



**PUBLIC WORKS & ENGINEERING SERVICES**

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August 23, 2019

Kimley-Horn & Associates, Inc.  
Attn: Joseph Malo, P.E.  
1400 Woodlock Forest Dr, Suite 225  
The Woodlands, TX 77380

Re: Addison Galaxy FBO Civil Plan Review

Mr. Malo,

As the Town's review engineer, Cobb, Fendley & Associates, Inc. (CobbFendley) has reviewed the following plan for compliance with Town of Addison and Dallas County requirements.

Development: Galaxy FBO  
Town Project #: 19-09D  
Plan Review: 1<sup>st</sup> Civil Submittal

Plan Received: July 30, 2019  
Plan Date: July 25, 2019

The City staff and review engineer have endeavored to review the plan for compliance with the governing authorities. This review does not relieve the design engineer, developer, and / or contractor from meeting all Town of Addison, TCEQ, TxDOT, TDLR, and other state and federal requirements that apply to this project that may or may not have been identified through this review.

CobbFendley has summarized our review comments along with the comments of the Town of Addison staff on the following pages. The submitting engineer / developer should address the following comments prior to plan approval.

I look forward to working with you on receiving approval for this development. If you have any questions, feel free to call at 972-335-3214.

Sincerely,  
COBB, FENDLEY & ASSOCIATES, INC.

Jenny Prazak, P.E.  
Municipal Infrastructure



Town of Addison

Summary of Engineering Review Comments

Date: August 23, 2019  
 Plan Review : Civil Review 1  
 Received: July 30, 2019  
 Plan Date: July 25, 2019  
 Development: Galaxy FBO

Town Project #:19-09D

Prepared by: JP

All comments on Plan Review Set and Summary of Review Comment form must be addressed.  
 Review Comment form may NOT be all inclusive of comments made directly on the Plan Review Set.

Summary of

Page No.	Comments	Response (See Note)	Explanation
GENERAL	Incorporate changes requested from most recent zoning review.		
GENERAL	Remove all references to City of Houston.		
GENERAL	Check north arrows on all sheets.		
GENERAL	Check match line sheet numbers on all sheets.		
GENERAL	Check for spelling & labeling errors throughout the set, some have been noted in markups, but not all.		
GENERAL	All airside plan sheets much be submitted to airport staff and Garver for review and approval also.		
GENERAL	You may want to wait to seal the plans until you receive approval and submit for stamping to reduce the need for revclouds and revision notes.		
GENERAL	In the plan set, also include (or submit simultaneously) plans for the access road relocation, fuel farm entry relocation, & George Haddaway improvements.		
GENERAL	Include plans with fire truck routing using autoturn (or similar) to show adequate turn radii & paths through the site. Use WB-50 vehicle for modeling.		
GENERAL	Label the car wash on all applicable sheets.		
GENERAL	Will detention pond maintenance be accessed from airside or landside?		
GENERAL	Reference markups for additional comments & detailed markups.		
C00.02	Sheet C00.09 is listed in the sheet table but not included in the set		
C00.04	Reference markups for revisions/additions to notes.		
C00.05	Check survey control coordinates. Reference markups		
1 of 4	Revise sheet number to match rest of set nomenclature		

Page No.	Comments	Response (See Note)	Explanation
1 of 4	Update per zoning plan changes - should reflect approved zoning plan (have not received resubmittal for review & approval).		
1 of 4 & C05.03	What is the paved area north of Hangar III and south of George Haddaway? Parking? Loading? Storage?		
C00.10	Hydrants must maintain minimum 3' (prefer 6') clear from bldg foundation for future maintenance/service.		
C01.00 & 03.01	Extend project limits to encompass ALL paving/grading/drainage/utility work.		
C01.01	Does the existing double 24" RCP have SET's or headwalls?		
C01.02 & 01.03	Check your viewports - plan view doesn't line up with labeling arrows.		
C02.01 & 02.02	Include CI protection on Addison Rd inlets.		
C02.03	Revise sheet number		
C02.03	Use TOA standard details where applicable.		
C03.01	Note to remove existing landscaping as applicable.		
C03.01 & 11.02	Where is the OH being relocated? Show.		
C03.01	Demo sidewalk to property line & connect back to ex.		
C03.02	Coordinate fence/gate removal with airport to maintain security & fire access.		
C03.02	Show ex. Sanitary service lines & cleanouts		
C03.02	Water should be cut & plugged at the cross.		
C03.03 & 03.04	Connect ex. Water line crossing Addison Rd to proposed line, demo ex line beyond extension point.		
C03.04	Show all existing drainage pipes across the site - coordinate with Dave Wilde to get records.		
C03.04	Remove tee on northern end of demo'd water line		
C04.01	Where is the new access road? Show location & connection to it.		
C04.03	Call for 1" expansion joint on details 3 & 5		
C05.01	Label all curb curve radii		
C05.01	Add detail nomenclature to the legend (typ)		
C05.01 & 05.05	Light duty pavement called out in the legend doesn't match the pavement detail. Should call for medium duty. (typ)		
C05.01	Transition sidewalk to match existing at the southern property line.		
C05.01	Should be 5" sidewalk. (typ)		
C05.02	What is the darker cross-hatched area? It is not labeled or in the legend. If it is pedestrian accessible, it should have ramps.		
C05.02	Do you need a publicly accessible route from the street?		

Page No.	Comments	Response (See Note)	Explanation
C05.02 & 09.02	Is the stamped pavement at the main FBO entrance curbed? Are there curb transitions at the entrance to the covered drive?		
C05.05	Alley pavement details are not applicable to fire lanes. If you intended to use it for the inverted crown, please provide a detail that reflects TOA paving standards with your intended grading.		
C05.05 & 05.06	Get the updated BFR detail from Dave Wilde & replace. You don't need the detectable warning paver detail.		
C05.06	Because Addison Rd is asphalt, provide a concrete-to-asphalt transition detail.		
C05.06 & 09.01	Include a concrete curb & gutter on asphalt pavement detail.		
C06.02	Check legend - looks like the isolation & expansion joints may be switched? (typ)		
C06.03	Detail 8 should be expansion joint, not isolation joint - has a dowel.		
C07.01 & 07.02	Dimension sawcut		
C07.01 & 07.02	Call for concrete to asphalt transitions on both driveways.		
GRADING	Add elevations at existing pvmt connections to elevation point sheets		
GRADING	Please move the grading plan sheets to immediate follow the elevation point sheets.		
C09.01	Provide grades for curb replacement		
C09.01	BFR's should have return curbs, not wings.		
C09.01	Add TOC & back of sidewalk grades w/ max 2% grade callouts for parkway.		
C09.02	If the darker crosshatched area is pedestrian, need spot grades.		
C10.00	Need pre-development & post-development DAM's.		
C10.00 & 12.07	Seems that at least some of the fuel farm drainage is captured by or flows through your site. Coordinate with Dave Wilde for records & show how this is being handled.		
C10.00	Legend shows DA boundaries are existing, but they match the proposed layout.		
C10.01	City of Houston drainage manual???		
C10.01	Why are you using different intensities for the western & eastern collection lines?		
C10.01	Both storm drain lines outfall at the detention pond, so should match beginning HGL's, which should match the 100-yr WSL of the pond.		
C10.01	Need calcs for the 3'x6' RCB downstream of the pond also.		
C11.01	Where is cross section 'A-A' as shown on sheet?		
C11.01	Geometry of your proposed channel connection to the existing storm drain is awkward - revise to be cleaner.		

Page No.	Comments	Response (See Note)	Explanation
C11.02	Show maintenance access for pond & check appropriate grading		
DRAINAGE	Provide stage-storage calcs for the pond, including pre-/post runoff calcs.		
DRAINAGE	Don't see location of your outfall structure for the pond. Show location & orifice sizing for 100-yr storm and emergency overflow. Reference TOA drainage manual for requirements.		
DRAINAGE	No tee connections on storm drains, prefer wyes or junction boxes/manholes.		
DRAINAGE	Label sizes of storm manholes & confirm wall integrity w/ larger pipe sizes & configurations.		
C12.01	Is this a pilot channel? Clarify & label.		
C12.02	Check invert elevations for trench drains and STM-16, does not seem to be positive drainage flow.		
C12.04	STM-4 calls for a pipe size change - is this for the 24" joining the main line? Clarify.		
C12.08	Refer to TOA Drainage Criteria Manual fore storm plan requirements.		
C12.08	Show and label HGL <sub>100</sub>		
C12.09	Addison uses "flows to creek" storm drain covers.		
C12.09	Reference NCTCOG for backfill standard specs		
C12.10	Are the catch basins in the detail the aircraft rated inlets? Where are these being used?		
C12.11	Do you want a cleanout on the roof drains? (not a requirement, just a question)		
SANITARY	Check clearances on all water/sewer crossings & ensure clearances or encasement per TCEQ requirements. Show & label any required encasement.		
SANITARY	Are there bathrooms/sinks/showers in the hangars? If so, how are they connecting to sanitary? Same service(s) as the floor drain(s) or separate connections?		
SANITARY	Legend - why clamp? Also, symbol doesn't match what's shown on the plans, and if it's a different symbol, where is it being used?		
C13.01	Is the sanitary service for Hangar 1 crossing the water services? It's not clear since bldg connection isn't shown. Would prefer that it not.		
C13.01	Cleanouts at all bldg connections		
C13.02	Would like SAN-16 MH moved into drive & outside of the landscape island		
C13.02	Profile the dumpster service & show encasement where it crosses the water		

Page No.	Comments	Response (See Note)	Explanation
C13.02	Show & profile the new service that will be required for the discharge from the fuel farm oil/water separator, encase it where it crosses the water.		
C13.02	6" service connections require manholes @ main, not tees/wyes.		
C13.02	Car wash drains should be connected to sanitary sewer (b/c of soap/detergents), & should have oil/water separator (check with TOA Environmental Services & plumbing codes to confirm). If allowed to discharge to storm, will need another stormwater interceptor on the eastern trunk line downstream of the car wash lateral.		
C13.02	What is being dumped at the waste station at SAN-21? Does it need an oil/water separator also?		
C13.02	Put cleanouts at bends.		
C13.03	On shallow clearances between SD & SS w/ SD on top of SS, would like to see some kind of encasement (conc or steel) for those sections to protect against the weight and any future settling of the SD and SD embedment.		
C13.04	TOA has new batch of MH covers that reflect the "new" logo note that these should be procured from public works.		
WATER	Check clearances on all water/sewer crossings & ensure clearances or encasement per TCEQ requirements. Show & label any required encasement.		
WATER	Label which services are domestic/fire/irrigation.		
WATER	Add valves as noted in the markups & water system requirements (valve on each leg of a tee unless in close proximity to another valve on the same line - deletion of a valve is at staff discretion).		
WATER	Show all applicable vaults & BPA's (must be outside of vehicular surfaces)		
WATER	See additional notes on 14.01 & 14.02, which should be added to all water sheets.		
WATER	Check legend. Water valve symbols & corresponding symbols on the plan sheets - circle w/ strike seems to be for existing valves, and hourglass shape for proposed, but not noted that way in the legend. Water linetypes in the legend don't match what was used in the plans.		
WATER	Dimension water line separation from west side of hangars. Must have a minimum 7.5' clearance from foundations (building & ramps) for maintenance purposes.		
WATER	What are the circles at the end of the fire lines? Wall-mounted FDC's? Other? Clarify.		

Page No.	Comments	Response (See Note)	Explanation
WATER	Include station equations where applicable in labels (plan & profile).		
WATER	Call for guard posts around airside FHA's & include standard detail.		
WATER	4" connections should be saddle & corp, not tee.		
C14.01	Would like to see FHA @ 300+58 moved west & a tee added to get the distance.		
C14.01	Why is a 4" plug on a 2" service at 102+83?		
C14.01 & 14.02	Existing Addison Rd crossing should be connected to the proposed 8" water line. See markups for further info on connection & demo.		
C14.02	Check with Fire Marshall re: length of FDC from the hydrant at fire line STA 107+29 (if the circle @ end of line is an FDC).		
C14.02	No water fittings within 10' of sanitary crossings.		
C14.02	Ensure min. 10' separation (CL-CL) between water & sewer lines.		
C14.03	On shallow clearances between SD & water w/ SD on top of water would like to see some kind of encasement (conc or steel) for those sections to protect against the weight and any future settling of the SD and SD embedment.		
C14.03	Show all crossings, including service crossings, in the profiles.		
C14.03	Show valves in profiles.		
C14.05	Not using RCCP water main - don't include RCCP embedment detail - use PVC detail SD-W01.		
C15.00	Dimension the separation from the water & gas (min. 4')		
C15.00	Include profile for Addison Rd crossing.		
PVMT MARKING	Airside markings need to reflect access road changes. Coordinate with the airport & Garver.		
PVMT MARKING	Stripe applicable areas in front of/near FHA's on the airside for NO PARKING. Include detail (similar to sketch on C16.04) for striping & bollards/guard posts.		
C16.04	Extend fire lane stripes all the way to access gate between Hangar I & FBO.		
C16.04	The circle under the canopy on FBO is striped as fire lane. Interior radii aren't labeled anywhere for these curves - are they fire lane compliant? Does the circle need to be firelane?		
C16.05	Does the paved area north of Hangar III and south of George Haddaway need fire lane striping for George Haddaway?		
FENCING	Coordinate Knox locations w/ Fire Marshall. Does there need to be Knox access on both sides of the gates that access public roads?		
C17.02	Will the proposed AOA gate to the fuel farm be swing or slide?		
C17.04	Detail for swing gate?		

Page No.	Comments	Response (See Note)	Explanation
LANDSCAPE	Many proposed trees are too close to utility lines/appurtenances. Tree trunks should be a minimum of 8' from outside edge of utilities.		
LANDSCAPE	Show concrete pads for FHA's/Valves/MH's/vaults, etc.		
LP1.01	Include transportation visibility triangles (Fig 3.6), not just the landscape triangles.		
LP1.01	No seeding. Sod.		
LP1.01	Include re-establishment of newly graded/re-graded areas south of site.		
LP1.02	Discuss possibility of moving water line further west and trees further east (see markups) with civil eng in order to keep trees on either side of the fuel farm access.		

- Notes:**
1. Response: Appropriate response is Agree (Correction Made) or Disagree (Correction Not Made), Explanation Required.
  2. This form must be completed and returned with future submittals.
  3. Previous red lined Plan Review Set must be submitted with future submittals.
  4. **Failure to submit Completed Summary of Review Comments form and previous Plan Review Set will result in a delay of future plan sets being reviewed.**
  5. **Send all plan submittals directly to the Town of Addison**