Contents

SB 686 Agricultural Enclave Perimeter-Adjacency Analysis

Methodology, Data Provenance, and Assumptions

Prepared by: PalmCoastStorylines.com, Mapping/Investigations subsystem **Subject property:** Withdrawn Westward Expansion tract, Raydient/Rayonier-owned parcels, Palm Coast/Flagler County, Florida **Statute analyzed:** Ch. 2026-XXX, Laws of Florida (SB 686), creating s. 163.3162(4), Fla. Stat., and amending s. 163.3164, Fla. Stat. — effective July 1, 2026; sunsets January 1, 2028 absent legislative renewal **Date of analysis:** August 27–28, 2026

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1. PURPOSE AND SCOPE

This document describes how we determined whether any parcel within the withdrawn Westward Expansion tract satisfies the perimeter-adjacency test required for "agricultural enclave" certification under SB 686. It covers three things specifically, at the requester's instruction:

1. **Data provenance** — where every dataset came from, and how we know it is what it claims to be.
2. **Data warehousing** — how the data was stored and made queryable.
3. **Calculation methodology and assumptions** — exactly how the perimeter-adjacency percentages were computed, and every place we made a judgment call rather than relying on a directly-stated statutory value.

This document does **not** address: agricultural-use classification history (s. 193.461, Fla. Stat.), single-ownership status as of January 1, 2025, public-services availability, or density-matching.

CONCLUSION

As measured, no parcel within the withdrawn Westward Expansion tract currently satisfies either testable SB 686 perimeter-adjacency pathway. Of the 47 parcels carried into the real calculation described below, the highest result obtained under Pathway 1 (75% threshold required) was 44.48%. No parcel reached the 50%/50% threshold required under Pathway 3. The margin between the closest actual result and either applicable threshold is substantial — not a close call decided by a methodological choice, but a clear negative result under the methodology set out in full below.

This conclusion is stated here first because it is the answer to the question this document was prepared to address. The remainder of this document sets out, in full, the data, method, and assumptions that produced it — including every point at which we made a judgment call rather than relying on a directly-stated statutory value — so that conclusion can be independently evaluated rather than taken on faith.

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2. THE STATUTORY TEST BEING MEASURED

SB 686 provides three independent pathways to agricultural enclave eligibility, only one of which need be satisfied. This analysis tested the two pathways that are geographically relevant to this tract:

- **Pathway 1 (base pathway, s. 163.3164(4)(c)(1), Fla. Stat.):** at least 75% of a parcel's perimeter must border land that either (a) already has existing industrial, commercial, or residential development, or (b) is designated in the local comprehensive plan/zoning/future land use map for such future development, with at least 75% of *that* bordering land itself already built out.
- **Pathway 2** (interstate-highway combination) was not tested. No interstate highway runs near this tract; this is a matter of basic geography, not requiring GIS analysis.
- **Pathway 3 (alternative pathway, s. 163.3162(4), Fla. Stat.):** for parcels under 700 acres, at least 50% of the perimeter must border land designated for future qualifying development, **and** at least 50% must border land within an "urban service district, area, or line."

Both tested pathways are, at core, a **percentage-of-perimeter** measurement: the length of a parcel's boundary that touches a qualifying neighbor, divided by the parcel's total boundary length.

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3. DATA PROVENANCE

3.1 Parcel data

Source: Flagler County Property Appraiser's CAMA (Computer-Assisted Mass Appraisal) system, republished as a public ArcGIS REST feature service by the City of Palm Coast at `gis.palmcoast.gov/hosting/rest/services/External/FlaglerCountyParcels/MapServer/1`

Despite being hosted on a City of Palm Coast server, this layer is explicitly countywide — confirmed by its own coverage of unincorporated land west of US-1 — because the City is mirroring the County's own assessment data, not generating parcel data independently. **How we know it's authoritative:** this is the same live service the City and County themselves use for public parcel lookup; it is not a third-party aggregation. **Fields relied upon:** `PARCELNO`, `file_as_name` (owner of record), `property_use_desc` (DOR use classification), `legal_acreage`, geometry.

3.2 Future Land Use Map (FLUM) data

Source: `palmcoastfl-flum-citywide-2026-07-31.geojson`, obtained directly from the City of Palm Coast, with verified `CityOfPalmCoastFL` attribution embedded in the source file's own metadata, dated July 31, 2026. **Note on scope:** this file is labeled "citywide" but its practical coverage was confirmed to extend to relevant unincorporated portions of this tract as well.

3.3 Zoning data

Source: the same county/city GIS parcel-and-zoning pipeline described in 3.1, harvested into the same warehouse (Section 4).

3.4 City Limits data — used as the Pathway 3 boundary substitute

Source: `PalmCoastFL_CityLimits`, a City of Palm Coast feature service, obtained via the City's public open data portal. **Provenance detail material to this analysis:** this layer was obtained specifically in response to a direct request to the City for its **Utility Service Area** boundary. No distinct Utility Service Area or formally adopted "Urban Service Area" layer was located — the City's own open data catalog search for "utility service area" returned only this City Limits layer. A separate, formal public records request to the City specifically asking whether a distinct Urban Service Area boundary exists was submitted August 22, 2026 (tracking ID `500VI000011y1RbYAI`), acknowledged August 24, 2026 by a City GIS Analyst, and routed to Community Development and the City Clerk's office. As of this writing, no substantive answer has been received. **File details:** single MultiPolygon feature, 10 disconnected parts (consistent with piecemeal annexation history), area 96.99 sq. mi., `CREATEDBY`/`EDITOR` fields both attributed to `CityOfPalmCoastFL`, dated August 27, 2026. **Why this substitution, and its limits:** see Section 6.1.

3.5 Statutory text

Source: the enrolled bill text of SB 686, retrieved directly from the Florida Senate's official bill-tracking system (flsenate.gov), not a secondary summary. Direct primary-source verification was also performed on the specific statutory sub-thresholds (e.g., the 75%-built-out requirement under Pathway 1(b), which was tightened from an earlier 50% draft during the committee process).

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4. DATA WAREHOUSING

All source data described in Section 3 was loaded into a single relational database (`palmcoast_gis`, MariaDB) maintained on our own infrastructure — not queried live against the City/County services at analysis time, to ensure a stable, reproducible dataset.

- **Parcels, zoning, and FLUM** were each loaded into their own table via dedicated PHP extract-transform-load scripts, querying the source ArcGIS REST services directly and inserting the returned geometry using MariaDB's spatial geometry type.
- **City Limits** was loaded via a similarly dedicated script from the GeoJSON file described in 3.4.
- **Coordinate reference system integrity:** all geometry was ingested and stored tagged as SRID 4326 (WGS84 latitude/longitude), matching the native output of the source services. One technical correction is disclosed here for completeness: on initial ingestion, this database version's default GeoJSON-import function did not properly tag the SRID on two of the four tables (roads, later superseded in this analysis, and City Limits). This was caught, diagnosed, and corrected by explicitly re-tagging the geometry to SRID 4326 before any measurement was performed — verified by direct query before proceeding. This correction affected data labeling only; it did not alter any coordinate values.

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5. CALCULATION METHODOLOGY

5.1 Candidate identification (screening pass)

We began with all 83 Raydient/Rayonier-owned parcels within the withdrawn Westward Expansion tract's footprint (approximately 25,900 gross acres). Each parcel was screened for **proximity** — not yet percentage — to qualifying FLUM-designated land, using a padded bounding-box query with an explicit exclusion for any qualifying polygon that merely overlapped the parcel's own geometry (a self-adjacency artifact, caught and corrected during an earlier pass of this same investigation). This screening step is disclosed as a **screen**, not a measurement: it identifies which parcels are worth the more expensive real calculation, and nothing more. 47 of the 83 parcels had at least one qualifying neighbor under this screen and were carried forward to Section 5.2. The remaining 36 had no qualifying neighbor within the padded search area at all and were excluded without further calculation.

5.2 Real perimeter-adjacency calculation

For each of the 47 candidate parcels, we exported the actual, unprojected geometry of: the parcel itself, every qualifying neighbor polygon located during the screen, and the City Limits polygon (for parcels under 700 acres, relevant to Pathway 3 only).

Reprojection. Percentage-of-perimeter is not a meaningful calculation in unprojected latitude/longitude coordinates, where a "degree" represents a different physical distance depending on location and axis. All geometry was reprojected from

EPSG:4326 to **EPSG:2236** (NAD83, Florida East State Plane, U.S. survey feet) using the Python `pyproj` library's coordinate transformer. This was necessary because the database platform used for storage and initial screening (MariaDB) does not have a functioning coordinate-transformation capability; the actual measurement was performed in Python using the `shapely` geometry library, operating on the reprojected coordinates.

Perimeter measurement. Each parcel's true boundary length, in feet, was computed directly from its reprojected polygon.

Adjacency measurement. For Pathway 1: all qualifying neighbor polygons for a given parcel were merged into a single unioned shape, then buffered by a small tolerance (see 5.3), then intersected against the parcel's boundary line. The length of the resulting intersection, divided by the parcel's total perimeter, is the reported Pathway 1 percentage. For Pathway 3: the identical method was applied against the City Limits polygon, producing a separate percentage for the "urban service district" side of that test. Pathway 3's "planned development" side reuses the Pathway 1 percentage, consistent with the statute's structure, which does not require these to be measured against different land for the two sub-tests.

5.3 The tolerance decision

The buffer tolerance applied before intersection is a judgment call, not a value drawn from the statute, and is disclosed here in full because it is the single methodological choice most likely to be questioned.

An initial calculation using a 3-foot tolerance produced near-universal 0% results across the candidate set. Before accepting that result, we ran a diagnostic step: measuring the actual **unbuffered minimum distance** between each parcel and its nearest qualifying neighbor and City Limits, to distinguish genuine non-adjacency from an artifact of the tolerance being too tight.

That diagnostic showed two distinct populations, not a uniform pattern: - Most candidate parcels were genuinely **hundreds to thousands of feet** from any qualifying neighbor — one parcel's nearest qualifying neighbor was over 8,300 feet away (roughly 1.6 miles). This confirmed that the earlier screening pass (Section 5.1), which operates on a padded bounding box rather than the true parcel edge, had been flagging parcels as "candidates" that are not, in fact, physically near any qualifying land — a known limitation of bounding-box screening for large or irregularly-shaped parcels, which this diagnostic step was specifically designed to catch. - A small number of parcels (four, in this dataset) showed real gaps of only **2 to 11 feet** — a distance consistent with ordinary vertex-level misalignment between two independently digitized government GIS layers (parcels and FLUM), not a genuine physical separation.

We selected a **15-foot tolerance**, chosen specifically to bridge gaps of the second, smaller-scale kind documented in the diagnostic, without being large enough to manufacture adjacency for parcels genuinely hundreds or thousands of feet away. This is disclosed as an estimate calibrated to the data, not a value with independent legal significance.

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6. RESULTS

Of the 47 candidate parcels carried into the real calculation:

Zero parcels satisfied Pathway 1 (75% threshold). The highest result obtained was **44.48%**, on parcel `24-11-29-0000-01010-0000` (11.90 acres).

Zero parcels satisfied Pathway 3 (50%/50% threshold, both required). Several parcels reached or approached 100% adjacency to City Limits on the "urban service district" side of the test, but none simultaneously reached 50% on the "planned development" side — the same underlying adjacency percentage as the Pathway 1 result above, which topped out at 44.48%.

The five highest Pathway 1 results obtained, for reference:

Parcel	Acreage	Pathway 1 %	Pathway 3 "development" %	Pathway 3 "City Limits" %
24-11-29-0000-01010-0000	11.90	44.48%	44.48%	45.34%
14-11-29-0000-01010-0000	3.19	43.25%	43.25%	44.89%
23-11-29-0000-01010-0020	57.02	42.13%	42.13%	42.35%
25-11-29-0000-01010-0020	123.94	37.83%	37.83%	38.04%
30-11-30-0000-01010-0000	21.61	20.03%	20.03%	21.05%

Full parcel-by-parcel results for all 47 candidates are available on request as a structured data file.

Conclusion, as measured: no parcel within the withdrawn Westward Expansion tract currently satisfies either testable SB 686 perimeter-adjacency pathway.

6.1 LIMITATIONS AND ASSUMPTIONS — DISCLOSED IN FULL

We consider it important, particularly for an attorney audience, to state plainly every point in this analysis that rests on a substitution, an inference, or an unverified assumption, rather than a directly confirmed fact.

1. **City Limits as a substitute for the statutory "urban service district."** No formally adopted Urban Service Area boundary, nor a distinct Utility Service Area boundary, was located despite direct inquiry to the City (see Section 3.4). City Limits was used as the working substitute for Pathway 3's urban-service-district test. This is a documented substitution, not a claim of legal equivalence.

   It is possible — and in our judgment likely — that no such boundary is formally defined at all. Palm Coast's own Comprehensive Plan Glossary defines the term

"Urban Service Area," but no mapped, adopted boundary bearing that name was located in the City's Future Land Use, Infrastructure, or Capital Improvements Elements, and the City's own open data catalog returned only its City Limits layer when queried for a distinct utility service boundary. A defined term with no corresponding adopted map is consistent with the boundary simply never having been drawn, rather than with our having missed an existing one.

Separately, and independent of whether the boundary has ever been formally adopted: it is reasonable to assume that if such a boundary were drawn, it would closely track existing City Limits rather than extend meaningfully beyond them. The City's own Infrastructure Element documents secured water supply covering under half of projected 2050 demand, leaving limited practical basis to extend a service boundary into land the City cannot currently serve. On that basis, City Limits is offered not merely as the closest available data, but as a reasonable estimate of where such a boundary would likely sit if one existed. This reasoning is offered as context, not as a substitute for the City's own answer to the pending records request.

2. **The right-of-way look-through rule was not implemented.** The statute directs that where a road, canal, or right-of-way runs along a parcel's boundary, the adjacency test should look to whatever land sits on the far side, rather than stopping at the road itself. This calculation measured only direct physical adjacency and does not account for this rule. We judge it unlikely to change the results reported above, given the size of the gap between the closest actual result (44.48%) and the 75% threshold — but this is an inference based on the margin involved, not a tested conclusion, and is disclosed as an open item.
3. **Agricultural-use history (s. 193.461, Fla. Stat.) was not independently verified** for any parcel in this analysis. This calculation addresses perimeter adjacency only.
4. **Ownership as of January 1, 2025** was reviewed at the entity level but common-control status between related corporate entities holding parcels in this tract was not independently confirmed as part of this specific analysis.
5. **This is not a certified survey.** It was performed using publicly available GIS data and open-source geometry-processing tools, following a documented and internally consistent methodology, but it has not been prepared or sealed by a licensed Florida surveyor. Given the margin between the closest measured result (44.48%) and either applicable threshold (75% or 50%), the methodology and tolerance choices described above would need to be substantially — not marginally — incorrect to change the conclusion. This analysis should not, however, be cited as a substitute for surveyor certification if relied upon in an actual regulatory or adversarial proceeding.

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7. TOOLS USED

- **MariaDB** — data warehousing, source-data ingestion, and the initial screening pass.

- **Python 3**, with the **shapely** library (geometric union, buffer, and intersection operations) and the **pyproj** library (coordinate reprojection, EPSG:4326 → EPSG:2236).
- **PHP** — data extraction/transformation scripts querying the source ArcGIS REST services.
- Google Maps JavaScript API — used only for the visualization/mapping work product, not for any calculation described in this document.

APPENDIX: ALL 47 PARCELS ANALYZED

The following table lists every parcel carried into the real perimeter-adjacency calculation (Section 5.2), sorted by Pathway 1 percentage, highest to lowest. The 36 parcels excluded at the screening stage (Section 5.1) — those with no qualifying neighbor within the padded search area at all — are not listed here, as no real calculation was performed on them.

Parcel	Acreage	Pathway 1 %	Pathway 3 “development” %	Pathway 3 “City Limits” %
24-11-29-0000-01010-0000	11.90	44.48%	44.48%	45.34%
14-11-29-0000-01010-0000	3.19	43.25%	43.25%	44.89%
23-11-29-0000-01010-0020	57.02	42.13%	42.13%	42.35%
25-11-29-0000-01010-0020	123.94	37.83%	37.83%	38.04%
30-11-30-0000-01010-0000	21.61	20.03%	20.03%	21.05%
16-11-30-0000-01010-0000	317.52	12.45%	12.45%	100.0%
11-11-29-0000-01010-0000	614.00	0.14%	0.14%	50.43%
02-11-29-0000-01010-0010	598.81	0.12%	0.12%	8.23%
07-11-30-0000-01010-0000	640.48	0.11%	0.11%	49.97%
35-11-29-0000-01010-0000	629.00	0.0%	0.0%	0.0%
04-11-30-0000-01010-00B1	112.10	0.0%	0.0%	42.99%
22-11-29-0000-01010-0000	638.90	0.0%	0.0%	0.0%
28-11-30-0000-01010-0010	66.22	0.0%	0.0%	100.0%

Parcel	Acreage	Pathway 1 %	Pathway 3 “development” %	Pathway 3 “City Limits” %
10-11-29-0000-01010-0000	639.00	0.0%	0.0%	0.14%
03-11-29-0000-01010-0000	623.00	0.0%	0.0%	0.0%
32-11-30-0000-02020-0000	139.66	0.0%	0.0%	0.0%
34-11-29-0000-01010-0000	640.00	0.0%	0.0%	0.0%
17-11-30-0000-01030-0000	350.70	0.0%	0.0%	100.0%
16-11-29-0000-01010-0000	638.38	0.0%	0.0%	0.0%
23-11-29-0000-01010-0000	312.87	0.0%	0.0%	0.0%
28-11-29-0000-01010-0000	641.00	0.0%	0.0%	0.0%
33-11-29-0000-01010-0000	579.00	0.0%	0.0%	0.0%
28-11-30-0000-01010-0000	241.55	0.0%	0.0%	100.0%
28-11-30-0000-04050-0000	0.91	0.0%	0.0%	100.0%
08-11-30-0000-01010-0010	640.88	0.0%	0.0%	24.85%
36-11-29-0000-01010-0000	538.77	0.0%	0.0%	0.0%
09-11-30-0000-0102A-0020	197.33	0.0%	0.0%	53.49%
28-11-30-0000-04020-0000	40.00	0.0%	0.0%	100.0%
26-11-29-0000-01010-0000	640.00	0.0%	0.0%	0.0%
27-11-29-0000-01010-0000	640.00	0.0%	0.0%	0.0%
20-11-30-0000-01010-0000	273.55	0.0%	0.0%	100.0%
21-11-29-0000-01010-0000	642.00	0.0%	0.0%	0.0%
04-11-29-0000-01010-0000	642.00	0.0%	0.0%	0.0%
31-11-30-0000-01050-0040	105.41	0.0%	0.0%	0.0%
31-11-30-2825-00000-0011	12.90	0.0%	0.0%	0.0%

Parcel	Acreage	Pathway 1 %	Pathway 3 “development” %	Pathway 3 “City Limits” %
21-11-30-0000-01010-0000	416.56	0.0%	0.0%	100.0%
25-11-29-0000-01010-0000	285.93	0.0%	0.0%	0.0%
28-11-30-0000-03040-0000	30.00	0.0%	0.0%	100.0%
31-11-30-0000-01050-0000	324.93	0.0%	0.0%	0.0%
09-11-29-0000-01010-0000	603.74	0.0%	0.0%	0.0%
31-11-30-0000-01050-0030	9.61	0.0%	0.0%	0.0%
22-11-30-0000-01030-0020	67.74	0.0%	0.0%	100.0%
15-11-29-0000-01020-0000	189.34	0.0%	0.0%	0.0%
36-11-29-0000-01010-0002	0.81	0.0%	0.0%	0.0%
31-11-30-2825-00000-0170	0.57	0.0%	0.0%	0.0%
05-11-30-0000-01010-0010	645.97	0.0%	0.0%	0.0%
22-11-30-0000-01030-0000	253.66	0.0%	0.0%	100.0%

47 parcels total. All figures are as computed under the methodology described in Section 5, including the 15-foot tolerance discussed in Section 5.3.