

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.

Summary of

Review Comment form may NOT be all inclusive of comments made directly on the Plan Review Set.

Page No.	Comments	Response (See Note)	Explanation
GENERAL	Incorporate changes requested from most recent zoning review.	AGREE	
GENERAL	Remove all references to City of Houston.	AGREE	
GENERAL	Check north arrows on all sheets.	AGREE	
GENERAL	Check match line sheet numbers on all sheets.	AGREE	
GENERAL	Check for spelling & labeling errors throughout the set, some have been noted in markups, but not all.	AGREE	
GENERAL	All airside plan sheets much be submitted to airport staff and Garver for review and approval also.	AGREE	
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.	AGREE	REVCLOUDS HAVE BEEN ADDED
GENERAL	In the plan set, also include (or submit simultaneously) plans for the access road relocation, fuel farm entry relocation, & George Haddaway improvements.	DISAGREE	THE ACCESS ROAD RELOCATION AND THE FUEL FARM ENTRY RELOCATION HAVE BEEN DESIGNED BY GARVER AND ARE UNDER CONSTRUCTION NOW (TOA PROJECT BID NO. 19-223). ALL IMPROVEMENTS WITHIN THE FUELFARM SITE AND ALONG GEORGE HADDAWAY DRIVE ARE TO BE DESIGNED AND CONSTRUCTED BY THE AIRPORT.
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.	AGREE	SEE SEPARATE FIRE TRUCK MANEUVERING PLAN INCLUDED WITH THIS RESUBMITTAL.

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GENERAL	Label the car wash on all applicable sheets.	AGREE	
GENERAL	Will detention pond maintenance be accessed from airside or landside?	AGREE	PRIVATE POND-CLIENT WILL PERFORM THE NECESSARY MAINTENANCE
GENERAL	Reference markups for additional comments & detailed markups.	AGREE	
C00.02	Sheet C00.09 is listed in the sheet table but not included in the set	AGREE	
C00.04	Reference markups for revisions/additions to notes.	AGREE	
C00.05	Check survey control coordinates. Reference markups	AGREE	
1 of 4	Revise sheet number to match rest of set nomenclature	AGREE	
1 of 4	Update per zoning plan changes - should reflect approved zoning plan (have not received resubmittal for review & approval).	AGREE	
1 of 4 & C05.03	What is the paved area north of Hangar III and south of George Haddaway? Parking? Loading? Storage?	AGREE	STORAGE
C00.10	Hydrants must maintain minimum 3' (prefer 6') clear from bldg foundation for future maintenance/service.	AGREE	
C01.00 & 03.01	Extend project limits to encompass ALL paving/grading/drainage/utility work.	DISAGREE	THESE REFERENCED LINES INDICATE THE LEASE LIMITS. PLEASE SEE UPDATED CALLOUTS FOR CLARITY.
C01.01	Does the existing double 24" RCP have SET's or headwalls?	AGREE	SET's
C01.02 & 01.03	Check your viewports - plan view doesn't line up with labeling arrows.	AGREE	
C02.01 & 02.02	Include CI protection on Addison Rd inlets.	AGREE	
C02.03	Revise sheet number	AGREE	
C02.03	Use TOA standard details where applicable.	AGREE	
C03.01	Note to remove existing landscaping as applicable.	AGREE	
C03.01 & 11.02	Where is the OH being relocated? Show.	AGREE	SEE SHEET C18.01 FOR PROPOSED RELOCATION
C03.01	Demo sidewalk to property line & connect back to ex.	AGREE	
C03.02	Coordinate fence/gate removal with airport to maintain security & fire access.	AGREE	
C03.02	Show ex. Sanitary service lines & cleanouts	DISAGREE	ALL KNOWN UTILITIES ARE SHOWN
C03.02	Water should be cut & plugged at the cross.	AGREE	
C03.03 & 03.04	Connect ex. Water line crossing Addison Rd to proposed line, demo ex line beyond extension point.	AGREE	
C03.04	Show all existing drainage pipes across the site - coordinate with Dave Wilde to get records.	AGREE	DRAINAGE COMING FROM THE FUEL FARM HAS BEEN ADDED
C03.04	Remove tee on northern end of demo'd water line	AGREE	

Page No.	Comments	Response (See Note)	Explanation
C04.01	Where is the new access road? Show location & connection to it.	DISAGREE	ACCESS ROAD PROVIDED BY OTHERS
C04.03	Call for 1" expansion joint on details 3 & 5	AGREE	
C05.01	Label all curb curve radii	AGREE	
C05.01	Add detail nomenclature to the legend (typ)	AGREE	
C05.01 & 05.05	Light duty pavement called out in the legend doesn't match the pavement detail. Should call for medium duty. (typ)	AGREE	
C05.01	Transition sidewalk to match existing at the southern property line.	DISAGREE	THE PROPOSED SIDEWALK IS TIEING INTO THE EXISTING CURB AT A 90. THIS WILL BE BEST FOR FUTURE TIE-IN, AS THERE WILL NOT BE ANY ADDITIONAL SIDEWALK REMOVAL NEEDED.
C05.01	Should be 5" sidewalk. (typ)	AGREE	
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.	DISAGREE	THIS AREA IS FOR LANDSCAPE ONLY, IT IS NOT A SIDEWALK
C05.02	Do you need a publicly accessible route from the street?	DISAGREE	THIS AREA IS LANDSCAPE
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?	AGREE	YES THE DRIVE AND SIDEWALK WILL BE STAMPED. THE CURB IS RAMPING UP FROM NORTH END AND RAMPING DOWN ON THE SOUTH
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.	AGREE	SEE DETAIL 1 ON SHEET C05.05 FOR UPDATED CROSS SECTION
C05.05 & 05.06	Get the updated BFR detail from Dave Wilde & replace. You don't need the detectable warning paver detail.	AGREE	SEE DETAIL 6 ON SHEET C05.05
C05.06	Because Addison Rd is asphalt, provide a concrete-to-asphalt transition detail.	AGREE	SEE DETAIL 6 ON SHEET C05.06
C05.06 & 09.01	Include a concrete curb & gutter on asphalt pavement detail.	AGREE	
C06.02	Check legend - looks like the isolation & expansion joints may be switched? (typ)	AGREE	
C06.03	Detail 8 should be expansion joint, not isolation joint - has a dowel.	AGREE	
C07.01 & 07.02	Dimension sawcut	AGREE	
C07.01 & 07.02	Call for concrete to asphalt transitions on both driveways.	AGREE	
GRADING	Add elevations at existing pvmt connections to elevation point sheets	AGREE	
GRADING	Please move the grading plan sheets to immediate follow the elevation point sheets.	AGREE	

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C09.01	Provide grades for curb replacement	AGREE	
C09.01	BFR's should have return curbs, not wings.	AGREE	
C09.01	Add TOC & back of sidewalk grades w/ max 2% grade callouts for parkway.	AGREE	
C09.02	If the darker crosshatched area is pedestrian, need spot grades.	DISAGREE	THIS AREA IS FOR LANDSCAPE
C10.00	Need pre-development & post-development DAM's.	AGREE	AN EXISTING DAM SHEET HAS BEEN ADDED, SEE SHEET C11.00
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.	AGREE	THE FUEL FARM DRAINAGE HAS BEEN INCORPORATED INTO THE SYSTEM
C10.00	Legend shows DA boundaries are existing, but they match the proposed layout.	AGREE	
C10.01	City of Houston drainage manual???	AGREE	ALL STORM CALCULATIONS ARE PERFORMED PER TOWN OF ADDISON DRAINAGE CRITERIA MANUAL, SEE UPDATED NOTE
C10.01	Why are you using different intensities for the western & eastern collection lines?	DISAGREE	WESTERN ZONE IS CLOSED STORM SEWER SYSTEM, REQUIRING DESIGN STORM FREQUENCY OF 10YR WITHIN STORM SYSTEM. EASTERN ZONE IS CLOSED SYSTEM AT LOW POINT OR SAG, REQUIRING 100YR WITHIN STORM SYSTEM.
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.	AGREE	DOWNSTREAM HGL ELEVATIONS HAVE BEEN UPDATED FOR 100YR WSL OF POND
C10.01	Need calcs for the 3'x6' RCB downstream of the pond also.	AGREE	SEE SHEET C11.03
C11.01	Where is cross section 'A-A' as shown on sheet?	AGREE	SEE SHEET C10.08
C11.01	Geometry of your proposed channel connection to the existing storm drain is awkward - revise to be cleaner.	AGREE	
C11.02	Show maintenance access for pond & check appropriate grading	DISAGREE	PRIVATE POND-CLIENT WILL PERFORM THE NECESSARY MAINTENANCE
DRAINAGE	Provide stage-storage calcs for the pond, including pre-/post runoff calcs.	AGREE	SEE SHEET C11.03
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.	AGREE	SEE SHEET C11.03

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DRAINAGE	No tee connections on storm drains, prefer wyes or junction boxes/manholes.	AGREE	TEE CONNECTIONS HAVE BEEN CONVERTED TO WYE'S AND MANHOLES
DRAINAGE	Label sizes of storm manholes & confirm wall integrity w/ larger pipe sizes & configurations.	AGREE	
C12.01	Is this a pilot channel? Clarify & label.	AGREE	THIS IS NOT A CONCRETE CHANNEL
C12.02	Check invert elevations for trench drains and STM-16, does not seem to be positive drainage flow.	AGREE	INVERT ELEVATIONS HAVE BEEN CORRECTED
C12.04	STM-4 calls for a pipe size change - is this for the 24" joining the main line? Clarify.	AGREE	THIS HAS BEEN CHANGED TO A WYE CONNECTION
C12.08	Refer to TOA Drainage Criteria Manual fore storm plan requirements.	AGREE	
C12.08	Show and label HGL ₁₀₀	AGREE	
C12.09	Addison uses "flows to creek" storm drain covers.	AGREE	
C12.09	Reference NCTCOG for backfill standard specs	AGREE	
C12.10	Are the catch basins in the detail the aircraft rated inlets? Where are these being used?	AGREE	YES, THESE ARE AIRCRAFT-RATED
C12.11	Do you want a cleanout on the roof drains? (not a requirement, just a question)	DISAGREE	REF MEP FOR ROOF DRAIN CLEANOUTS
SANITARY	Check clearances on all water/sewer crossings & ensure clearances or encasement per TCEQ requirements. Show & label any required encasement.	AGREE	
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?	AGREE	THERE ARE RESTROOMS IN HANAGARS 1 AND 3 AS WELL AS IN THE FBO
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?	AGREE	CHANGED TO MATCH
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.	DISAGREE	THE SANITARY SERVICE IS NOT CROSSING.
C13.01	Cleanouts at all bldg connections	DISAGREE	THE CLEANOUTS AT THE BUILDINGS ARE TO BE DETERMINED BY THE MEP
C13.02	Would like SAN-16 MH moved into drive & outside of the landscape island	AGREE	
C13.02	Profile the dumpster service & show encasement where it crosses the water	AGREE	

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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.	AGREE	PER THE EMAIL ATTACHED TO THIS SUMMARY OF REVIEW COMMENTS FROM JENNY PRAZAK WITH COBB FENDLEY, THE EXISTING OIL/WATER SEPARATOR ON THE FUEL FARM SITE WILL CONTINUE TO DISCHARGE INTO THE STORM SEWER RUNNING THROUGH THE SUBJECT SITE. SINCE THERE IS AN EXISTING PUBLIC SANITARY SEWER LINE RUNNING ALONG THE WEST SIDE OF THE ADDISON ROAD RIGHT OF WAY (I.E. ADJACENT TO THE FUEL FARM SITE) WE ARE NO LONGER PROPOSING A SANITARY SEWER STUB TO THE BOUNDARY OF THE FUEL FARM SITE FROM WITHIN THE SUBJECT SITE. IN THE FUTURE, IF THE AIRPORT AND/OR TOWN DETERMINE THE OIL/WATER SEPARATOR ON THE FUEL FARM SITE NEEDS TO DISCHARGE TO SANITARY SEWER, THE EXISTING PUBLIC LINE ON THE WEST SIDE ADDISON ROAD PROVIDES A CONNECTION POINT.
C13.02	6" service connections require manholes @ main, not tees/wyes.	AGREE	
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.	AGREE	
C13.02	What is being dumped at the waste station at SAN-21? Does it need an oil/water separator also?	DISAGREE	THAT IS JUST A NORMAL SS WASTE, AN OIL/WATER SEPARATOR IS NOT NEEDED
C13.02	Put cleanouts at bends.	AGREE	

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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.	AGREE	SEE NOTE 4 ON SANITARY SEWER PLAN SHEETS
C13.04	TOA has new batch of MH covers that reflect the "new" logo note that these should be procured from public works.	DISAGREE	D.W. DID NOT HAVE THE UPDATED LOGO DESIGN ON A STANDARD DETAIL SHEET
WATER	Check clearances on all water/sewer crossings & ensure clearances or encasement per TCEQ requirements. Show & label any required encasement.	AGREE	
WATER	Label which services are domestic/fire/irrigation.	AGREE	
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).	AGREE	ADDITIONAL VALVES HAVE BEEN PROVIDED, SEE WATERLINE PLAN SHEETS. VALVES NOT NECESSARY AT EACH LEG OF FHA TEES
WATER	Show all applicable vaults & BPA's (must be outside of vehicular surfaces)	AGREE	
WATER	See additional notes on 14.01 & 14.02, which should be added to all water sheets.	AGREE	
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.	AGREE	
WATER	Dimension water line separation from west side of hangars. Must have a minimum 7.5' clearance from foundations (building & ramps) for maintenance purposes.	AGREE	
WATER	What are the circles at the end of the fire lines? Wall-mounted FDC's? Other? Clarify.	AGREE	
WATER	Include station equations where applicable in labels (plan & profile).	AGREE	
WATER	Call for guard posts around airside FHA's & include standard detail.	AGREE	
WATER	4" connections should be saddle & corp, not tee.	AGREE	
C14.01	Would like to see FHA @ 300+58 moved west & a tee added to get the distance.	DISAGREE	SEE THE CURRENT FIRE HYDRANT ASSEMBLY LOCATION ON SHEET C14.01.
C14.01	Why is a 4" plug on a 2" service at 102+83?	AGREE	
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.	AGREE	THE FIRE HYDRANT HAS BE RELOCATED AND A CONNECTION HAS BEEN ADDED

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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).	AGREE	
C14.02	No water fittings within 10' of sanitary crossings.	AGREE	
C14.02	Ensure min. 10' separation (CL-CL) between water & sewer lines.	AGREE	
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.	AGREE	SEE NOTE 5 ON WATERLINE PLAN SHEETS
C14.03	Show all crossings, including service crossings, in the profiles.	AGREE	
C14.03	Show valves in profiles.	AGREE	
C14.05	Not using RCCP water main - don't include RCCP embedment detail - use PVC detail SD-W01.	AGREE	
C15.00	Dimension the separation from the water & gas (min. 4')	AGREE	
C15.00	Include profile for Addison Rd crossing.	DISAGREE	THE GAS CROSSING THE ROAD WILL BE DONE BY GAS PROVIDER
PVMT MARKING	Airside markings need to reflect access road changes. Coordinate with the airport & Garver.	AGREE	
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.	DISAGREE	THERE WILL BE NO VEHICLE PARKING ON AIRSIDE/APRON
C16.04	Extend fire lane stripes all the way to access gate between Hangar I & FBO.	AGREE	
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?	AGREE	SEE UPDATED FIRE LANE WITH RADII DIMENSIONS
C16.05	Does the paved area north of Hangar III and south of George Haddaway need fire lane striping for George Haddaway?	DISAGREE	NO, THIS AREA DOES NOT NEED FIRE LANE STRIPING
FENCING	Coordinate Knox locations w/ Fire Marshall. Does there need to be Knox access on both sides of the gates that access public roads?	AGREE	KNOX LOCATIONS TO BE COORDINATED WITH FIRE MARSHALL
C17.02	Will the proposed AOA gate to the fuel farm be swing or slide?	AGREE	GATE IS TO SLIDE, SEE UPDATED LABEL
C17.04	Detail for swing gate?	AGREE	SEE SHEET C17.03
LANDSCAPE	Many proposed trees are too close to utility lines/appurtenances. Tree trunks should be a minimum of 8' from outside edge of utilities.	AGREE	
LANDSCAPE	Show concrete pads for FHA's/Valves/MH's/vaults, etc.	AGREE	
LP1.01	Include transportation visibility triangles (Fig 3.6), not just the landscape triangles.	AGREE	SEE ATTACHED SIGHT VISIBILITY TRIANGLE EXHIBIT
LP1.01	No seeding. Sod.	AGREE	

Page No.	Comments	Response (See Note)	Explanation
LP1.01	Include re-establishment of newly graded/re-graded areas south of site.	DISAGREE	SEE CIVIL PLANS FOR NEWLY GRADED/RE-GRADED AREAS TO THE SOUTH OF THE 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.	AGREE	

- 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**