

JAN 01 1986

JAN 1988 - DESTROY  
SECNAVINST 5215.5B, Part 11, Chap 1  
Par 11010(1)(b)  
RETENTION - 2 YEARS



*JW*      *Enter your copy*

UNITED STATES MARINE CORPS  
Marine Corps  
Camp Lejeune, North Carolina

1

6280  
FAC  
AUG 24 1987

MEMORANDUM FOR RECORD

Subj: ENVIRONMENTAL AGENCY REVIEW OF THE PROPOSED MECHANIZED  
MOVEMENT COURSE AND THE G10 EXPANSION

1. On 4 August 1987, representatives of the U.S. Corps of Engineers Wilmington District, North Carolina Divisions of Environmental Management, Land Quality and Coastal Management, met with 2d Marine Division and Marine Corps Base staff to review the subject projects. The purpose of the meeting was to brief these external agencies and to conduct a site visit regarding the project's scope and the environmental impacts.

2. An outbriefing was conducted which brought forth the following significant issues:

A. Due to an extensive amount of disturbance to the shoreline and erosion prone areas, the lack of erosion control of existing property created an adverse image with the agencies of the base's environmental protection commitment which will affect their review of the current proposal.

B. The future commitment to road maintenance, tank trail maintenance and erosion control should be made by Camp Lejeune in the training and range projects.

C. More detailed wetlands identification is needed prior to applying for a Corps of Engineers permit.

D. Wetlands soils, which will be seasonably flooded and requiring drainage measures, should also be included in the project design.

E. Secondary impacts must also be considered in a well thought-out environmental document. These secondary impacts include the potential effects on New River water quality and use of New River by fishermen.

F. Agency review by Federal agencies such as the Fish and Wildlife Service will be completed by both the Ecological Services group in Raleigh and the Endangered Species group in Asheville; by the National Marine Fisheries Service and the Environmental Protection Agency. EPA retains the ultimate approval authority on wetlands permits. State agency review will be coordinated by the NC Division of Coastal Management.



THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

5712 S. UNIVERSITY AVE. CHICAGO, ILL. 60637

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UNITED STATES MARINE CORPS  
Marine Corps Base  
Camp Lejeune, North Carolina 28542-5001

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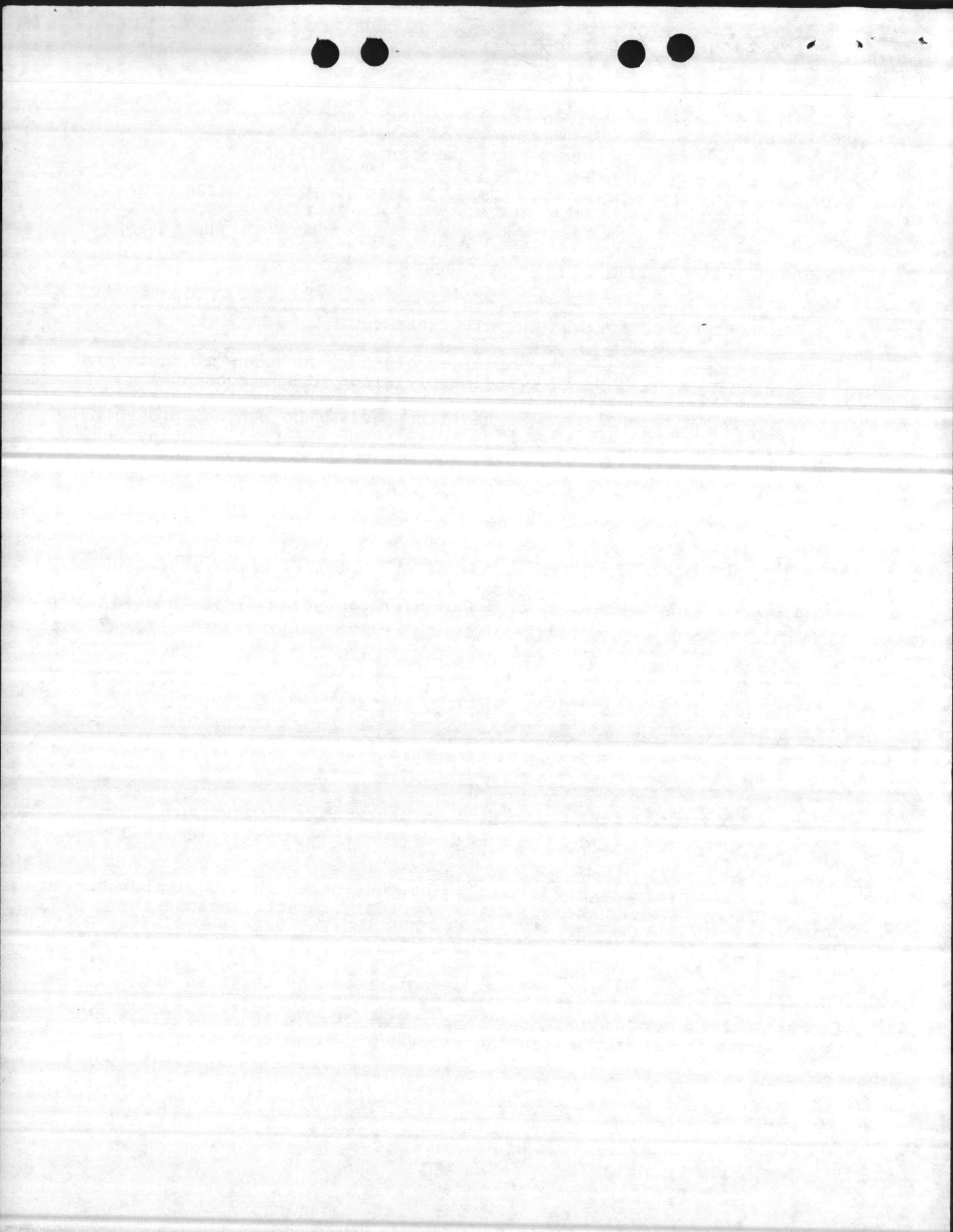
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Subj: ENVIRONMENTAL AGENCY REVIEW OF THE PROPOSED MECHANIZED  
MOVEMENT COURSE IN THE G10 EXPANSION

G. All agencies present encouraged the Base to conduct public information efforts regarding the project. The concern for the project being located in or affecting the use of navigable waters was repeatedly emphasized. The Corps of Engineers indicated they would rather the Base conduct a public information effort to find out public concerns during the environmental assessment process rather than trying to face a public controversy during the Corps of Engineers permitting process.

H. All the agencies present at the outbrief recognized the adverse impacts at Duck Creek created by tank trail maintenance and bridge crossing site. Colonel Dalzell committed the Base to correcting this problem by instituting erosion controls and other corrections as needed.

I. The continuing problem of communicating environmental precautions to a rapidly changing population of military equipment operators and unit commanders was discussed. The environmental agencies recommended some type of environmental handout to be given wide circulation.

J. The concern for splash points was mentioned by all the agencies. Specifically, a formal design for the splash points was suggested by the agencies as means to prevent future maintenance and erosion problems.

K. The recommendation was made by the Corps of Engineers to have a consultant design the road network and to include erosion control, drainage and the maintenance plan for submission with our proposal for the wetlands permit.

L. Archaeological issues were discussed in terms of the Base's response to determine the significance of sites mentioned in the draft historic preservation plan. Sites affected by the project must be tested for possible listing in the National Register of Historic Places.

M. The NC Division of Coastal Management was especially concerned about non-point source runoff from road maintenance and road construction. They stressed that the NC Division of Wildlife Resources would be reviewing our project for the impact on pocossins.



Subj: ENVIRONMENTAL AGENCY REVIEW OF THE PROPOSED MECHANIZED  
MOVEMENT COURSE IN THE G10 EXPANSION

N. All agencies encouraged us to maintain contact with their offices during the process of writing the EA and encouraged us to solicit their review of the EA prior to final publication.

  
T. J. DALZELL

Copy to:  
AC/S Trng & Ops  
SJA  
NREAD  
FacMgmtO  
EnvEngr  
2d MarDiv (G-3)  
2d MarDiv (G-4)  
2d MarDiv (10th Mar)  
2d MarDiv (CEB)  
2d MarDiv (2d Tk Bn)



*File - your copy*

UNITED STATES MARINE CORPS  
Marine Corps Base  
Camp Lejeune, North Carolina 28542-5001

6280  
FAC  
AUG 14 1987

MEMORANDUM FOR THE RECORD

Subj: MEETING WITH U.S. FISH AND WILDLIFE SERVICE REPRESENTATIVES  
REGARDING ENVIRONMENTAL ASSESSMENTS FOR THE G-10 EXPANSION  
AND MECHANIZED MANEUVER COURSE

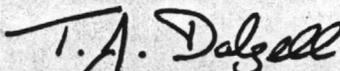
1. On 7 August 1987, Mr. Gary Henry of the Asheville office of the U.S. Fish and Wildlife Service met with the Marine Corps Base and 2d Marine Division staff to review the impact of the subject projects on the red-cockaded woodpecker habitat. During the meeting of 6 and 7 August, Mr. Henry was briefed regarding the scope of the project and provided the project information folders. He was given a site visit of the colonies immediately south of the G-10 impact area and provided the detailed timber stand data collected by NREAD.
2. Mr. Henry reviewed the detailed timber data along with information on the colony foraging habitat provided by Mr. John Hammond of NC State University who also attended the reviews. An analysis of the habitat for each colony affected by these projects was completed which examined the existing habitat available in terms of the quality of that habitat in detailed forestry terminology.
3. During the outbrief, Mr. Henry stressed that this data should be reformatted according to a process explained to NREA personnel. He stated that as a minimum, Base must leave the colony and foraging areas available for the birds in the G-10 expansion and a balance must be determined between the acreage that is required to be cleared for visibility into the G-10 impact area and to be cleared for mechanized movement and the minimum needs of the colonies for foraging habitat. He volunteered to assist us in this detailed analysis and the NREAD is preparing additional information to be submitted in the next two weeks.
4. Upon completion of the review of the revised data by the U.S. Fish and Wildlife Service, Mr. Henry will provide us his opinion regarding the impacts of the project as currently planned on the red



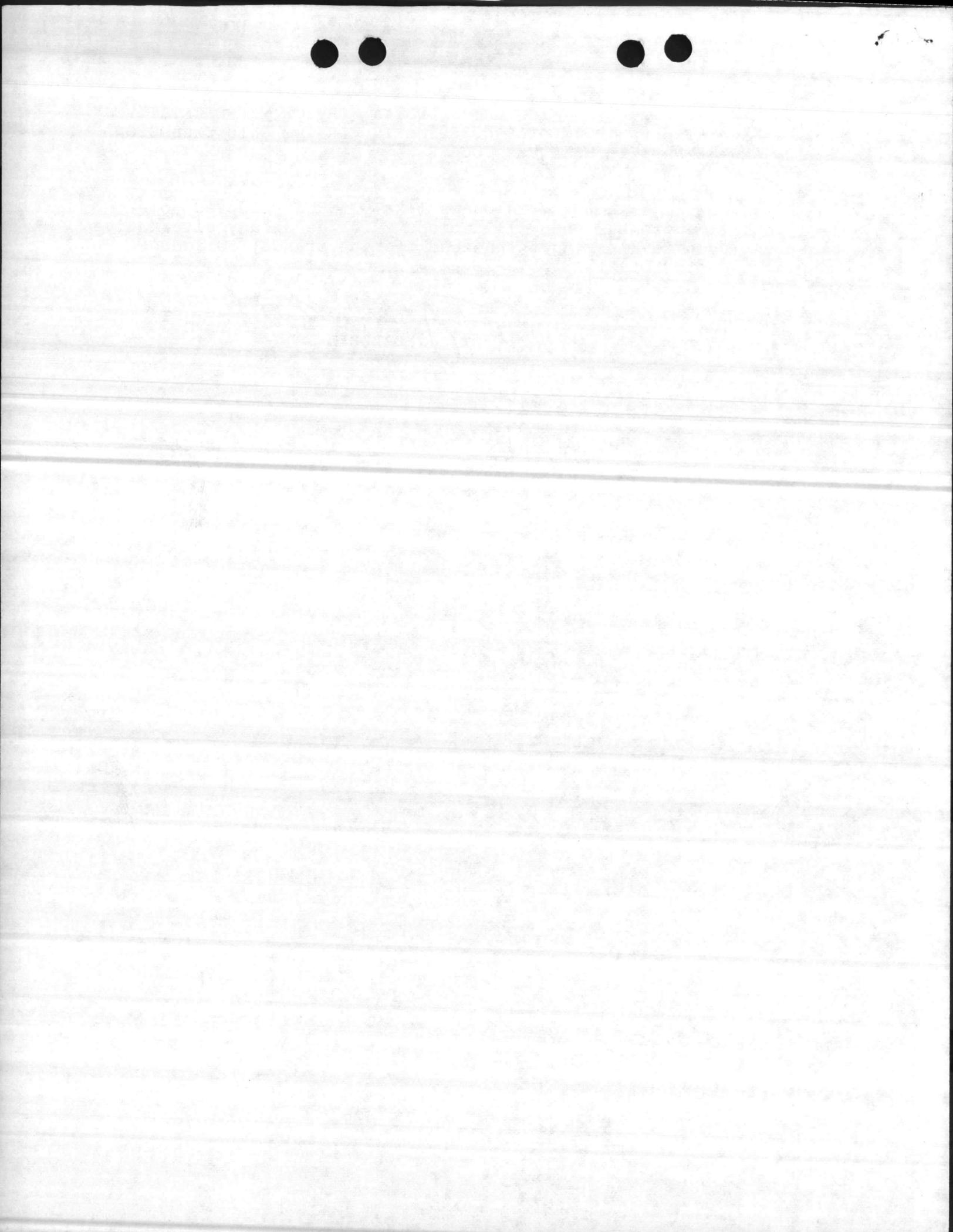
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cockaded woodpecker. His opinion is likely to be rendered some-  
time in late September and will include guidance on any alternative  
measures (such as clearing/thinning different stands) to reduce  
adverse impacts to a tolerable level.

  
T. J. DALZELL

Copy to:  
AC/S TRNG & OPS  
SJA  
NREAD  
FacMgmtO  
EnvEngr  
2d MarDiv (G-3)  
2d MarDiv (G-4)  
2d MarDiv (10th Mar)  
2d MarDiv (CEB)  
2d MarDiv (2d Tk Bn)



*file* *1 Peter your copy*



UNITED STATES MARINE CORPS  
MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542-5001

IN REPLY REFER TO:

6280  
FAC  
JUL 17 1987

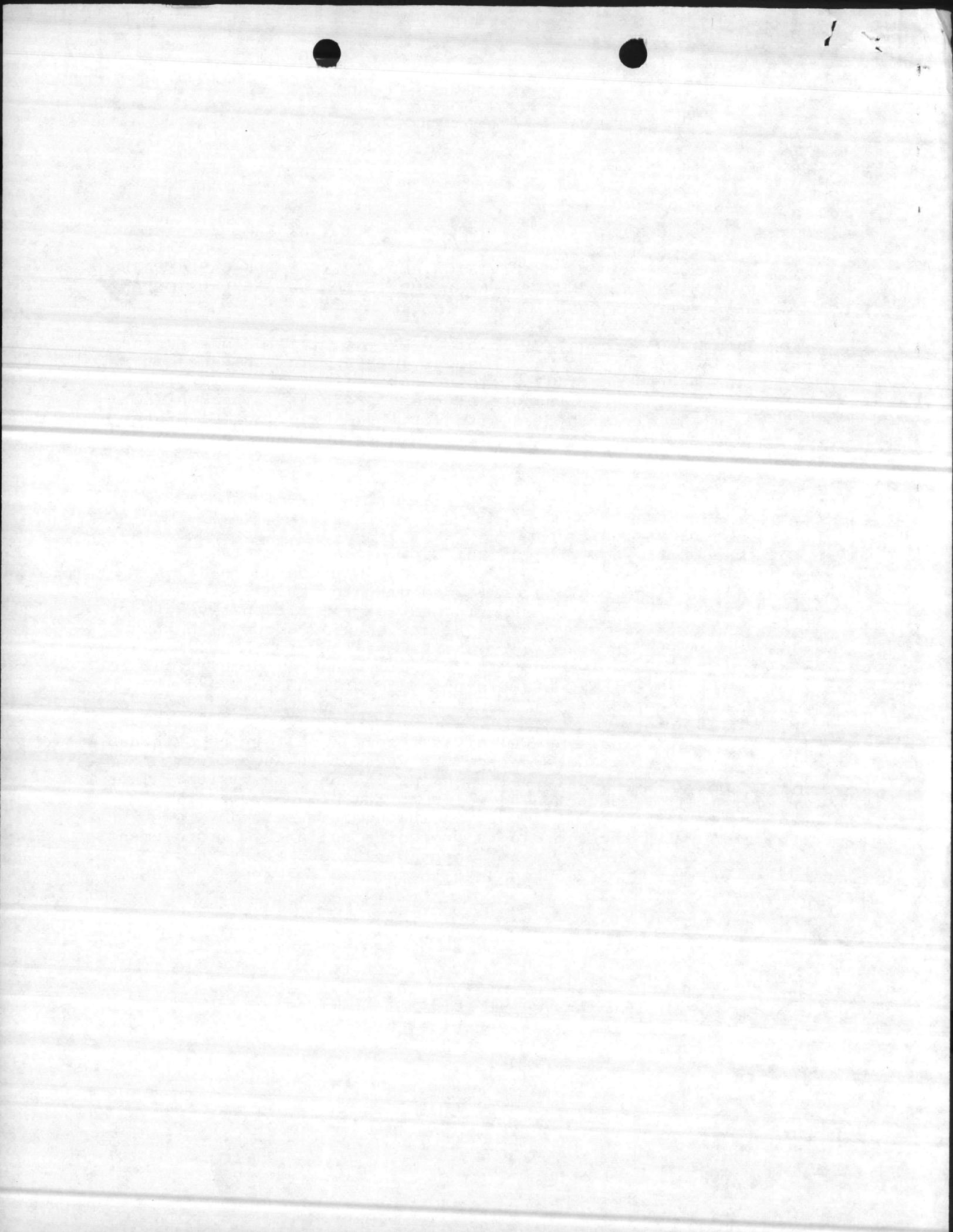
MEMORANDUM FOR RECORD

Subj: MEETING OF 2D MARINE DIVISION AND MARINE CORPS BASE STAFF  
REGARDING ENVIRONMENTAL ASSESSMENTS FOR G-10 EXPANSION AND  
MECHANIZED MANEUVER COURSE (MMC)

1. On 14 July, representatives of 2d Marine Division and Marine Corps Base met to review the progress in preparing the subject EA. The purpose of the meeting was to up-date all concerned on the scope and environmental impacts of these projects. The meeting was held in anticipation of a site visit and briefing for State and Federal environmental agencies who will be requested to comment on the EA.
2. A briefing of the projects was followed by comments and questions leading to the conclusion that the major issues involved in the G-10 expansion are endangered species and timber clearing. An EA package for each project was provided to each attendee. Each package addressed purpose, need, description and alternatives. Each package contained graphic exhibits. The EA package for the MMC requires refinement of the alternatives to include the matrix. The 2d Tank Battalion will accomplish the refinement of the MMC package. The major issues with the MMC are wetlands and timber clearing. The selective use of demolitions for stump removal in the MMC was discussed in areas where land clearing is proposed.
3. Development of separate EA's was recommended for the G-10 and the MMC. A tentative date during the week of 10 August was selected for briefing external agencies and on-site visits. This briefing will introduce the agencies to the broad scope of training issues at Camp Lejeune, including future land acquisition, with these projects presented as interim improvements to existing facilities. Agency input during and after the briefing will be incorporated into these EA's for review by Base and Headquarters staff.

*T. J. Dalzell*

T. J. DALZELL  
Colonel, U. S. Marine Corps  
Assistant Chief of Staff, Facilities  
Marine Corps Base



Subj: MEETING OF 2D MARINE DIVISION AND MARINE CORPS BASE STAFF  
REGARDING ENVIRONMENTAL ASSESSMENTS FOR G-10 EXPANSION AND  
MECHANIZED MANEUVER COURSE (MMC)

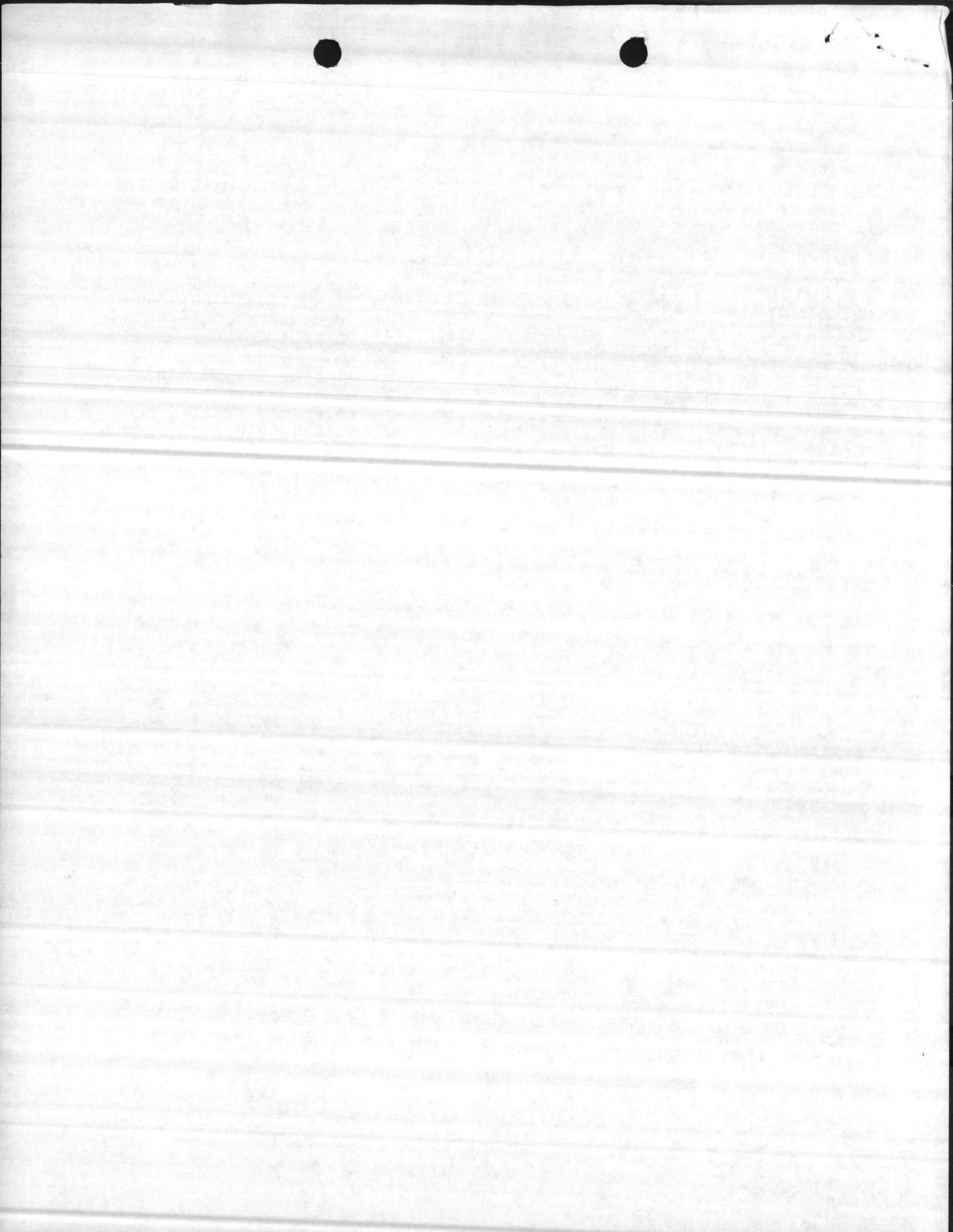
Meeting Attendees

Col. Speicher, AC/S Trng/Ops, MCB  
Col. McGowan, G-3, 2dMarDiv  
Col. Way, CO, 10th Marines  
Col. Marcentel, G-4, 2dMarDiv  
Col. Tokarz, SJA, MCB  
LTC Foore, 2dMarDiv  
LTC Sherrel, CO, 2dTkBn  
LTC Blair, XO, 10th Marines  
LTC Buckner, Range Control Off, MCB  
LTC Kiriapoulos, Facilities, MCB  
LTC Marapoti, CO, 2d CEB  
Maj. Johnson, 2dTkBn  
Cpt. Matthews, 10th Marines

Cpt. Reuter, 2dMarDivEngr  
Cpt. Dougherty, OSJA, MCB  
Lt. Kline, 2dMarDiv  
CWO Moon, 2dMarDiv  
Mr. Wooten, NREAD, MCB  
Mr. Black, NREAD, MCB  
Mr. Peterson, NREAD, MCB  
Mr. Alexander, EnvEngr, MCB

Copy to:

AC/S Trng&Ops  
SJA  
NREAD  
FacMgtO  
EnvrEngr  
G-3, 2dMarDiv  
G-4, 2dMarDiv  
10thMar, 2dMarDiv  
2d CEB, 2dMarDiv  
2d TankBn, 2dMarDiv



12 August 1987

FAC: Col. DALZELL, Bob, Capt Dockery (SJA)

2 MARINI: Lt. CLINE,

10 MARINES: Capt. MATTHEWS

2 Combat ENG: W/O. MAON, Maj. RIZNYCHOK

TRAINING: Lt. Col. BUCKNER (BASE), Lt. Col. MARTELLI (2 MARINI)

2 TANK BATT:

### Col. DALZELL

#### "Somber visit"

COE → : concerned with current state of trng. AREA.  
(make a commitment to correct)  
: correct prob. prior to considering EA for MMC

Bob & PW0 → Contract to develop bridge crossing (thorough PW0)  
(should help approval from other agencies)

### Pete

JEOPARDY OPINION ON G-10 PROPOSAL

no judgement on MMC PROPOSAL

### Bob

REAL Property Facilities Manual (Appendix D) (Copies to TANKS, ART. & 2 Combat Eng.)

1. Look early at ALL ALTERNATIVES FOR both projects

2. Existing Environment

★ Refer to improvements of MMC instead of development of MMC (Bob)

3. ENVIRONMENTAL EFFECTS; erosion, RCD, river, noise (etc.)

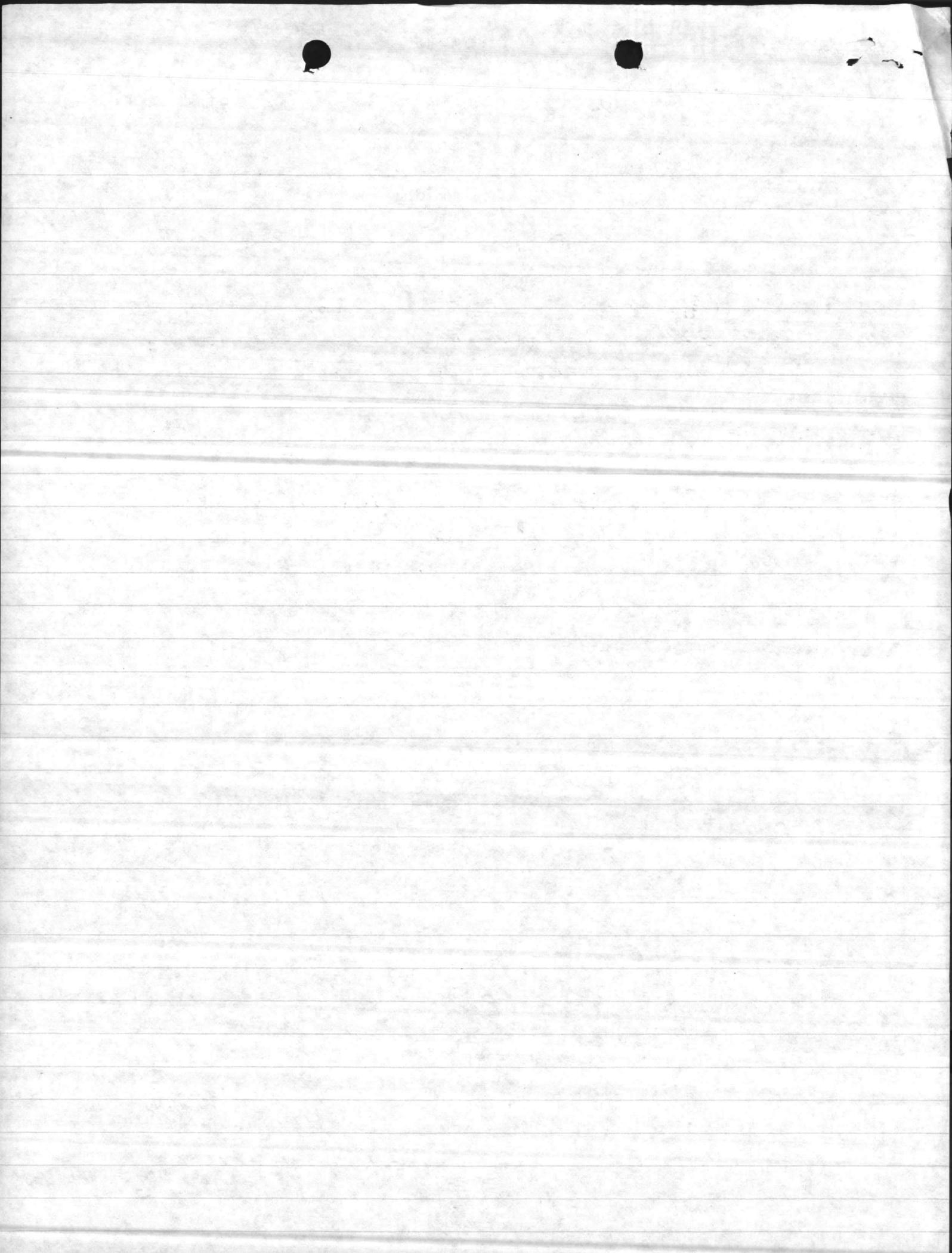
4. MEANS to "MITIGATE"

### Lt. Col. BUCKNER

Land acq. will have impact on G-10 expansion. Weaker position to mention land acquisition and G-10 TOGETHER. We need to really explain the need in great detail for G-10 EXPANSION

### Pete

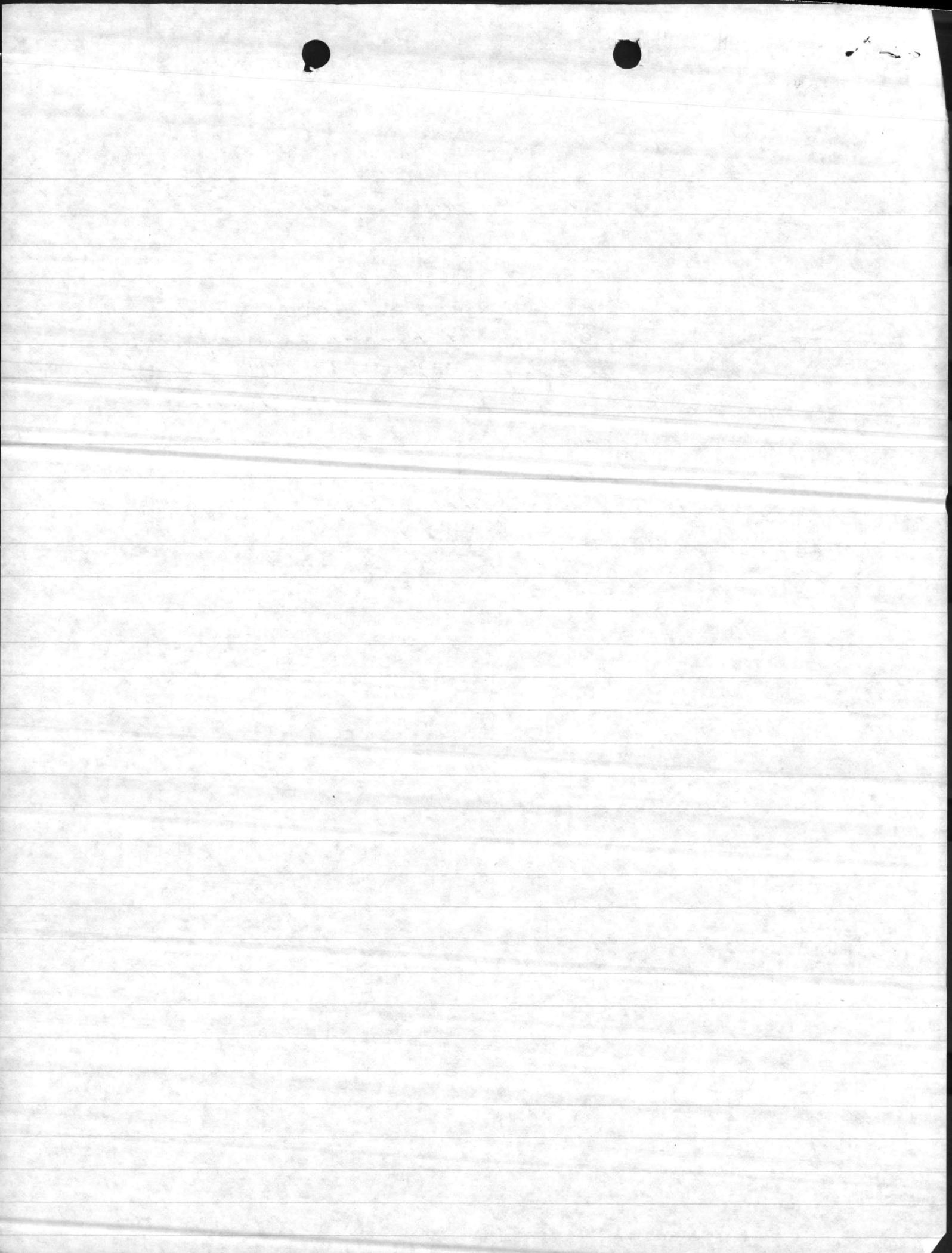
I told them about the timber harvesting 3.5 ± 1.1 years to complete and effects on economy (timber), local market, Onslow County, the companies. (BASE ON AAH)



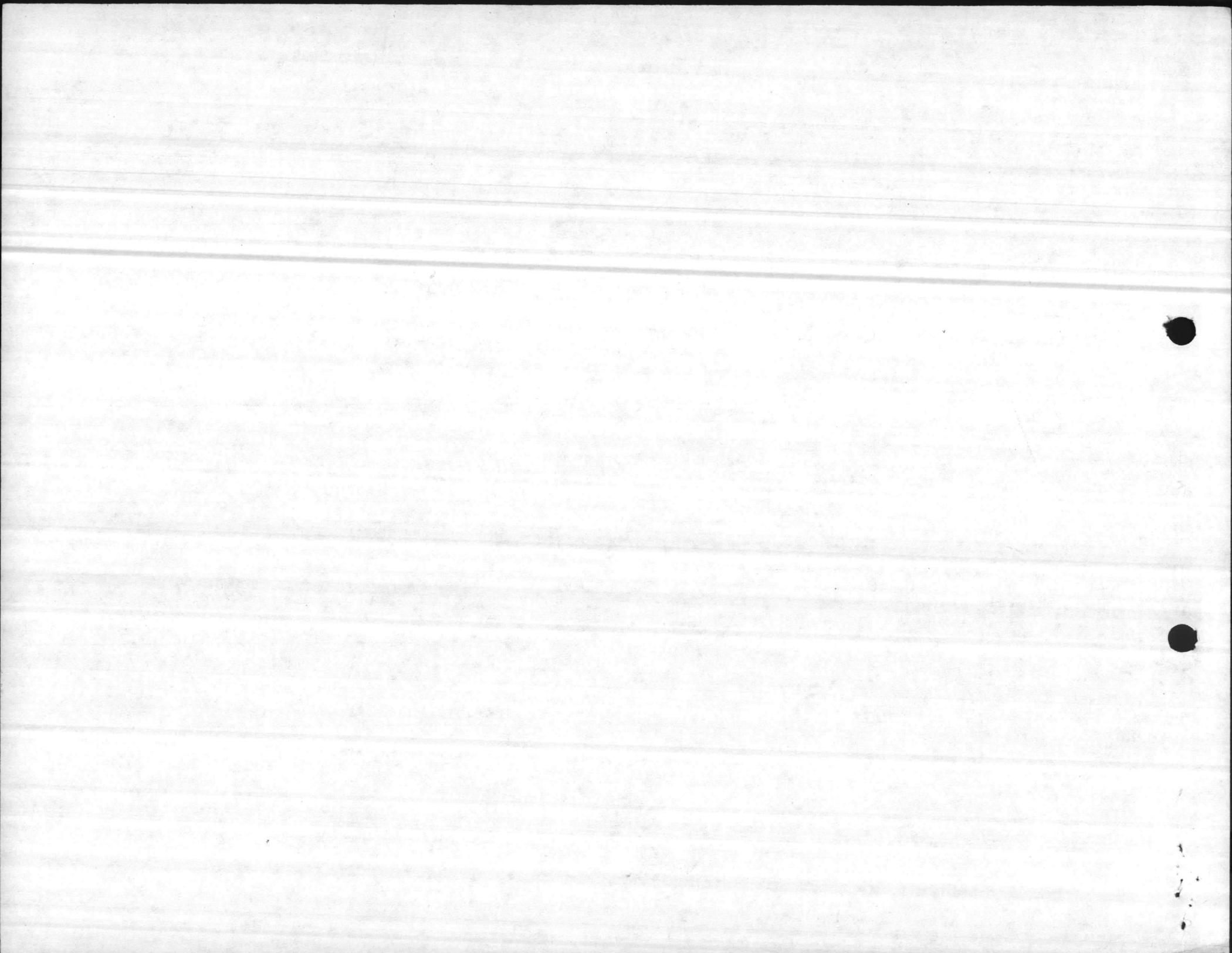
SOVIET STRONG POINT will be addressed with a separate  
PEA.

TOM'S CR. BRIDGE: PROJECT PLAN showing existing condition and  
expected condition. Division will do plan and work on RE-shaping  
the site and placing bridge. TIME requirement because of  
NURSERY WATERS? Can put bridge in and take out later if  
there is a restriction.

COL DALZELL WANTS to discuss timber aspects of G-10 & MMC.  
LARGER impact than he had envisioned







11000/2  
NREAD  
26 Jun 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune  
Subj: G-10 IMPACT AREA ENLARGEMENT AND MECHANIZED MOVEMENT COURSE  
Ref: (a) BO 11000.1B

Encl: (1) Existing Red-Cockaded Woodpecker habitat data for the  
G-10 Impact Area Enlargement  
(2) Existing Red-Cockaded Woodpecker habitat data for the  
Mechanized Movement Course  
(3) Location Map  
(4) Expected Red-Cockaded Woodpecker habitat data following  
implementation of the G-10 Impact Area Enlargement  
Project  
(5) Expected Red-Cockaded Woodpecker habitat data following  
implementation of the Mechanized Movement Course Project

SUBMISSION  
OF FIRST  
DATA BASE  
TO USFWS

1. During a meeting between Assistant Chief of Staff, Facilities, Environmental Engineer, 2D Marine Division, and Natural Resources and Environmental Affairs Division personnel on 22 September 1986, NREAD was tasked with the coordination, collection, and compilation of the existing Red-Cockaded Woodpecker habitat condition data and the formulation of expected habitat condition after subject projects implementation. That work was accomplished in January 1987.

2. On 27 May 1987, during a meeting between Assistant Chief of Staff, Facilities, Staff Judge Advocate representatives, Environmental Engineer, 2d Marine Division and NREAD representatives, NREAD was requested to modify the January data mentioned above based on new information provided by LtCol Marapoti, 2d Combat Engineers. That assignment has been accomplished and the product is provided as enclosures (1) - (5) for use by the 2d Combat Engineers, and the Environmental Engineer's use in preparation of Environmental Impact assessment (EIA) for the subject project.

3. It is recommended Mr. Gary Henry, U.S. Fish and Wildlife Service be invited to Camp Lejeune to review the proposed project as soon as the EIA is drafted. On 3 June 1987, Mr. Henry advised by telephone he could visit the base upon two-week notice, if base could fund his trip.

J. I. WOOTEN



[REDACTED]

[REDACTED]

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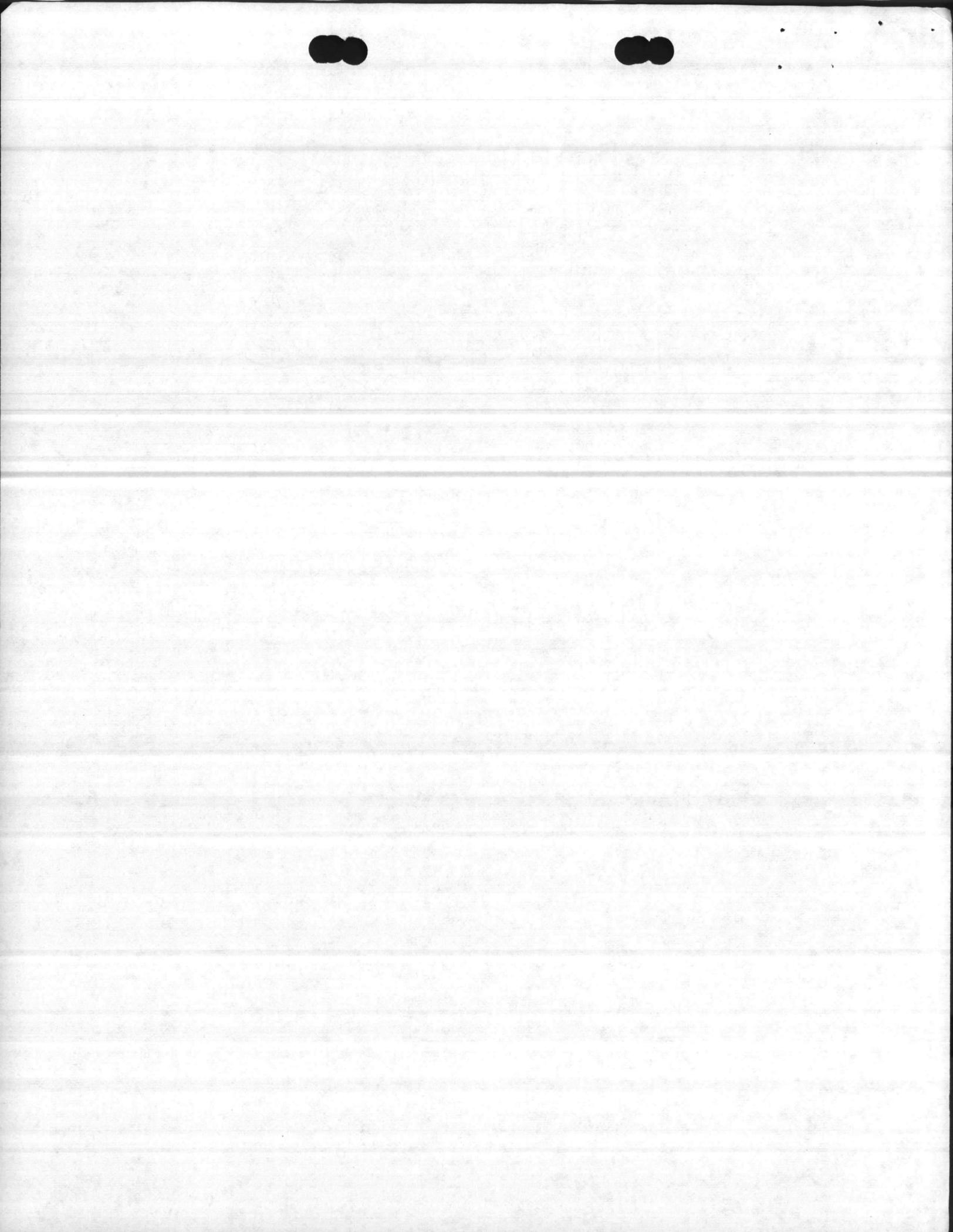
SUBMISSION  
OF FIRST  
DATA BASE  
TO USFWS



[REDACTED]

[REDACTED]





MECHANIZED MOVEMENT COURSE  
EXISTING HABITAT

MAP #1 [Photo 183-112(108)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS>10"/AC
1	0300	18	53	80	450	60
2	0100	36	51	46	202	44
3	1912	15	103	5	5	5
4	0319	24	70	48	163	45
5	1900	9	30	0	0	0
6	0301	17	88	55	615	40
7	0103	24	44	70	336	30
8	1900	13	47	0	0	0
9	0319	22	68	63	80	63
10	0314	12	90	37	43	40
11	0300	34	75	76	70	55
12	1918	38	60	0	0	0
13	0300	21	63	77	95	60
14	0300	12	64	45	80	45
15	0300	5	73	65	70	50
16	0403	39	53	69	164	52
17	0400	7	53	75	95	45
18	0104	12	56	100	230	45
19	0400	34	40	10	20	5
20	0304	11	46	50	605	5
21	0400	6	51	40	120	20
22	0100	16	58	55	175	40

<30 years old 67  
Presently cleared 0

FOREST TYPE CODES (4 Digits)

PINE

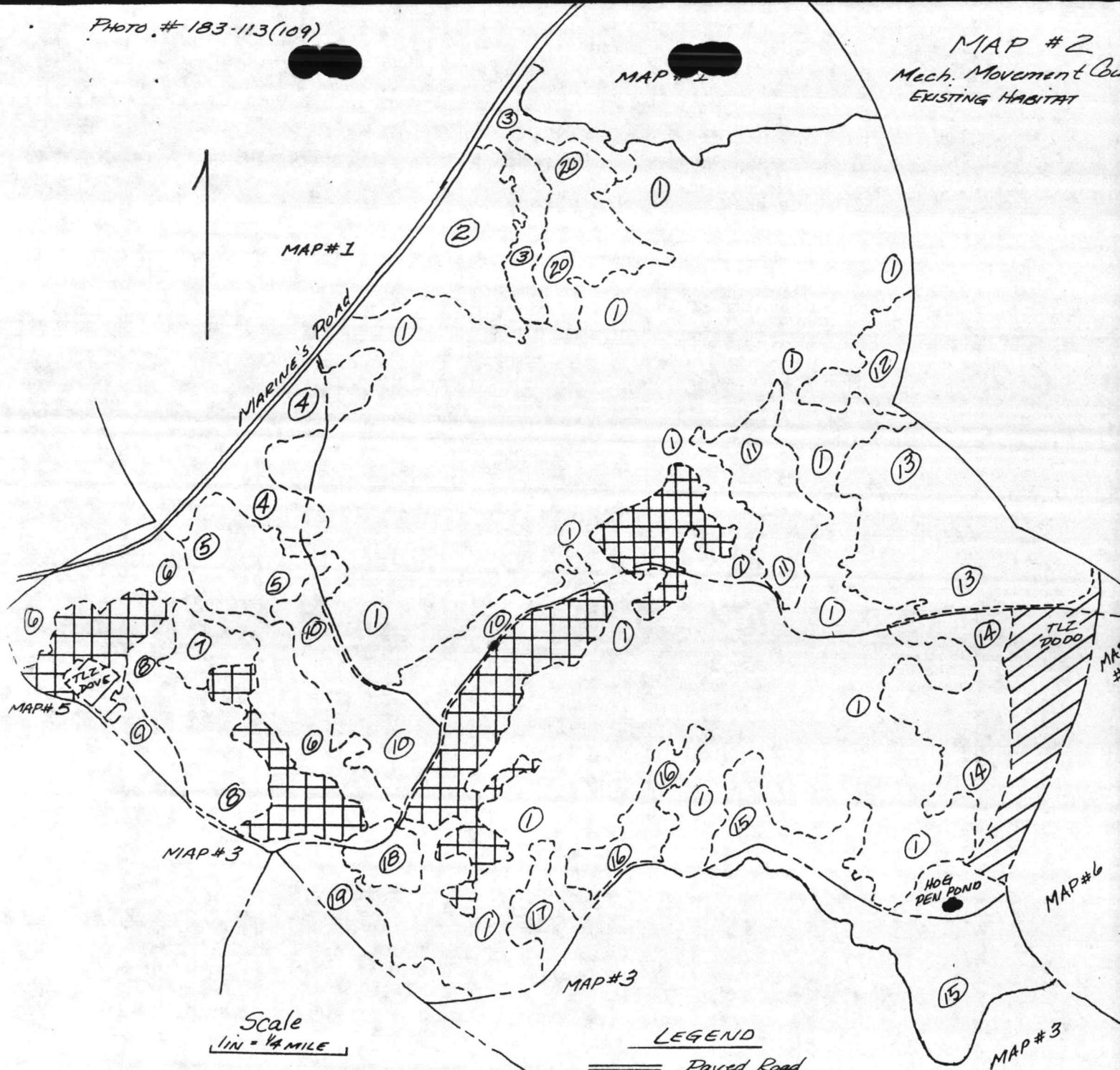
01 Longleaf  
02 Slash  
03 Loblolly  
04 Pond  
05 Shortleaf  
06 Cypress

HARDWOODS

11 Poplar  
12 Sweetgum  
13 White Oak  
14 Red Oak  
15 Scrub Oak  
16 Beech  
17 Maple  
18 Blackgum  
19 Misc

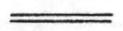
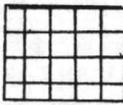
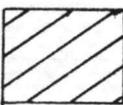
0000 Non-Forested  
00 Filler





Scale  
1 IN = 1/4 MILE

LEGEND

-  Paved Road
-  Dirt Road
-  Stand Boundary
-  Survey Area Boundary
-  4-30 YEARS OF AGE
-  Cleared Area
-  Natural pond



MECHANIZED MOVEMENT COURSE  
EXISTING HABITAT

MAP #2 [Photo 183-113(109)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS>10"/AC
1	0419	622	45	30	148	9
2	0103	31	54	73	177	47
3	1719	20	37	0	10	0
4	0103	28	43	17	57	20
5	0400	22	56	30	80	10
6	1719	45	66	23	23	17
7	0103	9	56	60	170	40
8	0419	28	64	45	110	30
9	0100	7	57	53	80	50
10	0100	46	51	65	228	46
11	0100	24	55	45	135	40
12	0100	14	68	55	100	90
13	0100	62	57	50	140	50
14	0401	34	131	10	20	10
15	0100	69	58	55	210	15
16	0100	17	64	60	180	30
17	0100	14	119	50	90	50
18	0100	8	56	60	410	0
19	0100	17	47	85	210	40
20	0100	28	101	65	270	30

<30 years old 95  
Presently cleared 39

FOREST TYPE CODES (4 Digits)

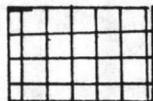
PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

0000 Non-Forested  
00 Filler



LEGEND

- ==== PAVED ROAD
- DIRT ROAD
- - - - STAND BOUNDARY
- - - - SURVEY AREA BOUNDARY

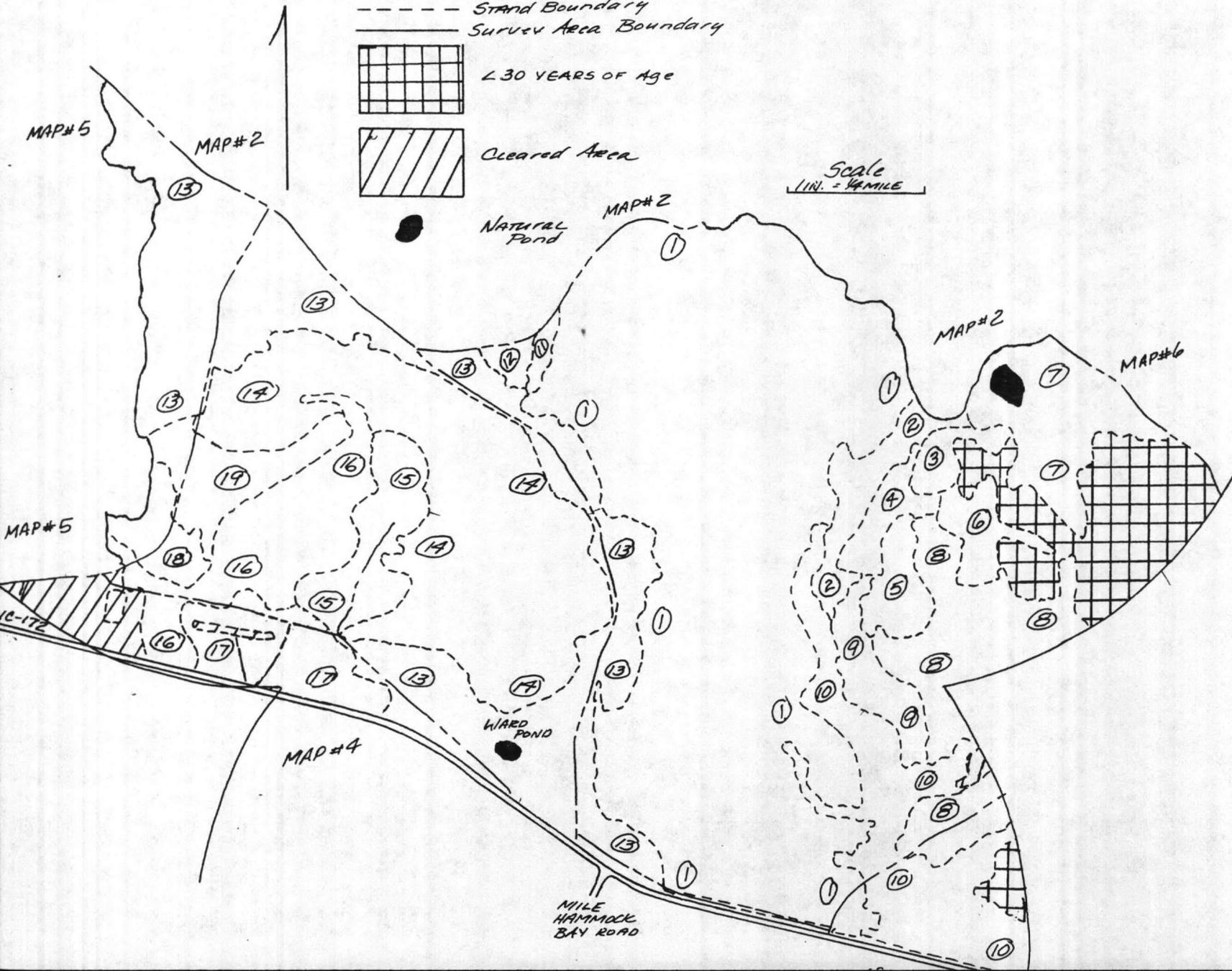


30 YEARS OF AGE



CLEARED AREA

Scale  
1 IN. = 1/4 MILE





MECHANIZED MOVEMENT COURSE  
EXISTING HABITAT

MAP #3 [Photo 183-114(110)]

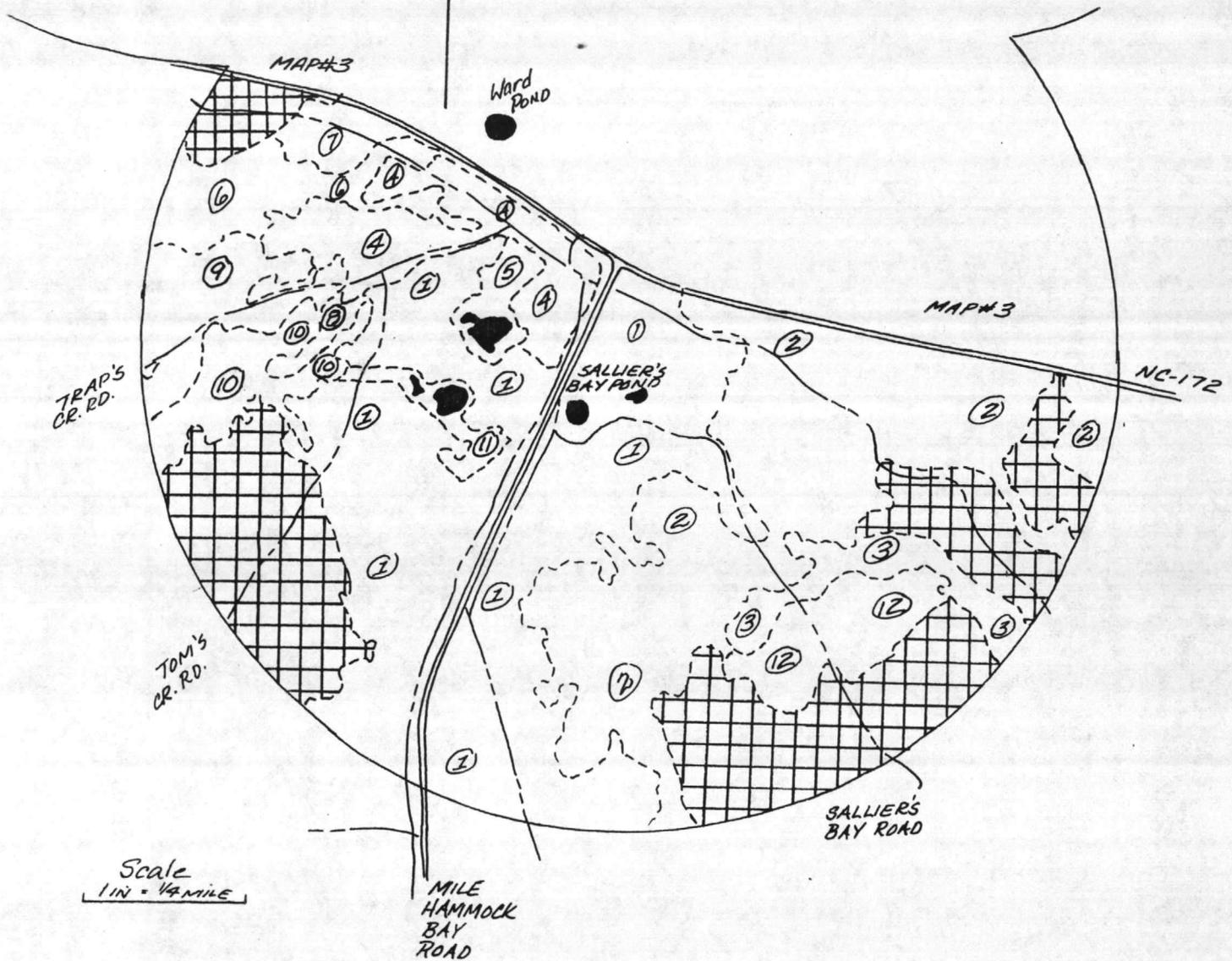
STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS>10"/AC
1	0400	336	46	14	169	6
2	0100	15	56	70	135	65
3	1900	7	41	0	0	0
4	0401	10	55	10	230	20
5	0100	11	57	65	270	15
6	0300	14	52	50	110	20
7	0100	34	55	25	115	25
8	0400	57	51	16	36	0
9	0100	18	59	87	283	60
10	1819	65	65	0	0	0
11	0100	3	170	30	190	20
12	0400	4	30	54	100	20
13	0103	172	55	54	114	41
14	0419	136	76	15	25	15
15	0100	25	57	47	60	23
16	1903	48	55	37	33	10
17	0300	28	38	48	75	40
18	0300	12	35	130	255	105
19	0300	22	37	63	133	40
<30 years old		63				
Presently cleared		16				

FOREST TYPE CODES (4 Digits)

PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

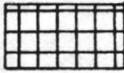
0000 Non-Forested  
00 Filler





Scale  
1 IN = 1/4 MILE

LEGEND

- ==== Paved Road
- Dirt Road
- - - - Stand Boundary
- Survey Area Boundary
-  < 30 years of Age
-  cleared area
- Natural Pond



MECHANIZED MOVEMENT COURSE  
EXISTING HABITAT

MAP #4 [Photo 183-115(111)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS >10"/AC
1	0301	224	45	32	98	25
2	0304	158	57	41	98	31
3	1819	17	59	0	0	0
4	0300	39	40	35	6	6
5	0300	6	31	0	340	0
6	1419	26	59	5	5	5
7	0315	9	50	20	20	10
8	0319	3	83	70	65	50
9	0300	27	48	55	80	16
10	0319	20	93	20	25	25
11	1900	4	78	0	0	0
12	0300	23	57	55	50	35

<30 years old 153  
Presently cleared 0

FOREST TYPE CODES (4 Digits)

PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

0000 Non-Forested  
00 Filler



PHOTO # 183-91(92)

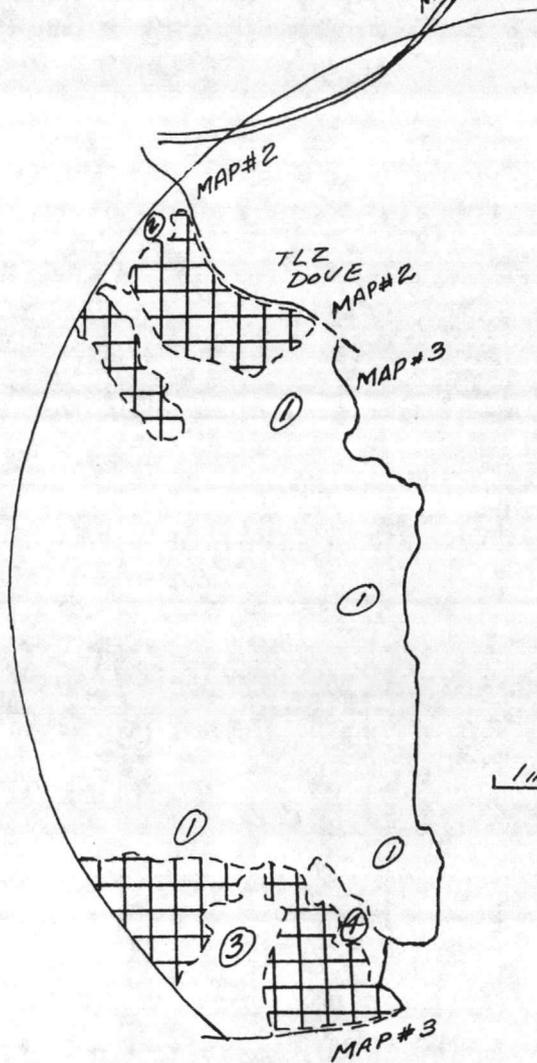
MAP# 5

MECH. MOVEMENT COURSE  
EXISTING HABITAT

MARINES RD.

LEGEND

- ==== Paved Road
- Dirt Road
- - - - Stand Boundary
- \_\_\_\_\_ Survey Area Boundary
-  < 30 years of AGE
-  Cleared Area
- Natural Ponds



Scale  
1 in. = 1/4 MILE



MECHANIZED MOVEMENT COURSE  
EXISTING HABITAT

MAP #5 [Photo 183-91(92)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS>10"/AC
1	0419	201	67	23	73	15
2	1800	2	58	0	0	0
3	0300	13	77	70	70	60
4	0400	4	42	20	90	10
<30 years old Presently cleared		47				0

FOREST TYPE CODES (4 Digits)

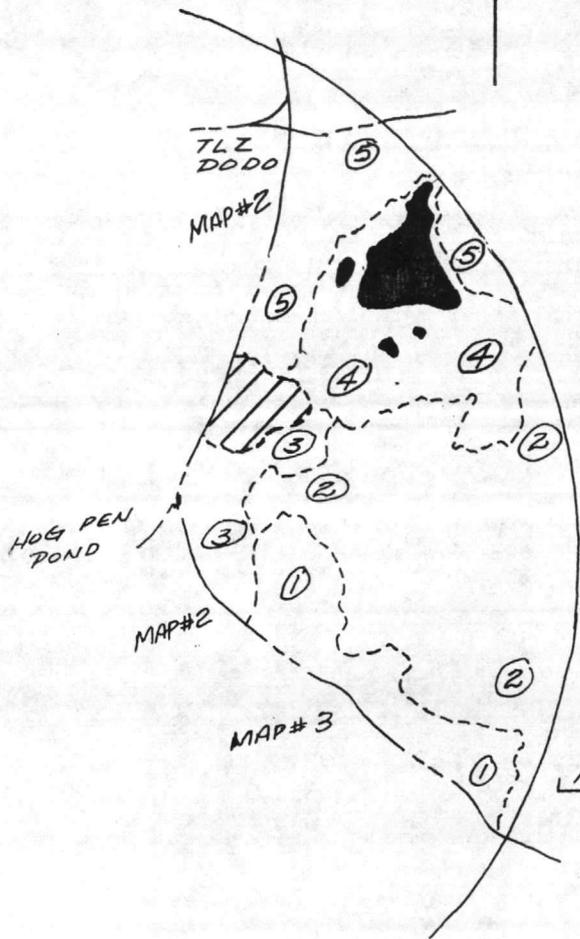
PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

0000 Non-Forested  
00 Filler



PHOTO #183-183(125)

MAP #6  
MECH. Movement Course  
EXISTING HABITAT



LEGEND

- ==== Paved Road
- - - - Dirt Road
- - - - Strand Boundary
- Survey Area Boundary
- 30 years of AGE
- ▨ Cleared area
- Natural Ponds



MECHANIZED MOVEMENT COURSE  
EXISTING HABITAT

MAP #6 [Photo 183-183(125)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS>10"/AC
1	0100	26	51	57	210	34
2	0400	82	57	56	160	30
3	0100	14	66	33	60	45
4	0100	31	58	58	185	40
5	0100	26	55	30	40	35
<30 years old		7				
Presently cleared		0				

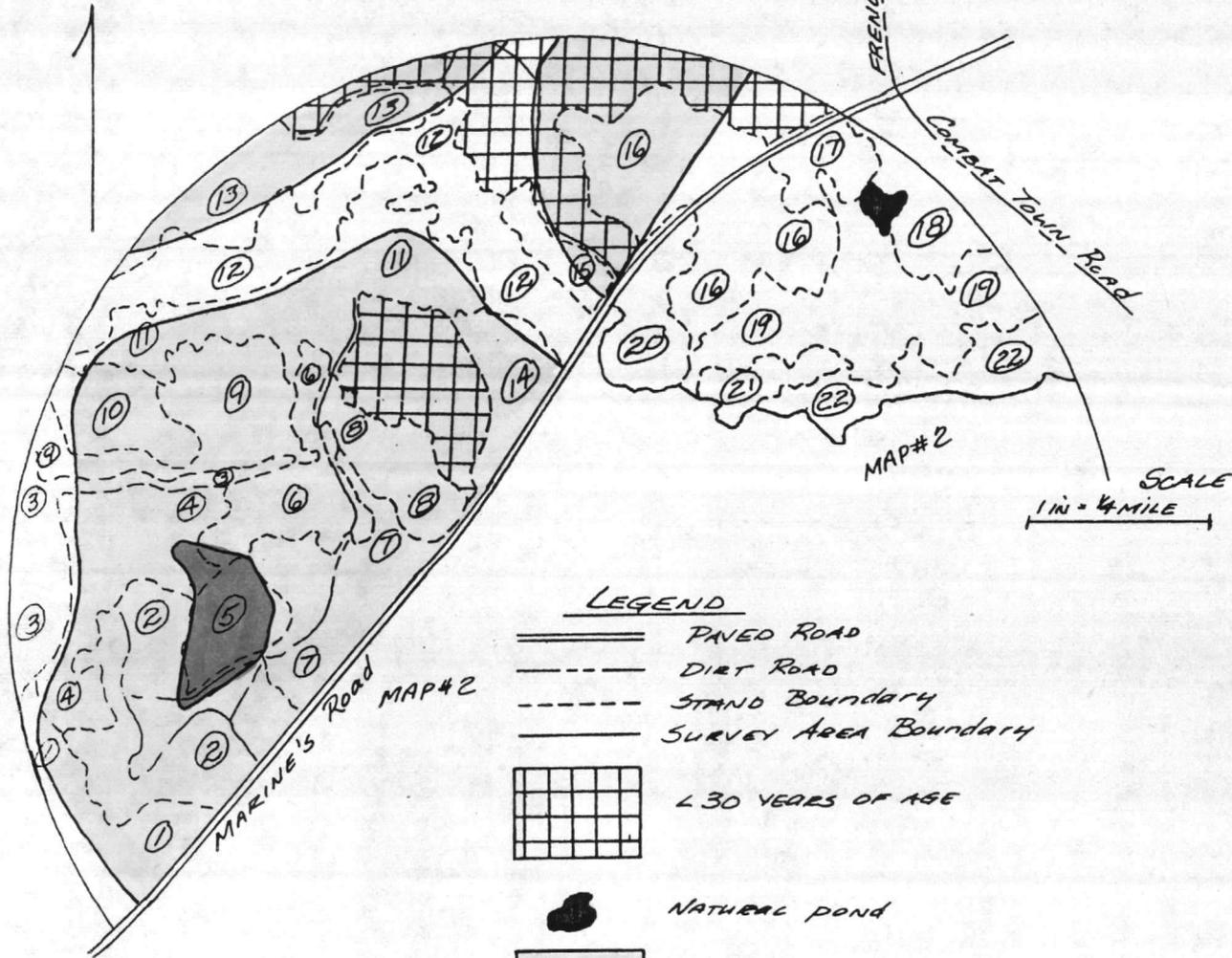
FOREST TYPE CODES (4 Digits)

PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

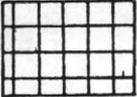
0000 Non-Forested  
00 Filler



MECH. MOVEMENT COURSE  
PROPOSED



LEGEND

-  PAVED ROAD
-  DIRT ROAD
-  STAND BOUNDARY
-  SURVEY AREA BOUNDARY
-  < 30 YEARS OF AGE
-  NATURAL POND
-  AREA TO BE CLEARED
-  AREA TO BE THINNED



MECHANIZED MOVEMENT COURSE  
PROPOSED

MAP #1 [Photo 183-112(108)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS >10"/AC
1	0300	6	53	80	450	60
2	0100	0	51	46	202	44
3	1912	11	103	5	5	5
4	0319	3	70	48	163	45
5	1900	0	30	0	0	0
6	0301	0	88	55	615	40
7	0103	0	44	70	336	30
8	1900	0	47	0	0	0
9	0319	3	68	63	80	63
10	0314	2	90	37	43	40
11	0300	10	75	76	70	55
12	1918	38	60	0	0	0
13	0300	3	63	77	95	60
14	0300	1	64	45	80	45
15	0300	3	73	65	70	50
16	0403	5	53	69	164	52
17	0400	7	53	75	95	45
18	0104	12	56	100	230	45
19	0400	34	40	10	20	5
20	0304	11	46	50	605	5
21	0400	6	51	40	120	20
22	0100	16	58	55	175	40

< 30 years old      18  
Proposed  
cleared              291

Acres Thinned      12

FOREST TYPE CODES (4 Digits)

PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

0000 Non-Forested  
00 Filler

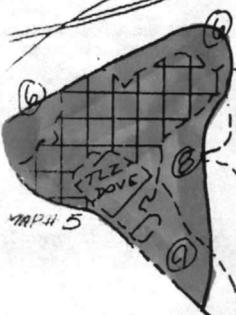


MAP #

MAP #2  
MECH. MOVEMENT COURSE  
PROPOSED

MAP #1

MARINE'S ROAD



MAP #5

MAP #3

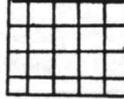
MAP #3

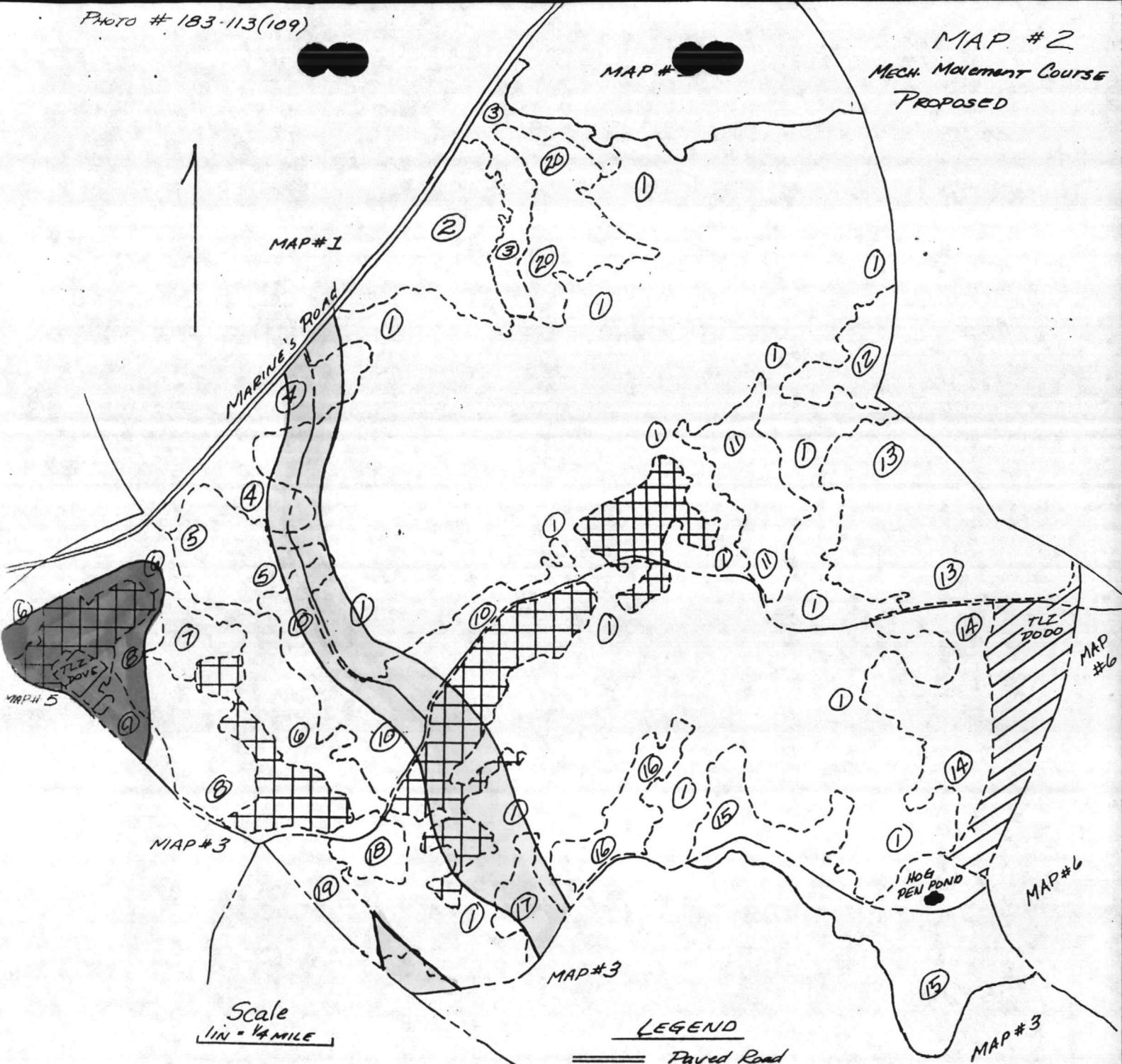
MAP #6

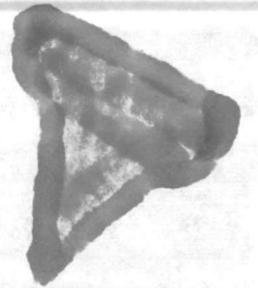
MAP #3

Scale  
1 IN = 1/4 MILE

LEGEND

-  Paved Road
-  Dirt Road
-  Stand Boundary
-  Survey Area Boundary
-  < 30 YEARS OF AGE
-  Cleared Area
-  Natural pond
-  AREA TO BE CLEARED
-  AREA TO BE THINNED





MECHANIZED MOVEMENT COURSE  
PROPOSED

MAP #2 [Photo 183-113(109)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS >10"/AC
1	0419	585	45	30	148	9
2	0103	31	54	73	177	47
3	1719	20	37	0	10	0
4	0103	16	43	17	57	20
5	0400	20	56	30	80	10
6	1719	40	66	23	23	17
7	0103	9	56	60	170	40
8	0419	24	64	45	110	30
9	0100	3	57	53	80	50
10	0100	30	51	65	228	46
11	0100	24	55	45	135	40
12	0100	14	68	55	100	90
13	0100	62	57	50	140	50
14	0401	34	131	10	20	10
15	0100	69	58	55	210	15
16	0100	17	64	60	180	30
17	0100	1	119	50	90	50
18	0100	8	56	60	410	0
19	0100	13	47	85	210	40
20	0100	28	101	65	270	30

< 30 years old      64  
Proposed  
cleared              138  
Acres Thinned      29

FOREST TYPE CODES (4 Digits)

PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

0000 Non-Forested  
00 Filler



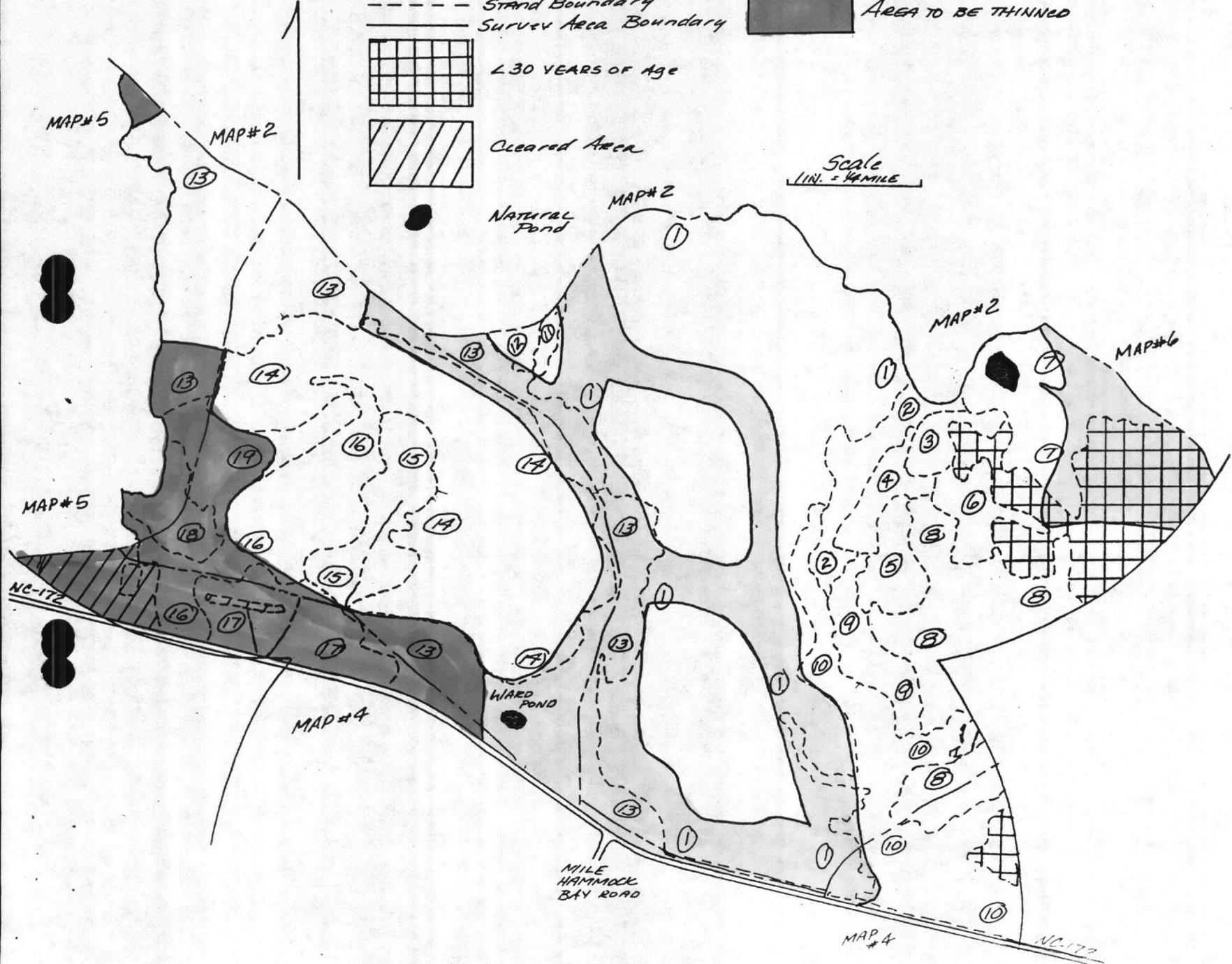
MAP 3  
MECH. Movement Course  
Proposed

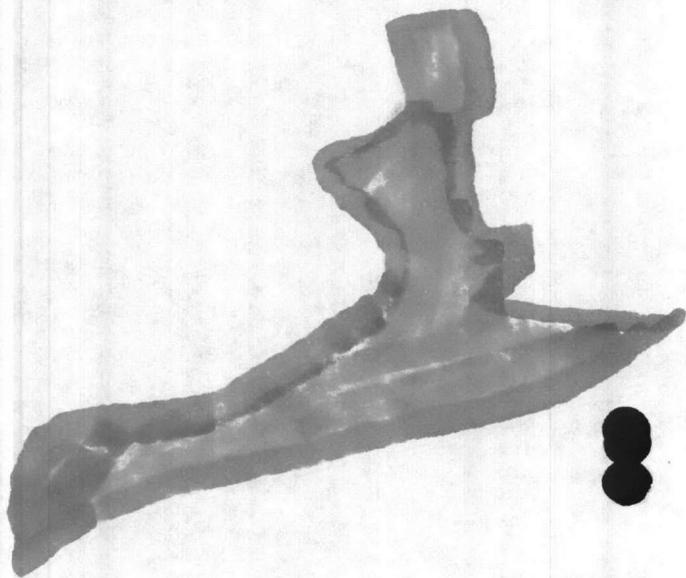
LEGEND

- ==== PAVED Road
- - - - DIET Road
- - - - STAND Boundary
- - - - SURVEY Area Boundary
- Grid Pattern L 30 YEARS OF Age
- Diagonal Lines Cleared Area

- Light Gray Box AREA TO BE CLEARED
- Dark Gray Box AREA TO BE THINNED

Scale  
1 IN. = 1/4 MILE





MECHANIZED MOVEMENT COURSE  
PROPOSED

MAP #3 [Photo 183-114(110)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS>10"/AC
1	0400	214	46	14	169	6
2	0100	15	56	70	135	65
3	1900	7	41	0	0	0
4	0401	10	55	10	230	20
5	0100	11	57	65	270	15
6	0300	14	52	50	110	20
7	0100	18	55	25	115	25
8	0400	57	51	16	36	0
9	0100	18	59	87	283	60
10	1819	61	65	0	0	0
11	0100	3	170	30	190	20
12	0400	4	30	54	100	20
13	0103	141	55	54	114	41
14	0419	122	76	15	25	15
15	0100	25	57	47	60	23
16	1903	36	55	37	33	10
17	0300	0	38	48	75	40
18	0300	0	35	130	255	105
19	0300	6	37	63	133	40

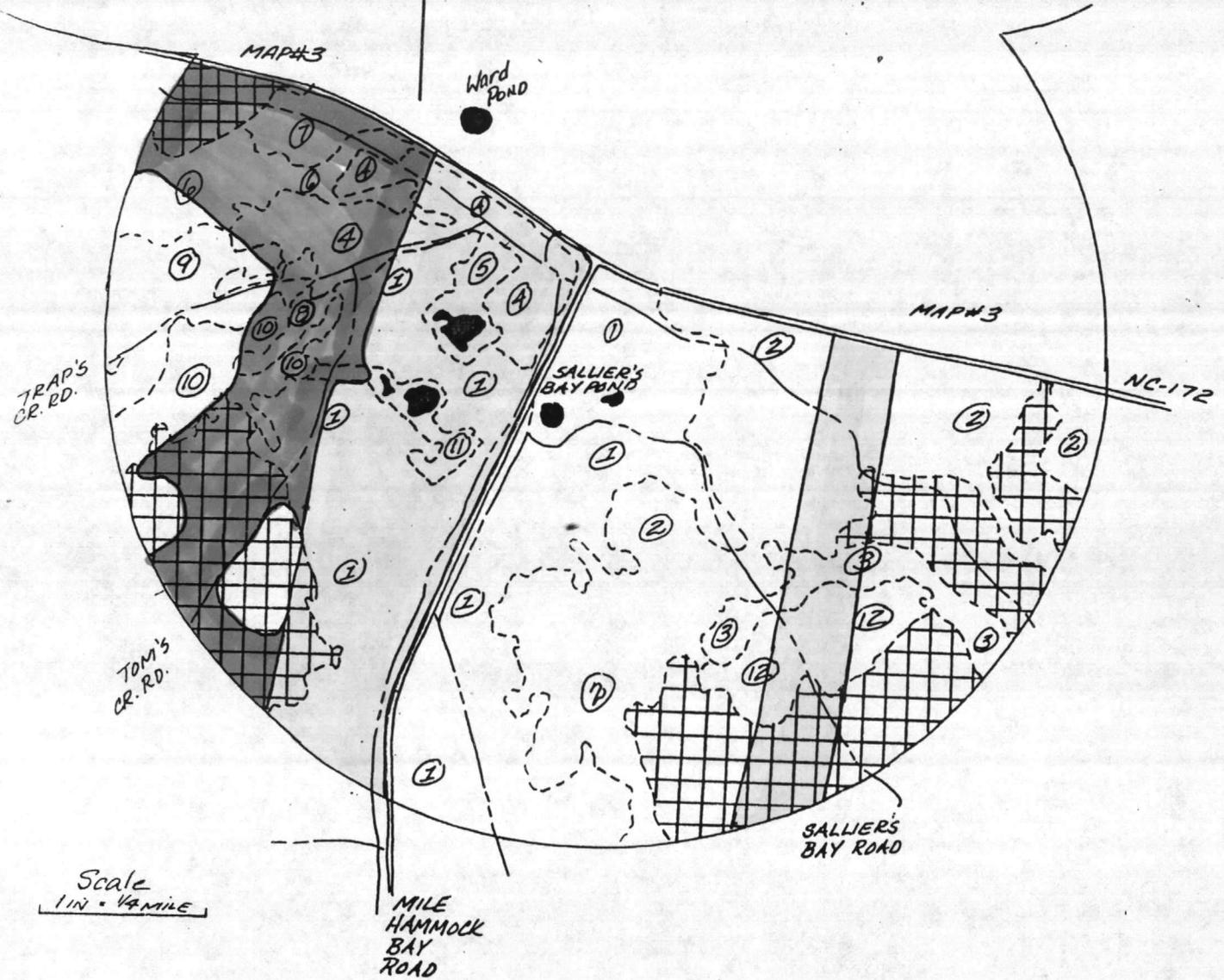
< 30 years old      21  
Proposed  
cleared              200  
Acres Thinned      113

FOREST TYPE CODES (4 Digits)

PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

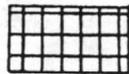
0000 Non-Forested  
00 Filler

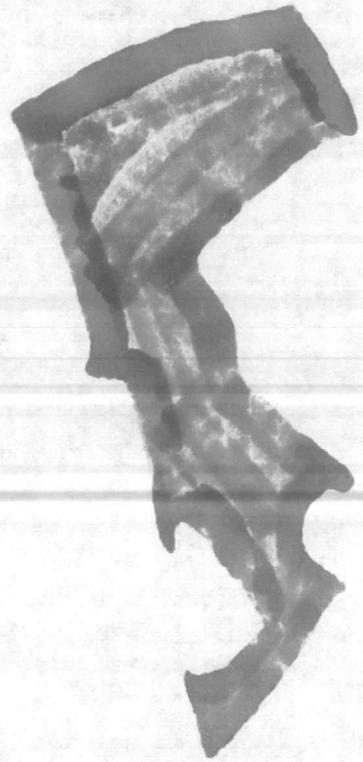




Scale  
1 IN = 1/4 MILE

LEGEND

-  Paved Road
-  Dirt Road
-  Stand Boundary
-  Survey Area Boundary
-  < 30 years of Age
-  cleared area
-  Natural Pond
-  AREA TO BE CLEARED
-  AREA TO BE THINNED



MECHANIZED MOVEMENT COURSE  
PROPOSED

MAP #4 [Photo 183-115(111)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS >10"/AC
1	0301	124	45	32	98	25
2	0304	138	57	41	98	31
3	1819	13	59	0	0	0
4	0300	0	40	35	6	6
5	0300	0	31	0	340	0
6	1419	7	59	5	5	5
7	0315	0	50	20	20	10
8	0319	0	83	70	65	50
9	0300	27	48	55	80	16
10	0319	12	93	20	25	25
11	1900	0	78	0	0	0
12	0300	11	57	55	50	35

< 30 years old      98  
Proposed  
cleared              177  
Acres Thinned      102

FOREST TYPE CODES (4 Digits)

PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

0000 Non-Forested  
00 Filler



Photo # 183-91(92)

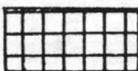
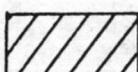
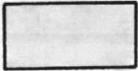
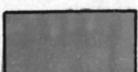
MAP# 5

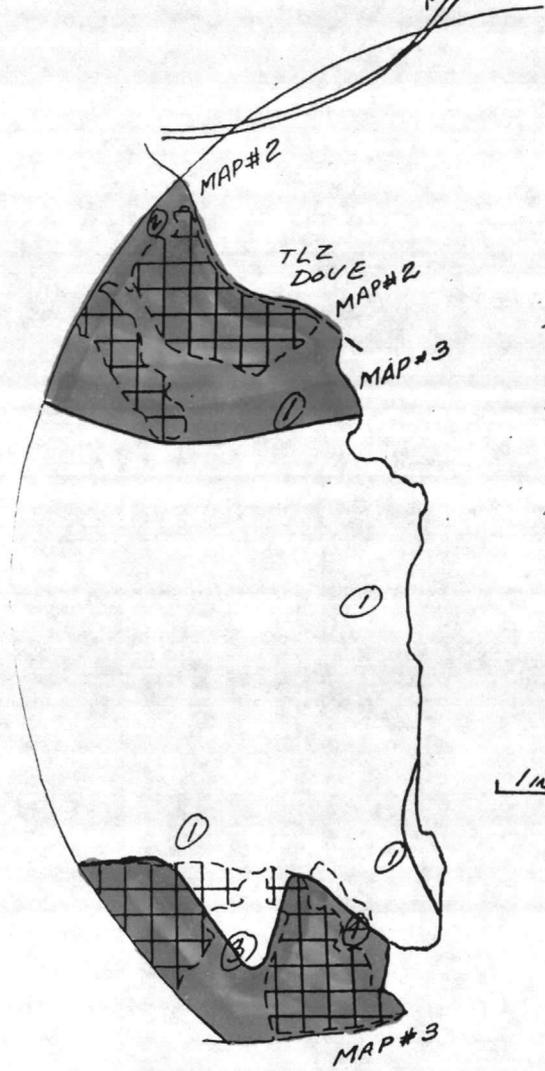
Mech. Movement Course  
Proposed



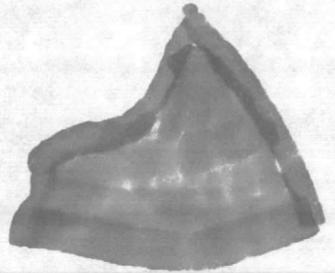
MARINES RD.

LEGEND

-  Paved Road
-  Dirt Road
-  Stand Boundary
-  Survey Area Boundary
-  < 30 years of AGE
-  Cleared Area
-  Natural Ponds
-  AREA TO BE CLEARED
-  AREA TO BE THINNED



Scale  
1 IN. = 1/4 MILE



MECHANIZED MOVEMENT COURSE  
PROPOSED

MAP #5 [Photo 183-91(92)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS>10"/AC
1	0419	177	67	23	73	15
2	1800	0	58	0	0	0
3	0300	5	77	70	70	60
4	0400	2	42	20	90	10
<30 years old Proposed cleared		3				
Acres Thinned		80				

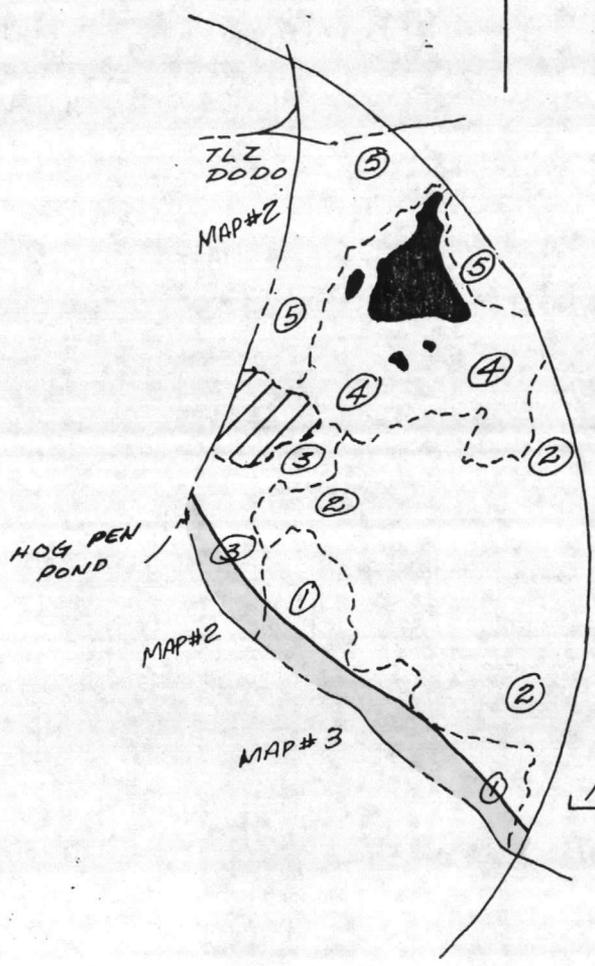
FOREST TYPE CODES (4 Digits)

PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

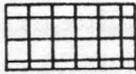
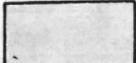
0000 Non-Forested  
00 Filler



PHOTO #183-183(125)



LEGEND

- ==== Paved Road
- - - - Dirt Road
- - - - Strand Boundary
- ==== Survey Area Boundary
-  2-30 years of Age
-  Cleared area
-  Natural Ponds
-  Area to be cleared
-  Area to be thinned

Scale  
1 in. = 1/4 mile



MECHANIZED MOVEMENT COURSE  
PROPOSED

MAP #6 [Photo 183-183(125)]

STD #	FOREST TYPE	ACRES	AGE	BA/ACRE PINE	TOTAL PINE STEMS/ACRE	TOTAL PINE STEMS>10"/AC
1	0100	15	51	57	210	34
2	0400	82	57	56	160	30
3	0100	11	66	33	60	45
4	0100	31	58	58	185	40
5	0100	26	55	30	40	35
<30 years old		7				
Proposed cleared		14				
Acres Thinned		0				

FOREST TYPE CODES (4 Digits)

PINE	HARDWOODS
01 Longleaf	11 Poplar
02 Slash	12 Sweetgum
03 Loblolly	13 White Oak
04 Pond	14 Red Oak
05 Shortleaf	15 Scrub Oak
06 Cypress	16 Beech
	17 Maple
	18 Blackgum
	19 Misc

0000 Non-Forested  
00 Filler

