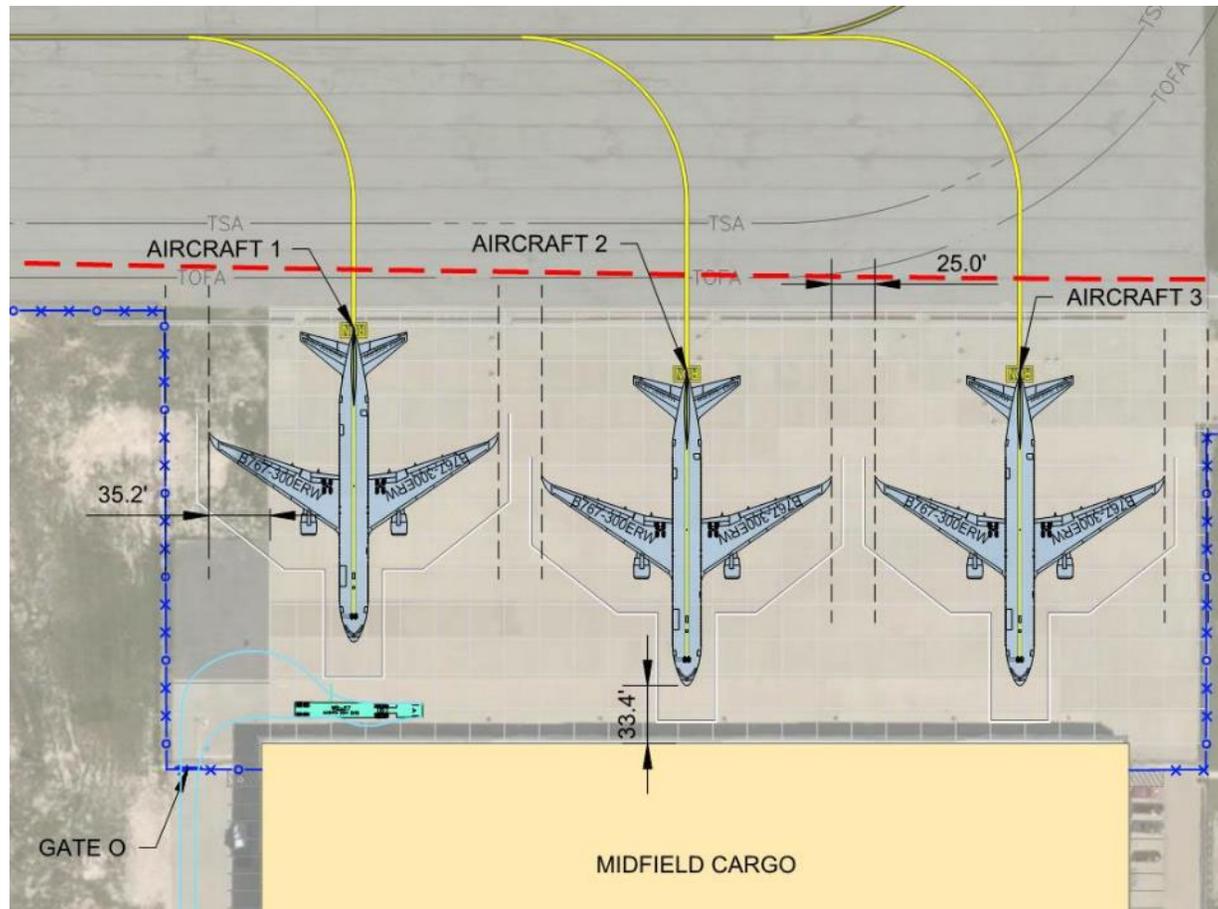
- Originally proposed in 1998
- Ten year development schedule
- 100 acres cargo-related land use
- Buildings combined 412,000 SF

Status of Midfield Cargo in March 2017



- 80,000 SY of asphalt apron/taxilane
- 14,500 SY of concrete apron
- 65,000 SF of building
- 20,000 SY employee parking lot
- 30,000 GAL fuel farm

Status of Midfield Cargo in March 2017

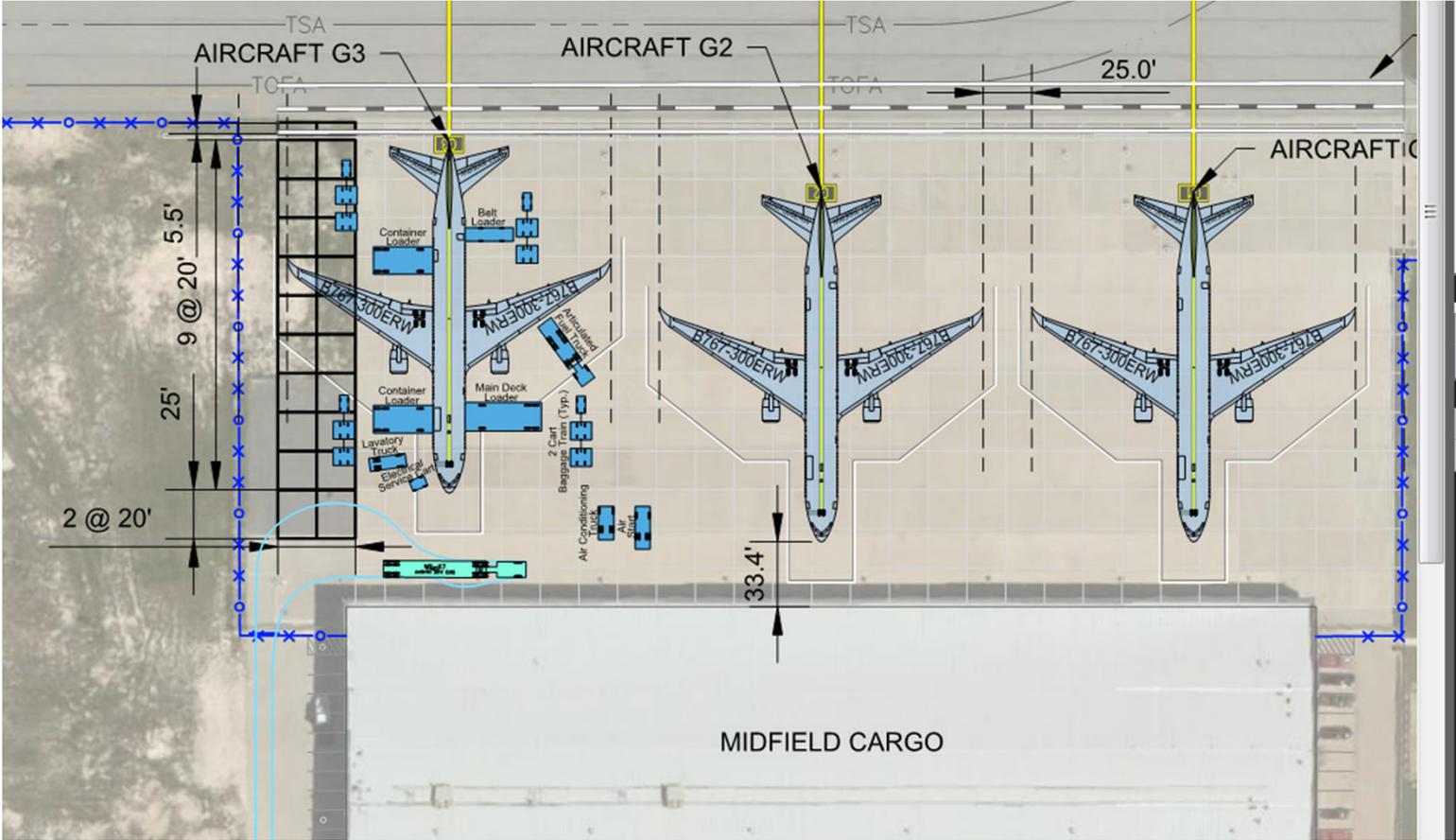


HighFlyer Requirements

- Three 767 parking spaces
- Suitable warehouse space
- Modifications to the building
- Fuel Farm
- Slurry Seal to Taxilane
- Begin operation May 1, 2017



HighFlyer Requirements – Short Term





Alan Peljovich, PE Program Manager



'be better'

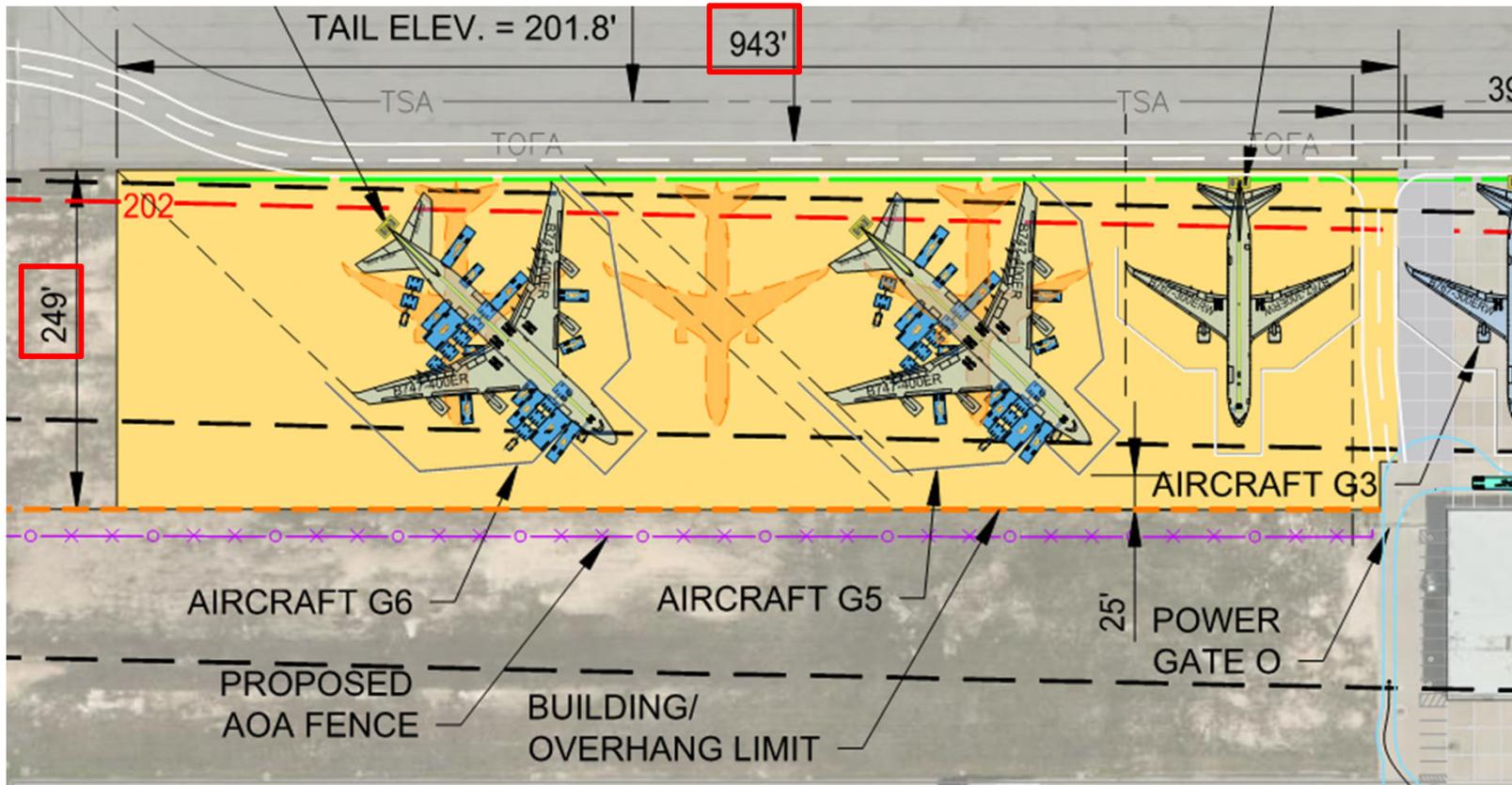


HighFlyer Requirements – Long Term

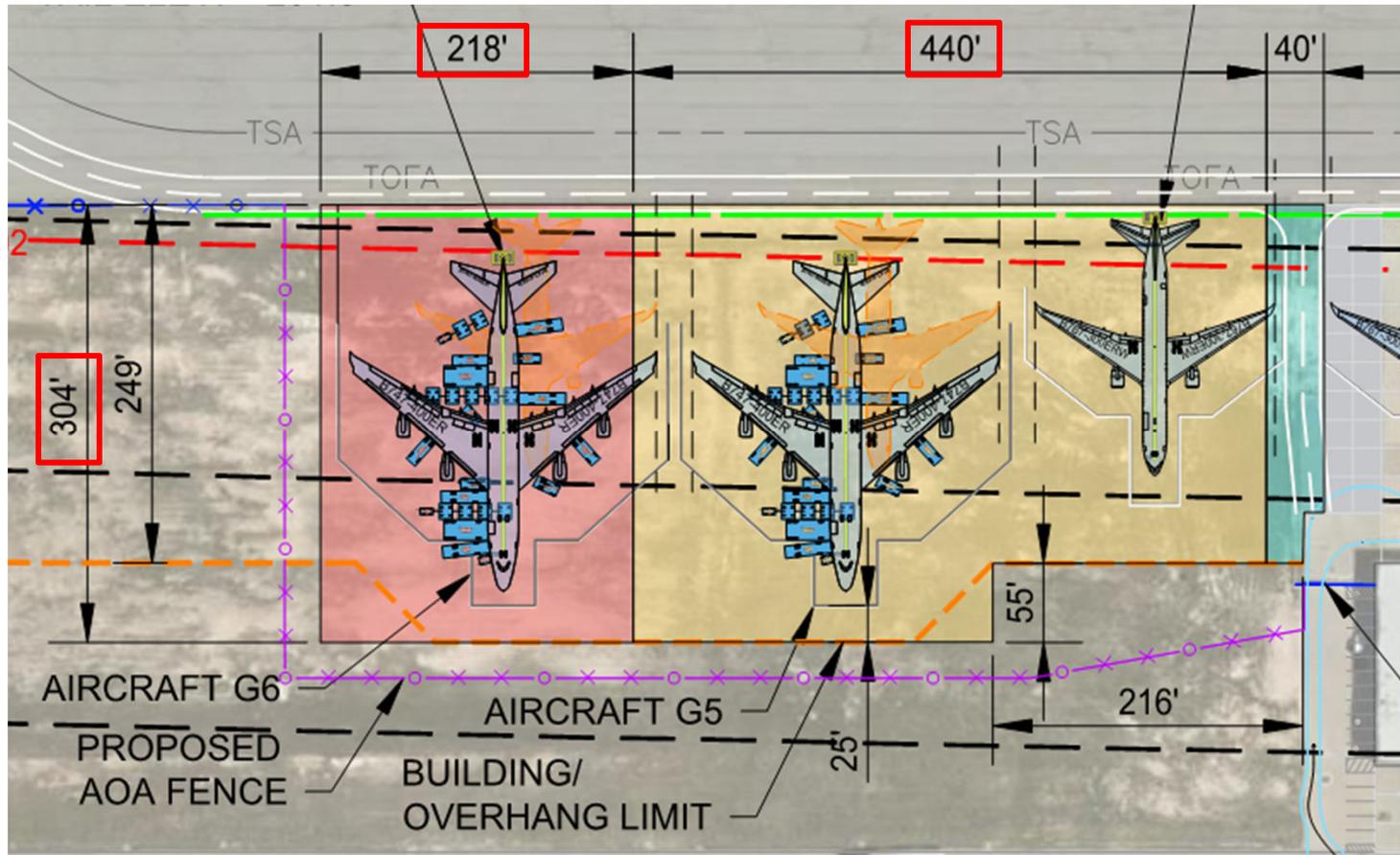
- Additional Parking for up to one additional 767 and one 747
- Complete by 2017 Holiday Season
- Additional Operational Space for MAA
- Deicing Requirements
- SIDA/Gate Changes
- Long-Term Fueling
- 747-400 vs 747-800



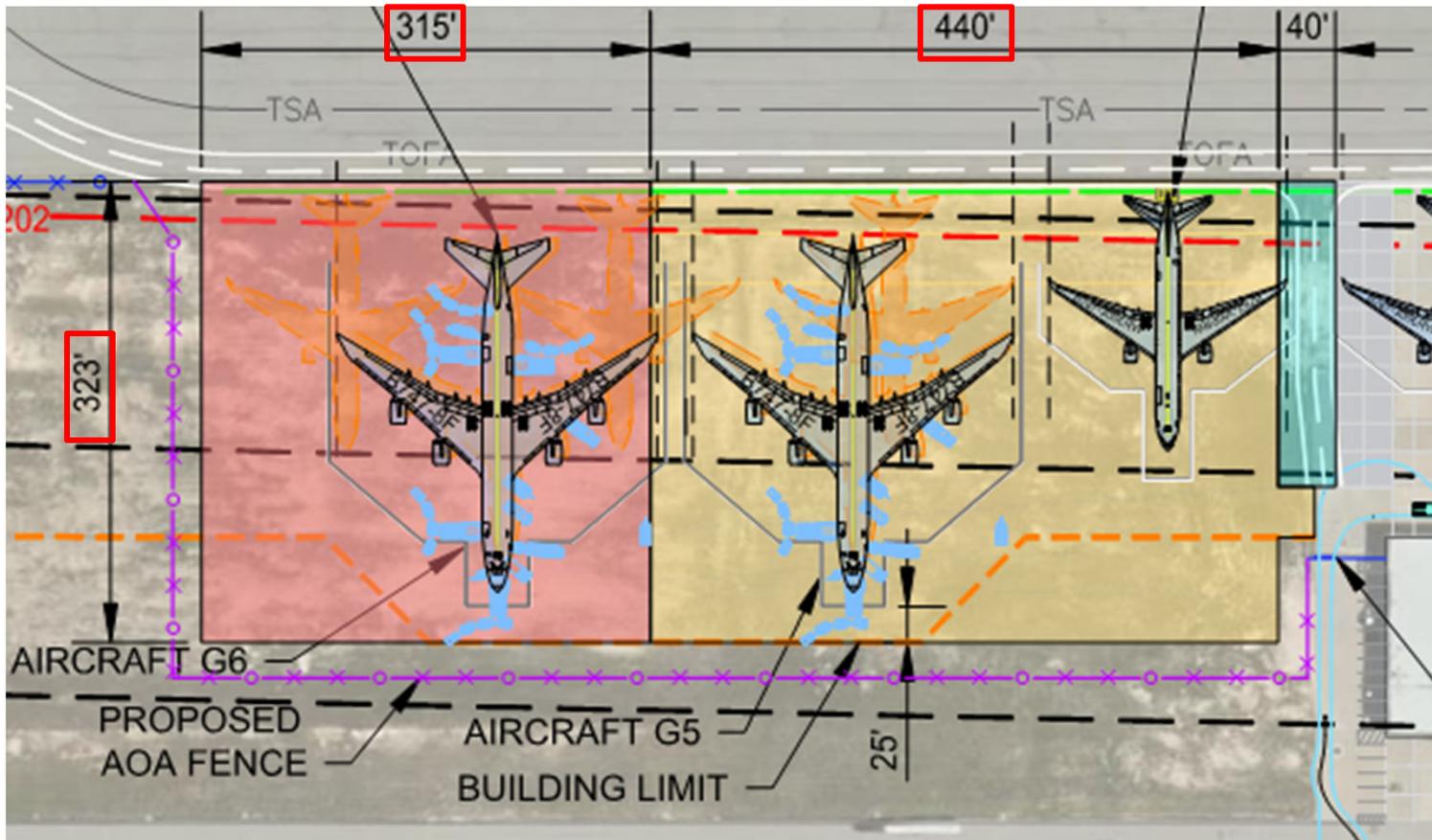
Long Term Development



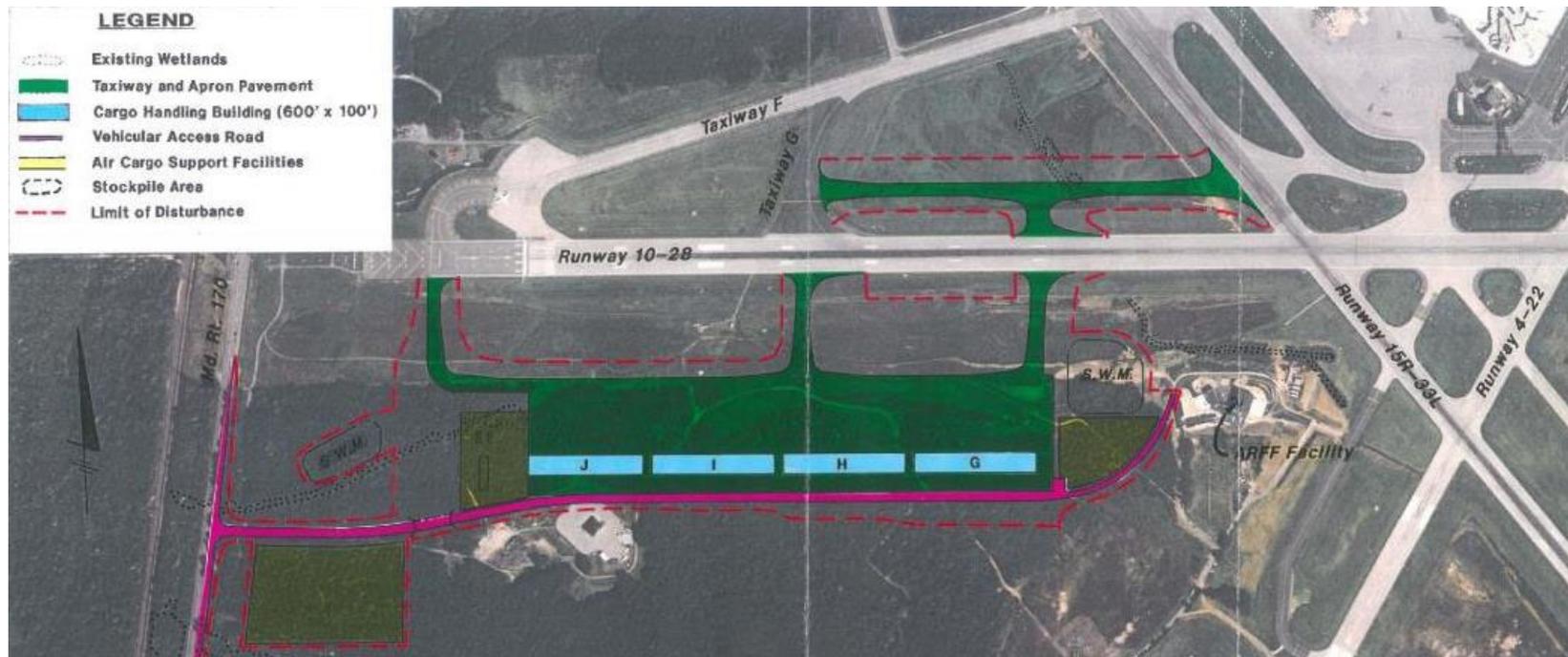
Long Term Development



Long Term Development



Long Term Development



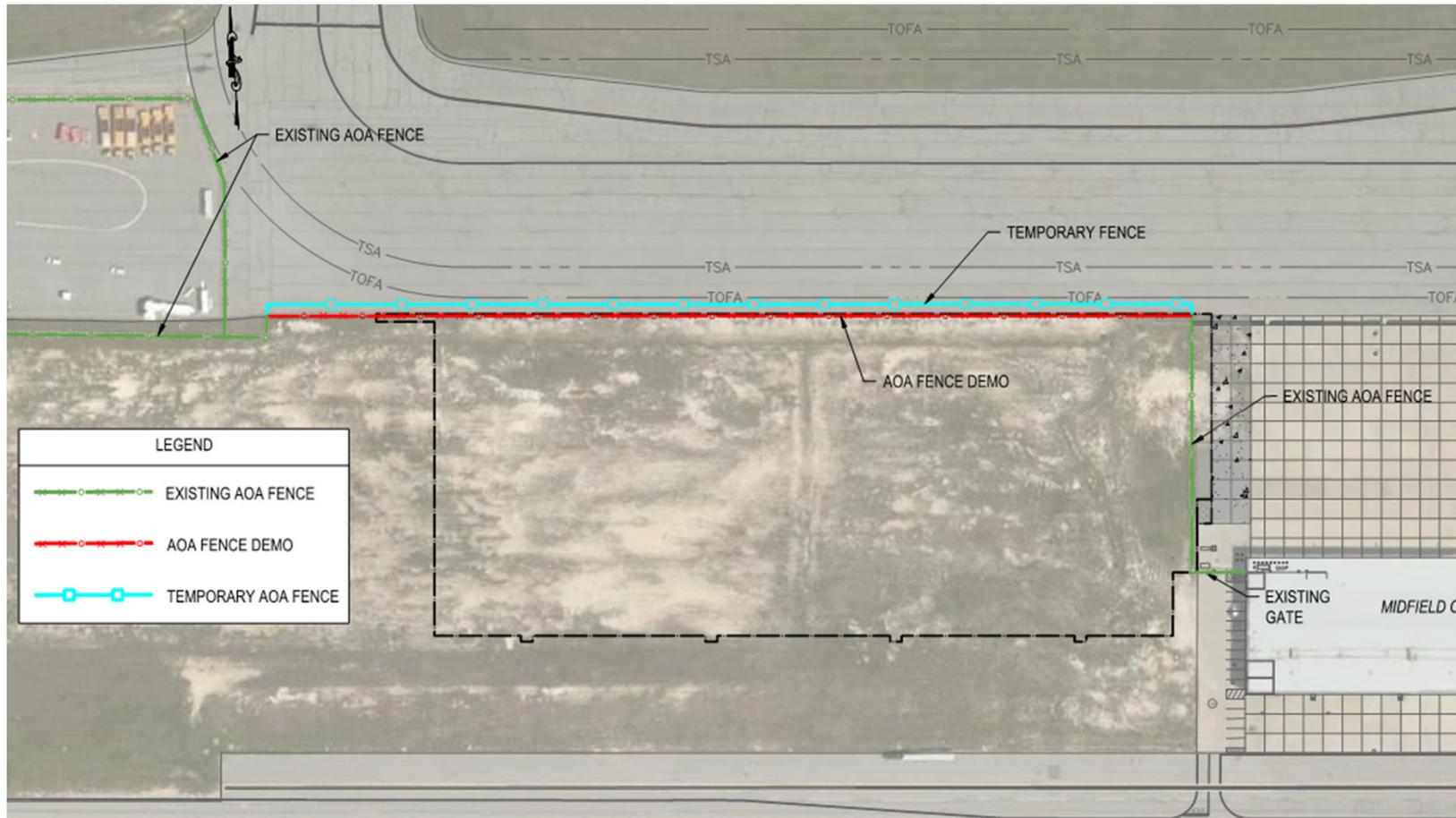
- Expedite NEPA Process
 - Within Development Footprint
 - Re-Evaluation of Existing EA

Long Term Development - Schedule

- Procurement Schedule
 - Justified Expedited Procurement
 - Selected Bidders List
- Contract Language
 - Incentives
 - Phasing
 - Must Haves – Early Phases Tied to Incentives
 - Nice to Haves – Later Phases
- Subsequent Contracts Would Address Any Remaining Needs
 - Fueling
 - Long-term Deicing

On or before 11:59.59 PM EST of October 31, 2017	\$500,000
On or before 11:59.59 PM EST of November 1, 2017	\$400,000
On or before 11:59.59 PM EST of November 2, 2017	\$300,000
On or before 11:59.59 PM EST of November 3, 2017	\$200,000
On or before 11:59.59 PM EST of November 4, 2017	\$100,000

Long Term Development - Schedule



Partnering

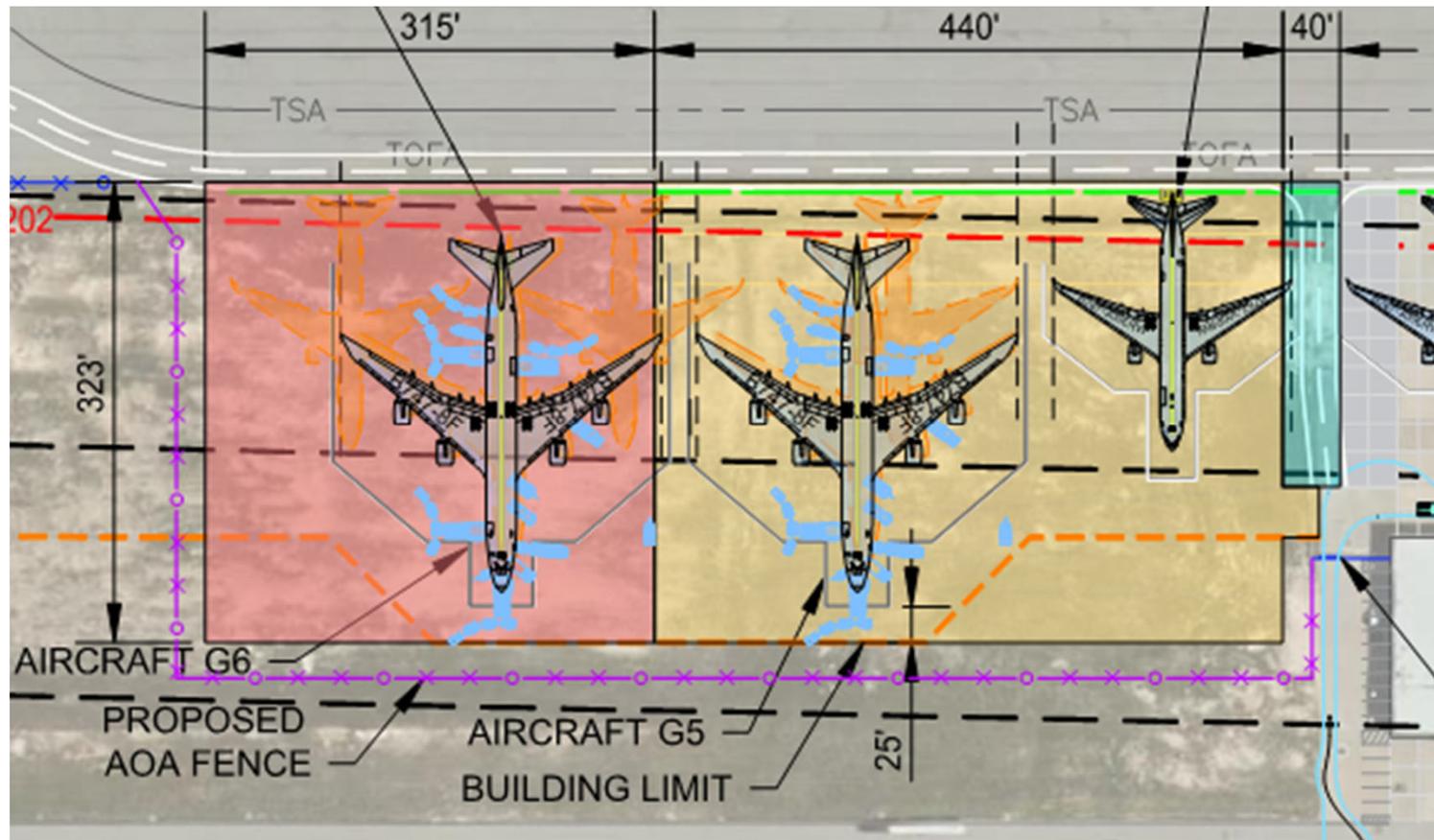
- Formal Process binding all parties to work together in a collaborative problem solving team dynamic.
- MAA has adopted formal partnering for all Capital projects exceeding \$10M
- Bid as an allowance to the construction contract



Design Elements - Apron

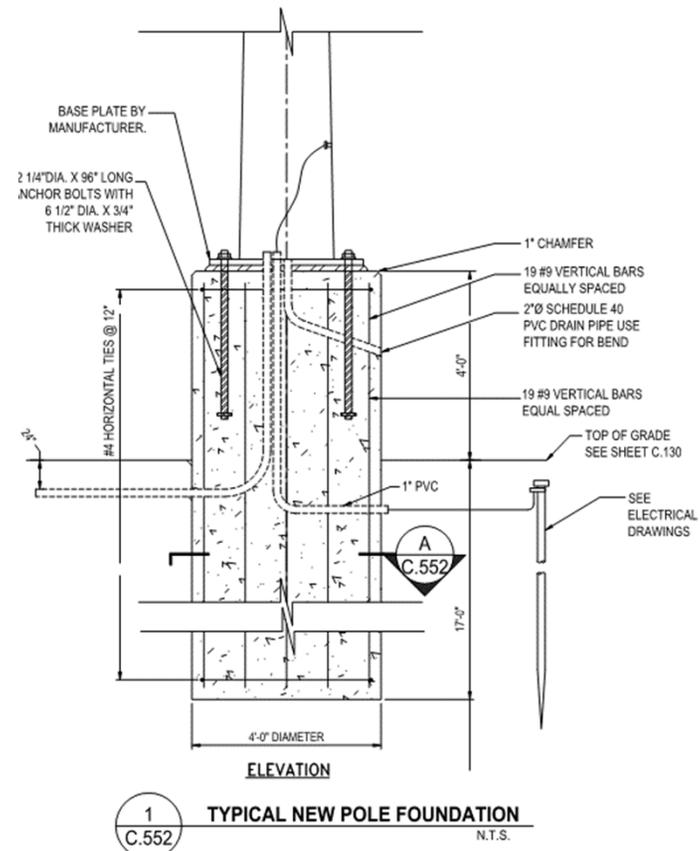


Design Elements - Apron



Expedited Field Investigations

- Pavement and Foundation designs performed using historical data
 - Confirmed design once lab work was completed
- Driller mobilized within 48 hrs.
- Performed visual pavement inspections within 24 hrs.



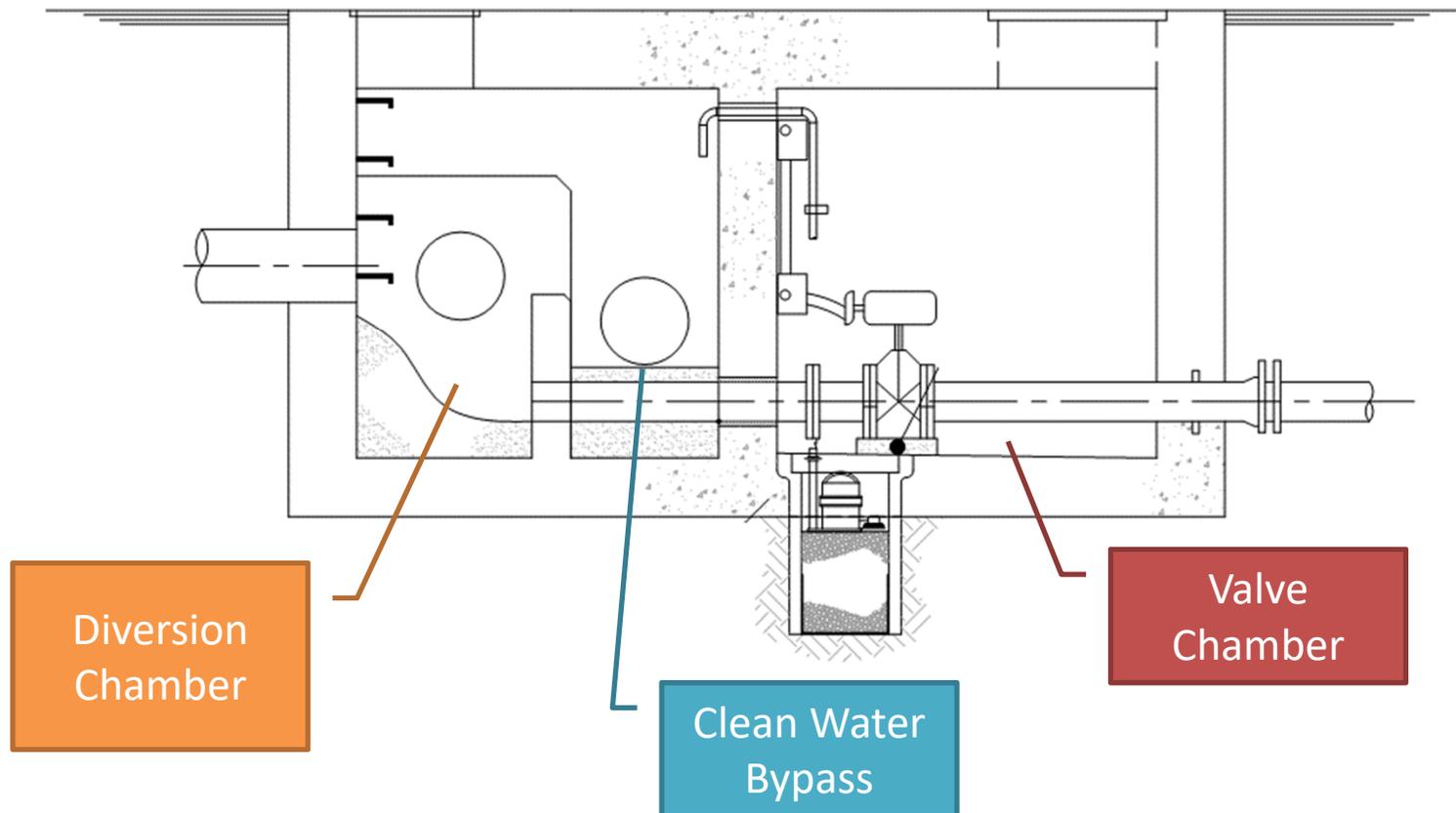
Design – Drainage and Glycol Collection



Design Elements – Drainage and Glycol Collection



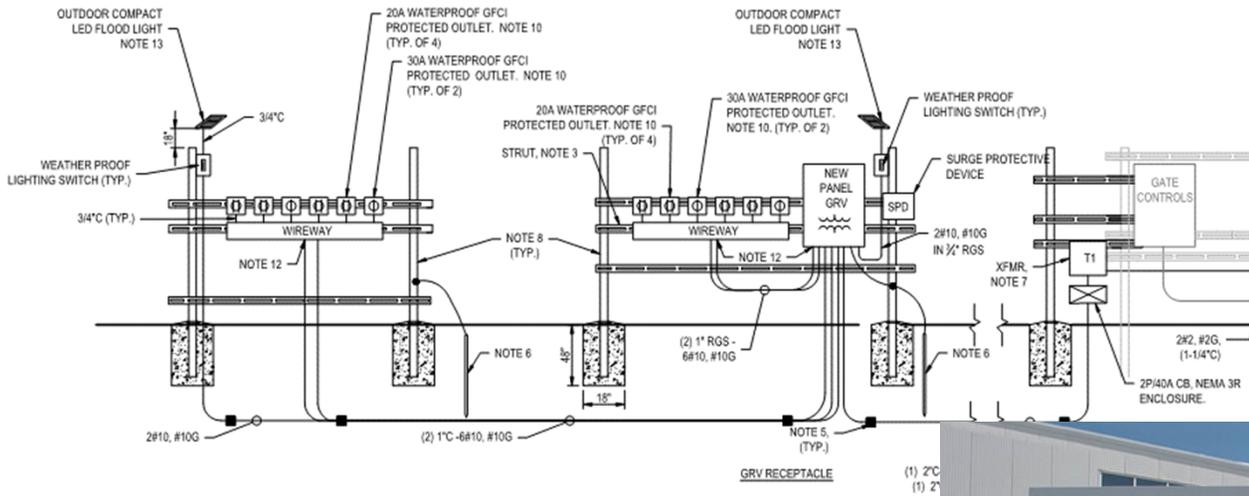
Design Elements – Glycol Diversion Vault



Design Elements – Glycol Diversion Vault



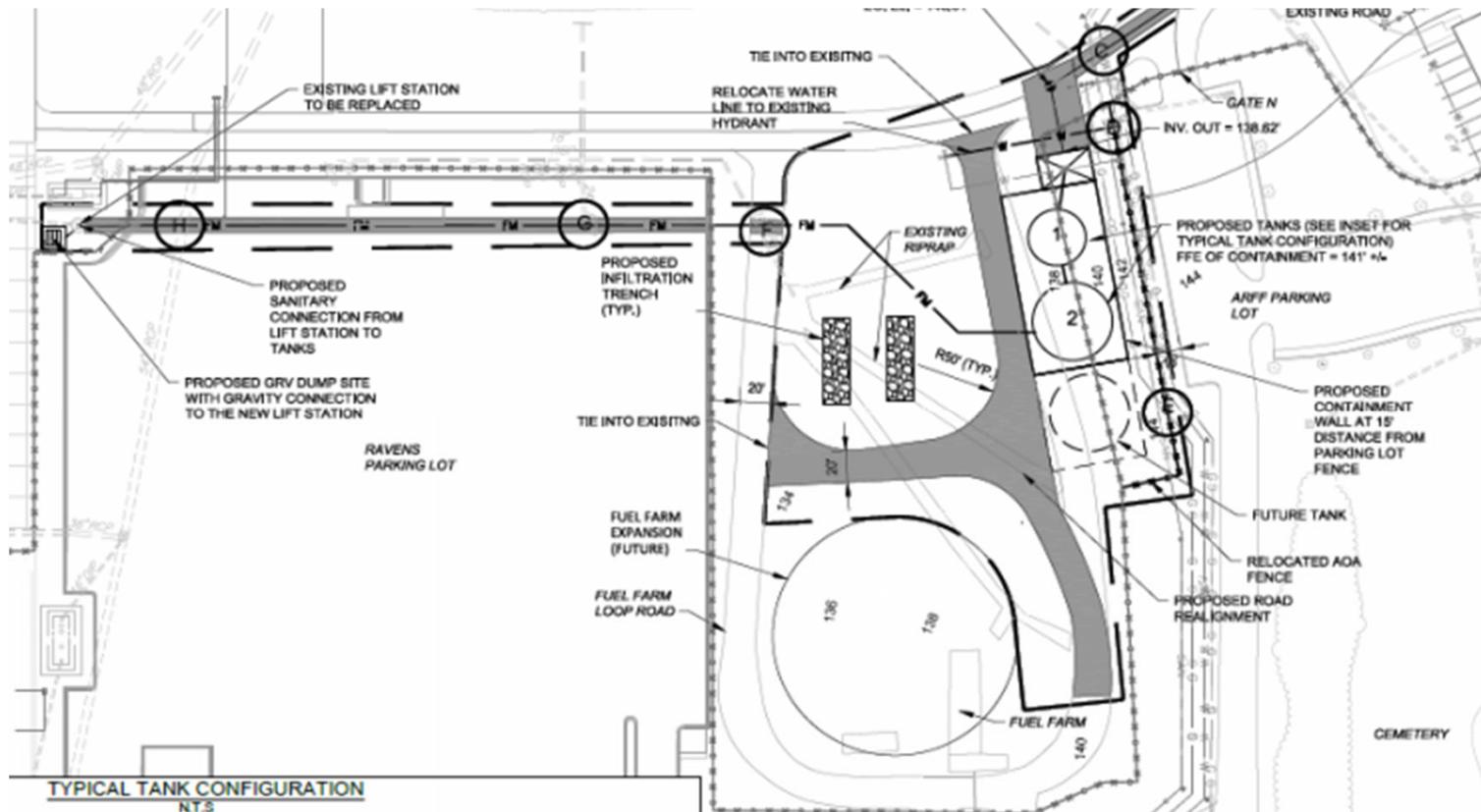
Short Term - Drainage and Glycol Collection



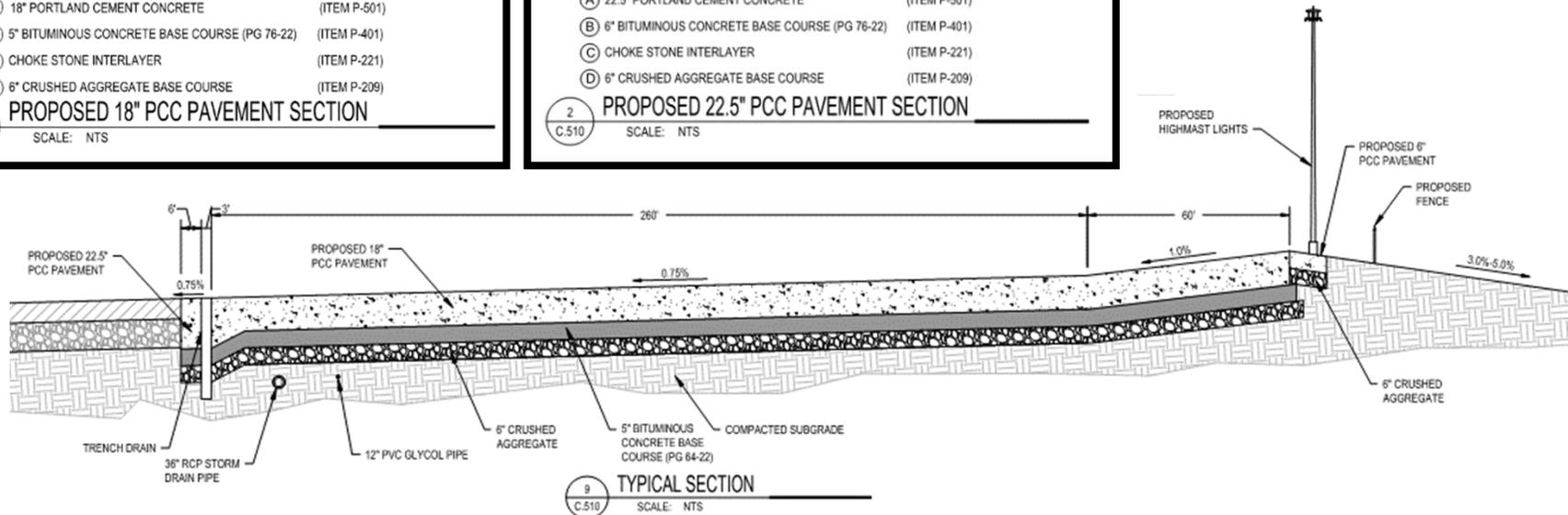
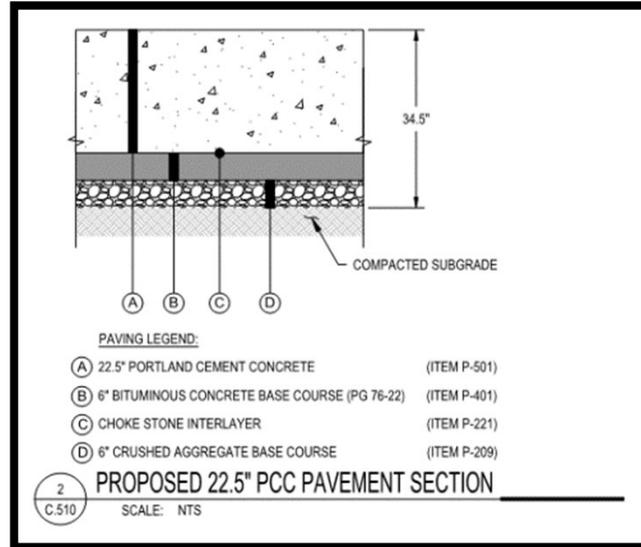
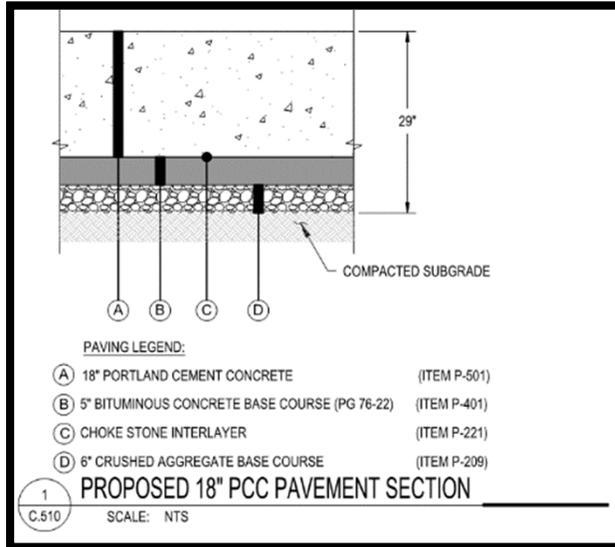
1 GRV MOTOR HEATER RISER DIAGRAM
E.501 NOT TO SCALE



Long Term – Drainage and Glycol Collection



Design Elements – Pavement Design

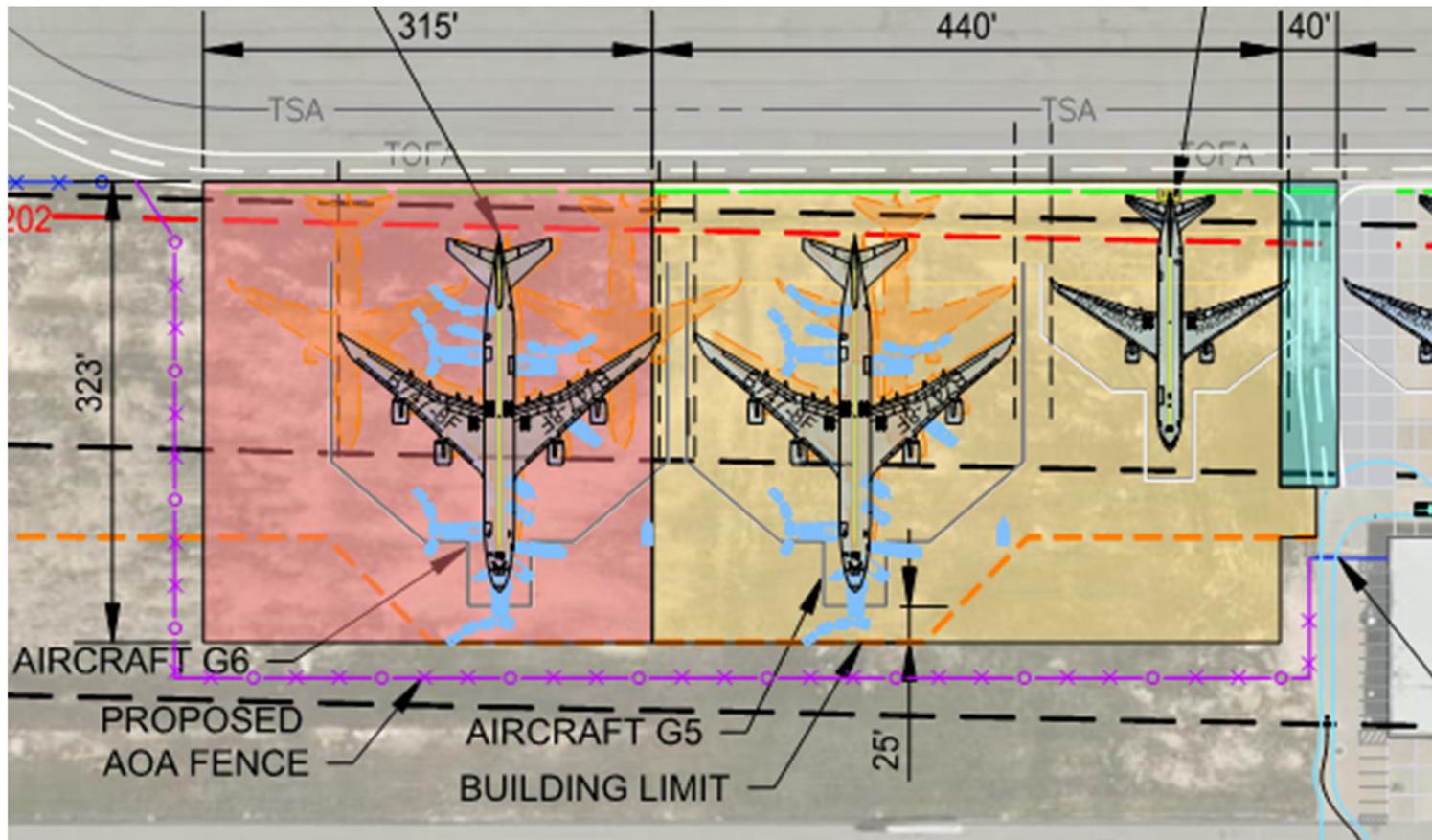


Production Rate Assumptions vs. Schedule

- Typical PCC pour – 800-850 CY or 1,600-1,700 SY
- Forms vs. Slip Form
 - Contractor leap frogged forms rather than setting up pilot lanes
 - Built “dam” to project utility corridor
- Set 50 LF of Trench Drain per Day
- Material Availability
 - Pours scheduled to coincide with concrete suppliers other projects



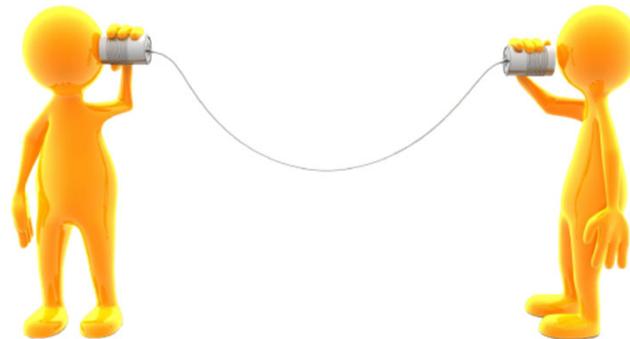
Phasing – Full Build Out

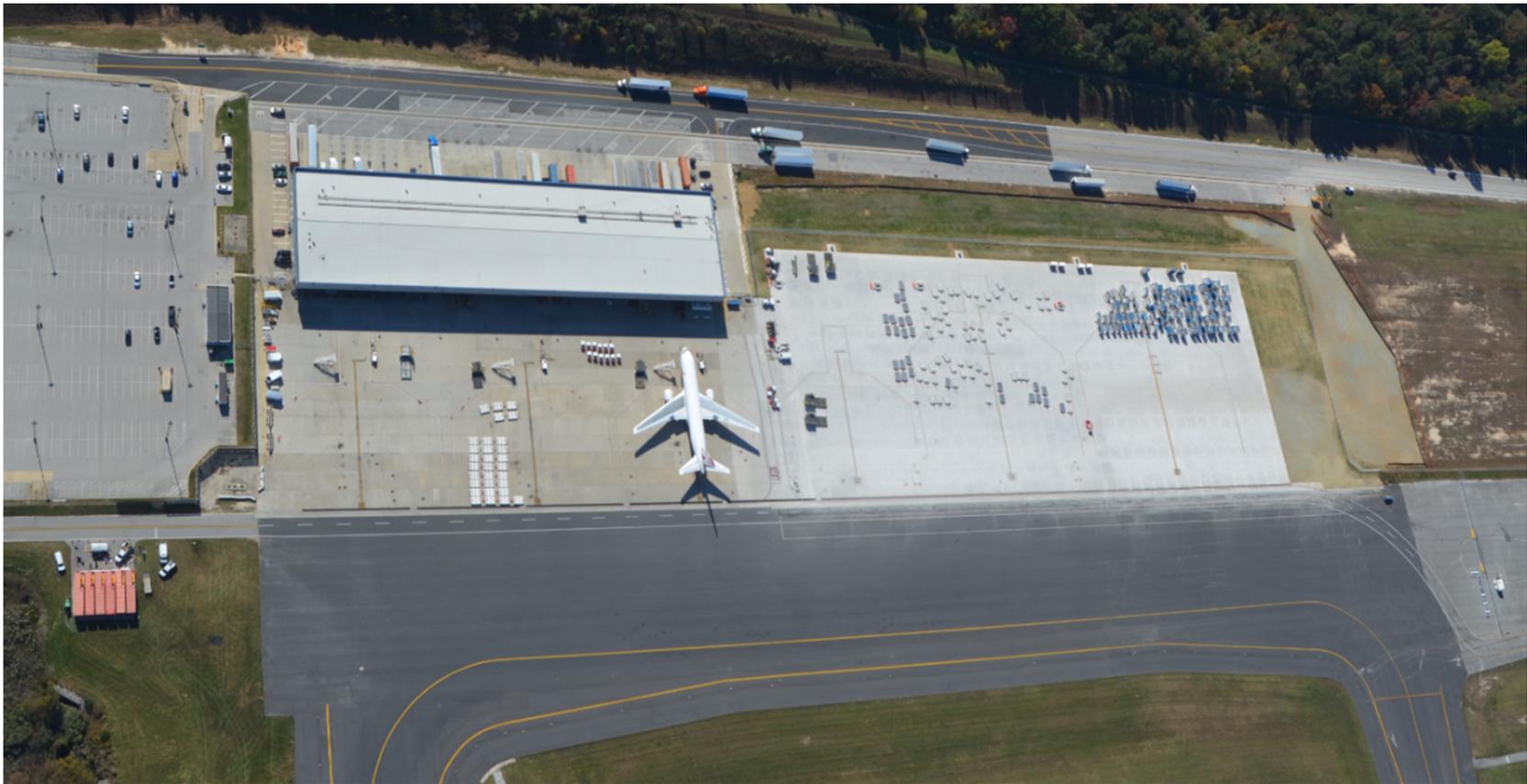


Construction Administration



- Shop Drawing Review
 - Dedicated staff member for reviews
- RFI Review Process
 - Confirming RFIs
 - Direct line of Communication
- Partnering





'be better'





Christina Pettit

Project Manager



28,000 SY of excavation and stone placement.

Excavation



Stone Placement



28,000 SY of asphalt paving and
concrete placement.

Asphalt Paving



Concrete Forming and Pouring



Working in a confined area.

Electrical line installation along side the glycol line.



Electrical installation, Trench drain installation, and stone placement.

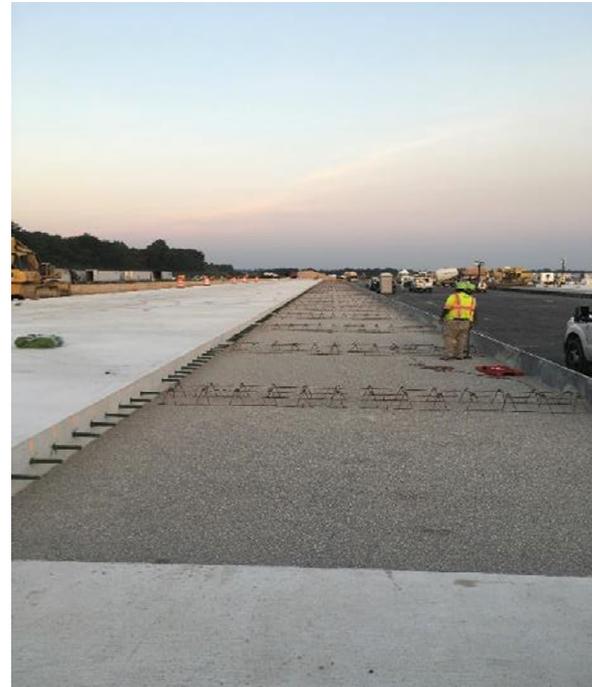


September 5th, pouring one lane and preparing for the next.

Pouring 1644 SY of concrete, pours typically started at 2AM.



Forming and preparing a 760' lane for tomorrow's concrete pour of 1644 SY.



Phase 1A

Adding security fencing to work in Phase 1A.



Working along side Pinnacle during their daily cargo operation.



Concrete lane to prevent sheet flow was poured 3 days prior to receiving a half inch of rain in a few short hours.





Day 108



April 2017



March - April 2017



'be better'



April 2017





June 2017





July 2017



August 2017



September 2017





September 2017



October 2017



October 2017



'be better'

