FEMA USE ONLY

FORM 1

REVISION REQUESTOR AND COMMUNITY OFFICIAL FORM

1. **The basis for this revision request is (are): (check all that apply)**
   - ☐ Physical change
     - ☐ Existing
     - ☐ Proposed
   - ☐ Improved methodology
   - ☐ Improved data
   - ☒ Floodway revision
   - ☐ Other _____

   Explain _____
2. **Flooding Source:** MIDDLE BRANCH GYPSUM CREEK.
3. **Project Name/Identifier:** SHANNON WOODS SECOND ADDITION
4. **FEMA zone designations affected:** A

   (example: A, AH, AO, A1-A30, A99, AE, V, V1-V30, VE, B, C, D, X)
5. **The NFIP map panel(s) affected for all impacted communities is (are):**

	Community No.	Community Name	County	State	Map No.	Panel No.	Effective Date
EX:	480301	Katy, City	Harris, Fort Bend	TX	480301	0005D	02/08/83
	480287	Harris County	Harris	TX	48201C	0220G	09/28/90
	200328	WICHITA	SEDGWICK	KS	0015B	15140	05/15/86

6. **The submitted request encompasses the following types of flooding, structures, and associated disciplines: (check all that apply)**

Types of Flooding	Structures	Disciplines*
☒ Riverine	☒ Channelization	☒ Water Resources
☐ Coastal	☐ Levee/Floodwall	☒ Hydrology
☐ Alluvial Fan	☐ Bridge/Culvert	☐ Hydraulics
☐ Shallow Flooding	☐ Dam	☐ Sediment Transport
☐ Lakes	☐ Coastal	☐ Interior Drainage
Affected by wind/wave action	☐ Fill	☐ Structural
☐ Yes	☐ Pump Station	☐ Geotechnical
☐ No	☐ None	☒ Land Surveying
☐ Other (describe)	☐ Other (describe)	☐ Other (describe)
_____	_____	_____

* Attach completed "Certification by Registered Professional and/or Land Surveyor" Form for each discipline checked. (Form 2)

Operation and Maintenance

- Does the physical change involve a flood control structure (e.g., levees, floodwalls, channelization, basins, dams)? [X] Yes [ ] No

If yes, please provide the following information for each of the new flood control structures:

A. Inspection of the flood control project will be conducted periodically by CITY OF (entity) WICHITA with a maximum interval of 12 months between inspections.

B. Based on the results of scheduled periodic inspections, appropriate maintenance of the flood control facilities will be conducted by CITY OF WICHITA (entity) to ensure the integrity and degree of flood protection of the structure.

C. A formal plan of operation, including documentation of the flood warning system, specific actions and assignments of responsibility by individual name or title, and provisions for testing the plan at intervals not less than one year, [ ] has [X] has not been prepared for the flood control structure.

D. The community is willing to assume responsibility for [X] performing [ ] overseeing compliance with the maintenance and operation plans of the (Name) _____ flood control structure. If not performed promptly by an owner other than the community, the community will provide the necessary services without cost to the Federal government.

Attach operation and maintenance plans

Requested Response from FEMA

- After examining the pertinent NFIP regulations and reviewing the document entitled "Appeals, Revisions, and Amendments to Flood Insurance Maps: A Guide for Community Officials," dated January 1990, this request is for a:

___a.	CLOMR	A letter from FEMA commenting on whether a proposed project, if built as proposed, would justify a map revision (LOMR or PMR), or proposed hydrology changes (see 44 CFR Ch. I, Parts 60, 65, and 72).
X b.	LOMR	A letter from FEMA officially revising the current NFIP map to show changes to floodplains, floodways, or flood elevations. LOMRs typically depict decreased flood hazards. (See 44 CFR Ch. I, Parts 60 and 65.)
___c.	PMR	A reprinted NFIP map incorporating changes to floodplains, floodways, or flood elevations. Because of the time and cost involved to change, reprint, and redistribute an NFIP map, a PMR is usually processed when a revision reflects increased flood hazards or large-scope changes. (See 44 CFR Ch. I, Parts 60 and 65.)
___d.	Other:	Describe _____

Floodway Information

- Does the affected flooding source have a floodway designated on the effective FIRM or FBFM?
  ☐ Yes ☒ No
- Does the revised floodway delineation differ from that shown on the effective FIRM or FBFM?
  ☐ Yes ☒ No

If yes, give reason: _____

_____

Attach request to revise the floodway from community CEO or designated official.

Attach copy of either a public notice distributed by the community stating the community's intent to revise the floodway or a statement by the community that it has notified all affected property owners and affected adjacent jurisdictions.

Does the State have jurisdiction over the floodway or it's adoption by communities participating in the NFIP? ☒ Yes ☐ No

If yes, attach a copy of a letter notifying the appropriate State agency of the floodway revision and documentation of the approval of the revised floodway by the appropriate State agency.

Proposed Encroachments

With floodways:

1A. Does the revision request involve fill, new construction, substantial improvement, or other development in the floodway? ☐ Yes ☒ No

1B. If yes, does the development cause the 100-year water surface elevation increase at any location by more than 0.000 feet? ☐ Yes ☐ No

Without floodways:

2A. Does the revision request involve fill, new construction, substantial improvement, or other development in the 100-year floodplain? ☒ Yes ☐ No

2B. If yes, does the cumulative effect of all development that has occurred since the effective SFHA was originally identified cause the 100-year water surface elevation increase at any location by more than one foot (or other surcharge limit if community or state has adopted more stringent criteria)? ☐ Yes ☒ No

If answer to either Items 1B or 2B is yes, please provide documentation that all requirements of Section 65.12 of the NFIP regulations have been met.

Revision Requestor Acknowledgement

- Having read NFIP Regulations, 44 CFR Ch. I, parts 59, 60, 61, 65, and 72, I believe that the proposed revision ☒ is ☐ is not in compliance with the requirements of the aforementioned NFIP Regulations.

Community Official Acknowledgement

- Was this revision request reviewed by the community for compliance with the community's adopted floodplain management ordinances? ☒ Yes ☐ No
- Does this revision request have the endorsement of the community? ☒ Yes ☐ No

If no to either of the above questions, please explain: _____

Please note that community acknowledgement and/or notification is required for all requests as outlined in Section 65.4 (b) of the NFIP Regulations.

Forms Included

Form 2 entitled "Certification By Registered Professional Engineer And/Or Land Surveyor" must be submitted.

The following forms should be included with this request if (check the included forms):

• Hydrologic analysis for riverine flooding differs from that used to develop FIRM	☐ Hydrologic Analysis Form (Form 3)
• Hydraulic analysis for riverine flooding differs from that used to develop FIRM	☐ Riverine Hydraulic Analysis (Form 4)
• The request is based solely on updated topographic information	☐ Riverine/Coastal Mapping (Form 5)
• The request involves any type of channel modification	☒ Channelization (Form 6)
• The request involves new bridge or culvert or revised analysis of an existing bridge or culvert	☐ Bridge/Culvert Form (Form 7)
• The request involves a new or revised levee/floodwall system	☐ Levee/Floodwall System Analysis (Form 8)
• The request involves analysis of coastal flooding	☐ Coastal Analysis Form (Form 9)
• The request involves coastal structures credited as providing protection from the 100-year flood	☐ Coastal Structures Form (Form 10)
• The request involves an existing, proposed, or modified dam	☐ Dam Form (Form 11)
• This request involves structures credited as providing protection from the 100-year flood on an alluvial fan	☐ Alluvial Fan Flooding Form (Form 12)

Initial Review Fee

- The minimum initial review fee for the appropriate request category has been included.

☒ Yes ☐ No

If yes, the amount submitted is $ 7600.

or

- This request is for a project that is for public benefit and is intended to reduce the flood hazard to existing development in identified flood hazard areas as opposed to planned floodplain development.

☐ Yes ☐ No

Note: I understand that my signature indicates that all information submitted in support of this request is correct.

Note: Signature indicates that the community understands, from the revision requestor, the impacts of the revision on flooding conditions in the community.

Signature of Revision Requestor	Signature of Community Official
Printed Name and Title of Revision Requestor	Printed Name and Title of Community Official
Company Name	Community Name
Date _____	Date _____

Attach letters from all affected jurisdictions acknowledging revision request and approving changes to floodway, if applicable.

Note: Although a photograph of physical changes is not required, it may be helpful for FEMA's review.

FEMA USE ONLY

CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

FORM 2

1. This certification is in accordance with 44 CFR Ch. I, Section 65.2.

2. I am licensed with an expertise in HYDROLOGY / LAND SURVEYING.
[example: water resources (hydrology, hydraulics, sediment transport, interior drainage)* structural, geotechnical, land surveying.]

3. I have 14 years experience in the expertise listed above.

4. I have ☒ prepared ☐ reviewed the attached supporting data and analyses related to my expertise.

5. I ☒ have ☐ have not visited and physically viewed the project.

6. In my opinion, the following analyses and/or design, were performed in accordance with sound engineering practices:
YES.

7. Based upon the following review, the modifications in place have been constructed in general accordance with plans and specifications.

Basis for above statement: (check all that apply)

a. ☐ Viewed all phases of actual construction.
b. ☐ Compared plans and specifications with as-built survey information.
c. ☒ Examined plans and specifications and compared with completed projects.
d. ☐ Other _____

8. All information submitted in support of this request is correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: N. BRENT WOOTEN
(please print or type)

Title: ENGINEER
PE LS. (please print or type)

Registration No. 8470 / 945

Expiration Date: PE - APRIL 30, 1995 LS - MARCH 31, 1995

State KANSAS

Type of License PROFESSIONAL ENGINEER / LICENSED LAND SURVEYOR

N. Brent Wooten
Signature

6/4/93
Date

N. BRENT WOOTEN LICENSED 8470 KANSAS PROFESSIONAL ENGINEER

N. BRENT WOOTE REGISTERED LS-945 KANSAS LAND SURVEYOR

Seal
(Optional)

*Specify Subdiscipline

Note: Insert not applicable (N/A) when statement does not apply.

FEMA USE ONLY

FORM 6

CHANNELIZATION FORM

Community Name: WICHITA, KANSAS
Flooding source: MIDDLE BRANCH GYPSUM CREEK.
Project Name/Identifier: SHANNON WOODS SECOND ADDITION.

Extent of Channelization

Downstream limit: SECTION 1120 ON TOPOGRAPHIC WORK MAP
Upstream limit: SECTION 1320 ON TOPOGRAPHIC WORK MAP

Channel Description

1. Describe the inlet to the channel NATURAL CHANNEL.

2. Briefly describe the shape of the channel (both cross sectional and planimetric configuration) and its lining (channel bottom and sides) TRAPEZOIDAL CHANNEL WITH VARIABLE BOTTOM WIDTH; 1:1 SIDE SLOPES; PROTECTED BY TIMBER RAILROAD TIES AND ROCK RIPRAP.

3. Describe the outlet from the channel NATURAL CHANNEL.

4. The channelization includes:

- ☐ Levees
- ☐ Drop structures
- ☐ Superelevated sections
- ☒ Transitions in cross sectional geometry
- ☐ Debris basin/detention basin
- ☐ Energy dissipater
- ☐ Other _____

5. Attach the following:

   a. Certified engineering drawings showing channel alignment and locations of inlet, outlet, and items checked in Item 4

   b. Typical cross sections and profiles of channel banks and invert

Hydraulic Considerations

1. What is the 100-year discharge? 176 cfs

2. Do the cross sections in the hydraulic model match the typical cross sections in the plans? [X] Yes [ ] No

3. Are the channel banks higher than the 100-year flood elevations everywhere? [ ] Yes [X] No

4. Are the channel banks higher than the 100-year flood energy grade lines everywhere? [ ] Yes [X] No

5. Is the land on both sides of the channel above the adjacent 100-year flood elevation at all points along the channel? [X] Yes [ ] No

6. What is the range of freeboard? ____ - ____ feet

7. What is the range of the 100-year flood velocities? 2.57 - 4.40 ft/sec

8. What is the lining type? (both bottom and sides) EARTH CROSS TIES.

   Explain how the channel lining prevents erosion and maintains channel stability (attach documentation) _____

9. What is the design elevation in the channel based on?:

   - [X] Subcritical flow
   - [ ] Critical flow
   - [ ] Supercritical flow
   - [ ] Energy grade line

   Is 100-year flood profile based on the above type of flow? [X] Yes [ ] No

   If no, explain: _____

10. Is there the potential for a hydraulic jump at the following locations?

Inlet to channel	[ ] Yes	[X] No
Outlet of channel	[ ] Yes	[X] No
At Drop Structures	[ ] Yes	[ ] No
At Transitions	[ ] Yes	[ ] No

    Other location. Explain: _____

    If the answer to any of the above is yes, please explain how the hydraulic jump is controlled and the effects of the hydraulic jump on the stability of the channel.

    Explain: _____

Sediment Transport Considerations

1. A. Is there any indication from historical records that sediment transport (including scour and deposition) can affect the 100-year water-surface elevations and/or the capacity of the channel?

☐ Yes ☒ No

B. Based on the conditions of the watershed and stream bed, is there a potential for sediment transport (including scour and deposition) to affect the 100-year water-surface elevations and/or the capacity of the channel?

☐ Yes ☒ No

2. If the answer to either 1A or 1B is yes:

A. What is the estimated sediment (bed) load?

_____ cfs (attach gradation curve)

Explain method used to estimate load _____

_____

_____

_____

_____

B. Is the 100-year flood velocity anywhere within the channel less than the 100-year flood velocity of the inlet? ☐ Yes ☒ No

C. Will sediment accumulate anywhere within the channel? ☐ Yes ☒ No

D. Will deposition or scour occur at or near the inlet? ☐ Yes ☒ No

E. Will deposition or scour occur at or near the outlet? ☐ Yes ☒ No

SUBDIVISION COMMITTEE
METROPOLITAN AREA PLANNING COMMISSION

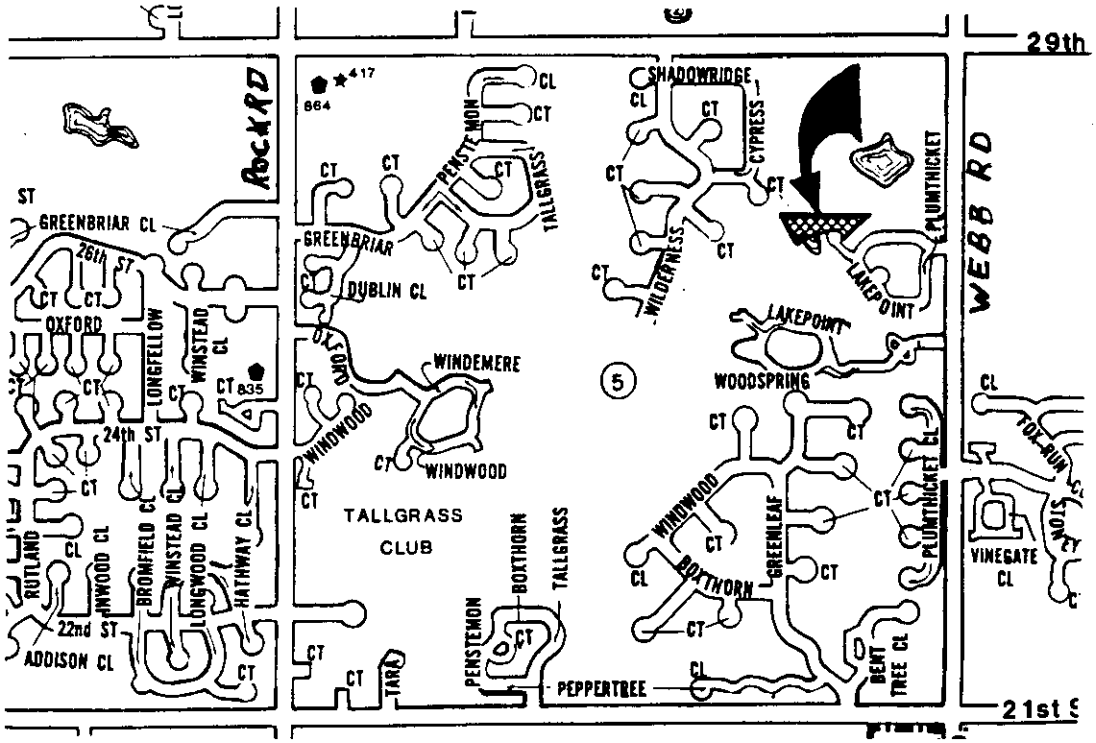
AGENDA ITEM NO. 9

May 17, 1990

STAFF REPORT
(Final Plat)

CASE NUMBER:	**S/D 90-13 - SHANNON WOODS SECOND AT TALLGRASS**
OWNER/APPLICANT:	J.W. Russell Construction, Inc.
SURVEYOR/ENGINEER:	Baughman Company, P.A.
LOCATION:	West of Webb Rd. approximately 1/4-mile south of 29th St. No.
SITE SIZE:	1.4 Acres
NUMBER OF LOTS	
Residential:	3
Office:	
Commercial:	
Industrial:	
Total:	3
MINIMUM LOT AREA:	16,176.2 sq. ft.
CURRENT ZONING:	"AA" One Family Dwelling (DP-96)

VICINITY MAP:



G. The applicant shall submit an avigational easement covering all of subject plat and a restrictive covenant assuring that adequate construction methods will be used to minimize the effects of noise pollution in the habitable structures constructed on subject property.

H. The applicant shall install or guarantee the installation of all utilities and facilities which are applicable and described in Article 8 of the MAPC Subdivision Regulations.

I. The applicant's engineer is advised that the Register of Deeds is requiring the name(s) of the notary public, who acknowledges the signatures on this plat, to be printed beneath the notary's signature.

J. To receive mail delivery without delay, and to avoid unnecessary expense, the applicant is advised of the necessity to meet with the U.S. Postal Service Growth Management Coordinator (phone 316-946-4527) prior to development of the plat so that the type of delivery, and the tentative mailbox locations can be determined.

K. Perimeter closure computations shall be submitted with the final plat tracing. Section 5-101(c).

L. Recording of the plat within 30 days after approval by the City Council.

M. The representative from City Engineering should be prepared to comment on the status of the applicant's drainage plan. Engineering also needs to indicate what guarantees are needed for this plat if not already provided for by previous petitions.

Note: This plat has been submitted in final form only.

WICHITA — SEDGWICK COUNTY

W-SC

METROPOLITAN AREA PLANNING DEPARTMENT
CITY HALL — TENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1688
(316) 268-4561

May 18, 1990

J.W. Russell Construction Inc.
P.O. Box 9077
Wichita, KS 67277

Re: S/D 90-31 Plat of Shannon Wood Second At Tallgrass Addition

Dear Gentlemen:

At the regular meeting of the Subdivision Committee of the Metropolitan Area Planning Commission on Thursday, May 17, 1990, the above captioned plat was considered. The action of the Committee was to recommend that this plat be approved subject to:

A. The applicant shall guarantee any drainage improvements required by the platting of this property.

B. If improvements are guaranteed by petition a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.

C. The applicant shall submit for review a copy of the ingress and egress easement; upon approval, this easement shall be recorded by the applicant and the recording information indicated on the face of the plat. A recorded copy shall be provided to Planning for the plat file. At a minimum, this easement shall indicate the properties involved, that a 20 foot (minimum) hard surfaced drive is to be installed and which property or properties will be responsible for the construction and maintenance of the improvements within the easement. The easement should further indicate that this easement is binding on future owners and assigns.

D. Since this plat proposes the platting of narrow street right-of-way with adjacent "15-foot street, drainage and utility easements," a restrictive covenant shall be submitted which calls out restrictions for lot-owner use of these easements. Retaining walls and change of grade shall be prohibited within these easements as well as fences, earth berms and mass plantings. Any plantings within the easement shall be reviewed by the City Forestry Division prior to installation.

E. The applicant shall submit a covenant which provides for four (4) Off-street parking spaces per dwelling unit for each lot of this plat. The covenant shall indicate the affected lots by lot number and shall state that the covenant runs with the land and is binding on future owners and assigns.

F. On the final plat tracing a note shall be added to the face of the plat in the vicinity of the north line of Lots 2 and 3, indicating that the 6-foot building setback line is a "side yard setback."

G. The final plat tracing shall indicate a utility easement to serve Lot 2, this may be included within the ingress-egress easement in order to cover water service to this lot.

H. The applicant shall submit an avigational easement covering all of subject plat and a restrictive covenant assuring that adequate construction methods will be used to minimize the effects of noise pollution in the habitable structures constructed on subject property.

I. If City Engineering determines that the drainage plan for this plat will require off-site easements such easements shall be provided by separate instrument. These easements shall be approved by Engineering and submitted for recording with the final plat tracing.

J. The applicant shall install or guarantee the installation of all utilities and facilities which are applicable and described in Article 8 of the MAPC Subdivision Regulations.

K. The applicant's engineer is advised that the Register of Deeds is requiring the name(s) of the notary public, who acknowledges the signatures on this plat, to be printed beneath the notary's signature.

L. To receive mail delivery without delay, and to avoid unnecessary expense, the applicant is advised of the necessity to meet with the U.S. Postal Service Growth Management Coordinator (phone 316-946-4527) prior to development of the plat so that the type of delivery, and the tentative mailbox locations can be determined.

M. Perimeter closure computations shall be submitted with the final plat tracing. Section 5-101(c).

Enclosed with the applicant's copy of this letter is a list of the five methods which have been adopted as being acceptable for guaranteeing improvements required in the approval of plats. The certificate will be required if petitions are submitted. Forms for the bond and irrevocable Letter of Credit are available from this office.

The enclosed "marked" copy of the final plat is for your information and files.

This matter will be forwarded to the Planning Commission for its consideration on Thursday, May 24, 1990 at 1:30 p.m. If you have any questions concerning this matter, please call.

Sincerely,

Don Losew

Don Losew
Senior Planner

DL:sm

Enclosure

cc: Baughman Company, 315 Ellis, Wichita, KS 67211
Mike Lindebak, City Engineer

SEDGWICK COUNTY

METROPOLITAN AREA PLANNING
DEPARTMENT
CITY HALL — TENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1688
(316) 268-4561

May 29, 1990

J.W. Russell Construction Inc.
P.O. Box 9077
Wichita, KS 67277

Re: S/D 90-31 Plat of Shannon Wood Second At Tallgrass Addition

Dear Gentlemen:

At the regular meeting of the Metropolitan Area Planning Commission on May 24, 1990, the above captioned plat was considered. The action of the Planning Commission was to recommend that the plat be approved as recommended by the Subdivision Committee subject to the conditions stated in our letter of May 18, 1990.

In addition to complying with those conditions, it is necessary that you meet the following requirements before this plat can be forwarded to the City Council for consideration:

1. Submission of the fully completed and signed tracing of the subdivision to the Metropolitan Area Planning Department.

2. Submission of a title report by an abstract or title insurance company or an attorney's opinion that fee title is vested in the plattor; if the title report or attorney's opinion has not already been submitted.

3. Certification that all due real estate taxes have been paid.

4. Submission of a check, made out to the Register of Deeds, covering the costs of any documents to be recorded as a requirement of platting.

Please call if you have any questions.

Sincerely,

Don Losew

Don Losew
Senior Planner

DL:sm
cc: Baughman Company, 315 Ellis, Wichita, KS 67211
Mike Lindebak, City Engineer

For Shannon Woods 2nd at Tallgrass

DRAINAGE EASEMENT

THIS EASEMENT made this 12th day of June, 1990, by and between Steve Lambert of the first part and the City of Wichita of the second part.

WITNESSETH: That the said first party, in consideration of the sum of One Dollar ($1.00) and other valuable consideration, the receipt whereof is hereby acknowledged, do hereby grant and convey unto the said second party a perpetual right-of-way and easement for the purpose of constructing, maintaining, and repairing a drainage system over, along, and under the following described real estate situated in Sedgwick County, Kansas; to wit:

A tract of land lying in the NE¼ of Sec. 5, Twp. 27-S, R-2-E of the 6th P.M., Sedgwick County, Kansas, described as commencing at the N.W. Corner of Reserve "E", Shannon Woods at Tallgrass, an Addition to Wichita, Sedgwick County, Kansas; thence S 41°30' E, along the southwesterly line of said Reserve "E", 245 feet for a place of beginning; thence S 48°30' W, 50 feet; thence N 80°46'35" E, 59.14 feet to the westerly most S.W. Corner of said Reserve "E"; thence N 41°30' W, along the southwesterly line of said Reserve "E", 31.58 feet to the place of beginning.

And said second party is hereby granted the right to enter upon said premises at any time for the purpose of constructing, operating, maintaining, and repairing such drainage system.

IN WITNESS WHEREOF: The said first party has signed these presents the day and year first written.

Steve Lambert SR V-P

Steve Lambert, Sr. V.President.

OFF SITE DRAINAGE EASEMENT

STATE OF KANSAS)
SS
SEDGWICK COUNTY)

Personally appeared before me, a notary public in and for the County and State aforesaid, Steve Lambert to me personally known to be the same person who executed the foregoing instrument of writing and said person duly acknowledged the execution thereof.

Dated at Wichita, Kansas, this 12 day of June, 1990.

GLADYS MADISON
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp.

Gladys Madison Notary Public
Gladys Madison

My Appointment Expires 4-16-91

DRAINAGE EASEMENT

THIS EASEMENT made this 8TH day of JUNE, 1990, by and between JAY W. RUSSELL of the first part and the City of Wichita of the second part.

WITNESSETH: That the said first party, in consideration of the sum of One Dollar ($1.00) and other valuable consideration, the receipt whereof is hereby acknowledged, do hereby grant and convey unto the said second party a perpetual right-of-way and easement for the purpose of constructing, maintaining, and repairing a drainage system over, along, and under the following described real estate situated in Sedgwick County, Kansas; to wit:

That part of Lot 19, Block 1, Shannon Woods at Tallgrass an Addition to Wichita, Sedgwick County, Kansas, described as beginning at the westerly most corner of said Lot 19, said corner being the rear corner common to Lot 19 and Reserve E, in said Block 1; thence S 41°30' E, along the southwesterly line of said Lot 19, 6 feet; thence N 48°30' E, parallel with the northwesterly line of said Lot 19, 114.74 feet to the northerly line of said Lot 19; thence n 79°49'51" W, along the northerly line of said Lot 19, 7.65 feet to the northerly most corner of said Lot 19; thence S 48°30' W, along the northwesterly line of said Lot 19, 110 feet to the place of beginning.

And said second party is hereby granted the right to enter upon said premises at any time for the purpose of constructing, operating, maintaining, and repairing such drainage system.

IN WITNESS WHEREOF: The said first party has ~~signed~~ these presents the day and year first written.

JAY W. RUSSELL

16' DRAINAGE EASMT.

STATE OF KANSAS)
SS
SEDGWICK COUNTY)

Personally appeared before me, a notary public in and for the County and State aforesaid, Jay W Russell to me personally known to be the same person who executed the foregoing instrument of writing and said person duly acknowledged the execution thereof.

~~Dated at Wichita, Kansas~~, this 8 day of June, 1990.

ANN ALLAIRE
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. 7-13-1991

Ann Allaire Notary Public

My Appointment Expires July 13, 1991

THE CITY OF WICHITA
OFFICE OF PUBLIC WORKS – ENGINEERING

DATE: April 5, 1991

TO: F. E. (Mike) Withrow, Water & Sewer System Planning & Development Engineer

FROM: Rob Younkin, Civil Engineer II

SUBJECT: Shannonwoods 2nd at Tallgrass Addition

On April 5, 1991, the Water Department (Wayne Fox) received a call requesting water service to the subject. He called me to determine if the lots could be served by the existing main.

Having no immediate knowledge of the plat, I suggested he discuss setting meters at the end of the existing main and that I would check out the plat and plat projects.

I talked with the Sub-Division Engineer and then located the plat folder, finding also that a water project had been set up (448-88481).

Mr. Fox called to tell me that you and David Warren had decided to allow meters to be set on the existing line. Further, that you felt a main extension was not necessary.

As verificatin of the above, I personally discussed the situation with you on this date.

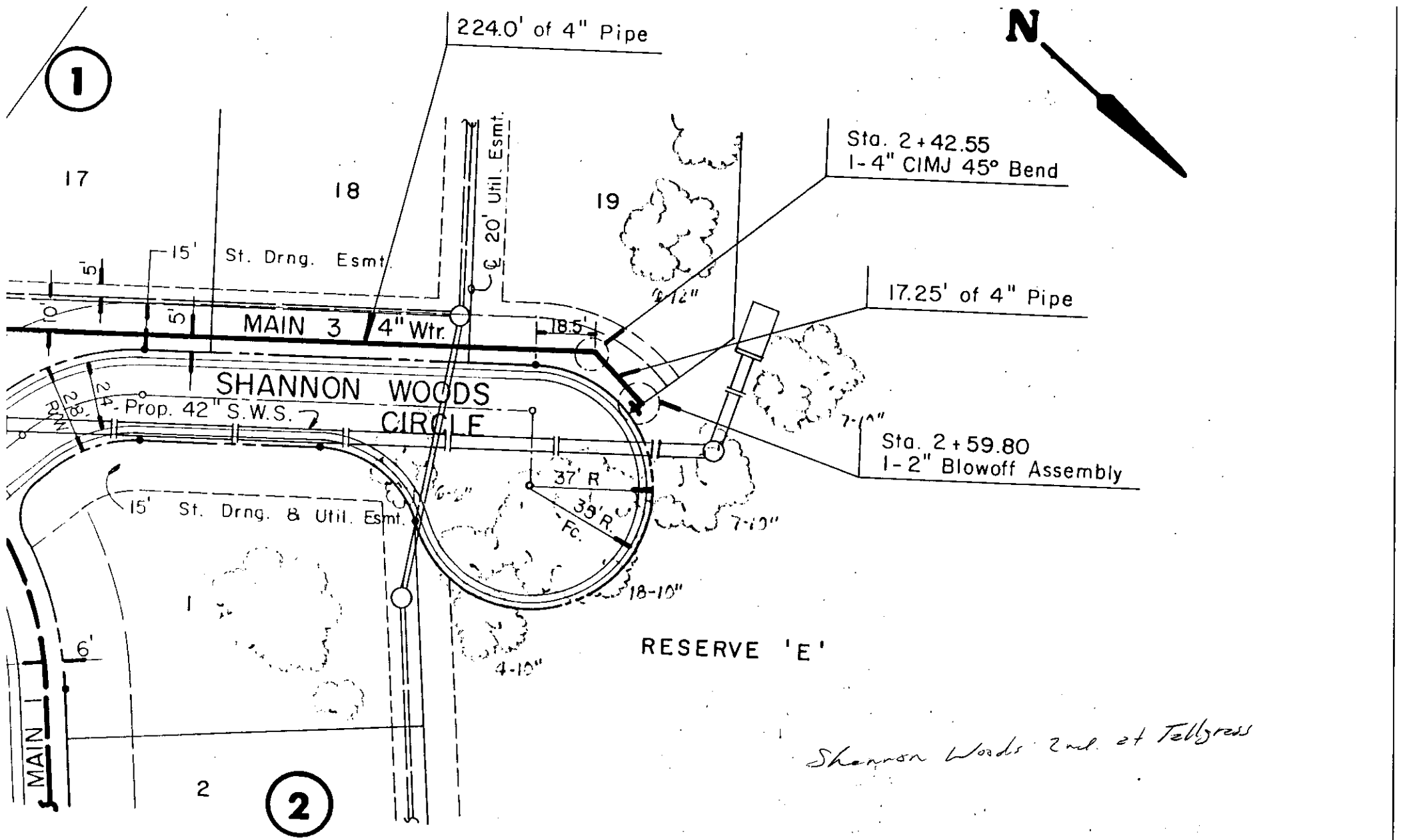
I called Baughman Co. (Brent Wooten) and told him of your decision and explained that the plumber for the site would discuss meter locations with Jim Harris of the Service Section of the Water Department.

I also told Baughman Co. that should the Developer wish to pursue the main extension, it was his option to do so. This option would allow short service lines to the meters, and provide volume for lawn sprinkler systems should they be desired.

This memo has been written to confirm our understanding of the water main situation for the subject.

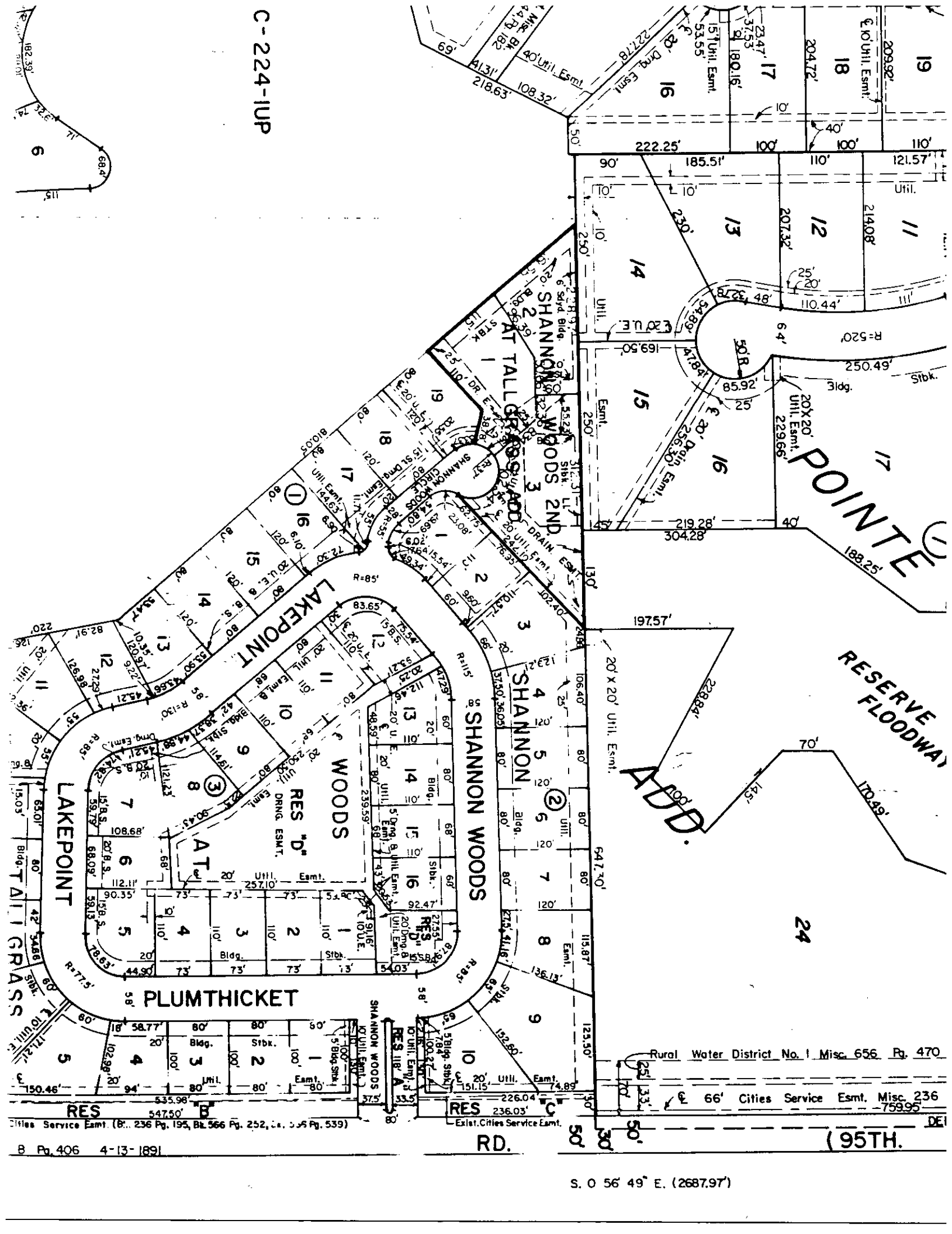
:wt

cc: Vicky Huang, Subdivision Engineer
David R. Warren, Director of Water and Sewer Department
Project File 448-88481
Plat Folder for subject



Shannon Woods 2nd at Tellgrass

PLAN - MAIN 3


C-224-IUP
LAKEPOINT
SHANNON WOODS 2ND ADD
SHANNON WOODS
LAKEPOINTE
RESERVE FLOODWAY
ADD.
TALL GRASS
PLUMTHICKET
RES "B"
RES "C"
RES "D"
RES "A"
DRNG. ESMT.
DRAIN. ESMT.
Util. Esmt.
Bldg.
Stbk.
Rural Water District No. 1 Misc. 656 Pg. 470
℄ 66' Cities Service Esmt. Misc. 236
Cities Service Esmt. (B... 236 Pg. 195, Bk. 566 Pg. 252, Bk. 565 Pg. 539)
Exist. Cities Service Esmt.
B Pg. 406 4-13-1891
S. 0 56' 49" E. (2687.97')
RD.
(95TH.

```
1*****************************************
* HEC-2 WATER SURFACE PROFILES          *
*                                       *
* Version   4.6.2;  May 1991            *
*                                       *
* RUN DATE    30APR93    TIME   15:20:24 *
*****************************************
```


```
***************************************
* U.S. ARMY CORPS OF ENGINEERS        *
* HYDROLOGIC ENGINEERING CENTER       *
* 609 SECOND STREET, SUITE D          *
* DAVIS, CALIFORNIA 95616-4687        *
*         (916) 756-1104              *
***************************************
```


```
X     X  XXXXXXX   XXXXX              XXXXX
X     X  X        X     X           X     X
X     X  X        X                       X
XXXXXXX  XXXX     X          XXXXX    XXXXX
X     X  X        X                  X
X     X  X        X     X            X
X     X  XXXXXXX  XXXXX              XXXXXXX
```

1

30APR93 15:20:24 PAGE 1

THIS RUN EXECUTED 30APR93 15:20:24

```
*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************
```

```
T1SHANNON WOODS 2ND ADDITION FLOOD PLAIN STUDY
T2APR-93
T3CROSS SECTIONS FROM SWOOD.DWG
```

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
		2							1395.72	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1		-1							

QT	2	176	176							
NC	.03	.03	.04	.1	.3					
X1	1084	12	550	567						
GR	1397	530	1396	536	1395	544	1394	550	1393	557
GR	1392	560	1392	562	1393	565	1394	567	1395	569
GR	1396	570	1397	572						
NC	.03	.015	.04							
X1	1120	15	558	559	36	36	36			
GR	1399	535	1398	541	1397	546	1396	549	1395	551
GR	1394	553	1393	557	1392	558	1392	559	1393	562
GR	1394	567	1395	568	1396	570	1397	571	1398	573
	CROSS-SECTION 1 OF SPECIAL CULVERT									
X1	1143	6	548	559	23	23	23			
GR	1400	534	1394	546	1393	548	1393	559	1394	561
GR	1400	574								
NC	.03	.03	.04		.3	.5				
	CROSS-SECTION 2 OF SPECIAL CULVERT									
X1	1179	8	549	562	36	36	36			
X3	10							1400.6	1400.6	
GR	1400	532	1398	535	1393	545	1392	549	1392	562
GR	1396	564	1397	570	1400	577				
NC	.04	.04	.04							
SC	2.013	.5	3.0		4		52	1.3	1392.6	1391.8
	CROSS-SECTION 3 OF SPECIAL CULVERT									
X1	1234	6	542	552	48	60	59			
X2			2	1396.6	1400.6					
X3	10							1400.6	1400.6	
BT	-3	538	1400.71		552	1400.60		567	1400.5	
GR	1401	520	1400	538	1393	542	1393	552	1399	567
GR	1401	594								

1

NC	.03	.04	.03	.1	.3					
	CROSS-SECTION 4 OF SPECIAL CULVERT									
X1	1245	6	543	552	11	11	11			
GR	1401	518	1400	536	1393	543	1393	552	1399	567
GR	1397.7	589								
X1	1326	10	581	602	112	74	81			
GR	1401	516	1400	524	1397	549	1397	575	1396	578
GR	1395	581	1394	588	1395	602	1399	612	1399.3	627
X1	1405	9	677	707	65	114	79			
GR	1401	563	1400	587	1399	609	1395	677	1395	707
GR	1397	718	1398	729	1399	779	1400	824		

1

> ,

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

#PROF 1
0

CCHV= .100 CEHV= .300
#SECND 1084.000

1084.000	3.72	1395.72	.00	1395.72	1395.87	.15	.00	.00	1394.00
176.0	20.7	149.3	6.0	9.4	46.7	2.7	.0	.0	1394.00
.00	2.21	3.19	2.22	.030	.040	.030	.000	1392.00	538.24
.002015	0.	0.	0.	0	0	0	.00	31.48	569.72

#SECND 1120.000

1120.000	3.55	1395.55	.00	.00	1396.02	.46	.06	.10	1392.00
176.0	36.2	11.1	128.7	13.7	3.6	20.9	.0	.0	1392.00
.00	2.64	3.11	6.17	.030	.040	.015	.000	1392.00	549.88
.001292	36.	36.	36.	2	0	0	.00	19.24	569.12

#SECND 1143.000

1143.000	2.81	1395.81	.00	.00	1396.08	.27	.04	.02	1393.00
176.0	23.4	104.5	48.1	7.9	30.9	8.2	.1	.0	1393.00
.00	2.96	3.38	5.88	.030	.040	.015	.000	1393.00	542.38
.002085	23.	23.	23.	2	0	0	.00	22.55	564.92

CCHV= .100 CEHV= .300
#SECND 1179.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1400.60 ELREA= 1400.60

1179.000	3.96	1395.96	.00	.00	1396.14	.18	.06	.01	1392.00
176.0	.0	176.0	.0	.0	51.5	.0	.1	.0	1392.00
.01	.00	3.42	.00	.000	.040	.000	.000	1392.00	549.00
.001349	36.	36.	36.	2	0	0	.00	13.00	562.00

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	2	.013	.50	3.00	.00	4.00	.00	52.00	1	3	1392.60	1391.80

CHART 1 - CONCRETE PIPE CULVERT; NO BEVELED RING ENTRANCE
SCALE 3 - GROOVE END ENTRANCE, PIPE PROJECTING FROM FILL

#SECND 1234.000
1

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1396.952 EGOC = 1397.300 PCWSE= 1395.963 ELTRD= 1400.600

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1396.95	1397.30	1.16	0.	176.	4.398	25.1	1400.60	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1400.60 ELREA= 1400.60

1234.000	4.00	1397.00	.00	.00	1397.30	.30	1.16	.00	1393.00
176.0	.0	176.0	.0	.0	40.0	.0	.2	.1	1393.00
.01	.00	4.40	.00	.000	.040	.000	.000	1393.00	542.00
.002205	48.	59.	60.	2	0	0	.00	10.00	552.00

CCHV= .100 CEHV= .300
#SECNO 1245.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.78

1245.000	4.19	1397.19	.00	.00	1397.33	.14	.01	.02	1393.00
176.0	14.9	127.7	33.4	8.8	37.7	21.9	.2	.1	1393.00
.01	1.69	3.39	1.52	.030	.030	.040	.000	1393.00	538.81
.000693	11.	11.	11.	2	0	0	.00	23.66	562.47

#SECNO 1326.000

1326.000	3.30	1397.30	.00	.00	1397.39	.09	.06	.00	1395.00
176.0	17.6	151.6	6.8	16.3	59.0	6.7	.3	.2	1395.00
.02	1.08	2.57	1.02	.030	.030	.040	.000	1394.00	546.43
.000684	112.	81.	74.	1	0	0	.00	61.35	607.77

#SECNO 1405.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.47

1405.000	2.40	1397.40	.00	.00	1397.43	.03	.04	.01	1395.00
176.0	48.9	114.2	12.9	49.0	72.0	16.3	.5	.3	1395.00
.04	1.00	1.59	.79	.030	.030	.040	.000	1395.00	636.17
.000319	65.	79.	114.	2	0	0	.00	86.25	722.42

THIS RUN EXECUTED 30APR93 15:20:24

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

SECTIONS FROM SWOOD.DWG

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	1084.000	.00	.00	.00	1392.00	176.00	1395.72	.00	1395.87	20.15	3.19	58.83	39.21
	1120.000	36.00	.00	.00	1392.00	176.00	1395.55	.00	1396.02	12.92	3.11	38.14	48.96
	1143.000	23.00	.00	.00	1393.00	176.00	1395.81	.00	1396.08	20.85	3.38	47.01	38.54
	1179.000	36.00	.00	.00	1392.00	176.00	1395.96	.00	1396.14	13.49	3.42	51.51	47.93
	1234.000	59.00	1400.60	1396.60	1393.00	176.00	1397.00	.00	1397.30	22.05	4.40	40.02	37.48
*	1245.000	11.00	.00	.00	1393.00	176.00	1397.19	.00	1397.33	6.93	3.39	68.41	66.88
	1326.000	81.00	.00	.00	1394.00	176.00	1397.30	.00	1397.39	6.84	2.57	81.94	67.30
*	1405.000	79.00	.00	.00	1395.00	176.00	1397.40	.00	1397.43	3.19	1.59	137.38	98.62

SECTIONS FROM SWDOD.DWG

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	1084.000	176.00	1395.72	.00	.00	.00	31.48	.00
	1120.000	176.00	1395.55	.00	-.17	.00	19.24	36.00
	1143.000	176.00	1395.81	.00	.25	.00	22.55	23.00
	1179.000	176.00	1395.96	.00	.16	.00	13.00	36.00
	1234.000	176.00	1397.00	.00	1.04	.00	10.00	59.00
*	1245.000	176.00	1397.19	.00	.19	.00	23.66	11.00
	1326.000	176.00	1397.30	.00	.11	.00	61.35	81.00
*	1405.000	176.00	1397.40	.00	.10	.00	86.25	79.00

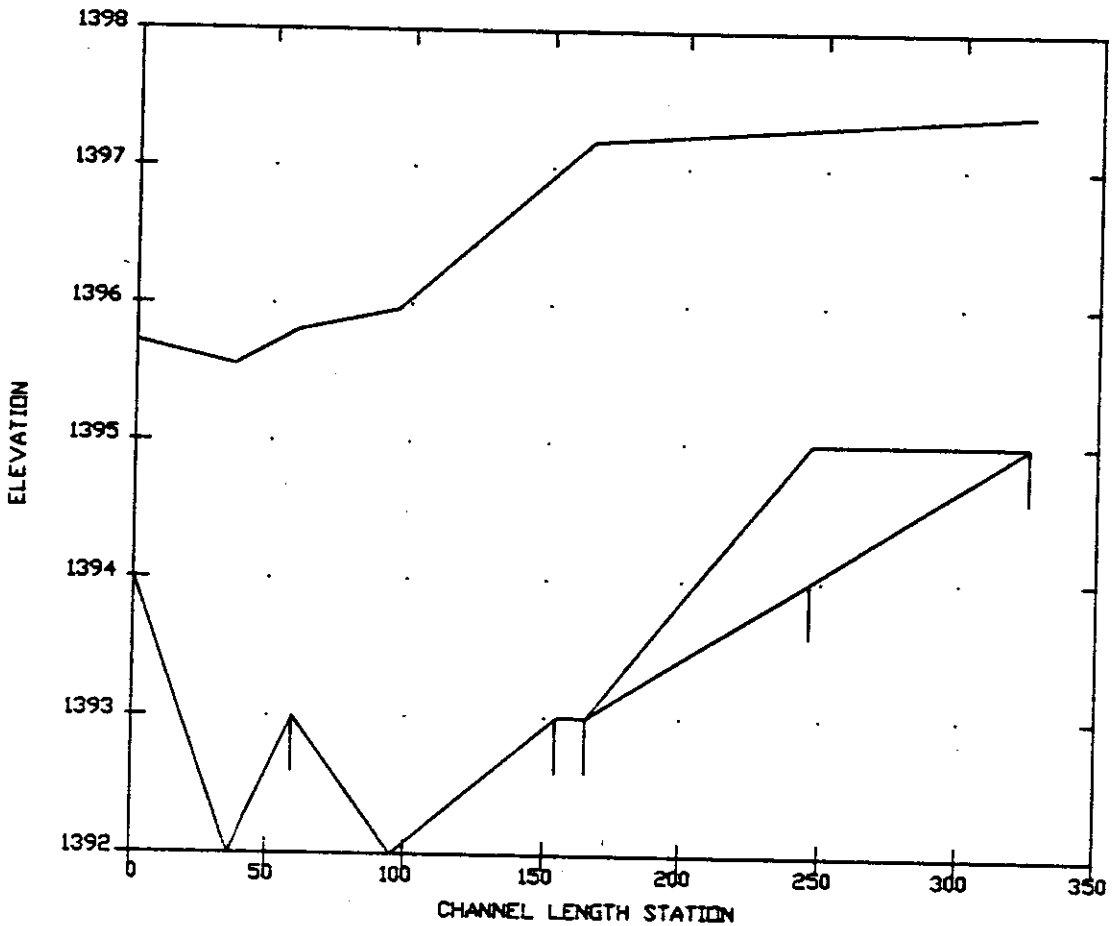
1

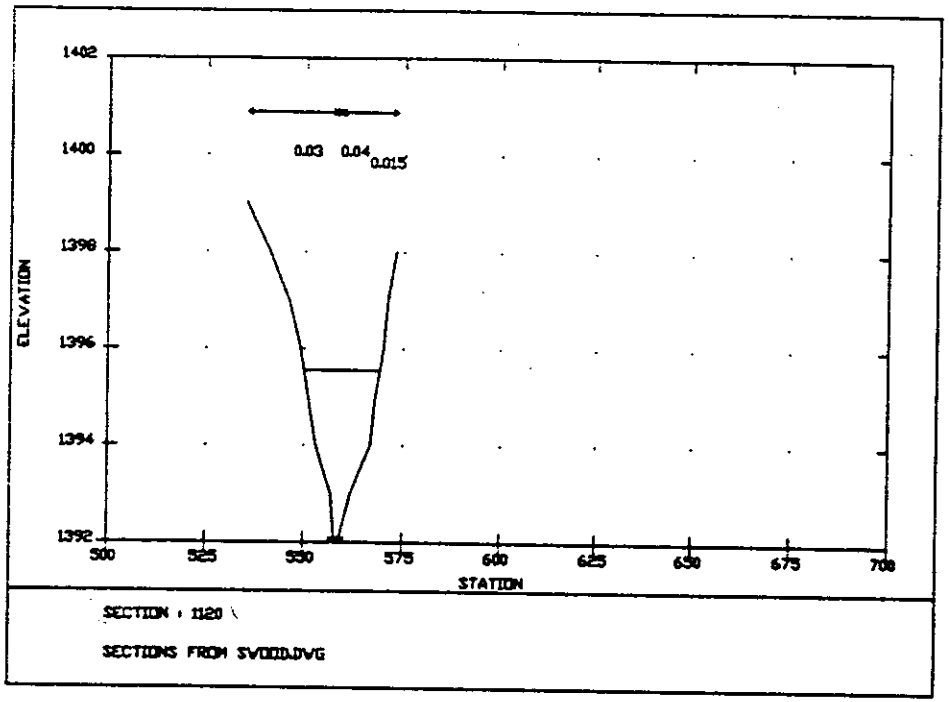
30APR93 15:20:24

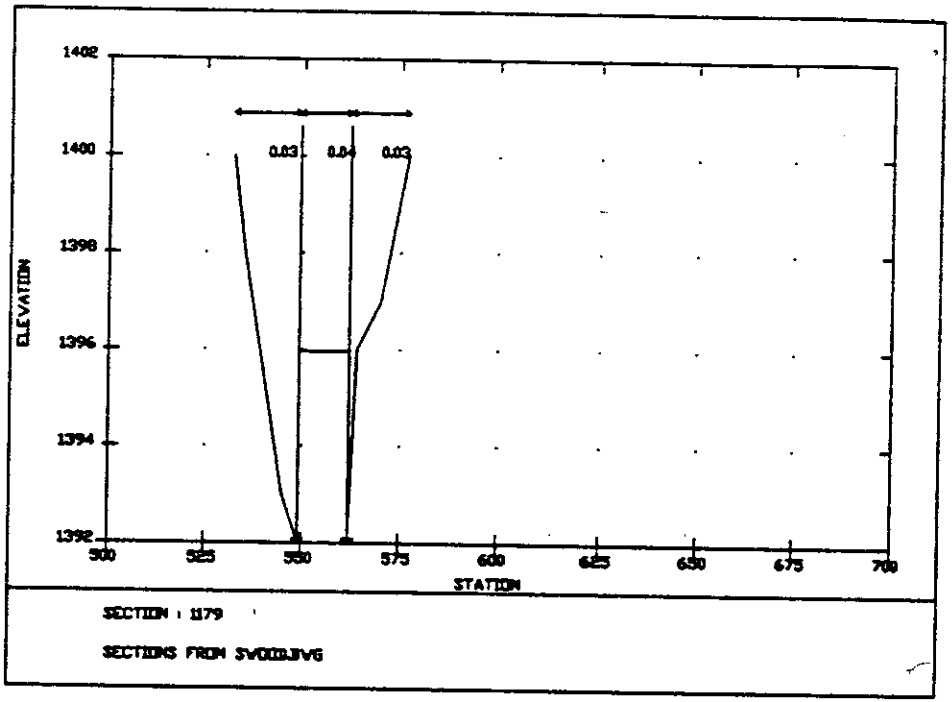
SUMMARY OF ERRORS AND SPECIAL NOTES

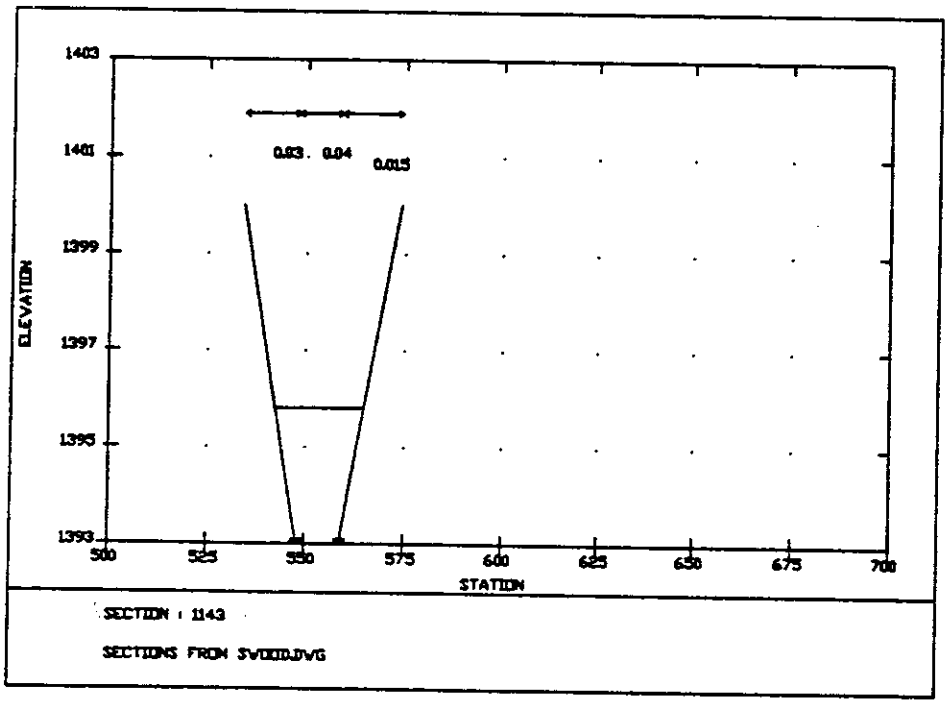
WARNING SECNO= 1245.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

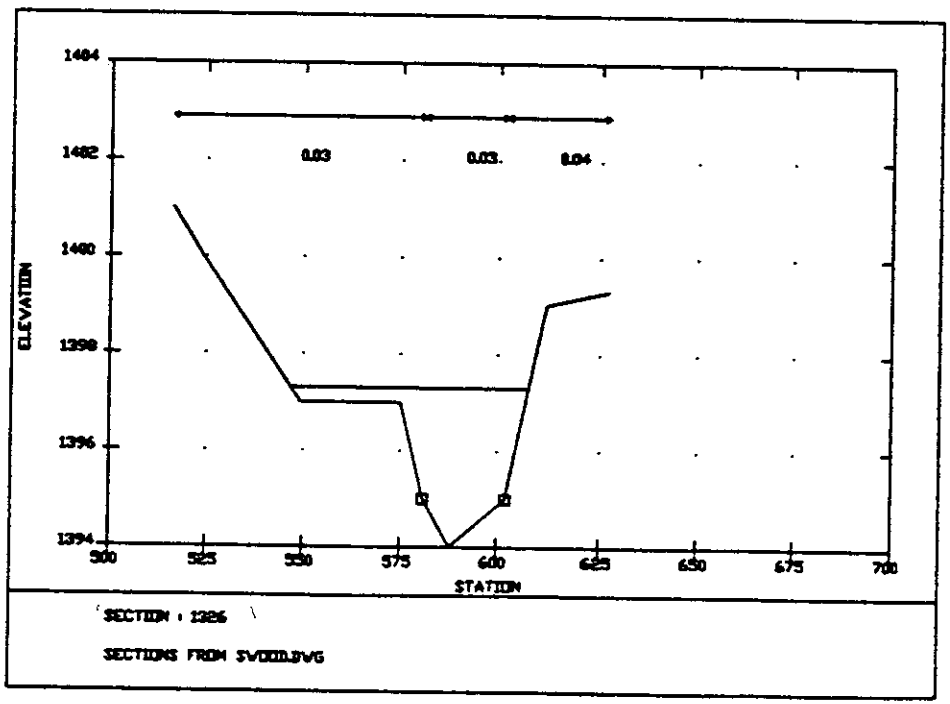
WARNING SECNO= 1405.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE


1398
1397
1396
1395
1394
1393
1392
ELEVATION
0
50
100
150
200
250
300
350
CHANNEL LENGTH STATION


1402
1400
1398
1396
1394
1392
ELEVATION
0.03 0.04 0.015
500 525 550 575 600 625 650 675 700
STATION
SECTION : 1120
SECTIONS FROM SV0000.DVG


1402
1400
1398
1396
1394
1392
ELEVATION
0.03 0.04 0.03
500 525 550 575 600 625 650 675 700
STATION
SECTION : 1179
SECTIONS FROM SV0000.DVG


1403
1401
1399
1397
1395
1393
ELEVATION
0.03 0.04 0.015
500 525 550 575 600 625 650 675 700
STATION
SECTION : 1143
SECTIONS FROM SV0000.DVG


1404
1402
1400
1398
1396
1394
ELEVATION
0.03 0.03 0.04
500 525 550 575 600 625 650 675 700
STATION
SECTION : 1326
SECTIONS FROM SV0000.DVG

WILLIAM L. KORBER, L.S.
N. BRENT WOOTEN, P.E.

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

June 9, 1993

Chris Breitenstein, P.E.
Department of Engineering
455 N. Main
Wichita, Kansas 67202

RE: SHANNON WOODS AT TALLGRASS 2ND ADDITION
DRAINAGE REPORT

Chris,

This report provides information to support a submittal of an application for a letter of map revision (LOMR) for a small project location in unstudied mapped area within the corporate limits of Wichita, Kansas in Sedgwick County.

The flooding source is the Middle Branch of Gypsum Creek. The general area is located 3/4 mile North of 21st Street North and West of Webb Road and is indicated in Exhibit 1 of the report. The area of interest is indicated as Shannon Woods at Tallgrass and Shannon Woods at Tallgrass 2nd Addition both of which are within the City of Wichita, Kansas.

The Middle Branch of Gypsum Creek Flood Profile within the FEMA Flood Insurance Study is included for the City of Wichita which was published in May, 1986. However, the detailed flood study extends only as far North as 21st Street North as evidenced by the Exhibit 2 Flood Profile and does not detail the area of request in our application. The requested area of interest is located approximately 4000 feet North of the end of the FEMA detailed study.

The 100 Year Q at the end of the detailed study at 21st St. No. is 1245 CFS. The 100 Year Q has been prorated for the entire basin identified in Exhibit I as evidenced by the following calculations.

The resulting B.F.E. at Section 1405 is 1397.4 N.G.V.D. or 210.0 City Datum which is the highest location on Lot 3, Shannon Woods at Tallgrass 2nd Addition. The proposed minimum pad for Lot 3 is proposed to be 211.0 City Datum or 1398.4 N.G.V.D.

Please review the following supporting data, the H.E.C. 2 model run through this reach, the sections and profiles and contact me if you should have any questions relative to this project.

Thank you.

Sincerely,

N. Brent Wooten, P.E.

cc: J. W. Russell
Robin Ridell

File

By	Date	Page	Of
	6/19/03		

BAUGHMAN COMPANY, P.A.

SHANNON WOODS AT TALLGRASS 2ND ADDITION.

CALCULATIONS -

FEMA 100 YEAR FLOW (Q_{100}) AT 21ST ST NO.
= 1245 cfs.

TOTAL ACREAGE ABOVE 21ST ST. = 998.0 ACRES.

FLOW PER SQ MILE ABOVE 21ST ST.
= 1245 cfs / 998 ACRES / 640 mi^2
= 798.4 cfs / SQ. MILE.

AREA ABOVE SUBDIVISION WITHIN BASIN
= 141.25 ACRES.

100 YEAR FLOW AT SHANNON WOODS 2ND
= (141.25 / 640 SQ. MILES.) (798.4) cfs
= 176 cfs.

ONAL FLOOD INSURANCE PROGRAM

RM
OD INSURANCE RATE MAP

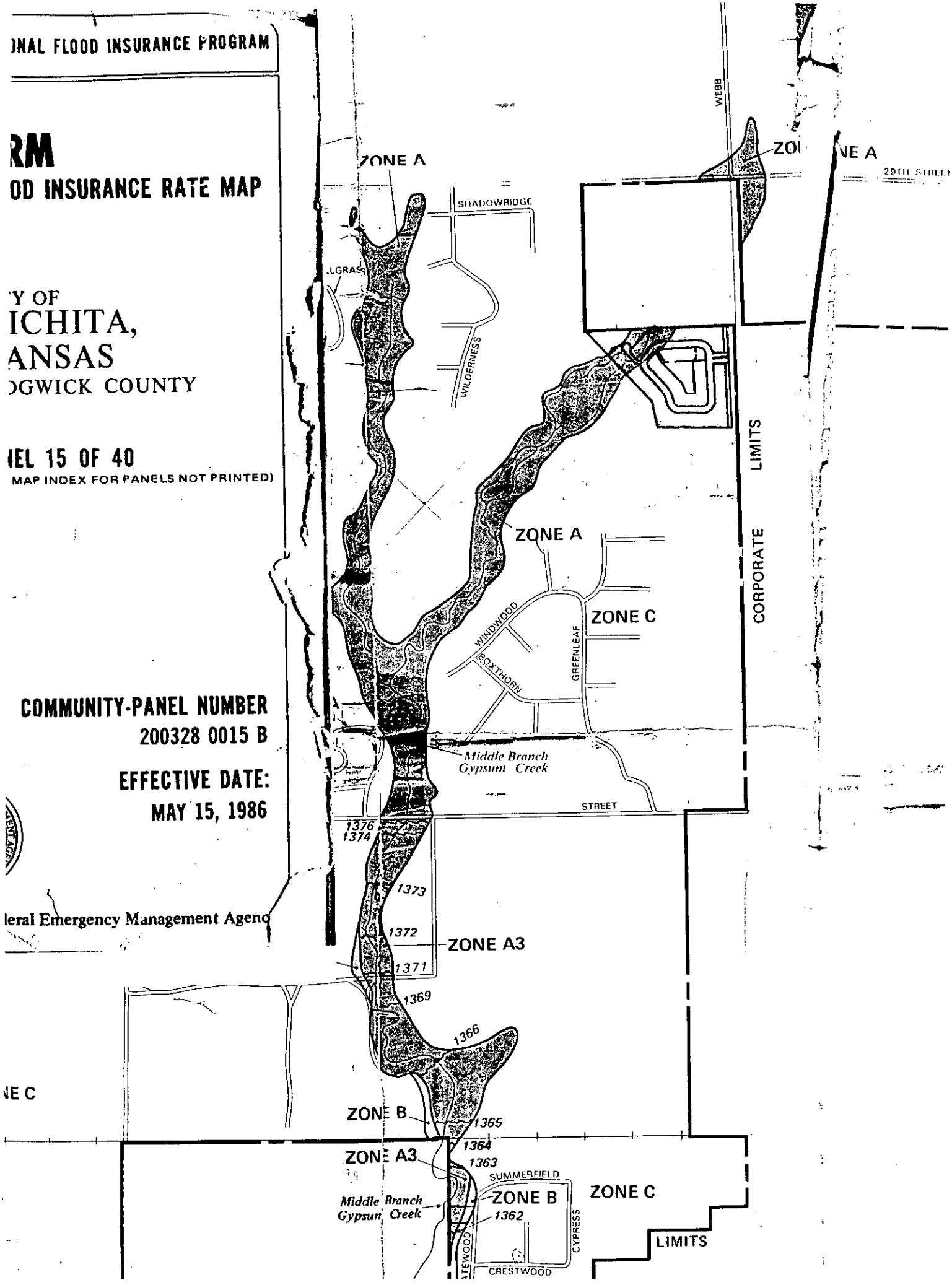
Y OF
ICHITA,
ANSAS
OGWICK COUNTY

IEL 15 OF 40
(MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
200328 0015 B

EFFECTIVE DATE:
MAY 15, 1986

leral Emergency Management Agenc



FLOODWAY

FLOOD BOUNDARY AND FLOODWAY MAP

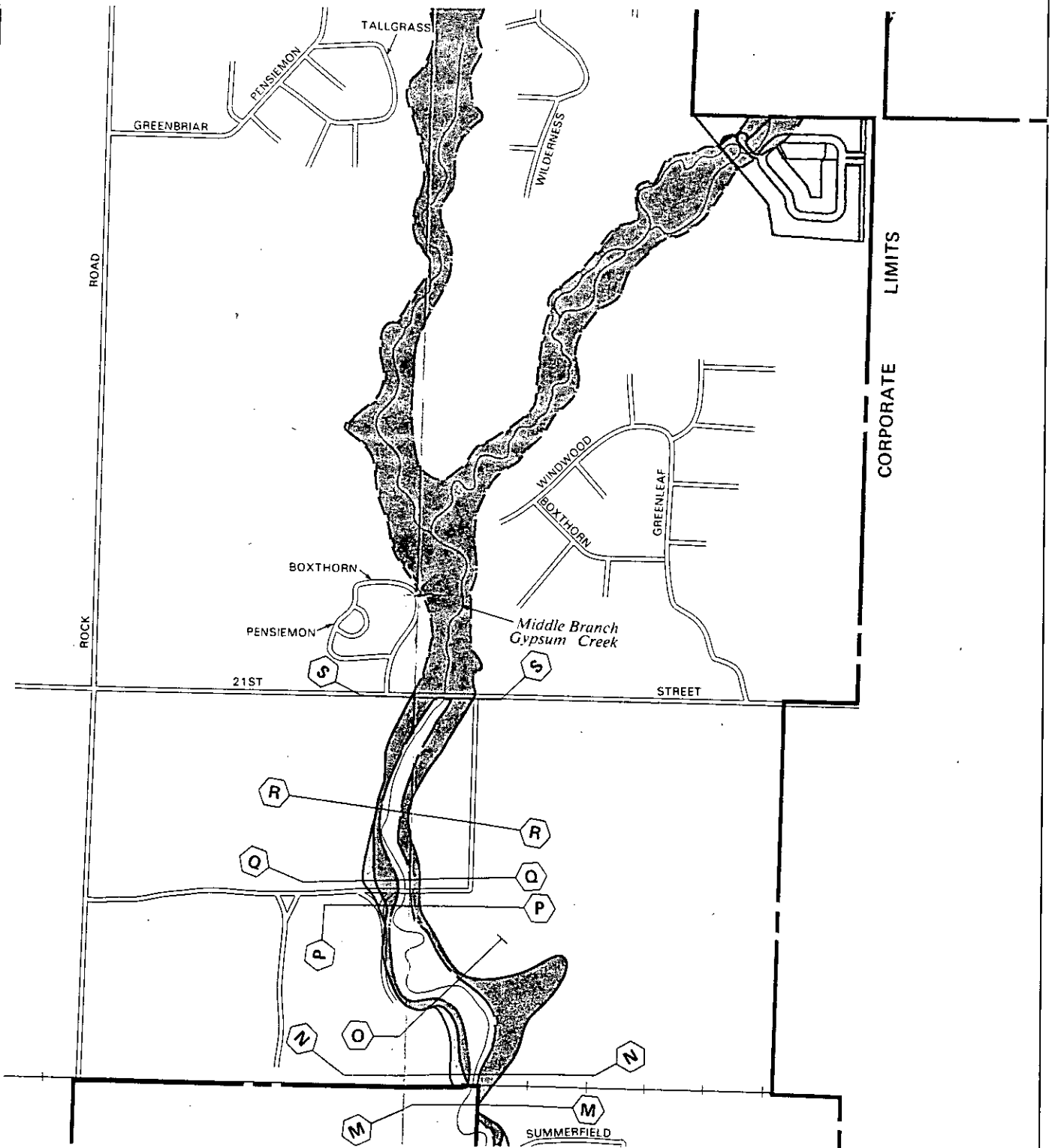
CITY OF
WICHITA,
KANSAS
SEDGWICK COUNTY

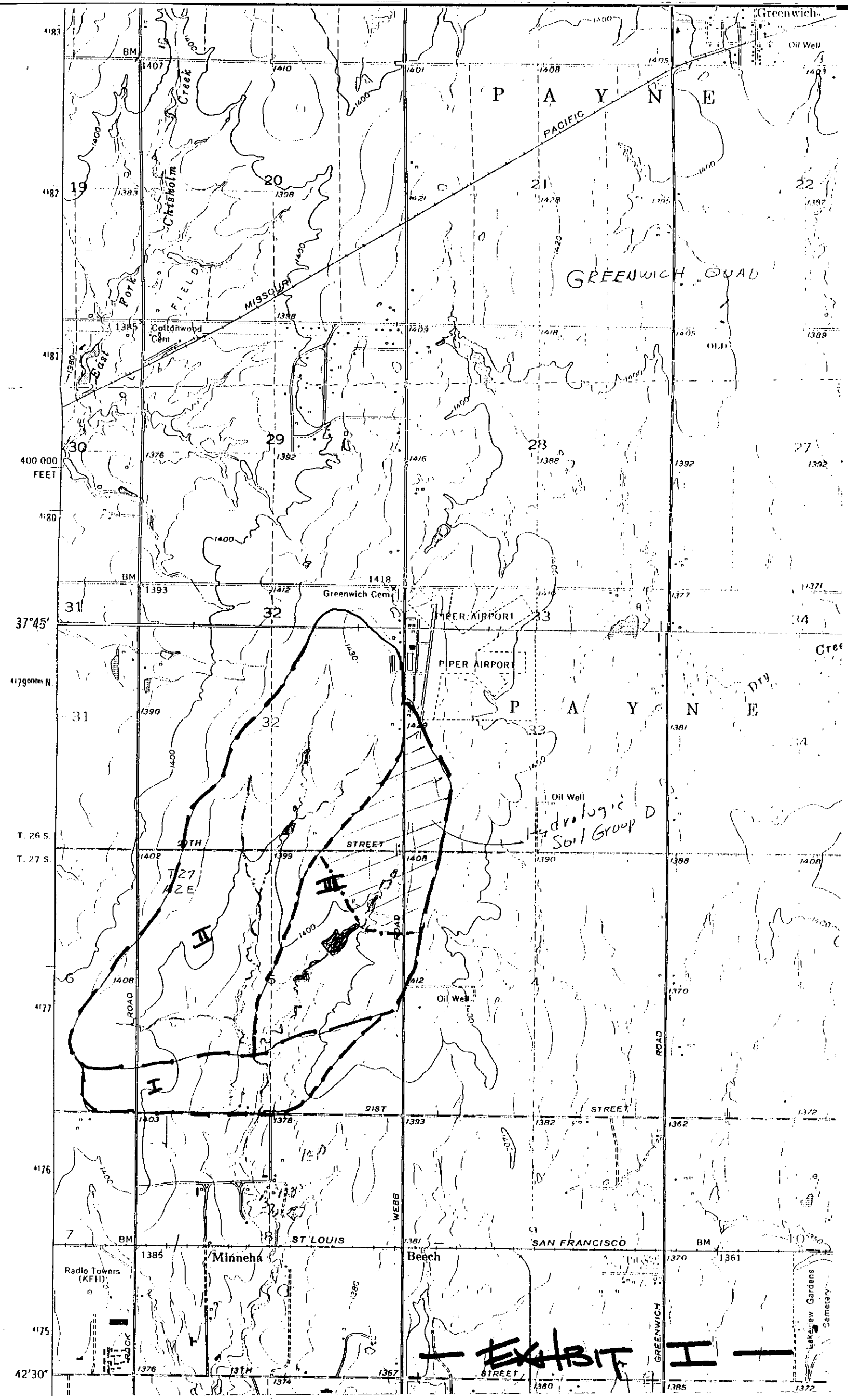
PANEL 15 OF 40
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
200328 0015

EFFECTIVE DATE:
MAY 15, 1986

Federal Emergency Management Agency




Greenwich
Oil Well
PAYNE
PACIFIC
Chisholm Creek
MISSOURI
East Fork
FIELD
GREENWICH QUAD
Cottonwood Cem
OLD
Greenwich Cem
PIPER AIRPORT
Oil Well
Hydrologic Soil Group D
T. 26 S.
T. 27 S.
T27 R2E
20TH STREET
21ST STREET
8TH STREET
L ROAD
WEBB ROAD
GREENWICH ROAD
ST LOUIS
SAN FRANCISCO
Minneha
Beech
Radio Towers (KFH)
Lakeview Gardens Cemetery
400 000 FEET
37°45'
42'30"
EXHIBIT I

ELEVATION IN FEET (NGVD)

1350 1355 1360 1365 1370 1375 1380

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH GYPSUM CREEK

11,000 12,000 13,000 14,000 15,000 16,000 17,000

M N O P Q R S

ST. LOUIS SAN FRANCISCO RAILWAY
CORPORATE LIMITS

CORPORATE LIMITS
CORPORATE LIMITS

REACH 1
ZONE A3

UNNAMED ROAD

21ST STREET
LIMIT OF DETAILED STUDY

A

LEGEND

500-YEAR FLOOD

100-YEAR FLOOD

50-YEAR FLOOD

10-YEAR FLOOD

STREAM BED

CROSS SECTION LOCATION

EXHIBIT 21

26P

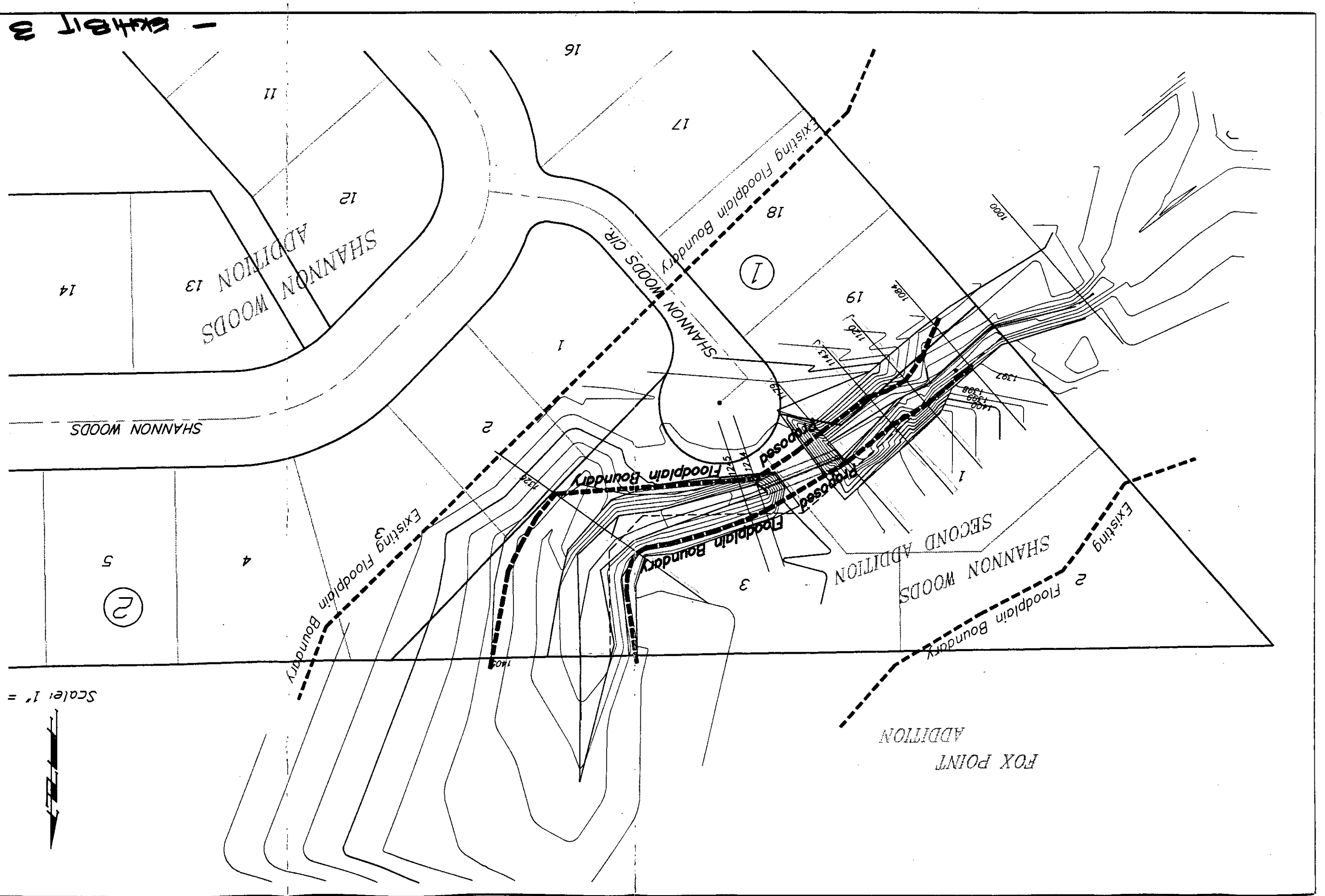
FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF WICHITA, KS
(SEDGWICK CO.)

FLOOD PROFILES

MIDDLE BRANCH GYPSUM CREEK

- Exhibit 3 -


SHANNON WOODS
ADDITION
SHANNON WOODS CIR.
Existing Floodplain Boundary
Proposed Floodplain Boundary
Proposed Floodplain Boundary
Existing Floodplain Boundary
Existing Floodplain Boundary
SECOND ADDITION
SHANNON WOODS
FOX POINT
ADDITION
Scale: 1" = 50'