Grooms Rip Rap Shoreline Stabilization

Project Narrative for CMPA and Nationwide Permit 13 Application

Prepared for: Terrance G. Grooms and Ariel Grooms
170 Gowen Drive, Woodbine, Camden County, Georgia

Prepared by: LaBarba Environmental Services
Revised October 29, 2026

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Applicant Information

Terrance G. Grooms and Ariel Grooms propose shoreline stabilization using Type 3 rip rap along an actively eroding segment of their waterfront property at Tract 10, Gowen Division 75 (Tax Parcel ID 131C017), 170 Gowen Drive, Woodbine, Georgia 31569, in Camden County. The project is located along the Crooked River, a tidal waterway. The application identifies the overall tract as approximately 28.49 acres and an approximate site elevation of 6 feet.

The proposed work consists of grading the existing steep, actively eroding bluff back into the upland to achieve a stable 2H:1V slope, followed by installation of a filter layer and Type 3 rip rap armor stone along approximately 172 linear feet (3,302 SF) of shoreline. Approximately two thirds of the project impacts occur in the marsh and one third in the upland. The stabilization will protect an approximately 8-foot-high bluff that is experiencing active erosion in a location where there is no existing marsh vegetation. The rip rap toe will be placed at approximately 22' landward of Mean Low Water (MLW), and the outer edges will be blended smoothly into the neighboring shoreline to prevent flanking.

The proposed project does not have an upland component as defined in Ga. Comp. R. & Regs. r. 391-2-3-.02 . The upland impacts will be regulated by O.C.G.A. § 12-7-6(b)(17), a buffer variance will be submitted to Georgia DNR EPD concurrently with this application.

Existing Conditions

The project location consists of the shoreline of the Crooked River along Parcel Ten (10) as described on the Limited Warranty Deed recorded April 8, 2021, in Book 2104, Page 341-342, Camden County records; referenced plat record book 550, Page 0410. The site consists of approximately 2.541 acres of upland with single family residence and a steep, actively eroding bluff face approximately 8 feet high that fronts the Crooked River. The bluff shows clear signs of ongoing erosion, including undercutting and slumping, with no live marsh vegetation present within the approximately 172gowen-linear-foot project footprint. The property to the east is protected by existing rip rap while the property to the south is unprotected and experiencing similar erosion.

A verified coastal marshlands jurisdictional determination (File JDS20250212, dated May 1, 2026, prepared by Beth Byrnes, Coastal Permit Coordinator) confirms the coastal marshlands boundary and is valid through April 30, 2027. Waterway characteristics include a tidal range of 0.0 to 7.01 feet (MLLW datum at Station 8679511 on Kings Bay), water depth of approximately 3 feet at MLW in the immediate project vicinity, and a channel width of approximately 18 feet at MLW. No existing shoreline stabilization structures are present on the lot. The site is not located over any landfill or hazardous waste area, contains no known historic or cultural resources, and is outside any known National Register of Historic Places (NRHP) districts or sites.

Purpose and Need

The purpose of the project is to stabilize the severely eroding shoreline segment on the subject parcel to protect the upland property, the newly constructed single-family residence, and the adjacent natural resources from further loss due to tidal erosion, boat wakes, and storm events. The existing bluff is actively eroding and poses an immediate threat to the stability of the lot and any improvements.

The need for the project is based on the documented active erosion at the site (evident from site inspections, topographic surveys, and digital elevation models) and the necessity of providing long-term protection while minimizing environmental impacts. Historic shoreline mapping shows that the shoreline has receded approximately 134 feet since the 1930's, with an annual erosion rate of greater than 1ft/yr. Stabilization is required to prevent continued retreat of the bluff, which would otherwise result in the loss of upland area and potential sedimentation into Crooked River. The project also supports the ongoing residential development of the lot.

Proposed Conditions

The proposed conditions consist of shoreline stabilization through targeted upland grading and placement of Type 3 rip rap armor stone along the actively eroding bluff face on Lot 83. The exact limits, dimensions, locations, slopes, and details are shown on the permit drawings (Sheets 1–5 of the Labarba Environmental Services exhibits dated 5/10/2026) and should govern over this narrative if any dimensional discrepancy is identified.

Shoreline Stabilization Details

The work includes:

- Selective removal of overhanging, unstable, and already fallen vegetation from the existing steep bluff.
- Grading of the existing approximately 8-foot-high bluff back into the upland to achieve a stable 2H:1V slope. This grading cuts into the upland area as necessary to obtain the proper slope without causing any obstruction or increased encroachment into the waterway.
- Installation of a geotextile filter layer over the graded slope.
- Placement of Type 3 rip rap armor stone along approximately 172 linear feet of shoreline, covering an area of approximately 3,302 square feet.
- Blending of the rip rap edges smoothly and gradually into the adjacent rip rap to the east and natural shoreline to the west to prevent flanking and ensure a natural transition.
- The toe of the rip rap will not extend past Mean Low Water (MLW).

All construction activities will be performed exclusively from the upland side of the property using low-ground-pressure equipment. No work will occur in vegetated marsh areas.

Marshland Impacts

The project has been carefully designed to minimize impacts to aquatic species while addressing the active erosion. Approximately two thirds of the total project impacts (roughly 66%) occur within the marsh. Soil from the existing bluff will be graded between the upland and marsh, no foreign fill will be used; only native soil from the bluff is regraded to achieve the stable 2H:1V slope. Then a layer of filter fabric and rip rap will be placed for approximately 2,236 square feet (123.6 CY of rip rap) of marshland impacts. The approximately 172 linear feet of shoreline stabilization includes the minimum required extent into jurisdiction required to obtain a stable slope. No dredging, filling in open water beyond the minimum toe protection, or other alterations are proposed.

Buffer Impacts

The project does not have an upland component as it does not qualify under 391-2-3-.02, Regulation of Upland Component of a Project. The 1,066 SF of impacts (58.94 CY) on the upland will be reviewed by Georgia DNR EPD through a Buffer Variance application, which is attached to this application.

Summary of Project Impacts

The project results in approximately 3,302 square feet (172 cubic yards) of direct impact associated with grading and rip rap placement within the marsh and upland. The impacts will be split with between structure in marsh jurisdiction and structure on the upland. There are no impacts to vegetated coastal marshlands within the project footprint, as the stabilization is confined to the actively eroding bluff area devoid of live marsh vegetation. The project will not result in a loss of greater than one-tenth of an acre of wetlands/marsh. Compensatory mitigation is not proposed or required. All work occurs within the area of documented erosion and within the property boundaries of the applicant. The project will have long-term beneficial effects by preventing further erosion and sedimentation into Crooked River.

Method of Construction

All work will be completed from the upland side of the property using low-ground-pressure equipment and standard construction practices. Equipment will be limited to that necessary for grading, filter fabric installation, and rip rap placement. Work will be sequenced to minimize disturbance:

(1) removal of overhanging/undercut vegetation (if present),
(2) grading of the bluff to 2H:1V slope,
(3) installation of filter layer, and
(4) placement of Type 3 rip rap.

The contractor will verify existing conditions, permit limits, and tidal conditions prior to commencement. Work limits will be clearly marked. Construction access will utilize the existing upland driveway and lot interior, avoiding unnecessary disturbance to adjacent marsh or properties. Any temporary materials or equipment will be removed following completion of the work. Best management practices will be employed throughout.

CMPA Applicability

The proposed project is shoreline stabilization (bank stabilization) in tidal waters subject to the Coastal Marshlands Protection Act (O.C.G.A. § 12-5-280 et seq.). The work qualifies for review as a minor activity necessary to protect existing and proposed upland development (single-family residence) from active erosion. The project is less than $1/10^{th}$ of an acre of impacts to coastal marshlands.

Compliance with Application Requirements (O.C.G.A. § 12-5-286(b))

The joint application satisfies each requirement as follows:

(1) The name and address of the applicants are provided on the Joint Application Form and in the Applicant Information section of this narrative.

(2) A plan or drawing showing the applicants' proposal and the manner or method by which such proposal shall be accomplished, identifying the coastal marshlands affected, is included in the permit drawings (Sheets 1–5) submitted with the application.

(3) A plat of the area in which the proposed work will take place is provided (Deed Book 550, Page 0410, and project exhibits).

(4) Reasonable evidence of ownership and lawful authority is provided via the recorded Limited Warranty Deed (Book 2104, Page 341-342).

(5) A list of all adjoining landowners together with their addresses is included in the application packet (Adjacent Property Owner notification documentation).
(6) A letter from the local governing authority (Camden County) stating that the proposal is not violative of any zoning law will be submitted to the Department.
(7) The non-refundable application fee will be paid to the Department in the amount required.
(8) A description of alternative sites and why they are not feasible is addressed in the Alternatives Analysis section below.
(9) A statement from the applicants that inquiry has been made to appropriate authorities confirming the site is not over a landfill or hazardous waste site and is otherwise suitable for the proposed project is included in the application packet.
(10) Water quality certification requirements have been satisfied through the blanket authorization issued by EPD for the use of Nationwide Permit 13.
(11) Certification of adherence to soil and erosion control responsibilities is provided in this narrative and will be implemented through the project's BMP's.
(12) All additional information required by the Committee to properly evaluate the application is included in the complete application packet, including drawings, surveys, jurisdictional determination, species assessments, historic resources review, and this narrative. Additional information will be provided upon request.

Compliance with CMPA Standards for Shoreline Stabilization / Bank Protection

The project satisfies all applicable standards for shoreline stabilization activities:

- The project is necessary to protect an existing and proposed upland residential use from active erosion.
- The stabilization is limited to the minimum area required (172 linear feet of actively eroding bluff only).
- The design (graded 2H:1V slope with rip rap) is the least environmentally damaging practicable alternative, as detailed in the Alternatives Analysis.
- Professional drawings and exhibits are provided.
- Post-construction documentation (as-built survey if required) will be submitted.
- The applicants have the capacity and legal authority to comply with all permit conditions.

CMPA Public Interest Statement

The proposed project is not contrary to the public interest under the Coastal Marshlands Protection Act. The project consists of targeted shoreline stabilization to address active erosion on a residential lot while extending minimally into the channel. The rip rap design ensures that tidal waters can continue to flow freely, resulting in only minimal impacts confined to the eroded bluff area. The three CMPA public interest criteria are addressed below.

A. Navigation and Natural Flow

The proposed project will not create an unreasonably harmful obstruction to or alteration of the natural flow of navigational water within the affected area. The rip rap will be placed along the graded shoreline at the existing bank toe and will not encroach into the waterway beyond the required conditions. The waterway at this location is approximately 600 feet wide at MLW, and the stabilization remains well outside of low tide channel. The sloped, permeable rip rap design allows

tidal currents and water flow to pass freely. This configuration preserves the natural flow regime and prevents any material obstruction to navigation.

B. Erosion, Shoaling, and Stagnation
The proposed stabilization will not result in unreasonably harmful or increased erosion, shoaling of channels, or stagnant areas of water. By grading to a stable 2H:1V slope and armoring with rip rap, the project will eliminate the existing source of erosion and prevent further sediment input into Crooked River. No dredging or foreign earthfill is proposed. The permeable nature of the rip rap and filter layer promotes natural drainage and sediment transport. The use of best management practices will control any temporary turbidity. Long-term, the project will reduce erosion, shoaling, and potential stagnation by stabilizing the bank.

C. Fish, Shrimp, Oysters, Crabs, Clams, Wildlife, and Other Resources
The project will not unreasonably interfere with the conservation of fish, shrimp, oysters, crabs, clams, wildlife, or other coastal resources. The project footprint contains no live marsh vegetation; stabilization is confined to the eroded bluff area. The rip rap design provides intertidal habitat complexity beneficial to aquatic species. Construction impacts are minimal and temporary, with best management practices (including silt curtains if needed) to protect water quality. Overall, the project will have a beneficial long-term effect by protecting the shoreline and preventing further degradation of adjacent marsh and creek resources.

Adjacent Landowners
The project is located entirely on Parcel Ten (10), owned by the applicants. Adjacent property owners (upstream and downstream) will be notified in accordance with CMPA requirements. The qPublic parcel map and addresses are included in this application packet.

Landfill/Hazardous Waste Statement
The application packet includes the required landfill/hazardous waste statement and map. The applicants will not knowingly use or place hazardous materials in jurisdictional areas. Any petroleum products, oils, fuels, or construction chemicals used during construction will be managed so that they do not enter tidal waters, marsh, or drainage ditches.

Historic/Cultural Resources
The application packet includes historic/cultural resource review materials (including GNAHRGIS and NRHP mapping). The proposed work is not expected to affect historic properties or archaeological resources. If any cultural materials, artifacts, or human remains are discovered during construction, work in the immediate area will stop and the appropriate agencies will be notified before work resumes.

Water Quality Certification
The Georgia DNR EPD has issued blanket 401 WQC for the use of a Nationwide Permit 13. This WQC is included in the attached Regional Conditions.

Soil and Erosion Control Statement

The proposed project will comply with all applicable soil erosion and sediment control responsibilities under the Georgia Erosion and Sedimentation Act and local ordinances. The upland grading will be conducted in accordance with best management practices, including silt fencing, temporary stabilization, and final vegetative stabilization where appropriate. The project will not result in sedimentation of the waterway.

Turbidity Statement

The proposed project will be performed in a manner that minimizes turbidity. Work will be limited to the smallest practicable area and will be conducted during appropriate tidal conditions. Silt curtains or other controls will be used if necessary, during rip rap placement. All disturbed areas will be stabilized immediately upon completion of grading and armoring.

Endangered Species and Protected Resources

The application packet includes EDGES and Determination Keys for species that may occur in coastal Georgia. The project is limited to the actively eroding bluff area with no vegetated marsh impacts and is not expected to result in more than minimal effects to protected resources. The applicants will comply with any species-specific conservation measures or agency conditions required during the permit review process.

Alternatives Analysis

The applicants have evaluated alternative sites and approaches for shoreline stabilization. No feasible and prudent alternatives exist that would avoid or substantially reduce impacts on coastal resources while meeting the project purpose of immediately protecting the residential lot from active erosion.

The “no action” alternative would allow continued erosion of the 8-foot bluff, resulting in loss of upland property, potential damage to the new single-family residence, and increased sedimentation into Crooked River, contrary to the public interest and the applicants’ property rights.

Living shoreline / vegetative stabilization was considered but rejected for site-specific and practical reasons. The steep 8-foot bluff, high tidal range (up to 7.01 feet), exposure to boat wakes, and ongoing undercutting create high-energy conditions that make successful establishment of vegetation unreliable in the short term. As new property owners simultaneously constructing a residence, the applicants are not comfortable relying on this relatively newer and still-evolving approach for immediate, reliable protection of their primary residence. Repeated plantings, long-term maintenance requirements, and the risk of initial failure further render this option impracticable and more costly overall.

Bulkhead / vertical wall was also evaluated but rejected because it would create a harder, more reflective structure that could increase scour in front of and adjacent to the wall, potentially causing greater long-term erosion and impacts to the waterway and neighboring properties. Rip rap is a softer, more environmentally friendly option that allows for habitat complexity, natural blending with the shoreline, and better integration with the tidal marsh system. It represents the least environmentally damaging practicable alternative.

The proposed rip rap design, combined with upland grading to a stable 2H:1V slope, utilizes the established shoreline alignment, requires only the minimum necessary area, involves no vegetated marsh impacts, and directly resolves the documented erosion threat.

NWP 13 Compliance

The project fully complies with Nationwide Permit 13 (Bank Stabilization) and all Savannah District Regional Conditions:

- No material is placed in excess of the minimum needed for erosion protection.
- Length is 172 linear feet (well below the 500-foot limit).
- Volume is less than 1 cubic yard per running foot below the ordinary high water mark (123.6 CY / 172 LF), meeting the threshold without waiver.
- No discharge into special aquatic sites (no vegetated marsh impacts).
- No impairment of surface water flow.
- The activity results in no more than minimal adverse environmental effects, with long-term beneficial stabilization effects.

The design satisfies all General Conditions and is consistent with the Georgia Coastal Management Program.

Justification Statement

The proposed shoreline stabilization on Parcel Ten (10) is fully justified and should be authorized. The project addresses documented active erosion on a residential waterfront lot currently under development with a single-family residence. The rip rap and upland grading design ensures minimal impacts (no vegetated marsh disturbance), provides immediate and reliable protection, and offers long-term environmental benefits by preventing sedimentation and stabilizing the shoreline. The project complies with all CMPA application requirements, NWP 13, and is not contrary to the public interest. It represents the least environmentally damaging practicable alternative and merits approval under the Coastal Marshlands Protection Act.

Conclusion

The proposed shoreline stabilization project for 170 Gowen Drive, is a targeted, minimal-impact response to active erosion along Crooked River. By grading the upland to a stable slope and armoring with Type 3 rip rap, strictly limited to the eroded area with no live marsh vegetation, the project will protect the applicants' residential property while preserving and enhancing adjacent natural resources. All impacts are confined to the minimum necessary area, and the design fully complies with CMPA standards, NWP 13, and all applicable environmental requirements.

The applicants respectfully request issuance of the CMPA, revocable license, and Nationwide Permit 13 Verification Letter. All required application materials, including the joint application form, revocable license request, adjacent owner notifications, deed, plat, jurisdictional determination verification, plans/exhibits, consistency certification, and this narrative, are provided. Should you have any questions or require additional information, please contact me at the information below.

Sam LaBarba
LaBarba Environmental Services
September 10, 2026

Docusign Envelope ID: 368ECF84-AB1C-89B2-8380-D0089D9A2BF1

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
COASTAL RESOURCES DIVISION
ONE CONSERVATION WAY · BRUNSWICK, GA 31520 · 912-264-7218

WALTER RABON
COMMISSIONER

DOUG HAYMANS
DIRECTOR

May 1, 2026

Terrance Grooms
170 Gowen Drive
Woodbine, GA 31569

Re: Coastal Marshlands Protection Act (CMPA), Jurisdictional Determination Verification, 170 Gowen Drive, Parcel 10, B.A. Gowen Subdivision, Crooked River, Camden County, Georgia

Dear Mr. Grooms:

Our office has received the survey and plat, dated April 14, 2026, prepared by AKM Surveying, Inc., No. 3143 entitled *"Map to Show Modified Topographical Survey of Parcel 10, B.A. Gowen Subdivision 31st G.M. District, Camden County, Georgia (According to Deed Recorded in Deed Book 148, Page 42 and as Shown on Plat Recorded in D.B. 612, PG. 535, Public Records of Said County)"* prepared for Terrance Grooms. Based on my site inspection, April 30, 2026, this plat and survey generally depict the delineation of the coastal marshlands boundary as required by the State of Georgia for jurisdiction under the authority of the Coastal Marshlands Protection Act O.C.G.A. § 12-5-280 et seq.

The Coastal Marshlands Protection Act O.C.G.A. § 12-5-280 et seq. delineation of this parcel is subject to change due to environmental conditions and legislative enactments. This jurisdiction line is valid for one year from date of the delineation. It will normally expire on April 30, 2027 but may be voided should legal and/or environmental conditions change.

This letter does not relieve you of the responsibility of obtaining other state, local, or federal permission relative to the site. Authorization by the Coastal Marshlands Protection Committee or this Department is required prior to any construction or alteration in the marsh jurisdictional area. We appreciate you providing us with this information for our records. If you have any questions, please contact me at (912) 264-7218.

Sincerely,

Beth Byrnes
Coastal Permit Coordinator
Marsh and Shore Management Program

Enclosure: *Map to Show Modified Topographical Survey of Parcel 10, B.A. Gowen Subdivision 31st G.M. District, Camden County, Georgia (According to Deed Recorded in Deed Book 148, Page 42 and as Shown on Plat Recorded in D.B. 612, PG. 535, Public Records of Said County)*

File: JDS20250212

Docusign Envelope ID: 368ECF84-AB1C-89B2-8380-D0089D9A2BF1

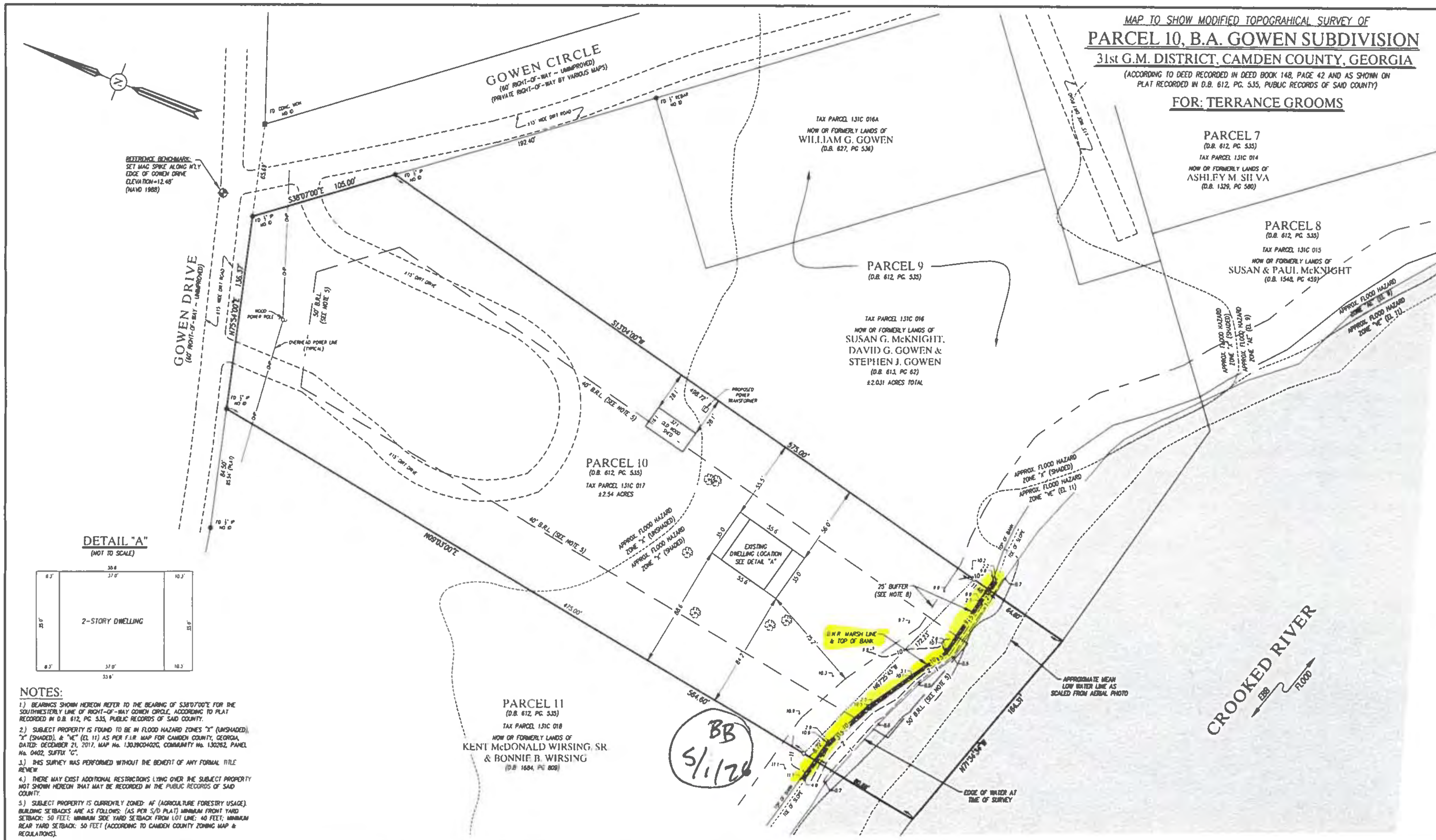
MAP TO SHOW MODIFIED TOPOGRAHICAL SURVEY OF

PARCEL 10, B.A. GOWEN SUBDIVISION

31st G.M. DISTRICT, CAMDEN COUNTY, GEORGIA

(ACCORDING TO DEED RECORDED IN DEED BOOK 148, PAGE 42 AND AS SHOWN ON PLAT RECORDED IN D.B. 612, PG. 535, PUBLIC RECORDS OF SAID COUNTY)

FOR: TERRANCE GROOMS



NOTES:

1.) BEARINGS SHOWN HEREON REFER TO THE BEARING OF S38°07'00"E FOR THE SOUTHWESTERLY LINE OF RIGHT-OF-WAY GOWEN CIRCLE, ACCORDING TO PLAT RECORDED IN D.B. 612, PG. 535, PUBLIC RECORDS OF SAID COUNTY.

2.) SUBJECT PROPERTY IS FOUND TO BE IN FLOOD HAZARD ZONES "X" (UNSHADED), "X" (SHADED), & "VE" (EL 11) AS PER F.I.R. MAP FOR CAMDEN COUNTY, GEORGIA, DATED: DECEMBER 21, 2017, MAP No. 13039C0402G, COMMUNITY No. 130262, PANEL No. 0402, SUFFIX "G".

3.) THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF ANY FORMAL TITLE REVIEW.

4.) THERE MAY EXIST ADDITIONAL RESTRICTIONS LYING OVER THE SUBJECT PROPERTY NOT SHOWN HEREON THAT MAY BE RECORDED IN THE PUBLIC RECORDS OF SAID COUNTY.

5.) SUBJECT PROPERTY IS CURRENTLY ZONED: AF (AGRICULTURE FORESTRY USAGE). BUILDING SETBACKS ARE AS FOLLOWS: (AS PER S/D PLAT) MINIMUM FRONT YARD SETBACK: 50 FEET; MINIMUM SIDE YARD SETBACK FROM LOT LINE: 40 FEET; MINIMUM REAR YARD SETBACK: 50 FEET (ACCORDING TO CAMDEN COUNTY ZONING MAP & REGULATIONS).

6.) THE DEPARTMENT OF NATURAL RESOURCES MARSH JURISDICTIONAL LINE SHOWN HEREON ARE CONSIDERED TO BE ALONG THE TOP OF BANK OF BLUFF AND WAS LOCATED IN THE FIELD BY THIS FIRM AT TIME OF SURVEY.

7.) NO ATTEMPT HAS BEEN MADE TO DETERMINE ANY WETLANDS OR OTHER ENVIRONMENTAL ISSUES, IF ANY, WHICH MAY AFFECT THE SUBJECT PROPERTY.

8.) THE GEORGIA EROSION & SEDIMENTATION ACT OF 1975, AS AMENDED (O.C.G.A. 12-7-1-et seq.) PROVIDES FOR THE PROTECTION OF STATE WATERS BY EXPLICITLY PROHIBITING LAND DISTURBING ACTIVITIES WITHIN 25 FEET FROM SPECIFIED STATE WATERS.

9.) REFERENCE BENCHMARK: MAG SPIKE ALONG N'LY EDGE OF GOWEN DRIVE AT INTERSECTION WITH GOWEN CIRCLE (LOCATION SHOWN HEREON). ELEVATION = 14.20' (NAVD 1988).

10.) EXISTING ELEVATIONS ARE SHOWN THUS: .10.1 AND ARE BASED ON NAVD 1988 DATUM.

SCALE 1" = 50'

DWN. BY: M.C. CKD. BY: J.S.F.
FIELD BOOK 128, PAGE 24
SURVEY DATE: 03-26-2026

DWG. # 1-2-1369-04-26

CLOSURE NOTE

THE FIELD DATA UPON WHICH THIS MAP IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN XXXXX FEET AND AN ANGULAR ERROR OF XX SECONDS PER ANGLE AND WAS ADJUSTED USING THE COMPASS RULE. (RADIAL SURVEY)

THIS MAP HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 454,494 FEET

EQUIPMENT USED ANGULAR: TOPCON ES LINEAR: TOPCON ES

LEGEND

- ○ – SET 1/2" REBAR LSF 1067
- □ – SET CONCRETE MONUMENT LSF 1067
- ■ – FOUND CONCRETE MONUMENT IDENTIFICATION AS NOTED
- ● – FOUND REBAR OR IRON PIPE IDENTIFICATION AS NOTED
- △ – FOUND PK NAIL & WASHER IDENTIFICATION AS NOTED
- P.C. = PLAT CABINET
- P.B. = PLAT BOOK
- P.D. = PLAT DRAWER
- D.B. = DEED BOOK
- PG. = PAGE
- (ch.) = CHORD
- PC = POINT OF CURVATURE
- PT = POINT OF TANGENCY
- PRC = POINT OF REVERSE CURVE
- B.R.L. = BUILDING RESTRICTION LINE

P.O. BOX 5730
ST. MARYS, GEORGIA 31558
(912) 729-1507 PHONE
(912) 729-1509 FAX
GEORGIA LICENSED
SURVEY FIRM No. 1067
EMAIL: AKM_SURVEYING@TDS.NET

PREPARED BY
A K M
SURVEYING, INC.
SURVEYORS & LAND PLANNERS

CERTIFICATION: This plat is a retracement of an existing parcel or parcels of land and does not subdivide or make any changes to any real property boundaries. The recording information of the documents, maps, plats, or other instruments which created the parcel or parcels are stated hereon. RECORDATION OF THIS PLAT DOES NOT IMPLY APPROVAL OF ANY LOCAL JURISDICTION, AVAILABILITY OF PERMITS, COMPLIANCE WITHOUT LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors as set forth in O.C.G.A. Section 15-6-67.

BY ____ DATE 04/14/2026

JEFFREY S. FOSTER
GA. REGISTERED SURVEYOR No. 3143

Docusign Envelope ID: 368ECF84-AB1C-89B2-8380-D0089D9A2BF1

MAP TO SHOW MODIFIED TOPOGRAPHICAL SURVEY OF

PARCEL 10, B.A. GOWEN SUBDIVISION

31st G.M. DISTRICT, CAMDEN COUNTY, GEORGIA

(ACCORDING TO DEED RECORDED IN DEED BOOK 148, PAGE 42 AND AS SHOWN ON PLAT RECORDED IN D.B. 612, PG. 535, PUBLIC RECORDS OF SAID COUNTY)

FOR: TERRANCE GROOMS

GOWEN CIRCLE
(60' RIGHT-OF-WAY ~ UMIMPROVED)
(PRIVATE RIGHT-OF-WAY BY VARIOUS MAPS)

GOWEN DRIVE
(60' RIGHT-OF-WAY ~ UNIMPROVED)

±15' WIDE DIRT ROAD

FD. CONC. MON. NO ID

FD. ½" REBAR NO ID

FD. ½" IP NO ID

REFERENCE BENCHMARK:
SET MAG SPIKE ALONG N'LY EDGE OF GOWEN DRIVE
ELEVATION=12.48'
(NAVD 1988)

S38°07'00"E 105.00'

65.69'

N75°54'00"E 136.37'

192.40'

S13°04'00"W 498.72'

N09°03'00"E 475.00'

S64°25'45"W 564.60'

N71°34'34"W 164.31'

84.50' (P.A.T.)
83.54' (P.A.T.)

±15' DIRT DRIVE

OHP

WOOD POWER POLE

OVERHEAD POWER LINE (TYPICAL)

50' B.R.L. (SEE NOTE 5)

40' B.R.L. (SEE NOTE 5)

PROPOSED POWER TRANSFORMER

28.1'

16.1'

±11.1' OLD WOOD SHED

575.00'

55.5'

55.6'

35.0'

56.0'

EXISTING DWELLING LOCATION SEE DETAIL "A"

88.6'

84.2'

75.2'

APPROX. FLOOD HAZARD ZONE "X" (UNSHADED)

APPROX. FLOOD HAZARD ZONE "X" (SHADED)

APPROX. FLOOD HAZARD ZONE "VE" (EL 11)

APPROX. FLOOD HAZARD ZONE "AE" (EL 9)

APPROX. FLOOD HAZARD ZONE "X" (SHADED)

TOP OF BANK

TOE OF SLOPE

25' BUFFER (SEE NOTE 8)

D.N.R. MARSH LINE & TOP OF BANK

172.25'

64.80'

APPROXIMATE MEAN LOW WATER LINE AS SCALED FROM AERIAL PHOTO

EDGE OF WATER AT TIME OF SURVEY

80.85'

CROOKED RIVER

EBB

FLOOD

PARCEL 10
(D.B. 612, PG. 535)
TAX PARCEL 131C 017
±2.54 ACRES

TAX PARCEL 131C 016A
NOW OR FORMERLY LANDS OF
WILLIAM G. GOWEN
(D.B. 627, PG 536)

PARCEL 9
(D.B. 612, PG. 535)

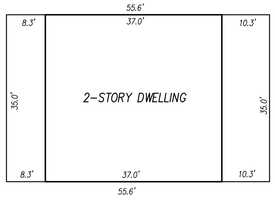
TAX PARCEL 131C 016
NOW OR FORMERLY LANDS OF
SUSAN G. McKNIGHT, DAVID G. GOWEN & STEPHEN J. GOWEN
(D.B. 613, PG 62)
±2.031 ACRES TOTAL

PARCEL 11
(D.B. 612, PG. 535)
TAX PARCEL 131C 018
NOW OR FORMERLY LANDS OF
KENT McDONALD WIRSING, SR. & BONNIE B. WIRSING
(D.B. 1684, PG 809)

PARCEL 7
(D.B. 612, PG. 535)
TAX PARCEL 131C 014
NOW OR FORMERLY LANDS OF
ASHLEY M. SILVA
(D.B. 1329, PG 580)

PARCEL 8
(D.B. 612, PG. 535)
TAX PARCEL 131C 015
NOW OR FORMERLY LANDS OF
SUSAN & PAUL McKNIGHT
(D.B. 1548, PG 459)

DETAIL "A"
(NOT TO SCALE)



NOTES:

1.) BEARINGS SHOWN HEREON REFER TO THE BEARING OF S38°07'00"E FOR THE SOUTHWESTERLY LINE OF RIGHT-OF-WAY GOWEN CIRCLE, ACCORDING TO PLAT RECORDED IN D.B. 612, PG. 535, PUBLIC RECORDS OF SAID COUNTY.

2.) SUBJECT PROPERTY IS FOUND TO BE IN FLOOD HAZARD ZONES "X" (UNSHADED), "X" (SHADED), & "VE" (EL 11) AS PER F.I.R. MAP FOR CAMDEN COUNTY, GEORGIA, DATED: DECEMBER 21, 2017, MAP No. 13039C0402G, COMMUNITY No. 130262, PANEL No. 0402, SUFFIX "G".

3.) THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF ANY FORMAL TITLE REVIEW.

4.) THERE MAY EXIST ADDITIONAL RESTRICTIONS LYING OVER THE SUBJECT PROPERTY NOT SHOWN HEREON THAT MAY BE RECORDED IN THE PUBLIC RECORDS OF SAID COUNTY.

5.) SUBJECT PROPERTY IS CURRENTLY ZONED: AF (AGRICULTURE FORESTRY USAGE). BUILDING SETBACKS ARE AS FOLLOWS: (AS PER S/D PLAT) MINIMUM FRONT YARD SETBACK: 50 FEET; MINIMUM SIDE YARD SETBACK FROM LOT LINE: 40 FEET; MINIMUM REAR YARD SETBACK: 50 FEET (ACCORDING TO CAMDEN COUNTY ZONING MAP & REGULATIONS).

6.) THE DEPARTMENT OF NATURAL RESOURCES MARSH JURISDICTIONAL LINE SHOWN HEREON ARE CONSIDERED TO BE ALONG THE TOP OF BANK OF BLUFF AND WAS LOCATED IN THE FIELD BY THIS FIRM AT TIME OF SURVEY.

7.) NO ATTEMPT HAS BEEN MADE TO DETERMINE ANY WETLANDS OR OTHER ENVIRONMENTAL ISSUES, IF ANY, WHICH MAY AFFECT THE SUBJECT PROPERTY.

8.) THE GEORGIA EROSION & SEDIMENTATION ACT OF 1975, AS AMENDED (O.C.G.A. 12-7-1-et seq.) PROVIDES FOR THE PROTECTION OF STATE WATERS BY EXPLICITLY PROHIBITING LAND DISTURBING ACTIVITIES WITHIN 25 FEET FROM SPECIFIED STATE WATERS.

9.) REFERENCE BENCHMARK: MAG SPIKE ALONG N'LY EDGE OF GOWEN DRIVE AT INTERSECTION WITH GOWEN CIRCLE (LOCATION SHOWN HEREON). ELEVATION = 14.20' (NAVD 1988).

10.) EXISTING ELEVATIONS ARE SHOWN THUS: +10.1 AND ARE BASED ON NAVD 1988 DATUM.

30' 15' 0' 30'
SCALE: 1" = 30'

DWN. BY: M.C. CKD. BY: J.S.F.
FIELD BOOK 126, PAGE 24
SURVEY DATE: 03-26-2026

DWG. # T-2-1369-04-26

CLOSURE NOTE:

THE FIELD DATA UPON WHICH THIS MAP IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN XXXXX FEET AND AN ANGULAR ERROR OF XX SECONDS PER ANGLE AND WAS ADJUSTED USING THE COMPASS RULE. (RADIAL SURVEY)

THIS MAP HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 454,494 FEET.

EQUIPMENT USED: ANGULAR: TOPCON ES
LINEAR: TOPCON ES

LEGEND:

- ○ = SET 1/2" REBAR LSF 1067
- □ = SET CONCRETE MONUMENT LSF 1067
- ■ = FOUND CONCRETE MONUMENT IDENTIFICATION AS NOTED
- ● = FOUND REBAR OR IRON PIPE IDENTIFICATION AS NOTED
- △ = FOUND PK NAIL & WASHER IDENTIFICATION AS NOTED

P.C. = PLAT CABINET
P.B. = PLAT BOOK
P.D. = PLAT DRAWER
D.B. = DEED BOOK
PG. = PAGE
(ch.) = CHORD
PC = POINT OF CURVATURE
PT = POINT OF TANGENCY
PRC = POINT OF REVERSE CURVE
B.R.L. = BUILDING RESTRICTION LINE

P.O. BOX 5730
ST. MARYS, GEORGIA 31558
(912) 729-1507 PHONE
(912) 729-1509 FAX

GEORGIA LICENSED SURVEY FIRM No. 1067

EMAIL: AKM_SURVEYING@TDS.NET

PREPARED BY:

A K M
SURVEYING, INC.
SURVEYORS & LAND PLANNERS

CERTIFICATION: This plat is a retracement of an existing parcel or parcels of land and does not subdivide or make any changes to any real property boundaries. The recording information of the documents, maps, plats, or other instruments which created the parcel or parcels are stated hereon. RECORDATION OF THIS PLAT DOES NOT IMPLY APPROVAL OF ANY LOCAL JURISDICTION, AVAILABILITY OF PERMITS, COMPLIANCE WITHOUT LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. Furthermore, the undersigned land surveyer certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors as set forth in O.C.G.A. Section 15-6-67.

BY: _____ DATE: 04/14/2026
JEFFREY S. FOSTER
GA. REGISTERED SURVEYOR No. 3143

JEFFREY S. FOSTER
No. 3143
REGISTERED LAND SURVEYOR

Docusign Envelope ID: 368ECF84-AB1C-89B2-8380-D0089D9A2BF1

Camden County, GA



Overview



Legend

- Parcels
- **USA Major Highways**
- Limited Access
- Highway
- Major Road
- Local Road
- Minor Road
- Other Road
- Ramp
- Ferry
- Pedestrian Way
- **City Labels**

Parcel ID	131C 017	**Owner**	GROOMS TERRANCE G & ARIEL	**Last 2 Sales**			
Class Code	Residential		170 GOWEN DRIVE	**Date**	**Net Price**	**Reason**	**Qual**
Taxing District	42 UNINCORPORATED SERVICE DIST		WOODBINE, GA 31569	3/30/2021	$173200	FY	U
	42 UNINCORPORATED SERVICE DIST	**Physical Address**	170 GOWEN DR	3/1/1976	0	FY	U
Acres	2.54	**Assessed Value**	Value $560687				

(Note: Not to be used on legal documents)

THE PARCEL LINES SHOWN ON THIS SITE ARE NOT LEGAL BOUNDRIES AND MUST NOT BE USED FOR LEGAL DOCUMENTS. THE PARCEL LINEWORK ARE FOR LOCATING PARCELS FOR TAX PURPOSES ONLY. THEY ARE NOT SURVEYS DUE TO THE NATURE OF HOW THE ARE PRODUCED. LEGAL BOUNDRIES SHOULD BE TAKEN FROM LEGALLY DOCUMENTED PLATS AND DEEDS.

Date created: 8/31/2026
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