



December 11, 2025

Call to order- Mark Rolling

Roll Call

M. Rolling- Present

W. Wainwright – Present

K. Ross - Present

J. Thomas- Absent

G. Recotta- Present

APPROVAL OF AUGUST 2025 MINUTES – All in Favor

#### **AIR TRAFFIC MANAGER COMMENTS – Maloney Robinson**

In the absence of the Air traffic control manager, Mr. Tony reported that per the manager the count for the month of November 2025 was 2,865 movements. The count is very low and it is only the count during the tower hours of operation 8a – 4p M-Sat. But they will probably go back to just M-F soon. The mayor inquired on an update relative the communications regarding the tower hours from the FAA. Mr. Tony said he was waiting on a return call from Ms. Hubbard to schedule a phone conference with him and Charles Borchers, City Administrator for one day next week to discuss this issue. Ray Reggie of TOP GUN Hammond, LLC asked if this count included the Military. He stated that last December the count was 5,660. Ken Ross stated that due to the administrative change in the tower, are we sure that the movements are being counted the same. It almost seems as though it's a reporting issue more than a tower hour issue.

#### **AIRPORT DIRECTOR COMMENTS – Tony Michelli**

##### **SKY X**

Mr. Toney introduced Chris Bates the new General manager for SKY X

##### **NOAA/DOPLAR RADAR**

Mr. Tony introduced Bobbie Harp from National Weather Service and Lathan Ruby the weather tech from the Slidell office here to address the request regarding the New business agenda item #1 – The Sky X lease (parking lot).

## **2027 AIRSHOW**

Mayor Panepinto stated that some of the board members we went to Vegas for the airshow convention. Some went Sunday to take 101 and 102 Air show when you're a new board member, that's one of the requirements. And then on Tuesday, they announce all acts for 26 & 27 and we were the second to last act because we in October to be announced for the Blue Angels. So that was huge for the City of Hammond. Great job. The show will be Halloween weekend of 2027. William Wainwright stated they picked us we did not pick them. We have asked them every year. 2016 is when we started talking to them. They picked us because they've heard about Hammonds Airshow, the hospitality in our parish and said they wanted to come. Their only requirement was, being able to pick the date. And we were like, "You can pick Christmas day, if you're coming to Hammond. It's going to be a lot of work. It's going to be painful for everybody on the airport, but we're going to make it happen because this is a great thing for Hammond and the entire parish. Ken Ross asked, how many people do they bring for this? . William Wainwright answered saying their group is 240 people. Ken Ross said, no I mean how many spectators? The smallest Blue Angel air show attendance numbers I could find show 30,000 people. And we generally do about nine thousand per day, maybe. Their first man will show up on a Tuesday to make noise and wake people up in the whole parish. And he has some things he has to iron out before the rest of them come. The rest of them will come on Thursday. They will fly Thursday on their way in. They're scoping the things out. Then they'll fly again on Friday, Saturday and Sunday. They're going actually park the airplanes here. The planes will land here. We worked out the arresting gear that is required through Belle Chase. We need to have everybody on board. Frank Van Mullen, he was with us when we started and he has since passed away. The mayor state that it's been nine years of trying to get to this point. And the great thing about it is these four shows have pretty much put us in a great place for this show. We're gone through a lot of trial and error, and I think we've finally got this thing down. We simply need to tighten up some gates and some areas where people are getting passed us. But other than that, we're in great shape. We have a really good team, 15 people on the board. This is a nonprofit that makes no money. There are non- profits out there that CEO's and whoever make money. This nonprofit makes no money, our vision and focus are on STEM education for kids, kids in general, and what we can do for this airport. The foundations biggest fear from day one of the first show was being able to pay all the bills to put the show on and eventually build up our general fund to put us in a better position each year. This 2027 show is going to be a huge show with a lot of bills, and I'm telling you, the beauty of this is you don't want to make money, but to be able to help out the airport with certain things as well as the STEM program. The great thing about these Blue Angels is they come in and they go out to the local schools. In prior years we have asked other acts to do the same but it's never really happened. But at this last airshow, we brought some schools in for the practice show up for that really went well. I think we could expand that for kids and bring more kids, maybe on Friday for the shows because they bused them in. From what we understand, it was our female air boss from this show that helped to

lobby for us getting the Blue Angels as well. Next airshow convention we will attempt to get the Thunderbirds for the 2029 airshow.

### **General questions from the Attending Airport community**

Ray Reggie of TOP GUN Hammond, LLC stood to read the following social media post from his company's social media page. He stated that we're getting hit pretty hard on social media at this airport. And this is the negative response that was posted underneath the announcement of us acquiring the Blue Angels for 2027. I feel we need to address some of these comments as a community. And I quote, "How about we fix a lot of the things at the Hammond Airport? Restaff the Control tower to normal working hours. All of the Papi lights for all four runways have been inoperable for months. The reels don't work. The automated weather is hit or miss, the remote NOLA frequency is hit or miss. Currently the ILS approach is inoperable. What's wrong with you people? We're back 30 years ago with airport ops. You should see the two notems that are currently posted. They make no sense. Big fail Hammond Airport." There are multiple of those that we try to comment positive on and this guy's nuts. We're getting hit. We need some sort of overall Hammond Airport social media platform or response page/team. I'd even be willing to pay for it if necessary.

Mr. Tony replied that he has not received any phone calls or formal complaints from any pilots regarding any of what was mentioned. The REILS were ordered on August 26, 2025 with a 12-14week lead time from the manufacturer. The REILS should be here either this week or next. The Papi lights have been installed from a couple of months, but are not turned on because they have to be flight checked at a cost of \$27,000.00. Therefore, we are not going to pay for (2) flight checks. We are going to wait until the REILS are installed so that we pay for (1) flight check.

The mayor stated that the FAA has made it clear that we all need to work together and buy into this airport if we want them to continue to help us financially. Julia Letlow, our congresswoman seems to have us set to receive funds that would help us push all of these projects forward, but with the government shutdown it's just not clear when we will receive those funds. We've been waiting on the Army Corp of Engineers to clear us on the cutting of the trees on the property we purchased years ago in order to reclaim the threshold of Runway 31.

### **OLD BUSINESS**

#### **OB – 1 – Review Hangar Waiting List – Elyria Jacobs**

We have (3) additions since our last meeting bringing the list to 28 people currently waiting for a hangar.

#### **OB – 2 Update on Ongoing and New Airport Projects/Grants – Tony Michelli**

##### **(5) New City owned box hangars under construction**

The completion date will depend on the weather. Ground cannot be broken until we receive the air study from the FAA. Our airport engineer Bobby Odom with Michael Baker International has submitted all of the necessary documentation. But at this point we should not have any problems due to the fact that the next box hangars will be the same height as the existing ones and will not be as tall as the already existing NOAA Doplar Radar Tower.

## **2026 CIP**

- We will rehab Runway 31's first 2500 feet which will cover the dip. It is currently in environmental mitigation.
- Threshold recovery of Runway 13/31 is in the design phase. But we are still waiting on Tree removal approval.

## **NEW BUSINESS**

### **NB – 1 – SKY X LAND LEASE (PARKING LOT) – Jay Seale**

Atty Jay Seale presented the authority board with a drawing of the proposed parking lot for review. Mr. Tony stated that he also submitted the drawing to our airport engineer Bobby Odom of Michael Baker International for review in which they took no issue with the proposal. We also have Mr. Bobby Harp with NOAA present for this proposal just in case they would like to make comments regarding this proposal.

Jay Seale stated what we're looking at here is a site that SKY X is interested in leasing for the purpose of putting in parking. This will be for it's expanding employee base as well as customers of the maintenance and avionics shop and passengers of the FBO. The request that you see here would be an asphalted permanent parking space with perimeter fence and any other technical requirements you might have for it. The mayor interjected saying that anything that is done here or prior to any authority board approval; this approval needs to be dependent upon the State Fire Marshall and/or the city building official regarding this parking. The mayor stated, so that being said, from what I'm seeing, before you the board approves anything or if you approve anything, it needs to be contingent upon the State Fire Marshal and or the city building official when it comes to parking and how this is laid out due to past issues we have had with tenants building on the airfield and not adhering to the established processes set forth by the authority board and by the city building officials. Mr. Jay Seale replied that it is an understood requirement of this request. Mr. Tony then stated that since this parking lot request is inside the fence line, it will be required to be fenced in. Mr. Jay Seale replied saying that it's an accepted commission. The mayor also said to make sure that fuel trucks can get in and out without affecting parking spots. Also, the Fire Marshall may require a certain radius relative to parking cars near the fuel farm as well as the fuel trucks filling the fuel tanks. The board is only approving the lease not the design of the parking lot or the current plans being presented today.

Ken Ross raised a concern relative to the east side of Taxiway Charlie not having a non-aircraft traffic lane which is an attempt to keep vehicle traffic off of Taxiway Charlie. He suggested that we should designate a vehicle movement lane. The mayor stated that the master plan already has a road design drawn in for a road from the Mosquito abatement hangar down to the west side of Charlie. The mayor suggested that Mr. Tony meet with Bobby Odom of Michael Baker

International to discuss Mr. Ken Ross' suggestion regarding the vehicle access road on the East and West side of Taxiway Charlie. Mr. Tony indicated that there are already (2) roads that lead to Taxiway Charlie, which are Cessna and Piper Ct. The mayor also mentioned Sikorsky down near Forestry & Ag down by Mosquito abatement. Ken Ross said there will be a day when the tower will prohibit traffic from Taxiway Charlie. The mayor and Mr. Tony said Taxiway Charlie is a non-movement area anyway. The non-movement line stops at Top Gun. Ken Ross said we will eventually need a utility road in the future of this airport. It may be as simple as saying that we are going to designate a utility road 50 feet away from the center line of the Taxiway. Would that be legal use on both sides of Charlie? Currently there is no utility road on the East side of Charlie. Ken Ross said I'm trying to think 20 years down the road with a north/south utility road. I know how we've been doing it, were a small airport and we can get away with it for a while. But when we have people applying to the lease and once that land is leased then, we've got a big problem. We won't be able to break these leases and then come up with a utility road. I would feel more comfortable if we put a utility road in the plan now.

Jaye Seale respectfully suggested that SKY X has a critical need right now for the parking. Because they need to get it approved and constructed for the terminal activity at the FBO increases the traffic that's in there. We're going to have cars parked all over the place. If you don't have a designated spot. This is not a spot that can be used for any aviation purposes otherwise. I would ask you to consider approving this lease request. It is subject to need for engineering review, and when the plans are submitted they are subject to building official review. But I would ask you to approve the lease of the site that you see there with the next requirement that we have to bring you a survey and engineering proposal after we have a lease. William Wainwright stated that it's very common to approve a conceptual lease, but there won't be any shovel stuck in the dirt until this is laid out correctly.

Mr. Bobby Harp of NOAA rose to speak regarding this proposed site. Their concern is that anytime any building is being constructed near the radar ball (especially during planning stages), our engineers are required to complete a free technical analysis which entails testing for radiation hazard for the surrounding users and a beam blockage impact. The Radar ball actually attracts lightening therefore, we have a robust grounding system for it as well as for the fence line. This is for the safety of the surrounding businesses, our equipment and for people who may just happen to be walking by at the time. If lightening were to strike there is a protection barrier the extends (3) feet pass the fence line. So, once you all receive the final plans for the parking lot we would like to review it just to be sure that nothing is overlapping on any of our underground grounding lines/systems and/or already leased property.

**Guy Recotta made a motion to approve a lease based upon the preliminary conceptual plans presented today but is subject to the submission of an official survey and approved plans; State Fire Marshall approval, and the City of Hammond building official approval; No ground is to be broken until then. Seconded by Ken Ross; ALL IN FAVOR**

**NB – 2 – SKY X LAND LEASE ADJACENT AND SOUTH OF SKY X'S HANGAR ON TAXIWAY CHARLIE – Jay Seale**

This is request to lease a site adjacent to and south of the two partials that Sky X has leased and is building hangers on the west side of Taxiway Charlie. There has been some discussion and some understanding that the site that I'm talking about now was to be a site for Top Gun. Months have gone by. Top Gun has not produced the lease and the board does not approve the lease. Sky X has now invested about 10.5 million dollars in improvements on this airport and is requesting this additional site to build another 30,000 sq ft hangar on that site. What I have today is a draft lease and a draft survey that shows the location and I'll distribute those and we can discuss them. The draft lease is identical in terms to the existing Sky X lease that was prepared and executed by the city attorney. And the exception is that the description is different, and the description in the draft lease describes a proposed hangar located south at the bottom the end of the survey. The next two hangar sites are already under construction for Sky X. That's the last In So, the reason for the request is that Sky X is able to anticipate its needs for the space based on the reception that is getting for the hangar spaces that are coming available now and for the sake of being able to accommodate the demand is seeking this additional site. It would be under the standard terms that you're using now, which is .21/sqft. You recall the procedure would be, if you approve this lease and concept, and it would be reviewed by the city attorney, and supplemented with the stamped survey. Then Sky X would have two years to produce plans and specifications and complete the construction of the hangar that we're talking about. And that's what the request is. I want to emphasize that Sky X has made the largest contribution by several orders of magnitude of construction dollars on this airport with the \$10.5 or \$11 million that's already been spent. And this would be probably another \$ 3.2 million in addition. The need for doing it now is that Sky X needs to plan its marketing of the hangar space that it will offer to the aviation community. And it's already clear that an additional hangar site is going to be needed and this would give Sky X a chance to get it approved, get it under construction, and get it built in the two-year window that tenants have under these kinds of arrangements.

I want to share with you a publication that has been prepared for municipal airport boards, and it's called a practical checklist with authority. What this provides is a guideline of requirements of airport boards from municipal airports in how they have to give equal access to all tenants and have to adopt a nondiscrimination plan and cannot grant exclusive rights and cannot adopt leasing practices that are not commercially reasonable. I want to suggest to you that Sky X is now proposing for lease a sight that is not now least. The fact that another tenant on the airport has requested to lease it is interesting, but not the pivotal legal point, because months and months have passed since that preliminary lease approval was made, and yet you've not been presented with a signed lease.

William Wainwright asked if the city has the answered the question that Top Gun had when they proposed leasing that parcel? The mayor replied if it's regarding the placement of the infrastructure (Utilities), the answer is yes. Water & Sewer is under contract and will be put in very soon, and we are actually meeting with Entergy again on tomorrow. The electricity pedestal has already been brought in from industrial to the west side of Taxiway Charlie and just needs to be run behind the buildings.

Ken Ross stated so therefore, at this point we have a preliminary lease approval of two potential new hangars. One North of the (2) Sky X West Hangars for John Bohning and one South of the two Sky X West hangars for Top Gun but we do not have plans, engineering nor executed leases.

Ray Reggie representing TOP Gun stated he spoke with the city attorney as well as the board regarding the utilities to which he was told first it would be the city, then he was told it would be SKY X. Also, the hangar plans that SKY X has submitted (Legal description) is not correct, therefore he needs to know his actual starting point. Top Gun is ready to start, we like the spot, we'd actually like to turn the corner and lease additional parcels, but until the city can answer the utilities questions and we have a clear starting point its really difficult to move forward. The lease has been prepared, we are prepared to sign, but we need a new legal description for the SKY X hangar that would be adjacent to us so that we have our correct starting point. He also asked if the two Sky X West hangars were (2) hangars with 10 feet between them or is it one hangar. Per Charles Borchers ( City administrator) the answer is no. But per board approval they were required to adjust their roof drainage system. The mayor stated this is a prime example of changing of plans after approvals. Jay Seale re-assured the board that the SKY X West hangars are within the footprint of the recorded executed lease description. Both Charles Borchers (City Administrator) and Robert Morgan (City Building Official) both confirmed the aforementioned statement.

**William Wainwright made a motion to table this item until we get more answers and give the Bohning and TOP Gun additional time to get their leases executed and recorded. Ken Ross seconded. ALL IN FAVOR.**

**NB – 3 – SKY X HOLDINGS AND SKY X WEST REQUEST TO BORE UNDERNEATH TAXIWAY CHARLIE FOR UTILITIES – Jay Seale**

Jay Seale gave a diagram showing engineering drawings with the calculations for the water flow for the hangar. What is needed is the board approval to boar underneath Taxiway Charlie. We also know we will need the approval of the State Fire Marshall as well as the City building official.

**Ken Ross made a motion to give preliminary approval of the concept of allowing boarding under Charlie when the engineer determines where it would be appropriate and not interfere with other properties and subject to plans and approval by the appropriate authorities. Motion seconded by William Wainwright. ALL IN FAVOR.**

**NB – 4 – SKY X HOLDINGS TO LEASE 5,000 FT. PARCEL ( AREA OF INTEREST 3) - Jay Seale**

SKY X would like to make an offer to lease the spot that TOP Gun requested and was approved to lease. And we are prepared to lease this spot, if and when TOP Gun fails to lease this spot according to whatever the additional timeline given for them to execute their lease.

**NO VOTE**

**Guy Recotta made a motion to adjourn, Second by Ken Ross. ALL IN FAVOR**

Meeting was adjourned.

APPROVAL

A handwritten signature in black ink, appearing to be 'MR', written over a horizontal line.

Mark Rolling, President



*Anthony F. Michelli, Director*

#### HANGAR WAITING LIST

1. Mark Richardson
2. Roy Pier
3. Mark Budgeon
4. Brian Teer
5. Michael Ellis
6. Randall Turner
7. James M. Sahn
8. Michael Gatlin
9. Matthew Becker
10. David Curtis
11. Holly Roy
12. James Bryan Ard
13. Chris Reggie
14. Ray Reggie
15. Johnny Angel
16. Daniel Toups
17. Alex Glover
18. Chris Panks
19. Scott Bernard, Sr.
20. Cliff Lemoine
21. Todd McCormick
22. Keith Bakewell
23. Connor Lorio
24. Kevin Manuel
25. Wayne Spring
26. Robert Dunleavy
27. Miles Jenkins
28. James White





Industrial Park Rd

Industrial Park Rd

Industrial Park Rd

Industrial Park Rd

Piper Ct

Piper St

701

559

Measure distance  
 Click on the map to add to your path  
 Total area: 10,774.94 ft<sup>2</sup> (1,001.02 m<sup>2</sup>)  
 Total distance: 429.70 ft (130.97 m)



# Airport Tenant Fairness & Compliance — One-Page Reference Guide

*Municipal Airport Boards | Practical Checklist with Authorities*

## **Purpose**

Provide a concise, actionable checklist to ensure leases, rates, and benefits are administered fairly to aeronautical tenants, in line with FAA grant assurances, civil rights obligations, and enforcement procedures.

## **Quick Checklist**

### **Equal Access & Non-Discrimination**

- Make the airport available to all aeronautical users on reasonable terms and without unjust discrimination (Grant Assurance 22).
- Apply uniform, comparable rates, charges, and lease terms to similarly situated tenants.
- Comply with Title VI and FAA nondiscrimination requirements (race, color, national origin, sex, age, disability).

### **No Exclusive Rights**

- Do not grant exclusive rights to any aeronautical service provider (Grant Assurance 23).
- Structure concessions or minimum standards to permit fair competition.

### **Transparent Lease Practices**

- Publish objective selection criteria (RFP/RFQ) and evaluate consistently.
- Document rate methodology (e.g., cost recovery, fair market value) and keep records of comparisons among similar tenants.
- Use FAA-approved incentive programs only for new air service and apply them narrowly and transparently.

### **Compliance & Recordkeeping**

- Maintain evidence of compliance with Grant Assurances and civil rights obligations (leases, rate studies, meeting minutes).
- Update the Airport Layout Plan (ALP) and Exhibit A as property or facilities change.

### **Dispute Resolution Awareness**

- Inform tenants of informal complaint options under 14 CFR Part 13.

- For unresolved or significant issues, advise on formal complaints under 14 CFR Part 16.

### **Periodic Audits & Training**

- Review leases and rates at least annually for parity and justification.
- Provide training to board and staff on Grant Assurances 22/23 and Title VI requirements.

### **Practical Do/Don't Examples**

#### **DO**

- Charge comparable hangar rent to tenants with similar space and services; justify any differences with documented, objective factors.
- Use a competitive solicitation for FBO services with clear minimum standards that multiple operators can meet.
- Offer time-limited, transparent airline incentives tied to verifiable new service.

#### **DON'T**

- Give one tenant lower rent or better fuel flowage rates without objective justification applicable to all similarly situated tenants.
- Grant a contract or lease that effectively prevents other qualified operators from offering the same aeronautical service.
- Apply subjective criteria or personal preferences when awarding leases.

### **Authorities & References**

- Grant Assurance 22 (Economic Nondiscrimination) and Grant Assurance 23 (Exclusive Rights); see FAA compliance materials and airport law workshops.
- 14 CFR Part 13 (Investigative and Enforcement Procedures) – informal complaints.
- 14 CFR Part 16 (Rules of Practice for Federally-Assisted Airport Enforcement Proceedings) – formal complaints.
- 14 CFR Part 152 Subpart E (Nondiscrimination in Airport Aid Program) and FAA Title VI/ADA guidance.
- FAA Order 5190.6B (Airport Compliance Manual) and updates on unjust discrimination among aeronautical users.

*Prepared for municipal airport board use. This guide is informational and does not constitute legal advice.*

FAA regulations and policies ensure that municipal airport boards—especially those accepting federal funds—must treat all airport tenants equitably and without favoritism, particularly when awarding leases or other benefits. Key provisions include:

## 1. Grant Assurance 22 – Economic Non-Discrimination

- Under Airport Improvement Program (AIP) grants, **Grant Assurance 22** requires sponsors to make the airport available for all aeronautical users “on reasonable terms and without unjust discrimination”. jetlaw +1
- It prohibits giving “more favorable terms” to one tenant over another similarly situated (e.g., rate structures, lease terms). jetlaw
- Exceptions include approved incentive programs (e.g., to attract new airlines), but these must be structured and justified under FAA guidance. jetlaw

## 2. Grant Assurance 23 – Exclusive Rights

- Grants bars airport sponsors from granting **exclusive rights** to any single aeronautical operator. Giving one tenant exclusive privileges (e.g., sole fueling provider) violates both GA22 and GA23. tamu +1

### 3. 49 U.S.C. § 47107 – Federal Grant Conditions

- Under U.S. law, airport grant recipients must keep the airport open on reasonable terms and **cannot discriminate** arbitrarily among operators or users. legalclarity

---

### 4. Part 152 Subpart E – Nondiscrimination in Airport Aid

- Enforces nondiscrimination in employment, contracts, and **public accommodations**, ensuring equitable treatment in commercial and lease provisions. ecfr +1
- Applies to race, color, national origin, sex, and other protected classes. ecfr +1

---

### 5. Title VI & FAA Order 1400.11

- Airport boards receiving federal funds must **comply with Title VI** (Civil Rights Act), prohibiting discrimination based on race, color, national origin, sex, age, or disability in all operations including tenant arrangements.

faa +1

---

### 6. Dispute Resolution under 14 CFR Part 13 & Part 16

- **Part 13:** Tenants can file **informal complaints** alleging violations of grant assurances (like unfair leases or favoritism).

faa

- **Part 16:** If unresolved, tenants may lodge **formal complaints**, triggering hearings and potential enforcement actions to ensure compliance with federal obligations. ecfr +1

## Summary of Legal Duties for Municipal Airport Boards

Obligation	Requirement
Treat tenants equitably	All tenants must receive <b>comparable rates, terms, fees, and acco</b> as other similarly situated tenants.
Avoid favoritism/exclusivity	No exclusive rights or preferential lease benefits unless under FAA-approved incen plan.
Non-discrimination	Prohibited from discrimination based on protected traits in lease or benefit provision (Title VI, Part 152).
Provide recourse	Tenants may file informal (Part 13) or formal (Part 16) complaints if a board appears to favor one tenant.

These provisions create a robust regulatory framework ensuring municipal airport boards administer leases and benefits fairly, transparently,

and nondiscriminatorily, with enforcement mechanisms for tenants who believe they're being treated unfairly.

Would you like me to draft a concise checklist for airport boards to ensure compliance with these rules?

---

Sources 

## Airport Tenant Fairness & Compliance Checklist

### 1. Equal Access & Non-Discrimination

- Ensure all aeronautical users have access on **reasonable terms**.
- Apply **uniform lease rates and conditions** for similarly situated tenants.
- Comply with **Title VI** and FAA nondiscrimination rules (race, color, national origin, sex, age, disability).

### 2. No Exclusive Rights

- Do not **grant exclusive rights** to any tenant for aeronautical services (fueling, maintenance, etc.), unless FAA-approved.

### 3. Transparent Lease Practices

- Document lease criteria and apply them consistently.
- Avoid preferential treatment unless part of an FAA-approved incentive program.

### 4. Compliance with Grant Assurances

- Follow **Grant Assurance 22 (Economic Non-Discrimination)** and **Grant Assurance 23 (Exclusive Rights)**.
- Keep records showing compliance with federal obligations.

### 5. Dispute Resolution Awareness

- Inform tenants of their right to file:
  - **Informal complaints** under 14 CFR Part 13.
  - **Formal complaints** under 14 CFR Part 16 if issues persist.

### 6. Regular Reviews

- Periodically audit leases and rates for fairness and compliance.
- Train staff on FAA rules and civil rights obligations.

# HYDRAULIC CALCULATIONS for

---

## Job Information

Project Name : SKY X HANGAR-WEST

Contract No. :

City: HAMMOND, LA 70401

Project Location: INDUSTRIAL PARK RD

Date: 11/28/2025

---

## Contractor Information

Name of Contractor: FIRE & SAFETY COMMODITIES

Address: 245 WOODLAND DR

City: LAPLACE, LA 70068

Phone Number: 504-465-5994

E-mail:

Name of Designer: MD

Authority Having Jurisdiction: STATE FIRE MARSHAL

---

## Design

Remote Area Name	1
Remote Area Location	HANGAR BAY 'B'
Occupancy Classification	GROUP II
Density (gpm/ft <sup>2</sup> )	0.17
Area of Application (ft <sup>2</sup> )	5000
Coverage per Sprinkler (ft <sup>2</sup> )	130
Number of Calculated Sprinklers	48
In-Rack Demand (gpm)	0
Special Heads	
Hose Streams (gpm)	500
Total Water Required (incl. Hose Streams) (gpm)	1556.4
Required Pressure at Source (psi)	-0.9
Type of System	Wet
Volume - Entire System (gal)	5980.7 gal

---

## Water Supply Information

Date	02/11/25
Location	12" MAIN ON INDUSTRIAL PARK
Source	W1

---

## Notes





DESIGN BUILD CONSTRUCTION  
 21212 SMITH ROAD  
 COVINGTON, LA, 70435  
 (888) 875-0395  
 COMMERCIAL LICENSE #20840  
 RESIDENTIAL LICENSE #83403

--	--

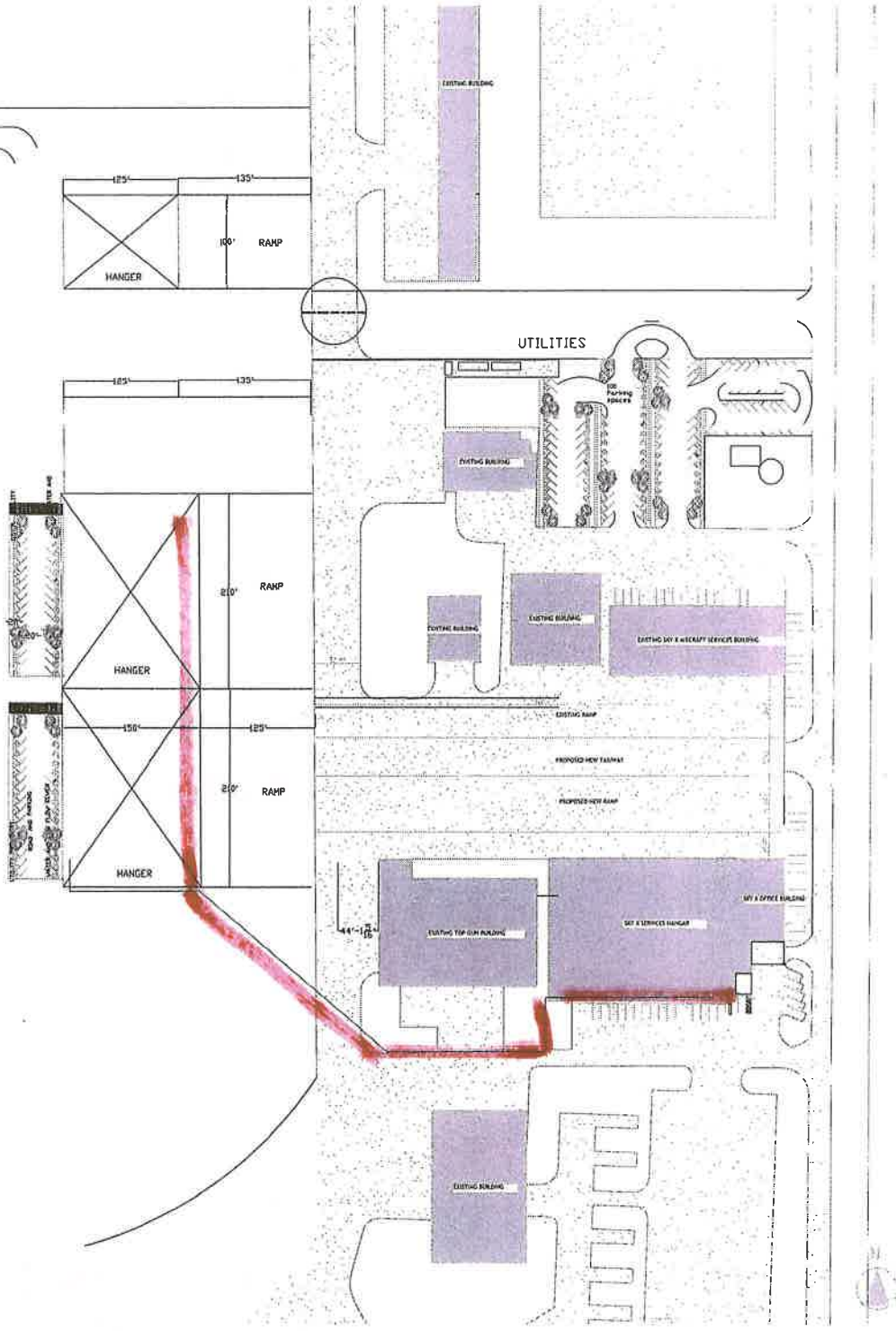
REV	DATE	DESCRIPTION

--	--	--

Master Plan for Hanger expansion  
**SkyX AIRCRAFT SERVICES**  
 INDUSTRIAL PARK ROAD HAMMOND, LA 70401

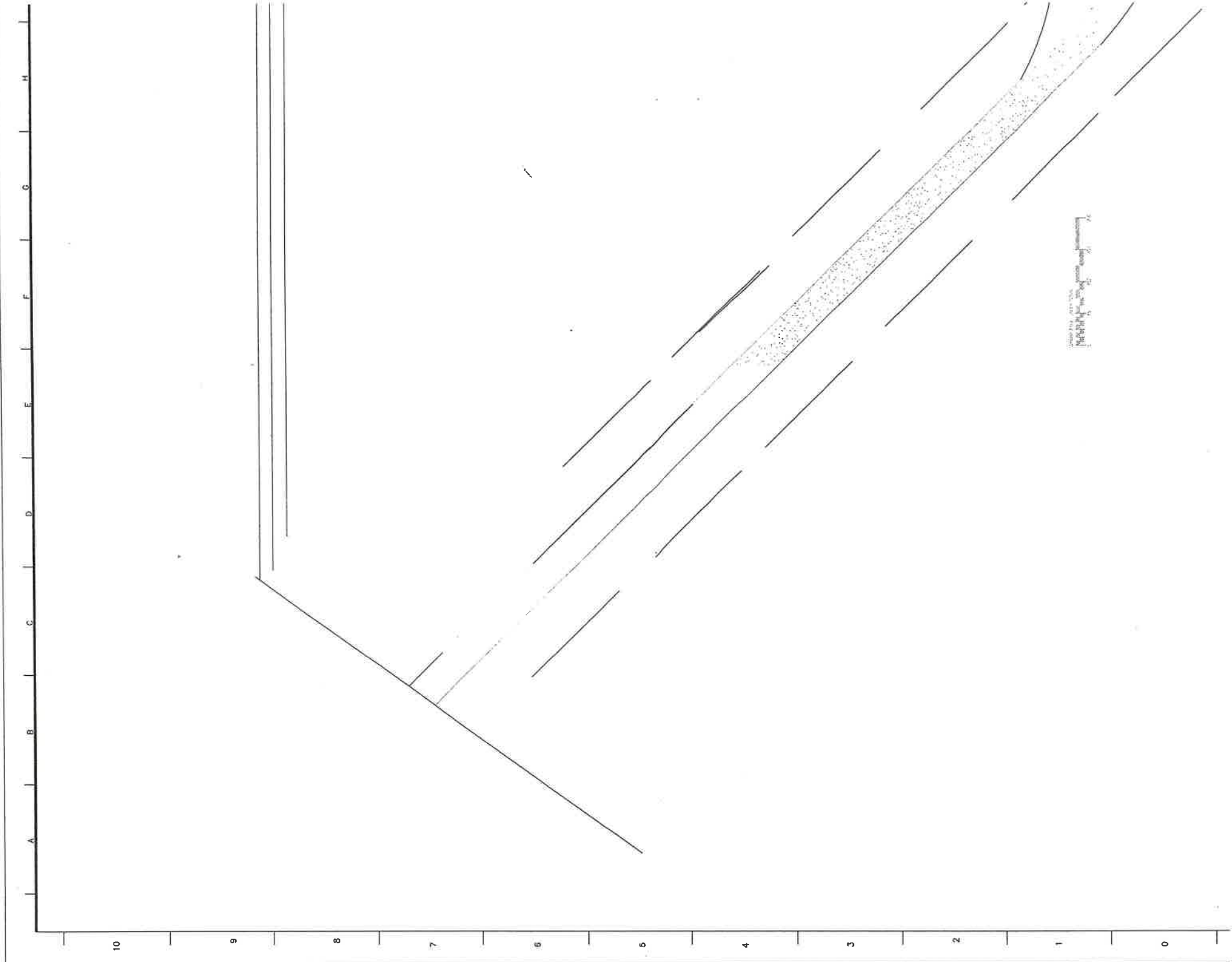
DATE: 1/29/2025  
 JOB. NO. 25-234  
 DRAWN BY: J.A.M.  
 CHECKED BY:

Concept layout  
 1 of 1



10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
0





Geological Cross Section  
of the [unclear] [unclear]  
[unclear] [unclear] [unclear] [unclear]  
[unclear] [unclear] [unclear] [unclear]

TAXIWAY CHARLIE

EXISTING  
SKY - X

New underground  
path

10inch  
pipe  
inside  
then go  
outside

3/4" into the ground

NEW - 10" C900 CL150 PVC

UNDERGROUND BY  
OTHERS  
3'-0" MIN BURY TOP  
OF THE PIPE

NEW - 10" C900 CL150 PVC

EXISTING  
10" C900 CL150 PVC

10" GATE VA 35 PSI

FLOW TEST INFORMATION 02-11-2025

STATIC PRESSURE: 60 PSI  
RESIDUAL PRESSURE: 35 PSI  
FLOW VOLUME: 1,000 GPM  
ELEVATION CHANGE: 0  
TIME OF TEST: 7:30 AM  
PERFORMED BY: HAMMOND FIRE DEPT

EX. 12" WATERLINE  
INDUSTRIAL PARK RD

PIPE ST  
1,000 GPM

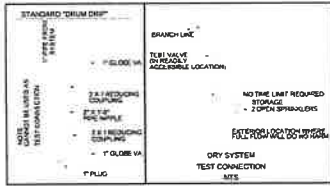
SKY - X HANGAR SITE PLAN  
SCALE: 1/8"=1'-0"

**SUBMITTAL**

FIRE & SAFETY COMMODITIES	Customer:	<b>SKY X HANGAR</b>	Scale:	1/8"=1'-0"
245 WOODLAND DRIVE LAFRANCE, LA 70068		HAMMOND AIRPORT INDUSTRIAL PARK RD HAMMOND, LA 70403	Drawn By:	MD
Phone (504)655-5994	Contract Name:	SKY X HANGAR	Checked By:	BC
FIRE & SAFETY COMMODITIES		PROPRIETARY INFORMATION	Date:	11-28-2025
Moved Duty #81140		FIRE & SAFETY COMMODITIES	Drawing No.:	FP-1
			Contract No.:	

- 11. CROSS HANGAR ARE EQUIPPED WITH CAPS FOR FLOODING CONNECTIONS
  - 12. HYDRAULIC DATA NAMEPLATES ARE TO BE FURNISHED IN THE SPRINKLER RISER ROOM AND SYSTEM ZONE VALVES
  - 13. ALL ABOVE GROUND PIPING IS TO BE HYDROSTATICALLY TESTED BY THE INSTALLING CONTRACTOR AT 200 PSI FOR A MINIMUM OF 2 HOURS IN STRICT ACCORDANCE WITH NFPA 13.
  - 14. THE OWNER WILL BE PROVIDED WITH A COPY OF NFPA 25 THE STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-EGGED FIRE PROTECTION SYSTEMS.
  - 15. - HANGAR IS NOT HEATED.
  - 16. OCCUPANCY OF THE BUILDING IS AS FOLLOWS: STORAGE / BUSINESS LIGHT HANGAR FOR OFFICE AND GROUP # FOR HANGAR - SEE DESIGN CRITERIA NOTE
  - 17. CEILING HEIGHTS ARE IF THROUGHOUT THE PLAN, UNLESS NOTED
  - 18. HEATING DUCTS AND DIFFUSERS ARE NOT NOT AIR, DOES NOT EXCEED 180 DEG.
- DESIGNED WITH AND FITTINGS (WHEN EXPOSED) AS SHOWN WITH GROOVED FITTINGS
- DANCE WITH NFPA 13  
1. 100 IN THE SPRINKLER ROOM.



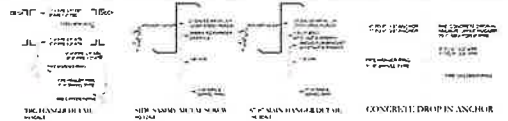


**NFPA 409: 2022**

**DESIGN BASIS:** TYPE H HANGAR - STORAGE & LIMITED SERVICE  
 3 1/2" LIMITED SERVICE - PROTECT PER 9.2  
 8.2. CLOSED HEAD WATER SPRINKLER SYSTEM  
 PRE-ACTION SYSTEM - NO INCREASE REMOTE AREA REQUIRED

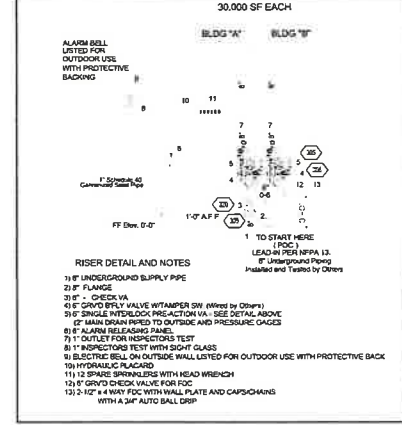
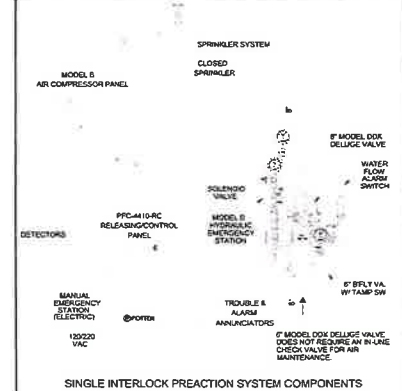
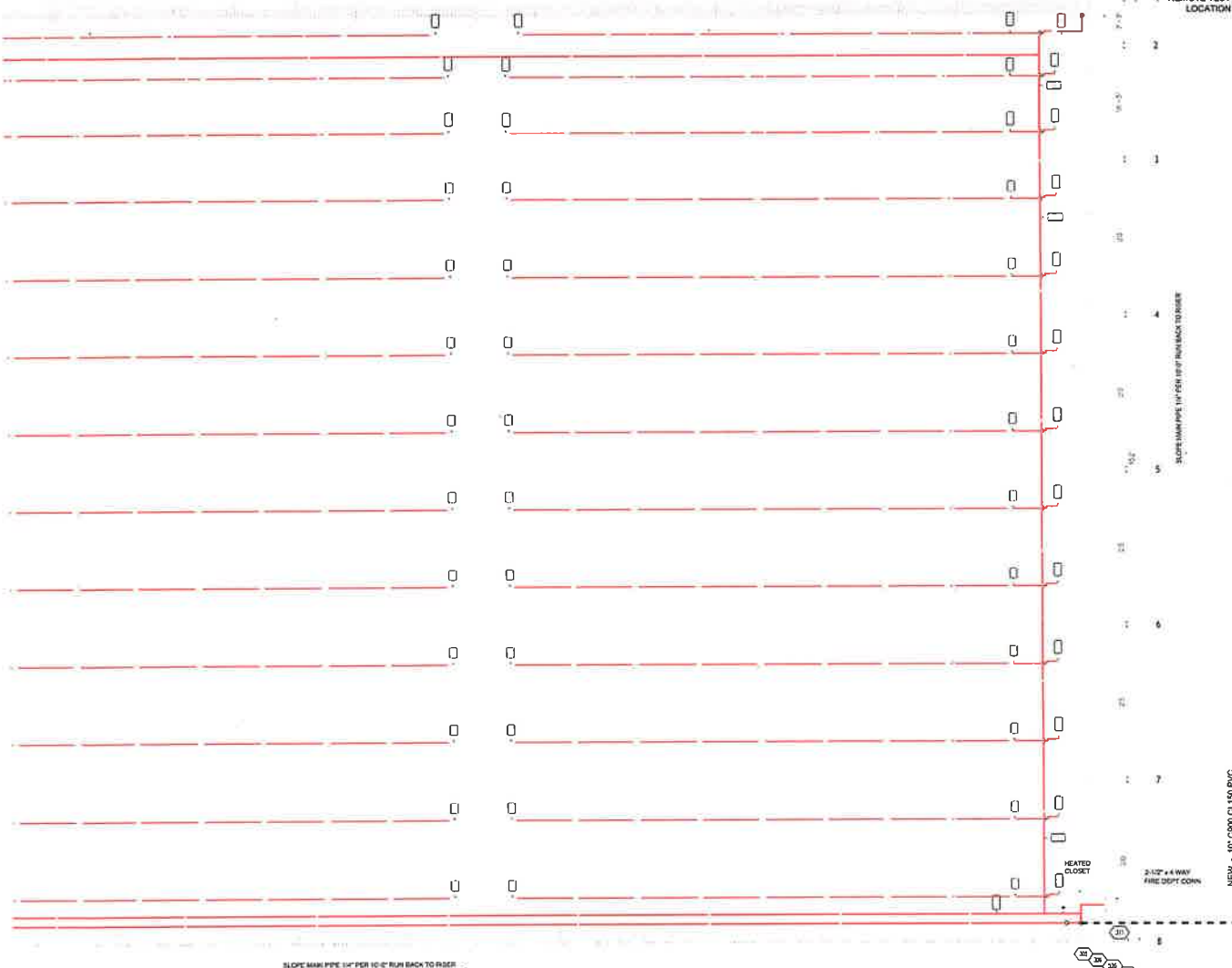
HANGAR AREA - 28,000 SF FLOOR AREA  
 STANDARD RESPONSE 1/4" SA UPRIGHT 130 SF MAX  
 USING 325 - 375 DEGREE F HEADS  
 DENSITY: 17 GPM PER SQFT 1,500 SQFT  
 500 GPM OUTSIDE HOSE - 2 HRS

**NOTE:** NEW BUILDING TO HAVE A NEW - NFPA 13 & 409  
 SPRINKLER SYSTEM INSTALLED THROUGHOUT  
 THE AREA OF WORK IS THE ENTIRE BUILDING  
 STEEL JOIST CONSTRUCTION  
 UNDERGROUND SUPPLY BY OTHERS  
 THE SPRINKLER SYSTEM SHALL BE MONITORED BY  
 A REMOTE SUPERVISING STATION BY OTHERS



0 CONSTRUCTION  
 1" TO 6" BELOW BEAMS  
 H LINE ONLY

OBSTRUCTED CONSTRUCTION  
 DEFLECTOR 1" TO 6" BELOW BEAMS  
 THIS BRANCH LINE ONLY



**SKY - X - WEST HANGAR \* A \* SPRINKLER PLAN**  
 SCALE: 1/8"=1'-0"

11 GROUND MARKS ARE EQUIPPED WITH COUS FOR FISHING CONNECTIONS  
 12 HYDRAULIC DRAIN MANIFOLD IS TO BE FURNISHED IN THE SPRINKLER RISER ROOM AND SYSTEM ZONE VALVES  
 13 ALL ABOVE GROUND PIPING IS TO BE HYDROSTATICALLY TESTED BY THE INSTALLING CONTRACTOR AT 200 PSI FOR A  
 MINIMUM OF 2 HOURS IN STRICT ACCORDANCE WITH NFPA 13.  
 14 THE OWNER WILL BE PROVIDED WITH A COPY OF NFPA 25 THE STANDARD FOR THE INSPECTION, TESTING AND  
 MAINTENANCE OF WATER BASED FIRE PROTECTION SYSTEMS  
 15 HANGAR IS NOT HEATED  
 16 OCCUPANCY OF THE BUILDING IS AS FOLLOWS: STORAGE / BUSINESS  
 LIGHT HANGAR FOR OFFICE AND GROUP 4 FOR HANGAR. SEE DESIGN CRITERIA NOTE  
 17 CEILING HEIGHTS ARE 8' THROUGHOUT THE PLAN, UNLESS NOTED  
 18 HEATING DUCTS AND DIFFUSERS ARE NOT HOT AIR. DOES NOT EXCEED 130 DEG.

1 IN THE SPRINKLER ROOM

NO.	DATE	REVISIONS / DESCRIPTION
1		
2		
3		
4		
5		

DATE	TYPE	BY	CHKD	APP'D	TITLE	TOTAL DRAWINGS IN PROJECT	DATE	STATUS
11/28/2025	REVISION	WATE	11/27/25	SA	27"	1840	11/28/2025	RECEIVED
11/28/2025	REVISION	BRST	11/27/25	SA	27"	1840	11/28/2025	STANDARD

**SUBMITTAL**

FIRE & SAFETY COMMODITIES  
 245 WOODLAND DRIVE  
 LA PLACE, LA 70066  
 Phone: (504)465-5994  
 Michael Drury # 84103

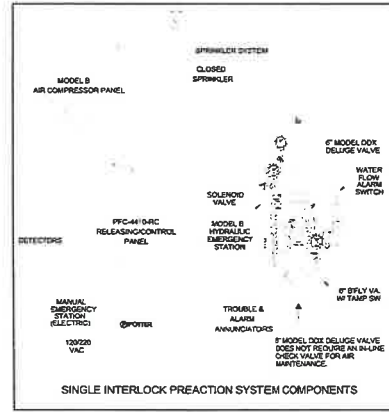
Customer: **SKY X - WEST HANGAR**  
 HAMMOND AIRPORT  
 INDUSTRIAL PARK RD  
 HAMMOND, LA 70401  
 Contract Name: **SKY X HANGAR**  
 PROPRIETARY INFORMATION  
 FIRE & SAFETY COMMODITIES

Scale: 1/8"=1'-0"  
 Drawn By: MO  
 Checked By: BC  
 Date: 11-28-2025  
 Drawing No.: FP-2  
 Contract No.:



- BRONZE CHECK VALVE WITH 3/2" ORFICE IN CLAPPER
- COPPER OR BRASS PIPING NOT LESS THAN 1/2" W/ COPPER/BRASS FITTINGS OR EQUIVALENT FLANGED OS&Y GATE VALVE W/ITS
- WASER DIE HEADER
- 7/8" NPT
- 3/4" NPT
- 1/2" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
- 1/4" NPT
- 1/8" NPT
000

CONNECTION DETAIL (CONNECTION SIMILAR)



VICTALUJUMC - 3" 8" V  
 OR 6" 8" 1/4" TAMP SW  
 1/2" 8" 1/4" TAMP SW  
 1/2" 8" 1/4" TAMP SW  
 1/2" 8" 1/4" TAMP SW  
 1-1/4" INSPECTORS TEST AND DRAIN AND PRESSURE RELIEF

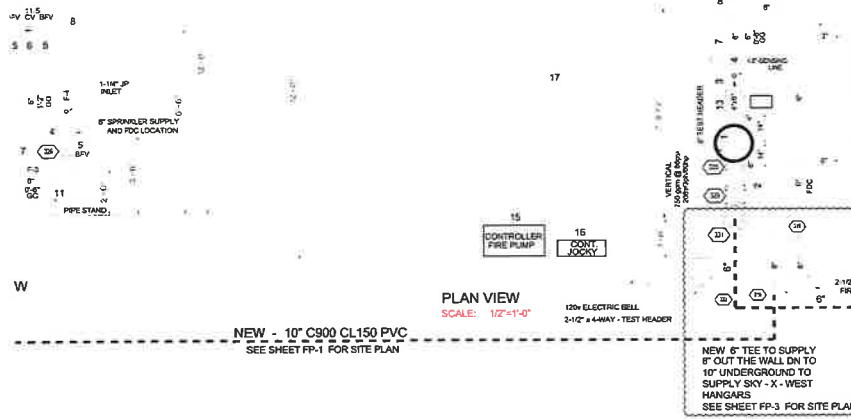
ITEM	SIZE	QTY
1	FIRE PUMP	750 GPM @ 85 PSI
2	OS&Y VALVE W/ITS	6"
3	ROSKO CHECK GRND	6"
4	GRVD TEE SHORT	6"
5	8" V DISCHARGE	6"
6	CHECK VALVE GRVD	6"
7	3" IN VALVE SPY ING	6"
8	GRVD 80 SHORT	6"
9	6" 8" 1/4" TAMP SW	6"
10	NOT USED	6"
11	PIPE STAND	2"
12	6" 8" 1/4" COUP	6" x 4"
13	COUP REDUCER	6" x 4"
14	EDGE REDUCER	6" x 4"
15	FIRE PUMP CONTRLR	6" x 4"
16	JOCKEY CONTRLR	6" x 4"
17	FLOOR DRAIN	1"

**FIRE PUMP SCHEDULE**

**FIRE PUMP:** 750 GPM @ 85 PSI PENTAIR Pump Model 4-383-10B  
 VERTICAL ELECTRIC FIRE PUMP  
**MOTOR:** 80 hp, 3,580 RPM; 3/60/208V  
**ELECTRIC CONTROLLER:** Tomatch GPA Full voltage across the line starter, 80hp, 200-208V, 60hz withstand rating - 100,000 Amps with Pressure recorder - 0-300 psi, NEMA 2 enclosure  
**JOCKEY PUMP:** 7.5 GPM @ 105 PSI PVMX1-3-3ph1Hp 55CFR - 208V  
**JOCKEY PUMP CONTROLLER:** Tomatch Controller JPLT, Across the line starter, 1hp, 200-208V, 3Ph, 60hz Pressure recorder - 15 - 290 psi input voltage - 3/60/208V NEMA 2 enclosure

**FLOW TEST INFORMATION 02-11-2025**

STATIC PRESSURE: 40 PSI  
 RESIDUAL PRESSURE: 35 PSI  
 FLOW VOLUME: 1,005 GPM  
 ELEVATION CHANGE: 0  
 TIME OF TEST: 7:50 AM  
 PERFORMED BY: HAMMOND FIRE DEPT



**FIRE PUMP GENERAL NOTE**

1. ALL FIRE PUMP MATERIALS, INSTALLATION AND TESTING PROCEDURES ARE TO BE IN ACCORDANCE WITH NFPA 720 AND NFPA 721. INSTALLATION OF CENTRIFUGAL FIRE PUMPS IS NFPA 13 MATERIALS & INSTALLATION REQUIREMENTS.
2. FIRE PUMP ROOM CONSTRUCTION IS TO COMPLY WITH ALL REQUIREMENTS OF NFPA 720.
3. FIRE PUMP CONTROLLER IS TO BE WIRED DIRECT FROM THE TRANSFORMER PER NFPA 720 ARTICLE 220 AND 895.
4. PROVIDE AUTOMATIC MEANS TO MAINTAIN PUMP ROOM ABOVE 40°F.
5. PROVIDE ADEQUATE VENTILATION OF PUMP ROOM.
6. PROVIDE ADEQUATE PERMANENT LIGHTING INSIDE PUMP ROOM.
7. PROVIDE FLOOR DRAIN AND SLOPED FLOOR TO DRAIN INSIDE PUMP ROOM.
8. ALL PIPING IN PUMP ROOM 2" AND LARGER TO BE SCH40 BLACK STEEL.
9. ALL PIPING IN PUMP ROOM SMALLER THAN 2" TO BE SCH40 BLACK STEEL.

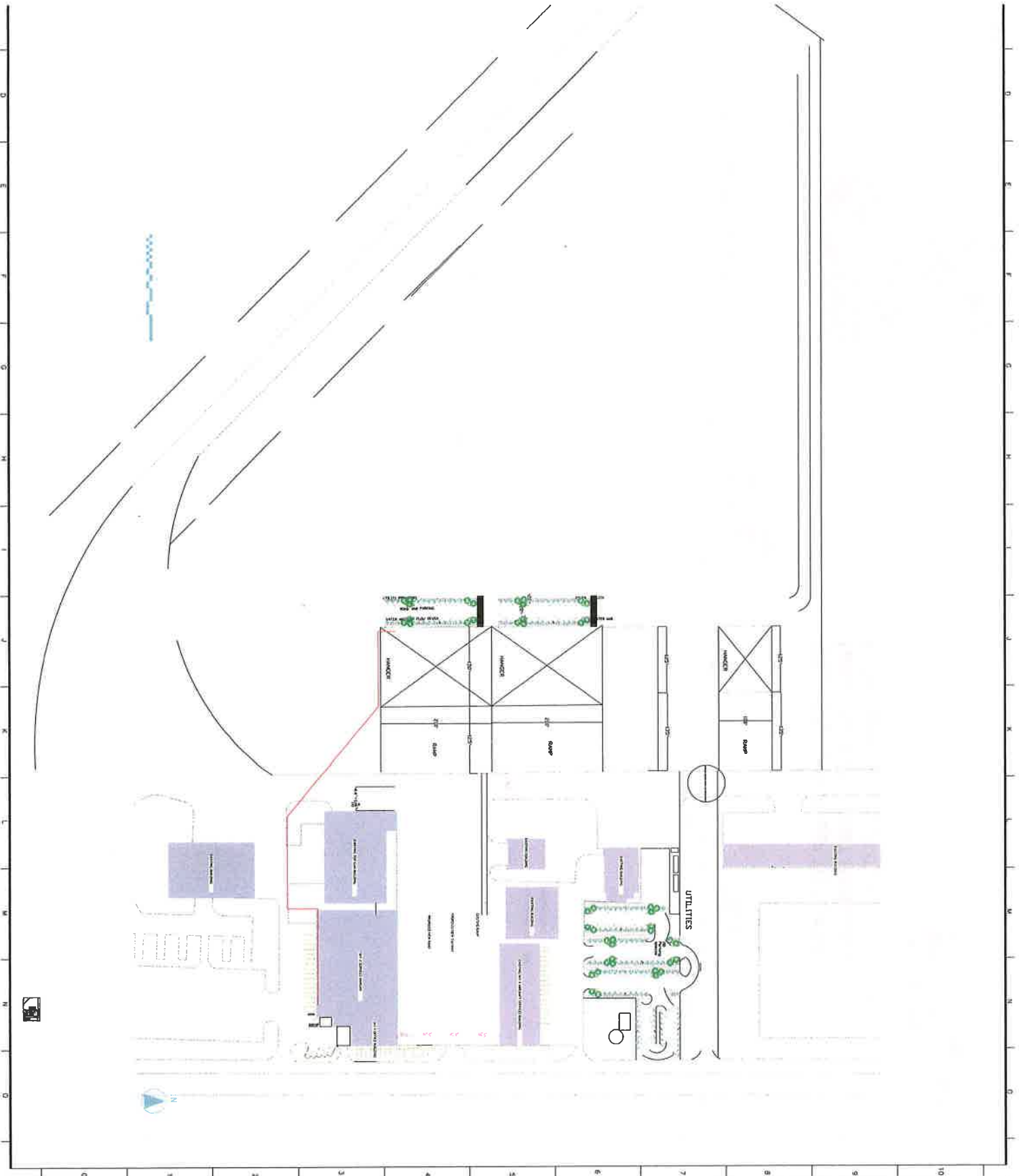
NOTE: THE FIRE SPRINKLER SYSTEM IS ACTIVATED BY HEAT, OPERATES AUTOMATICALLY, AND MAY BE TURNED ON-OFF AT THE MAIN SYSTEM CONTROL VALVE.  
 NOTE: THE FIELD INSTALLATION SHALL COMPLY WITH NFPA 13 INSTALLATION REQUIREMENTS, AS MAY BE APPLICABLE.  
 NOTE: ACCEPTANCE TESTING SHALL CONFORM TO CH 24 OF NFPA 13, INCLUDING HYDROTEST, PUMPING FLOW TEST, MAIN DRAIN TEST AND 8" IF FORWARD FLOW TEST, AS MAY BE APPLICABLE.  
 NOTE: PERIODIC INSPECTION AND TESTING IS REQUIRED IN CONFORMANCE WITH NFPA 25.  
 NOTE: NEW SYSTEM FOR FLORIDA BUILDING CODE 5TH ED. CHAPTERS 9 - FIRE PROTECTION SYSTEM.  
 NOTE: THE STANDARDS FOR THE FIRE SPRINKLER SYSTEM ARE NFPA 13 SPRINKLERS; NFPA 14 STANDPIPES; NFPA 24 UNDERGROUND.  
 NOTE: SYSTEM OPERATING INSTRUCTIONS AND EQUIPMENT SPECIFICATIONS ARE INCLUDED IN THE SUBMITTAL PACKAGE.  
 NOTE: ALL INFO. DISCREPANCY INDICATES EXCESSIVE WORK HAS NOT BEEN A PROBLEM IN THE PROJECT AREA.  
 NOTE: A FIRE PUMP IS REQUIRED ON THIS PROJECT.  
 NOTE: A STORAGE TANK IS NOT REQUIRED ON THIS PROJECT.

**EXISTING FIRE PUMP TO SUPPLY  
 NEW - SKY - X - WEST HANGARS  
 WITH NEW 10" UNDERGROUND MAIN**

**SUBMITTAL**

<p>FIRE &amp; SAFETY COMMODITIES          245 WOODLAND DRIVE          LaPlace LA 70068          Phone (504)465-5994          FIRE &amp; SAFETY COMMODITIES          Michael Drury          #2113</p>	<p>Customer: <b>SKY X HANGAR</b>          HAMMOND AIRPORT          INDUSTRIAL PARK RD          HAMMOND, LA 70401          Contract Name: <b>SKY X HANGAR</b>          PROPRIETARY INFORMATION          FIRE &amp; SAFETY COMMODITIES</p>	<p>Scale: 1/8"=1'-0"          Drawn By: MD          Checked By: BC          Date: 11-28-2025          Drawing No.: FP-4          Contract No.:</p>
--	--	--

NO.	DATE	REVISION
1	11/28/25	ADD 8" SUPPLY FOR NEW 10" UNDERGROUND
2		
3		
4		
5		



DATE: 1/29/2025  
 JOB: NO. 25-234  
 DRAWN BY: J.A.M.  
 CHECKED BY:

Master Plan for Hanger expansion  
**SkyX AIRCRAFT SERVICES**  
 INDUSTRIAL PARK ROAD HAMMOND, LA 70401

REV	DATE	DESCRIPTION

AXCESS  
 OPERATIONAL SERVICES, INC.

10

Concept layout  
 1 of 1

# HYDRAULIC CALCULATIONS for

---

## Job Information

Project Name : SKY X HANGAR-WEST

Contract No. :

City: HAMMOND, LA 70401

Project Location: INDUSTRIAL PARK RD

Date: 11/28/2025

---

## Contractor Information

Name of Contractor: FIRE & SAFETY COMMODITIES

Address: 245 WOODLAND DR

City: LAPLACE, LA 70068

Phone Number: 504-465-5994

E-mail:

Name of Designer: MD

Authority Having Jurisdiction: STATE FIRE MARSHAL

---

## Design

Remote Area Name	1
Remote Area Location	HANGAR BAY 'B'
Occupancy Classification	GROUP II
Density (gpm/ft <sup>2</sup> )	0.17
Area of Application (ft <sup>2</sup> )	5000
Coverage per Sprinkler (ft <sup>2</sup> )	130
Number of Calculated Sprinklers	48
In-Rack Demand (gpm)	0
Special Heads	
Hose Streams (gpm)	500
Total Water Required (incl. Hose Streams) (gpm)	1556.4
Required Pressure at Source (psi)	-0.9
Type of System	Wet
Volume - Entire System (gal)	5980.7 gal

---

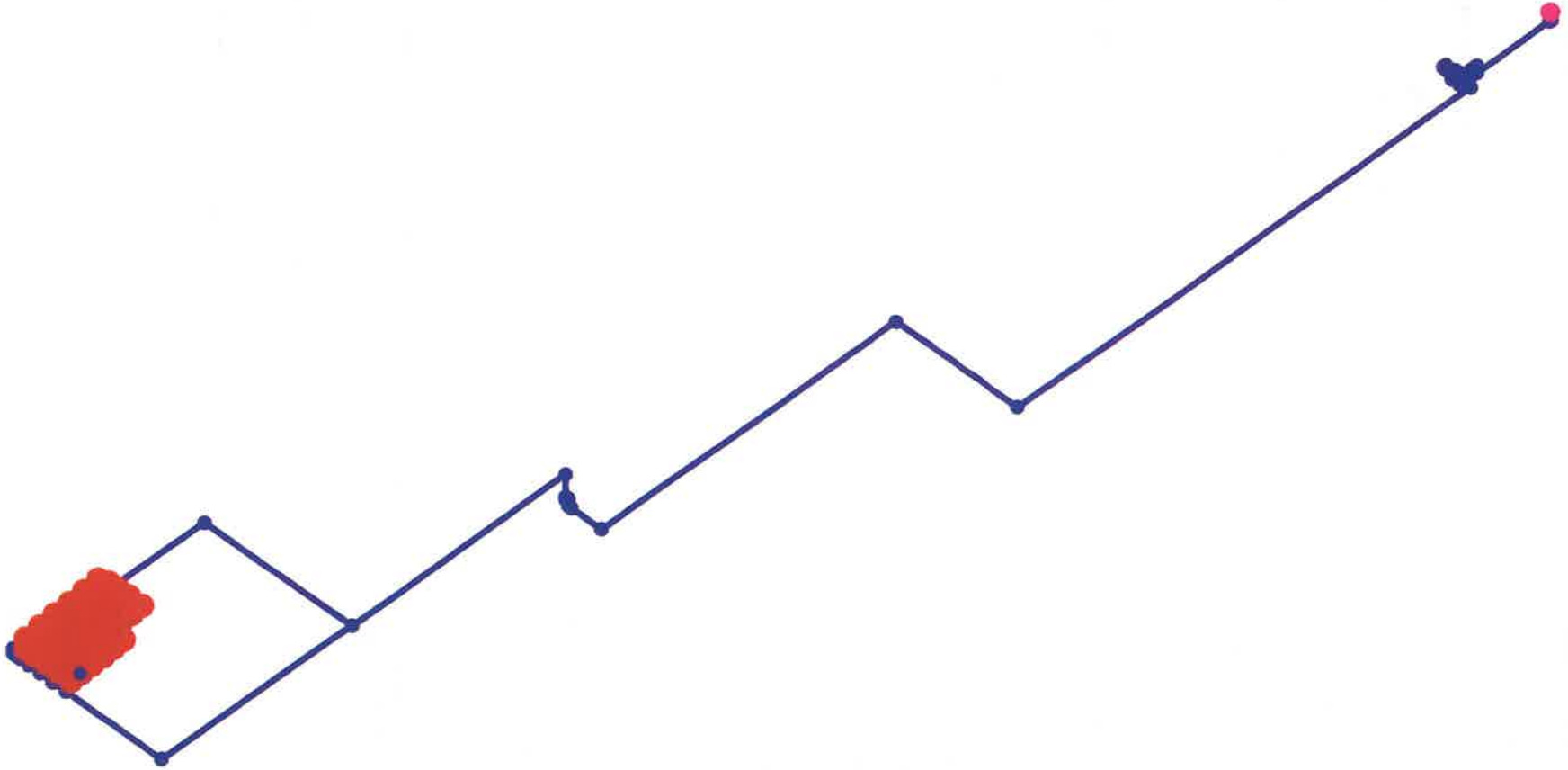
## Water Supply Information

Date	02/11/25
Location	12" MAIN ON INDUSTRIAL PARK
Source	W1

---

## Notes

**Diagram for Design Area : 1  
(Optimized Hvdraulic Simplified)**



## Hydraulic Analysis for : 1

### Calculation Info

Calculation Mode	Demand
Hydraulic Model	Hazen-Williams
Fluid Name	Water @ 60F (15.6C)
Fluid Weight, (lb/ft <sup>3</sup> )	N/A for Hazen-Williams calculation.
Fluid Dynamic Viscosity, (lb·s/ft <sup>2</sup> )	N/A for Hazen-Williams calculation.

### Water Supply Parameters

Supply 1 : W1

Flow (gpm)	Pressure (psi)
0	60
1005	35

### Supply Analysis

Node at Source	Static Pressure (psi)	Residual Pressure (psi)	Flow (gpm)	Available Pressure (psi)	Total Demand (gpm)	Required Pressure (psi)
W1	60	35	1005	3.9	1556.4	-0.9

### System Pump

Rated Flow (gpm)                      not defined

Rated Pressure (psi)                    not defined

Parameters

Flow (gpm)	Pressure (psi)
0	112
750	86
1125	55

---

**Hoses**

Inside Hose Flow / Standpipe Demand (gpm)	
Outside Hose Flow (gpm)	
Additional Outside Hose Flow (gpm)	500
Other (custom defined) Hose Flow (gpm)	
-----	
Total Hose Flow (gpm)	500

---

**Sprinklers**

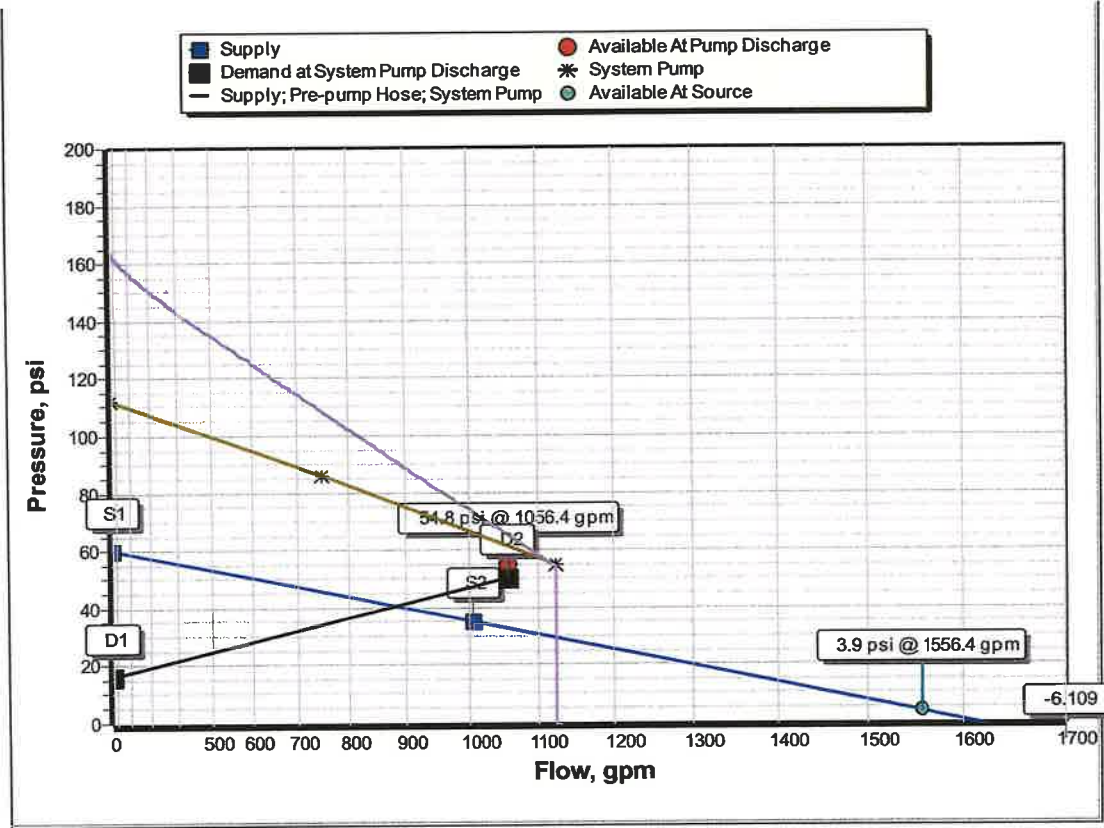
Ovehead Sprinkler Flow (gpm)	1056.4
InRack Sprinkler Flow (gpm)	0
Other (custom defined) Sprinkler Flow (gpm)	0
-----	
Total Sprinkler Flow (gpm)	1056.4

---

**Other**

Required Margin of Safety (psi)	0
W1 - Pressure (psi)	-0.9
W1 - Flow (gpm)	1056.4
Demand w/o System Pump(s)	60.6 psi @ 1056.4 gpm

### Hydraulic Analysis for : 1



### Hydraulic Analysis for : 1

#### Graph Labels

Label	Description	Values	
		Flow (gpm)	Pressure (psi)
S1	Supply point #1 - Static	0	60
S2	Supply point #2 - Residual	1005	35
D1	Elevation Pressure	0	16.5
D2	System Demand	1056.4	50.1

#### Open Heads

Head Ref.	Head Type	Coverage	K-Factor	Required			Calculated		
				Density	Flow	Pressure	Density	Flow	Pressure
		(ft <sup>2</sup> )	(gpm/psi <sup>1/2</sup> )	(gpm/ft <sup>2</sup> )	(gpm)	(psi)	(gpm/ft <sup>2</sup> )	(gpm)	(psi)
1	Overhead Sprinkler	80	5.6	0.17	13.6	7	0.259	20.7	13.7
10	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.213	19.2	11.7
11	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.218	19.6	12.3
12	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.227	20.5	13.4
13	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.239	21.5	14.7
14	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.254	22.8	16.6
15	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.26	23.4	17.5
16	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.203	18.3	10.7
17	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.208	18.7	11.2
18	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.213	19.1	11.7
19	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.219	19.7	12.4
2	Overhead Sprinkler	80	5.6	0.17	13.6	7	0.264	21.2	14.3
20	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.224	20.2	13
21	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.233	21	14
22	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.245	22	15.5
23	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.254	22.8	16.6

24	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.26	23.4	17.4
25	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.17	21.3	14.4
26	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.172	21.5	14.8
27	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.175	21.9	15.2
28	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.178	22.2	15.7
29	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.181	22.6	16.3
3	Overhead Sprinkler	80	5.6	0.17	13.6	7	0.271	21.7	15
30	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.185	23.1	17
31	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.19	23.7	17.9
32	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.195	24.4	18.9
33	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.193	24.1	18.5
34	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.17	21.3	14.4
35	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.172	21.5	14.8
36	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.175	21.9	15.2
37	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.178	22.2	15.7
38	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.181	22.6	16.3
39	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.185	23.1	17.1
4	Overhead Sprinkler	80	5.6	0.17	13.6	7	0.28	22.4	16
40	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.19	23.7	17.9
41	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.195	24.4	19
42	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.193	24.1	18.5
43	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.189	23.7	17.9
44	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.192	23.9	18.3
45	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.194	24.2	18.7
46	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.197	24.6	19.3

47	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.2	25	19.9
48	Overhead Sprinkler	130	5.6	0.17	22.1	15.6	0.189	24.5	19.2
5	Overhead Sprinkler	80	5.6	0.17	13.6	7	0.292	23.4	17.4
6	Overhead Sprinkler	80	5.6	0.17	13.6	7	0.307	24.6	19.3
7	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.198	17.8	10.1
8	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.202	18.2	10.5
9	Overhead Sprinkler	90	5.6	0.17	15.3	7.5	0.207	18.6	11.1

**Node Data**

Node# Elev	Type Hgroup	K-Fact. Open/Closed	Discharge Overdischarge	Coverage Density	Tot. Pres. Elev. Pres.	Req. Pres. Req. Discharge
ft		gpm/psi <sup>1/2</sup>	gpm gpm	ft <sup>2</sup> gpm/ft <sup>2</sup>	psi psi	psi gpm
7 40.5	Overhead Sprinkler HEAD	5.6 Open	17.8 2.5	90 0.198	10.1 -16.2	7.5 15.3
8 39.5	Overhead Sprinkler HEAD	5.6 Open	18.2 2.9	90 0.202	10.5 -15.8	7.5 15.3
16 40.5	Overhead Sprinkler HEAD	5.6 Open	18.3 3	90 0.203	10.7 -16.2	7.5 15.3
9 38.5	Overhead Sprinkler HEAD	5.6 Open	18.6 3.3	90 0.207	11.1 -15.4	7.5 15.3
17 39.5	Overhead Sprinkler HEAD	5.6 Open	18.7 3.4	90 0.208	11.2 -15.8	7.5 15.3
18 38.5	Overhead Sprinkler HEAD	5.6 Open	19.1 3.8	90 0.213	11.7 -15.4	7.5 15.3
10 37.5	Overhead Sprinkler HEAD	5.6 Open	19.2 3.9	90 0.213	11.7 -14.9	7.5 15.3
11 37	Overhead Sprinkler HEAD	5.6 Open	19.6 4.3	90 0.218	12.3 -14.7	7.5 15.3
19 37.5	Overhead Sprinkler HEAD	5.6 Open	19.7 4.4	90 0.219	12.4 -14.9	7.5 15.3
20 37	Overhead Sprinkler HEAD	5.6 Open	20.2 4.9	90 0.224	13 -14.7	7.5 15.3
12 36	Overhead Sprinkler HEAD	5.6 Open	20.5 5.2	90 0.227	13.4 -14.3	7.5 15.3
1 39.97	Overhead Sprinkler HEAD	5.6 Open	20.7 7.1	80 0.259	13.7 -16	7 13.6
21 36	Overhead Sprinkler HEAD	5.6 Open	21 5.7	90 0.233	14 -14.3	7.5 15.3
25 40.97	Overhead Sprinkler HEAD	5.6 Open	21.3 0	125 0.17	14.4 -16.5	14.4 21.3
34 40.97	Overhead Sprinkler HEAD	5.6 Open	21.3 0	125 0.17	14.4 -16.5	14.4 21.3
26 40.1	Overhead Sprinkler HEAD	5.6 Open	21.5 0.3	125 0.172	14.8 -16.1	14.4 21.3
35 40.1	Overhead Sprinkler HEAD	5.6 Open	21.5 0.3	125 0.172	14.8 -16.1	14.4 21.3
13 35	Overhead Sprinkler HEAD	5.6 Open	21.5 6.2	90 0.239	14.7 -13.9	7.5 15.3
2 38.71	Overhead Sprinkler HEAD	5.6 Open	21.2 7.6	80 0.264	14.3 -15.5	7 13.6
27 39.24	Overhead Sprinkler HEAD	5.6 Open	21.9 0.6	125 0.175	15.2 -15.7	14.4 21.3
36 39.24	Overhead Sprinkler HEAD	5.6 Open	21.9 0.6	125 0.175	15.2 -15.7	14.4 21.3
22 35	Overhead Sprinkler HEAD	5.6 Open	22 6.7	90 0.245	15.5 -13.9	7.5 15.3
3 37.45	Overhead Sprinkler HEAD	5.6 Open	21.7 8.1	80 0.271	15 -14.9	7 13.6
28 38.37	Overhead Sprinkler HEAD	5.6 Open	22.2 1	125 0.178	15.7 -15.3	14.4 21.3
37 38.37	Overhead Sprinkler HEAD	5.6 Open	22.2 1	125 0.178	15.7 -15.3	14.4 21.3

**Node Data**

Node# Elev	Type Hgroup	K-Fact. Open/Closed	Discharge Overdischarge	Coverage Density	Tot. Pres. Elev. Pres.	Req. Pres. Req. Discharge
ft		gpm/psi½	gpm gpm	ft² gpm/ft²	psi psi	psi gpm
4 36.19	Overhead Sprinkler HEAD	5.6 Open	22.4 8.8	80 0.28	16 -14.4	7 13.6
29 37.51	Overhead Sprinkler HEAD	5.6 Open	22.6 1.4	125 0.181	16.3 -15	14.4 21.3
38 37.51	Overhead Sprinkler HEAD	5.6 Open	22.6 1.4	125 0.181	16.3 -15	14.4 21.3
30 36.64	Overhead Sprinkler HEAD	5.6 Open	23.1 1.9	125 0.185	17 -14.6	14.4 21.3
39 36.64	Overhead Sprinkler HEAD	5.6 Open	23.1 1.9	125 0.185	17.1 -14.6	14.4 21.3
23 33.75	Overhead Sprinkler HEAD	5.6 Open	22.8 7.5	90 0.254	16.6 -13.3	7.5 15.3
14 33.75	Overhead Sprinkler HEAD	5.6 Open	22.8 7.5	90 0.254	16.6 -13.3	7.5 15.3
24 33.5	Overhead Sprinkler HEAD	5.6 Open	23.4 8.1	90 0.26	17.4 -13.2	7.5 15.3
15 33.5	Overhead Sprinkler HEAD	5.6 Open	23.4 8.1	90 0.26	17.5 -13.2	7.5 15.3
5 34.94	Overhead Sprinkler HEAD	5.6 Open	23.4 9.8	80 0.292	17.4 -13.8	7 13.6
43 38.37	Overhead Sprinkler HEAD	5.6 Open	23.7 2.4	125 0.189	17.9 -15.3	14.4 21.3
31 35.78	Overhead Sprinkler HEAD	5.6 Open	23.7 2.4	125 0.19	17.9 -14.2	14.4 21.3
40 35.78	Overhead Sprinkler HEAD	5.6 Open	23.7 2.5	125 0.19	17.9 -14.2	14.4 21.3
44 37.51	Overhead Sprinkler HEAD	5.6 Open	23.9 2.7	125 0.192	18.3 -15	14.4 21.3
33 34.5	Overhead Sprinkler HEAD	5.6 Open	24.1 2.8	125 0.193	18.5 -13.6	14.4 21.3
42 34.5	Overhead Sprinkler HEAD	5.6 Open	24.1 2.8	125 0.193	18.5 -13.6	14.4 21.3
45 36.64	Overhead Sprinkler HEAD	5.6 Open	24.2 3	125 0.194	18.7 -14.6	14.4 21.3
32 34.91	Overhead Sprinkler HEAD	5.6 Open	24.4 3.1	125 0.195	18.9 -13.8	14.4 21.3
41 34.91	Overhead Sprinkler HEAD	5.6 Open	24.4 3.1	125 0.195	19 -13.8	14.4 21.3
48 34.5	Overhead Sprinkler HEAD	5.6 Open	24.5 2.4	130 0.189	19.2 -13.6	15.6 22.1
46 35.78	Overhead Sprinkler HEAD	5.6 Open	24.6 3.3	125 0.197	19.3 -14.2	14.4 21.3
6 33.65	Overhead Sprinkler HEAD	5.6 Open	24.6 11	80 0.307	19.3 -13.3	7 13.6
47 34.91	Overhead Sprinkler HEAD	5.6 Open	25 3.7	125 0.2	19.9 -13.8	14.4 21.3
328-I 1.5	Node NODE				-11.4 0.6	
329-O 1.5	Node NODE				-11.4 0.6	

**Node Data**

Node# Elev	Type Hgroup	K-Fact. Open/Closed	Discharge Overdischarge	Coverage Density	Tot. Pres. Elev. Pres.	Req. Pres. Req. Discharge
ft		gpm/psi <sup>1/2</sup>	gpm gpm	ft <sup>2</sup> gpm/ft <sup>2</sup>	psi psi	psi gpm
329-I 1.5	Node NODE				-11.3 0.6	
335-O 3	Node NODE				-8.1 0	
331 -4	Node NODE				-7.6 3	
332 -4	Node NODE				-6.9 3	
333 -4	Node NODE				-6 3	
335-I 3	Node NODE				-2.7 0	
W1 3	Supply SUPPLY		-1056.4		-0.9 0	
337 -4	Node NODE				1.7 3	
338-O -4	Node NODE				1.9 3	
338-I -4	Node NODE				1.9 3	
083 39.99	Node NODE				10.9 -16	
082 39.15	Node NODE				11.3 -15.7	
067 39.99	Node NODE				11.5 -16	
081 38.32	Node NODE				11.7 -15.3	
066 39.15	Node NODE				11.9 -15.7	
080 37.48	Node NODE				12.4 -14.9	
065 38.32	Node NODE				12.4 -15.3	
064 37.48	Node NODE				13 -14.9	
079 36.65	Node NODE				13.1 -14.6	
063 36.65	Node NODE				13.8 -14.6	
078 35.81	Node NODE				14.1 -14.2	
062 35.81	Node NODE				14.9 -14.2	
077 34.93	Node NODE				15.5 -13.8	
061 34.93	Node NODE				16.3 -13.8	
060 34.84	Node NODE				16.5 -13.8	

### Node Data

Node# Elev	Type Hgroup	K-Fact. Open/Closed	Discharge Overdischarge	Coverage Density	Tot. Pres. Elev. Pres.	Req. Pres. Req. Discharge
ft		gpm/psi <sup>1/2</sup>	gpm gpm	ft <sup>2</sup> gpm/ft <sup>2</sup>	psi psi	psi gpm
059 33.99	Node NODE				17.4 -13.4	
076 33.99	Node NODE				17.4 -13.4	
075 33.9	Node NODE				17.6 -13.4	
058 33.05	Node NODE				18.5 -13	
074 33.05	Node NODE				18.6 -13	
051 34.82	Node NODE				19.1 -13.8	
043 34.82	Node NODE				19.1 -13.8	
094 33.56	Node NODE				19.5 -13.2	
050 34.03	Node NODE				19.7 -13.4	
042 34.03	Node NODE				19.7 -13.4	
875 34.82	Node NODE				20 -13.8	
001 34.03	Node NODE				20.5 -13.4	
034 28	Node NODE				23.9 -10.8	
033 28	Node NODE				23.9 -10.8	
035 28	Node NODE				23.9 -10.8	
085 28	Node NODE				23.9 -10.8	
036 28	Node NODE				23.9 -10.8	
032 28	Node NODE				23.9 -10.8	
007 28	Node NODE				23.9 -10.8	
031 28	Node NODE				24.8 -10.8	
016 28	Node NODE				25 -10.8	
305-O 6.42	Node NODE				36.4 -1.5	
305-I 4.91	Node NODE				38.9 -0.8	
306-O 4.51	Node NODE				39.1 -0.7	
306-I 4.02	Node NODE				39.7 -0.4	

**Node Data**

Node# Elev	Type Hgroup	K-Fact. Open/Closed	Discharge Overdischarge	Coverage Density	Tot. Pres. Elev. Pres.	Req. Pres. Req. Discharge
ft		gpm/psi <sup>1/2</sup>	gpm gpm	ft <sup>2</sup> gpm/ft <sup>2</sup>	psi psi	psi gpm
320-O 1.99	Node NODE				41.2 0.4	
320-I 0.82	Node NODE				42.2 0.9	
309 0	Node NODE				42.6 1.3	
311 -4	Node NODE				44.5 3	
319 3	Node NODE				45.3 0	
316 -4	Node NODE				47.5 3	
326-O 1.5	Node NODE				48.6 0.6	
326-I 1.5	Node NODE				49 0.6	
327-O 1.5	Node NODE				49 0.6	
327-I 1.5	Node NODE				50.1 0.6	
328-O 1.5	Node NODE				50.1 0.6	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

Path No: 1

25	40.97	5.6	21.3	2.5		10.04	120	14.4	
26	40.1	5.6	21.3	2.635		0	0.0016	0.4	
						10.04		0.0	
26	40.1	5.6	21.5	2.5		10.04	120	14.8	
27	39.24	5.6	42.8	2.635		0	0.006	0.4	
						10.04		0.1	
27	39.24	5.6	21.9	2.5		10.04	120	15.2	
28	38.37	5.6	64.6	2.635		0	0.0128	0.4	
						10.04		0.1	
28	38.37	5.6	22.2	2.5		10.04	120	15.7	
29	37.51	5.6	86.8	2.635		0	0.0222	0.4	
						10.04		0.2	
29	37.51	5.6	22.6	2.5		10.04	120	16.3	
30	36.64	5.6	109.5	2.635		0	0.034	0.4	
						10.04		0.3	
30	36.64	5.6	23.1	2.5		10.04	120	17	
31	35.78	5.6	132.6	2.635		0	0.0486	0.4	
						10.04		0.5	
31	35.78	5.6	23.7	2.5		10.04	120	17.9	
32	34.91	5.6	156.3	2.635		0	0.0658	0.4	
						10.04		0.7	
32	34.91	5.6	24.4	2.5		1	120	18.9	
051	34.82		180.7	2.635		0	0.0861	0.0	
						1		0.1	
051	34.82		0	3		9.2	120	19.1	
050	34.03		180.7	3.26		0	0.0305	0.3	
						9.2		0.3	
050	34.03		24.1	3	1x(us.Tee-Br)=20.16	10.77	120	19.7	
035	28		204.7	3.26	1x(us.90)=9.41	29.57	0.0385	2.6	
						40.34		1.6	
035	28		138	8		12.5	120	23.9	
036	28		342.8	8.329		0	0.001	0	
						12.5		0.0	
036	28		204.8	8		12.5	120	23.9	
007	28		547.6	8.329		0	0.0025	0	
						12.5		0.0	
007	28		146	8	1x(us.90)=20.98	272.52	120	23.9	
016	28		693.5	8.329		20.98	0.0038	0	
						293.5		1.1	
016	28		362.8	8	1x(us.90)=20.98	226.94	120	25	
305-O	6.42		1056.4	8.329		20.98	0.0083	9.4	
						247.92		2.1	
305-O	6.42		0	6		1.51		36.4	DV-5deluge
305-I	4.91		1056.4	0		0	1.1841	0.7	***
						1.51		1.8	
305-I	4.91		0	6		0.39	120	38.9	
306-O	4.51		1056.4	6.357		0	0.0311	0.2	
						0.39		0.0	

**PIPE INFORMATION**

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 1**

306-O	4.51		0	6		0.49		39.1	BFV-N
306-I	4.02		1056.4	0		0	0.8922	0.2	***
						0.49		0.4	
306-I	4.02		0	8	1x(us.Tee-Br)=40.8	4.53	120	39.7	
320-O	1.99		1056.4	8.329	1x(us.90)=20.98	61.78	0.0083	0.9	
						66.31		0.6	
320-O	1.99		0	8		1.17		41.2	Check 590
320-I	0.82		1056.4	0		0	0.4537	0.5	***
						1.17		0.5	
320-I	0.82		0	8		0.82	120	42.2	
309	0		1056.4	8.329		0	0.0083	0.4	
						0.82		0	
309	0		0	8	1x(us.90)=21.34	7	150	42.6	
311	-4		1056.4	7.68		21.34	0.0082	1.7	
						28.34		0.2	
311	-4		0	10	5x(us.90)=116.04	869.74	150	44.5	
316	-4		1056.4	9.42		116.04	0.003	0	
						985.78		3	
316	-4		0	8	1x(us.Tee-Br)=40.8	12.72	120	47.5	
319	3		1056.4	8.329	2x(us.90)=41.96	82.76	0.0083	-3	
						95.48		0.8	
319	3		0	6	1x(us.Tee-Br)=37.72	12.54	120	45.3	
326-O	1.5		1056.4	6.357	2x(us.90)=35.21	72.93	0.0311	0.6	
						85.46		2.7	
326-O	1.5		0	6		0.49		48.6	BFV-N
326-I	1.5		1056.4	0		0	0.8922	0	***
						0.49		0.4	
326-I	1.5		0	6		0.55	120	49	
327-O	1.5		1056.4	6.357		0	0.0311	0	
						0.55		0.0	
327-O	1.5		0	6		0.96		49	CV-1F Check
327-I	1.5		1056.4	0		0	1.0726	0	***
						0.96		1	
327-I	1.5		0	6		1.28	120	50.1	
328-O	1.5		1056.4	6.357		0	0.0311	0	
						1.28		0.0	
328-O	1.5		0	6		1.5		50.1	FIRE PUMP
328-I	1.5		1056.4	0		0	40.9725	0	***
						1.5		-61.5	
328-I	1.5		0	6		0.13	120	-11.4	
329-O	1.5		1056.4	6.357		0	0.0311	0	
						0.13		0	
329-O	1.5		0	6		0.88		-11.4	Gate A2360
329-I	1.5		1056.4	0		0	0.0425	0	***
						0.88		0.0	
329-I	1.5		0	6	2x(us.90)=35.21	6.71	120	-11.3	
331	-4		1056.4	6.357		35.21	0.0311	2.4	
						41.92		1.3	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 1**

331 332	-4 -4		0 1056.4	6 6.27	1x(us.90)=21.89	7.18 21.89 29.08	140 0.025	-7.6 0 0.7	
332 333	-4 -4		0 1056.4	6 5.86	1x(us.90)=17.88	10.22 17.88 28.1	150 0.0306	-6.9 0 0.9	
333 335-O	-4 3		0 1056.4	6 6.065	1x(us.90)=14	11.85 14 25.85	120 0.0391	-6 -3 1	
335-O 335-I	3 3		0 1056.4	6 0		0.5 0 0.5	10.7003	-8.1 0 5.4	WILKINS 350 DCDA ***
335-I 337	3 -4		0 1056.4	6 6.065	2x(us.90)=28	7.65 28 35.65	120 0.0391	-2.7 3 1.4	
337 338-O	-4 -4		0 1056.4	10 9.42		69.36 0 69.36	150 0.003	1.7 0 0.2	
338-O 338-I	-4 -4		0 1056.4	10 0		1.08 0 1.08	0.0045	1.9 0 0	Gate A2360 ***
338-I W1	-4 3		0 1056.4	10 9.42	1x(us.Tee-Br)=52.74 1x(us.90)=23.21	8.96 75.95 84.91	150 0.003	1.9 -3 0.3	
<b>W1</b>								<b>-0.9</b>	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 2**

34	40.97	5.6	21.3	2.5		10.04	120	14.4	
35	40.1	5.6	21.3	2.635		0	0.0016	0.4	
						10.04		0.0	
35	40.1	5.6	21.5	2.5		10.04	120	14.8	
36	39.24	5.6	42.8	2.635		0	0.006	0.4	
						10.04		0.1	
36	39.24	5.6	21.9	2.5		10.04	120	15.2	
37	38.37	5.6	64.7	2.635		0	0.0128	0.4	
						10.04		0.1	
37	38.37	5.6	22.2	2.5		10.04	120	15.7	
38	37.51	5.6	86.9	2.635		0	0.0222	0.4	
						10.04		0.2	
38	37.51	5.6	22.6	2.5		10.04	120	16.3	
39	36.64	5.6	109.5	2.635		0	0.0341	0.4	
						10.04		0.3	
39	36.64	5.6	23.1	2.5		10.04	120	17.1	
40	35.78	5.6	132.6	2.635		0	0.0486	0.4	
						10.04		0.5	
40	35.78	5.6	23.7	2.5		10.04	120	17.9	
41	34.91	5.6	156.3	2.635		0	0.0659	0.4	
						10.04		0.7	
41	34.91	5.6	24.4	2.5		1	120	19	
043	34.82		180.7	2.635		0	0.0862	0.0	
						1		0.1	
043	34.82		0	3		9.2	120	19.1	
042	34.03		180.7	3.26		0	0.0306	0.3	
						9.2		0.3	
042	34.03		24.1	3	1x(us.Tee-Br)=20.16	10.77	120	19.7	
036	28		204.8	3.26	1x(us.90)=9.41	29.57	0.0385	2.6	
						40.34		1.6	
<b>036</b>								<b>23.9</b>	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 3**

7 083	40.5 39.99	5.6	17.8 17.8	1 1.049	1x(us.Tee-Br)=5	0.52 5 5.52	120 0.1043	10.1 0.2 0.6	
083 082	39.99 39.15		0 17.8	2 2.157		9.68 0 9.68	120 0.0031	10.9 0.4 0.0	
082 081	39.15 38.32		18.2 36	2 2.157		9.68 0 9.68	120 0.0115	11.3 0.4 0.1	
081 080	38.32 37.48		18.6 54.6	2 2.157		9.68 0 9.68	120 0.0249	11.7 0.4 0.2	
080 079	37.48 36.65		19.2 73.8	2 2.157		9.68 0 9.68	120 0.0435	12.4 0.4 0.4	
079 078	36.65 35.81		19.6 93.4	2 2.157		9.68 0 9.68	120 0.0673	13.1 0.4 0.7	
078 077	35.81 34.93		20.5 113.9	2 2.157		10.28 0 10.28	120 0.0972	14.1 0.4 1	
077 076	34.93 33.99		21.5 135.4	2 2.157		10.88 0 10.88	120 0.1338	15.5 0.4 1.5	
076 075	33.99 33.9		22.8 158.3	2 2.157		1 0 1	120 0.1786	17.4 0.0 0.2	
075 074	33.9 33.05		0 158.3	2.5 2.635		9.88 0 9.88	120 0.0674	17.6 0.4 0.7	
074 033	33.05 28		23.4 181.7	2.5 2.635	1x(us.Tee-Br)=16.47 1x(us.90)=8.24	10.02 24.71 34.74	120 0.087	18.6 2.2 3	
033 032	28 28		47.2 228.8	8 8.329	1x(us.Tee-Br)=40.8	3.42 40.8 44.21	120 0.0005	23.9 0 0.0	
032 031	28 28		134 362.8	6 6.357	1x(us.Tee-Br)=37.72	180.77 37.72 218.49	120 0.0043	23.9 0 0.9	
031 016	28 28		0 362.8	8 8.329	1x(us.Tee-Br)=40.8	139.92 40.8 180.71	120 0.0012	24.8 0 0.2	
<b>016</b>								<b>25</b>	

**Path No: 4**

8 082	39.5 39.15	5.6	18.2 18.2	1 1.049	1x(us.Tee-Br)=5	0.35 5 5.35	120 0.1088	10.5 0.2 0.6	
<b>082</b>								<b>11.3</b>	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 5**

16 067	40.5 39.99	5.6	18.3 18.3	1 1.049	1x(us.Tee-Br)=5	0.52 5 5.52	120 0.1101	10.7 0.2 0.6	
067 066	39.99 39.15		0 18.3	2 2.157		9.68 0 9.68	120 0.0033	11.5 0.4 0.0	
066 065	39.15 38.32		18.7 37	2 2.157		9.68 0 9.68	120 0.0121	11.9 0.4 0.1	
065 064	38.32 37.48		19.1 56.2	2 2.157		9.68 0 9.68	120 0.0262	12.4 0.4 0.3	
064 063	37.48 36.65		19.7 75.9	2 2.157		9.68 0 9.68	120 0.0457	13 0.4 0.4	
063 062	36.65 35.81		20.2 96	2 2.157		9.68 0 9.68	120 0.0708	13.8 0.4 0.7	
062 061	35.81 34.93		21 117	2 2.157		10.28 0 10.28	120 0.1021	14.9 0.4 1	
061 060	34.93 34.84		22 139	2 2.157		1 0 1	120 0.1405	16.3 0.0 0.1	
060 059	34.84 33.99		0 139	2.5 2.635		9.88 0 9.88	120 0.053	16.5 0.4 0.5	
059 058	33.99 33.05		22.8 161.8	2.5 2.635		10.88 0 10.88	120 0.0702	17.4 0.4 0.8	
058 034	33.05 28		23.4 185.2	2.5 2.635	1x(us.Tee-Br)=16.47 1x(us.90)=8.24	10.02 24.71 34.74	120 0.0901	18.5 2.2 3.1	
034 035	28 28		-47.2 138	8 8.329		10.76 0 10.76	120 0.0002	23.9 0 0	
<b>035</b>								<b>23.9</b>	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 6**

43	38.37	5.6	23.7	2.5		10.04	120	17.9	
44	37.51	5.6	23.7	2.635		0	0.002	0.4	
						10.04		0.0	
44	37.51	5.6	23.9	2.5		10.04	120	18.3	
45	36.64	5.6	47.6	2.635		0	0.0073	0.4	
						10.04		0.1	
45	36.64	5.6	24.2	2.5		10.04	120	18.7	
46	35.78	5.6	71.9	2.635		0	0.0156	0.4	
						10.04		0.2	
46	35.78	5.6	24.6	2.5		10.04	120	19.3	
47	34.91	5.6	96.4	2.635		0	0.0269	0.4	
						10.04		0.3	
47	34.91	5.6	25	2.5		1	120	19.9	
875	34.82		121.4	2.635		0	0.0412	0.0	
						1		0.0	
875	34.82		0	3		9.2	120	20	
001	34.03		121.4	3.26		0	0.0146	0.3	
						9.2		0.1	
001	34.03		24.5	3	1x(us.Tee-Br)=20.16	10.77	120	20.5	
007	28		146	3.26	1x(us.90)=9.41	29.57	0.0206	2.6	
						40.34		0.8	
<b>007</b>								<b>23.9</b>	

**Path No: 7**

9	38.5	5.6	18.6	1	1x(us.Tee-Br)=5	0.18	120	11.1	
081	38.32		18.6	1.049		5	0.1138	0.1	
						5.18		0.6	
<b>081</b>								<b>11.7</b>	

**Path No: 8**

48	34.5	5.6	24.5	1	1x(us.Tee-Br)=5	0.47	120	19.2	
001	34.03		24.5	1.049		5	0.1895	0.2	
						5.47		1	
<b>001</b>								<b>20.5</b>	

**Path No: 9**

17	39.5	5.6	18.7	1	1x(us.Tee-Br)=5	0.35	120	11.2	
066	39.15		18.7	1.049		5	0.1145	0.2	
						5.35		0.6	
<b>066</b>								<b>11.9</b>	

**Path No: 10**

33	34.5	5.6	24.1	1	1x(us.Tee-Br)=5	0.47	120	18.5	
050	34.03		24.1	1.049		5	0.1828	0.2	
						5.47		1	
<b>050</b>								<b>19.7</b>	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 11**

42	34.5	5.6	24.1	1	1x(us.Tee-Br)=5	0.47	120	18.5	
042	34.03		24.1	1.049		5	0.1829	0.2	
						5.47		1	
								<b>19.7</b>	

**Path No: 12**

18	38.5	5.6	19.1	1	1x(us.Tee-Br)=5	0.18	120	11.7	
065	38.32		19.1	1.049		5	0.1196	0.1	
						5.18		0.6	
								<b>12.4</b>	

**Path No: 13**

10	37.5	5.6	19.2	1	1x(us.Tee-Br)=5	0.02	120	11.7	
080	37.48		19.2	1.049		5	0.1201	0	
						5.02		0.6	
								<b>12.4</b>	

**Path No: 14**

11	37	5.6	19.6	1	1x(us.Tee-Br)=5	0.35	120	12.3	
079	36.65		19.6	1.049		5	0.1255	0.2	
						5.35		0.7	
								<b>13.1</b>	

**Path No: 15**

19	37.5	5.6	19.7	1	1x(us.Tee-Br)=5	0.02	120	12.4	
064	37.48		19.7	1.049		5	0.126	0	
						5.02		0.6	
								<b>13</b>	

**Path No: 16**

20	37	5.6	20.2	1	1x(us.Tee-Br)=5	0.35	120	13	
063	36.65		20.2	1.049		5	0.1316	0.2	
						5.35		0.7	
								<b>13.8</b>	

**Path No: 17**

12	36	5.6	20.5	1	1x(us.Tee-Br)=5	0.19	120	13.4	
078	35.81		20.5	1.049		5	0.1354	0.1	
						5.19		0.7	
								<b>14.1</b>	

**Path No: 18**

21	36	5.6	21	1	1x(us.Tee-Br)=5	0.19	120	14	
062	35.81		21	1.049		5	0.1417	0.1	
						5.19		0.7	
								<b>14.9</b>	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 19**

1	39.97	5.6	20.7	2		14.22	120	13.7	
2	38.71	5.6	20.7	2.157		0	0.0041	0.5	
						14.22		0.1	
2	38.71	5.6	21.2	2		14.22	120	14.3	
3	37.45	5.6	41.9	2.157		0	0.0152	0.5	
						14.22		0.2	
3	37.45	5.6	21.7	2		14.22	120	15	
4	36.19	5.6	63.6	2.157		0	0.033	0.5	
						14.22		0.5	
4	36.19	5.6	22.4	2		14.22	120	16	
5	34.94	5.6	86	2.157		0	0.0577	0.5	
						14.22		0.8	
5	34.94	5.6	23.4	2		14.56	120	17.4	
6	33.65	5.6	109.4	2.157		0	0.0901	0.6	
						14.56		1.3	
6	33.65	5.6	24.6	2		1	120	19.3	
094	33.56		134	2.157		0	0.1312	0.0	
						1		0.1	
094	33.56		0	2.5	1x(us.Tee-Br)=16.47	15.75	120	19.5	
085	28		134	2.635	1x(us.90)=8.24	24.71	0.0495	2.4	
						40.46		2	
085	28		0	8	1x(us.Tee-Br)=40.8	3.5	120	23.9	
032	28		134	8.329		40.8	0.0002	0	
						44.3		0	
<b>032</b>								<b>23.9</b>	

**Path No: 20**

13	35	5.6	21.5	1	1x(us.Tee-Br)=5	0.07	120	14.7	
077	34.93		21.5	1.049		5	0.1483	0.0	
						5.07		0.8	
<b>077</b>								<b>15.5</b>	

**Path No: 21**

22	35	5.6	22	1	1x(us.Tee-Br)=5	0.07	120	15.5	
061	34.93		22	1.049		5	0.1551	0.0	
						5.07		0.8	
<b>061</b>								<b>16.3</b>	

**Path No: 22**

23	33.75	5.6	22.8	1	1x(us.Tee-Br)=5	0.24	120	16.6	
059	33.99		22.8	1.049		5	0.1655	-0.1	
						5.24		0.9	
<b>059</b>								<b>17.4</b>	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 23**

14	33.75	5.6	22.8	1	1x(us.Tee-Br)=5	0.24	120	16.6	
076	33.99		22.8	1.049		5	0.1657	-0.1	
						5.24		0.9	
								<b>17.4</b>	

**Path No: 24**

24	33.5	5.6	23.4	1	1x(us.Tee-Br)=5	0.45	120	17.4	
058	33.05		23.4	1.049		5	0.1728	0.2	
						5.45		0.9	
								<b>18.5</b>	

**Path No: 25**

15	33.5	5.6	23.4	1	1x(us.Tee-Br)=5	0.45	120	17.5	
074	33.05		23.4	1.049		5	0.1738	0.2	
						5.45		0.9	
								<b>18.6</b>	

**Path No: 26**

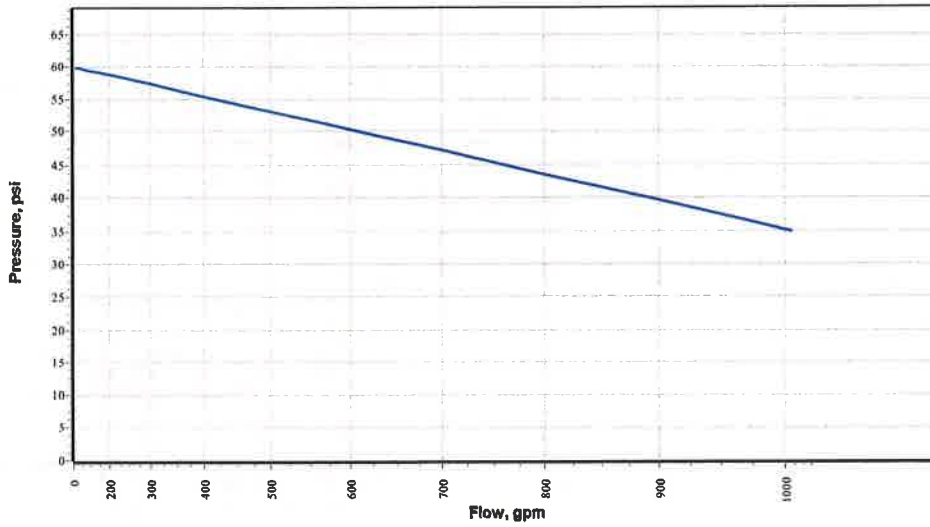
034	28		0	8		9	120	23.9	
033	28		47.2	8.329		0	0.0000	0	
						9		0	
								<b>23.9</b>	

\* Pressures are balanced to a high degree of accuracy. Values may vary by 0.1 psi due to display rounding.

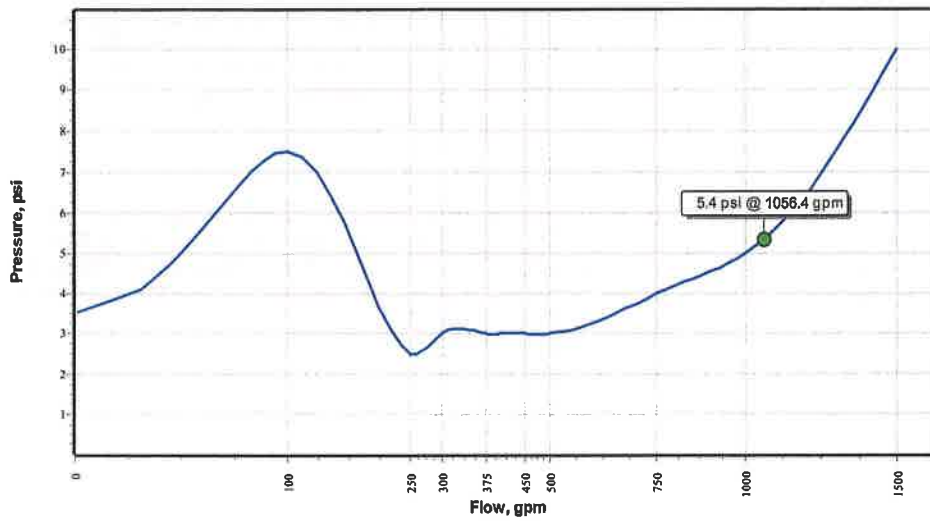
\* Maximum Velocity of 13.89 ft/s occurs in the following pipe(s): (075-076)

\*\*\* Device pressure loss (gain in the case of pumps) is calculated from the device's curve. If the device curve is printed with this report, it will appear below. The length of the device as shown in the table above comes from the CAD drawing. The friction loss per unit of length is calculated based upon the length and the curve-based loss/gain value. Internal ID and C Factor values are irrelevant as the device is not represented as an addition to any pipe, but is an individual item whose loss/gain is based solely on the curve data.

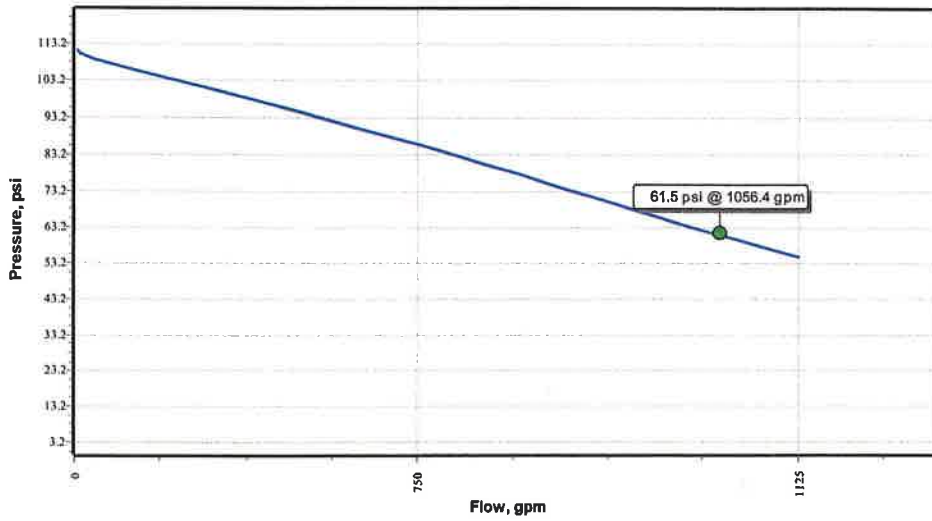
**Pressure vs. Flow Function**  
Design Area: 1; Supply Ref.: W1; Supply Name:W1



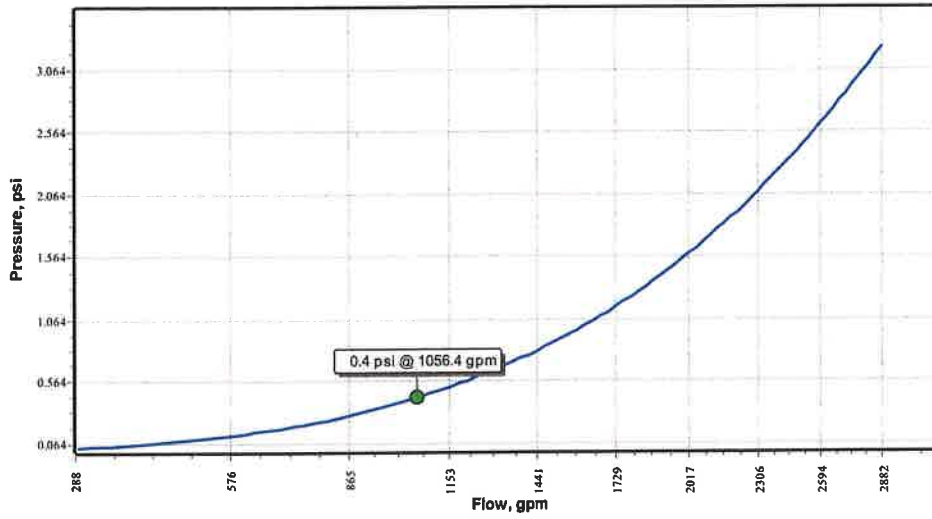
**Pressure Loss Function**  
Design Area: 1; BFP Ref.: 1108 (WILKINS 350 DCDA, Size = 6); Inlet Node: 335-I; Outlet Node: 335-O



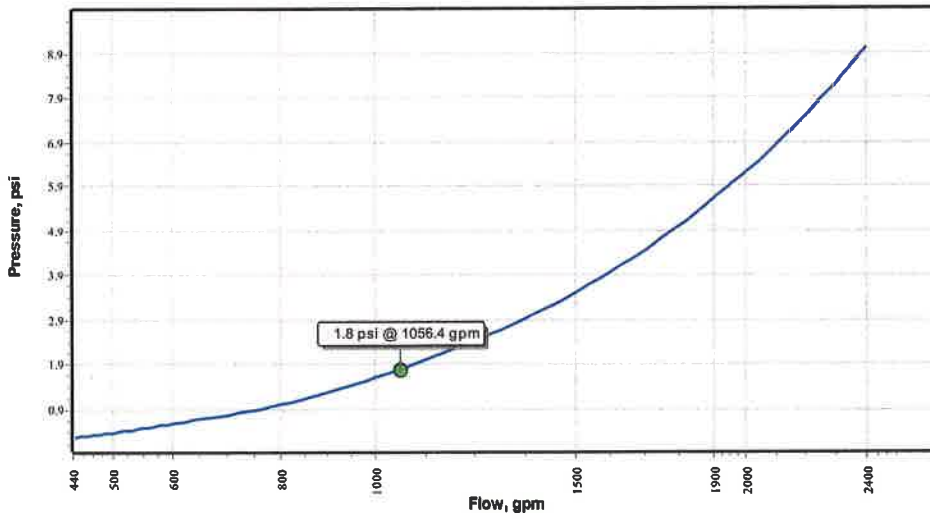
**Pressure Boost Function**  
Design Area: 1; Pump Ref.: 1105 (FIRE PUMP, Size = 6); Inlet Node: 328-I; Outlet Node: 328-O



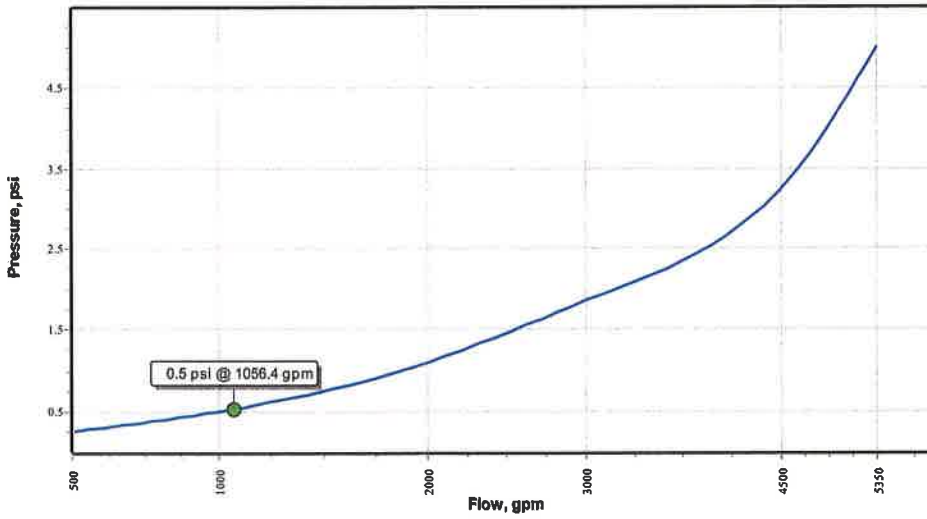
**Pressure Loss Function**  
Design Area: 1; Valve Ref.: 1101 (BFV-N, Size = 6); Inlet Node: 306-I; Outlet Node: 306-O



**Pressure Loss Function**  
Design Area: 1; Valve Ref.: 1102 (DV-5deluge, Size = 6); Inlet Node: 305-I; Outlet Node: 305-O

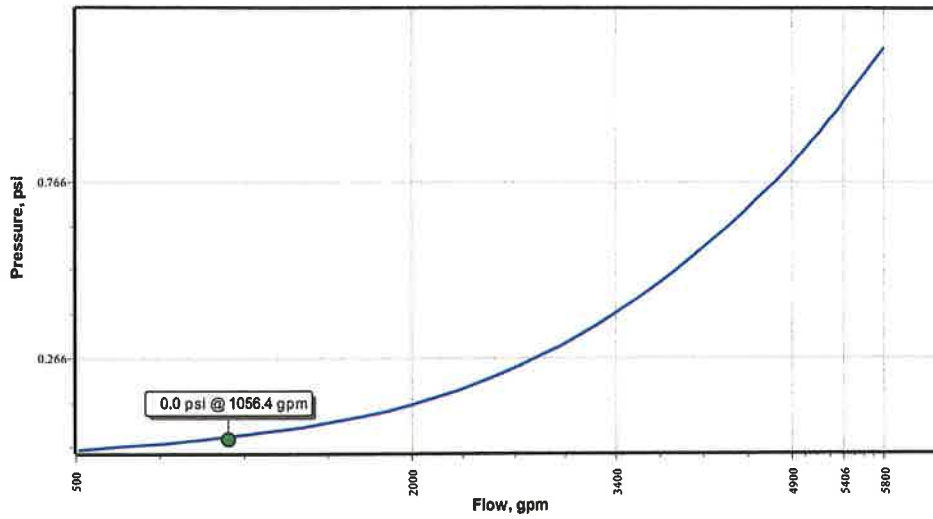


**Pressure Loss Function**  
Design Area: 1; Valve Ref.: 1103 (Check 590, Size = 8); Inlet Node: 320-I; Outlet Node: 320-O



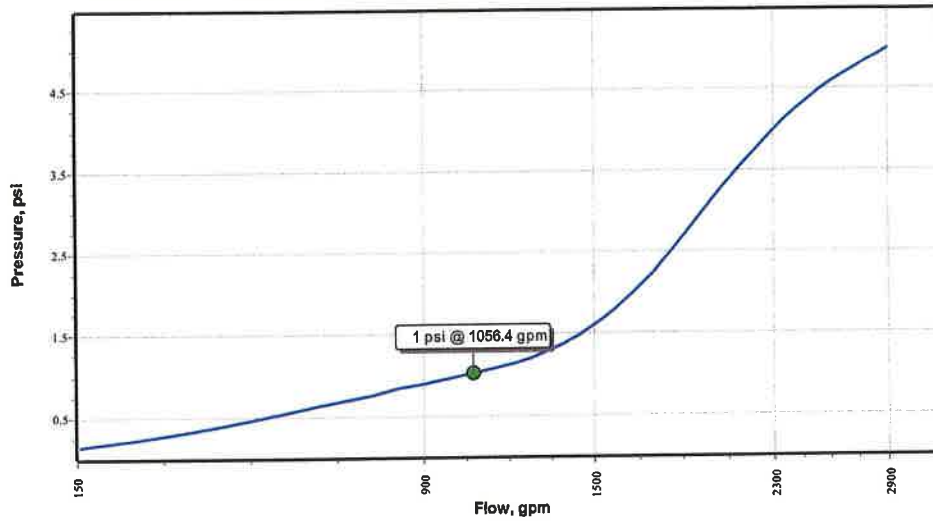
**Pressure Loss Function**

Design Area: 1; Valve Ref.: 1104 (Gate A2360, Size = 6); Inlet Node: 329-I; Outlet Node: 329-O

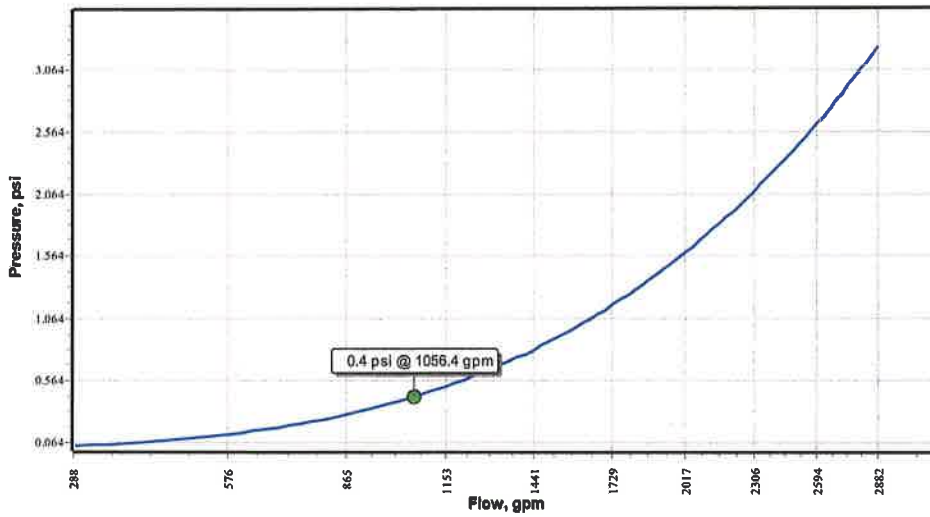


**Pressure Loss Function**

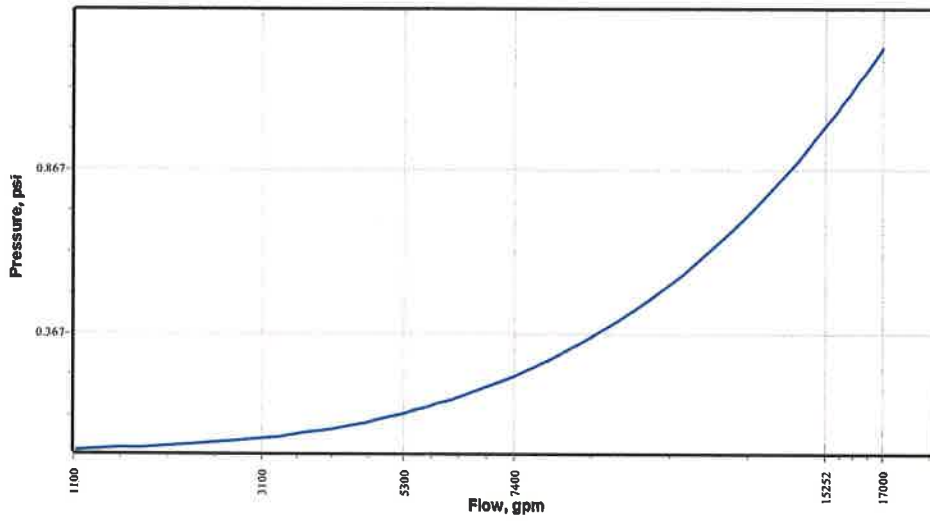
Design Area: 1; Valve Ref.: 1106 (CV-1F Check, Size = 6); Inlet Node: 327-I; Outlet Node: 327-O



**Pressure Loss Function**  
Design Area: 1; Valve Ref.: 1107 (BFV-N, Size = 6); Inlet Node: 326-I; Outlet Node: 326-O



**Pressure Loss Function**  
Design Area: 1; Valve Ref.: 1109 (Gate A2360, Size = 10); Inlet Node: 338-I; Outlet Node: 338-O



# HYDRAULIC CALCULATIONS for

---

## Job Information

Project Name : SKY X HANGAR-WEST

Contract No. :

City: HAMMOND, LA 70401

Project Location: INDUSTRIAL PARK RD

Date: 11/28/2025

---

## Contractor Information

Name of Contractor: FIRE & SAFETY COMMODITIES

Address: 245 WOODLAND DR

City: LAPLACE, LA 70068

Phone Number: 504-465-5994

E-mail:

Name of Designer: MD

Authority Having Jurisdiction: STATE FIRE MARSHAL

---

## Design

Remote Area Name	2
Remote Area Location	HANGAR BAY 'B'
Occupancy Classification	GROUP II
Density (gpm/ft <sup>2</sup> )	0.17
Area of Application (ft <sup>2</sup> )	5000
Coverage per Sprinkler (ft <sup>2</sup> )	130
Number of Calculated Sprinklers	42
In-Rack Demand (gpm)	0
Special Heads	
Hose Streams (gpm)	500
Total Water Required (incl. Hose Streams) (gpm)	1511.2
Required Pressure at Source (psi)	-0.3
Type of System	Wet
Volume - Entire System (gal)	5925.5 gal

---

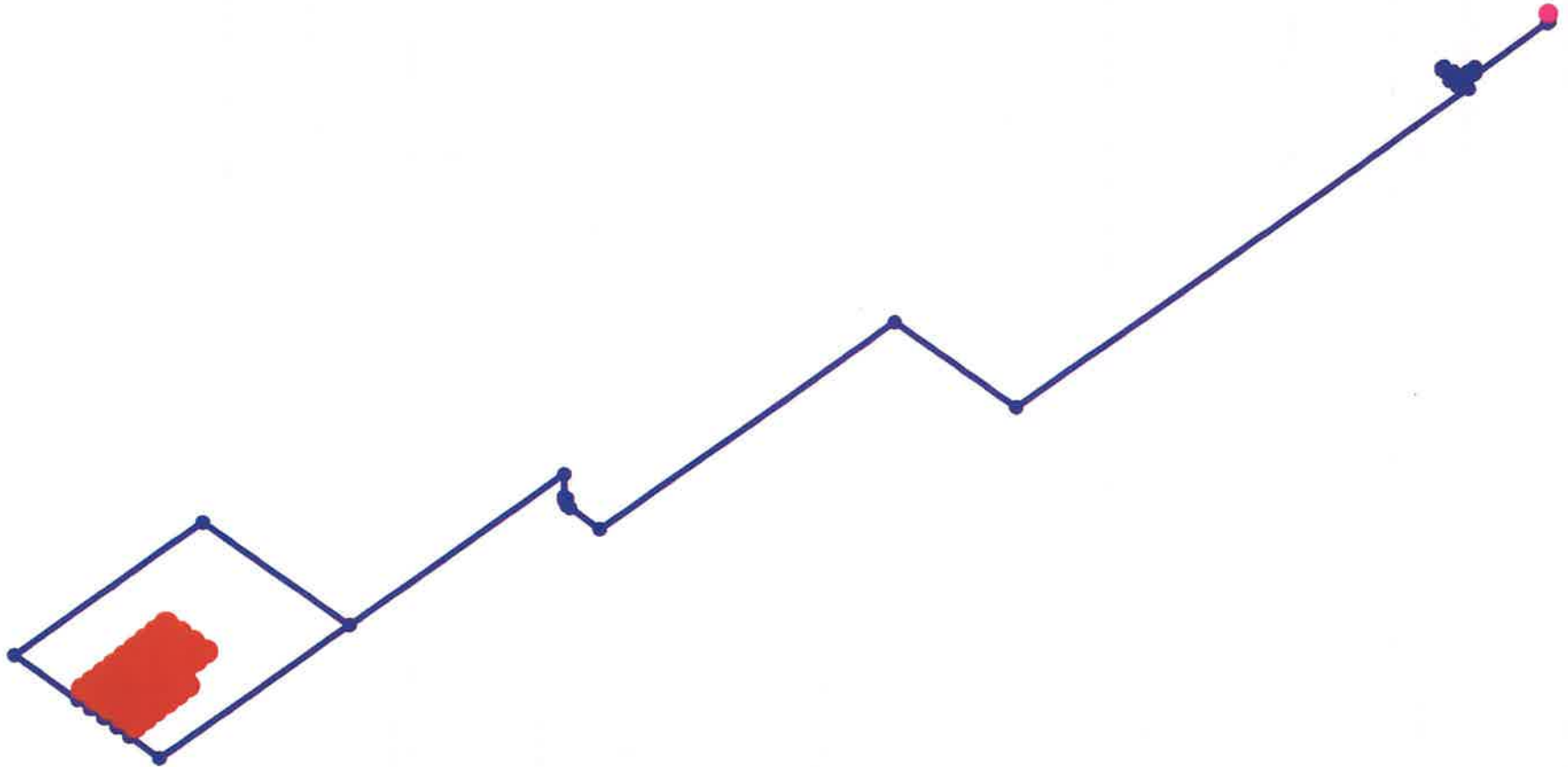
## Water Supply Information

Date	02/11/25
Location	12" MAIN ON INDUSTRIAL PARK
Source	W1

---

## Notes

### Diagram for Design Area : 2 (Optimized Hydraulic Simplified)



## Hydraulic Analysis for : 2

### Calculation Info

Calculation Mode	Demand
Hydraulic Model	Hazen-Williams
Fluid Name	Water @ 60F (15.6C)
Fluid Weight, (lb/ft <sup>3</sup> )	N/A for Hazen-Williams calculation.
Fluid Dynamic Viscosity, (lb·s/ft <sup>2</sup> )	N/A for Hazen-Williams calculation.

### Water Supply Parameters

Supply 1 : W1

Flow (gpm)	Pressure (psi)
0	60
1005	35

### Supply Analysis

Node at Source	Static Pressure (psi)	Residual Pressure (psi)	Flow (gpm)	Available Pressure (psi)	Total Demand (gpm)	Required Pressure (psi)
W1	60	35	1005	6.8	1511.2	-0.3

### System Pump

Rated Flow (gpm)                      not defined

Rated Pressure (psi)                    not defined

Parameters

Flow (gpm)	Pressure (psi)
0	112
750	86
1125	55

---

**Hoses**

Inside Hose Flow / Standpipe Demand (gpm)

Outside Hose Flow (gpm)

Additional Outside Hose Flow (gpm) 500

Other (custom defined) Hose Flow (gpm)

---

Total Hose Flow (gpm) 500

---

**Sprinklers**

Overhead Sprinkler Flow (gpm) 1011.2

InRack Sprinkler Flow (gpm) 0

Other (custom defined) Sprinkler Flow (gpm) 0

---

Total Sprinkler Flow (gpm) 1011.2

---

**Other**

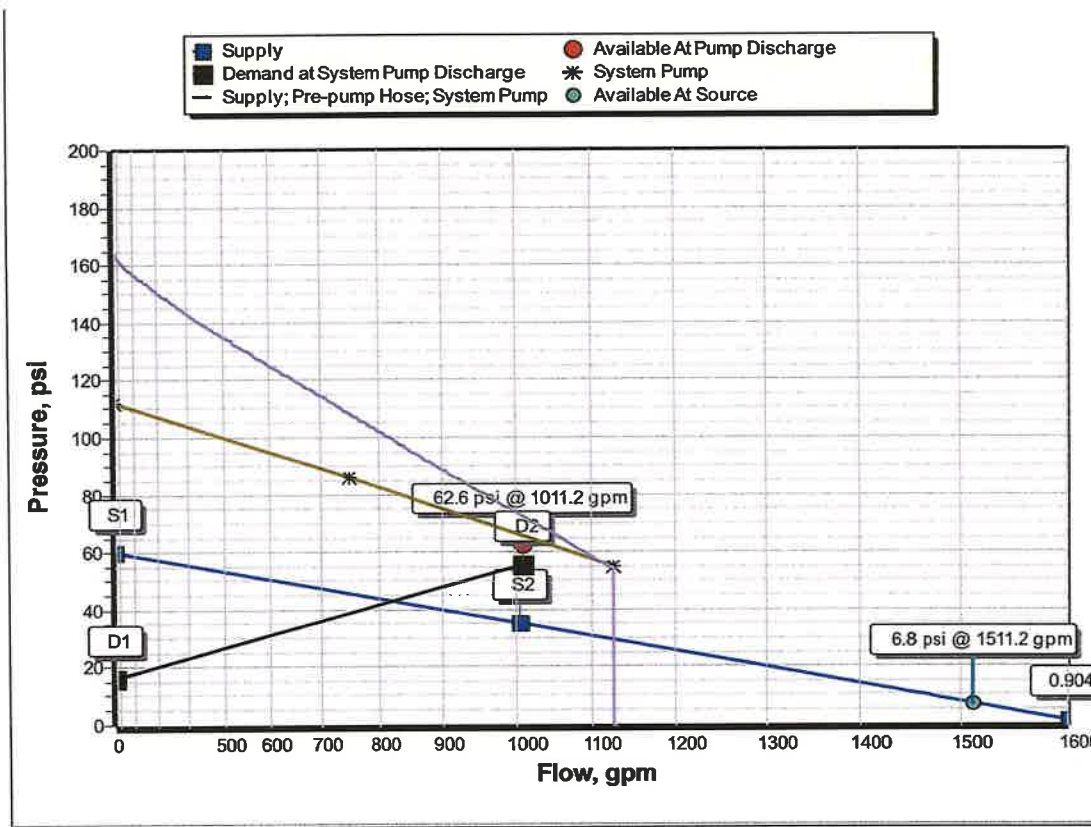
Required Margin of Safety (psi) 0

W1 - Pressure (psi) -0.3

W1 - Flow (gpm) 1011.2

Demand w/o System Pump(s) 65.2 psi @ 1011.2 gpm

### Hydraulic Analysis for : 2



## Hydraulic Analysis for : 2

### Graph Labels

Label	Description	Values	
		Flow (gpm)	Pressure (psi)
S1	Supply point #1 - Static	0	60
S2	Supply point #2 - Residual	1005	35
D1	Elevation Pressure	0	16.5
D2	System Demand	1011.2	55.4

### Open Heads

Head Ref.	Head Type	Coverage	K-Factor	Required			Calculated		
				Density	Flow	Pressure	Density	Flow	Pressure
		(ft²)	(gpm/psi½)	(gpm/ft²)	(gpm)	(psi)	(gpm/ft²)	(gpm)	(psi)
51	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.173	21.6	14.8
52	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.176	22	15.4
53	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.18	22.5	16.1
50	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.17	21.3	14.4
54	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.185	23.1	17.1
55	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.192	24	18.4
56	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.201	25.1	20.1
57	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.211	26.4	22.2
58	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.212	26.4	22.3
59	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.17	21.3	14.4
60	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.172	21.6	14.8
61	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.176	21.9	15.4
62	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.18	22.4	16.1
63	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.185	23.1	17
64	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.192	24	18.3
65	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.2	25.1	20

66	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.211	26.4	22.2
67	Overhead Sprinkler	130	5.6	0.17	22.1	15.6	0.21	27.2	23.7
68	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.17	21.3	14.4
69	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.172	21.6	14.8
70	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.176	21.9	15.4
71	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.18	22.4	16.1
72	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.185	23.1	17
73	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.192	24	18.3
74	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.201	25.1	20
75	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.211	26.4	22.2
76	Overhead Sprinkler	130	5.6	0.17	22.1	15.6	0.21	27.2	23.7
77	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.17	21.3	14.4
78	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.173	21.6	14.8
79	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.176	22	15.4
80	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.18	22.5	16.1
81	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.185	23.1	17.1
82	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.192	24	18.4
83	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.201	25.1	20.1
84	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.211	26.4	22.3
85	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.212	26.5	22.3
86	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.207	25.9	21.3
87	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.209	26.1	21.8
88	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.212	26.5	22.4
89	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.216	27	23.2
90	Overhead Sprinkler	125	5.6	0.17	21.3	14.4	0.222	27.7	24.4

91	Overhead Sprinkler	130	5.6	0.17	22.1	15.6	0.211	27.4	23.9
----	--------------------	-----	-----	------	------	------	-------	------	------

## Node Data

Node# Elev	Type Hgroup	K-Fact. Open/Closed	Discharge Overdischarge	Coverage Density	Tot. Pres. Elev. Pres.	Req. Pres. Req. Discharge
ft		gpm/psi <sup>1/2</sup>	gpm gpm	ft <sup>2</sup> gpm/ft <sup>2</sup>	psi psi	psi gpm
59 40.97	Overhead Sprinkler HEAD	5.6 Open	21.3 0	125 0.17	14.4 -16.5	14.4 21.3
68 40.97	Overhead Sprinkler HEAD	5.6 Open	21.3 0	125 0.17	14.4 -16.5	14.4 21.3
50 40.97	Overhead Sprinkler HEAD	5.6 Open	21.3 0.0	125 0.17	14.4 -16.5	14.4 21.3
77 40.97	Overhead Sprinkler HEAD	5.6 Open	21.3 0.0	125 0.17	14.4 -16.5	14.4 21.3
60 40.1	Overhead Sprinkler HEAD	5.6 Open	21.6 0.3	125 0.172	14.8 -16.1	14.4 21.3
69 40.1	Overhead Sprinkler HEAD	5.6 Open	21.6 0.3	125 0.172	14.8 -16.1	14.4 21.3
51 40.1	Overhead Sprinkler HEAD	5.6 Open	21.6 0.3	125 0.173	14.8 -16.1	14.4 21.3
78 40.1	Overhead Sprinkler HEAD	5.6 Open	21.6 0.3	125 0.173	14.8 -16.1	14.4 21.3
61 39.24	Overhead Sprinkler HEAD	5.6 Open	21.9 0.7	125 0.176	15.4 -15.7	14.4 21.3
70 39.24	Overhead Sprinkler HEAD	5.6 Open	21.9 0.7	125 0.176	15.4 -15.7	14.4 21.3
52 39.24	Overhead Sprinkler HEAD	5.6 Open	22 0.7	125 0.176	15.4 -15.7	14.4 21.3
79 39.24	Overhead Sprinkler HEAD	5.6 Open	22 0.7	125 0.176	15.4 -15.7	14.4 21.3
62 38.37	Overhead Sprinkler HEAD	5.6 Open	22.4 1.2	125 0.18	16.1 -15.3	14.4 21.3
71 38.37	Overhead Sprinkler HEAD	5.6 Open	22.4 1.2	125 0.18	16.1 -15.3	14.4 21.3
53 38.37	Overhead Sprinkler HEAD	5.6 Open	22.5 1.2	125 0.18	16.1 -15.3	14.4 21.3
80 38.37	Overhead Sprinkler HEAD	5.6 Open	22.5 1.2	125 0.18	16.1 -15.3	14.4 21.3
63 37.51	Overhead Sprinkler HEAD	5.6 Open	23.1 1.9	125 0.185	17 -15	14.4 21.3
72 37.51	Overhead Sprinkler HEAD	5.6 Open	23.1 1.9	125 0.185	17 -15	14.4 21.3
54 37.51	Overhead Sprinkler HEAD	5.6 Open	23.1 1.9	125 0.185	17.1 -15	14.4 21.3
81 37.51	Overhead Sprinkler HEAD	5.6 Open	23.1 1.9	125 0.185	17.1 -15	14.4 21.3
64 36.64	Overhead Sprinkler HEAD	5.6 Open	24 2.7	125 0.192	18.3 -14.6	14.4 21.3
73 36.64	Overhead Sprinkler HEAD	5.6 Open	24 2.7	125 0.192	18.3 -14.6	14.4 21.3
55 36.64	Overhead Sprinkler HEAD	5.6 Open	24 2.7	125 0.192	18.4 -14.6	14.4 21.3
82 36.64	Overhead Sprinkler HEAD	5.6 Open	24 2.7	125 0.192	18.4 -14.6	14.4 21.3
65 35.78	Overhead Sprinkler HEAD	5.6 Open	25.1 3.8	125 0.2	20 -14.2	14.4 21.3

### Node Data

Node# Elev	Type Hgroup	K-Fact. Open/Closed	Discharge Overdischarge	Coverage Density	Tot. Pres. Elev. Pres.	Req. Pres. Req. Discharge
ft		gpm/psi <sup>1/2</sup>	gpm gpm	ft <sup>2</sup> gpm/ft <sup>2</sup>	psi psi	psi gpm
74 35.78	Overhead Sprinkler HEAD	5.6 Open	25.1 3.8	125 0.201	20 -14.2	14.4 21.3
56 35.78	Overhead Sprinkler HEAD	5.6 Open	25.1 3.8	125 0.201	20.1 -14.2	14.4 21.3
83 35.78	Overhead Sprinkler HEAD	5.6 Open	25.1 3.8	125 0.201	20.1 -14.2	14.4 21.3
86 38.37	Overhead Sprinkler HEAD	5.6 Open	25.9 4.6	125 0.207	21.3 -15.3	14.4 21.3
87 37.51	Overhead Sprinkler HEAD	5.6 Open	26.1 4.9	125 0.209	21.8 -15	14.4 21.3
66 34.91	Overhead Sprinkler HEAD	5.6 Open	26.4 5.1	125 0.211	22.2 -13.8	14.4 21.3
75 34.91	Overhead Sprinkler HEAD	5.6 Open	26.4 5.1	125 0.211	22.2 -13.8	14.4 21.3
57 34.91	Overhead Sprinkler HEAD	5.6 Open	26.4 5.2	125 0.211	22.2 -13.8	14.4 21.3
84 34.91	Overhead Sprinkler HEAD	5.6 Open	26.4 5.2	125 0.211	22.3 -13.8	14.4 21.3
58 34.5	Overhead Sprinkler HEAD	5.6 Open	26.4 5.2	125 0.212	22.3 -13.6	14.4 21.3
85 34.5	Overhead Sprinkler HEAD	5.6 Open	26.5 5.2	125 0.212	22.3 -13.6	14.4 21.3
88 36.64	Overhead Sprinkler HEAD	5.6 Open	26.5 5.2	125 0.212	22.4 -14.6	14.4 21.3
67 34.03	Overhead Sprinkler HEAD	5.6 Open	27.2 5.1	130 0.21	23.7 -13.4	15.6 22.1
76 34.03	Overhead Sprinkler HEAD	5.6 Open	27.2 5.1	130 0.21	23.7 -13.4	15.6 22.1
89 35.78	Overhead Sprinkler HEAD	5.6 Open	27 5.7	125 0.216	23.2 -14.2	14.4 21.3
91 34.5	Overhead Sprinkler HEAD	5.6 Open	27.4 5.3	130 0.211	23.9 -13.6	15.6 22.1
90 34.91	Overhead Sprinkler HEAD	5.6 Open	27.7 6.4	125 0.222	24.4 -13.8	14.4 21.3
328-I 1.5	Node NODE				-10.1 0.6	
329-O 1.5	Node NODE				-10.1 0.6	
329-I 1.5	Node NODE				-10 0.6	
335-O 3	Node NODE				-7.1 0	
331 -4	Node NODE				-6.5 3	
332 -4	Node NODE				-5.8 3	
333 -4	Node NODE				-5 3	
335-I 3	Node NODE				-2 0	

**Node Data**

Node# Elev	Type Hgroup	K-Fact. Open/Closed	Discharge Overdischarge	Coverage Density	Tot. Pres. Elev. Pres.	Req. Pres. Req. Discharge
ft		gpm/psi <sup>1/2</sup>	gpm gpm	ft <sup>2</sup> gpm/ft <sup>2</sup>	psi psi	psi gpm
W1 3	Supply SUPPLY		-1011.2		-0.3 0	
337 -4	Node NODE				2.3 3	
338-O -4	Node NODE				2.5 3	
338-I -4	Node NODE				2.5 3	
072 34.82	Node NODE				22.5 -13.8	
055 34.82	Node NODE				22.5 -13.8	
090 34.82	Node NODE				22.5 -13.8	
046 34.82	Node NODE				22.5 -13.8	
091 34.03	Node NODE				23.7 -13.4	
045 34.03	Node NODE				23.7 -13.4	
874 34.82	Node NODE				24.6 -13.8	
002 34.03	Node NODE				25.4 -13.4	
029 28	Node NODE				30.4 -10.8	
028 28	Node NODE				30.4 -10.8	
030 28	Node NODE				30.4 -10.8	
037 28	Node NODE				30.4 -10.8	
009 28	Node NODE				30.5 -10.8	
032 28	Node NODE				30.5 -10.8	
031 28	Node NODE				31.2 -10.8	
016 28	Node NODE				31.4 -10.8	
305-O 6.42	Node NODE				42.6 -1.5	
305-I 4.91	Node NODE				44.9 -0.8	
306-O 4.51	Node NODE				45.1 -0.7	
306-I 4.02	Node NODE				45.7 -0.4	
320-O 1.99	Node NODE				47.1 0.4	

**Node Data**

Node# Elev	Type Hgroup	K-Fact. Open/Closed	Discharge Overdischarge	Coverage Density	Tot. Pres. Elev. Pres.	Req. Pres. Req. Discharge
ft		gpm/psi <sup>1/2</sup>	gpm gpm	ft <sup>2</sup> gpm/ft <sup>2</sup>	psi psi	psi gpm
320-I 0.82	Node NODE				48.1 0.9	
309 0	Node NODE				48.5 1.3	
311 -4	Node NODE				50.4 3	
319 3	Node NODE				50.9 0	
316 -4	Node NODE				53.2 3	
326-O 1.5	Node NODE				54 0.6	
326-I 1.5	Node NODE				54.4 0.6	
327-O 1.5	Node NODE				54.4 0.6	
327-I 1.5	Node NODE				55.4 0.6	
328-O 1.5	Node NODE				55.4 0.6	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 1**

59	40.97	5.6	21.3	2		10.04	120	14.4	
60	40.1	5.6	21.3	2.157		0	0.0043	0.4	
						10.04		0.0	
60	40.1	5.6	21.6	2		10.04	120	14.8	
61	39.24	5.6	42.8	2.157		0	0.0159	0.4	
						10.04		0.2	
61	39.24	5.6	21.9	2		10.04	120	15.4	
62	38.37	5.6	64.7	2.157		0	0.0341	0.4	
						10.04		0.3	
62	38.37	5.6	22.4	2		10.04	120	16.1	
63	37.51	5.6	87.2	2.157		0	0.0592	0.4	
						10.04		0.6	
63	37.51	5.6	23.1	2		10.04	120	17	
64	36.64	5.6	110.3	2.157		0	0.0915	0.4	
						10.04		0.9	
64	36.64	5.6	24	2		10.04	120	18.3	
65	35.78	5.6	134.3	2.157		0	0.1318	0.4	
						10.04		1.3	
65	35.78	5.6	25.1	2		10.04	120	20	
66	34.91	5.6	159.4	2.157		0	0.1809	0.4	
						10.04		1.8	
66	34.91	5.6	26.4	2		1	120	22.2	
072	34.82		185.7	2.157		0	0.2403	0.0	
						1		0.2	
072	34.82		0	2.5		9.2	120	22.5	
67	34.03	5.6	185.7	2.635		0	0.0906	0.3	
						9.2		0.8	
67	34.03	5.6	27.2	2.5	1x(us.Tee-Br)=16.47	10.77	120	23.7	
029	28		213	2.635	1x(us.90)=8.24	24.71	0.1168	2.6	
						35.49		4.1	
029	28		-97.7	8		12.5	120	30.4	
030	28		115.3	8.329		0	0.0001	0	
						12.5		0	
030	28		213	8		12.5	120	30.4	
037	28		328.3	8.329		0	0.001	0	
						12.5		0.0	
037	28		212.4	8		12.5	120	30.4	
009	28		540.7	8.329		0	0.0024	0	
						12.5		0.0	
009	28		160.5	8	1x(us.90)=20.98	210.01	120	30.5	
016	28		701.2	8.329		20.98	0.0039	0	
						230.99		0.9	
016	28		310	8	1x(us.90)=20.98	226.94	120	31.4	
305-O	6.42		1011.2	8.329		20.98	0.0077	9.4	
						247.92		1.9	
305-O	6.42		0	6		1.51		42.6	DV-5deluge
305-I	4.91		1011.2	0		0	1.0837	0.7	***
						1.51		1.6	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 1**

305-I 306-O	4.91 4.51		0 1011.2	6 6.357		0.39 0 0.39	120 0.0287	44.9 0.2 0.0	
306-O 306-I	4.51 4.02		0 1011.2	6 0		0.49 0 0.49	0.8162	45.1 0.2 0.4	BFV-N ***
306-I 320-O	4.02 1.99		0 1011.2	8 8.329	1x(us.Tee-Br)=40.8 1x(us.90)=20.98	4.53 61.78 66.31	120 0.0077	45.7 0.9 0.5	
320-O 320-I	1.99 0.82		0 1011.2	8 0		1.17 0 1.17	0.4335	47.1 0.5 0.5	Check 590 ***
320-I 309	0.82 0		0 1011.2	8 8.329		0.82 0 0.82	120 0.0077	48.1 0.4 0	
309 311	0 -4		0 1011.2	8 7.68	1x(us.90)=21.34	7 21.34 28.34	150 0.0076	48.5 1.7 0.2	
311 316	-4 -4		0 1011.2	10 9.42	5x(us.90)=116.04	869.74 116.04 985.78	150 0.0028	50.4 0 2.8	
316 319	-4 3		0 1011.2	8 8.329	1x(us.Tee-Br)=40.8 2x(us.90)=41.96	12.72 82.76 95.48	120 0.0077	53.2 -3 0.7	
319 326-O	3 1.5		0 1011.2	6 6.357	1x(us.Tee-Br)=37.72 2x(us.90)=35.21	12.54 72.93 85.46	120 0.0287	50.9 0.6 2.5	
326-O 326-I	1.5 1.5		0 1011.2	6 0		0.49 0 0.49	0.8162	54 0 0.4	BFV-N ***
326-I 327-O	1.5 1.5		0 1011.2	6 6.357		0.55 0 0.55	120 0.0287	54.4 0 0.0	
327-O 327-I	1.5 1.5		0 1011.2	6 0		0.96 0 0.96	1.0347	54.4 0 1	CV-1F Check ***
327-I 328-O	1.5 1.5		0 1011.2	6 6.357		1.28 0 1.28	120 0.0287	55.4 0 0.0	
328-O 328-I	1.5 1.5		0 1011.2	6 0		1.5 0 1.5	43.6784	55.4 0 -65.5	FIRE PUMP ***
328-I 329-O	1.5 1.5		0 1011.2	6 6.357		0.13 0 0.13	120 0.0287	-10.1 0 0	
329-O 329-I	1.5 1.5		0 1011.2	6 0		0.88 0 0.88	0.0388	-10.1 0 0.0	Gate A2360 ***

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 1**

329-I 331	1.5 -4		0 1011.2	6 6.357	2x(us.90)=35.21	6.71 35.21 41.92	120 0.0287	-10 2.4 1.2	
331 332	-4 -4		0 1011.2	6 6.27	1x(us.90)=21.89	7.18 21.89 29.08	140 0.0231	-6.5 0 0.7	
332 333	-4 -4		0 1011.2	6 5.86	1x(us.90)=17.88	10.22 17.88 28.1	150 0.0282	-5.8 0 0.8	
333 335-O	-4 3		0 1011.2	6 6.065	1x(us.90)=14	11.85 14 25.85	120 0.0361	-5 -3 0.9	
335-O 335-I	3 3		0 1011.2	6 0		0.5 0 0.5	10.1262	-7.1 0 5.1	WILKINS 350 DCDA ***
335-I 337	3 -4		0 1011.2	6 6.065	2x(us.90)=28	7.65 28 35.65	120 0.0361	-2 3 1.3	
337 338-O	-4 -4		0 1011.2	10 9.42		69.36 0 69.36	150 0.0028	2.3 0 0.2	
338-O 338-I	-4 -4		0 1011.2	10 0		1.08 0 1.08	0.0041	2.5 0 0	Gate A2360 ***
338-I W1	-4 3		0 1011.2	10 9.42	1x(us.Tee-Br)=52.74 1x(us.90)=23.21	8.96 75.95 84.91	150 0.0028	2.5 -3 0.2	
<b>W1</b>								<b>-0.3</b>	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 2**

68	40.97	5.6	21.3	2		10.04	120	14.4	
69	40.1	5.6	21.3	2.157		0	0.0043	0.4	
						10.04		0.0	
69	40.1	5.6	21.6	2		10.04	120	14.8	
70	39.24	5.6	42.8	2.157		0	0.0159	0.4	
						10.04		0.2	
70	39.24	5.6	21.9	2		10.04	120	15.4	
71	38.37	5.6	64.8	2.157		0	0.0341	0.4	
						10.04		0.3	
71	38.37	5.6	22.4	2		10.04	120	16.1	
72	37.51	5.6	87.2	2.157		0	0.0592	0.4	
						10.04		0.6	
72	37.51	5.6	23.1	2		10.04	120	17	
73	36.64	5.6	110.3	2.157		0	0.0915	0.4	
						10.04		0.9	
73	36.64	5.6	24	2		10.04	120	18.3	
74	35.78	5.6	134.3	2.157		0	0.1318	0.4	
						10.04		1.3	
74	35.78	5.6	25.1	2		10.04	120	20	
75	34.91	5.6	159.4	2.157		0	0.1809	0.4	
						10.04		1.8	
75	34.91	5.6	26.4	2		1	120	22.2	
055	34.82		185.8	2.157		0	0.2403	0.0	
						1		0.2	
055	34.82		0	2.5		9.2	120	22.5	
76	34.03	5.6	185.8	2.635		0	0.0907	0.3	
						9.2		0.8	
76	34.03	5.6	27.2	2.5	1x(us.Tee-Br)=16.47	10.77	120	23.7	
030	28		213	2.635	1x(us.90)=8.24	24.71	0.1168	2.6	
						35.49		4.1	
<b>030</b>								<b>30.4</b>	

**PIPE INFORMATION**

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 3**

50	40.97	5.6	21.3	2		10.04	120	14.4	
51	40.1	5.6	21.3	2.157		0	0.0043	0.4	
						10.04		0.0	
51	40.1	5.6	21.6	2		10.04	120	14.8	
52	39.24	5.6	42.8	2.157		0	0.0159	0.4	
						10.04		0.2	
52	39.24	5.6	22	2		10.04	120	15.4	
53	38.37	5.6	64.8	2.157		0	0.0342	0.4	
						10.04		0.3	
53	38.37	5.6	22.5	2		10.04	120	16.1	
54	37.51	5.6	87.3	2.157		0	0.0593	0.4	
						10.04		0.6	
54	37.51	5.6	23.1	2		10.04	120	17.1	
55	36.64	5.6	110.4	2.157		0	0.0916	0.4	
						10.04		0.9	
55	36.64	5.6	24	2		10.04	120	18.4	
56	35.78	5.6	134.4	2.157		0	0.1319	0.4	
						10.04		1.3	
56	35.78	5.6	25.1	2		10.04	120	20.1	
57	34.91	5.6	159.4	2.157		0	0.1811	0.4	
						10.04		1.8	
57	34.91	5.6	26.4	2		1	120	22.2	
090	34.82		185.9	2.157		0	0.2405	0.0	
						1		0.2	
090	34.82		0	2.5		9.2	120	22.5	
091	34.03		185.9	2.635		0	0.0907	0.3	
						9.2		0.8	
091	34.03		26.4	2.5	1x(us.Tee-Br)=16.47	10.77	120	23.7	
028	28		212.3	2.635	1x(us.90)=8.24	24.71	0.1161	2.6	
						35.49		4.1	
028	28		97.7	8	1x(us.Tee-Br)=40.8	60.68	120	30.4	
032	28		310	8.329		40.8	0.0009	0	
						101.47		0.1	
032	28		0	6	1x(us.Tee-Br)=37.72	180.77	120	30.5	
031	28		310	6.357		37.72	0.0032	0	
						218.49		0.7	
031	28		0	8	1x(us.Tee-Br)=40.8	139.92	120	31.2	
016	28		310	8.329		40.8	0.0009	0	
						180.71		0.2	
<b>016</b>									<b>31.4</b>

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 4**

77	40.97	5.6	21.3	2		10.04	120	14.4	
78	40.1	5.6	21.3	2.157		0	0.0043	0.4	
						10.04		0.0	
78	40.1	5.6	21.6	2		10.04	120	14.8	
79	39.24	5.6	42.8	2.157		0	0.0159	0.4	
						10.04		0.2	
79	39.24	5.6	22	2		10.04	120	15.4	
80	38.37	5.6	64.8	2.157		0	0.0342	0.4	
						10.04		0.3	
80	38.37	5.6	22.5	2		10.04	120	16.1	
81	37.51	5.6	87.3	2.157		0	0.0593	0.4	
						10.04		0.6	
81	37.51	5.6	23.1	2		10.04	120	17.1	
82	36.64	5.6	110.4	2.157		0	0.0917	0.4	
						10.04		0.9	
82	36.64	5.6	24	2		10.04	120	18.4	
83	35.78	5.6	134.4	2.157		0	0.132	0.4	
						10.04		1.3	
83	35.78	5.6	25.1	2		10.04	120	20.1	
84	34.91	5.6	159.5	2.157		0	0.1812	0.4	
						10.04		1.8	
84	34.91	5.6	26.4	2		1	120	22.3	
046	34.82		185.9	2.157		0	0.2406	0.0	
						1		0.2	
046	34.82		0	2.5		9.2	120	22.5	
045	34.03		185.9	2.635		0	0.0908	0.3	
						9.2		0.8	
045	34.03		26.5	2.5	1x(us.Tee-Br)=16.47	10.77	120	23.7	
037	28		212.4	2.635	1x(us.90)=8.24	24.71	0.1162	2.6	
						35.49		4.1	
<b>037</b>								<b>30.4</b>	

### PIPE INFORMATION

Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

**Path No: 5**

86	38.37	5.6	25.9	2		10.04	120	21.3	
87	37.51	5.6	25.9	2.157		0	0.0062	0.4	
						10.04		0.1	
87	37.51	5.6	26.1	2		10.04	120	21.8	
88	36.64	5.6	52	2.157		0	0.0227	0.4	
						10.04		0.2	
88	36.64	5.6	26.5	2		10.04	120	22.4	
89	35.78	5.6	78.5	2.157		0	0.0487	0.4	
						10.04		0.5	
89	35.78	5.6	27	2		10.04	120	23.2	
90	34.91	5.6	105.5	2.157		0	0.0842	0.4	
						10.04		0.8	
90	34.91	5.6	27.7	2		1	120	24.4	
874	34.82		133.1	2.157		0	0.1297	0.0	
						1		0.1	
874	34.82		0	2.5		9.2	120	24.6	
002	34.03		133.1	2.635		0	0.0489	0.3	
						9.2		0.5	
002	34.03		27.4	2.5	1x(us.Tee-Br)=16.47	10.77	120	25.4	
009	28		160.5	2.635	1x(us.90)=8.24	24.71	0.0692	2.6	
						35.49		2.5	
<b>009</b>								<b>30.5</b>	

**Path No: 6**

58	34.5	5.6	26.4	1	1x(us.Tee-Br)=5	0.47	120	22.3	
091	34.03		26.4	1.049		5	0.2176	0.2	
						5.47		1.2	
<b>091</b>								<b>23.7</b>	

**Path No: 7**

85	34.5	5.6	26.5	1	1x(us.Tee-Br)=5	0.47	120	22.3	
045	34.03		26.5	1.049		5	0.2177	0.2	
						5.47		1.2	
<b>045</b>								<b>23.7</b>	

**Path No: 8**

91	34.5	5.6	27.4	1	1x(us.Tee-Br)=5	0.47	120	23.9	
002	34.03		27.4	1.049		5	0.2323	0.2	
						5.47		1.3	
<b>002</b>								<b>25.4</b>	

**Path No: 9**

029	28		0	8		12.5	120	30.4	
028	28		97.7	8.329		0	0.0001	0	
						12.5		0	
<b>028</b>								<b>30.4</b>	

### PIPE INFORMATION

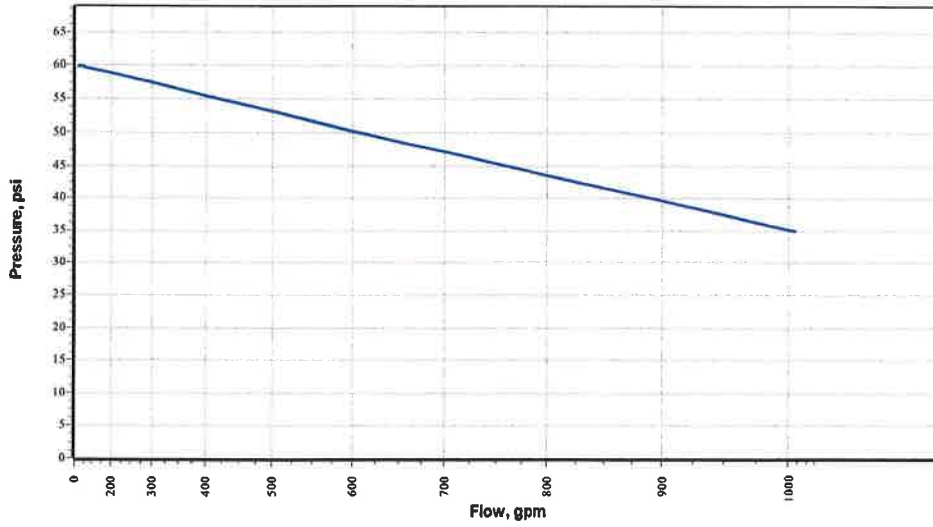
Node 1 Node 2	Elev 1 Elev 2	K-Factor 1 K-Factor 2	Flow added (q) Total flow (Q)	Nominal ID Actual ID	Fittings quantity x (name) = length	L F T	C Factor Pf per ft	total (Pt) elev (Pe) frict (Pf)	NOTES
	(ft)	(gpm/psi <sup>1/2</sup> )	(gpm)	(in)	(ft)	(ft)	(psi)	(psi)	

\* Pressures are balanced to a high degree of accuracy. Values may vary by 0.1 psi due to display rounding.

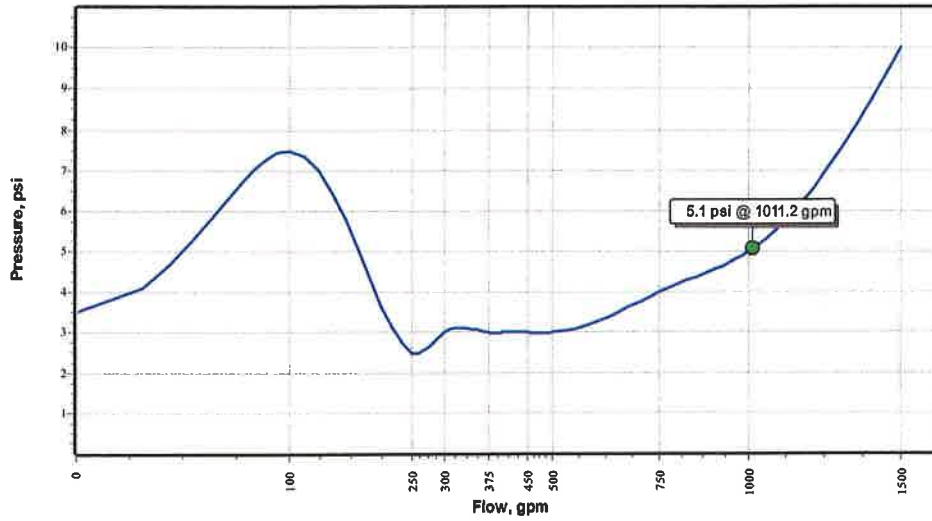
\* Maximum Velocity of 16.32 ft/s occurs in the following pipe(s): (046-84)

\*\*\* Device pressure loss (gain in the case of pumps) is calculated from the device's curve. If the device curve is printed with this report, it will appear below. The length of the device as shown in the table above comes from the CAD drawing. The friction loss per unit of length is calculated based upon the length and the curve-based loss/gain value. Internal ID and C Factor values are irrelevant as the device is not represented as an addition to any pipe, but is an individual item whose loss/gain is based solely on the curve data.

**Pressure vs. Flow Function**  
Design Area: 2; Supply Ref.: W1; Supply Name:W1

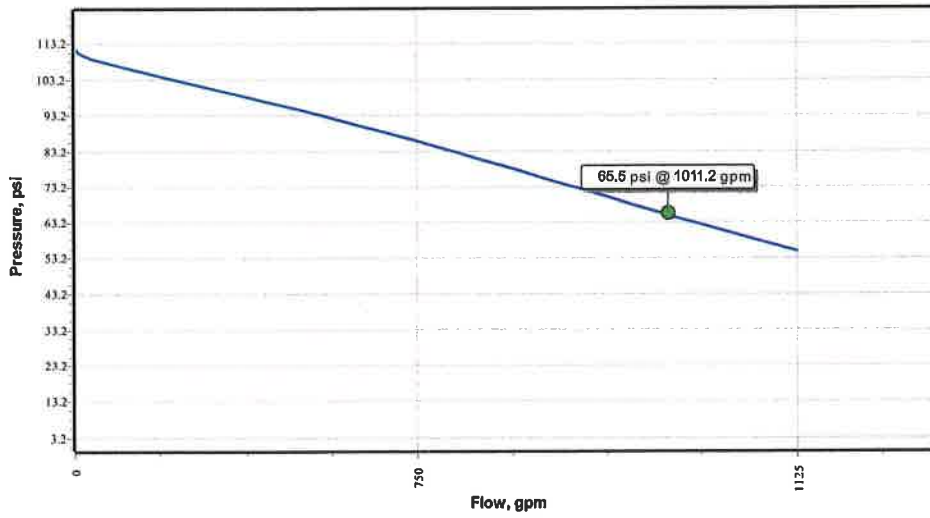


**Pressure Loss Function**  
Design Area: 2; BFP Ref.: 1109 (WILKINS 350 DCDA, Size = 6); Inlet Node: 335-I; Outlet Node: 335-O



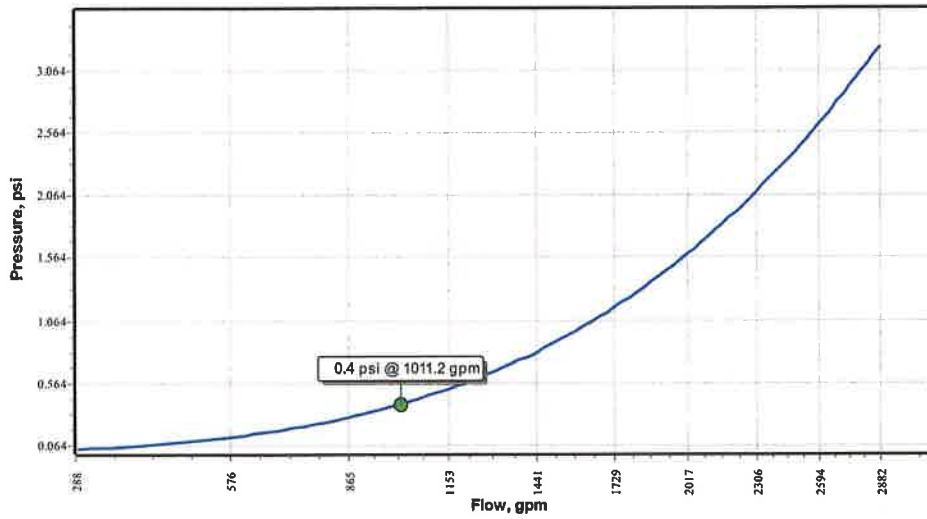
**Pressure Boost Function**

Design Area: 2; Pump Ref.: 1106 (FIRE PUMP, Size = 6); Inlet Node: 328-I; Outlet Node: 328-O

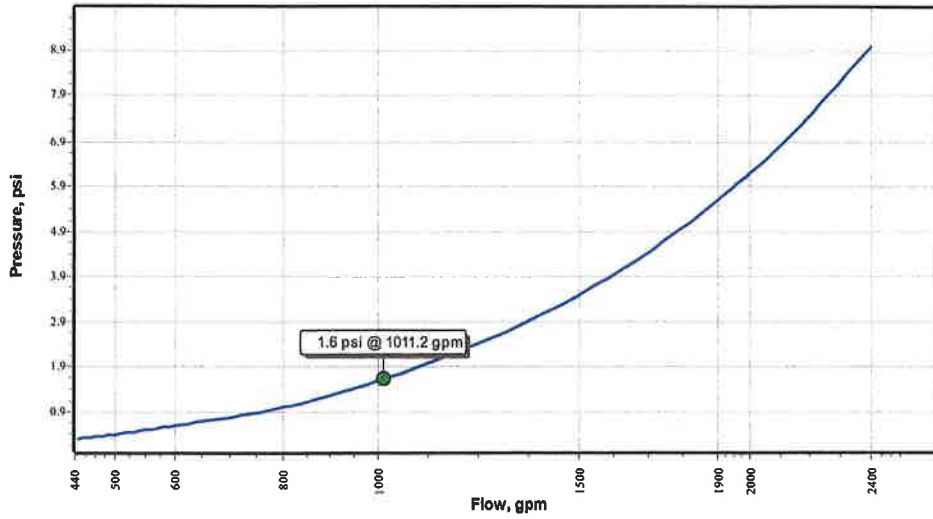


**Pressure Loss Function**

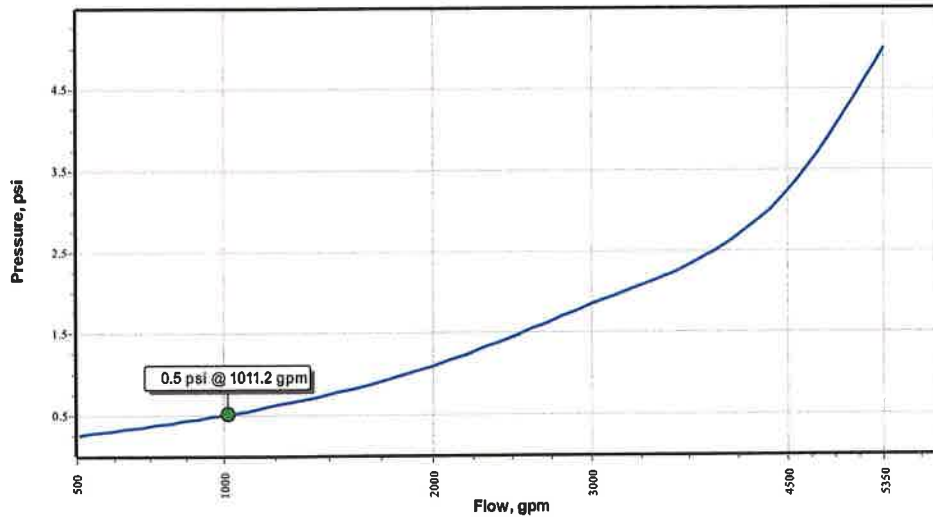
Design Area: 2; Valve Ref.: 1102 (BFV-N, Size = 6); Inlet Node: 306-I; Outlet Node: 306-O



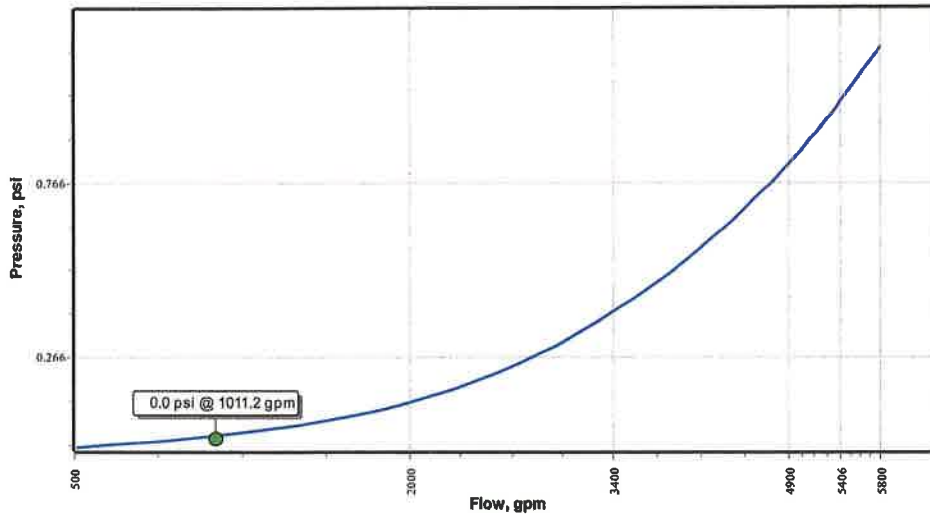
Pressure Loss Function  
Design Area: 2; Valve Ref.: 1103 (DV-5deluge, Size = 6); Inlet Node: 305-I; Outlet Node: 305-O



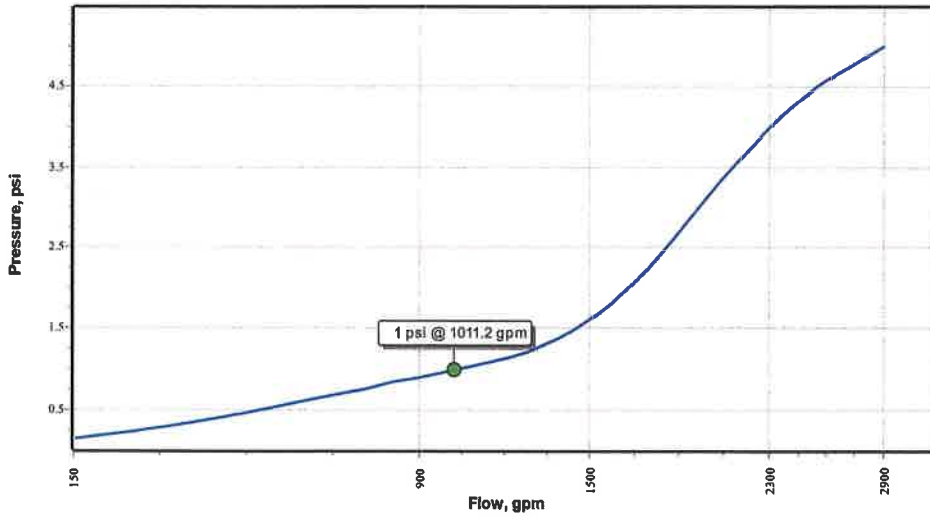
Pressure Loss Function  
Design Area: 2; Valve Ref.: 1104 (Check 590, Size = 8); Inlet Node: 320-I; Outlet Node: 320-O



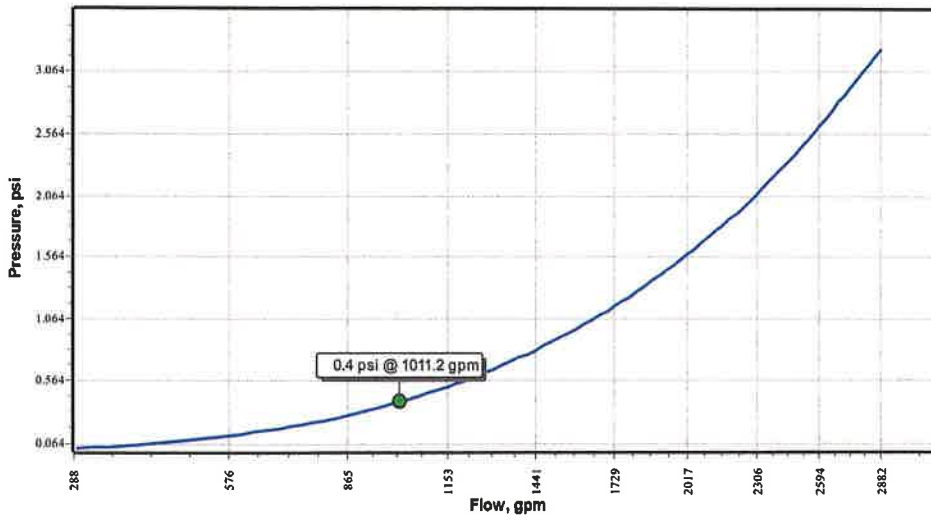
**Pressure Loss Function**  
Design Area: 2; Valve Ref.: 1106 (Gate A2360, Size = 6); Inlet Node: 329-I; Outlet Node: 329-O



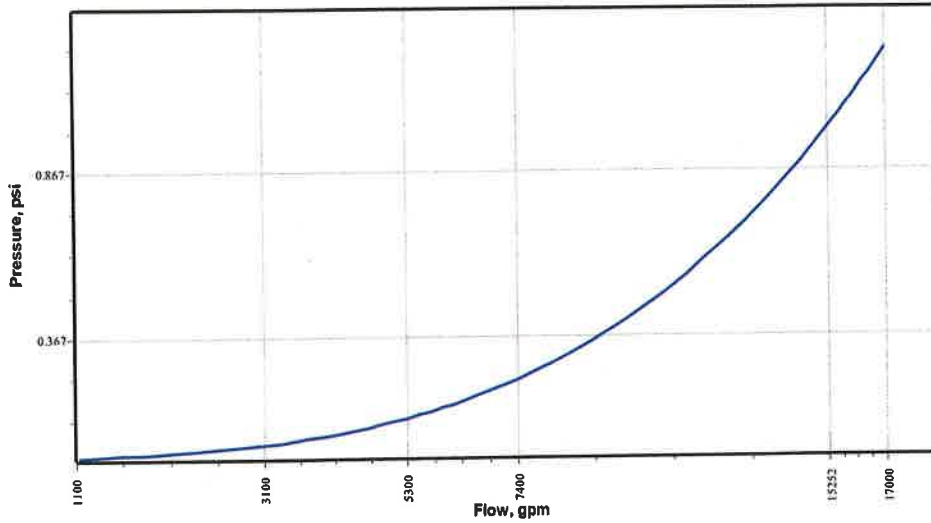
**Pressure Loss Function**  
Design Area: 2; Valve Ref.: 1107 (CV-1F Check, Size = 6); Inlet Node: 327-I; Outlet Node: 327-O



**Pressure Loss Function**  
Design Area: 2; Valve Ref.: 1108 (BFV-N, Size = 6); Inlet Node: 326-I; Outlet Node: 326-O



**Pressure Loss Function**  
Design Area: 2; Valve Ref.: 1110 (Gate A2360, Size = 10); Inlet Node: 338-I; Outlet Node: 338-O



T. JAY SEALE, III  
KENNETH L. ROSS  
STEVEN L. MCKNEELY<sup>1,3</sup>  
LESLI S. BOLNER  
NICOLE ROBERTS DILLON<sup>2</sup>  
REBECCA A. GILSON  
VICTORIA T. HEYER  
JUSTIN P. LAFLEUR  
DAVI CLEMENT WEBER  
KRISTEN STANLEY-WALLACE<sup>6</sup>  
LUCAS M. BERNARD  
GLEN R. GALBRAITH<sup>4</sup>  
RON S. MACALUSO<sup>4,5</sup>



P.O. BOX 699  
HAMMOND, LA 70404  
200 NORTH CATE STREET  
HAMMOND, LA 70401  
T: (985) 542.8500  
F: (985) 542.4111

Board Certified Estate Planning  
and Administration Specialist<sup>1\*</sup>  
Board Certified Family Law Specialist<sup>2\*</sup>  
By the Louisiana Board  
of Legal Specialization\*  
LL.M. (in Taxation)<sup>3</sup>  
of Counsel<sup>4</sup>  
of Ron S. Macaluso, Law Firm, LLC<sup>5</sup>  
St. Tammany Lead Counsel<sup>6</sup>

December 10, 2025

Tony Michelli, Airport Director  
Via Hand Delivery

Re: Request for Inclusion of Agenda Items

Dear Director Michelli:

On behalf of the Sky-X entities please place the following items on the Agenda for the December 11<sup>th</sup> meeting:

1. Request by Sky-X West, L.L.C. to lease a parcel adjacent to and South of the parcel it leased from the City of Hammond by lease recorded in the Conveyance Index of the Clerk of Court for Tangipahoa Parish and identified as Book 1709 Page 208. The requested parcel measures 205' by 275', more or less (subject to survey) and has a common boundary with the current Sky-X West, L.L.C. site.
2. Request by Sky-X Aircraft Services, L.L.C. to lease a space for parking shown as "Master Parking Plan for FBO/Hangar" which will be illustrated on a 24x36" Concept Layout to be provided to the Board at the meeting.
3. Request by Sky-X Holdings, L.L.C. and Sky-X West, L.L.C. for approval to bore beneath Taxiway Charley for the purpose of running utilities. The boring will be conducted by a licensed contractor with plans and specifications to be submitted to the City Building Official for technical review and approval. (Pre-approved by State Fire Marshall)
4. Request by Sky-X Holdings, L.L.C. to lease a 5000 s.f. parcel shown on a drawing submitted to you as Director before the November 2025 meeting and shown as "Area of Interest 3" The original request sought to lease 10686 sf . This request is limited to the East 5000 sf of that parcel.

Cordially,

T. Jay Seale

**Board Presentation:**

**Members of the Airport Board:**

**Item 1:** Lease of airport property for construction of a new hangar adjacent to the Sky X West hangars on the west side of Taxiway Charlie.

Sky-X proposes to lease this site and to build a 30,000 sf hangar similar or identical to the 2 hangars under construction now (and to the 1 hangar that has been completed adjacent to the FBO on the East side of the airport).

Permit me to provide you with some research on what your duty as a board is in these circumstances. I will pass out a document titled Airport Tenant Fairness & Compliance-A One Page Reference Guide. It is part of a Checklist with Authorities for Municipal Airport Boards you can find on line.

With respect, you should be aware that you are not entitled to “hold” a site for a party seeking to lease property. Once you have given approval to a party for a lease, as you have done in this case to Top Gun, Top Gun has a duty to finalize and sign the lease in a reasonable time. You do not have the authority to “park” a parcel for a prospective tenant month after month after month. That is especially true when another party is seeking to lease that site today.

If you follow the thread in this Guide I’ve passed out, you will see that you would be in flagrant violation of FAA standards if you denied Sky-X’s request and continued to hold the site for Top Gun.

I have a draft lease for the site in question that is identical to the lease you have approved for Sky-X West except for the legal description which describes the south-most parcel along Taxiway Charlie that has been laid out for the Board by engineers. When the lease is signed, the tenant will pre-pay the lease for 2 years.

The Sky-X companies have invested almost \$11 million in improvements on this airport since you granted them the first lease. A 10,000 FBO will be opened in about 45 days that will eclipse any other FBO facility in Louisiana and will rival the FBOs at major airports put in by national companies like Signature aviation.

**Item 2:** Sky-X is seeking to lease the site shown on the drawing I'm circulating. It is for parking. The company is expanding its employment base and currently has about 14 full time employees. That number will increase significantly when the FBO opens and will then include passengers who are leaving their cars at the airport while travel. The parking lot will be asphalted and fenced.

**Item 3:** Request for approval to bore beneath Taxiway Charlie to run utilities to Sky-X hangars on the West side. The utilities will include a 10" water line and electrical power distribution as well as fiber optic cabling for computer and video linkage. Attached is a layout and a single copy of the engineering specification package. The project will need approval by the City Building Official but this Board needs to approve the boring beneath the taxiway.

**Item 4:** Last month this Board approved a request by Top Gun to lease a 5000 parcel along \_\_\_\_\_ and adjacent to its newest hangar. To my knowledge Top Gun has not submitted a lease for that site, either. Now Sky-X Holdings is seeking to lease it. I have a drawing illustrating where the parcel is. Sky-X needs it for parking. It will be paved.



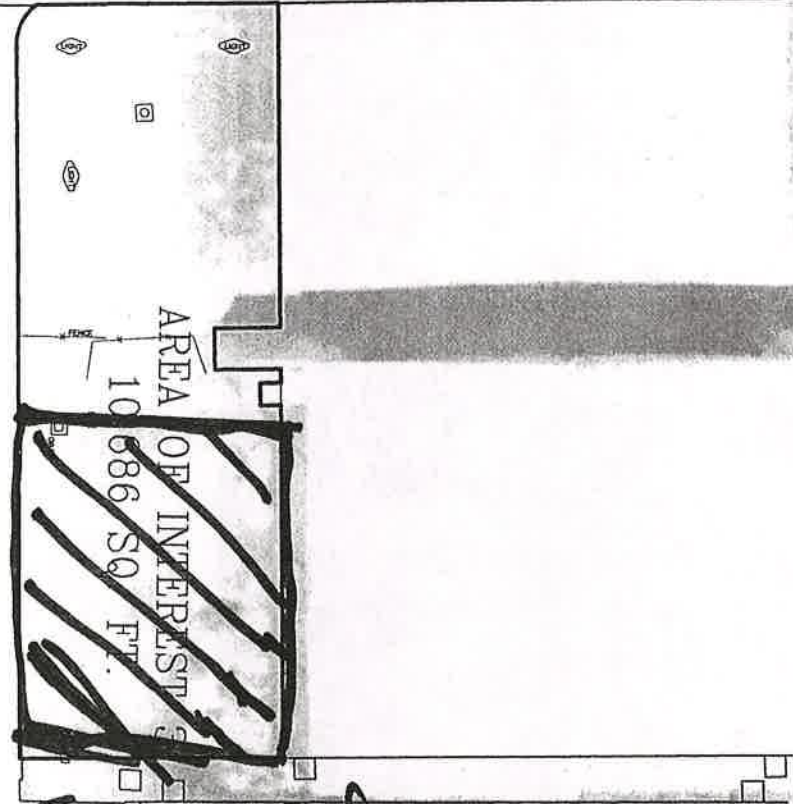


Fig. 0009

1 UNITED STATES OF AMERICA

2 STATE OF LOUISIANA

3 PARISH OF TANGIPAHOA

4 LEASE

5 HAMMOND NORTSHORE REGIONAL AIRPORT

6 HAMMOND, LOUISIANA

7 This agreement is effective as of the \_\_\_\_\_ day of \_\_\_\_\_, 2025.

8 BY AND BETWEEN

9 THE CITY OF HAMMOND, represented herein by its duly authorized authority,  
10 hereinafter called "LESSOR"; and SkyX West, LLC, a Louisiana limited liability company,  
11 represented by its duly authorized member Jay Scariano, hereinafter called "TENANT".

12 WITNESSETH:

13 WHEREAS, the Lessor now owns and operates a public airport designated as the  
14 HAMMOND NORTSHORE REGIONAL AIRPORT, located in Tangipahoa Parish,  
15 Louisiana, hereinafter referred to as Airport.

16 WHEREAS, Tenant proposes to Lease from Lessor the land and any improvements  
17 thereon described in Article I of this Lease (the "Demised Premises"), and to avail itself of  
18 certain privileges, rights and uses pertaining thereto, subject to certain provisions of  
19 Louisiana law and other applicable law (all collectively referred to herein as "Applicable law")  
20 and pursuant to the terms of this Agreement, and,

21 WHEREAS, Tenant, has also agreed to properly keep, maintain and improve the  
22 Demised Premises in accordance with Minimum Standards and Requirements for the  
23 Conduct of Commercial Aeronautical Services and Activities established and adopted by  
24 Lessor, and also known as the Hammond Northshore Regional Airport Operations Manual,  
25 and as it may be modified from time to time (hereinafter collectively referred to as the  
26 "Standards"), made a part hereof by reference to the same extent as if herein copied in its  
27 entirety;

28 NOW, THEREFORE, for and in consideration of premises, agreements and  
29 covenants hereinafter set forth, the parties hereto agree as follows:

30 ARTICLE I

31 PREMISES AND PRIVILEGES

32 Lessor, for and in consideration of the terms, conditions and covenants of this Lease  
33 to be performed by Tenant, all of which Tenant accepts, hereby Leases to Tenant and Tenant

34 hereby hires and takes from Lessor the Demised Premises, together with improvements  
35 thereon, rights of ingress and egress to the Demised Premises from public roads through  
36 locations provided by Lessor, and certain attendant privileges, uses and rights, as hereinafter  
37 specifically set out.

38 **A. DESCRIPTION OF DEMISED PREMISES:**

39 A certain parcel of ground situated in Section 21, Township 6 South, Range 8 East,  
40 Greensburg Land District, City of Hammond, Tangipahoa Parish, Louisiana, as shown on  
41 the survey of Randall W. Brown & Associates, Inc. dated July 14, 2025 and being more fully  
42 described as follows:

43  
44 PROPOSED HANGAR (SOUTH)

45  
46 ALL THAT CERTAIN PARCEL OF GROUND, KNOWN AS PROPOSED HANGAR  
47 (SOUTH), SITUATED IN SECTION 21, TOWNSHIP 6 SOUTH, RANGE 8 EAST,  
48 TANGIPAHOA PARISH, LOUISIANA, AND BEING MORE FULLY DESCRIBED  
49 AS FOLLOWS:

50  
51 COMMENCE FROM THE INTERSECTION OF THE WEST EDGE OF TAXIWAY  
52 CHARLIE AND THE SOUTHEASTERN CORNER OF THE CONCRETE RAMP TO  
53 A PRIVATE HANGAR, HAVING GEODETIC COORDINATES OF LATITUDE  
54 30.5197946 AND LONGITUDE -90.4087736; THENCE GO SOUTH 00 DEGREES 56  
55 MINUTES 00 SECONDS EAST A DISTANCE OF 635.00 FEET TO THE POINT OF  
56 BEGINNING.

57  
58 FROM THE POINT OF BEGINNING, GO SOUTH 00 DEGREES 56 MINUTES 00  
59 SECONDS EAST A DISTANCE OF 205.00 FEET; THENCE GO SOUTH 89  
60 DEGREES 04 MINUTES 00 SECONDS WEST A DISTANCE OF 275.00 FEET;  
61 THENCE GO NORTH 00 DEGREES 56 MINUTES 00 SECONDS WEST A  
62 DISTANCE OF 205.00 FEET; THENCE GO NORTH 89 DEGREES 04 MINUTES 00  
63 SECONDS EAST A DISTANCE OF 275.00 FEET BACK TO THE POINT OF  
64 BEGINNING.

65  
66 SAID PARCEL CONTAINS 1.2942 ACRES (56,374 SQUARE FEET) OF GROUND,  
67 MORE OR LESS.

68  
69 The parties agree that prior to the commencement of construction of any  
70 improvements contemplated in this agreement; the Demised Premises shall be surveyed by  
71 a surveyor acceptable to Lessor and a survey provided to Lessor showing the Demised  
72 Premises together with the location of said improvements on the property.

73 **B. DESCRIPTION OF GENERAL PRIVILEGES, USES AND RIGHTS:**

74 Lessor hereby grants to Tenant the following general privileges, uses and rights, all  
75 of which shall be subject to the terms, conditions, covenants set forth in Applicable Law and  
76 Section I and IV of Appendix 2 of the "Standards".

77 1. The General use of all public airport facilities and improvements which are  
78 now or may hereafter be connected with or appurtenant to said Airport, except as hereinafter  
79 provided, to be used by Tenant and/or its subtenants for aeronautical activities, therein  
80 defined. For the purpose of this Lease, "public airport facilities" shall include all necessary  
81 landing area appurtenances including but not limited to approach areas, runways, taxiways,

82 aprons, aircraft and automobile parking areas, roadways, sidewalks, navigational aids,  
83 lighting facilities, terminal facilities, or other public facilities appurtenant to said Airport.

84 2. The right of ingress to and egress from the Demised Premises over and across  
85 roadways serving the Airport for Tenant, his agents and servants, patrons and invitees,  
86 suppliers of service and furnishers of material. Said right shall be subject to such ordinances,  
87 rules and regulations as now or may hereafter have application at the Airport.

88 **C. DESCRIPTION OF SPECIFIC PRIVILEGES, USES AND RIGHTS FOR**  
89 **COMMERCIAL TENANTS.**

90 In addition to the general privileges, uses and rights herein before described and  
91 without limiting the generality thereof, Lessor hereby grants to Tenant, the right to engage  
92 in any aeronautical activity or support thereof consistent with the Commercial Aeronautical  
93 Activities, as defined in the standards and Lessor's Airport Layout Plan; and the Demised  
94 Premises shall be used by Tenant only for said purposes. The location and type of any fuel  
95 tank larger than fifty-five (55) gallons or permanently installed or attached to the Demised  
96 Premises must be approved by Lessor.

97 **D. CONDITIONS OF GRANTING LEASE.** The granting of this Lease and its  
98 acceptance by Tenant is conditioned upon the following covenants:

99 1. Tenant has satisfactorily completed construction of improvements on the  
100 Demised Premises ("Tenant's Work") described as follows:

101 a. A metal building to be constructed as a hangar containing approximately  
102 30,000 square feet, the exact dimensions of which shall be more fully described in the plans  
103 and specifications submitted by the Tenant and approved by the Lessor.

104 b. Construction of such site improvements as may be required for drainage,  
105 drives, parking, and other access to the Demised Premises.

106 2. That the right to use said public airport facilities in common with others  
107 authorized to do so shall be exercised only subject to and in accordance with the laws of the  
108 United States of America, the Federal Aviation Administration, the State of Louisiana, the  
109 City of Hammond, the Parish of Tangipahoa, and the Louisiana Department of  
110 Transportation and Development; the rules and regulations promulgated by their authority  
111 with reference to aviation and air navigation; and all reasonable and applicable rules and  
112 regulations and ordinances of Lessor now in force or hereafter prescribed or promulgated by  
113 charter authority or by law.



147 others, arising from the condition, upkeep or maintenance of the Demised Premises. Lessor  
148 is hereby expressly relieved of any and all liability for injuries or damages caused by any vice  
149 or defect in the Demised Premises to any occupant or to anyone in or on the Demised Premises  
150 or in or on any adjacent street, sidewalks, curbs, or other walks adjacent to the Demised  
151 Premises, under the provisions of Louisiana Revised Statutes 9:3221, as it might be amended,  
152 and the Tenant expressly assumes all such liability. Tenant further agrees to indemnify and  
153 save the Lessor from any liability whatsoever for any damages or injuries to any person or  
154 persons whomsoever, arising out of the occupancy, use, condition or state of repair of the  
155 Demised Premises, and he expressly assumes all such liabilities as an expressed term of this  
156 lease.

157 4. In the case of Land Leases to Tenant, an important economic consideration to  
158 Lessor in granting this Lease is the expectation of owning Tenant improvements at the  
159 termination of the Lease term. Thus, it is specifically expected and made a duty of the Tenant  
160 to construct, or cause to be constructed improvements in a timely manner, and to maintain  
161 improvements in a commercially accepted manner reasonably expected to achieve the  
162 normal life span of the type of construction utilized. By way of example only, the type of  
163 maintenance expected would include: (1) painting and other corrosion control measures to  
164 prevent rot, rust and ruin due to neglect; (2) maintaining electrical, plumbing and other  
165 utilities in a safe and generally commercially accepted condition; and (3) maintaining roofs  
166 to be in good condition, including replacement at the end of life cycles.

167 5. Lessor shall be the sole judge of the quality of maintenance and upon written  
168 notice by Lessor to Tenant, Tenant shall be required to perform whatever maintenance  
169 Lessor deems reasonably necessary. If said maintenance is not undertaken by Tenant within  
170 ten days after receipt of written notice, Lessor shall have the right to enter upon the Demised  
171 Premises and perform the necessary maintenance, the cost of which shall be borne by Tenant.

172 **D. DAMAGE.** If the Demised Premises together with any improvements thereon  
173 or any part hereof is damaged by reason of any cause whatsoever, the following shall apply:

174 1. Tenant may repair or rebuild at its expense any improvements, which are  
175 owned by or have been erected by Tenant, upon the occurrence of the destruction or damage.  
176 Rent during the period of damage, destruction, or repair shall not be abated and shall  
177 continue.

178 2. Except as otherwise provided herein, if any property which is owned by Lessor  
179 and leased to Tenant be destroyed by fire or unavoidable casualty, Lessor shall promptly

180 rebuild or replace the Demised Premises in as good a condition as it was prior to such fire or  
181 other casualty and a proportionate part of the monthly minimum rental shall be suspended  
182 or proportionately abated in accordance with the use until the Demised Premises has been  
183 restored and put in complete repair, provided that Lessor receives in advance of the repairs  
184 being made, a sufficient sum of Tenant's insurance proceeds to make such repairs, Lessor's  
185 obligation being limited to repair or rebuild only in an amount equal to the sums received by  
186 Lessor from said insurance proceeds.

187         3. In the event that Lessor is prohibited from completing any of the repairs as set  
188 forth in paragraph 2 above due to insufficient insurance funds or to actions beyond the control  
189 and responsibility of Lessor, such as, but not necessarily limited to, unavailability of  
190 materials, restriction imposed by any public authority relative to curtailment of building,  
191 inability of Lessor to secure building permits from public authority or strikes which may  
192 prevent Lessor's contractors from performing the work required, Tenant's obligation to  
193 Lessor to pay all sums due hereunder shall continue, or Tenant shall have the right to  
194 terminate this lease within ninety (90) days after casualty.

195         4. In the event of partial destruction to the Demised Premises, Tenant may  
196 continue this lease and, in such event, shall be obligated for the payment of a pro-rata rental  
197 based on the space used provided the remaining premises usable is sufficiently large enough  
198 for Tenant to conduct its business.

199         5. In the event of total destruction of the Demised Premises which renders the  
200 Demised Premises insufficient for Tenant's business, and Tenant elects not to rebuild the  
201 improvements, Tenant may terminate this lease within ninety (90) days after casualty, and  
202 in the event of Tenant's termination, Tenant shall remove all improvements and restore the  
203 Demised Premises to the condition prior to Tenant's construction at Tenant's expense, with  
204 Tenant's retaining any excess insurance proceeds.

205         E. **NON-DISCRIMINATION.** Tenant, for himself, his personal representatives,  
206 successors in interest, and permitted assigns, as a part of the consideration hereof, does  
207 hereby covenant and agree as a covenant running with the land to operate the Demised  
208 Premises for the benefit of the public, and:

209         1. No person on the grounds of race, color, or national origin shall be excluded  
210 from participation in, denied the benefits of, or be otherwise subjected to discrimination in  
211 the use of the Demised Premises; and

212           2.     That in the construction of any improvements, on, over, or under such land and  
213 the furnishing of services thereon, no person on the grounds of race color, or national origin  
214 shall be excluded from participation in, denied the benefits of, or otherwise be subjected to  
215 discrimination; and

216           3.     Tenant shall use the Demised Premises in compliance with all other  
217 requirements imposed by or pursuant to 49 CFR Part 21, Nondiscrimination in Federally  
218 Assisted Programs of the Department of Transportation, as said regulations may be  
219 amended, and other applicable Laws and Regulations, and shall obtain such compliance from  
220 any permitted sublessees or other parties holding lower tier agreements; and

221           4.     Tenant shall comply with applicable statutes, Executive Orders and such rules  
222 as are promulgated to ensure that no person shall, on the grounds of race, creed, color,  
223 national origin, sex, age, or disability be excluded from participating in any activity  
224 conducted with or benefiting from Federal assistance. If Tenant assigns this lease, the  
225 transferee shall be obligated in the same manner as Tenant.

226           In the event of breach of any of the nondiscrimination covenants contained herein, the  
227 Lessor shall have the right to terminate the lease and re-enter and repossess the Demised  
228 Premises and the facilities thereon, and hold the same as if this lease had never been made  
229 or issued.

230           **F.     AIRCRAFT SERVICE BY OWNER OR OPERATOR OF AIRCRAFT.**

231           It is clearly understood and agreed by the Tenant that no right or privilege has been  
232 granted which would operate to prevent any person, firm or corporation operating aircraft on  
233 the Airport from performing any services on its own aircraft with its own employees  
234 (including, but not limited to, maintenance and repair) that it may choose to perform.

235           **G.     INDEMNITY.** Tenant shall indemnify, save and keep Lessor, the Hammond  
236 Northshore Regional Airport Advisory Board (the "Board") their respective officers and  
237 employees, free and harmless from and against any and all actions, suits, proceedings, claims  
238 and demands for injury, damage, loss, liability, cost and expense, of any kind or nature  
239 whatsoever, which may be brought, made or filed against them, by reason of or arising out  
240 of, or in any manner attributable to any and all operations of Tenant in the use of the Demised  
241 Premises and by reason of its use of the Airport and not arising out of or resulting from the  
242 negligence or intentional misconduct of the Lessor, the Board and their respective officers  
243 and employees. In the event Lessor and/or the Board, its respective officers and employees is  
244 sent a demand or sued for any matter as to which Tenant has agreed to indemnify and hold

245 it harmless hereunder, it shall give immediate notice thereof to Tenant, delivering to Tenant  
246 all pleadings and papers which may have been received or served. Tenant shall defend the  
247 demand or suit with counsel acceptable to Lessor. Lessor and the Board agrees to cooperate  
248 with Tenant in the defense and handling of any such demand or suit. The Tenant shall hold  
249 Lessor, the Board and their respective officers, agents and employees harmless from and  
250 against all suits, claims, demands, actions, and/or causes of action of any kind or nature in  
251 any way arising out of, or resulting from Tenant's tenancy and activities, and shall pay all  
252 expenses in defending any such claims against the above described parties.

253 **H. NON-EXCLUSIVE RIGHTS.** It is understood and agreed that nothing herein  
254 contained shall be construed to grant or authorize the granting of an exclusive right.

255 **I. SUBORDINATION.** This Agreement is subordinate to the provisions of any  
256 existing or future agreement between Lessor and the United States or other governmental  
257 authority (regardless of when made) that affects the Airport, including, but not limited to,  
258 agreements governing the expenditure of Federal funds for Airport improvements, the  
259 execution of which has been or may be required as a condition precedent to the expenditure  
260 of federal funds for the development of the Airport. This lease is also subordinate to all  
261 reversionary clauses that may now exist in favor of the United States, and in the event that  
262 the United States exercises any rights it may have to the Demised Premises, then  
263 notwithstanding anything contained herein to the contrary, this lease will be rendered null  
264 and void without any prejudice to Lessor whatsoever. In the event that the Federal Aviation  
265 Administration or other governmental authority requires any modification to this Agreement  
266 as a condition of Lessor entering any agreement or participating in any program applicable  
267 to the Airport (including, but not limited to, those providing funding), Tenant agrees to  
268 consent to any such modification. If a governmental authority determines that any act or  
269 omission of Tenant or Tenant's associates has caused or will cause Lessor to be non-compliant  
270 with any of Lessor's government commitments (including, but not limited to, any assurances  
271 or covenants required of Lessor or obligations imposed by law), Tenant shall immediately  
272 take all actions that may be necessary to preserve Lessor's compliance with the same.  
273 Without liability to Lessor, Lessor shall have the right to terminate this Agreement and  
274 reenter and repossess any portion of the Premises if the U.S. Department of Transportation  
275 or other governmental authority having jurisdiction expressly requires any such action,  
276 subject to any review that may be afforded to Tenant by such authority.

277           **J. NO-SHAM AFFIDAVIT/ANTI-KICKBACK.** All terms and conditions with  
278 respect to this Lease are expressly contained herein, and the Tenant agrees that no  
279 representative or agent of Lessor has made any representation or promise with respect to  
280 this Lease not expressly contained herein. Tenant shall comply with all applicable "Anti-  
281 Kickback" regulations and laws and shall insert appropriate provisions in all contracts to  
282 ensure compliance with such regulations and laws.

283           **K. TERMINATION.** Upon the expiration or other termination of this agreement,  
284 the Tenant's rights to the premises, facilities, other rights, licensed services and privileges  
285 granted in the agreement shall cease, and the Tenant shall, upon such expiration or  
286 termination, immediately and peacefully surrender such.

287           **L. SUCCESSORS.** All covenants, stipulations and provisions in the agreement to  
288 be entered into shall extend to and bind the legal representatives, successors and permitted  
289 assigns of Tenant.

290           **M. SUBLEASE/ASSIGNMENT.** The Tenant shall not sublease the Demised  
291 Premises or assign this lease or any portion thereof, to a third party, except upon the express  
292 written permission of the Lessor. If Tenant is a corporation (other than a corporation the  
293 outstanding voting stock of which is listed on a "National Securities Exchange Act of 1934")  
294 or a limited liability company and if at any time after execution of the lease any part or all of  
295 the corporation shares or LLC membership interest shall be transferred by sale, assignment,  
296 bequest, inheritance, operation of law or other disposition (including such a transfer to or by  
297 a receiver or trustee in Federal or State Bankruptcy insolvency or other proceeding) so as to  
298 result in a change in the present control of said corporation shares or membership interest,  
299 then such transfer may be deemed to be an assignment of this lease for the purposes of this  
300 section. The storage of aircraft within the Demised Premises shall not be considered a sub-  
301 lease; however, upon reasonable request by Lessor, Tenant shall give Lessor notice of non-  
302 transient aircraft stored on the Demised Premises.

303           **N. REMOVAL OF DISABLED AIRCRAFT.** When consistent with Laws and  
304 Regulations, Tenant shall promptly remove or cause to be removed from any portion of the  
305 Airport not leased by Tenant the Aircraft or any other aircraft that Tenant owns or controls  
306 if it becomes disabled. Tenant may store such aircraft within Tenant's enclosed  
307 improvements or, with Lessor's prior written consent, elsewhere at the Airport on terms and  
308 conditions established by Lessor. If Tenant fails to comply with this requirement after a  
309 written request by Lessor to comply, Lessor may (but is not required to) cause the removal of

310 any such aircraft at Tenant's expense by any means that Lessor determines, in its sole  
311 discretion, to be in Lessor's best interests.

312 **ARTICLE III**

313 **RIGHTS OF LESSOR**

314 **A. MAINTENANCE.** Lessor reserves the right, but shall not be obligated to  
315 Tenant, to maintain and keep in repair the landing area of the Airport and all publicly-owned  
316 facilities of the Airport, together with the right to direct and control all activities of Tenant  
317 in this regard.

318 **B. BREACH OF COVENANTS.** In the event of breach of any of the above  
319 covenants, the Lessor shall have the right to terminate the Lease and to re-enter and  
320 repossess said land and the facilities thereon, and hold the same as if said Lease had never  
321 been made or issued.

322 **C. DEVELOPMENT.** Lessor reserves the right to further develop or improve the  
323 landing area of the Airport as it sees fit, and without interference or hindrance by Tenant or  
324 Tenant's agents. If the physical development of the Airport requires the relocation of Tenant-  
325 owned facilities, the Lessor agrees to provide a comparable location without any  
326 unreasonable interruption to the Tenant's activities, paying all reasonable costs and fees to  
327 relocate.

328 **D. RIGHT OF ENTRY.** The Lessor may enter upon the Demised Premises at any  
329 reasonable time, and for any purpose necessary, incidental to, or connected with the  
330 performance of the Tenant's obligations under the agreement or in the exercise of its function  
331 as Lessor.

332 **E. AIRPORT OBSTRUCTIONS.** Lessor reserves the right to take any action it  
333 considers necessary to protect the aerial approaches of the Airport against obstructions,  
334 together with the right to prevent Tenant from erecting or permitting to be erected, any  
335 building or other structure on or adjacent to the Airport which, in the opinion of the Lessor,  
336 would limit the usefulness of the Airport or constitute a hazard to aircraft. Tenant shall, upon  
337 approval by Lessor and prior to any construction of any nature within the boundaries of the  
338 Airport, prepare and submit An FAA Form 7460-1 (Obstruction Evaluation/Airport Airspace  
339 Analysis) via the FAA website, <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>, as required by  
340 Federal Aviation Regulation Part 77. This notice shall be submitted at least thirty days prior  
341 to the date of the proposed construction or the date that an application for a construction  
342 permit is filed, whichever is earlier. A photocopy will be supplied to Lessor and to the Division

343 of Aviation, Department of Transportation and Development, Post Office Box 94245, Baton  
344 Rouge, Louisiana 70804-9245, and the State of Louisiana. Comments shall be received as  
345 required by LSA RS 2§6 and 2§8 of the Louisiana Revised Statutes.

346 F. During time of war or national emergency, Lessor shall have the right to lease  
347 the airport property, or any part thereof, to the United States Government for military or  
348 naval use, and, if any such lease is executed, the provisions of this lease, insofar as they are  
349 inconsistent with the provisions of the lease to the Government, shall be suspended.

350 G. All rights not specifically granted Tenant under this Lease are reserved to the  
351 Lessor.

352 **ARTICLE IV**

353 **TERM OF LEASEHOLD**

354 A. **TERM.** The initial term of this Lease shall be for a period of two (2) years  
355 commencing on December 11, 2025, and ending on December 10, 2027. Tenant shall have the  
356 right to extend the term of the lease, as provided below, upon the satisfactory and timely  
357 completion of improvements as provided below. Tenant shall commence construction of  
358 Tenant's Work and complete the construction of Tenant's Work on or before December 10,  
359 2027, to Lessor's reasonable satisfaction. If Tenant's Work is not satisfactorily completed with  
360 the time set forth above, Tenant may request approval from Lessor for an extension of time.  
361 Provided Tenant has not been in default of this lease, Tenant shall have a right to extend the  
362 term by written notice to Lessor, but only if Tenant has satisfactorily and timely completed  
363 construction of Tenant's Work on the Demised Premises in accordance with plans and  
364 specifications approved by Lessor on or before December 10, 2027. The renewal term shall be  
365 based on the actual costs of labor and material, not including soft costs, of Tenant's Work as  
366 verified by Lessor, including a review of receipts, to the Demised Premises on the following  
367 schedule:

368	<b>Below \$240,000.00=</b>	<b>20 years</b>
369	<b>\$240,000.00- \$299,999.99=</b>	<b>25 years</b>
370	<b>\$300,000.00-\$399,999.99=</b>	<b>30 years</b>
371	<b>\$400,000.00-\$499,999.99=</b>	<b>35 years</b>
372	<b>\$500,000.00-\$574,999.99=</b>	<b>40 years</b>
373	<b>\$575,000.00-\$649,999.99=</b>	<b>45 years</b>
374	<b>\$650,000.00 and above=</b>	<b>50 years</b>

375           **B.     HOLDOVER.** Any holdover or occupancy of the Tenant after the expiration of  
376 the term of this Lease shall not be deemed a tacit reconstruction of this Lease, but shall be a  
377 month-to-month Lease which may be terminated by either party in compliance with the laws  
378 of the State of Louisiana relative to termination of month-to-month Leases.

379           **C.     NATIONAL EMERGENCY.** In the event the rights and privileges of Tenant's  
380 occupancy hereunder are suspended by reason of war or other national emergency, the term  
381 of this Lease shall be extended by the amount of the period of such suspension.

382           **D.     IMPROVEMENTS TO DEMISED PREMISES.** Subject to the prior written  
383 approval of Lessor and Applicable Law, Tenant may construct building(s) and  
384 improvement(s) as the Tenant may find necessary or convenient for its purposes. All  
385 improvements and permanent building fixtures installed by Tenant on or to the  
386 improvements leased hereunder shall be constructed in accordance with terms prescribed by  
387 Lessor. All such permanent improvements to the Demised Premises shall become the  
388 property of Lessor upon the expiration of this Lease. All other improvements and fixtures of  
389 a non-permanent nature and all trade fixtures, machinery and equipment made or installed  
390 by Tenant may be removed from the Demised Premises at any time by Tenant. Tenant shall  
391 repair any damage to the Demised Premises caused by such removal. In the event the other  
392 improvements and fixtures of a non-permanent nature and all trade fixtures, machinery and  
393 equipment made or installed by Tenant remain on the Demised Premises after the  
394 termination of the lease or any renewal thereof, the said improvements and fixtures of a non-  
395 permanent nature and all trade fixtures, machinery and equipment movables and equipment  
396 shall become the property of the Lessor, without reimbursement to the Tenant.

397 Before the sale of any movable structure on the Demised Premises is made by Tenant, such  
398 structures shall be first offered in writing to the Lessor at the sale price offered to third  
399 persons and the Lessor shall have thirty (30) days to accept or reject said offer.

400           **E.**Tenant may operate underground storage tanks on the Demised Premises only  
401 with Lessor's written consent. In such event. Tenant shall at all times obey and comply with  
402 all Federal, State and local regulations and laws. Lessor is permitted to, but not obligated to,  
403 inspect such improvements at any time upon reasonable notice. In the event of termination  
404 of this lease for any reason, including default, Lessor shall not be obligated to become owner  
405 of underground storage tanks and take possession of said tanks, until such time as Tenant  
406 has complied with all Federal, State and local regulations, including by way of example, any  
407 cleanup responsibilities. Lessor, in the event of default under this subsection, may, at its

408 option, elect to sue for specific performance to enforce compliance with any Federal, State or  
409 local regulations in addition to also seeking termination of the lease. Additionally, Lessor  
410 may, but shall not be obligated to, deduct from any amount which may be due Tenant  
411 hereunder, an amount necessary to remedy any default or non-compliance under this sub-  
412 section.

413 **ARTICLE V**

414 **RENTAL AND FEES**

415 **A. GENERAL.** Tenant shall pay Lessor an annual rental of \$0.21 (21 cents) per  
416 square foot, to be prorated in the first year. Tenant may pay rent in equal monthly  
417 installments on the of each month. Rent shall increase thereafter as of July 1, 2026 and on  
418 July 1 of each year thereafter by a percentage equal to the percentage increase, if any, of the  
419 Consumer Price Index - All Urban Consumers ("CPI") U. S. City Average — All Items (1982-  
420 84-100), issued and published by the Bureau of Labor Statistics of the United States  
421 Department of Labor, or if the CPI is no longer published, a successor or substitute index  
422 issued by a reliable governmental or non-partisan publication selected by Lessor. The  
423 increase shall be determined by comparing the CPI published on May 1 of the preceding year  
424 with the CPI published on May 1 of the current year. The rent shall be increased by such  
425 percentage increase until the next adjustment. However, in no event shall there be a decrease  
426 in rent.

427 Rent for any option period shall be adjusted as provided above.

428 For any holdover at the end of the Term, Tenant shall pay the then current monthly  
429 rent rates for Lessor owned airport hangars and facilities.

430 **B. TIME OF PAYMENT.** Rent is due on the first day of each month; except that  
431 for the month of July, rent shall be due and must be paid within thirty days of written notice  
432 from Lessor of any rent adjustment. Otherwise, if any rent payment is not made within five  
433 (5) days of the date of written notice of delinquent rent, Lessor shall be entitled to collect a  
434 late fee of the greater of (a) five percent of the payment due and (b) Fifty Dollars (\$50.00).

435 **ARTICLE VI**

436 **INSURANCE**

437 **A.** Tenant shall, at its own expense, carry and keep in full force and effect for the  
438 entire period covered by any written Lease or Agreement with Lessor, including any  
439 extensions thereof: (1) Liability insurance in the minimum amount of One Million Dollars

440 (\$1,000,000.00) or such amounts as reasonable required by Lessor; and (2) Casualty  
441 insurance with limits equal to the fair market value of the improvements on the Demised  
442 Premises constructed by Tenant.

443 B. Such policies shall provide coverage for each particular type of Tenant's  
444 business, including by way of example but not by way of limitation, commercial general  
445 liability coverage and primary automobile liability insurance coverage. Such insurance  
446 coverage shall be provided under policies issued by a company or companies of sound and  
447 adequate financial responsibility with no less than an A-rating, and acceptable to Lessor and  
448 which are authorized, qualified, and licensed under the laws of the State of Louisiana.

449 C. Said insurance shall provide that the Lessor and the Board be named as  
450 additional insureds and their inclusion as named insureds is not intended to, and shall not,  
451 make Lessor or the Board a partner or joint venture with Tenant's in its operations at the  
452 Airport. The Lessor and the Board shall have no liability for any premiums charged for such  
453 coverage.

454 D. The commercial general liability policies shall include contractual liability  
455 coverage, and shall make reference to this Lease. Tenant shall cause a certificate or  
456 certificates of all such insurance coverage, including any renewals, to be furnished, in  
457 duplicate, to Lessor and the Board evidencing such insurance coverage.

458 E. Such liability insurance coverage shall also extend to damage, destruction and  
459 injury to Lessor and the Demised Premises and Lessor's officers and employees, and caused  
460 by, or resulting from work, acts, operations or omissions of Tenant, its officers, agents,  
461 employees and independent contractors on the Demised Premises or the Airport.

462 F. All required insurance policies shall provide an endorsement to include a  
463 Waiver of Subrogation in favor of the Lessor and shall read as follows: "Tenant, its agents,  
464 assigns, employees and insurer(s) hereby release the City of Hammond, its agents and  
465 assigns from any and all liability or responsibility including anyone claiming through or  
466 under them by way of subrogation or otherwise for any loss or damage which Tenant, its  
467 agents or insurers may sustain incidental to or in any way related to Tenant's operation  
468 under this Lease."

469 G. Notwithstanding anything contained herein to the contrary, it is the intention  
470 of the parties hereto that, if the Demised Premises is lost or damaged and the amount of such  
471 loss or damage is adequately covered by insurance carried by the Tenant and such amount is

472 acceptable to Lessor, then upon receipt of such insurance proceeds by Lessor, the Tenant here  
473 shall not be liable for such loss or damage, should Tenant elect to cancel the Lease.

474 Accordingly, upon receipt of sufficient and acceptable insurance proceeds, Lessor  
475 hereby expressly waives any and all claims against Tenant for loss of or damage to the  
476 Demised Premises due to fire, explosion, windstorm or other casualty covered by fire or  
477 extended coverage insurance carried by Lessor, regardless of the cause of such damage,  
478 including without limitations damage resulting from the negligence of Tenant, its agents,  
479 servants or employees, and Tenant hereby expressly waives any and all claims against Lessor  
480 for loss of or damage to any and all property of Tenant or any time on the Demised Premises  
481 due to fire, explosion, windstorm or other casualty covered by fire and extended coverage  
482 insurance carried by Tenant, regardless of the cause of such damage, including without  
483 limitations, damage resulting from the negligence of Lessor, the Board, and their respective  
484 officers and employees.

485 H. Said policies or certificates of insurance shall contain a provision that written  
486 notice of cancellation or of any material change in said policy by the insurer shall be delivered  
487 to Lessor no less than thirty (30) days in advance of the effective date thereof.

488 I. Lessor, in its sole and absolute discretion, reserves the right to review and  
489 adjust at any time Tenant's required insurance limits, types of coverage, and any other terms  
490 applicable to insurance to insure against any risk associated with this Agreement or Tenant's  
491 use, occupancy, or operations at the Airport. Among other things, Lessor may review any or  
492 all insurance coverage on a periodic basis and in connection with any specific activity or event  
493 associated with the Airport or proposed by Tenant. This provision shall be uniformly applied  
494 to all tenants in the same or similarly operated businesses at the Airport.

495 **ARTICLE VII**

496 **CANCELLATION AND TERMINATION**

497 **A. CANCELLATION BY TENANT.** This Lease shall be subject to cancellation  
498 by Tenant after the happening of one or more of the following events:

- 499 1. The permanent abandonment of the Airport as an air transportation facility.
- 500 2. The lawful assumption by the United States Government, or any authorized  
501 agency thereof, of the operation, control or use of the Airport, or any substantial part of part  
502 thereof, in such a manner as substantially to restrict Tenant for a period of at least ninety  
503 (90) days, from operating thereon. Should assumption by the U.S. Government occur,  
504 Tenant's rent shall be suspended during this period of control by the Government.

505           3.     Issuance by any court competent jurisdiction of any injunction in any way  
506 preventing or restraining the use of the Airport, and the remaining in force of such injunction  
507 for a period of at least 180 days.

508           4.     The default by Lessor in the performance of any covenant or agreement herein  
509 required to be performed by Lessor and the failure of Lessor to remedy such default for a  
510 period of ninety (90) days after receipt from Tenant of written notice to remedy the same;  
511 except that if such default cannot be reasonably cured within ninety (90) days, Lessor shall  
512 commence a cure within ninety (90) days and diligently pursue remedy of the default.

513           Tenant may exercise such right of termination by written notice to Lessor at any time  
514 after the lapse of the applicable periods of time and this Lease shall terminate as of that date.  
515 Rentals due hereunder shall be payable only to the date of said termination.

516           **B.     CANCELLATION BY LESSOR.** This Lease shall be subject to cancellation  
517 by Lessor in the event Tenant shall:

518           1.     Be in arrears in the payment of the whole or any part of the rent and other  
519 monetary amounts agreed upon hereunder for a period of five (5) days after the time such  
520 payments become due and after a period of ten (10) days from written demand therefore from  
521 Lessor;

522           2.     Make a general assignment for the benefit of creditors;

523           3.     File a voluntary petition in bankruptcy;

524           4.     Abandon the Demised Premises;

525           5.     Failure to provide evidence of insurance coverage within five (5) days after  
526 demand.

527           6.     Default in the performance of any of the covenants and conditions required  
528 herein (except rental, insurance and other monetary payments) to be kept and performed by  
529 Tenant, and such default continues for a period of thirty (30) days after receipt of written  
530 notice from Lessor of said default.

531           In any of the aforesaid events, Lessee waives notice to vacate and Lessor may take  
532 immediate action to evict Tenant. Failure of Lessor to declare this Lease terminated upon  
533 the default or Tenant for any of the reasons set out shall not operate to bar or limit the right  
534 of Lessor to cancel this Lease by reason of any subsequent violation of the terms thereof.

535

536

**ARTICLE VIII**

537

**RIGHTS UNDER TERMINATION**

538

**A. SURRENDER OF POSSESSION.** Upon the expiration or earlier termination of this agreement or any renewal thereof, Tenant shall forthwith surrender possession of the Demised Premises, including any improvements added by Tenant in as good a condition as when received, subject to reasonable wear and tear; however, reasonable wear and tear does not excuse negligent maintenance of any buildings and structures in accordance with Article II(C). Tenant shall be responsible for all such necessary repairs due to improper maintenance.

545

**B. IMPROVEMENTS MADE BY TENANT.** At the termination of this Lease, for any reason except as outlined in Paragraph "C" below, the Lessor will take title to said improvements in lieu of removal by or for Tenant.

548

**C. LIQUIDATED DAMAGES.** The parties acknowledge that the calculation of damages sustained by Tenant in the event this Lease is cancelled by Tenant as a result of Lessor's default is uncertain and cannot reasonably be determined. Therefore, the parties agree that in the event this Lease is cancelled by Tenant as a result of Lessor's default, Lessor shall pay to Tenant liquidated damages calculated as follows:

553

1. the depreciated value of the permanent improvements constructed by Tenant which remain on the Demised Premises as of the date of cancellation, plus

555

2. an amount equal to 2% per year of the depreciated value of the permanent improvements constructed by Tenant which remain on the Demised Premises as of the date of cancellation for the remaining term of the lease. By way of example, if the depreciated value is \$1,000,000.00, the lease term is fifty (50) years, and the lease is cancelled in year twenty-five (25); the liquidated damages shall be \$500,000.00 (2% per year x 25).

560

Upon payment by Lessor to Tenant of said liquidated damages, all such improvements shall become the sole property of Lessor.

562

**ARTICLE IX**

563

**ENVIRONMENTAL MATTERS**

564

**A. TENANT COMPLIANCE.** Tenant shall comply, at its own cost and expense, with all laws and regulations now existing or hereafter enacted, including but not limited to all Federal, State and local environmental laws and regulations; any rules and/or regulations promulgated by any department, agency or division thereof; sanitary laws and ordinances; all rules and requirements of the State Board of Health; all other Federal, State, Parish and

569 Municipal requirements affecting the use, operation, and cleanliness of the Demised  
570 Premises; and all rules and regulations of any local Board of any authorized organization of  
571 fire underwriters and of any state authorities relating to safeguarding against fires. Tenant  
572 shall in every other regard use and occupy the Demised Premises in accordance with all  
573 applicable rules and regulations of any State, Parish and Municipal governmental  
574 authorities.

575 **B. CONTAMINATION.** Tenant assumes all liability for any contamination that  
576 is created during the term of this Lease. At the termination of this Lease, Tenant must return  
577 the Demised Premises to the condition that the Demised Premises was in prior to  
578 commencement of the lease, remediating environmental hazards including those caused by  
579 fuel leaks, spills, seepage, and fires which arise out of or are caused by Tenant's use of the  
580 Demised Premises.

581 **C. INDEMNIFICATION.** Tenant hereby agrees, jointly and severally,  
582 unconditionally, absolutely and irrevocably, to indemnify, defend (with counsel reasonably  
583 acceptable to Lessor and at Tenant's sole cost) and hold harmless Lessor, the Board, their  
584 successors and assigns, and their respective officers, employees, agents and affiliates, against  
585 and in respect of any loss, liability, cost, injury, expense or damage of any and every kind  
586 whatsoever (including, without limitation, court costs and reasonable attorneys' fees and  
587 expenses) which at any time or from time to time may be suffered or incurred by Lessor (or  
588 any other person indemnified hereunder) in connection with the breach of the  
589 representations, warranties and covenants contained in this lease or any representation,  
590 covenant and warranties in this lease pertaining to pollution, hazardous materials, toxic  
591 substances and environmental matters or in connection with any inquiry, charge, claim,  
592 cause of action, demand or lien made or arising directly to indirectly or in connection with,  
593 with respect to, or as a direct or indirect result of the presence on or under, or the escape,  
594 seepage, leakage, spillage, discharge, emission or release from, the Demised Premises into or  
595 upon any land, the atmosphere, or any watercourse, body of water, or wetland, of any  
596 "Hazardous Materials" (as hereinafter defined) including, without limitation, any losses,  
597 liabilities, damages, injuries, costs, expenses or claims asserted or arising under the  
598 "Statutes" (as hereinafter defined), whether now known or unknown, including without  
599 limitation:

600 1. any costs, fees or expenses incurred in connection with the removal,  
601 encapsulation, or other treatment of Hazardous Material from or on the Demised Premises;  
602 and

603 2. any reasonable attorney's fees and expenses, engineers' fees, and/or charges  
604 of any contractor or expert retained or consulted in connection with any inquiry, claim or  
605 demand, including without limitation any costs incurred in connection with compliance with  
606 such inquiry, claim or demand; and

607 3. any loss, liability, cost, expense or damage (including, without limitation,  
608 reasonable attorneys' fees and expenses) suffered or incurred by Lessor (or any other person  
609 indemnified hereunder) as a result of, arising out of or in connection with any failure of the  
610 Demised Premises to comply with all applicable environmental protection laws, ordinances,  
611 rules and regulations, and any litigation, proceeding or governmental investigation relating  
612 to such compliance or non-compliance; and

613 4. any loss, liability, cost, damage or expense suffered or incurred by Lessor (or  
614 any other person indemnified hereunder) directly or indirectly arising from any claim, action,  
615 demand, cause of action or damage relating to or in connection with any personal injury  
616 concerning or relating to the presence of asbestos or other Hazardous Material on the  
617 Demised Premises.

618 As used herein, "*Hazardous Material*" means and includes, without limitation: (I)  
619 "hazardous substances", or "toxic substances" as those terms are defined by the  
620 Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), as  
621 amended and hereafter amended; (II) "hazardous wastes", as that term is defined by the  
622 Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §6902 *et seq.*, as amended and  
623 hereafter amended; (III) any pollutant or contaminant or hazardous, dangerous or toxic  
624 chemicals, materials, or substances within the meaning of any other applicable federal, state  
625 or local law, regulation, ordinance, or requirement (including consent decrees and  
626 administrative orders) relating to or imposing liability or standards of conduct concerning  
627 any hazardous, toxic or dangerous waste substances or material, all as amended or hereafter  
628 amended; (IV) petroleum products, including, but not limited to, crude oil or any fraction  
629 thereof which is liquid at standard conditions of temperature and pressure (60 degrees  
630 Fahrenheit and 14.7 pounds per square inch absolute) and substances containing  
631 hydrocarbons (other than petroleum products which are normally contained in motor  
632 vehicles), to the extent that said petroleum products are not released from said motor

633 vehicles; (V) any radioactive material, including any source, special nuclear or by-product  
634 material as defined at 42 U.S.C. §6902 et seq., as amended or hereafter amended  
635 (collectively, the "*Statutes*"); (VI) asbestos in any form or condition; and (VII) polychlorinated  
636 biphenyls ("PCB") or substances or compounds containing PCBs.

637         The provisions of and undertakings and indemnification set out in this indemnity  
638 shall continue indefinitely in full force and effect and shall survive the satisfaction,  
639 termination, suspension or closure of this Lease, and shall continue to be the personal  
640 liability, obligation and indemnification of the Tenant, binding upon the Tenant, jointly and  
641 severally, forever. The provisions contained herein shall govern and control over any  
642 inconsistent provision of this Lease, and any other agreement, instrument, or document  
643 evidencing or securing the Lease; including, without limitation, any exculpatory or non-  
644 recourse provisions contained in any of the foregoing agreements.

645         If at any time or times hereafter Lessor employs counsel for advice or other  
646 representation (i) with respect to the Indemnity herein, (ii) except as otherwise expressly  
647 provided herein, to represent Lessor in any litigation, contest, dispute, suit or proceeding  
648 (whether instituted by Lessor, Tenant, or any other party) in any way or respect relating to  
649 the Indemnity herein (if Lessor prevails in the litigation, suit or proceeding in question), or  
650 (iii) to enforce Tenant's obligations hereunder, then all of the reasonable attorneys' fees and  
651 expenses arising from such services and all expenses, costs and charges in any way or respect  
652 arising in connection therewith or relating thereto shall be paid by Tenant to Lessor, on  
653 demand.

654         Tenant shall notify Lessor promptly upon receipt of any inquiry, notice claim, charge,  
655 cause of action or demand pertaining to the matters indemnified hereunder, including  
656 without limitation any notice of inspection for cause, abatement or non-compliance stating  
657 the nature and basis of such inquiry or notification. Tenant shall immediately deliver to  
658 Lessor any and all documentation or records as Lessor may request in connection with such  
659 notice or inquiry, and shall keep Lessor advised of any subsequent developments.

660         Lessor shall give written notice to the Tenant of any claim against Lessor which might  
661 give rise to a claim by Lessor against the Tenant under this Lease stating the nature and  
662 basis of the claim, the amount thereof and reasonable best estimate of the amount of the  
663 Tenant's liability to Lessor in connection therewith.

664         If any action shall be brought against Lessor, then after Lessor notifies the Tenant  
665 thereof as provided above, the defense thereof shall be at the expense of Tenant with counsel



698           **C. ENTIRE AGREEMENT/MODIFICATION.** This Agreement contains the  
699 entire agreement between the parties hereto with respect to the transactions contemplated  
700 herein and no representation; promise, inducement, or statement of intention relating to the  
701 transactions contemplated by this Agreement has been made by any party that is not set  
702 forth in the Agreement.

703           This Agreement shall not be modified or amended except by an instrument in writing  
704 signed by or on behalf of the parties hereto.

705           **D. BROKER.** The parties hereto recognize that there was no agent or broker who  
706 negotiated this Lease. This Lease is consummated in reliance on the representation of the  
707 Tenant that no broker or agent brought the premises to the Tenant's attention or was, in any  
708 way, a procuring cause of this Lease. The Lessor represents to the Tenant that no broker or  
709 agent represented the Lessor in the Lease of the Demised Premises or has any exclusive sale  
710 or exclusive agency listing on the Demised Premises, and the Lessor hereby agrees to  
711 indemnify and hold harmless the Tenant against the claim of any broker or agent for a  
712 commission due by reason of this Lease where it is judicially determined that said broker or  
713 agent had a listing applicable to such Lease of the Demised Premises. The Tenant hereby  
714 agrees to indemnify and hold harmless the Lessor against the claim of any broker or agent  
715 for a commission due by reason of this Lease, where it is judicially determined that said  
716 broker or agent called the Lease to the Tenant's attention or interested Tenant therein. Any  
717 indemnity contemplated within this Section shall include without limitation, all reasonable  
718 costs of defending any such claim, including reasonable attorney's fees. The provisions of this  
719 paragraph shall and are deemed continuing.

720           **E. EFFECT AND ASSIGNMENT.** The covenants and agreements herein are to  
721 be binding upon and inure to the benefit of the parties hereto, their respective heirs,  
722 representatives, successors and permitted assigns, and shall and are deemed continuing.

723           **F. OWNERSHIP.** The parties recognize that, except to the extent separately  
724 certified in writing, no title examination of the Demised Premises has been performed by any  
725 undersigned Notary.

726           **G. SEVERABILITY CLAUSE.** If any part or parts of this Lease are adjudged by  
727 a court of competent jurisdiction to be null and void and/or otherwise unenforceable, the  
728 validity of the remainder of this Lease shall not be affected thereby, the provisions of this  
729 lease being severable in any such instance.

730 H. **DUPLICATE ORIGINALS.** This Lease may be executed in duplicate  
731 originals, any of which shall be deemed and considered as the original Lease executed by the  
732 parties herein.

733 I. **WAIVER OF CONSTRUCTION AGAINST DRAFTER.** The parties hereby  
734 swear, affirm and stipulate that each has carefully and meaningfully reviewed the contents  
735 of this document, that each has had the advice of counsel regarding the contents of this  
736 document, that each party is, for all intents and purposes, the drafter of this document, and  
737 that, therefore, as to any vague or ambiguous term or terms herein, each party hereby fully  
738 and expressly waives as to the other the construction of such vagueness or ambiguity against  
739 the other.

740 J. **TEXTUAL CONSTRUCTION.** This Agreement shall be interpreted to  
741 preserve Lessor's rights and powers to comply with Lessor's Federal and other governmental  
742 obligations. The use of headings, line numbers and page numbers herein is for the  
743 convenience of the parties, and shall not be deemed or considered in any way to modify the  
744 text of this Lease, or otherwise be deemed to be the text of this Lease, or to modify the text  
745 of this Lease. Whenever used, the singular number shall include the plural, the plural the  
746 singular, and the use of any gender shall be applicable to all genders. This Agreement shall  
747 be construed pursuant to the laws of the State of Louisiana.

748 K. **NOTICES.** Notices to Lessor provided for herein shall be sufficient if sent by  
749 certified mail, postage prepaid, addressed to:

750 **HAMMOND NORTHSORE REGIONAL AIRPORT**  
751 **600 JUDGE LEON FORD DRIVE**  
752 **HAMMOND, LA 70401**  
753 **ATTENTION: AIRPORT DIRECTOR**

754 **With a copy to:**

755 **CITY OF HAMMOND**  
756 **OFFICE OF THE MAYOR**  
757 **310 EAST CHARLES STREET**  
758 **HAMMOND, LA 70401**

759 and notices to Tenant, if sent by certified mail, postage prepaid, addressed to:

760 **Name: Robert Scariano**  
761 **Address: 314 Grand Lakes Drive**  
762 **Baton Rouge, La. 70810**

763 or to such other addresses as the parties may designate to each other in writing from time  
764 to time.

765 L. **RIGHT OF FLIGHT.** Lessor reserves the right of flight and the passage of  
766 aircraft above the surface of the Demised Premises together with the right to cause in such

767 airspace such noise as may be inherent to the operation of aircraft now or hereafter used; and  
768 Lessor reserves the right of using said airspace for landing at, taking off from, or operating  
769 aircraft on said Airport, except where same may be otherwise prohibited by any law or  
770 regulation of the United States of America, the State of Louisiana, the Parish of Tangipahoa,  
771 or the City of Hammond.

772 **M. DELIVERY DATE.** Possession of the Demised Premises and any  
773 improvements thereon shall be delivered as of the effective date of this Lease.

774 **N.** The parties agree and stipulate that the exclusive venue and jurisdiction for  
775 any action arising from this Lease shall be in the 21st Judicial District Court, Parish of  
776 Tangipahoa, State of Louisiana.

777 **THUS DONE AND SIGNED** by Tenant by its Duly Authorized Representative, in  
778 the presence of the undersigned competent witnesses, who have signed their names with the  
779 party at Hammond, Louisiana, on this \_\_\_\_ day of \_\_\_\_\_, 2025.

780 WITNESSES: **TENANT: SKY X WEST, LLC**  
781 \_\_\_\_\_  
782 **Print Name:** \_\_\_\_\_ **By:** \_\_\_\_\_  
783 **Robert Scariano, Manager**  
784 \_\_\_\_\_  
785 **Print Name:** \_\_\_\_\_  
786 \_\_\_\_\_

787 **THUS DONE AND SIGNED** by the **CITY OF HAMMOND**, represented by its duly  
788 authorized representative, in the presence of the undersigned competent witnesses, who have  
789 hereunto signed their names with the party at Hammond, LA on this \_\_\_\_ day of \_\_\_\_\_,  
790 2025.

792 WITNESSES: **CITY OF HAMMOND**  
793 \_\_\_\_\_  
794 **Print Name:** \_\_\_\_\_ **BY:** \_\_\_\_\_  
795 **Pete Panepinto, Mayor**  
796 \_\_\_\_\_  
797 **Print Name:** \_\_\_\_\_  
798 \_\_\_\_\_

799



