

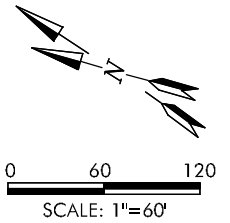
LEGEND

- TAXIWAY/TAXILANE/APRON MARKINGS (EXISTING)
- TAXIWAY/TAXILANE/APRON MARKINGS (FUTURE)
- PROPOSED AIRFIELD PAVEMENT (FUTURE)
- PROPOSED ACCESS ROAD/VEHICLE PARKING (FUTURE)
- - - PROPERTY LINE (EXISTING)
- x x FENCE (EXISTING)
- HANGARS (FUTURE)

KEY FEATURES

- 27 LIGHT AC TIEDOWNS
- T-HANGAR AND CONVENTIONAL HANGAR DEVELOPMENT AREA

NOTE:
1. RUNWAY OPTION A IS DEPICTED FOR REFERENCE



**FLORENCE MUNICIPAL AIRPORT
NORTH LANDSIDE OPTION A**

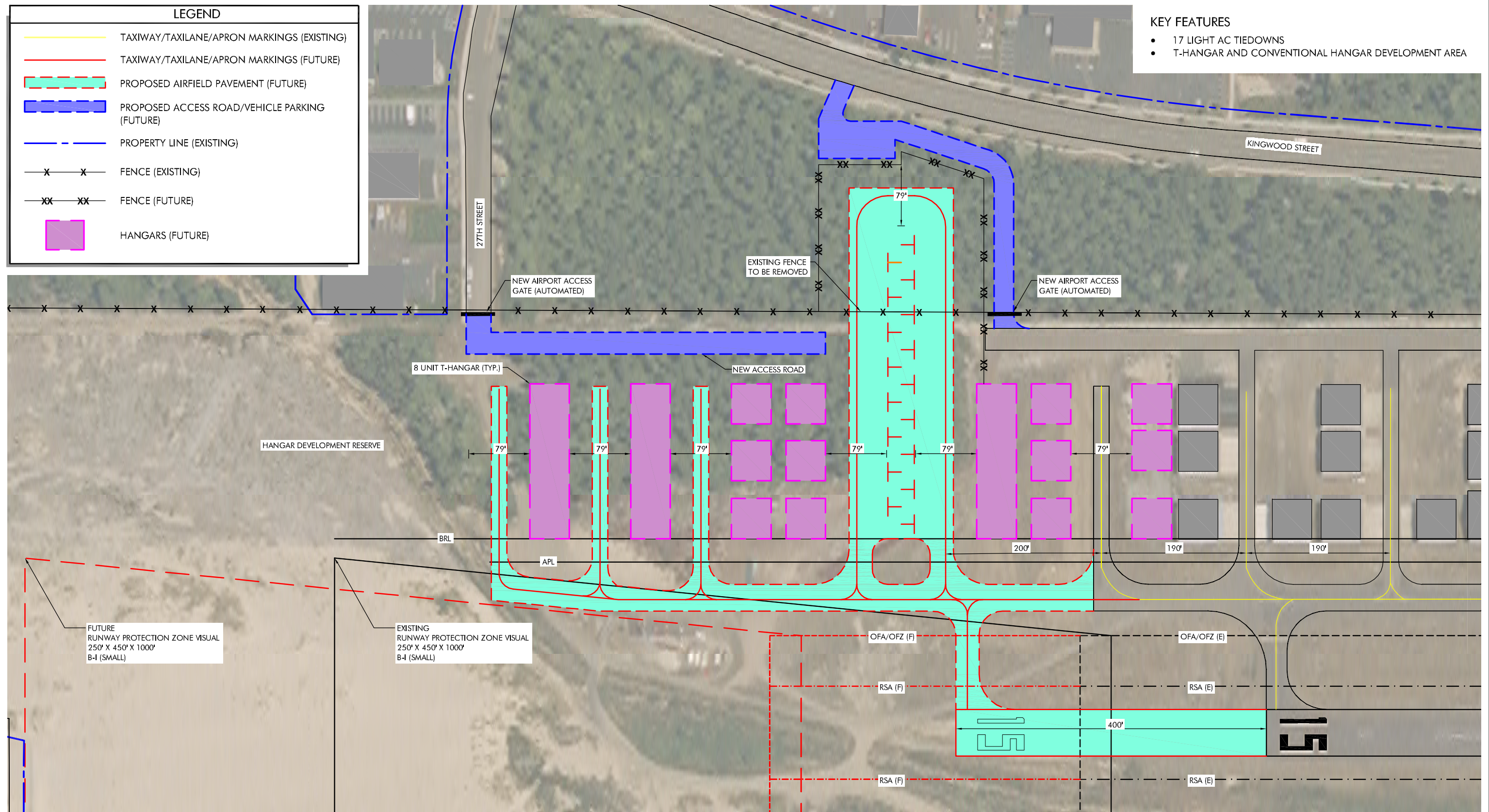
**FIGURE NO.
5-5**

LEGEND

- TAXIWAY/TAXILANE/APRON MARKINGS (EXISTING)
- TAXIWAY/TAXILANE/APRON MARKINGS (FUTURE)
- PROPOSED AIRFIELD PAVEMENT (FUTURE)
- PROPOSED ACCESS ROAD/VEHICLE PARKING (FUTURE)
- - - PROPERTY LINE (EXISTING)
- x x FENCE (EXISTING)
- xx xx FENCE (FUTURE)
- HANGARS (FUTURE)

KEY FEATURES

- 17 LIGHT AC TIEDOWNS
- T-HANGAR AND CONVENTIONAL HANGAR DEVELOPMENT AREA



NOTE:
1. RUNWAY OPTION A IS DEPICTED FOR REFERENCE



**FLORENCE MUNICIPAL AIRPORT
NORTH LANDSIDE OPTION B**

**FIGURE NO.
5-6**

Summary of Preferred Alternative

The City of Florence selected a preferred alternative concept that includes the proposed runway and parallel taxiway improvements, terminal area improvements and north landside facility improvements. **Figures 5-7 and 5-8** illustrate the preferred alternative elements described below:

The preferred landside development option does not require property acquisition to accommodate the proposed runway/parallel taxiway improvements, new hangar development, aircraft parking, and other related items. The preferred alternative addresses a variety of facility improvements within the standards defined for Airport Reference Code (ARC) B-I (small). Key elements include:

Runway & Parallel Taxiway Extension. The preferred runway option is based on **Preliminary Runway Option A**, which includes a 400-foot extension at the north end of Runway 15/33, with a 200-foot displaced threshold. The displaced threshold, coupled with an FAA-defined obstacle clearance surface (OCS) will allow an unobstructed 20:1 visual approach slope. Based on subsequent coordination with FAA, the displaced threshold will be eliminated after terrain removal is completed and an unobstructed 20:1 approach can be provided for the runway end.

- A 400-foot extension at the north end of Runway 15/33 is recommended based on the runway length required to accommodate 100 percent of the small airplane fleet at Florence. The parallel taxiway will also be extended. The runway and parallel taxiway extension will not require property acquisition. The future runway protection zone (RPZ) for Runway 15, the runway/taxiway extension, and all protected areas (RSA, OFA, and OFZ) will be contained within existing airport property. The project will require the removal of approximately 203,000 cubic yards (cy) of the sand dune located beyond the north end of the runway. The runway extension and obstruction removal project is anticipated to be conducted in phases:
 - **Phase 1.** Construct the 400-foot north runway extension with a 200-foot displaced threshold for obstruction clearance. FAA threshold clearance siting criteria contained in Advisory Circular (AC) 150/5300-13 (as amended), Appendix 2, Runway End Siting Requirements will be applied to provide an unobstructed 20:1 obstacle clearance surface (OCS) for Runway 15 without requiring any terrain removal. The runway length available for takeoff on Runway 15 and 33 and for landing on Runway 33 is 3,400 feet; the runway length available for landing on Runway 15 is 3,200 feet. Extend the parallel taxiway to connect to the new runway end; extend runway edge lights; add/realign precision approach slope indicator (PAPI).

- **Phase 2.** Eliminate the 200-foot displaced threshold for Runway 15 by removing approximately 87,100 CY of material from the sand dune to accommodate an unobstructed visual 20:1 OCS at the runway end. Modify existing runway lighting and PAPI aiming angle, as required. The useable runway length for all aircraft operations is 3,400 feet. Install Runway End Identifier Lights (REIL) for Runway 15 and 33.
- **Phase 3.** Remove approximately 116,200 CY of additional material from the sand dune to accommodate an unobstructed FAR Part 77 visual 20:1 approach surface to Runway 15. Modify PAPI aiming angle, as required. Phase 2 and 3 terrain removal may be consolidated into a single phase depending on the availability of funding.

Nonprecision Instrument Approach. The development of an instrument approach is recommended for Runway 15/33. The specifics of the approach procedure will be determined by FAA during design. For planning purposes, the ALP reflects the addition of a satellite-based Wide Area Augmentation System (WAAS) circling approach procedures for both runway ends. The development of a circling procedure is compatible with the existing utility visual FAR Part 77 airspace surfaces for Runway 15/33. It is noted that an upgrade to nonprecision instrument airspace criteria, which is required when nonprecision instrument approaches are designed to a particular runway end, requires a 500-foot wide primary surface (extending 250 feet either side of runway centerline). The primary surface must be clear of parked aircraft, hangars or other objects that could create a hazard for aircraft operating on the runway. Upgrading the FAR Part 77 surfaces for Runway 15/33 from visual to non-precision instrument is limited by the close proximity of aircraft parking apron and hangars.

Terminal Apron Reconfiguration & Expansion. The main apron will be reconfigured and expanded southward to increase current aircraft parking capacity, improve aircraft circulation within the apron, and meet FAA design standards. The improvements will increase the number of light aircraft tiedowns, provide designated business aircraft and helicopter parking positions, and improve the efficiency of aircraft fueling operations. The expanded apron capacity appears to be adequate to accommodate projected demand until late in the 20-year planning period. The primary improvements include:

- The existing aircraft fueling island will be relocated to the northwest corner of the apron to provide adequate clearance between fueling and taxiing aircraft and improve efficiency of aircraft fueling operations. Although the cost of relocating the fueling island and extending the underground fuel supply lines were cited as negative factors in the planning advisory committee evaluation, the benefits of relocation in conjunction with other planned apron improvements were deemed to outweigh the costs. In addition to improving aircraft

movement for the overall apron, relocating the fuel island will also eliminate the aircraft access conflict with Hangar “3-C,” the hangar located nearest the fuel island. The existing primary access taxilane through the main apron will be realigned.

- The existing 4-foot fencing located along the rear of the apron will be relocated approximately 15 feet east to meet object free area clearance standards for the main taxilane that runs along the back of the apron. The taxilane will be shifted eastward to maximize apron parking capacity. The existing 4-foot chain link fence along back edge of the apron will be replaced with a standard 8-foot chain link fence that will connect to the front corners of the FBO buildings. Public access to the apron will be provided through the FBO building. A controlled access pedestrian gate would be provided adjacent to the building for afterhours access to the apron. The fencing installed around the AWOS will be eliminated in conjunction with the terminal area fencing upgrade to accommodate straightening the existing north-south access taxiway. By shifting the north-south taxilane slightly eastward, one additional tiedown can be provided per row on the expanded apron.
- Two drive-through parking positions will be provided for multi-engine aircraft. The parking positions will accommodate aircraft that are not designed to use light aircraft tiedowns (multi-engine piston, single- and multi-engine turboprops, small business jets, etc.) including medevac and corporate aircraft. The drive-through parking positions will be located south of relocated fueling area with two additional access taxilane connections to the parallel taxiway to facilitate aircraft movement.
- 18 light airplane tiedowns will be provided in four east-west rows with direct taxilane access. The aircraft tiedowns are configured to meet FAA design standards for taxilane object free area clearance, for both the main taxilane and the taxilanes serving each tiedown row. It is noted that the planned expansion of the main apron will effectively maximize the parking capacity within the terminal area. Options for further reconfiguration and infill development of apron within the terminal area are limited without relocation of one or more existing hangars, which is not considered desirable. A more practical option is to reserve additional space elsewhere on the airport for future apron development.
- A helicopter parking pad will be constructed on the south side of the existing access taxiway that borders the south end of the expanded apron. The parking pad will be constructed of Portland Cement Concrete (PCC) and will be used by medevac helicopters and other itinerant rotorcraft.
- The terminal area has one site capable of accommodating a 3-unit executive hangar or two or three small/medium conventional hangars located south of the main apron

- The segmented circle, which is located near the south end of the expanded apron, will be relocated to the west side of the runway.

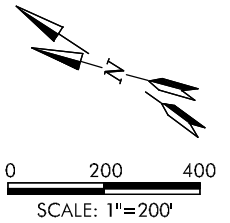
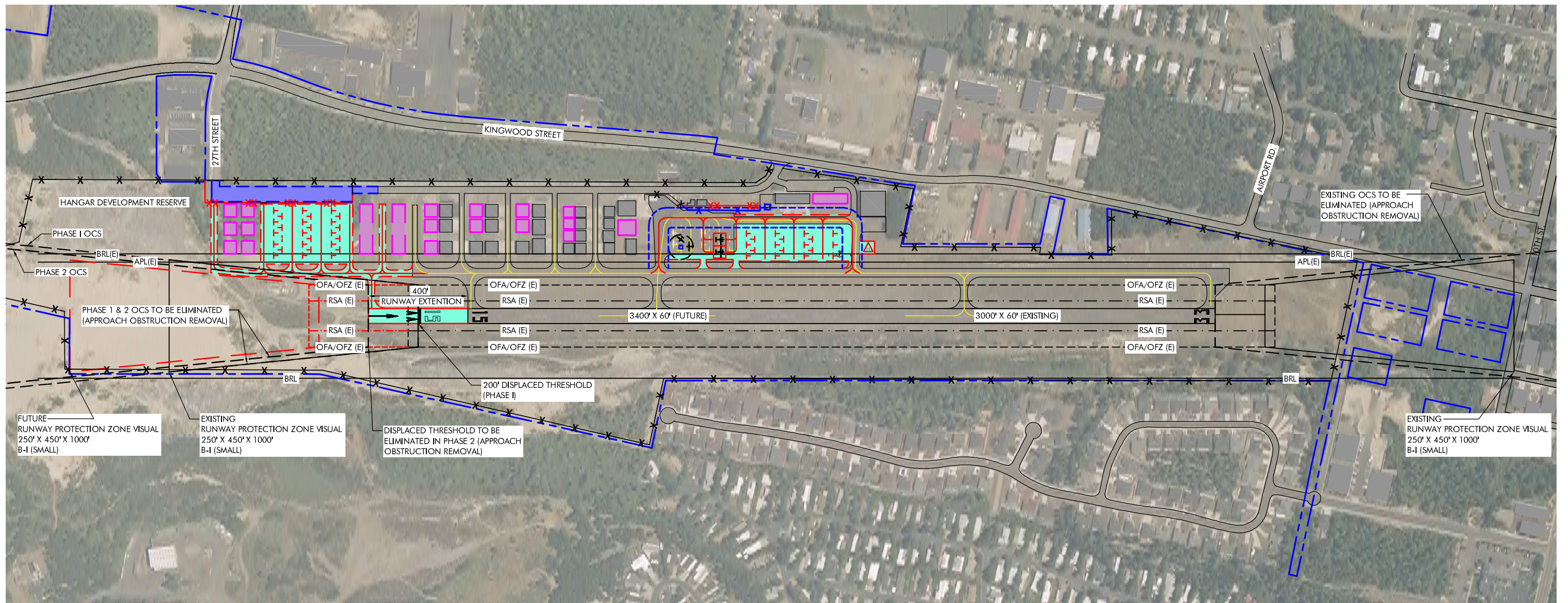
North Landside Development Area. The north hangar area is capable of accommodating hangar demand during the current planning period and beyond. The area also provides the last remaining readily-developable space on the airport for aircraft parking beyond the practical limits of the terminal area. The preferred alternative includes space reserved for development of additional conventional hangars, T-hangars and aircraft apron. As currently planned, the north landside area provides storage capacity for approximately 60 additional aircraft:

- Eleven (11) conventional hangar spaces with current taxilane access. One vacant hangar site (2-C) located at the north end of the main apron is reserved for commercial use. Approximate (existing) storage capacity: 11 aircraft.
- Two rows of T-hangars and two additional hangar taxilanes located immediately north of existing hangar development. The physical limits of the site will accommodate one 8-unit T-hangar (or multiple smaller T-hangars) per row. The first T-hangar will utilize the northernmost existing hangar taxilane with a new taxilane constructed to access the north side of the T-hangar. The second T-hangar row and north-side taxilane would be developed based on demand. Approximate additional storage capacity: 16 aircraft.
- An aircraft parking apron and reserve area is located north of the planned T-hangar rows. As conceptual configured, the apron has three rows of tiedowns (27 spaces total), which significantly exceeds forecast demand for parking. It is anticipated that the north apron would be constructed in phases, only in the event that the capacity of terminal apron becomes inadequate. Approximate additional storage capacity: 27 aircraft.
- Six additional conventional hangar spaces are located beyond the north apron. Approximate additional storage capacity: 6 aircraft.
- Existing airport fencing and gates will be modified at the 27th Street connection to the airport, with controlled access provided via pedestrian and automated vehicle gates located adjacent to the apron. Public vehicle parking and a passenger pick-up/drop off area will be provided adjacent to the apron (outside the fence). An automated access vehicle gate is recommended to provide tenant access to the north hangar area from the 27th Street connection. Tenant access to the north landside area would be provided through secured automated gates from both 27th Street and Airport Way. It is anticipated that the use of closed-circuit security video

Parallel Taxiway Lighting. The parallel taxiway will be equipped with blue edge lighting or reflective edge markers, depending on the availability of funding. Reflective edge markers are generally considered adequate for most general aviation airports with limited nighttime activity based on the initial cost and the life cycle maintenance and energy consumption expense. As noted earlier in the master plan, the recently updated Oregon Aviation Plan identified low-intensity taxiway edge lighting (LITL) as a facility need for Florence Municipal Airport based on the “minimum criteria” defined for Category IV airports.

| LEGEND | | | |
|--------|---|--|-------------------------------|
| | TAXIWAY/TAXILANE/APRON MARKINGS (EXISTING) | | FENCE (EXISTING) |
| | TAXIWAY/TAXILANE/APRON MARKINGS (FUTURE) | | FENCE (FUTURE) |
| | PROPOSED AIRFIELD PAVEMENT (FUTURE) | | FENCE TO BE REMOVED/RELOCATED |
| | PROPOSED ACCESS ROAD/VEHICLE PARKING (FUTURE) | | HANGARS (EXISTING) |
| | PROPERTY LINE (EXISTING) | | HANGARS (FUTURE) |
| | TIEDOWN TO BE REMOVED | | |

| KEY FEATURES | | |
|--|--|--|
| PHASE 1 | PHASE 2 | PHASE 3 |
| <ul style="list-style-type: none"> 400-FOOT NORTH EXTENSION WITH A 200-FOOT DISPLACED THRESHOLD RUNWAY OBSTACLE CLEARANCE SURFACE (OCS) USED W/DISPLACED THRESHOLD TO OBTAIN 20:1 CLEAR SLOPE 3,400 FEET AVAILABLE FOR TAKEOFF AND LANDING ON RUNWAY 33 AND TAKEOFF ON RUNWAY 15; 3,200 FEET AVAILABLE FOR LANDING ON RUNWAY 15 EXTEND THE PARALLEL TAXIWAY TO CONNECT TO THE NEW RUNWAY END EXTEND RUNWAY EDGE LIGHTS; ADD/REALIGN PAPI | <ul style="list-style-type: none"> ELIMINATE 200-FOOT DISPLACED THRESHOLD FOR RUNWAY 15 BY REMOVING MATERIAL FROM SAND DUNE TO ACCOMMODATE A VISUAL 20:1 (OCS) AT RUNWAY END MODIFY EXISTING RUNWAY LIGHTING AND PAPI AIMING ANGLE, AS REQUIRED 3,400' FEET AVAILABLE FOR ALL RUNWAY OPERATIONS | <ul style="list-style-type: none"> REMOVE MATERIAL FROM SAND DUNE TO ACCOMMODATE A FAR PART 77 VISUAL 20:1 APPROACH SURFACE TO RUNWAY 15 MODIFY PAPI AIMING ANGLE, AS REQUIRED 3,400 FEET AVAILABLE FOR ALL RUNWAY OPERATIONS |



FLORENCE MUNICIPAL AIRPORT PREFERRED RUNWAY OPTION

FIGURE NO.
5-7