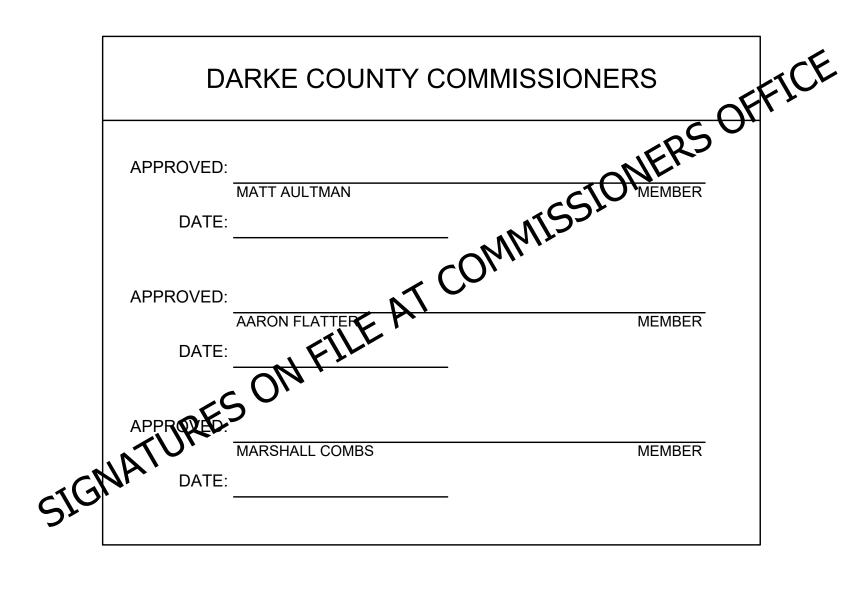
# DARKE COUNTY COMMISSIONERS DARKE COUNTY AIRPORT VERSAILLES, OHIO CONSTRUCT/EXPAND HANGAR AIP 3-39-0082-023/024-2025



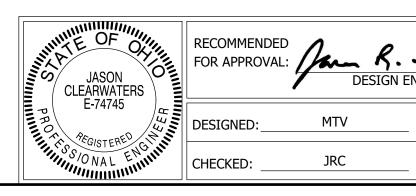


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# PROJECT LOCATION

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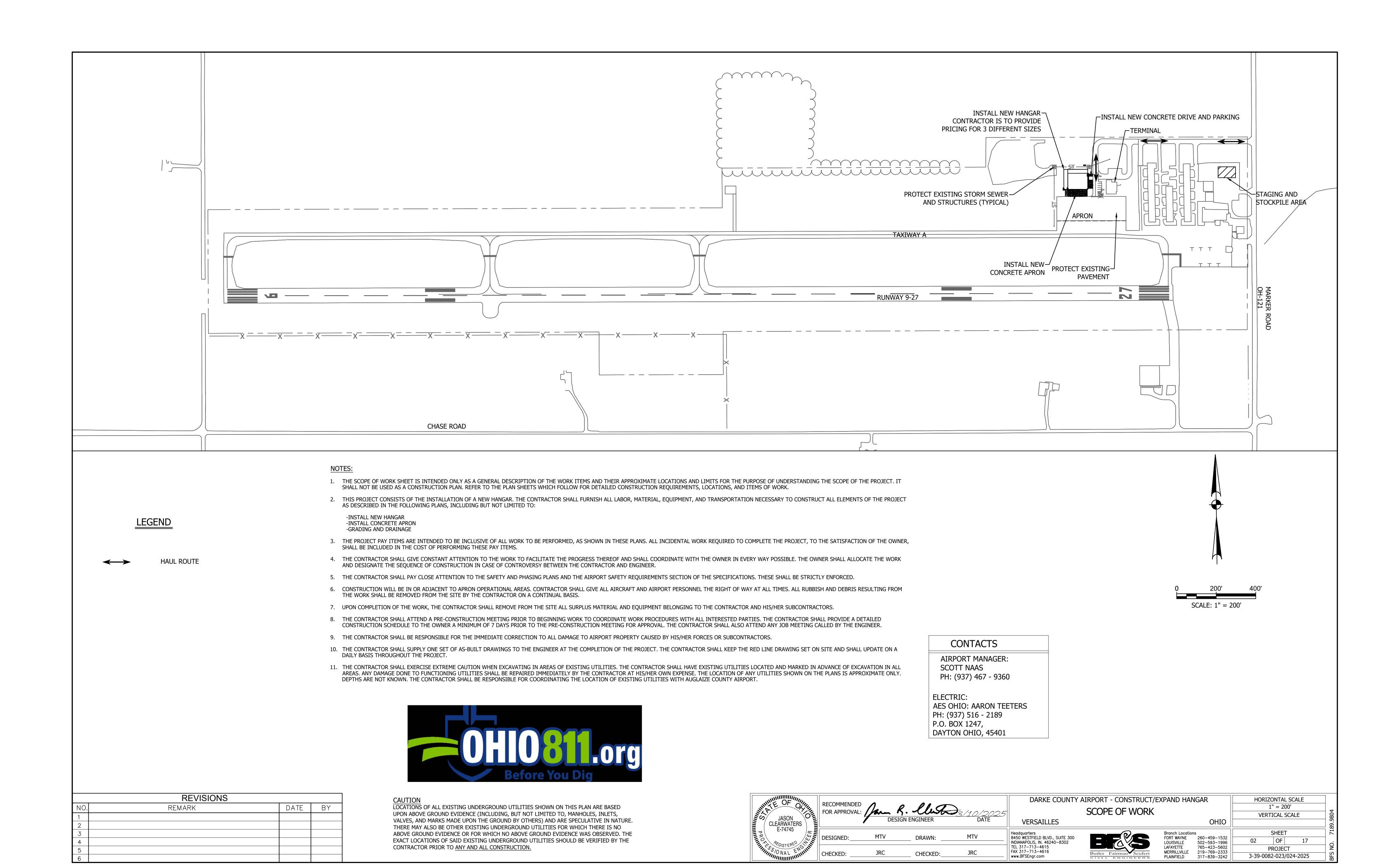


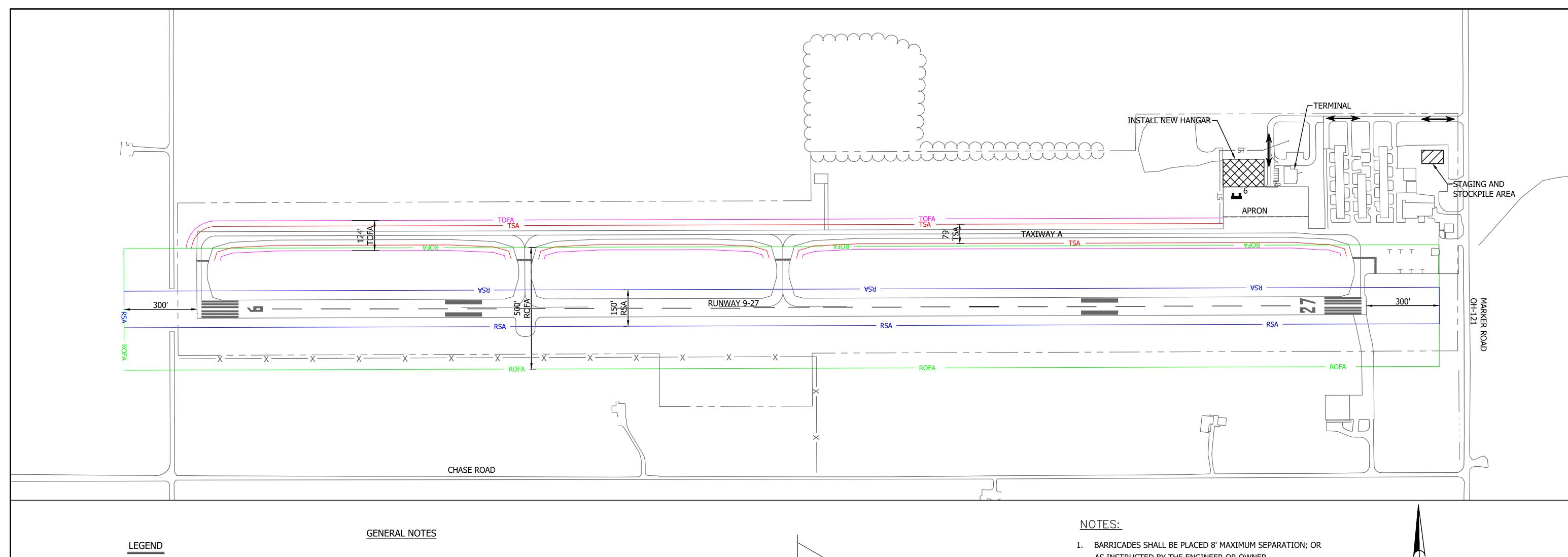
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	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240—8302  Branch Locations FORT WAYNE 260 LOUISVILLE 502	-

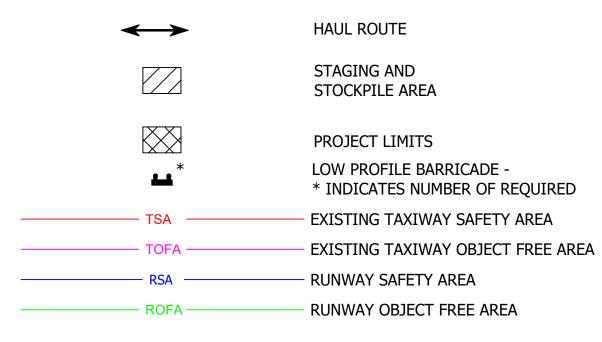


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WAYNE 260-459-1532	01 OF
SVILLE 502-593-1996	01 01
YETTE 765-423-5602	PROJECT
RILLVILLE 219-769-2333	***************************************
IFIELD 317-839-3242	3-39-0082-023/024

HORIZONTAL SCALE



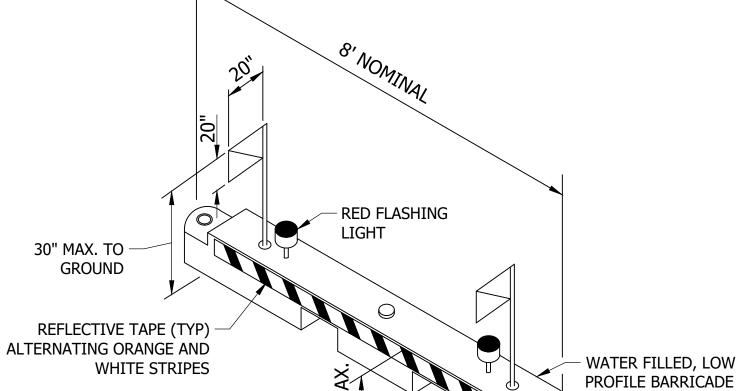




# **DURATION**

PHASE 1: 140 CONTINUOUS CALENDAR DAYS

- 1. PRIOR TO RE-OPENING ANY APRON PAVEMENT, THE FOLLOWING SHALL BE COMPLETED BY THE CONTRACTOR:
- a. NO TRENCHES, HOLES OR DROP-OFFS GREATER THAN 1 INCH ARE PRESENT.
- b. ALL AREAS ARE CLEAR OF DEBRIS AND THE PAVEMENT HAS BEEN SWEPT WITH A VACUUM TRUCK IF NEEDED.
- c. CONTRACTOR HAS COMPLETED A WALK-THROUGH INSPECTION WITH THE AIRPORT INSPECTOR.
- d. ACCEPTED BY THE OWNER.
- 2. THE CONTRACTOR SHALL PROVIDE SUPERVISION ON SITE DURING ALL WORK HOURS. ON SITE SUPERVISION SHALL HAVE THE ABILITY TO CONTROL THE WORK, MATERIALS AND LABOR. IF ADDITIONAL MATERIALS OR LABOR IS NEEDED AT ANY TIME, THE ON SITE REPRESENTATIVE SHALL HAVE THE MEANS TO OBTAIN IT.
- 3. CONTRACTOR SHALL GIVE OWNER / ENGINEER AT LEAST 48 HOURS NOTICE OF CLOSURE TO GET NOTAM IN PLACE AND NOTIFY TENANTS.
- 4. CONSTRUCTION WILL BE IN OR ADJACENT TO TAXIWAY OPERATIONAL AREAS. CONTRACTOR SHALL GIVE ALL AIRCRAFT AND AIRPORT PERSONNEL THE RIGHT OF WAY AT ALL TIMES.
- 5. PROJECT SHALL CONSIST OF ONE PHASE FOR A DURATION OF 160 DAYS.



LOW-PROFILE BARRICADE DETAIL

NOT TO SCALE

- AS INSTRUCTED BY THE ENGINEER OR OWNER.
- 2. INSTALL WHERE INDICATED ON CONSTRUCTION SAFETY PLAN OR IN LOCATIONS APPROVED BY THE ENGINEER OR OWNER.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING, PLACING, MOVING, LIGHTING AND MAINTAINING THE BARRICADES DURING CONSTRUCTION OF THE ENTIRE PROJECT.

SCALE: 1'' = 200'

- 4. THE BARRICADES SHALL BE WEIGHTED AND CAPABLE OF WITHSTANDING UP TO 110 M.P.H. WIND FORCES.
- 5. INSTALL A MINIMUM OF 2 OMNI-DIRECTIONAL SOLAR POWERED RED PHOTOCELL LIGHTS EQUALLY SPACED PER EACH 8' LONG BARRICADE. LIGHTS SHALL MAINTAIN SUCH INTENSITY SO AS TO BE READILY IDENTIFIED FROM DISTANCES OF 200' OR GREATER DURING DARKNESS PERIODS.
- 6. A MINIMUM OF 2 FLAGS NO MORE THAN 20" SQUARE MOUNTED TO THE BARRICADE AND NO MORE THAN 30" HIGH SHALL BE AFFIXED FOR EACH SPAN OF BARRICADES. FLAGS SHALL BE ALTERNATING AVIATION ORANGE (FED-STD-595, NO. 12197) AND WHITE.
- 7. THE COST OF PROVIDING AND MANIPULATING BARRICADES SHALL BE INCLUDED IN THE "MAINTENANCE OF TRAFFIC" PAY



REVISIONS				
NO.	REMARK	DATE	BY	
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#### **Construction Safety and Phasing Plan (CSPP):**

Scope of Work: This project at the Darke County Airport consists of a new Hangar, the contractor to furnish all labor, materials, equipment, and transportation necessary to construct all elements of the project described in the following plans, including

- Building and Framework
  - Install new concrete apron - Surface Grading, drainage and erosion control measures

**General:** The CSPP has been developed utilizing the process set forth in AC 150/5370-2 "Operational Safety on Airports During Construction". Everyone has a role in operational safety on airports during construction: the airport operator, the airport's consultants, the construction contractor and subcontractors, airport users, airport tenants, ARFF personnel, Air Traffic personnel, including Technical Operations personnel, FAA Airports Division personnel, and others. Close communication and coordination between all affected parties is the key to maintaining safe operations. Such communication and coordination should start at the project scoping meeting and continue through the completion of the project. The airport operator and contractor should conduct onsite safety inspections throughout the project and immediately remedy any deficiencies, whether caused by negligence, oversight, or project scope change.

**SPCD:** The contractor is responsible for submitting a Safety Plan Compliance Document (SPCD) which details how the contractor will comply with the CSPP. It is not possible to determine all safety plan details, which are specific to the contractor, during the development of the CSPP. The successful contractor will develop a SPCD that includes equipment hazards, contractor's points of contact, equipment heights, etc. that will be submitted to the airport for review prior to the issuance of a notice-to-proceed. A sample of a SPCD is provided in the project specifications.

#### Airport Operators conducting construction will use pre-design, pre-bid and pre-construction conferences to introduce the subject of airport operational safety during construction (see AC 150/5300-9). In addition, the following should be coordinated as required:

- a.) <u>Contractor Progress Meetings:</u> Operational safety will be a standing agenda item for discussion during progress meetings throughout the project. The progress meetings will be held either weekly or bi-weekly at the owner's and engineer's discretion and the frequency may vary during the course of the project. Attendance by the prime contractor and relevant sub-contractors is mandatory.
- b.) Scope or Schedule Changes: Changes in the scope or duration of the project may necessitate revisions to the CSSP and review and approval by the airport operator and the FAA. The prime contractor will submit a schedule at the beginning of the project and will be required to update the schedule as deviations occur due to weather, unforeseen circumstances, etc.
- c.) FAA ATO Coordination: Early coordination with FAA ATO is required to schedule airway facility shutdowns and restarts. Relocation or adjustments to NAVAIDs, or changes to final grades in critical areas, may require an FAA flight inspection prior to restarting the facility. Flight inspections must be coordinated and scheduled well in advance of the intended facility restart.

The project is broken into one (1) phase of construction and is outlined below:

<u>Phase 1:</u> Installation of new Community Hanagar.

Sequence of work estimated as follows:

Phase	Calendar Days	WORK HOUR RESTICTIONS
1	140	None

## (3) Areas and Operations Affected by the Construction Activity

See Operations Effects table below.

## Table 1: Airport Operations Affected by Construction - Phase 1

m	Taxiway Restrictions	Runway Restrictions
1	No Taxiway Restricitons	No Runway Restrictions.

# **Table 2: Safety Area of Active Runways**

Runway	Runway Aircraft Approach Category and Airplane Design Group		Phase 1
9-27	B-II	150'	150'

Runway	Aircraft Approach	Airplane	Safety Area Prior	Minimum Distance to Threshold

on Approach Slope

1,000'

20:1

20:1

Table 3: Runway Approach Protection Areas During Construction

Design Group to Threshold

II

\*See CSPP plan sheets for graphical representation of impacts.

300'

# (4) Protection of Navigational Aids (NAVAIDS)

В

Before commencing construction activity, parking vehicles or storing construction equipment and materials near a NAVAID, coordinate with the appropriate FAA ATO/Technical Operations Office to evaluate the effect of construction activity and the required distance and direction from the NAVAID. Construction activities, material/equipment storage, and vehicle parking near electronic NAVAIDs require special consideration since the may interfere with signals essential to air navigation. This project will not impact any NAVAIDS.

# **Table 4: NAVAID Facility Impacts**

Facility Type	Phase Impacted	Impact
Runway 8 PAPI	-	NONE
Runway 26 PAPI	-	NONE

#### (5) Contractor Access

- a.) <u>Location of Stockpiled Materials:</u> Stockpiled materials and equipment storage are not permitted within the Runway or Taxiway Safety Area (RSA/TSA) and Object Free Zone (OFZ), and if possible should not be permitted within the Object Free Area (OFA) of an operational runway. No stockpiles will be created by the project.
- b.) <u>Vehicle and Pedestrian Operations:</u> Vehicle and pedestrian access routes for airport construction projects must be controlled to prevent inadvertent or unauthorized entry of persons, vehicles, or animals onto the Aircraft Operations Area (AOA). The airport operator should coordinate requirements for vehicle operations with airport tenants, contractors, and the FAA air traffic manager. 1.) Construction Site Parking: The area for vehicle parking for contractor employees is shown on the plan sheets of the CSPP.

There shall be no unauthorized entry of persons or vehicles onto the AOA.

- 2.) Construction Equipment Parking: Contractor employees must park and service all construction vehicles in the designated staging area and never in the safety area of an active runway or taxiway. Unless a complex setup procedure makes movement of specialized equipment infeasible, inactive equipment must not be parked on a closed taxiway or runway. If it is necessary to leave specialized equipment on a closed taxiway or runway at night, the equipment must be well lighted. A maximum equipment height of 25 feet will be enforced, with the location submitted on a FAA Form 7460-1.
- 3.) Access and Haul Roads: The access and haul roads to the project site will be from OH-219 as shown on the plan sheets of CSPP. The contractor is not permitted to use any other access points. This access shall be clearly marked by the contractor to prevent trucks and personnel from inadvertently entering into area open to airport operations. The maximum equipment height on the access and haul road will be 25 feet.
- 4.) Marking and Lighting of Vehicles: Per AC 150/5210-5, the standard for identification lighting is a yellow flashing light that is mounted on the uppermost part of the vehicle structure. The light must be visible from any direction, day and night, including from the air. For vehicles and/or construction equipment where a light is not feasible, a flag must be attached that is readily visible. The flag must be at least a 3-foot by 3-foot square having a checkered pattern of international orange and white squares with at least 1 foot on each side.
- 5.) <u>Description of Proper Vehicle Operations:</u> All contractor vehicles shall be in proper and safe working order. Under normal conditions vehicles shall follow two-way radio communications procedures outlined below in 9.), under lost communications or emergency conditions all vehicles shall return to the staging area immediately while avoiding the AOA and all safety areas.
- 6.) Required Escorts: The Contractor's access to the primary Project work areas and AOA shall be via the haul road as shown on the plans. The Contractor will be required to coordinate with the airport manager.
- 7.) <u>Training Requirement for Vehicle Drivers:</u> A drivers training program is not required. All personnel driving on the airport shall be familiar with the FAA publication "FAA Guide to Ground Vehicle Operations." The airport operator and the engineer also reserve the right to revoke driving privileges from contractor personnel.
- 8.) <u>Situational Awareness:</u> Vehicle drivers must confirm by personal observation that no aircraft is approaching their position (either in the air or on the ground) when given clearance to cross a runway, taxiway, or any other area open to airport operations. In addition, it is the responsibility of the escort vehicle driver to verify the movement/position of all escorted vehicles at any given
- 9.) Two-way Radio Communications Procedures: The Contractor is not required to have a radio for this project.
- 10.) Maintenance of the Secured Area of the Airport: The project is not inside of a secure area.

- Construction contractors must carefully control and continuously remove waster or loose materials that might attract wildlife. Contractor personnel must be aware of an avoid construction activities that can create wildlife hazards on airports such as:
- a.) <u>Trash:</u> Food scraps must be collected from construction personnel activity. b.) Standing Water: Contractors must minimize the creation of standing water during construction by always maintaining positive
- drainage. Any standing water that exists after a rainfall event shall be drained immediately. Any pumping required is incidental and at
- c.) Tall Grass and Seeds: Grass seed is attractive to birds. Lower quality seed mixtures can contain seeds of plants (such as clover) that attract larger wildlife. Seeding shall comply with the project specifications.
- d.) <u>Poorly Maintained Fencing and Gates:</u> The Darke County Airport does not have a security fence.
- e.) <u>Disruption of Existing Wildlife Habitat:</u> No existing wildlife habitat is expected to be disturbed by this project. The contractor shall notify the airport operator and engineer of wildlife sightings.

Waste and loose materials, commonly referred to as FOD, are capable of causing damage to aircraft landing gears, propellers, and jet engines. Construction contractors must not leave or place FOD on or near active aircraft movement areas. Materials capable of creating FOD must be continuously removed during the construction project. Areas open to aircraft operation shall be inspected for FOD by the contractor at the end of each work day if work was done in that area.

# (8) Hazard Materials (HAZMAT) Management

Contractors operating construction vehicles and equipment on the airport must be prepared to expeditiously contain and clean-up spills resulting from fuel or hydraulic fluid leaks. Transport and handling of other hazardous materials on an airport also requires special procedures.

# (9) Notification of Construction Activities

- a.) List of Responsible Representatives:
  - Darke County Airport Manager
  - Scott Naas (937) 467-9360
- Butler, Fairman & Seufert, Inc. (317) 713-4615 Office
- b.) NOTAMs: Only the airport operator or ATCT may initiate or cancel NOTAMs on airport conditions, and is the only entity that can close or open a runway. The airport operator must coordinate the issuance, maintenance and cancellation of NOTAMs about airport conditions resulting from construction activities with tenants and must provide information on closed or hazardous conditions on airport movement areas to the FAA Flight Service Station (FSS) so it can issue a NOTAM. Any person having reason to believe that a NOTAM is missing, incomplete, or inaccurate must notify the airport operator.
- c.) <u>Emergency Notification Procedures:</u> The following are contacts for this project.
  - 1.) Emergencies: Dial 911 2.) Non-Emergency numbers:
- Versailles Police Department (937) 526-3712 Versailles Fire Department (937) 526-3112
- d.) Coordination with ARFF: No Aircraft Rescue and Fire Fighting (ARFF) equipment is stationed at the Van Wert County Airport.
- 1.) Part 77: FAA Form 7460-1 has been submitted to the FAA for this project. Any deviation from the plan construction areas may require another submission for FAA review. 2.) Part 157: Title 14 CFR Part 157 does not apply to this project.
- 3.) NAVAIDs: There are no FAA owned/maintained NAVAIDS at the Darke County Airport.

# (10) Inspection Requirements

- a.) <u>Daily Inspections:</u> Inspections of the site to verify that it is in compliance with the CSPP should be conducted at least daily, but more frequently if needed. The engineer will provide the contractor with a checklist for this inspection. The resident engineer (RE) will also
- b.) Final Inspections: Before re-opening closed sections of the airport to operations, the contractor, airport operator, and RE shall inspect the area. Upon their concurrence that the area is safe to operate aircraft, the area will re-open.

#### (11) Underground Utilities

Locations of all existing underground utilities shown on this plan are based upon above ground evidence (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) and are speculative in nature. There may also be other existing underground utilities for which no above ground evidence was observed. The exact locations of said existing underground utilities should be verified by the contractor prior to any and all construction. Ohio Utilities Protection Services may be used to locate the public utilities by calling 811 or (800) 362-2764. They will not however locate airport and FAA owned utilities. Any airport owned utilities that are damaged by construction must be repaired immediately. The contractor shall have an electrician that is available to respond in a timely fashion in

## (12) Penalties

Vehicle/Pedestrian Deviations (V/PDs) from the CSPP will face a penalty of varying amount depending on the severity of the deviation. A runway incursion is any unauthorized intrusion onto a runway, regardless of whether or not an aircraft presents a potential conflict. See runway incursion penalty table below:

Runway Incursion Category	Description	Penalty
Category A	A serious incident in which a collision was narrowly avoided.	\$1,500 fine and Rescission of Access to the AOA.
Category B	An incident in which separation decreases and there is a significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision.	\$500 fine and Rescission of Access to the AOA.
Category C	An incident characterized by ample time and/or distance to avoid a collision.	Rescission of Driving Privileges.
Category D  An incident that meets the definition of runway incursion such as incorrect presence of a single vehicle/person/aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences.		Written Warning.

Violations of the CSPP outside of runway incursions will be assessed a written warning for the first violation and then \$500 per violation thereafter.

#### (13) Special Conditions

In the case of an aircraft in distress or an accident, all contractor personnel must remove all equipment from the project site and return to the staging area. The project will be suspended until clearance is given from the engineer and the airport operator. In the event of a V/PD the project will be suspended until a safety meeting and de-briefing of the incident occurs.

#### (14) Runway and Taxiway Visual Aids

Areas where aircraft will be operating are clearly and visibly separated from construction areas, including closed runways. Throughout the duration of the construction project, verify that these areas remain clearly marked and visible at all times and that marking, lighting, signs, and visual NAVAIDs remain in place and operational.

- a.) General: Airport markings, lighting, signs, and visual NAVAIDs must be clearly visible to pilots, not misleading, confusing, or deceptive. All must be secured in place to prevent movement by prop wash, jet blast, wing vortices, or other wind currents and
- constructed of materials that would minimize damage to an aircraft in the event of inadvertent contact. b.) Markings: Markings must be in compliance with the standards of AC 150/5340-1, Standards for Airport Markings. Runway and exit
- taxiways closed to aircraft operations are marked with a yellow X. 1.) Closed Runways and Taxiways (See plan sheets for locations)
- i. Temporary Closed Runways. For runways that have been temporarily closed, place an X at each end of the runway directly on
- or as near as practicable to the runway designation numbers. See lighted closure X detail and notes ii. Temporary Closed Taxiways. Place barricades outside the safety area of intersecting taxiways. For runway/taxiway
- intersections, place an X at the entrance to the closed taxiway from the runway. iii. Construct the temporary closure X from any of the following materials: fabric, colored plastic, painted sheets of plywood, snow
- fence, or similar materials. They must be yellow and properly configured and appropriately secured to prevent movement by prop wash, jet blast, or other wind currents.
- iv. The application rate of paint to mark a short-term temporary runway and taxiway marking may deviate from the standard, but the dimensions must meet the existing standards. c.) Lighting and Visual NAVAIDs: Lighting must be in conformance with AC 150/5340-30, Design and Installation Details for Airport Visual
- Aids, and AC 150/5345-50, Specifications for Portable Runway and Taxiway Lights. When disconnecting runway and taxiway lighting fixtures, disconnect the associated isolation transformers. Alternatively, cover the light fixture in such a way as to prevent light leakage. Avoid removing the lamp from energized fixtures because an excessive number of isolation transformers with open secondaries may damage the regulators and/or increase the current above its normal value. Secure, identify, and place any above ground temporary wiring in conduit to prevent electrocution and fire ignition sources.
- 1.) Temporarily Closed Runways: There will be no temporary runway closures with this project. 2.) Partially Closed Runways and Displaced Thresholds: There will be no partially closed runway during the course of this project. 3.) Temporarily Closed Taxiways: Place barricades to restrict access to temporarily closed areas during the course of the project.
- d.) Signs: To the extend possible, signs must be in conformance with AC 150/5345-44, Specifications for Runway and Taxiway Signs and AC 150/5340-18, Standard for Airport Sign Systems. At any time a sign does not serve its normal function; it must be covered or removed to prevent misdirecting pilots.

# (15) Marking and Signs for Access Routes

Pavement markings and signs for construction personnel will conform to AC 150/5340-18 and, to the extent practicable, with the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) and/or State highway specifications.

# (16) Hazard Marking and Lighting

Hazard Marking and Lighting prevents pilots from entering areas closed to aircraft, and prevents construction personnel from entering areas open to aircraft.

## 1.) Barricades, including traffic cones, (weighted or sturdily attached to the surface) are acceptable methods used to identify and define the limits of construction and hazardous areas on the airport. The spacing of barricades must be such that a breach is

- physically preventable barring a deliberate act. For example, if barricades are intended to exclude vehicles, gaps between barricades must be smaller than the width of excluded vehicles, generally 4 ft. 2.) Lights must be red, either steady burning or flashing, and must meet the luminance requirements for the State Highway
- Department. Batteries powering lights will last longer if lights flash. Lights must be mounted on barricades and spaced no more than 10 ft. Lights must be operated between sunset and sunrise and during periods of low visibility whenever the airport is open for operations. They may be operated by photocell, but this may require the contractor to turn them on manually during periods of low visibility during daytime hours. 3.) Barricades are not permitted in any active safety area. Within a runway or taxiway object free area, and on aprons, use orange
- traffic cones, flashing or steady burning red lights as noted above, collapsible barricades marked with diagonal, alternating orange and white stripes; and/or signs to separate all construction/maintenance areas from the movement area. Barricades shall be supplemented with alternating orange and white flags at least 20 by 20 inches square and securely fastened to prevent FOD. All barricades adjacent to any open runway or taxiway/taxilane safety area, or apron, must be as low as possible to the ground, and no more than 18 inches high, exclusive of supplementary lights and flags. Barricades must be of low mass; easily collapsible upon contact with an aircraft or any of its components; and weighted or sturdily attached to the surface to prevent displacement. The airport owns approximately 30 low profile barricades that the contractor may use, however light/flags may need to be provided by the contractor. 4.) The contractor shall provide a person on call 24 hours a day for emergency maintenance of airport hazard lighting and barricades.

The contractor must file the contact person's information with the airport operator. Lighting should be checked for proper

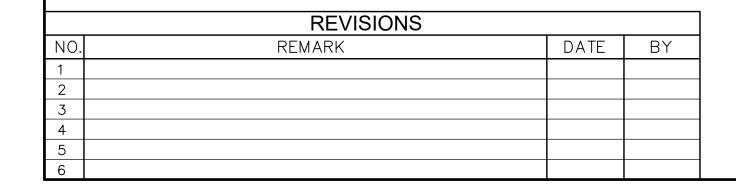
#### (17) Protection of Runway and Taxiway Safety Areas

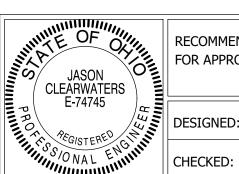
Runway Safety Areas (RSA), Taxiway Safety Areas (TSA), Obstacle Free Zones (OFZ), Object Free Areas (OFA), and approach surfaces must be protected during construction, and are shown on the plan sheets. Protection of these areas includes limitations on the locations and height of equipment and stockpiled material. See the plan sheets of the CSPP for locations and dimensions of the protected areas. a.) Runway Safety Area (RSA) & Taxiway Safety Area (TSA): A runway safety area is the defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the

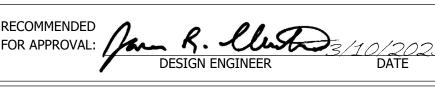
- runway. A taxiway safety area is a defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway. Construction activities within the existing RSA & TSA are subject to the following
- 1.) No construction may occur within the existing RSA or TSA while the corresponding runway or taxiway is open for aircraft
- 2.) Open trenches or excavations are not permitted within the RSA or TSA while the corresponding runway or taxiway is open. If possible, backfill trenches before the runway or taxiway is opened. If the runway or taxiway must be opened before the excavations are backfilled, cover the excavations appropriately. Covering for open trenches must allow safe operation of the heaviest aircraft operating on the runway or taxiway across the trench without damage to the aircraft. Construction contractors must prominently mark open trenches and excavations at the site with red or orange flags, as approved by the airport operator,
- and light them with red lights during hours of restricted visibility or darkness. 3.) Soil erosion must be controlled to maintain RSA and TSA standards. The RSA and TSA must be cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations, and capable, under dry conditions of supporting the
- occasional passage of aircraft without causing structural damage to the aircraft. b.) Runway Object Free Area (ROFA): Construction, including excavations, may be permitted in the ROFA. However, equipment must be
- removed from the ROFA when not in use, and material should not be stockpiled in the ROFA if not necessary. c.) Taxiway Object Free Area (TOFA): Unlike the Runway Object Free Area, aircraft wings regularly penetrate the taxiway object free area during normal operations. Thus, the restrictions are more stringent. Except as noted below, no construction may occur within
- the TOFA while the taxiway is open for aircraft operations. 1.) Construction activity may be accomplished within the TOFA subject to the following restrictions:
- Appropriate NOTAMs are issued.
- ii. Marking and lighting meeting the provisions of the CSPP are implemented. iii. Five foot clearance is maintained between equipment and materials and any part of an aircraft (includes wingtip overhang). In these situations, flaggers must be used to direct construction equipment, and wing walkers will be necessary to guide aircraft.
- Wing walkers should be airline/aviation personnel rather than construction workers. d.) Obstacle Free Zone (OFZ): In general, personnel, material and/or equipment may not penetrate the OFZ while the runway is open for aircraft operations. If a penetration to the OFZ is necessary, it may be possible to continue aircraft operations through operational
- e.) Runway Approach/Departure Areas and Clearways: All personnel, materials, and/or equipment must remain clear of the applicable threshold siting surfaces as shown on the plan sheets of the CSPP. Objects that do not penetrate these surfaces may still be

obstructions to air navigation.

- (18) Other Limitations on Construction a.) Prohibitions: No use of tall equipment (cranes, concrete pumps, etc.) unless a 7460-1 determination letter is issued for such equipment. No use of open flame welding or torches unless fire safety precautions are provided and the airport operator has approved their use. No use of electrical blasting caps is allowed on or within 1,000 ft. of the airport property. No use of flare pots is
- allowed within the AOA. b.) Restrictions: Construction suspension may be required during specific airport operations. The airport operator will notify the contractor and engineer if this is required.







DRAWN:

CHECKED:

**VERSAILLES** 8450 WESTFIFLD BLVD. SUITE 300 INDIANAPOLIS, IN, 46240-8302 FAX 317-713-4616 www.BFSEngr.com

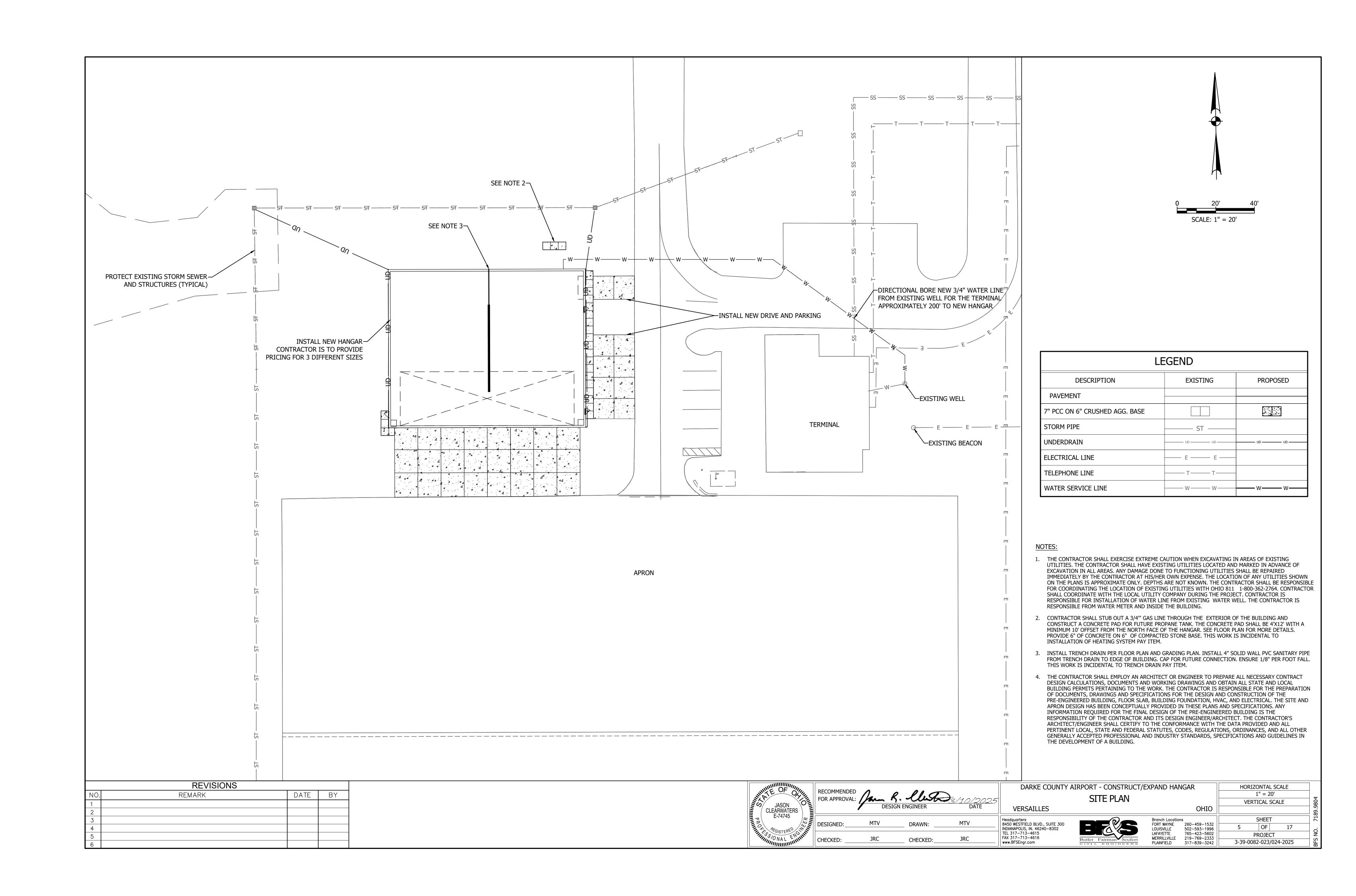


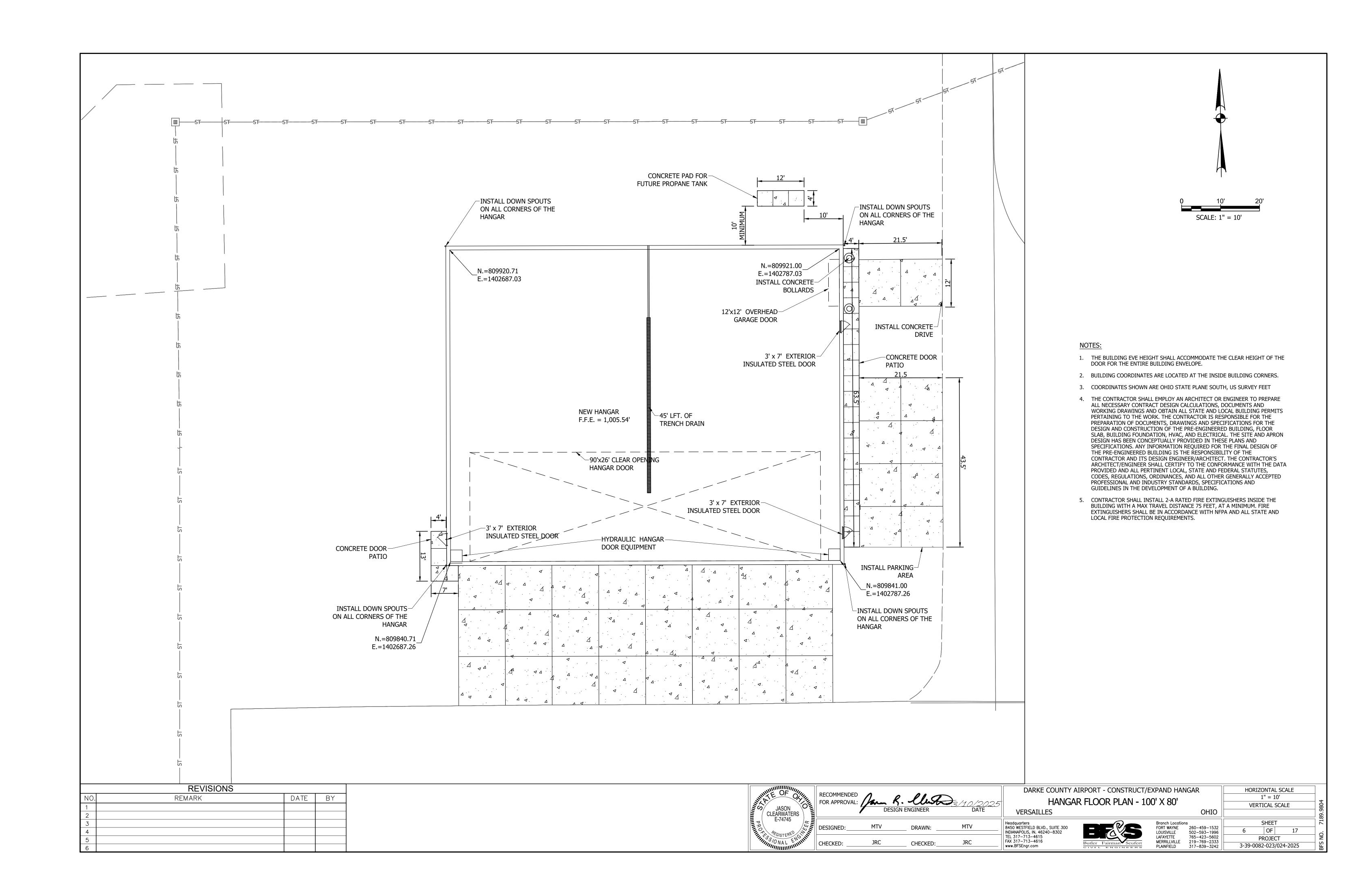
DARKE COUNTY AIRPORT - CONSTRUCT/EXPAND HANGAR

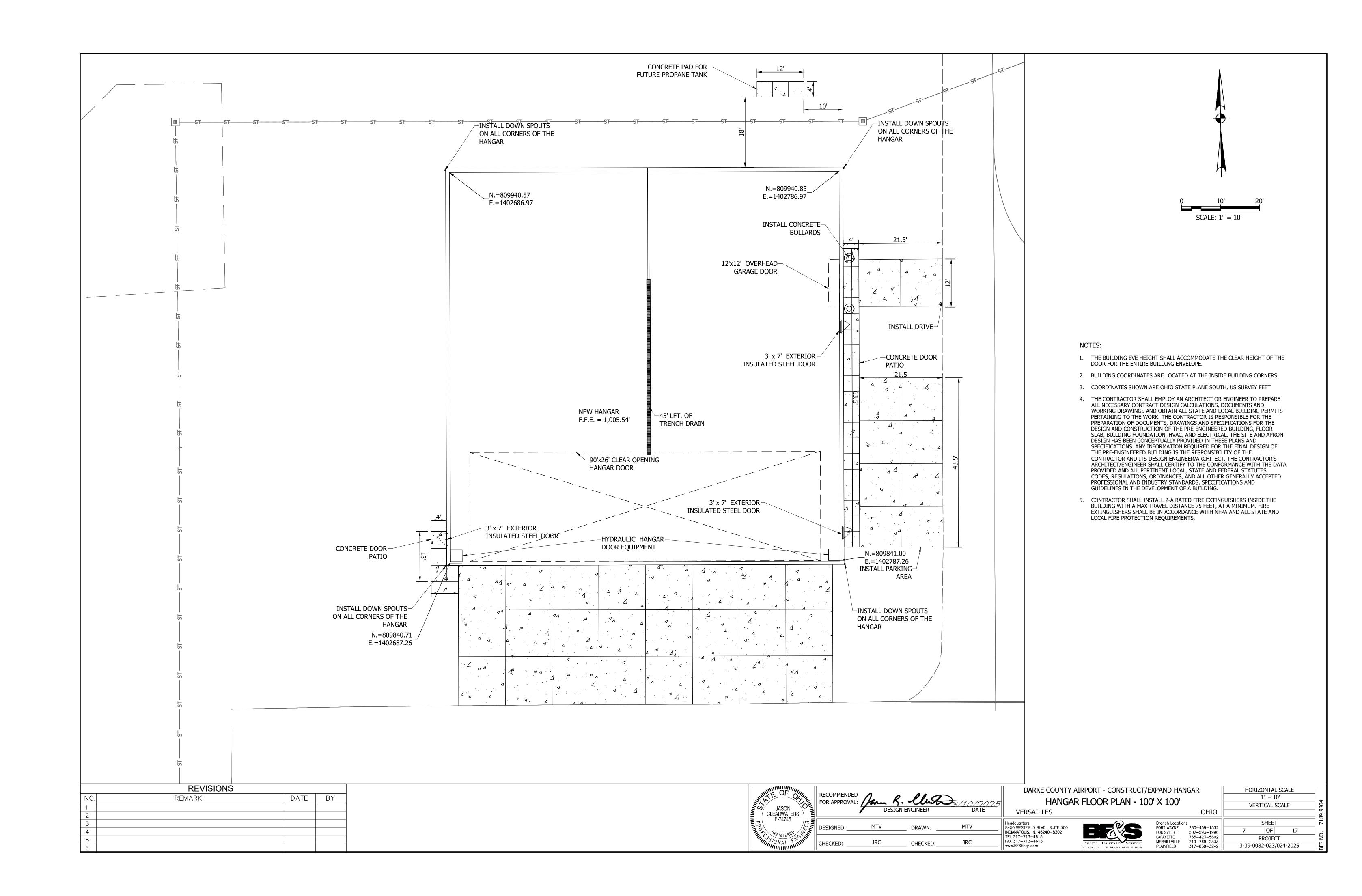
CONSTRUCTION SAFETY PHASING NOTES

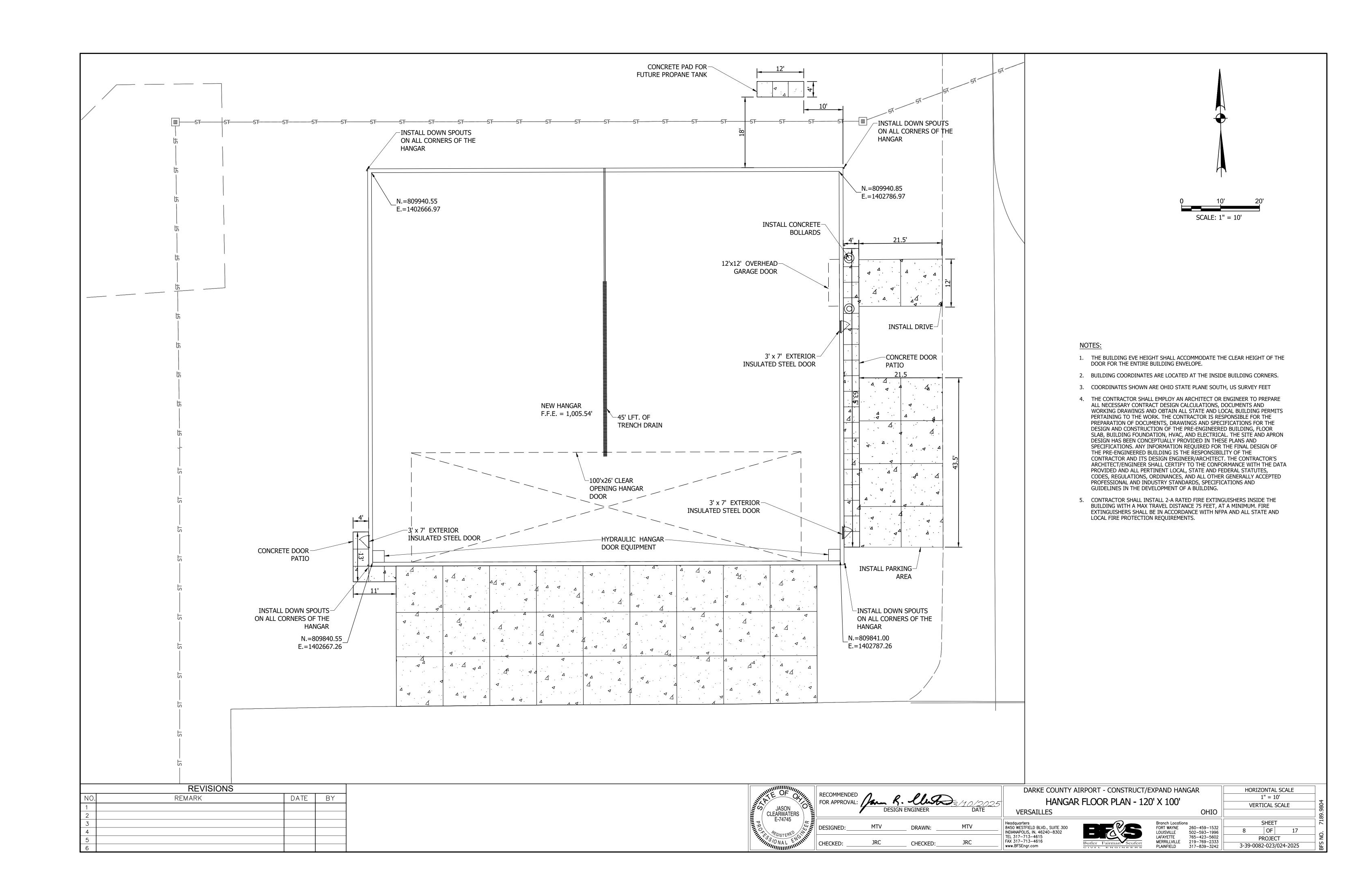
VERTICAL SCALE OHIO **Branch Locations** 260-459-1532 FORT WAYNE OF LOUISVILLE 502-593-1996 LAFAYETTE 765-423-5602 **PROJECT** MERRILLVILLE 219-769-2333 3-39-0082-023/024-2025 317-839-3242 PLAINFIELD

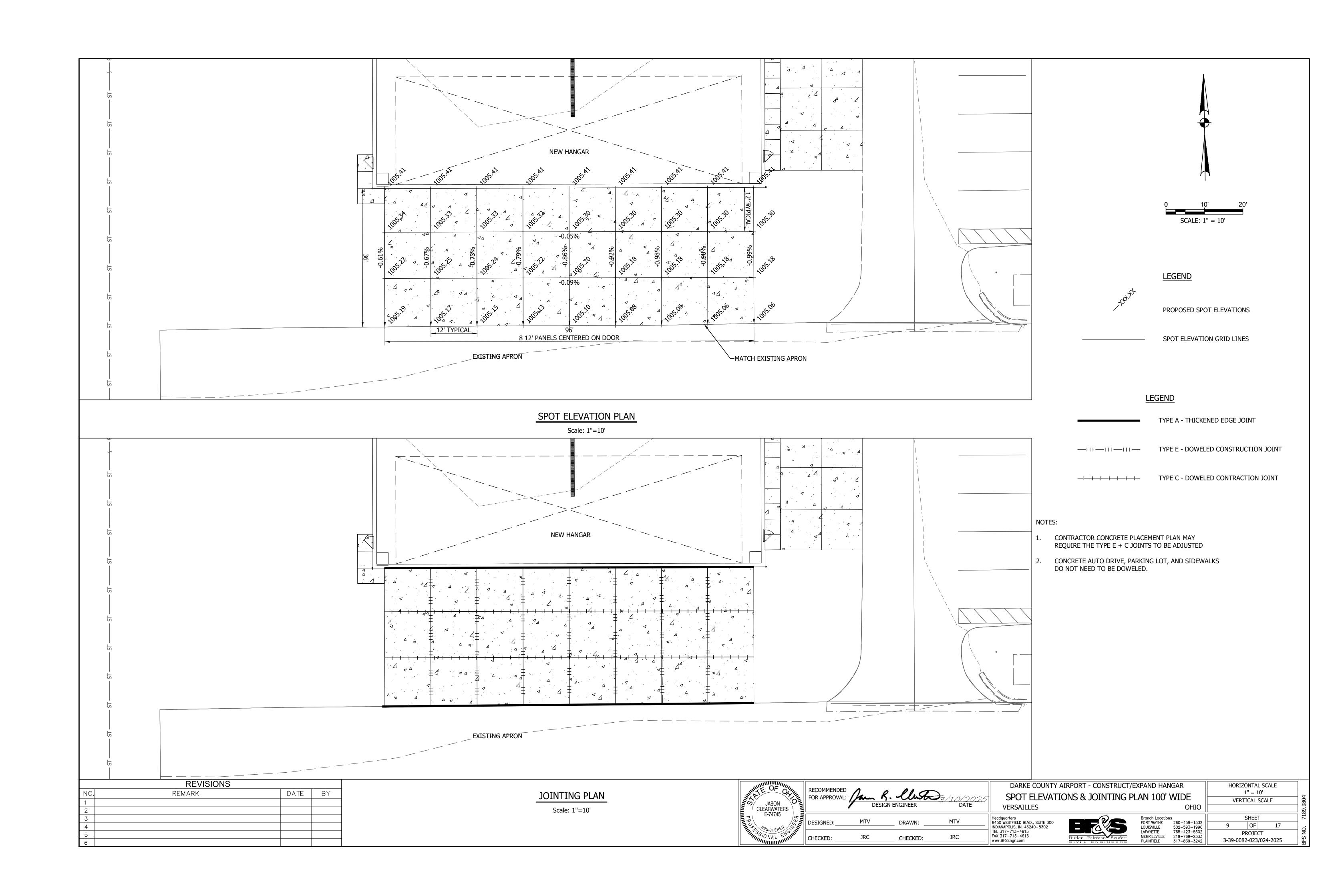
HORIZONTAL SCALE

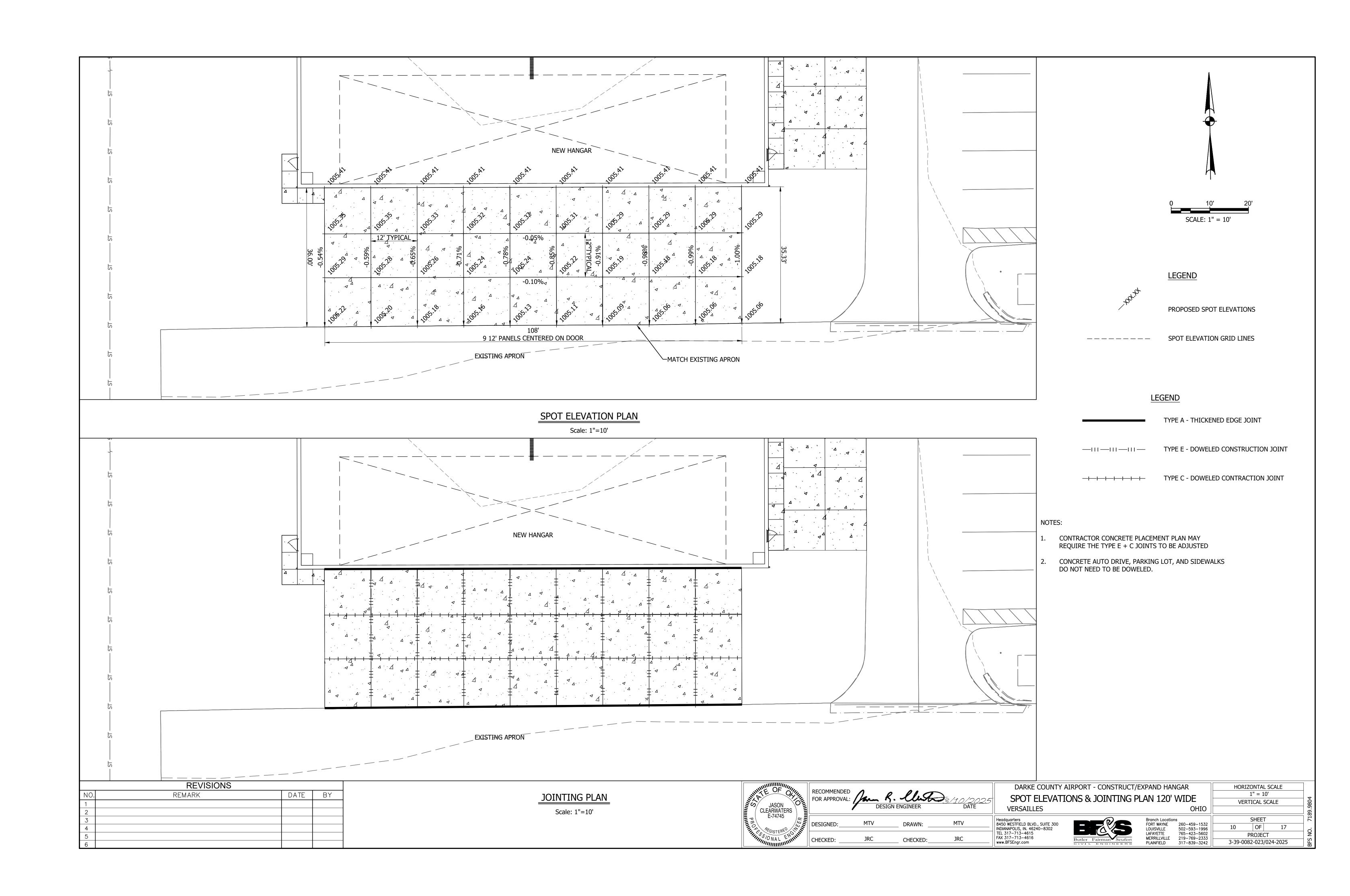


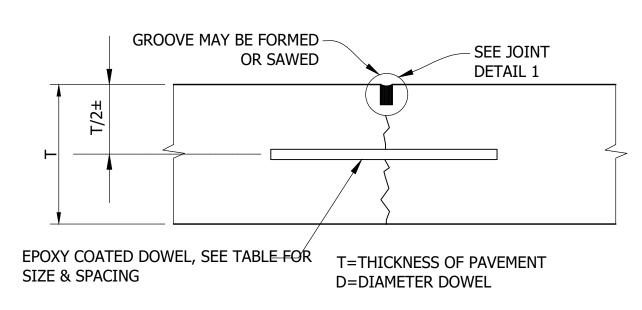






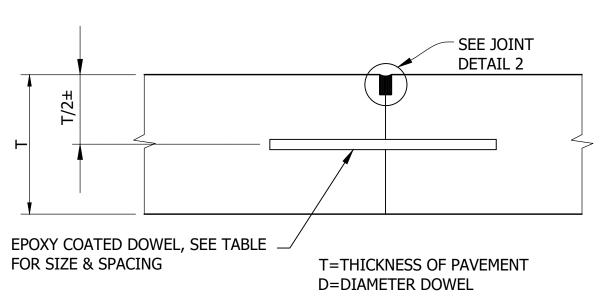






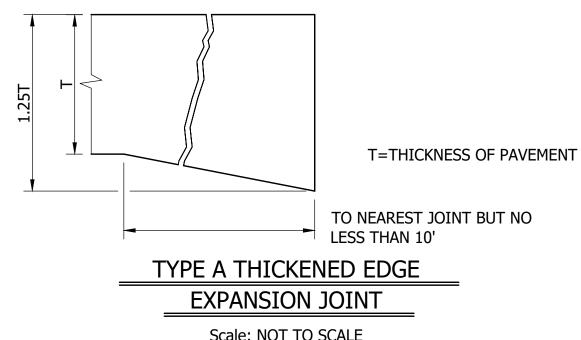
# TYPE C-DOWELED CONTRACTION JOINT

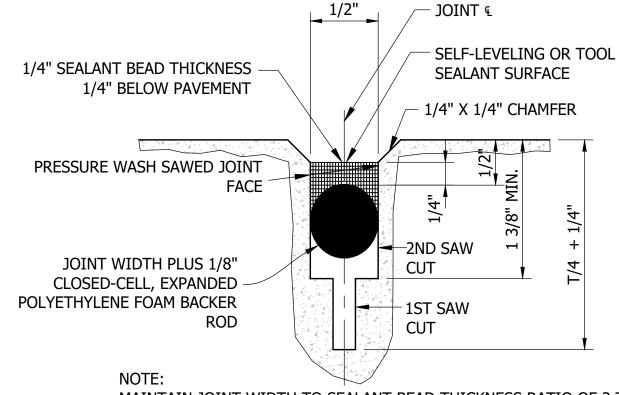
Scale: NOT TO SCALE



TYPE E-DOWELED **CONSTRUCTION JOINT** 

Scale: NOT TO SCALE

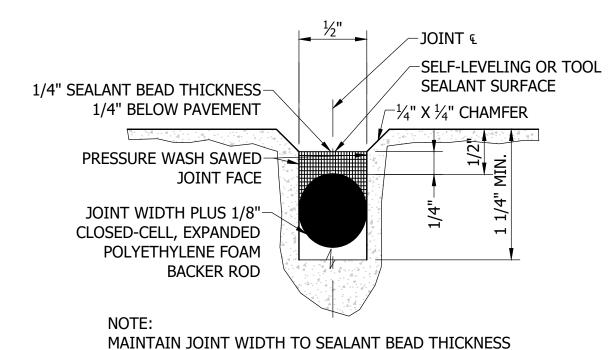




MAINTAIN JOINT WIDTH TO SEALANT BEAD THICKNESS RATIO OF 2 TO 1. PRIME AS NEEDED PER MANUFACTURERS RECOMMENDATIONS. SILICONE SEALANT ONLY.

# JOINT DETAIL 1

Scale: NOT TO SCALE



RATIO OF 2 TO 1. PRIME AS NEEDED PER MANUFACTURERS RECOMMENDATIONS. SILICONE SEALANT ONLY.

# JOINT DETAIL 2

Scale: NOT TO SCALE

DOWEL SIZE & SPACING				
SLAB DEPTH (T) (IN.)	DOWEL DIAMETER (D) (IN.)	TOTAL DOWEL LENGTH (L) (IN.)	DOWEL SPACING (S) C TO C (IN.)	
7	3/4"	18	12	

# **GENERAL NOTES**

- 1. ALL JOINTS FOR 7" PCC TO BE TYPE "C" OR "E" UNLESS SHOWN OTHERWISE.
- 2. DOWEL POSITIONING IN EITHER THE HORIZONTAL OR VERTICAL PLANE SHALL HAVE A TOLERANCE OF NO MORE THAN ±2%.
- 3. ONLY SOLID DOWELS SHALL BE ACCEPTABLE. NO HIGH-STRENGTH PIPE WILL BE ALLOWED.
- 4. NO CONCRETE SHALL BE PLACED UNTIL STEEL LAYOUT PLANS HAVE BEEN REVIEWED AND ACCEPTED BY THE ENGINEER.
- 5. NO INTERMEDIATE JOINTS IN THE MIDDLE OF A PLANNED SLAB WILL BE ALLOWED. EACH DAYS PAVING OPERATION SHALL END AT A PLANNED JOINT EMPLOYING A TYPE "E" CONSTRUCTION JOINT.
- 6. SAWCUT TERMINATION POINT SHALL NOT BE ALLOWED TO CONTINUE INTO ADJACENT SLAB.
- 7. PANELS ARE 12'-0" SQUARE UNLESS OTHERWISE NOTED.
- 8. GRADE TO DRAIN AND MULCH SEED ENTIRE PERIMETER DISTURBED BY WORK.
- 9. ALL NON-RECTANGULAR SHAPED SLABS SHALL BE REINFORCED WITH ASTM A185 COLD DRAWN WELDED STEEL WIRE FABRIC SIZE W4xW4 AND SHALL BE SPACED 6 INCHES C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS.
- 10. ALL JOINTS SHALL BE THOROUGHLY CLEANED AND DRIED PRIOR TO SEALING IN ACCORDANCE WITH ITEM P-605.
- 11. ALL DOWELS EMPLOYED IN TYPE "E" JOINTS SHALL BE DRILLED IN PLACE AS SHOWN IN DOWEL PLACEMENT DETAIL. NO DOWEL SHALL BE PUSHED WHILE SLAB IS STILL WET.
- 12. ALL DOWELS EMPLOYED IN TYPE "C" JOINTS SHALL BE PLACED AND SET UTILIZING
- 13. DOWEL SPACING AT CONCRETE PANEL CORNERS SHALL BE 12" FROM DOWEL END TO ADJACENT PERPENDICULAR DOWEL.

1.25T	<b>F</b>		T=THICKNESS OF PAVEMENT	
		-	TO NEAREST JOINT BUT NO LESS THAN 10'	
	TYPE A THICKENED EDGE			
EXPANSION JOINT				
		Scale: NOT TO	SCALE	

DATE BY

REVISIONS

REMARK

STITE .	TE OF	
William P.	JASON CLEARWATE E-74745	NOTIFIE BERNELLING
ROKININ	SONAL E	MORITIES



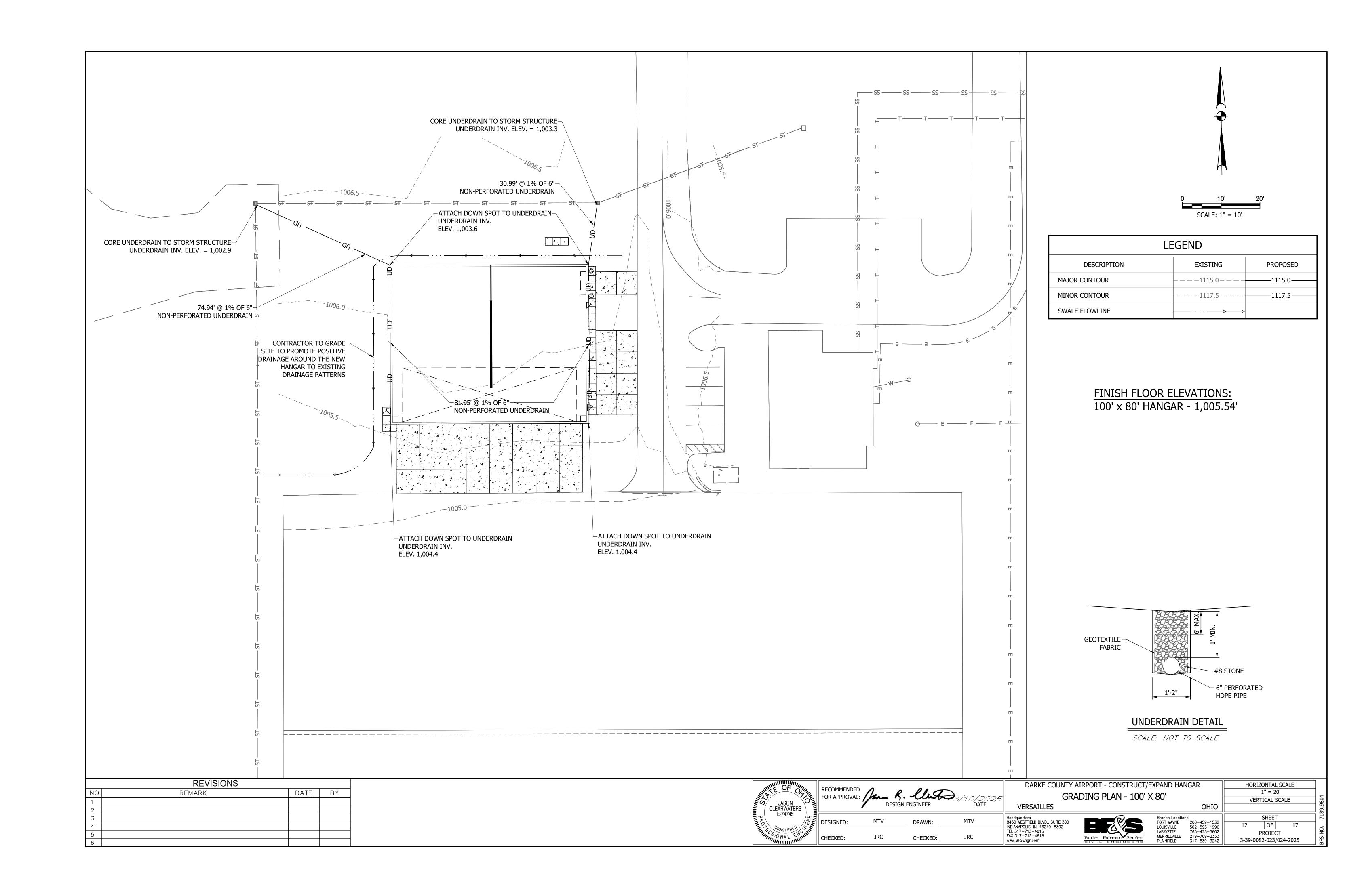
25	VERSAILLES	JOINTING D
	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302	

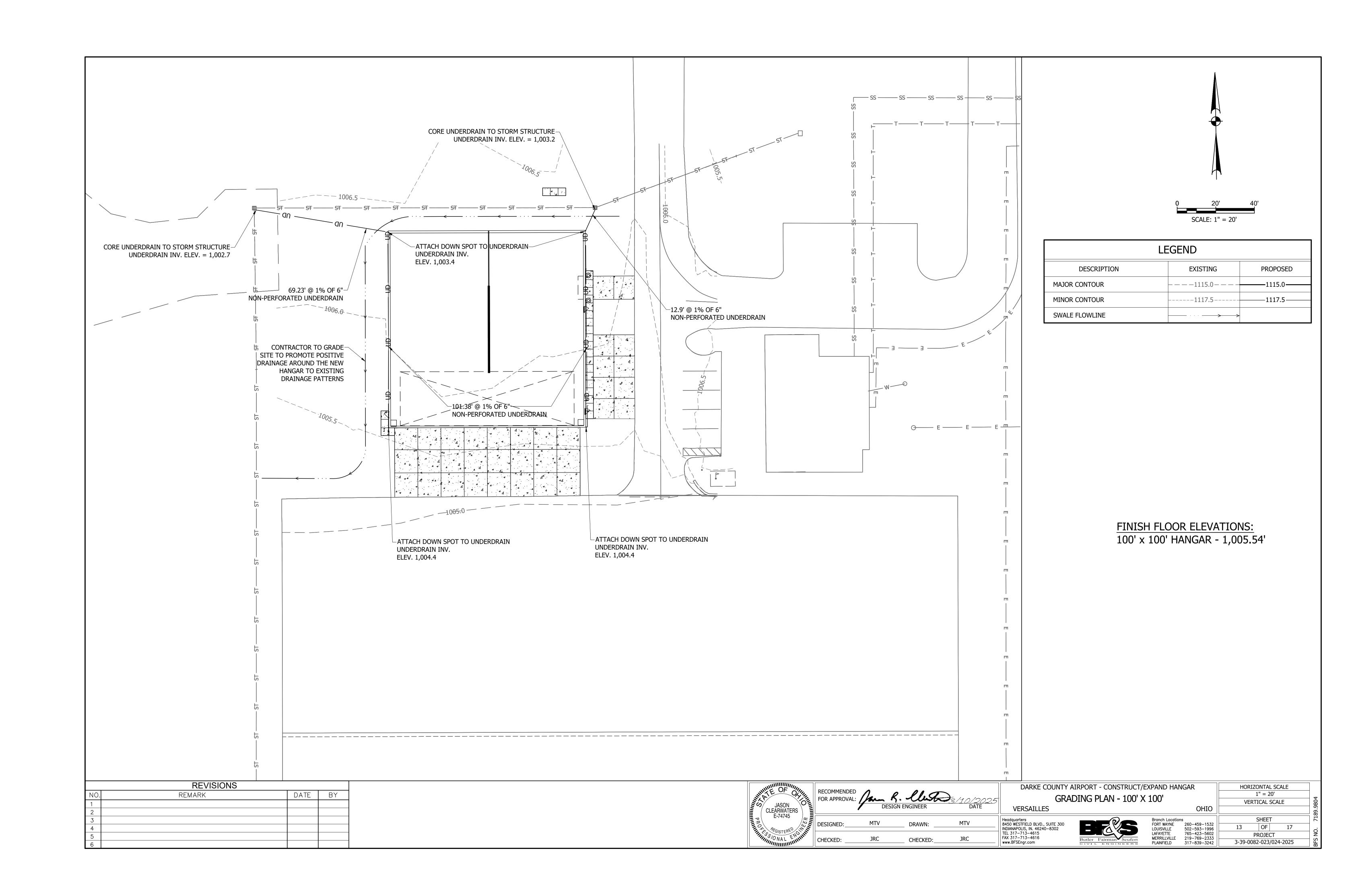
DARKE COUNTY AIRPORT - CONSTRUCT/EXPAND HANGAR

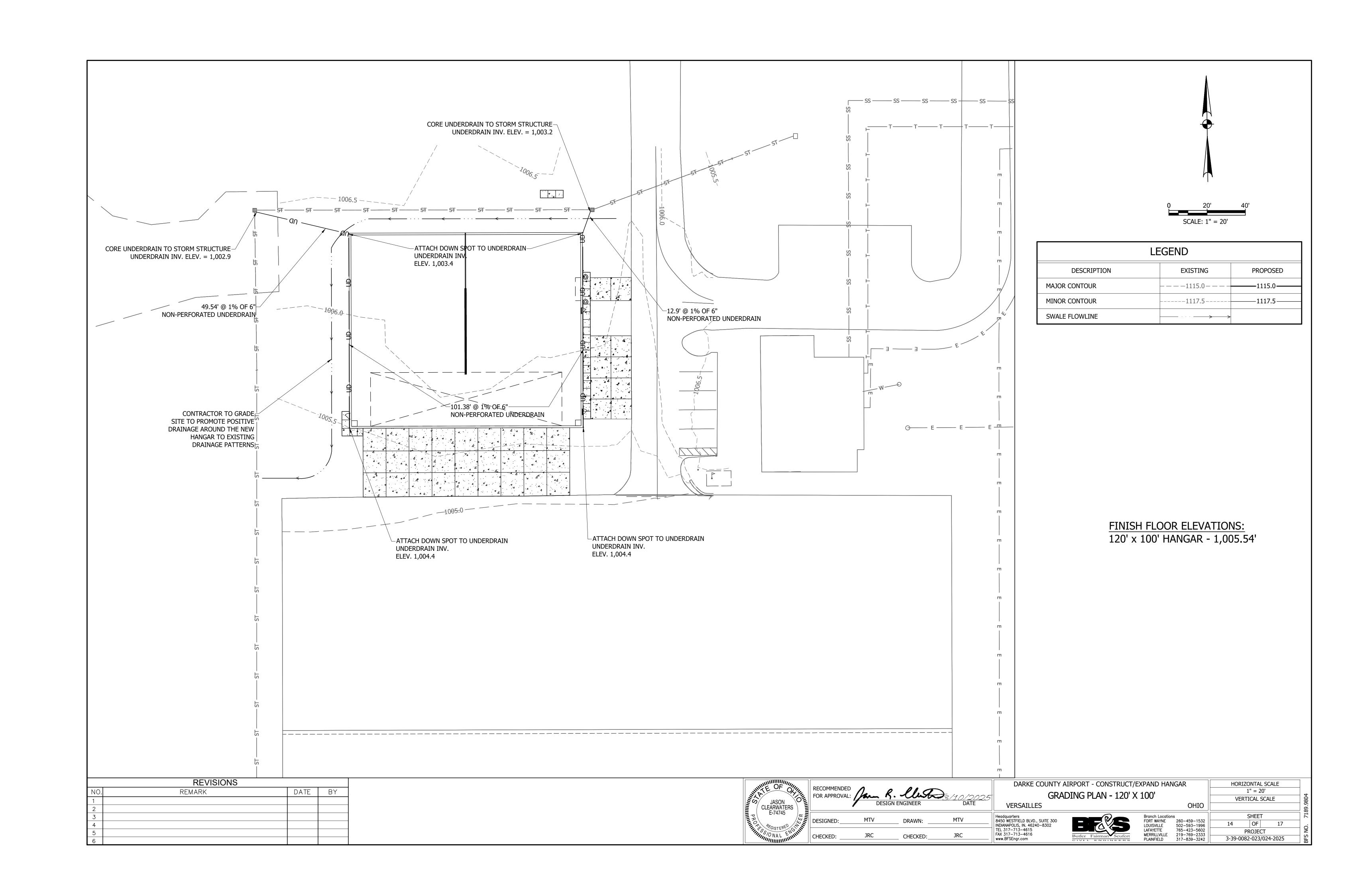
JOINTING DETAILS				N/A		
	JOINTING DETAILS			VERTICAL SCALE		
			OHIO			
	Branc			SHEET		
)		FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	11	OF	17
		LAFAYETTE MERRILLVILLE	765-423-5602 219-769-2333	I	PROJECT	•
	Butler Fairman Seufert	PLAINFIELD	317-839-3242	3-39-008	32-023/0	24-202

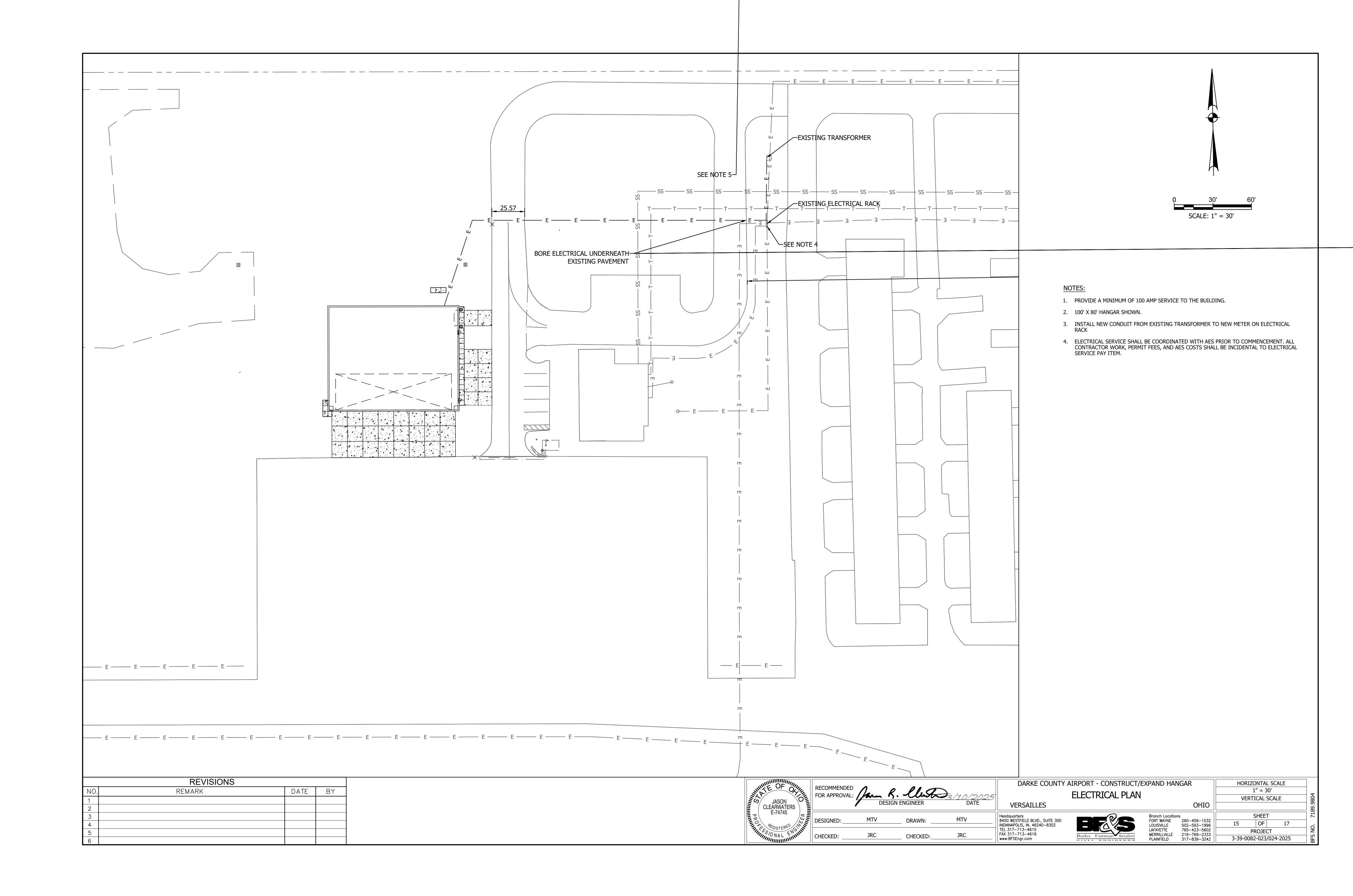
HORIZONTAL SCALE

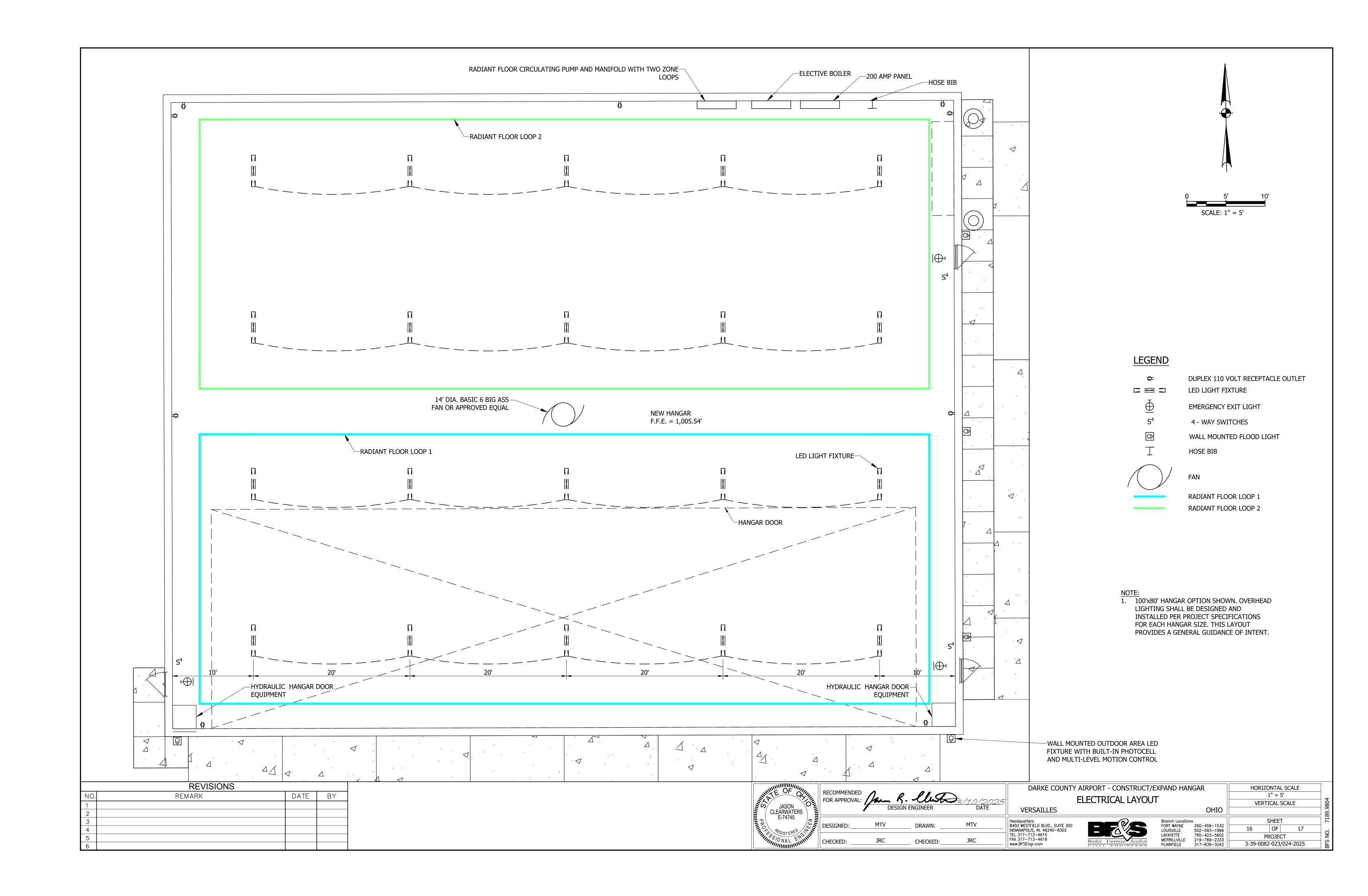
 FOR APPROVAL:	Jan 1	R. Cluston GN ENGINEER	3/10/2025 DATE	VERSAILLES
DESIGNED:	MTV	DRAWN:	MTV	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302
CHECKED:	JRC	CHECKED:	JRC	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com

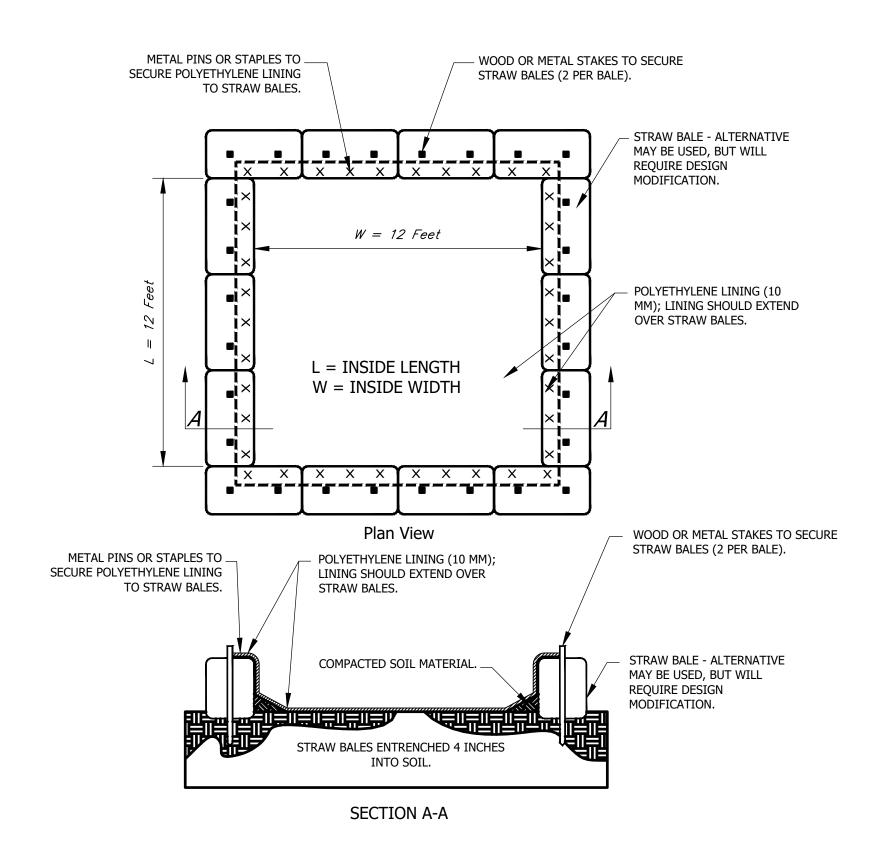






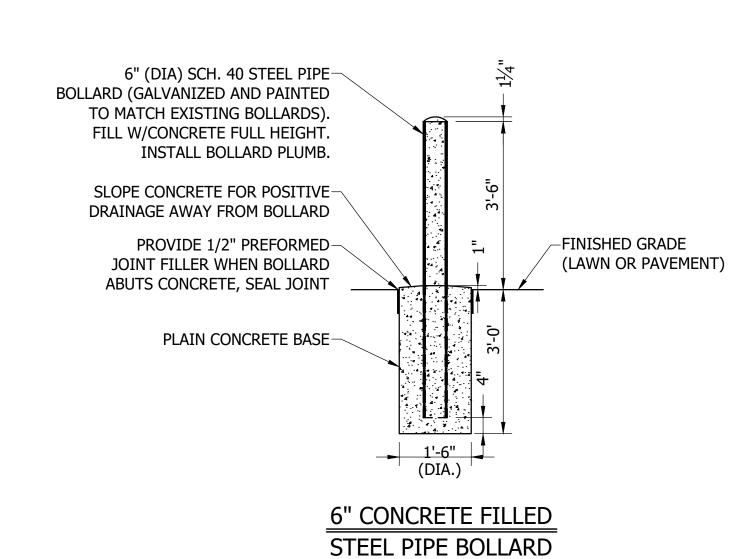




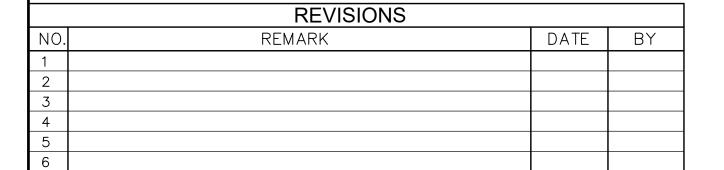


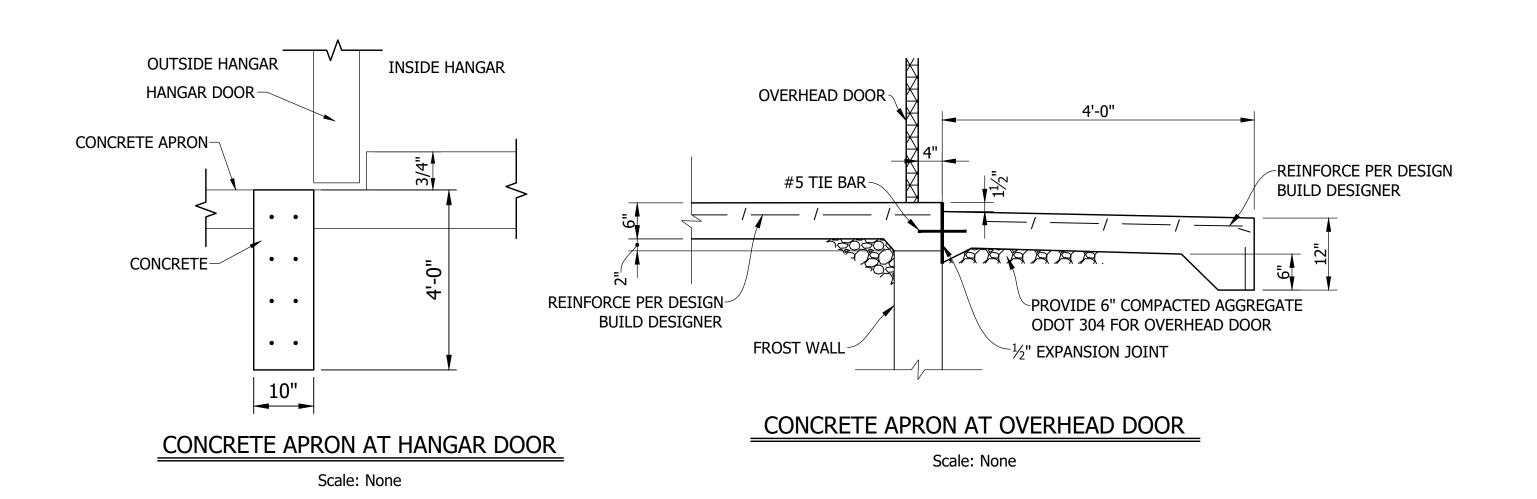
# CONCRETE WASHOUT - ABOVE GRADE

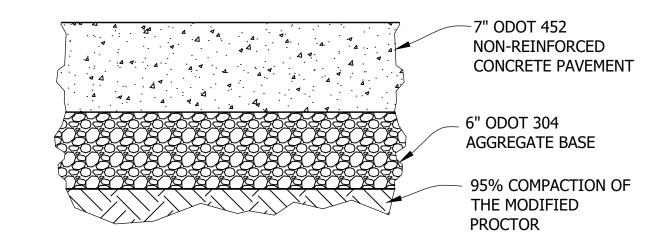
Scale: No Scale



Scale: NOT TO SCALE







TYPICAL CONCRETE SECTION-APRON

Scale: NOT TO SCALE

