



WARNOCK & ASSOCIATES, LLC

ENGINEERING, MANAGEMENT & PLANNING

February 11, 2012

Madison County Board of Supervisors
Attn: Mr. Gerald Steen
P.O. Box 608
Canton, MS 39046

Re: Northbay Subdivision Lake Improvement Project
Madison, MS

Dear Mr. Steen,

On January 22nd the Board of Supervisors requested that I perform an engineering evaluation of the "Northbay Subdivision Lake Improvement Project", being sponsored by the City of Madison to determine if Madison County could legally participate in paying half of the construction costs. An engineering plan and cost estimate performed by Williford Gearhart and Knight, Attachment "A", was furnished to my office by the City of Madison, via WG&K.

In performing this evaluation I made several field visits to the site to try and determine the following:

- A) Is the project considered an "Emergency"?
- B) The rightful "ownership" of the lake.
- C) The "Benefit" to Madison County residents as a whole.

EMERGENCY

As the lake exists today I could not say that the facility poses any immediate threat to the residents of the area. Attached you will see several pictures, Attachment "B", that depict the current condition of the lake. It was noted that the outflow structure has a minor leak, but not to the extent where the structural integrity has been compromised.

OWNERSHIP

The lake was originally part of a development known as "Douglas Place Estates"; please see Attachment "C". Douglas Place Estates was platted on August 6, 1986, and constitutes the northern portion of said lake. The southern portion of the lake is known as Northbay Annex Phase 1-A, see Attachment "D". The combination of the two plats encompasses the entire lake, thereby making the lake privately owned by the perspective lot owners. In my opinion this lake is no different than the thousands of ponds or lakes that exist throughout Madison County on privately held land.

"DEDICATED TO EXCELLENCE IN ENGINEERING"

158 W. CENTER STREET
CANTON, MS 39046
601-855-2250 PHONE
601-855-2599 FAX
www.warnockandassociates.com

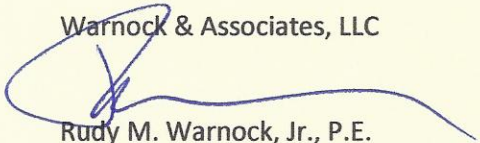
BENEFIT

In my professional opinion there would be no benefit to Madison County as a whole in performing or assisting with the reconstruction of this or any other private lake.

In conclusion I cannot recommend Madison County participate in the "Northbay Subdivision Lake Improvement Project", based upon these findings. If you have any questions please feel free to contact me at 601-855-2250.

Sincerely,

Warnock & Associates, LLC

A handwritten signature in blue ink, appearing to read "Rudy M. Warnock, Jr.", with a long, sweeping underline that extends to the right.

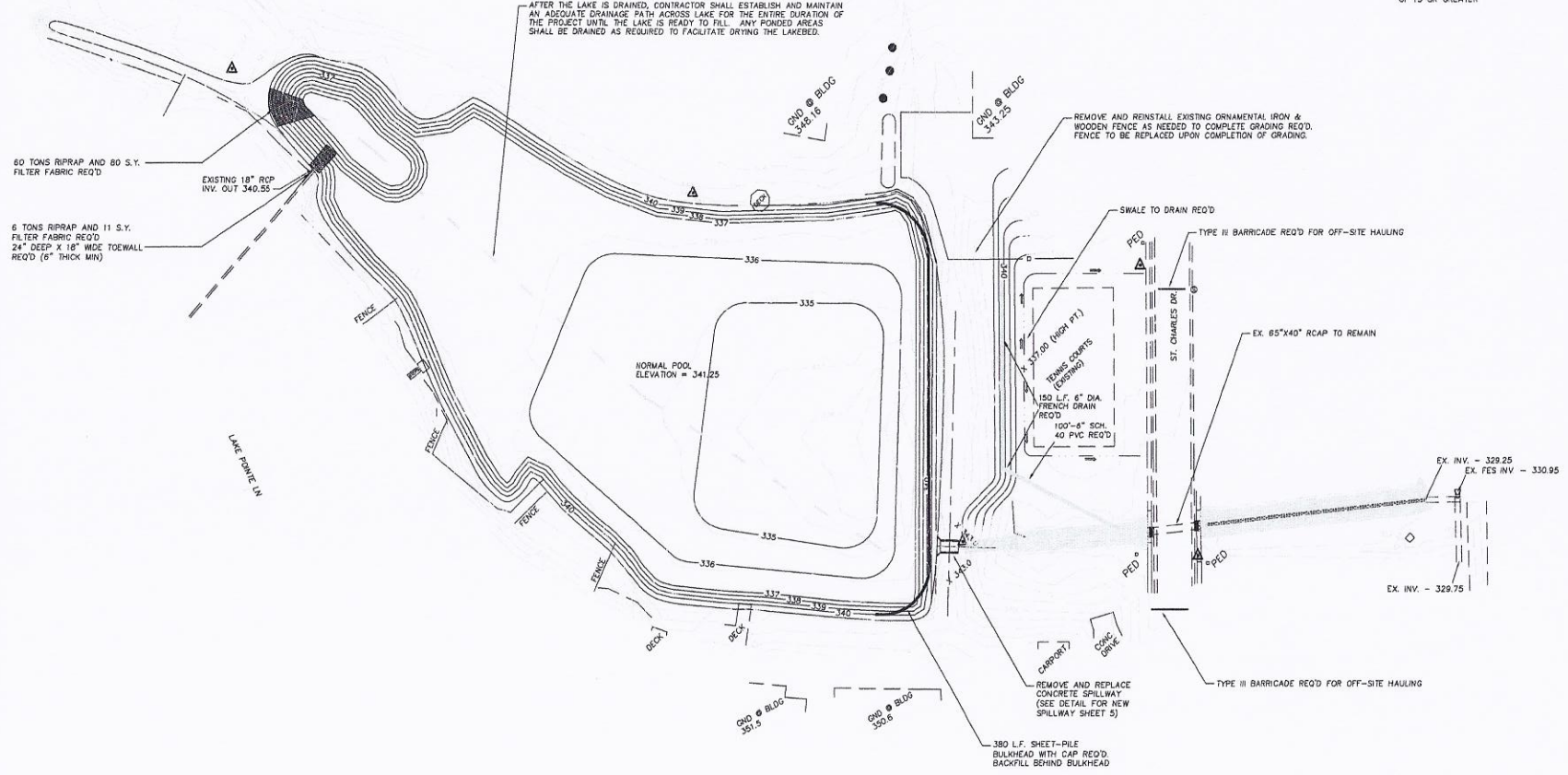
Rudy M. Warnock, Jr., P.E.
County Engineer

Cc: File

Attachment "A"

- GENERAL GRADING & DRAINAGE CONSTRUCTION NOTES:
- UNLESS OTHERWISE NOTED ON THESE PLANS, ALL EXISTING BOAT DOCKS, DECKS, FENCES OR RETAINING WALLS ARE TO REMAIN.
 - ALL CONSTRUCTION SHALL MEET OR EXCEED THE CITY OF MADISON REQUIREMENTS, VIDEO REQUIREMENTS, AND SHALL BE IN CONFORMANCE WITH THE GEOTECHNICAL RECOMMENDATIONS BY BURNS CODLEY DENNIS, INC INCLUDED WITH THE TECHNICAL SPECIFICATIONS.
 - ALL DISTURBED AREAS NOT INUNDATED BY THE LAKE SHALL BE GRASSED BY THE CONTRACTOR IMMEDIATELY UPON COMPLETION OF GRADING.
 - CLEARED AND GRUBBED RUBBISH, AS WELL AS MATERIAL UNSUITABLE FOR USE IN THE FILL, WILL BE DISPOSED OF OFF SITE BY THE CONTRACTOR IN A RESPONSIBLE MANNER.
 - FINISHED CONTOURS REPRESENT APPROXIMATE ELEVATIONS AT THE COMPLETION OF GRADING, REPLACEMENT OF TOPSOIL AND PAVING.
 - ANY EXCAVATION REQUIRED TO ACHIEVE STABLE SOLS BELOW THE FLOWLINE OF THE SPILLWAY SHALL BE CONSIDERED UNDERCUT.
 - BACKFILLS:
FOR UNDERCUTS - SILTY CLAYS OR SANDY CLAYS, LIQUID LIMIT LESS THAN 55, PI OF 12-35
FOR LEVEE BREACH & AROUND SPILLWAY - SILTY CLAY WITH PI OF 15 OR GREATER

AFTER THE LAKE IS DRAINED, CONTRACTOR SHALL ESTABLISH AND MAINTAIN AN ADEQUATE DRAINAGE PATH ACROSS LAKE FOR THE ENTIRE DURATION OF THE PROJECT UNTIL THE LAKE IS READY TO FILL. ANY PONDED AREAS SHALL BE DRAINED AS REQUIRED TO FACILITATE DRYING THE LAKEBED.



| | | | | | | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| NO. 1 | NO. 2 | NO. 3 | NO. 4 | NO. 5 | NO. 6 | NO. 7 | NO. 8 | NO. 9 | NO. 10 | NO. 11 | NO. 12 | NO. 13 | NO. 14 | NO. 15 | NO. 16 | NO. 17 | NO. 18 | NO. 19 | NO. 20 |
| | | | | | | | | | | | | | | | | | | | |

ENGINEERS & SURVEYORS

CITY OF MADISON
NORTHBAY LAKE IMPROVEMENT PROJECT
GRADING AND DRAINAGE PLAN

3

OPINION OF PROBABLE CONSTRUCTION COST - 2012-364-00
PROPOSED NORTHBAY DRAINAGE IMPROVEMENTS
CITY OF MADISON, MISSISSIPPI
REVISED AUGUST 23, 2012

| ITEM NO. | ITEM DESCRIPTION | ITEM UNIT | ESTIMATED QUANTITY | UNIT PRICE | TOTAL PRICE |
|---------------------------------------|------------------------------------------------------|-----------|--------------------|------------|------------------|
| LAKE AND SPILLWAY IMPROVEMENTS | | | | | |
| 1 | Mobilization, Clearing and Grubbing | L.S. | 1 | \$15,000 | \$15,000 |
| 2 | Removal of Obstructions | L.S. | 1 | \$10,000 | \$10,000 |
| 3 | Cut Existing Levee and Completely Drain Lake | L.S. | 1 | \$7,500 | \$7,500 |
| 4 | Unclassified Excavation | C.Y. | 1485 | \$5 | \$7,425 |
| 5 | Excess Excavation | C.Y. | 11248 | \$10 | \$112,480 |
| 6 | Sheet Piling Wall with Cap Installed | S.F. | 4000 | \$20 | \$80,000 |
| 7 | Earthfill Behind Seawall | C.Y. | 295 | \$10 | \$2,950 |
| 8 | 200 LB Riprap | TON | 66 | \$65 | \$4,290 |
| 9 | Geotextile Fabric for Riprap | S.Y. | 91 | \$4 | \$364 |
| 10 | Contractor Furnished Borrow (FM) | C.Y. | 300 | \$25 | \$7,500 |
| 11 | French Drain at Toe of Dam | L.S. | 1 | \$2,000 | \$2,000 |
| 12 | Reinstallation of Existing Iron and Wooden Fence | L.S. | 1 | \$5,000 | \$5,000 |
| 13 | High-Visibility Construction Barrier Fencing | L.S. | 1 | \$6,500 | \$6,500 |
| 14 | Silt Fence | L.F. | 510 | \$5 | \$2,550 |
| 15 | Temporary Erosion Checks | Each | 120 | \$5 | \$600 |
| 16 | Grassing and Erosion Control | L.S. | 1 | \$5,000 | \$5,000 |
| 17 | Solid Sod, Common Bermuda on levee | S.Y. | 1500 | \$5 | \$7,500 |
| 18 | Curb Removal / Replacement (Construction damage) | L.F. | 25 | \$20 | \$500 |
| 19 | Sidewalk Removal / Replacement (Construction damage) | S.Y. | 70 | \$35 | \$2,450 |
| 20 | Traffic Control | L.S. | 1 | \$2,000 | \$2,000 |
| SUBTOTAL | | | | | \$281,609 |
| CONTINGENCIES (10%) | | | | | \$28,161 |
| TOTAL CONSTRUCTION COSTS | | | | | \$309,770 |

Attachment "B"





Attachments 131

Attachment 11-13



Attachment B



Attachment "B"

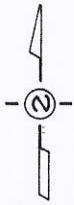


Attachment "B"

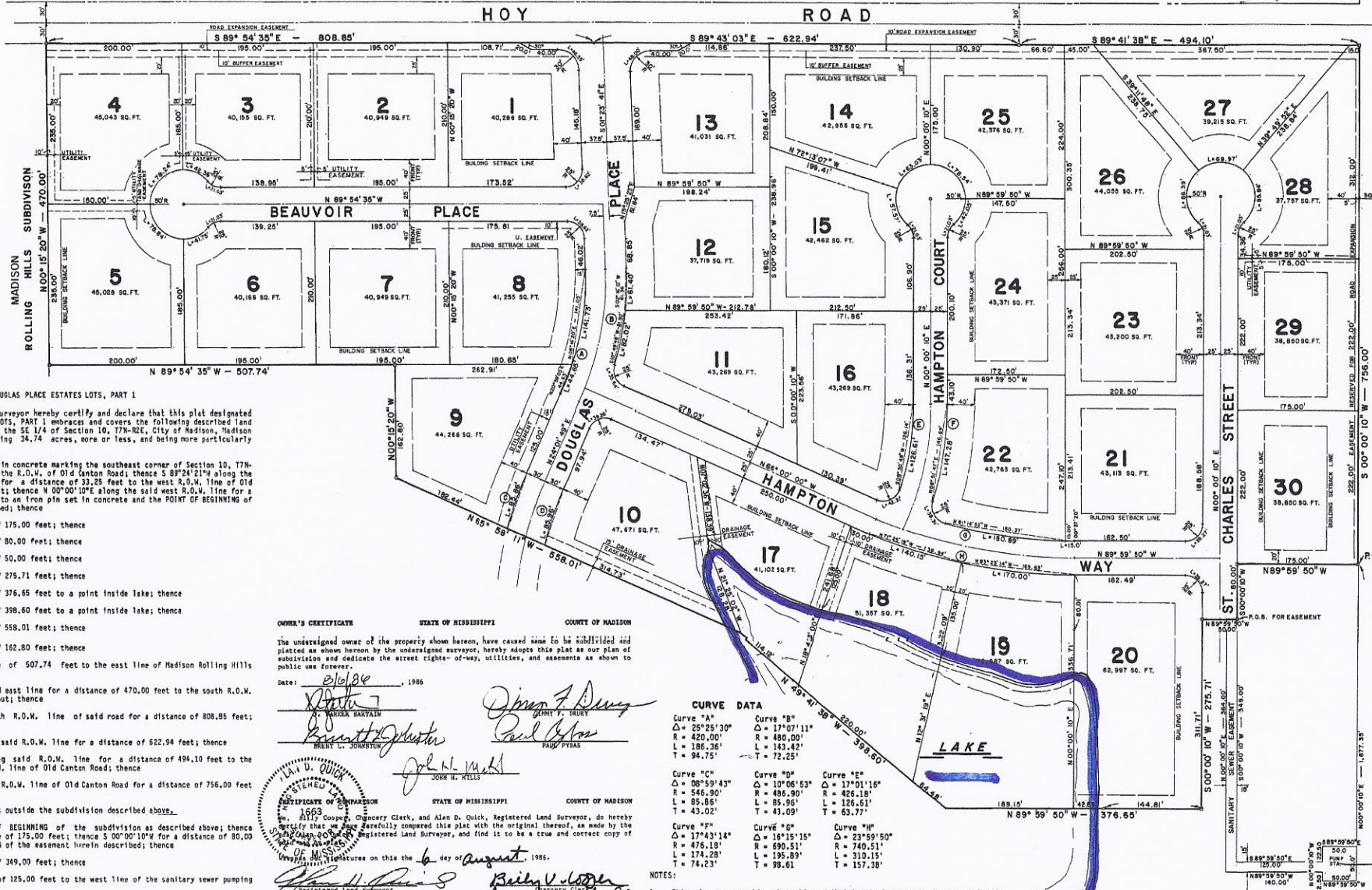


Attachment "TS"





Scale: 1"=100'
BEARINGS SHOWN
HEREON ARE BASED ON
TRUE NORTH



DOUGLAS PLACE ESTATES LOTS, PART 1

The undersigned owners and surveyor hereby certify and declare that this plat described as DOUGLAS PLACE ESTATES LOTS, PART 1 embraces and covers the following described land lying and being situated in the SE 1/4 of Section 10, T7N-R2E, City of Madison, Madison County, Mississippi, containing 34.74 acres, more or less, and being more particularly described as follows:

Commencing at an iron pin set in concrete marking the southeast corner of Section 10, T7N-R2E, said pin being inside the R.O.W. of Old Canton Road; thence S 89°24'21"W along the south line of Section 10 for a distance of 33.25 feet to the west R.O.W. line of Old Canton Road as now laid out; thence N 00°00'10"E along the said west R.O.W. line for a distance of 1,877.35 feet to an iron pin set in concrete and the POINT OF BEGINNING of the subdivision herein described; thence

- N 89°59'50"W for a distance of 175.00 feet; thence
- S 00°00'10"W for a distance of 80.00 feet; thence
- N 89°59'50"W for a distance of 50.00 feet; thence
- S 00°00'10"W for a distance of 275.71 feet; thence
- N 89°59'50"W for a distance of 376.65 feet to a point inside lake; thence
- N 49°41'38"W for a distance of 398.60 feet to a point inside lake; thence
- N 65°58'11"W for a distance of 558.01 feet; thence
- N 00°15'20"W for a distance of 162.80 feet; thence
- N 89°54'35"W for a distance of 507.74 feet to the east line of Madison Rolling Hills Subdivision; thence
- N 00°15'20"W along the said east line for a distance of 470.00 feet to the south R.O.W. line of Hoy Road as now laid out; thence
- S 89°54'35"E along the south R.O.W. line of said road for a distance of 808.85 feet; thence
- S 89°43'03"E continuing along said R.O.W. line for a distance of 622.94 feet; thence
- S 89°41'39"E continuing along said R.O.W. line for a distance of 494.10 feet to the intersection of the west R.O.W. line of Old Canton Road; thence
- S 00°00'10"W along the west R.O.W. line of Old Canton Road for a distance of 756.00 feet to the POINT OF BEGINNING.

Also a Sanitary Sewer Easement outside the subdivision described above.

- Commencing at the POINT OF BEGINNING of the subdivision as described above; thence N 89°59'50"W for a distance of 175.00 feet; thence S 00°00'10"W for a distance of 80.00 feet to the POINT OF BEGINNING of the easement herein described; thence
- S 00°00'10"W for a distance of 249.00 feet; thence
- S 89°59'50"E for a distance of 125.00 feet to the west line of the sanitary sewer pumping station; thence
- N 00°00'10"E for a distance of 22.50 feet; thence
- S 89°59'50"E for a distance of 50.00 feet to the east R.O.W. line of Old Canton Road; thence
- S 00°00'10"W along said R.O.W. line for a distance of 50.00 feet; thence
- N 89°59'50"W for a distance of 50.00 feet; thence
- N 00°00'10"E for a distance of 12.50 feet; thence
- N 89°59'50"W for a distance of 140.00 feet; thence
- N 00°00'10"E for a distance of 364.00 feet; thence
- S 89°59'50"E for a distance of 15.00 feet to the POINT OF BEGINNING, containing 0.23 acres, more or less.

SURVEYOR'S CERTIFICATE

It is hereby certified that this plat is true and correct as prepared from an actual survey of the property made by me or under my supervision on the 2 day of August, 1986.

Alan D. Quick
Alan D. Quick, R.L.S.
No. 1663



OWNER'S CERTIFICATE STATE OF MISSISSIPPI COUNTY OF MADISON

The undersigned owner of the property shown hereon, have caused same to be subdivided and platted as shown herein by the undersigned surveyor, hereby adopts this plat as our plan of subdivision and dedicates the street rights-of-way, utilities, and easements as shown to public use forever.

Date: 2/16/86, 1986
Mark Barkin
Mark Barkin
John L. Johnston
John L. Johnston
John H. Mills
John H. Mills
Jimmy F. Drury
Jimmy F. Drury
Paul Pybas
Paul Pybas



CERTIFICATE OF SUBDIVISION STATE OF MISSISSIPPI COUNTY OF MADISON

I, Billy V. Cooper, Chancery Clerk, and Alan D. Quick, Registered Land Surveyor, do hereby certify that we have carefully compared this plat with the original thereof, as made by the undersigned surveyor, and find it to be a true and correct copy of the same.

Witness our hands and seals on this the 6 day of August, 1986.

Billy V. Cooper
Billy V. Cooper
Chancery Clerk
John H. Mills
John H. Mills
Chancery Clerk
Alan D. Quick
Alan D. Quick
Registered Land Surveyor
John L. Johnston
John L. Johnston
Chancery Clerk
Jimmy F. Drury
Jimmy F. Drury
Chancery Clerk
Paul Pybas
Paul Pybas
Chancery Clerk



PERSONALLY APPEARED BEFORE ME, the undersigned Chancery Clerk, in and for said county and state, the undersigned owners, and the undersigned surveyor, and they acknowledged that they signed and delivered the plat on which this certificate appears as their own act and deed on the day and year herein stated.

Given under my hand and seal of office on this the 5th day of August, 1986.

My Commission Expires: 7-11-92

CURVE DATA

| | | | | | | |
|------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Curve "A" Δ = 25°25'30" R = 420.00' L = 186.36' T = 84.75' | Curve "B" Δ = 17°07'11" R = 480.00' L = 143.42' T = 72.25' | Curve "C" Δ = 08°59'43" R = 546.90' L = 85.86' T = 43.02' | Curve "D" Δ = 10°05'53" R = 406.90' L = 85.96' T = 43.09' | Curve "E" Δ = 17°01'16" R = 426.18' L = 126.61' T = 63.77' | Curve "F" Δ = 16°15'15" R = 690.51' L = 196.89' T = 98.61' | Curve "G" Δ = 23°59'50" R = 740.51' L = 310.15' T = 157.30' |
|------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------|

NOTES:

- This is to certify that this subdivision is located in Zone C, which is defined as "areas of minimal flooding", HUD identified special flood hazard area according to F.I.A. Map No. 280229 0002 B, effective date: December 16, 1980.
- Unless otherwise shown on Plat, minimum building setbacks for all lots are as follows: Front 40 feet; Back 25 feet; sides 20 feet.
- Unless otherwise shown on Plat all lots are subject to a 10' utility easement on front or street side of lot.

FILING AND RECORDATION STATE OF MISSISSIPPI COUNTY OF MADISON

I, Billy V. Cooper, Clerk of the Chancery Court in and for said county and state do hereby certify that the plat of DOUGLAS PLACE ESTATES LOTS, PART 1 was filed for record in my office on this the 16 day of August, 1986, and duly recorded in Plat Cabinet 15, at Station 449 on August 16, 1986.

Given under my hand and seal of office on this the 6 day of August, 1986.

CERTIFICATE OF APPROVAL STATE OF MISSISSIPPI TOWN OF MADISON

I, Mayor, of the Town of Madison, do hereby certify that the above plat was duly considered, approved and accepted by the Mayor and Board of Aldermen of the Town of Madison, Mississippi, at its meeting on the 11 day of August, 1986.

John C. Cecchini
John C. Cecchini
Notary Public
Paul Cook
Paul Cook
Clerk
Harry Lawrence
Harry Lawrence
Mayor

DESIGNED BY:
W. R. Ramage and Associates, Inc.
CONSULTING ENGINEERS - SURVEYORS
3000 Lake Village, P. O. Box 16460 • Jackson, Mississippi
Telephone (601) 981-2900
MARCH 1986

DOUGLAS PLACE ESTATE LOTS PART 1

SITUATED IN
THE SE 1/4 OF SECTION 10, T7N-R2E
MADISON, MADISON CO., MISSISSIPPI

OLD CANTON ROAD (GRAVEL)

Attachments "A" "C"

NORTHBAY ANNEX, PHASE I-A

BEING SITUATED IN THE SE 1/4 OF SECTION 10, T7N R2E,
MADISON, MADISON COUNTY, MISSISSIPPI.



SCALE: 1" = 100'

SURVEYED AND PLATTED BY
KARL P. LONG, CONSULTING ENGINEER
JACKSON, MISSISSIPPI

LEGEND

----- 10' UTILITY EASEMENT
(UNLESS NOTED)
--- IRON PIN

SURVEYOR'S CERTIFICATE
STATE OF MISSISSIPPI
COUNTY OF MADISON

I, Karl P. Long, Registered Land Surveyor, do hereby certify that, at the request of the undersigned OWNER'S, I have subdivided and platted the following 9.63 acre parcel being situated in the SE 1/4 of Section 10, T7N R2E, Madison, Madison County, Mississippi, and being more particularly described as follows:

Commencing at the SE corner of said section 10, run thence N 00°00' 10" E - 1877.35 ft. along the east line of said Section 10 to the SE corner of Lot 30 of Douglas Place Estates Lots, Part 1 as platted and recorded in the office of the Chancery Clerk of Madison County, Ms; run thence N 89°59' 50" W - 175.00 ft. along the southerly line of said subdivisions; thence S 00°00' 10" W - 80.00 ft. along the easterly right of way of St. Charles Street; thence N 89°59' 50" W - 50.00 ft.; thence S 00°00' 10" W - 386.50 ft.; run thence N 89°59' 50" W - 147.69 ft. to the POINT OF BEGINNING; run thence S 00°00' 10" W - 160.00 ft.; to a point on the northerly right of way line of Lake Pointe Lane; run thence S 89°59' 50" E - 147.69 ft. along said northerly right of way line; run thence S 00°00' 10" W - 30.00 ft. to a point on the southerly right of way line of Lake Pointe Lane; run thence N 89°59' 50" W - 121.69 ft. along said southerly right of way line; run thence S 00°02' 49" W - 130.00 ft.; run thence S 87°47' 32" W - 322.81 ft.; thence N 89°36' 24" W - 373.87 ft.; thence N 31°52' 35" W - 114.00 ft.; thence N 27°48' 42" W - 196.75 ft.; thence N 82°30' 05" W - 130.00 ft.; thence S 82°08' 54" W - 60.00 ft.; thence NORTHERLY - 269.47 ft. along the arc of a curve to the right having a chord of N 03°28' 05" E - 267.72 ft.; thence N 14°47' 18" E - 94.28 ft. to a point on the southerly line of said Douglas Place Estates Lots, Part 1; run thence S 69°50' 11" E - 375.54 ft. along said subdivision; thence S 89°59' 50" E - 228.96 ft. along said subdivision; thence S 00°00' 10" W - 110.79 ft. to the POINT OF BEGINNING.

WITNESS MY SIGNATURE on this 6 day of JULY, 1989.

Karl P. Long
Karl P. Long, L.S. #2221

OWNER'S CERTIFICATE
STATE OF MISSISSIPPI
COUNTY OF MADISON

I, J.A. Brown, President of Northpointe Builders, a Mississippi Corporation, the General Partner of Northbay, Ltd., a Mississippi General Partnership do hereby certify that the aforementioned Northbay, Ltd. is the OWNER of the land described in the foregoing Certificate of Karl P. Long, Registered Land Surveyor, and that acting as the duly authorized official of the aforementioned have caused the said land to be subdivided and platted as shown hereon, and have designated the same as NORTHBAY ANNEX PHASE I-A after being duly authorized so to do, and dedicates the street rights of way, utilities and easements as shown to public use.

WITNESS MY SIGNATURE on this 6 day of JULY, 1989.

NORTHBAY, LTD., A MISSISSIPPI GENERAL PARTNERSHIP
BY: NORTHPOINTE BUILDERS, INC., GENERAL PARTNER

J.A. Brown
J.A. Brown, President

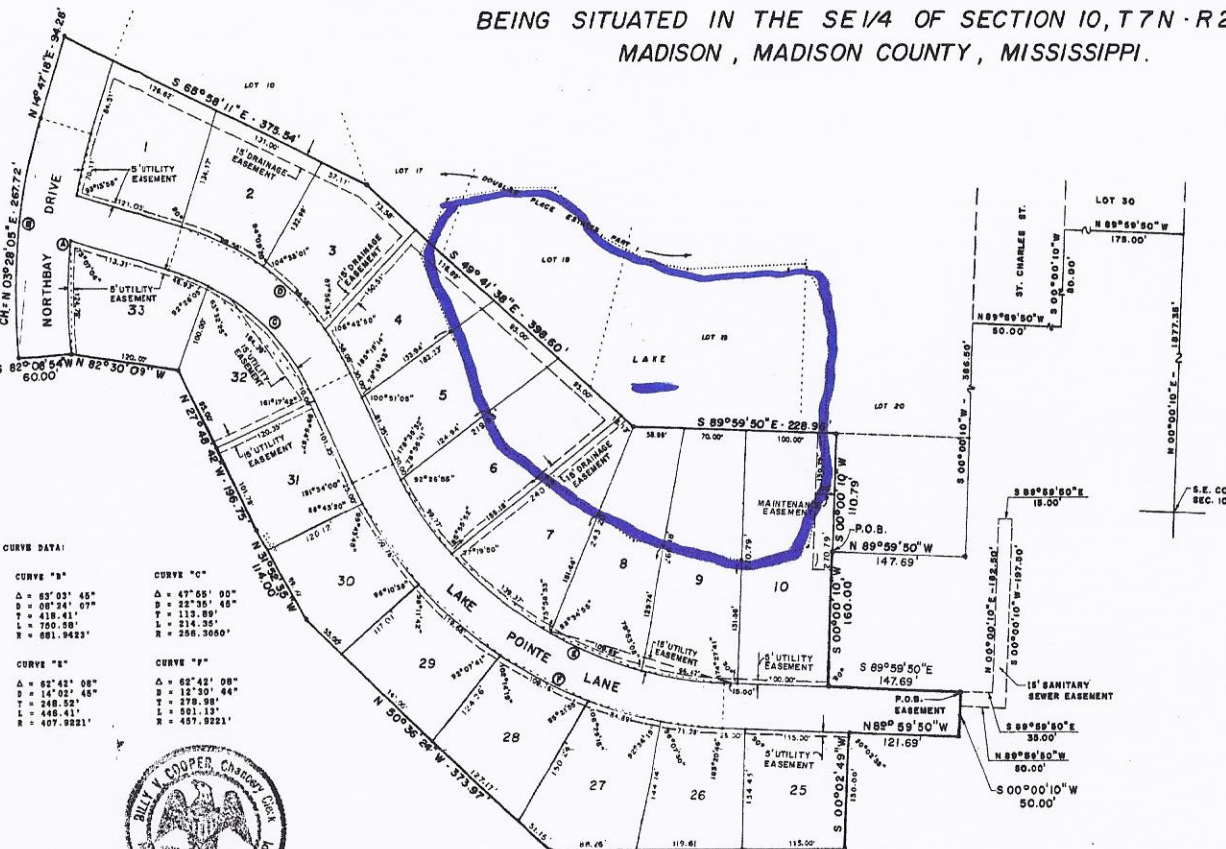
ACKNOWLEDGMENT
STATE OF MISSISSIPPI
COUNTY OF MADISON

PERSONALLY APPARED BEFORE ME, the undersigned authority in and for said County and State, J.A. Brown, President of Northpointe Builders, Inc., a Mississippi Corporation, the General Partner of Northbay, Ltd., a Mississippi General Partnership, who acknowledged that he signed and delivered the plat on which this certificate appears as that act and deed of Northbay, Ltd., on the day and year herein mentioned, after first being duly authorized to do so, and also appeared the within named Karl P. Long, Surveyor, who acknowledged that he executed the above and foregoing plat on the day and year therein mentioned.

GIVEN UNDER MY HAND and official seal on this the 6 day of July, 1989.

Valentine W. Davis
Notary Public
My Commission Expires: December 31, 1991

Addendum # 1 "B"



CURVE DATA:

| CURVE "A" | CURVE "B" | CURVE "C" |
|----------------|----------------|----------------|
| Δ = 83°03' 45" | Δ = 83°03' 45" | Δ = 47°58' 00" |
| B = 89°24' 46" | B = 08°34' 07" | B = 22°30' 45" |
| T = 381.59' | T = 418.41' | T = 113.59' |
| L = 684.54' | L = 700.58' | L = 214.35' |
| M = 521.9423' | M = 681.9423' | M = 286.3050' |

| CURVE "D" | CURVE "E" | CURVE "F" |
|----------------|----------------|----------------|
| Δ = 47°58' 00" | Δ = 62°42' 08" | Δ = 12°30' 46" |
| B = 18°42' 20" | B = 14°02' 45" | B = 270.58' |
| T = 136.11' | T = 248.52' | T = 501.13' |
| L = 286.15' | L = 446.41' | L = 501.13' |
| M = 306.3050' | M = 407.9221' | M = 457.9221' |



CERTIFICATE OF COMPARISON
STATE OF MISSISSIPPI
COUNTY OF MADISON

We, Billy V. Cooper, Chancery Court Clerk of said County, and Karl P. Long, Registered Land Surveyor, do hereby certify that we have carefully compared this plat of NORTHBAY ANNEX PHASE I-A with the original thereof and find it to be a true and correct copy of said map or plat.

Given under my hand and seal of office on this the 10 day of July, 1989.

Karl P. Long
Karl P. Long, R.L.S. #2221
Billy V. Cooper
Billy V. Cooper, Chancery Clerk

For Connection of Plat See
Book 714 Page 40
Billy V. Cooper C.C.
By: *Karagouy D.C.*
7-2-90

For Connection to Plat See
Book 709 Page 97
Billy V. Cooper C.C.
By: *Karagouy D.C.*
5-11-90

ENGINEER'S APPROVAL
STATE OF MISSISSIPPI
CITY OF MADISON
COUNTY OF MADISON

I have examined this plat and find that it conforms to all conditions set forth on the preliminary plat as approved by the Mayor and Board of Aldermen and thus recommend final approval.

ST. J. [Signature]
CITY ENGINEER

CITY APPROVAL CERTIFICATE
STATE OF MISSISSIPPI
CITY OF MADISON
COUNTY OF MADISON

I hereby certify that this is a true copy and that this plat was approved by the Mayor and Board of Aldermen in session on the 22nd day of JULY, 1989.

Mary Newman
Mayor
CITY OF MADISON, MISSISSIPPI

ATTEST:
Susan B. Crowell
CITY CLERK
CITY OF MADISON, MISSISSIPPI

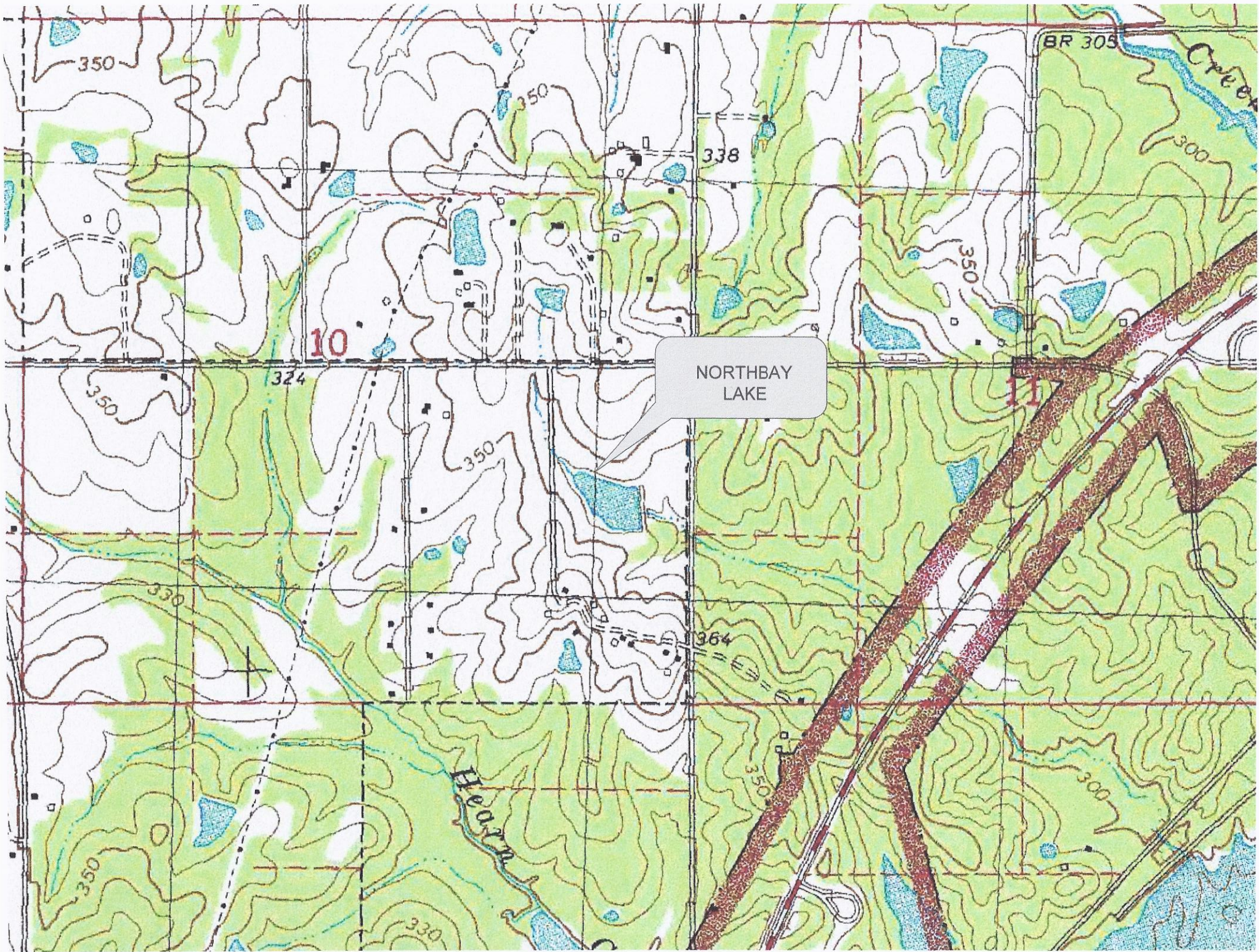
FILING AND RECORDATION
STATE OF MISSISSIPPI
COUNTY OF MADISON

I, Billy V. Cooper, Chancery Clerk in and for said County and State, do hereby certify that this Duplicate Plat of NORTHBAY ANNEX PHASE I-A was filed for record in my office on the 12 day of July, 1989, and was duly recorded in the Cabinet of Book 709 of the records and maps and plats of Madison County, Mississippi.

Given under my hand and seal of office in this the 10 day of July, 1989.

Billy V. Cooper
Billy V. Cooper, Chancery Clerk





NORTHBAY
LAKE

BR 305

Cree

10

11

Hearn

bing Maps

Madison, MS

Northbay Lake Improvement Project

On the go? Use m.bing.com to find maps, directions, businesses, and more

