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File 1992-0053 Name: St. Mary's Hospital Addition in PB Zone - Revised Final Plan

Present	Scanned	
		A few items are denoted with an asterisk (*), which means they are to be scanned for permanent record on the ISYS retrieval system. In some instances, items are found on the list but are not present in the scanned electronic development file because they are already scanned elsewhere on the system. These scanned documents are denoted with (**) and will be found on the ISYS query system in their designated categories. Documents specific to certain files, not found in the standard checklist materials, are listed at the bottom of the page. Remaining items, (not selected for scanning), will be listed and marked present. This index can serve as a quick guide for the contents of each file.
X	X	**Table of Contents**
X	X	***Review Sheet Summary**
X	X	***Application form**
		Review Sheets
		Receipts for fees paid for anything
		***Submittal checklist**
X	X	***General project report**
		Reduced copy of final plans or drawings
		Reduction of assessor's map.
		Evidence of title, deeds, easements
X	X	***Mailing list to adjacent property owners**
		Public notice cards
		Record of certified mail
X		Legal description
		Appraisal of raw land
		Reduction of any maps – final copy
		***Final reports for drainage and soils (geotechnical reports)**
		Other bound or non-bound reports
		Traffic studies
X	X	***Review Comments**
X	X	***Petitioner's response to comments**
		***Staff Reports**
		***Planning Commission staff report and exhibits**
		***City Council staff report and exhibits**
		***Summary sheet of final conditions**

DOCUMENT DESCRIPTION:

X	X	Action Sheet - Approved 10/6/92	X		Public Notice Posting - 10/7/92
			X	X	Planning Clearance - ** - permit # 25572
X	X	Correspondence	X	X	Site Signage Report - 1/10/94-
X		Notice of Public Hearing Mail-outs for 10/6/92	X	X	List of Plant Suggestions
X	X	Traffic / Pedestrian Impact Study - 7/92	X	X	Existing Parking Capacity Table
X		Building Permit - 7/12/93	X		Site Plan
X	X	Parking Lot Project Plan - 8/1/92	X	X	Proposed Addition Exhibit
X	X	Traffic Analysis and Parking Report	X	X	Proposed Addition and Additions Site Plan
X	X	Development Schedule	X		Civil Site Plan & Detail Sheet
X	X	Encumbrance Report	X	X	Elevation Map (not good copy) - large maps not scanned
X	X	Elevation Reports	X	X	Parking Lot Plan
X	X	Facilities Dev. Plan - fiscal years 1989 - 1995	X	X	Site Improvements
X	X	Addendum to Facilities Development Plan	X	X	Planting Plan
X		Legal Ad for 9/29/92	X	X	Irrigation Pressure Lines and Waterfall Supply
X	X	Planning Commission Minutes and Agenda - 10/6/92 - **	X	X	Irrigation System Plans

DEVELOPMENT APPLICATION

Community Development Department
250 North 5th Street Grand Junction, CO 81501
(303) 244-1430

A Receipt 52600
Date 8-26-92
Rec'd By DJ
File No. #53 92

We, the undersigned, being the owners of property situated in Mesa County, State of Colorado, as described herein do hereby petition this:

PETITION	PHASE	SIZE	LOCATION	ZONE	LAND USE
[ ] Subdivision Plat/Plan	[ ] Minor [ ] Major [ ] Resub				
[ ] Rezone				From: To:	
[X] Planned Development	[ ] ODP [ ] Prelim [X] Final (Revised)		2635 N. 7th ST.	Planned Business	Hospital
[ ] Conditional Use					
[ ] Zone of Annex					
[ ] Text Amendment					
[ ] Special Use					
[ ] Vacation					[ ] Right-of-Way [ ] Easement

[ ] PROPERTY OWNER [ ] DEVELOPER [ ] REPRESENTATIVE

Sisters of Charity of Leavenworth Health Services Corporation	St. Mary's Hospital	Western Engineers, Inc.
Name	Name	Name
4200 South 4th, Cantwell Hall	2635 North 7th Street	2150 Highway 6 & 50
Address	Address	Address
Leavenworth, Kansas 66048-5054	Grand Junction, Colo. 81501	Grand Junction, Colo. 81505
City/State/Zip	City/State/Zip	City/State/Zip
(913) 682-1338	244-2445	242-5202
Business Phone No.	Business Phone No.	Business Phone No.

NOTE: Legal property owner is owner of record on date of submittal.

We hereby acknowledge that we have familiarized ourselves with the rules and regulations with respect to the preparation of this submittal, that the foregoing information is true and complete to the best of our knowledge, and that we assume the responsibility to monitor the status of the application and the review comments. We recognize that we or our representative(s) must be present at all hearings. In the event that the petitioner is not represented, the item will be dropped from the agenda, and an additional fee charged to cover rescheduling expenses before it can again be placed on the agenda.

X Keith Estridge Director Engineering August 17, 1992
Signature of Person Completing Application Date

X Sister Lynn Casey August 26, 1992
Sister Lynn Casey, President St. Mary's Hospital & Medical Center

X
Signature of Property Owner(s) - Attach Additional Sheets if Necessary

(H)

Archie R. Turner
2624 Mira Vista Dr.
Grand Junction, CO 81501

Violet Ingwersen
2604 Mira Vista Dr.
Grand Junction, CO 81501

Sterling V. Hurst
2563 Mira Vista Dr.
Grand Junction, CO 81501

David S. Franklin, Jr.
2552 Mira Vista Dr.
Grand Junction, CO 81501

Harley E. Bauer
2542 Mira Vista Dr.
Grand Junction, CO 81501

Martha T. Prinster
c/o Central Bank Trust Dept.
P. O. Box 608
Grand Junction, CO 81502

Blaine O. Ford
2522 Mira Vista Dr.
Grand Junction, CO 81501

Gordon S. Harbert
2512 Mira Vista Dr.
Grand Junction, CO 81501

Stephen D. Fante
353 Mayfair Dr.
Grand Junction, CO 81501

Elizabeth H. Miles
343 Mayfair Dr.
Grand Junction, CO 81501

Melvin J. Benton
336 Belaire Dr.
Grand Junction, CO 81501

Regena H. Miller
533 Sunrise
Grand Junction, CO 81504

Harold B. Summons
333 Mayfair Dr.
Grand Junction, CO 81501

Phillip S. Lanham
2557 Mira Vista Dr.
Grand Junction, CO 81501

W. B. Rosenthal
2547 Mira Vista Dr.
Grand Junction, CO 81501

James N. Arney
2537 Mira Vista Dr.
Grand Junction, CO 81501

John R. Knipe
2527 Mira Vista Dr.
Grand Junction, CO 81501

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Vincent R. Jones
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John R. Roberts
307 Bookcliff Ct.
Grand Junction, CO 81501

Scott A. Hall
308 Bookcliff Ct.
Grand Junction, CO 81501

Guy D. Cherp
448 Bookcliff Dr.
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Leland A. Schmidt
536 Bookcliff Dr.
Grand Junction, CO 81501

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c/o Central Bank Marital Trust
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Larye Olsen
c/o Central Bank Marital Trust
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Arthur W. Arney
402 Bookcliff Dr.
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Karen Hayashi Traylor
Trustee
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Grand Junction, CO 81501

Virginia C. Raso
508 Bookcliff
Grand Junction, CO 81501

Dale Scharz
2211 N. 6th
Grand Junction, CO 81501

Gary W. Johnson
570 Cedar
Grand Junction, CO 81501

Lynn W. Hamilton
560 Cedar
Grand Jct., CO 81501

Don R. Hill
550 Cedar
Grand Jct., CO 81501

Donald R. Burkholder
540 Cedar
Grand Junction, CO 81501

David E. Flatt
536 Cedar
Grand Junction, CO 81501

Robert W. Hasse
526 Cedar
Grand Junction, CO 81501

Shari E. Sjerven
510 Cedar
Grand Junction, CO 81501

M. A. Cornelison
500 Cedar
Grand Junction, CO 81501

Warren A. Petersen
2339 N. 7th
Grand Junction, CO 81501

James R. Dunn
601 Center Ave.
Grand Junction, CO 81501

Western Co. Pediatric Inv.
2323 N. 7th
Grand Junction, CO 81501

Mercedes Cameron
2345 N. 7th
Grand Junction, CO 81501

W. Broderson
2376 North 7th
Grand Junction, CO 81501

J. N. Darnell Jr.
3339 C Road
Palisade, CO 81526

Bishop of Pueblo
c/o Diocese of Pueblo
1001 Grand Ave.
Pueblo, CO 81003

Carr Treasure
2604 N. 7th
Grand Junction, CO 81501

Rae O. Marasca
653 - 26½ Rd.
Grand Junction, CO 81506

Olga Henery
2711 N. 8th Ct.
Grand Junction, CO 81506

Robert Lubinsk
2709 N. 8th Ct.
Grand Junction, CO 81506

S. R.Rutter
2705 N. 8th Ct.
Grand Junction, CO 81506

Weston Edfast
604 - 26½ Rd.
Grand Junction, CO 81506

Gena Taylor
633 Fletcher Ln
Grand Junction, CO 81501

Wm. R. Patterson
662 - 26 Rd.
Grand Junction, CO 81506

G. Paul Smith
656 Larkspur Ln.
Grand Junction, CO 81506

Richard F. Gilmore Jr.
698 Crestridge Dr.
Grand Junction, Co 81506

Robert L. Orr
500 Patterson Rd.
Grand Junction, CO 81506

Edith Sisac
440 N. 13th
Grand Junction, CO 81501

R. B. Christensen
100 Mtv View Rd
Watsonville, CA 95076

Cheryl Lane Duree
605 - 26½ Rd.
Grand Junction, CO 81506

Mildred M. Vandover
604 Meander Dr.
Grand Junction, CO 81506

William O. Campbell
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Grand Junction, CO 81506

Jacquelyn A. Moran
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Grand Junction, CO 81506

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Grand Junction, CO 81501

William E. Pomrenke
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Grand Junction, CO 81506

Marjorie A. Bristol
Jean Statler Co./ Trustees
1006 21 Rd.
Fruita, CO 81521

Marie B. Pfander
580 Bookcliff Unit #3
Grand Junction, CO 81501

Nina Wire
580 Bookcliff Ave. #5
Grand Junction, CO 81501

Ellen L. Cowen
580 Bookcliff Ave. #6
Grand Junction, Co 81501

Marguerite Mulvehill
580 Bookcliff Ave.
Grand Junction, CO 81501

W & Elinor Bergman
580 Bookcliff Ave. #8
Grand Junction, CO 81501

Lawrence Capps
636 Horizon Dr. #603
Grand Junction, CO 81506

Amy Cherp
P. O. Box 3371
Grand Junction, CO 81502

William & Janet Pomrenke
710 Victor Dr.
Grand Junction, CO 81506

Stella Shanks
2606 Kelley Dr.
Grand Junction, CO 81506

No Record
2945-112-24-014

Joann Graham
2988 Brookwood
Grand Junction, CO 81504

Vera Gregory
580 Bookcliff Ave. #16
Grand Junction, CO 81501

Walter Davis
3060 Sheridan Ct.
Grand Junction, CO 81504

Miriam & Robin Peckham
629 - 26 Rd.
Grand Junction, CO 81501

Alez & Donna Matheson
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Basalt, CO 81621

Bookven
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Grand Junction, CO 81502

Eric & Elsie Schounhaar
1730 - 83rd Ave.
Greeley, CO 80634

Bookven
P. O. Box 40
Grand Junction, Co 81502

Marcus & Elaine Lang
1708 Hall Ave.
Grand Junction, CO 81501

Carol & Leslie Nichols
580 Bookcliff Ave. #24
Grand Junction, CO 81501

Marilyn Schorn
1360 Rood Ave.
Grand Junction, CO 81501

Wendell & Lyndall Johnson
580 Bookcliff Ave. #26
Grand Junction, CO 81501

Joseph & Judith Chmielewski
580 Bookcliff Ave. #27
Grand Junction, CO 81501

Bookven
P. O. Box 40
Grand Junction, CO 81502

(B)

IMPACT STATEMENT/PROJECT NARRATIVE

The proposal being presented includes construction of a six level Patient Tower, as well as a three story addition on top of existing structure for a Medical Office Building at St. Mary's. Included in the information currently being submitted, are all items under the categories of General Requirements, Other Requirements and Site Plan Requirements, which are part of the Submittal Legend on the action sheet from the City of Grand Junction. The intent of the proposal currently being submitted, is that it would receive the necessary reviews as a part of the Community Development process, and be presented at the October meeting of the City Planning Commission for approval. Pending approval, the project schedule provides for some preliminary site work in November of 1992, with overall completion of both projects, including the Patient Tower and the Medical Office Building addition within a 24 month period from the start of construction.

Per the site plans included in the proposal, the impact on the existing site at St. Mary's will be in two areas. First, that of the new Patient Tower, which will include a new main entrance for the hospital located on the southern side of the existing hospital building and the addition of three floors for the Medical Office Building on the western end of the existing hospital building. The area impacted is minimal in that the Patient Tower is essentially going to be constructed adjacent to the existing hospital structure, and the Medical Office Building will be simply an addition of three stories on top of existing hospital structure.

The Patient Tower essentially represents a replacement of approximately 105 beds to the existing hospital license, all to replace existing beds and services. The Medical Office Building will provide physician office space. Both of these functions, inpatient care and physician offices, are compatible uses to those currently in place at St. Mary's and in the private medical complexes, which surround the hospital.

Since the proposed uses for the additional space are consistent with current hospital functions, and also given the fact that no new property is being acquired for the projects, nor is there any impact on existing property lines, the project is felt to represent a minimal impact in all regards. The detailed information being submitted with the proposal should provide adequate detail and documentation regarding any specific details of the project.

(Y)

TRAFFIC ANALYSIS AND PARKING REPORT

PATIENT TOWER AND MEDICAL OFFICE BUILDING

St. Mary's Hospital is currently in the process of planning for the construction of a six level Patient Tower addition to the hospital, as well as a three story addition on top of existing structure, for a Medical Office Building. Both the Patient Tower and the Medical Office Building are identified on the attached drawing. As a part of the development of both of these projects, the impact on parking and traffic flow has been analyzed. The essential impact of both these projects regarding parking and traffic, are planned to be minimal given the following facts:

- The new Patient Tower essentially serves as a bed replacement project of approximately 105 beds - not an additional 105 beds to the hospital licensed capacity.

- Due to the fact these are not additional beds, nor necessarily the addition of new services, there is not an anticipated increase in employees at the hospital.

- Also, given the fact these are essentially updating and replacement beds for older parts of the hospital, it is not anticipated that significant additional patients or additional visitors will be generated as a part of the project.

On the attached diagram, the hospital has identified by alpha listing the existing parking lots. The strategy for reassignment of parking for employees, patients, visitors and physicians was long-range planned around the addition of parking lot F (located on the east side of the corner of 7th and Patterson). This parking lot, which will be completed in mid fall of 1992, and will provide an additional 350 parking spaces, allowing the hospital to shift a majority of employee parking over into lot F. The employees who are currently parking in lots A, D and E will be relocated across 7th Street, allowing parking in lots A, B, C, D and E for patients, visitors and physicians. With this systematic relocation of parking, there should be adequate parking spaces to meet various parking needs at the hospital.

As it relates to traffic volumes, again, since the impact of the Patient Tower will not be significant in terms of patient, employee or visitor volumes, the only significant new traffic will be associated with the Medical Office Building, which is on the western end of the existing campus. The majority of cars arriving and exiting for visits to the Medical Office Building will be using Center Avenue, and they will be utilizing parking lots D and E. Based on the nature of outpatient office hours in private offices, obviously, there are no specific time flows where significant numbers of cars arrive together or depart. Also, cars entering and exiting to access services of the Medical Office Building, will have the option of using the Center Avenue intersection at Patterson or the Center Avenue intersection at 7th Street.

The Attached drawing includes detail on the number and types of parking spaces in each lot. The total number of parking spaces in lot D and E, which will be available to service the Medical Office Building is 271.

All of the above information regarding the new Patient Tower, as well as the Medical Office Building is not anticipated to have any additional impact on the previous pedestrian and vehicular issues. These issues were addressed and resolved in August in regards to the approval of parking lot F on the western corner of Patterson and 7th. Attached is a copy of the one page plan approved at the August, City Planning Commission Meeting

mj

ST. MARY'S HOSPITAL
The Regional Medical Center

(V)

PARKING LOT PROJECT
8/01/92

At the July 7th Planning Commission Meeting this agenda item was tabled until the August meeting with a request from the Planning Commision for representatives from St. Mary's and City Staff to review the issues of potential pedestrian and vechicular traffic problems. Subsequent to the July 7th meeting, 4 meetings between St. Mary's Staff and City Staff have occurred, both in the City Offices and on-site at St. Mary's. As a result of these meetings, the following Plan Of Action has been developed to prepare this agenda item for approval at the August meeting of the Planning Commission:

LOCATION	ACTION(Numbers refer to attached drawing)
7TH & PATTERSON	1. Improve line-of-sight at intersection by taking 10 existing parking spaces out of service
	2. Move Stop-Bar back for Left Turn and Thru Lane
	3. Lengthen walk signal across 7TH
	4. Add new sign - "No Right Turn on Red When Pedestrians in Crosswalk"
7TH STREET	5. Add fencing
WELLINGTON	6. Add signage(Public and Private) directing cars east on Wellington
PATTERSON	7. Entrance/Exit to Lot with Full Access and Left Turn Lane
	8. Remove old curb cuts on Patterson

This Plan Of Action was developed after extensive studying of existing and projected pedestrian and vechicular traffic patterns in the areas adjacent to the new parking lot. It was determined that no additional action should be required either at 7Th and Wellington or on 7TH between Patterson and Wellington. St. Mary's will carry-out an extensive Employee Education Program regarding desired pedistrian and vechicular patterns for the new lot.

2635 North 7th Street • P.O. Box 1628 • Grand Junction, CO 81502-1628 • (303) 244-2273

ST. MARY'S HOSPITAL & MEDICAL CENTER

GRAND JUNCTION, COLORADO

0 DEVELOPMENT SCHEDULE

The project consists of three (3) phases: a new 5-Story Addition to the south of the present hospital; alterations to existing hospital areas; and a new 3-Story Addition over the existing building on the northwest side. This 3-Story Addition will add a 4th, 5th and 6th Floor to the existing structure.

Phase 1: **5-Story Addition:** will include a new Main Lobby Area, Expansion of Laboratory, New Central Supply Services, Medical Records and Nursing Units.

Phase 2: **Existing Hospital Alterations:** will include alterations of areas now occupied by functions that will move into the new 5-Story Addition as well as other departmental upgrading.

Phase 3: **3-Story (4th, 5th, and 6th Floor) Addition:** will be floors reserved for Medical Offices.

CONSTRUCTION SCHEDULE

The Phase 1 Project is scheduled to start immediately upon approval of this Planning Review Submittal and be completed in 24 months.

The Phase 2 Project is scheduled to start later than Phase 1 but should complete at the same time as Phase 1.

The Phase 3 Project is scheduled to start in December of 1992 and be completed in 11 months, November 1993.

(E)

AMERICAN LAND TITLE COMPANY

550 Grand Ave.
Grand Junction, CO 81501

(303) 242-2582 (ALTC)

ENCUMBRANCE REPORT

Our Order No. ALTC- 4644

To: Western Engineers, Inc.
2150 U S Hwy 6 & 50
Grand Junction, CO
Attn: Cecil

Gentlemen:

At your request, we have searched our Tract Indexes of County Records, as to the following described property:

A tract of land situate in the NW 1/4 of Section 11, T1S, R1W of the Ute Meridian, the perimeter of which is described as follows:
Beginning at the N 1/4 Corner of said Section 11, thence along the following twenty courses:
1. N 90°00'00" E along the north line of said Section 11 738.05
(Continued)

And as of February 27, 1991, we find the last deed of record to be a Warranty Deed, recorded October 23, 1973, in Book 1004 at Page 257, from Sisters of Charity of Leavenworth to Sisters of Charity of Leavenworth Health Services Corporation, A Kansas Corporation. We have also searched our General Index for judgements and income tax liens against Sisters of Charity of Leavenworth Health Services Corporation, A Kansas Corporation, and as of the above date, we find: None.

We further find taxes, city liens, and other encumbrances as follows:

1. Unpatented mining claims; reservations or exceptions in Patents or in Acts authorizing the issuance thereof; water rights, claims and/or title to water, whether or not these matters are shown by public records.

2. General Taxes and Assessments which are liens, now due or payable.

3. Special assessments, liens for water and sewer service, and installation charges, if any, none now show of record.
(Continued)

Legal Description (continued)

feet;

2. S 02°33'00" E 50.05 feet;
3. S 02°33'00" E 602.14 feet to the north line of Wellington Avenue;
4. N 89°29'00" W along Wellington Avenue 533.43 feet to the beginning of a 25 foot radius curve to the right with a central angle of 72°19' (the chord of which bears N 53°19'30" W 29.50 feet);
5. 31.55 feet along the arc of said curve;
6. N 17°10'00" W along the east line of 7th Street 15.49 feet;
7. N 90°00'00" W 89.42 feet;
8. N 23°04'54" W 131.01 feet;
9. N 84°07'00" E 176.29 feet;
10. S 00°00'00" E 138.59 feet;
11. N 90°00'00" E 0.61 feet;
12. N 73°02'00" E 98.00 feet;
13. N 01°45'00" E 239.92 feet;
14. S 77°10'00" W 322.78 feet;
15. N 26°19'00" W 60.80 feet to the west line of said NW 1/4 Section 11;
16. N 00°00'00" E 108.10 feet;
17. N 90°00'00" E 190.30 feet;
18. N 05°33'00" E 75.35 feet;
19. S 90°00'00" W 197.59 feet to said west line NE 1/4 Section 11;
20. N 00°00'00" E 180.00 feet; except road right-of-way.

Exceptions (continued)

4. An Easement in favor of Grand Valley Irrigation Company, for Water Lines, recorded September 18, 1946, in Book 453, at Page 215, Official Records.

5. An Easement in favor of City of Grand Junction, for Sewer Lines, recorded September 11, 1964, in Book 873, at Page 999, Official Records.

6. An Easement in favor of Theordore N. Naff, for Gas Line, recorded May 4, 1965, in Book 882, at Page 829, Official Records.

7. An Easement in favor of City of Grand Junction, for Sewer Lines, recorded May 4, 1965, in Book 882, at Page 830, Official Records.

8. An Easement in favor of Mountain States Telephone and Telegraph Company, for Communication Lines, recorded August 7, 1975, in Book 1043, at Page 174, Official Records.

9. An Easement in favor of City of Grand Junction, for Sewer Line, recorded October 7, 1977, in Book 1122, at Page 659, Official Records.

10. An Easement in favor of Mountain States Telephone and Telegraph Company, for Communication Lines, recorded July 12, 1982, in Book 1381, at Page 869, Official Records.

11. Covenants, conditions, restrictions and easements (deleting therefrom any based on race, color, national origin or creed):
Recorded: February 14, 1977
Book 1094 at Page 559
A copy of which is hereto attached.

Amendment and/or Modification of said Covenants:
Recorded: February 26, 1979
Book 1188 at Page 712
A copy of which is hereto attached.

(Continued)

Exceptions (continued)

This report is based on a search of our Tract Indexes of the County Records. This is not a title or ownership report and no examination of the title to the property described has been made. It is not to be used as a basis for closing any transaction affecting title to said premises. For this reason, no liability beyond the amount paid for this report is assumed hereunder, and the Company is not responsible beyond the amount paid for any errors or omissions contained herein.

AMERICAN LAND TITLE COMPANY

Authorized Signature

(Z)

ST. MARY'S HOSPITAL & MEDICAL CENTER

GRAND JUNCTION, COLORADO

Z STRUCTURAL INFORMATION

a) HEIGHTS, ELEVATIONS, SQUARE FOOTAGE

5-STORY ADDITION

Main Roof Line Height	60 feet above grade
Roof of Stair	72 feet above grade
Elevator Penthouse	85 feet above grade

3-STORY ADDITION OVER EXISTING BUILDING

Present Roof at 4th Floor	47 feet above grade
Main Roof Line with Addition	85 feet above grade

SQUARE FOOTAGES

5-STORY ADDITION		3-STORY ADDITION (4th, 5th and 6th Floors)	
Basement	9,305	Basement	-
Ground Floor	13,930	Ground Floor	833
1st Floor	12,495	1st Floor	-
2nd Floor	12,495	2nd Floor	-
3rd Floor	12,495	3rd Floor	-
4th Floor	12,495	4th Floor	17,072
5th Floor	590	5th Floor	17,072
		6th Floor	17,072
		Penthouse	1,296
	73,805 sq.ft.		53,345 sq.ft.

Z STRUCTURAL INFORMATION

b) PERCENT BUILDIG COVERAGE

HOSPITAL SITE WEST OF 7TH STREET

EXISTING CONDITION

Approximately 18 acres at 43,560 sq. ft./Acre = 784,080 sq. ft.

Existing Hospital and Out Buildings Combined Area = 415,756 sq. ft.

$$\text{Ratio \%} = \frac{\text{Existing Building Areas}}{\text{Site Area}} = \frac{415,756}{784,080} = 53\%$$

EXISTING PLUS ADDITIONS

Existing Hospital and Out Building Areas	415,756 sq. ft.
Proposed 5-Story Addition	73,805 sq. ft.
Proposed 3-Story Addition	53,345 sq. ft.
Combined Areas	542,906 sq. ft.

$$\text{Ratio \%} = \frac{\text{Existing Building with Additions}}{\text{Site Area}} = \frac{542,906}{784,080} = 69\%$$

Ratio Change 16% Increase.

ST. MARY'S HOSPITAL & MEDICAL CENTER

GRAND JUNCTION, COLORADO

Z STRUCTURAL INFORMATION (Page 3 of 4)

b) PERCENT BUILDING COVERAGE

HOSPITAL SITE EAST OF 7TH STREET

EXISTING CONDITION

Approximately 8 acres at 43,560 sq. ft./Acre = 348,480 sq. ft.

Existing Buildings Combined Areas = 10,380 sq. ft.

$$\text{Ratio \%} = \frac{\text{Existing Building Areas}}{\text{Site Area}} = \frac{10,380}{348,480} = 3\%$$

No New Proposal or Ratio Change

HOSPITAL SITE EAST & WEST OF 7TH STREET

EXISTING & PROPOSED RATIOS

Approximately 26 acreas at 43,560 sq. ft./Acre = 1,132,560 sq. ft.

EXISTING	EXISTING with ADDITIONS
Buildings 426,136 sq. ft.	553,286 sq. ft.
Ratios $\frac{426,136}{1,132,560} = 38\%$	$\frac{553,286}{1,132,560} = 49\%$

Ratio Change 11% Increase.

Z STRUCTURAL INFORMATION

c) SETBACKS

The 5-Story Addition is within the present hospital setbacks from the south and east property lines.

The 3-Story Addition is over the existing building with no reduction of setback for the Ground Floor Elevator Lobby Addition that serves the new addition.

d) LIGHTING AND SIGNAGE DETAIL

There are two 2) existing parking lot lights that are effected by the new 5-Story Addition. These lights will be relocated to fit the configuration of the revised entry drive to the new Main Hospital Lobby as shown on the Site Plan.

The present hospital signs will remain where they are presently located. The wording on those signs will be changed to reflect the new entry locations.

MEMORANDUM

DATE: August 31, 1992

TO: Karl Metzner, Community Development

FROM: Gerald Williams, Development Engineer

SUBJ: Application for St. Mary's Hospital Expansion

We have received the application for St. Mary's hospital expansion, and have determined that the submittal is incomplete per the action sheet, and submitted plans too small to read, which prevents us from providing adequate review.

Of greater interest and impact than missing items referred to above is an overall Master Plan. Corresponding to need and ability to expand, development has understandably been piecemeal. However, facility planning should not follow the same quilt patchwork format, but should involve a comprehensive look at present and various future conditions including overall impact on zoning, neighborhood compatibility, traffic (pedestrian and vehicular), and drainage. In the process of considering past applications, the Planning Commission has repeatedly requested submittal of a Master Plan, and have not yet received one. We understand that the hospital currently has a Master Plan that is about five years old, which is only partially applicable today. In the interest of time, the old Master Plan might be revised and amended as required to address the above issues in lieu of or prior to a new Master Plan. It could include or reference information about vehicular and pedestrian traffic as previously submitted.

It is not our intent to recommend rejection of the application at this submittal stage. However, we expect to receive substantial information regarding master planning and stormwater runoff mitigation prior to the next planning commission meeting, or engineering will recommend that the application be tabled.

In conjunction with stormwater mitigation, we have observed that the hospital owns a park south of and downstream from the hospital, which is suitable for detention purposes. The park is currently leased by the City, but there would not be City opposition to the hospital having the park regraded and re-landscaped as required to provide detention volume, provided the design addressed City Parks and Recreation and Public Works Departmental concerns.

We do not wish to impact the development schedule of St. Mary's Hospital, we only want to be sure that all appropriate issues are not overlooked, that all may be benefactors from the proposed development.

If you have any questions concerning the above, please call.

Sincerely,

Gerald R Williams

Gerald Williams, P.E.
Development Engineer

xc: Don Newton - City Engineer
John Shaver - Assistant City Attorney
File

file:gw:hospexp.app

skw

ST. MARY'S HOSPITAL
The Regional Medical Center

September 3, 1992

Larry Gephart
Western Engineering
2150 U. S. Highway 6 & 50
Grand Junction, CO

Dear Mr. Gephart:

As discussed, please accept this letter as authorization to proceed on the water retention project relating to the use of St. Mary's park as a retention center. We have verbally committed to the city planning department to complete this project as soon as possible. Please keep us posted of your progress and you have our authorization to work directly with Gerald Williams of the cities engineering department to facilitate a fast resolution of this problem.

Very truly yours,

Daryll Evans
Vice President, Finance

Keith Estridge
Director of Engineering

cc: Karl Metzner, Community Development
Gerald Williams, Development Engineer

DE/jpd

2635 North 7th Street • P.O. Box 1628 • Grand Junction, CO 81502-1628 • (303) 244-2273

TRANSACTION REPORT

SEP- 2-92 WED 10:17

SEND

#	DATE	S. T.	NAME	TIME	PGS	NOTE	DP
01	SEP- 2	10:15	92442893	1'33"	3	OK	

City of Grand Junction, Colorado
81501-2668
250 North Fifth Street

DATE: 9/2/92

TIME: 11:15

FACSIMILE TRANSMISSION COVER SHEET

To: Keith Eskridge

Location: St. Mary's

Telephone Number: (____) 244-2445

FAX Number: (____) 244-2893

From: Karl Metzner

FAX Number: (303) 244-1599

Telephone Number: (303) 244-1439

Number of Pages 3
(Including Cover Sheet)

SPECIAL INSTRUCTIONS: _____

If the telecopy you received is incomplete or illegible, please call 244-1439.

REVIEW COMMENTS

FILE NO. #53-92 **TITLE HEADING:** Revised Final Plan

ACTIVITY: Addition to St. Mary's Hospital

LOCATION: Southwest corner of 7th & Patterson

PHASE: **ACRES:**

PETITIONER: St. Mary's Hospital

PETITIONER'S ADDRESS/TELEPHONE: 2635 North 7th Street
Grand Junction, CO
(303) 244-2445

ENGINEER/REPRESENTATIVE: Hospital Building & Equipment Comp. (HBE)

STAFF REPRESENTATIVE: Karl Metzner

NOTE: WRITTEN RESPONSE BY THE PETITIONER TO THE REVIEW COMMENTS IS REQUIRED ON OR BEFORE 5:00 P.M., SEPTEMBER 28, 1992

CITY UTILITIES ENGINEER **9/10/92**
Bill Cheney **244-1590**

SEWER - Existing sewer facilities should be adequate to handle expansion. The "Plant Investment Fees" and monthly service charges will have to be re-evaluated based on the expanded usage of the facility.

WATER - Water pressure in the area of 7th & Patterson is approximately 50 psi during periods of high demand. Therefore, a booster pump will be required to supply water to the upper floors of both proposed additions. The pump will be the responsibility of the owner.

U.S. WEST **9/09/92**
Leon Peach **244-4964**

No comments at this time.

PUBLIC SERVICE COMPANY **9/10/92**
Harold Ball **244-2693**

Gas & Electric: No objections.

CITY POLICE DEPARTMENT **9/10/92**
Marty Currie **244-3563**

No problems noted.

CITY FIRE DEPARTMENT **9/14/92**
George Bennett **244-1400**

We don't have a problem with this addition. A fire flow survey will need to be conducted to determine if adequate flows are available for protection of existing and additional structures.

COMMUNITY DEVELOPMENT **9/15/92**
Karl Metzner **244-1439**

1. A Master Plan, identifying possible or projected future development on the hospital site should be prepared to allow a more comprehensive look at possible future needs and concerns.
2. With the approval of the parking lot east of 7th Street, parking on the site is adequate and meets code.
3. St. Mary's has committed to receiving possible uses of the "park" as a detention area for storm drainage.

CITY ENGINEER **8/31/92**
Gerald Williams **244-1591**

See attached memo to Karl Metzner.

GRAND JUNCTION DRAINAGE **9/16/92**
John Ballagh **242-4343**

The structural information "2" may consider building footprints and square footages, it does not consider all the impervious areas. A full (all lands owned by the hospital and/or Sisters of Charity) site plan for drainage and surface runoff from storms should be required. The City of Grand Junction and the Drainage District spent over $75,000 just this year to upgrade a drainage system below this site. The hospital is property tax exempt, hence, contributes nothing directly to the Grand Junction Drainage District revenues.

The District supports the City Engineer in the style and content and depth of drainage/site plan evaluation.

Gerald w

MEMORANDUM

DATE: August 31, 1992

TO: Karl Metzner, Community Development

FROM: Gerald Williams, Development Engineer

SUBJ: Application for St. Mary's Hospital Expansion

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xc: Don Newton - City Engineer
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File

file:gw:hospexp.app

skw

St. Mary's Hospital & Medical Center

Grand Junction, Colorado

FACILITIES DEVELOPMENT PLAN

FISCAL YEARS 1989-1995

LEO A DALY

ARCHITECTURE
PLANNING · ENGINEERING · INTERIORS

ST. MARY'S HOSPITAL & MEDICAL CENTER
GRAND JUNCTION, COLORADO

FACILITIES DEVELOPMENT PLAN

JULY 1988

TABLE OF CONTENTS

A. INTRODUCTION/EXECUTIVE SUMMARY

1. Purpose

St. Mary's Hospital and Medical Center contracted with Leo A. Daly for professional services to identify needs and produce a site and facilities development plan. This development plan is to be considered a working document to guide future expansion and renovation at the hospital.

2. Methodology

Representatives of Leo A. Daly met with the Department Heads of the Hospital to discuss and establish needs which were documented through use of a Facilities Development Questionnaire. The goal was to obtain general and specific information about each department and to formulate additional space requirements based on the departments managers' and staff professionals' projections. (Appendix 2, bound separately, contains copies of these questionnaires.)

A complete walk-through of existing building space was conducted by the planning team to observe uses and operational conditions.

Leo A. Daly's health care professionals analyzed the results of the questionnaire and the input from the department managers and staff, and compared the data to current health care norms for the identified needs. These results were then discussed with the President's Council and the Planning Committee of the Hospital.

Finally, a site plan and building floor plans were produced identifying the existing department names and boundaries, and indicating the proposed renovations, expansions and additions. The plans represent a schematic diagram for planning purposes, actual configuration to be determined from the program that is established for each phase.

3. Executive Summary

This report is broken down into five segments, "A" being the introduction. Segment "B", the Phasing Schedule and Cost Projection for each phase, lists the needs of the hospital in an order of priority as determined by St. Mary's. Segment "C" consists of a list of the existing hospital departments and their present size with an indication of requirements for renovation, expansion into other areas, and/or a new addition. A final column gives the total recommended area of each department. All of the requirements have been tabulated for the overall hospital. Segment "D" consists of the foldouts of the Site Plan and Floor Plans providing a graphic indication of those spaces that are to be renovated and/or expanded (with a phasing reference in fiscal years). Segment "E" provides an evaluation summary of the present mechanical and electrical systems.

Cost projections are based upon current construction dollars. The actual cost and timeframe for the phases will be established by St. Mary's Hospital and Medical Center upon continuing evaluation of the functional need and the financial viability. The phasing reflects the Hospital's priorities and also certain logical needs for sequencing. Care should be exercised for interrelations and dependancies within phasing matrix. It would be possible to accomplish all of the indicated development within an aggregrate timeframe from 1989 - 1995 exclusive of the additional considerations and indefinite projects.

This Facilities Development Plan has been completed as a record of needs established by St. Mary's Hospital and Medical Center utilizing analyses of information and trends apparent at this time. So that this document will serve as a working guideline for future considerations, it is recommended that it be amended for ongoing changes and that a formal review and update be accomplished every year.

B. PHASING

1. General

a. Through a series of interviews and meetings with St. Mary's Hospital and Medical Center staff, the Leo A. Daly health care team has completed an in-depth analysis of the hospital's present and future needs to produce a development plan. This plan will provide a scheme for integrated implementation of these established needs as demonstrated in the study.

b. To establish an order of priority for implementation of the results of the space study and to accommodate the hospital's needs, a phased plan has been established. This planned staging is designed to produce an economical solution for expansion which can be implemented to accommodate present as well as future needs.

c. This plan covers fiscal years 1989 through 1995. To stay current with the industry an update of this plan should be accomplished every year in association with the Hospital's Strategic Plan in regard to the present and projected workload along with new technology trends and regulations that are being established.

2. Phasing Schedule (Fiscal Years)

1989

~~a.~~ Expand parking to the area adjacent to where the Home Health Building is located.

~~b.~~ Finish the lower level of the Saccomanno Building into classrooms allowing space that was being used for conferences and classes in the hospital to be used for the hospital's medical departments.

c. Convert the space previously used for classrooms on the ground floor to Cardiac, Rehabilitation and Cardio/Pulmonary Services.

d. Finish the space previously occupied by Cardio/Pulmonary Services to a Conference and Storage Space. Alternate: Finish the Cardio/Pulonary space for the laboratory.

e. Provide an M.R.I. addition adjacent to the Radiology Suite with shell in space for a future Linear Accelerator.

1989,1990,1991

a. Provide an Emergency addition and renovate the existing Emergency Suite.

b. Renovate the existing Laboratory.

1990

a. Temporary relocations: Relocate the Gift Shop to the existing Emergency Dept. adjacent to Admitting and temporarily relocate the Board Room to where the Gift Shop was located. Relocate Administration to where the Board Room was located and the converted space vacated by Administration to a Storage Space for Oncology.

b. Renovate the Dining Room and Cafeteria and add a patio with a privacy screen.

1992, 1993, 1994

a. Provide an Admitting/Business Office on the ground floor and Outpatient Addition on the first floor east of the Laboratory and Operating Suite.

b. Expand the Laboratory into the space previously occupied by the Business Office and Admitting.

c. Create a new public entrance at the south side of the building along with a new Lobby, Gift Shop (Relocated from the Emergency Department) Volunteers space and Parking Lot Renovations.

d. Create a new Doctors' and Employee's Entrance at the East end of the building with a new Doctor's Lounge where the temporary Board Room was located.

e. Relocate the PBX to the Basement.

f. Provide an addition to the Operating Suite on the first floor for Ambulatory Surgery and expansion space for O.R./CSR. (Due to changes in Health Care Delivery it is possible that this project would need to be started earlier.)

1993

a. Relocated Oncology to the 2nd or 4th floor dependent on bed needs.

b. Finish the area vacated by Oncology to an Administrative Suite for Marketing, Planning, Development, Patient Care and Boardroom.

c. Finish the space occupied by Administration and the space across the corridor previously occupied by Oncology for Human Resources Offices, Social Services, Library, Medical records, American Cancer Society and miscellaneous offices.

1994, 1995

a. Renovate and expand the Family Practice Service Building and parking lot.

Indefinite:

a. Finish the shelled in Linear Accelerator.

b. A Patient Room Addition will be added to the Fourth Floor above the Critical Care Unit (to the extent need is substantiated.)

MESA MEMORIAL

This project is broken down into 2 phases of work.

1989: Renovate the existing Operating Suite into an Outpatient Adolescent Unit.

1990-1991: Renovate the remaining space into Inpatient Adolescent Psychiatric and Chemical Dependency services.

The mechanical/electrical systems of the building would require extensive work; new interior finishes and related space revisions would also be required.

3. Additional Considerations

a. Intergrated into the additions and renovation projects an up-grade of the air-conditioning system to handle those areas of the Hospital that have a problem with air-conditioning.

There is adequate capacity in the mechanical equipment rooms to handle the new additions along with an upgrade of the existing air-conditioning system but the equipment that is available is absorption equipment that is inefficient to run.

b. Interior finishes in the 1950 portion of the Hospital building and the 1961 Addition should be upgraded to meet appropriate standards.

c. The existing elevators in the 1950 Hospital building and in the 1961 Addition should be upgraded to current standards.

d. New exterior fenestration treatment for the exterior of the 1950 building and 1961 Addition should be researched.

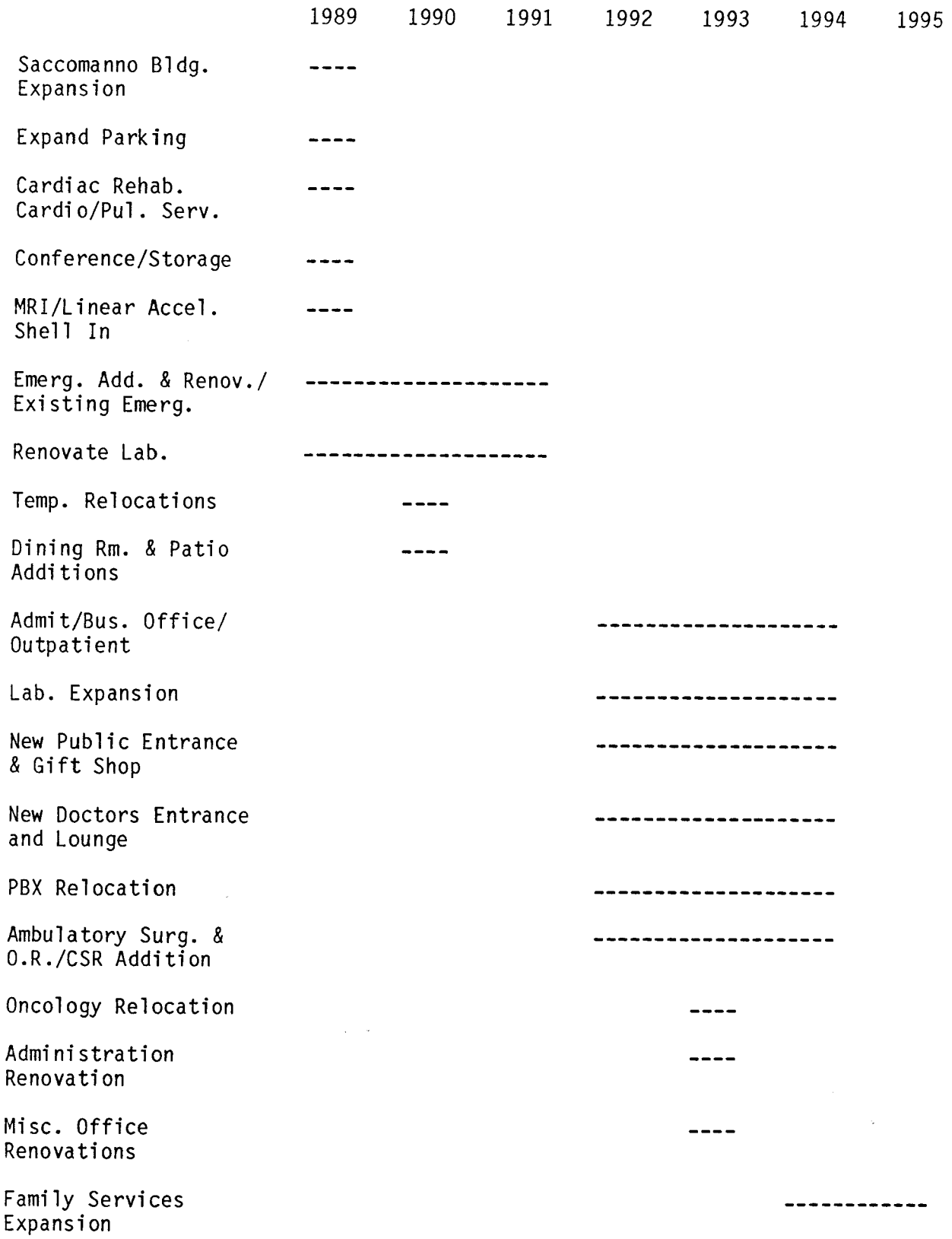
e. Erecting a brick screenwall to block view of the metal maintenance buildings should be considered.

f. Additional space for materials management could be obtained with an expansion to the west.

g. The Hospital owns other buildings and land that may be utilized once a program is established.

h. There may be minor renovation projects that will take place that are not covered in this plan.

4. Bar Chart


1989
1990
1991
1992
1993
1994
1995
Saccomanno Bldg. Expansion
Expand Parking
Cardiac Rehab. Cardio/Pul. Serv.
Conference/Storage
MRI/Linear Accel. Shell In
Emerg. Add. & Renov./ Existing Emerg.
Renovate Lab.
Temp. Relocations
Dining Rm. & Patio Additions
Admit/Bus. Office/ Outpatient
Lab. Expansion
New Public Entrance & Gift Shop
New Doctors Entrance and Lounge
PBX Relocation
Ambulatory Surg. & O.R./CSR Addition
Oncology Relocation
Administration Renovation
Misc. Office Renovations
Family Services Expansion

5. Cost Projection (See Phasing Schedule for space descriptions)

The following budget estimates are based on square footages reflecting the apparent needs of the facility. The location and size may vary slightly once a program is established. The costs per square foot are based on similar projects and the building construction cost index for 1988 and projected to the time frame the project will be completed including fixed equipment, within the indicated phasing schedule. The estimates do not include movable equipment, professional fees, Owner cost, etc.

1989		
a. Lower Level Saccomano Building		
3,150 sf x 30.00/sf =	$ 94,500.00	$106K
b. Parking Addition		
17,000 sf x 2.50/sf =	$ 42,500.00	$100K
c. Cardio Pulmonary/Rehabilitation		
4,214 sf x 80.00/sf =	$ 337,120.00	
d. Conference & Storage Space		
2,315 sf x 20.00/sf =	$ 46,300.00	
e. M.R.I. Addition		
1,800 sf x 300.00/sf =	$ 540,000.00	$725K
Linear Accelerator Shell-in		
1,500 sf x 100.00/sf =	$ 150,000.00	
M.R.I. Renovation		
400 sf x 50.00/sf =	$ 20,000.00	
TOTAL (1988)		$ 1,230,420.00
3.3% Escalation		40,604.00
TOTAL (1989)		$ 1,271,024.00
1989,1990,1991		
a. Emergency Addition w/ Canopy		
4,300 sf x 165/sf =	$ 709,500.00	
Renovate Emergency		
5,680 sf x 70/sf =	$ 397,600.00	
b. Laboratory Renovation		
4,200 sf x 100/sf =	$ 420,000.00	
TOTAL (1988)		$ 1,527,100.00
6.3% Escalation		96,207.00
TOTAL (1991)		$ 1,623,307.00
1990 (Temporary Relocation)		
a. Gift Shop		
1,007 sf x 20.00/sf =	$ 20,140.00	
Board Room		
960 sf x 20.00/sf =	$ 19,200.00	
Administration		
512 sf x 10.00/sf =	$ 5,120.00	
Storage Space Oncology		
180 sf x 20.00/sf =	$ 3,600.00	

b. Dining Room Renovation		
4,093 sf x 60.00/sf =	$ 245,580.00	
Patio Addition		
1,292 sf x 25.00/sf =	$ 32,300.00	
TOTAL (1988)		$ 325,940.00
6.3% Escalation		20,534.00
TOTAL (1990)		$ 346,474.00
1992,1993,1994		
a. Admitting/Business Office/Outpatient		
15,506 sf x 110.00/sf =	$1,705,660.00	
b. Laboratory Expansion Renovation		
6,588 sf x 100.00/sf =	$ 658,800.00	
c. New Public Entrance		
2,213 sf x 105.00/sf =	$ 232,365.00	
Lobby Gift Shop		
1,421 sf x 70.00/sf =	$ 99,470.00	
Volunteers Space		
768 sf x 40.00/sf =	$ 30,720.00	
Parking Lot Renovations		
Lump Sum =	$ 200,000.00	
d. Doctors Lounge and Entrance		
1,750 sf x 40.00/sf =	$ 70,000.00	
e. Relocate PBX		
400 sf x 60.00/sf =	$ 24,000.00	
f. Ambulatory Surgery		
3,528 sf x 160.00/sf	$ 564,480.00	
O.R./C.S.R. Expansion		
2,146 sq x 150.00/sf	$ 321,900.00	
TOTAL (1988)		$ 3,907,395.00
16% Escalation		625,183.00
TOTAL (1994)		$ 4,532,578.00
1993		
a. Relocate Oncology		
7,000 sf x 50.00/sf =	$ 350,000.00	
b. Renovate Existing Oncology Suite to Administrative Suite		
3,683 sf x 60.00/sf =	$ 220,980.00	
c. Misc. Adminstration Renovation		
5,298 sf x 40.00/sf =	$ 211,920.00	
TOTAL (1988)		$ 782,900.00
16% Escalation		125,264.00
TOTAL (1993)		$ 908,164.00

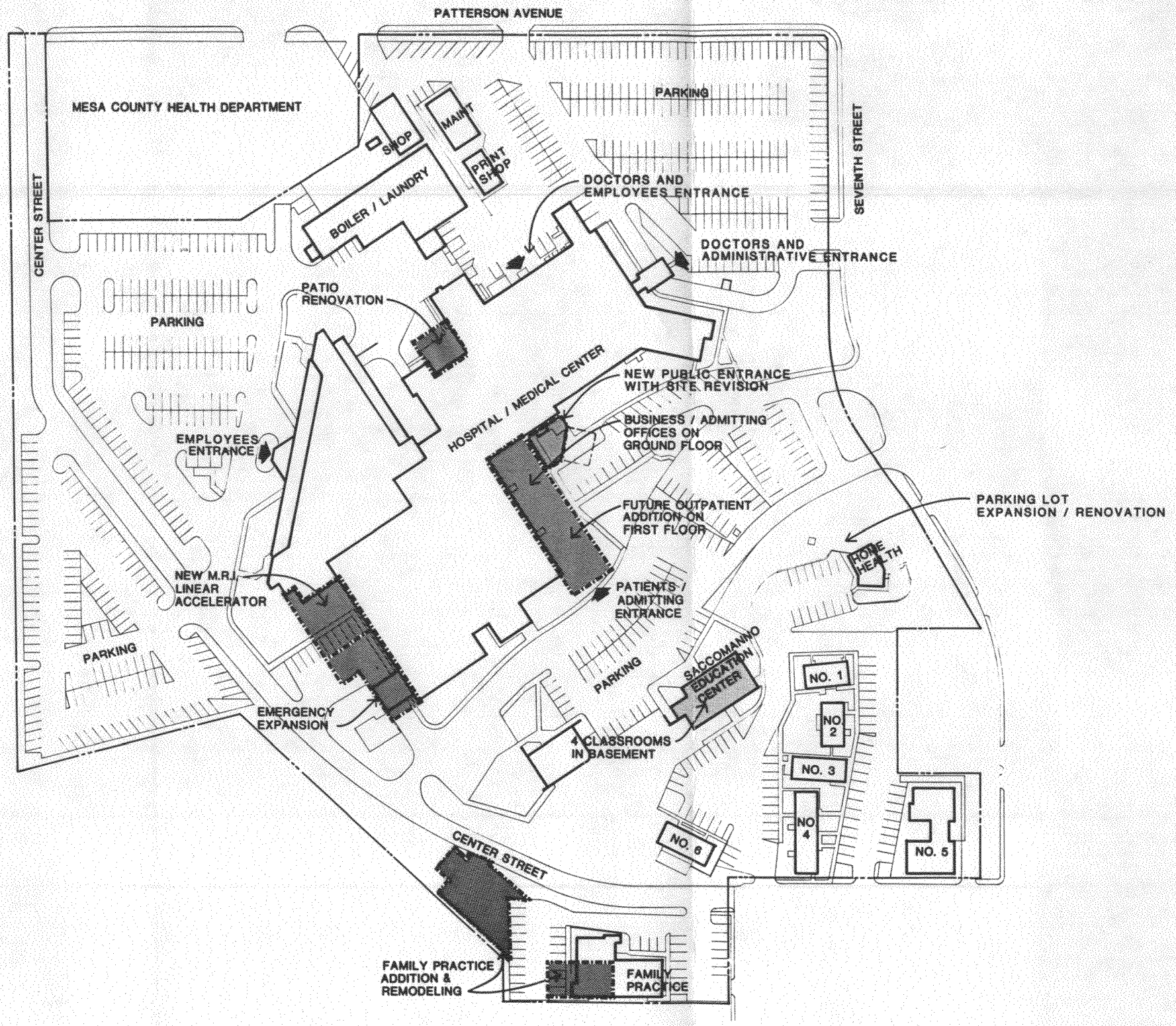
1994, 1995		
a. Renovate and Expand the Family Services Building and Parking Lot Addition and Renovation		
2,800 sf x 65.00/sf =	$ 182,000.00	
Parking Extension		
5,500 sf x 2.50/sf =	$ 13,750.00	
TOTAL (1988)		$ 195,750.00
20% Escalation		39,150.00
TOTAL (1995)		$ 234,900.00
Indefinite		
a. Shell in Linear Accelerator		
1,500 sf x 125.00/sf =	$ 187,500.00	
b. Patient Room Addition		
15,870 sf x 120.00/sf =	$1,904,400.00	
TOTAL (1988)		$ 2,091,900.00
Mesa Memorial 1989		
a. Outpatient Adolescent Unit		
6,000 sf x 65.00/sf =	$ 390,000.00	
TOTAL (1988)		$ 390,000.00
3.3% Escalation		12,870.00
TOTAL (1989)		$ 402,870.00
Mesa Memorial 1990-1991		
a. Inpatient Adolescent Psychiatric and Chemical Dependency Unit		
24,000 sf x 50.00/sf =	$1,200,000.00	
TOTAL (1988)		$ 1,200,000.00
7% Escalation (1991)		84,000.00
TOTAL		$ 1,284,000.00
TOTAL		$12,695,217.00

C. SPACE REQUIREMENTS

	Departments	Existing Sq. Ft.	Existing Renovation	Expansion Renovation	New Addition	Total Area
1.	Psychiatry	15,070	---	---	---	15,070
2.	Medical Records	2,109	---	512	---	2,621
3.	Materials Mgmt.	5,509	---	---	---	5,509
4.	Cath. Lab	1,896	---	---	---	1,896
5.	Volunteers & Gift Shop	856	---	1,421	---	1,421
6.	Dialysis	1,205	---	---	---	1,205
7.	Telemetry	8,695	---	---	---	8,695
8.	Critical Care	16,484	---	---	---	16,484
9.	Envir. Serv. Offices	1,087	---	---	---	1,087
10.	P.B.X.	176	---	400	---	400
11.	Business Office/ Admitting	5,649	---	---	7,048	7,048
12.	Library	1,031	---	416	---	1,447
13.	Emergency Suite	7,338	6,680	---	4,300	11,638
14.	Pharmacy	3,145	---	---	---	3,145
15.	Marketing/Planning	334	---	400	---	400
16.	Human Resources & Security	710	---	---	---	710
17.	Dietary	17,411	4,036	---	---	17,411
18.	Physical Therapy	6,993	---	---	---	6,993
19.	Social Services	120	---	384	---	384
20.	Radiology	21,556	---	---	3,300	24,856
21.	Outpatient	---	---	---	8,136	8,136
22.	Data Processing	1,875	---	---	---	1,875
23.	Education	5,515	---	3,150	---	5,490
24.	Laboratory	10,425	4,200	6,588	---	12,817
25.	Cardio-Pulmonary/ Cardiac Rehab	4,124	---	4,086	---	4,086
26.	Finance/Accounting	3,288	---	---	---	3,288
27.	Surgery	14,722	---	---	5,674	20,396
28.	Labor & Delivery/Nursery Postpartum & Prenatal	21,946	---	---	---	21,946

29.	Pediatrics	7,480	---	---	---	7,480
30.	Oncology	5,071	---	7,000	---	7,000
31.	Administration	2,264	---	3,683	---	3,683
32.	Entrance & Lobby		---	1,518	2,203	3,721
33.	Family Practice	7,000	1,000	---	1,000	8,000
		201,084	15,916	29,558	31,661	236,338
	Mesa Memorial	30,000	30,000	---	---	30,000
	Total	231,084	45,916	29,558	31,661	266,338

Note: The square footage indications in this table are used for reference comparisons against established norms and should be considered only as a general guide. Specific useable area assignments and actual building totals (encompassing all spaces) should be computed nore acurately when required for more detailed analysis.



SITE PLAN

N

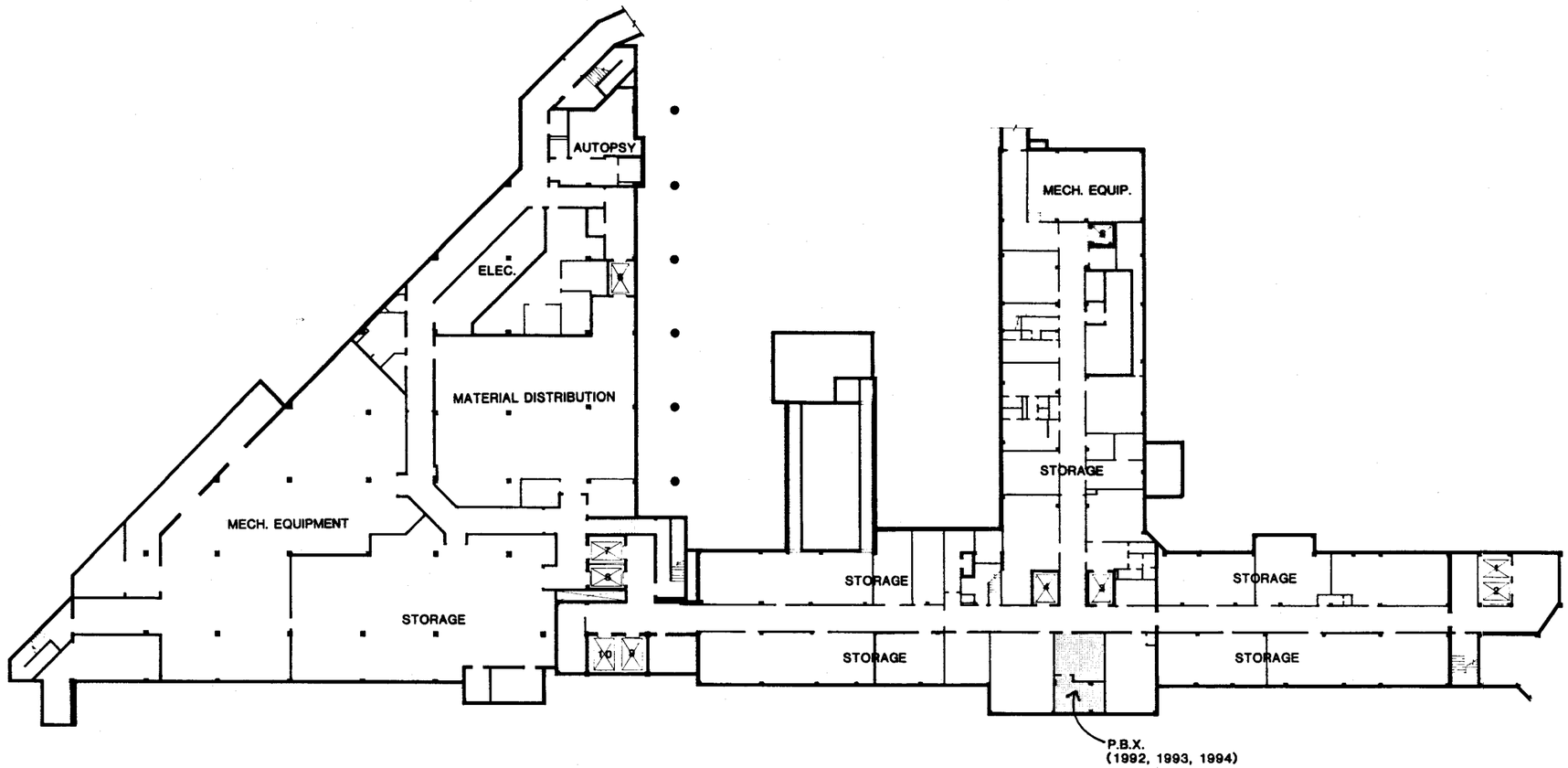
0 20 40 60 80 100

RENOVATION

NEW CONSTRUCTION

ST. MARY'S HOSPITAL

GRAND JUNCTION, COLORADO



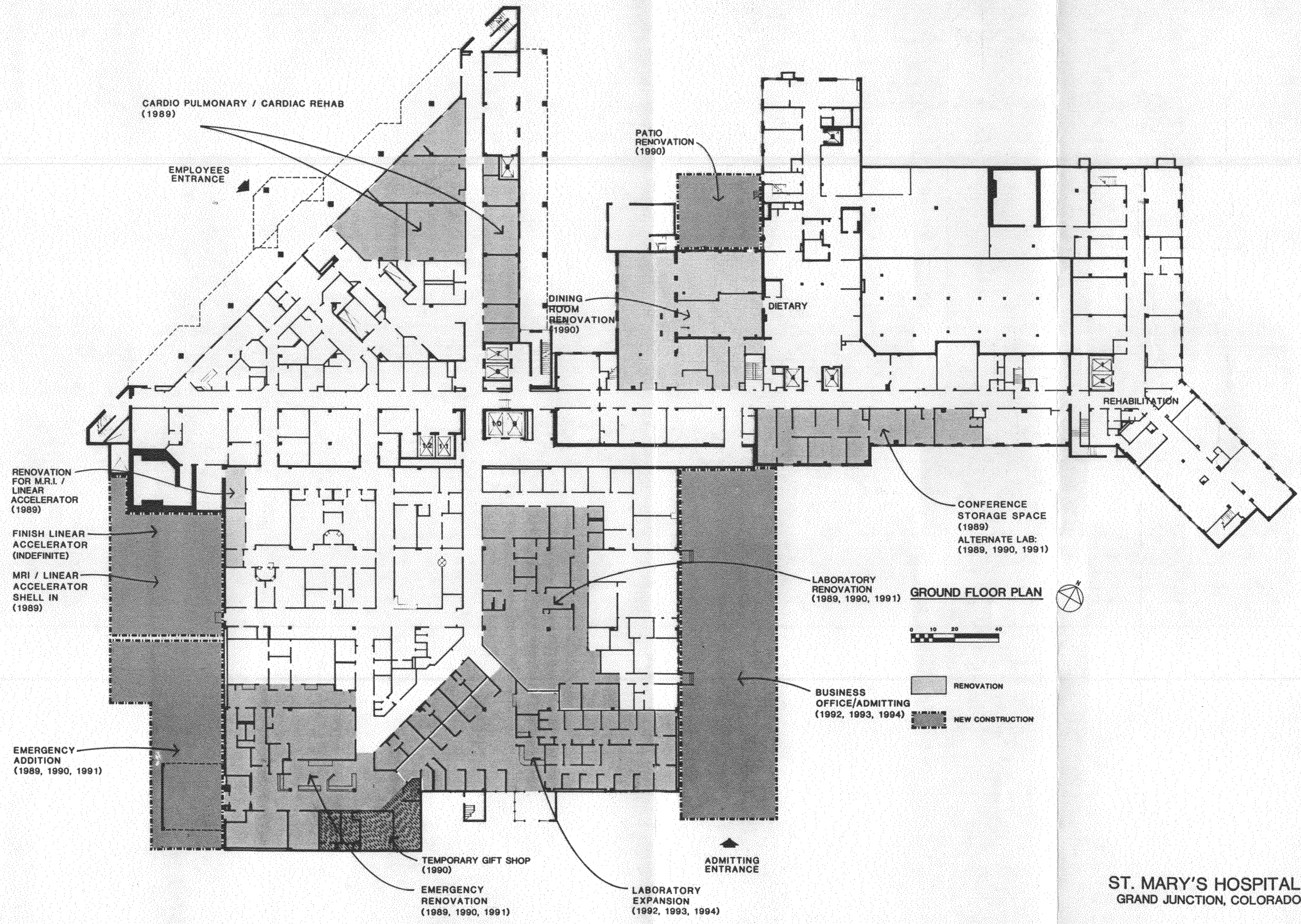
BASEMENT PLAN

0 10 20 40

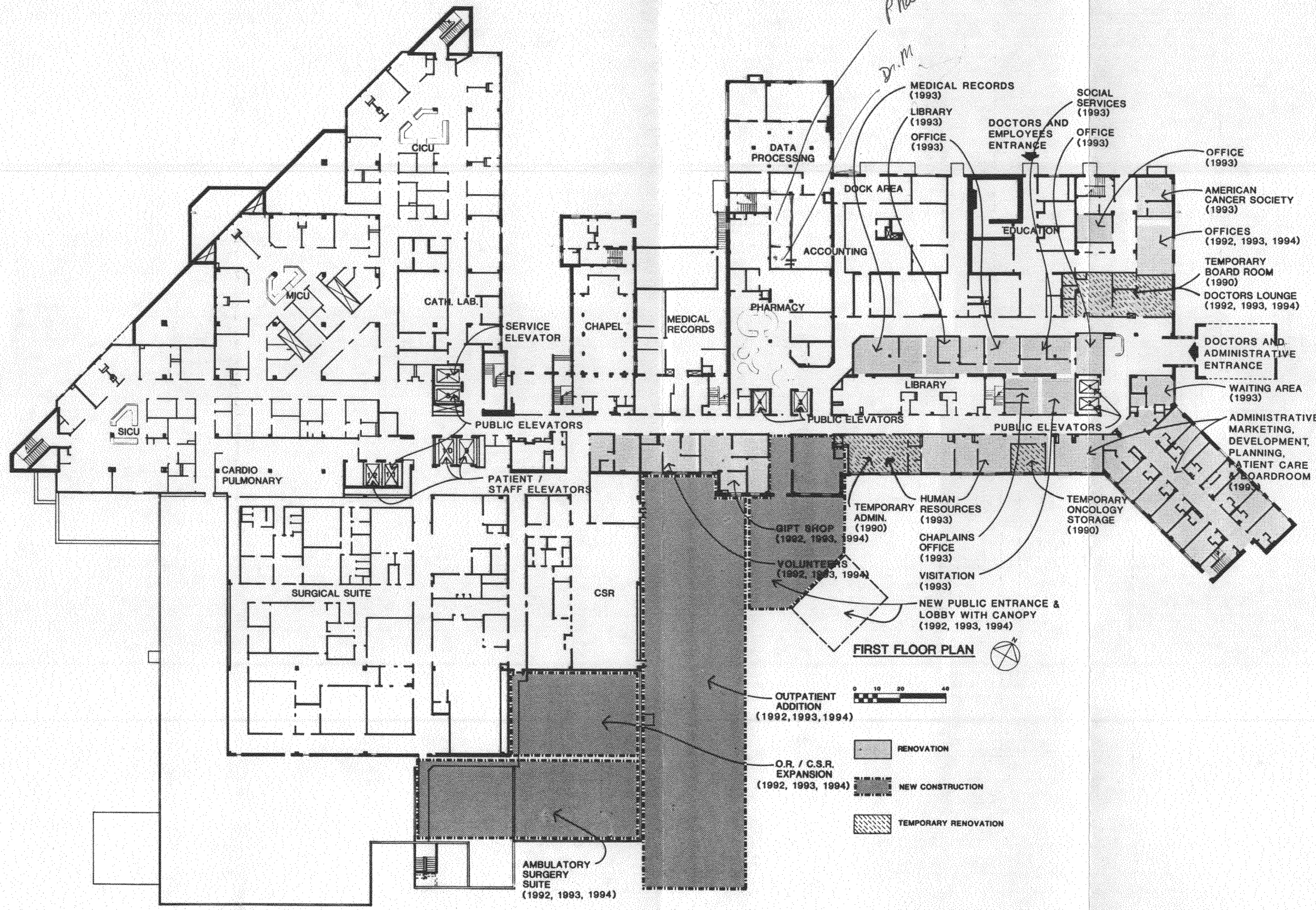
RENOVATION

NEW CONSTRUCTION

ST. MARY'S HOSPITAL
GRAND JUNCTION, COLORADO

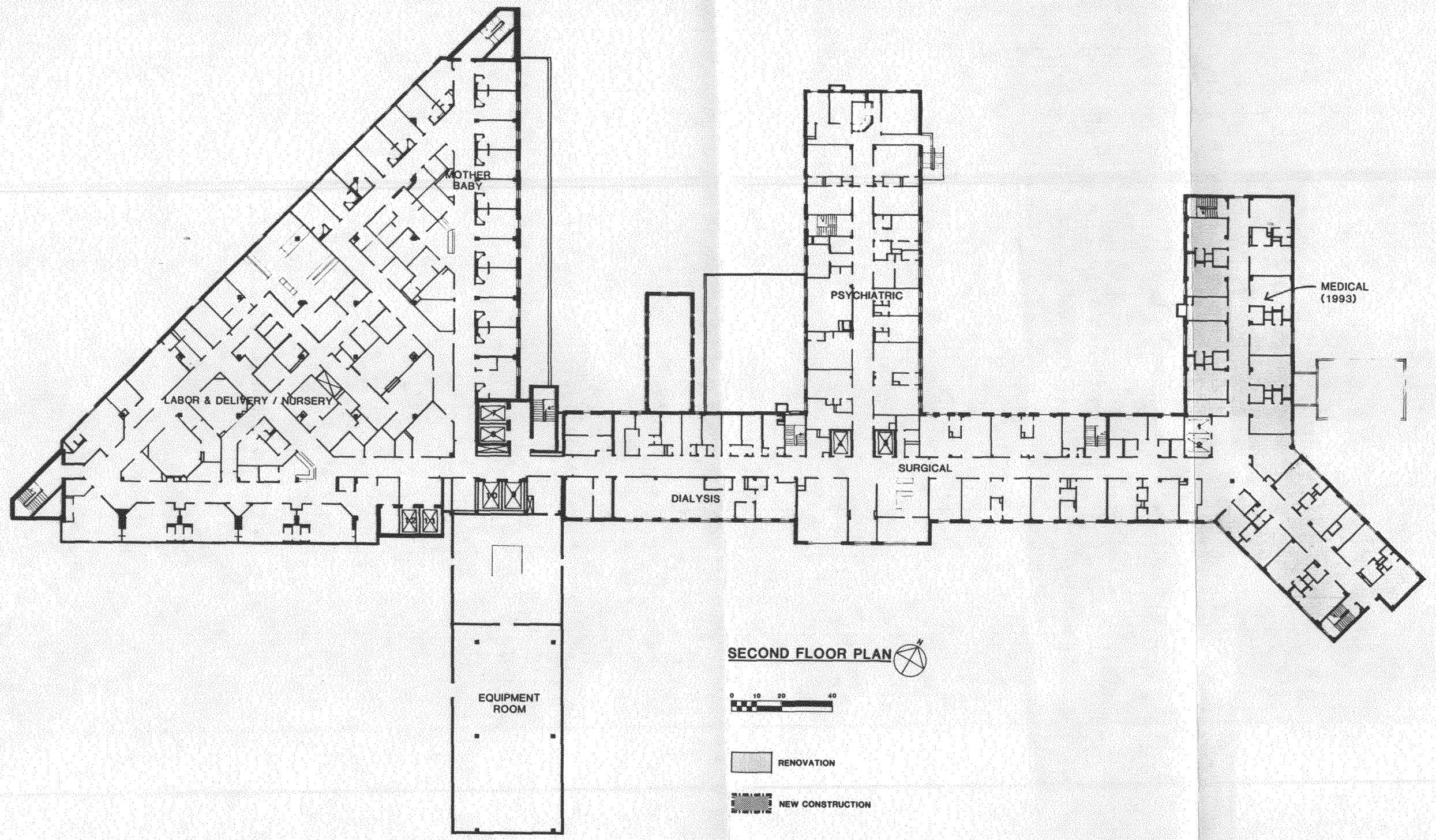


ST. MARY'S HOSPITAL
GRAND JUNCTION, COLORADO



FIRST FLOOR PLAN

ST. MARY'S HOSPITAL
GRAND JUNCTION, COLORADO



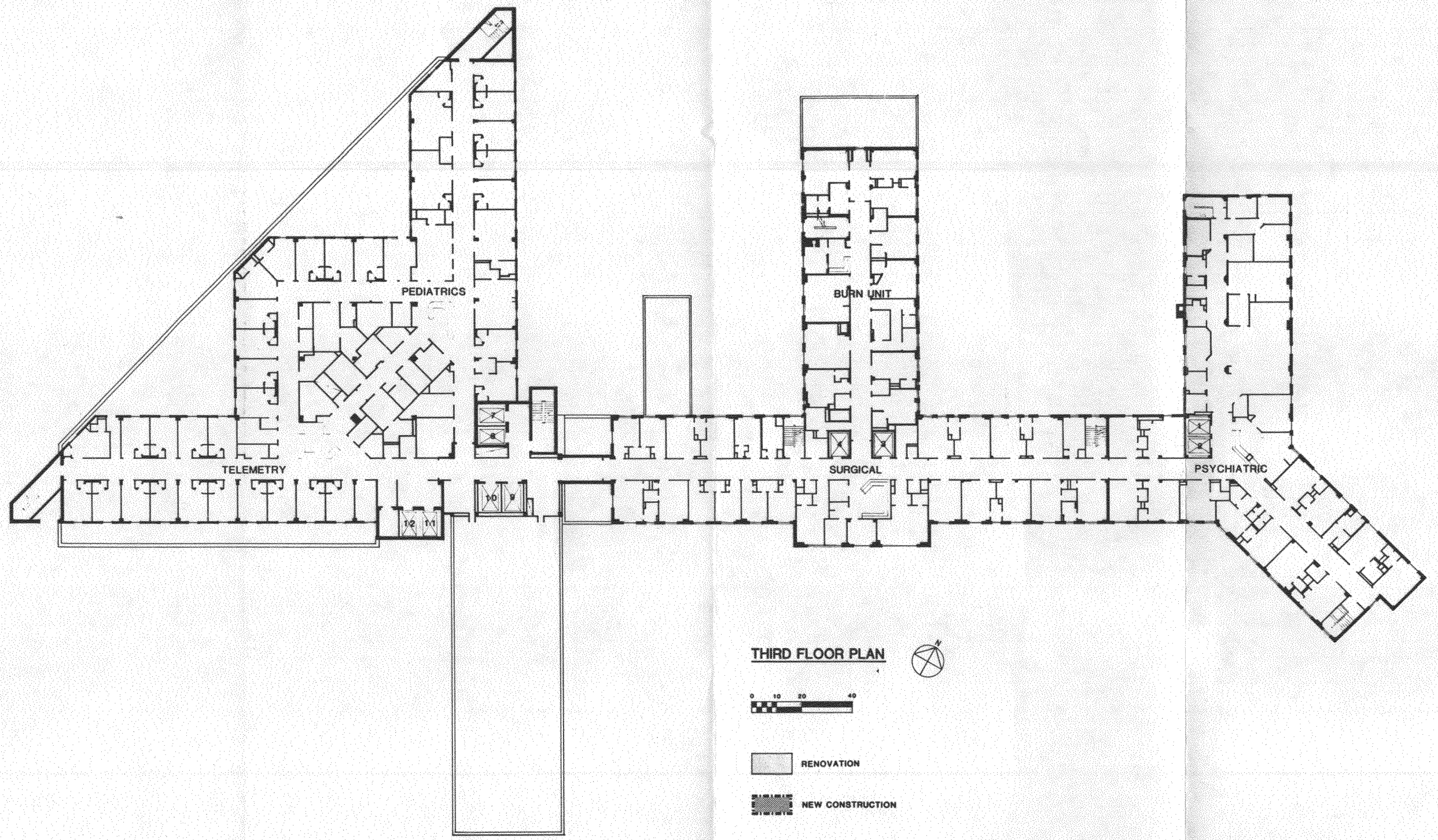
SECOND FLOOR PLAN

0 10 20 40

RENOVATION

NEW CONSTRUCTION

ST. MARY'S HOSPITAL
GRAND JUNCTION, COLORADO



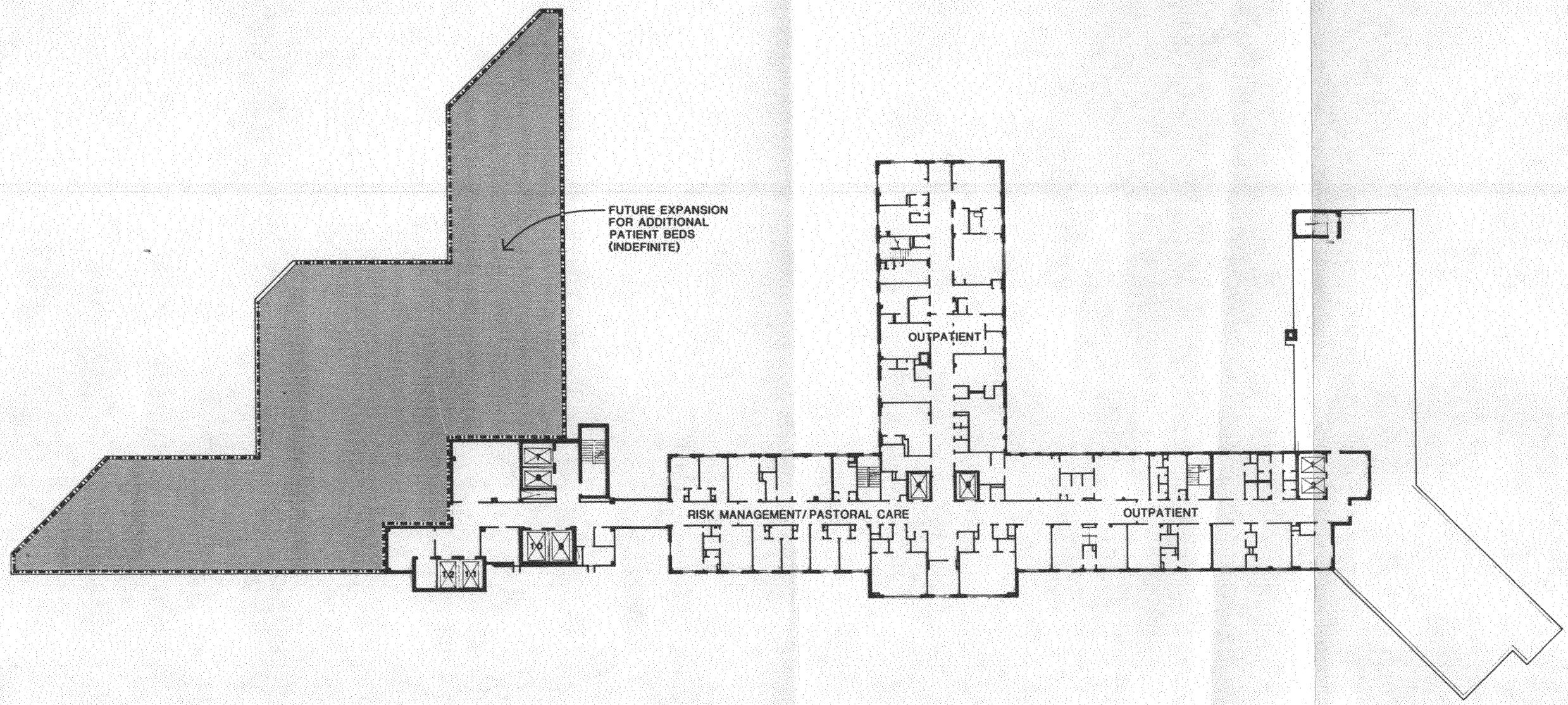
THIRD FLOOR PLAN

0 10 20 40

RENOVATION

NEW CONSTRUCTION

ST. MARY'S HOSPITAL
GRAND JUNCTION, COLORADO



FOURTH FLOOR PLAN

0 10 20 40

RENOVATION

NEW CONSTRUCTION

ST. MARY'S HOSPITAL
GRAND JUNCTION, COLORADO

APPENDIX 1

MECHANICAL AND ELECTRICAL SUMMARY

OF EXISTING SYSTEMS

I. ST. MARY'S HOSPITAL MECHANICAL SYSTEM

A. Boiler Room

1. Boilers:

There are four (4) boilers installed in boiler room with capacities as follows:

Superior Boiler	500 HP
Superior Boiler	300 HP
Cleaver Brooks	200 HP
Cleaver Brooks	200 HP

The boilers can generate a total of 1200 HP. At 345 pounds of steam per boiler horsepower, the capacity of these boilers is 41,400 pounds of steam per hour. The 300 HP steam boiler is able to generate enough steam to handle the maximum requirements of heating, hot water and laundry. Another 200 HP boiler is required when an absorption refrigeration machine is on line. A standby boiler is required for heating the hospital. The boiler capacity is ample for identified expansion needs.

2. Refrigeration Machines:

There are three (3) refrigeration machines located in the boiler room with the following capacities:

Trane Centrifugal	500 tons
Trane Absorption	256 tons
Trane Absorption	296 tons

Also there is one (1) 156 ton Trane Absorption Machine that is located in the mechanical room above surgery in the 1973 expansion. This makes a total of 1208 tons of refrigeration.

During the warm months of July and August, the 500 ton centrifugal and one (1) 256 ton absorption machine are on-line to provide chilled water to the entire building. This is a total of approximately 800 tons. There is ample capacity for future expansion.

All refrigeration machines are cross connected to provide redundancy to all areas.

B. Heating and Air Conditioning Systems:

Medium pressure steam and chilled water is distributed throughout the hospital. The steam is then converted to heating hot water to be distributed to various types of heating systems. There is a two pipe fan coil systems in some patient areas. There are constant volume air systems served by air handling units with terminal reheat in office areas, laboratory, x-ray, surgery. Any modifications for expansion could be made with minimum disruption of other space's or departments.

C. Sprinkler Systems:

The 1983 addition is completely sprinklered and in all other areas the sub-basement and basement are completely sprinklered. All other floors are partially sprinklered. Any future sprinklering would require new risers, branch mains and sprinkler runouts.

D. Plumbing:

The domestic cold water and hot water is of ample size to accomodate any renovation with any revisions within departmental limits.

Soil, waste and vent piping is also in good condition and fixtures can be added with a minimum of extension of branches to install fixtures

as required. Any special systems such as medical gases & laboratory waste may require extension of new piping to accomodate new additions.

II. MESA MEMORIAL HOSPITAL MECHANICAL SYSTEM

A. Heating, Ventilating and Air Conditioning

1. The basement areas of this facility have a water problem due to the high water table. The floor has many crack to allow water to seep into basement. The basement has sub soil drain tile around the perimeter of the building. To remove water from under slab, a drain tile grid system would have to be installed and a pump to the storm sewer system.

2. The building is heated by convectors located under windows with piping run exposed in basement areas and below floors in other areas. Piping in areas under floor are developing leaks. Repairing these leaks is very difficult because of piping locations.

3. The heating equipment now installed is generally in a condition which requires much maintenance and repair. Most of this equipment is original equipment.

4. The air conditioning systems are adequately sized to accommodate the existing areas.

B. Medical Gases

1. Medical gases are piped to operating rooms only and would require some changes to conform to the new codes.

C. Plumbing

1. The soil waste and vent piping systems are of adequate size to handle any type fixture with minimum extension of branches.
2. Domestic cold water and hot water piping is adequate to handle any renovation required at the facility.

III. ST. MARY'S HOSPITAL ELECTRICAL SYSTEM

A. Normal Power:

1. Dual source normal power at 13.2 KV is available for the hospital. "Redlands substation" feeder serves the hospital. The standby normal power feeder is originated from "Grand Junction Substation". A two-position high voltage switch is installed on a street utility pole for switching power from one source to another, where necessary.

2. The main switchboard (PPS) in boiler house sub-basement consists of a 600A main switch (13.2 KV) and 5-600A high voltage (13.2 KV) service disconnects. The space is available for 2-600A high voltage switchinstallation.

3. Five-600A high voltage switches feed the following transformers:
   a) 1-1000 KVA, 13.2 KV/277-480V transformer located in the sub-basement in the boiler house. This transformer feeds the loads in the boiler house.
   b) 1-1000 KVA, 13.2 KV/277-480V transformer located outside building next to the cafeteria. This transformer feeds the loads in '73 addition.
   c) 1-500 KVA, 13.2 KV/120-208V transformer located outside across from the boiler house. This transformer feeds the building constructed originally in 1948 and additions to this building.
   d) 1-500 KVA, 13.2 KV/277-480V unit substation (US1). This unit substation is located in lower level in '83 addition and feeds 277/480V loads.
   e) 1-500 KVA, 13.2 KV/120-208V unit substation (US2). This unit substation is located in lower level in '83 addition and feeds 120/208V loads.

4. The existing electrical system is upgraded under the '83 addition and a new switchboard is installed. Some new distribution panelboards and lighting and appliance panelboards are also installed where old equipment is considered not being adequate for meeting new load demand requirements. All distribution panelboards and motor control centers are located on

drawings. Space capacity and space availability of all distribution panelboards and motor control centers are determined for future use of such spares.

B. Emergency Power:

1. There are two engine generators located in the boiler house. 1000 KW engine generator is assigned as standby unit. 350 KW unit is assigned as back-up unit. Where necessary 350 KW may be used to feed the emergency distribution panelboard provided load shedding is planned carefully to prevent overloading of the 350 KW generator. Transfer switches are provided for an automatic load transfer.

2. The essential electrical system (life safety, life support, critical branches) and equipment branch are installed under '73 addition to meet the emergency power requirements outlined in NEC, Article 517.

C. System Evaluation:

Spare capacity and space availability for device installation have been determined for main switchboard and normal and emergency power distribution panelboards. Where required lighting and appliance panelboard may be installed to feed additional loads. Space availability in electrical rooms for lighting and appliance panelboard installation shall be studied for each area prior to finalizing the renovation design. Main switchboard in the boiler house sub-basement may be expanded to accommodate two-600A high voltage switches. Enclosures are required for switch installation.

IV. MESA MEMORIAL HOSPITAL ELECTRICAL SYSTEM

a. Normal Power:

120/208V secondary 50 KVA transformer feeds the hospital. Main distribution panelboard is located in basement of '48 construction. '68 and '73 additions are fed from the existing distribution panelboard in '48 construction.

b. Emergency Power:

Emergency generator serves the hospital for emergency power needs. Emergency distribution panelboards is installed in the basement of '73 surgical addition.

c. System Evaluation:

40 KVA service for the hospital is considered adequate provided the building is to be used as an office space, (Other use will require upgrade). Due to flooding conditions of the basement of '48 construction main distribution panelboard may require replacement.

ST. MARY'S HOSPITAL & MEDICAL CENTER, INC.
RESPONSE TO REVIEW COMMENTS

FILE NO. #53-92

ACTIVITY:	Addition to St. Mary's Hospital
PETITIONER'S ADDRESS/TELEPHONE:	2635 North 7th Street Grand Junction, Co (303)244-2445
HOSPITAL REPRESENTATIVE:	Daryll Evans Keith Estridge

NOTE: THE FOLLOWING ARE WRITTEN RESPONSES TO THE REVIEW COMMENTS SUBMITTED TO ST. MARY'S HOSPITAL REGARDING THE PROPOSED ADDITION AS OUTLINED IN OUR DEVELOPMENTAL APPLICATION DATED AUGUST 26, 1992.

CITY UTILITIES ENGINEER

SEWER - St. Mary's will comply with any additional service charges relating to the new additions.

WATER - St. Mary's will supply the necessary booster pumps as part of the project in order to supply water to the upper floors of both proposed additions.

CITY FIRE DEPARTMENT

Hospital will install new pumps in connection with project and will meet all codes in connection with flow.

COMMUNITY DEVELOPMENT

1. Three copies of a detailed Master Site Plan have been submitted to the Community Development office with "update comments" noting past, current and future progress regarding this comprehensive plan. In addition, Exhibit A is attached as an Addendum to the Application and the Master Site Plan.

2. The parking lot across 7th street will be ready by the end of October, 1992.

ST. MARY'S HOSPITAL & MEDICAL CENTER
Grand Junction, Colorado
ADDENDUM TO THE LEO A. DALY FACILITIES DEVELOPMENT PLAN - 1989 - 1995

The purpose of this memorandum is to supplement St. Mary's Hospital & Medical Center's Master Site Plan prepared by Leo A. Daly in July of 1988 covering the years 1989 - 1995 and current development application. We are proposing an expansion that will add a five level addition on the south side of the hospital. This building will contain a new patient entrance, expansion of the existing lab and central processing, and replacement of patient care areas. Additionally we are proposing the addition of floors 4, 5 and 6 on "Project Critical Care" for Medical Office Building use.

HISTORICAL BACKGROUND

At the current time St. Mary's Hospital & Medical Center occupies approximately 415,756 square feet of building space. St. Mary's is licensed for 294 beds and is considered a full service hospital. Approximately 112,000 square feet of the total square feet is occupied by the nursing units and of that approximately 48,000 square feet is contained in buildings completed in 1948 and 1964 and by today's standards is considered obsolete for patient care. See Exhibit E for building foot print.

The obsolescence relates to the size of patient rooms. Currently many rooms are too small to handle modern medical equipment. During the bust period the hospital converted two patient rooms to single rooms and four patient rooms to two patient rooms in order to better accommodate patients and their needed medical equipment. Most of these rooms do not include personal comfort facilities currently required in the patient care environment (washroom basin, etc.). Some rooms have been taken out of service as they do not include oxygen, suction and other standby emergency equipment necessities.

In addition to the space problems of the nursing units many other hospital departments are unable to function efficiently in their existing allocated square footage. For example, the Medical Records department is located in three different hospital areas all of which have inadequate ventilation, inadequate lighting and space too small to accommodate the required personnel. Although the hospital has renovated many of these areas over the last few years, we are no longer able to obtain efficient use of space due to outmoded building design.

As you may recall, St. Mary's obtained approval to complete a $22 million dollar expansion in late 1979 and began construction during the early 1980's. However, due to economic slow down this program was cut in half to approximately $15 million dollars as patient volumes and the resulting drop in the economy reduced the demand for health care services. During this period St. Mary's adapted its physical space to accommodate reduced patient demands.

The general economy of the valley and the western slope has now improved beyond pre-economic slow down levels and St. Mary's finds itself back to pre-economic slow down patient volumes. We simply cannot handle present and future volumes with existing bed space and structure. We therefore are asking planning commission approval to replace the beds in the 1948 addition and the 1964 addition so we can meet our projected capacity.

Phase I - 5 Story Addition

After extensive review of our space needs and based upon the Leo A. Daly facility development plan completed in 1988, it became evident that several major areas needed to be addressed in order to further our mission. Those areas identified as problematic were as follows: 1) the Hospital does not have an easily identifiable front entrance; currently patients and visitors are confused when they approach the hospital as to where to enter the building. It was therefore recommended that the Hospital establish a distinct front entrance for all patients, visitors, etc. 2) Additional space is needed for the Laboratory and other support areas which have been substantially automated in the last few years. 3) The Hospital has been accommodating its patients volume with obsolete patient care space; however, now that the valley's population has returned back to its pre-bust level, the Hospital is unable (many times throughout the year) to provide the necessary bed space.

Currently the Hospital is licensed for 294 beds, however, due to outmoded design only 200 beds can be staffed. Many of those 200 beds are not able to be used for Trauma-Surgical patients because of their distinct requirements. For example, only clean cases can be put on the Obstetrics floor which contains 18 beds. Those beds cannot be used for General Medical/Surgical patients. Likewise, the Hospital Pediatric unit containing 20 beds and is unsuitable for Medical/Surgical patients. The Psychiatric beds totaling 37 cannot be used for General Medical/Surgical patients. The ICN/Nursery contains 14 beds. This leaves only 111 beds for Medical/Surgical patients, 59 of which are contained in the 1948/1964 additions. The rooms in these additions do not meet current codes and any renovation work done would be expensive and disruptive. Finally, even after renovation these rooms would not be efficient to operate because of their distance from central staffing and supply areas.

The Hospital therefore has abandoned its previous planning process of renovation because of efficiency, asbestos abatement and because renovation would disrupt patient care on the floors above and below the affected areas.

The best solution to solving our requirements is to add the proposed five story addition which will bring together the new patient and visitor entrance, expand the Lab, add storage space and provide replacement beds for the outmoded beds in the 1948 and 1964 additions. By replacing these beds, it will allow the Hospital adequate time to remove the asbestos from the old building and then study the best uses for vacated areas, phase II.

In summary, the proposed five level addition is not adding any additional capacity to the hospital but rather bringing it closer to its licensed capacity. This action will help eliminate the bed alerts being experienced on an increasingly frequent basis. The hospital is not adding any new major programs. Hospital administration feels that with the completion of this additional square footage the hospital will gain breathing room to maximize the efficiency of its departments. We do not anticipate any new major additions for several years.

Phase II

The vacated space currently occupied by the nursing units moving to the new tower will be used to consolidate existing support departments. Phase II will increase storage space and increase the efficiency of the hospital. Areas to be addressed are Cardiology, Laboratory, Dialysis, Central Sterile supplies, Administration, QA Medical Records, Medical Library, Physical Therapy and Storage.

PHASE III - MEDICAL OFFICE BUILDING

The Medical Office space being added will total 42,000 rentable square feet. It is anticipated that 25 to 30 physicians will occupy medical office building space consisting mainly of specialists and subspecialists who are heavy users of hospital services (orthopedic surgeons, cardiologists). Many of the patients being seen by these physicians are already using the hospital. Having the MOB connected to the hospital will save these patients trips between physician office and the hospital. Some additional parking will be needed to accommodate the medical office building, however, anticipated traffic flow will be reduced since the physician will not be coming from other office areas two or three times during the day to see patients. This also may reduce patient flow traffic as many patients visit their doctor, then visit the hospital for tests and return back to their physician. Once the MOB is completed, patients will park once, enter the medical office building, see their physician, take elevators to the appropriate hospital service, then return back to the medical office building without having to use their car. And finally, all employees (except night shift) will be required to park across the street in the new lot, further reducing traffic on the hospital main campus.

FUTURE PROPERTY ACQUISITION PLAN

Regarding the six buildings and the motel located below the Saccamanno Education Center, the hospitals intent is to utilize those buildings until such time as those buildings are no longer usable. The services located there are the Marillac Clinic (a charity clinic), the Guest House Motel, the Family Practice annex and Mesa Midwives (who rent space and provide OB services to the low income patients). Approximately $200,000 has been committed to these buildings in order to fully realize their potential for the next 3 - 5 years.

Hospital Services are changing from an inpatient basis to an outpatient basis. Therefore the hospital is considering placing more services convenient to alternative patient settings. An example of this would be the Home Health Services (one of the hospitals fastest growing departments) which has been moved to off site space on Horizon Drive. This location enables better access for people on both ends of the valley. (45 employees were moved from the 7th & Patterson location.) Also the hospital moved its outpatient physical therapy to a building located on South Center Street which provides better parking and easier access for patients.

PARKING

Once the hospital has completed the parking lot across 7th street known as Parking Lot F and the currently proposed additions the hospital will have a total of 1101 parking spaces. 464 parking spaces will be committed for employees and the balance will be committed for visitors, patients and physicians.

Again its important to note that the hospitals primary issue is trying to address parking for patients. All employees other than the night employees will be required to park in F lot. This action will free existing parking for patients using the medical office building and the hospital. This, in effect, will reduce traffic flow on the main campus as previously noted. See exhibit B for total Hospital parking spaces.

DRAINAGE

Please refer to Exhibit C noting St. Mary's Hospital's Commitment to address the drainage problem that has existed for several years.

MASTER SITE PLAN

It is our intent to update our Master Site Plan once these projects are complete, i.e. 2-3 years.

WESTERN ENGINEERS, INC. SINCE 1952
CONSULTING ENGINEERS / LAND SURVEYORS
2150 Hwy. 6 & 50, Grand Junction, CO 81505-9422 • 303/242-5202 • FAX 242-1672

September 18, 1992

Mr. Keith Estridge
DIRECTOR OF ENGINEERING
ST. MARY'S HOSPITAL
2635 North Seventh Avenue
Grand Junction, Colorado 81502

Dear Keith,

We would like to present this progress report with regards to the ongoing hydrology study we are preparing for St. Mary's Hospital.

The present campus of the medical center resides on approximately eighteen acres. The majority of this land has been developed with impermeable surfaces such as buildings and asphalt parking. However there is considerable landscaping which absorbs and impedes runoff. Presently all the runoff finds its way into the Buthorn Drain. The Buthorn Drain services a large area of north Grand Junction and is currently loaded beyond capacity during normal storm events. To assist the City of Grand Junction and the Grand Junction Drainage District in reducing the inflow to the drain, Western Engineers is examining the feasibility of detention of storm water runoff from St. Mary's Hospital property.

The southwest area of St. Mary's property, referred to as St. Mary's Park provides the most viable alternate for a detention pond to limit the volume of storm water discharging from the property. The Park is approximately 2.1 acres of landscaped area, mainly lawn and trees. This area also has a low enough elevation to provide gravity flow for runoff into a storm drainage collection system. Consequently, the Park will be the focus of the study. Very careful consideration for maintaining the "park atmosphere" will be utmost in the design. Mr. Bob Arcieri will be available to assist with the necessary rearranging of the landscape to provide a detention basin.

To meet present interim standards of the City of Grand Junction, the discharge of storm water from the property should not exceed that which would have occurred without the hospital's developments. To accommodate storm water runoff created by development (impervious surfaces), a suitable storage facility will be necessary. The present hydrology study will determine the rate allowable to discharge and required volume of detention. During the course of the study it may be determined that complete historical discharge can not be achieved or may not be feasible. If this is so it will require working with the City and the Drainage District to provide an adequate solution. The scope of work for the report is divided into the following three categories:

1. Determination of historical discharge,
2. Determination of present discharge,
3. Determine the most reasonable and effective method to achieve the historical discharge.

The goal which we are trying to achieve (Category 1) has been determined. At the moment , we are working on the second category. The runoff varies depending on the type and slope of the terrain. The individual areas of lawn, gravel, asphalt, buildings, etc. have been measured and the elevations (slopes) determined. By next week the study will progress into the third category.

The perfect time frame, which we never quite obtain, will take about four months. The hydrology report will be completed by October 2. All the necessary topography surveying has been completed. There will be some site specific surveying required in the course of the design phase. The design of the system will require approximately three weeks. Construction drawings are anticipated to be completed by the 23rd of October. Discussing the time table with Elam Construction, they will have a crew available to begin work on October 26. Construction time is estimated to be at least two months. This does not include the landscaping. For landscaping and irrigation, add one more month. Calendar wise this puts the landscaping in January which is not a practical time for planting. The landscaping and other temperature related portions (asphalt) may have to be delayed till spring time.

Associated cost for the anticipated project are roughly estimated as follows:

Hydrology Report	$ 2,600
Surveying	$ 800
Design Phase	$ 3,200
Construction	
Earthwork	$ 24,000
Storm Drains	$ 25,300
Miscellaneous	$ 13,000
Landscape and Irrigation	$ 35,000
Sub Total	$103,900
Contingency 15%	$ 15,600
Total Project Services	$119,200

Hopefully these estimates are at the upper end of the cost range. Upon completion of the hydrology report the parameters of the project will be more closely defined and the costs will be refined to match. There may be a necessary to phase the project of this magnitude over a period of time to allow for budget allocation.

Thank you for your time and consideration on this project. Please call if you have any questions.

Respectfully,
WESTERN ENGINEERS, INC.

Larry R. Gebhart
Staff Engineer

cc: Mr. Karl Metzner, Community Development
Mr. Gerald Williams, City Engineering
Mr. John Ballagh, Grand Junction Drainage District

Grand Junction Community Development Department
Planning / Zoning / Code Enforcement
250 North Fifth Street
Grand Junction, Colorado 81501-2668
(303) 244-1430 FAX (303) 244-1599

September 21, 1992

Tammy K. Anderson
Premier Services Ambulance, Inc.
P.O. Box 3062
Grand Junction, CO 81502

Dear Ms. Anderson:

This is in response to your proposal to base an ambulance out of St. Mary's Hospital Emergency Room. I understand that you plan to base an ALS ambulance at the facility and run 911 calls. Your employees will work in the emergency room when they are not responding to calls. The ambulance will be kept parked outside the emergency entrance in the open.

St. Mary's Hospital is in a Planned Business Zone which was approved for the existing hospital use. The proposal to station an ambulance at the hospital is clearly an accessory use and will be allowed without further review. As stated in your letter dated 9/10/92, ambulances have been responding in and out of St. Mary's Emergency room for years and having the ambulance stationed there should have no greater impact on the neighborhood. The area where the ambulance unit is stored may not interfer with traffic flow or parking on the site. Future construction of a garage or bay area for the unit would require site plan review as a minor change to the original development plan.

Sincerely,

Katherine M. Portner

Katherine M. Portner
Senior Planner

09- 14-92

TO: KATHY PORTNER
CITY HALL

FROM: PREMIER SERVICES AMBULANCE, INC.
P.O. BOX 3062
GRAND JUCT CO 81502

RE: AMBULANCE AT HOSPITAL

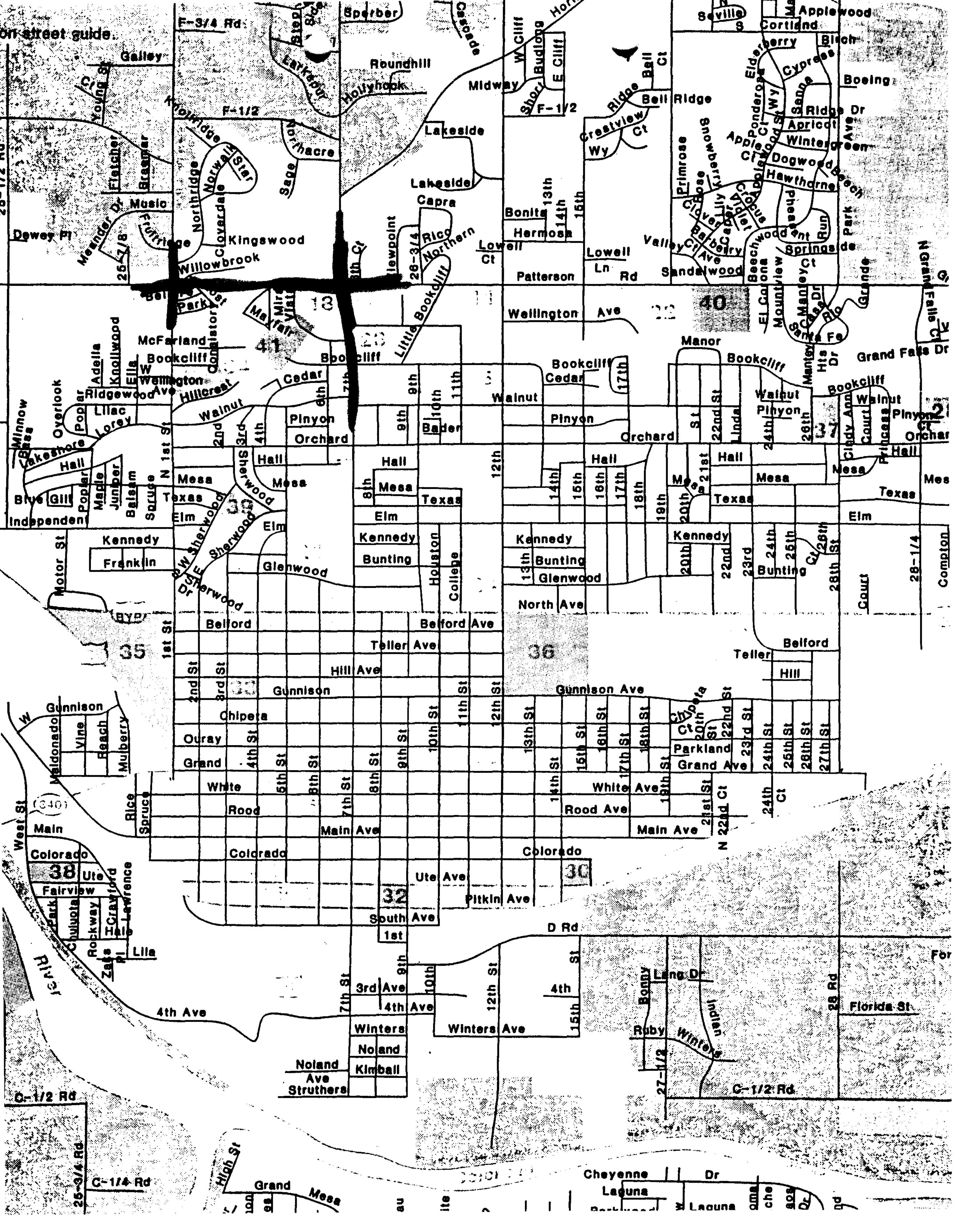
DEAR KATHY,

PER YOUR REQUEST, FOLLOWING YOU WILL FIND A DESCRIPTION OF PREMIER SERVICES AMBULANCES PROPOSAL TO BASE AN AMBULANCE OUT OF ST. MARYS HOSPITAL EMERGENCY ROOM. PREMIER AMBULANCE PLANS TO BASE AN ALS AMBULANCE AT THIS FACILITY AND RUN 911 CALLS. OUR EMPLOYEES WILL WORK IN THE EMERGENCY ROOM DOING WHATEVER IS NEEDED TO ASSIST WITH PATIENT CARE. WHEN THEY ARE NEEDED FOR A 911 CALL, THEY WILL DEPART FROM ST. MARYS HOSPITAL AND RESPOND WITH THE FIRE DEPARTMENT ON THE CALL. THEY WILL BE RUNNING CODE 3, USING LIGHTS AND SIRENS WHEN THEY RESPOND. WITH THIS IN MIND, AND THE FACT THAT AMBULANCES HAVE BEEN RESPONDING IN AND OUT OF ST.MARYS HOSPITAL EMERGENCY ROOM FOR YEARS, THERE SHOULD BE NO CHANGE IN THE NOISE LEVEL OTHER THAN IT WILL OCCUR MORE OFTEN. OUR EMPLOYEES WILL REFRAIN FROM USING THE SIREN UNTIL THEY REACH A MAJOR STREET OR INTERSECTION, (I.E.: 7th ST OR PATTERSON RD UNLESS OTHERWISE NEEDED.) PREMIER SERVICES AMBULANCE INC. WILL BE KEPT PARKED OUTSIDE THE EMERGENCY ENTRANCE AND WILL BE RESPONDING FROM THERE. IN TIME, WE HOPE TO CONSTRUCT A TYPE OF GARAGE OR BAY AREA TO KEEP THE UNIT PROTECTED FROM THE WEATHER. WHEN THIS OCCURS, WE WILL APPLY FOR THE APPROPRIATE PERMITS.

SINCERELY,

Tammy K Anderson

TAMMY K ANDERSON
PRESIDENT
PREMIER SERVICES AMBULANCE, INC.
P.O. BOX 3062
GRAND JUCT CO 81502
(303) 245-5358


on street guide.
F-3/4 Rd
Galley
Sperber
Roundhill
Hollyhock
Larkspur
Midway
Bell Ridge
Crestview
Lakeside
Applewood
Cortland
Elderberry
Birch
Cypress
Boeing
Ridge Dr
Apricot
Wintergreen
Dogwood
Beech
Hawthorne
Snowberry
Primrose
Fletcher
Bregmar
Music
Meander Dr
Knollridge
Northridge
Norwalk
Star
Northacre
Sage
Cloverdale
Kingswood
Willowbrook
Dewey Pl
Capra
Rico
Northern
Lowell Ct
Bonita
Hermosa
Lowell Ln
Patterson
Rd
Valley Ct
Sandalwood
Springside
Beechwood
Mountview
Rio Grande
Wellington Ave
Manor
Bookcliff
Little Bookcliff
Grand Falls Dr
McFarland
Mayfair
Cedar
Hillcrest
Walnut
Pinyon
Orchard
Bader
Ridgewood
Lilac
Lorey
Overlook
Poplar
Adelia
Knollwood
Lakeshore
Hall
Mesa
Texas
Elm
Blue Gill
Independent
Maple
Juniper
Balsam
Spruce
N 1st St
Sherwood
Kennedy
Franklin
Bunting
Glenwood
North Ave
Houston
College
Motor St
Belford
Belford Ave
Teller Ave
Hill Ave
Gunnison
Gunnison Ave
Chipeta
Ouray
Grand
Grand Ave
Parkland
White
White Ave
Rood
Rood Ave
Main
Main Ave
Colorado
Ute
Ute Ave
Pitkin Ave
South Ave
Fairview
Maldonado
Vine
Peach
Mulberry
Rice
West St
Lawrence
Crawford
Lila
D Rd
4th Ave
3rd Ave
Winters
Winters Ave
Noland
Kimball
Struthers
Lang Dr
Florida St
Ruby
Indian
C-1/2 Rd
C-1/4 Rd
25-3/4 Rd
27-1/2
28 Rd
28-1/4
Compton
Court
High St
Grand Mesa
Cheyenne Dr
Laguna
River

ST. MARY'S HOSPITAL
The Regional Medical Center

Exhibit D

September 24, 1992

Carl Metzner
Community Development
City of Grand Junction
Grand Junction, CO 81501

RE: Drainage and Surface runoff relating to St. Mary's Hospital & Medical Center's addition per Development Application dated August 26, 1992.

Dear Mr. Metzner,

Please accept this letter as St. Mary's Hospital & Medical Center's commitment to address the drainage and surface runoff problem as outlined by Western Engineers letter dated September 18, 1992.

I have instructed our budgeting department to prepare a line item with a maximum expenditure of $150,000 for this project to be completed as soon as possible but not later than the date the new additions brought on line.

This action was approved by our Board of Directors at a Quarterly Board meeting held September 24, 1992.

If you require any further questions regarding this matter, please do not hesitate to contact me.

Very truly yours,

Sister Lynn Casey

Sister Lynn Casey
President

2635 North 7th Street • P.O. Box 1628 • Grand Junction, CO 81502-1628 • (303) 244-2273

FF

ACTION SHEET

ACRES _____

UNITS N/A

DENSITY N/A

FINAL

FILE NUMBER #53-92

ZONE PB

TAX SCHEDULE # _____

ACTIVITY Revised Final Plan - St. Mary's Hospital Addition

PHASE Final

COMMON LOCATION 2635 N. 7th ST

DATE SUBMITTED 8-26-92 DATE MAILED OUT _____ DATE POSTED _____

_____ DAY REVIEW PERIOD RETURN BY _____

OPEN SPACE DEDICATION (acreage) N/A OPEN SPACE FEE REQUIRED $ N/A PAID RECEIPT # N/A

RECORDING FEE REQUIRED $ _____ PAID (Date) _____ DATE RECORDED _____

REVIEW AGENCIES

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG
● Planning Department	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
● City Engineer	●	●	●					●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●					
● Transportation Engineer	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●					
○ City Parks/Recreation	●	●	●	●							●	●	●	●	●	●					●	●				●		●					
● City Fire Department	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●					
● City Police Department	●	●	●										●	●	●	●					●	●				●		●					
○ County Planning	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●				●		●					
○ County Engineer	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●					
○ County Health	●	●	●						●	●	●	●	●	●	●	●	●	●			●	●				●		●					
○ Floodplain Administration	●	●	●					●			●	●	●	●	●	●	●	●			●	●				●		●					
○ G.J. Dept. of Energy	●	●	●								●	●	●	●	●	●	●	●			●	●				●		●					
○ Walker Field	●	●	●								●	●	●	●	●	●	●	●			●	●				●		●					
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○ Sewer Dist. (FV, CGV, OM)	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●				●		●					
● U.S. West	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●				●		●					
● Public Service (2 sets)	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●				●		●					
○ State Highway Department	●	●	●								●	●	●	●	●	●	●	●			●	●				●		●					
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● City Property Agent	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●				●		●					
● City Utilities Engineer	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●				●		●					
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● GJPC (7 packets)	●	●	●										●			●					●	●			●	●		●					
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BOARDS DATE

R.C. 10/6/92 Approved subject to revised agency summary comments.

STAFF

APPLICATION FEE REQUIREMENTS

$450 + $50 sign deposit

GRAND JUNCTION planning

Karl Metzner

February 26, 1993

Peter Moberg, Director
St. Mary's Hospital
P.O. Box 1628
Grand Junction, CO 81502-1628

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (303) 244-1599

Re: St. Mary's Park on Bookcliff Avenue

Dear Peter Moberg, Director:

Recently, St. Mary's Hospital staff requested approval of a building expansion to:

1) Meet increased patient needs; and
2) Provide laboratory and service facilities in keeping with current medical technology and practices.

As part of the review process, the City identified the hospital complex as a primary contributor of stormwater to the Buthorn Drain. The Buthorn Drain was originally intended only as an irrigation tailwater pipeline, and services a large area which is now mostly urbanized. As development has occurred, the drain began to be used for stormwater purposes as well. However, the drain is only capable of conveying a minimal amount of stormwater; consequently, flooding often results during significant storms.

In order to alleviate overloading of the drain, the City requested construction of a detention basin or stormwater holding pond in St. Mary's Park. The pond will slowly meter out runoff at a rate more suited to the capacity of the Buthorn Drain. Water will be in the pond only for short periods during significant storm events, and should not substantially interfere with its current use.

The pond, associated storm drain facilities, and landscape restoration will be provided by St. Mary's Hospital. We sympathize with any inconvenience you may experience as a result of disruption, but would appreciate your patience during the construction of this much needed project.

If you have any questions regarding this project, please feel free to call at 244-1591.

Sincerely,

Gerald Williams

Gerald Williams, P.E.
City Development Engineer

DRAINAGE STUDY
ST MARY'S HOSPITAL ADDITION
Grand Junction, Colorado
January, 1993

Prepared by:
WESTERN ENGINEERS, INC
2150 HIGHWAY 6 & 50
GRAND JUNCTION, COLO

TABLE OF CONTENTS

DRAINAGE STUDY
ST MARY'S HOSPITAL
Grand Junction, Colorado
January, 1992

SCOPE

St Mary's hospital currently proposes to construct an addition to the existing hospital building at 7th street and Patterson Road in Grand Junction. The total developed area used by the hospital encompasses approximately 20 acres. Current stormwater discharges from the site occur overland or by means of dedicated conveyance facilities. Presently, there are no provisions for detention or retention of stormwater runoff. The runoff water from the entire site eventually flows to the Buthorn Drain which is at maximum capacity during frequent storm events and does not have adequate capacity for the less frequent events. The runoff from the St Mary's site has a significant impact on the flows draining to the Buthorn drain. As a result, an agreement was reached between the City of Grand Junction and St Mary's Hospital to provide some detention for the hospital runoff. The site for the detention pond is the existing St Mary's Hospital Park located in the southwestern portion of the property. As will be discussed in subsequent paragraphs, the developed site can be divided into generally three drainage basins. The runoff from two of the basins (basins 1 and 3) can relatively easily be diverted into the detention pond site, while the third (basin 2) would require installation of storm drains to collect runoff and convey it to the pond. Based on these considerations and discussions with the City Engineering Department, the design requirements for the collection and detention facilities were determined as follows:

1. Facilities will be constructed to provide for collection of all basin 1 and 3 runoff and conveyance to the detention pond.

2. Provisions will be made in the current designs to allow for the future construction of facilities necessary for the collection of basin 2 runoff and drainage into the detention pond. Any future construction of these facilities will be performed by the City.

3. The detention pond will be sized to store the 100 year runoff from basins 1 and 3 while restricting the basin outflow. The pond will also be sized to store at least the 40 to 50 year runoff from all three basins while restricting the basin outflow. The outflow from the detention pond due to runoff from basins 1 and 3 will be limited to less than the prehistoric runoff from the entire site during the 2 and 100 year events. The outflow from the detention pond due to runoff from all three basins will be limited as much as practical.

SURFACE DRAINAGE CHARACTERISTICS

As was mentioned above, the drainage area can generally be divided into three basins. The basin divisions are shown on Figure 1 in the Appendix.

Drainage basin 1 encompasses nearly 70 percent of the site and drains southeastward to the low point on Center Street at the intersection with 6th Street. Runoff from basin 1 occurs by a combination of overland flow, gutter flow and flow through storm drains. Basin 1 can be further subdivided into 4 subbasins determined by the route which the runoff water takes to reach the concentration point at Center and 6th. The flow from two of these subbasins originates in the west and southwest parking areas and follows the north and south gutters along Center Street respectively running southeasterly. Runoff from a third subbasin which encompasses the northwest parking area is captured by catch basins and is conveyed through an 18 inch diameter storm drain to a concrete ditch located just west of the intersection of Center and 6th Street. Flows in this concrete ditch cross Center Street in a culvert and discharge into the street gutter on the northwest corner of

Center and 6th Street. The fourth subbasin includes the hospital building, the Saccomano Building, and the parking area to the south of the hospital. Runoff from this subbasin is captured by a combination of building gutters and catch basins and flows through a series of storm drains to the concrete ditch mentioned above.

Drainage basin 2 consists of the northeast and east parking areas. Runoff from this basin travels overland until it either reaches the west gutter along 7th Street or is intercepted by the catch basin in the southeast corner of the upper parking lot. The flow in both the 7th Street west gutter and the southeast catch basin are captured by the underground storm drainage system which runs southward along 7th Street.

Drainage basin 3 includes the buildings, landscape and parking areas located on the lower level of the southeastern portion of the site. Surface water from basin 3 travels overland and through gutters to the north side of Center Street where it flows west to the low point on Center Street.

As can be seen from the above description of the site drainage, the concentration point for basins 1 and 3 is the low point at the intersection of Center Street and 6th Street.

Tables 1 and 2 show the percentages of various ground covers for each of the three basins under both original and final conditions.

DRAINAGE EVALUATION METHODOLOGY

The drainage basin was evaluated for 2 storm recurrence intervals consisting of the 2 and 100 year storms. In order to provide a comparison, the runoff characteristics were evaluated using 2 methods. These consisted of the rational method and the SCS tabular method with a type II unit hydrograph. The SCS tabular method was chosen because it provides a method for obtaining runoff hydrograph data. Hydrograph values were obtained from the appropriate Tables published in "Urban

Hydrology for Small Watersheds, Technical Release No. 55, Soil Conservation Service" (SCS-TR-55) depending on the storm distribution type, initial abstraction value, storm precipitation depth and time of concentration. The Modified Rational Method was used to provide comparison hydrograph data. Design storm values were obtained from two sources -- "Interim Outline of Grading and Drainage Criteria, City of Grand Junction, July, 1992" and "Mesa County Storm Drainage Criteria Manual". The determination of the runoff coefficients in the rational method as well as the curve number values used in the SCS tabular method are presented in Tables 1 and 2 in the Appendix. The soil group number required for the SCS tabular method was evaluated based on information compiled by the Soil Conservation Service and presented in a report entitled "Soil Survey, Grand Junction Area, Colorado." Times of Concentration were determined using the rational runoff coefficients and the following methods:

1. For sheet flow the following SCS-TR-55 formulas were used:

$$TO_2 = \frac{0.42(NL)^{0.8}}{S^{0.4}}$$

$$TO_{100} = \frac{0.26(NL)^{0.8}}{S^{0.4}}$$

2. For overland flow beyond 300 feet and shallow concentrated flow, the table entitled "Average Velocities for Overland Flow" from the SCS TR-55 was used to determine flow velocities.

3. For gutter flow, the Manning equation modified by Izzard was used as follows:

$$Q = \frac{0.56(Z)(D^{8/3})(S^{1/2})}{n}$$

For cases where lag times were determined to be less than 5 minutes a minimum value of 5 minutes was used for the time of concentration. The calculations of the times of concentration are summarized on Table 3 in the Appendix.

Tables 4 and 5 in the Appendix present a summary of the resulting peak flow values and volumes. The surface flow hydrographs are presented on Figure 2 in the Appendix for the original undeveloped conditions and Figures 3 through 10 for the final conditions.

The detention pond volume and discharge capacity were sized to accommodate the design storms derived by both the SCS Method and the Modified Rational Method while satisfying the previously mentioned criteria as much as possible. The storm hydrographs were routed through the proposed detention pond and discharge pipe system using a Western Engineers routing spreadsheet which uses the storage routing methods. Tabulations of the routing calculations including inflow and outflow hydrographs are presented in the Appendix on Tables 16-23.

The capacity and flow rating curves for the proposed detention pond are shown on Figures 11 and 12. The discharge from the proposed detention pond will be by means of a two level outlet system including two standard catch basins. The purpose of the two level outlet is to restrict outflows during the frequent storms while allowing the discharge from the less frequent storms to be controlled through the outlet system without overtopping the detention pond. The lower level catch basin will discharge through a 4 inch diameter orifice in the side of the basin into a horizontal 6 inch diameter pipe. The upper level catch basin will discharge by means of a vertical 12 inch diameter drop outlet connecting to the discharge pipe from the lower level catch basin. The outlet pipe downstream from the 12 inch diameter drop outlet will be 12 inch diameter to accommodate the total flow. This downstream discharge pipe will connect directly to the Buthorn drain system which runs along the south side of Bookcliff Avenue. The pipe entrance for

the lower level catch basin was treated as an orifice using the following formula with an orifice coefficient of 0.62:

$$Q = CA(2gH)^{0.5}$$

The pipe entrance to the upper level catch basin could be controlled either by orifice or weir conditions depending on the head. The orifice capacity was evaluated by the formula shown above. However, because the outlet includes a tube extension the same size as the orifice, the an orifice coefficient of 0.8 was used. The capacity of the catch basin grates for both the lower and upper level inlets in the detention pond were also calculated for ponding conditions using the above formula with an orifice coefficient of .62 and an area of 2.2 sq ft per grate for the standard City of Grand Junction catch basin. A 50 percent clogging factor was applied to the grates as required by the City of Grand Junction Criteria.

The weir capacity for the upper level catch basin was calculated by use of the following formula with a weir coefficient of 3.3 for a sharp crested weir with the vertical pipe protruding up into the bottom of the catch basin:

$$Q = CLH^{1.5}$$

Pipe flow characteristics were evaluated using the Manning Formula with a coefficient of .008 for PVC pipe. The total outlet system capacity was determined including both inlet flow and pipe flow characteristics for each of the catch basins. Since it is impractical to determine the hydraulic grade line elevation at the connection to the Buthorn drain during the full range of detention pond discharges, it was assumed that, any time during which discharges from the detention pond are occurring, the hydraulic grade line elevation at the connection to the drain will be at the top of the Buthorn drain pipe. The detention pond discharge capacity was evaluated using a trial and error method in which the hydraulic grade elevation at the tee connection for the upper

level catch basin drop outlet was varied until a maximum possible flow rate from the combined catch basins was identified. Tabulations of the calculations for the detention pond discharge capacity which were made by use of a spreadsheet program are included on Table 6 in the Appendix. A plot of the hydraulic grade levels during the peak discharge for all three drainage basins combined is shown on Figure 13 in the Appendix for both the 2 and 100 year storm events.

The capacity of the catch basins to be installed at the concentration points in the street gutters was determined in two different ways depending on the catchment condition. For catch basins and curb boxes placed in a depression for ponding conditions, the orifice formula previously presented was used with an orifice coefficient of 0.62. For catch basins and curb boxes placed along the gutter flow line without ponding conditions, the Manning equation modified by Izzard and simplified to include a grate capacity coefficient was used as follows:

$$Q = KD^{1.67}$$

The grate capacity coefficients used in the above formula were obtained from the Neenah manual for inlet grate capacities. In accordance with the City of Grand Junction Criteria the grate capacity in these situations did not include a clogging factor, but the capacity of the curb box was ignored.

In conjunction with the Modified Rational method, it was necessary to vary the storm duration to determine the storm event that will most severely impact the detention facilities. Tabulations of the resulting Modified Rational hydrographs for the two storm events and for a range of storm durations are shown on Tables 12 and 13 in the Appendix for combined flows from basins 1 and 3 and Tables 14 and 15 for combined flows from basins 1, 2 and 3.

As was previously mentioned, the stormwater collection and conveyance facilities planned as part of this project will divert runoff from basins 1 and 3 into the detention pond. Therefore, the inflow\outflow hydrographs shown on Figures 3 through 6 in the Appendix are for combined flows from these two basins. However, since consideration needs to be made for the possible future diversion of basin 2 runoff into the detention pond, the impact of the runoff from all three basins on the detention pond performance was evaluated and is shown on Figures 7 through 10 in the Appendix.

The following table summarizes the results of the hydrologic evaluations:

BASIN I.D.	SITE CONDITION	CRITICAL STORM DURATION (MIN)	STORM RECURRENCE INTERVAL (YEAR)	SITE RUNOFF (CFS)	PEAK POND OUTFLOW (CFS)	PEAK POND DEPTH (FT)	PEAK POND STORAGE (CU FT)
ALL	PREDEV	1440 (SCS)	2	0.70	N/A	N/A	N/A
ALL	PREDEV	1440 (SCS)	100	12.57	N/A	N/A	N/A
ALL	PREDEV	70 (RATION)	2	1.00	N/A	N/A	N/A
ALL	PREDEV	50 (RATION)	100	8.65	N/A	N/A	N/A
1	FINAL	1440 (SCS)	2	5.49	N/A	N/A	N/A
1	FINAL	1440 (SCS)	100	39.86	N/A	N/A	N/A
1	FINAL	90 (RATION)	2	4.02	N/A	N/A	N/A
1	FINAL	70 (RATION)	100	13.85	N/A	N/A	N/A
2	FINAL	1440 (SCS)	2	1.00	N/A	N/A	N/A
2	FINAL	1440 (SCS)	100	6.19	N/A	N/A	N/A
2	FINAL	90 (RATION)	2	1.20	N/A	N/A	N/A
2	FINAL	70 (RATION)	100	4.11	N/A	N/A	N/A
3	FINAL	1440 (SCS)	2	0.97	N/A	N/A	N/A
3	FINAL	1440 (SCS)	100	6.23	N/A	N/A	N/A
3	FINAL	90 (RATION)	2	0.65	N/A	N/A	N/A
3	FINAL	70 (RATION)	100	2.23	N/A	N/A	N/A
1&3	FINAL	1440 (SCS)	2	6.47	0.70	1.80	5,595
1&3	FINAL	1440 (SCS)	100	46.09	7.39	4.72	48,857
1&3	FINAL	90 (RATION)	2	4.67	0.87	3.19	21,132
1&3	FINAL	70 (RATION)	100	16.08	7.76	4.91	52,552
1,2&3	FINAL	1440 (SCS)	2	6.70	0.74	2.05	7,755
1,2&3	FINAL	1440 (SCS)	100	47.19	8.12	5.09	56,045
1,2&3	FINAL	90 (RATION)	2	5.87	0.91	3.57	26,685
1,2&3	FINAL	70 (RATION)	100	20.19	8.92	5.50	63,995

PROPOSED DRAINAGE FACILITIES

Site conveyance facilities will be installed as part of this project which will include a combination of catch basins and pipes to capture all of the runoff from drainage basins 1 and 3 and transport to a proposed detention pond. Additionally, provisions will be made to allow for future installation of facilities to intercept the flow from basin 2 and divert it into the proposed detention pond. It must be recognized that, if the basin 2 flows are captured by means of intercepting all of the water currently flowing in the piped storm drain system running along Seventh Street, more water will flow into the detention pond than anticipated in this analysis. This is because the Seventh Street line carries runoff water from a significantly larger drainage area than just basin 2, although the exact extent of the tributary area is not known. The result is that, if the Seventh Street line is intercepted, the detention pond may spill over the overflow section and out the Sixth Street catch basin during events with recurrence intervals less than 100 years.

The majority of the site runoff from basins 1 and 3 is currently directed into a piped storm drain system which runs along the North side of Center Avenue and discharges on the surface at the intersection of Center Avenue and Sixth Street. The proposed plan includes intercepting the flow in this existing piped system before it reaches its discharge point and diverting the water into the detention pond. In addition, the water which currently flows along the Center Avenue gutters and ends up at the intersection of Center Avenue and Sixth Street will be captured by a double catch basin on the north side of this intersection combined with a single catch basin to be constructed on the southwest side of the intersection. The flows into these catch basins will be piped westward to the proposed detention pond. Calculation of the required capacity for the catch basins was based on a storm duration of 5 minutes since only water from drainage basins 1 and 3 will be captured by the proposed catch basins and since calculated concentration times for these two

basins were less than 5 minutes. Catch basin capacity was based on the 100 year storm event. Table 7 in the Appendix presents a summary of the calculations for the catch basin capacities. The calculations indicated a need for a double catch basin on the north side of the intersection of Center Avenue and Sixth Street and a single basin on the south side of the intersection. The single catch basin on the south side has an indicated capacity of about 6.9 cfs while the estimated 100 year flow was 7.4 cfs. Even though the apparent catch basin capacity is slightly less than the calculations indicated will occur, it was concluded that this undercapacity was not significant considering the facts that the curb box was not taken into account in the calculations, the excess flows will only occur during the most infrequent storm events and any excess water not captured by the catch basin can continue south along Sixth Street.

Following are area and capacity tables for the proposed detention pond. Since the influent lines into the pond are relatively flat and of significant size, it was important to include their volume as part of the total for the pond. The volumes were calculated using the conical method:

FINAL DETENTION VOLUME

ELEVATION	POND AREA(SQ FT)	POND VOLUME(CU FT)	PIPE VOLUME(CU FT)	TOTAL VOLUME(CU FT)
27.50	0	0	0	0
28.00	375	63	47	100
29.00	4,558	2,143	889	3,032
30.00	10,443	9,443	2,192	11,635
31.00	16,106	22,616	2,757	25,373
32.00	19,392	40,340	2,757	43,097
33.00	22,297	61,167	2,757	63,924

FINAL DETENTION DISCHARGE

ELEVATION	FLOW (CFS)
27.50	0
28.50	0.70
29.50	0.92
30.50	0.85
31.50	7.13
32.50	9.02

The elevation of the overflow crest for the detention pond was set at the elevation of the catch basin grate on the southwest corner of the intersection of Center Avenue and Sixth Street at about elevation 33.0. This was because a higher water surface elevation in the detention pond would result in uncontrolled backflow out of the pond through this catch basin into the gutter on the west side of Sixth Street.

The discharge system capacity calculations made indicated that a double grate catch basin will be needed for the upper level detention pond outlet in order to accommodate the 100 year storm flows without the catch basin grate controlling the flow, considering the design requirement of a 50 percent clogging factor for the grate. The calculations summarized on Table 6 in the Appendix include this double installation. In addition to the considerations previously discussed, the above discharge capacities are based on the assumption that the hydraulic grade line elevation at the connection to the Buthorn drain pipe will not be higher than the top of the Buthorn drain pipe. As was previously mentioned, there was not sufficient information available to determine the hydraulic grade elevation in the Buthorn drain pipe during the two storm events. If significantly higher back pressure develops at this connection than was assumed in the calculations, the discharge capacity of the detention pond outlet might be lower than the values shown above or it might even be possible for backflow to occur from the drain into the detention pond since the ground elevation at the Buthorn

drain manhole on the south side of Bookcliff Avenue is nearly 2 feet higher than the bottom of the detention pond. No provisions were made in the design to prevent such backflow from occurring.

The analyses indicated that the proposed pond and outlet system will be capable of accommodating storms up to the 100 year recurrence level without overtopping the pond. However, a pond overflow section will be provided to allow for flows in excess of those analyzed. This overflow section will consist of a length of dike crest along Bookcliff Avenue approximately 150 feet long. The overflow section will be depressed about 0.5 foot below the remaining top of pond elevation to allow for controlled crest spills as much as .05 foot deep along the overflow section. To protect the overflow section from erosion during spills, a concrete sidewalk with an upstream cutoff will be provided along the spillway.

It can be seen from the above summary data that, within reasonable limits, for all storm events and with all calculation methods used, the off-site discharge under the final proposed conditions will be about the same or less than that which would have occurred during the same storms under the predevelopment conditions. The events during which the detention pond outflow was found to exceed the predevelopment conditions are listed below:

STORM EVENT	DRAINAGE BASINS	ANALYSIS METHOD	PREDEVELOPMENT RUNOFF (CFS)	FINAL DETENTION POND DISCHARGE (CFS)	PERCENT INCREASE
2 Year	1, 2 & 3	SCS	0.70	0.74	6
100 Year	1, 2 & 3	Rational	8.65	8.92	3

In view of the facts that the amounts of increase shown above are small and that detention pond/discharge system is capable of handling

the 100 year event from all three drainage basins rather than just the 40 to 50 year event as initially targeted, the proposed system was considered adequate.

The maximum water depth in the pond for any of the routed storm hydrographs considered was 5.50 feet. The detention pond and outlet control will be maintained by personnel from St Mary's Hospital.

APPENDIX

ST MARY'S HOSPITAL
UNDEVELOPED CONDITIONS

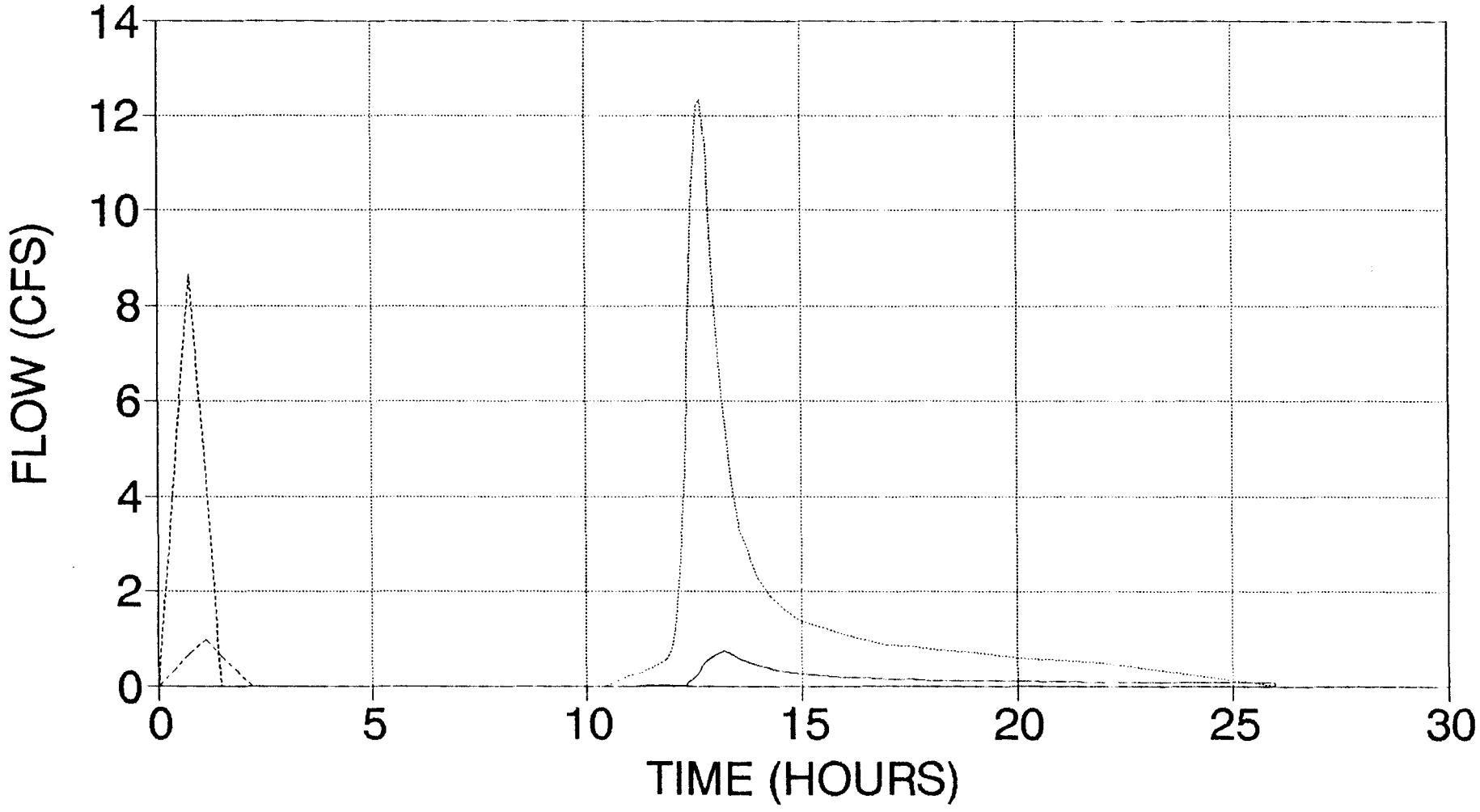


Figure 2

ST MARY'S HOSPITAL, COMBINED BASINS SCS METHOD, FINAL CONDITIONS

2 YEAR STORM, BASINS 1 AND 3

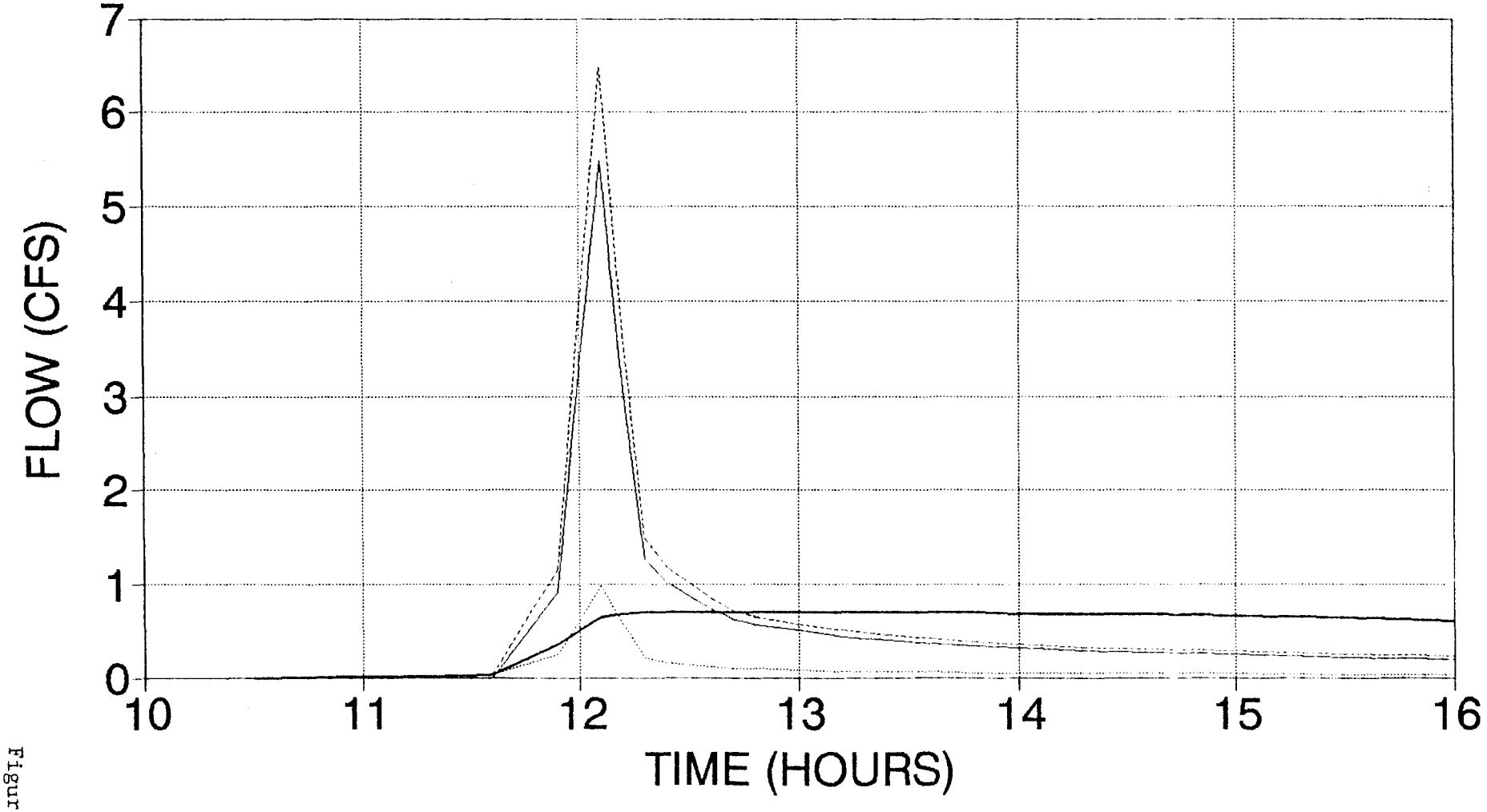


Figure 3

ST MARY'S HOSPITAL, COMBINED BASINS
SCS METHOD, FINAL CONDITIONS

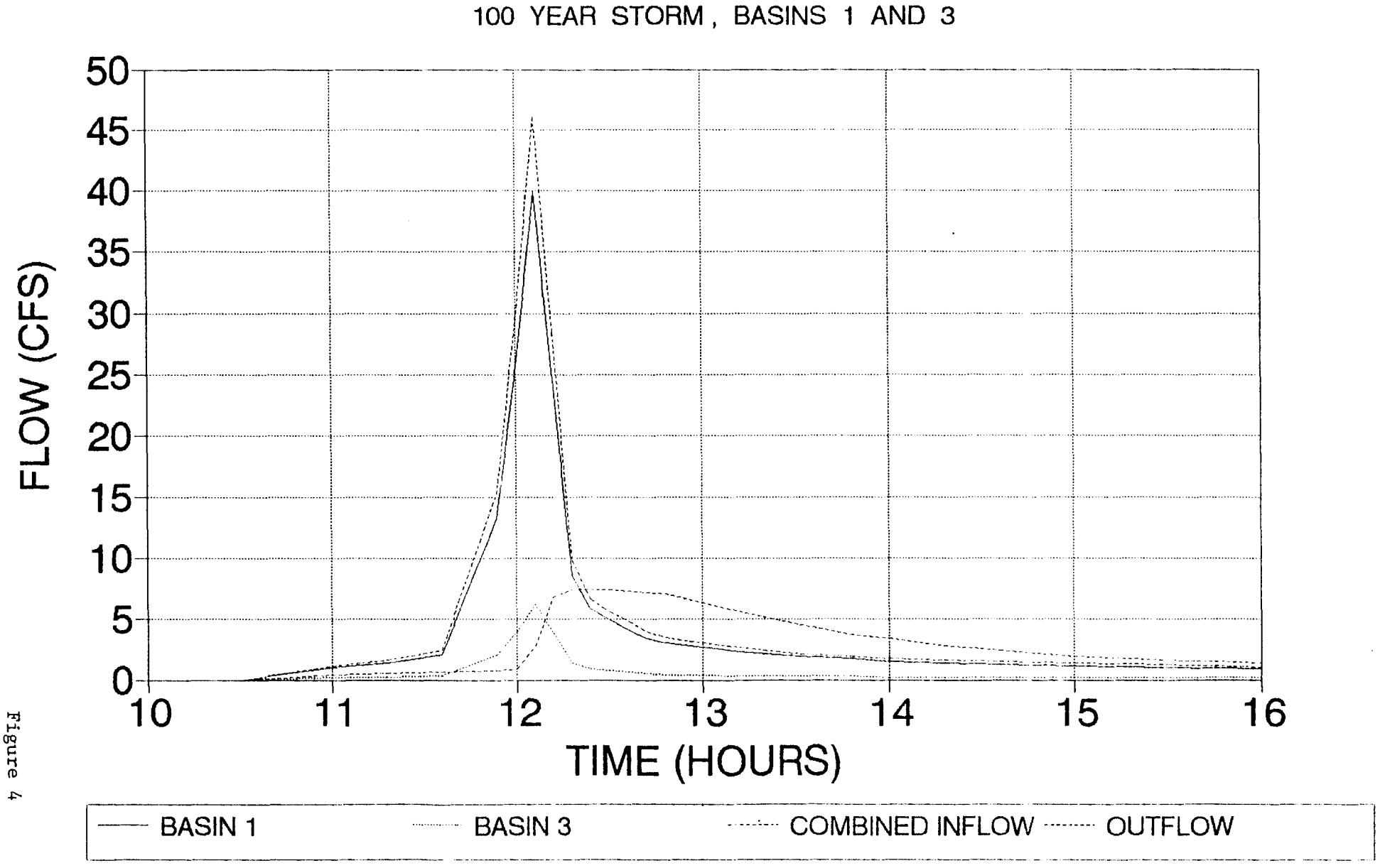


Figure 4

ST MARY'S HOSPITAL, COMBINED BASINS MODIFIED RATIONAL, FINAL CONDITIONS

2 YEAR STORM, BASINS 1 AND 3

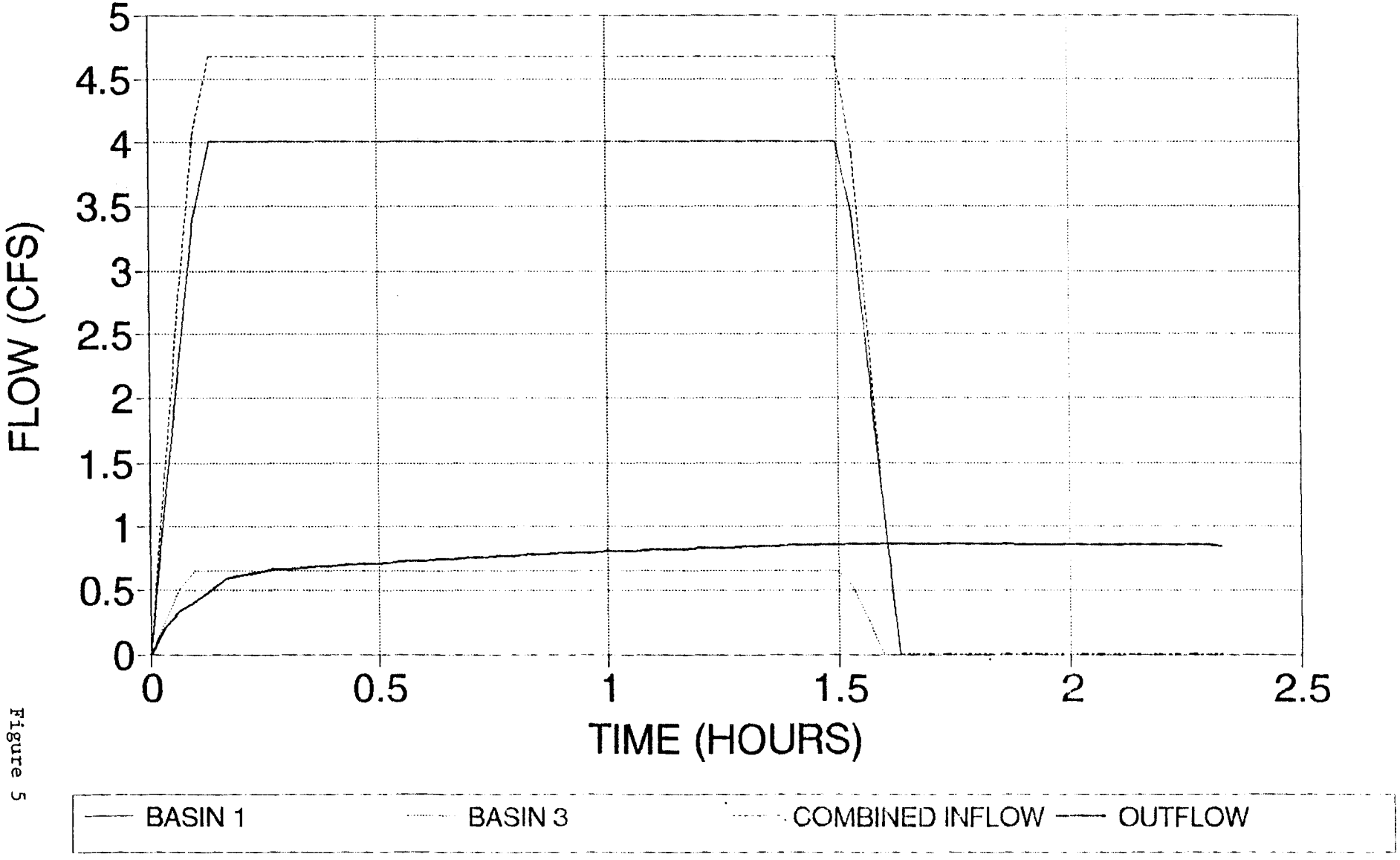


Figure 5

ST MARY'S HOSPITAL, COMBINED BASINS MODIFIED RATIONAL, FINAL CONDITIONS

100 YEAR STORM, BASINS 1 AND 3

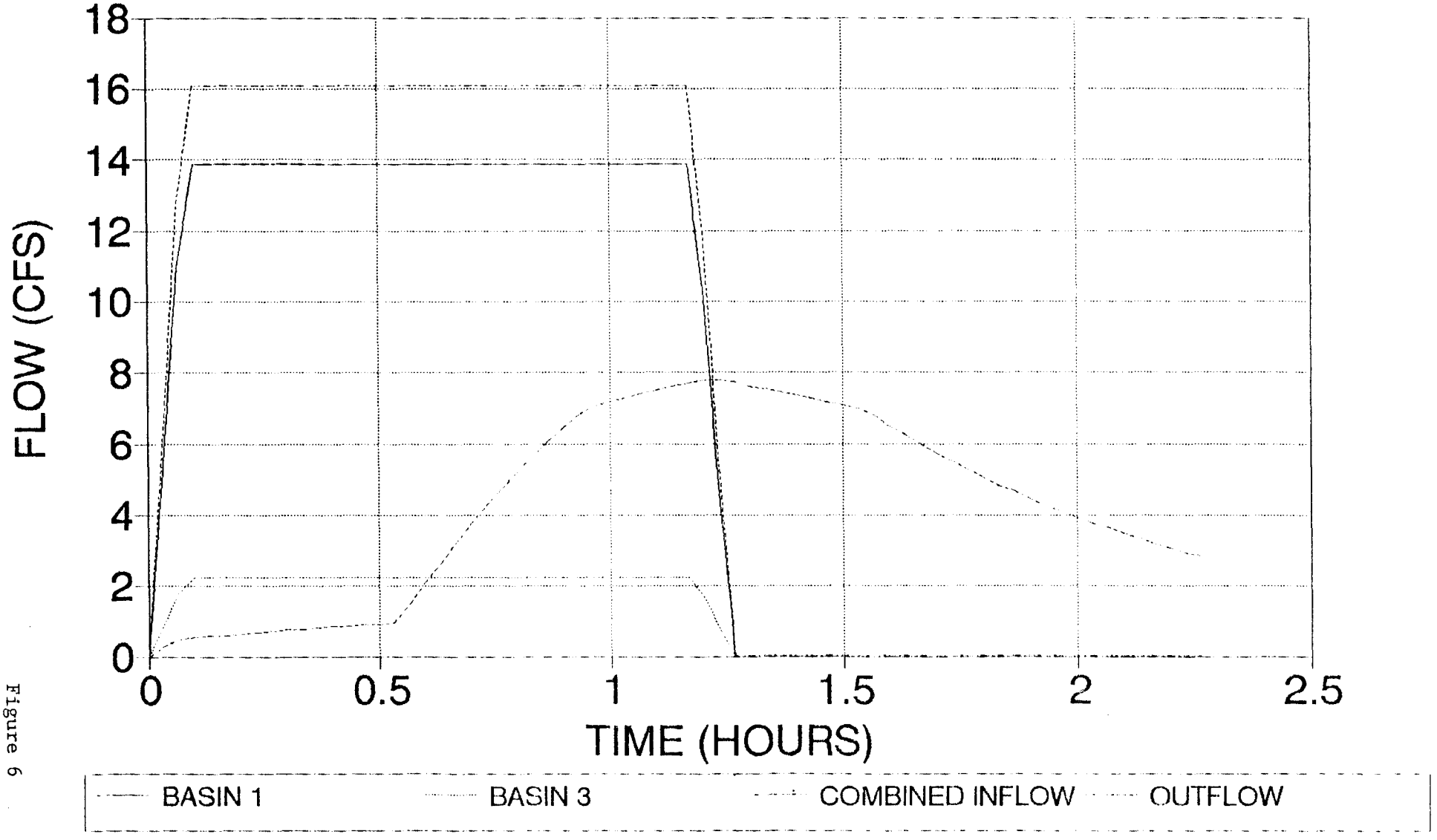


Figure 6

ST MARY'S HOSPITAL, COMBINED BASINS SCS METHOD, FINAL CONDITIONS

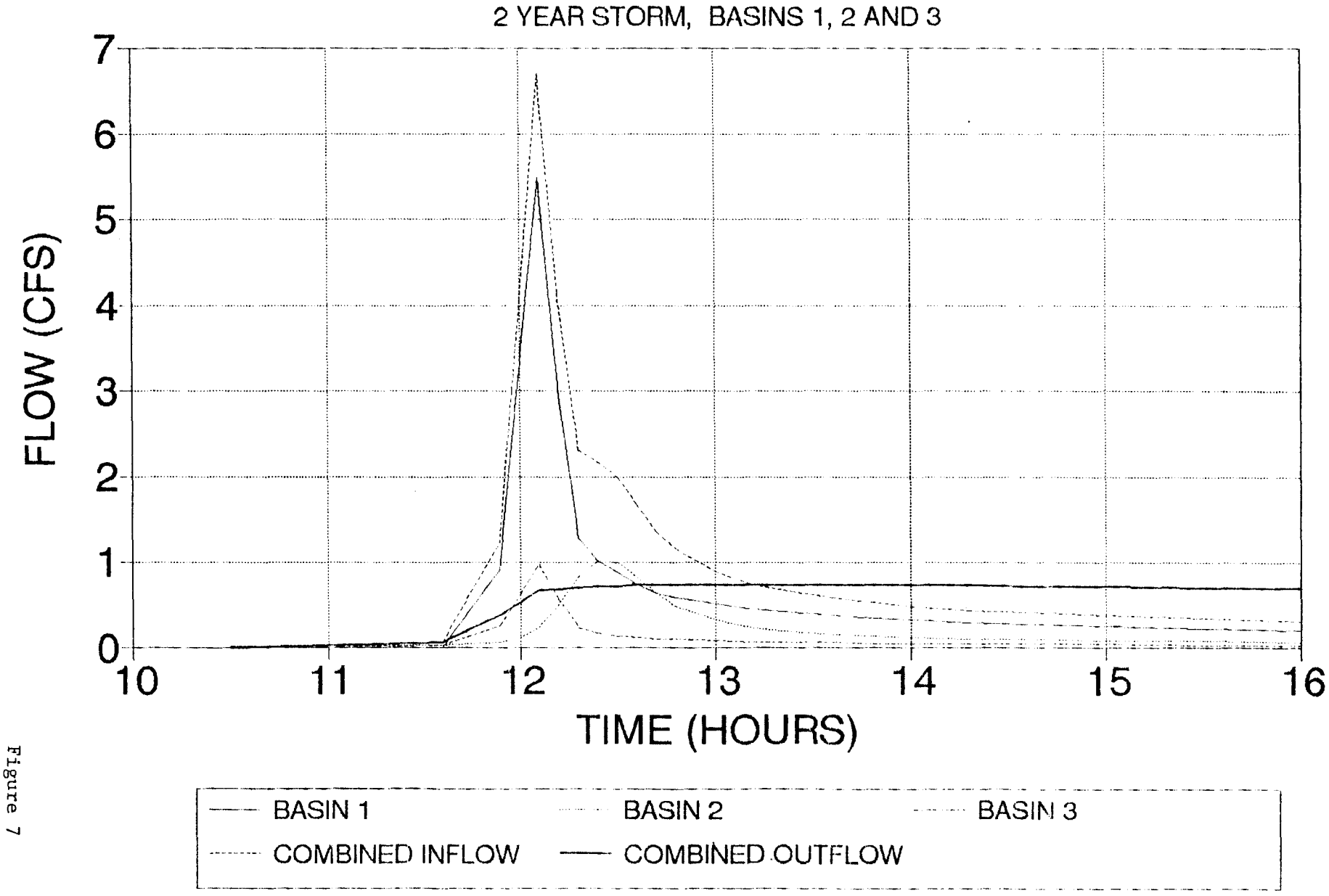


Figure 7

ST MARY'S HOSPITAL, COMBINED BASINS SCS METHOD, FINAL CONDITIONS

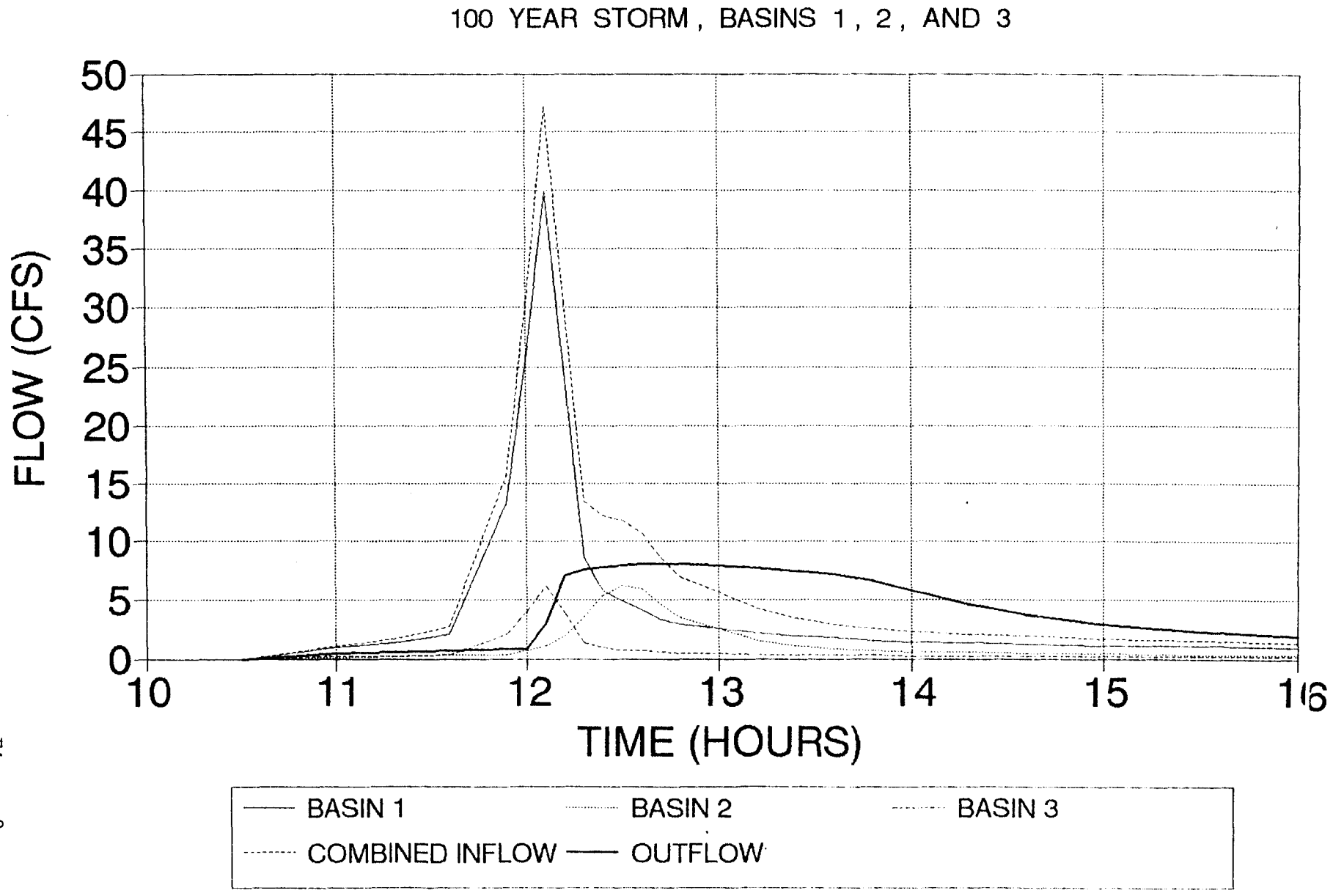


Figure 8

ST MARY'S HOSPITAL, COMBINED BASINS MODIFIED RATIONAL, FINAL CONDITIONS

2 YEAR STORM, BASINS 1, 2 AND 3

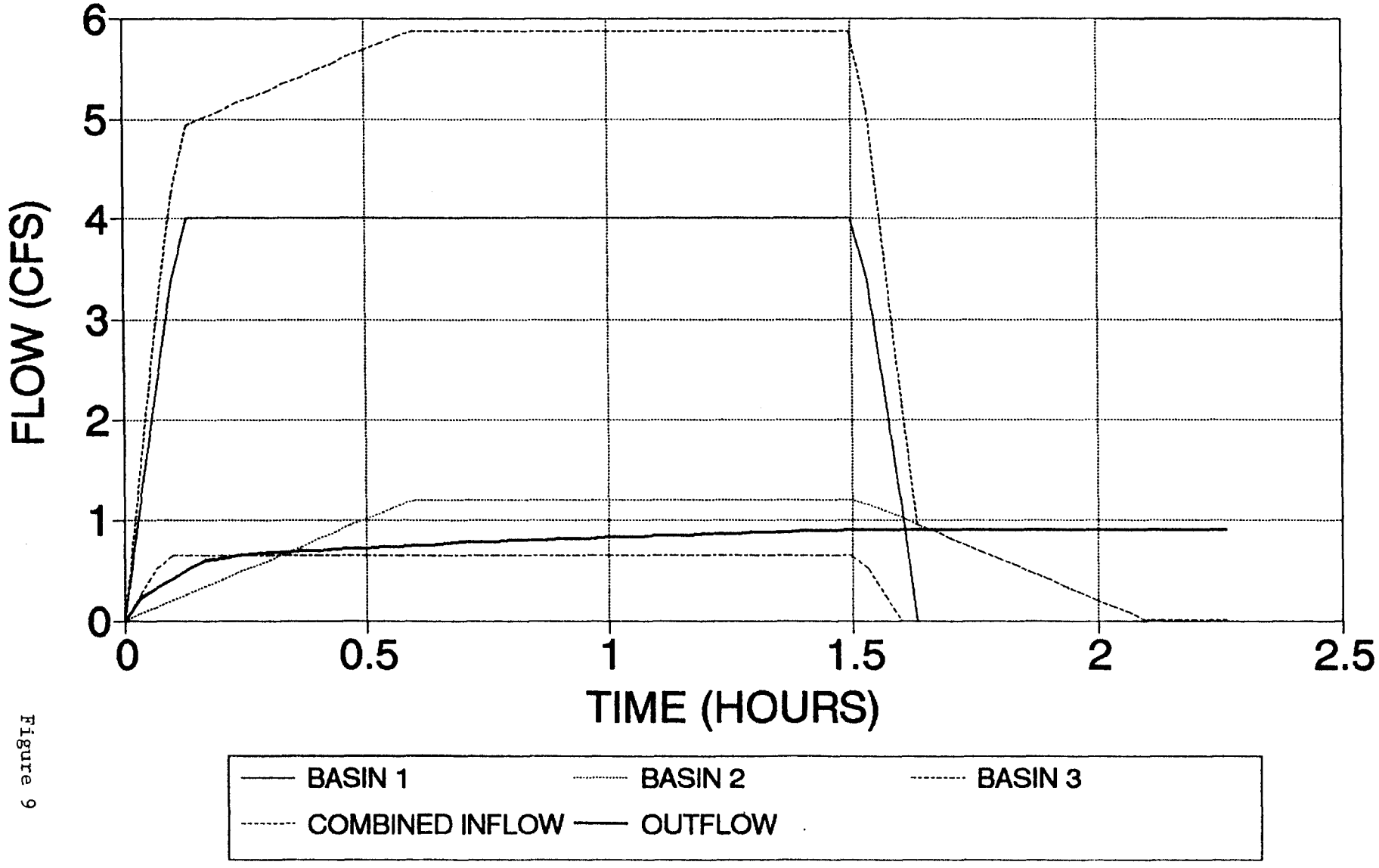


Figure 9

ST MARY'S HOSPITAL, COMBINED BASINS MODIFIED RATIONAL, FINAL CONDITIONS

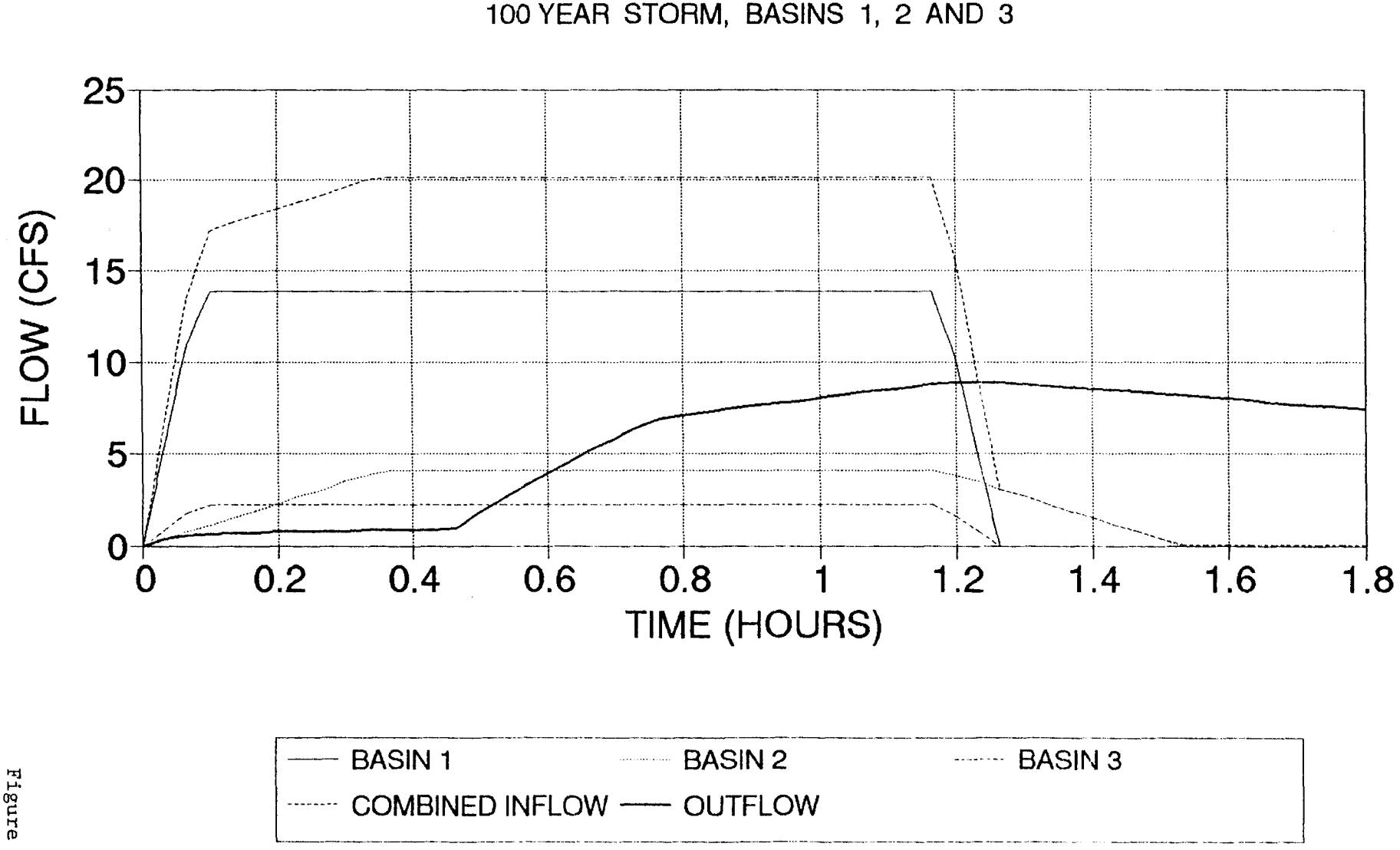


Figure 10

ST MARY'S HOSPITAL

DETENTION POND CAPACITY

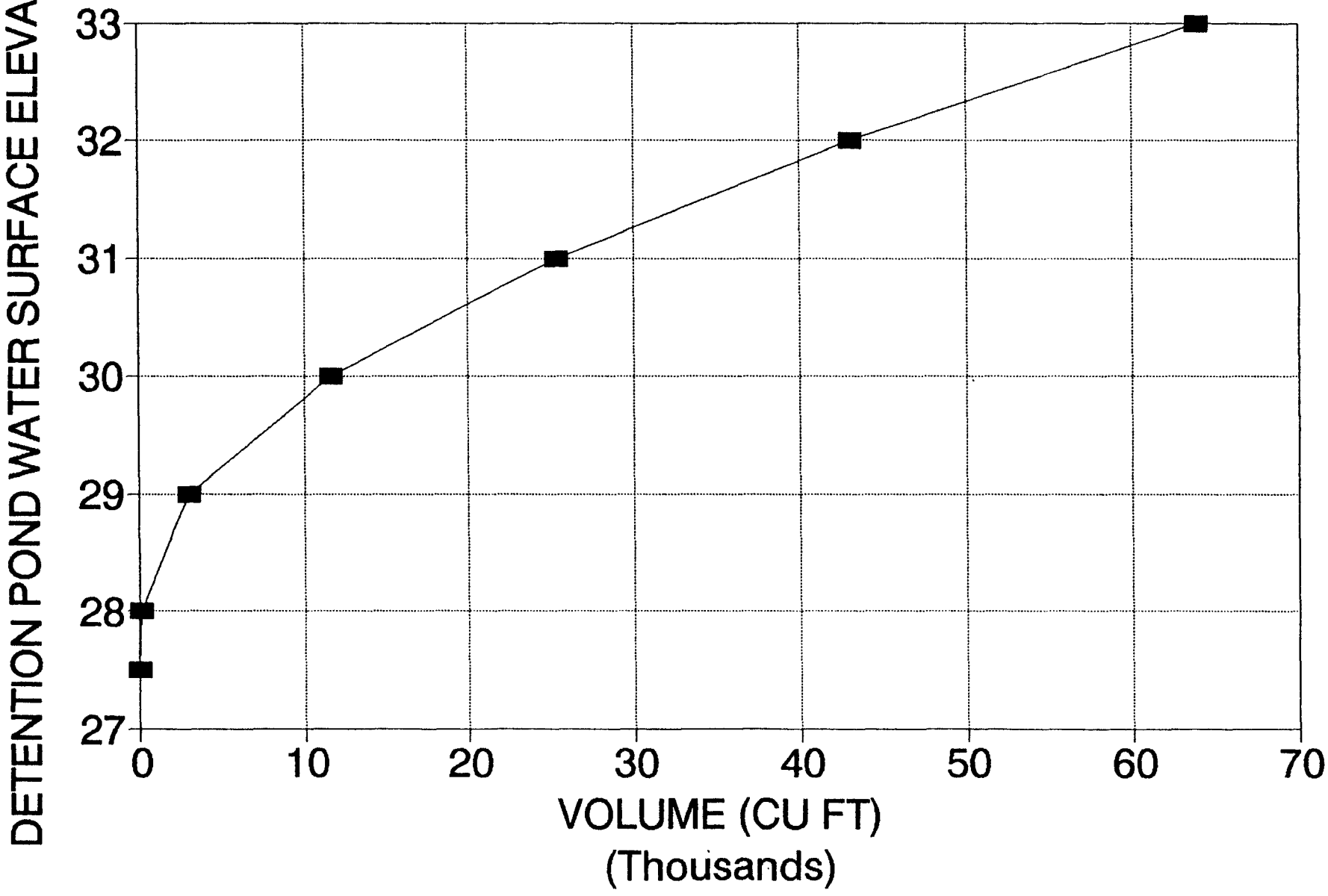


Figure 11

ST MARY'S HOSPITAL
DETENTION POND - LOWER LEVEL OUTLET

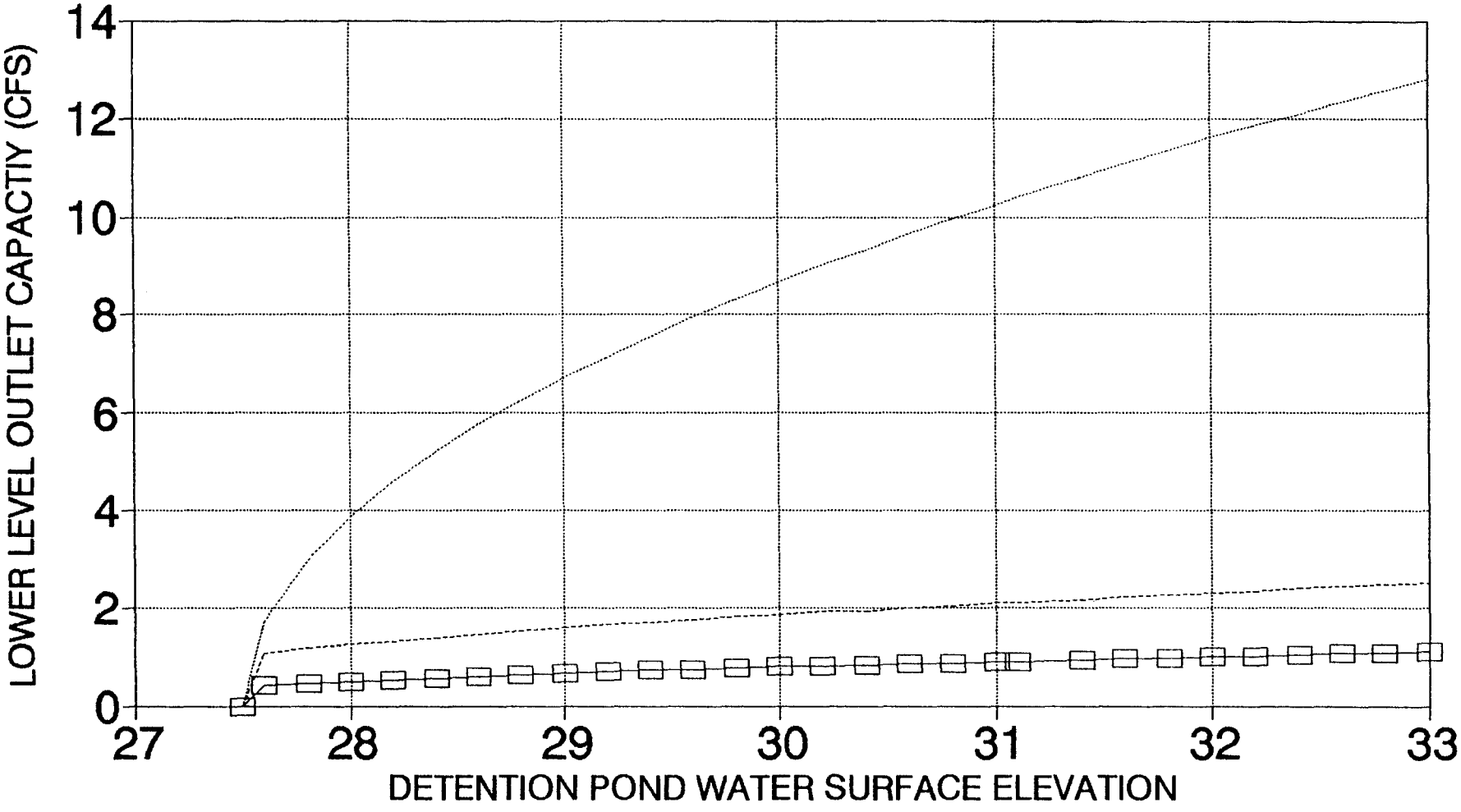
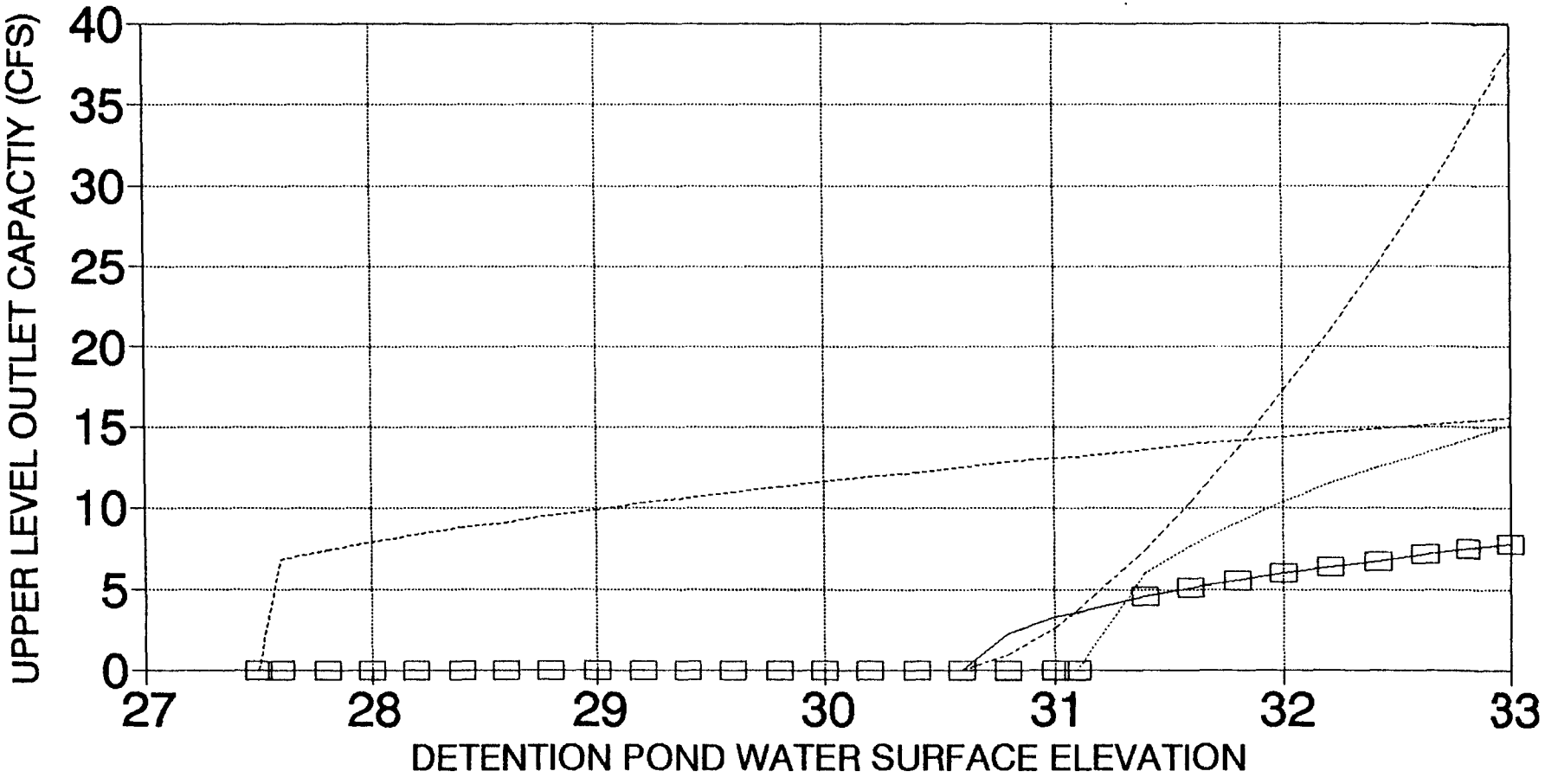


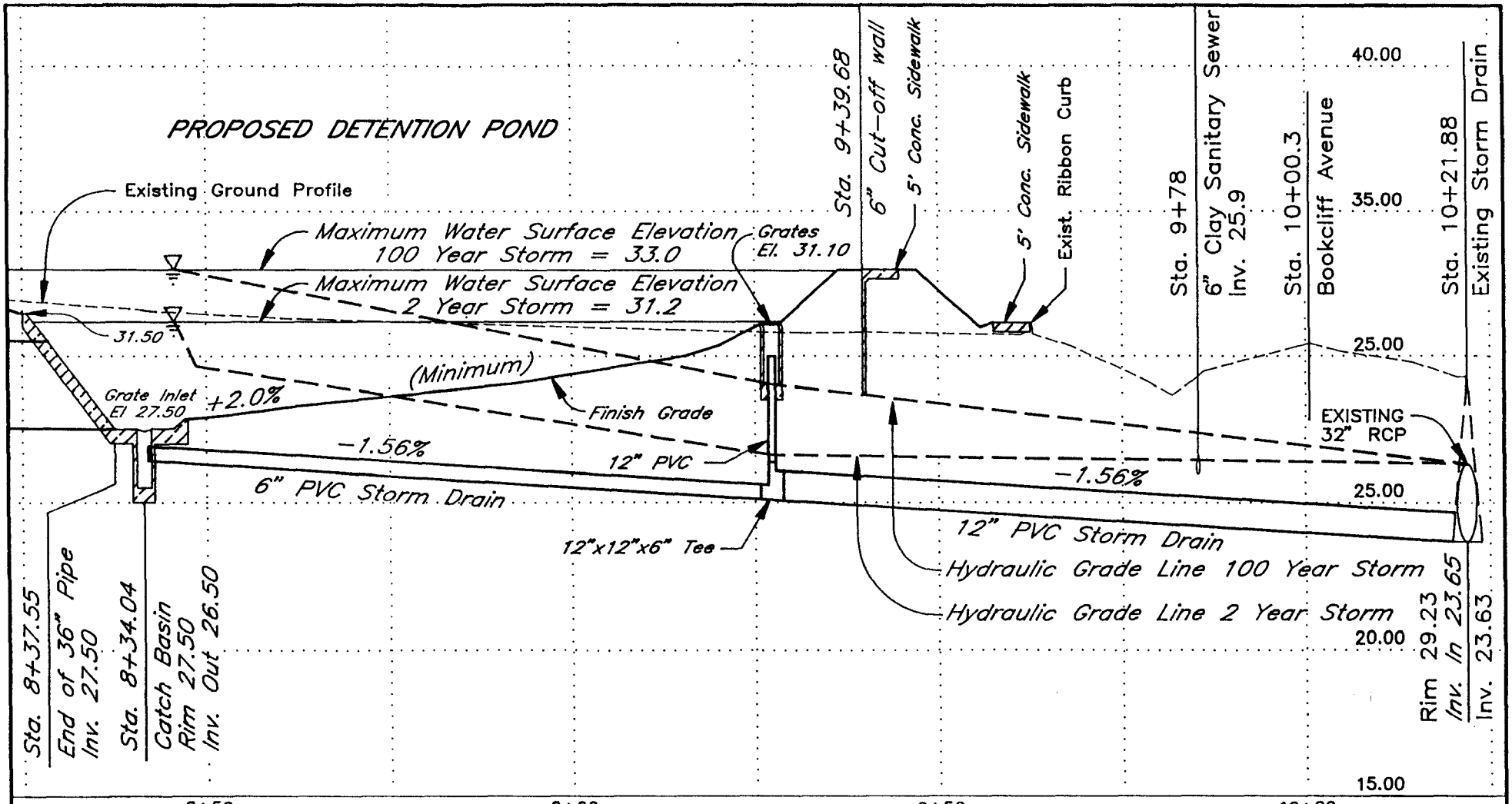
Figure 12A

ST MARY'S HOSPITAL
DETENTION POND - UPPER LEVEL OUTLET



ORIFICE
GRATE
PIPE
OVERALL
CREST

Figure 12B



PROFILE – PROPOSED STORM DRAIN
SCALE: HORIZ. 1" = 25'
VERT. 1" = 5'

FIGURE 13
ST. MARY'S HOSPITAL
WESTERN ENGINEERS, INC.
GRAND JUNCTION, CO. 2–4–93

ST MARY'S HOSPITAL
UNDEVELOPED CONDITIONS (2 YEAR STORM)
HYDROLOGY STUDY

GROUND SURFACE COVER TYPE	RATIONAL RUNOFF COEFFICIENT	SCS RUNOFF CURVE NUMBER (24 HR)	AREA (ACRES)	PERCENT	RATIONAL WEIGHTING FACTOR	SCS RUNOFF WEIGHTING FACTOR (24 HR)
ASPHALT	0.90	98.00	0.00	0.00	0.000	0.000
ROOF	0.90	98.00	0.00	0.00	0.000	0.000
LAWN 2%	0.15	78.00	0.00	0.00	0.000	0.000
BARE GROUND	0.10	82.00	19.88	100.00	0.100	82.000
TOTAL			19.88	100.00	0.10	82.00

ST MARY'S HOSPITAL
UNDEVELOPED CONDITIONS (100 YEAR STORM)
HYDROLOGY STUDY

GROUND SURFACE COVER TYPE	RATIONAL RUNOFF COEFFICIENT	SCS RUNOFF CURVE NUMBER (24 HR)	AREA (ACRES)	PERCENT	RATIONAL WEIGHTING FACTOR	SCS RUNOFF WEIGHTING FACTOR (24 HR)
ASPHALT	0.95	98.00	0.00	0.00	0.000	0.000
LAWN 7%	0.35	81.00	0.00	0.00	0.000	0.000
LAWN 2%	0.25	78.00	0.00	0.00	0.000	0.000
BARE GROUND	0.25	98.00	19.88	100.00	0.250	98.000
TOTAL						

Table 1

ST MARY'S HOSPITAL
FINAL CONDITIONS (2 YEAR STORM)
HYDROLOGY STUDY

GROUND SURFACE COVER TYPE	RATIONAL RUNOFF COEFFICIENT	SCS RUNOFF CURVE NUMBER (24 HR)	BASIN 1 AREA (ACRES)	BASIN 1 PERCENT	BASIN 1 RATIONAL WEIGHTING FACTOR	BASIN 1 SCS RUNOFF WEIGHTING FACTOR (24 HR)	BASIN 2 AREA (ACRES)	BASIN 2 PERCENT	BASIN 2 RATIONAL WEIGHTING FACTOR	BASIN 2 SCS RUNOFF WEIGHTING FACTOR (24 HR)	BASIN 3 AREA (ACRES)	BASIN 3 PERCENT	BASIN 3 RATIONAL WEIGHTING FACTOR	BASIN 3 SCS RUNOFF WEIGHTING FACTOR (24 HR)
ASPHALT	0.90	98.00	6.99	50.54	0.455	49.531	3.11	79.95	0.720	0.000	1.29	59.72	0.538	0.000
ROOF	0.90	98.00	3.33	24.08	0.217	23.597	0.00	0.00	0.000	0.000	0.36	16.67	0.150	16.333
LAWN 2%	0.15	61.00	3.51	25.38	0.038	15.462	0.78	20.05	0.030	12.231	0.51	23.61	0.035	14.403
TOTAL			13.83	100.00	0.71	88.61	3.89	100.00	0.75	12.23	2.16	100.00	0.72	30.74

ST MARY'S HOSPITAL
FINAL CONDITIONS (100 YEAR STORM)
HYDROLOGY STUDY

GROUND SURFACE COVER TYPE	RATIONAL RUNOFF COEFFICIENT	SCS RUNOFF CURVE NUMBER (24 HR)	BASIN 1 AREA (ACRES)	BASIN 1 PERCENT	BASIN 1 RATIONAL WEIGHTING FACTOR	BASIN 1 SCS RUNOFF WEIGHTING FACTOR (24 HR)	BASIN 2 AREA (ACRES)	BASIN 2 PERCENT	BASIN 2 RATIONAL WEIGHTING FACTOR	BASIN 2 SCS RUNOFF WEIGHTING FACTOR (24 HR)	BASIN 3 AREA (ACRES)	BASIN 3 PERCENT	BASIN 3 RATIONAL WEIGHTING FACTOR	BASIN 3 SCS RUNOFF WEIGHTING FACTOR (24 HR)
ASPHALT	0.95	98.00	6.99	50.54	0.480	49.531	3.11	79.95	0.760	78.350	1.29	59.72	0.567	58.528
ROOF	0.95	98.00	3.33	24.08	0.229	23.597	0.00	0.00	0.000	0.000	0.36	16.67	0.158	16.333
LAWN 2%	0.25	78.00	3.51	25.38	0.063	19.796	0.78	20.05	0.050	15.640	0.51	23.61	0.059	18.417
			13.83	100.00	0.77	92.92	3.89	100.00	0.81	93.99	2.16	100.00	0.78	93.28

Table 2

ST MARY'S HOSPITAL CALCULATION OF TIMES OF CONCENTRATION

BASIN	TYPE OF FLOW	TRAVEL DISTANCE (FEET)	SLOPE (PERCENT)	2 YEAR STORM VELOCITY (FT/SEC)	2 YEAR STORM TRAVEL TIME (MIN)	100 YEAR STORM VELOCITY (FT/SEC)	100 YEAR STORM TRAVEL TIME (MIN)
1	GUTTER	240	0.86	2.6	1.54	5.7	0.70
1	GUTTER	227	1.00	2.7	1.40	6.2	0.61
1	GUTTER	233	0.64	2.3	1.69	5.1	0.76
1	GUTTER	488	3.40	4.2	1.94	9.8	0.83
	TOTAL BASIN 1				6.56		2.90
2	OVERLAND	150	0.27	0.1	22.40	0.2	13.9
2	OVERLAND	150	1.67	0.2	10.80	0.4	6.7
2	CHANNEL	60	2.50	3.3	0.30	3.3	0.30
2	GUTTER	240	3.80	3.7	1.08	8.4	0.48
	TOTAL BASIN 2				34.58		21.38
3	GUTTER	365	1.67	2.3	2.64	5.1	1.19
3	GUTTER	130	1.43	2.2	0.98	4.9	0.44
	TOTAL BASIN 3				3.63		1.63

Table 3

ST MARY'S HOSPITAL
PREDEVELOPMENT CONDITIONS

BASIN PARAMETER	
AREA (ACRES)	19.88
AREA (SQUARE MILES)	0.0311
MAXIMUM ELEVATION	4665.00
MINIMUM ELEVATION	4634.00
LONGEST WATER COURSE	
LENGTH (FEET)	1330.00
AVERAGE SLOPE	0.0233
TIME OF CONCENTRATION (MINUTES)	
2-YEAR	69.00
100-YEAR	47.00
2-YEAR RAINFALL	
RATIONAL METHOD (INCH/HR), D=T(C)	0.50
SCS METHOD (INCH/24 HOUR)	1.00
100-YEAR RAINFALL	
RATIONAL METHOD (INCH/HR), D=T(C)	1.73
SCS METHOD (INCH/24 HOUR)	2.56
RUNOFF--SCS METHOD (INCH)	
24 HOUR	
2-YEAR	0.114
100-YEAR	2.330
2-YEAR PEAK FLOW (CFS)	
RATIONAL METHOD	1.00
SCS METHOD (24 HOUR)	0.70
100-YEAR PEAK FLOW (CFS)	
RATIONAL METHOD	8.65
SCS METHOD (24 HOUR)	12.57
2-YEAR RUNOFF VOLUME (CU. FT.)	
RATIONAL METHOD	4064.00
SCS METHOD (24 HOUR)	8057.00
100-YEAR RUNOFF VOLUME (CU. FT.)	
RATIONAL METHOD	25917.00
SCS METHOD (24 HOUR)	74262.00
2-YEAR OFF-SITE DISCHARGE (CFS)	
RATIONAL METHOD	1.00
SCS METHOD (24 HOUR)	0.70
100-YEAR OFF-SITE DISCHARGE (CFS)	
RATIONAL METHOD (50 MIN)	8.65
SCS METHOD (24 HOUR)	12.57

Table 4

ST MARY'S HOSPITAL
FINAL CONDITIONS

BASIN PARAMETER	BASIN 1	BASIN 2	BASIN 3
AREA (ACRES)	13.83	3.89	2.16
AREA (SQUARE MILES)	0.0216	0.0061	0.0034
MAXIMUM ELEVATION	4657.00	4667.00	4642.00
MINIMUM ELEVATION	4634.00	4650.00	4634.00
LONGEST WATER COURSE			
LENGTH (FEET)	1188.00	600.00	495.00
AVERAGE SLOPE	0.0194	0.0283	0.0162
TIME OF CONCENTRATION (MINUTES)			
2-YEAR	7.00	35.00	4.00
100-YEAR	3.00	21.00	3.00
2-YEAR RAINFALL			
RATIONAL METHOD (INCH/HR), D=T(C)	1.78	0.81	1.95
SCS METHOD (INCH/24 HOUR)	1.00	1.00	1.00
100-YEAR RAINFALL			
RATIONAL METHOD (INCH/HR), D=T(C)	4.95	2.80	4.95
SCS METHOD (INCH/24 HOUR)	2.56	2.56	2.56
RUNOFF--SCS METHOD (INCH)			
24 HOUR			
2-YEAR	0.272	0.342	0.294
100-YEAR	1.829	1.926	1.861
2-YEAR PEAK FLOW (CFS)			
RATIONAL METHOD, D=T(C)	17.47	2.36	3.04
SCS METHOD (24 HOUR)	5.49	1.00	0.97
100-YEAR PEAK FLOW (CFS)			
RATIONAL METHOD, D=T(C)	52.87	8.82	8.39
SCS METHOD (24 HOUR)	39.86	6.19	6.23
2-YEAR RUNOFF VOLUME (CU. FT.)			
RATIONAL METHOD (90 MIN)	21856.00	6533.00	3546.00
SCS METHOD (24 HOUR)	14964.00	3856.00	2480.00
100-YEAR RUNOFF VOLUME (CU. FT.)			
RATIONAL METHOD (70 MIN)	58575.00	17395.00	9447.00
SCS METHOD (24 HOUR)	91558.00	28763.00	14304.00
2-YEAR OFF-SITE DISCHARGE (CFS)			
RATIONAL METHOD (90 MIN)	ALL BASINS COMBINED--0.91		
SCS METHOD (24 HOUR)	ALL BASINS COMBINED--0.74		
100-YEAR OFF-SITE DISCHARGE (CFS)			
RATIONAL METHOD (70 MIN)	ALL BASINS COMBINED--8.92		
SCS METHOD (24 HOUR)	ALL BASINS COMBINED--8.12		

Table 5

ST MARY'S DETENTION POND DISCHARGE CAPACITY

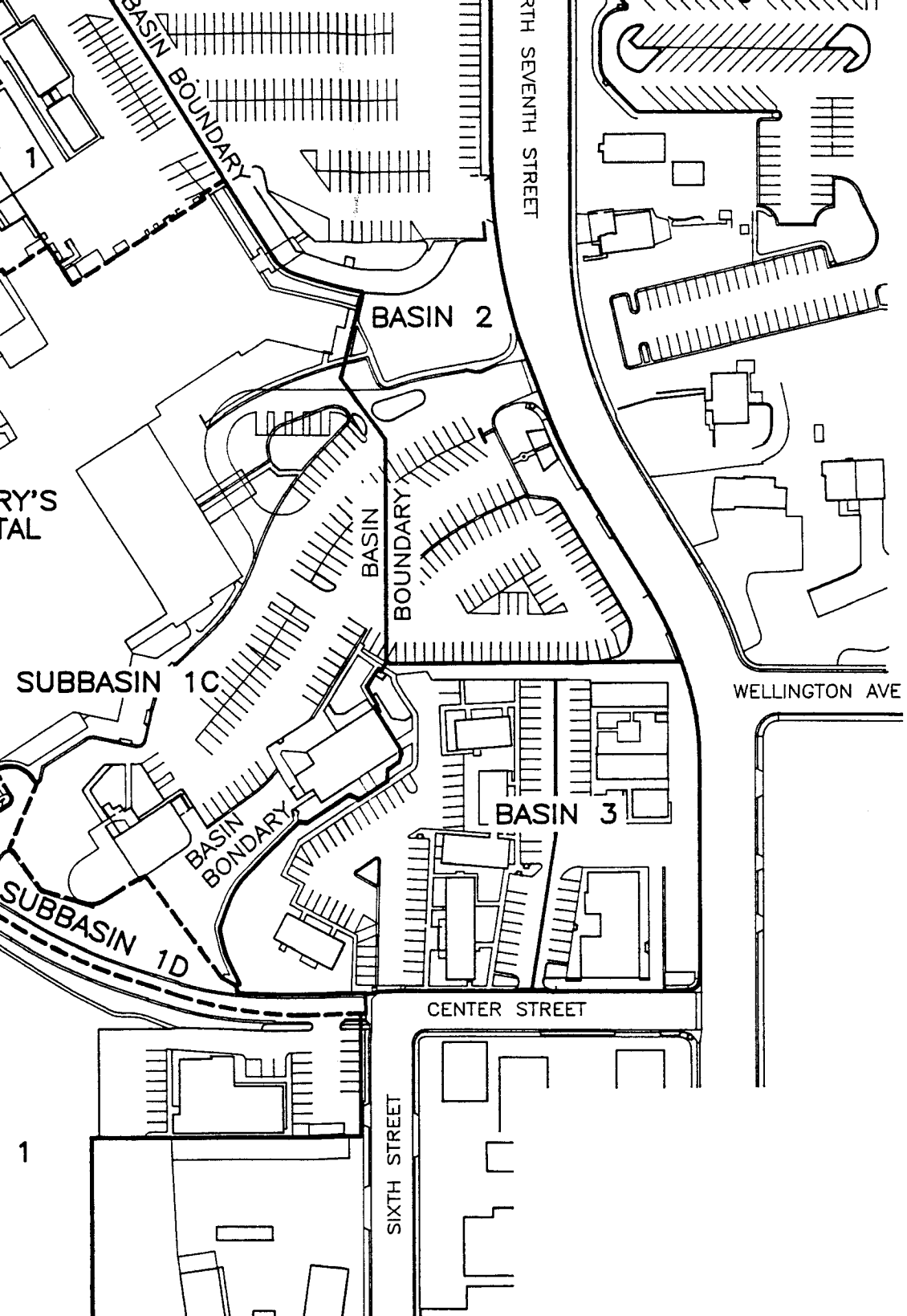
POND LEVEL	TOTAL ENERGY AVAILABLE (FEET)	HEAD ON UPPER INLET (FEET)	HEAD ON LOWER INLET (FEET)	TRIAL HGL ELEV @ UPPER INLET	PIPE CAPACITY D/S FROM UPPER INLET (CFS)	PIPE CAPACITY U/S FROM UPPER INLET (CFS)	LOWER INLET ORIFICE CAPACITY (CFS)	LOWER INLET GRATE CAPACITY (CFS)	LOWER INLET CONTROL MODE	UPPER INLET PIPE CAPACITY (CFS)	UPPER INLET CREST CAPACITY (CFS)	UPPER INLET ORIFICE CAPACITY (CFS)	UPPER INLET GRATE CAPACITY (CFS)	UPPER INLET CONTROL MODE	TOTAL SYSTEM CAPACITY (CFS)
27.6	1.3	0	0.95	26.4	1.908712	1.07848	0.423215	1.730722	ORIFICE	1.485497	0	0	0	NA	0.423215
27.6	1.3	0	0.95	26.5	2.699326	1.032566	0.423215	1.730722	ORIFICE	2.276111	0	0	0	NA	0.423215
27.8	1.5	0	1.15	26.4	1.908712	1.164892	0.465638	2.997698	ORIFICE	1.443074	0	0	0	NA	0.465638
27.8	1.5	0	1.15	26.5	2.699326	1.122518	0.465638	2.997698	ORIFICE	2.233688	0	0	0	NA	0.465638
28	1.7	0	1.35	26.4	1.908712	1.245322	0.504506	3.870012	ORIFICE	1.404206	0	0	0	NA	0.504506
28	1.7	0	1.35	26.5	2.699326	1.205778	0.504506	3.870012	ORIFICE	2.19482	0	0	0	NA	0.504506
28.2	1.9	0	1.55	26.4	1.908712	1.320863	0.540587	4.57906	ORIFICE	1.368125	0	0	0	NA	0.540587
28.2	1.9	0	1.55	26.5	2.699326	1.283648	0.540587	4.57906	ORIFICE	2.15874	0	0	0	NA	0.540587
28.4	2.1	0	1.75	26.4	1.908712	1.392312	0.574405	5.192166	ORIFICE	1.334307	0	0	0	NA	0.574405
28.4	2.1	0	1.75	26.5	2.699326	1.357058	0.574405	5.192166	ORIFICE	2.124921	0	0	0	NA	0.574405
28.6	2.3	0	1.95	26.4	1.908712	1.460269	0.606341	5.740155	ORIFICE	1.302371	0	0	0	NA	0.606341
28.6	2.3	0	1.95	26.5	2.699326	1.426695	0.606341	5.740155	ORIFICE	2.092986	0	0	0	NA	0.606341
28.8	2.5	0	2.15	26.4	1.908712	1.525201	0.636676	6.240207	ORIFICE	1.272036	0	0	0	NA	0.636676
28.8	2.5	0	2.15	26.5	2.699326	1.493088	0.636676	6.240207	ORIFICE	2.06265	0	0	0	NA	0.636676
29	2.7	0	2.35	26.4	1.908712	1.58748	0.665631	6.703057	ORIFICE	1.243081	0	0	0	NA	0.665631
29	2.7	0	2.35	26.5	2.699326	1.556652	0.665631	6.703057	ORIFICE	2.033696	0	0	0	NA	0.665631
29.2	2.9	0	2.55	26.4	1.908712	1.647406	0.693377	7.13595	ORIFICE	1.215335	0	0	0	NA	0.693377
29.2	2.9	0	2.55	26.5	2.699326	1.61772	0.693377	7.13595	ORIFICE	2.005949	0	0	0	NA	0.693377
29.4	3.1	0	2.75	26.4	1.908712	1.705227	0.720055	7.544042	ORIFICE	1.188657	0	0	0	NA	0.720055
29.4	3.1	0	2.75	26.5	2.699326	1.676566	0.720055	7.544042	ORIFICE	1.979271	0	0	0	NA	0.720055
29.6	3.3	0	2.95	26.4	1.908712	1.761151	0.745779	7.931164	ORIFICE	1.162933	0	0	0	NA	0.745779
29.6	3.3	0	2.95	26.5	2.699326	1.733414	0.745779	7.931164	ORIFICE	1.953547	0	0	0	NA	0.745779
29.8	3.5	0	3.15	26.4	1.908712	1.815353	0.770645	8.300251	ORIFICE	1.138066	0	0	0	NA	0.770645
29.8	3.5	0	3.15	26.5	2.699326	1.788457	0.770645	8.300251	ORIFICE	1.928681	0	0	0	NA	0.770645
30	3.7	0	3.35	26.4	1.908712	1.867982	0.794734	8.65361	ORIFICE	1.113978	0	0	0	NA	0.794734
30	3.7	0	3.35	26.5	2.699326	1.841856	0.794734	8.65361	ORIFICE	1.904592	0	0	0	NA	0.794734
30.2	3.9	0	3.55	26.4	1.908712	1.91917	0.818113	8.993095	ORIFICE	1.090598	0	0	0	NA	0.818113
30.2	3.9	0	3.55	26.5	2.699326	1.893749	0.818113	8.993095	ORIFICE	1.881213	0	0	0	NA	0.818113
30.4	4.1	0	3.75	26.4	1.908712	1.969026	0.840843	9.320223	ORIFICE	1.067869	0	0	0	NA	0.840843
30.4	4.1	0	3.75	26.5	2.699326	1.944258	0.840843	9.320223	ORIFICE	1.858483	0	0	0	NA	0.840843
30.6	4.3	0	3.95	26.4	1.908712	2.017652	0.862974	9.636252	ORIFICE	1.045738	0	0	0	NA	0.862974
30.6	4.3	0	3.95	26.5	2.699326	1.993487	0.862974	9.636252	ORIFICE	1.836352	0	0	0	NA	0.862974
30.8	4.5	0.2	4.15	26.4	1.908712	2.065132	0.884552	9.942241	ORIFICE	1.02416	0.927276	2.254955	0	GRATE	0.884552
30.8	4.5	0.2	4.15	26.5	2.699326	2.04153	0.884552	9.942241	ORIFICE	1.814774	0.927276	2.254955	0	GRATE	0.884552
31	4.7	0.4	4.35	26.4	1.908712	2.111546	0.905616	10.23909	ORIFICE	1.003096	2.622731	3.188987	0	GRATE	0.905616
31	4.7	0.4	4.35	26.5	2.699326	2.088468	0.905616	10.23909	ORIFICE	1.793711	2.622731	3.188987	0	GRATE	0.905616
31.1	4.8	0.5	4.45	26.4	1.908712	2.134374	0.915966	10.38433	ORIFICE	0.992746	3.665378	3.565396	0	GRATE	0.915966
31.1	4.8	0.5	4.45	26.5	2.699326	2.111546	0.915966	10.38433	ORIFICE	1.78336	3.665378	3.565396	0	GRATE	0.915966
31.4	5.1	0.8	4.75	26.4	1.908712	2.201438	0.946338	10.80836	ORIFICE	0.962374	7.418204	4.509909	5.995397	PIPE	1.908712
31.4	5.1	0.8	4.75	26.5	2.699326	2.179313	0.946338	10.80836	ORIFICE	1.752989	7.418204	4.509909	5.995397	PIPE	2.699326
31.4	5.1	0.8	4.75	26.6	3.305986	2.15696	0.946338	10.80836	ORIFICE	2.359648	7.418204	4.509909	5.995397	PIPE	3.305986
31.4	5.1	0.8	4.75	26.7	3.817424	2.134374	0.946338	10.80836	ORIFICE	2.871086	7.418204	4.509909	5.995397	PIPE	3.817424
31.4	5.1	0.8	4.75	26.8	4.26801	2.111546	0.946338	10.80836	ORIFICE	3.321672	7.418204	4.509909	5.995397	PIPE	4.26801
31.4	5.1	0.8	4.75	26.9	4.67537	2.088468	0.946338	10.80836	ORIFICE	3.729033	7.418204	4.509909	5.995397	PIPE	4.67537
31.4	5.1	0.8	4.75	27	5.049977	2.065132	0.946338	10.80836	ORIFICE	4.103639	7.418204	4.509909	5.995397	PIPE	5.049977
31.4	5.1	0.8	4.75	27.1	5.398653	2.04153	0.946338	10.80836	ORIFICE	4.452315	7.418204	4.509909	5.995397	PIPE	5.398653
31.4	5.1	0.8	4.75	27.2	5.726136	2.017652	0.946338	10.80836	ORIFICE	4.779798	7.418204	4.509909	5.995397	ORIFICE	5.456247
31.4	5.1	0.8	4.75	27.3	6.035877	1.993487	0.946338	10.80836	ORIFICE	5.089539	7.418204	4.509909	5.995397	ORIFICE	5.456247
31.4	5.1	0.8	4.75	27.4	6.330481	1.969026	0.946338	10.80836	ORIFICE	5.384144	7.418204	4.509909	5.995397	ORIFICE	5.456247
31.4	5.1	0.8	4.75	27.5	6.611972	1.944258	0.946338	10.80836	ORIFICE	5.665634	7.418204	4.509909	5.995397	ORIFICE	5.456247

Table 6A

ST MARY'S DETENTION POND DISCHARGE CAPACITY

POND LEVEL	TOTAL ENERGY AVAILABLE (FEET)	HEAD ON UPPER INLET (FEET)	HEAD ON LOWER INLET (FEET)	TRIAL HGL ELEV @ UPPER INLET	PIPE CAPACITY D/S FROM UPPER INLET (CFS)	PIPE CAPACITY U/S FROM UPPER INLET (CFS)	LOWER INLET ORIFICE CAPACITY (CFS)	LOWER INLET GRATE CAPACITY (CFS)	LOWER INLET CONTROL MODE	UPPER INLET PIPE CAPACITY (CFS)	UPPER INLET CREST CAPACITY (CFS)	UPPER INLET ORIFICE CAPACITY (CFS)	UPPER INLET GRATE CAPACITY (CFS)	UPPER INLET CONTROL MODE	TOTAL SYSTEM CAPACITY (CFS)
31.4	5.1	0.8	4.75	27.6	6.881959	1.91917	0.946338	10.80836	ORIFICE	5.935621	7.418204	4.509909	5.995397	ORIFICE	5.456247
31.4	5.1	0.8	4.75	27.7	7.141746	1.893749	0.946338	10.80836	ORIFICE	6.195408	7.418204	4.509909	5.995397	ORIFICE	5.456247
31.4	5.1	0.8	4.75	27.8	7.39241	1.867982	0.946338	10.80836	ORIFICE	6.446072	7.418204	4.509909	5.995397	ORIFICE	5.456247
31.6	5.3	1	4.95	26.4	1.908712	2.245036	0.966055	11.08203	ORIFICE	0.942657	10.36726	5.042232	7.740024	PIPE	1.908712
31.6	5.3	1	4.95	26.5	2.699326	2.223344	0.966055	11.08203	ORIFICE	1.733271	10.36726	5.042232	7.740024	PIPE	2.699326
31.6	5.3	1	4.95	26.6	3.305986	2.201438	0.966055	11.08203	ORIFICE	2.339931	10.36726	5.042232	7.740024	PIPE	3.305986
31.6	5.3	1	4.95	26.7	3.817424	2.179313	0.966055	11.08203	ORIFICE	2.851369	10.36726	5.042232	7.740024	PIPE	3.817424
31.6	5.3	1	4.95	26.8	4.26801	2.15696	0.966055	11.08203	ORIFICE	3.301954	10.36726	5.042232	7.740024	PIPE	4.26801
31.6	5.3	1	4.95	26.9	4.67537	2.134374	0.966055	11.08203	ORIFICE	3.709315	10.36726	5.042232	7.740024	PIPE	4.67537
31.6	5.3	1	4.95	27	5.049977	2.111546	0.966055	11.08203	ORIFICE	4.083922	10.36726	5.042232	7.740024	PIPE	5.049977
31.6	5.3	1	4.95	27.1	5.398653	2.088468	0.966055	11.08203	ORIFICE	4.432597	10.36726	5.042232	7.740024	PIPE	5.398653
31.6	5.3	1	4.95	27.2	5.726136	2.065132	0.966055	11.08203	ORIFICE	4.760081	10.36726	5.042232	7.740024	PIPE	5.726136
31.6	5.3	1	4.95	27.3	6.035877	2.04153	0.966055	11.08203	ORIFICE	5.069822	10.36726	5.042232	7.740024	ORIFICE	6.008287
31.6	5.3	1	4.95	27.4	6.330481	2.017652	0.966055	11.08203	ORIFICE	5.364426	10.36726	5.042232	7.740024	ORIFICE	6.008287
31.6	5.3	1	4.95	27.5	6.611972	1.993487	0.966055	11.08203	ORIFICE	5.645917	10.36726	5.042232	7.740024	ORIFICE	6.008287
31.6	5.3	1	4.95	27.6	6.881959	1.969026	0.966055	11.08203	ORIFICE	5.915904	10.36726	5.042232	7.740024	ORIFICE	6.008287
31.6	5.3	1	4.95	27.7	7.141746	1.944258	0.966055	11.08203	ORIFICE	6.175691	10.36726	5.042232	7.740024	ORIFICE	6.008287
31.6	5.3	1	4.95	27.8	7.39241	1.91917	0.966055	11.08203	ORIFICE	6.426354	10.36726	5.042232	7.740024	ORIFICE	6.008287
31.6	5.3	1	4.95	27.9	7.634848	1.893749	0.966055	11.08203	ORIFICE	6.668793	10.36726	5.042232	7.740024	ORIFICE	6.008287
31.8	5.5	1.2	5.15	26.4	1.908712	2.287802	0.985378	11.3491	ORIFICE	0.923334	13.62811	5.523488	9.15812	PIPE	1.908712
31.8	5.5	1.2	5.15	26.5	2.699326	2.26652	0.985378	11.3491	ORIFICE	1.713948	13.62811	5.523488	9.15812	PIPE	2.699326
31.8	5.5	1.2	5.15	26.6	3.305986	2.245036	0.985378	11.3491	ORIFICE	2.320608	13.62811	5.523488	9.15812	PIPE	3.305986
31.8	5.5	1.2	5.15	26.7	3.817424	2.223344	0.985378	11.3491	ORIFICE	2.832046	13.62811	5.523488	9.15812	PIPE	3.817424
31.8	5.5	1.2	5.15	26.8	4.26801	2.201438	0.985378	11.3491	ORIFICE	3.282631	13.62811	5.523488	9.15812	PIPE	4.26801
31.8	5.5	1.2	5.15	26.9	4.67537	2.179313	0.985378	11.3491	ORIFICE	3.689992	13.62811	5.523488	9.15812	PIPE	4.67537
31.8	5.5	1.2	5.15	27	5.049977	2.15696	0.985378	11.3491	ORIFICE	4.064599	13.62811	5.523488	9.15812	PIPE	5.049977
31.8	5.5	1.2	5.15	27.1	5.398653	2.134374	0.985378	11.3491	ORIFICE	4.413274	13.62811	5.523488	9.15812	PIPE	5.398653
31.8	5.5	1.2	5.15	27.2	5.726136	2.111546	0.985378	11.3491	ORIFICE	4.740758	13.62811	5.523488	9.15812	PIPE	5.726136
31.8	5.5	1.2	5.15	27.3	6.035877	2.088468	0.985378	11.3491	ORIFICE	5.050499	13.62811	5.523488	9.15812	PIPE	6.035877
31.8	5.5	1.2	5.15	27.4	6.330481	2.065132	0.985378	11.3491	ORIFICE	5.345103	13.62811	5.523488	9.15812	PIPE	6.330481
31.8	5.5	1.2	5.15	27.5	6.611972	2.04153	0.985378	11.3491	ORIFICE	5.626594	13.62811	5.523488	9.15812	ORIFICE	6.508866
31.8	5.5	1.2	5.15	27.6	6.881959	2.017652	0.985378	11.3491	ORIFICE	5.896581	13.62811	5.523488	9.15812	ORIFICE	6.508866
31.8	5.5	1.2	5.15	27.7	7.141746	1.993487	0.985378	11.3491	ORIFICE	6.156368	13.62811	5.523488	9.15812	ORIFICE	6.508866
31.8	5.5	1.2	5.15	27.8	7.39241	1.969026	0.985378	11.3491	ORIFICE	6.407031	13.62811	5.523488	9.15812	ORIFICE	6.508866
31.8	5.5	1.2	5.15	27.9	7.634848	1.944258	0.985378	11.3491	ORIFICE	6.649469	13.62811	5.523488	9.15812	ORIFICE	6.508866
31.8	5.5	1.2	5.15	28	7.869821	1.91917	0.985378	11.3491	ORIFICE	6.884443	13.62811	5.523488	9.15812	ORIFICE	6.508866
31.8	5.5	1.2	5.15	28.1	8.097979	1.893749	0.985378	11.3491	ORIFICE	7.112601	13.62811	5.523488	9.15812	ORIFICE	6.508866
32	5.7	1.4	5.35	26.4	1.908712	2.329784	1.00433	11.61004	ORIFICE	0.904382	17.17338	5.966049	10.38433	PIPE	1.908712
32	5.7	1.4	5.35	26.5	2.699326	2.308888	1.00433	11.61004	ORIFICE	1.694997	17.17338	5.966049	10.38433	PIPE	2.699326
32	5.7	1.4	5.35	26.6	3.305986	2.287802	1.00433	11.61004	ORIFICE	2.301656	17.17338	5.966049	10.38433	PIPE	3.305986
32	5.7	1.4	5.35	26.7	3.817424	2.26652	1.00433	11.61004	ORIFICE	2.813094	17.17338	5.966049	10.38433	PIPE	3.817424
32	5.7	1.4	5.35	26.8	4.26801	2.245036	1.00433	11.61004	ORIFICE	3.26368	17.17338	5.966049	10.38433	PIPE	4.26801
32	5.7	1.4	5.35	26.9	4.67537	2.223344	1.00433	11.61004	ORIFICE	3.671041	17.17338	5.966049	10.38433	PIPE	4.67537
32	5.7	1.4	5.35	27	5.049977	2.201438	1.00433	11.61004	ORIFICE	4.045648	17.17338	5.966049	10.38433	PIPE	5.049977
32	5.7	1.4	5.35	27.1	5.398653	2.179313	1.00433	11.61004	ORIFICE	4.394323	17.17338	5.966049	10.38433	PIPE	5.398653
32	5.7	1.4	5.35	27.2	5.726136	2.15696	1.00433	11.61004	ORIFICE	4.721806	17.17338	5.966049	10.38433	PIPE	5.726136
32	5.7	1.4	5.35	27.3	6.035877	2.134374	1.00433	11.61004	ORIFICE	5.031548	17.17338	5.966049	10.38433	PIPE	6.035877
32	5.7	1.4	5.35	27.4	6.330481	2.111546	1.00433	11.61004	ORIFICE	5.326152	17.17338	5.966049	10.38433	PIPE	6.330481
32	5.7	1.4	5.35	27.5	6.611972	2.088468	1.00433	11.61004	ORIFICE	5.607643	17.17338	5.966049	10.38433	PIPE	6.611972
32	5.7	1.4	5.35	27.6	6.881959	2.065132	1.00433	11.61004	ORIFICE	5.877629	17.17338	5.966049	10.38433	PIPE	6.881959
32	5.7	1.4	5.35	27.7	7.141746	2.04153	1.00433	11.61004	ORIFICE	6.137417	17.17338	5.966049	10.38433	ORIFICE	6.970379
32	5.7	1.4	5.35	27.8	7.39241	2.017652	1.00433	11.61004	ORIFICE	6.38808	17.17338	5.966049	10.38433	ORIFICE	6.970379
32	5.7	1.4	5.35	27.9	7.634848	1.993487	1.00433	11.61004	ORIFICE	6.630518	17.17338	5.966049	10.38433	ORIFICE	6.970379
32	5.7	1.4	5.35	28	7.869821	1.969026	1.00433	11.61004	ORIFICE	6.865491	17.17338	5.966049	10.38433	ORIFICE	6.970379
32	5.7	1.4	5.35	28.1	8.097979	1.944258	1.00433	11.61004	ORIFICE	7.093649	17.17338	5.966049	10.38433	ORIFICE	6.970379
32	5.7	1.4	5.35	28.2	8.319882	1.91917	1.00433	11.61004	ORIFICE	7.315553	17.17338	5.966049	10.38433	ORIFICE	6.970379
32	5.7	1.4	5.35	28.3	8.536019	1.893749	1.00433	11.61004	ORIFICE	7.53169	17.17338	5.966049	10.38433	ORIFICE	6.970379
32.2	5.9	1.6	5.55	26.4	1.908712	2.371022	1.02293	11.86523	ORIFICE	0.885782	20.98185	6.377975	11.48031	PIPE	1.908712
32.2	5.9	1.6	5.55	26.5	2.699326	2.350493	1.02293	11.86523	ORIFICE	1.676396	20.98185	6.377975	11.48031	PIPE	2.699326
32.2	5.9	1.6	5.55	26.6	3.305986	2.329784	1.02293	11.86523	ORIFICE	2.283056	20.98185	6.377975	11.48031	PIPE	3.305986
32.2	5.9	1.6	5.55	26.7	3.817424	2.308888	1.02293	11.86523	ORIFICE	2.794494	20.98185	6.377975	11.48031	PIPE	3.817424
32.2	5.9	1.6	5.55	26.8	4.26801	2.287802	1.02293	11.86523	ORIFICE	3.24508	20.98185	6.377975	11.48031	PIPE	4.26801
32.2	5.9	1.6	5.55	26.9	4.67537	2.26652	1.02293	11.86523	ORIFICE	3.65244	20.98185	6.377975	11.48031	PIPE	4.67537
32.2	5.9	1.6	5.55	27	5.049977	2.245036	1.02293	11.86523	ORIFICE	4.027047	20.98185	6.377975	11.48031	PIPE	5.049977
32.2	5.9	1.6	5.55	27.1	5.398653	2.223344	1.02293	11.86523	ORIFICE	4.375723	20.98185	6.377975	11.48031	PIPE	5.398653

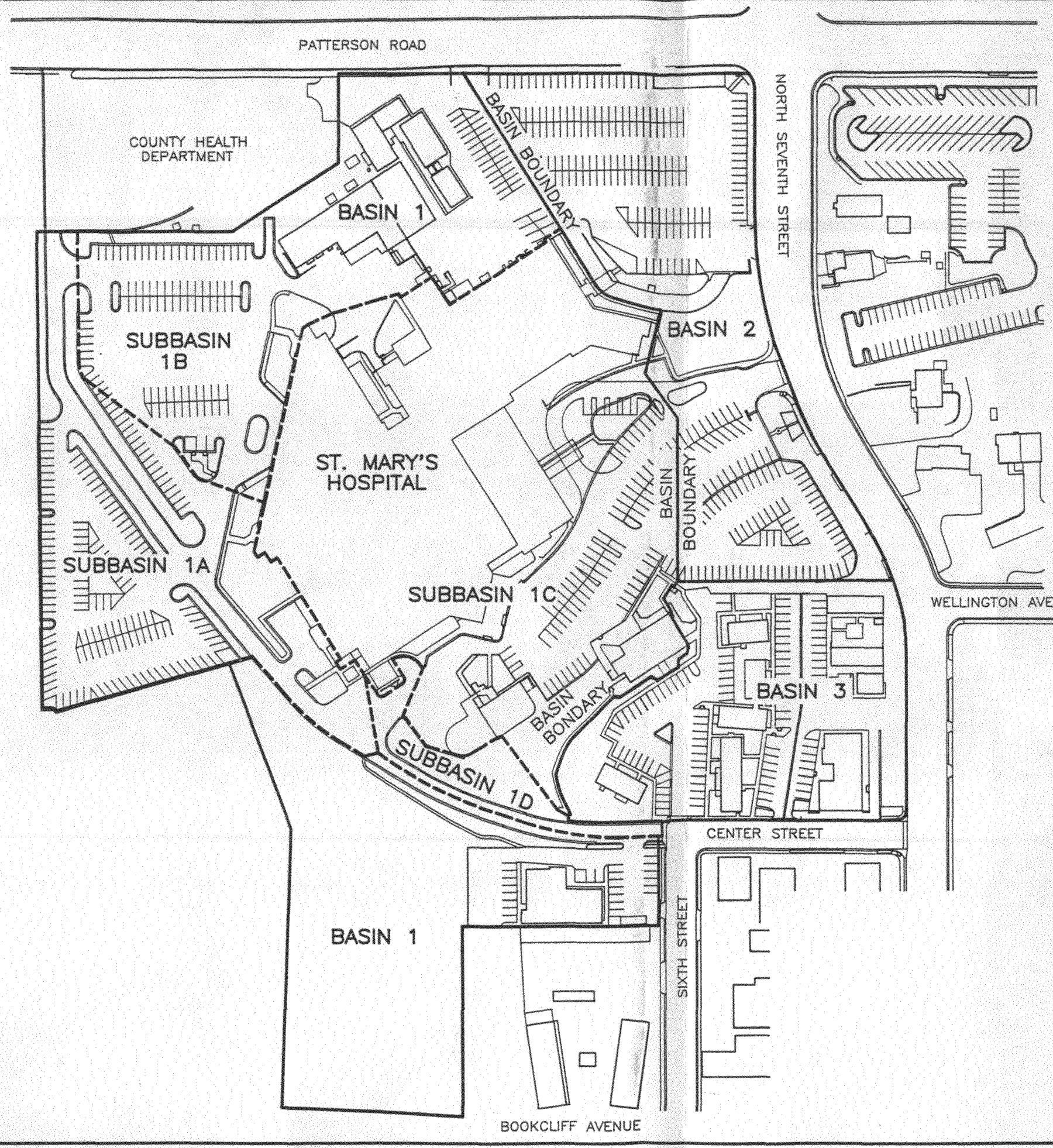
Table 6B



N

NOT TO SCALE

FIGURE 1
ST. MARY'S HOSPITAL



N

NOT TO SCALE

FIGURE 1
ST. MARY'S HOSPITAL

WESTERN ENGINEERS, INC.

GRAND JUNCTION, CO. 2-4-93

ST MARY'S DETENTION POND DISCHARGE CAPACITY

POND LEVEL	TOTAL ENERGY AVAILABLE (FEET)	HEAD ON UPPER INLET (FEET)	HEAD ON LOWER INLET (FEET)	TRIAL HGL ELEV @ UPPER INLET	PIPE CAPACITY D/S FROM UPPER INLET (CFS)	PIPE CAPACITY U/S FROM UPPER INLET (CFS)	LOWER INLET ORIFICE CAPACITY (CFS)	LOWER INLET GRATE CAPACITY (CFS)	LOWER INLET CONTROL MODE	UPPER INLET PIPE CAPACITY (CFS)	UPPER INLET CREST CAPACITY (CFS)	UPPER INLET ORIFICE CAPACITY (CFS)	UPPER INLET GRATE CAPACITY (CFS)	UPPER INLET CONTROL MODE	TOTAL SYSTEM CAPACITY (CFS)
32.2	5.9	1.6	5.55	27.2	5.726136	2.201438	1.02293	11.86523	ORIFICE	4.703206	20.98185	6.377975	11.48031	PIPE	5.726136
32.2	5.9	1.6	5.55	27.3	6.035877	2.179313	1.02293	11.86523	ORIFICE	5.012947	20.98185	6.377975	11.48031	PIPE	6.035877
32.2	5.9	1.6	5.55	27.4	6.330481	2.15696	1.02293	11.86523	ORIFICE	5.307551	20.98185	6.377975	11.48031	PIPE	6.330481
32.2	5.9	1.6	5.55	27.5	6.611972	2.134374	1.02293	11.86523	ORIFICE	5.589042	20.98185	6.377975	11.48031	PIPE	6.611972
32.2	5.9	1.6	5.55	27.6	6.881959	2.111546	1.02293	11.86523	ORIFICE	5.859029	20.98185	6.377975	11.48031	PIPE	6.881959
32.2	5.9	1.6	5.55	27.7	7.141746	2.088468	1.02293	11.86523	ORIFICE	6.118816	20.98185	6.377975	11.48031	PIPE	7.141746
32.2	5.9	1.6	5.55	27.8	7.39241	2.065132	1.02293	11.86523	ORIFICE	6.36948	20.98185	6.377975	11.48031	PIPE	7.39241
32.2	5.9	1.6	5.55	27.9	7.634848	2.04153	1.02293	11.86523	ORIFICE	6.611918	20.98185	6.377975	11.48031	ORIFICE	7.400905
32.2	5.9	1.6	5.55	28	7.869821	2.017652	1.02293	11.86523	ORIFICE	6.846891	20.98185	6.377975	11.48031	ORIFICE	7.400905
32.2	5.9	1.6	5.55	28.1	8.097979	1.993487	1.02293	11.86523	ORIFICE	7.075049	20.98185	6.377975	11.48031	ORIFICE	7.400905
32.2	5.9	1.6	5.55	28.2	8.319882	1.969026	1.02293	11.86523	ORIFICE	7.296953	20.98185	6.377975	11.48031	ORIFICE	7.400905
32.2	5.9	1.6	5.55	28.3	8.536019	1.944258	1.02293	11.86523	ORIFICE	7.513089	20.98185	6.377975	11.48031	ORIFICE	7.400905
32.2	5.9	1.6	5.55	28.4	8.746817	1.91917	1.02293	11.86523	ORIFICE	7.723887	20.98185	6.377975	11.48031	ORIFICE	7.400905
32.4	6.1	1.8	5.75	26.4	1.908712	2.411555	1.041198	12.11505	ORIFICE	0.867514	25.03644	6.764864	12.48041	PIPE	1.908712
32.4	6.1	1.8	5.75	26.5	2.699326	2.391374	1.041198	12.11505	ORIFICE	1.658128	25.03644	6.764864	12.48041	PIPE	2.699326
32.4	6.1	1.8	5.75	26.6	3.305986	2.371022	1.041198	12.11505	ORIFICE	2.264788	25.03644	6.764864	12.48041	PIPE	3.305986
32.4	6.1	1.8	5.75	26.7	3.817424	2.350493	1.041198	12.11505	ORIFICE	2.776226	25.03644	6.764864	12.48041	PIPE	3.817424
32.4	6.1	1.8	5.75	26.8	4.26801	2.329784	1.041198	12.11505	ORIFICE	3.226812	25.03644	6.764864	12.48041	PIPE	4.26801
32.4	6.1	1.8	5.75	26.9	4.67537	2.308888	1.041198	12.11505	ORIFICE	3.634172	25.03644	6.764864	12.48041	PIPE	4.67537
32.4	6.1	1.8	5.75	27	5.049977	2.287802	1.041198	12.11505	ORIFICE	4.008779	25.03644	6.764864	12.48041	PIPE	5.049977
32.4	6.1	1.8	5.75	27.1	5.398653	2.26652	1.041198	12.11505	ORIFICE	4.357455	25.03644	6.764864	12.48041	PIPE	5.398653
32.4	6.1	1.8	5.75	27.2	5.726136	2.245036	1.041198	12.11505	ORIFICE	4.684938	25.03644	6.764864	12.48041	PIPE	5.726136
32.4	6.1	1.8	5.75	27.3	6.035877	2.223344	1.041198	12.11505	ORIFICE	4.994679	25.03644	6.764864	12.48041	PIPE	6.035877
32.4	6.1	1.8	5.75	27.4	6.330481	2.201438	1.041198	12.11505	ORIFICE	5.289283	25.03644	6.764864	12.48041	PIPE	6.330481
32.4	6.1	1.8	5.75	27.5	6.611972	2.179313	1.041198	12.11505	ORIFICE	5.570774	25.03644	6.764864	12.48041	PIPE	6.611972
32.4	6.1	1.8	5.75	27.6	6.881959	2.15696	1.041198	12.11505	ORIFICE	5.840761	25.03644	6.764864	12.48041	PIPE	6.881959
32.4	6.1	1.8	5.75	27.7	7.141746	2.134374	1.041198	12.11505	ORIFICE	6.100548	25.03644	6.764864	12.48041	PIPE	7.141746
32.4	6.1	1.8	5.75	27.8	7.39241	2.111546	1.041198	12.11505	ORIFICE	6.351212	25.03644	6.764864	12.48041	PIPE	7.39241
32.4	6.1	1.8	5.75	27.9	7.634848	2.088468	1.041198	12.11505	ORIFICE	6.59365	25.03644	6.764864	12.48041	PIPE	7.634848
32.4	6.1	1.8	5.75	28	7.869821	2.065132	1.041198	12.11505	ORIFICE	6.828623	25.03644	6.764864	12.48041	ORIFICE	7.806062
32.4	6.1	1.8	5.75	28.1	8.097979	2.04153	1.041198	12.11505	ORIFICE	7.056781	25.03644	6.764864	12.48041	ORIFICE	7.806062
32.4	6.1	1.8	5.75	28.2	8.319882	2.017652	1.041198	12.11505	ORIFICE	7.278685	25.03644	6.764864	12.48041	ORIFICE	7.806062
32.4	6.1	1.8	5.75	28.3	8.536019	1.993487	1.041198	12.11505	ORIFICE	7.494821	25.03644	6.764864	12.48041	ORIFICE	7.806062
32.4	6.1	1.8	5.75	28.4	8.746817	1.969026	1.041198	12.11505	ORIFICE	7.705619	25.03644	6.764864	12.48041	ORIFICE	7.806062
32.4	6.1	1.8	5.75	28.5	8.952653	1.944258	1.041198	12.11505	ORIFICE	7.911455	25.03644	6.764864	12.48041	ORIFICE	7.806062
32.4	6.1	1.8	5.75	28.6	9.153861	1.91917	1.041198	12.11505	ORIFICE	8.112663	25.03644	6.764864	12.48041	ORIFICE	7.806062
32.6	6.3	2	5.95	26.4	1.908712	2.451418	1.059151	12.35983	ORIFICE	0.849561	29.32303	7.130793	13.40611	PIPE	1.908712
32.6	6.3	2	5.95	26.5	2.699326	2.431568	1.059151	12.35983	ORIFICE	1.640175	29.32303	7.130793	13.40611	PIPE	2.699326
32.6	6.3	2	5.95	26.6	3.305986	2.411555	1.059151	12.35983	ORIFICE	2.246835	29.32303	7.130793	13.40611	PIPE	3.305986
32.6	6.3	2	5.95	26.7	3.817424	2.391374	1.059151	12.35983	ORIFICE	2.758273	29.32303	7.130793	13.40611	PIPE	3.817424
32.6	6.3	2	5.95	26.8	4.26801	2.371022	1.059151	12.35983	ORIFICE	3.208859	29.32303	7.130793	13.40611	PIPE	4.26801
32.6	6.3	2	5.95	26.9	4.67537	2.350493	1.059151	12.35983	ORIFICE	3.616219	29.32303	7.130793	13.40611	PIPE	4.67537
32.6	6.3	2	5.95	27	5.049977	2.329784	1.059151	12.35983	ORIFICE	3.990826	29.32303	7.130793	13.40611	PIPE	5.049977
32.6	6.3	2	5.95	27.1	5.398653	2.308888	1.059151	12.35983	ORIFICE	4.339502	29.32303	7.130793	13.40611	PIPE	5.398653
32.6	6.3	2	5.95	27.2	5.726136	2.287802	1.059151	12.35983	ORIFICE	4.666985	29.32303	7.130793	13.40611	PIPE	5.726136
32.6	6.3	2	5.95	27.3	6.035877	2.26652	1.059151	12.35983	ORIFICE	4.976726	29.32303	7.130793	13.40611	PIPE	6.035877
32.6	6.3	2	5.95	27.4	6.330481	2.245036	1.059151	12.35983	ORIFICE	5.27133	29.32303	7.130793	13.40611	PIPE	6.330481
32.6	6.3	2	5.95	27.5	6.611972	2.223344	1.059151	12.35983	ORIFICE	5.552821	29.32303	7.130793	13.40611	PIPE	6.611972
32.6	6.3	2	5.95	27.6	6.881959	2.201438	1.059151	12.35983	ORIFICE	5.822808	29.32303	7.130793	13.40611	PIPE	6.881959
32.6	6.3	2	5.95	27.7	7.141746	2.179313	1.059151	12.35983	ORIFICE	6.082595	29.32303	7.130793	13.40611	PIPE	7.141746
32.6	6.3	2	5.95	27.8	7.39241	2.15696	1.059151	12.35983	ORIFICE	6.333259	29.32303	7.130793	13.40611	PIPE	7.39241
32.6	6.3	2	5.95	27.9	7.634848	2.134374	1.059151	12.35983	ORIFICE	6.575697	29.32303	7.130793	13.40611	PIPE	7.634848
32.6	6.3	2	5.95	28	7.869821	2.111546	1.059151	12.35983	ORIFICE	6.81067	29.32303	7.130793	13.40611	PIPE	7.869821
32.6	6.3	2	5.95	28.1	8.097979	2.088468	1.059151	12.35983	ORIFICE	7.038828	29.32303	7.130793	13.40611	PIPE	8.097979
32.6	6.3	2	5.95	28.2	8.319882	2.065132	1.059151	12.35983	ORIFICE	7.260732	29.32303	7.130793	13.40611	ORIFICE	8.189943
32.6	6.3	2	5.95	28.3	8.536019	2.04153	1.059151	12.35983	ORIFICE	7.476868	29.32303	7.130793	13.40611	ORIFICE	8.189943
32.6	6.3	2	5.95	28.4	8.746817	2.017652	1.059151	12.35983	ORIFICE	7.687666	29.32303	7.130793	13.40611	ORIFICE	8.189943
32.6	6.3	2	5.95	28.5	8.952653	1.993487	1.059151	12.35983	ORIFICE	7.893502	29.32303	7.130793	13.40611	ORIFICE	8.189943
32.6	6.3	2	5.95	28.6	9.153861	1.969026	1.059151	12.35983	ORIFICE	8.09471	29.32303	7.130793	13.40611	ORIFICE	8.189943
32.6	6.3	2	5.95	28.7	9.350741	1.944258	1.059151	12.35983	ORIFICE	8.29159	29.32303	7.130793	13.40611	ORIFICE	8.189943
32.6	6.3	2	5.95	28.8	9.54356	1.91917	1.059151	12.35983	ORIFICE	8.484409	29.32303	7.130793	13.40611	ORIFICE	8.189943
32.8	6.5	2.2	6.15	26.4	1.908712	2.490643	1.076805	12.59985	ORIFICE	0.831907	33.82968	7.478838	14.2719	PIPE	1.908712
32.8	6.5	2.2	6.15	26.5	2.699326	2.471109	1.076805	12.59985	ORIFICE	1.622522	33.82968	7.478838	14.2719	PIPE	2.699326
32.8	6.5	2.2	6.15	26.6	3.305986	2.451418	1.076805	12.59985	ORIFICE	2.229181	33.82968	7.478838	14.2719	PIPE	3.305986
32.8	6.5	2.2	6.15	26.7	3.817424	2.431568	1.076805	12.59985	ORIFICE	2.740619	33.82968	7.478838	14.2719	PIPE	3.817424
32.8	6.5	2.2	6.15	26.8	4.26801	2.411555	1.076805	12.59985	ORIFICE	3.191205	33.82968	7.478838	14.2719	PIPE	4.26801

Table 6C

ST MARY'S DETENTION POND DISCHARGE CAPACITY

POND LEVEL	TOTAL ENERGY AVAILABLE (FEET)	HEAD ON UPPER INLET (FEET)	HEAD ON LOWER INLET (FEET)	TRIAL HGL ELEV @ UPPER INLET	PIPE CAPACITY D/S FROM UPPER INLET (CFS)	PIPE CAPACITY U/S FROM UPPER INLET (CFS)	LOWER INLET ORIFICE CAPACITY (CFS)	LOWER INLET GRATE CAPACITY (CFS)	LOWER INLET CONTROL MODE	UPPER INLET PIPE CAPACITY (CFS)	UPPER INLET CREST CAPACITY (CFS)	UPPER INLET ORIFICE CAPACITY (CFS)	UPPER INLET GRATE CAPACITY (CFS)	UPPER INLET CONTROL MODE	TOTAL SYSTEM CAPACITY (CFS)
32.8	6.5	2.2	6.15	26.9	4.67537	2.391374	1.076805	12.59985	ORIFICE	3.598566	33.82968	7.478838	14.2719	PIPE	4.67537
32.8	6.5	2.2	6.15	27	5.049977	2.371022	1.076805	12.59985	ORIFICE	3.973172	33.82968	7.478838	14.2719	PIPE	5.049977
32.8	6.5	2.2	6.15	27.1	5.398653	2.350493	1.076805	12.59985	ORIFICE	4.321848	33.82968	7.478838	14.2719	PIPE	5.398653
32.8	6.5	2.2	6.15	27.2	5.726136	2.329784	1.076805	12.59985	ORIFICE	4.649331	33.82968	7.478838	14.2719	PIPE	5.726136
32.8	6.5	2.2	6.15	27.3	6.035877	2.308888	1.076805	12.59985	ORIFICE	4.959072	33.82968	7.478838	14.2719	PIPE	6.035877
32.8	6.5	2.2	6.15	27.4	6.330481	2.287802	1.076805	12.59985	ORIFICE	5.253677	33.82968	7.478838	14.2719	PIPE	6.330481
32.8	6.5	2.2	6.15	27.5	6.611972	2.26652	1.076805	12.59985	ORIFICE	5.535167	33.82968	7.478838	14.2719	PIPE	6.611972
32.8	6.5	2.2	6.15	27.6	6.881959	2.245036	1.076805	12.59985	ORIFICE	5.805154	33.82968	7.478838	14.2719	PIPE	6.881959
32.8	6.5	2.2	6.15	27.7	7.141746	2.223344	1.076805	12.59985	ORIFICE	6.064941	33.82968	7.478838	14.2719	PIPE	7.141746
32.8	6.5	2.2	6.15	27.8	7.39241	2.201438	1.076805	12.59985	ORIFICE	6.315605	33.82968	7.478838	14.2719	PIPE	7.39241
32.8	6.5	2.2	6.15	27.9	7.634848	2.179313	1.076805	12.59985	ORIFICE	6.558043	33.82968	7.478838	14.2719	PIPE	7.634848
32.8	6.5	2.2	6.15	28	7.869821	2.15696	1.076805	12.59985	ORIFICE	6.793016	33.82968	7.478838	14.2719	PIPE	7.869821
32.8	6.5	2.2	6.15	28.1	8.097979	2.134374	1.076805	12.59985	ORIFICE	7.021174	33.82968	7.478838	14.2719	PIPE	8.097979
32.8	6.5	2.2	6.15	28.2	8.319882	2.111546	1.076805	12.59985	ORIFICE	7.243078	33.82968	7.478838	14.2719	PIPE	8.319882
32.8	6.5	2.2	6.15	28.3	8.536019	2.088468	1.076805	12.59985	ORIFICE	7.459215	33.82968	7.478838	14.2719	PIPE	8.536019
32.8	6.5	2.2	6.15	28.4	8.746817	2.065132	1.076805	12.59985	ORIFICE	7.670012	33.82968	7.478838	14.2719	ORIFICE	8.555643
32.8	6.5	2.2	6.15	28.5	8.952653	2.04153	1.076805	12.59985	ORIFICE	7.875848	33.82968	7.478838	14.2719	ORIFICE	8.555643
32.8	6.5	2.2	6.15	28.6	9.153861	2.017652	1.076805	12.59985	ORIFICE	8.077056	33.82968	7.478838	14.2719	ORIFICE	8.555643
32.8	6.5	2.2	6.15	28.7	9.350741	1.993487	1.076805	12.59985	ORIFICE	8.273936	33.82968	7.478838	14.2719	ORIFICE	8.555643
32.8	6.5	2.2	6.15	28.8	9.54356	1.969026	1.076805	12.59985	ORIFICE	8.466755	33.82968	7.478838	14.2719	ORIFICE	8.555643
32.8	6.5	2.2	6.15	28.9	9.732559	1.944258	1.076805	12.59985	ORIFICE	8.655755	33.82968	7.478838	14.2719	ORIFICE	8.555643
33	6.7	2.4	6.35	26.4	1.908712	2.52926	1.094174	12.83538	ORIFICE	0.814538	38.54612	7.811392	15.08808	PIPE	1.908712
33	6.7	2.4	6.35	26.5	2.699326	2.510026	1.094174	12.83538	ORIFICE	1.605153	38.54612	7.811392	15.08808	PIPE	2.699326
33	6.7	2.4	6.35	26.6	3.305986	2.490643	1.094174	12.83538	ORIFICE	2.211812	38.54612	7.811392	15.08808	PIPE	3.305986
33	6.7	2.4	6.35	26.7	3.817424	2.471109	1.094174	12.83538	ORIFICE	2.72325	38.54612	7.811392	15.08808	PIPE	3.817424
33	6.7	2.4	6.35	26.8	4.26801	2.451418	1.094174	12.83538	ORIFICE	3.173836	38.54612	7.811392	15.08808	PIPE	4.26801
33	6.7	2.4	6.35	26.9	4.67537	2.431568	1.094174	12.83538	ORIFICE	3.581197	38.54612	7.811392	15.08808	PIPE	4.67537
33	6.7	2.4	6.35	27	5.049977	2.411555	1.094174	12.83538	ORIFICE	3.955804	38.54612	7.811392	15.08808	PIPE	5.049977
33	6.7	2.4	6.35	27.1	5.398653	2.391374	1.094174	12.83538	ORIFICE	4.304479	38.54612	7.811392	15.08808	PIPE	5.398653
33	6.7	2.4	6.35	27.2	5.726136	2.371022	1.094174	12.83538	ORIFICE	4.631962	38.54612	7.811392	15.08808	PIPE	5.726136
33	6.7	2.4	6.35	27.3	6.035877	2.350493	1.094174	12.83538	ORIFICE	4.941704	38.54612	7.811392	15.08808	PIPE	6.035877
33	6.7	2.4	6.35	27.4	6.330481	2.329784	1.094174	12.83538	ORIFICE	5.236308	38.54612	7.811392	15.08808	PIPE	6.330481
33	6.7	2.4	6.35	27.5	6.611972	2.308888	1.094174	12.83538	ORIFICE	5.517799	38.54612	7.811392	15.08808	PIPE	6.611972
33	6.7	2.4	6.35	27.6	6.881959	2.287802	1.094174	12.83538	ORIFICE	5.787785	38.54612	7.811392	15.08808	PIPE	6.881959
33	6.7	2.4	6.35	27.7	7.141746	2.26652	1.094174	12.83538	ORIFICE	6.047573	38.54612	7.811392	15.08808	PIPE	7.141746
33	6.7	2.4	6.35	27.8	7.39241	2.245036	1.094174	12.83538	ORIFICE	6.298236	38.54612	7.811392	15.08808	PIPE	7.39241
33	6.7	2.4	6.35	27.9	7.634848	2.223344	1.094174	12.83538	ORIFICE	6.540674	38.54612	7.811392	15.08808	PIPE	7.634848
33	6.7	2.4	6.35	28	7.869821	2.201438	1.094174	12.83538	ORIFICE	6.775647	38.54612	7.811392	15.08808	PIPE	7.869821
33	6.7	2.4	6.35	28.1	8.097979	2.179313	1.094174	12.83538	ORIFICE	7.003805	38.54612	7.811392	15.08808	PIPE	8.097979
33	6.7	2.4	6.35	28.2	8.319882	2.15696	1.094174	12.83538	ORIFICE	7.225709	38.54612	7.811392	15.08808	PIPE	8.319882
33	6.7	2.4	6.35	28.3	8.536019	2.134374	1.094174	12.83538	ORIFICE	7.441846	38.54612	7.811392	15.08808	PIPE	8.536019
33	6.7	2.4	6.35	28.4	8.746817	2.111546	1.094174	12.83538	ORIFICE	7.652643	38.54612	7.811392	15.08808	PIPE	8.746817
33	6.7	2.4	6.35	28.5	8.952653	2.088468	1.094174	12.83538	ORIFICE	7.858479	38.54612	7.811392	15.08808	ORIFICE	8.905565
33	6.7	2.4	6.35	28.6	9.153861	2.065132	1.094174	12.83538	ORIFICE	8.059687	38.54612	7.811392	15.08808	ORIFICE	8.905565

Table 6D

ST MARY'S HOSPITAL
CALCULATION OF CATCH BASIN CAPACITY

LOCATION	TRIBUTARY AREA (ACRES)	RATIONAL RUNOFF COEFFICIENT	SCS CURVE NUMBER	RATIONAL RUNOFF (CFS)	SCS RUNOFF (CFS)	CATCH BASIN TYPE	WATER DEPTH (FEET)	GUTTER SLOPE	GRATE AREA (SQ FT)	CLOGGING FACTOR (PERCENT)	GRATE INLET COEFFICIENT	CATCH BASIN CAPACITY (CFS)
N. SIDE OF INTERSECTION OF CENTER AVE AND SIXTH STREET (SUBBASIN 1A)	1.95	0.77	93	7.43	5.63	PONDED	0.5	NA	2.2	0	NA	7.74
SW. CORNER OF INTERSECTION OF CENTER AVE AND SIXTH STREET (SUBBASIN 1D AND BASIN 3)	3.48	0.78	93	13.3	10	GUTTER	0.65	0.0007	4.4	0	28	13.66

Table 7

ST MARY'S ORIGINAL CONDITIONS, ENTIRE SITE
SCS METHOD, 2 YEAR STORM
SCS TR 20: FOR Tc=1.1, Ia/P=.4 AND Tt=0, 24 HR STORM

AREA (SQ MI)	CN	S	P	Q	UNIT Qp	Qp	Ia/P
0.03125	82	2.195122	1	0.114181	211.2	0.753594 0	0.439024

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)
10.5	0	
11	3.57E-06	0.003211
11.3	3.57E-06	0.003854
11.6	3.57E-06	0.003854
11.9	3.57E-06	0.003854
12	0.001073	0.193772
12.1	0.005711	1.221079
12.2	0.025334	5.588048
12.3	0.073861	17.85503
12.4	0.156285	41.42625
12.5	0.271536	77.00786
12.6	0.40891	122.4804
12.7	0.540932	170.9716
12.8	0.638342	212.2694
13	0.753594	501.097
13.2	0.676879	514.97
13.4	0.583036	453.5693
13.6	0.493119	387.4157
13.8	0.42354	329.997
14	0.370374	285.809
14.3	0.310429	367.6339
14.6	0.266541	311.5639
15	0.225507	354.2747
15.5	0.195892	379.2589
16	0.17591	334.6213
16.5	0.15914	301.5446
17	0.144153	272.9637
17.5	0.133449	249.842
18	0.127303	234.7487
19	0.115965	438.0264
20	0.102406	393.0677
22	0.083852	670.5272
26	0.003212	626.8607
		8056.82

Table 8

ST MARY'S ORIGINAL CONDITIONS, ENTIRE SITE
SCS METHOD, 100 YEAR STORM
SCS TR 20: FOR Tc=0.75, Ia/P=.2 AND Tt=0, 24 HR STORM

AREA (SQ MI)	CN	S	P	Q	UNIT Qp	Qp	Ia/P
0.03125	82	2.195122	2.56	1.04227	379	12.34438	0.171494
						0	

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)
10.5	0.001	
11	0.211727	191.4546
11.3	0.293155	272.6362
11.6	0.390867	369.3719
11.9	0.586293	527.6666
12	0.765417	243.3078
12.1	1.205124	354.6974
12.2	2.361392	641.973
12.3	4.55993	1245.838
12.4	7.621597	2192.675
12.5	10.52041	3265.561
12.6	12.2141	4092.211
12.7	12.34438	4420.526
12.8	11.35097	4265.163
13	8.110161	7006.006
13.2	5.748769	4989.215
13.4	4.250506	3599.739
13.6	3.305949	2720.324
13.8	2.703387	2163.361
14	2.279965	1794.007
14.3	1.872828	2242.508
14.6	1.595975	1873.154
15	1.367979	2134.047
15.5	1.22141	2330.45
16	1.091126	2081.282
16.5	0.977128	1861.428
17	0.879415	1670.889
17.5	0.830559	1538.976
18	0.781702	1451.035
19	0.700275	2667.559
20	0.618848	2374.421
22	0.504849	4045.309
26	1.63E-05	3635.033
		74261.82

Table 9

ST MARY'S HOSPITAL, ORIGINAL CONDITIONS, ENTIRE SITE, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH Tc=70 MIN AND STORM DURATION 70 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
20	0.1	0.5	1	1

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)
0	0	
0.083	0.071429	18.675
0.167	0.142857	56.7
0.25	0.214286	93.375
0.333	0.285714	130.725
0.417	0.357143	170.1
0.5	0.428571	205.425
0.5833	0.5	243.6525
0.6667	0.571429	281.475
0.75	0.642857	299.88
0.833	0.714286	298.8
0.9167	0.785714	282.4875
1	0.857143	243.6525
1.083	0.928571	205.425
1.166	1	168.075
1.249	0.928571	130.725
1.332	0.857143	93.375
1.415	0.785714	56.025
1.498	0.714286	18.675
1.581	0.642857	202.7571
1.664	0.571429	181.4143
1.747	0.5	160.0714
1.83	0.428571	138.7286
1.913	0.357143	117.3857
1.996	0.285714	96.04286
2.079	0.214286	74.7
2.162	0.142857	53.35714
2.245	0.071429	32.01429
2.328	0	10.67143
2.411	0	0
		4064.39

Table 10

ST MARY'S HOSPITAL, ORIGINAL CONDITIONS, ENTIRE SITE, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH Tc=50 MIN AND STORM DURATION 50 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
20	0.25	1.73	1	8.65

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)
0	0	
0.083	0.865	129.231
0.167	1.73	392.364
0.25	2.595	646.155
0.333	3.46	904.617
0.417	4.325	1177.092
0.5	5.19	1421.541
0.5833	6.055	1686.075
0.6667	6.92	1947.807
0.75	7.785	2204.868
0.833	8.65	2455.389
0.9167	7.785	2476.097
1	6.92	2204.868
1.083	6.055	1938.465
1.166	5.19	1680.003
1.249	4.325	1421.541
1.332	3.46	1163.079
1.415	2.595	904.617
1.498	1.73	646.155
1.581	0.865	387.693
1.664	0	129.231
1.747	0	0
		25916.89

Table 11

ST MARY,S HOSPITAL, COMBINED FLOW FROM BASINS 1 AND 3, MODIFIED RATIONAL METHOD

DURATION	5.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00	50.00	60.00	70.00	80.00	90.00
i,2	1.85	1.35	1.28	1.11	0.98	0.88	0.81	0.76	0.66	0.56	0.50	0.45	0.41
i,100	4.95	3.80	3.24	2.84	2.51	2.27	2.09	1.94	1.64	1.43	1.30	1.17	1.06
BASIN 1													
AREA	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80
Tc,2	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Tc,100	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
C,2	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
C,100	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Q,2	13.65	14.89	12.54	10.88	9.60	8.62	7.94	7.45	6.47	5.49	4.90	4.41	4.02
Q,100	52.74	40.48	34.52	30.26	26.74	24.18	22.27	20.67	17.47	15.23	13.85	12.46	11.29
BASIN 2													
AREA	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Tc,2	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
Tc,100	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
C,2	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
C,100	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Q,2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Q,100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BASIN 3													
AREA	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Tc,2	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Tc,100	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
C,2	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
C,100	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Q,2	3.10	2.42	2.04	1.77	1.56	1.40	1.29	1.21	1.05	0.89	0.80	0.72	0.65
Q,100	8.51	6.53	5.57	4.88	4.31	3.90	3.59	3.33	2.82	2.46	2.23	2.01	1.82

TWO YEAR STORM
DETENTION POND INFLOW FROM 2 BASINS COMBINED

TIME (HOURS)	TIME (MINUTES)	5 MINUTE DURATION	10 MINUTE DURATION	15 MINUTE DURATION	20 MINUTE DURATION	25 MINUTE DURATION	30 MINUTE DURATION	35 MINUTE DURATION	40 MINUTE DURATION	50 MINUTE DURATION	60 MINUTE DURATION	70 MINUTE DURATION	80 MINUTE DURATION	90 MINUTE DURATION
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.03	1.98	6.63	5.17	4.35	3.78	3.33	2.99	2.76	2.58	2.24	1.90	1.70	1.53	1.39
0.07	3.96	13.27	10.34	8.71	7.55	6.67	5.99	5.51	5.17	4.49	3.81	3.40	3.06	2.79
0.10	5.94	16.17	15.06	12.68	10.99	9.71	8.72	8.02	7.53	6.54	5.55	4.95	4.46	4.06
0.13	7.92	12.43	17.31	14.58	12.64	11.16	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.17	9.90	5.79	17.31	14.58	12.64	11.16	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.20	11.88	0.33	12.40	14.58	12.64	11.16	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.23	13.86	0.00	7.23	14.58	12.64	11.16	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.26	15.84	0.00	2.47	12.73	12.64	11.16	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.30	17.82	0.00	0.00	8.38	12.64	11.16	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.33	19.80	0.00	0.00	4.02	12.64	11.16	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.36	21.78	0.00	0.00	0.39	9.25	11.16	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.40	23.76	0.00	0.00	0.00	5.47	11.16	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.43	25.74	0.00	0.00	0.00	1.96	9.92	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.46	27.72	0.00	0.00	0.00	0.00	6.58	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.50	29.70	0.00	0.00	0.00	0.00	3.25	10.02	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.53	31.68	0.00	0.00	0.00	0.00	0.44	7.48	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.56	33.66	0.00	0.00	0.00	0.00	0.00	4.49	9.22	8.66	7.52	6.38	5.69	5.12	4.67
0.59	35.64	0.00	0.00	0.00	0.00	0.00	1.68	8.33	8.66	7.52	6.38	5.69	5.12	4.67
0.63	37.62	0.00	0.00	0.00	0.00	0.00	0.00	5.58	8.66	7.52	6.38	5.69	5.12	4.67
0.66	39.60	0.00	0.00	0.00	0.00	0.00	0.00	2.82	8.66	7.52	6.38	5.69	5.12	4.67
0.69	41.58	0.00	0.00	0.00	0.00	0.00	0.00	0.48	6.59	7.52	6.38	5.69	5.12	4.67
0.73	43.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.01	7.52	6.38	5.69	5.12	4.67
0.76	45.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	7.52	6.38	5.69	5.12	4.67
0.79	47.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.52	6.38	5.69	5.12	4.67
0.83	49.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.52	6.38	5.69	5.12	4.67
0.86	51.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.84	6.38	5.69	5.12	4.67
0.89	53.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.59	6.38	5.69	5.12	4.67
0.92	55.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	6.38	5.69	5.12	4.67
0.96	57.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.38	5.69	5.12	4.67
0.99	59.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.38	5.69	5.12	4.67
1.02	61.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.05	5.69	5.12	4.67
1.06	63.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.15	5.69	5.12	4.67
1.09	65.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	5.69	5.12	4.67
1.12	67.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.69	5.12	4.67
1.16	69.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.69	5.12	4.67
1.19	71.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.59	5.12	4.67
1.22	73.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.89	5.12	4.67
1.25	75.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	5.12	4.67
1.29	77.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.12	4.67
1.32	79.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.12	4.67
1.35	81.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.21	4.67
1.39	83.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.68	4.67
1.42	85.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	4.67
1.45	87.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.67
1.49	89.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.67
1.52	91.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.91
1.55	93.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.51
1.58	95.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12
1.62	97.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.65	99.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.68	100.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.72	102.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.75	104.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.78	106.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 12

ST MARY,S HOSPITAL, COMBINED FLOW FROM BASINS 1 AND 3, MODIFIED RATIONAL METHOD

DURATION	5.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00	50.00	60.00	70.00	80.00	90.00
I,2	1.95	1.52	1.28	1.11	0.98	0.88	0.81	0.76	0.66	0.56	0.50	0.45	0.41
I,100	4.95	3.80	3.24	2.84	2.51	2.27	2.09	1.94	1.64	1.43	1.30	1.17	1.06
BASIN 1													
AREA	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80
Tc,2	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Tc,100	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
C,2	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
C,100	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Q,2	13.65	14.89	12.54	10.88	9.60	8.62	7.94	7.45	6.47	5.49	4.90	4.41	4.02
Q,100	52.74	40.48	34.52	30.26	26.74	24.18	22.27	20.67	17.47	15.23	13.85	12.46	11.29
BASIN 2													
AREA	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Tc,2	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
Tc,100	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
C,2	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
C,100	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Q,2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Q,100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BASIN 3													
AREA	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Tc,2	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Tc,100	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
C,2	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
C,100	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Q,2	3.10	2.42	2.04	1.77	1.56	1.40	1.29	1.21	1.05	0.89	0.80	0.72	0.65
Q,100	8.51	6.53	5.57	4.88	4.31	3.90	3.59	3.33	2.82	2.46	2.23	2.01	1.82

100 YEAR STORM
DETENTION POND INFLOW FROM 2 BASINS COMBINED

TIME (HOURS)	TIME (MIN)	5 MINUTE DURATION	10 MINUTE DURATION	15 MINUTE DURATION	20 MINUTE DURATION	25 MINUTE DURATION	30 MINUTE DURATION	35 MINUTE DURATION	40 MINUTE DURATION	50 MINUTE DURATION	60 MINUTE DURATION	70 MINUTE DURATION	80 MINUTE DURATION	90 MINUTE DURATION
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.03	1.98	24.25	18.62	15.87	13.91	12.30	11.12	10.24	9.50	8.03	7.01	6.37	5.73	5.19
0.07	3.96	48.50	37.23	31.75	27.83	24.59	22.24	20.48	19.01	16.07	14.01	12.74	11.46	10.39
0.10	5.94	49.73	47.01	40.08	35.14	31.05	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.13	7.92	25.48	47.01	40.08	35.14	31.05	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.17	9.90	1.22	47.01	40.08	35.14	31.05	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.20	11.88	0.00	29.34	40.08	35.14	31.05	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.23	13.86	0.00	10.72	40.08	35.14	31.05	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.26	15.84	0.00	0.00	33.35	35.14	31.05	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.30	17.82	0.00	0.00	17.48	35.14	31.05	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.33	19.80	0.00	0.00	1.60	35.14	31.05	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.36	21.78	0.00	0.00	0.00	22.63	31.05	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.40	23.76	0.00	0.00	0.00	8.71	31.05	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.43	25.74	0.00	0.00	0.00	0.00	26.46	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.46	27.72	0.00	0.00	0.00	0.00	14.16	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.50	29.70	0.00	0.00	0.00	0.00	1.86	28.08	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.53	31.68	0.00	0.00	0.00	0.00	0.00	18.65	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.56	33.66	0.00	0.00	0.00	0.00	0.00	7.33	25.86	24.00	20.29	17.69	16.08	14.48	13.11
0.59	35.64	0.00	0.00	0.00	0.00	0.00	0.00	22.55	24.00	20.29	17.69	16.08	14.48	13.11
0.63	37.62	0.00	0.00	0.00	0.00	0.00	0.00	12.31	24.00	20.29	17.69	16.08	14.48	13.11
0.66	39.60	0.00	0.00	0.00	0.00	0.00	0.00	2.07	24.00	20.29	17.69	16.08	14.48	13.11
0.69	41.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.42	20.29	17.69	16.08	14.48	13.11
0.73	43.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.91	20.29	17.69	16.08	14.48	13.11
0.76	45.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29	17.69	16.08	14.48	13.11
0.79	47.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29	17.69	16.08	14.48	13.11
0.83	49.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29	17.69	16.08	14.48	13.11
0.86	51.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.28	17.69	16.08	14.48	13.11
0.89	53.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25	17.69	16.08	14.48	13.11
0.92	55.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.69	16.08	14.48	13.11
0.96	57.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.69	16.08	14.48	13.11
0.99	59.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.69	16.08	14.48	13.11
1.02	61.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.81	16.08	14.48	13.11
1.06	63.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	16.08	14.48	13.11
1.09	65.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.08	14.48	13.11
1.12	67.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.08	14.48	13.11
1.16	69.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.08	14.48	13.11
1.19	71.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.97	14.48	13.11
1.22	73.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.60	14.48	13.11
1.25	75.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.48	13.11
1.29	77.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.48	13.11
1.32	79.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.48	13.11
1.35	81.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.06	13.11
1.39	83.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.33	13.11
1.42	85.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.11
1.45	87.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.11
1.49	89.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.11
1.52	91.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.28
1.55	93.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.09

Table 13

ST MARY,S HOSPITAL, COMBINED FLOW FROM BASINS 1, 2, AND 3, MODIFIED RATIONAL METHOD

DURATION	5.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00	50.00	60.00	70.00	80.00	90.00	100.00
i,2	1.95	1.52	1.28	1.11	0.98	0.88	0.81	0.76	0.66	0.56	0.50	0.45	0.45	0.45
i,100	4.95	3.80	3.24	2.84	2.51	2.27	2.09	1.94	1.64	1.43	1.30	1.17	1.17	1.17
BASIN 1														
AREA	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80
Tc,2	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Tc,100	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
C,2	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
C,100	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Q,2	13.65	14.89	12.54	10.88	9.60	8.62	7.94	7.45	6.47	5.49	4.90	4.41	4.41	4.41
Q,100	52.74	40.48	34.52	30.26	26.74	24.18	22.27	20.67	17.47	15.23	13.85	12.46	12.46	12.46
BASIN 2														
AREA	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Tc,2	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
Tc,100	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
C,2	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
C,100	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Q,2	0.81	1.24	1.60	1.86	2.05	2.21	2.32	2.22	1.93	1.64	1.46	1.32	1.32	1.32
Q,100	3.72	5.72	7.31	8.54	7.93	7.17	6.60	6.13	5.18	4.52	4.11	3.70	3.70	3.70
BASIN 3														
AREA	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Tc,2	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Tc,100	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
C,2	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
C,100	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Q,2	3.10	2.42	2.04	1.77	1.56	1.40	1.29	1.21	1.05	0.89	0.80	0.72	0.72	0.72
Q,100	8.51	6.53	5.57	4.88	4.31	3.90	3.59	3.33	2.82	2.46	2.23	2.01	2.01	2.01

TWO YEAR STORM
DETENTION POND INFLOW FROM 3 BASINS COMBINED

TIME (HOURS)	TIME (MIN)	5 MINUTE DURATION	10 MINUTE DURATION	15 MINUTE DURATION	20 MINUTE DURATION	25 MINUTE DURATION	30 MINUTE DURATION	35 MINUTE DURATION	40 MINUTE DURATION	50 MINUTE DURATION	60 MINUTE DURATION	70 MINUTE DURATION	80 MINUTE DURATION	90 MINUTE DURATION	100 MINUTE DURATION
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.03	1.98	7.96	5.42	4.57	4.02	3.60	3.24	2.99	2.71	2.35	2.00	1.78	1.61	1.61	1.61
0.07	3.96	13.91	10.84	9.13	7.92	6.99	6.28	5.78	5.42	4.71	3.99	3.57	3.21	3.21	3.21
0.10	5.94	16.98	15.81	13.31	11.55	10.19	9.15	8.43	7.91	6.86	5.82	5.20	4.68	4.68	4.68
0.13	7.92	13.24	18.32	15.42	13.38	11.81	10.60	9.76	9.16	7.95	6.75	6.03	5.42	5.42	5.42
0.17	9.90	6.61	18.57	15.64	13.56	11.97	10.75	9.89	9.28	8.06	6.84	6.11	5.50	5.50	5.50
0.20	11.88	1.14	13.67	15.85	13.74	12.13	10.90	10.03	9.41	8.17	6.93	6.19	5.57	5.57	5.57
0.23	13.86	0.81	8.50	16.06	13.93	12.30	11.04	10.16	9.54	8.28	7.03	6.27	5.65	5.65	5.65
0.26	15.84	0.81	3.74	14.33	14.11	12.46	11.19	10.30	9.66	8.39	7.12	6.36	5.72	5.72	5.72
0.30	17.82	0.81	1.27	9.98	14.29	12.62	11.33	10.43	9.79	8.50	7.21	6.44	5.80	5.80	5.80
0.33	19.80	0.81	1.27	5.63	14.48	12.78	11.48	10.57	9.91	8.61	7.30	6.52	5.87	5.87	5.87
0.36	21.78	0.81	1.27	2.00	14.10	12.94	11.62	10.70	10.04	8.72	7.40	6.60	5.94	5.94	5.94
0.40	23.76	0.81	1.27	1.60	7.33	13.11	11.77	10.83	10.16	8.83	7.49	6.69	6.02	6.02	6.02
0.43	25.74	0.81	1.27	1.60	3.81	11.96	11.91	10.97	10.29	8.94	7.58	6.77	6.09	6.09	6.09
0.46	27.72	0.81	1.27	1.60	1.86	8.63	12.06	11.10	10.42	9.05	7.67	6.85	6.17	6.17	6.17
0.50	29.70	0.81	1.27	1.60	1.86	5.30	12.21	11.24	10.54	9.15	7.77	6.94	6.24	6.24	6.24
0.53	31.68	0.81	1.27	1.60	1.86	2.49	9.69	11.37	10.67	9.26	7.86	7.02	6.32	6.32	6.32
0.56	33.66	0.81	1.27	1.60	1.86	2.05	6.70	11.50	10.79	9.37	7.95	7.10	6.39	6.39	6.39
0.59	35.64	0.71	1.19	1.54	1.80	2.00	3.83	10.66	10.88	9.45	8.02	7.16	6.44	6.44	6.44
0.63	37.62	0.39	0.94	1.32	1.61	1.83	2.01	7.77	10.88	9.45	8.02	7.16	6.44	6.44	6.44
0.66	39.60	0.07	0.69	1.11	1.43	1.67	1.87	4.88	10.88	9.45	8.02	7.16	6.44	6.44	6.44
0.69	41.58	0.00	0.43	0.90	1.24	1.51	1.72	2.40	8.72	9.45	8.02	7.16	6.44	6.44	6.44
0.73	43.56	0.00	0.18	0.69	1.06	1.35	1.58	1.79	6.00	9.45	8.02	7.16	6.44	6.44	6.44
0.76	45.54	0.00	0.00	0.48	0.88	1.18	1.43	1.66	3.42	9.45	8.02	7.16	6.44	6.44	6.44
0.79	47.52	0.00	0.00	0.27	0.69	1.02	1.29	1.52	1.75	9.45	8.02	7.16	6.44	6.44	6.44
0.83	49.50	0.00	0.00	0.05	0.51	0.86	1.14	1.39	1.62	9.45	8.02	7.16	6.44	6.44	6.44
0.86	51.48	0.00	0.00	0.00	0.33	0.70	0.99	1.25	1.49	7.69	8.02	7.16	6.44	6.44	6.44
0.89	53.46	0.00	0.00	0.00	0.14	0.54	0.85	1.12	1.37	5.33	8.02	7.16	6.44	6.44	6.44
0.92	55.44	0.00	0.00	0.00	0.00	0.37	0.70	0.99	1.24	3.07	8.02	7.16	6.44	6.44	6.44
0.96	57.42	0.00	0.00	0.00	0.00	0.21	0.56	0.85	1.12	1.52	8.02	7.16	6.44	6.44	6.44
0.99	59.40	0.00	0.00	0.00	0.00	0.05	0.41	0.72	0.99	1.41	8.02	7.16	6.44	6.44	6.44
1.02	61.38	0.00	0.00	0.00	0.00	0.00	0.27	0.58	0.87	1.30	6.62	7.16	6.44	6.44	6.44
1.06	63.36	0.00	0.00	0.00	0.00	0.00	0.12	0.45	0.74	1.19	4.63	7.16	6.44	6.44	6.44
1.09	65.34	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.61	1.08	2.69	7.16	6.44	6.44	6.44
1.12	67.32	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.49	0.98	1.30	7.16	6.44	6.44	6.44
1.16	69.30	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.36	0.87	1.20	7.16	6.44	6.44	6.44
1.19	71.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.76	1.11	6.00	6.44	6.44	6.44
1.22	73.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.65	1.02	4.22	6.44	6.44	6.44
1.25	75.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.92	2.48	6.44	6.44	6.44
1.29	77.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.83	1.16	6.44	6.44	6.44
1.32	79.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.74	1.08	6.44	6.44	6.44
1.35	81.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.65	1.00	5.48	6.44	6.44
1.39	83.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.55	0.91	3.88	6.44	6.44
1.42	85.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.83	2.29	6.44	6.44
1.45	87.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.75	1.05	6.44	6.44
1.49	89.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.66	0.97	6.44	6.44
1.52	91.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.58	0.90	5.57	6.44
1.55	93.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.50	0.83	3.96	6.44
1.58	95.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.75	2.36	6.44
1.62	97.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.68	1.05	6.44
1.65	99.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.60	0.98	6.44
1.68	100.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.53	0.90	5.65
1.72	102.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.45	0.83	4.04
1.75	104.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.75	2.44
1.78	106.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.68	1.11
1.82	108.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.61	0.88
1.85	110.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.53	0.91
1.88	112.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.46	0.83
1.91	114.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.38	0.76
1.95	116.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.68
1.98	118.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.61
2.01	120.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.53
2.05	122.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.46
2.08	124.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.39

ST MARY,S HOSPITAL, COMBINED FLOW FROM BASINS 1, 2, AND 3, MODIFIED RATIONAL METHOD

DURATION	5.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00	50.00	60.00	70.00	80.00	90.00	100.00
I,2	1.95	1.52	1.28	1.11	0.98	0.88	0.81	0.76	0.66	0.56	0.50	0.45	0.45	0.45
I,100	4.95	3.80	3.24	2.84	2.51	2.27	2.09	1.94	1.84	1.43	1.30	1.17	1.17	1.17
BASIN 1														
AREA	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80	13.80
Tc,2	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Tc,100	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
C,2	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
C,100	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Q,2	13.65	14.89	12.54	10.88	9.60	8.62	7.94	7.45	6.47	5.49	4.90	4.41	4.41	4.41
Q,100	52.74	40.48	34.52	30.26	26.74	24.18	22.27	20.67	17.47	15.23	13.85	12.46	12.46	12.46
BASIN 2														
AREA	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Tc,2	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
Tc,100	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
C,2	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
C,100	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Q,2	0.81	1.27	1.60	1.86	2.05	2.21	2.37	2.22	1.93	1.64	1.46	1.32	1.32	1.32
Q,100	3.72	5.72	7.31	8.54	7.93	7.17	6.60	6.13	5.18	4.52	4.11	3.70	3.70	3.70
BASIN 3														
AREA	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Tc,2	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Tc,100	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
C,2	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
C,100	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Q,2	3.10	2.42	2.04	1.77	1.56	1.40	1.29	1.21	1.05	0.89	0.80	0.72	0.72	0.72
Q,100	8.51	6.53	5.57	4.88	4.31	3.90	3.59	3.33	2.82	2.46	2.23	2.01	2.01	2.01

100 YEAR STORM
DETENTION POND INFLOW FROM 3 BASINS COMBINED

TIME (HOURS)	TIME (MIN)	5 MINUTE DURATION	10 MINUTE DURATION	15 MINUTE DURATION	20 MINUTE DURATION	25 MINUTE DURATION	30 MINUTE DURATION	35 MINUTE DURATION	40 MINUTE DURATION	50 MINUTE DURATION	60 MINUTE DURATION	70 MINUTE DURATION	80 MINUTE DURATION	90 MINUTE DURATION	100 MINUTE DURATION
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.03	1.98	25.73	19.75	16.84	14.76	13.04	11.80	10.86	10.08	8.52	7.43	6.76	6.08	6.08	6.08
0.07	3.96	51.45	39.50	33.68	29.52	26.09	23.59	21.72	20.16	17.05	14.86	13.51	12.16	12.16	12.16
0.10	5.94	53.45	50.41	42.98	37.67	33.30	30.11	27.72	25.73	21.76	18.97	17.24	15.52	15.52	15.52
0.13	7.92	29.20	51.54	43.94	38.52	34.04	30.79	28.35	26.31	22.24	19.40	17.63	15.87	15.87	15.87
0.17	9.90	4.95	52.67	44.91	39.37	34.79	31.46	28.97	26.89	22.73	19.82	18.02	16.22	16.22	16.22
0.20	11.88	3.22	35.05	45.87	40.21	35.54	32.14	29.59	27.47	23.22	20.25	18.41	16.57	16.57	16.57
0.23	13.86	3.22	16.44	46.84	41.06	36.29	32.82	30.21	28.05	23.71	20.67	18.79	16.91	16.91	16.91
0.26	15.84	3.22	5.22	40.96	41.90	37.03	33.49	30.84	28.62	24.20	21.10	19.18	17.26	17.26	17.26
0.30	17.82	3.22	5.22	24.79	42.75	37.78	34.17	31.46	29.20	24.69	21.52	19.57	17.61	17.61	17.61
0.33	19.80	3.22	5.22	8.91	43.59	38.53	34.85	32.08	29.78	25.17	21.95	19.96	17.96	17.96	17.96
0.36	21.78	3.14	5.27	6.93	30.84	38.98	35.53	32.46	30.13	25.47	22.21	20.19	18.17	18.17	18.17
0.40	23.76	1.67	4.14	5.97	16.08	38.98	35.53	32.46	30.13	25.47	22.21	20.19	18.17	18.17	18.17
0.43	25.74	0.19	3.01	5.00	6.55	34.11	35.53	32.46	30.13	25.47	22.21	20.19	18.17	18.17	18.17
0.46	27.72	0.00	1.87	4.04	5.67	21.06	35.53	32.46	30.13	25.47	22.21	20.19	18.17	18.17	18.17
0.50	29.70	0.00	0.74	3.07	4.83	8.02	35.53	32.46	30.13	25.47	22.21	20.19	18.17	18.17	18.17
0.53	31.68	0.00	0.00	2.11	3.98	5.41	25.25	32.46	30.13	25.47	22.21	20.19	18.17	18.17	18.17
0.56	33.66	0.00	0.00	1.14	3.14	4.66	13.45	32.46	30.13	25.47	22.21	20.19	18.17	18.17	18.17
0.59	35.64	0.00	0.00	0.18	2.29	3.91	5.33	28.35	30.13	25.47	22.21	20.19	18.17	18.17	18.17
0.63	37.62	0.00	0.00	0.00	1.44	3.16	4.57	18.09	30.13	25.47	22.21	20.19	18.17	18.17	18.17
0.66	39.60	0.00	0.00	0.00	0.60	2.42	3.89	7.22	30.13	25.47	22.21	20.19	18.17	18.17	18.17
0.69	41.58	0.00	0.00	0.00	0.00	1.67	3.22	4.53	22.08	25.47	22.21	20.19	18.17	18.17	18.17
0.73	43.56	0.00	0.00	0.00	0.00	0.92	2.54	3.91	12.00	25.47	22.21	20.19	18.17	18.17	18.17
0.76	45.54	0.00	0.00	0.00	0.00	0.17	1.86	3.29	4.51	23.47	22.21	20.19	18.17	18.17	18.17
0.79	47.52	0.00	0.00	0.00	0.00	0.00	1.19	2.67	3.93	23.47	22.21	20.19	18.17	18.17	18.17
0.83	49.50	0.00	0.00	0.00	0.00	0.00	0.51	2.04	3.36	23.47	22.21	20.19	18.17	18.17	18.17
0.86	51.48	0.00	0.00	0.00	0.00	0.00	0.00	1.42	2.78	19.10	22.21	20.19	18.17	18.17	18.17
0.89	53.46	0.00	0.00	0.00	0.00	0.00	0.00	0.80	2.20	10.58	22.21	20.19	18.17	18.17	18.17
0.92	55.44	0.00	0.00	0.00	0.00	0.00	0.00	0.18	1.62	3.84	22.21	20.19	18.17	18.17	18.17
0.96	57.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	3.35	22.21	20.19	18.17	18.17	18.17
0.99	59.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	2.86	22.21	20.19	18.17	18.17	18.17
1.02	61.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.37	17.03	20.19	18.17	18.17	18.17
1.06	63.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.88	9.60	20.19	18.17	18.17	18.17
1.09	65.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	3.37	20.19	18.17	18.17	18.17
1.12	67.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	2.94	20.19	18.17	18.17	18.17
1.16	69.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	2.52	20.19	18.17	18.17	18.17
1.19	71.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.09	15.82	18.17	18.17	18.17
1.22	73.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66	9.07	18.17	18.17	18.17
1.25	75.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	3.08	18.17	18.17	18.17
1.29	77.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	2.69	18.17	18.17	18.17
1.32	79.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	2.31	18.17	18.17	18.17
1.35	81.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92	14.55	18.17	18.17
1.39	83.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.53	8.47	18.17	18.17
1.42	85.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15	2.79	18.17	18.17
1.45	87.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	2.44	18.17	18.17
1.49	89.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	2.09	18.17	18.17
1.52	91.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75	14.85	18.17
1.55	93.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	8.77	18.17
1.58	95.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	2.81	18.17
1.62	97.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	2.46	18.17
1.65	99.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	2.11	18.17
1.68	100.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76	15.16
1.72	102.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42	9.08
1.75	104.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	3.00
1.78	106.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	2.48
1.82	108.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	2.13
1.85	110.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	1.78
1.88	112.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43
1.91	114.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
1.95	116.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74
1.98	118.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39
2.01	120.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, ST MARY'S, COMBINED BASINS 1 AND 3, 2 YEAR STORM, SCS METHOD

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)	BASIN 1	BASIN 3
10.5	0			0			0	0						0	0
11	0.012012	10.8106	0	0	0	2.956301	0.014782	0.008727	7.8543	0	0.726537	0	2.95630077	0	0.012012
11.3	0.017017	15.67537	0.014782	2.956301	0.008727	5.365714	0.026829	0.01584	13.26596	8.38E-16	0.846293	1.37E-16	5.36571417	0	0.017017
11.6	0.026526	23.51306	0.026829	5.365714	0.01584	7.835299	0.039176	0.02313	21.04347	1.78E-15	0.89497	1.87E-16	7.83529922	0	0.026526
11.9	1.148311	634.4121	0.039176	7.835299	0.02313	434.0282	0.613925	0.362461	208.2192	-3.6E-15	0.328208	-2.4E-15	434.028151	0.904072	0.244239
12	3.942594	916.363	0.613925	434.0282	0.362461	1192.417	0.872584	0.515174	157.9743	-8.5E-14	0.172393	-7.1E-14	1192.41683	3.334498	0.608096
12.1	6.468832	1874.057	0.872584	1192.417	0.515174	2856.176	1.440033	0.653149	210.298	-2E-13	0.112215	-1.8E-13	2856.17555	5.494877	0.973955
12.2	3.650255	1821.436	1.440033	2856.176	0.653149	4436.747	1.663286	0.684985	240.864	-2.3E-13	0.132239	-2E-13	4436.74721	3.076192	0.574063
12.3	1.491132	925.4496	1.663286	4436.747	0.684985	5113.583	1.74196	0.696204	248.6139	-4.8E-13	0.268641	-3.5E-13	5113.583	1.273919	0.217213
12.4	1.169399	478.8956	1.74196	5113.583	0.696204	5341.166	1.768414	0.699976	251.3123	-2.8E-13	0.524775	-1.4E-13	5341.1663	1.009742	0.159657
12.5	1.010852	392.4452	1.768414	5341.166	0.699976	5481.202	1.784692	0.702297	252.4091	-4.8E-13	0.64317	-1.7E-13	5481.20238	0.874719	0.136133
12.6	0.854808	335.8183	1.784692	5481.202	0.702297	5563.947	1.79431	0.703669	253.0738	1.34E-12	0.753602	3.29E-13	5563.94737	0.739695	0.115113
12.7	0.724748	284.3201	1.79431	5563.947	0.703669	5594.855	1.797902	0.704181	253.4129	3.44E-12	0.891294	3.74E-13	5594.8546	0.628154	0.096595
12.8	0.656033	248.5406	1.797902	5594.855	0.704181	5589.903	1.797327	0.704099	253.4903	0.002111	1.019924	4.21E-05	5589.90277	0.569448	0.086585
13	0.580946	445.3122	1.797327	5589.903	0.704099	5528.629	1.790204	0.703083	506.5855	0.000353	1.137597	4.86E-05	5529.62914	0.504871	0.076075
13.2	0.512731	393.7235	1.790204	5528.629	0.703083	5416.8	1.777206	0.70123	505.5526	0.000162	1.28403	5.16E-05	5416.79986	0.446165	0.066565
13.4	0.46513	352.0298	1.777206	5416.8	0.70123	5264.851	1.759543	0.698711	503.9785	0.000124	1.431637	5.35E-05	5264.85096	0.405071	0.060059
13.6	0.424401	320.2311	1.759543	5264.851	0.698711	5083.095	1.738416	0.695698	501.9872	9.65E-05	1.567578	5.48E-05	5083.09476	0.369847	0.054553
13.8	0.390544	293.38	1.738416	5083.095	0.695698	4876.803	1.714437	0.692279	499.6717	7.92E-05	1.703155	5.57E-05	4876.30304	0.340495	0.050049
14	0.356686	269.0027	1.714437	4876.803	0.692279	4648.726	1.687926	0.688498	497.0797	6.64E-05	1.847362	5.63E-05	4648.726	0.311142	0.045545
14.3	0.322829	366.9381	1.687926	4648.726	0.688498	4275.4	1.644531	0.68231	740.2365	0.028021	2.017487	0.00049	4275.40002	0.281789	0.04104
14.6	0.309086	341.2338	1.644531	4275.4	0.68231	3883.245	1.598947	0.67581	733.3848	0.003602	2.149238	0.000538	3883.24546	0.270047	0.039038
15	0.2821	425.6536	1.598947	3883.245	0.67581	3342.187	1.536056	0.666842	966.709	0.002054	2.271128	0.000557	3342.18794	0.246565	0.035535
15.5	0.255114	483.4925	1.536056	3342.187	0.666842	2646.85	1.368639	0.642968	1178.829	0.001242	2.438159	0.000544	2646.85062	0.223083	0.032031
16	0.228128	434.918	1.368639	2646.85	0.642968	1954.721	1.132579	0.609306	1127.046	0.000865	2.591405	0.000512	1954.72142	0.1996	0.028528
16.5	0.208014	392.528	1.132579	1954.721	0.609306	1313.308	0.913816	0.539517	1033.94	0.000667	2.63406	0.000423	1313.30831	0.181988	0.026026
17	0.201142	368.2407	0.913816	1313.308	0.539517	802.9149	0.739739	0.436742	878.6329	0.000787	2.386034	0.000304	802.915225	0.176118	0.025025
17.5	0.1879	350.1379	0.739739	802.9149	0.436742	433.8052	0.613849	0.362416	719.2425	0.00514	2.054199	0.000279	433.805438	0.164377	0.023523
18	0.181028	332.0351	0.613849	433.8052	0.362416	162.6342	0.521362	0.307812	603.2058	0.00024	1.816694	0.000196	162.63437	0.158506	0.022522
19	0.160413	614.5948	0.521362	162.6342	0.307812	35.347	0.176735	0.104344	741.8819	9.69E-05	1.207107	2.01E-05	35.3470174	0.140894	0.019519
20	0.133928	529.8147	0.176735	35.347	0.104344	59.76657	0.298833	0.176431	505.3955	-0.00031	0.953909	-1.4E-05	59.7663599	0.117412	0.016516
22	0.127057	939.5446	0.298833	59.76657	0.176431	31.31962	0.156598	0.092456	967.9912	0.000414	1.030277	1.25E-05	31.3196294	0.111541	0.015515
26	0.127057	1829.614	0.156598	31.31962	0.092456	53.7087	0.268543	0.158548	1807.226	-0.00099	0.987763	-1.2E-05	53.7086858	0.111541	0.015515

17444.16

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, ST MARY'S, COMBINED FLOW, BASINS 1, and 3, 100 YEAR STORM, SCS METHOD

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)	BASIN 1	BASIN 3
10.5	0			0			0	0						0	0
11	1.095122	985.6101	0	0	0	624.3184	0.678997	0.40088	360.7917	0	0.366059	0	624.318423	0.947148	0.147974
11.3	1.551423	1429.135	0.678997	624.3184	0.40088	1523.305	0.985438	0.581803	530.6485	1.14E-13	0.371308	7.15E-14	1523.30464	1.341793	0.20963
11.6	2.418395	2143.702	0.985438	1523.305	0.581803	2996.449	1.487875	0.859971	670.5578	0	0.312304	0	2996.44891	2.091619	0.326776
11.9	15.24045	9535.778	1.487875	2996.449	0.659971	11748.63	2.508271	0.791134	783.5964	-8E-13	0.082174	-7.3E-13	11748.6305	13.18115	2.059306
12	29.52267	8057.363	2.508271	11748.63	0.791134	19509.55	3.073195	0.855747	296.4384	4.55E-13	0.036791	4.38E-13	19509.5548	25.53354	3.989134
12.1	46.0864	13609.63	3.073195	19509.55	0.855747	32475.22	3.868459	2.721832	643.9641	1.25E-12	0.047317	1.19E-12	32475.2239	39.85916	6.227242
12.2	28.42755	13412.51	3.868459	32475.22	2.721832	44173.07	4.475335	6.804087	1714.665	-9.1E-13	0.127841	-7.9E-13	44173.0698	24.58639	3.84116
12.3	9.901731	6899.271	4.475335	44173.07	6.804087	48522.82	4.700997	7.359934	2549.524	1.36E-12	0.369535	8.6E-13	48522.8169	8.563799	1.337932
12.4	6.707624	2989.684	4.700997	48522.82	7.359934	48856.87	4.718328	7.393555	2655.628	3.05E-11	0.888264	3.4E-12	48856.8728	5.801283	0.906341
12.5	5.612502	2217.623	4.718328	48856.87	7.393555	48420.72	4.6957	7.349658	2653.778	1.32E-11	1.196677	2.59E-12	48420.7172	4.854135	0.758367
12.6	4.74553	1864.446	4.6957	48420.72	7.349658	47653.19	4.655881	7.27241	2631.972	2.05E-12	1.411665	8.42E-13	47653.1908	4.104309	0.641221
12.7	3.924188	1560.549	4.655881	47653.19	7.27241	46614.49	4.601994	7.167869	2599.25	5.46E-12	1.665599	3.63E-12	46614.49	3.393948	0.53024
12.8	3.467887	1330.574	4.601994	46614.49	7.167969	45386.87	4.538306	7.044314	2558.193	2.5E-12	1.922624	2.31E-12	45386.8707	2.999303	0.468585
13	3.011587	2332.611	4.538306	45386.87	7.044314	42894.66	4.409012	6.357955	4824.817	5.23E-11	2.068419	3.58E-12	42894.6644	2.604658	0.406929
13.2	2.600916	2020.501	4.409012	42894.66	6.357955	40622.35	4.291152	5.565148	4292.317	2.05E-11	2.124333	2.55E-12	40622.3479	2.249477	0.351438
13.4	2.327125	1774.098	4.291152	40622.35	5.565148	38639.24	4.188244	4.872919	3757.704	2.18E-11	2.118093	2.58E-12	38639.2418	2.01269	0.314445
13.6	2.098965	1593.403	4.188244	38639.24	4.872919	36937.89	4.099979	4.279189	3294.759	5.32E-11	2.06775	3.6E-12	36937.8859	1.815368	0.283617
13.8	1.916464	1445.562	4.099979	36937.89	4.279189	35484.94	4.024601	3.772148	2898.481	0.022031	2.005121	0.000113	35484.944	1.65751	0.258955
14	1.733944	1314.147	4.024601	35484.94	3.772148	34239.6	3.959993	3.337554	2559.493	9.3E-05	1.947646	8.31E-05	34239.5979	1.499651	0.234292
14.3	1.551423	1774.098	3.959993	34239.6	3.337554	32699.39	3.880088	2.800058	3314.311	6.97E-05	1.868166	6.05E-05	32699.3855	1.341793	0.20963
14.6	1.460163	1626.257	3.880088	32699.39	2.800058	31523.22	3.819069	2.389607	2802.419	5.75E-05	1.723233	4.16E-05	31523.2228	1.262864	0.197299
15	1.323273	2004.074	3.819069	31523.22	2.389607	30374.81	3.759491	1.988841	3152.483	4.38E-05	1.573037	2.51E-05	30374.814	1.144471	0.178802
15.5	1.186383	2258.69	3.759491	30374.81	1.988841	29369.38	3.707329	1.637968	3264.128	2.97E-05	1.445142	1.32E-05	29369.3754	1.026077	0.160305
16	1.049492	2012.287	3.707329	29369.38	1.637968	28657.05	3.670374	1.389383	2724.616	1.98E-05	1.35399	6.99E-06	28657.0464	0.907684	0.141808
16.5	0.958232	1806.952	3.670374	28657.05	1.389383	28128.97	3.642978	1.205097	2335.032	1.27E-05	1.292249	3.71E-06	28128.9664	0.828755	0.129477
17	0.912602	1683.751	3.642978	28128.97	1.205097	27759.56	3.623813	1.076184	2053.153	9E-06	1.219393	1.97E-06	27759.5641	0.78929	0.123312
17.5	0.866972	1601.616	3.623813	27759.56	1.076184	27504.24	3.610567	0.997083	1856.94	6.67E-06	1.159416	1.06E-06	27504.2401	0.749826	0.117146
18	0.821342	1519.482	3.610567	27504.24	0.997083	27308.46	3.600411	0.918761	1715.26	4.89E-06	1.128845	6.3E-07	27308.4627	0.710361	0.110981
19	0.684451	2710.428	3.600411	27308.46	0.918761	26722.49	3.570011	0.91257	3296.396	1.34E-06	1.21619	2.89E-07	26722.4942	0.591968	0.092484
20	0.684451	2464.025	3.570011	26722.49	0.91257	25909.95	3.527856	0.907749	3276.573	1.05E-06	1.329765	3.46E-07	25909.9461	0.591968	0.092484
22	0.684451	4928.051	3.527856	25909.95	0.907749	24344.5	3.425135	0.896	6493.494	1.36E-06	1.31766	4.33E-07	24344.5026	0.591968	0.092484
26	0.684451	9856.101	3.425135	24344.5	0.896	21470.48	3.215933	0.872072	12730.12	1.89E-06	1.291598	5.5E-07	21470.4846	0.591968	0.092484
		112762				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR		

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 5 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0						
0.0333	6.632558	397.5555	0	0	0	376.5237	0.594312	0.350882	21.03187	1.42E-14	0.052903	1.35E-14	376.523671
0.0666	13.26512	1192.667	0.594312	376.5237	0.350882	1513.405	0.982062	0.579809	55.70563	9.24E-14	0.046774	8.81E-14	1513.40465
0.0999	16.16577	1764.087	0.982062	1513.405	0.579809	3202.906	1.519866	0.864533	74.58586	7.11E-14	0.04228	6.81E-14	3202.90614
0.1332	12.42642	1713.816	1.519866	3202.906	0.864533	4835.436	1.709629	0.691593	81.28619	-2E-13	0.04743	-1.9E-13	4835.43593
0.1665	5.793863	1092.124	1.709629	4835.436	0.691593	5843.65	1.826822	0.708305	83.90988	3.53E-14	0.076832	7.87E-14	5843.64994
0.1998	0.327533	366.9165	1.826822	5843.65	0.708305	6125.375	1.859569	0.712975	85.19149	3.13E-13	0.232182	2.4E-13	6125.37496
0.2331	0.001	19.59223	1.859569	6125.375	0.712975	6059.661	1.851931	0.711885	85.4061	7E-13	4.337036	2.36E-13	6059.66113
0.2664	0.001	0.11988	1.851931	6059.661	0.711885	5974.525	1.842035	0.710474	85.25623	0.000138	712	1.36E-13	5974.52464
0.2997	0.001	0.11988	1.842035	5974.525	0.710474	5889.557	1.832158	0.709066	85.00722	3.35E-14	709.77	2.58E-14	5889.5573
0.333	0.001	0.11988	1.832158	5889.557	0.709066	5804.759	1.822301	0.70766	84.91855	1.01E-12	708.363	3.68E-13	5804.75863
0.3663	0.001	0.11988	1.822301	5804.759	0.70766	5720.128	1.812464	0.706257	84.75022	3.32E-13	706.9588	3.18E-13	5720.12829
0.3996	0.001	0.11988	1.812464	5720.128	0.706257	5635.666	1.802646	0.704857	84.58222	-7.9E-13	705.5574	-4.4E-13	5635.66595
0.4329	0.001	0.11988	1.802646	5635.666	0.704857	5551.371	1.792848	0.70346	84.41455	-2.8E-12	704.1587	-4.4E-13	5551.37128
0.4662	0.001	0.11988	1.792848	5551.371	0.70346	5467.244	1.783069	0.702066	84.24722	-3.8E-13	702.7629	-2.9E-13	5467.24395
0.4995	0.001	0.11988	1.783069	5467.244	0.702066	5383.284	1.77331	0.700674	84.08021	-1.2E-12	701.3698	-4.4E-13	5383.28361
0.5328	0.001	0.11988	1.77331	5383.284	0.700674	5299.49	1.76357	0.699285	83.91354	-2.9E-13	699.9795	-2.9E-13	5299.48995
0.5661	0.001	0.11988	1.76357	5299.49	0.699285	5215.863	1.753849	0.697899	83.7472	-5.9E-13	698.5919	-3.5E-13	5215.86263
0.5994	0.001	0.11988	1.753849	5215.863	0.697899	5132.401	1.744148	0.696515	83.58119	-1.7E-12	697.2072	-3.5E-13	5132.40132
0.6327	0.001	0.11988	1.744148	5132.401	0.696515	5049.106	1.734465	0.695135	83.41551	-3.9E-13	695.8251	-3.2E-13	5049.10568
0.666	0.001	0.11988	1.734465	5049.106	0.695135	4965.975	1.724802	0.693757	83.25016	-6.8E-13	694.4458	-3E-13	4965.9754
0.6993	0.001	0.11988	1.724802	4965.975	0.693757	4883.01	1.715159	0.692382	83.08514	-6.4E-12	693.0692	-4.4E-13	4883.01014
0.7326	0.001	0.11988	1.715159	4883.01	0.692382	4800.21	1.705534	0.691009	82.92044	-4.2E-13	691.6954	-2.9E-13	4800.20959
0.7659	0.001	0.11988	1.705534	4800.21	0.691009	4717.573	1.695929	0.689639	82.75608	-5.5E-13	690.3243	-1.8E-13	4717.57338
0.7992	0.001	0.11988	1.695929	4717.573	0.689639	4635.101	1.686342	0.688272	82.59203	-2.2E-13	688.9559	-2.1E-13	4635.10123
0.8325	0.001	0.11988	1.686342	4635.101	0.688272	4552.793	1.676775	0.686908	82.42832	-7.5E-13	687.5902	-4.4E-13	4552.79279
0.8658	0.001	0.11988	1.676775	4552.793	0.686908	4470.648	1.667226	0.685546	82.26493	-1.4E-12	686.2273	-3.1E-13	4470.64775
0.8991	0.001	0.11988	1.667226	4470.648	0.685546	4388.666	1.657697	0.684188	82.10186	-3.4E-13	684.867	-2.9E-13	4388.66577
0.9324	0.001	0.11988	1.657697	4388.666	0.684188	4306.847	1.648186	0.682831	81.93911	-6.2E-13	683.5095	-3.2E-13	4306.84659
0.9657	0.001	0.11988	1.648186	4306.847	0.682831	4225.19	1.638695	0.681478	81.77669	-2.8E-12	682.1546	-4.3E-13	4225.18972
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 18A

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 10 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0		0	0				
0.0333	5.169994	309.8894	0	0	0	289.9031	0.564769	0.33344	19.98638	-7.1E-15	0.064495	-6.6E-15	289.903069
0.0666	10.33999	929.6683	0.564769	289.9031	0.33344	1168.988	0.864594	0.510456	50.58311	-2.1E-14	0.05441	-2E-14	1168.98829
0.0999	15.05545	1522.203	0.864594	1168.988	0.510456	2622.127	1.360207	0.641766	69.06416	-5.7E-14	0.045371	-5.4E-14	2622.12684
0.1332	17.31067	1940.025	1.360207	2622.127	0.641766	4482.581	1.668613	0.685744	79.57094	-3.7E-13	0.041015	-3.5E-13	4482.58139
0.1665	17.31067	2075.203	1.668613	4482.581	0.685744	6473.6	1.900046	0.718747	84.18518	3.84E-13	0.040567	3.68E-13	6473.59957
0.1998	12.48179	1780.965	1.900046	6473.6	0.718747	8166.883	2.096871	0.74408	87.68181	-2.6E-13	0.049233	-2.4E-13	8166.88266
0.2331	7.231795	1176.837	2.096871	8166.883	0.74408	9253.653	2.223196	0.758528	90.0663	-6E-13	0.076533	-5.5E-13	9253.65334
0.2664	2.467976	581.4043	2.223196	9253.653	0.758528	9743.735	2.280162	0.765044	91.32288	-2.8E-13	0.157073	-2.4E-13	9743.73473
0.2997	0.001	147.9904	2.280162	9743.735	0.765044	9799.967	2.286698	0.765791	91.75823	1.58E-12	0.620028	5.99E-13	9799.96694
0.333	0.001	0.11988	2.286698	9799.967	0.765791	9708.357	2.27605	0.764573	91.73004	3.27E-12	765.1022	5.96E-13	9708.35673
0.3663	0.001	0.11988	2.27605	9708.357	0.764573	9616.893	2.265418	0.763357	91.58415	-1.9E-13	763.9652	-1.9E-13	9616.89251
0.3996	0.001	0.11988	2.265418	9616.893	0.763357	9525.574	2.254803	0.762143	91.43849	-5.8E-13	762.7502	-4.3E-13	9525.5739
0.4329	0.001	0.11988	2.254803	9525.574	0.762143	9434.401	2.244206	0.760931	91.29306	2.18E-13	761.5371	1.17E-13	9434.40072
0.4662	0.001	0.11988	2.244206	9434.401	0.760931	9343.373	2.233625	0.759721	91.14787	-1.4E-12	760.3259	-4.5E-13	9343.37272
0.4995	0.001	0.11988	2.233625	9343.373	0.759721	9252.49	2.223061	0.758513	91.00291	-6.1E-12	759.1167	-7.1E-13	9252.4897
0.5328	0.001	0.11988	2.223061	9252.49	0.758513	9161.751	2.212513	0.757306	90.85818	5.32E-15	757.9094	4.83E-15	9161.7514
0.5661	0.001	0.11988	2.212513	9161.751	0.757306	9071.158	2.201983	0.756102	90.71367	-1.9E-13	756.704	-1.4E-13	9071.15761
0.5994	0.001	0.11988	2.201983	9071.158	0.756102	8980.708	2.191469	0.754899	90.5694	-7.9E-13	755.5005	-4E-13	8980.70808
0.6327	0.001	0.11988	2.191469	8980.708	0.754899	8890.403	2.180972	0.753699	90.42536	-1.4E-12	754.299	-4.2E-13	8890.4026
0.666	0.001	0.11988	2.180972	8890.403	0.753699	8800.241	2.170492	0.7525	90.28155	-8.8E-12	753.0993	-8.7E-13	8800.24093
0.6993	0.001	0.11988	2.170492	8800.241	0.7525	8710.223	2.160028	0.751303	90.13797	6.73E-13	751.9016	6.07E-13	8710.22285
0.7326	0.001	0.11988	2.160028	8710.223	0.751303	8620.348	2.149581	0.750108	89.99461	-5.2E-14	750.7058	-3.7E-14	8620.34812
0.7659	0.001	0.11988	2.149581	8620.348	0.750108	8530.617	2.139151	0.748915	89.85148	-3.5E-13	749.5119	-1.8E-13	8530.61651
0.7992	0.001	0.11988	2.139151	8530.617	0.748915	8441.028	2.128737	0.747724	89.70859	-2E-12	748.3199	-6.3E-13	8441.02781
0.8325	0.001	0.11988	2.128737	8441.028	0.747724	8351.582	2.11834	0.746535	89.56592	-5.4E-12	747.1298	-7E-13	8351.58177
0.8658	0.001	0.11988	2.11834	8351.582	0.746535	8262.278	2.10796	0.745348	89.42347	2.32E-13	745.9415	2.19E-13	8262.27818
0.8991	0.001	0.11988	2.10796	8262.278	0.745348	8173.117	2.097596	0.744163	89.28125	-2.2E-13	744.7552	-1.7E-13	8173.11681
0.9324	0.001	0.11988	2.097596	8173.117	0.744163	8084.097	2.087248	0.742979	89.13926	-5.9E-13	743.5708	-3.4E-13	8084.09742
0.9657	0.001	0.11988	2.087248	8084.097	0.742979	7995.22	2.076917	0.741797	88.9975	-6.5E-13	742.3882	-2.5E-13	7995.2198
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 18B

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 15 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	4.353679	260.9595	0	0	0	241.5567	0.54828	0.323704	19.40235	-7.1E-15	0.074352	-6.6E-15	241.556807
0.0666	8.707358	782.8786	0.54828	241.5567	0.323704	976.7559	0.79903	0.471747	47.67938	2.13E-14	0.060903	2E-14	976.755905
0.0999	12.67828	1281.855	0.79903	976.7559	0.471747	2193.118	1.213887	0.6209	65.4933	-1.7E-13	0.051093	-1.6E-13	2193.11751
0.1332	14.57741	1633.706	1.213887	2193.118	0.6209	3749.232	1.58337	0.673589	77.59166	-1.4E-13	0.047494	-1.4E-13	3749.23153
0.1665	14.57741	1747.54	1.58337	3749.232	0.673589	5414.367	1.776923	0.701189	82.40418	-3.6E-13	0.047154	-3.4E-13	5414.36702
0.1998	14.57741	1747.54	1.776923	5414.367	0.701189	7076.197	1.970091	0.728735	85.70966	-4.1E-13	0.049046	-3.9E-13	7076.19703
0.2331	14.57741	1747.54	1.970091	7076.197	0.728735	8735.003	2.162909	0.751633	88.73324	3.41E-13	0.050776	3.24E-13	8735.00346
0.2664	12.73039	1636.83	2.162909	8735.003	0.751633	10280.5	2.342554	0.77218	91.33731	-9.9E-14	0.055801	-9.4E-14	10280.4957
0.2997	8.376713	1265.16	2.342554	10280.5	0.77218	11452.15	2.478746	0.787757	93.50258	6.39E-13	0.073906	5.92E-13	11452.1531
0.333	4.023034	743.2409	2.478746	11452.15	0.787757	12100.58	2.53389	0.794064	94.81431	7.11E-13	0.127569	6.2E-13	12100.5796
0.3663	0.39416	264.7666	2.53389	12100.58	0.794064	12270.07	2.546227	0.795475	95.27693	4.55E-13	0.359853	2.91E-13	12270.0693
0.3996	0.001	23.68586	2.546227	12270.07	0.795475	12198.43	2.541012	0.794878	95.32576	3.24E-06	4.024585	7.96E-08	12198.4294
0.4329	0.001	0.11988	2.541012	12198.43	0.794878	12103.31	2.534088	0.794086	95.24254	7.82E-05	795.0011	8.35E-08	12103.3066
0.4662	0.001	0.11988	2.534088	12103.31	0.794086	12008.28	2.527171	0.793295	95.14765	4.7E-05	794.0019	9.05E-08	12008.2788
0.4995	0.001	0.11988	2.527171	12008.28	0.793295	11913.35	2.520261	0.792505	95.05286	1.62E-05	793.0071	1.14E-07	11913.3458
0.5328	0.001	0.11988	2.520261	11913.35	0.792505	11818.51	2.513358	0.791715	94.95815	0.000135	793.0009	1.17E-07	11818.5074
0.5661	0.001	0.11988	2.513358	11818.51	0.791715	11723.76	2.506461	0.790926	94.86355	0.000103	792.0012	1.21E-07	11723.7637
0.5994	0.001	0.11988	2.506461	11723.76	0.790926	11629.12	2.499316	0.790109	94.76728	7.33E-05	791.0017	1.27E-07	11629.1162
0.6327	0.001	0.11988	2.499316	11629.12	0.790109	11534.59	2.488329	0.788853	94.64298	7.9E-05	790.0017	1.33E-07	11534.593
0.666	0.001	0.11988	2.488329	11534.59	0.788853	11440.22	2.477359	0.787598	94.49245	6.44E-07	788.2295	1.48E-07	11440.2204
0.6993	0.001	0.11988	2.477359	11440.22	0.787598	11346	2.466407	0.786345	94.34216	8.1E-06	787.0248	2.01E-07	11345.9981
0.7326	0.001	0.11988	2.466407	11346	0.786345	11251.93	2.455472	0.785095	94.19211	0.000195	787.001	2.04E-07	11251.9257
0.7659	0.001	0.11988	2.455472	11251.93	0.785095	11158	2.444555	0.783846	94.0423	8.13E-05	785.0026	2.11E-07	11158.0032
0.7992	0.001	0.11988	2.444555	11158	0.783846	11064.23	2.433655	0.782599	93.89272	1.01E-06	783.2292	2.31E-07	11064.2304
0.8325	0.001	0.11988	2.433655	11064.23	0.782599	10970.61	2.422772	0.781355	93.74339	3.68E-06	782.0335	2.91E-07	10970.6069
0.8658	0.001	0.11988	2.422772	10970.61	0.781355	10877.13	2.411907	0.780112	93.59429	0.000194	782.0015	2.95E-07	10877.1323
0.8991	0.001	0.11988	2.411907	10877.13	0.780112	10783.81	2.401059	0.778871	93.44543	7.38E-05	780.0039	3.05E-07	10783.8066
0.9324	0.001	0.11988	2.401059	10783.81	0.778871	10690.63	2.390228	0.777632	93.29681	1.26E-06	778.2599	3.27E-07	10690.6297
0.9657	0.001	0.11988	2.390228	10690.63	0.777632	10597.6	2.379414	0.776396	93.14843	6.79E-06	777.0579	3.93E-07	10597.6011
		ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 18C

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 20 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0		0	0				
0.0333	3.775456	226.3008		0	0	207.3113		0.5366	0.316809	18.98951	1.07E-14	0.003918	9.78E-15	207.311383
0.0666	7.550912	678.9025	0.5366	207.3113	0.316809	840.5913	0.752589	0.444329	45.62257	-5E-14	0.0672	-4.6E-14	840.591297
0.0999	10.99444	1111.609	0.752589	840.5913	0.444329	1889.236	1.110244	0.606121	62.96394	0	0.056642	0	1889.23591
0.1332	12.64135	1416.729	1.110244	1889.236	0.606121	3229.775	1.522989	0.664978	76.18968	-2.8E-14	0.058779	-2.7E-14	3229.77537
0.1665	12.64135	1515.445	1.522989	3229.775	0.664978	4664.077	1.68971	0.688753	81.14263	2.98E-13	0.055544	2.82E-13	4664.0773
0.1998	12.64135	1515.445	1.68971	4664.077	0.688753	6095.532	1.8561	0.71248	83.98988	-3.3E-13	0.055423	-3.1E-13	6095.53138
0.2331	12.64135	1515.445	1.8561	6095.532	0.71248	7524.183	2.022165	0.735535	86.79402	2.84E-14	0.057273	2.68E-14	7524.18252
0.2664	12.64135	1515.445	2.022165	7524.183	0.735535	8950.315	2.187936	0.754495	89.31241	-8.5E-14	0.058935	-8E-14	8950.31466
0.2997	12.64135	1515.445	2.187936	8950.315	0.754495	10374.18	2.353444	0.773425	91.58354	2.42E-13	0.060433	2.27E-13	10374.1757
0.333	12.64135	1515.445	2.353444	10374.18	0.773425	11795.82	2.511706	0.791526	93.80319	5.26E-13	0.061898	4.93E-13	11795.817
0.3663	9.247249	1312.002	2.511706	11795.82	0.791526	13012.32	2.600257	0.801654	95.49525	5.83E-13	0.072786	5.4E-13	13012.3242
0.3996	5.471793	882.2594	2.600257	13012.32	0.801654	13798.09	2.657453	0.808196	96.49444	-6E-13	0.109372	-5.3E-13	13798.0891
0.4329	1.95764	445.3202	2.657453	13798.09	0.808196	14146.35	2.682803	0.811096	97.06035	-2.8E-13	0.217956	-2.2E-13	14146.349
0.4662	0.001	117.4009	2.682803	14146.35	0.811096	14166.51	2.68427	0.811263	97.2442	4.59E-12	0.828309	7.88E-13	14166.5057
0.4995	0.001	0.11988	2.68427	14166.51	0.811263	14069.42	2.677203	0.810455	97.20581	0.000168	812	3.34E-13	14069.4196
0.5328	0.001	0.11988	2.677203	14069.42	0.810455	13972.43	2.670143	0.809648	97.10896	0.00014	811	7.44E-13	13972.4304
0.5661	0.001	0.11988	2.670143	13972.43	0.809648	13875.54	2.663091	0.808841	97.01221	3.02E-12	809.2443	7.37E-13	13875.538
0.5994	0.001	0.11988	2.663091	13875.54	0.808841	13778.74	2.656045	0.808035	96.91555	1.72E-12	808.4388	7.55E-13	13778.7424
0.6327	0.001	0.11988	2.656045	13778.74	0.808035	13682.04	2.649006	0.80723	96.81899	9E-13	807.6326	5.7E-13	13682.0432
0.666	0.001	0.11988	2.649006	13682.04	0.80723	13585.44	2.641974	0.806426	96.72253	-1.1E-13	806.8279	-9E-14	13585.4406
0.6993	0.001	0.11988	2.641974	13585.44	0.806426	13488.93	2.634949	0.805622	96.62616	3.3E-07	806.0263	3.68E-09	13488.9343
0.7326	0.001	0.11988	2.634949	13488.93	0.805622	13392.52	2.627932	0.80482	96.52989	4.51E-08	805.2213	9.98E-09	13392.5243
0.7659	0.001	0.11988	2.627932	13392.52	0.80482	13296.21	2.620921	0.804018	96.43372	2.56E-08	804.4189	1.07E-08	13296.2105
0.7992	0.001	0.11988	2.620921	13296.21	0.804018	13199.99	2.613917	0.803217	96.33764	1.82E-08	803.6174	1.12E-08	13199.9927
0.8325	0.001	0.11988	2.613917	13199.99	0.803217	13103.87	2.60692	0.802417	96.24166	1.43E-08	802.8167	1.16E-08	13103.8709
0.8658	0.001	0.11988	2.60692	13103.87	0.802417	13007.85	2.59993	0.801617	96.14577	-1.2E-06	802.0069	-1E-08	13007.845
0.8991	0.001	0.11988	2.59993	13007.85	0.801617	12911.91	2.592948	0.800818	96.04998	-5.7E-07	801.2139	-1.2E-07	12911.9149
0.9324	0.001	0.11988	2.592948	12911.91	0.800818	12816.08	2.585972	0.800021	95.95428	-1.3E-06	800.4135	-5.5E-07	12816.0805
0.9657	0.001	0.11988	2.585972	12816.08	0.800021	12720.34	2.579003	0.799223	95.85868	-0.00046	796.5758	-0.00026	12720.3419
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 18D

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	-0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 25 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	3.333286	199.7971	0	0	0	181.1237	0.527663	0.311535	18.67343	-7.1E-15	0.093462	-6.4E-15	181.123709
0.0666	6.666571	599.3914	0.527668	181.1237	0.311535	736.4654	0.717076	0.423361	44.04971	-2.8E-14	0.073481	-2.6E-14	736.46542
0.0999	9.999805	981.4202	0.717076	736.4654	0.423361	1656.856	1.030988	0.594819	61.02972	3.55E-14	0.062135	3.33E-14	1656.85586
0.1332	11.16083	1250.806	1.030988	1656.856	0.594819	2832.926	1.432103	0.652018	74.73539	-7.1E-14	0.05975	-6.7E-14	2832.92638
0.1665	11.16083	1337.96	1.432103	2832.926	0.652018	4091.09	1.623107	0.679255	79.7965	2.27E-13	0.05864	2.14E-13	4091.08993
0.1998	11.16083	1337.96	1.623107	4091.09	0.679255	5346.374	1.769019	0.700062	82.67627	-3.7E-13	0.061793	-3.5E-13	5346.37372
0.2331	11.16083	1337.96	1.769019	5346.374	0.700062	6599.166	1.914642	0.720828	85.16815	1.28E-13	0.062653	1.2E-13	6599.16603
0.2664	11.16083	1337.96	1.914642	6599.166	0.720828	7849.572	2.059987	0.739861	87.5537	1.28E-13	0.063408	1.2E-13	7849.57199
0.2997	11.16083	1337.96	2.059987	7849.572	0.739861	9097.843	2.205085	0.756457	89.68928	-9.9E-14	0.067034	-9.3E-14	9097.84277
0.333	11.16083	1337.96	2.205085	9097.843	0.756457	10344.13	2.349951	0.773026	91.67716	1.85E-13	0.06852	1.72E-13	10344.1257
0.3663	11.16083	1337.96	2.349951	10344.13	0.773026	11588.42	2.494586	0.789568	93.66188	-1.7E-13	0.070003	-1.6E-13	11588.4239
0.3996	11.16083	1337.96	2.494586	11588.42	0.789568	12831.1	2.587065	0.800146	95.28745	-1.4E-13	0.071218	-1.3E-13	12831.0965
0.4329	9.915055	1263.288	2.587065	12831.1	0.800146	13997.88	2.671996	0.80986	96.5037	-6.5E-13	0.076391	-6E-13	13997.8812
0.4662	6.581769	988.8196	2.671996	13997.88	0.80986	14889.17	2.736874	0.81728	97.53074	5.54E-13	0.098634	5E-13	14889.17
0.4995	3.248483	539.2253	2.736874	14889.17	0.81728	15330.17	2.772614	0.821368	98.22054	-4E-13	0.166694	-3.3E-13	15330.1748
0.5328	0.43895	221.0248	2.772614	15380.17	0.821368	15502.67	2.781531	0.822388	98.5267	5.68E-13	0.445772	3.15E-13	15502.6729
0.5661	0.001	26.37063	2.781531	15502.67	0.822388	15430.49	2.776277	0.821787	98.55181	1.08E-12	3.737191	7.96E-13	15430.4917
0.5994	0.001	0.11988	2.776277	15430.49	0.821787	15332.14	2.769118	0.820968	98.46671	-1.6E-12	821.3773	-5.9E-13	15332.1449
0.6327	0.001	0.11988	2.769118	15332.14	0.820963	15233.9	2.761967	0.82015	98.3686	1.65E-13	820.3339	5.85E-14	15233.8962
0.666	0.001	0.11988	2.761967	15233.9	0.82015	15135.75	2.754822	0.819333	98.27059	5.45E-13	819.7413	4.04E-13	15135.7454
0.6993	0.001	0.11988	2.754822	15135.75	0.819333	15037.69	2.747685	0.818516	98.17268	5.02E-13	818.9246	4.65E-13	15037.6926
0.7326	0.001	0.11988	2.747685	15037.69	0.818516	14939.74	2.740554	0.817701	98.07487	-3.8E-10	818.1087	-4.1E-11	14939.7275
0.7659	0.001	0.11988	2.740554	14939.74	0.817701	14841.88	2.733431	0.816886	97.97715	-2.2E-10	817.2936	-6.5E-11	14841.8604
0.7992	0.001	0.11988	2.733431	14841.88	0.816886	14744.12	2.726315	0.816072	97.87953	-1.7E-10	816.4793	-8.4E-11	14744.1207
0.8325	0.001	0.11988	2.726315	14744.12	0.816072	14646.46	2.719206	0.815259	97.78201	-1.5E-10	815.6658	-1E-10	14646.4586
0.8658	0.001	0.11988	2.719206	14646.46	0.815259	14548.89	2.712105	0.814447	97.68459	-1.4E-10	814.8531	-1.2E-10	14548.8939
0.8991	0.001	0.11988	2.712105	14548.89	0.814447	14451.43	2.70501	0.813636	97.58726	-5.7E-07	814.0373	-2.1E-08	14451.4265
0.9324	0.001	0.11988	2.70501	14451.43	0.813636	14354.06	2.697922	0.812825	97.49003	-3.1E-07	813.2281	-7E-08	14354.0563
0.9657	0.001	0.11988	2.697922	14354.06	0.812825	14256.78	2.690842	0.812015	97.3929	-7.5E-07	812.4148	-3.1E-07	14256.7833
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 18E

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	-0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 30 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	2.993154	179.4097	0	0	0	160.9794	0.520798	0.307479	18.4303	1.07E-14	0.102727	9.56E-15	160.979803
0.0666	5.986309	538.229	0.520798	160.9794	0.307479	656.3686	0.689757	0.407233	42.83983	1.42E-14	0.079594	1.31E-14	656.368592
0.0999	8.716315	881.2752	0.689757	656.3686	0.407233	1478.897	0.970292	0.572861	58.74679	9.95E-14	0.066661	9.28E-14	1478.89705
0.1332	10.02197	1123.173	0.970292	1478.897	0.572861	2529.535	1.328627	0.637262	72.53476	5.68E-14	0.06458	5.32E-14	2529.53494
0.1665	10.02197	1201.434	1.328627	2529.535	0.637262	3652.492	1.572125	0.671985	78.47628	7.11E-14	0.065319	6.64E-14	3652.49218
0.1998	10.02197	1201.434	1.572125	3652.492	0.671985	4772.256	1.702285	0.690546	81.6701	3.41E-13	0.067977	3.18E-13	4772.25561
0.2331	10.02197	1201.434	1.702285	4772.256	0.690546	5889.796	1.832186	0.70907	83.89295	3.84E-13	0.069827	3.57E-13	5889.79617
0.2664	10.02197	1201.434	1.832186	5889.796	0.70907	7005.118	1.961829	0.727557	86.1114	4.41E-13	0.071674	4.09E-13	7005.1183
0.2997	10.02197	1201.434	1.961829	7005.118	0.727557	8118.381	2.091233	0.743435	88.17124	1.28E-13	0.073388	1.19E-13	8118.38058
0.333	10.02197	1201.434	2.091233	8118.381	0.743435	9229.805	2.220424	0.758211	90.00865	8.38E-13	0.074918	7.76E-13	9229.80546
0.3663	10.02197	1201.434	2.220424	9229.805	0.758211	10339.46	2.349408	0.772964	91.7736	-8.1E-13	0.076391	-7.5E-13	10339.4604
0.3996	10.02197	1201.434	2.349408	10339.46	0.772964	11447.35	2.478188	0.787693	93.54574	7.11E-13	0.077862	6.55E-13	11447.3482
0.4329	10.02197	1201.434	2.478188	11447.35	0.787693	12553.75	2.566876	0.797836	95.03662	-6.8E-13	0.079103	-6.3E-13	12553.7451
0.4662	10.02197	1201.434	2.566876	12553.75	0.797836	13658.98	2.647327	0.807038	96.19618	6.82E-13	0.080068	6.28E-13	13658.9824
0.4995	10.02197	1201.434	2.647327	13658.98	0.807038	14763.12	2.727698	0.81623	97.29872	8.1E-13	0.080986	7.44E-13	14763.1172
0.5328	7.482322	1049.207	2.727698	14763.12	0.81623	15714	2.796914	0.824147	98.32423	-1.4E-13	0.093713	-1.3E-13	15714.0001
0.5661	4.489167	717.5711	2.796914	15714	0.824147	16332.46	2.841932	0.829296	99.10737	-5.7E-13	0.138115	-4.9E-13	16332.4638
0.5994	1.675178	369.4909	2.841932	16332.46	0.829296	16602.4	2.861581	0.831543	99.55071	-2.6E-13	0.269427	-1.9E-13	16602.404
0.6327	0.001	100.4701	2.861581	16602.4	0.831543	16602.38	2.861579	0.831543	99.6854	0.812199	1.000276	0.000224	16602.3797
0.666	0.001	0.11988	2.861579	16602.38	0.831543	16502.86	2.854335	0.830715	99.63573	0.000244	832.8254	0.000202	16502.8636
0.6993	0.001	0.11988	2.854335	16502.86	0.830715	16403.44	2.847099	0.829887	99.53646	0.000249	832.0267	6.63E-06	16403.4436
0.7326	0.001	0.11988	2.847099	16403.44	0.829887	16304.13	2.839869	0.82906	99.43728	0.001089	831.0794	9.65E-05	16304.1252
0.7659	0.001	0.11988	2.839869	16304.13	0.82906	16204.91	2.832647	0.828234	99.33821	0.000582	832.8881	0.0004	16204.9066
0.7992	0.001	0.11988	2.832647	16204.91	0.828234	16105.79	2.825432	0.827409	99.23923	0.000567	831.7558	0.000429	16105.7867
0.8325	0.001	0.11988	2.825432	16105.79	0.827409	16006.77	2.818224	0.826584	99.14035	0.000336	829.3197	0.000107	16006.7655
0.8658	0.001	0.11988	2.818224	16006.77	0.826584	15907.84	2.811024	0.825761	99.04157	0.000282	828.1223	3.45E-05	15907.8435
0.8991	0.001	0.11988	2.811024	15907.84	0.825761	15809.02	2.80383	0.824938	98.94289	0.000422	828.2686	0.000113	15809.0201
0.9324	0.001	0.11988	2.80383	15809.02	0.824938	15710.3	2.796644	0.824116	98.84431	0.000331	826.8119	0.000269	15710.2955
0.9657	0.001	0.11988	2.796644	15710.3	0.824116	15611.67	2.789465	0.823295	98.74583	0.000259	825.4863	0.000126	15611.6692
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 18F

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 35 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	2.755063	165.1385	0	0	0	146.8784	0.515989	0.30464	18.2601	3.55E-15	0.110574	3.16E-15	146.878355
0.0666	5.510125	495.4154	0.515989	146.8784	0.30464	600.3008	0.670635	0.395943	41.9929	3.55E-14	0.084763	3.25E-14	600.300812
0.0999	8.022971	811.1738	0.670635	600.3008	0.395943	1354.901	0.928002	0.547892	56.57347	8.53E-14	0.069743	7.98E-14	1354.90115
0.1332	9.224766	1033.829	0.928002	1354.901	0.547892	2318.308	1.256585	0.626989	70.42239	-1.4E-14	0.068118	-1.3E-14	2318.30814
0.1665	9.224766	1105.865	1.256585	2318.308	0.626989	3346.616	1.536571	0.666915	77.55661	1.28E-13	0.070132	1.19E-13	3346.61648
0.1998	9.224766	1105.865	1.536571	3346.616	0.666915	4371.513	1.655703	0.683903	80.96804	4.69E-13	0.073217	4.35E-13	4371.51339
0.2331	9.224766	1105.865	1.655703	4371.513	0.683903	5394.376	1.774599	0.700358	83.00258	4.41E-13	0.075057	4.07E-13	5394.37576
0.2664	9.224766	1105.865	1.774599	5394.376	0.700358	6415.208	1.893259	0.717779	85.03308	-2.7E-13	0.076893	-2.5E-13	6415.20763
0.2997	9.224766	1105.865	1.893259	6415.208	0.717779	7434.033	2.011686	0.734337	87.03979	2.7E-13	0.078707	2.49E-13	7434.03279
0.333	9.224766	1105.865	2.011686	7434.033	0.734337	8451.055	2.129903	0.747858	88.84272	5.54E-13	0.080338	5.1E-13	8451.05501
0.3663	9.224766	1105.865	2.129903	8451.055	0.747858	9466.458	2.247932	0.761357	90.46234	1.71E-13	0.081808	1.57E-13	9466.45762
0.3996	9.224766	1105.865	2.247932	9466.458	0.761357	10480.24	2.365773	0.774835	92.07938	9.66E-13	0.083265	8.86E-13	10480.2432
0.4329	9.224766	1105.865	2.365773	10480.24	0.774835	11492.41	2.483426	0.788292	93.69384	-1.4E-13	0.084724	-1.3E-13	11492.4143
0.4662	9.224766	1105.865	2.483426	11492.41	0.788292	12503.23	2.563199	0.797416	95.04732	5.97E-13	0.085948	5.46E-13	12503.2319
0.4995	9.224766	1105.865	2.563199	12503.23	0.797416	13513	2.636701	0.805823	96.09812	-4.3E-13	0.086899	-3.9E-13	13512.9988
0.5328	9.224766	1105.865	2.636701	13513	0.805823	14521.76	2.710129	0.814221	97.10542	-7.2E-13	0.087809	-6.6E-13	14521.7583
0.5661	9.224766	1105.865	2.710129	14521.76	0.814221	15529.51	2.783485	0.822611	98.11172	7.11E-14	0.088719	6.48E-14	15529.5115
0.5994	8.334241	1052.487	2.783485	15529.51	0.822611	16482.91	2.852883	0.830549	99.09038	2.84E-13	0.094149	2.57E-13	16482.908
0.6327	5.579178	833.9703	2.852883	16482.91	0.830549	17216.95	2.906314	0.83666	99.93246	8.53E-14	0.119827	7.5E-14	17216.9459
0.666	2.824115	503.6934	2.906314	17216.95	0.83666	17620.14	2.935663	0.840016	100.5	1.09E-12	0.199526	8.76E-13	17620.1393
0.6993	0.476133	197.8199	2.935663	17620.14	0.840016	17717.21	2.942729	0.840825	100.7496	2.76E-12	0.5093	1.35E-12	17717.2096
0.7326	0.001	28.60234	2.942729	17717.21	0.840825	17645.05	2.937476	0.840224	100.762	3.44E-12	3.522861	1.8E-12	17645.0499
0.7659	0.001	0.11988	2.937476	17645.05	0.840224	17544.49	2.930157	0.839387	100.6759	-4.9E-13	889.0053	-4E-13	17544.4939
0.7992	0.001	0.11988	2.930157	17544.49	0.839387	17444.04	2.922845	0.83855	100.5755	3.6E-13	888.9685	3.49E-13	17444.0382
0.8325	0.001	0.11988	2.922845	17444.04	0.83855	17343.68	2.91554	0.837715	100.4753	-1E-11	888.9326	-1.4E-12	17343.6828
0.8658	0.001	0.11988	2.91554	17343.68	0.837715	17243.43	2.908242	0.83688	100.3752	-5.3E-12	887.2975	-1.6E-12	17243.4274
0.8991	0.001	0.11988	2.908242	17243.43	0.83688	17143.27	2.900952	0.836046	100.2752	-2.1E-12	886.4632	-9.7E-13	17143.2721
0.9324	0.001	0.11988	2.900952	17143.27	0.836046	17043.22	2.893668	0.835213	100.1753	-1.4E-12	885.6298	-9.1E-13	17043.2167
0.9657	0.001	0.11988	2.893668	17043.22	0.835213	16943.26	2.886393	0.834381	100.0755	-1.6E-12	884.7972	-1.3E-12	16943.261
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

ETENTION BASIN RATING:

ASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

INAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
ODIFIED RATIONAL METHOD WITH STORM DURATION 40 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)	BASIN 1	BASIN 3
0	0			0	0		0	0						0	0
0.0333	2.584997	154.9447	0	0	0	136.8062	0.512553	0.302611	18.13853	7.11E-15	0.117065	6.27E-15	136.806192	2.10629	0.478707
0.0666	5.169994	464.8342	0.512553	136.8062	0.302611	560.2524	0.656976	0.387878	41.38796	4.26E-14	0.089038	3.88E-14	560.252398	4.21258	0.957414
0.0999	7.527726	761.1014	0.656976	560.2524	0.387878	1266.333	0.897794	0.530058	55.02109	5.68E-14	0.072291	5.27E-14	1266.33266	6.31887	1.208856
0.1332	8.655336	970.0127	0.897794	1266.333	0.530058	2167.432	1.205127	0.619651	68.91355	-1.4E-14	0.071044	-1.3E-14	2167.43136	7.44648	1.208856
0.1665	8.655336	1037.602	1.205127	2167.432	0.619651	3128.134	1.511174	0.663293	76.8997	-1.3E-13	0.074113	-1.2E-13	3128.13304	7.44648	1.208856
0.1998	8.655336	1037.602	1.511174	3128.134	0.663293	4085.269	1.62243	0.679159	80.46658	1.99E-13	0.077551	1.84E-13	4085.26895	7.44648	1.208856
0.2331	8.655336	1037.602	1.62243	4085.269	0.679159	5040.504	1.733466	0.694992	82.3666	1.85E-13	0.079382	1.7E-13	5040.50403	7.44648	1.208856
0.2664	8.655336	1037.602	1.733466	5040.504	0.694992	5993.843	1.84428	0.710794	84.26285	1.99E-13	0.081239	1.83E-13	5993.84286	7.44648	1.208856
0.2997	8.655336	1037.602	1.84428	5993.843	0.710794	6945.289	1.954875	0.726565	86.15533	-4.1E-13	0.083033	-3.8E-13	6945.28921	7.44648	1.208856
0.333	8.655336	1037.602	1.954875	6945.289	0.726565	7894.957	2.065263	0.740464	87.93376	3.84E-13	0.084747	3.51E-13	7894.95714	7.44648	1.208856
0.3663	8.655336	1037.602	2.065263	7894.957	0.740464	8843.036	2.175466	0.753069	89.52239	4.97E-13	0.086278	4.54E-13	8843.03642	7.44648	1.208856
0.3996	8.655336	1037.602	2.175466	8843.036	0.753069	9789.606	2.285494	0.765653	91.03222	6.54E-13	0.087733	5.96E-13	9789.60589	7.44648	1.208856
0.4329	8.655336	1037.602	2.285494	9789.606	0.765653	10734.67	2.395347	0.778218	92.53964	-3E-13	0.089186	-2.7E-13	10734.6679	7.44648	1.208856
0.4662	8.655336	1037.602	2.395347	10734.67	0.778218	11678.24	2.503147	0.790547	94.03179	7.25E-13	0.090624	6.59E-13	11678.2378	7.44648	1.208856
0.4995	8.655336	1037.602	2.503147	11678.24	0.790547	12620.6	2.571742	0.798393	95.24109	9.81E-13	0.09179	8.91E-13	12620.5984	7.44648	1.208856
0.5328	8.655336	1037.602	2.571742	12620.6	0.798393	13562.02	2.640269	0.806231	96.18115	8.1E-13	0.092696	7.35E-13	13562.0189	7.44648	1.208856
0.5661	8.655336	1037.602	2.640269	13562.02	0.806231	14502.5	2.708728	0.814061	97.12027	-5.7E-13	0.093601	-5.2E-13	14502.5003	7.44648	1.208856
0.5994	8.655336	1037.602	2.708728	14502.5	0.814061	15442.04	2.777118	0.821883	98.05846	5.54E-13	0.094505	5.02E-13	15442.0436	7.44648	1.208856
0.6327	8.655336	1037.602	2.777118	15442.04	0.821883	16380.65	2.84544	0.829697	98.99571	3.55E-13	0.095408	3.21E-13	16380.6495	7.44648	1.208856
0.666	8.655336	1037.602	2.84544	16380.65	0.829697	17318.32	2.913693	0.837504	99.93202	1.01E-12	0.096311	9.12E-13	17318.3192	7.44648	1.208856
0.6993	6.592561	913.9589	2.913693	17318.32	0.837504	18131.47	2.972883	0.844274	100.8057	3.55E-13	0.110296	3.16E-13	18131.4724	5.765703	0.826858
0.7326	4.007564	635.3714	2.972883	18131.47	0.844274	18665.37	3.011746	0.848718	101.4779	6.39E-13	0.159714	5.37E-13	18665.3659	3.659413	0.348151
0.7659	1.553123	333.3076	3.011746	18665.37	0.848718	18896.81	3.028593	0.850645	101.8599	1.99E-13	0.305603	1.38E-13	18896.8136	1.553123	0
0.7992	0.001	93.15413	3.028593	18896.81	0.850645	18888	3.027951	0.850572	101.971	1.91E-11	1.094648	1.81E-12	18887.9967	0	0
0.8325	0.001	0.11988	3.027951	18888	0.850572	18786.2	3.020542	0.849724	101.9158	-9.2E-12	850.1402	-1.4E-12	18786.2089	0	0
0.8658	0.001	0.11988	3.020542	18786.2	0.849724	18684.51	3.013139	0.848878	101.8142	-5E-12	849.3011	-1.5E-12	18684.5065	0	0
0.8991	0.001	0.11988	3.013139	18684.51	0.848878	18582.91	3.005744	0.848032	101.7128	-3.6E-12	848.4549	-1.6E-12	18582.9136	0	0
0.9324	0.001	0.11988	3.005744	18582.91	0.848032	18481.42	2.998357	0.847187	101.6114	-1.9E-12	847.6095	-1.2E-12	18481.4221	0	0
0.9657	0.001	0.11988	2.998357	18481.42	0.847187	18380.03	2.990976	0.846343	101.5102	3.33E-05	847	1.19E-12	18380.0317	0	0
0.999	0.001	0.11988	2.990976	18380.03	0.846343	18278.74	2.983603	0.8455	101.409	1.12E-05	846	1.36E-10	18278.7426	0	0
1.0323	0.001	0.11988	2.983603	18278.74	0.8455	18177.55	2.976238	0.844657	101.308	1.49E-08	845.0735	1.17E-09	18177.5544	0	0
1.0656	0.001	0.11988	2.976238	18177.55	0.844657	18076.47	2.96888	0.843816	101.2071	6.98E-09	844.2364	1.65E-09	18076.4673	0	0
1.0989	0.001	0.11988	2.96888	18076.47	0.843816	17975.48	2.961529	0.842975	101.1062	5.05E-09	843.3953	1.99E-09	17975.4809	0	0
1.1322	0.001	0.11988	2.961529	17975.48	0.842975	17874.6	2.954185	0.842135	101.0055	4.1E-09	842.5549	2.27E-09	17874.5953	0	0
1.1655	0.001	0.11988	2.954185	17874.6	0.842135	17773.81	2.946849	0.841296	100.9048	4.05E-05	842.0001	2.99E-09	17773.8103	0	0
1.1988	0.001	0.11988	2.946849	17773.81	0.841296	17673.13	2.93952	0.840458	100.8043	1.76E-05	841.0004	6.37E-09	17673.1259	0	0
1.2321	0.001	0.11988	2.93952	17673.13	0.840458	17572.54	2.932198	0.83962	100.7039	7.82E-07	840.0444	3.47E-08	17572.5419	0	0
1.2654	0.001	0.11988	2.932198	17572.54	0.83962	17472.06	2.924884	0.838784	100.6035	2.13E-07	839.2034	4.33E-08	17472.0583	0	0
1.2987	0.001	0.11988	2.924884	17472.06	0.838784	17371.67	2.917577	0.837948	100.5033	1.33E-07	838.3667	4.87E-08	17371.6749	0	0
1.332	0.001	0.11988	2.917577	17371.67	0.837948	17271.39	2.910277	0.837113	100.4031	6.73E-05	838.0008	5.34E-08	17271.3915	0	0
1.3653	0.001	0.11988	2.910277	17271.39	0.837113	17171.21	2.902985	0.836279	100.3031	4.38E-05	837.0014	6.17E-08	17171.2082	0	0
1.3986	0.001	0.11988	2.902985	17171.21	0.836279	17071.12	2.8957	0.835446	100.2032	2.04E-05	836.0042	8.64E-08	17071.1249	0	0
1.4319	0.001	0.11988	2.8957	17071.12	0.835446	16971.14	2.888422	0.834613	100.1033	3.13E-06	835.0513	1.6E-07	16971.1415	0	0
1.4652	0.001	0.11988	2.888422	16971.14	0.834613	16871.26	2.881151	0.833782	100.0036	9.37E-07	834.204	1.91E-07	16871.2578	0	0
1.4985	0.001	0.11988	2.881151	16871.26	0.833782	16771.47	2.873888	0.832951	99.90395	5.68E-07	833.3703	2.1E-07	16771.4737	0	0
1.5318	0.001	0.11988	2.873888	16771.47	0.832951	16671.79	2.866632	0.832121	99.80441	4.16E-07	832.5389	2.24E-07	16671.7892	0	0
1.5651	0.001	0.11988	2.866632	16671.79	0.832121	16572.2	2.859383	0.831292	99.70497	3.32E-07	831.7088	2.36E-07	16572.2041	0	0
1.5984	0.001	0.11988	2.859383	16572.2	0.831292	16472.72	2.852141	0.830464	99.60563	2.79E-07	830.8797	2.45E-07	16472.7183	0	0
1.6317	0.001	0.11988	2.852141	16472.72	0.830464	16373.33	2.844907	0.829636	99.50639	4.31E-06	830.0798	3.43E-07	16373.3318	0	0
1.665	0.001	0.11988	2.844907	16373.33	0.829636	16274.04	2.83768	0.82881	99.40724	1.68E-06	829.2345	3.93E-07	16274.0444	0	0
1.6983	0.001	0.11988	2.83768	16274.04	0.82881	16174.86	2.83046	0.827984	99.3082	1.05E-06	828.404	4.25E-07	16174.8561	0	0

Table 18H

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11535
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 50 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	2.244866	134.5573	0	0	0	116.6619	0.505663	0.298555	17.89539	0	0.132995	0	116.661866
0.0666	4.489732	403.6718	0.505663	116.6619	0.298555	480.1556	0.629657	0.37175	40.17807	2.84E-14	0.099532	2.56E-14	480.155569
0.0999	6.537236	650.9564	0.629657	480.1556	0.37175	1089.196	0.837379	0.494389	51.91634	6.39E-14	0.078547	5.03E-14	1089.19567
0.1332	7.516476	842.3795	0.837379	1089.196	0.494389	1865.679	1.10221	0.604975	65.89506	7.11E-14	0.070226	6.55E-14	1865.6793
0.1665	7.516476	901.0751	1.10221	1865.679	0.604975	2691.822	1.383977	0.645155	74.93281	-1.1E-13	0.083159	-1E-13	2691.82153
0.1998	7.516476	901.0751	1.383977	2691.822	0.645155	3514.085	1.556037	0.669691	78.81187	2.42E-13	0.087464	2.2E-13	3514.0849
0.2331	7.516476	901.0751	1.556037	3514.085	0.669691	4334.063	1.65135	0.683282	81.09722	-4E-13	0.090001	-3.3E-13	4334.06222
0.2664	7.516476	901.0751	1.65135	4334.063	0.683282	5152.413	1.746474	0.696847	82.72497	3.41E-13	0.091007	3.1E-13	5152.41299
0.2997	7.516476	901.0751	1.746474	5152.413	0.696847	5969.139	1.841409	0.710385	84.34949	2.56E-13	0.09361	2.32E-13	5969.13865
0.333	7.516476	901.0751	1.841409	5969.139	0.710385	6784.243	1.936155	0.723896	85.97078	1.99E-13	0.095409	1.8E-13	6784.24391
0.3663	7.516476	901.0751	1.936155	6784.243	0.723896	7597.701	2.03072	0.736514	87.53693	-2.3E-13	0.097147	-2.1E-13	7597.70122
0.3996	7.516476	901.0751	2.03072	7597.701	0.736514	8409.916	2.125121	0.747311	88.94043	7.96E-13	0.098735	7.17E-13	8409.91594
0.4329	7.516476	901.0751	2.125121	8409.916	0.747311	9220.757	2.219372	0.758091	90.23376	-1.1E-13	0.10014	-1E-13	9220.75732
0.4662	7.516476	901.0751	2.219372	9220.757	0.758091	10030.31	2.313473	0.768853	91.52503	2.7E-13	0.101573	2.43E-13	10030.3074
0.4995	7.516476	901.0751	2.313473	10030.31	0.768853	10838.57	2.407424	0.779599	92.81425	6.96E-13	0.103004	6.25E-13	10838.5683
0.5328	7.516476	901.0751	2.407424	10838.57	0.779599	11645.55	2.500768	0.790275	94.09827	6.39E-13	0.104429	5.73E-13	11645.5452
0.5661	7.516476	901.0751	2.500768	11645.55	0.790275	12451.48	2.559432	0.796985	95.14039	-4.4E-13	0.105585	-3.9E-13	12451.48
0.5994	7.516476	901.0751	2.559432	12451.48	0.796985	13256.61	2.618038	0.803688	95.94435	8.24E-13	0.106478	7.36E-13	13256.6107
0.6327	7.516476	901.0751	2.618038	13256.61	0.803688	14060.94	2.676586	0.810385	96.74752	4.12E-13	0.107369	3.68E-13	14060.9304
0.666	7.516476	901.0751	2.676586	14060.94	0.810385	14864.46	2.735075	0.817074	97.54988	4.55E-13	0.108259	4.06E-13	14864.4636
0.6993	7.516476	901.0751	2.735075	14864.46	0.817074	15667.19	2.793506	0.823757	98.35144	8.53E-13	0.109149	7.6E-13	15667.1073
0.7326	7.516476	901.0751	2.793506	15667.19	0.823757	16469.11	2.851879	0.830434	99.1522	2.27E-13	0.110038	2.02E-13	16469.1103
0.7659	7.516476	901.0751	2.851879	16469.11	0.830434	17270.23	2.910193	0.837103	99.95217	-1.2E-12	0.110925	-1E-12	17270.2208
0.7992	7.516476	901.0751	2.910193	17270.23	0.837103	18070.56	2.968449	0.843766	100.7513	1.36E-12	0.111812	1.21E-12	18070.5571
0.8325	7.516476	901.0751	2.968449	18070.56	0.843766	18870.08	3.026647	0.850423	101.5497	-2.6E-13	0.112698	-2.3E-13	18870.0825
0.8658	5.838495	800.497	3.026647	18870.08	0.850423	19568.28	3.07747	0.856236	102.2971	-3E-13	0.127732	-2.6E-13	19568.2824
0.8991	3.59363	565.3616	3.07747	19568.28	0.856236	20030.77	3.111135	0.860086	102.8763	2.19E-12	0.181966	1.79E-12	20030.7677
0.9324	1.441146	301.7844	3.111135	20030.77	0.860086	20229.35	3.125589	0.861739	103.2062	1.92E-12	0.341987	1.26E-12	20229.3459
0.9657	0.301	86.44222	3.125589	20229.35	0.861739	20212.49	3.124362	0.861599	103.2969	8.5E-12	1.194982	1.66E-12	20212.4912
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 18I

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 60 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	STORAGE/ OUTFLOW+ RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0	0		0	0					
0.0333	1.904735	114.1698	0	0	0	97.00538	0.485027	0.28636	17.16441	3.55E-15	0.150341	3.02E-15	97.00538
0.0666	3.809469	342.5094	0.485027	97.00538	0.28636	401.0228	0.662668	0.355815	38.49198	-2.1E-14	0.112382	-1.9E-14	401.0228
0.0999	5.546746	560.8115	0.602668	401.0228	0.355815	912.9997	0.777285	0.458909	48.83458	-2.1E-14	0.087078	-1.9E-14	912.999739
0.1332	6.377616	714.7462	0.777285	912.9997	0.458909	1564.864	0.999613	0.590171	62.88188	1.42E-14	0.087978	1.3E-14	1564.8641
0.1665	6.377616	764.5486	0.999613	1564.864	0.590171	2256.636	1.235551	0.62399	72.7768	1.35E-13	0.095189	1.67E-13	2256.6359
0.1998	6.377616	764.5486	1.235551	2256.636	0.62399	2944.376	1.470115	0.657438	76.80879	-5.7E-14	0.100463	-5.1E-14	2944.37512
0.2331	6.377616	764.5486	1.470115	2944.376	0.657438	3629.262	1.569425	0.6716	79.66256	2.27E-13	0.104196	2.04E-13	3629.262177
0.2664	6.377616	764.5486	1.569425	3629.262	0.6716	4312.62	1.648857	0.682927	81.19035	-3.4E-13	0.106194	-3E-13	4312.620082
0.2997	6.377616	764.5486	1.648857	4312.62	0.682927	4994.622	1.728132	0.694232	82.54689	8.53E-14	0.107968	7.61E-14	4994.62173
0.333	6.377616	764.5486	1.728132	4994.622	0.694232	5675.27	1.80725	0.705514	83.90074	1.71E-13	0.109739	1.52E-13	5675.2696
0.3663	6.377616	764.5486	1.80725	5675.27	0.705514	6354.566	1.88621	0.716774	85.25191	4.12E-13	0.111506	3.66E-13	6354.5663
0.3996	6.377616	764.5486	1.88621	6354.566	0.716774	7032.515	1.965014	0.728011	86.60039	2.56E-13	0.11327	2.27E-13	7032.51452
0.4329	6.377616	764.5486	1.965014	7032.515	0.728011	7709.191	2.04367	0.737995	87.87238	-9.9E-14	0.114934	-8.8E-14	7709.19074
0.4662	6.377616	764.5486	2.04367	7709.191	0.737995	8384.73	2.122193	0.746976	89.00914	-1.6E-13	0.116421	-1.4E-13	8384.73021
0.4995	6.377616	764.5486	2.122193	8384.73	0.746976	9059.194	2.200592	0.755943	90.08494	4.26E-14	0.117828	3.76E-14	9059.19387
0.5328	6.377616	764.5486	2.200592	9059.194	0.755943	9732.583	2.278866	0.764895	91.15903	0	0.119232	0	9732.58345
0.5661	6.377616	764.5486	2.278866	9732.583	0.764895	10404.9	2.357015	0.773834	92.23141	-7.1E-13	0.120635	-6.2E-13	10404.9006
0.5994	6.377616	764.5486	2.357015	10404.9	0.773834	11076.15	2.43504	0.782758	93.30208	-1.6E-13	0.122036	-1.4E-13	11076.1472
0.6327	6.377616	764.5486	2.43504	11076.15	0.782758	11746.36	2.508106	0.791115	94.3379	-5.1E-13	0.12339	-4.5E-13	11746.3579
0.666	6.377616	764.5486	2.508106	11746.36	0.791115	12415.73	2.55683	0.796607	95.17286	3.27E-13	0.124402	2.86E-13	12415.7036
0.6993	6.377616	764.5486	2.55683	12415.73	0.796607	13084.44	2.605506	0.802255	95.8406	4.55E-13	0.125356	3.98E-13	13084.4415
0.7326	6.377616	764.5486	2.605506	13084.44	0.802255	13752.48	2.654133	0.807816	96.58767	-2.4E-13	0.126226	-2.1E-13	13752.4808
0.7659	6.377616	764.5486	2.654133	13752.48	0.807816	14419.86	2.702712	0.813373	97.17408	7.53E-13	0.1271	6.57E-13	14419.8571
0.7992	6.377616	764.5486	2.702712	14419.86	0.813373	15086.57	2.751242	0.818923	97.83982	-5.8E-13	0.127971	-5.1E-13	15086.5659
0.8325	6.377616	764.5486	2.751242	15086.57	0.818923	15752.61	2.799724	0.824468	98.5049	9.38E-13	0.128841	8.17E-13	15752.5976
0.8658	6.377616	764.5486	2.799724	15752.61	0.824468	16417.99	2.848158	0.830008	99.16932	8.1E-13	0.12971	7.05E-13	16417.9809
0.8991	6.377616	764.5486	2.848158	16417.99	0.830008	17082.7	2.896543	0.835542	99.83307	5.54E-13	0.130578	4.82E-13	17082.7044
0.9324	6.377616	764.5486	2.896543	17082.7	0.835542	17746.76	2.94488	0.841071	100.4962	1.66E-12	0.131445	1.44E-12	17746.7568
0.9657	6.377616	764.5486	2.94488	17746.76	0.841071	18410.15	2.993168	0.846594	101.1586	1.21E-12	0.132312	1.05E-12	18410.1469
0.999	6.377616	764.5486	2.993168	18410.15	0.846594	19072.88	3.041409	0.852111	101.8204	3.27E-13	0.133177	2.83E-13	19072.8751
1.0323	5.050074	684.9757	3.041409	19072.88	0.852111	19655.41	3.083812	0.856961	102.4418	1.44E-12	0.149555	1.22E-12	19655.489
1.0656	3.145339	491.233	3.083812	19655.41	0.856961	20043.72	3.112077	0.860194	102.9263	-1.4E-13	0.209526	-1.1E-13	20043.7158
1.0989	1.301174	266.524	3.112077	20043.72	0.860194	20207.04	3.123966	0.861554	103.2015	8.24E-13	0.387213	5.05E-13	20207.0383
1.1322	0.001	78.05233	3.123966	20207.04	0.861554	20181.82	3.12213	0.861344	103.2705	3.79E-12	1.323092	1.23E-12	20181.8202
1.1655	0.001	0.11988	3.12213	20181.82	0.861344	20078.73	3.114626	0.860485	103.2064	0.000151	862	4.15E-13	20078.7335
1.1988	0.001	0.11988	3.114626	20078.73	0.860485	19975.75	3.10713	0.859628	103.1036	3.11E-11	860.0567	1.76E-12	19975.7497
1.2321	0.001	0.11988	3.10713	19975.75	0.859628	19872.87	3.099641	0.858771	103.0009	8.97E-12	859.1997	1.79E-12	19872.8688
			0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 18J

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 70 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE= OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0	0	86.61195	0	0					
0.0333	1.700656	101.9373	0	0	0	86.61195	0.43306	0.255678	15.32537	-7.1E-15	0.150341	-6E-15	86.61194
0.0666	3.401312	305.812	0.43306	86.61195	0.255678	356.3106	0.587418	0.346812	36.11327	7.11E-15	0.11089	6.27E-15	356.3106
0.0999	4.952451	500.7246	0.587418	356.3106	0.346812	809.9837	0.74215	0.438165	47.05153	-4.3E-14	0.093967	-3.9E-14	809.983
0.1332	5.6943	638.1663	0.74215	809.9837	0.438165	1388.638	0.939508	0.554686	59.51149	1.21E-13	0.093254	1.1E-13	1388.63847
0.1665	5.6943	682.6327	0.939508	1388.638	0.554686	2001.366	1.148488	0.611574	69.90563	4.26E-14	0.102406	3.83E-14	2001.36552
0.1998	5.6943	682.6327	1.148488	2001.366	0.611574	2608.912	1.3557	0.641123	75.08666	-1.4E-14	0.109996	-1.3E-14	2608.91154
0.2331	5.6943	682.6327	1.3557	2608.912	0.641123	3213.273	1.521071	0.664765	78.2713	1.71E-13	0.114661	1.51E-13	3213.27293
0.2664	5.6943	682.6327	1.521071	3213.273	0.664765	3815.622	1.591087	0.674689	80.28326	-1.6E-13	0.117608	-1.4E-13	3815.62235
0.2997	5.6943	682.6327	1.591087	3815.622	0.674689	4416.776	1.660964	0.684654	81.47899	5.12E-13	0.11936	4.51E-13	4416.77604
0.333	5.6943	682.6327	1.660964	4416.776	0.684654	5016.736	1.730703	0.694598	82.67225	4.69E-13	0.121108	4.12E-13	5016.73638
0.3663	5.6943	682.6327	1.730703	5016.736	0.694598	5615.506	1.800303	0.704523	83.86334	-8.5E-14	0.122853	-7.5E-14	5615.50572
0.3996	5.6943	682.6327	1.800303	5615.506	0.704523	6213.086	1.869765	0.714428	85.05196	-3.1E-13	0.124594	-2.7E-13	6213.08645
0.4329	5.6943	682.6327	1.869765	6213.086	0.714428	6809.481	1.939089	0.724314	86.23823	-9.9E-14	0.126332	-8.7E-14	6809.4809
0.4662	5.6943	682.6327	1.939089	6809.481	0.724314	7404.705	2.008277	0.733947	87.40815	3.98E-13	0.128046	3.47E-13	7404.70544
0.4995	5.6943	682.6327	2.008277	7404.705	0.733947	7998.879	2.077343	0.741846	88.45902	2.27E-13	0.129585	1.98E-13	7998.87911
0.5328	5.6943	682.6327	2.077343	7998.879	0.741846	8592.107	2.146299	0.749733	89.40524	3.55E-13	0.130971	3.09E-13	8592.10655
0.5661	5.6943	682.6327	2.146299	8592.107	0.749733	9184.389	2.215145	0.757607	90.34996	-7.1E-14	0.132355	-6.2E-14	9184.38927
0.5994	5.6943	682.6327	2.215145	9184.389	0.757607	9775.729	2.283881	0.765469	91.29318	-3E-13	0.133737	-2.6E-13	9775.72877
0.6327	5.6943	682.6327	2.283881	9775.729	0.765469	10366.13	2.352508	0.773318	92.23489	1.42E-14	0.135116	1.23E-14	10366.1266
0.666	5.6943	682.6327	2.352508	10366.13	0.773318	10955.58	2.421026	0.781155	93.17511	-4.4E-13	0.136494	-3.8E-13	10955.5841
0.6993	5.6943	682.6327	2.421026	10955.58	0.781155	11544.1	2.489434	0.788979	94.11382	-6.5E-13	0.137869	-5.6E-13	11544.1133
0.7326	5.6943	682.6327	2.489434	11544.1	0.788979	12131.83	2.536165	0.794324	94.90318	-1.1E-13	0.139025	-9.8E-14	12131.8325
0.7659	5.6943	682.6327	2.536165	12131.83	0.794324	12718.95	2.570901	0.799212	95.51653	-2.7E-13	0.139924	-2.3E-13	12718.9487
0.7992	5.6943	682.6327	2.570901	12718.95	0.799212	13305.48	2.605635	0.804095	96.10221	-4E-13	0.140732	-3.4E-13	13305.4791
0.8325	5.6943	682.6327	2.605636	13305.48	0.804095	13891.42	2.664247	0.808973	96.68731	9.52E-13	0.141639	8.17E-13	13891.4045
0.8658	5.6943	682.6327	2.664247	13891.42	0.808973	14476.79	2.706856	0.813847	97.27182	9.52E-13	0.142495	8.16E-13	14476.7654
0.8991	5.6943	682.6327	2.706856	14476.79	0.813847	15061.56	2.749422	0.818715	97.85575	-3.1E-13	0.143351	-2.7E-13	15061.5623
0.9324	5.6943	682.6327	2.749422	15061.56	0.818715	15645.76	2.791946	0.823579	98.4391	-3.5E-13	0.144205	-2.8E-13	15645.7559
0.9657	5.6943	682.6327	2.791946	15645.76	0.823579	16229.37	2.834428	0.828438	99.02187	-3E-13	0.145059	-2.6E-13	16229.3667
0.999	5.6943	682.6327	2.834428	16229.37	0.828438	16812.4	2.876867	0.833292	99.60405	1.65E-12	0.145912	1.41E-12	16812.3953
1.0323	5.6943	682.6327	2.876867	16812.4	0.833292	17394.84	2.919264	0.838141	100.1857	7.82E-13	0.146764	6.67E-13	17394.8424
1.0656	5.6943	682.6327	2.919264	17394.84	0.838141	17976.71	2.961618	0.842985	100.7667	1.61E-12	0.147615	1.37E-12	17976.7084
1.0989	5.6943	682.6327	2.961618	17976.71	0.842985	18557.99	3.00393	0.847825	101.3471	4.69E-13	0.148465	3.99E-13	18557.9939
1.1322	5.6943	682.6327	3.00393	18557.99	0.847825	19138.7	3.0462	0.852659	101.927	-1.5E-12	0.149315	-1.3E-12	19138.6996
1.1655	5.6943	682.6327	3.0462	19138.7	0.852659	19718.33	3.088428	0.857489	102.5063	4.83E-13	0.150163	4.11E-13	19718.826
1.1988	4.594886	616.7338	3.088428	19718.83	0.857489	20232.51	3.125819	0.861766	103.0521	-4.8E-13	0.167093	-4E-13	20232.5077
1.2321	2.89423	448.8976	3.125819	20232.51	0.861766	20577.92	3.150963	0.864641	103.4808	1.65E-12	0.230522	1.27E-12	20577.9245
1.2654	1.231749	247.3112	3.150963	20577.92	0.864641	20721.51	3.161414	0.865837	103.7249	2.26E-12	0.41941	1.31E-12	20721.5108
1.2987	0.001	73.89095	3.161414	20721.51	0.865837	20691.62	3.159239	0.865588	103.7816	2.66E-12	1.404524	1.07E-12	20691.6202
			0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 18K

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 80 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RATIO OUTFLOW/ STORAGE- OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	1.68059	91.74069	0	0	0	77.95075	0.389754	0.230111	13.79283	-5.3E-15	0.180341	-4.5E-15	77.9507545
0.0666	3.861181	275.2338	0.389754	77.95075	0.230111	319.0505	0.57471	0.339309	34.13101	1.42E-14	0.124089	1.24E-14	319.050552
0.0999	4.457206	450.6521	0.57471	319.0505	0.339309	724.137	0.712871	0.420879	45.56566	2.13E-14	0.10111	1.92E-14	724.13696
0.1332	5.12487	574.3497	0.712871	724.137	0.420879	1241.784	0.889421	0.525114	56.70284	5.68E-14	0.098725	5.12E-14	1241.78877
0.1665	5.12487	614.3694	0.889421	1241.784	0.525114	1788.64	1.075935	0.601228	67.51298	1.14E-13	0.10939	1.01E-13	1788.64021
0.1998	5.12487	614.3694	1.075935	1788.64	0.601228	2329.358	1.260354	0.627526	78.65156	-1.8E-13	0.119302	-1.6E-13	2329.35686
0.2331	5.12487	614.3694	1.260354	2329.358	0.627526	2866.932	1.443701	0.653672	76.79503	-1.8E-13	0.124999	-1.6E-13	2866.93245
0.2664	5.12487	614.3694	1.443701	2866.932	0.653672	3402.091	1.543019	0.667834	79.21109	-5.7E-14	0.128931	-5E-14	3402.09078
0.2997	5.12487	614.3694	1.543019	3402.091	0.667834	3935.87	1.605064	0.676682	80.59033	-9.9E-14	0.131176	-8.8E-14	3935.86907
0.333	5.12487	614.3694	1.605064	3935.87	0.676682	4468.589	1.666987	0.685512	81.64994	2.13E-13	0.1329	1.85E-13	4468.58934
0.3663	5.12487	614.3694	1.666987	4468.589	0.685512	5000.251	1.728787	0.694325	82.70745	-3.8E-13	0.134622	-3.3E-13	5000.25131
0.3996	5.12487	614.3694	1.728787	5000.251	0.694325	5530.858	1.790464	0.70312	83.76286	-9.9E-14	0.136634	-8.6E-14	5530.85786
0.4329	5.12487	614.3694	1.790464	5530.858	0.70312	6060.411	1.852018	0.711898	84.81617	4.69E-13	0.138054	4.04E-13	6060.41111
0.4662	5.12487	614.3694	1.852018	6060.411	0.711898	6588.913	1.91345	0.720658	85.86739	5.68E-14	0.139765	4.89E-14	6588.91313
0.4995	5.12487	614.3694	1.91345	6588.913	0.720658	7116.366	1.974761	0.729401	86.91653	-1.8E-13	0.141473	-1.6E-13	7116.36602
0.5328	5.12487	614.3694	1.974761	7116.366	0.729401	7642.833	2.035956	0.737113	87.90281	-4.3E-14	0.143078	-3.7E-14	7642.83262
0.5661	5.12487	614.3694	2.035956	7642.833	0.737113	8168.418	2.09705	0.7441	88.78388	2.84E-14	0.144512	2.43E-14	8168.41815
0.5994	5.12487	614.3694	2.09705	8168.418	0.7441	8693.167	2.158046	0.751076	89.62088	4.41E-13	0.145875	3.76E-13	8693.16669
0.6327	5.12487	614.3694	2.158046	8693.167	0.751076	9217.08	2.218945	0.758042	90.45655	-5.4E-13	0.147235	-4.6E-13	9217.07956
0.666	5.12487	614.3694	2.218945	9217.08	0.758042	9740.158	2.279746	0.764996	91.29088	6.54E-13	0.148593	5.57E-13	9740.15839
0.6993	5.12487	614.3694	2.279746	9740.158	0.764996	10262.4	2.340451	0.771939	92.12389	1.28E-13	0.149949	1.09E-13	10262.4006
0.7326	5.12487	614.3694	2.340451	10262.4	0.771939	10783.82	2.40136	0.778871	92.95557	2.84E-13	0.151302	2.41E-13	10783.8175
0.7659	5.12487	614.3694	2.40136	10783.82	0.778871	11304.4	2.461572	0.785792	93.78593	7.53E-13	0.152654	6.38E-13	11304.4009
0.7992	5.12487	614.3694	2.461572	11304.4	0.785792	11824.21	2.521773	0.791763	94.55865	4.97E-13	0.153918	4.21E-13	11824.4111
0.8325	5.12487	614.3694	2.521773	11824.21	0.791763	12343.41	2.581585	0.796085	95.17561	-1.8E-13	0.154916	-1.6E-13	12343.4055
0.8658	5.12487	614.3694	2.581585	12343.41	0.796085	12862.08	2.58932	0.800404	95.69336	2.42E-13	0.155799	2.04E-13	12862.0814
0.8991	5.12487	614.3694	2.58932	12862.08	0.800404	13380.24	2.627037	0.804717	96.21095	5.83E-13	0.156681	4.91E-13	13380.1259
0.9324	5.12487	614.3694	2.627037	13380.24	0.804717	13897.88	2.664717	0.809027	96.72784	1.05E-12	0.157442	8.86E-13	13897.8814
0.9657	5.12487	614.3694	2.664717	13897.88	0.809027	14415.01	2.702359	0.813332	97.24422	-6E-13	0.158283	-5E-13	14415.0066
0.999	5.12487	614.3694	2.702359	14415.01	0.813332	14931.62	2.739963	0.817633	97.76008	-4.7E-13	0.159123	-3.9E-13	14931.616
1.0323	5.12487	614.3694	2.739963	14931.62	0.817633	15447.71	2.77753	0.82193	98.27543	1.42E-14	0.159961	1.19E-14	15447.71
1.0656	5.12487	614.3694	2.77753	15447.71	0.82193	15963.29	2.81506	0.826222	98.79026	8.1E-13	0.160799	6.8E-13	15963.2891
1.0989	5.12487	614.3694	2.81506	15963.29	0.826222	16478.35	2.852552	0.830511	99.30458	-5E-13	0.161637	-4.2E-13	16478.354
1.1322	5.12487	614.3694	2.852552	16478.35	0.830511	16992.9	2.890086	0.834794	99.81838	-7.4E-13	0.162473	-6.2E-13	16992.905
1.1655	5.12487	614.3694	2.890006	16992.9	0.834794	17506.94	2.927423	0.839074	100.3317	-3.6E-13	0.163308	-3E-13	17506.9427
1.1988	5.12487	614.3694	2.927423	17506.94	0.839074	18020.47	2.964803	0.843349	100.8445	-3.6E-13	0.164143	-3E-13	18020.4677
1.2321	5.12487	614.3694	2.964803	18020.47	0.843349	18533.48	3.002146	0.84762	101.3567	8.1E-13	0.164977	6.76E-13	18533.4804
1.2654	5.12487	614.3694	3.002146	18533.48	0.84762	19045.98	3.039451	0.851887	101.8685	1.25E-12	0.16581	1.04E-12	19045.9813
1.2987	5.12487	614.3694	3.039451	19045.98	0.851887	19557.97	3.076719	0.85615	102.3797	-1.2E-12	0.166642	-9.8E-13	19557.971
1.332	5.12487	614.3694	3.076719	19557.97	0.85615	20069.45	3.11395	0.860408	102.8905	1.49E-12	0.167473	1.24E-12	20069.4499
1.3653	4.2127	559.6939	3.11395	20069.45	0.860408	20525.77	3.147166	0.864207	103.3734	2.84E-13	0.184696	2.32E-13	20525.7704
1.3986	2.68211	413.2749	3.147166	20525.77	0.864207	20835.29	3.169696	0.866784	103.7556	1.98E-12	0.251057	1.48E-12	20835.2897
1.4319	1.171561	230.989	3.169696	20835.29	0.866784	20962.31	3.178942	0.867841	103.9735	2.29E-12	0.450123	1.26E-12	20962.3052
1.4652	0.001	70.2833	3.178942	20962.31	0.867841	20928.57	3.176486	0.867561	104.02	4.69E-13	1.48001	2.25E-13	20928.5605
1.4985	0.001	0.11938	3.176486	20928.57	0.867561	20824.74	3.168928	0.866696	103.9514	1.33E-11	867.1284	1.7E-12	20824.7371
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 18L

ETENTION BASIN RATING:

ASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

INAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
ODIFIED RATIIONAL METHOD WITH STORM DURATION 90 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RATIO OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)	BASIN 1 INFLOW (CFS)	BASIN 3 INFLOW (CFS)
0	0			0		0	0							0	0
0.0333	1.394538	83.5886	0	0	0	71.0218	0.355109	0.209656	12.5668	5.33E-15	0.150241	4.53E-15	71.0217985	1.136288	0.258325
0.0666	2.789076	250.7658	0.355109	71.0218	0.209656	289.2424	0.564544	0.333307	32.5452	2.13E-14	0.129783	1.85E-14	289.242296	2.272576	0.5165
0.0999	4.06101	410.5941	0.564544	289.2424	0.333307	655.4596	0.689447	0.40705	44.37696	2.84E-14	0.10808	2.53E-14	655.4596586	3.408864	0.652146
0.1332	4.669326	523.2964	0.689447	655.4596	0.40705	1124.3	0.849352	0.501457	54.45592	9.24E-14	0.104063	8.28E-14	1124.38002	4.01718	0.652146
0.1665	4.669326	559.7588	0.849352	1124.3	0.501457	1618.46	1.017892	0.592951	65.59887	8.53E-14	0.117191	7.53E-14	1618.45995	4.01718	0.652146
0.1998	4.669326	559.7588	1.017892	1618.46	0.592951	2105.715	1.184078	0.616649	72.50348	2.84E-14	0.129526	2.47E-14	2105.71518	4.01718	0.652146
0.2331	4.669326	559.7588	1.184078	2105.715	0.616649	2590.138	1.349297	0.64021	75.32814	-2.8E-14	0.134507	-2.5E-14	2590.13794	4.01718	0.652146
0.2664	4.669326	559.7588	1.349297	2590.138	0.64021	3071.821	1.504629	0.66236	78.07603	-1.4E-14	0.139482	-1.2E-14	3071.82071	4.01718	0.652146
0.2997	4.669326	559.7588	1.504629	3071.821	0.66236	3551.699	1.560409	0.670314	79.0805	1.56E-13	0.142795	1.34E-13	3551.69901	4.01718	0.652146
0.333	4.669326	559.7588	1.560409	3551.699	0.670314	4030.625	1.616079	0.678253	80.83311	8.53E-14	0.144407	7.3E-14	4030.62469	4.01718	0.652146
0.3663	4.669326	559.7588	1.616079	4030.625	0.678253	4508.6	1.671638	0.686176	81.78384	-3.6E-13	0.146105	-3E-13	4508.59966	4.01718	0.652146
0.3996	4.669326	559.7588	1.671638	4508.6	0.686176	4985.626	1.727087	0.694083	82.73267	3.13E-13	0.147601	2.65E-13	4985.62579	4.01718	0.652146
0.4329	4.669326	559.7588	1.727087	4985.626	0.694083	5461.705	1.782425	0.701974	83.67962	-1.4E-14	0.149492	-1.2E-14	5461.70497	4.01718	0.652146
0.4662	4.669326	559.7588	1.782425	5461.705	0.701974	5936.839	1.837654	0.709849	84.62469	4.12E-13	0.151181	3.5E-13	5936.83908	4.01718	0.652146
0.4995	4.669326	559.7588	1.837654	5936.839	0.709849	6411.03	1.892773	0.717709	85.56789	-2.6E-13	0.152866	-2.2E-13	6411.03	4.01718	0.652146
0.5328	4.669326	559.7588	1.892773	6411.03	0.717709	6884.28	1.947783	0.725554	86.50921	4.12E-13	0.154547	3.48E-13	6884.27959	4.01718	0.652146
0.5661	4.669326	559.7588	1.947783	6884.28	0.725554	7356.594	2.002684	0.733307	87.44412	2.7E-13	0.156218	2.29E-13	7356.59427	4.01718	0.652146
0.5994	4.669326	559.7588	2.002684	7356.594	0.733307	7828.069	2.057488	0.739575	88.28456	-2.7E-13	0.157719	-2.3E-13	7828.06851	4.01718	0.652146
0.6327	4.669326	559.7588	2.057488	7828.069	0.739575	8298.792	2.112204	0.745823	89.03539	2.42E-13	0.15906	2.03E-13	8298.79192	4.01718	0.652146
0.666	4.669326	559.7588	2.112204	8298.792	0.745823	8768.766	2.166833	0.752082	89.78582	2.13E-13	0.160399	1.79E-13	8768.7657	4.01718	0.652146
0.6993	4.669326	559.7588	2.166833	8768.766	0.752082	9237.991	2.221375	0.75832	90.53346	-5.4E-13	0.161737	-4.5E-13	9237.99105	4.01718	0.652146
0.7326	4.669326	559.7588	2.221375	9237.991	0.75832	9706.469	2.27583	0.764548	91.2807	-2.8E-13	0.163071	-2.4E-13	9706.46915	4.01718	0.652146
0.7659	4.669326	559.7588	2.27583	9706.469	0.764548	10174.2	2.330199	0.770766	92.02576	-1.1E-13	0.164404	-9.5E-14	10174.2012	4.01718	0.652146
0.7992	4.669326	559.7588	2.330199	10174.2	0.770766	10641.19	2.384481	0.776975	92.77163	2.7E-13	0.165735	2.35E-13	10641.1884	4.01718	0.652146
0.8325	4.669326	559.7588	2.384481	10641.19	0.776975	11107.43	2.438676	0.783174	93.51531	-4.4E-13	0.167064	-3.7E-13	11107.4819	4.01718	0.652146
0.8658	4.669326	559.7588	2.438676	11107.43	0.783174	11572.33	2.492785	0.789362	94.2578	9.95E-13	0.16839	8.42E-13	11572.3313	4.01718	0.652146
0.8991	4.669326	559.7588	2.492785	11572.33	0.789362	12037.81	2.529321	0.793541	94.87923	-2E-13	0.1695	-1.7E-13	12037.8124	4.01718	0.652146
0.9324	4.669326	559.7588	2.529321	12037.81	0.793541	12502.21	2.563125	0.797407	95.36145	1.04E-12	0.170362	8.61E-13	12502.2098	4.01718	0.652146
0.9657	4.669326	559.7588	2.563125	12502.21	0.797407	12966.14	2.596895	0.80127	95.82472	2.84E-14	0.171189	2.36E-14	12966.1439	4.01718	0.652146
0.999	4.669326	559.7588	2.596895	12966.14	0.80127	13429.62	2.630631	0.805128	96.28752	1.09E-12	0.172016	9.06E-13	13429.6151	4.01718	0.652146
1.0323	4.669326	559.7588	2.630631	13429.62	0.805128	13892.62	2.664334	0.808983	96.74986	-2.7E-13	0.172842	-2.2E-13	13892.6241	4.01718	0.652146
1.0656	4.669326	559.7588	2.664334	13892.62	0.808983	14355.17	2.698003	0.812834	97.21173	-1.1E-13	0.173667	-9.4E-14	14355.1712	4.01718	0.652146
1.0989	4.669326	559.7588	2.698003	14355.17	0.812834	14817.26	2.731639	0.816681	97.67315	2.42E-13	0.174491	1.99E-13	14817.2568	4.01718	0.652146
1.1322	4.669326	559.7588	2.731639	14817.26	0.816681	15278.88	2.765241	0.820524	98.13411	8.95E-13	0.175315	7.38E-13	15278.8815	4.01718	0.652146
1.1655	4.669326	559.7588	2.765241	15278.88	0.820524	15740.05	2.79881	0.824364	98.5946	5.68E-13	0.176138	4.68E-13	15740.0457	4.01718	0.652146
1.1988	4.669326	559.7588	2.79881	15740.05	0.824364	16200.75	2.832345	0.828199	99.05464	-5.4E-13	0.17696	-4.4E-13	16200.7499	4.01718	0.652146
1.2321	4.669326	559.7588	2.832345	16200.75	0.828199	16660.99	2.865846	0.832031	99.51422	-1.2E-12	0.177781	-1E-12	16660.9944	4.01718	0.652146
1.2654	4.669326	559.7588	2.865846	16660.99	0.832031	17120.78	2.899314	0.835859	99.97334	3.13E-13	0.178601	2.57E-13	17120.7799	4.01718	0.652146
1.2987	4.669326	559.7588	2.899314	17120.78	0.835859	17580.11	2.932749	0.839683	100.432	4.69E-13	0.17942	3.85E-13	17580.1067	4.01718	0.652146
1.332	4.669326	559.7588	2.932749	17580.11	0.839683	18038.98	2.96615	0.843503	100.8902	8.24E-13	0.180239	6.76E-13	18038.9753	4.01718	0.652146
1.3653	4.669326	559.7588	2.96615	18038.98	0.843503	18497.39	2.999519	0.84732	101.348	2.09E-12	0.181056	1.71E-12	18497.3861	4.01718	0.652146
1.3986	4.669326	559.7588	2.999519	18497.39	0.84732	18955.34	3.032853	0.851133	101.8052	1.92E-12	0.181873	1.57E-12	18955.3397	4.01718	0.652146
1.4319	4.669326	559.7588	3.032853	18955.34	0.851133	19412.84	3.066155	0.854941	102.2621	1.73E-12	0.18269	1.42E-12	19412.8364	4.01718	0.652146
1.4652	4.669326	559.7588	3.066155	19412.84	0.854941	19869.88	3.099423	0.858747	102.7185	-1.1E-12	0.183505	-8.7E-13	19869.8768	4.01718	0.652146
1.4985	4.669326	559.7588	3.099423	19869.88	0.858747	20326.46	3.132658	0.862548	103.1744	1.07E-12	0.184319	8.69E-13	20326.4612	4.01718	0.652146
1.5318	3.908669	514.165	3.132658	20326.46	0.862548	20737.02	3.162543	0.865966	103.6071	-1.3E-12	0.201506	-1.1E-12	20737.0191	3.397387	0.511282
1.5651	2.514131	384.9826	3.162543	20737.02	0.865966	21018.05	3.183	0.868306	103.9522	1.71E-13	0.270018	1.24E-13	21018.0495	2.261098	0.253033
1.5984	1.12481	218.1182	3.183	21018.05	0.868306	21132.02	3.191296	0.869254	104.1493	2.7E-12	0.477491	1.41E-12	21132.0183	1.12481	0
1.6317	0.001	67.48108	3.191296	21132.02	0.869254	21095.31	3.188624	0.868949	104.1879	1.14E-12	1.543957	6.18E-13	21095.3115	0	0
1.665	0.001	0.11988	3.188624	21095.31	0.868949	20991.31	3.181054	0.868083	104.1177	-2.8E-13	868.5159	-1.4E-13	20991.3137	0	0
1.6983	0.001	0.11988	3.181054	20991.31	0.868083	20887.42	3.173491	0.867218	104.0139	-5.2E-13	367.6505	-3.4E-13	20887.4196	0	0

Table 18M

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	190
1.5	3892
2.5	11635
3.5	25572
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 AND 3, 2 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 100 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	ROUTING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0	0		0	0					
0.0333	1.230485	75.48361	0	0	0	64.09284	0.320464	0.189202	11.24077	-5.3E-15	0.150341	-4.5E-15	64.09284
0.0666	2.516971	226.3008	0.320464	64.09284	0.189202	259.4343	0.554377	0.327304	30.9534	1.07E-14	0.136806	9.2E-15	259.434391
0.0999	3.664814	370.5362	0.554377	259.4343	0.327304	506.7822	0.666024	0.393221	43.18826	5.68E-14	0.136556	5.02E-14	506.782212
0.1332	4.213782	472.243	0.666024	506.7822	0.393221	1006.816	0.809282	0.4778	52.20899	-4.3E-14	0.120555	-3.8E-14	1006.81627
0.1665	4.213782	505.1482	0.809282	1006.816	0.4778	1449.345	0.960213	0.56691	62.61993	9.24E-14	0.122963	8.09E-14	1449.34459
0.1998	4.213782	505.1482	0.960213	1449.345	0.56691	1884.196	1.108525	0.650576	72.29676	2.84E-14	0.139161	2.49E-14	1884.19535
0.2331	4.213782	505.1482	1.108525	1884.196	0.650576	2315.455	1.255612	0.62685	73.38959	-1.7E-13	0.156873	-1.5E-13	2315.45414
0.2664	4.213782	505.1482	1.255612	2315.455	0.62685	2744.286	1.401844	0.647703	76.39672	-1.3E-13	0.151286	-1.1E-13	2744.28651
0.2997	4.213782	505.1482	1.401844	2744.286	0.647703	3170.731	1.516126	0.664	78.62345	1.99E-13	0.155644	1.68E-13	3170.73075
0.333	4.213782	505.1482	1.516126	3170.731	0.664	3595.856	1.565542	0.671046	80.02265	1.56E-13	0.158414	1.32E-13	3595.85629
0.3663	4.213782	505.1482	1.565542	3595.856	0.671046	4020.138	1.61486	0.678079	80.86657	-7.1E-14	0.160035	-6E-14	4020.13791
0.3996	4.213782	505.1482	1.61486	4020.138	0.678079	4443.577	1.66408	0.685098	81.70801	1.85E-13	0.161752	1.55E-13	4443.57728
0.4329	4.213782	505.1482	1.66408	4443.577	0.685098	4866.176	1.713202	0.692103	82.54939	-2.6E-13	0.163416	-2.1E-13	4866.17608
0.4662	4.213782	505.1482	1.713202	4866.176	0.692103	5287.936	1.762227	0.699094	83.3883	2.84E-13	0.165077	2.37E-13	5287.93597
0.4995	4.213782	505.1482	1.762227	5287.936	0.699094	5708.859	1.811154	0.706071	84.22554	8.53E-14	0.166734	7.1E-14	5708.85862
0.5328	4.213782	505.1482	1.811154	5708.859	0.706071	6128.946	1.859984	0.713034	85.06111	-1.1E-13	0.168388	-9.5E-14	6128.94569
0.5661	4.213782	505.1482	1.859984	6128.946	0.713034	6548.199	1.908718	0.719983	85.89503	-1.4E-13	0.170039	-1.2E-13	6548.19684
0.5994	4.213782	505.1482	1.908718	6548.199	0.719983	6966.62	1.957354	0.726919	86.7273	8.53E-14	0.171687	7.09E-14	6966.61973
0.6327	4.213782	505.1482	1.957354	6966.62	0.726919	7384.22	2.005896	0.733674	87.54795	3.96E-13	0.173311	3.29E-13	7384.21997
0.666	4.213782	505.1482	2.005896	7384.22	0.733674	7801.083	2.054351	0.739216	88.28507	-1.1E-13	0.174771	-9.3E-14	7801.08339
0.6993	4.213782	505.1482	2.054351	7801.083	0.739216	8217.232	2.10273	0.74475	88.94893	6.82E-13	0.176065	5.66E-13	8217.23024
0.7326	4.213782	505.1482	2.10273	8217.232	0.74475	8632.819	2.151031	0.750274	89.61179	9.95E-14	0.177367	8.26E-14	8632.81918
0.7659	4.213782	505.1482	2.151031	8632.819	0.750274	9047.694	2.199255	0.75579	90.27348	1.09E-12	0.178707	9.09E-13	9047.69351
0.7992	4.213782	505.1482	2.199255	9047.694	0.75579	9461.908	2.247403	0.761297	90.93417	1.85E-13	0.180015	1.54E-13	9461.90753
0.8325	4.213782	505.1482	2.247403	9461.908	0.761297	9875.462	2.295474	0.766795	91.59381	4.97E-13	0.181321	4.13E-13	9875.46131
0.8658	4.213782	505.1482	2.295474	9875.462	0.766795	10288.36	2.343468	0.772284	92.2524	2.56E-13	0.182624	2.09E-13	10288.3577
0.8991	4.213782	505.1482	2.343468	10288.36	0.772284	10700.6	2.391386	0.777765	92.90994	-6.4E-13	0.183926	-5.2E-13	10700.5959
0.9324	4.213782	505.1482	2.391386	10700.6	0.777765	11112.18	2.439228	0.783237	93.56643	6.82E-13	0.185226	5.55E-13	11112.1777
0.9657	4.213782	505.1482	2.439228	11112.18	0.783237	11523.1	2.486993	0.7887	94.22188	3.13E-13	0.186523	2.54E-13	11523.104
0.999	4.213782	505.1482	2.486993	11523.1	0.7887	11933.46	2.521725	0.792672	94.78745	8.81E-13	0.187643	7.16E-13	11933.4647
1.0323	4.213782	505.1482	2.521725	11933.46	0.792672	12343.38	2.551564	0.796085	95.23012	1.02E-12	0.188519	8.3E-13	12343.3828
1.0656	4.213782	505.1482	2.551564	12343.38	0.796085	12752.89	2.581372	0.799494	95.63904	-2.3E-13	0.189329	-1.8E-13	12752.892
1.0989	4.213782	505.1482	2.581372	12752.89	0.799494	13161.99	2.611151	0.8029	96.04755	-5.1E-13	0.190137	-4.1E-13	13161.9926
1.1322	4.213782	505.1482	2.611151	13161.99	0.8029	13570.69	2.6409	0.806303	96.45565	-5.4E-13	0.190945	-4.4E-13	13570.6651
1.1655	4.213782	505.1482	2.6409	13570.69	0.806303	13978.97	2.670619	0.809702	96.86334	-3E-13	0.191752	-2.4E-13	13978.97
1.1988	4.213782	505.1482	2.670619	13978.97	0.809702	14386.85	2.700309	0.813098	97.27063	1.42E-13	0.192559	1.15E-13	14386.8475
1.2321	4.213782	505.1482	2.700309	14386.85	0.813098	14794.32	2.729969	0.81649	97.67751	1.42E-13	0.193364	1.15E-13	14794.3182
1.2654	4.213782	505.1482	2.729969	14794.32	0.81649	15201.38	2.7596	0.819879	98.08399	0	0.194169	0	15201.3824
1.2987	4.213782	505.1482	2.7596	15201.38	0.819879	15608.04	2.789201	0.823265	98.49006	5.26E-13	0.194973	4.23E-13	15608.0405
1.332	4.213782	505.1482	2.789201	15608.04	0.823265	16014.29	2.818772	0.826647	98.89572	7.25E-13	0.195776	5.83E-13	16014.293
1.3653	4.213782	505.1482	2.818772	16014.29	0.826647	16420.14	2.848314	0.830026	99.30098	-6.3E-13	0.196578	-5E-13	16420.1402
1.3986	4.213782	505.1482	2.848314	16420.14	0.830026	16825.58	2.877827	0.833401	99.70584	-5.7E-14	0.197379	-4.6E-14	16825.5826
1.4319	4.213782	505.1482	2.877827	16825.58	0.833401	17230.62	2.90731	0.836774	100.1103	1.15E-12	0.19818	9.23E-13	17230.6205
1.4652	4.213782	505.1482	2.90731	17230.62	0.836774	17635.25	2.936763	0.840142	100.5143	2.27E-13	0.19898	1.82E-13	17635.2543
1.4985	4.213782	505.1482	2.936763	17635.25	0.840142	18039.48	2.966188	0.843508	100.918	-2.8E-13	0.199779	-2.3E-13	18039.4845
1.5318	4.213782	505.1482	2.966188	18039.48	0.843508	18443.31	2.995582	0.84687	101.3212	-1.3E-13	0.200577	-1E-13	18443.3115
1.5651	4.213782	505.1482	2.995582	18443.31	0.84687	18846.74	3.024948	0.850228	101.7241	1.86E-12	0.201375	1.49E-12	18846.7356
1.5984	4.213782	505.1482	3.024948	18846.74	0.850228	19249.76	3.054284	0.853584	102.1265	7.11E-14	0.202171	5.67E-14	19249.7573
1.6317	4.213782	505.1482	3.054284	19249.76	0.853584	19652.38	3.083591	0.856936	102.5285	-5.7E-14	0.202967	-4.5E-14	19652.3769
1.665	4.213782	505.1482	3.083591	19652.38	0.856936	20054.59	3.112869	0.860284	102.9302	-6.7E-13	0.203762	-5.3E-13	20054.5949
1.6983	3.590895	467.8124	3.112869	20054.59	0.860284	20419.09	3.139401	0.863319	103.3128	-1.2E-12	0.220042	-9.6E-13	20419.0945

Table 18N

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY,

DEPTH	FLOW
0	-0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

1.7316	2.33241	355.0429	3.139401	20419.39	0.863319	20670.52	3.157703	0.865412	103.6202	-9.9E-14	0.291852	-7E-14	20670.5173
1.7649	1.073924	204.1757	3.157703	20670.52	0.865412	20770.9	3.165009	0.866248	103.7957	3.61E-12	0.508365	1.77E-12	20770.8972
1.7982	0.041432	66.85444	3.165009	20770.9	0.866248	20733.92	3.162318	0.86594	103.8274	8.38E-13	1.553006	4.34E-13	20733.9243
1.8315	0.001	2.540047	3.162318	20733.92	0.86594	20632.71	3.15495	0.865097	103.7584	2.07E-12	40.79501	1.95E-12	20632.7093
1.8648	0.001	0.11988	3.15495	20632.71	0.865097	20529.17	3.147414	0.864235	103.6562	-8.8E-13	864.5665	-3.3E-13	20529.173
1.8981	0.001	0.11988	3.147414	20529.17	0.864235	20425.74	3.139865	0.863374	103.5529	2.71E-05	864	1.67E-12	20425.7099
1.9314	0.001	0.11988	3.139865	20425.74	0.863374	20322.41	3.132364	0.862514	103.4498	7.75E-06	863	1.71E-11	20322.41
1.9647	0.001	0.11988	3.132364	20322.41	0.862514	20219.18	3.12485	0.861655	103.3467	5.95E-10	862.0844	5.02E-11	20219.1802
1.998	0.001	0.11988	3.12485	20219.18	0.861655	20116.06	3.117343	0.860796	103.2437	3.01E-10	861.2254	6.79E-11	20116.0594
2.0313	0.001	0.11988	3.117343	20116.06	0.860796	20013.04	3.109844	0.859938	103.1408	2.21E-10	860.3673	8.1E-11	20013.0384
2.0646	0.001	0.11988	3.109844	20013.04	0.859938	19910.12	3.102353	0.859082	103.0381	1.74E-10	859.51	8.9E-11	19910.1203
2.0979	0.001	0.11988	3.102353	19910.12	0.859082	19807.3	3.094869	0.858226	102.9354	4.83E-05	859	1.04E-10	19807.3047

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 5 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	24.2512	1453.617	0	0	0	1426.15	0.952302	0.458248	27.46737	0	0.018896	0	1426.1497
0.0666	48.5024	4360.851	0.952302	1426.15	0.458248	5725.646	1.813105	0.565356	61.35483	7.11E-15	0.014069	7.01E-15	5725.64607
0.0999	49.72721	5687.883	1.813105	5725.646	0.565356	11538.53	2.488786	0.685909	75.00087	-7.8E-13	0.012738	-7.7E-13	11538.5285
0.1332	25.47601	4507.681	2.488786	11538.53	0.685909	15959.94	2.814816	0.753418	86.27326	-6.8E-13	0.019139	-6.7E-13	15959.9364
0.1665	1.224808	1600.447	2.814816	15959.94	0.753418	17468.7	2.92464	0.776158	91.68278	5.83E-13	0.057286	5.49E-13	17468.7007
0.1998	0.001	73.47494	2.92464	17468.7	0.776158	17449.15	2.923216	0.775864	93.02818	3.91E-12	1.266121	1.04E-12	17449.1475
0.2331	0.001	0.11988	2.923216	17449.15	0.775864	17356.34	2.916461	0.774465	92.92667	9.54E-12	775.1641	1.57E-12	17356.3407
0.2664	0.001	0.11988	2.916461	17356.34	0.774465	17263.7	2.909718	0.773068	92.75913	-1.1E-13	773.7666	-8.3E-14	17263.7014
0.2997	0.001	0.11988	2.909718	17263.7	0.773068	17171.23	2.902987	0.771675	92.5919	2.73E-12	772.3715	1.02E-12	17171.2294
0.333	0.001	0.11988	2.902987	17171.23	0.771675	17078.92	2.896268	0.770283	92.42497	-3.1E-13	770.979	-3E-13	17078.9243
0.3663	0.001	0.11988	2.896268	17078.92	0.770283	16986.79	2.889561	0.768895	92.25833	2.11E-12	769.589	1.24E-12	16986.7859
0.3996	0.001	0.11988	2.889561	16986.79	0.768895	16894.81	2.882866	0.767508	92.092	-5.8E-12	768.2016	-1.2E-12	16894.8138
0.4329	0.001	0.11988	2.882866	16894.81	0.767508	16803.01	2.876183	0.766125	91.92597	3.6E-13	766.8166	2.94E-13	16803.0077
0.4662	0.001	0.11988	2.876183	16803.01	0.766125	16711.37	2.869513	0.764744	91.76024	-3.9E-12	765.4341	-1.7E-12	16711.3673
0.4995	0.001	0.11988	2.869513	16711.37	0.764744	16619.89	2.862854	0.763365	91.59481	-3.2E-11	764.0541	-1.7E-12	16619.8924
0.5328	0.001	0.11988	2.862854	16619.89	0.763365	16528.58	2.856208	0.761989	91.42968	-1.9E-12	762.6766	-1.3E-12	16528.5826
0.5661	0.001	0.11988	2.856208	16528.58	0.761989	16437.44	2.849573	0.760615	91.26484	-4.1E-12	761.3016	-1.2E-12	16437.4376
0.5994	0.001	0.11988	2.849573	16437.44	0.760615	16346.46	2.842951	0.759243	91.1003	-9.4E-14	759.9291	-8.8E-14	16346.4572
0.6327	0.001	0.11988	2.842951	16346.46	0.759243	16255.64	2.83634	0.757875	90.93606	7.62E-14	758.5591	4.26E-14	16255.641
0.666	0.001	0.11988	2.83634	16255.64	0.757875	16164.99	2.829742	0.756508	90.77212	-3E-12	757.1915	-5.7E-13	16164.9888
0.6993	0.001	0.11988	2.829742	16164.99	0.756508	16074.5	2.823155	0.755144	90.60847	3.04E-13	755.8264	2.51E-13	16074.5002
0.7326	0.001	0.11988	2.823155	16074.5	0.755144	15984.17	2.81658	0.753783	90.44512	-1.1E-12	754.4638	-5.1E-13	15984.1749
0.7659	0.001	0.11988	2.81658	15984.17	0.753783	15894.01	2.810017	0.752424	90.28206	-7.6E-12	753.1036	-7.3E-13	15894.0123
0.7992	0.001	0.11988	2.810017	15894.01	0.752424	15804.01	2.803466	0.751068	90.1193	1.93E-14	751.7459	1.44E-14	15804.0133
0.8325	0.001	0.11988	2.803466	15804.01	0.751068	15714.18	2.796927	0.749714	89.95683	-1.6E-12	750.3906	-6.4E-13	15714.1764
0.8658	0.001	0.11988	2.796927	15714.18	0.749714	15624.5	2.790399	0.748362	89.79465	-2.4E-11	749.0378	-9E-13	15624.5016
0.8991	0.001	0.11988	2.790399	15624.5	0.748362	15534.99	2.783883	0.747013	89.63277	-1.9E-13	747.6874	-1.3E-13	15534.9887
0.9324	0.001	0.11988	2.783883	15534.99	0.747013	15445.64	2.777379	0.745666	89.47118	-1.8E-12	746.3395	-6.2E-13	15445.6374
0.9657	0.001	0.11988	2.777379	15445.64	0.745666	15356.45	2.770887	0.744322	89.30988	-6.2E-13	744.994	-6.2E-13	15356.4474
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19A

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 10 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	18.61703	1115.903	0	0	0	1091.73	0.838244	0.403363	24.17757	9.24E-14	0.021666	9.04E-14	1091.73048
0.0666	37.23417	3347.724	0.838244	1091.73	0.403363	4382.358	1.656964	0.549196	57.09636	1.63E-13	0.017055	1.61E-13	4382.35828
0.0999	47.01284	5049.766	1.656964	4382.358	0.549196	9361.233	2.235701	0.633505	70.89107	2.42E-13	0.014028	2.38E-13	9361.23295
0.1332	47.01284	5635.899	2.235701	9361.233	0.633505	14914.94	2.73875	0.737667	82.18306	1.28E-13	0.014583	1.26E-13	14914.9441
0.1665	47.01284	5635.899	2.73875	14914.94	0.737667	20457.4	3.14219	0.821205	93.43879	0	0.016579	0	20457.4046
0.1998	29.33601	4576.35	3.14219	20457.4	0.821205	24931.27	3.467846	0.888636	102.4678	1.32E-12	0.022395	1.29E-12	24931.267
0.2331	10.71893	2400.893	3.467846	24931.27	0.888636	27224.04	3.596031	0.915178	108.1206	4.97E-13	0.045033	4.75E-13	27224.0395
0.2664	0.001	642.5525	3.596031	27224.04	0.915178	27747.48	3.623187	1.071968	119.1095	-8.5E-13	0.185369	-6.9E-13	27747.4824
0.2997	0.001	0.11988	3.623187	27747.48	1.071968	27621.73	3.616662	1.028082	125.877	-7E-11	1050.025	-1.8E-12	27621.7252
0.333	0.001	0.11988	3.616662	27621.73	1.028082	27501.12	3.610406	0.985994	120.7237	-4.5E-11	1007.038	-1.7E-12	27501.1214
0.3663	0.001	0.11988	3.610406	27501.12	0.985994	27385.46	3.604405	0.945631	115.7816	1.38E-12	965.8129	1.12E-12	27385.4596
0.3996	0.001	0.11988	3.604405	27385.46	0.945631	27274.01	3.598623	0.915715	111.5691	-1.1E-12	930.6731	-7.2E-13	27274.0104
0.4329	0.001	0.11988	3.598623	27274.01	0.915715	27164.42	3.592938	0.914538	109.7053	-1.1E-11	915.1263	-1.4E-12	27164.4249
0.4662	0.001	0.11988	3.592938	27164.42	0.914538	27054.98	3.58726	0.913362	109.5643	1.34E-12	913.9499	1.27E-12	27054.9805
0.4995	0.001	0.11988	3.58726	27054.98	0.913362	26945.68	3.581589	0.912188	109.4235	3.18E-13	912.7749	2.46E-13	26945.6769
0.5328	0.001	0.11988	3.581589	26945.68	0.912188	26836.51	3.575926	0.911015	109.2828	5.32E-15	911.6015	3.2E-15	26836.514
0.5661	0.001	0.11988	3.575926	26836.51	0.911015	26727.49	3.57027	0.909844	109.1423	-1.7E-12	910.4296	-7.3E-13	26727.4916
0.5994	0.001	0.11988	3.57027	26727.49	0.909844	26618.61	3.564621	0.908674	109.002	-6.3E-12	909.2592	-1.6E-12	26618.6095
0.6327	0.001	0.11988	3.564621	26618.61	0.908674	26509.87	3.55898	0.907506	108.8619	-2E-11	908.0903	-1.8E-12	26509.8675
0.666	0.001	0.11988	3.55898	26509.87	0.907506	26401.27	3.553346	0.90634	108.7219	-1.6E-12	906.922	-1.5E-12	26401.2654
0.6993	0.001	0.11988	3.553346	26401.27	0.90634	26292.8	3.547719	0.905175	108.5822	-1.9E-13	905.7571	-1.3E-13	26292.8031
0.7326	0.001	0.11988	3.547719	26292.8	0.905175	26184.48	3.542099	0.904011	108.4426	-2E-12	904.5927	-1.2E-12	26184.4804
0.7659	0.001	0.11988	3.542099	26184.48	0.904011	26076.3	3.536487	0.902849	108.3032	-6.6E-13	903.4298	-2.8E-13	26076.2972
0.7992	0.001	0.11988	3.536487	26076.3	0.902849	25968.25	3.530881	0.901688	108.1639	-4.2E-12	902.2684	-1.1E-12	25968.2531
0.8325	0.001	0.11988	3.530881	25968.25	0.901688	25860.35	3.525283	0.900529	108.0249	-1.6E-11	901.1085	-1.7E-12	25860.3431
0.8658	0.001	0.11988	3.525283	25860.35	0.900529	25752.58	3.519692	0.899371	107.886	1.47E-12	899.9501	1.4E-12	25752.5819
0.8991	0.001	0.11988	3.519692	25752.58	0.899371	25644.95	3.514109	0.898215	107.7473	3.04E-13	898.7932	2.41E-13	25644.9545
0.9324	0.001	0.11988	3.514109	25644.95	0.898215	25537.47	3.508532	0.89706	107.6088	-2.4E-13	897.6378	-1.5E-13	25537.4655
0.9657	0.001	0.11988	3.508532	25537.47	0.89706	25430.11	3.502963	0.895907	107.4705	-2.8E-13	896.4839	-1.4E-13	25430.1149
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19B

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 15 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	15.87351	951.4584	0	0	0	928.8829	0.782702	0.376636	22.57558	3.55E-15	0.023727	3.47E-15	928.882866
0.0666	31.74703	2854.375	0.782702	928.8829	0.376636	3728.236	1.580929	0.541326	55.02267	3.55E-14	0.019277	3.48E-14	3728.23553
0.0999	40.08463	4305.59	1.580929	3728.236	0.541326	7965.42	2.073453	0.599909	68.40566	-1.7E-13	0.015868	-1.7E-13	7965.4196
0.1332	40.08463	4805.346	2.073453	7965.42	0.599909	12692.6	2.576983	0.704172	78.16662	8.53E-14	0.016267	8.39E-14	12692.5987
0.1665	40.08463	4805.346	2.576983	12692.6	0.704172	17409.27	2.920314	0.775262	88.67728	1.65E-12	0.018454	1.62E-12	17409.2671
0.1998	40.08463	4805.346	2.920314	17409.27	0.775262	22117.42	3.263024	0.846225	97.19195	-1.1E-12	0.020226	-1.1E-12	22117.4208
0.2331	40.08463	4805.346	3.263024	22117.42	0.846225	26817.45	3.574937	0.91081	105.3167	-8E-13	0.021917	-7.8E-13	26817.4493
0.2664	33.35041	4401.697	3.574937	26817.45	0.91081	31031.6	3.793565	2.218044	187.5435	1.93E-12	0.042607	1.85E-12	31031.6029
0.2997	17.4769	3046.589	3.793565	31031.6	2.218044	33755.32	3.934869	3.168553	322.8726	-6.3E-13	0.105978	-5.6E-13	33755.3195
0.333	1.603385	1143.672	3.934869	33755.32	3.168553	34503.5	3.973684	3.429648	395.4961	1.82E-12	0.345812	1.19E-12	34503.4956
0.3663	0.001	96.16685	3.973684	34503.5	3.429648	34194.97	3.957678	3.32198	404.6925	1.38E-11	4.208233	2.87E-12	34194.9699
0.3996	0.001	0.11988	3.957678	34194.97	3.32198	33805.01	3.937447	3.185893	390.0819	2.34E-06	3254	3.33E-12	33805.0079
0.4329	0.001	0.11988	3.937447	33805.01	3.185893	33431.03	3.918045	3.055382	374.102	1.39E-05	3121	2.52E-12	33431.0257
0.4662	0.001	0.11988	3.918045	33431.03	3.055382	33072.37	3.899438	2.93022	358.777	7.96E-06	2993	2.3E-12	33072.3686
0.4995	0.001	0.11988	3.899438	33072.37	2.93022	32728.41	3.881594	2.810187	344.08	6.17E-12	2870.203	1.26E-12	32728.4085
0.5328	0.001	0.11988	3.881594	32728.41	2.810187	32398.54	3.86448	2.695072	329.9852	1.45E-12	2752.629	9.15E-13	32398.5431
0.5661	0.001	0.11988	3.86448	32398.54	2.695072	32082.2	3.848069	2.584674	316.468	-1E-12	2639.373	-9.1E-13	32082.195
0.5994	0.001	0.11988	3.848069	32082.2	2.584674	31778.81	3.832329	2.478801	303.5047	2.36E-12	2531.737	1.74E-12	31778.8102
0.6327	0.001	0.11988	3.832329	31778.81	2.478801	31487.36	3.817235	2.377265	291.0726	5.15E-11	2428.033	1.7E-12	31487.3575
0.666	0.001	0.11988	3.817235	31487.36	2.377265	31208.83	3.802759	2.279891	279.15	2.42E-12	2328.573	1.4E-12	31208.8274
0.6993	0.001	0.11988	3.802759	31208.83	2.279891	30941.23	3.788876	2.186507	267.7159	7.2E-12	2233.139	1.43E-12	30941.2314
0.7326	0.001	0.11988	3.788876	30941.23	2.186507	30684.6	3.775562	2.096949	256.7503	1.8E-12	2141.728	1.21E-12	30684.631
0.7659	0.001	0.11988	3.775562	30684.6	2.096949	30438.49	3.762794	2.011061	246.2241	-3.5E-10	2054.085	-1.8E-12	30438.4067
0.7992	0.001	0.11988	3.762794	30438.49	2.011061	30202.46	3.750549	1.928693	236.1489	6.02E-13	1969.077	5.28E-13	30202.4577
0.8325	0.001	0.11988	3.750549	30202.46	1.928693	29976.1	3.738806	1.8497	226.4769	-7.2E-12	1889.197	-1.4E-12	29976.1007
0.8658	0.001	0.11988	3.738806	29976.1	1.8497	29759.02	3.727544	1.773944	217.2012	-1.8E-12	1811.822	-1.3E-12	29759.0194
0.8991	0.001	0.11988	3.727544	29759.02	1.773944	29550.83	3.716743	1.701293	208.3057	-8.3E-13	1737.618	-5.4E-13	29550.8335
0.9324	0.001	0.11988	3.716743	29550.83	1.701293	29351.18	3.706385	1.631618	199.7747	-2.7E-12	1666.455	-1.2E-12	29351.1788
0.9657	0.001	0.11988	3.706385	29351.18	1.631618	29159.71	3.696452	1.564799	191.5932	-5.5E-12	1598.208	-1.1E-12	29159.7054
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 20 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	13.91382	833.9944	0	0	0	812.5631	0.74303	0.357546	21.4313	5.33E-14	0.025697	5.19E-14	812.563139
0.0666	27.82764	2501.983	0.74303	812.5631	0.357546	3261.005	1.526619	0.535705	53.54146	-3.6E-14	0.0214	-3.5E-14	3261.00499
0.0999	35.13591	3774.035	1.526619	3261.005	0.535705	6968.147	1.957532	0.580305	66.89362	-2.3E-13	0.017725	-2.2E-13	6968.14682
0.1332	35.13591	4212.093	1.957532	6968.147	0.580305	11104.97	2.43839	0.675474	75.27137	3.55E-13	0.01787	3.49E-13	11104.9686
0.1665	35.13591	4212.093	2.43839	11104.97	0.675474	15232.07	2.761834	0.742447	84.9902	8.95E-13	0.020178	8.77E-13	15232.0715
0.1998	35.13591	4212.093	2.761834	15232.07	0.742447	19351.44	3.061686	0.804535	92.72613	-4.3E-14	0.022814	-4.2E-14	19351.4385
0.2331	35.13591	4212.093	3.061686	19351.44	0.804535	23463.37	3.360996	0.866511	100.1625	-1.1E-12	0.02378	-1.1E-12	23463.3691
0.2664	35.13591	4212.093	3.360996	23463.37	0.866511	27563.13	3.613622	1.007632	112.3362	8.38E-13	0.02667	8.16E-13	27563.1261
0.2997	35.13591	4212.093	3.613622	27563.13	1.007632	31570.6	3.821527	2.40614	204.6215	1.88E-12	0.04858	1.78E-12	31570.5977
0.333	35.13591	4212.093	3.821527	31570.6	2.40614	35413.85	4.020913	3.747339	368.8395	7.39E-13	0.087567	6.74E-13	35413.8513
0.3663	22.62753	3462.341	4.020913	35413.85	3.747339	38365.23	4.174028	4.777295	510.9665	6.25E-13	0.147578	5.33E-13	38365.2253
0.3996	8.713706	1878.594	4.174028	38365.23	4.777295	39644.36	4.240389	5.223681	599.4585	-1.8E-12	0.3191	-1.2E-12	39644.3604
0.4329	0.001	522.3595	4.240389	39644.36	5.223681	39542.63	4.235111	5.18818	624.0869	1.77E-11	1.194746	3.45E-12	39542.633
0.4662	0.001	0.11988	4.235111	39542.63	5.18818	38933.53	4.202511	4.97562	609.2182	2.35E-06	5082	3.43E-12	38933.5346
0.4995	0.001	0.11988	4.202511	38933.53	4.97562	38349.4	4.173207	4.77177	584.2586	3.21E-05	4875	3.34E-12	38349.3959
0.5328	0.001	0.11988	4.173207	38349.4	4.77177	37789.19	4.144144	4.576274	560.3218	1.64E-10	4674.322	3.64E-12	37789.194
0.5661	0.001	0.11988	4.144144	37789.19	4.576274	37251.95	4.116272	4.388789	537.3659	4.01E-12	4482.531	2.13E-12	37251.948
0.5994	0.001	0.11988	4.116272	37251.95	4.388789	36736.72	4.089542	4.208986	515.3506	3.14E-06	4299	3.23E-12	36736.7173
0.6327	0.001	0.11988	4.089542	36736.72	4.208986	36242.6	4.063908	4.036551	494.2375	-1.9E-12	4122.769	-1.5E-12	36242.5996
0.666	0.001	0.11988	4.063908	36242.6	4.036551	35768.73	4.039323	3.871183	473.9896	-1.3E-12	3953.867	-1.2E-12	35768.7299
0.6993	0.001	0.11988	4.039323	35768.73	3.871183	35314.28	4.015747	3.71259	454.5714	3.39E-12	3791.387	3E-12	35314.2785
0.7326	0.001	0.11988	4.015747	35314.28	3.71259	34878.45	3.993136	3.560497	435.9489	5.21E-12	3636.544	2.83E-12	34878.4495
0.7659	0.001	0.11988	3.993136	34878.45	3.560497	34460.48	3.971452	3.414636	418.0895	-4.2E-13	3487.367	-2.4E-13	34460.4799
0.7992	0.001	0.11988	3.971452	34460.48	3.414636	34059.64	3.950657	3.274752	400.9619	8.29E-13	3344.594	5.76E-13	34059.6378
0.8325	0.001	0.11988	3.950657	34059.64	3.274752	33675.22	3.930714	3.140601	384.5363	5.21E-12	3207.676	3.52E-12	33675.2214
0.8658	0.001	0.11988	3.930714	33675.22	3.140601	33306.56	3.911588	3.011946	368.7837	6.29E-12	3076.273	1.72E-12	33306.5576
0.8991	0.001	0.11988	3.911588	33306.56	3.011946	32953	3.893245	2.888564	353.6766	1.25E-11	2950.255	3.18E-12	32953.0009
0.9324	0.001	0.11988	3.893245	32953	2.888564	32613.93	3.875655	2.770237	339.1885	1E-12	2829.401	4.01E-13	32613.9323
0.9657	0.001	0.11988	3.875655	32613.93	2.770237	32288.76	3.858785	2.65676	325.2942	3.22E-12	2713.498	1.6E-12	32288.758
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19D

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 25 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	12.29707	737.0866	0	0	0	716.5994	0.7103	0.341796	20.48727	1.42E-14	0.027795	1.38E-14	716.599364
0.0666	24.59415	2211.26	0.7103	716.5994	0.341796	2875.758	1.446711	0.527435	52.1017	4.26E-14	0.023562	4.16E-14	2875.75757
0.0999	31.05322	3335.503	1.446711	2875.758	0.527435	6145.456	1.861904	0.570407	85.80463	-2.1E-13	0.019729	-2.1E-13	6145.4561
0.1332	31.05322	3722.66	1.861904	6145.456	0.570407	9795.327	2.286159	0.643953	72.78873	-8.2E-13	0.019553	-8.1E-13	9795.32714
0.1665	31.05322	3722.66	2.286159	9795.327	0.643953	13436.51	2.631133	0.715384	81.47865	4.55E-13	0.021807	4.45E-13	13436.5083
0.1998	31.05322	3722.66	2.631133	13436.51	0.715384	17070.13	2.895627	0.770151	89.04296	-1.2E-12	0.023919	-1.2E-12	17070.1251
0.2331	31.05322	3722.66	2.895627	17070.13	0.770151	20697.18	3.159643	0.824819	95.60247	1.12E-12	0.025681	1.09E-12	20697.1824
0.2664	31.05322	3722.66	3.159643	20697.18	0.824819	24317.69	3.423183	0.879388	102.1501	9.81E-13	0.02744	9.54E-13	24317.692
0.2997	31.05322	3722.66	3.423183	24317.69	0.879388	27919.78	3.632125	1.132097	120.5684	-1.7E-12	0.032388	-1.6E-12	27919.7834
0.333	31.05322	3722.66	3.632125	27919.78	1.132097	31433.23	3.814401	2.358203	209.2086	9.66E-13	0.056199	9.12E-13	31433.2346
0.3663	31.05322	3722.66	3.814401	31433.23	2.358203	34802.71	3.989207	3.534067	353.1827	1.25E-12	0.094074	1.13E-12	34802.7117
0.3996	31.05322	3722.66	3.989207	34802.71	3.534067	38034.11	4.15635	4.661745	491.257	-2.3E-12	0.131964	-2E-12	38034.1145
0.4329	26.45734	3447.183	4.15635	38034.11	4.661745	40863.27	4.303625	5.649049	618.029	-9.1E-13	0.179285	-7.5E-13	40863.2685
0.4662	14.16027	2434.619	4.303625	40863.27	5.649049	42584.67	4.39293	6.249776	713.2156	2.16E-12	0.292947	1.53E-12	42584.6724
0.4995	1.863193	960.4462	4.39293	42584.67	6.249776	42791.57	4.403664	6.321977	753.5509	1.55E-11	0.784584	3.33E-12	42791.5677
0.5328	0.001	111.7397	4.403664	42791.57	6.321977	42158.67	4.370829	6.101111	744.6399	-1.8E-12	6.664056	-1.2E-12	42158.6676
0.5661	0.001	0.11988	4.370829	42158.67	6.101111	41442.37	4.333668	5.851141	716.418	-2.8E-11	5976.126	-3.5E-12	41442.3695
0.5994	0.001	0.11988	4.333668	41442.37	5.851141	40755.42	4.29803	5.611414	687.0655	-7.1E-12	5731.277	-2E-12	40755.4238
0.6327	0.001	0.11988	4.29803	40755.42	5.611414	40096.63	4.263852	5.381511	658.9159	-2.6E-12	5496.462	-1.2E-12	40096.6278
0.666	0.001	0.11988	4.263852	40096.63	5.381511	39464.83	4.231075	5.161028	631.9198	-1E-11	5271.269	-2.8E-12	39464.8279
0.6993	0.001	0.11988	4.231075	39464.83	5.161028	38858.92	4.19964	4.949581	606.0299	-9.1E-12	5055.305	-2.6E-12	38858.9179
0.7326	0.001	0.11988	4.19964	38858.92	4.949581	38277.84	4.169494	4.746798	581.201	-1.4E-11	4848.189	-2.6E-12	38277.8368
0.7659	0.001	0.11988	4.169494	38277.84	4.746798	37720.57	4.140583	4.552325	557.3894	-2E-12	4649.562	-1.1E-12	37720.5672
0.7992	0.001	0.11988	4.140583	37720.57	4.552325	37186.13	4.112857	4.365821	534.5537	-4.7E-11	4459.073	-3.5E-12	37186.1335
0.8325	0.001	0.11988	4.112857	37186.13	4.365821	36673.6	4.086268	4.18696	512.6537	-4.3E-12	4276.09	-1.7E-12	36673.5997
0.8658	0.001	0.11988	4.086268	36673.6	4.18696	36182.07	4.060767	4.015427	491.6511	-1.9E-11	4101.194	-3.6E-12	36182.0685
0.8991	0.001	0.11988	4.060767	36182.07	4.015427	35710.68	4.036312	3.850924	471.5091	-1.5E-11	3933.176	-2.7E-12	35710.6792
0.9324	0.001	0.11988	4.036312	35710.68	3.850924	35258.61	4.012859	3.693162	452.1926	-8E-11	3772.043	-3.5E-12	35258.6065
0.9657	0.001	0.11988	4.012859	35258.61	3.693162	34825.06	3.990366	3.541865	433.6675	-2.4E-12	3617.514	-1.2E-12	34825.0589
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19E

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	28373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 2, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 30 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	11.12126	666.6882	0	0	0	646.8075	0.686496	0.330342	19.8007	-2.5E-14	0.029784	-2.4E-14	646.807528
0.0666	22.24252	1999.825	0.686496	646.8075	0.330342	2595.809	1.351231	0.517552	50.8228	6.39E-14	0.025414	6.23E-14	2595.80943
0.0999	28.08399	3016.571	1.351231	2595.809	0.517552	5547.599	1.792409	0.563214	64.78116	3.13E-13	0.022473	3.06E-13	5547.59985
0.1332	28.08399	3366.708	1.792409	5547.599	0.563214	8843.323	2.1755	0.621039	70.98417	8.38E-13	0.021884	8.21E-13	8843.32292
0.1665	28.08399	3366.708	2.1755	8843.323	0.621039	12131.11	2.536112	0.695709	78.92508	8.01E-13	0.023443	8.6E-13	12131.1053
0.1998	28.08399	3366.708	2.536112	12131.11	0.695709	15411.45	2.774891	0.745151	86.36512	-9.9E-14	0.025653	-9.7E-14	15411.4484
0.2331	28.08399	3366.708	2.774891	15411.45	0.745151	18685.87	3.013238	0.794504	92.28689	8.1E-13	0.027412	7.88E-13	18685.8698
0.2664	28.08399	3366.708	3.013238	18685.87	0.794504	21954.38	3.251156	0.843767	98.19797	1.56E-13	0.029167	1.52E-13	21954.38
0.2997	28.08399	3366.708	3.251156	21954.38	0.843767	25216.99	3.488644	0.892942	104.0984	-4.4E-13	0.03092	-4.3E-13	25216.9899
0.333	28.08399	3366.708	3.488644	25216.99	0.892942	28451.2	3.659695	1.317548	132.4968	1.68E-12	0.039355	1.61E-12	28451.2013
0.3663	28.08399	3366.708	3.659695	28451.2	1.317548	31594.22	3.822753	2.414382	223.6919	-7.7E-13	0.066842	-7.2E-13	31594.2176
0.3996	28.08399	3366.708	3.822753	31594.22	2.414382	34608.44	3.979128	3.46627	352.4863	2.5E-12	0.104698	2.24E-12	34608.4395
0.4329	28.08399	3366.708	3.979128	34608.44	3.46627	37499.14	4.129096	4.475054	476.003	-2.3E-12	0.141385	-2E-12	37499.1443
0.4662	28.08399	3366.708	4.129096	37499.14	4.475054	40271.39	4.272919	5.4425	594.4582	-3.1E-12	0.17657	-2.5E-12	40271.3948
0.4995	28.08399	3366.708	4.272919	40271.39	5.4425	42930.04	4.410848	6.370302	708.0593	3.52E-12	0.210312	2.78E-12	42930.0437
0.5328	18.64777	2801.101	4.410848	42930.04	6.370302	44929.83	4.514595	6.998315	801.3149	3.52E-12	0.286071	2.52E-12	44929.8301
0.5661	7.526508	1568.386	4.514595	44929.83	6.998315	45655.38	4.552236	7.071338	843.335	4.66E-12	0.537537	2.16E-12	45655.3811
0.5994	0.001	451.1988	4.552226	45655.38	7.071338	45261.25	4.531789	7.03167	845.3343	3.47E-12	1.87352	3.03E-12	45261.2456
0.6327	0.001	0.11988	4.531789	45261.25	7.03167	44426.74	4.488495	6.892613	834.6215	2.56E-11	6962.142	2.63E-12	44426.744
0.666	0.001	0.11988	4.488495	44426.74	6.892613	43617.5	4.446513	6.810208	809.3591	6.74E-12	6751.411	2.77E-12	43617.5048
0.6993	0.001	0.11988	4.446513	43617.5	6.810208	42841.43	4.40625	6.339377	776.1981	2.88E-12	6474.793	1.28E-12	42841.4265
0.7326	0.001	0.11988	4.40625	42841.43	6.339377	42097.15	4.367638	6.079643	744.396	3.44E-12	6209.51	1.76E-12	42097.1504
0.7659	0.001	0.11988	4.367638	42097.15	6.079643	41383.37	4.330607	5.838553	713.8971	-3E-11	5955.093	-2.3E-12	41383.3731
0.7992	0.001	0.11988	4.330607	41383.37	5.838553	40698.85	4.295095	5.591669	684.648	-2.6E-11	5711.111	-2.3E-12	40698.845
0.8325	0.001	0.11988	4.295095	40698.85	5.591669	40042.37	4.261037	5.362575	656.5974	-2.8E-11	5477.122	-3.4E-12	40042.3675
0.8658	0.001	0.11988	4.261037	40042.37	5.362575	39412.79	4.228375	5.142869	629.6963	-3.9E-12	5252.722	-2.8E-12	39412.7911
0.8991	0.001	0.11988	4.228375	39412.79	5.142869	38809.01	4.197051	4.932165	603.8975	-1.2E-12	5037.517	-5.3E-13	38809.0134
0.9324	0.001	0.11988	4.197051	38809.01	4.932165	38229.98	4.167011	4.730096	579.156	-2.2E-11	4831.131	-2.9E-12	38229.9773
0.9657	0.001	0.11988	4.167011	38229.98	4.730096	37674.67	4.138202	4.536308	555.4283	-1.5E-11	4633.202	-3E-12	37674.6689
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19F

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 35 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	10.2394	613.7494	0	0	0	594.4637	0.668644	0.321751	19.28578	-2.1E-14	0.031423	-2.1E-14	594.46365
0.0666	20.47879	1841.248	0.668644	594.4637	0.321751	2385.848	1.279621	0.510141	49.86362	1.85E-13	0.027001	1.8E-13	2385.84832
0.0999	25.85706	2777.371	1.279621	2385.848	0.510141	5099.206	1.740289	0.55782	64.01356	-2.1E-13	0.023048	-2.1E-13	5099.20591
0.1332	25.85706	3099.745	1.740289	5099.206	0.55782	8129.32	2.092505	0.603854	69.63075	2.7E-13	0.022463	2.6E-13	8129.31976
0.1665	25.85706	3099.745	2.092505	8129.32	0.603854	11152.31	2.443093	0.676614	76.75125	2.27E-13	0.024761	2.2E-13	11152.3131
0.1998	25.85706	3099.745	2.443893	11152.31	0.676614	14167.96	2.684376	0.726409	84.09716	-1.4E-13	0.02713	-1.4E-13	14167.9605
0.2331	25.85706	3099.745	2.684376	14167.96	0.726409	17177.9	2.903472	0.771775	89.80114	-4.5E-13	0.02897	-4.4E-13	17177.904
0.2664	25.85706	3099.745	2.903472	17177.9	0.771775	20182.41	3.122173	0.81706	95.23478	1.32E-12	0.030723	1.28E-12	20182.4128
0.2997	25.85706	3099.745	3.122173	20182.41	0.81706	23181.5	3.340479	0.862263	100.6586	2.84E-13	0.032473	2.75E-13	23181.4998
0.333	25.85706	3099.745	3.340479	23181.5	0.862263	26175.38	3.541627	0.903913	105.8646	-1.3E-12	0.034153	-1.3E-12	26175.3798
0.3663	25.85706	3099.745	3.541627	26175.38	0.903913	29127.82	3.694797	1.55367	147.3076	-5.7E-13	0.047522	-5.4E-13	29127.8168
0.3996	25.85706	3099.745	3.694797	29127.82	1.55367	31981.61	3.84285	2.549574	245.9484	1.34E-12	0.079345	1.23E-12	31981.613
0.4329	25.85706	3099.745	3.84285	31981.61	2.549574	34718.47	3.984837	3.504667	362.3912	-1.2E-12	0.117071	-1.1E-12	34718.4664
0.4662	25.85706	3099.745	3.984837	34718.47	3.504667	37343.17	4.121004	4.420623	475.0419	2.1E-12	0.153252	1.78E-12	37343.1691
0.4995	25.85706	3099.745	4.121004	37343.17	4.420623	39860.32	4.251592	5.299044	582.5968	4.32E-12	0.18795	3.51E-12	39860.3169
0.5328	25.85706	3099.745	4.251592	39860.32	5.299044	42274.32	4.376829	6.14147	685.7444	3.87E-12	0.221226	3.01E-12	42274.3171
0.5661	25.85706	3099.745	4.376829	42274.32	6.14147	44589.4	4.496934	6.949374	784.6652	4.21E-12	0.253139	3.14E-12	44589.3965
0.5994	22.54736	2901.361	4.496934	44589.4	6.949374	46644.39	4.603545	7.170878	846.3679	2.84E-12	0.291714	2.01E-12	46644.3895
0.6327	12.30796	2089.228	4.603545	46644.39	7.170878	47866.6	4.666953	7.293888	867.0181	5.57E-12	0.414995	3.23E-12	47866.5932
0.666	2.068565	861.729	4.666953	47866.6	7.293888	47854.81	4.6663	7.292622	874.3154	3.96E-07	1.014606	3.79E-09	47854.8128
0.6993	0.301	124.0497	4.6663	47854.81	7.292622	47108.32	4.627614	7.217571	869.7409	2.72E-05	7.01123	3.0E-07	47108.3216
0.7326	0.301	0.11988	4.627614	47108.32	7.217571	46248.39	4.583001	7.131022	860.0547	1.22E-05	7175.025	3.05E-07	46248.3868
0.7659	0.301	0.11988	4.583001	46248.39	7.131022	45398.77	4.538923	7.045511	849.7414	1.28E-05	7089.024	3.07E-07	45398.7652
0.7992	0.001	0.11988	4.538923	45398.77	7.045511	44560.63	4.495442	6.959337	838.2518	1.04E-05	6993.029	3.04E-07	44560.6333
0.8325	0.001	0.11988	4.495442	44560.63	6.959337	43745.91	4.453174	6.655018	814.0456	1.22E-06	6797.247	2.92E-07	43745.9076
0.8658	0.001	0.11988	4.453174	43745.91	6.655018	42964.57	4.412639	6.38235	781.4598	6.64E-06	6519.045	2.97E-07	42964.5677
0.8991	0.001	0.11988	4.412639	42964.57	6.38235	42215.25	4.373764	6.120855	749.4421	8.3E-06	6252.035	2.92E-07	42215.2454
0.9324	0.001	0.11988	4.373764	42215.25	6.120855	41496.63	4.336483	5.870076	718.7364	1.12E-05	5996.025	2.85E-07	41496.6289
0.9657	0.001	0.11988	4.336483	41496.63	5.870076	40807.46	4.300729	5.629573	689.289	4.87E-06	5750.053	2.83E-07	40807.4598
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19G

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 40 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0		0					
0.0333	9.504512	569.7004	0	0	0	550.3438	0.653767	0.314593	18.85667	5.33E-14	0.033099	5.15E-14	550.343753
0.0666	19.00902	1709.101	0.653767	550.3438	0.314593	2210.881	1.219946	0.503964	49.0643	2.13E-14	0.028708	2.07E-14	2210.88074
0.0999	24.00129	2578.038	1.219946	2210.881	0.503964	4725.545	1.696855	0.553325	63.3739	3.41E-13	0.024582	3.33E-13	4725.54514
0.1332	24.00129	2877.275	1.696855	4725.545	0.553325	7534.317	2.023343	0.589533	68.5029	4.12E-13	0.022898	4.02E-13	7534.31712
0.1665	24.00129	2877.275	2.023343	7534.317	0.589533	10336.88	2.349108	0.656987	74.71644	8.24E-13	0.025968	8.03E-13	10336.8756
0.1998	24.00129	2877.275	2.349108	10336.88	0.656987	13132.17	2.60898	0.710797	81.98498	-5.5E-13	0.028494	-5.4E-13	13132.1655
0.2331	24.00129	2877.275	2.60898	13132.17	0.710797	15921.71	2.812033	0.752842	87.73049	8.1E-13	0.030491	7.85E-13	15921.7099
0.2664	24.00129	2877.275	2.812033	15921.71	0.752842	18706.22	3.01472	0.79481	92.76626	-7E-13	0.032241	-6.7E-13	18706.2105
0.2997	24.00129	2877.275	3.01472	18706.22	0.79481	21485.7	3.21704	0.836703	97.79294	-3.8E-13	0.033938	-3.7E-13	21485.7004
0.333	24.00129	2877.275	3.21704	21485.7	0.836703	24260.16	3.418996	0.878521	102.8105	1.32E-12	0.035732	1.27E-12	24260.1648
0.3663	24.00129	2877.275	3.418996	24260.16	0.878521	27030.05	3.585967	0.913094	107.3894	-7.1E-13	0.037323	-6.8E-13	27030.0503
0.3996	24.00129	2877.275	3.585967	27030.05	0.913094	29746.53	3.726896	1.769584	160.7997	2.84E-13	0.055886	2.68E-13	29746.5254
0.4329	24.00129	2877.275	3.726896	29746.53	1.769584	32357.06	3.862328	2.680594	266.7437	6.82E-13	0.092707	6.19E-13	32357.0566
0.4662	24.00129	2877.275	3.862328	32357.06	2.680594	34860.61	3.992211	3.554273	373.7179	-3E-12	0.129886	-2.6E-12	34860.6136
0.4995	24.00129	2877.275	3.992211	34860.61	3.554273	37261.58	4.116772	4.39215	476.3086	-6.8E-13	0.165542	-5.7E-13	37261.5799
0.5328	24.00129	2877.275	4.116772	37261.58	4.39215	39564.16	4.236228	5.195693	574.6953	2.16E-12	0.199736	1.73E-12	39564.1595
0.5661	24.00129	2877.275	4.236228	39564.16	5.195693	41772.38	4.350789	5.966308	669.0503	-2.5E-12	0.232529	-1.9E-12	41772.3841
0.5994	24.00129	2877.275	4.350789	41772.38	5.966308	43890.12	4.460656	6.705344	759.5388	1.48E-12	0.263979	1.09E-12	43890.1201
0.6327	24.00129	2877.275	4.460656	43890.12	6.705344	45939.9	4.566997	7.099975	827.4908	2.27E-13	0.287595	1.62E-13	45939.9042
0.666	24.00129	2877.275	4.566997	45939.9	7.099975	47953.88	4.671431	7.302673	863.2947	-1.1E-13	0.300039	-8E-14	47953.8844
0.6993	16.41868	2422.665	4.671431	47953.88	7.302673	49491.83	4.751269	7.457461	884.7225	1.71E-12	0.308106	1.08E-12	49491.8274
0.7326	6.912372	1398.356	4.751269	49491.83	7.457461	49993.16	4.777277	7.507918	897.0248	6.14E-12	0.6441485	2.2E-12	49993.1582
0.7659	0.001	414.3875	4.777277	49993.16	7.507918	49510.41	4.752233	7.459331	897.1369	1.77E-11	2.1649771	2.92E-12	49510.4088
0.7992	0.001	0.11988	4.752233	49510.41	7.459331	48621.67	4.706125	7.369883	888.8631	6.35E-06	7415	2.69E-12	48621.6656
0.8325	0.001	0.11988	4.706125	48621.67	7.369883	47743.58	4.660571	7.281507	878.2043	4.99E-06	7326	2.15E-12	47743.5811
0.8658	0.001	0.11988	4.660571	47743.58	7.281507	46876.03	4.615563	7.194192	867.6734	2.49E-06	7238	2.96E-12	46876.0276
0.8991	0.001	0.11988	4.615563	46876.03	7.194192	46018.88	4.571094	7.107923	857.2687	5.84E-11	7151.057	3.34E-12	46018.8787
0.9324	0.001	0.11988	4.571094	46018.88	7.107923	45172.01	4.527159	7.022689	846.9889	8.9E-12	7065.306	2.72E-12	45172.0097
0.9657	0.001	0.11988	4.527159	45172.01	7.022689	44339.86	4.483988	6.362294	832.2659	2.53E-12	6942.491	1.25E-12	44339.8637
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19H

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.5	0.916
4.5	6.97
5.5	9.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 30 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	0.034742	481.6024	0	0	0	463.604	0.624012	0.300275	17.99847	-2.1E-14	0.037072	-2.1E-14	463.60957
0.0666	16.06948	1444.307	0.624012	463.604	0.300275	1860.945	1.100595	0.491612	47.46567	-1.4E-14	0.022030	-1.4E-14	1860.94536
0.0999	20.28975	2179.373	1.100595	1860.946	0.491612	3970.224	1.609908	0.544334	62.39456	7.82E-14	0.020492	7.39E-14	3970.22058
0.1332	20.28975	2432.335	1.609908	3970.224	0.544334	6343.599	1.804935	0.570791	66.59644	1.29E-13	0.027529	1.24E-13	6343.5966
0.1665	20.28975	2432.335	1.804935	6343.599	0.570791	8704.576	2.159372	0.6177	71.33301	-1.3E-13	0.029337	-1.3E-13	8704.5756
0.1998	20.28975	2432.335	2.159372	8704.576	0.6177	11059.46	2.433101	0.674379	77.4472	-1.3E-13	0.031041	-1.2E-13	11059.4646
0.2331	20.28975	2432.335	2.433101	11059.46	0.674379	13408.52	2.629096	0.714962	83.17711	8.95E-13	0.034230	8.65E-13	13408.5227
0.2664	20.28975	2432.335	2.629096	13408.52	0.714962	15752.03	2.799755	0.750299	87.82777	6.96E-13	0.036108	6.71E-13	15752.0304
0.2997	20.28975	2432.335	2.799755	15752.03	0.750299	18093.31	2.970105	0.785572	92.26015	9.66E-13	0.037040	9.3E-13	18093.3057
0.333	20.28975	2432.335	2.970105	18093.31	0.785572	20429.36	3.140148	0.820702	96.28408	-1.8E-13	0.039505	-1.8E-13	20429.3553
0.3663	20.28975	2432.335	3.140148	20429.36	0.820702	22761.19	3.309884	0.855928	100.532	1.56E-12	0.041319	1.5E-12	22761.1898
0.3996	20.28975	2432.335	3.309884	22761.19	0.855928	25088.81	3.479314	0.89101	104.7115	1.42E-13	0.04305	1.36E-13	25088.8138
0.4329	20.28975	2432.335	3.479314	25088.81	0.89101	27410.54	3.605706	0.954382	110.6129	7.11E-14	0.045476	6.78E-14	27410.5364
0.4662	20.28975	2432.335	3.605706	27410.54	0.954382	29680.97	3.723495	1.746706	161.9033	-1.3E-12	0.066563	-1.2E-12	29680.9686
0.4995	20.28975	2432.335	3.723495	29680.97	1.746706	31858.36	3.836456	2.506563	254.9409	1.45E-12	0.104013	1.3E-12	31858.3631
0.5328	20.28975	2432.335	3.836456	31858.36	2.506563	33946.53	3.944789	3.235201	344.1661	-1.7E-13	0.141496	-1.5E-13	33946.5324
0.5661	20.28975	2432.335	3.944789	33946.53	3.235201	35949.13	4.048683	3.934139	429.735	4.04E-12	0.175676	3.83E-12	35949.1329
0.5994	20.28975	2432.335	4.048683	35949.13	3.934139	37869.37	4.140319	4.604358	511.7975	4.21E-12	0.210414	3.98E-12	37869.3708
0.6327	20.28975	2432.335	4.140319	37869.37	4.604358	39711.31	4.248872	5.247114	590.4972	4.43E-12	0.24177	3.96E-12	39711.309
0.666	20.28975	2432.335	4.248872	39711.31	5.247114	41477.07	4.33551	[illegible]	[illegible]	7.95E-13	0.278749	[illegible]	41477.0705
0.6993	20.28975	2432.335	4.33551	41477.07	[illegible]	43171.35	4.423373	6.454608	[illegible]	2.73E-12	[illegible]	[illegible]	43171.354
0.7326	20.28975	2432.335	4.423373	43171.35	6.454608	44790.51	4.507708	6.985108	805.5613	-1.1E-12	[illegible]	[illegible]	44790.5[illegible]
0.7659	20.28975	2432.335	4.507708	44790.51	6.985108	46384	4.590037	7.144671	846.939	2.04E-12	[illegible]	1.95E-12	46384.0046
0.7992	20.28975	2432.335	4.590037	46384	7.144671	47950.39	4.6713	7.302321	865.9528	3.87E-12	0.355017	2.49E-12	47950.3873
0.8325	20.28975	2432.335	4.6713	47950.39	7.302321	49497.98	4.751588	7.450031	884.7385	1.82E-12	0.38674	[illegible]	49497.9843
0.8658	14.28099	2072.35	4.751588	49497.98	7.450031	50669.19	4.81225	7.575959	901.1403	2.39E-12	0.43404	1.35E-12	50669.1900
0.8991	6.249244	1230.762	4.81225	50669.19	7.575958	50909.82	4.820963	7.608227	910.1401	3.19E-12	0.739490	1.13E-12	50909.8[illegible]
0.9324	0.001	374.6396	4.820963	50909.82	7.608227	50455.6	4.801269	7.554461	908.0516	3.07E-12	2.425[illegible]	1.01E-12	50455.6036
0.9657	0.001	0.11988	4.801269	50455.6	7.554461	49555.52	4.754573	7.468872	900.1969	-2E-11	7509.167	-6.3E-12	49555.5246
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19I

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3000
2.5	11635
3.5	25373
5.5	50924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5047
3.6	0.916
4.5	0.97
5.5	0.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 60 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	7.205903	419.9000	0	0	0	402.5361	0.603104	0.290252	17.39772	1.73E-14	0.04143	1.7E-14	402.536101
0.0666	14.01181	1259.801	0.603104	402.5361	0.290252	1615.991	1.31735	0.402965	46.34552	-5E-14	0.036705	-4.0E-14	1615.99054
0.0999	17.69167	1900.307	1.31735	1615.991	0.402965	3455.098	1.54918	0.53004	61.19903	8.53E-14	0.031233	3.25E-14	3455.09049
0.1332	17.69167	2120.878	1.54918	3455.098	0.53004	5509.994	1.700038	0.562762	65.98208	-3.7E-13	0.031111	-3.6E-13	5509.99429
0.1665	17.69167	2120.878	1.700038	5509.994	0.562762	7561.764	2.026583	0.590194	69.10813	-1.0E-13	0.032585	-1.0E-13	7561.76398
0.1998	17.69167	2120.878	2.026583	7561.764	0.590194	9608.936	2.264493	0.639467	73.70586	9.24E-13	0.034733	5.92E-13	9608.936
0.2331	17.69167	2120.878	2.264493	9608.936	0.639467	11650.22	2.501108	0.688461	79.59596	3.70E-13	0.03733	1.00E-13	11650.2179
0.2664	17.69167	2120.878	2.501108	11650.22	0.688461	13686.72	2.649347	0.719155	84.3725	2.04E-13	0.039702	2.73E-13	13686.7203
0.2997	17.69167	2120.878	2.649347	13686.72	0.719155	15719.55	2.797318	0.749795	88.04806	-4.0E-13	0.041515	-4.5E-13	15719.5520
0.333	17.69167	2120.878	2.797318	15719.55	0.749795	17748.71	2.945022	0.780379	91.71058	-1.5E-12	0.043046	-1.5E-12	17748.7116
0.3663	17.69167	2120.878	2.945022	17748.71	0.780379	19774.21	3.092459	0.810907	95.36168	1.53E-12	0.044973	1.40E-12	19774.2078
0.3996	17.69167	2120.878	3.092459	19774.21	0.810907	21796.05	3.239631	0.841381	99.00817	-1.1E-12	0.046697	-1E-12	21796.0475
0.4329	17.69167	2120.878	3.239631	21796.05	0.841381	23814.24	3.386536	0.8718	102.6881	8.53E-14	0.048418	8.11E-14	23814.2378
0.4662	17.69167	2120.878	3.386536	23814.24	0.8718	25828.9	3.523652	0.900191	106.2131	1.09E-12	0.05008	1.32E-12	25828.9021
0.4995	17.69167	2120.878	3.523652	25828.9	0.900191	27829.35	3.62746	1.100711	119.9341	-1.1E-12	0.056549	-9.9E-13	27829.3459
0.5328	17.69167	2120.878	3.62746	27829.35	1.100711	29778.02	3.728529	1.780575	172.7043	-6E-13	0.081401	-5.5E-13	29778.0195
0.5661	17.69167	2120.878	3.728529	29778.02	1.780575	31646.36	3.825458	2.432579	252.5364	1.51E-12	0.119072	1.33E-12	31646.3609
0.5994	17.69167	2120.878	3.825458	31646.36	2.432579	33438.14	3.918414	3.057866	329.0973	3.3E-12	0.15517	2.79E-12	33438.1416
0.6327	17.69167	2120.878	3.918414	33438.14	3.057866	35156.5	4.007561	3.657529	402.5208	1.08E-12	0.18979	8.75E-13	35156.4987
0.666	17.69167	2120.878	4.007561	35156.5	3.657529	36804.44	4.093055	4.23252	472.9355	3.3E-12	0.22299	1.55E-12	36804.441
0.6993	17.69167	2120.878	4.093055	36804.44	4.23252	38384.05	4.175046	4.784144	540.4649	3.3E-12	0.254931	2.45E-12	38384.054
0.7326	17.69167	2120.878	4.175046	38384.05	4.784144	39900.5	4.253677	5.313069	605.227	4.09E-12	0.285536	3.32E-12	39900.5047
0.7659	17.69167	2120.878	4.253677	39900.5	5.313069	41354.05	4.329086	5.820319	667.3352	-1.1E-13	0.31465	-7.8E-14	41354.0476
0.7992	17.69167	2120.878	4.329086	41354.05	5.820319	42748.03	4.401405	6.306783	726.8904	4.77E-12	0.342705	3.14E-12	42748.027
0.8325	17.69167	2120.878	4.401405	42748.03	6.306783	44084.38	4.47076	6.773312	784.0209	-1.6E-12	0.369663	-1E-12	44084.384
0.8658	17.69167	2120.878	4.47076	44084.38	6.773312	45377.59	4.537825	7.04338	820.1715	1.93E-12	0.390406	1.10E-12	45377.5894
0.8991	17.69167	2120.878	4.537825	45377.59	7.04338	46646.45	4.603652	7.171086	852.0151	-8.3E-13	0.401723	-4.1E-13	46646.4522
0.9324	17.69167	2120.878	4.603652	46646.45	7.171086	47900.1	4.668691	7.29726	867.2025	2.5E-12	0.408903	1.46E-12	47900.0974
0.9657	17.69167	2120.878	4.668691	47900.1	7.29726	49138.71	4.732949	7.421921	882.2677	1.14E-12	0.415992	6.64E-13	49138.7078
0.999	17.69167	2120.878	4.732949	49138.71	7.421921	50362.46	4.796437	7.545087	897.1225	1.25E-12	0.422996	7.22E-13	50362.463
1.0323	12.00077	1828.197	4.796437	50362.46	7.545087	51280.62	4.84407	7.637495	910.344	4.55E-13	0.497702	2.28E-13	51280.6158
1.0656	5.802869	1115.582	4.84407	51280.62	7.637495	51479.42	4.854383	7.657504	916.7022	1.53E-11	0.821797	2.74E-12	51479.4153
1.0989	0.001	347.3039	4.854383	51479.42	7.657504	50912.74	4.824984	7.60047	914.5629	-2.3E-13	2.628931	-1.3E-13	50912.7393
1.1322	0.001	0.11988	4.824984	50912.74	7.60047	50007.17	4.778004	7.509329	905.6813	-2.7E-12	7554.899	-2.4E-12	50007.1749
1.1655	0.001	0.11988	4.778004	50007.17	7.509329	49112.47	4.731508	7.419281	894.0208	-3.6E-12	7464.305	-2.6E-12	49112.4709
1.1988	0.001	0.11988	4.731508	49112.47	7.419281	48228.5	4.685728	7.330313	884.0906	-2E-12	7374.797	-1.6E-12	48228.5002
1.2321	0.001	0.11988	4.685728	48228.5	7.330313	47355.13	4.640418	7.242412	873.4091	-3.4E-12	7286.362	-1.2E-12	47355.134
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19J

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25973
5.5	63904

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.6	3.916
4.5	6.37
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 70 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)	BASIN 1	BASIN 3
0	0			0			0	0						0	0
0.0333	6.369003	381.750	0	0	0	364.7322	0.590291	0.204048	17.02533	1.07E-14	0.044530	1.02E-14	364.732109	5.484473	0.904
0.0666	12.73331	1145.274	0.590291	364.7322	0.204048	1465.13	0.965597	0.464645	44.07656	-7.1E-15	0.039184	-6.0E-15	1465.12959	10.96095	1.769
0.0999	16.08334	1727.551	0.965597	1465.13	0.464645	3132.012	1.511718	0.534163	59.06655	-2.3E-14	0.034635	-1.7E-14	3132.01247	13.84968	2.23366
0.1332	16.08334	1928.071	1.511718	3132.012	0.534163	4995.505	1.728235	0.556572	65.37567	4.26E-14	0.033539	4.12E-14	4995.50451	13.84968	2.23366
0.1665	16.08334	1928.071	1.728235	4995.505	0.556572	6855.512	1.944439	0.578949	68.06318	2.84E-14	0.035301	2.74E-14	6855.51222	13.84968	2.23366
0.1998	16.08334	1928.071	1.944439	6855.512	0.578949	8711.845	2.160217	0.617875	71.73765	1.34E-13	0.037287	1.74E-13	8711.84537	13.84968	2.23366
0.2331	16.08334	1928.071	2.160217	8711.845	0.617875	10563.17	2.375413	0.662434	76.74171	0	0.039002	0	10563.1745	13.84968	2.23366
0.2664	16.08334	1928.071	2.375413	10563.17	0.662434	12409.59	2.556383	0.699906	81.65065	7.82E-13	0.042353	7.48E-13	12409.5866	13.84968	2.23366
0.2997	16.08334	1928.071	2.556383	12409.59	0.699906	14252.09	2.6905	0.727677	85.5693	7.11E-14	0.044381	5.79E-14	14252.0881	13.84968	2.23366
0.333	16.08334	1928.071	2.6905	14252.09	0.727677	16091.26	2.824375	0.755397	88.89544	-4.4E-13	0.046106	-4.2E-13	16091.2605	13.84968	2.23366
0.3663	16.08334	1928.071	2.824375	16091.26	0.755397	17927.12	2.958008	0.783068	92.21558	1.78E-12	0.047828	1.55E-12	17927.1187	13.84968	2.23366
0.3996	16.08334	1928.071	2.958008	17927.12	0.783068	19759.66	3.0914	0.810688	95.52972	-1.6E-12	0.049547	-1.5E-12	19759.6598	13.84968	2.23366
0.4329	16.08334	1928.071	3.0914	19759.66	0.810688	21588.89	3.224552	0.838259	98.83788	-1.7E-12	0.051253	-1.6E-12	21588.8927	13.84968	2.23366
0.4662	16.08334	1928.071	3.224552	21588.89	0.838259	23414.82	3.357463	0.86578	102.1401	-4.4E-13	0.052975	-4.2E-13	23414.8234	13.84968	2.23366
0.4995	16.08334	1928.071	3.357463	23414.82	0.86578	25237.46	3.490134	0.893251	105.4363	1.11E-12	0.054605	1.05E-12	25237.4579	13.84968	2.23366
0.5328	16.08334	1928.071	3.490134	25237.46	0.893251	27057.24	3.587377	0.913386	108.2898	-3.4E-13	0.056165	-3.2E-13	27057.2389	13.84968	2.23366
0.5661	16.08334	1928.071	3.587377	27057.24	0.913386	28843.38	3.680041	1.45441	141.9257	1.59E-12	0.07361	1.47E-12	28843.384	13.84968	2.23366
0.5994	16.08334	1928.071	3.680041	28843.38	1.45441	30561.17	3.769159	2.053874	210.2866	0	0.109066	0	30561.1682	13.84968	2.23366
0.6327	16.08334	1928.071	3.769159	30561.17	2.053874	32208.56	3.854624	2.628773	280.6779	-8.5E-13	0.145574	-7.3E-13	32208.5611	13.84968	2.23366
0.666	16.08334	1928.071	3.854624	32208.56	2.628773	33788.45	3.936588	3.180114	348.1847	4.43E-12	0.180587	3.68E-12	33788.4473	13.84968	2.23366
0.6993	16.08334	1928.071	3.936588	33788.45	3.180114	35303.59	4.015192	3.708862	412.9252	2.5E-12	0.214165	1.97E-12	35303.5929	13.84968	2.23366
0.7326	16.08334	1928.071	4.015192	35303.59	3.708862	36756.65	4.090576	4.215942	475.0127	3.41E-13	0.246367	2.57E-13	36756.651	13.84968	2.23366
0.7659	16.08334	1928.071	4.090576	36756.65	4.215942	38150.17	4.162871	4.702244	534.3361	3.18E-12	0.277249	2.3E-12	38150.1667	13.84968	2.23366
0.7992	16.08334	1928.071	4.162871	38150.17	4.702244	39486.58	4.232203	5.168618	591.6595	2.39E-12	0.306066	1.55E-12	39486.577	13.84968	2.23366
0.8325	16.08334	1928.071	4.232203	39486.58	5.168618	40768.12	4.298694	5.615861	646.4029	-1E-12	0.335259	[illegible]	40768.1239	13.84968	2.23366
0.8658	16.08334	1928.071	4.298694	40768.12	5.615861	41997.35	4.36246	6.044816	698.9422	-8E-13	0.362509	-5.1E-13	41997.3535	13.84968	2.23366
0.8991	16.08334	1928.071	4.36246	41997.35	6.044816	43176.11	4.423614	6.456174	749.3094	-1.1E-12	0.388632	-7E-13	43176.1147	13.84968	2.23366
0.9324	16.08334	1928.071	4.423614	43176.11	6.456174	44306.57	4.482261	6.850676	797.6126	4.77E-12	0.413684	2.8E-12	44306.5731	13.84968	2.23366
0.9657	16.08334	1928.071	4.482261	44306.57	6.850676	45401.69	4.539075	7.045805	832.9551	4.09E-12	0.432015	2.32E-12	45401.6888	13.84968	2.23366
0.999	16.08334	1928.071	4.539075	45401.69	7.045805	46478.61	4.594945	7.154193	851.1479	3.64E-12	0.441451	2.03E-12	46478.6117	13.84968	2.23366
1.0323	16.08334	1928.071	4.594945	46478.61	7.154193	47542.62	4.650145	7.261201	864.0635	6.03E-12	0.448149	3.33E-12	47542.6189	13.84968	2.23366
1.0656	16.08334	1928.071	4.650145	47542.62	7.261201	48593.87	4.704683	7.367085	876.8243	2.96E-12	0.454758	1.61E-12	48593.8655	13.84968	2.23366
1.0989	16.08334	1928.071	4.704683	48593.87	7.367085	49632.5	4.758567	7.47162	889.4819	3.41E-13	0.461307	1.84E-13	49632.5043	13.84968	2.23366
1.1322	16.08334	1928.071	4.758567	49632.5	7.47162	50658.69	4.811804	7.574901	901.8834	2.05E-12	0.467767	1.09E-12	50658.6867	13.84968	2.23366
1.1655	16.08334	1928.071	4.811804	50658.69	7.574901	51672.56	4.864404	7.676943	914.1955	4.09E-12	0.47415	2.15E-12	51672.562	13.84968	2.23366
1.1988	11.966	1681.278	4.864404	51672.56	7.676943	52428.96	4.903645	7.753072	924.8751	2.96E-12	0.550103	1.33E-12	52428.9646	10.38416	1.661643
1.2321	5.597002	1052.727	4.903645	52428.96	7.753072	52551.51	4.910003	7.765406	930.1776	2.63E-11	0.883589	3.06E-12	52551.5137	4.819689	0.777314
1.2654	0.001	335.5443	4.910003	52551.51	7.765406	51959.71	4.879301	7.705843	927.3467	-1.1E-12	2.763709	-8.2E-13	51959.7113	0	0
1.2987	0.001	0.11988	4.879301	51959.71	7.705843	51041.59	4.831669	7.613439	918.2378	-3.7E-12	7659.641	-2.4E-12	51041.5934		
1.332	0.001	0.11988	4.831669	51041.59	7.613439	50134.49	4.784609	7.522142	907.2267	1.97E-12	7567.79	1.55E-12	50134.4866		
1.3653	0.001	0.11988	4.784609	50134.49	7.522142	49238.26	4.738114	7.43194	896.3477	3.58E-11	7477.041	3.54E-12	49238.2588		
1.3986	0.001	0.11988	4.738114	49238.26	7.43194	48352.78	4.692176	7.342821	885.5992	4.35E-12	7387.38	1.66E-12	48352.7795		
1.4319	0.001	0.11988	4.692176	48352.78	7.342821	47477.92	4.646788	7.254769	874.9795	4.47E-12	7298.795	3.55E-12	47477.9198		
1.4652	0.001	0.11988	4.646788	47477.92	7.254769	46613.55	4.601946	7.167774	864.4873	1.28E-11	7211.272	3.47E-12	46613.5524		
1.4985	0.001	0.11988	4.601946	46613.55	7.167774	45759.55	4.557641	7.081823	854.1209	-2E-12	7124.799	-1.6E-12	45759.5514		
1.5318	0.001	0.11988	4.557641	45759.55	7.081823	44915.79	4.513867	6.996902	843.8788	7.08E-12	7039.362	2.57E-12	44915.7926		
1.5651	0.001	0.11988	4.513867	44915.79	6.996902	44090.41	4.471047	6.775241	825.5022	4.46E-11	6886.071	3.10E-12	44090.4102		
1.5984	0.001	0.11988	4.471047	44090.41	6.775241	43294.95	4.429779	6.497646	795.5768	3.33E-12	6636.443	1.48E-12	43294.9533		
1.6317	0.001	0.11988	4.429779	43294.95	6.497646	42532.09	4.390202	6.231427	762.9806	2.08E-12	6364.536	1.12E-12	42532.0925		
1.665	0.001	0.11988	4.390202	42532.09	6.231427	41800.49	4.352247	5.976117	731.7202	1.17E-12	6103.772	9.04E-13	41800.4922		
1.6983	0.001	0.11988	4.352247	41800.49	5.976117	41098.87	4.315848	5.731269	701.7407	-9.3E-13	5853.693	-6.3E-13	41098.8714		
1.7316	0.001	0.11988	4.315848	41098.87	5.731269	40426	4.28094	5.496454	672.9897	1.48E-13	5613.861	1.27E-13	40426.0016		

Table 19K

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
[illegible]	100
1.5	3932
[illegible]	11685
3.5	25073
[illegible]	60924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5847
3.5	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 2, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 60 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	5.732132	343.0022	0	0	0	326.9203	0.577397	0.277043	16.65394	3.33E-15	0.046471	3.08E-15	326.92073
0.0666	11.4542	1030.747	0.577397	326.9203	0.277043	1314.55	0.914274	0.439949	43.02445	4.97E-14	0.041741	4.77E-14	1314.55046
0.0999	14.47501	1534.796	0.914274	1314.55	0.439949	2811.598	1.424829	0.52517	57.34919	-1.5E-12	0.037207	-1.4E-12	2811.59730
0.1332	14.47501	1735.264	1.424829	2811.598	0.52517	4482.892	1.668591	0.550399	64.4696	-4.1E-13	0.037113	-4E-13	4482.89157
0.1665	14.47501	1735.264	1.668591	4482.892	0.550399	6150.471	1.862486	0.570467	67.13474	-1.4E-14	0.038717	-1.4E-14	6150.47067
0.1998	14.47501	1735.264	1.862486	6150.471	0.570467	7815.738	2.056062	0.596008	69.93633	-2.0E-13	0.040303	-2.7E-13	7815.73736
0.2331	14.47501	1735.264	2.056062	7815.738	0.596008	9477.179	2.249178	0.636295	73.58227	8.55E-13	0.042577	8.4E-13	9477.17902
0.2664	14.47501	1735.264	2.249178	9477.179	0.636295	11133.77	2.441738	0.676167	78.66902	-7.5E-13	0.045335	-7.2E-13	11133.774
0.2997	14.47501	1735.264	2.441738	11133.77	0.676167	12786.22	2.583798	0.705583	82.8221	6.11E-13	0.047729	5.82E-13	12786.2256
0.333	14.47501	1735.264	2.583798	12786.22	0.705583	14435.4	2.703844	0.73044	86.07518	-6.8E-13	0.049604	-6.5E-13	14435.4042
0.3663	14.47501	1735.264	2.703844	14435.4	0.73044	16081.62	2.823673	0.755252	89.05234	-4.5E-13	0.051919	-4.3E-13	16081.6156
0.3996	14.47501	1735.264	2.823673	16081.62	0.755252	17724.86	2.943235	0.780019	92.02413	-1.7E-13	0.053392	-1.5E-13	17724.8551
0.4329	14.47501	1735.264	2.943235	17724.86	0.780019	19365.13	3.062602	0.804742	94.99035	1.78E-12	0.054741	1.68E-12	19365.1233
0.4662	14.47501	1735.264	3.062602	19365.13	0.804742	21002.44	3.181063	0.82942	97.95162	1.07E-12	0.056448	1.01E-12	21002.4404
0.4995	14.47501	1735.264	3.181063	21002.44	0.82942	22636.8	3.30083	0.854053	100.9073	-5.3E-13	0.058151	-5E-13	22636.7958
0.5328	14.47501	1735.264	3.30083	22636.8	0.854053	24268.2	3.419581	0.878642	103.8577	1.66E-12	0.059851	1.55E-12	24268.2028
0.5661	14.47501	1735.264	3.419581	24268.2	0.878642	25896.8	3.527174	0.900921	106.667	1.24E-12	0.06147	1.16E-12	25896.7995
0.5994	14.47501	1735.264	3.527174	25896.8	0.900921	27518.6	3.611312	0.992093	110.4672	-4.3E-13	0.065389	-4E-13	27518.596
0.6327	14.47501	1735.264	3.611312	27518.6	0.992093	29101.01	3.693448	1.544595	152.049	1.42E-12	0.087623	1.3E-12	29101.0107
0.666	14.47501	1735.264	3.693448	29101.01	1.544595	30620.15	3.772219	2.074437	[illegible]	8.01E-13	0.12501	[illegible]	30620.1484
0.6993	14.47501	1735.264	3.772219	30620.15	2.074437	32075.27	3.847731	2.502306	[illegible]	-5E-13	0.150666	[illegible]	[illegible]
0.7326	14.47501	1735.264	3.847731	32075.27	2.502306	33472.72	3.920208	3.069932	[illegible]	[illegible]	0.175252	[illegible]	[illegible]
0.7659	14.47501	1735.264	3.920208	33472.72	3.069932	34811.95	3.989686	3.537209	396.0060	-2.0E-12	0.222229	-1.8E-12	34811.9450
0.7992	14.47501	1735.264	3.989686	34811.95	3.537209	36096.29	4.056317	3.985494	450.9155	-9.7E-13	0.259054	-7.1E-13	36096.2934
0.8325	14.47501	1735.264	4.056317	36096.29	3.985494	37323.01	4.120218	4.415333	503.3456	-1.5E-12	0.290104	-1.2E-12	37323.0123
0.8658	14.47501	1735.264	4.120218	37323.01	4.415333	38509.26	4.1815	4.827558	554.0109	2.09E-12	0.319271	1.68E-12	38509.2594
0.8991	14.47501	1735.264	4.1815	38509.26	4.827558	39642.1	4.240271	5.222391	602.4209	4.55E-12	0.347166	2.97E-12	39642.0976
0.9324	14.47501	1735.264	4.240271	39642.1	5.222391	40720.51	4.295634	5.602023	648.8453	-8E-13	0.373917	-5E-13	40720.5147
0.9657	14.47501	1735.264	4.295634	40720.51	5.602023	41770.41	4.350607	5.96562	693.3645	-4.5E-13	0.399573	-2.7E-13	41770.4100
0.999	14.47501	1735.264	4.350607	41770.41	5.96562	42769.62	4.402525	6.314317	736.0594	5.0E-12	0.424177	3.04E-12	42769.6201
1.0323	14.47501	1735.264	4.402525	42769.62	6.314317	43727.38	4.452239	6.648726	777.0048	-1.1E-13	0.447773	-6.3E-14	43727.377
1.0656	14.47501	1735.264	4.452239	43727.38	6.648726	44646.37	4.499915	6.969431	816.2723	5.68E-12	0.470402	3.31E-12	44646.3685
1.0989	14.47501	1735.264	4.499915	44646.37	6.969431	45541.22	4.546314	7.059848	840.915	5.91E-12	0.484604	3.05E-12	45541.2170
1.1322	14.47501	1735.264	4.546314	45541.22	7.059848	46424.02	4.592154	7.148779	851.6651	2.61E-12	0.490799	1.33E-12	46424.0156
1.1655	14.47501	1735.264	4.592154	46424.02	7.148779	47297.02	4.637445	7.236643	862.2622	5.46E-12	0.496906	2.73E-12	47297.0173
1.1988	14.47501	1735.264	4.637445	47297.02	7.236643	48160.35	4.682192	7.323453	872.7322	1.14E-13	0.502939	5.65E-14	48160.3487
1.2321	14.47501	1735.264	4.682192	48160.35	7.323453	49012.54	4.726403	7.409222	883.0756	6.02E-12	0.5089	2.96E-12	49012.5361
1.2654	14.47501	1735.264	4.726403	49012.54	7.409222	49854.5	4.770084	7.493963	893.2969	4.09E-12	0.51479	1.99E-12	49854.5029
1.2987	14.47501	1735.264	4.770084	49854.5	7.493963	50686.37	4.813241	7.577687	903.3947	6.82E-12	0.520609	3.27E-12	50686.3719
1.332	14.47501	1735.264	4.813241	50686.37	7.577687	51508.26	4.85588	7.660407	913.3714	7.5E-12	0.526359	3.55E-12	51508.2642
1.3653	11.0539	1530.503	4.85588	51508.26	7.660407	52116.77	4.887449	7.72165	922.0005	7.5E-12	0.602417	2.90E-12	52116.7663
1.3986	5.326802	982.1593	4.887449	52116.77	7.72165	52172.92	4.890362	7.727302	926.0102	5.68E-11	0.942031	3.25E-12	52172.9154
1.4319	0.001	319.3485	4.890362	52172.92	7.727302	51569.55	4.85906	7.666576	922.709	2.16E-12	2.089349	1.92E-12	51569.5549
1.4652	0.001	0.11988	4.85906	51569.55	7.666576	50656.12	4.811671	7.574642	913.5586	-6.5E-13	7620.609	-3.9E-13	50656.1161
1.4985	0.001	0.11988	4.811671	50656.12	7.574642	49753.63	4.764051	7.483011	902.6026	1.48E-11	7529.226	3.35E-12	49753.6324
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19L

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	130
1.5	3032
2.5	11835
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.4812
2	0.5047
3.5	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1 & 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 90 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW: STORAGE: OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	5.93187	311.2796	0	0	0	294.9404	0.566487	0.272594	16.33926	2.49E-14	0.052491	2.36E-14	294.940333
0.0666	10.38607	933.0368	0.566487	294.9404	0.272594	1187.322	0.870847	0.419051	41.4572	7.11E-14	0.044094	6.79E-14	1187.322
0.0999	13.11411	1400.619	0.870847	1187.322	0.419051	2539.919	1.332169	0.515579	56.02177	-6.4E-14	0.039771	-6.1E-14	2539.91909
0.1332	13.11411	1572.119	1.332169	2539.919	0.515579	4048.457	1.618181	0.545179	63.58134	-7.1E-15	0.040440	-6.3E-15	[illegible]
0.1665	13.11411	1572.119	1.618181	4048.457	0.545179	5554.134	1.798169	0.568293	66.44179	-1.4E-13	[illegible]	-1.4E-13	[illegible]
0.1998	13.11411	1572.119	1.798169	5554.134	0.568293	7057.341	1.967935	0.591391	68.61177	2.56E-13	[illegible]	[illegible]	[illegible]
0.2331	13.11411	1572.119	1.967935	7057.341	0.591391	8558.099	2.142346	0.614174	71.66161	-6.3E-13	[illegible]	-6E-13	[illegible]
0.2664	13.11411	1572.119	2.142346	8558.099	0.614174	10054.43	2.316277	0.650109	75.70595	-8.1E-13	[illegible]	[illegible]	[illegible]
0.2997	13.11411	1572.119	2.316277	10054.43	0.650109	11546.45	2.489708	0.6861	80.09718	1.14E-13	0.050949	1.00E-13	[illegible]
0.333	13.11411	1572.119	2.489708	11546.45	0.6861	13034.93	2.601902	0.709331	83.64216	-2.1E-13	[illegible]	-2E-13	13034.9317
0.3663	13.11411	1572.119	2.601902	13034.93	0.709331	14520.67	2.710051	0.731725	86.37691	-6.1E-13	0.054943	-5.0E-13	14520.674
0.3996	13.11411	1572.119	2.710051	14520.67	0.731725	16003.73	2.818004	0.754078	89.05901	-8E-13	0.056649	-7.3E-13	16003.7343
0.4329	13.11411	1572.119	2.818004	16003.73	0.754078	17484.12	2.925762	0.776391	91.73628	1.75E-12	0.058352	[illegible]	17484.1173
0.4662	13.11411	1572.119	2.925762	17484.12	0.776391	18961.83	3.033326	0.798663	94.40871	1.66E-12	0.060052	1.56E-12	18961.8278
0.4995	13.11411	1572.119	3.033326	18961.83	0.798663	20436.87	3.140695	0.820895	97.07632	1.76E-12	0.061749	1.65E-12	20436.8708
0.5328	13.11411	1572.119	3.140695	20436.87	0.820895	21909.25	3.247871	0.843087	99.73911	1.39E-12	0.063442	1.3E-12	21909.2509
0.5661	13.11411	1572.119	3.247871	21909.25	0.843087	23378.97	3.354853	0.865239	102.3971	2.84E-14	0.065133	2.66E-14	23378.9731
0.5994	13.11411	1572.119	3.354853	23378.97	0.865239	24846.04	3.461642	0.887351	105.0503	-5.3E-13	0.066821	-4.9E-13	24846.0421
0.6327	13.11411	1572.119	3.461642	24846.04	0.887351	26310.71	3.548648	0.905367	107.4555	7.53E-13	0.068351	7.02E-13	26310.7133
0.666	13.11411	1572.119	3.548648	26310.71	0.905367	27763.96	3.624041	1.077718	110.8651	-6E-13	0.075609	-5.5E-13	[illegible]
0.6993	13.11411	1572.119	3.624041	27763.96	1.077718	29177.32	3.697365	1.570945	130.7609	-1.3E-12	[illegible]	[illegible]	[illegible]
0.7326	13.11411	1572.119	3.697365	29177.32	1.570945	30532.76	3.767665	[illegible]	[illegible]	1.17E-12	[illegible]	[illegible]	[illegible]
0.7659	13.11411	1572.119	3.767665	30532.76	[illegible]	31832.66	3.835123	2.497592	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0.7992	13.11411	1572.119	3.835123	31832.66	2.497592	33079.29	3.899797	2.932535	325.4878	-1.9E-12	0.207038	-1.7E-12	[illegible]
0.8325	13.11411	1572.119	3.899797	33079.29	2.932535	34274.34	3.961821	3.349851	376.5722	-4E-13	[illegible]	-3E-13	[illegible]
0.8658	13.11411	1572.119	3.961821	34274.34	3.349851	35421.39	4.021304	3.749971	425.5633	7.96E-13	0.270694	5.8E-13	[illegible]
0.8991	13.11411	1572.119	4.021304	35421.39	3.749971	36520.96	4.078349	4.133694	472.3468	-8.3E-13	0.30058	-5E-13	[illegible]
0.9324	13.11411	1572.119	4.078349	36520.96	4.133694	37575.48	4.133056	4.501693	517.6051	4.55E-12	0.32924	3.05E-12	37575.4709
0.9657	13.11411	1572.119	4.133056	37575.48	4.501693	38586.78	4.185522	4.854612	560.0169	3.75E-12	0.356727	2.41E-12	38586.7013
0.999	13.11411	1572.119	4.185522	38586.78	4.854612	39556.64	4.235838	5.193069	602.258	1.25E-12	0.383087	7.71E-13	39556.6425
1.0323	13.11411	1572.119	4.235838	39556.64	5.193069	40486.76	4.284092	5.517657	642.001	3.18E-12	0.408067	1.88E-12	[illegible]
1.0656	13.11411	1572.119	4.284092	40486.76	5.517657	41378.76	4.330363	5.828944	680.1153	3.52E-12	0.43261	2E-12	[illegible]
1.0989	13.11411	1572.119	4.330363	41378.76	5.828944	42234.22	4.374749	6.127475	716.5678	4.09E-12	0.455661	2.36E-12	[illegible]
1.1322	13.11411	1572.119	4.374749	42234.22	6.127475	43054.51	4.41731	6.413773	751.7225	5.91E-12	0.478159	3.00E-12	43054.5101
1.1655	13.11411	1572.119	4.41731	43054.51	6.413773	43841.39	4.458128	6.688339	785.3406	2.96E-12	0.499543	1.40E-12	43841.3917
1.1988	13.11411	1572.119	4.458128	43841.39	6.688339	44595.93	4.497273	6.951654	817.5812	7.05E-12	0.52005	3.30E-12	44595.9290
1.2321	13.11411	1572.119	4.497273	44595.93	6.951654	45329.48	4.535329	7.038538	838.5721	1.02E-12	0.533402	4.77E-13	45329.4769
1.2654	13.11411	1572.119	4.535329	45329.48	7.038538	46053.45	4.572888	7.111402	848.1474	1.71E-12	0.539492	7.85E-13	46053.4488
1.2987	13.11411	1572.119	4.572888	46053.45	7.111402	46768.74	4.609997	7.183393	856.33	6.71E-12	0.545016	3.05E-12	46768.738
1.332	13.11411	1572.119	4.609997	46768.74	7.183393	47475.45	4.64666	7.254521	865.4086	7.15E-12	0.550473	3.22E-12	47475.4487
1.3653	13.11411	1572.119	4.64666	47475.45	7.254521	48173.68	4.682884	7.324795	873.8842	4.66E-12	0.555864	2.07E-12	48173.6838
1.3986	13.11411	1572.119	4.682884	48173.68	7.324795	48863.54	4.718674	7.394227	882.2582	5.12E-12	0.56119	2.24E-12	48863.5448
1.4319	13.11411	1572.119	4.718674	48863.54	7.394227	49545.13	4.754034	7.462826	890.5318	3.87E-12	0.566453	1.68E-12	49545.1324
1.4652	13.11411	1572.119	4.754034	49545.13	7.462826	50218.55	4.78897	7.530602	898.7061	2.05E-12	0.571653	8.77E-13	50218.5455
1.4985	13.11411	1572.119	4.78897	50218.55	7.530602	50883.88	4.823487	7.597566	906.7824	3.64E-12	0.57679	1.54E-12	50883.8824
1.5318	10.23146	1402.33	4.823487	50883.88	7.597566	51372.47	4.848835	7.64674	913.7437	1.02E-11	0.651589	3.56E-12	51372.4691
1.5651	5.088274	921.2619	4.848835	51372.47	7.64674	51377.01	4.849071	7.647197	916.7186	2.69E-07	0.995068	1.33E-08	51377.0124
1.5984	0.001	305.0511	4.849071	51377.01	7.647197	50768.21	4.817486	7.585924	913.0733	0.781348	0.000068	0.000670	50768.2096
1.6317	0.001	0.11988	4.817486	50768.21	7.585924	49864.38	4.770596	7.494957	903.948	0.000841	7593.731	0.000613	49864.3806
1.665	0.001	0.11988	-4.770596	49864.38	7.494957	48971.39	4.724269	7.405001	893.1083	0.001341	7534.324	0.000435	48971.3907
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 19M

TENTION BASIN RATING:

SIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

NAL CONDITIONS, ST MARY'S, COMBINED BASINS 1, 2, 3, 2 YEAR STORM, SCS METHOD

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)	BASIN 1	BASIN 2	BASIN 3
10.5	0.001			0			0	0						0	0.001	0
11	0.02972	27.54779	0	0	0	7.560652	0.037803	0.022319	20.08714	-8.9E-16	0.726587	-2.4E-15	7.56065244	0	0.017708	0.012012
11.3	0.040974	30.17474	0.037803	7.560652	0.022319	12.98461	0.064923	0.038331	32.75079	7.99E-15	0.857918	1.14E-15	12.9846061	0	0.023958	0.017017
11.6	0.059858	54.44927	0.064923	12.98461	0.038331	18.01616	0.090081	0.053184	49.41771	7.11E-15	0.907592	6.57E-16	18.0161642	0	0.033332	0.026526
11.9	1.208723	685.0337	0.090081	18.01616	0.053184	474.2301	0.627636	0.370557	228.8198	1.07E-14	0.334027	7.1E-15	474.230087	0.904072	0.060412	0.244239
12	4.049878	946.5481	0.627636	474.2301	0.370557	1258.936	0.895271	0.528568	161.8425	8.53E-14	0.170982	7.07E-14	1258.93575	3.334490	0.107283	0.608096
12.1	6.701106	1935.177	0.895271	1258.936	0.528568	2980.317	1.482373	0.659186	213.7958	-5.7E-14	0.110479	-5.1E-14	2980.3169	5.494877	0.232274	0.973955
12.2	4.134592	1950.426	1.482373	2980.317	0.659186	4688.042	1.692496	0.68915	242.7005	1.14E-13	0.124435	9.95E-14	4688.04193	3.076192	0.404337	0.574063
12.3	2.30461	1159.056	1.692496	4688.042	0.68915	5596.294	1.79807	0.704205	250.8038	-5.7E-13	0.216336	-4.5E-13	5596.29449	1.273919	0.813478	0.217213
12.4	2.171404	805.6826	1.79807	5596.294	0.704205	6146.821	1.862062	0.71333	255.1563	-5.7E-13	0.316696	-3.9E-13	6146.8208	1.009742	1.002005	0.159657
12.5	1.996192	750.1673	1.862062	6146.821	0.71333	6638.722	1.91924	0.721484	258.2665	-5.1E-13	0.344279	-3.4E-13	6638.7216	0.874719	0.98534	0.136133
12.6	1.668286	659.606	1.91924	6638.722	0.721484	7037.404	1.965582	0.728092	260.9236	-3.4E-13	0.395575	-2.1E-13	7037.40401	0.739695	0.813478	0.115113
12.7	1.345533	542.4875	1.965582	7037.404	0.728092	7316.944	1.998076	0.732726	262.9472	-4.5E-13	0.484706	-2.3E-13	7316.94431	0.628154	0.620785	0.096595
12.8	1.138287	447.0876	1.998076	7316.944	0.732726	7499.803	2.019331	0.735211	264.2236	-9.1E-13	0.591	-3.7E-13	7499.80331	0.569448	0.482254	0.086585
13	0.89233	731.0399	2.019331	7499.803	0.735211	7700.531	2.042663	0.73788	530.3126	-1.1E-12	0.725422	-3.1E-13	7700.53063	0.504871	0.311434	0.076075
13.2	0.73563	506.0834	2.042663	7700.531	0.73788	7755.08	2.049004	0.738605	531.5344	4.77E-12	0.906926	4.44E-13	7755.07769	0.446165	0.222099	0.066565
13.4	0.641158	495.6436	2.049004	7755.08	0.738605	7719.1	2.044822	0.738126	531.6233	5.51E-12	1.072592	4E-13	7719.09998	0.405071	0.175020	0.060059
13.6	0.572306	436.047	2.044822	7719.1	0.738126	7624.947	2.033877	0.736875	531.0004	1.71E-12	1.215529	3.68E-13	7624.94659	0.369347	0.147935	0.054553
13.8	0.5197	393.1223	2.033877	7624.947	0.736875	7488.174	2.017979	0.735056	529.8952	6.82E-13	1.347914	2.37E-13	7488.17366	0.340495	0.129157	0.050049
14	0.470344	357.4958	2.017979	7488.174	0.735056	7317.266	1.998113	0.732731	528.4034	1.14E-13	1.478069	5.44E-14	7317.26607	0.311142	0.116658	0.045545
14.3	0.423863	434.4914	1.998113	7317.266	0.732731	7013.13	1.962761	0.72769	768.6271	1.14E-13	1.627742	7.14E-14	7013.13038	0.281769	0.101034	0.04104
14.6	0.398662	444.1633	1.962761	7013.13	0.72769	6674.421	1.92339	0.722075	782.3731	3.41E-13	1.76258	2.6E-13	6674.42053	0.270047	0.089576	0.039038
15	0.363343	548.644	1.92339	6674.421	0.722075	6189.068	1.866973	0.71403	1033.996	1.14E-13	1.88464	1.01E-13	6189.06830	0.246535	0.081244	0.035535
15.5	0.329067	623.1691	1.866973	6189.068	0.71403	5536.715	1.791144	0.703217	1275.523	5.16E-10	2.046833	2.42E-11	5536.71468	0.223083	0.073953	0.032031
16	0.29479	561.4706	1.791144	5536.715	0.703217	4842.747	1.710479	0.691714	1255.438	1.23E-10	2.235982	2.91E-11	4842.74703	0.1996	0.066661	0.028528
16.5	0.267384	505.9566	1.710479	4842.747	0.691714	4114.482	1.625826	0.679643	1234.221	7.26E-11	2.439382	3.19E-11	4114.48229	0.181988	0.05937	0.026026
17	0.255305	470.4202	1.625826	4114.482	0.679643	3372.613	1.539592	0.667346	1212.29	5.79E-11	2.577036	3.34E-11	3372.61273	0.176118	0.054162	0.025025
17.5	0.239979	445.7554	1.539592	3372.613	0.667346	2639.411	1.366102	0.642606	1178.957	5.26E-11	2.644851	3.39E-11	2639.41135	0.164377	0.052079	0.023523
18	0.229983	422.9655	1.366102	2639.411	0.642606	1936.456	1.126349	0.608417	1125.921	5.07E-11	2.561969	3.36E-11	1936.45563	0.158536	0.048955	0.022522
19	0.203118	779.582	1.126349	1936.456	0.608417	326.2815	0.747709	0.441447	1089.756	5.78E-11	2.424063	2.45E-11	326.281481	0.140094	0.042705	0.019519
20	0.171425	674.1785	0.747709	326.2815	0.441447	154.6771	0.518648	0.30621	1345.783	1.22E-11	1.996182	1.22E-11	154.677091	0.117412	0.037497	0.016516
22	0.159346	1190.775	0.518648	154.6771	0.30621	20.90753	0.104538	0.061719	1324.545	2.96E-12	1.112338	3.32E-13	20.9075325	0.111541	0.032289	0.015515
26	0.159346	2294.578	0.104538	20.90753	0.061719	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	0.111541	0.032289	0.015515
		22447.92														
						ERR	ERR	ERR	ERR	ERR	ERR	ERR				

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, ST MARY'S, COMBINED FLOW, BASINS 1, 2, 3, 100 YEAR STORM, SCS METHOD

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)	BASIN 1	BASIN 2	BASIN 3
10.5	0			0		0		0						0	0	0
11	1.095222	985.7001	0	0	0	624.8946	0.679023	0.400895	360.8055	5.68E-14	0.36604	3.6E-14	624.894615	0.947148	0.0001	0.147974
11.3	1.750242	1536.551	0.679023	624.8946	0.400895	1624.607	1.019989	0.59325	536.8385	0	0.349379	0	1624.60699	1.341793	0.198819	0.20963
11.6	2.687385	2396.319	1.019989	1624.607	0.59325	3340.491	1.535859	0.666813	680.4345	2.27E-13	0.28395	1.63E-13	3340.4915	2.091619	0.26899	0.326776
11.9	15.6147	9883.126	1.535859	3340.491	0.666813	12433.25	2.558105	0.796833	790.3692	5.68E-13	0.079972	5.23E-13	12433.2486	13.18115	0.374247	2.059306
12	30.1893	3244.72	2.558105	12433.25	0.796833	20379.2	3.136497	0.862987	298.7676	1.88E-12	0.036237	1.81E-12	20379.2013	25.53354	0.666628	3.989134
12.1	47.18575	13927.51	3.136497	20379.2	0.862987	33591.33	3.926362	3.111326	715.3764	3.75E-12	0.051364	3.56E-12	33591.3345	39.85916	1.099352	6.227242
12.2	30.41574	13968.27	3.926362	33591.33	3.111326	45725.45	4.555872	7.078391	1834.149	-1.6E-12	0.131308	-1.4E-12	45725.4538	24.58639	1.988139	3.84116
12.3	13.50386	7905.528	4.555872	45725.45	7.078391	50987.43	4.82886	7.607988	2643.548	1.82E-12	0.334392	1.21E-12	50987.4341	8.563799	3.602131	1.337932
12.4	12.1693	4621.169	4.82886	50987.43	7.607988	52836.23	4.924774	7.794062	2772.369	2.73E-12	0.599928	1.09E-12	52836.2337	5.301283	5.461672	0.906341
12.5	11.79928	4314.344	4.924774	52836.23	7.794062	54317.87	5.001641	7.943183	2832.704	8.64E-12	0.656578	2.97E-12	54317.8732	4.854135	6.186776	0.758367
12.6	10.67501	4045.372	5.001641	54317.87	7.943183	55482.6	5.062066	8.060408	2880.646	7.73E-12	0.712084	2.23E-12	55482.5992	4.104309	5.929481	0.641221
12.7	8.625671	3474.123	5.062066	55482.6	8.060408	56044.79	5.091232	8.11699	2911.932	1.86E-11	0.838177	3.02E-12	56044.7904	3.393948	4.701482	0.53024
12.8	6.941371	2302.067	5.091232	56044.79	8.11699	55926.88	5.085115	8.105122	2919.98	8.14E-08	1.042081	3.43E-09	55926.8776	2.999303	3.473483	0.468585
13	5.654708	4534.588	5.085115	55926.88	8.105122	54671.27	5.019975	7.978751	5790.194	1.35E-08	1.276895	3.75E-09	54671.2717	2.604658	2.643122	0.406929
13.2	4.238248	3561.464	5.019975	54671.27	7.978751	52564.37	4.91067	7.7667	5668.362	6.34E-09	1.591582	3.75E-09	52564.3735	2.249477	1.637332	0.351438
13.4	3.449877	2767.725	4.91067	52564.37	7.7667	49838.83	4.769271	7.492385	5493.271	3.7E-09	1.98476	3.64E-09	49838.8277	2.01269	1.122742	0.314445
13.6	2.964432	2309.151	4.769271	49838.83	7.492385	46861.34	4.614801	7.192714	5286.636	1.37E-08	2.289428	3.95E-09	46861.3432	1.815368	0.865447	0.283617
13.8	2.629873	2013.95	4.614801	46861.34	7.192714	43874.02	4.45982	6.699724	5001.278	7.62E-09	2.483318	3.68E-09	43874.0152	1.65751	0.713409	0.258955
14	2.353791	1794.119	4.45982	43874.02	6.699724	41182.47	4.320185	5.760444	4485.66	6.2E-09	2.500202	3.1E-09	41182.4738	1.499651	0.619847	0.234292
14.3	2.101099	2405.641	4.320185	41182.47	5.760444	37971.86	4.153621	4.640021	5616.251	7.21E-09	2.334618	2.41E-09	37971.8635	1.341793	0.549676	0.20963
14.6	1.939668	2182.014	4.153621	37971.86	4.640021	35591.27	4.030117	3.809252	4562.608	0.003244	2.091011	0.000295	35591.2668	1.262364	0.479504	0.197299
15	1.744301	2652.457	4.030117	35591.27	3.809252	33327.26	3.912662	3.019171	4916.465	0.00023	1.853551	0.000197	33327.2594	1.144471	0.421028	0.178802
15.5	1.56063	2974.438	3.912662	33327.26	3.019171	31455.17	3.815539	2.365859	4846.526	0.000188	1.629392	0.000118	31455.1709	1.026077	0.374247	0.160305
16	1.388654	2654.355	3.815539	31455.17	2.365859	30234.4	3.752206	1.939839	3875.128	0.000163	1.459913	7.51E-05	30234.3979	0.907684	0.339162	0.141808
16.5	1.262308	2385.866	3.752206	30234.4	1.939839	29392.86	3.708548	1.646164	3227.403	0.000145	1.352718	5.11E-05	29392.8605	0.823755	0.304076	0.129477
17	1.181592	2199.51	3.708548	29392.86	1.646164	28811.78	3.678402	1.443381	2780.591	0.000147	1.264186	3.88E-05	28811.7798	0.78929	0.26899	0.123312
17.5	1.112572	2064.748	3.678402	28811.78	1.443381	28405.91	3.657346	1.301744	2470.613	0.000177	1.196569	3.48E-05	28405.9141	0.749826	0.2456	0.117146
18	1.055246	1951.036	3.657346	28405.91	1.301744	28107.53	3.641865	1.197615	2249.423	0.000256	1.152938	3.91E-05	28107.5269	0.710361	0.233905	0.110981
19	0.906661	3531.433	3.641865	28107.53	1.197615	27628.47	3.617012	1.030436	4010.491	0.000127	1.135655	1.72E-05	27628.4692	0.591968	0.222209	0.092484
20	0.780315	3036.556	3.617012	27628.47	1.030436	27162.91	3.592859	0.915183	3502.114	0.000109	1.153318	1.67E-05	27162.9115	0.513039	0.187124	0.080153
22	0.711294	5369.794	3.592859	27162.91	0.915183	25968.89	3.530914	0.908098	6563.814	0.00012	1.222359	2.66E-05	25968.8912	0.473574	0.163733	0.073987
26	0.140343	6131.787	3.530914	25968.89	0.908098	19407.13	3.06574	0.854894	12693.54	0.000991	2.070122	6.95E-05	19407.1329	0	0.140343	0
		134625.4				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR			

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 5 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	6.955227	416.8963	0	0	0	395.6338	0.60083	0.35473	21.26252	2.49E-14	0.051002	2.36E-14	395.633813
0.0666	13.91045	1250.689	0.60083	395.6338	0.35473	1589.603	1.00805	0.591548	56.71991	1.07E-13	0.045351	1.02E-13	1589.60291
0.0999	16.98059	1851.609	1.00805	1589.603	0.591548	3365.761	1.538796	0.667232	75.45129	1.99E-13	0.040749	1.91E-13	3365.76096
0.1332	13.24124	1811.497	1.538796	3365.761	0.667232	5095.551	1.739864	0.695905	81.70643	-7.1E-14	0.045104	-6.8E-14	5095.55131
0.1665	6.608685	1189.805	1.739864	5095.551	0.695905	6200.833	1.86834	0.714225	84.52319	7.11E-14	0.07104	6.6E-14	6200.83279
0.1998	1.142355	464.5973	1.86834	6200.833	0.714225	6579.433	1.912348	0.720501	85.99749	1.28E-13	0.185101	1.04E-13	6579.43261
0.2331	0.814821	117.3131	1.912348	6579.433	0.720501	6610.341	1.915941	0.721013	86.40435	1.09E-12	0.736528	2.88E-13	6610.34138
0.2664	0.814821	97.68079	1.915941	6610.341	0.721013	6621.576	1.917247	0.721199	86.44622	3.15E-12	0.884987	3.63E-13	6621.57595
0.2997	0.814821	97.68079	1.917247	6621.576	0.721199	6632.788	1.91855	0.721385	86.46853	3.58E-12	0.885215	4.11E-13	6632.78822
0.333	0.814821	97.68079	1.91855	6632.788	0.721385	6643.978	1.919851	0.721571	86.49078	3.28E-12	0.885443	3.76E-13	6643.97822
0.3663	0.814821	97.68079	1.919851	6643.978	0.721571	6655.146	1.921149	0.721756	86.513	3.25E-12	0.885671	3.72E-13	6655.14602
0.3996	0.814821	97.68079	1.921149	6655.146	0.721756	6666.292	1.922445	0.721941	86.53517	3.48E-12	0.885897	3.97E-13	6666.29165
0.4329	0.814821	97.68079	1.922445	6666.292	0.721941	6677.415	1.923738	0.722125	86.55729	3.38E-12	0.886124	3.85E-13	6677.41515
0.4662	0.814821	97.68079	1.923738	6677.415	0.722125	6688.517	1.925028	0.722309	86.57937	3.4E-12	0.88635	3.86E-13	6688.51657
0.4995	0.814821	97.68079	1.925028	6688.517	0.722309	6699.596	1.926316	0.722493	86.60141	3.62E-12	0.886576	4.11E-13	6699.59595
0.5328	0.814821	97.68079	1.926316	6699.596	0.722493	6710.653	1.927601	0.722676	86.62341	3.57E-12	0.886801	4.04E-13	6710.65333
0.5661	0.814821	97.68079	1.927601	6710.653	0.722676	6721.689	1.928884	0.722859	86.64536	3.54E-12	0.887026	4E-13	6721.68877
0.5994	0.710524	91.42922	1.928884	6721.689	0.722859	6726.457	1.929438	0.722938	86.66106	7.83E-12	0.947849	4.08E-13	6726.45694
0.6327	0.387855	65.83685	1.929438	6726.457	0.722938	6705.649	1.927019	0.722593	86.64512	1.24E-12	1.316058	3.91E-13	6705.64867
0.666	0.065186	27.15526	1.927019	6705.649	0.722593	6646.239	1.920114	0.721608	86.56542	1.51E-12	3.187796	2.84E-13	6646.23851
0.6993	0.001	3.967172	1.920114	6646.239	0.721608	6563.781	1.910529	0.720241	86.42447	2.3E-13	21.78491	1.81E-13	6563.78122
0.7326	0.001	0.11988	1.910529	6563.781	0.720241	6477.644	1.900517	0.718814	86.25696	6.45E-13	719.5276	3.4E-13	6477.64413
0.7659	0.001	0.11988	1.900517	6477.644	0.718814	6391.678	1.890524	0.717389	86.08597	4.04E-12	718.1012	4.09E-13	6391.67804
0.7992	0.001	0.11988	1.890524	6391.678	0.717389	6305.883	1.880551	0.715967	85.91532	5.39E-05	717	4.31E-13	6305.88255
0.8325	0.001	0.11988	1.880551	6305.883	0.715967	6220.257	1.870598	0.714547	85.74501	1.23E-12	715.257	3.15E-13	6220.25742
0.8658	0.001	0.11988	1.870598	6220.257	0.714547	6134.802	1.860665	0.713131	85.57503	2.89E-13	713.8391	2.43E-13	6134.80227
0.8991	0.001	0.11988	1.860665	6134.802	0.713131	6049.517	1.850752	0.711717	85.40539	3.18E-13	712.424	1.35E-13	6049.51676
0.9324	0.001	0.11988	1.850752	6049.517	0.711717	5964.401	1.840858	0.710306	85.23609	1.74E-07	711.0128	2.23E-09	5964.40055
0.9657	0.001	0.11988	1.840858	5964.401	0.710306	5879.453	1.830984	0.708898	85.06712	6.72E-05	710	2.3E-09	5879.45324
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 22A

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 10 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	5.421511	324.9653	0	0	0	304.7992	0.56985	0.336439	20.16617	1.07E-14	0.062056	1E-14	304.79918
0.0666	10.84302	974.896	0.56985	304.7992	0.336439	1228.217	0.884794	0.522383	51.47778	3.55E-14	0.052803	3.37E-14	1228.21744
0.0999	15.81	1597.582	0.884794	1228.217	0.522383	2755.631	1.405741	0.648259	70.16824	-1.3E-13	0.043922	-1.2E-13	2755.63142
0.1332	18.31674	2045.557	1.405741	2755.631	0.648259	4720.991	1.696326	0.689696	80.197	-2.4E-13	0.039205	-2.3E-13	4720.99123
0.1665	18.56825	2210.886	1.696326	4720.991	0.689696	6847.085	1.94346	0.724937	84.79313	-4.3E-14	0.038353	-4.1E-14	6847.08459
0.1998	13.67207	1932.485	1.94346	6847.085	0.724937	8691.099	2.157805	0.751049	88.47062	-4.1E-13	0.045781	-3.9E-13	8691.09931
0.2331	8.50208	1329.119	2.157805	8691.099	0.751049	9929.196	2.30172	0.767509	91.02238	-5.8E-13	0.068483	-5.4E-13	9929.19577
0.2664	3.738262	733.6861	2.30172	9929.196	0.767509	10570.36	2.376248	0.776033	92.51994	0	0.126103	0	10570.362
0.2997	1.270286	300.2123	2.376248	10570.36	0.776033	10777.38	2.400311	0.778786	93.19585	-4.8E-13	0.310433	-3.3E-13	10777.3784
0.333	1.270286	152.2819	2.400311	10777.38	0.778786	10836.25	2.407155	0.779568	93.40773	1.01E-12	0.613387	3.9E-13	10836.2526
0.3663	1.270286	152.2819	2.407155	10836.25	0.779568	10895.03	2.413987	0.78035	93.50149	2.32E-12	0.614003	8.94E-13	10895.0329
0.3996	1.270286	152.2819	2.413987	10895.03	0.78035	10953.72	2.420809	0.78113	93.5951	1.22E-12	0.614618	4.71E-13	10953.7197
0.4329	1.270286	152.2819	2.420809	10953.72	0.78113	11012.31	2.42762	0.781909	93.68856	5.68E-13	0.615231	2.19E-13	11012.313
0.4662	1.270286	152.2819	2.42762	11012.31	0.781909	11070.81	2.43442	0.782687	93.78187	1.73E-12	0.615844	6.66E-13	11070.8129
0.4995	1.270286	152.2819	2.43442	11070.81	0.782687	11129.22	2.441209	0.783463	93.87503	2.12E-12	0.616456	8.12E-13	11129.2198
0.5328	1.270286	152.2819	2.441209	11129.22	0.783463	11187.53	2.447987	0.784239	93.96805	1.99E-12	0.617067	7.62E-13	11187.5336
0.5661	1.270286	152.2819	2.447987	11187.53	0.784239	11245.75	2.454755	0.785013	94.06091	1.53E-12	0.617676	5.87E-13	11245.7545
0.5994	1.188987	147.4088	2.454755	11245.75	0.785013	11299.01	2.460945	0.785721	94.14975	1.19E-12	0.638698	4.31E-13	11299.0136
0.6327	0.937471	127.4599	2.460945	11299.01	0.785721	11332.25	2.464809	0.786163	94.21868	2.2E-12	0.739202	5.74E-13	11332.2548
0.666	0.685954	97.3081	2.464809	11332.25	0.786163	11335.32	2.465165	0.786203	94.24761	2.86E-11	0.968548	8.99E-13	11335.3153
0.6993	0.434438	67.1563	2.465165	11335.32	0.786203	11308.24	2.462018	0.785843	94.22847	9.38E-13	1.403122	3.78E-13	11308.2431
0.7326	0.182921	37.00449	2.462018	11308.24	0.785843	11251.09	2.455374	0.785083	94.16135	4.69E-13	2.544593	2.55E-13	11251.0863
0.7659	0.001	11.02423	2.455374	11251.09	0.785083	11168.06	2.445724	0.78398	94.04964	-5.3E-15	8.531173	-2.8E-15	11168.0609
0.7992	0.001	0.11988	2.445724	11168.06	0.78398	11074.27	2.434822	0.782733	93.90874	2.49E-12	783.3562	8.88E-13	11074.272
0.8325	0.001	0.11988	2.434822	11074.27	0.782733	10980.63	2.423937	0.781488	93.75938	6.98E-12	782.1103	7.7E-13	10980.6325
0.8658	0.001	0.11988	2.423937	10980.63	0.781488	10887.14	2.41307	0.780245	93.61026	8.29E-13	780.8664	7.19E-13	10887.1421
0.8991	0.001	0.11988	2.41307	10887.14	0.780245	10793.8	2.40222	0.779004	93.46138	1.06E-12	779.6244	6.6E-13	10793.8006
0.9324	0.001	0.11988	2.40222	10793.8	0.779004	10700.61	2.391388	0.777765	93.31273	1.74E-12	778.3844	6.68E-13	10700.6078
0.9657	0.001	0.11988	2.391388	10700.61	0.777765	10607.56	2.380572	0.776528	93.16432	5.89E-12	777.1465	8.62E-13	10607.5634
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 22B

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 15 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	4.565483	273.655	0	0	0	254.1008	0.552558	0.32623	19.55425	7.11E-15	0.071456	6.6E-15	254.10078
0.0666	9.130965	820.9651	0.552558	254.1008	0.32623	1026.633	0.816041	0.481791	48.43279	-5.7E-14	0.058995	-5.3E-14	1026.63308
0.0999	13.31369	1345.332	0.816041	1026.633	0.481791	2305.542	1.252231	0.626368	66.42305	1.56E-13	0.049373	1.49E-13	2305.54243
0.1332	15.42462	1722.574	1.252231	2305.542	0.626368	3949.998	1.606707	0.676916	78.11888	8.53E-14	0.04535	8.14E-14	3949.99771
0.1665	15.63643	1861.799	1.606707	3949.998	0.676916	5728.881	1.813481	0.706402	82.91613	4.41E-13	0.044535	4.21E-13	5728.88073
0.1998	15.84823	1887.19	1.813481	5728.881	0.706402	7529.637	2.022799	0.735608	86.43408	-2.6E-13	0.0458	-2.4E-13	7529.63679
0.2331	16.06003	1912.581	2.022799	7529.637	0.735608	9352.581	2.234695	0.759843	89.63732	-7.7E-13	0.046867	-7.3E-13	9352.5806
0.2664	14.33496	1821.876	2.234695	9352.581	0.759843	11081.99	2.435719	0.782835	92.46815	1.28E-13	0.050754	1.21E-13	11081.9885
0.2997	9.981285	1457.516	2.435719	11081.99	0.782835	12444.81	2.558947	0.79693	94.69111	3.84E-13	0.064967	3.59E-13	12444.8134
0.333	5.627606	935.5969	2.558947	12444.81	0.79693	13284.46	2.620065	0.80392	95.95492	2.84E-13	0.10256	2.55E-13	13284.4553
0.3663	1.998731	457.1226	2.620065	13284.46	0.80392	13645.02	2.646311	0.806922	96.55386	2.27E-13	0.211221	1.79E-13	13645.0241
0.3996	1.604571	215.9819	2.646311	13645.02	0.806922	13764.21	2.654987	0.807914	96.79327	1.14E-13	0.448154	6.27E-14	13764.2128
0.4329	1.604571	192.356	2.654987	13764.21	0.807914	13859.67	2.661935	0.808709	96.90038	4.97E-13	0.503755	2.47E-13	13859.6684
0.4662	1.604571	192.356	2.661935	13859.67	0.808709	13955.03	2.668877	0.809503	96.99561	1.05E-12	0.50425	5.21E-13	13955.0288
0.4995	1.604571	192.356	2.668877	13955.03	0.809503	14050.29	2.675811	0.810296	97.09073	1.82E-12	0.504745	9.01E-13	14050.2941
0.5328	1.604571	192.356	2.675811	14050.29	0.810296	14145.46	2.682739	0.811088	97.18577	4.26E-14	0.505239	2.11E-14	14145.4644
0.5661	1.604571	192.356	2.682739	14145.46	0.811088	14240.54	2.689659	0.81188	97.2807	1.38E-12	0.505733	6.81E-13	14240.5397
0.5994	1.53611	188.2524	2.689659	14240.54	0.81188	14331.42	2.696274	0.812636	97.3735	6.68E-13	0.51725	3.22E-13	14331.4186
0.6327	1.324306	171.4533	2.696274	14331.42	0.812636	14405.42	2.701661	0.813252	97.45578	1.07E-12	0.56841	4.6E-13	14405.4162
0.666	1.112503	146.0623	2.701661	14405.42	0.813252	14453.96	2.705194	0.813657	97.51693	2.06E-12	0.667639	6.85E-13	14453.9616
0.6993	0.900699	120.6713	2.705194	14453.96	0.813657	14477.08	2.706877	0.813849	97.55269	3.98E-12	0.808416	7.62E-13	14477.0802
0.7326	0.688896	95.28035	2.706877	14477.08	0.813849	14474.8	2.706711	0.81383	97.56309	3.73E-11	1.023958	8.94E-13	14474.7975
0.7659	0.477093	69.88935	2.706711	14474.8	0.81383	14447.14	2.704698	0.8136	97.54815	1.79E-12	1.395751	7.09E-13	14447.1387
0.7992	0.265289	44.49836	2.704698	14447.14	0.8136	14394.13	2.700839	0.813158	97.50789	2.93E-12	2.191269	5.61E-13	14394.1292
0.8325	0.053486	19.10736	2.700839	14394.13	0.813158	14315.79	2.695137	0.812506	97.44235	7.44E-12	5.099727	7.42E-13	14315.7942
0.8658	0	3.205934	2.695137	14315.79	0.812506	14221.64	2.688284	0.811722	97.35627	8.62E-13	30.36753	3.17E-13	14221.6438
0.8991	0	0	2.688284	14221.64	0.811722	14124.38	2.681204	0.810913	97.26075	-1.6E-13	6.22E+14	-7.8E-14	14124.3831
0.9324	0	0	2.681204	14124.38	0.810913	14027.22	2.674132	0.810104	97.16373	-4.8E-13	2.01E+14	-4.2E-13	14027.2194
0.9657	0	0	2.674132	14027.22	0.810104	13930.15	2.667066	0.809296	97.0668	-7.5E-13	1.29E+14	-2.1E-13	13930.1526
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 22C

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 20 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	3.959129	237.3102	0	0	0	218.1894	0.54031	0.318999	19.12081	1.07E-14	0.080573	9.8E-15	218.189414
0.0666	7.918259	711.9307	0.54031	218.1894	0.318999	883.8442	0.767341	0.453038	46.27592	-5E-14	0.065001	-4.7E-14	883.844159
0.0999	11.54546	1166.655	0.767341	883.8442	0.453038	1986.729	1.143496	0.610862	63.77021	9.24E-14	0.054661	8.73E-14	1986.72939
0.1332	13.37604	1493.795	1.143496	1986.729	0.610862	3403.877	1.543226	0.667864	76.64687	-1.7E-13	0.05131	-1.6E-13	3403.8773
0.1665	13.55971	1614.529	1.543226	3403.877	0.667864	4936.82	1.721413	0.693274	81.58659	-2.6E-13	0.050533	-2.4E-13	4936.81966
0.1998	13.74339	1636.548	1.721413	4936.82	0.693274	6488.716	1.901804	0.718997	84.65151	-2.8E-14	0.051726	-2.7E-14	6488.71585
0.2331	13.92706	1658.566	1.901804	6488.716	0.718997	8059.671	2.084409	0.742654	87.61139	1.85E-13	0.052824	1.75E-13	8059.67092
0.2664	14.11073	1680.585	2.084409	8059.671	0.742654	9649.959	2.269262	0.763797	90.29668	-8.1E-13	0.053729	-7.7E-13	9649.95945
0.2997	14.29441	1702.604	2.269262	9649.959	0.763797	11259.72	2.456378	0.785198	92.84676	-4.4E-13	0.054532	-4.2E-13	11259.7167
0.333	14.47808	1724.623	2.456378	11259.72	0.785198	12889.28	2.5913	0.80063	95.05454	2.7E-13	0.055116	2.55E-13	12889.2848
0.3663	11.10253	1533.302	2.5913	12889.28	0.80063	14325.89	2.695872	0.81259	96.69643	2.13E-13	0.063064	2E-13	14325.8904
0.3996	7.327079	1104.671	2.695872	14325.89	0.81259	15332.65	2.769155	0.820972	97.91573	-1.8E-13	0.088638	-1.7E-13	15332.6457
0.4329	3.812926	667.7319	2.769155	15332.65	0.820972	15901.68	2.810575	0.825709	98.70209	8.24E-13	0.147817	7.02E-13	15901.6755
0.4662	1.855286	339.7526	2.810575	15901.68	0.825709	16142.32	2.828092	0.827713	99.10614	-4E-13	0.291701	-2.8E-13	16142.3219
0.4995	1.855286	222.4117	2.828092	16142.32	0.827713	16265.45	2.837054	0.828738	99.28767	3.13E-13	0.446414	1.73E-13	16265.4459
0.5328	1.855286	222.4117	2.837054	16265.45	0.828738	16388.45	2.846007	0.829762	99.4105	2.61E-12	0.446966	1.45E-12	16388.4471
0.5661	1.855286	222.4117	2.846007	16388.45	0.829762	16511.33	2.854952	0.830785	99.5332	-3.1E-13	0.447518	-1.7E-13	16511.3255
0.5994	1.795917	218.8531	2.854952	16511.33	0.830785	16630.52	2.863628	0.831777	99.654	2.73E-12	0.455347	1.49E-12	16630.5246
0.6327	1.612243	204.2851	2.863628	16630.52	0.831777	16735.04	2.871236	0.832648	99.76564	1.96E-12	0.488365	1E-12	16735.044
0.666	1.42857	182.2663	2.871236	16735.04	0.832648	16817.45	2.877235	0.833334	99.85892	2.56E-12	0.547874	1.16E-12	16817.4515
0.6993	1.244897	160.2476	2.877235	16817.45	0.833334	16877.77	2.881625	0.833836	99.93015	1.72E-12	0.623598	6.47E-13	16877.7689
0.7326	1.061223	138.2288	2.881625	16877.77	0.833836	16916.02	2.88441	0.834154	99.97934	4.87E-12	0.723289	1.35E-12	16916.0184
0.7659	0.87755	116.2101	2.88441	16916.02	0.834154	16932.22	2.885589	0.834289	100.0065	1.1E-11	0.860567	1.54E-12	16932.222
0.7992	0.693877	94.19133	2.885589	16932.22	0.834289	16926.4	2.885165	0.834241	100.0117	2.87E-11	1.061793	1.77E-12	16926.4016
0.8325	0.510204	72.17258	2.885165	16926.4	0.834241	16898.58	2.88314	0.834009	99.9949	4.08E-12	1.385497	1.57E-12	16898.5793
0.8658	0.32653	50.15383	2.88314	16898.58	0.834009	16848.78	2.879515	0.833595	99.95616	1.81E-12	1.992992	1.8E-12	16848.777
0.8991	0.142857	28.13507	2.879515	16848.78	0.833595	16777.02	2.874291	0.832997	99.8955	1.4E-12	3.550568	7.71E-13	16777.0166
0.9324	0	8.562849	2.874291	16777.02	0.832997	16685.77	2.867649	0.832237	99.81415	1.78E-12	11.65665	1.17E-12	16685.7652
0.9657	0	0	2.867649	16685.77	0.832237	16586.05	2.860391	0.831407	99.71885	-1.9E-12	5.32E+13	-7.3E-13	16586.0464
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 22D

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 25 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	3.495448	209.5171	0	0	0	190.7278	0.530944	0.313469	18.78935	3.55E-15	0.089679	3.23E-15	190.72778
0.0666	6.990895	628.5514	0.530944	190.7278	0.313469	774.6526	0.7301	0.431051	44.62654	0	0.070999	0	774.652632
0.0999	10.19329	1030.02	0.7301	774.6526	0.431051	1742.931	1.060345	0.599005	61.74156	1.07E-13	0.059942	1E-13	1742.93118
0.1332	11.80948	1318.846	1.060345	1742.931	0.599005	2986.343	1.484428	0.659479	75.43357	-2.1E-13	0.057197	-2E-13	2986.34346
0.1665	11.97164	1425.44	1.484428	2986.343	0.659479	4331.301	1.651029	0.683237	80.48241	-8.5E-14	0.056461	-8E-14	4331.30102
0.1998	12.1338	1444.88	1.651029	4331.301	0.683237	5692.922	1.809302	0.705806	83.25924	2.98E-13	0.057624	2.81E-13	5692.92173
0.2331	12.29596	1464.32	1.809302	5692.922	0.705806	7071.26	1.969518	0.728653	85.98151	4.26E-13	0.058718	4.01E-13	7071.26016
0.2664	12.45812	1483.76	1.969518	7071.26	0.728653	8466.506	2.131699	0.748063	88.51437	8.53E-14	0.059655	8.02E-14	8466.5057
0.2997	12.62029	1503.2	2.131699	8466.506	0.748063	9878.902	2.295874	0.766841	90.80332	-4.1E-13	0.060407	-3.9E-13	9878.90227
0.333	12.78245	1522.64	2.295874	9878.902	0.766841	11308.47	2.462045	0.785846	93.06806	8.38E-13	0.061123	7.87E-13	11308.4741
0.3663	12.94461	1542.08	2.462045	11308.47	0.785846	12755.53	2.581564	0.799516	95.02665	2.42E-13	0.061622	2.27E-13	12755.5273
0.3996	13.10677	1561.52	2.581564	12755.53	0.799516	14220.47	2.688198	0.811713	96.57707	7.25E-13	0.061848	6.8E-13	14220.4701
0.4329	11.96255	1502.655	2.688198	14220.47	0.811713	15625.12	2.790444	0.823407	98.00907	-5.1E-13	0.065224	-4.8E-13	15625.1164
0.4662	8.629269	1234.274	2.790444	15625.12	0.823407	16760.11	2.873061	0.832856	99.27643	3.41E-13	0.080433	3.14E-13	16760.1139
0.4995	5.295983	834.6796	2.873061	16760.11	0.832856	17494.58	2.926524	0.838971	100.2093	1.68E-12	0.120057	1.48E-12	17494.5842
0.5328	2.48645	466.4791	2.926524	17494.58	0.838971	17860.3	2.953145	0.842016	100.7584	1.95E-12	0.215998	1.53E-12	17860.3049
0.5661	2.0475	271.765	2.953145	17860.3	0.842016	18031.04	2.965573	0.843437	101.0261	1.18E-12	0.371741	7.41E-13	18031.0438
0.5994	1.995084	242.3125	2.965573	18031.04	0.843437	18172.17	2.975846	0.844612	101.1817	9.24E-13	0.417567	5.38E-13	18172.1746
0.6327	1.832922	229.4507	2.975846	18172.17	0.844612	18300.31	2.985173	0.845679	101.3161	4.97E-13	0.441559	2.78E-13	18300.3092
0.666	1.67076	210.0107	2.985173	18300.31	0.845679	18408.89	2.993077	0.846583	101.4342	3.45E-12	0.482995	1.79E-12	18408.8857
0.6993	1.508598	190.5707	2.993077	18408.89	0.846583	18497.92	2.999558	0.847324	101.5328	3.54E-12	0.532783	1.65E-12	18497.9236
0.7326	1.346436	171.1307	2.999558	18497.92	0.847324	18567.44	3.004618	0.847903	101.6119	3.62E-12	0.593768	1.47E-12	18567.4424
0.7659	1.184274	151.6908	3.004618	18567.44	0.847903	18617.46	3.008259	0.84832	101.6716	2.36E-12	0.670256	7.78E-13	18617.4615
0.7992	1.022112	132.2508	3.008259	18617.46	0.84832	18648	3.010482	0.848574	101.7118	7.16E-12	0.769083	1.65E-12	18648.0005
0.8325	0.85995	112.8108	3.010482	18648	0.848574	18659.08	3.011288	0.848666	101.7326	1.51E-11	0.901798	1.49E-12	18659.0787
0.8658	0.697788	93.37082	3.011288	18659.08	0.848666	18650.72	3.01068	0.848596	101.7339	1.92E-11	1.089569	1.72E-12	18650.7156
0.8991	0.535626	73.93084	3.01068	18650.72	0.848596	18622.93	3.008657	0.848365	101.7159	3.08E-12	1.375825	1.16E-12	18622.9306
0.9324	0.373464	54.49085	3.008657	18622.93	0.848365	18575.74	3.005222	0.847972	101.6785	-1.3E-12	1.865973	-1.1E-12	18575.743
0.9657	0.211302	35.05087	3.005222	18575.74	0.847972	18509.17	3.000376	0.847418	101.6217	1.29E-12	2.899263	1.16E-12	18509.1722
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 30 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	3.138769	188.1378	0	0	0	169.6034	0.523739	0.309216	18.53439	3.55E-15	0.098515	3.2E-15	169.603447
0.0666	6.277539	564.4135	0.523739	169.6034	0.309216	690.6591	0.701453	0.414138	43.3578	-7.1E-15	0.076819	-6.6E-15	690.659149
0.0999	9.153159	924.916	0.701453	690.6591	0.414138	1555.49	0.996415	0.588284	60.08513	-2.8E-14	0.064963	-2.7E-14	1555.49004
0.1332	10.60443	1184.27	0.996415	1555.49	0.588284	2665.903	1.375137	0.643895	73.85677	5.68E-14	0.062365	5.33E-14	2665.90301
0.1665	10.75004	1279.987	1.375137	2665.903	0.643895	3866.803	1.597036	0.675537	79.08675	-1.7E-13	0.061787	-1.6E-13	3866.80317
0.1998	10.89566	1297.443	1.597036	3866.803	0.675537	5082.056	1.738295	0.695681	82.19083	5.68E-14	0.063348	5.32E-14	5082.05557
0.2331	11.04127	1314.9	1.738295	5082.056	0.695681	6312.335	1.881301	0.716074	84.62056	1.14E-13	0.064355	1.06E-13	6312.33454
0.2664	11.18689	1332.356	1.881301	6312.335	0.716074	7557.654	2.026055	0.73598	87.0361	2.27E-13	0.065325	2.13E-13	7557.65428
0.2997	11.3325	1349.812	2.026055	7557.654	0.73598	8818.233	2.172583	0.752739	89.23383	9.09E-13	0.066108	8.49E-13	8818.2326
0.333	11.47812	1367.268	2.172583	8818.233	0.752739	10094.25	2.320905	0.769704	91.25522	6.96E-13	0.066743	6.5E-13	10094.2458
0.3663	11.62373	1384.725	2.320905	10094.25	0.769704	11385.67	2.471018	0.786873	93.30118	-3.7E-13	0.067379	-3.4E-13	11385.6694
0.3996	11.76935	1402.181	2.471018	11385.67	0.786873	12692.79	2.576998	0.798994	95.05686	9.52E-13	0.067792	8.88E-13	12692.7937
0.4329	11.91496	1419.637	2.576998	12692.79	0.798994	14015.99	2.673314	0.81001	96.44372	9.66E-13	0.067935	9.01E-13	14015.9873
0.4662	12.06058	1437.094	2.673314	14015.99	0.81001	15355.31	2.770804	0.821161	97.77239	-1.3E-13	0.068035	-1.2E-13	15355.3086
0.4995	12.20619	1454.55	2.770804	15355.31	0.821161	16710.74	2.869467	0.832445	99.11715	1.35E-12	0.068143	1.26E-12	16710.7415
0.5328	9.688608	1312.374	2.869467	16710.74	0.832445	17922.72	2.957688	0.842536	100.3984	1.63E-12	0.076501	1.51E-12	17922.7173
0.5661	6.695453	982.0606	2.957688	17922.72	0.842536	18803.34	3.021789	0.849867	101.4426	2.02E-12	0.103296	1.81E-12	18803.3353
0.5994	3.834396	631.1592	3.021789	18803.34	0.849867	19332.35	3.060296	0.854271	102.1461	1.61E-12	0.161839	1.35E-12	19332.3484
0.6327	2.013603	350.5291	3.060296	19332.35	0.854271	19580.34	3.078348	0.856336	102.5338	4.26E-13	0.292512	3.02E-13	19580.3437
0.666	1.867989	232.6626	3.078348	19580.34	0.856336	19710.28	3.087806	0.857418	102.7224	8.24E-13	0.441508	4.6E-13	19710.2839
0.6993	1.722374	215.2063	3.087806	19710.28	0.857418	19822.65	3.095985	0.858353	102.8433	1.25E-12	0.477882	6.53E-13	19822.6469
0.7326	1.576759	197.75	3.095985	19822.65	0.858353	19917.45	3.102886	0.859143	102.9467	4.41E-13	0.52059	2.11E-13	19917.4502
0.7659	1.431144	180.2937	3.102886	19917.45	0.859143	19994.71	3.10851	0.859786	103.0326	9.81E-13	0.571471	4.2E-13	19994.7114
0.7992	1.285529	162.8374	3.10851	19994.71	0.859786	20054.45	3.112858	0.860283	103.1009	2.73E-12	0.633153	1E-12	20054.4478
0.8325	1.139914	145.3811	3.112858	20054.45	0.860283	20096.68	3.115932	0.860635	103.1518	5.51E-12	0.709527	1.6E-12	20096.6771
0.8658	0.994299	127.9248	3.115932	20096.68	0.860635	20121.42	3.117733	0.860841	103.1852	6.18E-12	0.806609	1.2E-12	20121.4166
0.8991	0.848685	110.4685	3.117733	20121.42	0.860841	20128.68	3.118262	0.860901	103.2012	2.7E-11	0.934214	1.78E-12	20128.6839
0.9324	0.70307	93.01215	3.118262	20128.68	0.860901	20118.5	3.11752	0.860816	103.1998	1.56E-11	1.10953	1.71E-12	20118.4963
0.9657	0.557455	75.55584	3.11752	20118.5	0.860816	20090.87	3.11551	0.860586	103.1809	3.69E-12	1.365624	1.35E-12	20090.8712
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 22F

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 35 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	2.889094	173.1723	0	0	0	154.8164	0.518696	0.306238	18.35591	7.11E-15	0.105998	6.35E-15	154.816414
0.0666	5.778189	519.517	0.518696	154.8164	0.306238	631.8637	0.6814	0.402298	42.46967	0	0.081748	0	631.863712
0.0999	8.425067	851.3432	0.6814	631.8637	0.402298	1425.402	0.952047	0.562088	57.80535	9.95E-14	0.067899	9.27E-14	1425.40152
0.1332	9.760893	1090.066	0.952047	1425.402	0.562088	2443.829	1.299396	0.633094	71.63923	-1.3E-13	0.06572	-1.2E-13	2443.82875
0.1665	9.894925	1178.17	1.299396	2443.829	0.633094	3543.88	1.5595	0.670185	78.11852	9.95E-14	0.066305	9.29E-14	3543.88001
0.1998	10.02896	1194.238	1.5595	3543.88	0.670185	4656.67	1.688849	0.68863	81.44735	-8.5E-14	0.0682	-7.9E-14	4656.67017
0.2331	10.16299	1210.305	1.688849	4656.67	0.68863	5783.303	1.819807	0.707305	83.67231	5.68E-14	0.069133	5.29E-14	5783.30311
0.2664	10.29702	1226.373	1.819807	5783.303	0.707305	6923.751	1.952371	0.726208	85.92475	8.53E-14	0.070064	7.93E-14	6923.75135
0.2997	10.43105	1242.441	1.952371	6923.751	0.726208	8078.134	2.086555	0.7429	88.05833	2.84E-13	0.070875	2.64E-13	8078.13375
0.333	10.56508	1258.508	2.086555	8078.134	0.7429	9246.652	2.222382	0.758435	89.99	-4.8E-13	0.071505	-4.5E-13	9246.65222
0.3663	10.69912	1274.576	2.222382	9246.652	0.758435	10429.36	2.359859	0.774159	91.86367	3.13E-13	0.072074	2.9E-13	10429.3648
0.3996	10.83315	1290.644	2.359859	10429.36	0.774159	11626.25	2.498983	0.790071	93.75995	1.71E-13	0.072646	1.58E-13	11626.2488
0.4329	10.96718	1306.712	2.498983	11626.25	0.790071	12837.64	2.587541	0.8002	95.32085	-4.3E-14	0.072947	-4E-14	12837.6396
0.4662	11.10121	1322.779	2.587541	12837.64	0.8002	14063.88	2.6768	0.810409	96.5399	4.69E-13	0.072983	4.35E-13	14063.8791
0.4995	11.23524	1338.847	2.6768	14063.88	0.810409	15304.96	2.767139	0.820742	97.77116	-4.7E-13	0.073026	-4.3E-13	15304.9551
0.5328	11.36928	1354.915	2.767139	15304.96	0.820742	16560.85	2.858557	0.831197	99.01722	1.59E-12	0.07308	1.48E-12	16560.8528
0.5661	11.50331	1370.983	2.858557	16560.85	0.831197	17831.56	2.951052	0.841777	100.2781	5.83E-13	0.073143	5.4E-13	17831.5574
0.5994	10.66017	1328.479	2.951052	17831.56	0.841777	19058.51	3.040363	0.851992	101.5245	-1.5E-12	0.076422	-1.4E-12	19058.5116
0.6327	7.771073	1104.769	3.040363	19058.51	0.851992	20060.64	3.113309	0.860335	102.6368	-5.7E-13	0.092903	-5.2E-13	20060.6433
0.666	4.881978	758.4239	3.113309	20060.64	0.860335	20715.6	3.160984	0.865788	103.4638	-6.1E-13	0.136419	-5.3E-13	20715.6034
0.6993	2.400014	436.4826	3.160984	20715.6	0.865788	21048.13	3.185189	0.868556	103.9566	-2.6E-13	0.238169	-1.9E-13	21048.1294
0.7326	1.789799	251.1374	3.185189	21048.13	0.868556	21195.07	3.195885	0.869779	104.1958	1.79E-12	0.414896	1.05E-12	21195.071
0.7659	1.655767	206.5273	3.195885	21195.07	0.869779	21297.28	3.203325	0.87063	104.3202	1.48E-12	0.505116	7.31E-13	21297.2781
0.7992	1.521735	190.4595	3.203325	21297.28	0.87063	21383.32	3.209588	0.871347	104.4141	2.7E-12	0.548222	1.22E-12	21383.3235
0.8325	1.387704	174.3918	3.209588	21383.32	0.871347	21453.22	3.214676	0.871929	104.4919	2.02E-12	0.599179	8.09E-13	21453.2234
0.8658	1.253672	158.324	3.214676	21453.22	0.871929	21506.99	3.21859	0.872376	104.5536	4.97E-12	0.660378	1.69E-12	21506.9938
0.8991	1.11964	142.2563	3.21859	21506.99	0.872376	21544.65	3.221331	0.87269	104.5993	6.35E-12	0.735287	1.68E-12	21544.6508
0.9324	0.985608	126.1886	3.221331	21544.65	0.87269	21566.21	3.222901	0.872869	104.6288	9.18E-12	0.829147	1.57E-12	21566.2106
0.9657	0.851576	110.1208	3.222901	21566.21	0.872869	21571.69	3.2233	0.872915	104.6423	3.56E-11	0.95025	1.77E-12	21571.6891
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 50 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	2.354077	141.1034	0	0	0	123.1299	0.507889	0.299858	17.97346	-3.6E-15	0.127378	-3.1E-15	123.129914
0.0666	4.708154	423.3101	0.507889	123.1299	0.299858	505.8735	0.638429	0.376928	40.56655	0	0.095832	0	505.873488
0.0999	6.864869	693.687	0.638429	505.8735	0.376928	1146.64	0.856971	0.505956	52.92009	-7.8E-14	0.076288	-7.2E-14	1146.64041
0.1332	7.953321	888.2023	0.856971	1146.64	0.505956	1967.955	1.137093	0.609949	66.88737	9.95E-14	0.075306	9.2E-14	1967.95535
0.1665	8.062532	959.9902	1.137093	1967.955	0.609949	2852.247	1.438693	0.652958	75.69864	-1.8E-13	0.078854	-1.7E-13	2852.24689
0.1998	8.171743	973.0824	1.438693	2852.247	0.652958	3745.82	1.582973	0.673532	79.50978	1.99E-13	0.081709	1.83E-13	3745.81952
0.2331	8.280954	986.1746	1.582973	3745.82	0.673532	4650.352	1.688115	0.688525	81.64171	-3.3E-13	0.082786	-3E-13	4650.35247
0.2664	8.390165	999.2669	1.688115	4650.352	0.688525	5566.169	1.794568	0.703705	83.4503	2.98E-13	0.083512	2.74E-13	5566.16905
0.2997	8.499376	1012.359	1.794568	5566.169	0.703705	6493.247	1.90233	0.719072	85.2813	3.27E-13	0.08424	2.99E-13	6493.24686
0.333	8.608587	1025.451	1.90233	6493.247	0.719072	7431.583	2.011401	0.734304	87.11537	4.26E-14	0.084953	3.9E-14	7431.58283
0.3663	8.717799	1038.544	2.011401	7431.583	0.734304	8381.341	2.1218	0.746931	88.78521	2.7E-13	0.08549	2.47E-13	8381.3412
0.3996	8.82701	1051.636	2.1218	8381.341	0.746931	9342.669	2.233543	0.759711	90.30814	-2.1E-13	0.085874	-1.9E-13	9342.66887
0.4329	8.936221	1064.728	2.233543	9342.669	0.759711	10315.55	2.346629	0.772646	91.84949	6.11E-13	0.086266	5.58E-13	10315.5474
0.4662	9.045432	1077.82	2.346629	10315.55	0.772646	11299.96	2.461055	0.785733	93.40923	2.7E-13	0.086665	2.47E-13	11299.9585
0.4995	9.154643	1090.913	2.461055	11299.96	0.785733	12296.08	2.548121	0.795691	94.79058	-9.8E-13	0.086891	-9E-13	12296.0804
0.5328	9.263854	1104.005	2.548121	12296.08	0.795691	13304.19	2.621502	0.804084	95.89055	-8.5E-14	0.086857	-7.8E-14	13304.1946
0.5661	9.373065	1117.097	2.621502	13304.19	0.804084	14324.39	2.695763	0.812578	96.90273	1.28E-13	0.086745	1.17E-13	14324.3888
0.5994	9.446976	1128.073	2.695763	14324.39	0.812578	15354.54	2.770748	0.821154	97.92591	1.42E-14	0.086808	1.3E-14	15354.5362
0.6327	9.446976	1132.503	2.770748	15354.54	0.821154	16388.08	2.845981	0.829759	98.95575	1.17E-12	0.087378	1.06E-12	16388.0839
0.666	9.446976	1132.503	2.845981	16388.08	0.829759	17420.6	2.921138	0.838355	99.98677	-8.5E-14	0.088288	-7.8E-14	17420.6006
0.6993	9.446976	1132.503	2.921138	17420.6	0.838355	18452.09	2.996221	0.846943	101.0168	7.96E-13	0.089198	7.25E-13	18452.0874
0.7326	9.446976	1132.503	2.996221	18452.09	0.846943	19482.55	3.071229	0.855522	102.0457	-6.7E-13	0.090106	-6.1E-13	19482.5451
0.7659	9.446976	1132.503	3.071229	19482.55	0.855522	20511.97	3.146162	0.864092	103.0737	-4.8E-13	0.091014	-4.4E-13	20511.9749
0.7992	9.446976	1132.503	3.146162	20511.97	0.864092	21540.38	3.22102	0.872654	104.1006	-1.7E-12	0.091921	-1.6E-12	21540.3778
0.8325	9.446976	1132.503	3.22102	21540.38	0.872654	22567.75	3.295804	0.881208	105.1265	-1.1E-12	0.092827	-1E-12	22567.7548
0.8658	7.687363	1027.032	3.295804	22567.75	0.881208	23488.69	3.362839	0.888875	106.0987	-9E-13	0.103306	-8E-13	23488.6884
0.8991	5.333286	780.4577	3.362839	23488.69	0.888875	24162.25	3.411869	0.894482	106.8944	-1.1E-13	0.136964	-9.8E-14	24162.2516
0.9324	3.071591	503.7883	3.411869	24162.25	0.894482	24558.61	3.44072	0.897782	107.4284	3.98E-13	0.213241	3.13E-13	24558.6116
0.9657	1.521234	275.2939	3.44072	24558.61	0.897782	24726.2	3.452919	0.899178	107.7098	-1.6E-12	0.391254	-1E-12	24726.1957
0.999	1.412023	175.8194	3.452919	24726.2	0.899178	24794.19	3.457868	0.899744	107.8273	-3.6E-12	0.613285	-1.4E-12	24794.1878
1.0323	1.302812	162.7272	3.457868	24794.19	0.899744	24849.03	3.46186	0.9002	107.8886	-2.4E-12	0.663003	-7.9E-13	24849.0264
1.0656	1.193601	149.635	3.46186	24849.03	0.9002	24890.72	3.464895	0.900547	107.9368	-3.9E-12	0.721334	-1.1E-12	24890.7245
1.0989	1.084389	136.5427	3.464895	24890.72	0.900547	24919.3	3.466974	0.900785	107.9719	-7.4E-12	0.790755	-1.5E-12	24919.2954
1.1322	0.975178	123.4505	3.466974	24919.3	0.900785	24934.75	3.4681	0.900914	107.9938	-1.2E-11	0.874795	-1.5E-12	24934.752
1.1655	0.865967	110.3583	3.4681	24934.75	0.900914	24937.11	3.468271	0.900934	108.0027	-8.3E-11	0.978656	-1.8E-12	24937.1075
1.1988	0.756756	97.26603	3.468271	24937.11	0.900934	24926.38	3.46749	0.900844	107.9986	-1.4E-11	1.110342	-1.5E-12	24926.375
1.2321	0.647545	84.17379	3.46749	24926.38	0.900844	24902.57	3.465757	0.900646	107.9813	-5.8E-12	1.282838	-1.6E-12	24902.5675
1.2654	0.538334	71.08156	3.465757	24902.57	0.900646	24865.7	3.463073	0.900339	107.951	-3.3E-12	1.518693	-1.7E-12	24865.698
1.2987	0.429123	57.98933	3.463073	24865.7	0.900339	24815.78	3.459439	0.899923	107.9077	-5.4E-13	1.86082	-4.6E-13	24815.7796
1.332	0.319911	44.8971	3.459439	24815.78	0.899923	24752.83	3.454857	0.899399	107.8514	-3.4E-12	2.402191	-1.4E-12	24752.8253
1.3653	0.2107	31.80487	3.454857	24752.83	0.899399	24676.85	3.449327	0.898767	107.7821	-2.6E-12	3.388855	-1E-12	24676.8481
1.3986	0.101489	18.71263	3.449327	24676.85	0.898767	24587.86	3.442849	0.898026	107.6997	-1E-12	5.755456	-7.8E-13	24587.861
1.4319	0.001	6.143199	3.442849	24587.86	0.898026	24486.4	3.435464	0.897181	107.6047	-3E-13	17.51607	-1.6E-13	24486.3995
1.4652	0.001	0.11988	3.435464	24486.4	0.897181	24379.02	3.427647	0.896287	107.5005	-1E-12	896.7342	-7.7E-13	24379.0189
1.4985	0.001	0.11988	3.427647	24379.02	0.896287	24271.75	3.419839	0.895394	107.3934	-1.8E-12	895.8406	-1.5E-12	24271.7454
1.5318	0.001	0.11988	3.419839	24271.75	0.895394	24164.58	3.412038	0.894502	107.2864	-4.5E-13	894.948	-4.3E-13	24164.5789
1.5651	0.001	0.11988	3.412038	24164.58	0.894502	24057.52	3.404245	0.893611	107.1795	-3.1E-11	894.0562	-1.7E-12	24057.5193
1.5984	0.001	0.11988	3.404245	24057.52	0.893611	23950.57	3.39646	0.89272	107.0727	-1.1E-11	893.1653	-1.8E-12	23950.5665
1.6317	0.001	0.11988	3.39646	23950.57	0.89272	23843.72	3.388683	0.891831	106.966	-5E-12	892.2753	-1.4E-12	23843.7205
1.665	0.001	0.11988	3.388683	23843.72	0.891831	23736.98	3.380913	0.890942	106.8594	-1.7E-12	891.3862	-6.7E-13	23736.981

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 40 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	2.710755	162.4827	0	0	0	144.2542	0.515094	0.304111	18.22843	-3.6E-15	0.112187	-3.2E-15	144.254247
0.0666	5.421511	487.448	0.515094	144.2542	0.304111	589.867	0.667076	0.393842	41.8353	-7.1E-15	0.085825	-6.5E-15	589.86697
0.0999	7.905001	798.7911	0.667076	589.867	0.393842	1332.481	0.920355	0.543378	56.17693	1.07E-13	0.070327	9.91E-14	1332.48115
0.1332	9.158369	1022.778	0.920355	1332.481	0.543378	2285.204	1.245295	0.625379	70.05528	1.85E-13	0.068495	1.72E-13	2285.20428
0.1665	9.284127	1105.443	1.245295	2285.204	0.625379	3313.221	1.532689	0.666361	77.42692	1.71E-13	0.070042	1.59E-13	3313.22061
0.1998	9.409886	1120.519	1.532689	3313.221	0.666361	4352.823	1.653531	0.683593	80.91629	-3.3E-13	0.072213	-3E-13	4352.82346
0.2331	9.535644	1135.595	1.653531	4352.823	0.683593	5405.424	1.775883	0.701041	82.99499	2.84E-13	0.073085	2.63E-13	5405.42352
0.2664	9.661402	1150.671	1.775883	5405.424	0.701041	6470.995	1.899744	0.718703	85.09948	-3.4E-13	0.073956	-3.2E-13	6470.995
0.2997	9.787161	1165.747	1.899744	6470.995	0.718703	7549.555	2.025114	0.735872	87.18728	9.95E-14	0.074791	9.2E-14	7549.55458
0.333	9.912919	1180.823	2.025114	7549.555	0.735872	8641.291	2.152016	0.750387	89.08638	-4.5E-13	0.075444	-4.2E-13	8641.29097
0.3663	10.03868	1195.899	2.152016	8641.291	0.750387	9746.353	2.280466	0.765078	90.83698	-7.2E-13	0.075957	-6.7E-13	9746.35265
0.3996	10.16444	1210.975	2.280466	9746.353	0.765078	10864.72	2.410464	0.779947	92.60881	9.66E-13	0.076475	8.92E-13	10864.7184
0.4329	10.29019	1226.05	2.410464	10864.72	0.779947	11996.47	2.526312	0.793197	94.29423	-2.7E-13	0.076909	-2.5E-13	11996.4746
0.4662	10.41595	1241.126	2.526312	11996.47	0.793197	13141.94	2.609691	0.802733	95.66007	5.83E-13	0.077075	5.38E-13	13141.941
0.4995	10.54171	1256.202	2.609691	13141.94	0.802733	14301.33	2.694085	0.812386	96.81026	3.13E-13	0.077066	2.89E-13	14301.333
0.5328	10.66747	1271.278	2.694085	14301.33	0.812386	15474.64	2.77949	0.822154	97.97433	-5.1E-13	0.077068	-4.7E-13	15474.6368
0.5661	10.79323	1286.354	2.77949	15474.64	0.822154	16661.84	2.865908	0.832038	99.15229	-1.2E-12	0.07708	-1.1E-12	16661.8386
0.5994	10.87834	1298.993	2.865908	16661.84	0.832038	17860.49	2.953158	0.842017	100.3429	1.53E-12	0.077247	1.42E-12	17860.4892
0.6327	10.87834	1304.095	2.953158	17860.49	0.842017	19063.04	3.040693	0.852029	101.5412	1.86E-12	0.077863	1.72E-12	19063.043
0.666	10.87834	1304.095	3.040693	19063.04	0.852029	20264.4	3.128141	0.862031	102.7408	1.78E-12	0.078783	1.64E-12	20264.3971
0.6993	8.715208	1174.437	3.128141	20264.4	0.862031	21334.96	3.206068	0.870944	103.8745	1.22E-12	0.088446	1.11E-12	21334.9596
0.7326	6.004453	882.2965	3.206068	21334.96	0.870944	22112.46	3.262663	0.877417	104.7968	-9.4E-13	0.118777	-8.3E-13	22112.4593
0.7659	3.424254	565.1567	3.262663	22112.46	0.877417	22572.2	3.296128	0.881245	105.4142	-1E-12	0.186522	-8.4E-13	22572.2018
0.7992	1.745373	309.8674	3.296128	22572.2	0.881245	22776.32	3.310986	0.882944	105.7455	-1.3E-13	0.34126	-8.4E-14	22776.3237
0.8325	1.619614	201.6973	3.310986	22776.32	0.882944	22872.13	3.317959	0.883742	105.8951	2.59E-12	0.52502	1.23E-12	22872.1259
0.8658	1.493856	186.6214	3.317959	22872.13	0.883742	22952.76	3.323829	0.884413	105.9832	1.32E-12	0.567905	5.71E-13	22952.7641
0.8991	1.368098	171.5455	3.323829	22952.76	0.884413	23018.25	3.328596	0.884958	106.0561	4.36E-12	0.618239	1.67E-12	23018.2535
0.9324	1.242339	156.4696	3.328596	23018.25	0.884958	23068.61	3.332262	0.885377	106.1139	5.46E-12	0.678176	1.76E-12	23068.6092
0.9657	1.116581	141.3937	3.332262	23068.61	0.885377	23103.85	3.334826	0.885671	106.1566	6.58E-12	0.750788	1.64E-12	23103.8463
0.999	1.116581	133.8557	3.334826	23103.85	0.885671	23131.51	3.33684	0.885901	106.188	8.23E-12	0.793302	1.7E-12	23131.514
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 22H

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 60 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	1.997399	119.7241	0	0	0	102.0056	0.500684	0.295604	17.71849	-3.6E-15	0.147994	-3E-15	102.005581
0.0666	3.994797	359.1722	0.500684	102.0056	0.295604	421.88	0.609782	0.360015	39.2978	-2.1E-14	0.109412	-1.9E-14	421.880005
0.0999	5.824738	588.5829	0.609782	421.88	0.360015	960.7997	0.793588	0.468534	49.66325	-5E-14	0.084378	-4.6E-14	960.799676
0.1332	6.748272	753.6262	0.793588	960.7997	0.468534	1650.706	1.02889	0.59452	63.71946	9.95E-14	0.08455	9.11E-14	1650.70641
0.1665	6.840936	814.5371	1.02889	1650.706	0.59452	2391.812	1.281655	0.630564	73.43152	-2E-13	0.090151	-1.8E-13	2391.81202
0.1998	6.9336	825.6457	1.281655	2391.812	0.630564	3139.892	1.512541	0.663488	77.5655	-1.6E-13	0.093945	-1.4E-13	3139.89221
0.2331	7.026264	836.7542	1.512541	3139.892	0.663488	3896.356	1.600471	0.676027	80.29057	-1.7E-13	0.095955	-1.5E-13	3896.35589
0.2664	7.118928	847.8628	1.600471	3896.356	0.676027	4662.415	1.689517	0.688725	81.80326	-2.4E-13	0.096482	-2.2E-13	4662.41544
0.2997	7.211592	858.9714	1.689517	4662.415	0.688725	5438.052	1.779676	0.701582	83.335	4.55E-13	0.097017	4.11E-13	5438.05182
0.333	7.304256	870.0799	1.779676	5438.052	0.701582	6223.246	1.870946	0.714597	84.88575	1.56E-13	0.097561	1.41E-13	6223.246
0.3663	7.39692	881.1885	1.870946	6223.246	0.714597	7017.979	1.963324	0.72777	86.45547	3.84E-13	0.098112	3.46E-13	7017.97901
0.3996	7.489584	892.297	1.963324	7017.979	0.72777	7822.328	2.056821	0.739499	87.9481	7.11E-14	0.098564	6.41E-14	7822.32797
0.4329	7.582248	903.4056	2.056821	7822.328	0.739499	8636.434	2.151451	0.750322	89.29988	-5.1E-13	0.098848	-4.6E-13	8636.4337
0.4662	7.674912	914.5142	2.151451	8636.434	0.750322	9460.343	2.247221	0.761276	90.60519	-2.4E-13	0.099075	-2.2E-13	9460.34268
0.4995	7.767576	925.6227	2.247221	9460.343	0.761276	10294.04	2.344129	0.77236	91.92612	1.85E-13	0.099313	1.66E-13	10294.0393
0.5328	7.86024	936.7313	2.344129	10294.04	0.77236	11137.51	2.442172	0.783573	93.26263	5.83E-13	0.099562	5.25E-13	11137.5079
0.5661	7.952904	947.8399	2.442172	11137.51	0.783573	11990.84	2.525902	0.79315	94.5088	-2.8E-14	0.09971	-2.6E-14	11990.839
0.5994	8.015616	957.1531	2.525902	11990.84	0.79315	12852.48	2.588621	0.800324	95.51281	7.11E-14	0.099788	6.4E-14	12852.4793
0.6327	8.015616	960.912	2.588621	12852.48	0.800324	13717.02	2.651552	0.807521	96.37422	5.97E-13	0.100295	5.37E-13	13717.0171
0.666	8.015616	960.912	2.651552	13717.02	0.807521	14580.69	2.714419	0.814712	97.23664	1.42E-13	0.101192	1.28E-13	14580.6925
0.6993	8.015616	960.912	2.714419	14580.69	0.814712	15443.51	2.777224	0.821895	98.09821	-5E-13	0.102089	-4.5E-13	15443.5063
0.7326	8.015616	960.912	2.777224	15443.51	0.821895	16305.46	2.839966	0.829071	98.95891	-6.7E-13	0.102984	-6E-13	16305.4595
0.7659	8.015616	960.912	2.839966	16305.46	0.829071	17166.55	2.902646	0.83624	99.81876	-3.1E-13	0.103879	-2.8E-13	17166.5528
0.7992	8.015616	960.912	2.902646	17166.55	0.83624	18026.79	2.965263	0.843402	100.6777	-9E-13	0.104773	-8E-13	18026.7871
0.8325	8.015616	960.912	2.965263	18026.79	0.843402	18886.16	3.027818	0.850557	101.5359	-7.2E-13	0.105666	-6.5E-13	18886.1632
0.8658	8.015616	960.912	3.027818	18886.16	0.850557	19744.68	3.09031	0.857704	102.3932	5.12E-13	0.106558	4.57E-13	19744.6821
0.8991	8.015616	960.912	3.09031	19744.68	0.857704	20602.34	3.15274	0.864845	103.2496	9.09E-13	0.10745	8.12E-13	20602.3446
0.9324	8.015616	960.912	3.15274	20602.34	0.864845	21459.15	3.215108	0.871978	104.1051	-8.2E-13	0.10834	-7.3E-13	21459.1515
0.9657	8.015616	960.912	3.215108	21459.15	0.871978	22315.1	3.277413	0.879104	104.9599	9.38E-13	0.109229	8.35E-13	22315.1037
0.999	8.015616	960.912	3.277413	22315.1	0.879104	23170.2	3.339657	0.886223	105.8137	-1.4E-13	0.110118	-1.3E-13	23170.202
1.0323	6.62349	877.468	3.339657	23170.2	0.886223	23941.04	3.395767	0.892641	106.6251	2.84E-14	0.121515	2.5E-14	23941.0449
1.0656	4.626091	674.2999	3.395767	23941.04	0.892641	24508.05	3.43704	0.897361	107.2927	5.83E-13	0.159117	4.9E-13	24508.052
1.0989	2.689262	438.4823	3.43704	24508.05	0.897361	24838.79	3.461115	0.900115	107.7407	2.33E-12	0.245713	1.76E-12	24838.7935
1.1322	1.295424	238.8421	3.461115	24838.79	0.900115	24969.66	3.470641	0.901205	107.9711	2.07E-12	0.452061	1.14E-12	24969.6646
1.1655	1.20276	149.7411	3.470641	24969.66	0.901205	25011.35	3.473675	0.901552	108.0572	6.03E-12	0.721627	1.68E-12	25011.3485
1.1988	1.110096	138.6326	3.473675	25011.35	0.901552	25041.89	3.475898	0.901806	108.0932	7.08E-12	0.77971	1.56E-12	25041.8878
1.2321	1.017432	127.524	3.475898	25041.89	0.901806	25061.29	3.477311	0.901967	108.1182	1.06E-11	0.847826	1.61E-12	25061.2937
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 70 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	1.783392	106.8965	0	0	0	90.82556	0.454128	0.268117	16.07094	3.55E-15	0.150341	3.02E-15	90.8255598
0.0666	3.566783	320.6895	0.454128	90.82556	0.268117	374.4374	0.593601	0.350462	37.07762	2.13E-14	0.115618	1.89E-14	374.437426
0.0999	5.200659	525.5205	0.593601	374.4374	0.350462	852.1783	0.756541	0.446662	47.7796	-5.7E-14	0.090919	-5.2E-14	852.178297
0.1332	6.025243	672.8805	0.756541	852.1783	0.446662	1464.127	0.965255	0.569886	60.9319	-1.4E-14	0.090554	-1.3E-14	1464.12693
0.1665	6.107979	727.2653	0.965255	1464.127	0.569886	2120.229	1.189028	0.617355	71.16327	1.14E-13	0.09785	1.03E-13	2120.22895
0.1998	6.190714	737.1836	1.189028	2120.229	0.617355	2781.476	1.414555	0.649516	75.93624	1.28E-13	0.103009	1.15E-13	2781.47636
0.2331	6.27345	747.102	1.414555	2781.476	0.649516	3449.569	1.548538	0.668621	79.00914	1.42E-14	0.105754	1.27E-14	3449.56923
0.2664	6.356186	757.0204	1.548538	3449.569	0.668621	4125.763	1.627137	0.67983	80.82617	-3.6E-13	0.106769	-3.2E-13	4125.76342
0.2997	6.438921	766.9387	1.627137	4125.763	0.67983	4810.524	1.706733	0.69118	82.17833	3.84E-13	0.107151	3.43E-13	4810.52381
0.333	6.521657	776.8571	1.706733	4810.524	0.69118	5503.833	1.787322	0.702672	83.54751	-3.7E-13	0.107546	-3.3E-13	5503.83339
0.3663	6.604393	786.7754	1.787322	5503.833	0.702672	6205.675	1.868903	0.714306	84.93365	-1.4E-13	0.107952	-1.3E-13	6205.67518
0.3996	6.687129	796.6938	1.868903	6205.675	0.714306	6916.032	1.951474	0.72608	86.33673	-3.1E-13	0.108369	-2.8E-13	6916.03224
0.4329	6.769864	806.6122	1.951474	6916.032	0.72608	7634.947	2.03504	0.737008	87.69749	4.69E-13	0.108723	4.18E-13	7634.94691
0.4662	6.8526	816.5305	2.03504	7634.947	0.737008	8362.545	2.119615	0.746681	88.93229	5.83E-13	0.108915	5.19E-13	8362.54512
0.4995	6.935336	826.4489	2.119615	8362.545	0.746681	9098.895	2.205207	0.756471	90.0989	-6E-13	0.109019	-5.3E-13	9098.89509
0.5328	7.018071	836.3672	2.205207	9098.895	0.756471	9843.983	2.291815	0.766376	91.27944	4.26E-13	0.109138	3.8E-13	9843.98287
0.5661	7.100807	846.2856	2.291815	9843.983	0.766376	10597.79	2.379437	0.776398	92.4739	8.1E-13	0.10927	7.22E-13	10597.7946
0.5994	7.1568	854.601	2.379437	10597.79	0.776398	11358.71	2.467885	0.786514	93.68097	-3.3E-13	0.10962	-2.9E-13	11358.7146
0.6327	7.1568	857.9572	2.467885	11358.71	0.786514	12121.92	2.535443	0.794241	94.7505	4.26E-13	0.110437	3.79E-13	12121.9212
0.666	7.1568	857.9572	2.535443	12121.92	0.794241	12884.28	2.590936	0.800588	95.59409	-1.6E-13	0.111421	-1.4E-13	12884.2843
0.6993	7.1568	857.9572	2.590936	12884.28	0.800588	13645.89	2.646374	0.806929	96.35459	-9.9E-14	0.112307	-8.8E-14	13645.8869
0.7326	7.1568	857.9572	2.646374	13645.89	0.806929	14406.73	2.701756	0.813263	97.11433	1.42E-14	0.113193	1.26E-14	14406.7298
0.7659	7.1568	857.9572	2.701756	14406.73	0.813263	15166.81	2.757084	0.819591	97.87332	-1.3E-13	0.114077	-1.1E-13	15166.8136
0.7992	7.1568	857.9572	2.757084	15166.81	0.819591	15926.14	2.812355	0.825913	98.63154	1.01E-12	0.114961	8.93E-13	15926.1393
0.8325	7.1568	857.9572	2.812355	15926.14	0.825913	16684.71	2.867572	0.832229	99.38902	-1.2E-12	0.115844	-1E-12	16684.7075
0.8658	7.1568	857.9572	2.867572	16684.71	0.832229	17442.52	2.922734	0.838538	100.1457	1.86E-12	0.116726	1.64E-12	17442.5189
0.8991	7.1568	857.9572	2.922734	17442.52	0.838538	18199.57	2.977841	0.844841	100.9017	1.42E-14	0.117607	1.25E-14	18199.5744
0.9324	7.1568	857.9572	2.977841	18199.57	0.844841	18955.87	3.032892	0.851137	101.6569	-1.5E-12	0.118487	-1.3E-12	18955.8747
0.9657	7.1568	857.9572	3.032892	18955.87	0.851137	19711.42	3.087889	0.857427	102.4113	-1.2E-12	0.119367	-1.1E-12	19711.4205
0.999	7.1568	857.9572	3.087889	19711.42	0.857427	20466.21	3.142831	0.863711	103.165	-3E-13	0.120245	-2.6E-13	20466.2127
1.0323	7.1568	857.9572	3.142831	20466.21	0.863711	21220.25	3.197718	0.869989	103.918	3.98E-13	0.121123	3.5E-13	21220.2518
1.0656	7.1568	857.9572	3.197718	21220.25	0.869989	21973.54	3.252551	0.87626	104.6702	1.98E-12	0.121999	1.73E-12	21973.5388
1.0989	7.1568	857.9572	3.252551	21973.54	0.87626	22726.07	3.307328	0.882526	105.4216	4.83E-13	0.122875	4.24E-13	22726.0744
1.1322	7.1568	857.9572	3.307328	22726.07	0.882526	23477.86	3.362051	0.888785	106.1723	1.11E-12	0.12375	9.71E-13	23477.8592
1.1655	7.1568	857.9572	3.362051	23477.86	0.888785	24228.89	3.41672	0.895037	106.9223	1.71E-13	0.124624	1.49E-13	24228.8941
1.1988	6.0039	788.8524	3.41672	24228.89	0.895037	24910.11	3.466306	0.900709	107.637	1.71E-12	0.136448	1.47E-12	24910.1095
1.2321	4.220509	612.8511	3.466306	24910.11	0.900709	25414.74	3.502165	0.90481	108.2228	2.7E-13	0.176589	2.22E-13	25414.7378
1.2654	2.475291	401.3463	3.502165	25414.74	0.90481	25707.51	3.517354	0.906547	108.5728	-1.4E-14	0.270521	-1E-14	25707.5113
1.2987	1.160807	217.9477	3.517354	25707.51	0.906547	25816.74	3.523021	0.907196	108.7158	1.88E-12	0.498816	9.4E-13	25816.7432
1.332	1.078071	134.1984	3.523021	25816.74	0.907196	25842.18	3.524341	0.907346	108.7636	6.07E-12	0.810469	1.15E-12	25842.178
1.3653	0.995336	124.28	3.524341	25842.18	0.907346	25857.68	3.525145	0.907438	108.7782	1.35E-11	0.875267	1.68E-12	25857.6798
1.3986	0.9126	114.3617	3.525145	25857.68	0.907438	25863.26	3.525434	0.907472	108.7857	3.41E-11	0.951243	1.66E-12	25863.2558
1.4319	0.829864	104.4433	3.525434	25863.26	0.907472	25858.91	3.525209	0.907446	108.7861	4.28E-11	1.041581	1.78E-12	25858.9129
1.4652	0.747129	94.52495	3.525209	25858.91	0.907446	25844.66	3.524469	0.907361	108.7795	8.7E-12	1.150802	1.31E-12	25844.6584
1.4985	0.664393	84.60659	3.524469	25844.66	0.907361	25820.5	3.523216	0.907218	108.7659	3.37E-12	1.285548	9.62E-13	25820.4991
1.5318	0.581657	74.68824	3.523216	25820.5	0.907218	25786.44	3.521449	0.907016	108.7452	1.04E-12	1.455988	4.73E-13	25786.4422
1.5651	0.498921	64.76988	3.521449	25786.44	0.907016	25742.49	3.519169	0.906755	108.7174	-2.3E-13	1.678518	-1.5E-13	25742.4946
1.5984	0.416186	54.85152	3.519169	25742.49	0.906755	25688.66	3.516376	0.906436	108.6826	9.02E-13	1.981397	8.86E-13	25688.6635
1.6317	0.33345	44.93316	3.516376	25688.66	0.906436	25624.96	3.513071	0.906058	108.6408	2.95E-12	2.417832	1.23E-12	25624.9558
1.665	0.250714	35.01481	3.513071	25624.96	0.906058	25551.38	3.509254	0.905621	108.592	1.71E-11	3.101317	1.74E-12	25551.3786

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 80 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	1.605052	96.20685	0	0	0	81.743	0.408715	0.241305	14.46384	5.33E-15	0.150341	4.53E-15	81.7430038
0.0666	3.210105	288.6205	0.408715	81.743	0.241305	335.3646	0.580274	0.342594	34.99893	0	0.121263	0	335.364615
0.0999	4.680593	472.9684	0.580274	335.3646	0.342594	762.1121	0.725823	0.428526	46.22092	-2.1E-14	0.097725	-1.9E-14	762.112118
0.1332	5.422719	605.5925	0.725823	762.1121	0.428526	1309.723	0.912593	0.538795	57.98121	-8.5E-14	0.095743	-7.7E-14	1309.72339
0.1665	5.497181	654.5388	0.912593	1309.723	0.538795	1895.617	1.112421	0.606431	68.64486	1.42E-14	0.104875	1.27E-14	1895.61729
0.1998	5.571643	663.4653	1.112421	1895.617	0.606431	2484.666	1.313324	0.63508	74.41618	1.56E-13	0.112163	1.39E-13	2484.6664
0.2331	5.646105	672.3918	1.313324	2484.666	0.63508	3079.282	1.505496	0.662484	77.77597	1.71E-13	0.115671	1.51E-13	3079.28223
0.2664	5.720567	681.3183	1.505496	3079.282	0.662484	3680.585	1.575391	0.672451	80.01597	1.28E-13	0.117443	1.13E-13	3680.58459
0.2997	5.795029	690.2448	1.575391	3680.585	0.672451	4289.611	1.646183	0.682546	81.21848	4.55E-13	0.117666	4.01E-13	4289.61096
0.333	5.869491	699.1714	1.646183	4289.611	0.682546	4906.346	1.717871	0.692768	82.43633	-3.1E-13	0.117906	-2.8E-13	4906.346
0.3663	5.943954	708.0979	1.717871	4906.346	0.692768	5530.774	1.790454	0.703119	83.66948	4.55E-13	0.118161	4.01E-13	5530.77442
0.3996	6.018416	717.0244	1.790454	5530.774	0.703119	6162.881	1.863929	0.713596	84.9179	-3.1E-13	0.118431	-2.8E-13	6162.88094
0.4329	6.092878	725.9509	1.863929	6162.881	0.713596	6802.65	1.938295	0.724201	86.18156	4.26E-14	0.118715	3.76E-14	6802.65032
0.4662	6.16734	734.8775	1.938295	6802.65	0.724201	7450.09	2.013552	0.73455	87.43753	-1.3E-13	0.118982	-1.1E-13	7450.09025
0.4995	6.241802	743.804	2.013552	7450.09	0.73455	8105.314	2.089715	0.743261	88.58	-2.4E-13	0.119091	-2.1E-13	8105.31423
0.5328	6.316264	752.7305	2.089715	8105.314	0.743261	8768.414	2.166792	0.752077	89.63056	1.42E-13	0.119074	1.25E-13	8768.41417
0.5661	6.390726	761.657	2.166792	8768.414	0.752077	9439.378	2.244784	0.760997	90.69366	-3.6E-13	0.119074	-3.1E-13	9439.37753
0.5994	6.44112	769.1409	2.244784	9439.378	0.760997	10116.75	2.323521	0.770003	91.76813	8.53E-13	0.119313	7.51E-13	10116.7503
0.6327	6.44112	772.1615	2.323521	10116.75	0.770003	10796.06	2.402483	0.779034	92.84926	4.12E-13	0.120246	3.63E-13	10796.0625
0.666	6.44112	772.1615	2.402483	10796.06	0.779034	11474.29	2.48132	0.788051	93.93107	-2.8E-13	0.121647	-2.5E-13	11474.2929
0.6993	6.44112	772.1615	2.48132	11474.29	0.788051	12151.6	2.537604	0.794488	94.85741	-4.1E-13	0.122847	-3.6E-13	12151.5969
0.7326	6.44112	772.1615	2.537604	12151.6	0.794488	12828.18	2.586852	0.800121	95.5809	-2.8E-14	0.123784	-2.5E-14	12828.1775
0.7659	6.44112	772.1615	2.586852	12828.18	0.800121	13504.08	2.636052	0.805748	96.25583	-2.1E-13	0.124658	-1.9E-13	13504.0831
0.7992	6.44112	772.1615	2.636052	13504.08	0.805748	14179.31	2.685203	0.81137	96.93008	-2.8E-14	0.125531	-2.5E-14	14179.3145
0.8325	6.44112	772.1615	2.685203	14179.31	0.81137	14853.87	2.734304	0.816986	97.60367	-4.4E-13	0.126403	-3.8E-13	14853.8723
0.8658	6.44112	772.1615	2.734304	14853.87	0.816986	15527.76	2.783357	0.822596	98.27658	-1.4E-14	0.127275	-1.2E-14	15527.7572
0.8991	6.44112	772.1615	2.783357	15527.76	0.822596	16200.97	2.832361	0.828201	98.94881	7.82E-13	0.128145	6.81E-13	16200.9699
0.9324	6.44112	772.1615	2.832361	16200.97	0.828201	16873.51	2.881315	0.8338	99.62038	7.82E-13	0.129015	6.81E-13	16873.5109
0.9657	6.44112	772.1615	2.881315	16873.51	0.8338	17545.38	2.930221	0.839394	100.2913	-7.7E-13	0.129884	-6.7E-13	17545.3811
0.999	6.44112	772.1615	2.930221	17545.38	0.839394	18216.58	2.979079	0.844982	100.9615	5.68E-13	0.130752	4.94E-13	18216.5811
1.0323	6.44112	772.1615	2.979079	18216.58	0.844982	18887.11	3.027887	0.850565	101.6311	1.08E-12	0.131619	9.38E-13	18887.1115
1.0656	6.44112	772.1615	3.027887	18887.11	0.850565	19556.97	3.076647	0.856141	102.3	-5.8E-13	0.132485	-5.1E-13	19556.973
1.0989	6.44112	772.1615	3.076647	19556.97	0.856141	20226.17	3.125358	0.861713	102.9682	1.9E-12	0.133351	1.65E-12	20226.1663
1.1322	6.44112	772.1615	3.125358	20226.17	0.861713	20894.69	3.17402	0.867279	103.6357	2.06E-12	0.134215	1.78E-12	20894.692
1.1655	6.44112	772.1615	3.17402	20894.69	0.867279	21562.55	3.222634	0.872839	104.3026	4.26E-13	0.135079	3.69E-13	21562.5508
1.1988	6.44112	772.1615	3.222634	21562.55	0.872839	22229.74	3.2712	0.878393	104.9689	-1.3E-12	0.135942	-1.1E-12	22229.7434
1.2321	6.44112	772.1615	3.2712	22229.74	0.878393	22896.27	3.319717	0.883943	105.6344	-6.5E-12	0.136804	-5.6E-13	22896.2705
1.2654	6.44112	772.1615	3.319717	22896.27	0.883943	23562.13	3.368186	0.889486	106.2993	8.1E-13	0.137665	6.99E-13	23562.1326
1.2987	6.44112	772.1615	3.368186	23562.13	0.889486	24227.33	3.416606	0.895024	106.9636	9.95E-13	0.138525	8.57E-13	24227.3305
1.332	6.44112	772.1615	3.416606	24227.33	0.895024	24891.86	3.464978	0.900557	107.6271	-8.5E-14	0.139384	-7.3E-14	24891.8648
1.3653	5.484574	714.8261	3.464978	24891.86	0.900557	25498.45	3.506508	0.905307	108.2435	3.98E-13	0.151426	3.38E-13	25498.4474
1.3986	3.879521	561.2838	3.506508	25498.45	0.905307	25951.04	3.529988	0.907992	108.6892	4.69E-13	0.193644	3.78E-13	25951.0421
1.4319	2.29451	370.0714	3.529988	25951.04	0.907992	26212.17	3.543536	0.909542	108.943	7.39E-13	0.294384	5.21E-13	26212.1705
1.4652	1.048487	200.3793	3.543536	26212.17	0.909542	26303.48	3.548273	0.910084	109.0684	2.87E-12	0.54431	1.31E-12	26303.4814
1.4985	0.974025	121.2294	3.548273	26303.48	0.910084	26315.61	3.548902	0.910156	109.1051	1.74E-11	0.899989	1.74E-12	26315.6057
1.5318	0.899563	112.3029	3.548902	26315.61	0.910156	26318.8	3.549067	0.910175	109.1106	1.15E-09	0.971575	3.28E-11	26318.7979
1.5651	0.825101	103.3763	3.549067	26318.8	0.910175	26313.06	3.54877	0.910141	109.1097	1.21E-09	1.055461	6.7E-11	26313.0646
1.5984	0.750639	94.44981	3.54877	26313.06	0.910141	26298.41	3.54801	0.910054	109.1024	5.28E-10	1.155137	8.19E-11	26298.412
1.6317	0.676176	85.52329	3.54801	26298.41	0.910054	26274.85	3.546787	0.909914	109.0888	3.32E-10	1.275545	9.14E-11	26274.8464
1.665	0.601714	76.59677	3.546787	26274.85	0.909914	26242.37	3.545103	0.909721	109.0689	2.32E-10	1.423936	9.85E-11	26242.3743

ETENTION BASIN RATING:

ASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

INAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
ODIFIED RATIIONAL METHOD WITH STORM DURATION 90 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)	BASIN 1 INFLOW (CFS)	BASIN 2 INFLOW (CFS)	BASIN 3 INFLOW (CFS)
0	0			0		0	0							0	0	0
0.0333	1.462381	87.65513	0	0	0	74.47696	0.372385	0.219856	13.17817	-1.8E-15	0.150341	-1.5E-15	74.476959	1.136288	0.067843	0.25825
0.0666	2.924762	262.9654	0.372385	74.47696	0.219856	304.1064	0.569613	0.3363	33.33597	-7.1E-15	0.126769	-6.2E-15	304.106366	2.272576	0.135687	0.5165
0.0999	4.26454	430.9268	0.569613	304.1064	0.3363	690.0592	0.701248	0.414017	44.97397	4.26E-14	0.104366	3.82E-14	690.059174	3.408864	0.20353	0.652146
0.1332	4.940699	551.762	0.701248	690.0592	0.414017	1186.201	0.870464	0.513922	55.62065	-6.4E-14	0.100806	-5.8E-14	1186.20056	4.01718	0.271373	0.652146
0.1665	5.008542	596.3575	0.870464	1186.201	0.513922	1715.928	1.051135	0.597692	66.63013	2.84E-14	0.111728	2.52E-14	1715.92797	4.01718	0.339216	0.652146
0.1998	5.076386	604.4906	1.051135	1715.928	0.597692	2247.218	1.232339	0.623532	73.20013	4.26E-14	0.121094	3.75E-14	2247.21843	4.01718	0.40706	0.652146
0.2331	5.144229	612.6236	1.232339	2247.218	0.623532	2783.53	1.415256	0.649615	76.31243	9.95E-14	0.124567	8.71E-14	2783.52964	4.01718	0.474903	0.652146
0.2664	5.212072	620.7567	1.415256	2783.53	0.649615	3325.395	1.534104	0.666563	78.89175	2.13E-13	0.12709	1.86E-13	3325.39459	4.01718	0.542746	0.652146
0.2997	5.279916	628.8898	1.534104	3325.395	0.666563	3873.832	1.597853	0.675654	80.45249	-5.7E-14	0.127928	-5E-14	3873.83185	4.01718	0.61059	0.652146
0.333	5.347759	637.0228	1.597853	3873.832	0.675654	4429.305	1.662421	0.684861	81.54927	9.95E-14	0.128016	8.67E-14	4429.30538	4.01718	0.678433	0.652146
0.3663	5.415602	645.1559	1.662421	4429.305	0.684861	4991.801	1.727804	0.694185	82.66002	4.55E-13	0.128124	3.96E-13	4991.80122	4.01718	0.746276	0.652146
0.3996	5.483445	653.2889	1.727804	4991.801	0.694185	5561.305	1.794003	0.703625	83.78471	1.14E-13	0.128251	9.91E-14	5561.30542	4.01718	0.814119	0.652146
0.4329	5.551289	661.422	1.794003	5561.305	0.703625	6137.804	1.861014	0.713181	84.92332	-1.6E-13	0.128395	-1.4E-13	6137.80407	4.01718	0.881963	0.652146
0.4662	5.619132	669.555	1.861014	6137.804	0.713181	6721.283	1.928837	0.722852	86.0758	-1.1E-13	0.128557	-9.9E-14	6721.28328	4.01718	0.949806	0.652146
0.4995	5.686975	677.6881	1.928837	6721.283	0.722852	7311.729	1.997469	0.732639	87.24215	-2.3E-13	0.128735	-2E-13	7311.72921	4.01718	1.017649	0.652146
0.5328	5.754819	685.8211	1.997469	7311.729	0.732639	7909.241	2.066923	0.740654	88.30921	4.26E-13	0.128764	3.71E-13	7909.24112	4.01718	1.085493	0.652146
0.5661	5.822662	693.9542	2.066923	7909.241	0.740654	8513.924	2.137211	0.748693	89.27151	1.02E-12	0.128642	8.92E-13	8513.92379	4.01718	1.153336	0.652146
0.5994	5.868576	700.7728	2.137211	8513.924	0.748693	9124.457	2.208178	0.75681	90.2399	9.95E-14	0.128772	8.67E-14	9124.45668	4.01718	1.19925	0.652146
0.6327	5.868576	703.5249	2.208178	9124.457	0.75681	9736.767	2.279352	0.764951	91.21437	-3.3E-13	0.129653	-2.8E-13	9736.7672	4.01718	1.19925	0.652146
0.666	5.868576	703.5249	2.279352	9736.767	0.764951	10348.1	2.350413	0.773078	92.18948	-6.5E-13	0.131039	-5.7E-13	10348.1026	4.01718	1.19925	0.652146
0.6993	5.868576	703.5249	2.350413	10348.1	0.773078	10958.46	2.421361	0.781193	93.16304	-1.4E-14	0.132423	-1.2E-14	10958.4645	4.01718	1.19925	0.652146
0.7326	5.868576	703.5249	2.421361	10958.46	0.781193	11567.85	2.492195	0.789295	94.13505	5.68E-14	0.133805	4.92E-14	11567.8543	4.01718	1.19925	0.652146
0.7659	5.868576	703.5249	2.492195	11567.85	0.789295	12176.43	2.539411	0.794695	94.94436	1.71E-13	0.134955	1.48E-13	12176.4348	4.01718	1.19925	0.652146
0.7992	5.868576	703.5249	2.539411	12176.43	0.794695	12784.39	2.583665	0.799757	95.57144	8.81E-14	0.135847	7.61E-14	12784.3883	4.01718	1.19925	0.652146
0.8325	5.868576	703.5249	2.583665	12784.39	0.799757	13391.74	2.627874	0.804813	96.17791	3.41E-13	0.136709	2.94E-13	13391.7353	4.01718	1.19925	0.652146
0.8658	5.868576	703.5249	2.627874	13391.74	0.804813	13998.48	2.672039	0.809864	96.78378	-7.5E-13	0.13757	-6.5E-13	13998.4764	4.01718	1.19925	0.652146
0.8991	5.868576	703.5249	2.672039	13998.48	0.809864	14604.61	2.71616	0.814911	97.38903	7.82E-13	0.13843	6.73E-13	14604.6122	4.01718	1.19925	0.652146
0.9324	5.868576	703.5249	2.71616	14604.61	0.814911	15210.14	2.760238	0.819952	97.99369	8.24E-13	0.13929	7.09E-13	15210.1434	4.01718	1.19925	0.652146
0.9657	5.868576	703.5249	2.760238	15210.14	0.819952	15815.07	2.804271	0.824988	98.59774	7.11E-14	0.140148	6.11E-14	15815.0706	4.01718	1.19925	0.652146
0.999	5.868576	703.5249	2.804271	15815.07	0.824988	16419.39	2.84826	0.83002	99.20119	1.58E-12	0.141006	1.35E-12	16419.3943	4.01718	1.19925	0.652146
1.0323	5.868576	703.5249	2.84826	16419.39	0.83002	17023.12	2.892205	0.835046	99.80404	-7E-13	0.141863	-6E-13	17023.1151	4.01718	1.19925	0.652146
1.0656	5.868576	703.5249	2.892205	17023.12	0.835046	17626.23	2.936107	0.840067	100.4063	-4.8E-13	0.142719	-4.1E-13	17626.2337	4.01718	1.19925	0.652146
1.0989	5.868576	703.5249	2.936107	17626.23	0.840067	18228.75	2.979964	0.845083	101.0079	-7.4E-13	0.143574	-6.3E-13	18228.7507	4.01718	1.19925	0.652146
1.1322	5.868576	703.5249	2.979964	18228.75	0.845083	18830.67	3.023778	0.850095	101.609	-1.4E-14	0.144428	-1.2E-14	18830.6666	4.01718	1.19925	0.652146
1.1655	5.868576	703.5249	3.023778	18830.67	0.850095	19431.98	3.067549	0.855101	102.2094	-1.4E-12	0.145282	-1.2E-12	19431.9821	4.01718	1.19925	0.652146
1.1988	5.868576	703.5249	3.067549	19431.98	0.855101	20032.7	3.111275	0.860102	102.8093	-1.1E-13	0.146135	-9.7E-14	20032.6977	4.01718	1.19925	0.652146
1.2321	5.868576	703.5249	3.111275	20032.7	0.860102	20632.81	3.154958	0.865098	103.4085	1.46E-12	0.146986	1.25E-12	20632.8141	4.01718	1.19925	0.652146
1.2654	5.868576	703.5249	3.154958	20632.81	0.865098	21232.33	3.198597	0.87009	104.0072	3.13E-13	0.147837	2.66E-13	21232.3318	4.01718	1.19925	0.652146
1.2987	5.868576	703.5249	3.198597	21232.33	0.87009	21831.25	3.242193	0.875076	104.6052	-5E-13	0.148687	-4.2E-13	21831.2515	4.01718	1.19925	0.652146
1.332	5.868576	703.5249	3.242193	21831.25	0.875076	22429.57	3.285746	0.880057	105.2027	4.12E-13	0.149537	3.5E-13	22429.5737	4.01718	1.19925	0.652146
1.3653	5.868576	703.5249	3.285746	22429.57	0.880057	23027.3	3.329255	0.885033	105.7995	1.99E-12	0.150385	1.69E-12	23027.2991	4.01718	1.19925	0.652146
1.3986	5.868576	703.5249	3.329255	23027.3	0.885033	23624.43	3.37272	0.890005	106.3958	2.84E-13	0.151232	2.41E-13	23624.4282	4.01718	1.19925	0.652146
1.4319	5.868576	703.5249	3.37272	23624.43	0.890005	24220.96	3.416142	0.894971	106.9915	-1.3E-12	0.152079	-1.1E-12	24220.9616	4.01718	1.19925	0.652146
1.4652	5.868576	703.5249	3.416142	24220.96	0.894971	24816.9	3.459521	0.899933	107.5865	1.42E-13	0.152925	1.2E-13	24816.8999	4.01718	1.19925	0.652146
1.4985	5.868576	703.5249	3.459521	24816.9	0.899933	25412.25	3.502036	0.904795	108.1754	-4.1E-13	0.153762	-3.5E-13	25412.2494	4.01718	1.19925	0.652146
1.5318	5.070914	655.713	3.502036	25412.25	0.904795	25959.3	3.530417	0.908041	108.6614	-2.7E-13	0.165715	-2.3E-13	25959.301	3.397387	1.162245	0.511282
1.5651	3.608532	520.246	3.530417	25959.3	0.908041	26370.54	3.551752	0.910482	109.0023	1.69E-12	0.209521	1.34E-12	26370.5447	2.261098	1.094401	0.253033
1.5984	2.151368	345.2485	3.551752	26370.54	0.910482	26606.56	3.563996	0.911882	109.2325	-3.6E-13	0.316388	-2.4E-13	26606.5607	1.12481	1.026558	0
1.6317	0.958715	186.4184	3.563996	26606.56	0.911882	26683.64	3.567995	0.912339	109.3438	3.62E-12	0.586551	1.5E-12	26683.6352	0	0.958715	0
1.665	0.890871	110.8642	3.567995	26683.64	0.912339	26685.13	3.568072	0.912348	109.3718	5.48E-05	0.986539	7.38E-07	26685.1276	0	0.890871	0

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

1.6983	0.823028	102.7311	3.568072	26685.13	0.912348	26678.49	3.567728	0.912309	109.3699	1.44E-05	1.064623	9.32E-07	26678.4888	0	0.823028	0
1.7316	0.755185	94.59809	3.567728	26678.49	0.912309	26663.72	3.566962	0.912221	109.3623	6.53E-06	1.156074	1.02E-06	26663.7245	0	0.755185	0
1.7649	0.687342	86.46503	3.566962	26663.72	0.912221	26640.84	3.565775	0.912085	109.3489	4.05E-06	1.264661	1.07E-06	26640.8406	0	0.687342	0
1.7982	0.619498	78.33198	3.565775	26640.84	0.912085	26609.84	3.564167	0.911902	109.3298	2.8E-06	1.395724	1.11E-06	26609.8428	0	0.619498	0
1.8315	0.551655	70.19893	3.564167	26609.84	0.911902	26570.74	3.562138	0.91167	109.3048	2.04E-06	1.557073	1.14E-06	26570.7369	0	0.551655	0
1.8648	0.483812	62.06587	3.562138	26570.74	0.91167	26523.53	3.559689	0.911389	109.2742	1.52E-06	1.760616	1.16E-06	26523.5286	0	0.483812	0
1.8981	0.415968	53.93282	3.559689	26523.53	0.911389	26468.22	3.556819	0.911061	109.2377	9.61E-05	2.025444	2.44E-06	26468.2236	0	0.415968	0
1.9314	0.348125	45.79977	3.556819	26468.22	0.911061	26404.83	3.553531	0.910685	109.1955	6.59E-06	2.384193	2.53E-06	26404.8279	0	0.348125	0
1.9647	0.280282	37.66672	3.553531	26404.83	0.910685	26333.35	3.549822	0.910261	109.1475	2.86E-06	2.897718	2.57E-06	26333.3471	0	0.280282	0
1.998	0.212439	29.53366	3.549822	26333.35	0.910261	26253.79	3.545695	0.909789	109.0938	3.77E-06	3.69388	2.62E-06	26253.787	0	0.212439	0
2.0313	0.144595	21.40061	3.545695	26253.79	0.909789	26166.15	3.541148	0.909269	109.0343	3.21E-05	5.094924	3.04E-06	26166.1533	0	0.144595	0
2.0646	0.076752	13.26756	3.541148	26166.15	0.909269	26070.45	3.536183	0.908701	108.9691	1.52E-05	8.213211	3.25E-06	26070.4517	0	0.076752	0
2.0979	0.008909	5.134503	3.536183	26070.45	0.908701	25966.69	3.5308	0.908085	108.8982	1.66E-05	21.20916	3.47E-06	25966.688	0	0.008909	0
2.1312	0.001	0.593928	3.5308	25966.69	0.908085	25858.46	3.525185	0.907443	108.8228	0.002505	184.0014	3.52E-06	25858.4567	0	0	0
2.1645	0.001	0.11988	3.525185	25858.46	0.907443	25749.83	3.51955	0.906799	108.7456	1.54E-05	907.2374	3.66E-06	25749.8309	0	0	0
2.1978	0.001	0.11988	3.51955	25749.83	0.906799	25641.28	3.513918	0.906154	108.6684	7.06E-06	906.5298	3.74E-06	25641.2824	0	0	0
2.2311	0.001	0.11988	3.513918	25641.28	0.906154	25532.81	3.508291	0.905511	108.5912	3.63E-05	906.1067	3.87E-06	25532.811	0	0	0
2.2644	0.001	0.11988	3.508291	25532.81	0.905511	25424.42	3.502667	0.904868	108.5141	1.37E-05	905.2924	4E-06	25424.4168	0	0	0

Table 22N

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 2 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 100 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	1.31971	79.10341	0	0	0	67.21091	0.336055	0.198407	11.89249	-3.6E-15	0.150341	-3E-15	67.2109143
0.0666	2.63942	237.3102	0.336055	67.21091	0.198407	272.8481	0.558952	0.330005	31.67302	1.07E-14	0.133467	9.24E-15	272.848117
0.0999	3.848487	388.8851	0.558952	272.8481	0.330005	618.0062	0.676673	0.399508	43.72703	-4.3E-14	0.112442	-3.8E-14	618.006231
0.1332	4.45868	497.9316	0.676673	618.0062	0.399508	1062.678	0.828335	0.489049	53.2601	5.68E-14	0.106963	5.08E-14	1062.67773
0.1665	4.519904	538.1763	0.828335	1062.678	0.489049	1536.508	0.989941	0.584461	64.3462	9.95E-14	0.119563	8.76E-14	1536.50784
0.1998	4.581129	545.5159	0.989941	1536.508	0.584461	2010.307	1.151537	0.612009	71.71644	-2.8E-14	0.131465	-2.5E-14	2010.3073
0.2331	4.642353	552.8555	1.151537	2010.307	0.612009	2488.401	1.314598	0.635262	74.76142	-2E-13	0.135228	-1.7E-13	2488.40137
0.2664	4.703577	560.1951	1.314598	2488.401	0.635262	2971.034	1.479207	0.658735	77.56215	-1.4E-14	0.138456	-1.2E-14	2971.03428
0.2997	4.764802	567.5347	1.479207	2971.034	0.658735	3458.998	1.549634	0.668778	79.57111	-5.7E-14	0.140205	-4.9E-14	3458.99783
0.333	4.826026	574.8742	1.549634	3458.998	0.668778	3953.208	1.60708	0.67697	80.6641	-4.3E-14	0.140316	-3.7E-14	3953.20797
0.3663	4.887251	582.2138	1.60708	3953.208	0.67697	4453.769	1.665264	0.685267	81.65244	2.13E-13	0.140245	1.83E-13	4453.76935
0.3996	4.948475	589.5534	1.665264	4453.769	0.685267	4960.669	1.724186	0.693669	82.6534	-9.9E-14	0.140197	-8.6E-14	4960.66936
0.4329	5.0097	596.893	1.724186	4960.669	0.693669	5473.895	1.783842	0.702176	83.66694	-7.1E-14	0.140171	-6.1E-14	5473.89542
0.4662	5.070924	604.2326	1.783842	5473.895	0.702176	5993.435	1.844233	0.710788	84.69303	7.11E-14	0.140166	6.11E-14	5993.43496
0.4995	5.132148	611.5722	1.844233	5993.435	0.710788	6519.275	1.905356	0.719504	85.73166	4.97E-13	0.140182	4.28E-13	6519.27546
0.5328	5.193373	618.9117	1.905356	6519.275	0.719504	7051.404	1.96721	0.728324	86.7828	3.84E-13	0.140218	3.3E-13	7051.40441
0.5661	5.254597	626.2513	1.96721	7051.404	0.728324	7589.86	2.029799	0.736408	87.79606	-2.6E-13	0.140193	-2.2E-13	7589.85968
0.5994	5.296032	632.4047	2.029799	7589.86	0.736408	8133.551	2.092997	0.743636	88.71388	4.97E-13	0.14028	4.28E-13	8133.55052
0.6327	5.296032	634.8883	2.092997	8133.551	0.743636	8678.857	2.156382	0.750886	89.58169	-3.3E-13	0.141098	-2.8E-13	8678.85714
0.666	5.296032	634.8883	2.156382	8678.857	0.750886	9223.295	2.219667	0.758124	90.4501	4.12E-13	0.142466	3.53E-13	9223.29536
0.6993	5.296032	634.8883	2.219667	9223.295	0.758124	9766.867	2.282851	0.765351	91.31712	6.68E-13	0.143832	5.72E-13	9766.86656
0.7326	5.296032	634.8883	2.282851	9766.867	0.765351	10309.57	2.345934	0.772566	92.18276	1.14E-13	0.145195	9.72E-14	10309.5721
0.7659	5.296032	634.8883	2.345934	10309.57	0.772566	10851.41	2.408917	0.77977	93.04703	-4.7E-13	0.146557	-4E-13	10851.4134
0.7992	5.296032	634.8883	2.408917	10851.41	0.77977	11392.39	2.4718	0.786962	93.90991	-1.1E-13	0.147916	-9.7E-14	11392.3918
0.8325	5.296032	634.8883	2.4718	11392.39	0.786962	11932.6	2.521662	0.792665	94.68285	-6.7E-13	0.149133	-5.7E-13	11932.5973
0.8658	5.296032	634.8883	2.521662	11932.6	0.792665	12472.19	2.56094	0.797157	95.29397	4.41E-13	0.150096	3.74E-13	12472.1916
0.8991	5.296032	634.8883	2.56094	12472.19	0.797157	13011.25	2.600178	0.801645	95.83224	2.98E-13	0.150943	2.53E-13	13011.2477
0.9324	5.296032	634.8883	2.600178	13011.25	0.801645	13549.77	2.639377	0.806129	96.36998	3.69E-13	0.15179	3.13E-13	13549.766
0.9657	5.296032	634.8883	2.639377	13549.77	0.806129	14087.75	2.678537	0.810608	96.90719	2.7E-13	0.152637	2.29E-13	14087.7471
0.999	5.296032	634.8883	2.678537	14087.75	0.810608	14625.19	2.717658	0.815082	97.44385	1.04E-12	0.153482	8.78E-13	14625.1916
1.0323	5.296032	634.8883	2.717658	14625.19	0.815082	15162.1	2.75674	0.819552	97.97998	8.67E-13	0.154326	7.33E-13	15162.0999
1.0656	5.296032	634.8883	2.75674	15162.1	0.819552	15698.47	2.795783	0.824018	98.51558	1.42E-13	0.15517	1.2E-13	15698.4727
1.0989	5.296032	634.8883	2.795783	15698.47	0.824018	16234.31	2.834787	0.828479	99.05064	7.67E-13	0.156013	6.48E-13	16234.3103
1.1322	5.296032	634.8883	2.834787	16234.31	0.828479	16769.61	2.873753	0.832935	99.58517	2.15E-12	0.156855	1.81E-12	16769.6135
1.1655	5.296032	634.8883	2.873753	16769.61	0.832935	17304.38	2.912679	0.837388	100.1192	-1.3E-12	0.157696	-1.1E-12	17304.3826
1.1988	5.296032	634.8883	2.912679	17304.38	0.837388	17838.62	2.951566	0.841835	100.6526	-4.5E-13	0.158536	-3.8E-13	17838.6183
1.2321	5.296032	634.8883	2.951566	17838.62	0.841835	18372.32	2.990415	0.846279	101.1856	2.13E-12	0.159375	1.79E-12	18372.3211
1.2654	5.296032	634.8883	2.990415	18372.32	0.846279	18905.49	3.029225	0.850718	101.718	1.22E-12	0.160214	1.03E-12	18905.4914
1.2987	5.296032	634.8883	3.029225	18905.49	0.850718	19438.13	3.067996	0.855152	102.2498	8.38E-13	0.161052	7.03E-13	19438.1299
1.332	5.296032	634.8883	3.067996	19438.13	0.855152	19970.24	3.106729	0.859582	102.7812	-7.2E-13	0.161889	-6.1E-13	19970.2371
1.3653	5.296032	634.8883	3.106729	19970.24	0.859582	20501.81	3.145422	0.864008	103.312	-5.7E-13	0.162725	-4.8E-13	20501.8134
1.3986	5.296032	634.8883	3.145422	20501.81	0.864008	21032.86	3.184078	0.868429	103.8422	1.07E-12	0.16356	8.91E-13	21032.8595
1.4319	5.296032	634.8883	3.184078	21032.86	0.868429	21563.38	3.222694	0.872846	104.372	2.7E-13	0.164394	2.26E-13	21563.3758
1.4652	5.296032	634.8883	3.222694	21563.38	0.872846	22093.36	3.261273	0.877258	104.9012	-2.4E-13	0.165228	-2E-13	22093.3629
1.4985	5.296032	634.8883	3.261273	22093.36	0.877258	22622.82	3.299812	0.881666	105.4299	1.21E-12	0.166061	1.01E-12	22622.8213
1.5318	5.296032	634.8883	3.299812	22622.82	0.881666	23151.75	3.338314	0.88607	105.9581	1.01E-12	0.166892	8.41E-13	23151.7516
1.5651	5.296032	634.8883	3.338314	23151.75	0.88607	23680.15	3.376776	0.890469	106.4857	6.39E-13	0.167724	5.32E-13	23680.1542
1.5984	5.296032	634.8883	3.376776	23680.15	0.890469	24208.03	3.415201	0.894864	107.0128	-1.1E-12	0.168554	-8.9E-13	24208.0297
1.6317	5.296032	634.8883	3.415201	24208.03	0.894864	24735.38	3.453587	0.899254	107.5394	-1.2E-12	0.169383	-1E-12	24735.3786
1.665	5.296032	634.8883	3.453587	24735.38	0.899254	25262.2	3.491935	0.90364	108.0655	-6.5E-13	0.170212	-5.4E-13	25262.2014

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	8.135
5.5	9.828

1.6983	4.642842	595.7361	3.491935	25262.2	0.90364	25749.42	3.519528	0.906796	108.5175	6.25E-13	0.182157	5.11E-13	25749.42
1.7316	3.323132	477.4805	3.519528	25749.42	0.906796	26118.06	3.538653	0.908983	108.8378	-2.8E-14	0.227942	-2.2E-14	26118.0627
1.7649	2.003423	319.2737	3.538653	26118.06	0.908983	26328.29	3.54956	0.910231	109.0437	1.56E-12	0.341537	1.03E-12	26328.2927
1.7982	0.909705	174.6129	3.54956	26328.29	0.910231	26393.76	3.552957	0.910619	109.1418	4.58E-12	0.62505	1.72E-12	26393.7638
1.8315	0.807049	102.9023	3.552957	26393.76	0.910619	26387.5	3.552632	0.910582	109.1628	2.69E-11	1.06084	1.64E-12	26387.5033
1.8648	0.745825	93.07928	3.552632	26387.5	0.910582	26371.43	3.551798	0.910487	109.1549	6.98E-12	1.172709	1.21E-12	26371.4276
1.8981	0.6846	85.73969	3.551798	26371.43	0.910487	26348.03	3.550584	0.910348	109.1408	6.58E-12	1.272933	1.8E-12	26348.0265
1.9314	0.623376	78.40011	3.550584	26348.03	0.910348	26317.31	3.54899	0.910166	109.1216	3.98E-12	1.391855	1.56E-12	26317.305
1.9647	0.562152	71.06052	3.54899	26317.31	0.910166	26279.27	3.547017	0.90994	109.0971	2.39E-12	1.535271	1.28E-12	26279.2684
1.998	0.500927	63.72094	3.547017	26279.27	0.90994	26233.92	3.544664	0.909671	109.0675	1.52E-12	1.711643	1.08E-12	26233.9219
2.0313	0.439703	56.38135	3.544664	26233.92	0.909671	26181.27	3.541933	0.909359	109.0326	-6E-13	1.933842	-5.6E-13	26181.2706
2.0646	0.378478	49.04177	3.541933	26181.27	0.909359	26121.32	3.538822	0.909003	108.9926	7.08E-12	2.222444	1.57E-12	26121.3198
2.0979	0.317254	41.70218	3.538822	26121.32	0.909003	26054.07	3.535334	0.908604	108.9473	-6.6E-13	2.612509	-4E-13	26054.0746
2.1312	0.256029	34.3626	3.535334	26054.07	0.908604	25979.54	3.531467	0.908162	108.8969	7.5E-12	3.169053	1.27E-12	25979.5403
2.1645	0.194805	27.02302	3.531467	25979.54	0.908162	25897.72	3.527222	0.907676	108.8413	-6.3E-11	4.027726	-1.7E-12	25897.722
2.1978	0.133581	19.68343	3.527222	25897.72	0.907676	25808.62	3.5226	0.907147	108.7805	-3.3E-12	5.526502	-1.7E-12	25808.6249
2.2311	0.072356	12.34385	3.5226	25808.62	0.907147	25712.25	3.5176	0.906576	108.7146	1.33E-12	8.807186	1.07E-12	25712.2542
2.2644	0.011132	5.004262	3.5176	25712.25	0.906576	25608.62	3.512224	0.905961	108.6434	-2.1E-13	21.71018	-1.5E-13	25608.6151
2.2977	0.001	0.727175	3.512224	25608.62	0.905961	25500.77	3.506629	0.905321	108.5682	-3.5E-12	149.3013	-1.1E-12	25500.7741
2.331	0.001	0.11988	3.506629	25500.77	0.905321	25392.4	3.501007	0.904678	108.4913	1.23E-12	904.9992	1.23E-12	25392.4026
2.3643	0.001	0.11988	3.501007	25392.4	0.904678	25284.12	3.49353	0.903823	108.4015	-4.9E-12	904.2501	-1.2E-12	25284.121
2.3976	0.001	0.11988	3.49353	25284.12	0.903823	25175.94	3.485656	0.902922	108.2963	-3.8E-12	903.3722	-1.4E-12	25175.9446
2.4309	0.001	0.11988	3.485656	25175.94	0.902922	25067.88	3.47779	0.902022	108.1884	-3.3E-12	902.4721	-1.5E-12	25067.8762
2.4642	0.001	0.11988	3.47779	25067.88	0.902022	24959.92	3.469931	0.901123	108.0805	4.81E-14	901.5728	2.76E-14	24959.9155
2.4975	0.001	0.11988	3.469931	24959.92	0.901123	24852.06	3.462081	0.900225	107.9728	-1.5E-12	900.6744	-1E-12	24852.0625
2.5308	0.001	0.11988	3.462081	24852.06	0.900225	24744.32	3.454238	0.899328	107.8653	1E-12	899.7769	7.77E-13	24744.3171
2.5641	0.001	0.11988	3.454238	24744.32	0.899328	24636.68	3.446403	0.898432	107.7578	3.04E-13	898.8804	2.68E-13	24636.6792

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 5 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0		0	0				
0.0333	25.72555	1541.99	0	0	0	1507.309	0.979983	0.578582	34.68019	2.13E-14	0.022491	2.08E-14	1507.309
0.0666	51.45111	4625.969	0.979983	1507.309	0.578582	6055.931	1.851497	0.711824	77.3469	-1.6E-13	0.01672	-1.5E-13	6055.931
0.0999	53.45032	6287.791	1.851497	6055.931	0.711824	12253.38	2.545013	0.795336	90.33913	-4.7E-13	0.014367	-4.6E-13	12253.38
0.1332	29.19912	4954.007	2.545013	12253.38	0.795336	17109.62	2.898502	0.835766	97.76825	-8.7E-13	0.019735	-8.5E-13	17109.62
0.1665	4.947915	2046.773	2.898502	17109.62	0.835766	19055.23	3.040125	0.851964	101.1626	-4.3E-13	0.049425	-4.1E-13	19055.23
0.1998	3.723107	519.7411	3.040125	19055.23	0.851964	19472.63	3.070508	0.855439	102.3418	1.22E-12	0.196909	9.81E-13	19472.63
0.2331	3.723107	446.3261	3.070508	19472.63	0.855439	19816.24	3.095519	0.8583	102.7215	6.54E-13	0.230149	5.03E-13	19816.24
0.2664	3.723107	446.3261	3.095519	19816.24	0.8583	20159.5	3.120505	0.861158	103.0643	3.27E-13	0.230917	2.51E-13	20159.5
0.2997	3.723107	446.3261	3.120505	20159.5	0.861158	20502.42	3.145466	0.864013	103.4067	-9.8E-13	0.231684	-7.5E-13	20502.42
0.333	3.723107	446.3261	3.145466	20502.42	0.864013	20845	3.170403	0.866865	103.7488	2.29E-12	0.232451	1.76E-12	20845
0.3663	3.142302	411.5126	3.170403	20845	0.866865	21152.44	3.192782	0.869424	104.0732	6.82E-13	0.252904	5.1E-13	21152.44
0.3996	1.667952	288.3267	3.192782	21152.44	0.869424	21336.44	3.206176	0.870956	104.3184	2.16E-12	0.361806	1.38E-12	21336.44
0.4329	0.193602	111.5815	3.206176	21336.44	0.870956	21343.61	3.206698	0.871016	104.4138	2.69E-11	0.935763	1.73E-12	21343.61
0.4662	0.001	11.66442	3.206698	21343.61	0.871016	21250.9	3.199949	0.870244	104.3711	-1.5E-12	8.947822	-1.4E-12	21250.9
0.4995	0.001	0.11988	3.199949	21250.9	0.870244	21146.75	3.192368	0.869377	104.2729	-8.3E-13	869.8106	-6.8E-13	21146.75
0.5328	0.001	0.11988	3.192368	21146.75	0.869377	21042.7	3.184794	0.868511	104.169	-1.5E-12	868.944	-1.4E-12	21042.7
0.5661	0.001	0.11988	3.184794	21042.7	0.868511	20938.76	3.177228	0.867645	104.0652	2.02E-11	868.0781	1.58E-12	20938.76
0.5994	0.001	0.11988	3.177228	20938.76	0.867645	20834.92	3.169669	0.86781	103.9615	5.7E-12	867.2132	1.22E-12	20834.92
0.6327	0.001	0.11988	3.169669	20834.92	0.866781	20731.18	3.162118	0.865917	103.8579	4.87E-12	866.3491	1.7E-12	20731.18
0.666	0.001	0.11988	3.162118	20731.18	0.865917	20627.54	3.154574	0.865054	103.7544	9.15E-13	865.4858	4.44E-13	20627.54
0.6993	0.001	0.11988	3.154574	20627.54	0.865054	20524.01	3.147038	0.864192	103.6511	5.22E-05	865	8.53E-13	20524.01
0.7326	0.001	0.11988	3.147038	20524.01	0.864192	20420.58	3.13951	0.863331	103.5478	3.3E-05	864	1.68E-12	20420.58
0.7659	0.001	0.11988	3.13951	20420.58	0.863331	20317.26	3.131989	0.862471	103.4446	1.37E-05	863	1.73E-12	20317.26
0.7992	0.001	0.11988	3.131989	20317.26	0.862471	20214.04	3.124475	0.861612	103.3415	4.26E-11	862.0415	1.77E-12	20214.04
0.8325	0.001	0.11988	3.124475	20214.04	0.861612	20110.92	3.116969	0.860753	103.2386	9.14E-12	861.1826	1.67E-12	20110.92
0.8658	0.001	0.11988	3.116969	20110.92	0.860753	20007.9	3.10947	0.859896	103.1357	5.42E-12	860.3245	1.76E-12	20007.9
0.8991	0.001	0.11988	3.10947	20007.9	0.859896	19904.99	3.101979	0.859039	103.0329	7.43E-05	860	1.78E-12	19904.99
0.9324	0.001	0.11988	3.101979	19904.99	0.859039	19802.18	3.094495	0.858183	102.9303	5.59E-13	858.6109	3.42E-13	19802.18
0.9657	0.001	0.11988	3.094495	19802.18	0.858183	19699.47	3.087019	0.857328	102.8277	3.42E-05	858	1.21E-12	19699.47
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 23A

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 10 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	19.74891	1183.75	0	0	0	1153.342	0.859257	0.507305	30.40788	-1.1E-13	0.025688	-1.1E-13	1153.342
0.0666	39.49782	3551.249	0.859257	1153.342	0.507305	4632.93	1.68609	0.688236	71.66077	-1.4E-13	0.020179	-1.4E-13	4632.93
0.0999	50.40831	5388.974	1.68609	4632.93	0.688236	9934.642	2.302353	0.767582	87.26173	5.12E-13	0.016193	5.03E-13	9934.642
0.1332	51.54014	6110.79	2.302353	9934.642	0.767582	15949.91	2.814085	0.826111	95.52594	3.98E-13	0.015632	3.92E-13	15949.91
0.1665	52.67196	6246.473	2.814085	15949.91	0.826111	22094.28	3.261339	0.877266	102.1004	1.18E-12	0.016345	1.16E-12	22094.28
0.1998	35.0523	5258.192	3.261339	22094.28	0.877266	27245	3.597118	0.91567	107.4686	4.41E-13	0.020438	4.32E-13	27245
0.2331	16.43521	3086.161	3.597118	27245	0.91567	30161.53	3.748426	1.91441	169.635	-9.7E-13	0.054966	-9.1E-13	30161.53
0.2664	5.716286	1327.761	3.748426	30161.53	1.91441	31237.29	3.804235	2.289823	252.0017	1.19E-12	0.189795	9.67E-13	31237.29
0.2997	5.716286	685.2683	3.804235	31237.29	2.289823	31639.64	3.825109	2.430232	282.9201	1.71E-13	0.41286	1E-13	31639.64
0.333	5.716286	685.2683	3.825109	31639.64	2.430232	32025.5	3.845127	2.564888	299.4075	1.14E-12	0.43692	6.4E-13	32025.5
0.3663	5.270415	658.5429	3.845127	32025.5	2.564888	32369.37	3.862967	2.684891	314.6717	2.44E-12	0.47783	1.28E-12	32369.37
0.3996	4.138591	563.9758	3.862967	32369.37	2.684891	32606.52	3.87527	2.76765	326.8253	3.98E-12	0.579502	1.67E-12	32606.52
0.4329	3.006766	428.2927	3.87527	32606.52	2.76765	32701.05	3.880174	2.800639	333.7632	5.23E-12	0.779288	1.15E-12	32701.05
0.4662	1.874942	292.6096	3.880174	32701.05	2.800639	32658.8	3.877982	2.785895	334.8568	1.13E-11	1.144381	1.63E-12	32658.8
0.4995	0.743117	156.9264	3.877982	32658.8	2.785895	32485.38	3.868986	2.725376	330.3456	1.53E-11	2.105098	1.61E-12	32485.38
0.5328	0.001	44.60238	3.868986	32485.38	2.725376	32209.05	3.854649	2.628942	320.9379	6.4E-12	7.195532	1.25E-12	32209.05
0.5661	0.001	0.11988	3.854649	32209.05	2.628942	31900.46	3.83864	2.521255	308.7028	-1.5E-11	2575.098	-1.4E-12	31900.46
0.5994	0.001	0.11988	3.83864	31900.46	2.521255	31604.53	3.823287	2.41798	296.0577	-1.2E-12	2469.617	-7.5E-13	31604.53
0.6327	0.001	0.11988	3.823287	31604.53	2.41798	31320.71	3.808563	2.318937	283.9308	-4.8E-13	2368.458	-2.2E-13	31320.71
0.666	0.001	0.11988	3.808563	31320.71	2.318937	31048.53	3.794443	2.223952	272.3008	-1.1E-12	2271.445	-4.9E-13	31048.53
0.6993	0.001	0.11988	3.794443	31048.53	2.223952	30787.51	3.780901	2.13286	261.1474	-1.6E-12	2178.406	-6.3E-13	30787.51
0.7326	0.001	0.11988	3.780901	30787.51	2.13286	30537.18	3.767914	2.045501	250.451	-6.4E-12	2089.181	-1.2E-12	30537.18
0.7659	0.001	0.11988	3.767914	30537.18	2.045501	30297.1	3.755459	1.961722	240.1929	3.18E-13	2003.611	1.94E-13	30297.1
0.7992	0.001	0.11988	3.755459	30297.1	1.961722	30066.87	3.743515	1.881375	230.3552	-1.7E-12	1921.548	-9.2E-13	30066.87
0.8325	0.001	0.11988	3.743515	30066.87	1.881375	29846.07	3.73206	1.804321	220.9207	-1.2E-12	1842.848	-1.1E-12	29846.07
0.8658	0.001	0.11988	3.73206	29846.07	1.804321	29634.31	3.721074	1.730425	211.8727	-4.7E-12	1767.373	-1.8E-12	29634.31
0.8991	0.001	0.11988	3.721074	29634.31	1.730425	29431.24	3.710539	1.659557	203.1955	6.67E-07	1695	1.07E-10	29431.24
0.9324	0.001	0.11988	3.710539	29431.24	1.659557	29236.48	3.700435	1.591592	194.8739	3.14E-05	1626	1.05E-10	29236.48
0.9657	0.001	0.11988	3.700435	29236.48	1.591592	29049.71	3.690745	1.526413	186.8932	1.52E-07	1559.005	7.11E-10	29049.71
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 23B

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 15 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	16.83854	1009.302	0	0	0	980.9749	0.800469	0.472597	28.32745	2.49E-14	0.028066	2.42E-14	980.9749
0.0666	33.67709	3027.907	0.800469	980.9749	0.472597	3939.99	1.605543	0.67675	68.89188	1.85E-13	0.022752	1.81E-13	3939.99
0.0999	42.97972	4594.809	1.605543	3939.99	0.67675	8449.409	2.129712	0.747836	85.3897	-9.9E-14	0.018584	-9.8E-14	8449.409
0.1332	43.94475	5210.253	2.129712	8449.409	0.747836	13566.51	2.640596	0.806268	93.15299	1.42E-13	0.017879	1.4E-13	13566.51
0.1665	44.90978	5325.94	2.640596	13566.51	0.806268	18793.19	3.02105	0.849783	99.26368	-1.4E-13	0.018638	-1.4E-13	18793.19
0.1998	45.87481	5441.628	3.02105	18793.19	0.849783	24130.28	3.409541	0.894216	104.5353	1.48E-12	0.01921	1.45E-12	24130.28
0.2331	46.83984	5557.316	3.409541	24130.28	0.894216	29532.41	3.715787	1.694862	155.1893	-1.4E-12	0.027925	-1.4E-12	29532.41
0.2664	40.66124	5244.815	3.715787	29532.41	1.694862	34470.74	3.971985	3.418217	306.4779	-2E-12	0.058434	-1.9E-12	34470.74
0.2997	24.78773	3923.011	3.971985	34470.74	3.418217	37911.99	4.150515	4.619128	481.7585	2.16E-12	0.122803	1.89E-12	37911.99
0.333	8.914214	2020.094	4.150515	37911.99	4.619128	39348.3	4.225029	5.120364	583.7852	2.39E-12	0.288989	1.7E-12	39348.3
0.3663	6.930665	949.7421	4.225029	39348.3	5.120364	39677.33	4.242099	5.235188	620.7118	5.12E-12	0.653558	1.77E-12	39677.33
0.3996	5.965636	773.0043	4.242099	39677.33	5.235188	39819.76	4.249488	5.284892	630.5736	1.35E-11	0.815744	2.49E-12	39819.76
0.4329	5.000607	657.3166	4.249488	39819.76	5.284892	39843.04	4.250696	5.293015	634.0398	1.24E-05	0.964588	4.4E-07	39843.04
0.4662	4.035577	541.6289	4.250696	39843.04	5.293015	39752.05	4.245975	5.261261	632.6233	3.18E-06	1.168001	5.34E-07	39752.05
0.4995	3.070548	425.9412	4.245975	39752.05	5.261261	39551.46	4.235569	5.191262	626.5242	1.18E-06	1.470917	5.54E-07	39551.46
0.5328	2.105519	310.2534	4.235569	39551.46	5.191262	39243.5	4.219592	5.083791	615.8867	2.328739	2.000121	0.000282	39243.5
0.5661	1.140489	194.5657	4.219592	39243.5	5.083791	38837.12	4.198509	4.941974	600.9444	0.003676	3.088703	0.000326	38837.12
0.5994	0.17546	78.87799	4.198509	38837.12	4.941974	38334.08	4.172412	4.766424	581.9214	0.000863	7.377568	0.000326	38334.08
0.6327	0.001	10.57701	4.172412	38334.08	4.766424	37784.73	4.143912	4.574715	559.9079	0.016957	53.02134	0.000362	37784.73
0.666	0.001	0.11988	4.143912	37784.73	4.574715	37247.66	4.11605	4.387294	537.1828	0.000663	4505.922	0.000611	37247.66
0.6993	0.001	0.11988	4.11605	37247.66	4.387294	36732.61	4.089329	4.207552	515.175	0.001024	4334.454	0.000465	36732.61
0.7326	0.001	0.11988	4.089329	36732.61	4.207552	36238.66	4.063703	4.035176	494.0691	0.000349	4133.408	0.000143	36238.66
0.7659	0.001	0.11988	4.063703	36238.66	4.035176	35764.95	4.039127	3.869864	473.8281	0.000298	3962.365	0.000109	35764.95
0.7992	0.001	0.11988	4.039127	35764.95	3.869864	35310.65	4.015559	3.711325	454.4165	0.000324	3800.88	0.000285	35310.65
0.8325	0.001	0.11988	4.015559	35310.65	3.711325	34874.97	3.992956	3.559283	435.8003	0.001096	3668.858	0.000941	34874.97
0.8658	0.001	0.11988	3.992956	34874.97	3.559283	34457.14	3.971279	3.413472	417.9469	0.001541	3531.776	0.001195	34457.14
0.8991	0.001	0.11988	3.971279	34457.14	3.413472	34056.44	3.950491	3.273635	400.8252	0.000204	3349.262	5.36E-05	34056.44
0.9324	0.001	0.11988	3.950491	34056.44	3.273635	33672.15	3.930554	3.139529	384.4051	0.001076	3235.636	0.000684	33672.15
0.9657	0.001	0.11988	3.930554	33672.15	3.139529	33303.61	3.911435	3.010918	368.6578	0.000676	3092.675	0.000457	33303.61
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 23C

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 20 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	14.75971	884.6971	0	0	0	857.8556	0.758477	0.447805	26.84143	-2.5E-14	0.03034	-2.4E-14	857.8556
0.0666	29.51942	2654.091	0.758477	857.8556	0.447805	3445.033	1.54801	0.668546	66.9141	-1.6E-13	0.025212	-1.5E-13	3445.033
0.0999	37.67358	4027.549	1.54801	3445.033	0.668546	7388.529	2.006396	0.733732	84.05254	1.28E-13	0.020869	1.25E-13	7388.529
0.1332	38.51947	4567.012	2.006396	7388.529	0.733732	11864.08	2.516675	0.792095	91.45803	2.13E-13	0.020026	2.09E-13	11864.08
0.1665	39.36536	4668.417	2.516675	11864.08	0.792095	16435.26	2.849415	0.830152	97.23746	7.39E-13	0.020829	7.24E-13	16435.26
0.1998	40.21125	4769.822	2.849415	16435.26	0.830152	21103.24	3.1892	0.869015	101.848	-6E-13	0.021353	-5.8E-13	21103.24
0.2331	41.05714	4871.227	3.1892	21103.24	0.869015	25867.98	3.525679	0.9075	106.4843	1.14E-13	0.02186	1.11E-13	25867.98
0.2664	41.90303	4972.633	3.525679	25867.98	0.9075	30661.02	3.774339	2.088719	179.5934	2.84E-13	0.036116	2.74E-13	30661.02
0.2997	42.74892	5074.038	3.774339	30661.02	2.088719	35385.83	4.019459	3.73756	349.2272	1.82E-12	0.068826	1.69E-12	35385.83
0.333	43.59481	5175.443	4.019459	35385.83	3.73756	40016.36	4.259687	5.353497	544.918	1.59E-12	0.105289	1.42E-12	40016.36
0.3663	30.83864	4461.541	4.259687	40016.36	5.353497	43757.86	4.453794	6.659187	720.0403	3.75E-12	0.161388	3.15E-12	43757.86
0.3996	16.07893	2812.239	4.453794	43757.86	6.659187	45746.54	4.556965	7.080513	823.5576	1.25E-12	0.292848	8.84E-13	45746.54
0.4329	6.519334	1354.54	4.556965	45746.54	7.080513	46249.23	4.583045	7.131107	851.8445	9.21E-12	0.628881	3.42E-12	46249.23
0.4662	5.673444	730.8351	4.583045	46249.23	7.131107	46125.93	4.576648	7.118698	854.1333	1.97E-11	1.168709	3.32E-12	46125.93
0.4995	4.827554	629.4298	4.576648	46125.93	7.118698	45903.32	4.565099	7.096292	852.0465	6.14E-12	1.35368	2.17E-12	45903.32
0.5328	3.981664	528.0245	4.565099	45903.32	7.096292	45582.57	4.548459	7.064011	848.7686	1.82E-12	1.607442	1.1E-12	45582.57
0.5661	3.135774	426.6192	4.548459	45582.57	7.064011	45164.88	4.526789	7.021971	844.3138	2.44E-12	1.979081	2.39E-12	45164.88
0.5994	2.289884	325.2139	4.526789	45164.88	7.021971	44651.4	4.50015	6.970292	838.6962	1.53E-12	2.578906	8.88E-13	44651.4
0.6327	1.443994	223.8086	4.50015	44651.4	6.970292	44052.1	4.469059	6.761871	823.1058	3.89E-12	3.677721	2.64E-12	44052.1
0.666	0.598104	122.4034	4.469059	44052.1	6.761871	43377.99	4.434087	6.526624	796.5124	2.84E-12	6.507276	1.44E-12	43377.99
0.6993	0.001	35.91029	4.434087	43377.99	6.526624	42646.78	4.396152	6.271451	767.1166	-8.9E-12	21.36203	-3.2E-12	42646.78
0.7326	0.001	0.11988	4.396152	42646.78	6.271451	41910.48	4.357954	6.014501	736.42	2.88E-12	6142.976	2.81E-12	41910.48
0.7659	0.001	0.11988	4.357954	41910.48	6.014501	41204.36	4.32132	5.76808	706.2479	-1.2E-11	5891.291	-3.4E-12	41204.36
0.7992	0.001	0.11988	4.32132	41204.36	5.76808	40527.16	4.286188	5.531757	677.3122	3.1E-12	5649.918	2.85E-12	40527.16
0.8325	0.001	0.11988	4.286188	40527.16	5.531757	39877.72	4.252495	5.305118	649.5623	-5.8E-12	5418.437	-2.5E-12	39877.72
0.8658	0.001	0.11988	4.252495	39877.72	5.305118	39254.89	4.220183	5.087766	622.9494	-7.1E-12	5196.442	-3.1E-12	39254.89
0.8991	0.001	0.11988	4.220183	39254.89	5.087766	38657.58	4.189195	4.879321	597.4272	-3.2E-11	4983.543	-1.7E-11	38657.58
0.9324	0.001	0.11988	4.189195	38657.58	4.879321	38084.75	4.159477	4.679417	572.9507	-6.7E-07	4779.342	-2.3E-07	38084.75
0.9657	0.001	0.11988	4.159477	38084.75	4.679417	37535.4	4.130977	4.487705	549.4773	-0.00067	4558.244	-0.00016	37535.4
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 23D

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 25 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0		0					
0.0333	13.04467	781.8978	0	0	0	756.2823	0.723834	0.427352	25.61547	3.55E-14	0.032761	3.44E-14	756.2823
0.0666	26.08935	2345.693	0.723834	756.2823	0.427352	3036.693	1.500546	0.661778	65.28243	-1.3E-13	0.027831	-1.2E-13	3036.693
0.0999	33.29602	3559.559	1.500546	3036.693	0.661778	6513.464	1.90468	0.719407	82.78824	4.26E-13	0.023258	4.16E-13	6513.464
0.1332	34.04362	4036.338	1.90468	6513.464	0.719407	10460.25	2.363449	0.774569	89.54897	-7E-13	0.022186	-6.8E-13	10460.25
0.1665	34.79122	4125.96	2.363449	10460.25	0.774569	14491	2.70789	0.813965	95.21675	9.95E-14	0.023077	9.72E-14	14491
0.1998	35.53882	4215.582	2.70789	14491	0.813965	18606.95	3.007494	0.848232	99.63209	1.39E-12	0.023634	1.36E-12	18606.95
0.2331	36.28642	4305.205	3.007494	18606.95	0.848232	22808.37	3.313318	0.883211	103.7827	1.66E-12	0.024106	1.62E-12	22808.37
0.2664	37.03402	4394.827	3.313318	22808.37	0.883211	27095.42	3.589358	0.914783	107.7717	-7.2E-13	0.024522	-7.1E-13	27095.42
0.2997	37.78162	4484.449	3.589358	27095.42	0.914783	31384.7	3.811883	2.341268	195.1677	-1.6E-12	0.043521	-1.5E-12	31384.7
0.333	38.52922	4574.071	3.811883	31384.7	2.341268	35590.14	4.030058	3.808858	368.6386	3.87E-12	0.080593	3.55E-12	35590.14
0.3663	38.98231	4646.041	4.030058	35590.14	3.808858	39693.74	4.24295	5.240911	542.4432	4.55E-13	0.116754	4.02E-13	39693.74
0.3996	38.98231	4673.199	4.24295	39693.74	5.240911	43655.78	4.448498	6.623565	711.1567	3.64E-12	0.152178	3.08E-12	43655.78
0.4329	34.10703	4380.975	4.448498	43655.78	6.623565	47206.52	4.632708	7.227454	830.2301	9.09E-13	0.189508	7.37E-13	47206.52
0.4662	21.06235	3306.852	4.632708	47206.52	7.227454	49632.31	4.758557	7.4716	881.0613	6.82E-13	0.266435	5E-13	49632.31
0.4995	8.017677	1743.057	4.758557	49632.31	7.4716	50474.59	4.802254	7.556372	900.7767	6.82E-12	0.51678	3.3E-12	50474.59
0.5328	5.406884	804.6682	4.802254	50474.59	7.556372	50374.01	4.797036	7.546249	905.2511	2.36E-11	1.124999	2.96E-12	50374.01
0.5661	4.659284	603.3661	4.797036	50374.01	7.546249	50074.54	4.781499	7.516109	902.8377	6.03E-12	1.496335	2.99E-12	50074.54
0.5994	3.911684	513.7439	4.781499	50074.54	7.516109	49689.57	4.761528	7.477363	898.7087	3.18E-12	1.749332	2.39E-12	49689.57
0.6327	3.164084	424.1216	4.761528	49689.57	7.477363	49220.14	4.737174	7.430117	893.5544	2.67E-11	2.106835	2.85E-12	49220.14
0.666	2.416485	334.4993	4.737174	49220.14	7.430117	48667.25	4.70849	7.374471	887.387	7.96E-13	2.652881	5.2E-13	48667.25
0.6993	1.668885	244.877	4.70849	48667.25	7.374471	48031.91	4.675529	7.310527	880.2188	2.05E-12	3.594534	1.22E-12	48031.91
0.7326	0.921285	155.2548	4.675529	48031.91	7.310527	47315.1	4.638342	7.238383	872.0616	-1.1E-12	5.616972	-6.5E-13	47315.1
0.7659	0.173685	65.63248	4.638342	47315.1	7.238383	46517.81	4.596979	7.158138	862.9275	2.45E-11	13.14787	3.62E-12	46517.81
0.7992	0.001	10.47061	4.596979	46517.81	7.158138	45675.25	4.553267	7.073338	853.0347	6.35E-12	81.46945	2.98E-12	45675.25
0.8325	0.001	0.11988	4.553267	45675.25	7.073338	44832.5	4.509546	6.988519	842.8677	1.22E-06	7031	3.31E-12	44832.5
0.8658	0.001	0.11988	4.509546	44832.5	6.988519	44009.31	4.466839	6.74694	823.3034	-1.7E-12	6867.729	-1.2E-12	44009.31
0.8991	0.001	0.11988	4.466839	44009.31	6.74694	43217.18	4.425744	6.470505	792.2537	-1.3E-12	6608.723	-9.6E-13	43217.18
0.9324	0.001	0.11988	4.425744	43217.18	6.470505	42457.51	4.386333	6.205398	759.7937	-3.1E-12	6337.952	-3E-12	42457.51
0.9657	0.001	0.11988	4.386333	42457.51	6.205398	41728.96	4.348536	5.951155	728.6638	9.36E-12	6078.277	2.59E-12	41728.96
		0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Table 23E

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 30 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	11.79737	707.1346	0	0	0	682.4108	0.698639	0.412477	24.72385	0	0.034963	0	682.4108
0.0666	23.59475	2121.404	0.698639	682.4108	0.412477	2740.279	1.400504	0.647512	63.53572	1.49E-13	0.02995	1.45E-13	2740.279
0.0999	30.11233	3219.203	1.400504	2740.279	0.647512	5878.18	1.830836	0.708877	81.30196	1.56E-13	0.025255	1.52E-13	5878.18
0.1332	30.78845	3650.393	1.830836	5878.18	0.708877	9440.468	2.244911	0.761012	88.10514	-3.4E-13	0.024136	-3.3E-13	9440.468
0.1665	31.46457	3731.446	2.244911	9440.468	0.761012	13078.21	2.605053	0.802203	93.69908	2.27E-13	0.025111	2.22E-13	13078.21
0.1998	32.14068	3812.499	2.605053	13078.21	0.802203	16792.69	2.875432	0.833128	98.02171	-1.5E-12	0.025711	-1.4E-12	16792.69
0.2331	32.8168	3893.552	2.875432	16792.69	0.833128	20584.48	3.151439	0.864696	101.7675	4.69E-13	0.026137	4.57E-13	20584.48
0.2664	33.49292	3974.604	3.151439	20584.48	0.864696	24453.49	3.433068	0.896907	105.5905	-6.7E-13	0.026566	-6.5E-13	24453.49
0.2997	34.16903	4055.657	3.433068	24453.49	0.896907	28377.94	3.655895	1.291984	131.2021	-7.4E-13	0.03235	-7.2E-13	28377.94
0.333	34.84515	4136.71	3.655895	28377.94	1.291984	32278.19	3.858237	2.653071	236.4666	-1E-12	0.057163	-9.6E-13	32278.19
0.3663	35.25492	4201.798	3.858237	32278.19	2.653071	36082.36	4.055594	3.980632	397.6242	1.71E-13	0.094632	1.54E-13	36082.36
0.3996	35.25492	4226.359	4.055594	36082.36	3.980632	39754.71	4.246113	5.262189	554.0147	-2.3E-12	0.131086	-2E-12	39754.71
0.4329	35.25492	4226.359	4.246113	39754.71	5.262189	43276.57	4.428825	6.491229	704.4999	3.64E-12	0.166692	3.03E-12	43276.57
0.4662	35.25492	4226.359	4.428825	43276.57	6.491229	46683.78	4.605589	7.174843	819.1444	4.09E-12	0.193818	3.3E-12	46683.78
0.4995	35.25492	4226.359	4.605589	46683.78	7.174843	50029.83	4.77918	7.511609	880.3059	1.93E-12	0.208289	1.53E-12	50029.83
0.5328	25.24502	3626.366	4.77918	50029.83	7.511609	52739.36	4.919749	7.784312	916.8375	-9.1E-13	0.252825	-6.8E-13	52739.36
0.5661	13.44765	2319.239	4.919749	52739.36	7.784312	54117.11	4.991225	7.922976	941.4949	4.77E-12	0.40595	2.84E-12	54117.11
0.5994	5.245023	1120.439	4.991225	54117.11	7.922976	54286.72	5.000024	7.940047	950.8296	2.02E-11	0.848623	3.06E-12	54286.72
0.6327	4.568907	588.247	5.000024	54286.72	7.940047	53925.29	4.981274	7.903671	949.6724	5.46E-12	1.614411	3.35E-12	53925.29
0.666	3.892791	507.1941	4.981274	53925.29	7.903671	53487.63	4.958568	7.859622	944.8518	-3E-12	1.8629	-2.6E-12	53487.63
0.6993	3.216674	426.1413	4.958568	53487.63	7.859622	52974.66	4.931955	7.807994	939.1169	1.49E-11	2.203769	3.05E-12	52974.66
0.7326	2.540558	345.0885	4.931955	52974.66	7.807994	52387.27	4.901482	7.748875	932.4787	-1.5E-12	2.702144	-1.1E-12	52387.27
0.7659	1.864442	264.0357	4.901482	52387.27	7.748875	51726.35	4.867194	7.682357	924.9481	5.12E-12	3.503118	2.57E-12	51726.35
0.7992	1.188326	182.9829	4.867194	51726.35	7.682357	50992.8	4.829138	7.608528	916.5356	0.003918	5.008967	3.51E-05	50992.8
0.8325	0.512209	101.9301	4.829138	50992.8	7.608528	50186.36	4.7873	7.527363	907.2453	1.12541	9.000034	3.82E-05	50186.36
0.8658	0.001	30.76176	4.7873	50186.36	7.527363	49319.97	4.742352	7.440164	897.1535	0.000243	29.1648	4E-05	49319.97
0.8991	0.001	0.11988	4.742352	49319.97	7.440164	48433.51	4.696364	7.350945	886.5791	7.37E-05	7400.106	7.83E-06	48433.51
0.9324	0.001	0.11988	4.696364	48433.51	7.350945	47557.68	4.650926	7.262797	875.9477	5.1E-05	7309.983	5.02E-05	47557.68
0.9657	0.001	0.11988	4.650926	47557.68	7.262797	46692.35	4.606034	7.175706	865.4438	9.28E-05	7224.844	7.84E-05	46692.35
0.999	0.001	0.11988	4.606034	46692.35	7.175706	45837.41	4.56168	7.089659	855.0659	0.000105	7138.906	9.46E-05	45837.41
1.0323	0.001	0.11988	4.56168	45837.41	7.089659	44992.72	4.517858	7.004644	844.8125	0.000129	7054.733	9.45E-05	44992.72
1.0656	0.001	0.11988	4.517858	44992.72	7.004644	44165.3	4.474932	6.801376	827.5328	8.86E-05	6908.118	1.04E-05	44165.3
1.0989	0.001	0.11988	4.474932	44165.3	6.801376	43366.78	4.433505	6.52271	798.6457	2.5E-05	6663.431	1.07E-05	43366.78
1.1322	0.001	0.11988	4.433505	43366.78	6.52271	42600.97	4.393776	6.255464	765.9238	6.49E-05	6392.549	3.56E-05	42600.97

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 35 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	10.8619	651.0623	0	0	0	627.0071	0.679743	0.40132	24.05514	-3.9E-14	0.036948	-3.8E-14	627.0071
0.0666	21.7238	1953.187	0.679743	627.0071	0.40132	2517.975	1.324685	0.6367	62.21894	2.27E-13	0.031855	2.2E-13	2517.975
0.0999	27.72457	2963.935	1.324685	2517.975	0.6367	5401.73	1.775454	0.70098	80.18052	-1.4E-13	0.027052	-1.4E-13	5401.73
0.1332	28.34708	3360.935	1.775454	5401.73	0.70098	8675.642	2.156009	0.750843	87.02228	4.41E-13	0.025892	4.29E-13	8675.642
0.1665	28.96958	3435.56	2.156009	8675.642	0.750843	12018.64	2.527926	0.793381	92.56085	7.11E-14	0.026942	6.91E-14	12018.64
0.1998	29.59208	3510.186	2.527926	12018.64	0.793381	15432.01	2.776388	0.821799	96.81394	-7.2E-13	0.027581	-7E-13	15432.01
0.2331	30.21459	3584.812	2.776388	15432.01	0.821799	18916.57	3.030031	0.85081	100.2562	-1E-12	0.027967	-1E-12	18916.57
0.2664	30.83709	3659.438	3.030031	18916.57	0.85081	22472.24	3.288851	0.880412	103.7695	9.52E-13	0.028357	9.25E-13	22472.24
0.2997	31.45959	3734.063	3.288851	22472.24	0.880412	26099.05	3.537667	0.908871	107.2496	-5.7E-13	0.028722	-5.5E-13	26099.05
0.333	32.0821	3808.689	3.537667	26099.05	0.908871	29747.18	3.72693	1.769813	160.5603	-3.1E-13	0.042156	-3E-13	29747.18
0.3663	32.45937	3868.616	3.72693	29747.18	1.769813	33328.71	3.912737	3.019678	287.0821	3.92E-12	0.074208	3.63E-12	33328.71
0.3996	32.45937	3891.23	3.912737	33328.71	3.019678	36785.63	4.09208	4.226057	434.3093	2.05E-12	0.111612	1.82E-12	36785.63
0.4329	32.45937	3891.23	4.09208	36785.63	4.226057	40100.9	4.264073	5.383	575.9669	-2.6E-12	0.148017	-2.2E-12	40100.9
0.4662	32.45937	3891.23	4.264073	40100.9	5.383	43280.31	4.429019	6.492535	711.8196	3.52E-12	0.182929	2.88E-12	43280.31
0.4995	32.45937	3891.23	4.429019	43280.31	6.492535	46354.3	4.588496	7.141682	817.2349	-1.1E-12	0.21002	-9E-13	46354.3
0.5328	32.45937	3891.23	4.588496	46354.3	7.141682	49371.19	4.74501	7.445319	874.3448	3.64E-12	0.224696	2.82E-12	49371.19
0.5661	32.45937	3891.23	4.74501	49371.19	7.445319	52351.89	4.899647	7.745314	910.5266	4.55E-12	0.233995	3.48E-12	52351.89
0.5994	28.94845	3680.785	4.899647	52351.89	7.745314	55087.66	5.041577	8.020659	945.0124	2.05E-12	0.256742	1.52E-12	55087.66
0.6327	18.08655	2819.278	5.041577	55087.66	8.020659	56934.28	5.137378	8.206514	972.6567	3.64E-12	0.345002	2.38E-12	56934.28
0.666	7.224655	1517.154	5.137378	56934.28	8.206514	57464.44	5.164882	8.259872	986.9952	3.87E-12	0.650557	1.35E-12	57464.44
0.6993	4.533586	704.789	5.164882	57464.44	8.259872	57180.75	5.150165	8.231319	988.482	4.77E-12	1.402522	1.92E-12	57180.75
0.7326	3.911083	506.1735	5.150165	57180.75	8.231319	56703.03	5.125381	8.183239	983.8887	1.59E-12	1.943778	1.5E-12	56703.03
0.7659	3.288579	431.5477	5.125381	56703.03	8.183239	56156.87	5.097046	8.12827	977.7119	1.12E-11	2.265594	2.97E-12	56156.87
0.7992	2.666076	356.922	5.097046	56156.87	8.12827	55543.08	5.065203	8.066494	970.7142	2.39E-12	2.719682	1.72E-12	55543.08
0.8325	2.043572	282.2963	5.065203	55543.08	8.066494	54862.47	5.029894	7.997994	962.9054	4.21E-12	3.410974	1.73E-12	54862.47
0.8658	1.421069	207.6706	5.029894	54862.47	7.997994	54115.84	4.991159	7.922849	954.2353	2.47E-12	4.595236	1.47E-12	54115.84
0.8991	0.798565	133.0448	4.991159	54115.84	7.922849	53303.99	4.949041	7.84114	944.8935	3.21E-11	7.102068	3.28E-12	53303.99
0.9324	0.176062	58.41913	4.949041	53303.99	7.84114	52427.7	4.90358	7.752944	934.7094	0.007169	16.00202	1.45E-05	52427.7
0.9657	0.001	10.61307	4.90358	52427.7	7.752944	51514.4	4.856198	7.661024	923.9133	0.000273	87.05651	1.54E-05	51514.4
0.999	0.001	0.11988	4.856198	51514.4	7.661024	50601.62	4.808844	7.569157	912.8971	2.97E-05	7616.976	2.9E-05	50601.62
1.0323	0.001	0.11988	4.808844	50601.62	7.569157	49699.79	4.762057	7.478392	901.9501	1.82E-06	7523.889	1.62E-06	49699.79
1.0656	0.001	0.11988	4.762057	49699.79	7.478392	48808.77	4.715832	7.388715	891.1343	5.16E-05	7436.755	3.9E-05	48808.77
1.0989	0.001	0.11988	4.715832	48808.77	7.388715	47928.45	4.670161	7.300113	880.4483	1.67E-05	7345.435	7.24E-06	47928.45
1.1322	0.001	0.11988	4.670161	47928.45	7.300113	47058.68	4.625038	7.212574	869.8905	2.72E-05	7257.99	2.69E-05	47058.68
1.1655	0.001	0.11988	4.625038	47058.68	7.212574	46199.34	4.580456	7.126085	859.4593	2.33E-05	7170.722	1.68E-05	46199.34
1.1988	0.001	0.11988	4.580456	46199.34	7.126085	45350.3	4.536409	7.040634	849.1531	4.14E-05	7085.805	3.33E-05	45350.3
1.2321	0.001	0.11988	4.536409	45350.3	7.040634	44513.45	4.492994	6.922871	836.9725	2.07E-05	6982.958	1.98E-05	44513.45
1.2654	0.001	0.11988	4.492994	44513.45	6.922871	43700.66	4.450827	6.639227	812.9121	5.67E-05	6784.256	1.45E-05	43700.66

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 40 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	10.08234	604.3353	0	0	0	580.8374	0.663996	0.392023	23.49789	2.13E-14	0.038882	2.05E-14	580.8374
0.0666	20.16468	1813.006	0.663996	580.8374	0.392023	2332.722	1.261501	0.62769	61.12163	1.42E-14	0.033713	1.37E-14	2332.722
0.0999	25.73477	2751.213	1.261501	2332.722	0.62769	5004.689	1.729302	0.694399	79.24599	3.98E-13	0.028304	3.86E-13	5004.689
0.1332	26.3126	3119.719	1.729302	5004.689	0.694399	8038.288	2.081924	0.74237	86.11991	4.41E-13	0.027605	4.28E-13	8038.288
0.1665	26.89042	3188.989	2.081924	8038.288	0.74237	11135.81	2.441975	0.783551	91.4637	1.56E-13	0.028681	1.52E-13	11135.81
0.1998	27.46825	3258.259	2.441975	11135.81	0.783551	14298.41	2.693872	0.812362	95.659	7.82E-13	0.029359	7.59E-13	14298.41
0.2331	28.04608	3327.529	2.693872	14298.41	0.812362	17526.94	2.928879	0.839241	98.99703	-7E-13	0.029751	-6.8E-13	17526.94
0.2664	28.6239	3396.798	2.928879	17526.94	0.839241	20821.49	3.168692	0.866669	102.2522	-1.3E-12	0.030103	-1.3E-12	20821.49
0.2997	29.20173	3466.068	3.168692	20821.49	0.866669	24181.99	3.413305	0.894647	105.5733	-4.7E-13	0.030459	-4.5E-13	24181.99
0.333	29.77955	3535.338	3.413305	24181.99	0.894647	27602.48	3.615664	1.021365	114.8458	-6.1E-13	0.032485	-5.9E-13	27602.48
0.3663	30.12975	3590.964	3.615664	27602.48	1.021365	30999.93	3.791922	2.206992	193.5078	8.81E-13	0.053887	8.34E-13	30999.93
0.3996	30.12975	3611.955	3.791922	30999.93	2.206992	34278.73	3.962023	3.35121	333.1587	-7.4E-13	0.092238	-6.7E-13	34278.73
0.4329	30.12975	3611.955	3.962023	34278.73	3.35121	37423.17	4.125155	4.44854	467.517	-2.1E-12	0.129436	-1.8E-12	37423.17
0.4662	30.12975	3611.955	4.125155	37423.17	4.44854	40438.75	4.281601	5.500904	596.3697	1.48E-12	0.16511	1.23E-12	40438.75
0.4995	30.12975	3611.955	4.281601	40438.75	5.500904	43330.77	4.431637	6.510144	719.9422	2.39E-12	0.199322	1.91E-12	43330.77
0.5328	30.12975	3611.955	4.431637	43330.77	6.510144	46125.81	4.576642	7.118685	816.912	4.32E-12	0.226169	3.34E-12	46125.81
0.5661	30.12975	3611.955	4.576642	46125.81	7.118685	48867.83	4.718896	7.394659	869.9298	1.36E-12	0.240847	1.04E-12	48867.83
0.5994	30.12975	3611.955	4.718896	48867.83	7.394659	51576.97	4.859445	7.667322	902.8151	3.41E-12	0.249952	2.56E-12	51576.97
0.6327	30.12975	3611.955	4.859445	51576.97	7.667322	54253.62	4.998307	7.936716	935.3061	-1.1E-12	0.258947	-8.4E-13	54253.62
0.666	30.12975	3611.955	4.998307	54253.62	7.936716	56898.17	5.135505	8.202879	967.4073	1.14E-13	0.267835	8.32E-14	56898.17
0.6993	22.08425	3129.707	5.135505	56898.17	8.202879	59031.64	5.246188	8.417604	996.2318	-8E-13	0.318315	-5.4E-13	59031.64
0.7326	12.00191	2043.125	5.246188	59031.64	8.417604	60059.47	5.299511	8.52105	1015.303	3.41E-12	0.496936	1.72E-12	60059.47
0.7659	4.511714	989.8267	5.299511	60059.47	8.52105	60027.98	5.297877	8.517881	1021.314	1.13E-10	1.03181	3.59E-12	60027.98
0.7992	3.933888	506.2294	5.297877	60027.98	8.517881	59516.17	5.271325	8.46637	1018.036	5.28E-08	2.011017	5.82E-10	59516.17
0.8325	3.356061	436.9595	5.271325	59516.17	8.46637	58941.65	5.241519	8.408547	1011.483	1.9E-09	2.31482	5.97E-10	58941.65
0.8658	2.778235	367.6897	5.241519	58941.65	8.408547	58305.16	5.208498	8.344487	1004.177	8.24E-10	2.731044	6.02E-10	58305.16
0.8991	2.200409	298.4199	5.208498	58305.16	8.344487	57607.45	5.172302	8.274266	996.128	1.8E-09	3.338008	6.1E-10	57607.45
0.9324	1.622583	229.1501	5.172302	57607.45	8.274266	56849.26	5.132967	8.197956	987.345	2.02E-09	4.308725	6.24E-10	56849.26
0.9657	1.044757	159.8803	5.132967	56849.26	8.197956	56031.3	5.090532	8.115632	977.8365	5.89E-09	6.116053	6.84E-10	56031.3
0.999	0.46693	90.61051	5.090532	56031.3	8.115632	55154.3	5.045034	8.027366	967.6113	1.01E-09	10.6788	6.88E-10	55154.3
1.0323	0.001	28.04774	5.045034	55154.3	8.027366	54225.63	4.996855	7.933899	956.7182	6.81E-09	34.11035	7.51E-10	54225.63
1.0656	0.001	0.11988	4.996855	54225.63	7.933899	53280.34	4.947814	7.838759	945.4131	1.02E-05	7887	7.53E-10	53280.34
1.0989	0.001	0.11988	4.947814	53280.34	7.838759	52346.38	4.899361	7.74476	934.0761	3.7E-06	7792	7.82E-10	52346.38
1.1322	0.001	0.11988	4.899361	52346.38	7.74476	51423.63	4.851489	7.651889	922.8751	1.05E-05	7699	7.9E-10	51423.63
1.1655	0.001	0.11988	4.851489	51423.63	7.651889	50511.94	4.804191	7.560131	911.8085	8.76E-08	7606.015	1.35E-09	50511.94
1.1988	0.001	0.11988	4.804191	50511.94	7.560131	49611.18	4.757461	7.469474	900.8745	3.16E-06	7515	1.39E-09	49611.18
1.2321	0.001	0.11988	4.757461	49611.18	7.469474	48721.23	4.711291	7.379904	890.0717	2.03E-09	7424.689	1.4E-09	48721.23
1.2654	0.001	0.11988	4.711291	48721.23	7.379904	47841.95	4.665674	7.291408	879.3984	2.13E-09	7335.656	1.4E-09	47841.95
1.2987	0.001	0.11988	4.665674	47841.95	7.291408	46973.22	4.620605	7.203974	868.8532	2.03E-09	7247.691	1.4E-09	46973.22
1.332	0.001	0.11988	4.620605	46973.22	7.203974	46114.91	4.576076	7.117588	858.4344	1.79E-09	7160.781	1.4E-09	46114.91
1.3653	0.001	0.11988	4.576076	46114.91	7.117588	45266.88	4.532081	7.032238	848.1405	1.53E-09	7074.913	1.39E-09	45266.88
1.3986	0.001	0.11988	4.532081	45266.88	7.032238	44432.23	4.48878	6.894529	834.7704	3.63E-09	6963.383	1.39E-09	44432.23
1.4319	0.001	0.11988	4.48878	44432.23	6.894529	43622.77	4.446786	6.612046	809.5841	4.79E-09	6753.288	1.38E-09	43622.77
1.4652	0.001	0.11988	4.446786	43622.77	6.612046	42846.48	4.406512	6.341139	776.4139	2.26E-09	6476.592	1.34E-09	42846.48
1.4985	0.001	0.11988	4.406512	42846.48	6.341139	42101.99	4.367889	6.081333	744.6029	5.65E-09	6211.236	1.33E-09	42101.99

Table 23H

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIIONAL METHOD WITH STORM DURATION 50 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0		0	0	0					
0.0333	8.523213	510.3814	0	0	0	488.498	0.632503	0.37343	22.38337	-2.1E-14	0.043813	-2E-14	488.498
0.0666	17.04643	1532.644	0.632503	488.498	0.37343	1962.215	1.135135	0.60967	58.927	0	0.033448	0	1962.215
0.0999	21.75517	2325.768	1.135135	1962.215	0.60967	4210.606	1.636999	0.681236	77.37693	1.56E-13	0.033269	1.51E-13	4210.606
0.1332	22.24364	2637.288	1.636999	4210.606	0.681236	6763.691	1.933766	0.723555	84.20318	-2.7E-13	0.031928	-2.6E-13	6763.691
0.1665	22.73211	2695.346	1.933766	6763.691	0.723555	9370.608	2.23679	0.769083	88.92926	5.26E-13	0.032988	5.08E-13	9370.608
0.1998	23.22058	2754.404	2.23679	9370.608	0.769083	12031.89	2.52889	0.793492	93.12127	2.27E-13	0.033808	2.2E-13	12031.89
0.2331	23.70905	2812.962	2.52889	12031.89	0.793492	14748.37	2.726625	0.816108	96.4794	-5.7E-14	0.034298	-5.5E-14	14748.37
0.2664	24.19752	2871.52	2.726625	14748.37	0.816108	17520.68	2.928423	0.839188	99.21845	-2.4E-13	0.034553	-2.3E-13	17520.68
0.2997	24.686	2930.078	2.928423	17520.68	0.839188	20348.74	3.13428	0.862733	102.0132	-1.7E-12	0.034816	-1.7E-12	20348.74
0.333	25.17447	2988.636	3.13428	20348.74	0.862733	23232.51	3.344192	0.886742	104.8635	8.38E-13	0.035087	8.09E-13	23232.51
0.3663	25.47051	3035.66	3.344192	23232.51	0.886742	26160.52	3.540856	0.909235	107.6509	-1.1E-13	0.035462	-1.1E-13	26160.52
0.3996	25.47051	3053.405	3.540856	26160.52	0.909235	29067.56	3.691671	1.532643	146.3662	7.39E-13	0.047935	7.04E-13	29067.56
0.4329	25.47051	3053.405	3.691671	29067.56	1.532643	31878.44	3.837498	2.513568	242.5299	-4.3E-13	0.079429	-4.4E-13	31878.44
0.4662	25.47051	3053.405	3.837498	31878.44	2.513568	34574.13	3.977348	3.454297	357.7138	8.53E-13	0.117152	7.53E-13	34574.13
0.4995	25.47051	3053.405	3.977348	34574.13	3.454297	37159.36	4.111468	4.356476	468.1777	1.36E-12	0.15333	1.16E-12	37159.36
0.5328	25.47051	3053.405	4.111468	37159.36	4.356476	39638.65	4.240092	5.221686	574.1151	-6.8E-13	0.188025	-5.5E-13	39638.65
0.5661	25.47051	3053.405	4.240092	39638.65	5.221686	42016.34	4.363445	6.051442	675.7113	-2.4E-12	0.221298	-1.9E-12	42016.34
0.5994	25.47051	3053.405	4.363445	42016.34	6.051442	44296.6	4.481744	6.847196	773.1443	3.41E-12	0.253207	2.55E-12	44296.6
0.6327	25.47051	3053.405	4.481744	44296.6	6.847196	46510.57	4.596603	7.15741	839.436	6.82E-13	0.274918	4.95E-13	46510.57
0.666	25.47051	3053.405	4.596603	46510.57	7.15741	48692.78	4.709814	7.37704	871.1949	1.14E-12	0.285319	8.12E-13	48692.78
0.6993	25.47051	3053.405	4.709814	48692.78	7.37704	50848.82	4.821668	7.594037	897.3663	-4.5E-13	0.29369	-3.2E-13	50848.82
0.7326	25.47051	3053.405	4.821668	50848.82	7.594037	52979	4.932181	7.808431	923.2239	-9.1E-13	0.302359	-6.3E-13	52979
0.7659	25.47051	3053.405	4.932181	52979	7.808431	55083.63	5.041368	8.020253	948.7713	4.43E-12	0.310726	3.06E-12	55083.63
0.7992	25.47051	3053.405	5.041368	55083.63	8.020253	57163.02	5.149245	8.229536	974.0123	2.73E-12	0.318992	1.86E-12	57163.02
0.8325	25.47051	3053.405	5.149245	57163.02	8.229536	59217.48	5.255829	8.436308	998.9507	0	0.32716	0	59217.48
0.8658	19.09963	2671.534	5.255829	59217.48	8.436308	60867.71	5.341442	8.602397	1021.3	1.82E-12	0.38229	1.12E-12	60867.71
0.8991	10.57641	1778.782	5.341442	60867.71	8.602397	61610.76	5.379991	8.677182	1035.738	4.77E-12	0.582274	1.99E-12	61610.76
0.9324	3.838696	864.0416	5.379991	61610.76	8.677182	61435.63	5.370905	8.659556	1039.164	1.72E-11	1.202678	3.48E-12	61435.63
0.9657	3.350225	439.9039	5.370905	61435.63	8.659556	60832.07	5.339593	8.59881	1034.466	5.97E-12	2.400689	2.39E-12	60832.07
0.999	2.861753	372.346	5.339593	60832.07	8.59881	60177.54	5.305636	8.532934	1026.877	-1.5E-12	2.757857	-1.1E-12	60177.54
1.0323	2.373281	313.788	5.305636	60177.54	8.532934	59472.65	5.269067	8.46199	1018.676	9.49E-12	3.246382	2.34E-12	59472.65
1.0656	1.88481	255.23	5.269067	59472.65	8.46199	58718.01	5.229917	8.386039	1009.871	-1.9E-12	3.956709	-1.8E-12	58718.01
1.0989	1.396338	196.672	5.229917	58718.01	8.386039	57914.22	5.188216	8.30514	1000.469	4.01E-11	5.086993	3.49E-12	57914.22
1.1322	0.907867	138.114	5.188216	57914.22	8.30514	57061.85	5.143996	8.219353	990.4781	2.02E-11	7.171452	3.46E-12	57061.85
1.1655	0.419395	79.55605	5.143996	57061.85	8.219353	56161.5	5.097287	8.128736	979.9045	7.56E-12	12.31716	2.4E-12	56161.5
1.1988	0.001	25.19847	5.097287	56161.5	8.128736	55217.92	5.048334	8.033769	968.7806	5.15E-12	38.44601	2.3E-12	55217.92
1.2321	0.001	0.11988	5.048334	55217.92	8.033769	54260.73	4.998676	7.937431	957.3137	-4.9E-12	7985.6	-2.9E-12	54260.73
1.2654	0.001	0.11988	4.998676	54260.73	7.937431	53315.01	4.949613	7.842249	945.834	1.06E-12	7889.84	8.88E-13	53315.01
1.2987	0.001	0.11988	4.949613	53315.01	7.842249	52380.64	4.901138	7.748208	934.492	-1.5E-11	7795.229	-3.5E-12	52380.64
1.332	0.001	0.11988	4.901138	52380.64	7.748208	51457.47	4.853245	7.655295	923.286	-3.1E-13	7701.752	-2.3E-13	51457.47
1.3653	0.001	0.11988	4.853245	51457.47	7.655295	50545.38	4.805926	7.563497	912.2144	-8.5E-12	7609.396	-3.4E-12	50545.38
1.3986	0.001	0.11988	4.805926	50545.38	7.563497	49644.22	4.759175	7.472799	901.2756	-2.1E-09	7518.148	-3E-10	49644.22
1.4319	0.001	0.11988	4.759175	49644.22	7.472799	48753.88	4.712984	7.383189	890.4679	-3.5E-10	7427.994	-3.5E-10	48753.88
1.4652	0.001	0.11988	4.712984	48753.88	7.383189	47874.21	4.667347	7.294654	879.7899	-4.6E-10	7338.922	-4.2E-10	47874.21
1.4985	0.001	0.11988	4.667347	47874.21	7.294654	47005.09	4.622258	7.207181	869.24	-5.3E-10	7250.917	-4.9E-10	47005.09

Table 23I

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 60 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	7.431826	445.4637	0	0	0	423.8605	0.610457	0.360414	21.60321	-3.6E-15	0.040496	-3.4E-15	423.8605
0.0666	14.86365	1336.391	0.610457	423.8605	0.360414	1702.861	1.046678	0.597056	57.39077	-4.3E-14	0.042945	-4.1E-14	1702.861
0.0999	18.96944	2027.956	1.046678	1702.861	0.597056	3654.748	1.572387	0.672022	76.06858	7.11E-14	0.03751	6.84E-14	3654.748
0.1332	19.39537	2299.587	1.572387	3654.748	0.672022	5871.57	1.830067	0.708768	82.76456	-2.8E-13	0.035991	-2.7E-13	5871.57
0.1665	19.82129	2350.647	1.830067	5871.57	0.708768	8135.158	2.093184	0.743658	87.05838	-3.1E-13	0.037036	-3E-13	8135.158
0.1998	20.24721	2401.706	2.093184	8135.158	0.743658	10445.87	2.361778	0.774378	90.99109	4.55E-13	0.037886	4.38E-13	10445.87
0.2331	20.67314	2452.766	2.361778	10445.87	0.774378	12804.28	2.585113	0.799922	94.36358	-4.4E-13	0.038472	-4.2E-13	12804.28
0.2664	21.09906	2503.826	2.585113	12804.28	0.799922	15211.01	2.7603	0.819959	97.0957	-6E-13	0.038779	-5.7E-13	15211.01
0.2997	21.52499	2554.885	2.7603	15211.01	0.819959	17666.37	2.939028	0.840401	99.52202	4.55E-13	0.038954	4.37E-13	17666.37
0.333	21.95091	2605.945	2.939028	17666.37	0.840401	20170.32	3.121293	0.861248	101.9969	-5.7E-13	0.03914	-5.5E-13	20170.32
0.3663	22.20904	2646.948	3.121293	20170.32	0.861248	22712.75	3.306358	0.882415	104.5151	1.25E-12	0.039485	1.2E-12	22712.75
0.3996	22.20904	2662.42	3.306358	22712.75	0.882415	25268.11	3.492365	0.903689	107.0591	1.75E-12	0.040211	1.68E-12	25268.11
0.4329	22.20904	2662.42	3.492365	25268.11	0.903689	27810.79	3.626471	1.09406	119.7451	-3.6E-13	0.044976	-3.4E-13	27810.79
0.4662	22.20904	2662.42	3.626471	27810.79	1.09406	30290.19	3.7551	1.959309	183.0189	1.05E-12	0.068742	9.79E-13	30290.19
0.4995	22.20904	2662.42	3.7551	30290.19	1.959309	32667.99	3.878459	2.789101	284.6197	3.98E-13	0.106903	3.55E-13	32667.99
0.5328	22.20904	2662.42	3.878459	32667.99	2.789101	34948.35	3.996763	3.584891	382.0571	-2.6E-12	0.1435	-2.2E-12	34948.35
0.5661	22.20904	2662.42	3.996763	34948.35	3.584891	37135.27	4.110219	4.348071	475.5017	1.31E-12	0.178598	1.07E-12	37135.27
0.5994	22.20904	2662.42	4.110219	37135.27	4.348071	39232.57	4.219025	5.079977	565.1172	-3.4E-13	0.212257	-2.7E-13	39232.57
0.6327	22.20904	2662.42	4.219025	39232.57	5.079977	41243.93	4.323373	5.781891	651.0604	-3.4E-13	0.244537	-2.8E-13	41243.93
0.666	22.20904	2662.42	4.323373	41243.93	5.781891	43172.87	4.423445	6.455042	733.4818	5E-12	0.275494	3.62E-12	43172.87
0.6993	22.20904	2662.42	4.423445	43172.87	6.455042	45028.3	4.519704	7.008226	806.9883	1.36E-12	0.303103	9.51E-13	45028.3
0.7326	22.20904	2662.42	4.519704	45028.3	7.008226	46839.65	4.613675	7.19053	851.0734	-5.7E-13	0.319662	-3.9E-13	46839.65
0.7659	22.20904	2662.42	4.613675	46839.65	7.19053	48629.27	4.70652	7.370648	872.797	4.21E-12	0.327821	2.83E-12	48629.27
0.7992	22.20904	2662.42	4.70652	48629.27	7.370648	50397.43	4.798251	7.548606	894.2601	-6.8E-13	0.335862	-4.5E-13	50397.43
0.8325	22.20904	2662.42	4.798251	50397.43	7.548606	52144.39	4.888882	7.72443	915.4658	2.16E-12	0.343847	1.42E-12	52144.39
0.8658	22.20904	2662.42	4.888882	52144.39	7.72443	53870.39	4.978425	7.898145	936.4172	-1E-12	0.351717	-6.6E-13	53870.39
0.8991	22.20904	2662.42	4.978425	53870.39	7.898145	55575.69	5.066895	8.069777	957.1173	1.14E-12	0.359491	7.28E-13	55575.69
0.9324	22.20904	2662.42	5.066895	55575.69	8.069777	57260.54	5.154304	8.23935	977.5691	-6.8E-13	0.367173	-4.3E-13	57260.54
0.9657	22.20904	2662.42	5.154304	57260.54	8.23935	58925.19	5.240665	8.40689	997.7757	2.84E-12	0.374763	1.78E-12	58925.19
0.999	22.20904	2662.42	5.240665	58925.19	8.40689	60569.87	5.32599	8.57242	1017.74	7.96E-13	0.382261	4.92E-13	60569.87
1.0323	17.02929	2351.946	5.32599	60569.87	8.57242	61886.21	5.394281	8.704905	1035.603	1.82E-12	0.440318	1.02E-12	61886.21
1.0656	9.59746	1596.007	5.394281	61886.21	8.704905	62435.36	5.42277	8.760175	1046.857	9.09E-12	0.655922	3.13E-12	62435.36
1.0989	3.368667	777.1897	5.42277	62435.36	8.760175	62164.02	5.408693	8.732865	1048.533	3.41E-12	1.349134	1.19E-12	62164.02
1.1322	2.942744	378.306	5.408693	62164.02	8.732865	61499.44	5.374215	8.665978	1042.887	-2E-12	2.756728	-1.5E-12	61499.44
1.1655	2.51682	327.2463	5.374215	61499.44	8.665978	60792.07	5.337518	8.594735	1034.61	1.71E-11	3.161564	2.76E-12	60792.07
1.1988	2.090897	276.1866	5.337518	60792.07	8.594785	60042.44	5.298627	8.519337	1025.82	0	3.71423	0	60042.44
1.2321	1.664974	225.1269	5.298627	60042.44	8.519337	59251.04	5.25757	8.439686	1016.524	2.59E-12	4.515338	1.33E-12	59251.04
1.2654	1.23905	174.0672	5.25757	59251.04	8.439686	58418.38	5.214372	8.355882	1006.726	-1.2E-12	5.783551	-9.1E-13	58418.38
1.2987	0.813127	123.0075	5.214372	58418.38	8.355882	57544.96	5.16906	8.267976	996.434	3.06E-11	8.100598	3.08E-12	57544.96
1.332	0.387203	71.94776	5.16906	57544.96	8.267976	56631.25	5.121657	8.176015	985.6528	4.75E-12	13.69956	3.32E-12	56631.25
1.3653	0.001	23.2689	5.121657	56631.25	8.176015	55680.12	5.072313	8.080287	974.4027	1.19E-12	41.87576	1.04E-12	55680.12
1.3986	0.001	0.11988	5.072313	55680.12	8.080287	54717.38	5.022367	7.983392	962.8569	1.4E-12	8031.839	1.17E-12	54717.38
1.4319	0.001	0.11988	5.022367	54717.38	7.983392	53766.19	4.97302	7.887658	951.3107	3.33E-12	7935.525	1.75E-12	53766.19
1.4652	0.001	0.11988	4.97302	53766.19	7.887658	52826.41	4.924264	7.793073	939.903	-7E-12	7840.366	-2.6E-12	52826.41
1.4985	0.001	0.11988	4.924264	52826.41	7.793073	51897.9	4.876094	7.699622	928.6321	-5.8E-12	7746.347	-2E-12	51897.9
1.5318	0.001	0.11988	4.876094	51897.9	7.699622	50980.52	4.828501	7.607292	917.4964	-6.2E-12	7653.457	-2.8E-12	50980.52
1.5651	0.001	0.11988	4.828501	50980.52	7.607292	50074.14	4.781479	7.516069	906.4942	-1.2E-12	7561.68	-8.3E-13	50074.14
1.5984	0.001	0.11988	4.781479	50074.14	7.516069	49178.64	4.735021	7.42594	895.624	-1E-08	7471.004	-3.9E-11	49178.64
1.6317	0.001	0.11988	4.735021	49178.64	7.42594	48293.88	4.68912	7.336892	884.8842	-8.7E-11	7381.416	-3.6E-11	48293.88
1.665	0.001	0.11988	4.68912	48293.88	7.336892	47419.72	4.643769	7.248912	874.2731	-3.9E-11	7292.902	-3.5E-11	47419.72
1.6983	0.001	0.11988	4.643769	47419.72	7.248912	46556.05	4.598963	7.161987	863.7893	-7.8E-11	7205.45	-3.5E-11	46556.05

St. Mary's Hospital

Site Signage

Issued January 10, 1994

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St. Mary's Hospital

Grand Junction, CO
Attn: Mr. Peter Moberg

Sign Type Hierarchy	Issued Jan 12, 1994	Exterior System

Sign Type	Function	Illuminated	Quantity
A	Primary Directional (Double-faced)	Yes	3
B	Specific Directional (Double-faced)	Yes	0
C	Secondary Directional (Double-faced)	Yes	3
D	Entry Identification (Canopy Mounted)	No	2
D.1	Entry Identification (Canopy Mounted)	Yes	1
E	Entry Identification (Single-faced)	No	2
E.1	Entry Identification (Double-faced)	Yes	2

St. Mary's Hospital

Elevations

Issued January 10, 1994

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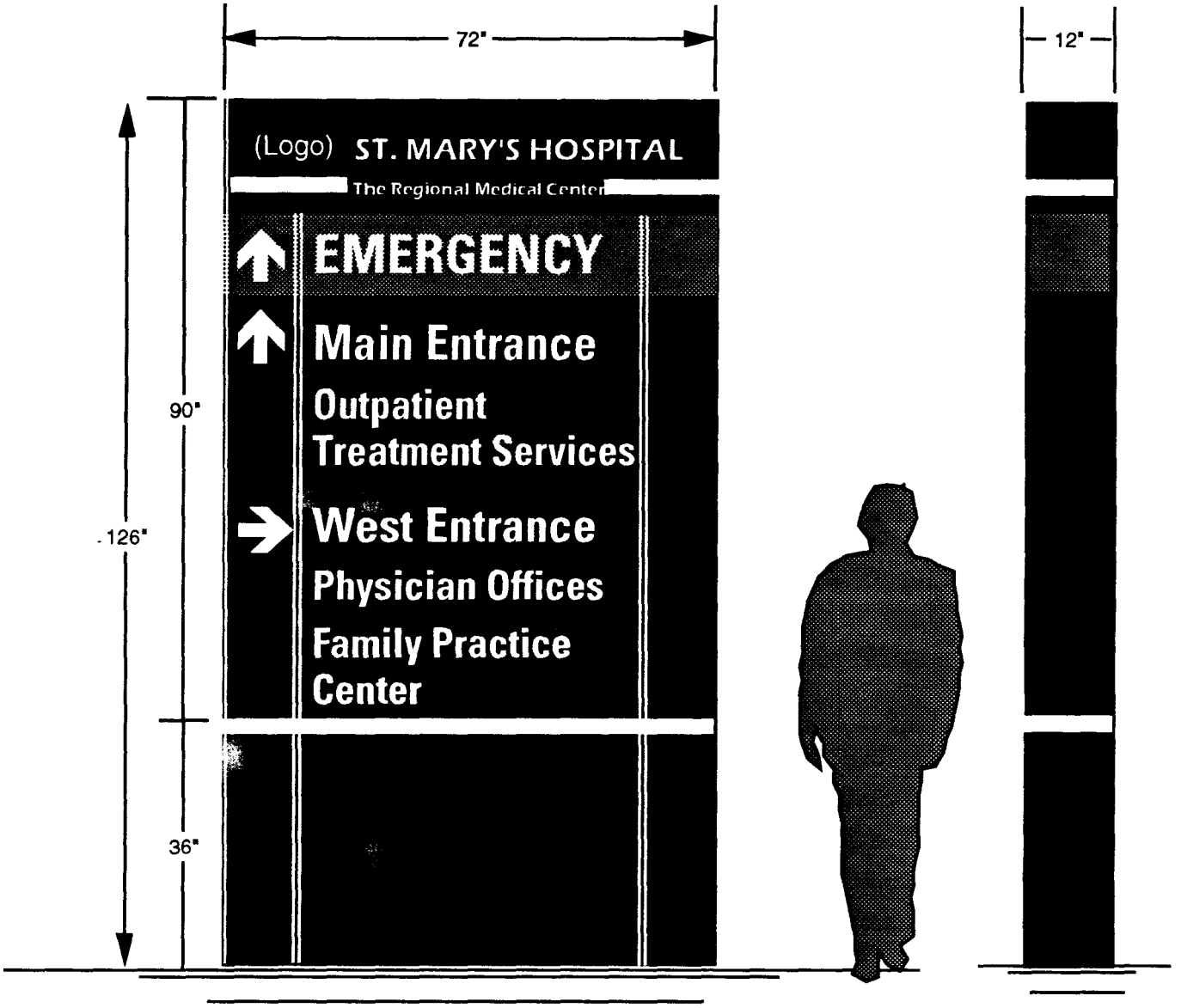
A	Primary Directional	St. Mary's Hospital	Site Signage
SIGN TYPE	*FUNCTION*	*CLIENT*	*PROJECT*



COLORS:	*TYPEFACE:*	*TYPE SIZE:*	*GRAPHIC METHOD:*	*MOUNTING:*
Cabinet/Base: Blue Copy: White Emergency Band : Reflectv. Red Vertical Stripe: Refl. White	Univers 67 Bold, Logotype	6", 5", 4" Cap	Routed aluminum face w/ translucent acrylic backing. Internal illumination	Direct Burial

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11/12/93	C. Burnard	1/2" = 1'-0"		
ISSUED	*CSR*	*SCALE*	*APPROVED*	*DATE*

C	Secondary Directional	St. Mary's Hospital	Site Signage
SIGN TYPE	*FUNCTION*	*CLIENT*	*PROJECT*

COLORS:	*TYPEFACE:*	*TYPE SIZE:*	*GRAPHIC METHOD:*	*MOUNTING:*
Cabinet/Base: Blue Copy: White Emergency : Reflective Red Vert. Stripes: Reflective White	Univers 67 Bold, Logotype	6", 4" Cap	Routed aluminum face w/ translucent acrylic backing. Internal illumination	Direct Burial

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11/12/93	C. Burnard	1/2" = 1'-0"		
ISSUED	*CSR*	*SCALE*	*APPROVED*	*DATE*

C	Secondary Directional	St. Mary's Hospital	Site Signage
SIGN TYPE	*FUNCTION*	*CLIENT*	*PROJECT*

COLORS:	*TYPEFACE:*	*TYPE SIZE:*	*GRAPHIC METHOD:*	*MOUNTING:*
Cabinet/Base: Blue Copy: White Emergency : Reflective Red Vert. Stripes: Reflective White	Univers 67 Bold, Logotype	6", 5", 3-1/2"" Cap	Routed aluminum face w/ translucent acrylic backing. Internal illumination	Direct Burial

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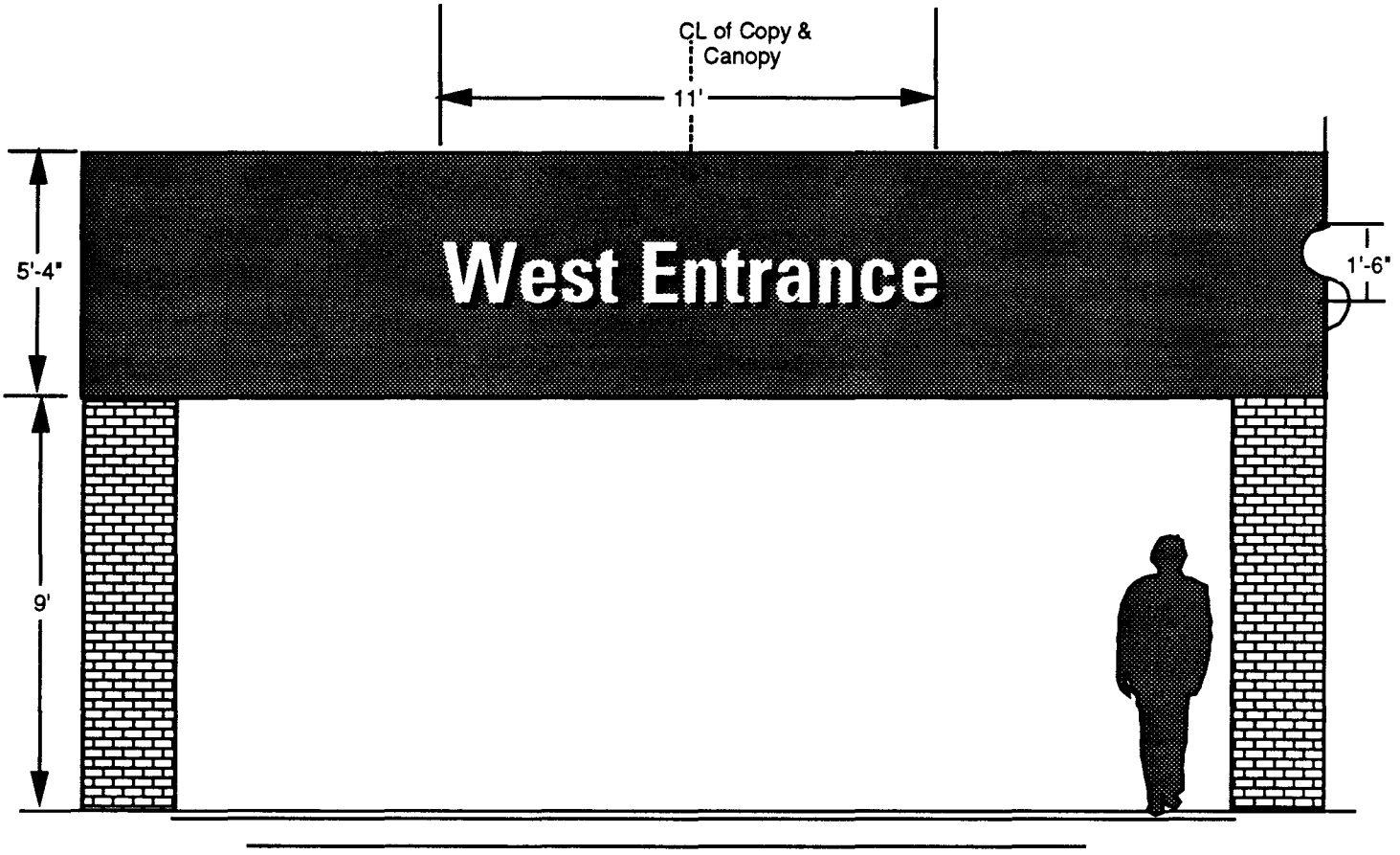
1/10/93	C. Burnard	1/2" = 1'-0"		
ISSUED	*CSR*	*SCALE*	*APPROVED*	*DATE*

D	Entry Identification	St. Mary's Hospital	Site Signage
SIGN TYPE	*FUNCTION*	*CLIENT*	*PROJECT*



COLORS:	*TYPEFACE:*	*TYPE SIZE:*	*GRAPHIC METHOD:*	*MOUNTING:*
Copy: White	Univers 67 Bold, Logotype	18" Cap	Individual painted 3/8" thick aluminum flat cut out letters	Stud mount to panel wall

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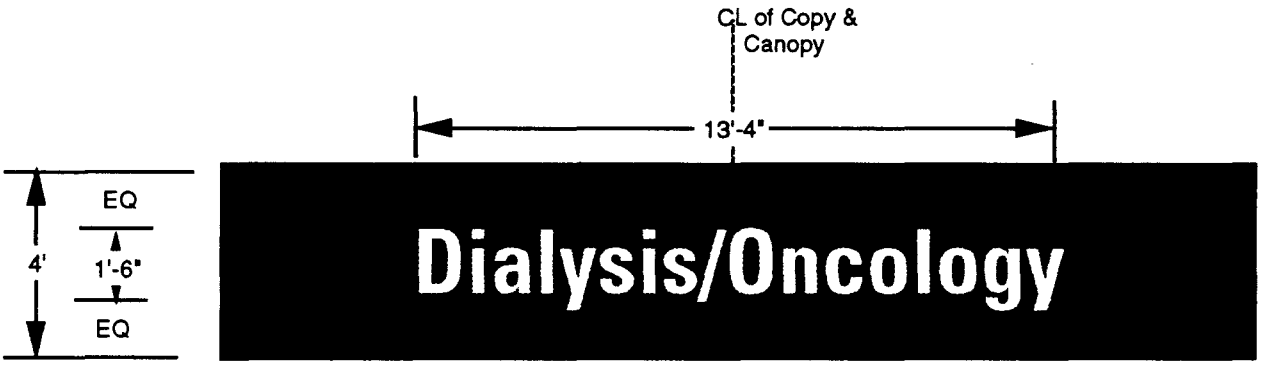
1/12/94	C. Burnard	1/2" = 1'-0"		
ISSUED	*CSR*	*SCALE*	*APPROVED*	*DATE*

D	Entry Identification	St. Mary's Hospital	Site Signage
SIGN TYPE	FUNCTION	CLIENT	PROJECT



COLORS:	TYPEFACE:	TYPE SIZE:	GRAPHIC METHOD:	MOUNTING:
Copy: White Background: Translucent Red	Univers 67 Bold, Logotype	18" Cap	Individual 3/8" thick Flat Cut Out Letters	Stud mount to panel wall

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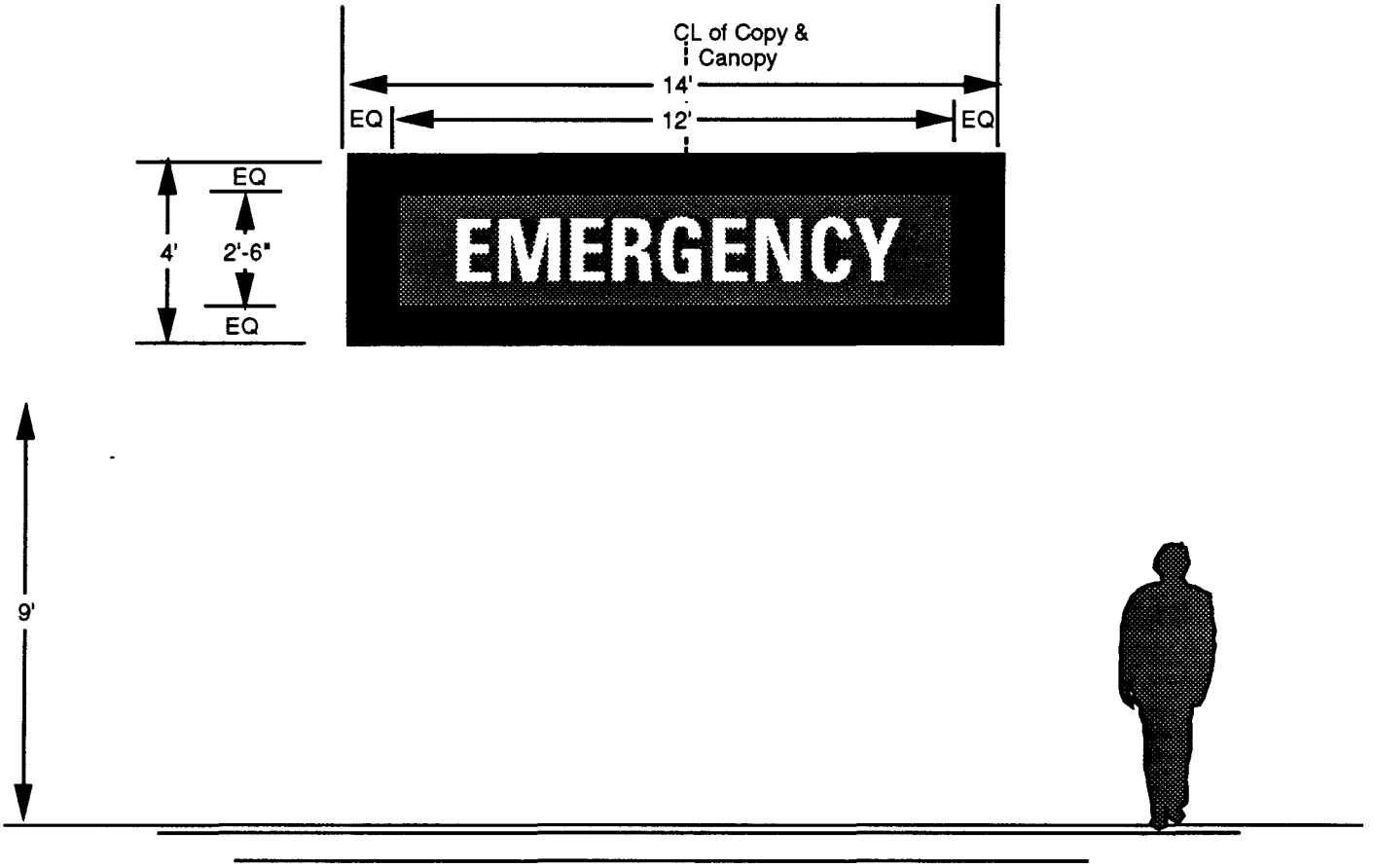
1/12/94	C. Burnard	1/2" = 1'-0"		
ISSUED	CSR	SCALE	APPROVED	DATE

D.1	Entry Identification	St. Mary's Hospital	Site Signage
SIGN TYPE	*FUNCTION*	*CLIENT*	*PROJECT*



COLORS:	*TYPEFACE:*	*TYPE SIZE:*	*GRAPHIC METHOD:*	*MOUNTING:*
Copy: White Background: Translucent Red	Univers 67 Bold, Logotype	18" Cap	Internally illuminated cabinet w/ Flexible Vinyl Face	Stud mount to panel wall

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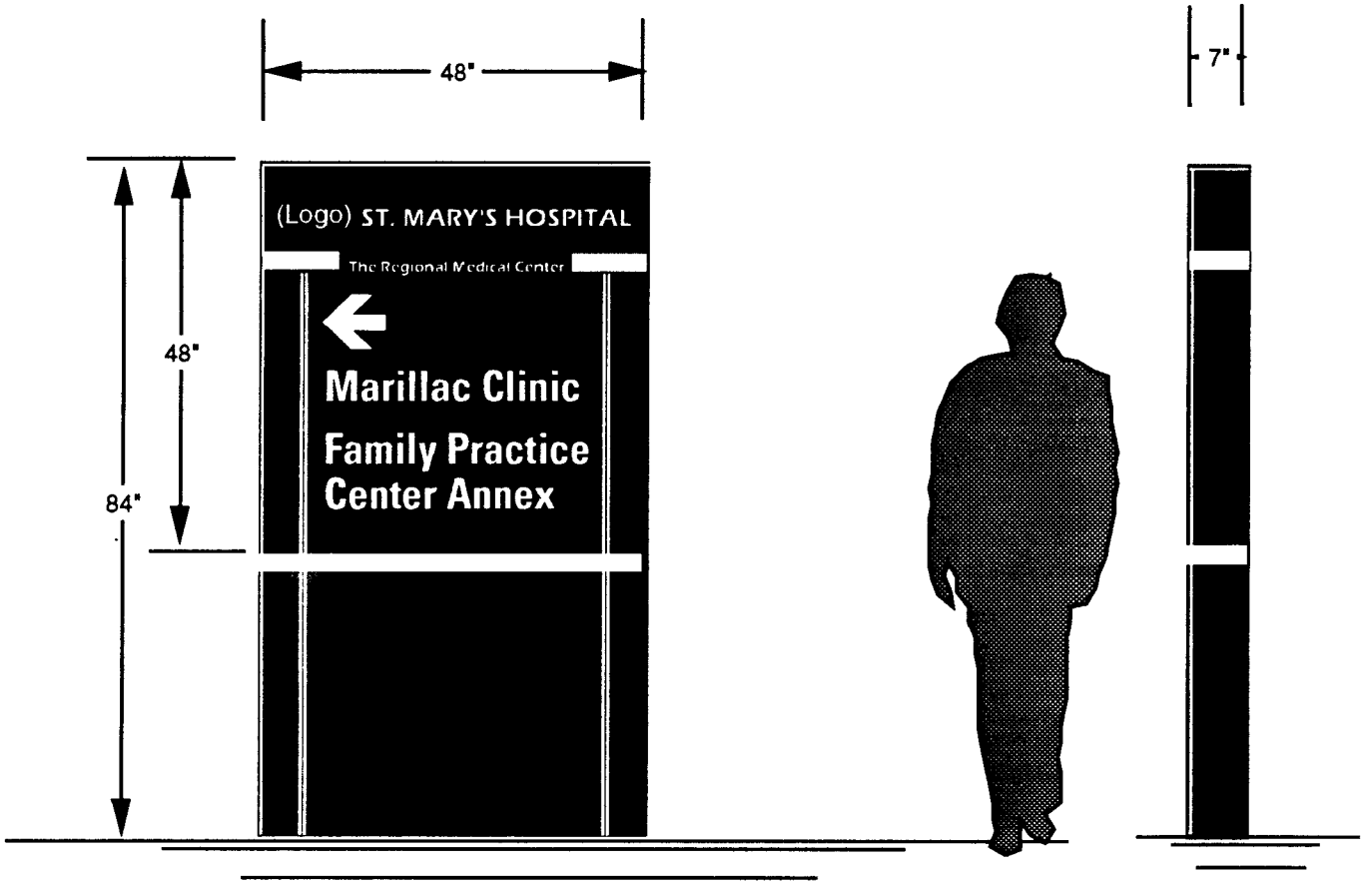
1/12/94	C. Burnard	1/2" = 1'-0"	
ISSUED	*CSR*	*SCALE*	*APPROVED* *DATE*

E	Entry Identification	St. Mary's Hospital	Site Signage
SIGN TYPE	*FUNCTION*	*CLIENT*	*PROJECT*



COLORS:	*TYPEFACE:*	*TYPE SIZE:*	*GRAPHIC METHOD:*	*MOUNTING:*
Cabinet/Base:Blue Copy: White Vertical Stripes: Reflective White	Univers 67 Bold, Logotype	5" Cap	Applied Vinyl Copy	Direct Burial

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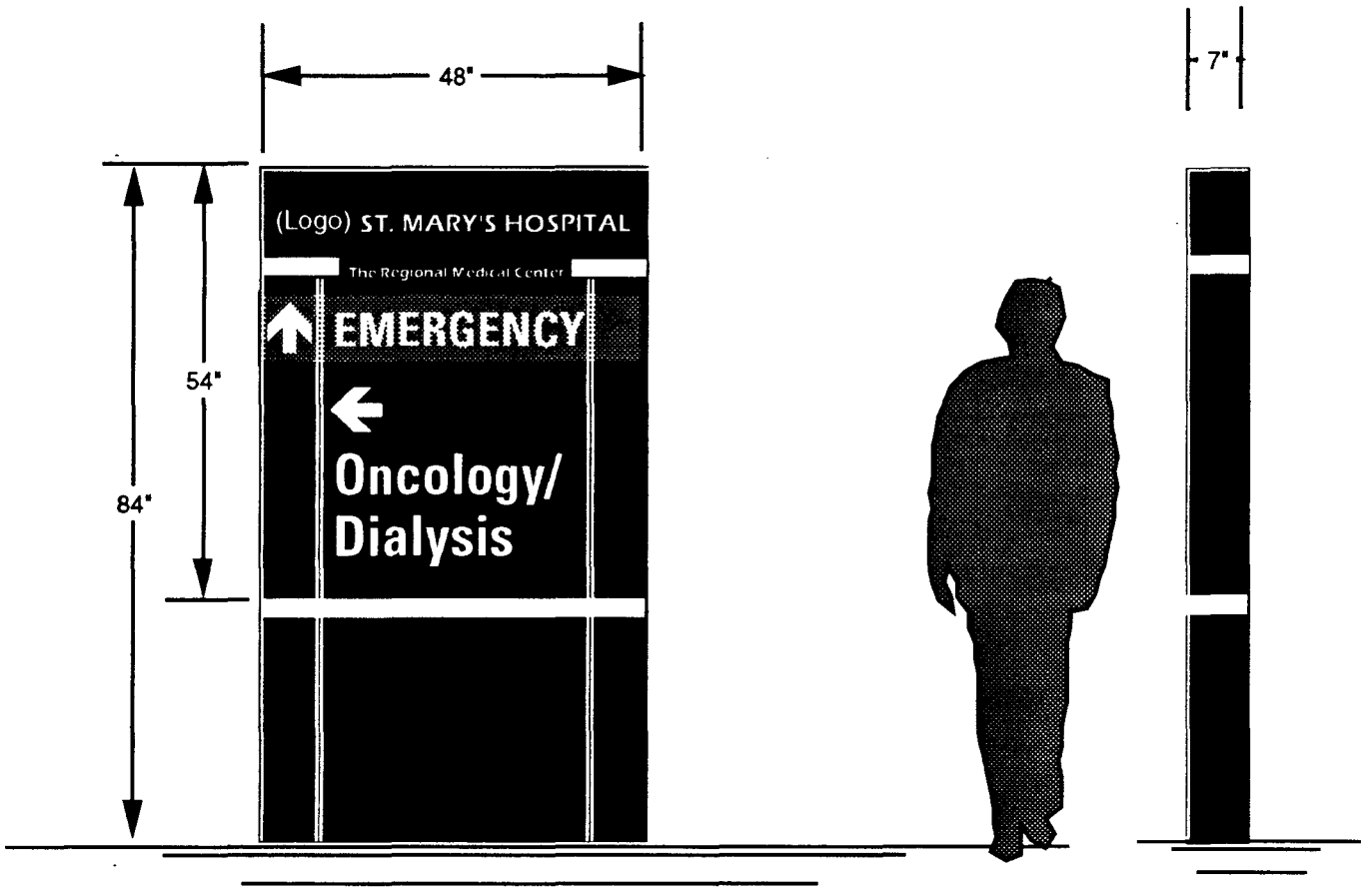
1/10/93	C. Burnard	1/2" = 1'-0"		
ISSUED	*CSR*	*SCALE*	*APPROVED*	*DATE*

E.1	Entry Identification-Illuminated	St. Mary's Hospital	Site Signage
SIGN TYPE	*FUNCTION*	*CLIENT*	*PROJECT*



COLORS:	*TYPEFACE:*	*TYPE SIZE:*	*GRAPHIC METHOD:*	*MOUNTING:*
Cabinet/Base:Blue Copy: White Vertical Stripes: Reflective White	Univers 67 Bold, Logotype	4" & 4-1/2" Cap	Routed face w/ Translucent acrylic backing & internal illumination.	Direct Burial

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1/7/94	C. Burnard	1/2" = 1'-0"		
ISSUED	*CSR*	*SCALE*	*APPROVED*	*DATE*

St. Mary's Hospital

Message Schedule

Issued January 10, 1994

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INTERFACE™
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St. Mary's Hospital

Grand Junction, CO
Attn: Mr. Peter Moberg

Message Schedule	Issued Jan 10, 1994	Site Signage

Location	Sign Type	Size	Message	Remarks
E-1	C		(Side A) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center ^ EMERGENCY -> Main Entrance ^ Outpatient Treatment Services Saccomanno Education Center (Side B) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center <- Main Entrance ^ Exit	Double-faced.
E-2	E.1		(Side A) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center ^ EMERGENCY <- Oncology/Dialysis Side B) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center -> Oncology/Dialysis	Double-faced.

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St. Mary's Hospital

Grand Junction, CO
Attn: Mr. Peter Moberg

Message Schedule	Issued Jan 10, 1994	Site Signage

Location	Sign Type	Size	Message	Remarks
E-3	A		(Side A) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center <- EMERGENCY <- West Entrance Physician Offices Family Practice Center (Side B) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center ^ Main Entrance Oncology/Dialysis ->West Entrance Physician Offices Family Practice Center	Double-faced

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Grand Junction, CO
Attn: Mr. Peter Moberg

Message Schedule	Issued Jan 10, 1994	Site Signage

Location	Sign Type	Size	Message	Remarks
E-4	C		(Side A) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center ^ EMERGENCY ^ Main Entrance Family Practice Center <- West Entrance Physician Offices (Side B) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center ->
West Entrance Physician Offices ^ Exit to Patterson Rd.	

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Message Schedule	Issued Jan 10, 1994	Site Signage

Location	Sign Type	Size	Message	Remarks
E-5	C		(Side A) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center <- EMERGENCY <- Main Entrance ^ Family Practice Center (Side B) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center -> EMERGENCY ->> Main Entrance ^ West Entrance Physician Offices	Double-faced.

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Grand Junction, CO
Attn: Mr. Peter Moberg

Message Schedule	Issued Jan 10, 1994	Site Signage

Location	Sign Type	Size	Message	Remarks
E-6	A		(Side A) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center ^ EMERGENCY -> Saccomanno Education Center <- Family Practice Center ^ West Entrance Physician Offices (Side B) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center <- Saccomanno Education Center ^ Exit to 7th Street	Double-faced. Sign Type change due to amount of information.

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Grand Junction, CO
Attn: Mr. Peter Moberg

Message Schedule	Issued Jan 10, 1994	Site Signage

Location	Sign Type	Size	Message	Remarks
E- 6.1	E		(Side A) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center -> Marillac Clinic Famliy Practice Center Annex (Side B) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center <- Marillac Clinic Family Practice Center Annex	Double-faced. Please verify location.

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Grand Junction, CO
Attn: Mr. Peter Moberg

Message Schedule	Issued Jan 10, 1994	Site Signage

Location	Sign Type	Size	Message	Remarks
E-7	A		(Side A) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center ->West Entrance Physician Offices Family Practice Center (Side B) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center ^EMERGENCY <- West Entrance Physician Offices Family Practice Center ^ Main Entrance Outpatient Treatment Services	
E-8	B		(Deleted)	Existing sign to be remanufactured.

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Grand Junction, CO
Attn: Mr. Peter Moberg

Message Schedule	Issued Jan 10, 1994	Site Signage

Location	Sign Type	Size	Message	Remarks
E-9	E.1		(Side A) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center ^ EMERGENCY -> Dialysis/Oncology (Side B) (Logo) ST. MARY'S HOSPITAL The Regional Medical Center <- Dialysis/Oncology	Double-faced.
E-10	D		Dialysis/Oncology	Canopy Mounted.
E-11	D		West Entrance	Canopy Mounted
E-12	E		(Logo) ST. MARY'S HOSPITAL The Regional Medical Center Physician Offices	Single-faced.
E-13	D.1		EMERGENCY	Canopy mounted. Size & placement to be verified.
E-14			(Deleted)	

Submitted By-

Matthew Brown
Project Manager

Approved-

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.6	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 70 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	STORAGE OUTFLOW/ STORAGE+ OUTFLOW RATIO	ADJUSTMENT DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)	BASIN 1 FLOW (CFS)	BASIN 2 FLOW (CFS)	BASIN 3 FLOW (CFS)
0	0			0		0	0							0	0	0
0.0333	6.756206	404.967	0	0	0	383.8467	0.59681	0.352357	21.12025	1.78E-14	0.052163	1.68E-14	383.8467	5.484473	0.387203	0.884529
0.0666	13.51241	1214.901	0.59681	383.8467	0.352357	1542.522	0.991993	0.585672	56.22546	5.68E-14	0.04628	5.42E-14	1542.522	10.96895	0.774406	1.769059
0.0999	17.24495	1843.536	0.991993	1542.522	0.585672	3311.074	1.532439	0.666326	75.04477	-9.9E-14	0.040706	-9.5E-14	3311.074	13.84968	1.161609	2.23366
0.1332	17.63215	2090.533	1.532439	3311.074	0.666326	5319.732	1.765923	0.699621	81.87483	-2.8E-14	0.039165	-2.7E-14	5319.732	13.84968	1.548813	2.23366
0.1665	18.01936	2136.951	1.765923	5319.732	0.699621	7370.783	2.004334	0.733496	85.90099	9.95E-14	0.040198	9.55E-14	7370.783	13.84968	1.936016	2.23366
0.1998	18.40656	2183.369	2.004334	7370.783	0.733496	9464.552	2.24771	0.761332	89.59996	-6.3E-13	0.041037	-6E-13	9464.552	13.84968	2.323219	2.23366
0.2331	18.79376	2229.787	2.24771	9464.552	0.761332	11601.37	2.496091	0.78974	92.97127	-1.4E-13	0.041695	-1.4E-13	11601.37	13.84968	2.710422	2.23366
0.2664	19.18097	2276.205	2.496091	11601.37	0.78974	13781.8	2.656267	0.808061	95.77219	9.09E-13	0.042075	8.71E-13	13781.8	13.84968	3.097625	2.23366
0.2997	19.56817	2322.623	2.656267	13781.8	0.808061	16006.44	2.818201	0.826582	97.98046	-6.1E-13	0.042185	-5.9E-13	16006.44	13.84968	3.484828	2.23366
0.333	19.95537	2369.041	2.818201	16006.44	0.826582	18275.26	2.98335	0.845471	100.2228	-3.1E-13	0.042305	-3E-13	18275.26	13.84968	3.872031	2.23366
0.3663	20.19004	2406.316	2.98335	18275.26	0.845471	20579.07	3.151046	0.864651	102.5047	-1.3E-12	0.042598	-1.2E-12	20579.07	13.84968	4.1067	2.23366
0.3996	20.19004	2420.382	3.151046	20579.07	0.864651	22894.65	3.319599	0.883929	104.8099	1.22E-12	0.043303	1.17E-12	22894.65	13.84968	4.1067	2.23366
0.4329	20.19004	2420.382	3.319599	22894.65	0.883929	25207.91	3.487983	0.903188	107.1198	1.14E-12	0.044257	1.09E-12	25207.91	13.84968	4.1067	2.23366
0.4662	20.19004	2420.382	3.487983	25207.91	0.903188	27514.77	3.611113	0.990756	113.523	-3E-13	0.046903	-2.8E-13	27514.77	13.84968	4.1067	2.23366
0.4995	20.19004	2420.382	3.611113	27514.77	0.990756	29769.22	3.728073	1.777504	165.9295	8.24E-13	0.060555	7.68E-13	29769.22	13.84968	4.1067	2.23366
0.5328	20.19004	2420.382	3.728073	29769.22	1.777504	31931.29	3.84024	2.532012	258.3123	-1.4E-12	0.106724	-1.3E-12	31931.29	13.84968	4.1067	2.23366
0.5661	20.19004	2420.382	3.84024	31931.29	2.532012	34004.76	3.94781	3.255602	346.9095	2.84E-13	0.143328	2.43E-13	34004.76	13.84968	4.1067	2.23366
0.5994	20.19004	2420.382	3.94781	34004.76	3.255602	35993.27	4.050972	3.94954	431.8762	5.68E-14	0.178433	4.67E-14	35993.27	13.84968	4.1067	2.23366
0.6327	20.19004	2420.382	4.050972	35993.27	3.94954	37900.29	4.149907	4.615043	513.3611	-3E-12	0.212099	-2.3E-12	37900.29	13.84968	4.1067	2.23366
0.666	20.19004	2420.382	4.149907	37900.29	4.615043	39729.16	4.244788	5.253274	591.5069	3.87E-12	0.244386	2.92E-12	39729.16	13.84968	4.1067	2.23366
0.6993	20.19004	2420.382	4.244788	39729.16	5.253274	41483.09	4.335781	5.865353	666.4505	4.32E-12	0.275349	3.13E-12	41483.09	13.84968	4.1067	2.23366
0.7326	20.19004	2420.382	4.335781	41483.09	5.865353	43165.15	4.423045	6.452349	738.323	3.18E-12	0.305044	2.31E-12	43165.15	13.84968	4.1067	2.23366
0.7659	20.19004	2420.382	4.423045	43165.15	6.452349	44780.2	4.506833	6.983256	805.3301	5.68E-13	0.332729	3.79E-13	44780.2	13.84968	4.1067	2.23366
0.7992	20.19004	2420.382	4.506833	44780.2	6.983256	46353.94	4.588477	7.141646	846.6466	5.23E-12	0.349799	3.4E-12	46353.94	13.84968	4.1067	2.23366
0.8325	20.19004	2420.382	4.588477	46353.94	7.141646	47908.3	4.669142	7.298136	865.5205	4.43E-12	0.357597	2.85E-12	47908.3	13.84968	4.1067	2.23366
0.8658	20.19004	2420.382	4.669142	47908.8	7.298136	49445.02	4.74884	7.45275	884.1681	1.48E-12	0.365301	9.38E-13	49445.02	13.84968	4.1067	2.23366
0.8991	20.19004	2420.382	4.74884	49445.02	7.45275	50962.81	4.827582	7.605509	902.592	1.14E-13	0.372913	7.13E-14	50962.81	13.84968	4.1067	2.23366
0.9324	20.19004	2420.382	4.827582	50962.81	7.605509	52462.39	4.90538	7.756436	920.795	3.52E-12	0.380434	2.18E-12	52462.39	13.84968	4.1067	2.23366
0.9657	20.19004	2420.382	4.90538	52462.39	7.756436	53944	4.982244	7.905553	938.7797	2.05E-12	0.387864	1.25E-12	53944	13.84968	4.1067	2.23366
0.999	20.19004	2420.382	4.982244	53944	7.905553	55407.83	5.058187	8.052882	956.5486	4.21E-12	0.395206	2.54E-12	55407.83	13.84968	4.1067	2.23366
1.0323	20.19004	2420.382	5.058187	55407.83	8.052882	56854.11	5.133219	8.198444	974.1045	0	0.402459	0	56854.11	13.84968	4.1067	2.23366
1.0656	20.19004	2420.382	5.133219	56854.11	8.198444	58283.04	5.207351	8.34226	991.4498	4.32E-12	0.409625	2.55E-12	58283.04	13.84968	4.1067	2.23366
1.0989	20.19004	2420.382	5.207351	58283.04	8.34226	59694.83	5.280594	8.484352	1008.587	2.39E-12	0.416706	1.39E-12	59694.83	13.84968	4.1067	2.23366
1.1322	20.19004	2420.382	5.280594	59694.83	8.484252	61089.7	5.352958	8.624739	1025.519	9.09E-13	0.423701	5.24E-13	61089.7	13.84968	4.1067	2.23366
1.1655	20.19004	2420.382	5.352958	61089.7	8.624739	62467.83	5.424455	8.763443	1042.248	4.55E-12	0.430613	2.59E-12	62467.83	13.84968	4.1067	2.23366
1.1988	15.82239	2158.585	5.424455	62467.83	8.763443	63569.21	5.481594	8.874292	1057.206	1.14E-12	0.489768	5.8E-13	63569.21	10.30416	3.856387	1.661843
1.2321	9.066186	1491.821	5.481594	63569.21	8.874292	63994.61	5.503663	8.917107	1066.416	1.16E-11	0.714842	3.31E-12	63994.61	4.819689	3.469164	0.777314
1.2654	3.081981	728.1611	5.503663	63994.61	8.917107	63655.84	5.486088	8.88301	1066.939	1.82E-12	1.465251	8.46E-13	63655.84	0	3.081981	0
1.2987	2.694777	346.2589	5.486088	63655.84	8.88301	62941.51	5.449029	8.811116	1060.586	5.25E-11	3.062986	3.3E-12	62941.51	0	2.694777	0
1.332	2.307574	299.841	5.449029	62941.51	8.811116	62189.61	5.410021	8.735441	1051.741	3.07E-12	3.507662	1.56E-12	62189.61	0	2.307574	0
1.3653	1.920371	253.423	5.410021	62189.61	8.735441	61400.59	5.369087	8.656029	1042.445	3.05E-11	4.113457	3.46E-12	61400.59	0	1.920371	0
1.3986	1.533168	207.0051	5.369087	61400.59	8.656029	60574.89	5.32625	8.572926	1032.704	3.41E-12	4.988782	3.37E-12	60574.89	0	1.533168	0
1.4319	1.145965	160.5872	5.32625	60574.89	8.572926	59712.95	5.281534	8.486176	1022.523	7.13E-12	6.367397	2.62E-12	59712.95	0	1.145965	0
1.4652	0.758752	114.1693	5.281534	59712.95	8.486176	58815.22	5.23496	8.395822	1011.907	-2E-12	8.863213	-1.7E-12	58815.22	0	0.758752	0
1.4985	0.371559	67.7514	5.23496	58815.22	8.395822	57882.11	5.186551	8.301908	1000.862	4.19E-12	14.77257	3.24E-12	57882.11	0	0.371559	0
1.5318	0.001	22.33116	5.186551	57882.11	8.301908	56915.04	5.13638	8.204577	989.3987	4.72E-12	44.30574	1.44E-12	56915.04	0	0	0
1.5651	0.001	0.11988	5.13638	56915.04	8.204577	55937.49	5.085665	8.106191	977.6674	3.1E-12	8155.384	1.19E-12	55937.49	0	0	0
1.5984	0.001	0.11988	5.085665	55937.49	8.106191	54971.67	5.035559	8.008984	965.9436	-8.8E-13	8057.588	-5.1E-13	54971.67	0	0	0
1.6317	0.001	0.11988	5.035559	54971.67	8.008984	54017.43	4.986054	7.912944	954.3604	1.06E-12	7960.964	1.02E-12	54017.43	0	0	0
1.665	0.001	0.11988	4.986054	54017.43	7.912944	53074.63	4.937142	7.818056	942.9161	7.62E-06	7866	1.01E-12	53074.63	0	0	0
1.6983	0.001	0.11988	4.937142	53074.63	7.818056	52143.14	4.888817	7.724305	931.6091	-1.5E-11	7771.18	-2.7E-12	52143.14	0	0	0

Table 23K

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	100
1.5	3032
2.5	11635
3.5	25373
5.5	63924

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
1	0.5904
2	0.733
3.5	0.916
4.5	6.97
5.5	8.91

FINAL CONDITIONS, COMBINED BASINS 1, 2 AND 3, 100 YEAR STORM
MODIFIED RATIONAL METHOD WITH STORM DURATION 80 MIN

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)	INITIAL WATER ELEVATION	INITIAL STORAGE VOLUME (CU FT)	INITIAL OUTFLOW (CFS)	FINAL STORAGE VOLUME (CU FT)	FINAL WATER ELEVATION	FINAL OUTFLOW (CFS)	OUTFLOW VOLUME (CU FT)	EXCESS INFLOW VOLUME (CU FT)	RISING OUTFLOW: STORAGE+ OUTFLOW RATIO	ADJUSTING DELTA V	ADJUSTED FINAL STORAGE VOLUME (CU FT)
0	0			0			0	0					
0.0333	6.000585	364.4703	0	0	0	343.833	0.583163	0.344299	20.6373	-1.8E-14	0.056623	-1.7E-14	343.833
0.0666	12.16117	1093.411	0.583163	343.833	0.344299	1383.422	0.937729	0.553635	53.82219	-5.4E-14	0.049224	-5.1E-14	1383.422
0.0999	15.52045	1659.237	0.937729	1383.422	0.553635	2969.992	1.478851	0.658684	72.66643	8.53E-14	0.048795	8.15E-14	2969.992
0.1332	15.86894	1881.48	1.478851	2969.992	0.658684	4770.601	1.702092	0.690518	80.8712	4.55E-13	0.042933	4.36E-13	4770.601
0.1665	16.21742	1923.256	1.702092	4770.601	0.690518	6609.251	1.915814	0.720995	84.60612	2.98E-13	0.043991	2.85E-13	6609.251
0.1998	16.5659	1965.032	1.915814	6609.251	0.720995	8486.212	2.13399	0.748325	88.07105	-4.8E-13	0.044019	-4.6E-13	8486.212
0.2331	16.91429	2006.809	2.13399	8486.212	0.748325	10401.79	2.356653	0.773792	91.23571	-5.4E-13	0.045463	-5.2E-13	10401.79
0.2664	17.26287	2048.585	2.356653	10401.79	0.773792	12356.26	2.552501	0.796192	94.10487	-8.1E-13	0.045957	-7.7E-13	12356.26
0.2997	17.61135	2090.361	2.552501	12356.26	0.796192	14350.18	2.69764	0.812793	96.44256	2.13E-13	0.046137	2.03E-13	14350.18
0.333	17.95983	2132.137	2.69764	14350.18	0.812793	16383.87	2.845674	0.829724	98.45244	2.42E-13	0.046175	2.3E-13	16383.87
0.3663	18.17104	2165.684	2.845674	16383.87	0.829724	18449.05	2.996	0.846918	100.4979	1.42E-13	0.046405	1.36E-13	18449.05
0.3996	18.17104	2178.344	2.996	18449.05	0.846918	20524.83	3.147098	0.864199	102.5643	-1.6E-12	0.047384	-1.5E-12	20524.83
0.4329	18.17104	2178.344	3.147098	20524.83	0.864199	22598.54	3.298045	0.881464	104.6351	9.52E-13	0.048034	9.06E-13	22598.54
0.4662	18.17104	2178.344	3.298045	22598.54	0.881464	24670.18	3.448841	0.898711	106.7037	-1.3E-13	0.048984	-1.2E-13	24670.18
0.4995	18.17104	2178.344	3.448841	24670.18	0.898711	26739.95	3.570917	0.912674	108.5744	3.41E-13	0.049843	3.24E-13	26739.95
0.5328	18.17104	2178.344	3.570917	26739.95	0.912674	28777.78	3.676638	1.431518	140.5108	1.14E-13	0.064504	1.06E-13	28777.78
0.5661	18.17104	2178.344	3.676638	28777.78	1.431518	30743.4	3.778613	2.117469	212.7263	1.96E-12	0.097655	1.77E-12	30743.4
0.5994	18.17104	2178.344	3.778613	30743.4	2.117469	32628.47	3.876409	2.775312	293.2733	-7.4E-13	0.134631	-6.4E-13	32628.47
0.6327	18.17104	2178.344	3.876409	32628.47	2.775312	34436.3	3.970198	3.406197	370.5196	-6.8E-13	0.170092	-5.7E-13	34436.3
0.666	18.17104	2178.344	3.970198	34436.3	3.406197	36170.04	4.060143	4.01123	444.6006	4.26E-12	0.2041	3.39E-12	36170.04
0.6993	18.17104	2178.344	4.060143	36170.04	4.01123	37832.74	4.146403	4.59147	516.6458	4.43E-12	0.236725	3.38E-12	37832.74
0.7326	18.17104	2178.344	4.146403	37832.74	4.59147	39427.3	4.229128	5.147933	582.7738	-3.4E-13	0.267832	-2.5E-13	39427.3
0.7659	18.17104	2178.344	4.229128	39427.3	5.147933	40956.52	4.308463	5.681593	649.1218	1.59E-12	0.297909	1.12E-12	40956.52
0.7992	18.17104	2178.344	4.308463	40956.52	5.681593	42423.08	4.384547	6.193305	711.7862	5.23E-12	0.326756	3.52E-12	42423.08
0.8325	18.17104	2178.344	4.384547	42423.08	6.193305	43829.54	4.457513	6.684204	771.3827	2.34E-12	0.354344	1.34E-12	43829.54
0.8658	18.17104	2178.344	4.457513	43829.54	6.684204	45186.21	4.527096	7.024118	821.5769	3.52E-12	0.377233	2.19E-12	45186.21
0.8991	18.17104	2178.344	4.527096	45186.21	7.024118	46514.49	4.596806	7.157804	850.0644	3.18E-12	0.390234	1.94E-12	46514.49
0.9324	18.17104	2178.344	4.596806	46514.49	7.157804	47826.84	4.66439	7.289807	865.9946	1.93E-12	0.397547	1.16E-12	47826.84
0.9657	18.17104	2178.344	4.66439	47826.84	7.289807	49123.45	4.732157	7.420385	881.7337	4.43E-12	0.404773	2.64E-12	49123.45
0.999	18.17104	2178.344	4.732157	49123.45	7.420385	50404.51	4.798613	7.549319	897.284	4.66E-12	0.411911	2.74E-12	50404.51
1.0323	18.17104	2178.344	4.798613	50404.51	7.549319	51670.2	4.864281	7.676706	912.6479	9.09E-13	0.418964	5.28E-13	51670.2
1.0656	18.17104	2178.344	4.864281	51670.2	7.676706	52920.72	4.929157	7.802565	927.8275	5E-12	0.425933	2.87E-12	52920.72
1.0989	18.17104	2178.344	4.929157	52920.72	7.802565	54156.24	4.993255	7.926915	942.825	3.64E-12	0.432817	2.06E-12	54156.24
1.1322	18.17104	2178.344	4.993255	54156.24	7.926915	55376.94	5.056584	8.049773	957.6427	3.3E-12	0.43962	1.85E-12	55376.94
1.1655	18.17104	2178.344	5.056584	55376.94	8.049773	56583	5.119154	8.171159	972.2827	5.46E-12	0.44634	3.02E-12	56583
1.1988	18.17104	2178.344	5.119154	56583	8.171159	57774.6	5.180973	8.291088	986.7471	2.61E-12	0.45298	1.43E-12	57774.6
1.2321	18.17104	2178.344	5.180973	57774.6	8.291088	58951.9	5.242051	8.409579	1001.038	3.87E-12	0.459541	2.09E-12	58951.9
1.2654	18.17104	2178.344	5.242051	58951.9	8.409579	60115.09	5.302396	8.526649	1015.157	5.68E-12	0.466023	3.04E-12	60115.09
1.2987	18.17104	2178.344	5.302396	60115.09	8.526649	61264.33	5.362018	8.642315	1029.108	4.55E-13	0.472427	2.4E-13	61264.33
1.332	18.17104	2178.344	5.362018	61264.33	8.642315	62399.78	5.420924	8.756593	1042.891	2.27E-12	0.478754	1.19E-12	62399.78
1.3653	14.54725	1961.134	5.420924	62399.78	8.756593	63305.71	5.467923	8.847771	1055.206	5.46E-12	0.538059	2.52E-12	63305.71
1.3986	8.466668	1379.454	5.467923	63305.71	8.847771	63622.58	5.484363	8.879663	1062.582	1.05E-11	0.770292	2.4E-12	63622.58
1.4319	2.791383	674.8075	5.484363	63622.58	8.879663	63235.23	5.464267	8.840678	1062.157	1.14E-13	1.574015	6.53E-14	63235.23
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1.5318	1.745934	233.1906	5.385626	61719.39	8.688115	60912.92	5.343787	8.606947	1036.666	-3.5E-12	4.508511	-1.8E-12	60912.92
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1.665	0.352003	63.08616	5.208433	58303.89	8.344359	57372.28	5.160101	8.250596	994.7016	2.93E-12	15.76735	2.25E-12	57372.28
1.6983	0.00352	21.31004	5.160101	57372.28	8.250596	56410.31	5.110195	8.153778	983.2782	2.53E-11	46.14154	3.58E-12	56410.31

Table 23L

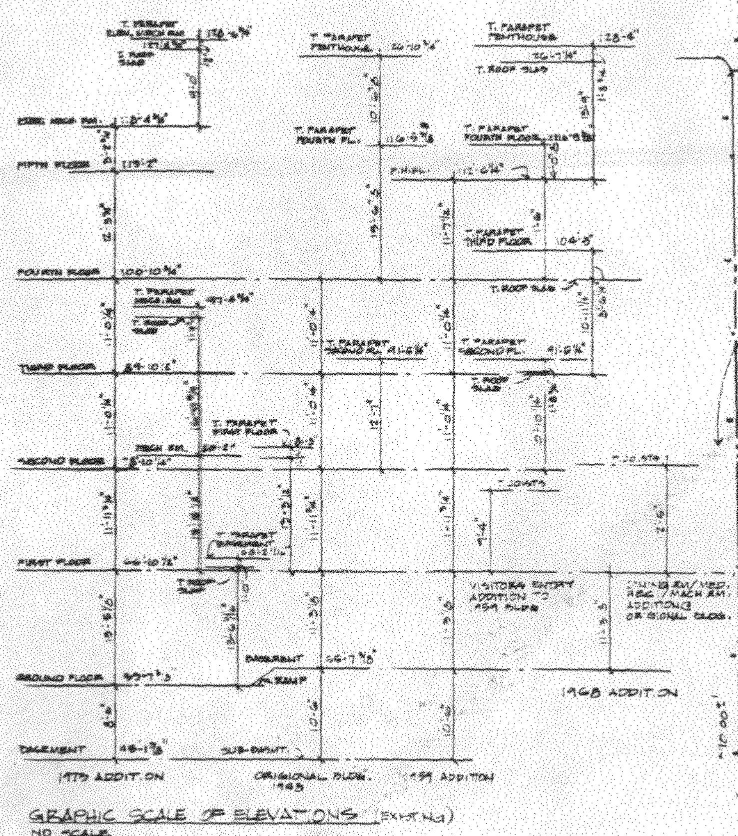
ST. MARY'S HOSPITAL

EXISTING PARKING CAPACITY

AS OF OCTOBER 1992

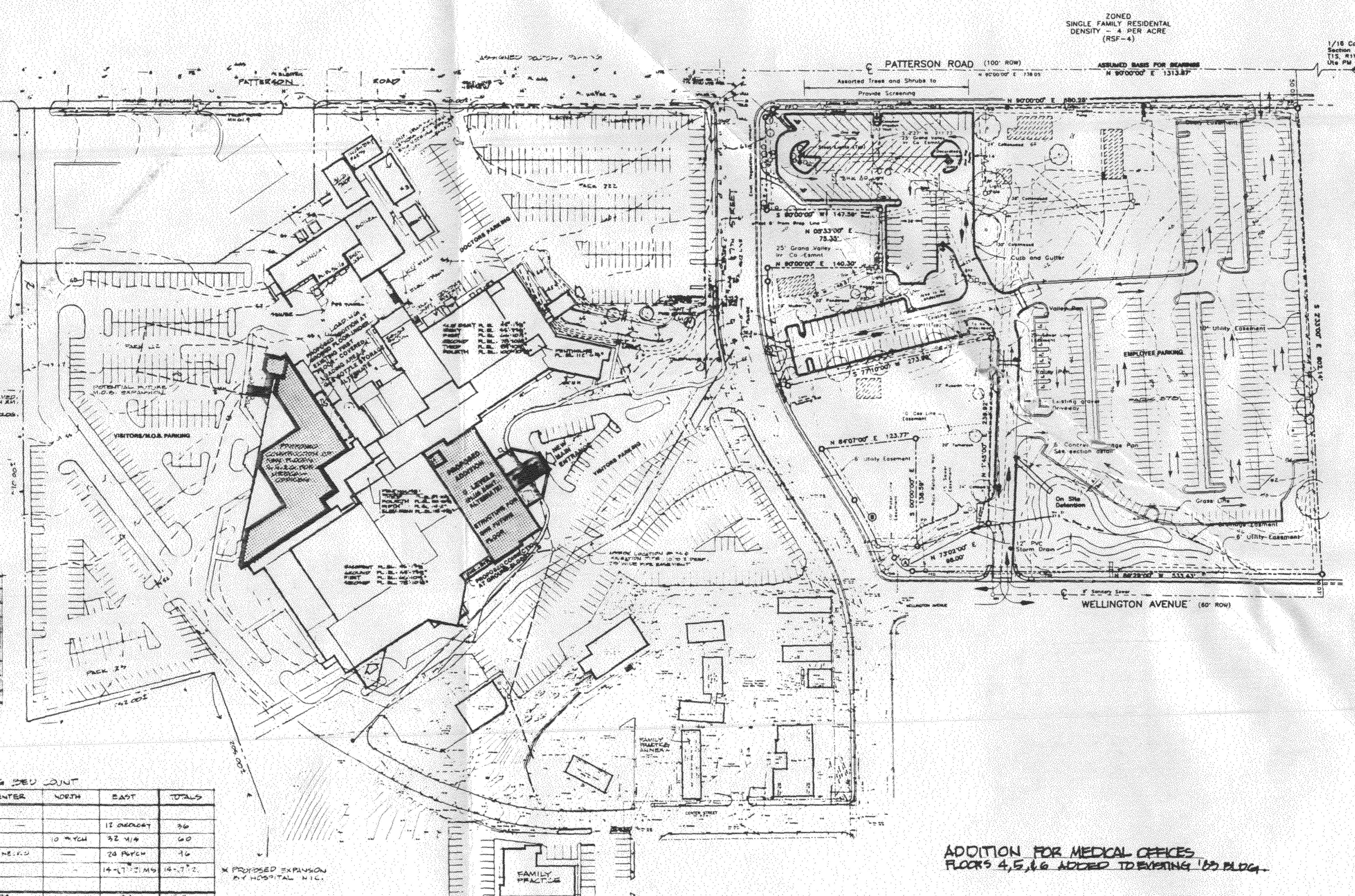
PARKING LOT	EMPLOYEE	PHYSICIAN	VISITOR	OUT PATIENT	HANDICAP	TOTAL
A	0	55	106	20	8	189
B	0	0	118	10	4	132
C	0	0	0	33	4	37
D	0	0	35	100	6	141
E	0	0	30	100	0	130
F	464	0	0	0	8	472
TOTAL	464	55	289	263	30	1,101

DD



GRAPHIC SCALE OF ELEVATIONS (EXISTING)
NO SCALE

PROPOSED BED COUNT - MASTER PLAN						
	WEST	CENTER	NORTH	SOUTH	EAST	TOTALS
GROUND	—	—	—	—	—	[illegible]
FIRST	24 [illegible]	—	—	—		[illegible]
SECOND	8 OB.	—	—	35 M/S	32 M/S	75
THIRD	44 [illegible]	—	—	35 NEURO	32 PSYCH *	
FOURTH	FUTURE	—	—	35 MEDICAL & ONCOLOGY	—	[illegible]
FIFTH	FUTURE			FUTURE		[illegible]
TOTALS	56	0	0	09	64	[illegible]



EXISTING BED COUNT

	WEST	CENTER	NORTH	EAST	TOTALS
GROUND					
FIRST	[illegible]	—		12 ONCOLOGY	36
SECOND	18 OB.		10 PSYCH	32 M/S	60
THIRD	24 [illegible]	23 NEURO	—	20 PSYCH	96
FOURTH	FUTURE		—	14-[illegible]	14-[illegible]
FIFTH	FUTURE				
TOTALS	85	23	10	64	[illegible]

× PROPOSED EXPANSION BY HOSPITAL N.I.C.

PARKING TOTALS

EXISTING	831
NET LOSS	30
	801
NEW LOT	378
TOTAL	1,179 CARS

ADDITION FOR MEDICAL OFFICES
FLOORS 4,5,&6 ADDED TO EXISTING '83 BLDG.

PROPOSED ALTERATIONS & ADDITIONS
M.O.B.
ST. MARY'S HOSPITAL & MEDICAL CENTER
GRAND JUNCTION COLORADO
SCALE: 1" = 60'-0"
SITE PLAN
FEB. 1979
AUG. 21, 1982

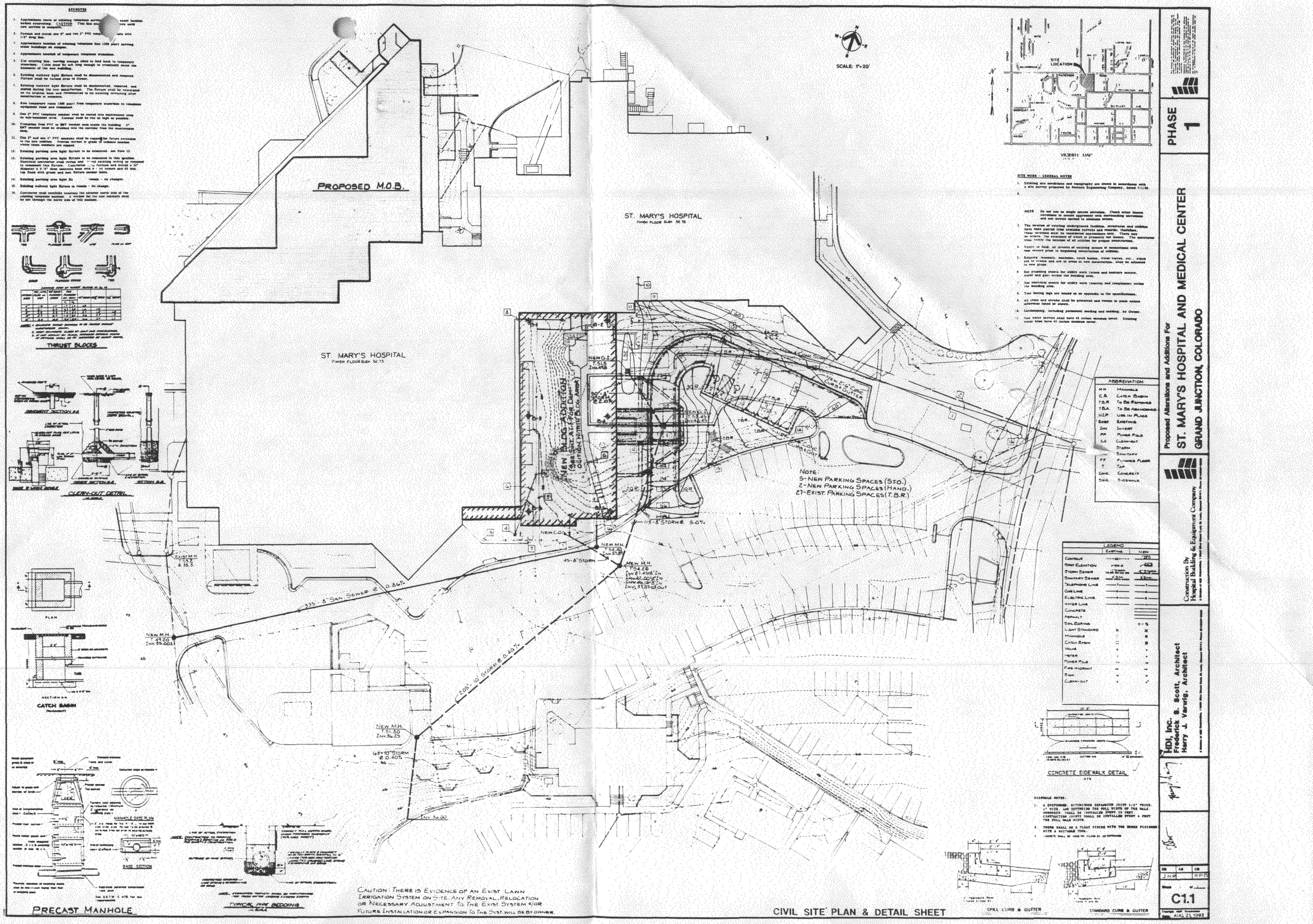

PROPOSED M.O.B.
ST. MARY'S HOSPITAL
FINISH FLOOR ELEV. 52.75
NEW BLDG. ADDITION
SCALE: 1"=20'
VICINITY MAP
SITE LOCATION
NOTE:
5-NEW PARKING SPACES (STD.)
2-NEW PARKING SPACES (HAND.)
27-EXIST. PARKING SPACES (T.B.R.)
115-8" STORM @ 5.0%
45-8" STORM
335-8" SAN. SEWER @ 0.86%
205'-10" STORM @ 0.40%
63-10" STORM @ 0.40%
NEW M.H.
CAUTION: THERE IS EVIDENCE OF AN EXIST. LAWN IRRIGATION SYSTEM ON SITE. ANY REMOVAL, RELOCATION OR NECESSARY ADJUSTMENT TO THE EXIST. SYSTEM &/OR FUTURE INSTALLATION OR EXPANSION TO THE SYST. WILL BE BY OWNER.
THRUST BLOCKS
CLEAN-OUT DETAIL
CATCH BASIN
PRECAST MANHOLE
TYPICAL PIPE BEDDING
CONCRETE SIDEWALK DETAIL
SPILL CURB & GUTTER
STANDARD CURB & GUTTER
ABBREVIATION
LEGEND
SITE WORK - GENERAL NOTES
KEYNOTES
PHASE 1
Proposed Alterations and Additions For
ST. MARY'S HOSPITAL AND MEDICAL CENTER
GRAND JUNCTION, COLORADO
Construction By
Hospital Building & Equipment Company
HDI, Inc.
Frederick S. Scott, Architect
Harry J. Varvig, Architect
CIVIL SITE PLAN & DETAIL SHEET
C1.1
AUG 21 1992

Exhibit E

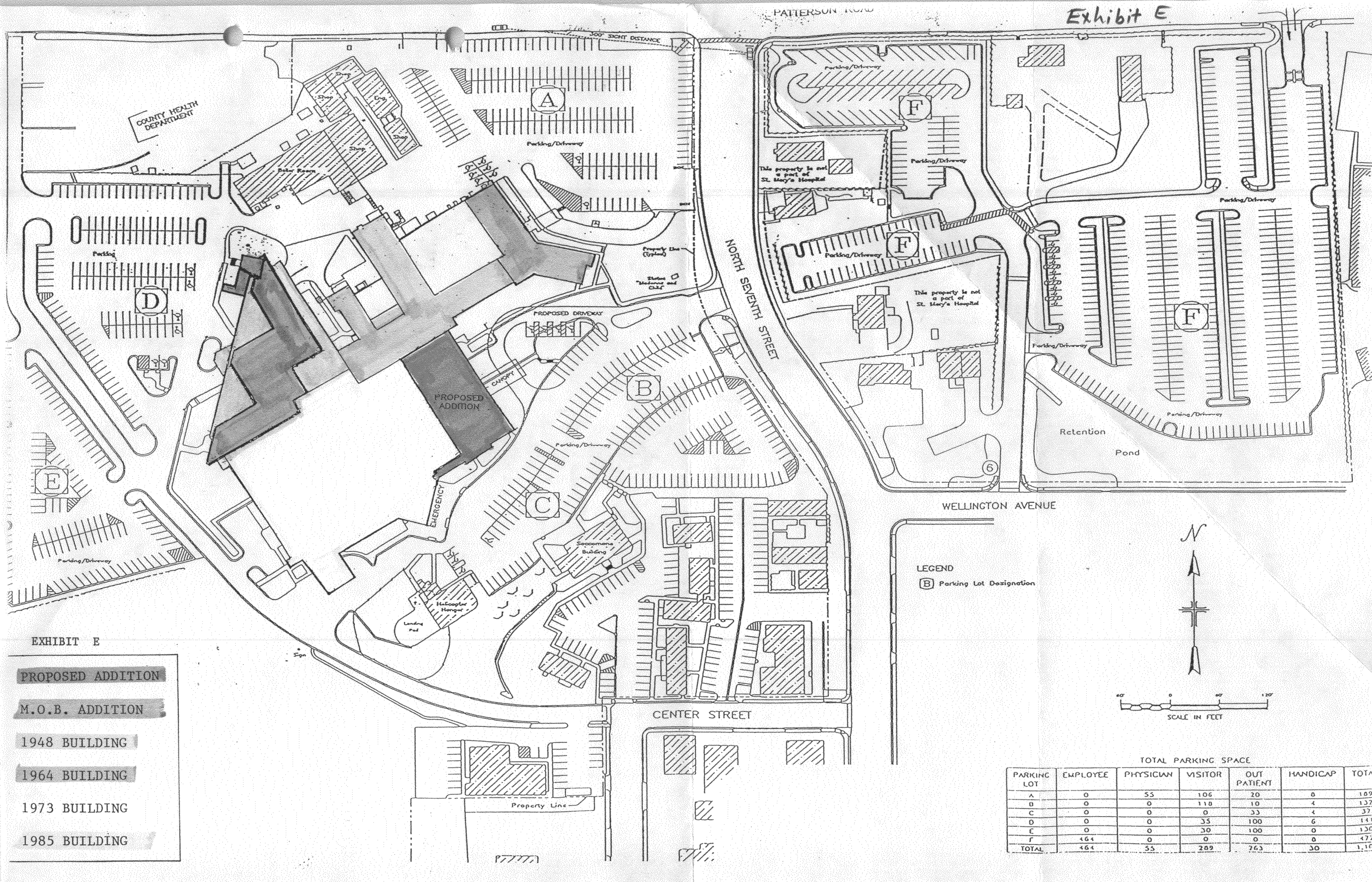


EXHIBIT E

- PROPOSED ADDITION
- M.O.B. ADDITION
- 1948 BUILDING
- 1964 BUILDING
- 1973 BUILDING
- 1985 BUILDING

LEGEND

(B) Parking Lot Designation

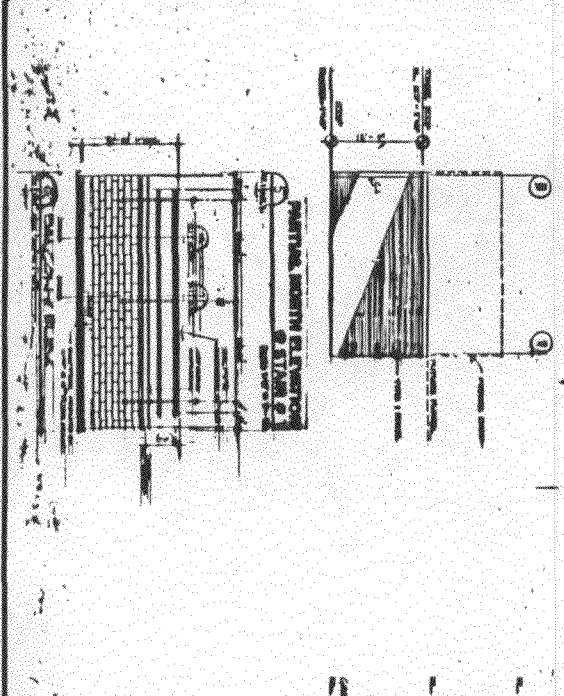
N

60' 0 60' 120'

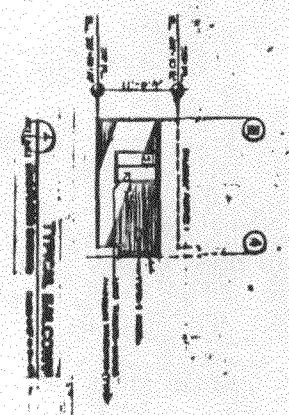
SCALE IN FEET

TOTAL PARKING SPACE

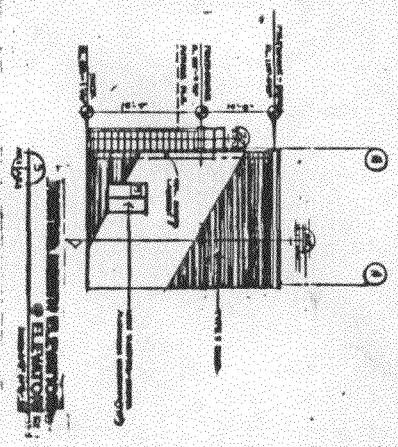
PARKING LOT	EMPLOYEE	PHYSICIAN	VISITOR	OUT PATIENT	HANDICAP	TOTAL
A	0	55	106	20	8	189
B	0	0	118	10	4	132
C	0	0	0	33	4	37
D	0	0	35	100	6	141
E	0	0	30	100	0	130
F	464	0	0	0	0	477
TOTAL	464	55	289	263	30	1,101



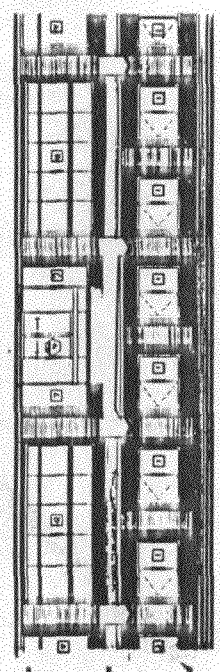
PARTIAL NORTH ELEVATION



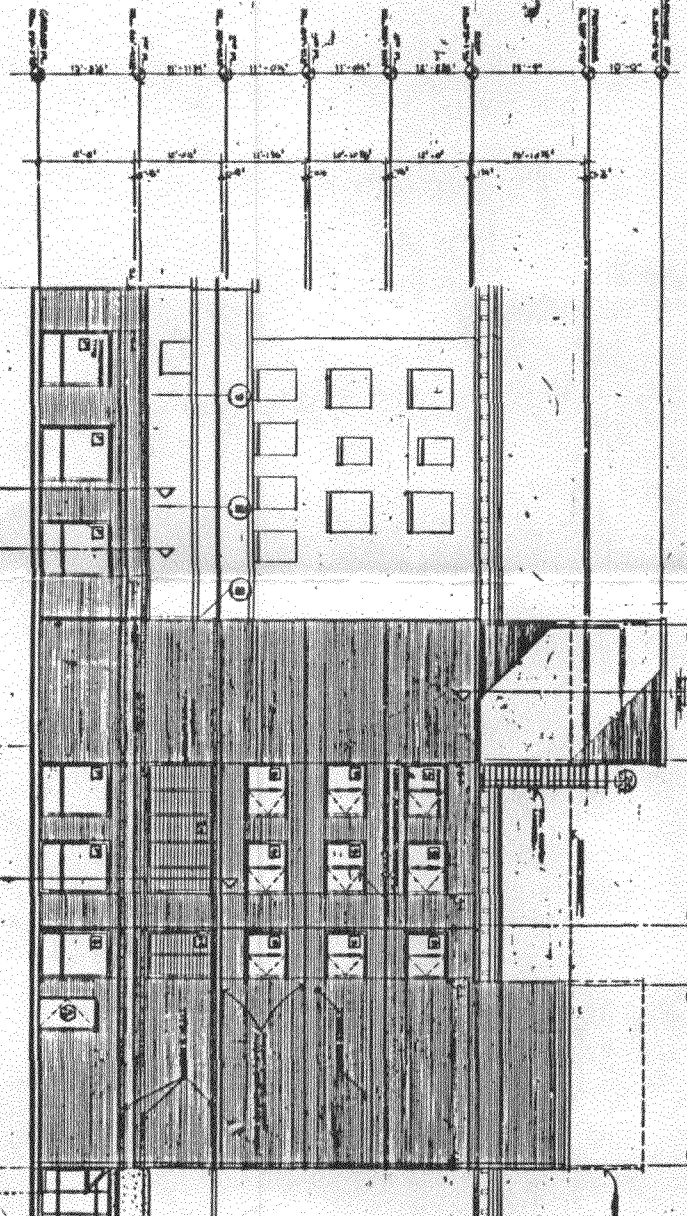
TYPICAL BALCONY



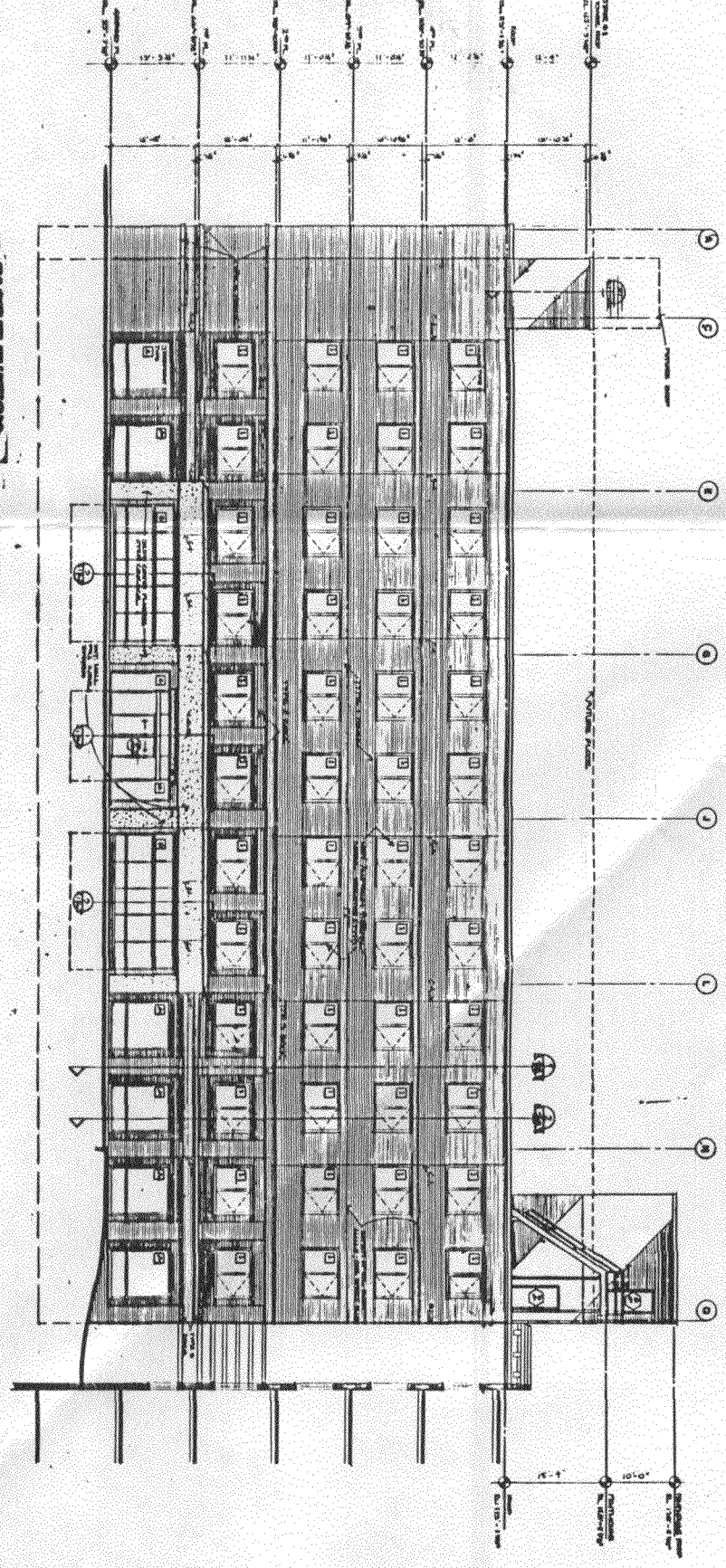
PARTIAL EAST ELEVATION



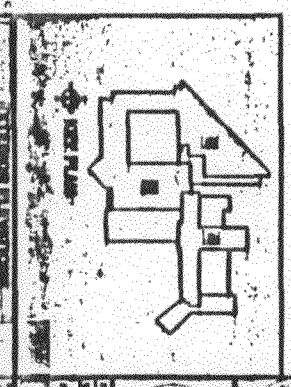
PARTIAL ELEVATION @ ENTRANCE CANOPY



SOUTH ELEVATION



EAST ELEVATION



KEY PLAN

A5.1

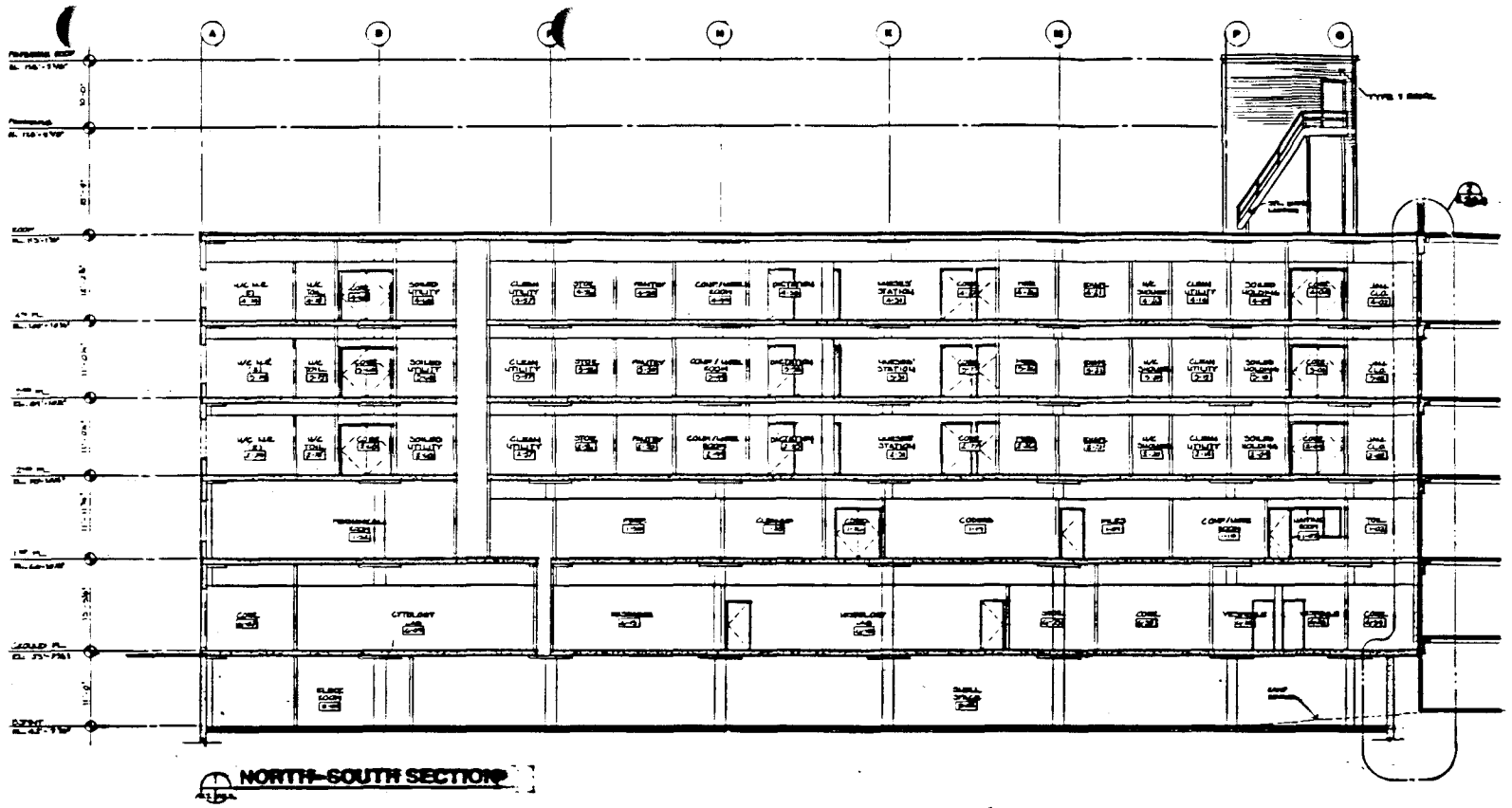
HDI, Inc.
Frederick S. Boott, Architect
Harry J. Varvig, Architect

Construction By
Hospital Building & Equipment Company

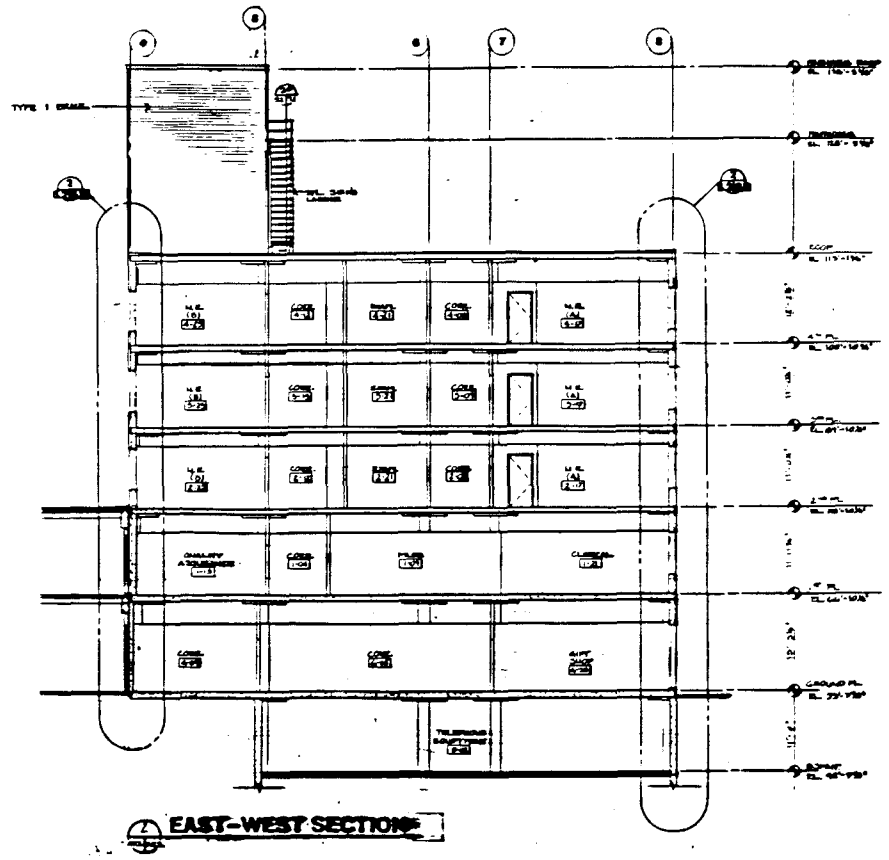
Proposed Alterations and Additions For
ST. MARY'S HOSPITAL AND MEDICAL CENTER
GRAND JUNCTION, COLORADO

PHASE
1

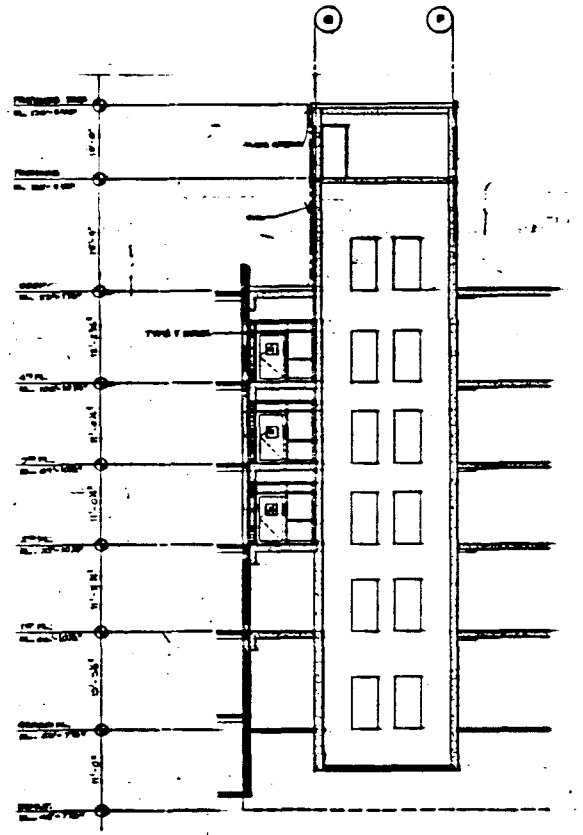
2



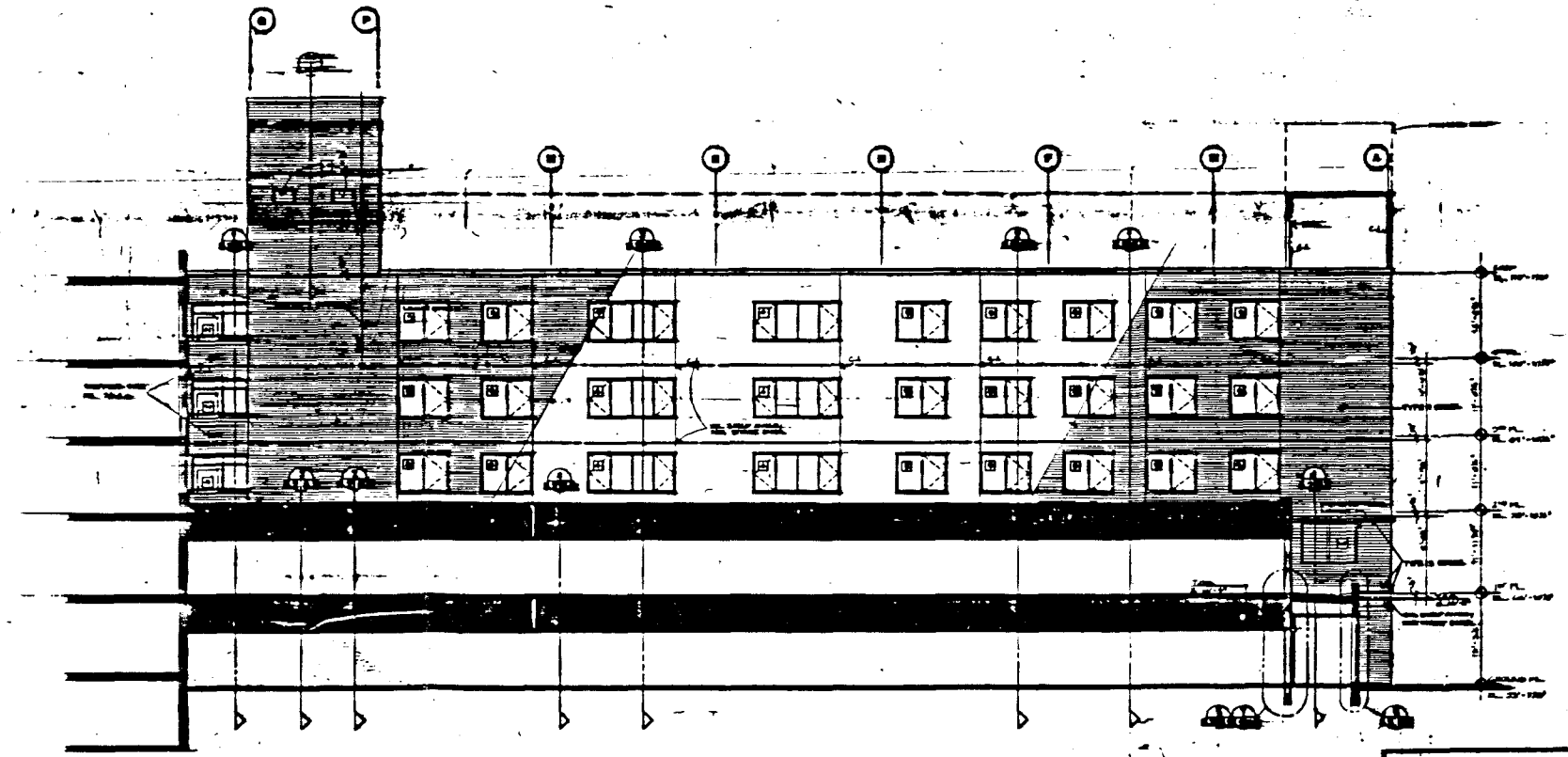
NORTH-SOUTH SECTION



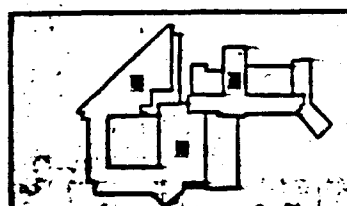
EAST-WEST SECTION



PARTIAL BUILDING SECTION



WEST ELEVATION



KEY PLAN

Proposed Alterations and Additions For
ST. MARY'S HOSPITAL AND MEDICAL CENTER
GRAND JUNCTION, COLORADO

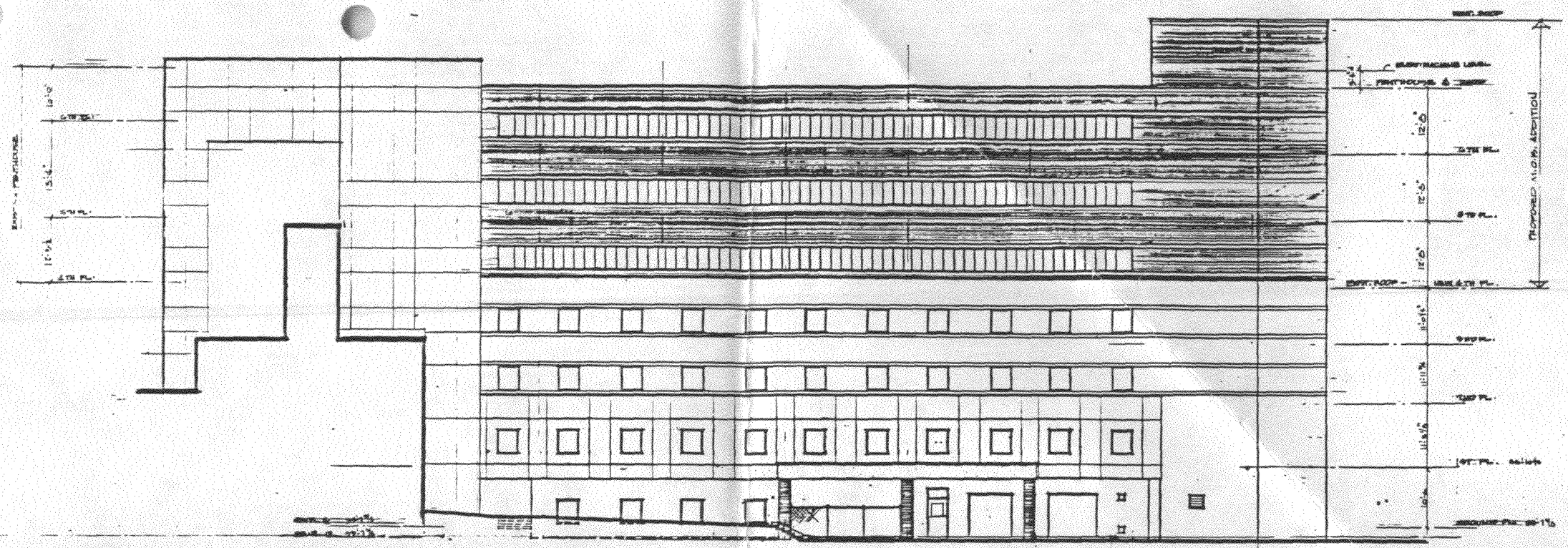
PHASE 1

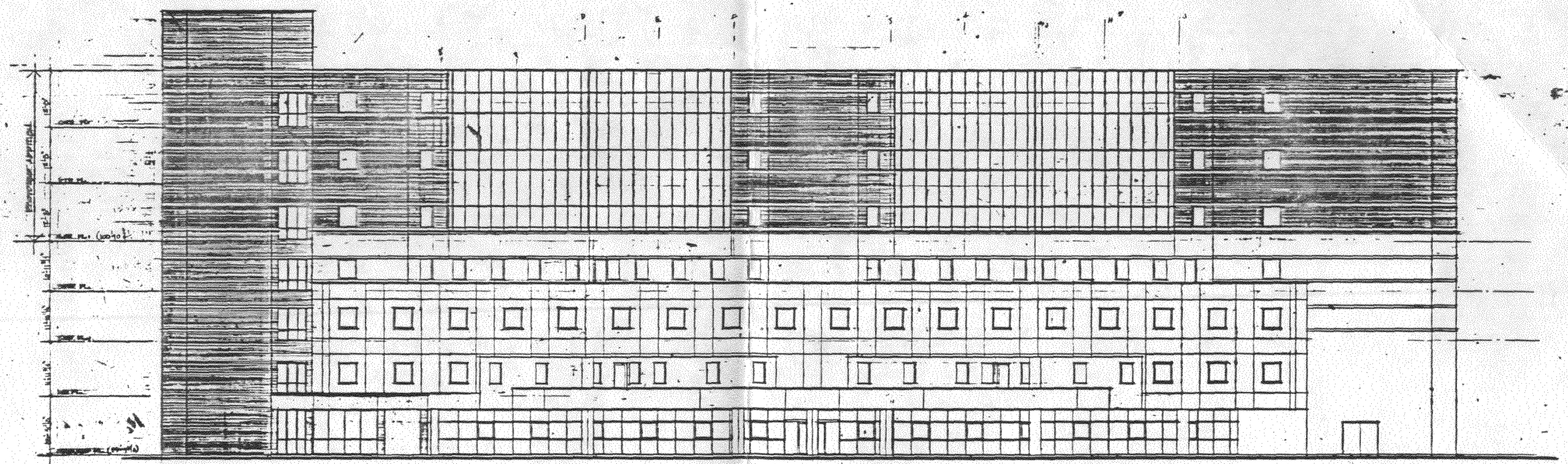
Construction By:
Hospital Building & Equipment Company

HDL Inc.
Frederick S. Scott, Architect
Harry J. Varvis, Architect

A5.2

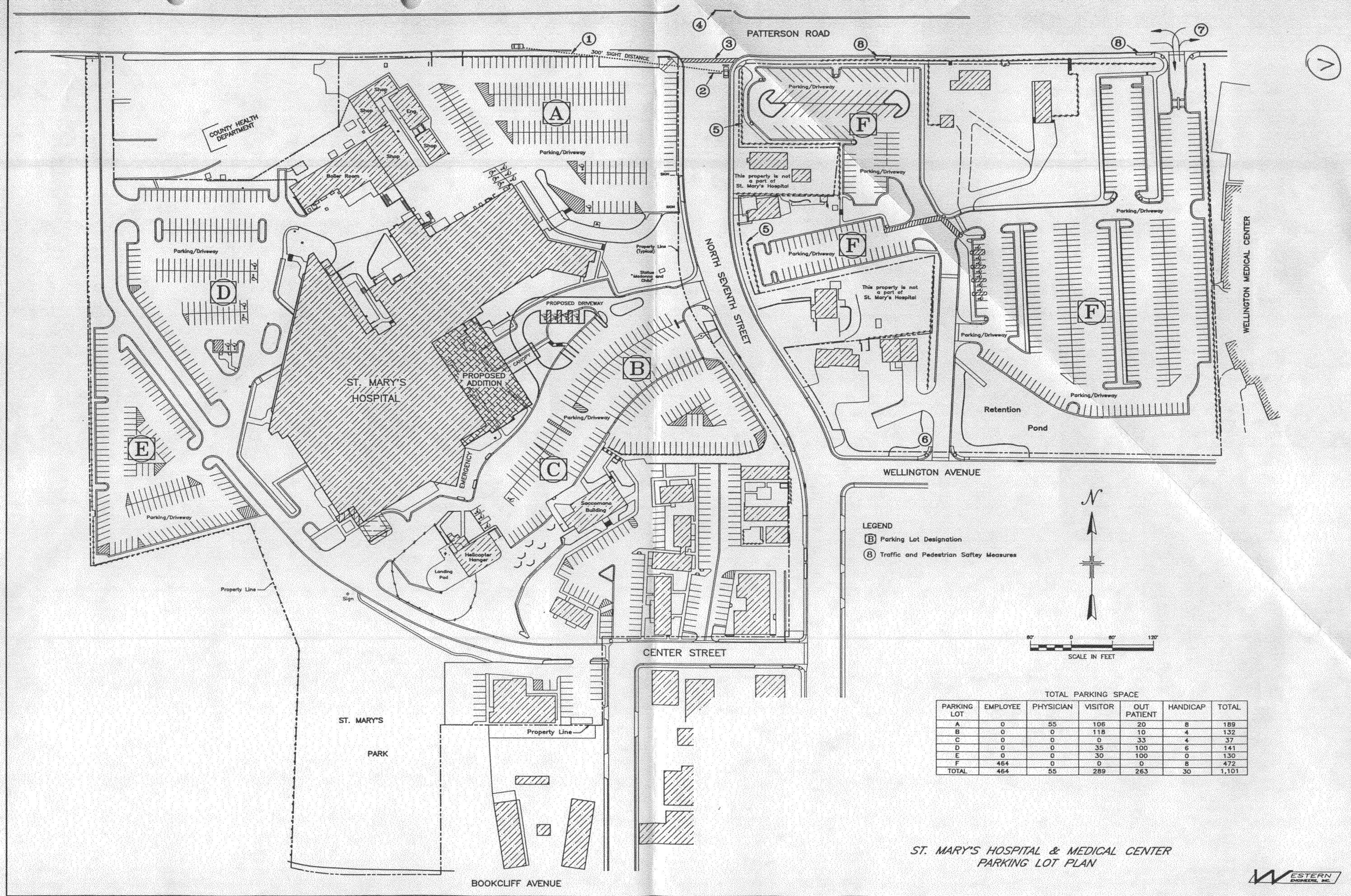
EXTERIOR ELEVATIONS & SLICE SECTIONS





ADDITION FOR MEDICAL OFFICES
FLOORS 4, 5 & 6 ADDED TO EXISTING '69 BLDG.

PROPOSED ALTERATIONS & ADDITIONS
M.O.B.
ST. MARY'S HOSPITAL & MEDICAL CENTER
GRAND JUNCTION COLORADO



LEGEND

(B) Parking Lot Designation

(8) Traffic and Pedestrian Saftey Measures

N

80' 0 80' 120'

SCALE IN FEET

TOTAL PARKING SPACE

PARKING LOT	EMPLOYEE	PHYSICIAN	VISITOR	OUT PATIENT	HANDICAP	TOTAL
A	0	55	106	20	8	189
B	0	0	118	10	4	132
C	0	0	0	33	4	37
D	0	0	35	100	6	141
E	0	0	30	100	0	130
F	464	0	0	0	8	472
TOTAL	464	55	289	263	30	1,101

ST. MARY'S HOSPITAL & MEDICAL CENTER
PARKING LOT PLAN

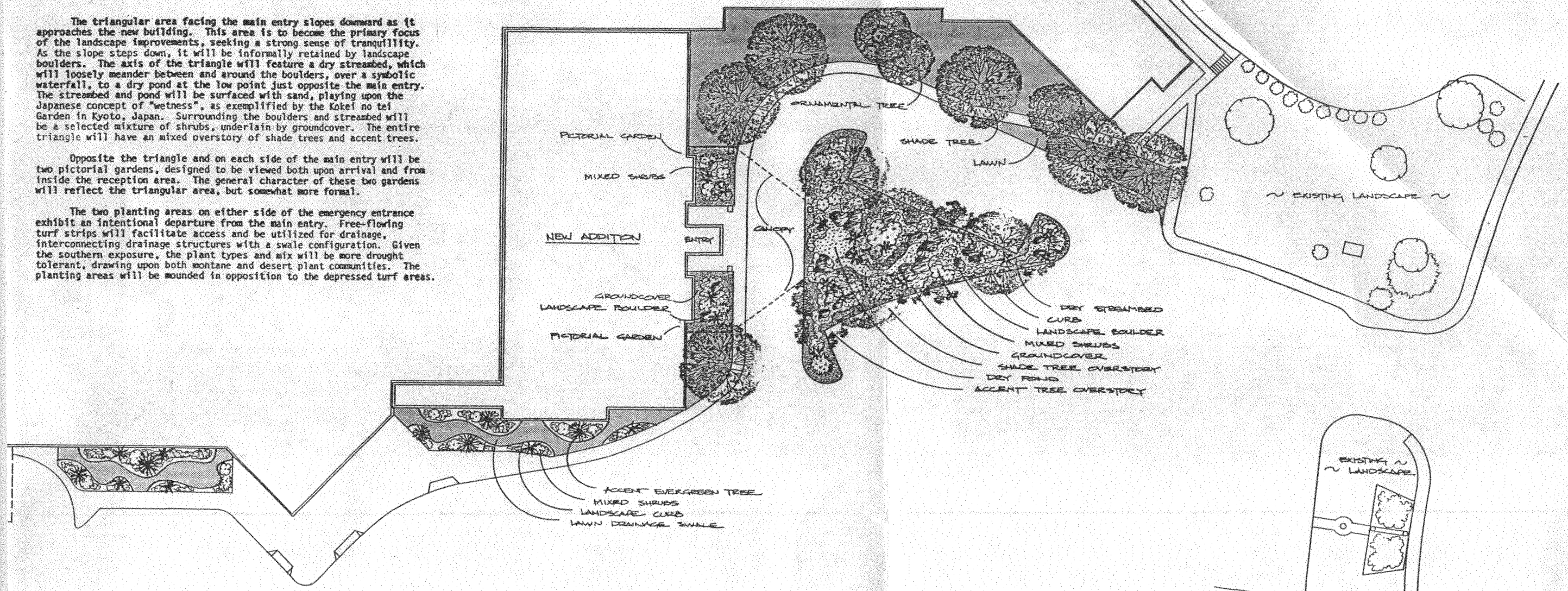
WESTERN ENGINEERS, INC.

CONCEPT DESCRIPTION

The triangular area facing the main entry slopes downward as it approaches the new building. This area is to become the primary focus of the landscape improvements, seeking a strong sense of tranquillity. As the slope steps down, it will be informally retained by landscape boulders. The axis of the triangle will feature a dry streambed, which will loosely meander between and around the boulders, over a symbolic waterfall, to a dry pond at the low point just opposite the main entry. The streambed and pond will be surfaced with sand, playing upon the Japanese concept of "wetness", as exemplified by the Kokei no tei Garden in Kyoto, Japan. Surrounding the boulders and streambed will be a selected mixture of shrubs, underlain by groundcover. The entire triangle will have an mixed overstory of shade trees and accent trees.

Opposite the triangle and on each side of the main entry will be two pictorial gardens, designed to be viewed both upon arrival and from inside the reception area. The general character of these two gardens will reflect the triangular area, but somewhat more formal.

The two planting areas on either side of the emergency entrance exhibit an intentional departure from the main entry. Free-flowing turf strips will facilitate access and be utilized for drainage, interconnecting drainage structures with a swale configuration. Given the southern exposure, the plant types and mix will be more drought tolerant, drawing upon both montane and desert plant communities. The planting areas will be mounded in opposition to the depressed turf areas.



LANDSCAPE CONCEPT

DD

Arcieri Associates
Landscape Architecture & Planning
604 23 Road Grand Junction, Colorado 81505 • (303) 243-4145 FAX (303) 242-1894
American Society of Landscape Architects

LANDSCAPE DESIGN
ST. MARY'S HOSPITAL ADDITION

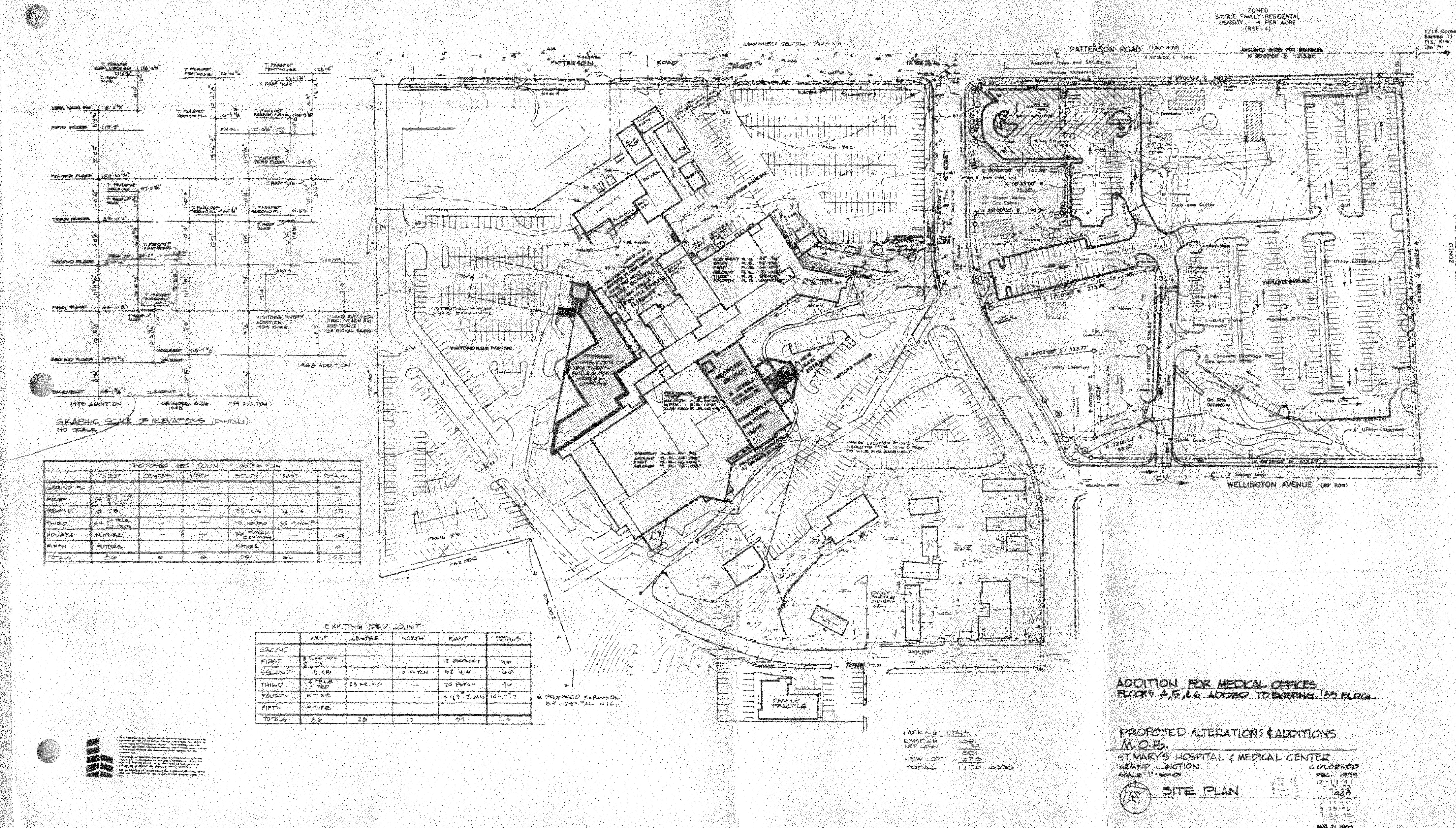
North

1" = 20'
Scale

8/20/92
Date Issued

Date Revised

L-1
Sheet



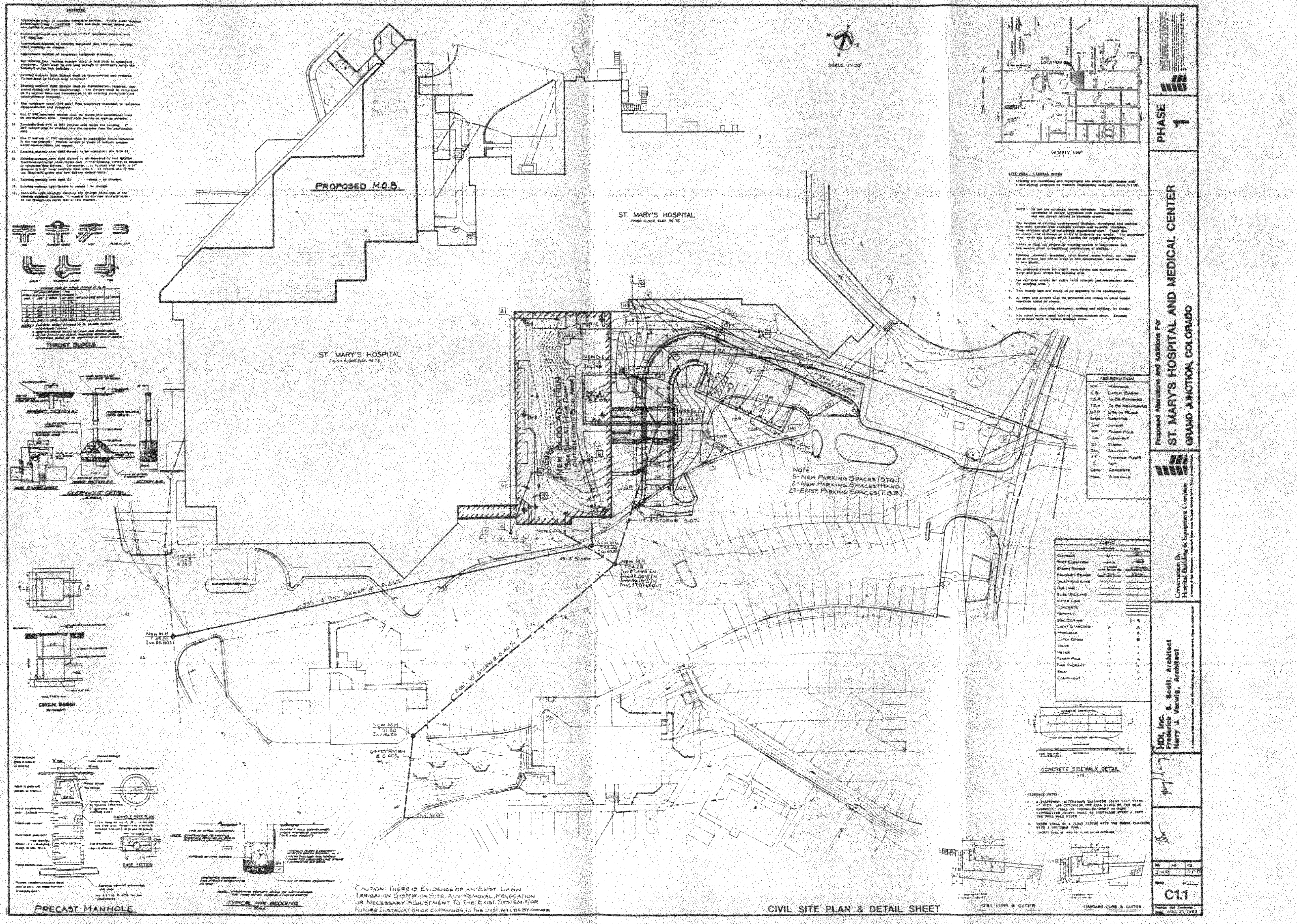
PROPOSED BED COUNT · MASTER PLAN

	WEST	CENTER	NORTH	SOUTH	EAST	TOTALS
GROUND FL.	—	—	—	—	—	0
FIRST	24 (? I.C.U. / ? C.C.U.)	—	—	—	—	24
SECOND	8 OB.	—	—	35 M/S	32 M/S	75
THIRD	44 (? TELE / ? PEDS)	—	—	35 NEURO	32 PSYCH *	
FOURTH	FUTURE	—	—	34 MEDICAL ONCOLOGY	—	34
FIFTH	FUTURE			FUTURE		0
TOTALS	56?	0	0	105?	64?	235?

EXISTING BED COUNT

	WEST	CENTER	NORTH	EAST	TOTALS
GROUND					
FIRST	[illegible]	—		12 ONCOLOGY	36
SECOND	18 OB.		10 PSYCH	32 M/S	60
THIRD	(? TELE / ? PED)	23 NEURO	—	24 PSYCH	96
FOURTH	FUTURE		—	14 + (7* 21 MS)	14 + 7* 21
FIFTH	FUTURE				
TOTALS	86	23	10	91	[illegible]

* PROPOSED EXPANSION BY HOSPITAL N.I.C.


PROPOSED M.O.B.
ST. MARY'S HOSPITAL
FINISH FLOOR ELEV. 52.75
ST. MARY'S HOSPITAL
FINISH FLOOR ELEV. 52.75
SCALE: 1"=20'
NEW BLDG. ADDITION
NOTE:
5-NEW PARKING SPACES (STD.)
2-NEW PARKING SPACES (HAND.)
27-EXIST. PARKING SPACES (T.B.R.)
335' 8" SAN. SEWER @ 0.86%
205' 10" STORM @ 0.40%
115' 8" STORM @ 5.0%
45' 8" STORM
THRUST BLOCKS
CLEAN-OUT DETAIL
CATCH BASIN
PRECAST MANHOLE
TYPICAL PIPE BEDDING
MANHOLE BASE PLAN
BASE SECTION
CONCRETE SIDEWALK DETAIL
SPILL CURB & GUTTER
STANDARD CURB & GUTTER
SIDEWALK NOTES
SITE WORK - GENERAL NOTES
VICINITY MAP
SITE LOCATION
LEGEND
ABBREVIATION
CAUTION: THERE IS EVIDENCE OF AN EXIST. LAWN IRRIGATION SYSTEM ON SITE. ANY REMOVAL, RELOCATION OR NECESSARY ADJUSTMENT TO THE EXIST. SYSTEM &/OR FUTURE INSTALLATION OR EXPANSION TO THE SYST. WILL BE BY OWNER.
CIVIL SITE PLAN & DETAIL SHEET
PHASE 1
Proposed Alterations and Additions For
ST. MARY'S HOSPITAL AND MEDICAL CENTER
GRAND JUNCTION, COLORADO
Construction By
Hospital Building & Equipment Company
HDI, Inc.
Frederick S. Scott, Architect
Harry J. Varwig, Architect
C1.1
AUG 21 1992