

To: File

From: Parsons Brinckerhoff Team

Date: June 16, 2015

Subject: Mid Currituck Bridge Study Reevaluation - Field Reconnaissance January 2015
(STIP No, R-2576)

The Parsons Brinckerhoff team visited the project study area between January 11 and 13, 2015 inclusive. In addition to a windshield survey of existing conditions along the Preferred Alternative, two meetings were held with government officials. The first was held on January 11th with the Town of Duck representatives Joe Heard, – Director of Community Development and Chris Layton – Town Manager. The second, was held January 12th with Currituck County. The county was represented by: Ben Woody – Planning Director, Donna Voliva – Senior Planner, and Peter Bishop – County Economic Director.

The content addressed herein follows the Scope of Services for Task Order No.20 for the Mid Currituck Bridge Project. This memo highlights the findings of the field visit and the discussion from the meetings with government officials.

1. New Development and Preferred Alternative

No new residential developments have been approved within the vicinity of the Preferred Alternative since the completion of the 2012 Mid Currituck Bridge Study FEIS. There have been changes within developments previously approved.

SAGA Construction company was noted to have several signs on the Outer Banks highlighting their proposed single-family residential construction activities. The Currituck county officials noted that they are a new construction company operating on the Outer Banks with financial investment from overseas supporting the company's expansion. The county representatives indicated that this foreign direct investment was coming from Asia.

New development (built or under construction) identified during the field reconnaissance within range of project aerial photography are marked on field maps included with this memorandum as Attachments A and B.

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Mainland

Coopers Landing Subdivision in Aydlett – 5 new homes. This subdivision is approximately 2,200 feet north of the Preferred Alternative (north of the project aerial photography included in Attachment A) off of Narrow Shore Road in Aydlett. These homes are outside of the impact area (proposed right-of-way) for the bridge, but as documented in the FEIS, access via Narrow Shore Road would be affected during the construction period when the bridge spans over Narrow Shore Road are built.

Other Aydlett – One new home was noted within the Narrow Shore Road community approximately 900 feet south of the proposed bridge. This is a sound-facing house. Visual impacts of sound-facing homes in this area are addressed in the FEIS. The Whispering Pines subdivision (approximately 1,800 feet south of the proposed project) had several lots for sale but only one new home appears to have been built since the completion of the FEIS. This subdivision is outside the impact area of the project.

Outer Banks

Corolla Bay Phase I Subdivision (west of NC 12) – The FEIS noted two completed homes. There are now four. Impacts to Corolla Bay Phase I were addressed in the FEIS.

Corolla Bay Phase II Subdivision (west of NC 12) – No improvements (streets/utilities/homes) have yet been built in this subdivision. The Preferred Alternative ends in this subdivision and the impact is addressed in the FEIS. The current developer submitted a request to the county for vested rights. The NCDOT has agreed to a protective purchase.

Corolla Bay Villas (east of NC 12) – 27 new homes have been built or are currently being constructed on the eastern side of NC 12 just to the north of the bridge terminus. Its street connection to NC 12 intersects with NC 12 at the same location as Corolla Bay Phase I. This subdivision was platted but not developed at the time of the FEIS. Immediately adjacent and south of this development is another subdivision occupying the north end of N. Harbor View. The subdivision was platted before the completion of the FEIS and potential impacts were addressed. Currituck County officials do not think construction is imminent. They were unable to give a timeframe within which they expected construction to begin.

Other New Residential Development on the Outer Banks. Elsewhere along NC 12, four homes have been built on lots adjoining NC 12 or within the area of potential noise impact (66 dBA contour).

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Impacts on undeveloped lots along NC 12 were considered in the FEIS. This included land purchase and noise levels for which the 66 dBA contour was published for subdivisions affected by NC 12 improvements.

Commercial Development

A Wings store has been built in the existing Monterey Plaza Shopping Center. Its construction removed approximately 50 parking spaces from the existing parking lot. The Preferred Alternative also removes parking spaces from this shopping center and the lower number of existing parking spaces should be considered in the re-evaluation. A new commercial property has been developed immediately west of the Shopping Center, across NC 12, and south of Timbuk II. It houses a recreational business of miniature golf and a go-kart racing facility. A commercial building housing a Townebank branch was built at the junction of US 158 and Juniper Trail east of the Wright Memorial Bridge. It replaced an office use building that was present during the preparation of the FEIS.

2. Viewshed Changes

No notable changes in potential views to or from the Preferred Alternative were noted during the field visit. New residential construction was noted but in a few locations but these were within existing subdivisions already assessed for visual impact in the FEIS.

Adylett – as noted above, one new home has been built and will be within the viewshed to and from the Preferred Alternative. Visual impacts of sound-facing homes in this area are addressed in the FEIS.

Corolla Bay Subdivision Phase I – No new homes have been added to the sound-facing side of this subdivision. The two added do not front on the sound. Impacts to Corolla Bay Phase I were addressed in the FEIS, including visual impacts.

3. New Parking & the Preferred Alternative

No new parking spaces were noted during the field visit within the area affected by proposed right-of-way or permanent drainage easements. A Wings store that has been built in the existing Monterey Plaza Shopping Center removed approximately 50 parking spaces. As noted above, the Preferred Alternative also removes parking spaces from this shopping center and the lower number of existing parking spaces should be considered in the re-evaluation. The new Adventure Golf complex includes a new parking lot but is outside of the proposed right of way/permanent drainage easement requirements for the project.

4. Non-Road Accessible Outer Banks Development Pattern Changes

Currituck County representatives indicated that there have been no changes in the development patterns north of the end of the paved portion of NC 12 since the completion of the Mid Currituck Bridge Study FEIS. New homes in this area still tend to be built in the first couple rows on the ocean side. The number of developed parcels in 2014 was 731 of 3,150 platted parcels compared to 611 in 2007. The county has maintained that there can be no permitting or re-zoning in this area for commercial development, despite repeated applications. As was the case when the FEIS was completed, the only commercial uses allowed in the area include a Twiddy Vacation Rental office that operates out of the historic Coast Guard Station/Wash Woods Life Saving Station in North Swan Beach, a small accessory snack/t-shirt store that is housed within the Fire Station Number 7 in Carova Beach, and several home-based businesses.

5. Multi Use Paths

Currituck County – No new multi-use paths have been built since the release of the FEIS. The Connecting Corolla Bike, Pedestrian, Access & Wayfinding Plan for the Currituck County Outer Banks completed in October 2013 does propose additional multi-use paths. This report is described in a change in local plans and ordinances memorandum prepared by Parsons Brinkerhoff under Task Order 20.

6. New Community Facilities

Maple Area, Currituck County – This newer development area is a 600+ acre tract of land on the mainland along US 158 west of its intersection with NC 168 that includes a \$40 million dollar investment in new county facilities. This development area is adjacent to the Currituck County Regional Airport and the College of the Albemarle's new Regional Aviation and Technical Training Center. The site includes a commerce park, access to walking trails, a new YMCA community center and other recreation facilities, including the first county-run multi-sports complex. The sporting complex was opened in November 2014. Commerce Park is designed to attract high quality business development to the county. The State-Certified, shovel-ready park includes 11 individual shovel-ready sites available immediately, ranging in size from 3.8 to 24.5 acres. All required infrastructure - water, sewer, natural gas, broadband, and electricity was installed by the county.

The Maple area of Currituck County is one of two areas of future nodal development planned in the upcoming County Land Use Plan update. Infrastructure development in the Maple area is expected to be a crucial element in fostering growth in that area. The

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other area of planned nodal development is the Moyock Region in northern mainland Currituck County. Moyock is 22 miles north-northwest of the Aydlett Road and US 158 intersection, along NC 168.

The Town of Duck is also undertaking a \$15 million beach nourishment project with an expected completion date of 2016. The nourishment project will begin north of the pier at the US Army Corps of Engineers Field Research Facility, approximately 1 mile north of Duck's main commercial area, and continue for approximately 7 miles to the north.

7. Notable Impervious Surface Changes

No notable additions to the total amount impervious surface were noted during the field reconnaissance, including new roads and parking lots. New development is generally in-filling subdivisions with existing improvements.

8. Noise Receptor Changes

Mainland

On the mainland along US 158, Aydlett Road and Narrow Shore Road, no new noise receptors were noted within the 66dBA noise contour.

Outer Banks

There were a total of four new residential noise receptors located within the 66dBA noise contour that did not exist when the FEIS was completed. See Attachment B.

The 27 new homes in the Corolla Bay Villas Subdivision fall outside of the noise contours associated with the proposed bridge's landing at Corolla. Along NC 12 there are 10 new residential structures that fall within the 66dBA contour. They occur in the following subdivisions: Monteray Shores, Currituck Club, and Magnolia Bay.

Three new commercial facilities were identified during the field reconnaissance. A Wings Superstore and the Adventure mini golf and kart racing facility are along NC 12. The Townebank building is at the junction of US 158 and Juniper Trail east of the Wright Memorial Bridge. It replaced an office use building that was considered in the FEIS noise impact assessment. The mini-golf/kart racing facility lies outside of the 71 dBA commercial noise contour. The Wings Superstore is not considered a noise sensitive receptor. The Townebank building and the building it replaced fall within the 71dBA contour.

Attachment A



1 Home

1 Home

New Construction
Since the FEIS

Excerpt from: Preferred Alternative PE Scroll 2 of 6



27 Homes

PDE

PDE

PDE

PDE

PDE

PDE

PDE

PDE

PDE

PDE

PDE

PDE

PDE

PDE

PDE

PDE

New Construction
Since the FEIS

Excerpt from: Preferred Alternative PE Scroll 4 of 6



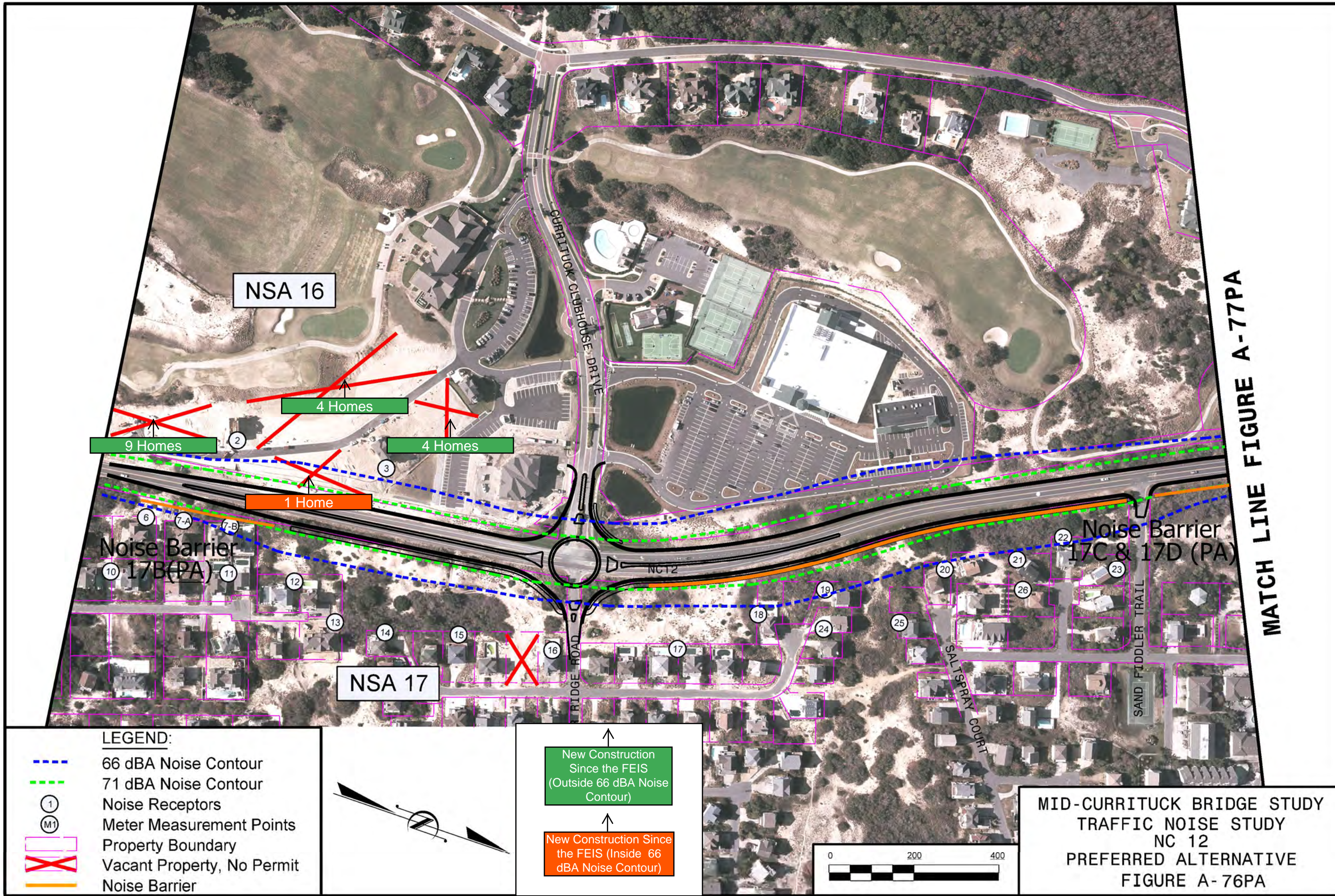
Townebank

Excerpt from Preferred Alternative PE Scroll 6 of 6

New Commercial
Construction Since
the FEIS

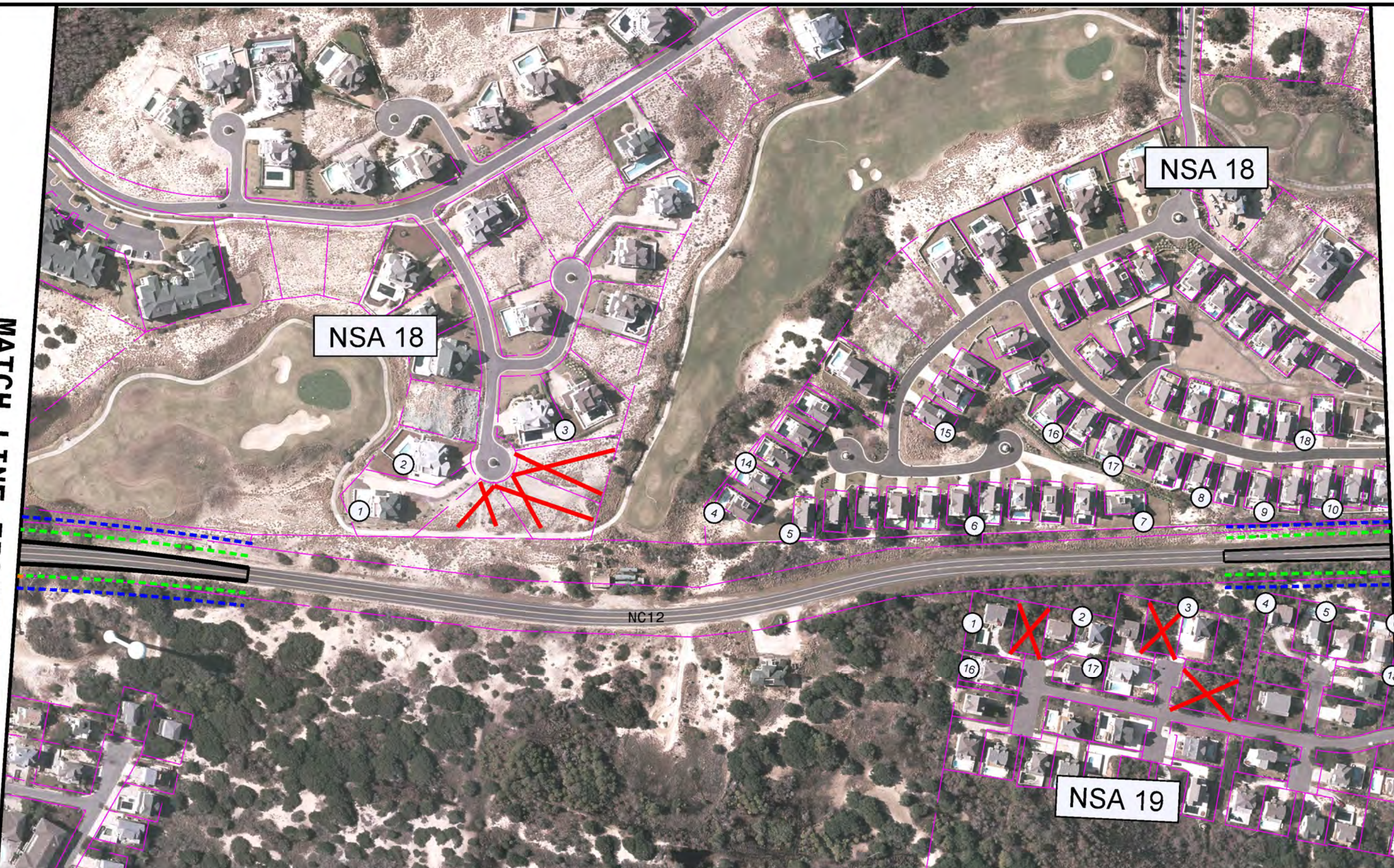


Attachment B










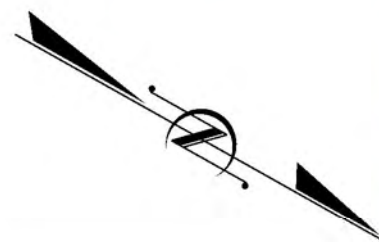
MATCH LINE FIGURE A-76PA

MATCH LINE FIGURE A-78PA



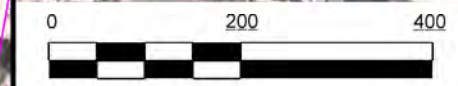
LEGEND:

-  66 dBA Noise Contour
-  71 dBA Noise Contour
-  Noise Receptors
-  Meter Measurement Points
-  Property Boundary
-  Vacant Property, No Permit
-  Noise Barrier










↑
 New Construction
 Since the FEIS
 (Outside 66 dBA Noise
 Contour)

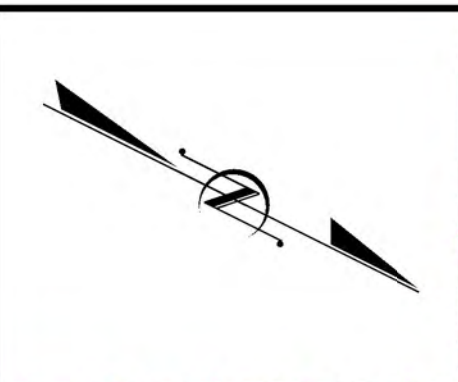
↑
 New Construction Since
 the FEIS (Inside 66
 dBA Noise Contour)



MID-CURRITUCK BRIDGE STUDY
 TRAFFIC NOISE STUDY
 NC 12
 PREFERRED ALTERNATIVE
 FIGURE A-77PA

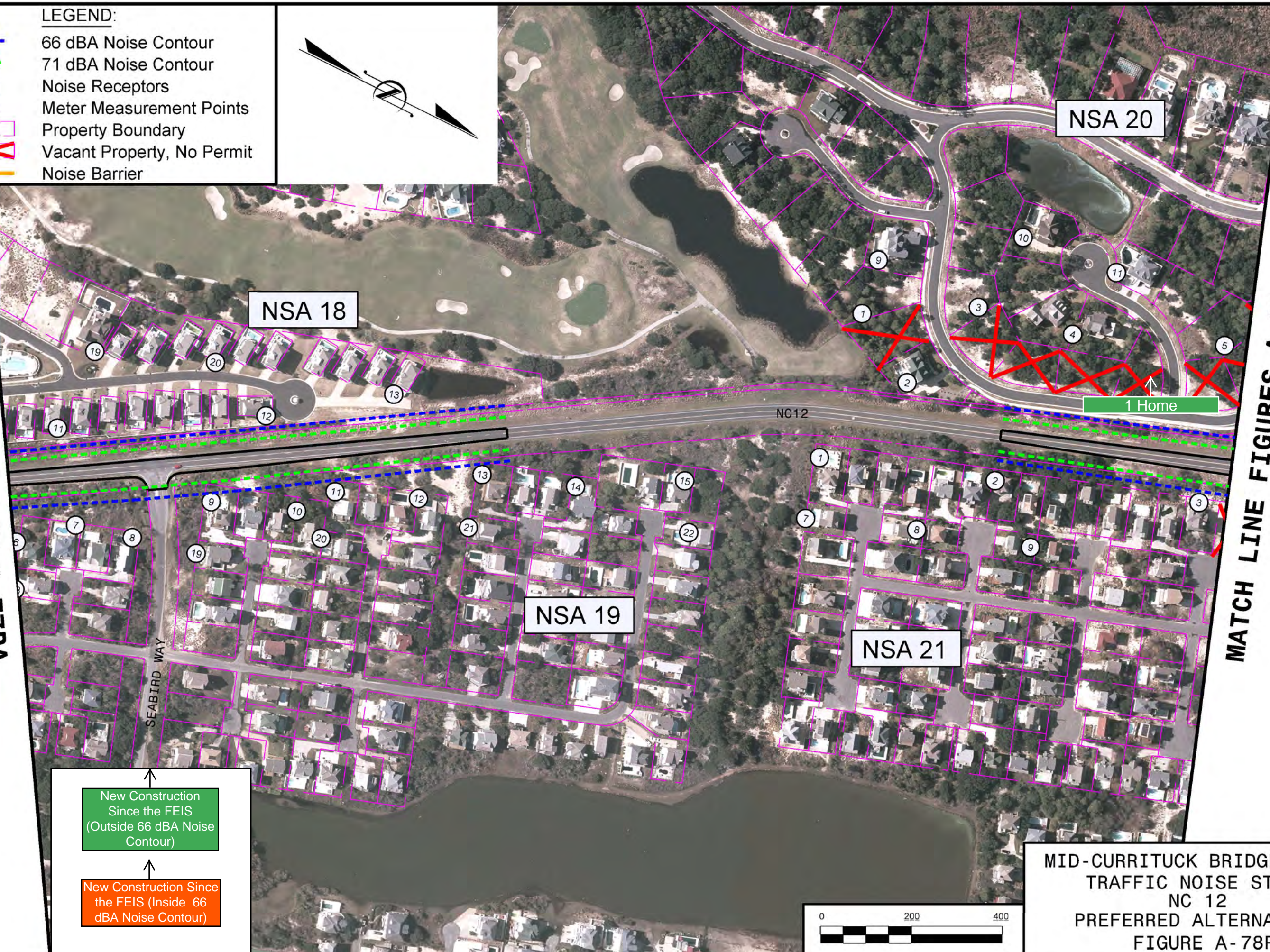
LEGEND:

-  66 dBA Noise Contour
-  71 dBA Noise Contour
-  Noise Receptors
-  Meter Measurement Points
-  Property Boundary
-  Vacant Property, No Permit
-  Noise Barrier



MATCH LINE FIGURE A-77PA

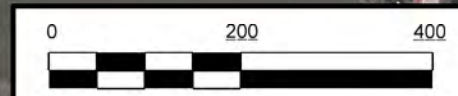
MATCH LINE FIGURES A-79PA



New Construction Since the FEIS (Outside 66 dBA Noise Contour)








↑

New Construction Since the FEIS (Inside 66 dBA Noise Contour)



**MID-CURRITUCK BRIDGE STUDY
TRAFFIC NOISE STUDY
NC 12
PREFERRED ALTERNATIVE
FIGURE A-78PA**

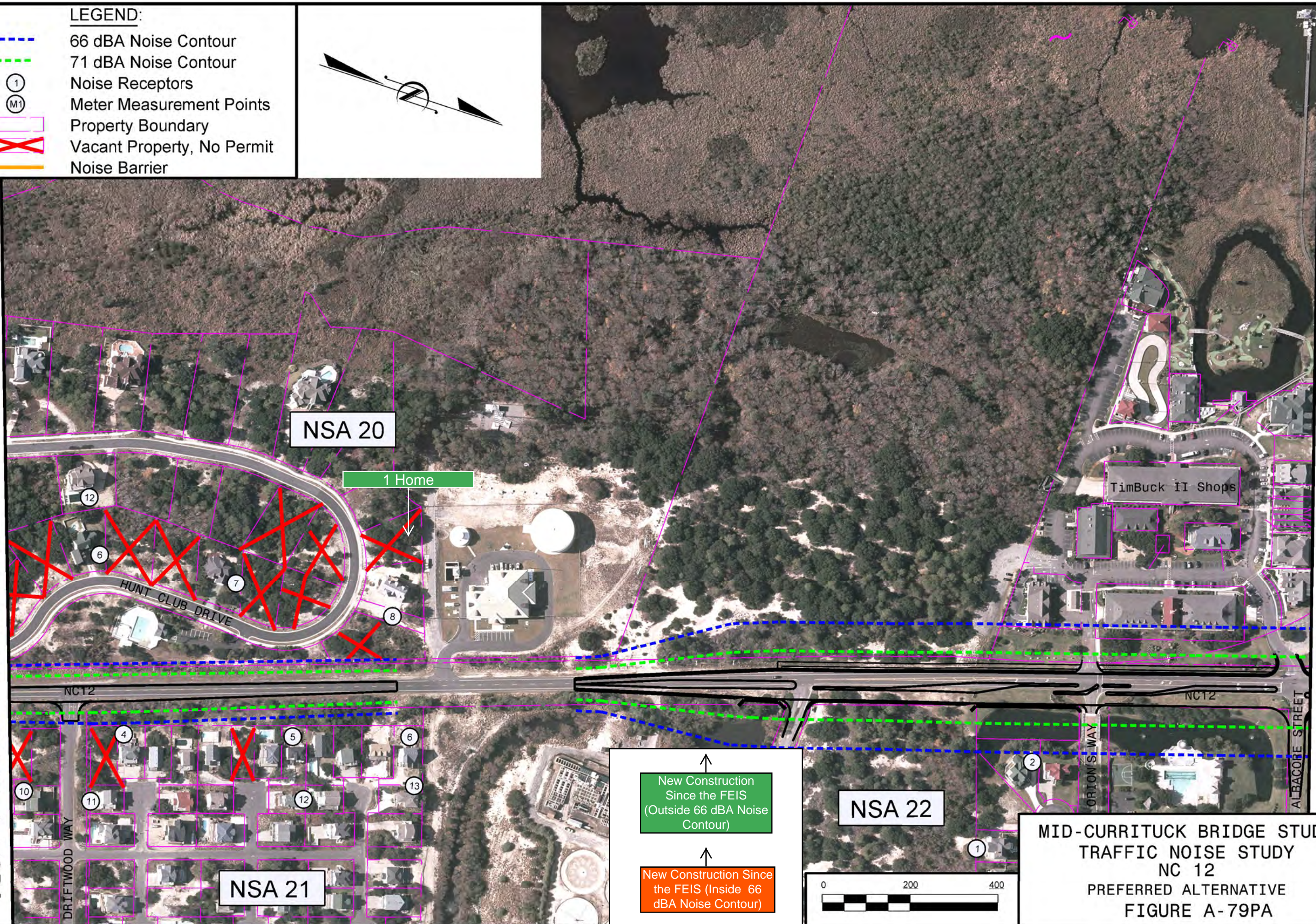
LEGEND:

-  66 dBA Noise Contour
-  71 dBA Noise Contour
-  Noise Receptors
-  Meter Measurement Points
-  Property Boundary
-  Vacant Property, No Permit
-  Noise Barrier



MATCH LINE FIGURE A-78PA

MATCH LINE FIGURES A-81PA



NSA 20

1 Home

TimBuck II Shops

HUNT CLUB DRIVE

NCT12

NCT12

DRIFTWOOD WAY

NSA 21

NSA 22

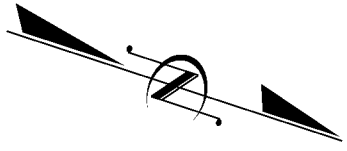
ORION'S WAY

ALBACORE STREET

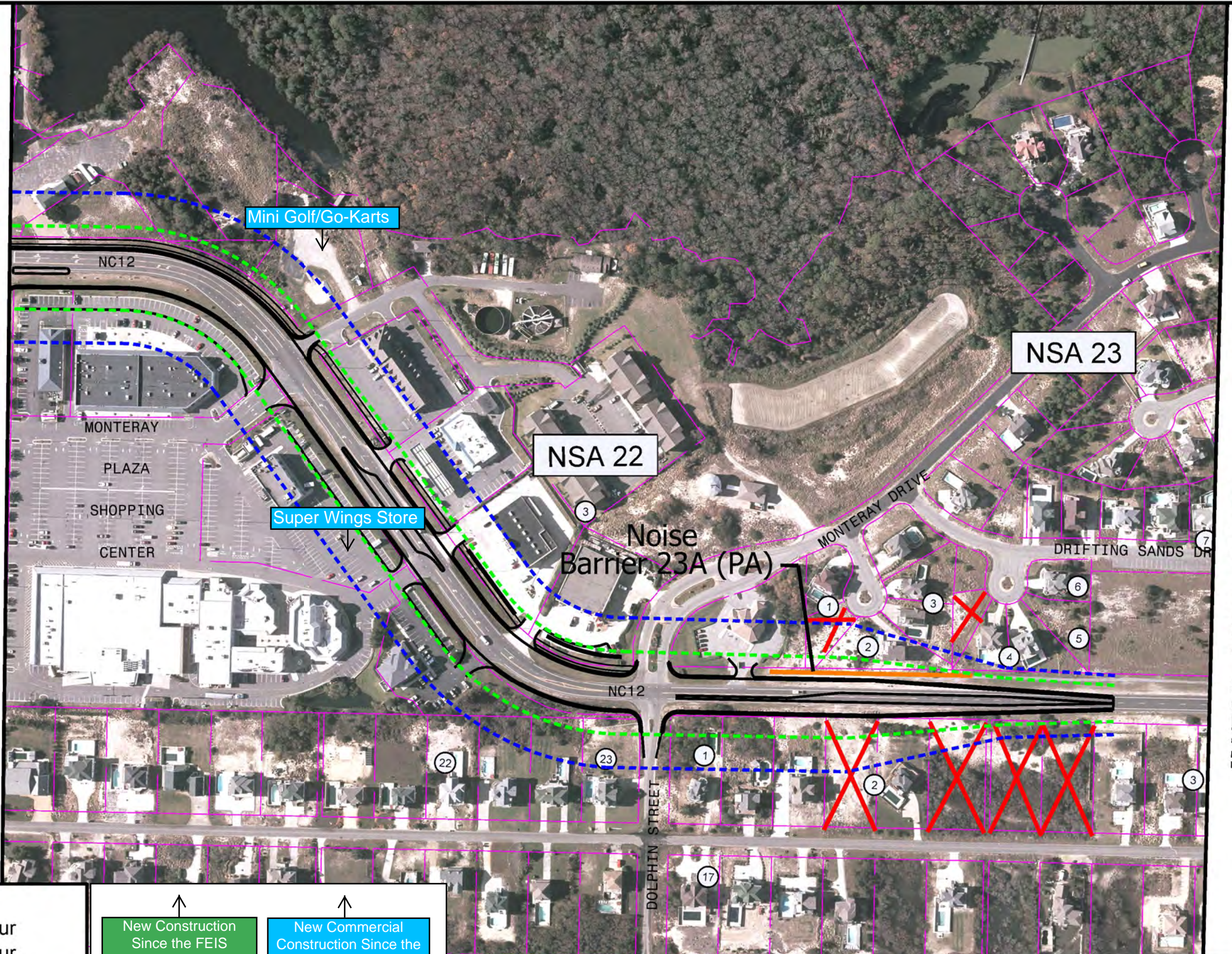
New Construction Since the FEIS (Outside 66 dBA Noise Contour)

New Construction Since the FEIS (Inside 66 dBA Noise Contour)

MID-CURRITUCK BRIDGE STUDY
TRAFFIC NOISE STUDY
NC 12
PREFERRED ALTERNATIVE
FIGURE A-79PA



MATCH LINE FIGURE A-79PA



MATCH LINE FIGURE A-83PA

LEGEND:

- 66 dBA Noise Contour
- 71 dBA Noise Contour
- Noise Receptors
- Meter Measurement Points
- Property Boundary
- Vacant Property, No Permit
- Noise Barrier

New Construction Since the FEIS (Outside 66 dBA Noise Contour)

New Commercial Construction Since the FEIS

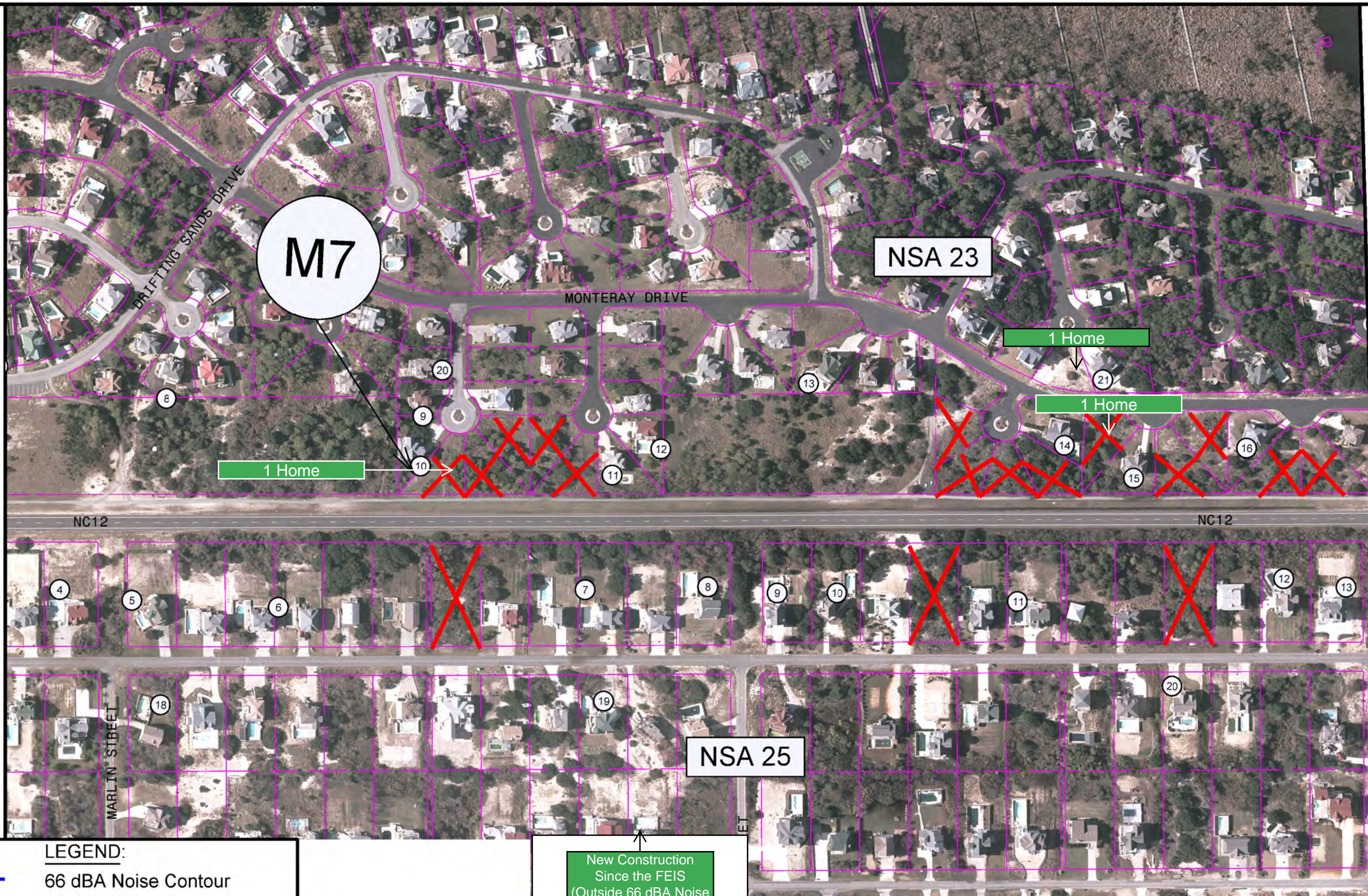
New Construction Since the FEIS (Inside 66 dBA Noise Contour)

NSA 25








MID-CURRITUCK BRIDGE STUDY
TRAFFIC NOISE STUDY
NC 12
PREFERRED ALTERNATIVE
FIGURE A-81PA

MATCH LINE FIGURE A-81PA

MATCH LINE FIGURE A-84PA



LEGEND:

-  66 dBA Noise Contour
-  71 dBA Noise Contour
-  Noise Receptors
-  Meter Measurement Points
-  Property Boundary
-  Vacant Property, No Permit
-  Noise Barrier



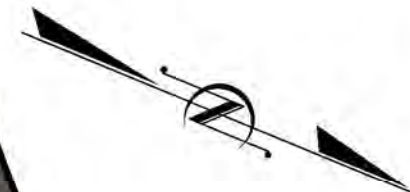
New Construction
Since the FEIS
(Outside 66 dBA Noise
Contour)

New Construction Since
the FEIS (Inside 66
dBA Noise Contour)

MID-CURRITUCK BRIDGE STUDY
TRAFFIC NOISE STUDY
NC 12
PREFERRED ALTERNATIVE
FIGURE A-83PA

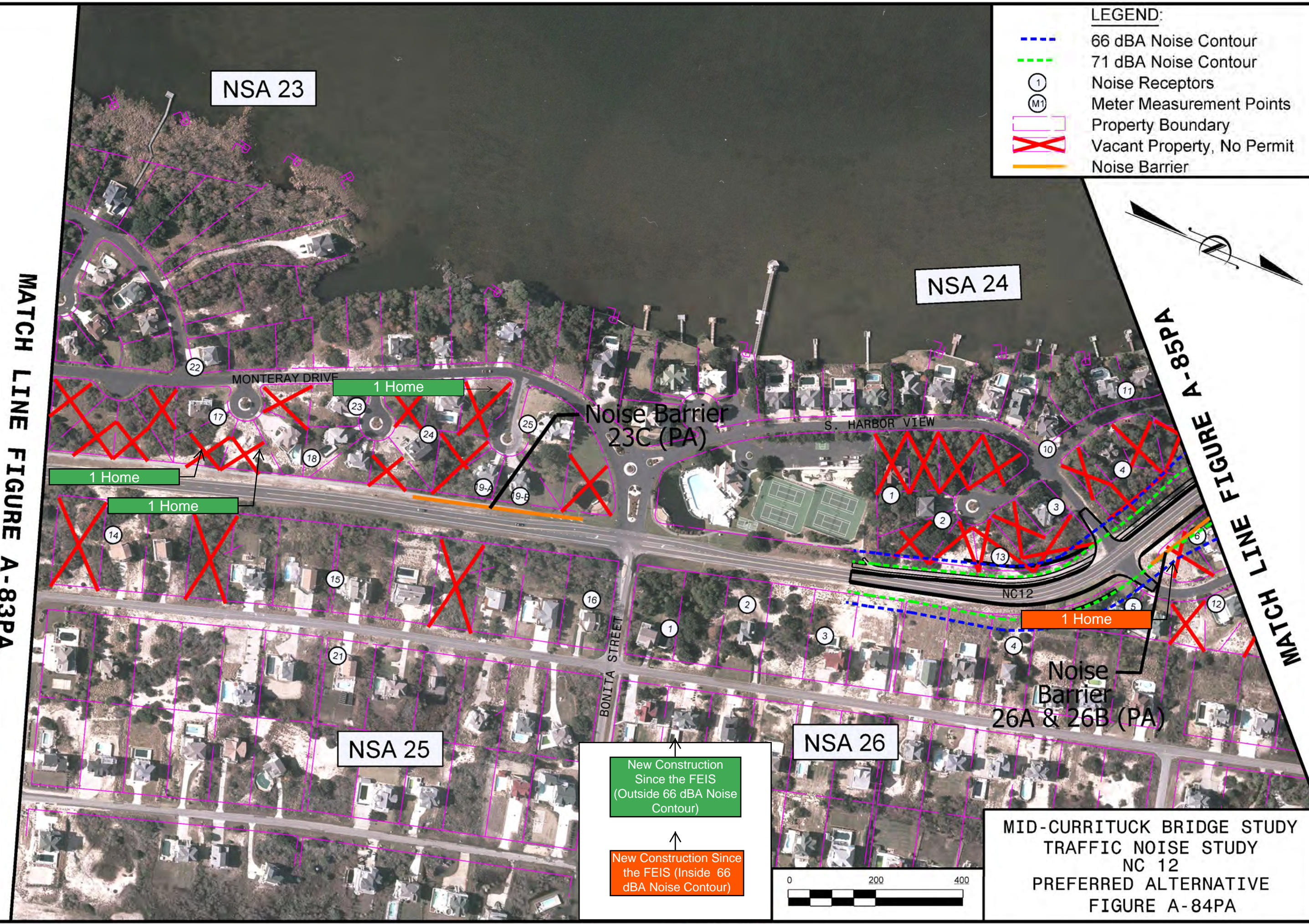
LEGEND:

- 66 dBA Noise Contour
- 71 dBA Noise Contour
- ① Noise Receptors
- Ⓜ Meter Measurement Points
- ▭ Property Boundary
- ✗ Vacant Property, No Permit
- Noise Barrier



MATCH LINE FIGURE A-83PA

MATCH LINE FIGURE A-85PA



NSA 23

NSA 24

NSA 25

NSA 26

1 Home

1 Home

1 Home

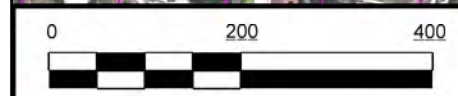
Noise Barrier
23C (PA)

1 Home

Noise Barrier
26A & 26B (PA)








New Construction
Since the FEIS
(Outside 66 dBA Noise
Contour)

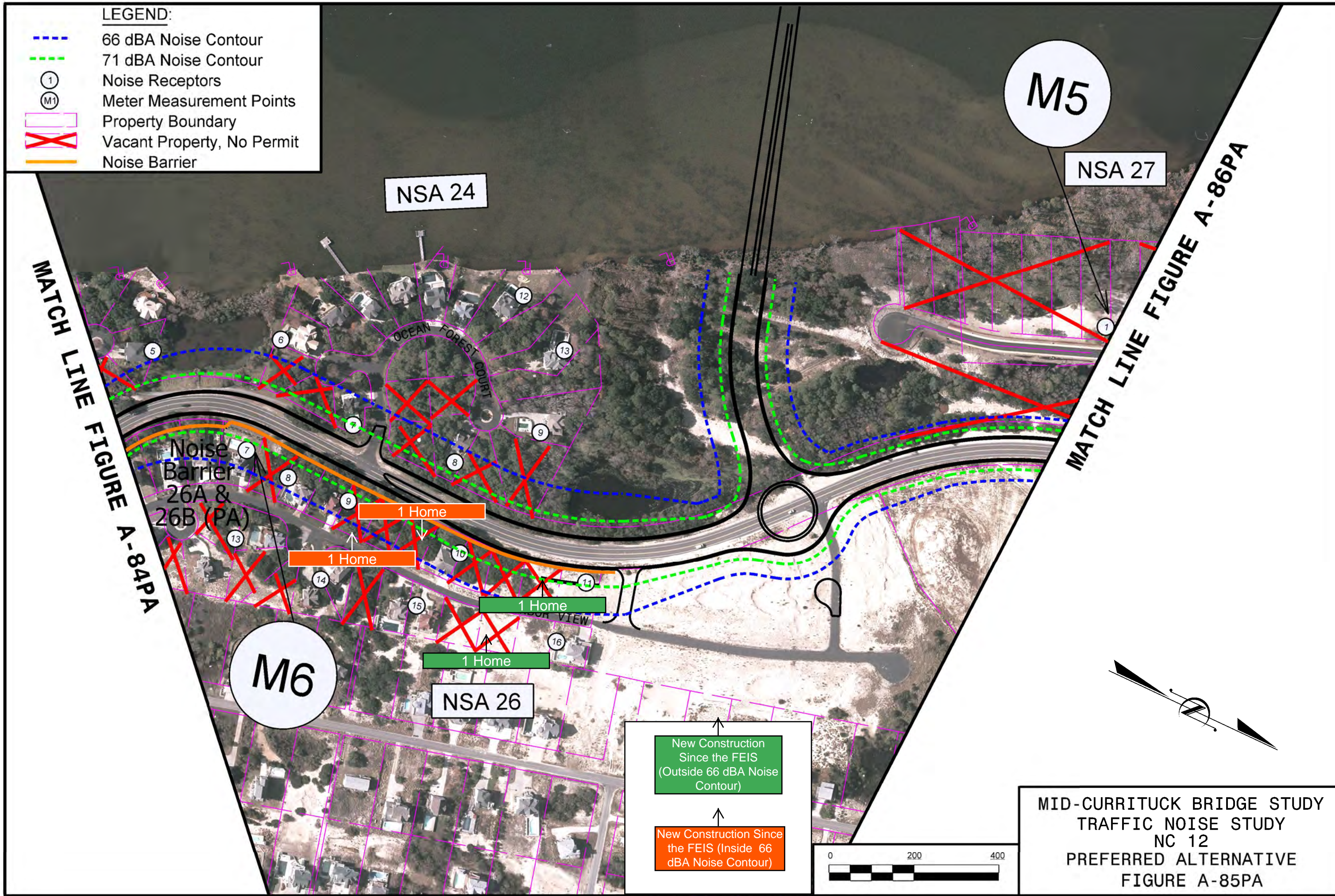
New Construction Since
the FEIS (Inside 66
dBA Noise Contour)



MID-CURRITUCK BRIDGE STUDY
TRAFFIC NOISE STUDY
NC 12
PREFERRED ALTERNATIVE
FIGURE A-84PA








LEGEND:

-  66 dBA Noise Contour
-  71 dBA Noise Contour
-  Noise Receptors
-  Meter Measurement Points
-  Property Boundary
-  Vacant Property, No Permit
-  Noise Barrier



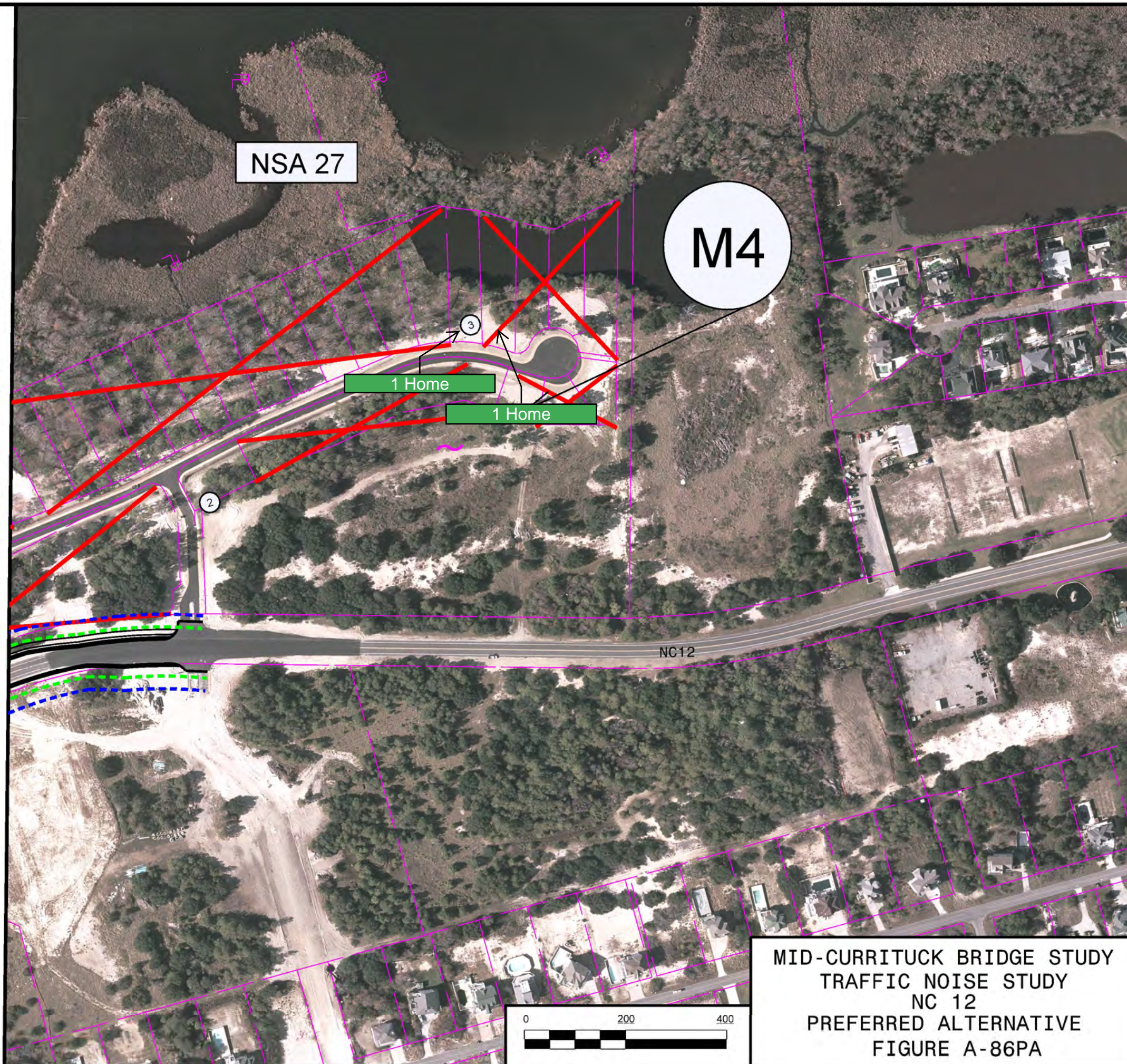
MID-CURRITUCK BRIDGE STUDY
TRAFFIC NOISE STUDY
NC 12
PREFERRED ALTERNATIVE
FIGURE A-85PA

LEGEND:

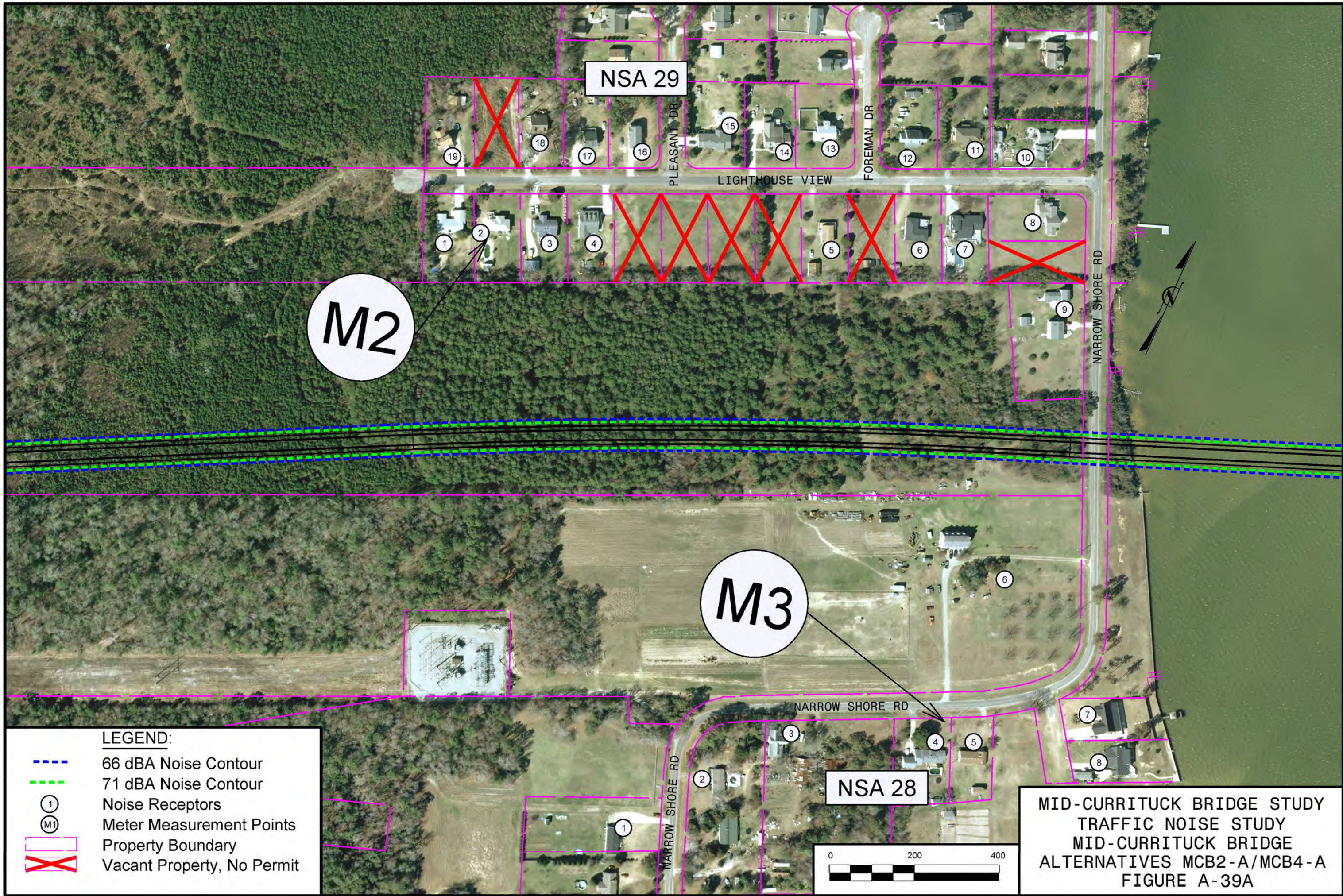
-  66 dBA Noise Contour
-  71 dBA Noise Contour
-  Noise Receptors
-  Meter Measurement Points
-  Property Boundary
-  Vacant Property, No Permit
-  Noise Barrier



MATCH LINE FIGURE A-85PA



**MID-CURRITUCK BRIDGE STUDY
TRAFFIC NOISE STUDY
NC 12
PREFERRED ALTERNATIVE
FIGURE A-86PA**



NSA 29

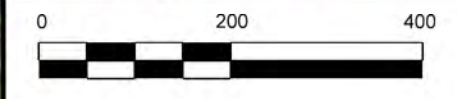
M2

M3

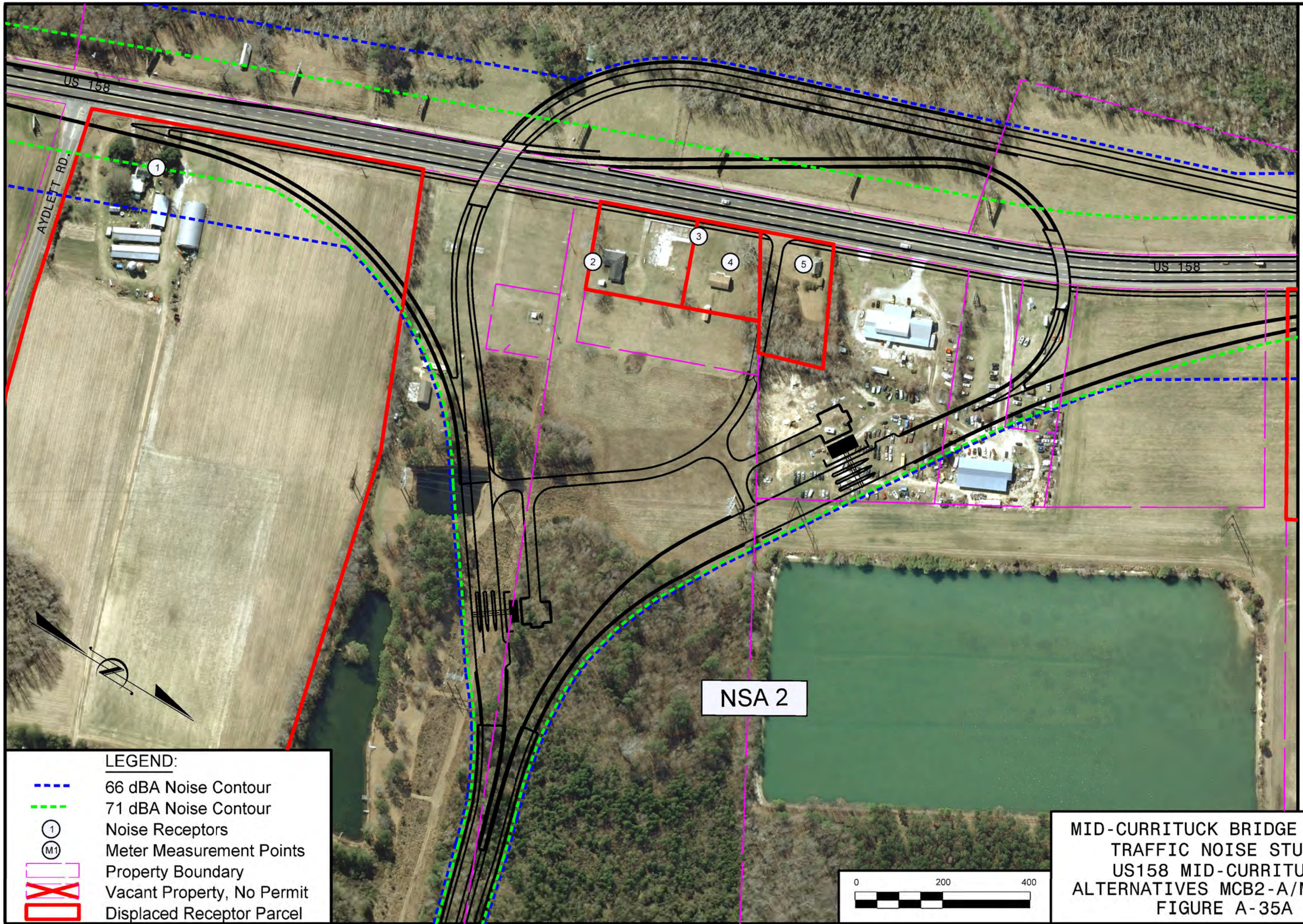
NSA 28

LEGEND:

- - - 66 dBA Noise Contour
- - - 71 dBA Noise Contour
- ① Noise Receptors
- Ⓜ Meter Measurement Points
- ▭ Property Boundary
- ✗ Vacant Property, No Permit



MID-CURRITUCK BRIDGE STUDY
 TRAFFIC NOISE STUDY
 MID-CURRITUCK BRIDGE
 ALTERNATIVES MCB2 - A/MCB4 - A
 FIGURE A-39A



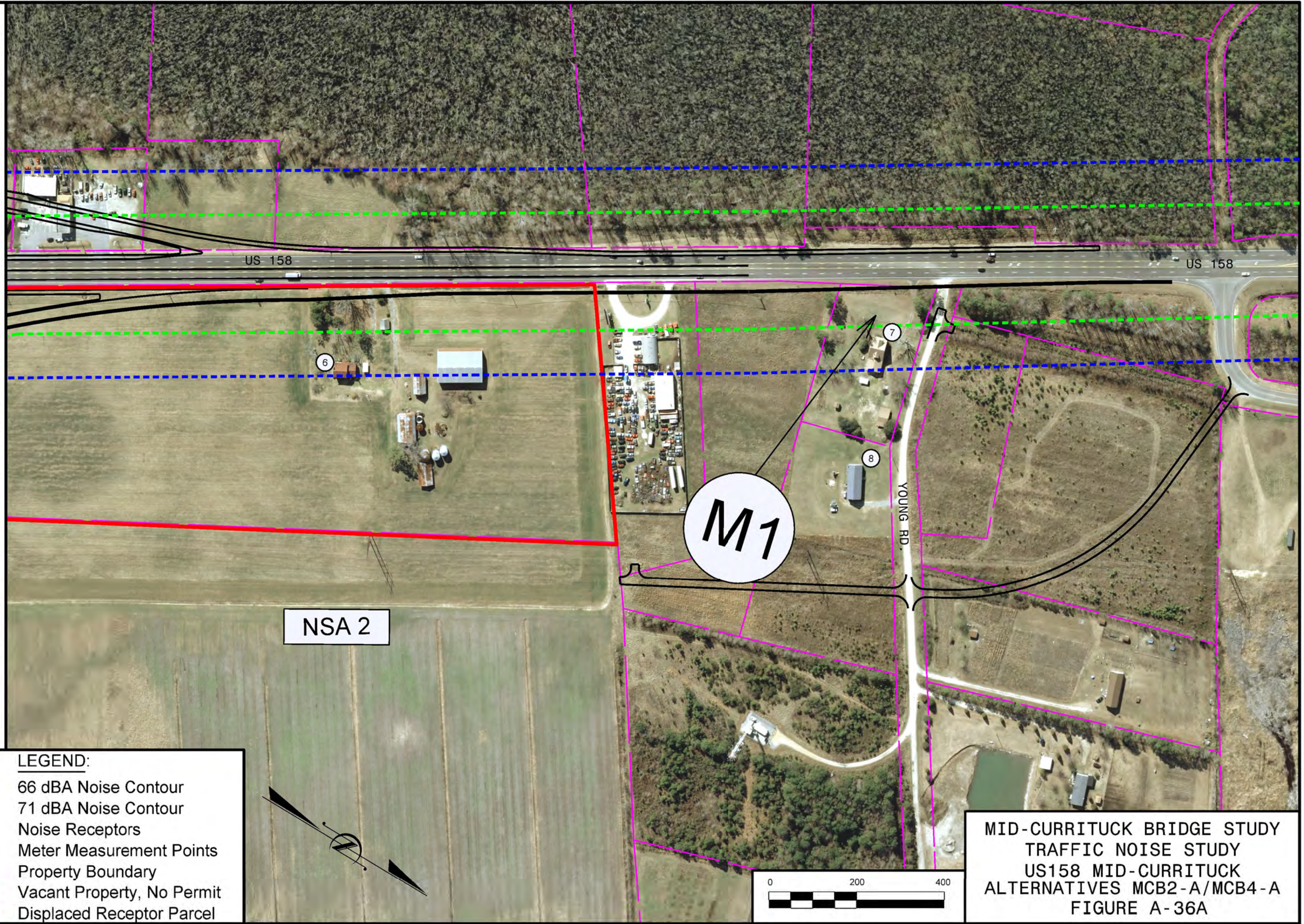
MATCH LINE FIGURE A-36A

LEGEND:








- 66 dBA Noise Contour
- 71 dBA Noise Contour
- ① Noise Receptors
- Ⓜ Meter Measurement Points
- ▭ Property Boundary
- ▭X Vacant Property, No Permit
- ▭█ Displaced Receptor Parcel

MID-CURRITUCK BRIDGE STUDY
 TRAFFIC NOISE STUDY
 US158 MID-CURRITUCK
 ALTERNATIVES MCB2-A/MCB4-A
 FIGURE A-35A

MATCH LINE FIGURE A-35A



LEGEND:

-  66 dBA Noise Contour
-  71 dBA Noise Contour
-  Noise Receptors
-  Meter Measurement Points
-  Property Boundary
-  Vacant Property, No Permit
-  Displaced Receptor Parcel

MID-CURRITUCK BRIDGE STUDY
TRAFFIC NOISE STUDY
US158 MID-CURRITUCK
ALTERNATIVES MCB2-A/MCB4-A
FIGURE A-36A