Table of Contents

File 1992-0075 Name: Red Lobster Restaurant - Conditional Use Permit - 575 24 ½ Road (Mesa Mall)

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**
		***Review Sheet Summary**
X	X	***Application form**
		Review Sheets
X		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
		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**
X	X	***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 - 1/5/93	X	X	Planning Commission Minutes - 1/5/93 - **
X	X	Site Plan - **	X	X	Public Notice Posting - 2/2/93
X	X	Drainage Study	X	X	Conditional Use Process List
X	X	Geotechncal Report	X	X	Development Improvements Agmt. - delivered to City Clerk for retention and scanning - rec. 2/19/93 - **
X		Computer Files Indexing Information Sheet	X		Planning Clearance - 9/13/93 - to scan
X		Fax Sheets	X	X	Development Improvements Agmt - Memorandum of lease between General Mills Restaurants, Inc. and the Equitable Life Assurance Soc.
X	X	Flood Plain Permit	X	X	Memorandum of Improvements Agrmt & Guarantee - **
X	X	Irrevocable Standby Letter of Credit - 8/21/92	X	X	Improvements Agreement - Site Plan - **
X	X	Contact List	X	X	General Sign Specifications Plan
X	X	Pre-Submittal Comments - 11/20/92	X	X	Detailed Elevations
X	X	Red Lobster Total Signage Listing	X	X	Construction Plans
X	X	Improvements List / Detail	X		Appraisal

X		Lighting Product Info	X	X	Directional Display
X		Shopping Center Lease	X		Vicinity Map
X		Legal Ad - 12/29/93	X	X	Radiation Survey
X		Traffic Impact Study	X		Irrigation Plan
X	X	Grading and Drainage Plan	X	X	Dimension Plan
X	X	Utility Composite	X		As-built Foundation Plot
X		Assessor's map	X		Site Lease Plan

Grand Junction Soils

- conventional shallow found. ok w/ pad prepped to remove collapsable soils. May require struct. fill up to 6' deep.

GILES ENGINEERING ASSOCIATES, INC.

GEOTECHNICAL ENGINEERING EXPLORATION AND ANALYSIS
AND
LIMITED VOLATILE ORGANIC COMPOUND VAPOR SCAN

PROPOSED RED LOBSTER RESTAURANT
MESA MALL
U.S. HIGHWAY 6 AND 50 AT 24½ ROAD
GRAND JUNCTION, COLORADO
GEA PROJECT NO. 2G-920504

92

FOR
GENERAL MILLS RESTAURANTS, INC.
ORLANDO, FLORIDA

GEOTECHNICAL, GEOENVIRONMENTAL AND CONSTRUCTION MATERIALS CONSULTANTS

TABLE OF CONTENTS

GEOTECHNICAL ENGINEERING EXPLORATION AND ANALYSIS
AND
LIMITED VOLATILE ORGANIC COMPOUND VAPOR SCAN

Proposed Red Lobster Restaurant
Mesa Mall
U.S. Highway 6 and 50 at 24½ Road
Grand Junction, Colorado
GEA Project No. 2G-920504

MILWAUKEE, WI
LOS ANGELES, CA
WASHINGTON, D.C.

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL, GEOENVIRONMENTAL
AND CONSTRUCTION MATERIALS CONSULTANTS
4875 EAST LA PALMA AVENUE — SUITE 607, ANAHEIM, CA 92807
714-779-0052, FAX: 714-779-0068

June 9, 1992

General Mills Restaurants, Inc.
6770 Lake Ellenor Drive
Orlando, Florida 32809

Attention: Ms. Sharon K. South
Site Development Coordinator

Subject: Geotechnical Engineering Exploration and Analysis and
Limited Volatile Organic Compound Vapor Scan
Proposed Red Lobster Restaurant
Mesa Mall - U.S. Highway 6 and 50 at 24½ Road
Grand Junction, Colorado
GEA Project No. 2G-920504

Dear Ms. South:

In compliance with your request, a Geotechnical Engineering Exploration and Analysis and Limited Volatile Organic Compound Vapor Scan has been conducted by Giles Engineering Associates, Inc. (GEA) for the above referenced site. Conclusions and recommendations developed from the exploration and analysis are summarized below and discussed in more detail in the accompanying report. The summary of recommendations and recommended bid options included with the cover letter are intended to aid in your understanding of this report, but should be read in context with the report.

1. The proposed site consists of an undeveloped outlot within an existing shopping center. Soil conditions encountered during exploration indicate the presence of near surface existing fill within a limited area of the site and more widespread near surface possible fill extending to depths of 3± feet. The central region of the building pad area was found to contain a stratum of potentially collapsible soil extending to depths of 6 to 8± feet. Soils encountered at these depths at other locations in the building pad area and underlying the potentially collapsible soils consist of moderate strength silty clay to depths of 14 to 15± feet and loose to firm fine sands extending to at least the maximum depth explored of 18± feet. At the locations of Test Boring Nos. 2 and 3, very loose to soft consistency clayey silts were encountered between depths of 11 to 14± feet. The groundwater table was considered to exist at depths of 10 to 12± feet below existing grade but should be considered capable of fluctuations.

2. The recovered soil samples did not exhibit odors or discolorations indicative of volatile organic compound exposure. Furthermore, the results of the vapor scan did not indicate the presence of volatile organic compounds.

3. The use of a conventional shallow foundation system for support of the proposed structure is considered appropriate provided the building pad area is prepared as described herein. In summary, preparation of the pad area will require either the removal of potentially collapsible soils with finished grade established through the placement of structural compacted fill to provide a building pad of relatively uniform support characteristics; and as anticipated to be more feasible, the extent of vertical removal may be limited to a prescribed depth throughout the pad area with the depth of excavation increased in the area of the perimeter foundations. The depths of removal as indicated herein have been based upon an assumed finished elevation. Significant variation between this assumed elevation and planned finished grade may require revision to the site preparation and/or construction recommendations. It is, therefore, recommended that GEA review the final grading plan. The floor may be constructed as a conventional slab-on-grade.

4. An economical foundation system for the proposed trash enclosure is considered to consist of a properly reinforced Portland Cement concrete pad with thickened edges, designed to resist the impact loads of trash removal equipment supported by a properly prepared subgrade.

5. The proposed monument sign is recommended to be supported by a conventional spread footing designed for a moderate allowable soil bearing pressure. A drilled pier foundation may not be feasibly constructed due to potential borehole stability problems. The actual bearing grade is recommended to be evaluated by the soils consultant to ensure the sign is supported by suitable bearing materials; due to the presence of possible fill, some removal of unsuitable bearing soils may be necessary. If a high-rise sign is planned for this site, further engineering analysis will be required to provide the necessary design parameters.

6. Pavements may consist of 3 inches of asphaltic concrete over 8 inches of granular base within drive areas. The base course thickness may be decreased to 6 inches in parking stall areas. Portland Cement concrete pavement should be used in all areas subjected to intense vehicular stresses and in front of the trash enclosure.

GILES ENGINEERING ASSOCIATES, INC.

8. Subgrade soils may develop stability problems if exposed to increases in moisture. Subgrade modification through chemical or mechanical means or overexcavation and replacement of unstable soil with structural fill may be necessary. The degree to which subgrade stability may affect site development costs is strongly dependent upon weather conditions at the time of development and the care used to prevent the subgrade soils from significant increases in moisture content.

GEA appreciates the opportunity to be of service on this project. If GEA may be of additional assistance, should geotechnical related problems occur or to provide monitoring and testing services during construction, please do not hesitate to contact us at any time.

Very truly yours,

GILES ENGINEERING ASSOCIATES, INC.

John E. Haertle, P.E.
Project Engineer

Robert R. Russell, P.E.
Regional Manager

Terry L. Giles, P.E.
President
RPE No. 20495

Enclosure: GEA Report No. 2G-920504
Distribution: (4) General Mills Restaurants, Inc.
Attn: Ms. Sharon K. South

JEH/msw
CA009

INSERT A
SUMMARY OF RECOMMENDATIONS

I. Foundations
   a. Conventional spread footings designed for an allowable soil bearing pressure of 2,000 psf.
      1. Founded at a depth of 36 inches below adjacent grade for frost protection on structural fill replacing existing unsuitable soil/materials approximately 6 fet deep (including the foundation influence zone as defined in Item No. 4 of the Guide Specifications in Appendix), or extended to suitable bearing soils anticipated to exist at depths of about 6 to 8 feet.
   b. Turned-down slab or monolithically poured foundation and floor slab designed for an allowable soil bearing pressure of 2,000 psf containing additional steel reinforcing within perimeter footings.
      1. Founded at a depth of 36 inches below adjacent grade for frost protection on structural fill replacing existing unsuitable soil/materials approximately 6 fet deep (including the foundation influence zone as defined in Item No. 4 of the Guide Specifications in Appendix), or extended to suitable bearing soils anticipated to exist at depths of about 6 to 8 feet.

II. Floor Slab
   a. Conventional slab-on-grade (including turned-down slab).
   b. Overexcavation required for subgrade preparation (See IV below).

#75 92

III. Pavement
   a. Conventional asphalt pavement with granular base.
   b. Possible overexcavation for subgrade preparation (See IV below).

IV. Site Grading and Subgrade Preparation (also deals with II and III above)
   a. Topsoil/Root Mat vegetation stripping - range 6 to 8 inches, average 7 inches.
   b. Moisture sensitive soils typically resulting in undercutting during wet periods.
   c. Overexcavation resulting from existing and possible fill.
   d. Building pad preparation to include overexcavation of existing soils to a depth of 3 feet below existing grade with replacement as structural compacted fill.

V. Limited Volatile Organic Compound Vapor Scan
No evidence of Volatile Organic Compounds detected/encountered (additional geoenvironmental study not considered warranted at this time.)

VI. Review of grading plan is recommended since depths of overexcavation and recompaction may be influenced by finished grades.

This is a brief summary of more detailed considerations and recommendations presented in the main report. Extreme caution should be exercised in interpreting this summary without thorough understanding of the report.

INSERT B
RECOMMENDED BID OPTIONS

1. Remove unsuitable, unstable existing fill soils on the surface to develop a stable subgrade and replace with structural compacted fill.
   a. Select sand and gravel or crushed stone (well-graded granular material) may be necessary during wet periods to expedite construction.
   b. Common soil (silt, clay, sand, gravel mixture)
2. Provide, place, and compact structural fill as general site fill including pavement and floor slab areas.
   a. Select sand and gravel or crushed stone (well-graded granular material) may be necessary during wet periods to expedite construction.
   b. Common soil (silt, clay, sand, gravel mixture)
3. Provide, place, and compact structural fill in foundation excavations.
   a. Select sand and gravel or crushed stone (well-graded granular material) may be necessary during wet periods to expedite construction.
   b. Common soil (silt, clay, sand, gravel mixture)
4. Topsoil/root mat stripping (depth estimate: range 6-8 inches, average 7 inches).
5. Subgrade stabilization with 3± inch layer of coarse 2 to 3 inch clean crushed stone aggregate "pushed" into subgrade to improve stability.
6. Subgrade stabilization with hydrated lime (4-6% by dry weight mixed into top 6 to 8 inches, moist cured, and compacted to proper in-place density).
7. Subgrade stabilization with Portland Cement (6-8% by dry weight mixed into top 6 to 8 inches, moisted cured, and compacted to proper in-place density).
8. Geotextile or Geogrid underlyment below pavement base course on top of properly prepared subgrade or stabilized subgrade.
9. Removal of large tree root balls, where requires overexcavation below typical subgrade excavation depth.
10. Construction dewatering
    a. Sump pits with pump.

JEH/msw
CA009

8/5 92

GEOTECHNICAL ENGINEERING EXPLORATION AND ANALYSIS
AND
LIMITED VOLATILE ORGANIC COMPOUND VAPOR SCAN

PROPOSED RED LOBSTER RESTAURANT
MESA MALL
U.S. HIGHWAY 6 AND 50 AT 24½ ROAD
GRAND JUNCTION, COLORADO
GEA PROJECT NO. 2G-920504

INTRODUCTION

The scope of services performed by Giles Engineering Associates, Inc. (GEA) for this project included a site reconnaissance, subsurface exploration, field and laboratory testing, and geotechnical engineering analysis to provide criteria for preparing the design of the building and sign foundations, building floor slab, trash enclosure and pavement for the proposed development. A limited volatile organic compound vapor scan was also performed on the recovered subsurface soil samples. Further consideration of geoenvironmental site characteristics was not included within the authorized scope of services but can be performed by GEA upon request.

SITE AND PROJECT DESCRIPTION

The proposed site is an outlot within the Mesa Mall which is located at the intersection of U.S. Highway 6 and 50 at 24½ Road in Grand Junction, Colorado. At the time of field exploration, the site was undeveloped, did not appear to have been graded to a predetermined finished elevation and contained grass and weed vegetation with one moderate size tree in the southern region of the site near the southern corner of the proposed structure. Surface topography was relatively flat with less than 2 to 3± feet of elevation differential between test boring locations. Although the subject site was approximately 3 to 5± feet lower than the adjacent roadways, adjacent parcels to the west and north appeared to be relatively level with the subject site.

The proposed structure is anticipated to consist of a single story structure approximately 80 x 95± feet in plan dimension which will consist of wood frame and wood truss roof system. No basement is planned for the building. Structural support is primarily through interior columns located around the perimeter of the structure as well as several columns within the central area of the structure. The interior column footings are separate from perimeter wall footings which are generally non-load bearing. The structure may also contain interior shear

walls. Perimeter walls are generally non-load bearing. Structural loads are anticipated to be in the range of 1 to 2± kips per lineal foot for walls and 15 to 30 kips for columns. The floor is understood to carry a maximum design live load of 100 psf. Pavement within parking areas are anticipated to be subjected to a daily traffic loading intensity of five equivalent 18-kip single axle loads and 1,000 cars for a twenty year analysis period.

The planned finished floor elevation was not specified in the preliminary project information supplied by the client. On the basis of existing topography, a finished floor elevation at El. 96.0± has been assumed for geotechnical analysis relative to the temporary benchmark indicated on the Boring Location Plan, Figure 1. Since existing grades within the proposed building area were found to range from El. 95 to 96± at the test boring locations, only nominal site grading is anticipated to be necessary to establish the assumed final grades, exclusive of any overexcavation or site preparation requirements.

FIELD AND LABORATORY TESTING

Eight (8) soil test borings were drilled for this project to depths ranging from 5 to 18± feet below existing grade. Upon completion of the drilling operations, the borings were backfilled with the remaining auger cuttings to the existing grade using conventional backfilling operations. Caving and/or settling of the backfill may, however, occur over time or due to changing conditions which may result in the formation of surficial depressions. Further backfilling or maintenance of the test boring areas may be required of the client or property owner. Test Boring Logs (Record of Subsurface Exploration) and the Boring Location Plan, Figure 1, are enclosed in the Appendix. Elevations shown on the test boring logs have been determined using conventional hand-leveling techniques referenced to the benchmark indicated on Figure 1. Elevations referenced in this report are considered accurate to the nearest 1± foot.

Field exploration for this project consisted of performing Standard Penetration Tests (SPT) in general accordance with ASTM D-1586 Standard Test Method. The SPT provides a means of evaluating the relative density of granular soils and the comparative consistency of cohesive soils; thereby providing relative soil strength and settlement characteristics. In addition, to provide relative soil design parameters, soil samples were also obtained from the SPT sampler for classification of the subsoils and geotechnical laboratory testing. Relatively undisturbed soil samples were also obtained using a ring-lined sampler per ASTM D-3550. Soils obtained from the field exploration were originally classified in the field by the GEA drilling representative and again reviewed in the laboratory by an engineer in general accordance with the Unified Soil Classification System (ASTM D-2488-75).

Laboratory testing consisted of performing calibrated penetrometer (qp), unconfined compression (qu), and vane shear (qs) tests on cohesive samples to evaluate shear strength. All recovered soil samples were subjected to a moisture content (w) tests to establish an in-situ moisture profile. Specialized consolidation/collapse testing was performed on a representative soil sample obtained from a depth of 2½± feet from the location of Test Boring No. 1 as well as the relatively undisturbed ring sample obtained from a depth of 5± feet at the location of Test Boring No. 4. Several select soil samples were subjected to Atterberg Limits determination toaid in classification and to evaluate the expansive characteristics of the on-site soils. Laboratory testing was generally performed to evaluate relative strength and settlement characteristics of the soils.

Soil parameters indicating the engineering characteristics of the materials encountered in the test borings as determined by the field testing are presented on the logs with the terms and symbols defined on the General Notes enclosed on the last page of the Appendix. Field and laboratory testing was performed in general accordance with ASTM drilling and sampling techniques.

In addition to the geotechnical field and laboratory testing, a volatile organic compound vapor scan was conducted on each recovered soil sample (excluding surface samples). The scan was conducted in the GEA Geoenvironmental laboratory under environmentally controlled conditions, using a Photionization Detector (PID) equipped with a 10.2 ev lamp calibrated to a benzene standard. The PID is capable of detecting minute traces of certain volatile organic compound vapors such as those typically associated with petroleum products. The analysis consisted of scanning the "head space" of the soil samples (contained in sample jars) at the time of soil classification. The results of the vapor scan are indicated on the Test Boring Logs and are briefly discussed in the following sections.

SUBSURFACE CONDITIONS

The subsurface conditions at the test boring locations indicate the presence of existing and possible fill soils at various locations on the site. Existing fill soils, comprised firm fine sandy silt with little clay, gravel and trace debris content, were encountered at the location of Test Boring No. 5 to a depth of 3± feet. Possible fill soils, generally consisting of firm light grayish brown fine sandy silt to silty fine sand, were encountered at the majority of the remaining test boring locations to a depth of 3± feet. Possible fill was classified as such due to the somewhat inconsistent appearance and results of field testing as well as the probability of previous grading activities in conjunction with shopping mall development.

Native soil conditions consist of firm relative density light grayish brown clayey silt or fine sandy silt extending to depths of 5 to 8± feet within the central region of the proposed building area (Test Boring Nos. 2 and 4). Soils underlying existing and possible fill as well as near surface native soils consist of stiff to very stiff consistency silty clay which are generally grayish brown in coloration with occasional orangish brown and gray mottling extending to depths of 15 to 16± feet; and firm fine sands extending to at least the maximum depth explored of 18± feet where unstable soils, due to unbalanced hydrostatic pressures, flowed into the drilling augers prohibiting further sample collection. At the locations of Test Boring Nos. 2 and 3, a stratum of very loose or soft consistency clayey silt and fine sandy silt was encountered between the depths of 11 to 15± feet.

Free water was encountered within the Test Boring Nos. 3 and 4 at the time of exploration at depths ranging from 11 to 12± feet below existing grade. On the basis of the relative moisture contents, soil sample coloration and field observations indicating groundwater within only two of the deeper test borings, the encountered groundwater is anticipated to represent a perched groundwater table at depths of 10 to 12± feet at the time of exploration. The long term groundwater table is anticipated to exist below the depths explored but explored but fluctuations should be expected due to seasonal precipitation and surface water runoff. Watering may also become perched at variable depths within previous soils underlain by less permeable materials.

The above described subsurface conditions have been simplified somewhat for ease of report interpretation. A more detailed description of the subsurface conditions at the test boring locations is presented on the test boring logs enclosed in the Appendix.

CONCLUSIONS AND RECOMMENDATIONS

Conditions imposed by the proposed development have been evaluated on the basis of the engineering characteristics of the subsurface materials encountered in the borings and their anticipated behavior both during and after construction. Conclusions and recommendations for the building foundation and floor slab, trash enclosure, sign foundation and pavement design along with seismic considerations and site preparation recommendations and construction considerations are discussed in the following sections of the report.

Limited Volatile Organic Compound Vapor Scan

The results of the volatile vapor scan did not indicate the presence of significant concentrations of volatile organic compounds. Furthermore, the recovered soil samples did not exhibit odors or discolorations indicative of the exposure to petroleum hydrocarbon compounds.

Site Development Considerations

The results of the subsurface exploration and specialized laboratory testing indicate the site is underlain by metastable, potentially collapsible silt extending to depths ranging from 3 to 4± feet up to depths of 6 to 8± feet below existing grade. Potentially collapsible soils are not recommended for direct foundation support in their present condition due to the potential for post-construction settlement which could exceed tolerances of the structure. Consequently, preparation of the building pad area will require either grading to remove the potentially collapsible soils with possible reuse as structural fill to establish finished grade; or removal and recompaction of the potentially collapsible soils may be limited to a specified depth within the foundation influence zone below bearing grade and to a lesser extent within the building pad area to develop a suitable structural fill mat for support of the foundation and floor slab. The actual depth of overexcavation and recompaction to reduce the collapse potential to within tolerable levels will be dependent upon the desired finished elevation of the building pad. Therefore, it is recommended that GEA review the grading plan to determine if revision to recommendations subsequently presented require revision.

Upon completion of the recommended site preparation, the use of a conventional shallow foundation system consisting of continuous strip footings and isolated square pad footings for walls and columns, respectively, is considered to be appropriate. The floor may consist of a conventional slab-on-grade and may be constructed monolithically with perimeter and interior footings. Pavement may consist of asphaltic concrete underlain by a crushed aggregate base course.

Site Preparation Recommendations and Construction Considerations

Initial preparation of the proposed building and parking areas will require the removal of the existing vegetation. Surficial stripping is anticipated to be necessary to depths of 6 to 8± inches to remove soils with significant concentrations of organic material, but additional stripping may be necessary to adequately remove root systems, especially in the vicinity of the existing tree. Considering the fact that the proposed site is an outlot within an existing shopping center, the site may contain buried debris or unsuitable bearing, deleterious materials not evident from the recovered soil samples or as suggested by site topography. The need may, therefore, arise during grading and site preparation activities to remove such materials.

Recommendations for preparation of the building pad area have been based upon an assumed Finished Floor at El. 96 (referenced to the benchmark indicated on Figure 1). On the basis of the assumed floor elevation, foundation bearing grade for perimeter footings is anticipated to be at El. 93 to 92±. If the assumed elevations differ from the final planned grades, alteration of the preparation recommendations may be necessary; GEA should be provided with the grading plan for review.

General preparation of the building pad area is recommended to consist of the removal of existing soils to a depth of 3 feet below finished pad elevation or El. 93, whichever is greater. Perimeter footing areas are recommended to be further overexcavated to a depth of 2 feet below foundation bearing elevation (approximately El. 90 to 91±) and to a sufficient lateral extent to encompass the foundation influence zone as described in Item No. 3 of the enclosed guide specifications. The exposed subgrade within the foundation influence zone should then be evaluated using the criteria established in the Foundation Design Parameters section of this report to verify the bearing suitability of the exposed soils. The footing excavations should then be scarified to a depth of 12 inches, moistened to 3±1 percent above optimum moisture content and recompacted to the required density. Excavated soils or imported material may be used to backfill the footing trenches and building pad area to establish bearing grade elevation and finished pad elevation, respectively.

The exposed subgrade within the building pad area and within areas planned for parking lot pavement should be proofrolled with a heavy rubber tire mounted vehicle in the presence of the soils consultant to detect any unstable areas which should be removed to a stable subgrade. Following proofrolling and any necessary overexcavation, the subgrade should be scarified, moisture conditioned and recompacted in accordance with the enclosed guide specifications. Scarification is generally recommended to be performed to a depth of 6 to 8± inches within pavement areas and to a depth of 12± inches within the building pad area. Site grades, low areas, and excavations may then be raised to finished elevation with suitable non-organic compacted backfill. Placement of fill and backfill should be performed in accordance with the guide specifications enclosed in the Appendix of this report (Standard Proctor Procedures) and be performed with appropriate observation and testing by the soils consultant.

Encountered cohesive soils are considered to be extremely sensitive to moisture. Therefore, care must be exercised to ensure that the surface and subsurface materials are not subjected to significant increases in moisture. If the subsoils increase in moisture content, they will become unstable and possibly swell if allowed to become dry prior to moisture infiltration. The site should, therefore, be graded to prevent surface water from ponding within construction areas and running into excavations. Any accumulated water should be removed as soon as possible to protect the bearing grade. Concrete should be poured and excavations backfilled as soon as possible. Typically, soils of this nature which become unstable due to an increase in

moisture content, possibly combined with construction traffic disturbance, are anticipated to require removal to at least 6 to 8± inches. A layer of crushed aggregate placed on the bottom of excavations may help stabilize exposed subgrades during wet periods. Modification of unstable soils through the addition of hydrated lime or Portland Cement may also be beneficial/necessary depending on conditions at the time of construction. Overexcavation of unstable soils with subsequent backfilling using structural compacted fill may also be feasible.

Soils excavated from the site which do not contain excessive organic or other deleterious materials may be reused as compacted fill for foundation, floor slab, and pavement support. However, due to the moisture sensitive nature of the soils, compaction must be performed within a narrow range of optimum moisture to ensure proper compaction for load bearing and pavement support. Recompaction of on-site soils is recommended to be performed at a moisture content 3±1 percent above optimum.

A perched groundwater was considered to exist at depths of 10 to 12± feet below the grade existing at the time of subsurface exploration. Dewatering of shallow excavations, as is typical for the proposed development, is not anticipated to be a major concern during development. If water is encountered, filtered sump pumps placed in the bottoms of excavations or other conventional dewatering methods are expected to be adequate with the anticipated shallow excavations.

Foundation Design Parameters

Upon completion of the recommended site preparation activities, the foundation system is anticipated to be underlain by structural compacted fill and underlying moderate strength native soils. Areas of the building pad may contain a limited zone of potentially collapsible soils below the compacted structural fill. The proposed structure may, therefore, be supported by a conventional shallow foundation system consisting of continuous strip and isolated square pads for wall and column support, respectively. Foundations may be designed for a maximum, net, allowable soil bearing pressure of 2,000 pounds per square foot (psf). Footings may cast monolithically with interior footings where the interior footing consist of thickened sections. Trench footings may be used where the trench walls are stable and allowed by the local building code. Conventional steel reinforcing is expected to be adequate with regard to geotechnical engineering considerations.

Suitable soils for direct foundation support or to serve as the structural fill subgrade within the foundation influence zone and thereby provide indirect foundation support should exhibit at least a stiff comparative consistency (average qu value of at least 1.0 tsf) for cohesive soils or loose firm relative density (average N-value of at least 8) for granular soils for the recommended 2,000 psf maximum allowable soil bearing pressure. Suitable bearing soils are

anticipated to exist at typical foundation depths below adjacent exterior grade and within the building pad area upon completion of the recommended building pad preparation.

It is recommended that the suitability of the structural fill subgrade with footing excavations and the actual bearing grade and underlying soils be evaluated by appropriate bearing capacity tests to a depth of two footing widths or 4 feet (whichever is greater) below the bearing grade elevation during construction by the geotechnical engineer to ensure that the foundations are supported on suitable materials. The actual depth of evaluation may be revised at the discretion of the soils engineer based upon encountered conditions. If unsuitable bearing soils are encountered at the proposed subgrade elevation, they should be excavated to a suitable bearing subgrade and to a lateral extent as defined by Item No. 3 of the enclosed guide specifications with the excavation backfilled with structural compacted fill to develop a uniform bearing grade. As an alternative, vertically extended footing trenches may be backfilled with a lean cement (1,500 psi) slurry to planned footing bearing grade to reduce the extent of lateral excavation. Footings may also be locally stepped or thickened to ensure proper embedment within suitable bearing soils.

The local building department indicates a foot depth of 36 inches for the area. Perimeter footings are, therefore, recommended to founded at least 36 inches below adjacent exterior grade for the frost protection. Interior footings may be supported immediately below the floor slab within heated portions of the structure. Footings in areas such as the entry vestibule and storage/delivery areas, which typically receive less heat, are recommended to extend an additional 12 inches in depth or be provided with additional insulation for additional frost protection. All footings must be protected against weather and water damage during and after construction, and must be supported within suitable bearing materials as described herein.

Post-construction total and differential settlements of a shallow foundation system designed and constructed in accordance with the recommendations presented for specialized subgrade preparation within the building pad or specialized construction of the footings are estimated to be less than 1.0 and 0.5 inches, respectively, which is considered within tolerable limits for the proposed structure.

Floor Slab Design Parameters

Areas to support the floor slab should be prepared in accordance with the work recommended in the Site Preparation Recommendations and Construction Considerations section of this report, with the foundation and other excavations (including utility trenches) backfilled with structural compacted fill in accordance with the enclosed guide specifications.

Upon completion of the site preparation as recommended herein, construction of the floor slab as a conventional slab-on-grade is anticipated to be suitable. The floor slab may be poured monolithically with the interior and perimeter foundations. The slab should be underlain by a 4- to 6-inch thick layer of compacted coarse granular material. A synthetic sheet should be placed immediately below the floor slab to serve as a vapor barrier to protect moisture sensitive floor coverings (i.e. tile, etc.). If materials underlying the synthetic sheet contain sharp, angular particles, a cushion layer of sand approximately 2 inches thick or a geotextile should be provided to protect it from puncture. All vapor barrier sheets should be evaluated for punctures and holes and should be overlapped and taped prior to installation.

The floor slab may be designed as a "Mat on Elastic Foundation" using a Modulus of Subgrade Reaction (kvi) of 75 tons per cubic foot (tcf). On the basis of the assumed live loading, a 4-inch thick slab containing conventional welded wire mesh reinforcement (6x6-W1.4xW1.4 WWM) is anticipated to be suitable. The actual design of the slab should, however, be performed by a qualified structural engineer to ensure proper reinforcing and thickness.

With proper site preparation and construction monitoring, the post-construction total and differential settlement of the floor slab designed and poured independent from footings and constructed as recommended is estimated to be less than 0.6 and 0.3 inches, respectively, which is considered within tolerable limits for the proposed structure. Estimates of slab settlement assume adequate moisture protection will be provided for the floor slab soils.

Trash Enclosure Design Parameters

As depicted on the site plan provided by the client, the proposed trash enclosure is planned to be located north of the proposed structure near the location of Test Boring No. 6. Near-surface soil conditions generally consist of moderate strength native fine sandy silt underlain by moderate strength silty clay extending to at least the maximum depth explored of 5± feet. The encountered soil conditions are considered suitable for support of the trash enclosure provided the subgrade is prepared as recommended in the Site Preparation Recommendations and Construction Considerations section of this report.

The trash enclosure is understood to consist of either a flexible wooden frame fence, chain link fence, or a more rigid masonry block enclosure. The proposed enclosure will be very light and a bearing capacity analysis is not considered to be necessary. However, the trash enclosure will be subjected to impact loads imposed by trash removal equipment.

An economical foundation system for the proposed trash enclosure may consist of a 6-inch minimum thickness, properly reinforced concrete slab, supported on a compacted 4- to 6-inch thick compacted coarse granular material and a properly prepared subgrade. Slab edges should be thickened to at least 24 inches and should have a width of at-least 12 inches for block wall or wood fence support, and should be designed by a qualified structural engineer. The trash enclosure may experience some frost-related movements which are anticipated to be within tolerable limits.

Sign Foundation Design Parameters

The preliminary site plan provided by the client indicates a monument sign is planned for the proposed development with the location being in the vicinity of Test Boring No. 5. If the sign is altered to consist of a high-rise sign, additional field exploration, laboratory testing, and engineering analysis will be required to provide the necessary design parameters for foundation design. The foundation for a pylon or sign typically consists of a conventional spread footing or shallow drilled pier adequately embedded for overturning considerations.

Encountered soil conditions at the location of Test Boring No. 5 consist of moderate strength existing fill to 3± feet underlain by moderate strength fine sandy silt extending to 5± feet, the maximum depth explored. The sign is recommended to be supported by a conventional spread footing which is designed for an allowable pressure in the range of 2,000 to 3,000 psf and embedded to at least 42 inches below adjacent grade since the sign structure will not have the benefit of heat from the building. Construction of a drilled pier foundation may not be feasible due to the potential for caving of the predominantly granular soils. The sign foundation bearing soils are recommended to be evaluated, tested, and approved by the soils consultant at the time of construction to ensure that the sign will be supported by suitable bearing soils. The sign footing is recommended to be supported at least two feet into suitable bearing soils and at least four feet below grade to provide adequate frost protection. If unsuitable bearing soils are encountered as may be expected due to the presence of fill soils in the vicinity, they should be excavated to a suitable bearing grade with the foundation extended in depth or the excavation properly backfilled to planned bearing grade.

Pavement Design Parameters

a) Pavement Subgrade

Following proper subgrade preparation as described in the Site Preparation Recommendations and Construction Considerations section of this report, the pavement subgrade is anticipated to generally consist of possible fill generally comprised of fine sandy silts or silty clays. These soils are rated as a fair to poor subgrade based on the Unified Soil Classification of CL-ML and are anticipated to exhibit CBR-values ranging from 5 to 15 when properly prepared. Since a specific CBR-value test has not been authorized for the preparation of the pavement recommendations, a CBR-value of 5 has been used in the preparation of the pavement design. It should, however, be recognized that the City of Grand Junction may require a specific CBR-value test to verify the support characteristics of the subsoils to allow the use of the following design. Alternatively, the local code may require a minimum pavement section be used if a specific CBR-value test is not performed. All fill material added to the pavement subgrade must be at least equivalent in support characteristics as the assumed soil type and be placed and compacted in accordance with the enclosed specification guidelines.

The anticipated pavement subgrade soils are considered to be highly sensitive to moisture and disturbance as severe stability problems may result, especially during typically wet periods. Consequently, specialized preparation of the subgrade through mechanical or chemical modification, as described in the Site Preparation Recommendations and Construction Considerations section of this report may be necessary if subgrade stability problems develop.

b) Asphalt Pavements

The following table presents the recommended thicknesses for a flexible pavement structure for asphaltic concrete over a granular base. The table also includes the appropriate Colorado Specifications to ensure proper materials and placement procedures. An alternate pavement section has been provided for areas subjected to the relatively light traffic loading of the parking stalls. However, if heavy truck traffic cannot be excluded from particular areas of the parking lot, the section recommended for drive areas should be used throughout the parking lot to reduce the potential for premature pavement distress.

ASPHALT PAVEMENT

Materials	Section Thickness (inches)		Colorado DOT Standard Specifications
	Stalls	Drives	
Asphalt Concrete Surface Course	1	1	Section 401, Grading EX
Asphalt Concrete Binder Course	2	2	Section 401, Grading C
Crushed Aggregate Base Course	6	8	Section 304, Class E

Pavement recommendations assume proper drainage and construction monitoring and are based on AASHTO design parameters for a twenty-year analysis period. It is recommended that a qualified geotechnical engineer monitor and test subgrade preparation, and that the subgrade be evaluated by an engineer immediately before pavement construction. Continual maintenance and major pavement rehabilitation possibly requiring the placement of an asphaltic concrete overlay after 8 to 10± years are anticipated to be necessary to achieve a twenty year service life.

c) Concrete Pavements

A concrete pad typically about 10 by 30 feet in plan dimension is recommended trash enclosure in the loading area due to the heavy impact loads developed by trash removal equipment in this area. Concrete pads are also recommended in all areas subjected to relatively high vehicular stresses such as parking lot entrance and exit aprons. The concrete pads should typically consist of a 6½-inch thick properly reinforced concrete slab with a 4- to 6- inch thick compacted layer of coarse granular material and properly prepared subgrade. Materials and construction procedures for concrete pavements should be in accordance with Colorado DOT Standard Specifications, Section 412.

GENERAL COMMENTS

Development of the proposed site entails some soil and foundation concerns, especially with respect to the presence of moisture sensitive soils and potentially collapsible soils. Recommendations presented in this report are therefore predicated upon site preparation, foundation, floor slab, and pavement construction monitored under the guidance of a qualified geotechnical engineer.

Soil samples obtained during the subsurface exploration will be retained for a period of 30 days. If no instructions are received, they will be disposed of at that time.

This report has been prepared exclusively for General Mills Restaurants, Inc. in order to aid in evaluation of this property and to assist the architects and engineers in the design and preparation of the project plans and specification. Copies of this report may be provided to contractor(s), with contract documents, to disclose information relative to this project. The report, however, has not been prepared to serve as the plans and specifications for actual construction without the appropriate interpretation by the project architect, structural engineer, and/or civil engineer. Reproduction and distribution of this report must be authorized by General Mills Restaurants, Inc. and GEA. This report is intended for use with regard to the specific project discussed herein. any substantial changes in the building type, structural loads, location, or assumed/provided floor elevations; or in the pavement traffic load intensities, location, layout, and/or elevation should be brought to GEA's attention so that GEA may determine how such changes may affect the conclusions and recommendations for the foundation, floor, and pavement construction, along with any other construction characteristics covered by this report, be reviewed by GEA to ensure that the conclusions and recommendations provided herein have been interpreted correctly.

Analysis of this site was based on a subsoil profile interpolated from a limited subsurface exploration. If the actual conditions encountered during construction vary from those indicated by the borings, GEA must be contacted immediately to determine if the conditions alter these recommendations.

Conclusions and recommendations presented in this report have been promulgated in accordance with generally accepted professional engineering practice in the field of geotechnical engineering. No other warranty is either expressed or implied.

APPENDIX

The boring logs and related information enclosed in the appendix depict subsurface conditions only at the specific locations drilled and at the particular times designated on the logs. Soil conditions at other locations may differ from conditions occurring at these boring locations. Also the passage of time may result in a change in the soil conditions at the boring locations drilled.

GUIDE SPECIFICATIONS FOR SUBGRADE AND GRADE PREPARATION FOR FILL, FOUNDATION, FLOOR SLAB AND PAVEMENT SUPPORT; AND SELECTION, PLACEMENT AND COMPACTION OF FILL SOILS USING MODIFIED PROCTOR PROCEDURES

GILES ENGINEERING ASSOCIATES, INC.

1. Construction monitoring and testing of subgrades and grades for fill, foundation, floor slab and pavement; and fill selection, placement and compaction shall be performed by an experienced soils engineer and/or his representatives.

2. All compacted fill, subgrades, and grades shall be (a) underlain by suitable bearing material, (b) free of all organic, frozen, or other deleterious material, and (c) observed, tested and approved by qualified engineering personnel representing an experienced soils engineer. Preparation of subgrades after stripping vegetation, organic or other unsuitable materials shall consist of (a) proofrolling to detect soft, wet, yielding soils or other unstable materials that must be undercut, (b) scarifying top 6 to 8 inches, (c) moisture conditioning the soils as required, and (d) recompaction to same minimum in-situ density required for similar materials indicated under Item 5. Note: Compaction requirements for pavement subgrade are higher than other areas. Weather and construction equipment may damage compacted fill surface and reworking and retesting may be necessary to assure proper performance.

3. In overexcavation and fill areas, the compacted fill must extend (a) a minimum 1 foot lateral distance beyond the exterior edge of the foundation at bearing grade or pavement at subgrade and down to compacted fill subgrade on a maximum 0.5(H):1(V) slope, (b) 1 foot above footing grade outside the building, and (c) to floor subgrade inside the building. Fill shall be placed and compacted on a 5(H):1(V) slope or must be stepped or benched as required to flatten if not specifically approved by qualified personnel under the direction of an experienced soils engineer.

4. The compacted fill materials shall be free of deleterious, organic, or frozen matter, shall contain no chemicals that may result in the material being classified as "contaminated," and shall be low-expansive with a maximum Liquid Limit (ASTM D-423) and Plasticity Index (ASTM D-424) of 30 and 15, respectively, unless specifically tested and found to have low expansive properties and approved by an experienced soils engineer. The top 12 inches of compacted fill should have a maximum 3 inch particle diameter and all underlying compacted fill a maximum 6 inch diameter unless specifically approved by an experienced soils engineer. All fill material must be tested and approved under the direction of an experienced soils engineer prior to placement. If the fill is to provide non-frost susceptible characteristics, it must be classified as a clean GW, GP, SW or SP per Unified Soil Classification System (ASTM D-2487).

5. For structural fill depths less than 20 feet, the density of the structural compacted fill and scarified subgrade and grades shall not be less than 90 percent of the maximum dry density as determined by Modified Proctor (ASTM D-1557) with the exception of the top 12 inches of pavement subgrade which shall have a minimum in-situ density of 95 percent of maximum dry density, or 5 percent higher than underlying structural fill materials. Where the structural fill depth is greater than 20 feet, the portion below 20 feet should have a minimum in-place density of 95 percent of its maximum dry density or 5 percent higher than the top 20 feet. Moisture contents of cohesive soil shall not vary by more than -1 to +3 percent and granular soil ±3 percent of optimum when placed and compacted or recompacted, unless specifically recommended/approved by the soils engineer monitoring the placement and compaction. Cohesive soils with moderate to high expansion potentials (PI>15) should, however, be placed, compacted and maintained prior to construction at a moisture content of 3 ±1 percent above optimum moisture content to limit future heave. Fill shall be placed in layers with a maximum loose thickness of 8 inches for foundations and 10 inches for floor slabs and pavements, unless specifically approved by the soils engineer taking into consideration the type of materials and compaction equipment being used. The compaction equipment should consist of suitable mechanical equipment specifically designed for soil compaction. Bulldozers or similar tracked vehicles are typically not suitable for compaction.

6. Excavation, filling, subgrade and grade preparation shall be performed in a manner and sequence that will provide drainage at all times and proper control of erosion. Precipitation, springs, and seepage water encountered shall be pumped or drained to provide a suitable working platform. Springs or water seepage encountered during grading/foundation construction must be called to the soil engineer's attention immediately for possible construction procedure revision or inclusion of an underdrain system.

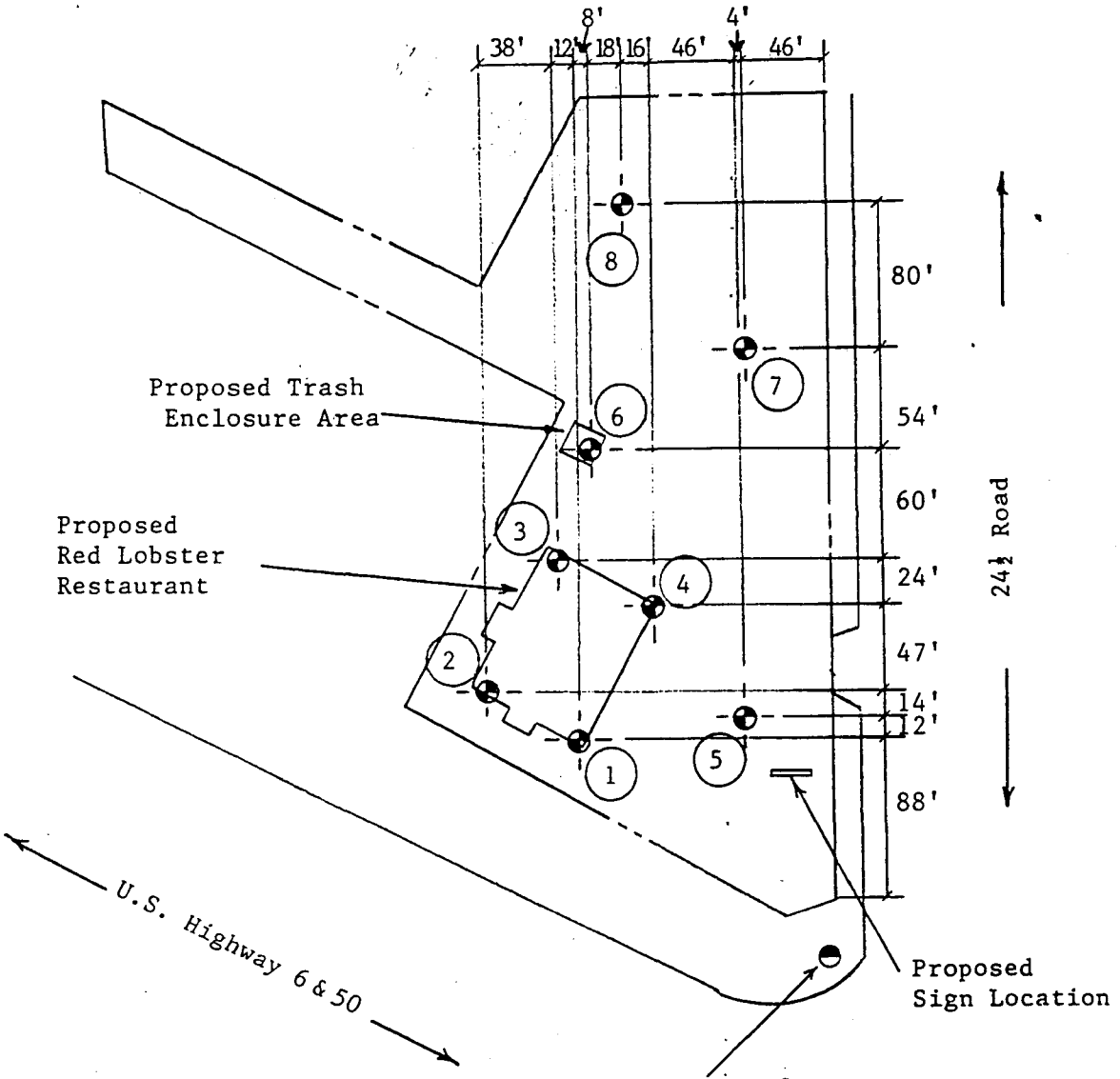
7. Non-structural fill adjacent to structural fill should typically be placed in unison to provide lateral support. Backfill along walls must be placed and compacted with care to ensure excessive unbalanced lateral pressures do not develop. The type of fill material placed adjacent to below grade walls (i.e. basement walls and retaining walls) must be properly tested and approved by an experienced soils engineer with consideration for the lateral pressure used in the wall design.

8. Wherever, in the opinion of the soils engineer or the Owner's Representatives, an unstable condition is being created either by cutting or filling, the work shall not proceed into that area until an appropriate geotechnical exploration and analysis has been performed and the grading plan revised, if found necessary.

NOTE: Dimensions indicate approximate method of locating test borings in the field with respect to property lines. Site Plan adapted from sketch provided by the Client.

N

SCALE:
1"=100'±

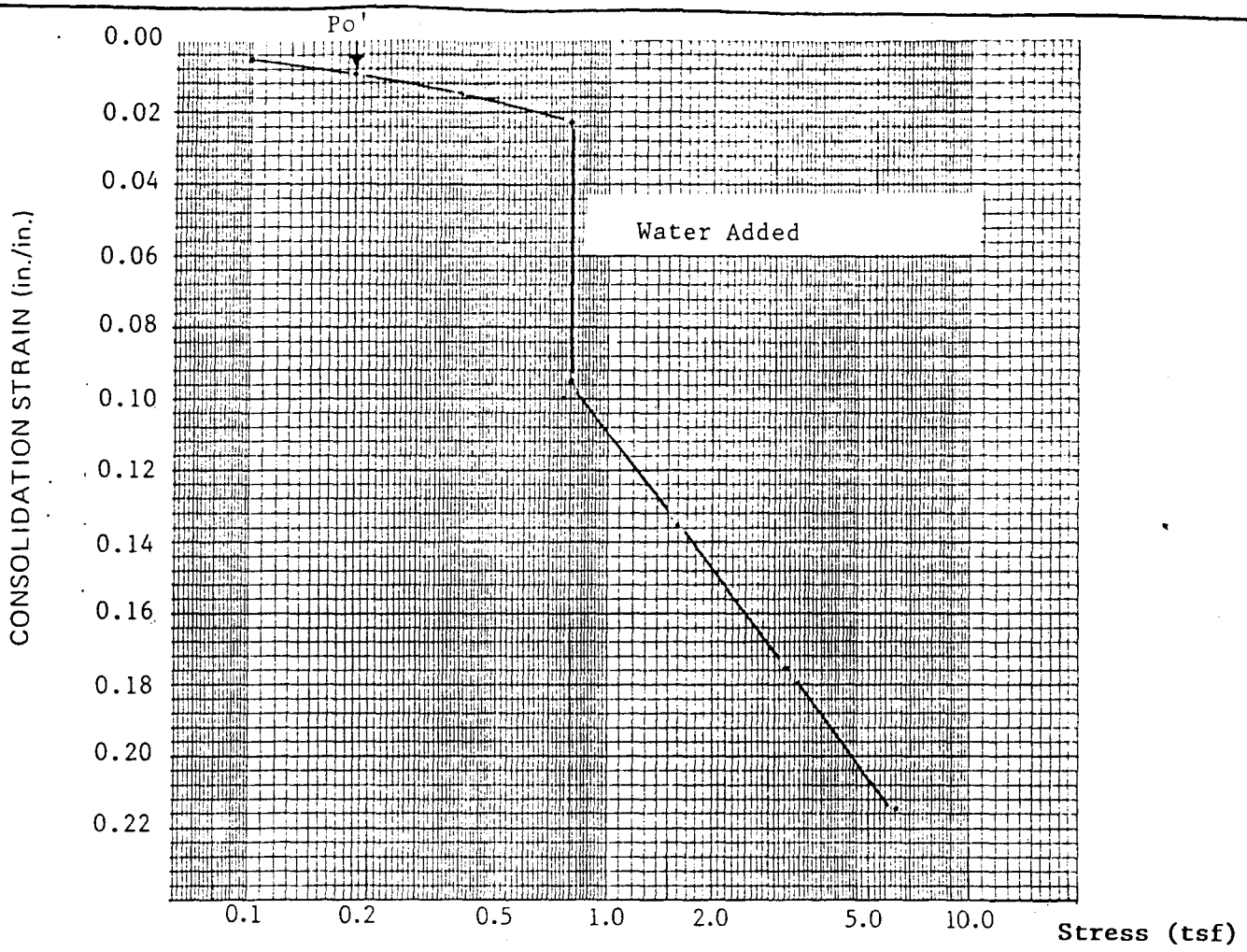


BENCHMARK: Base of Signal Light at ground surface; Assumed El. 100.0

#75 92

FIGURE 1
BORING LOCATION PLAN
Proposed Red Lobster Restaurant
Grand Junction, Colorado
GEA Project No. 2G-920504

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL, GEO-ENVIRONMENTAL, GEO-HYDROLOGICAL AND CONSTRUCTION MATERIALS CONSULTANTS



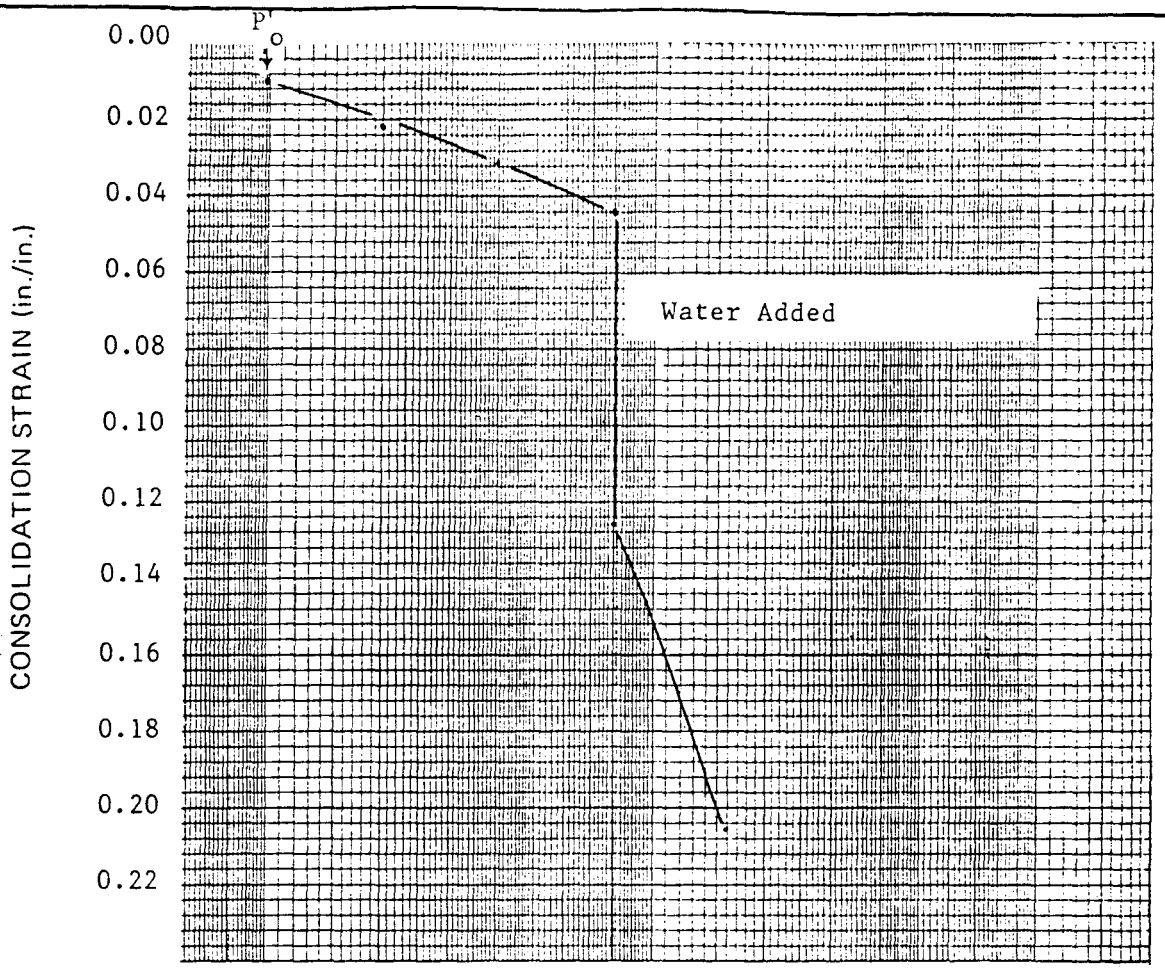
Classification	Light Grayish Brown Clayey Silt, little fine Sand, trace Organic Matter (Fibers) - Damp (CL)		
Boring No.	4	Initial/Natural Moisture Content (%)	11
Sample No.	3-CS	Final Moisture Content (%)	19
Depth (ft.)	4-5	Natural Density (pcf)	97
Elevation	92-91	Initial Dry Density (pcf)	87
L.L.	32	Final Dry Density (pcf)	111
P.L.	19	Initial Void Ratio, e_o	0.92
Specific Gravity	2.68	Final Void Ratio, e_f	0.51
Specimen Diameter (in.)	2.4	Most Probable Preconsolidation Stress (tsf), P_c	
Initial Specimen Thickness (in.)	1.0	Existing Overburden Stress (tsf), P_o	0.2

92

Proposed Red Lobster Restaurant
Grand Junction, Colorado
GEA Project No. 2G-920504

CONSOLIDATION/COLLAPSE TEST RESULTS
Figure 2

GILES ENGINEERING ASSOCIATES



Classification	Grayish Brown Clayey Silt, some fine Sand, few White leachate seams		
Boring No.	1	Initial/Natural Moisture Content (%)	12
Sample No.	2-SS	Final Moisture Content (%)	21
Depth (ft.)	1-2½	Natural Density (pcf)	96
Elevation	93±	Initial Dry Density (pcf)	85
L.L.	24	Final Dry Density (pcf)	108
P.L.	18	Initial Void Ratio, e_o	--
Specific Gravity	--	Final Void Ratio, e_f	--
Specimen Diameter (in.)	1.4	Most Probable Preconsolidation Stress (tsf), P_c	--
Initial Specimen Thickness (in.)	0.5	Existing Overburden Stress (tsf), P_o	0.10

Proposed Red Lobster Restaurant
Grand Junction, Colorado
GEA Project No. 2G-920504

CONSOLIDATION TEST RESULTS
Figure 3

GILES ENGINEERING ASSOCIATES

RECORD OF SUBSURFACE EXPLORATION

#181

BORING NO.	GEA PROJECT NO.
1 (South Building Corner)	2G-920504
DATE	**FIELD REPRESENTATIVE**
5-20-92	R. Koester

PROJECT
Proposed Red Lobster Restaurant
U.S. Highway 6 and 50 at 24½ Road
Grand Junction, Colorado

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL, GEOENVIRONMENTAL AND CONSTRUCTION MATERIALS CONSULTANTS

DESCRIPTION Ground Surface Elevation 95.0±'	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	w	PID	REM
Note A		1-AU	---						
Note B		2-SS	13				9	BDL	See Fig. 3
Grayish Brown Silty Clay, few White Leachate Seams, little fine Sand - Moist	5'	3-SS	5		3.7		19	BDL	
		4-SS	9				18	BDL	
Grayish Brown, slightly Orangish Brown mottled Silty Clay - Moist	10'	5-SS	10		2.5		21	BDL	
	15'	6-SS	10		3.0		25	BDL	*

Boring Terminated at 15'

Note A: 7± inches Grayish Brown Silt, some fine Sand, little Organic Matter (roots) - Damp (Root Mat)

Note B: Grayish Brown Clayey Silt, some fine Sand, few White Leachate Seams, trace Organic Matter (roots) - Damp (Possible Fill)

* Caved and Dry to 13½± feet upon Completion.

#7 5-92

▽ Water encountered at ___ ft. while drilling
▽ Water at _____ ft. at completion
▼ Water at _____ ft. after _____ hours

Changes of strata indicated by the lines are approximate boundary between soil types. The actual transition may be gradual and may vary considerably between boring locations. Dashed lines should be interpreted as more approximate than solid lines.

RECORD OF SUBSURFACE EXPLORATION

BORING NO.	GEA PROJECT NO.
2 (West Building Corner)	2G-920504
DATE	**FIELD REPRESENTATIVE**
5-20-92	R. Koester

PROJECT
Proposed Red Lobster Restaurant
U.S. Highway 6 and 50 at 24½ Road
Grand Junction, Colorado

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL, GEO-ENVIRONMENTAL, GEO-HYDROLOGICAL AND CONSTRUCTION MATERIALS CONSULTANTS

DESCRIPTION Ground Surface Elevation 95.4±'	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	w	PID	REM
Note A		1-AU	--						
Light Brown fine Sandy Silt, little Clay, few White Leachate Seams, trace Organic Matter (roots) - Damp (Possible Fill to 3± feet)		2-SS	20				11	BDL	
	5'	3-SS	13				11	BDL	
Grayish Brown Silty Clay, little fine Sand, trace Organic Matter (roots) - Damp		4-SS	15				16	BDL	
Grayish Brown Silty Clay with Orangish Brown streaking and few Light Brown Silty Clay Seams - Moist	10'	5-SS	21		4.0		20	BDL	
Brown fine Sandy Silt, trace Clay - Wet							36	BDL	*
		6-SS	5	2.1	2.0		27	BDL	
Grayish Brown, Gray and Orangish Brown mottled Silty Clay - Moist	15'								
Brown fine Sand - Wet									
Boring Terminated at 18' due to unstable soils clogging augers preventing sample collection.	20'								
Note A: 8± inches Grayish Brown fine Sandy Silt, little Organic Matter (roots), trace fine Gravel - Damp (Root Mat)	25'								
* Caved and Dry to 13½± feet upon Completion.	30'								
	35'								
	40'								
▽ Water encountered at ____ft. while drilling ▼ Water at ____ft. at completion ▼ Water at ____ft. after ____hours	45'								

Changes of strata indicated by the lines are approximate boundary between soil types. The actual transition may be gradual and may vary considerably between boring locations. Dashed lines should be interpreted as more approximate than solid lines.

RECORD OF SUBSURFACE EXPLORATION

BORING NO.	GEA PROJECT NO.
3 (North Building Corner)	2G-920504
DATE	**FIELD REPRESENTATIVE**
5-20-92	R. Koester
PROJECT	
Proposed Red Lobster Restaurant	
U.S. Highway 6 and 50 at 24½ Road Grand Junction, Colorado	

GILES ENGINEERING ASSOCIATES, INC.

GEOTECHNICAL, GEO-ENVIRONMENTAL, GEO-HYDROLOGICAL AND CONSTRUCTION MATERIALS CONSULTANTS

DESCRIPTION Ground Surface Elevation 95.8±'	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	w	PID	REM
Note A		1-AU	--						
Light Brown fine Sandy Silt to Silty fine Sand - Damp (Possible Fill)		2-SS	27				10	BDL	
Grayish Brown Silty Clay, little fine Sand, trace Organic Matter (fine roots) - Damp	5'	3-SS	13				11	BDL	Note B
		4-SS	14		4.0		15	BDL	
Grayish Brown Silty Clay with Orangish Brown and Gray Laminations - Moist	10'	5-SS	17				22	BDL	▼
Grayish Brown Clayey Silt, little fine Sand and Organic Matter (roots and fibers) - Wet		6-SS	2				32	BDL	▽ *
Brown, slightly Orangish Brown mottled Clayey Silt, little Organic Matter (fibers)-Wet	15'	7-SS	5				29	BDL	
Brown fine Sand - Wet		8-SS	10				26	BDL	

Boring Terminated at 16½ feet

20'

Note A: 6± inches Grayish Brown fine Sandy Silt, little Organic Matter (fibers) - Damp (Root Mat)

25'

* Caved to 12± feet upon Completion.

Note B: Atterberg Limits
LL = 41 (CL)
PL = 22

30'

35'

40'

▽ Water encountered at _____ft. while drilling

▼ Water at 12½ ft. at completion

▼ Water at 11 ft. after 1 hours

45'

Changes of strata indicated by the lines are approximate boundary between soil types. The actual transition may be gradual and may

RECORD OF SUBSURFACE EXPLORATION

#181

BORING NO.	GEA PROJECT NO.
4 (East Building Corner)	2G-920504
DATE	**FIELD REPRESENTATIVE**
5-20-92	R. Koester
PROJECT	
Proposed Red Lobster Restaurant	
U.S. Highway 6 and 50 at 24½ Road Grand Junction, Colorado	

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL GEOENVIRONMENTAL AND CONSTRUCTION MATERIALS CONSULTANTS

DESCRIPTION Ground Surface Elevation 96.0±'	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	W	PID	REM
Note A		1-AU	---						
Grayish Brown Silty Clay, little fine Sand and Organic Matter (roots)-Damp		2-CS	13				12	BDL	Note B
Light Grayish Brown Clayey Silt, little fine Sand, trace Organic Matter (fibers) - Damp	5'	3-CS	17				11	BDL	See Fig. 2
		4-SS	15				11	BDL	
Gray slightly Orangish Brown mottled Silty Clay, trace fine Sand - Moist	10'	5-SS	18		3.5		19	BDL	
		6-CS	11		3.2		23	BDL	▼ ▽ *
Brown fine Sand with Light Gray Clay Seams - Wet	15'	7-SS	12				24	BDL	

Boring Terminated at 15'

Note A: 7± inches Brown to Grayish Brown fine Sandy Silt, little Clay, trace Organic Matter (roots) - Damp (Root Mat)

Note B: Atterberg Limits
LL = 42
PL = 17 (CL)

* Caved to 13± feet upon Completion.

▽ Water encountered at ___ ft. while drilling

▼ Water at 12½ ft. at completion

▼ Water at 11½ ft. after 2 hours

Changes of strata indicated by the lines are approximate boundary between soil types. The actual transition may be gradual and may vary considerably between boring locations. Dashed lines should be interpreted as more approximate than solid lines.

RECORD OF SUBSURFACE EXPLORATION

#179

BORING NO.	GEA PROJECT NO.
5 (South Parking Area)	2G-920504
DATE: 5-20-92	FIELD REPRESENTATIVE: R. Koester

PROJECT
Proposed Red Lobster Restaurant
U.S. Highway 6 and 50 at 24½ Road
Grand Junction, Colorado

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL GEO-ENVIRONMENTAL GEO-HYDROLOGICAL AND CONSTRUCTION MATERIALS CONSULTANTS

DESCRIPTION (Ground Surface Elevation 96.9±')	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	w	PID	REM
Note A		1-AU	---						
Note B		2-SS	26				9	BDL	
Light Grayish Brown fine Sandy Silt, little Clay, few White Leachate Seams - Damp	5'	3-SS	15				8	BDL	*

Boring Terminated at 5'

Note A: 7± inches Brown to Grayish Brown Silty fine Sand, little coarse Sand and fine Gravel, trace Organic Matter (roots and fibers) - Damp (Fill)

Note B: Grayish Brown fine Sandy Silt, some coarse Sand, little Clay, trace fine Gravel and Debris (Asphalt Fragments) - Damp (Fill)

* Caved and Dry to 3½± feet upon Completion.

▽ Water encountered at ___ ft. while drilling
▽ Water at _____ ft. at completion
▼ Water at _____ ft. after _____ hours

RECORD OF SUBSURFACE EXPLORATION

#179

BORING NO.	GEA PROJECT NO.
6 (Trash Enclosure)	2G-920504
DATE: 5-20-92	FIELD REPRESENTATIVE: R. Koester
PROJECT: Proposed Red Lobster Restaurant U.S. Highway 6 and 50 at 24½ Road Grand Junction, Colorado	

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL GEO-ENVIRONMENTAL GEO-HYDROLOGICAL AND CONSTRUCTION MATERIALS CONSULTANTS

DESCRIPTION Ground Surface Elevation 95.0±'	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	w	PID	REM
Note A		1-AU	---						
Note B		2-SS	14				5	BDL	
Grayish Brown Silty Clay, little fine Sand, trace Organic Matter (roots) - Damp	5'	3-SS	18				12	BDL	*

Boring Terminated at 5'

Note A: 6± inches Brown fine Sandy Silt, little Clay and Organic Matter (roots) - Damp (Root Mat)

Note B: Light Grayish Brown fine Sandy Silt, little Clay, trace Organic Matter (roots), few Light Brown Leachate Seams - Damp

* Caved and Dry to 3½± feet upon Completion.

▽ Water encountered at ___ ft. while drilling

▽ Water at _____ ft. at completion

▼ Water at _____ ft. after _____ hours

RECORD OF SUBSURFACE EXPLORATION

#179

BORING NO.	GEA PROJECT NO.
7 (East Parking Area)	2G-920504
DATE: 5-20-92	FIELD REPRESENTATIVE: R. Koester

PROJECT
Proposed Red Lobster Restaurant
U.S. Highway 6 and 50 at 24½ Road
Grand Junction, Colorado

Giles Engineering Associates, Inc.
Geotechnical Geo-Environmental Geo-Hydrological
and Construction Materials Consultants

DESCRIPTION Ground Surface Elevation 96.4±'	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	w	PID	REM
Note A		1-AU	---						
Grayish Brown Silty Clay to Clayey Silt, little fine Sand-Damp (Possible Fill)		2-SS	40				6	BDL	
Light Grayish Brown fine Sandy Silt - Damp	5'	3-SS	25				4	BDL	

Boring Terminated at 5'

Note A: 6± inches Brown fine Sandy Silt, little Organic Matter (roots), trace fine Gravel and Clay - Damp (Root Mat)

#179 92

▽ Water encountered at ___ ft. while drilling
▽ Water at _____ ft. at completion
▼ Water at _____ ft. after _____ hours

RECORD OF SUBSURFACE EXPLORATION

#179

BORING NO.	GEA PROJECT NO.
8 (North Parking Area)	2G-920504
DATE	**FIELD REPRESENTATIVE**
5-20-92	R. Koester

PROJECT
Proposed Red Lobster Restaurant
U.S. Highway 6 and 50 at 24½ Road
Grand Junction, Colorado

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL GEO-ENVIRONMENTAL GEO-HYDROLOGICAL AND CONSTRUCTION MATERIALS CONSULTANTS

DESCRIPTION Ground Surface Elevation 96.1±'	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	w	PID	REM
Note A		1-AU	--						
Light Grayish Brown fine Sand, little Silt - Damp (Possible Fill)		2-SS	20				3	BDL	
Note B	5'	3-SS	11				6	BDL	*

Boring Terminated at 5'

Note A: 7± inches Grayish Brown fine Sandy Silt, little fine Sand and Clay, trace Organic Matter (fibers and roots) - Damp (Root Mat)

Note B: Light Grayish Brown Silty fine Sand, little Clay, few Seams of Brown Clayey Silt and White Leachate Seams - Damp

* Caved and Dry to 3½± feet upon Completion.

▽ Water encountered at ___ ft. while drilling
▽ Water at _____ ft. at completion
▼ Water at _____ ft. after _____ hours

Changes of strata indicated by the lines are approximate boundary between soil types. The actual transition may be gradual and may

GENERAL NOTES

GILES ENGINEERING ASSOCIATES, INC.

SAMPLE IDENTIFICATION

All samples are visually classified in general accordance with the Unified Soil Classification System (ASTM D-2487-75 or D-2488-75)

DESCRIPTIVE TERM (% BY DRY WEIGHT)

Trace:	1-10%
Little:	11-20%
Some:	21-35%
And/Adjective	36-50%

PARTICLE SIZE (DIAMETER)

Boulders:	8 in and larger	
Cobbles:	3 in to 8 in	
Gravel:	coarse-	3/4 to 3 in
	fine-	No. 4 (4.76mm) to 3/4 in
Sand:	coarse-	No. 4 (4.76mm) to No. 10 (2.0mm)
	medium-	No.10 (2.0mm) to No. 40 (0.42mm)
	fine-	No. 40 (0.42mm) to No. 200 (0.074mm)
Silt:	No. 200 (0.074mm) and smaller (Non-plastic)	
Clay:	No. 200 (0.074mm) and smaller (Plastic)	

SOIL PROPERTY SYMBOLS

- Dd: Dry Density (pcf)
- LL: Liquid Limit, percent
- PL: Plastic Limit, percent
- PI: Plasticity Index (LL-PL)
- LOI: Loss on Ignition, percent
- Gs: Specific Gravity
- K: Coefficient of Permeability
- w: Moisture content, percent
- qp: Calibrated Penetrometer Resistance, tsf
- qs: Vane-Shear Strength, tsf
- qu: Unconfined Compressive Strength, tsf
- qc: Static Cone Penetrometer Resistance. Correlated to Unconfined Compressive Strength, tsf
- PID: Results of vapor analysis conducted on representative samples utilizing a Photoionization Detector calibrated to a benzene standard. Results expressed in HNU-units (BDL=Below Detection Limits)
- N': Penetration Resistance per 6 inch interval, or fraction thereof, for a standard 2 inch O.D. (1-3/8 inch I.D.) split spoon sampler driven with a 140 pound weight free-falling 30 inches. Performed in genral accordance with Standard Penetration Test Specifications (ASTM D-1586). N in blows per foot equals sum of N' values where plus sign is shown.
- Nc: Penetration Resistance per 1-3/4 inches of Dynamic Cone Penetrometer. Approximately equivalent to Standard Penetration Test N-Value in blows per foot.
- Nr': Penetration Resistance per 6 inch interval, or fraction thereof, for California Ring Sampler driven with a 140 pound weight free-falling 30 inches perASTM D-3550. Not equivalent to Standard Penetration Test N-Value.

DRILLING AND SAMPLING SYMBOLS

- SS: Split-Spoon
- ST: Shelby Tube - 3" O.D. (except where noted)
- CS: 3" O.D. California Ring Sampler
- DC: Dynamic Cone Penetrometer per ASTM Special Technical Publication No. 399
- AU: Auger Sample
- DB: Diamond Bit
- CB: Carbide Bit
- WS: Wash Sample.
- RB: Rock-Roller Bit
- BS: Bulk Sample

Note: Depth intervals for sampling shown on Record of Subsurface Exploration are not indicative of sample recovery, but position where sampling initiated.

SOIL STRENGTH CHARACTERISTICS

COHESIVE (CLAYEY) SOILS

COMPARATIVE CONSISTENCY	BLOWS PER FOOT (N)	UNCONFINED COMPRESSIVE STRENGTH (TSF)
Very Soft	0-2	0 - 0.25
Soft	3-4	0.25 - 0.50
Medium Stiff	5-8	0.50 - 1.00
Stiff	9-15	1.00 - 2.00
Very Stiff	16-30	2.00 - 4.00
Hard	31+	4.00+

NON-COHESIVE (GRANULAR) SOILS

RELATIVE DENSITY	BLOWS PER FOOT (N)
Very Loose	0-4
Loose	5-10
Firm	11-30
Dense	31-50
Very Dense	51+

DEGREE OF PLASTICITY	PI
None to Slight	0-4
Slight	5-10
Medium	11-30
High to Very High	31+

DEGREE OF EXPANSIVE POTENTIAL	PI
Low	0-15
Medium	15-25
High	25+

GEA446/kah

Recycled Paper

CITY OF GRAND JUNCTION FLOODPLAIN PERMIT

APPLICANT: General Mills Restaurants, Inc.
Mr. Ron Gates

MAILING ADDRESS 5900 Lake Ellenor Drive

Orlando, Florida 32809

TELEPHONE: Home ( ) Work (407) 851-0370

OWNER (If different than applicant): Same

MAILING ADDRESS

TELEPHONE: Home ( ) Work ( )

COMMON LOCATION OF PROJECT SITE: 575 24-1/2 Road (Mesa Mall)
(STREET ADDRESS)

MESA COUNTY ASSESSOR'S TAX PARCEL NO: 2945-09-10-017

BRIEF DESCRIPTION OF THE PROPOSED USE OF THE SITE:

Red Lobster Restaurant

RIVER, STATION: Horizon Drive Channel

ELEVATION OF THE 100 YEAR FLOOD EVENT: 4549.7

DETERMINED FROM: ( ) CORPS OF ENGINEERS, FLOOD HAZARD STUDY, NOVEMBER 1976
( ) HUD FLOOD INSURANCE STUDY, JANUARY 1978
(X) Federal Emergency Management Agency, July 15, 1992

ENGINEER: Western Engineers, Inc.

MAILING ADDRESS 2150 Highway 6 and 50

Grand Junction, Colorado 81505

TELEPHONE: Work (303) 242-5202

TO BE COMPLETED BY STAFF:

#75 oB

DATE REC'D _____ RECEIPT NO. _____

FILE NO. _____ FEE _____

REQUIRED DOCUMENTS: _____

Original
Do Not Remove
From Office

I

DOCUMENTS LIST

The following items, identified by a check mark, must be included as a necessary part of the floodplain permit application. The materials may be submitted in narrative form or in graphical (drawing, sketch, etc.) form. As a minimum for favorable review all required items must be included in a floodplain permit application file.

✓ PLOT PLAN drawn to scale at not less than 1"=200', showing the location and dimensions of the lot, the spatial arrangements of all existing and proposed structures and improvements, streets and driveways, stored materials, and floodproofing measures. The plot plan must show both banks of the stream channel, any existing overflow channel(s) and the perimeter of the 100 year flood in relation to the project site.

✓ STRUCTURES List all existing and proposed structures on the project site within the floodplain, state the type of construction (frame, metal, masonry, etc.), state the elevation of the lowest floor expressed in feet above Mean Sea Level as determined from comparison to an identified datum point.

____ A CROSS SECTION or elevation view at the point of the proposed development showing:

___ a. the full channel of the stream,
___ b. the contours of the adjoining land areas of the project site,
___ c. the elevation of the 100 year flood event,
___ d. the elevation of the lowest floor of all proposed structures,
___ e. the elevation to which each structure has been or will be floodproofed.
___ f. the elevation of existing and proposed streets, or driveways,
___ g. areas to be filled or excavated,
___ h. water or wastewater treatment facilities,
___ i. existing and proposed storage areas,
___ j. elevation of all utilities serving the site or structure,
___ k. _____

NOTE: All elevations shall be tied to either USGS datum points or Grand Valley Vertical and Horizontal Control Points, as used by the Army Corps of Engineers in the Flood Hazard Study, November 1976. Location and elevation of the control points are available from the County Floodplain Administrator.

#75 92

____ STORED MATERIALS Identify in tabular from all materials which are presently or are proposed to be stored within the floodplain on the project site. Provide adequate description of the material (a trade name will be insufficient), identify the least, normal, and maximum quantity of material which will be stored in the floodplain. In the case that the stored material(s) is (are) hazardous to animal or plant life, are explosive, poisonous, flammable, or is (are) volatile when in contact with water, explain the degree of hazard for each such material.

____ SPECIFICATIONS for construction material(s) floodproofing, filling, dredging, grading, or channel improvement shall be included. Proposed floodproofing measures, designed to mitigate potential flood hazard at the project site must be certified by a professional engineer registered in the State of Colorado.

____ WATERCOURSE ALTERATIONS OR RELOCATIONS must be indicated on an overhead air photo (scale 1"=200') and at least two cross sections. Existing direction of the water forces, areas of bank erosion, areas of accretion (build-up) or potential for channel movement shall be shown on the air photos. Related hydraulic considerations such as watercourse capacity, efficiency or storage characteristics may be in tabular, narrative, or graphic form.

____ A NARRATIVE should describe the effects of the development on adjoining, upstream, and downstream properties and uses at the time of a 100-year flood.

___ a. Describe the effect caused by this development on floodwater height (elevation), velocity, and direction of floodwaters during a 100 year flood event.
___ b. Evaluate the possibility of increased erosion to downstream properties, or scour to adjacent or upstream properties as a result of this development.
___ c. Estimate the additional protective measures necessary to mitigate b above.
___ d. Evaluate the possibility of release and effect of toxic or hazardous materials during a 100 year flood event.

___ Describe in written or pictorial fashion the route(s) of ACCESS during a 100 year flood event.

___ Describe the locations and list the specifications for floodproofing equipment for each of the following:

sanitary sewer	electric power
domestic water	natural gas

#75 92

____ Describe the method of anchoring floatables, call-out the specifications for anchors, and anchoring ties.

copy of FEMA

____ A FLOOD PLAIN/HAZARD BOUNDARY MAP prepared by a registered professional engineer, drawn to a scale of not less than 1" = 200' must show those items required on a PLOT PLAN. This document will be necessary when there is not detailed flood plain or flood hazard information available.

____ CERTIFICATE OF ELEVATION OF THE LOWEST FLOOR must be submitted. The certificate must be signed by a professional land surveyor licensed to practice in the State of Colorado. The Mesa County Building Department will not issue a certificate of occupancy for a fixed structure, or proceed with utility inspections for a manufactured home unless this document has been received and approved by the Mesa County Flood Plain Administrator.

____ OTHER REQUIRED ATTACHMENTS:

_____

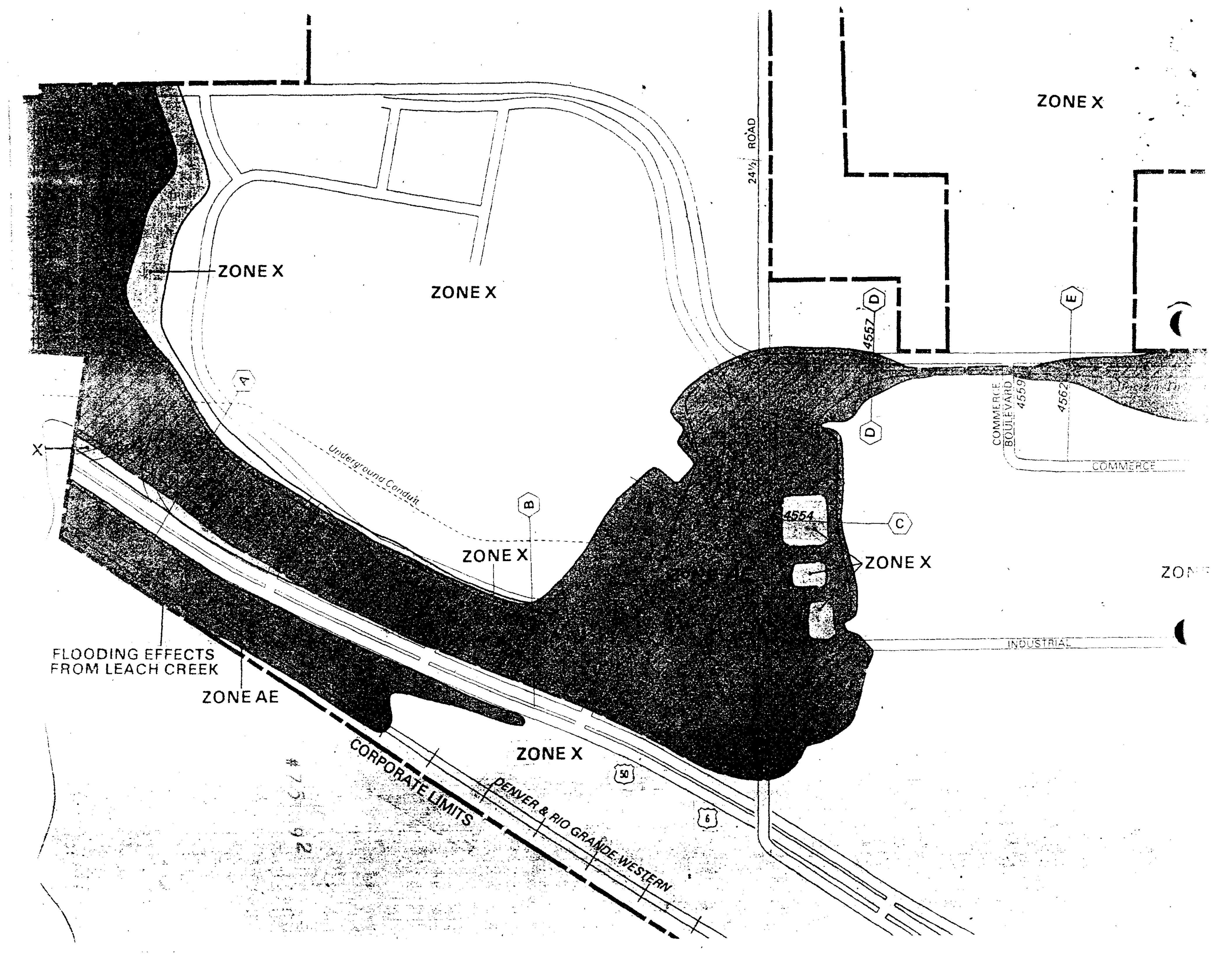
_____

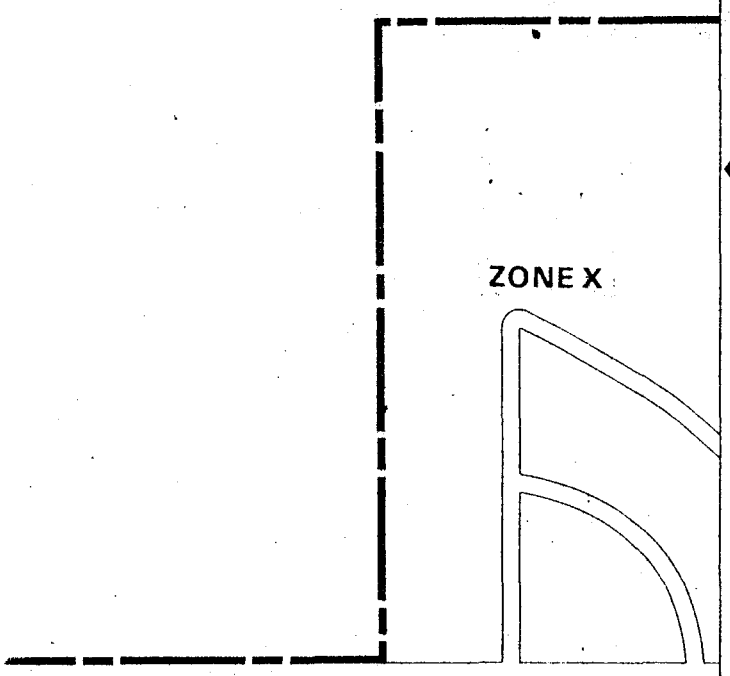
_____

_____

_____

#75 92


ZONE X
24½ ROAD
ZONE X
ZONE X
D
4557
E
4559
4562
COMMERCE
BOULEVARD
COMMERCE
D
A
Underground Conduit
B
4554
C
ZONE X
ZONE X
INDUSTRIAL
FLOODING EFFECTS
FROM LEACH CREEK
ZONE AE
ZONE X
50
6
CORPORATE LIMITS
DENVER & RIO GRANDE WESTERN



#75 92

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- **ZONE A** — No base flood elevations determined.
- **ZONE AE** — Base flood elevations determined.
- **ZONE AH** — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE A99** — To be protected from 100-year flood by Federal flood protection system under construction; no base elevations determined.
- **ZONE V** — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- **ZONE VE** — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- **ZONE X** — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- **ZONE X** — Areas determined to be outside 500-year flood plain.
- **ZONE D** — Areas in which flood hazards are undetermined.

Flood Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

513 — Base Flood Elevation Line; Elevation in Feet*

D — D — Cross Section Line

(EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone*

RM7 X — Elevation Reference Mark

*Referenced to the National Geodetic Vertical Datum of 1929

NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas.

Areas of special flood hazard (100-year flood) include Zones A, A1-30, AE, AH, AO, A99, V, V1-30 AND VE.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale.

FOLD

WESTERN ENGINEERS, INC. SINCE 1052
CONSULTING ENGINEERS / LAND SURVEYORS
2150 Hwy. 6 & 50, Grand Junction, CO 81505-9422 • 303/242-5202 • FAX 242-1672

Narrative for
FLOOD PLAIN PERMIT

General Mills Restaurants, Inc.
Red Lobster Restaurant

The proposed project lies in the 100 year flood plain of the Horizon Drive Channel. High water elevation at the building location, interpolated from the Federal Emergency Management Agency Map, July 15, 1992, is 4549.7 from sea level. The following is a synopsis of the requirements for the City of Grand Junction Flood Plain Permit for the Red Lobster Restaurant as proposed by General Mills Restaurants, Inc.:

PLOT PLAN
The submitted site plan for the Red Lobster project details the location and dimensions of the lot. The relative spatial arrangements of all existing and proposed structures and improvements are delineated on the same plan. The proposed project does not encroach nor is it near the stream channel. The site is located in the 100 year overflow plain for the Horizon Drive Channel. Except for a small portion in the southeast corner at an elevation above 4550, the remainder of the lot lies in the 100 year flood plain.

STRUCTURES
There are no existing structures on the proposed project site. The proposed structures consist of a 6,160 square foot, single story, wooden frame restaurant and a masonry trash enclosure. The trash enclosure will have the lowest floor elevation of 4550.9. The proposed floor elevation of the restaurant is 4552. In no case will the floor elevation be less than one foot above flood stage.

ACCESS
An emergency access lane requiring less than one foot depth of flood water is shown on the Grading and Drainage Plan for the Red Lobster Restaurant.

UTILITIES
All proposed utilities will be installed underground. The power transformer is located at an elevation above 4550. All appertances associated with the phone service will be located above 4550. The water and sewer service appertances will be installed with the typical caps and lids, ie. Sewer cleanouts will have the typical threaded caps and water valves will have standard double lid protection.

FLOOD PLAIN BOUNDARY MAP
A detailed flood plain boundary map has been provided by the Federal Emergency Management Agency, July 15, 1992.

#75 92

CERTIFICATION OF ELEVATION

A certification of elevation for the lowest floor will be provided upon completion of slab construction for the restaurant. The certificate will be signed by a professional Colorado Land Surveyor.

#75 92

NORWEST BANKS

Norwest Bank Denver, N.A.
1740 Broadway
Denver, Colorado 80274
303/861-8811

NORWEST BANK INTERNATIONAL COLORADO
DENVER OFFICE
LETTERS OF CREDIT
1740 BROADWAY
DENVER, COLORADO 80274-8685
SWIFT ADDRESS: UBDNUS55
TELEX NUMBER: 168118 NBI DVR
FAX: (303) 863-4898

PAY ANY

IRREVOCABLE STANDBY LETTER OF CREDIT

OUR REFERENCE NUMBER: S800041
AUGUST 21, 1992

BENEFICIARY:
CITY OF GRAND JUNCTION
ATTN: JOHN SHAVER, ASST. CITY ATTORNEY
250 N. 5TH ST.
GRAND JUNCTION, CO 81501

GENTLEMEN:

AT THE REQUEST OF: TOYS "R" US, INC.
ATTN: TREASURY DEPT.
395 W. PASSAIC ST.
ROCHELLE PARK, NJ 07662

AND FOR THE ACCOUNT OF: SAME

WE HEREBY ISSUE OUR IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER S800041 WHICH IS AVAILABLE BY PAYMENT AGAINST BENEFICIARY'S DRAFT(S) AT SIGHT, DRAWN ON NORWEST BANK DENVER, N.A.

THIS CREDIT IS FOR AN AGGREGATE AMOUNT NOT TO EXCEED A TOTAL OF U.S. DOLLAR
U.S. DOLLARS). DRAFTS SUBMITTED MUST BE ACCOMPANIED BY THE FOLLOWING DOCUMENTS:

1. THIS LETTER OF CREDIT.

2. A STATEMENT PURPORTEDLY SIGNED BY THE BENEFICIARY THAT:

"THE UNDERSIGNED, AN AUTHORIZED SIGNER, HEREBY CERTIFIES

*** CONTINUED ON NEXT PAGE ***

NORWEST BANKS

Norwest Bank Denver, N.A.
1740 Broadway
Denver, Colorado 80274
303/861-8811

THAT TOYS "R" US, INC. HAS FAILED TO CONSTRUCT IMPROVEMENTS TO THE MESA MALL MINOR SUBDIVISION AS REQUIRED BY A CONDITIONAL USE AND REPLAT OF A PORTION OF LOT 2 OF THE MESA MALL SUBDIVISION, JULY 1992, KNOWN AS FILE NUMBER(S) 33-92 AND AS PER THE CITY'S ZONING AND DEVELOPMENT CODE AND/OR PLANS, SPECIFICATIONS OR AGREEMENTS. THE MONIES RECEIVED FROM THIS DRAWING ARE REQUIRED TO COMPLETE SUCH IMPROVEMENTS."

EXPIRES AT OUR COUNTERS AT 3:00 PM DENVER TIME ON AUGUST 19, 1993.

ALL DRAFTS MUST BE MARKED: "DRAWN UNDER NORWEST BANK DENVER, N.A. IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER S800041 DATED AUGUST 21, 1992".

CANCELLATION OF L/C PRIOR TO EXPIRATION
THIS LETTER OF CREDIT (AND AMENDMENTS) MUST BE RETURNED TO US FOR CANCELLATION WITH A STATEMENT PURPORTEDLY SIGNED THE BENEFICIARY STATING THAT:
"THIS LETTER OF CREDIT IS NO LONGER REQUIRED BY US AND IS HEREWITH RETURNED TO ISSUING FOR CANCELLATION."

WE HEREBY AGREE TO HONOR EACH DRAFT DRAWN AND IN COMPLIANCE WITH THE TERMS OF THIS CREDIT IF DULY PRESENTED (TOGETHER WITH THE DOCUMENTS AS SPECIFIED) AT THIS OFFICE ON OR BEFORE THE EXPIRY DATE.

THIS CREDIT IS ISSUED SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS (1983 REVISION), INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 400.

NORWEST BANK DENVER NATIONAL ASSOCIATION

Lydia C. Siegold

(AUTHORIZED SIGNATURE)

Lydia C. Siegold
International Banking Officer
Letters of Credit/Collections
Manager

DRAINAGE STUDY
RED LOBSTER RESTAURANT
Grand Junction, Colorado
November, 1992

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

DRAINAGE STUDY
RED LOBSTER RESTAURANT
Grand Junction, Colorado
November, 1992

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

TABLE OF CONTENTS

DRAINAGE STUDY
RED LOBSTER RESTAURANT
Grand Junction, Colorado
November, 1992

SCOPE

The site for the proposed Restaurant is located in the southeastern portion of Mesa Mall at about 24 1/2 road and Highway 6 & 50 in Grand Junction Colorado. The total area to be developed encompasses approximately 2.2 acres. Current storm water discharges from the site occur overland and drain to the south to surface conveyances along Highway 6 & 50. Presently, there are no provisions for detention or retention of storm water runoff. The runoff water from the entire site eventually flows to Leach Creek to the west.

SURFACE DRAINAGE CHARACTERISTICS

The drainage area for the proposed development can generally be divided into three basins. The basin divisions are shown on Figure 1 in the Appendix.

Drainage basin 1 encompasses nearly 60 percent of the site and will drain to a low point in the middle of the northeast parking area. Runoff from basin 1 occurs by a combination of overland flow and gutter flow and drains into a catch basin located at the low point in the parking area.

Drainage basin 2 consists of the southeast parking areas. The building roof will drain into the detention pond for basin 2. Runoff from this basin travels overland and in gutters until it reaches the southeast corner of the property where one of two detention ponds are to be located. The flows from this drainage basin are captured by the detention pond and a catch basin in the pond.

Drainage basin 3 includes approximately the west half of the entrance driveway and drains to the west into the gutters along the Mall entrance road.

Runoff flows from all 3 drainage basins finally drain into a dedicated underground storm drainage system which flows toward the west along Highway 6 & 50 until it reaches Leach Creek.

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. 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. 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." The soils within the proposed site are all identified as Billings Clays or Group D soils. Group D soils are characterized as soils with high runoff potential, having very slow infiltration rates when thoroughly wetted and consisting chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. These soils have a very slow rate of water transmission.

Times of Concentration were determined using the rational runoff coefficients and the following methods:

1. For sheet flow the following Federal Aviation Administration formula was used:

$$To = \frac{1.8(1.1-C)L^{0.5}}{S^{0.33}}$$

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 following table presents a summary of the determinations for times of concentration:

BASIN I.D.	STORM RECURRENCE	SITE CONDITION	FLOW PATH	GROUND COVER	FLOW PATH LENGTH (FT)	FLOW PATH SLOPE	TRAVEL TIME (MIN)
All	2 Yr	Undevelop	Overland	Dirt	300	.0056	34
All	2 Yr	Undevelop	Shallow Ch	Dirt	110	.0056	2
All	100 Yr	Undevelop	Overland	Dirt	300	.0056	28
All	100 Yr	Undevelop	Shallow Ch	Dirt	110	.0056	2
1	2 Yr	Final	Overland	Asphalt	240	.0080	12
1	100 Yr	Final	Overland	Asphalt	240	.0080	10
2	2 Yr	Final	Overland	Asphalt	200	.010	11
2	100 Yr	Final	Overland	Asphalt	200	.010	9
3	2 Yr	Final	Gutter	Concrete	100	.035	4
3	100 Yr	Final	Gutter	Concrete	100	.035	3

Tables 3 and 4 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 capacity and flow rating curves for the proposed detention ponds are shown on Figures 11, 12 and 13 in the Appendix. The discharge from the proposed detention ponds will be by means of a standard catch basin discharging into an 2 inch diameter orifice. As indicated on Figures 12 and 13 in the Appendix, inlet conditions for the catch basin pipe entrance control the overall flow capacity. The pipe entrance was treated as an orifice using the following formula with an orifice coefficient of 0.6:

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

Following are area and capacity tables for the proposed detention ponds. The volumes were calculated using the conical method:

FINAL DETENTION VOLUME (BASIN 1)

ELEVATION	AREA (SQ FT)	VOLUME (CU FT)
48.30	0	0
49.00	8,267	1,929
49.30	12,622	5,039

FINAL DETENTION VOLUME (BASIN 2)

ELEVATION	AREA (SQ FT)	VOLUME (CU FT)
47.00	846	0
48.00	1,521	1,167
49.00	2,268	3,049

FINAL DETENTION DISCHARGE (BASIN 1)

ELEVATION	FLOW (CFS)
48.30	0
48.80	0.15
49.30	0.17
49.8	0.18

FINAL DETENTION DISCHARGE (BASIN 2)

ELEVATION	FLOW (CFS)
47.00	0
47.50	0.11
48.00	0.13
48.50	0.15
49.00	0.17

The outlet capacities shown above include consideration of a 50 percent clogging factor for the catch basin grate as required by the City of Grand Junction Criteria, and are based on the assumption that there will be no back pressure at the connection to the existing storm drain system. There was not sufficient information available to determine the hydraulic grade elevation in the existing storm drain pipe during the two storm events. For the purposes of estimating hydraulic grade lines for the two events, it was conservatively assumed that the 8 inch collector pipe will be running full during the 2 year event and that the hydraulic grade elevation will be one foot above the manhole invert during the 100 year event. Even if significant back pressure develops at these connections, the discharge capacity of the detention pond outlet should not be lower than the values shown above because the control is provided by a metering orifice in each of the catch basins. Estimated hydraulic grade lines are shown on Figures 14 and 15 in the Appendix for the two detention pond outlets.

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. Independent storm routing through detention ponds for drainage basins 1 and 2 indicated that the critical duration for a storm recurrence interval of 2 years was 50 minutes for both ponds and that the critical storm duration for a 100 year recurrence interval was 90 minutes for basin 1 and 80 minutes for basin 2. Therefore, for the overall site evaluation, the critical storm duration for the 2 year recurrence interval was selected to be 50 minutes and for the 100 year recurrence interval an 80 minute duration was used.

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	0.32	N/A	N/A	N/A
ALL	PREDEV	1440 (SCS)	100	2.85	N/A	N/A	N/A
ALL	PREDEV	35 (RATION)	2	0.35	N/A	N/A	N/A
ALL	PREDEV	30 (RATION)	100	1.73	N/A	N/A	N/A
1	FINAL	1440 (SCS)	2	0.78	0.14	0.27	757
1	FINAL	1440 (SCS)	100	3.02	0.16	0.95	4,486
1	FINAL	50 (RATION)	2	0.62	0.15	0.50	1,378
1	FINAL	80 (RATION)	100	1.19	0.17	0.99	4,906
2	FINAL	1440 (SCS)	2	0.21	0.05	0.22	251
2	FINAL	1440 (SCS)	100	1.83	0.16	1.78	2,631
2	FINAL	50 (RATION)	2	0.37	0.12	0.73	853
2	FINAL	80 (RATION)	100	0.72	0.16	1.87	2,812
3	FINAL	1440 (SCS)	2	0.05	N/A	N/A	N/A
3	FINAL	1440 (SCS)	100	0.23	N/A	N/A	N/A
3	FINAL	50 (RATION)	2	0.04	N/A	N/A	N/A
3	FINAL	80 (RATION)	100	0.07	N/A	N/A	N/A
1,2&3	FINAL	1440 (SCS)	2	0.99	0.18	N/A	N/A
1,2&3	FINAL	1440 (SCS)	100	4.99	0.51	N/A	N/A
1,2&3	FINAL	50 (RATION)	2	1.02	0.26	N/A	N/A
1,2&3	FINAL	80 (RATION)	100	1.87	0.40	N/A	N/A

PROPOSED DRAINAGE FACILITIES

The drainage facilities must satisfy the following criteria established by the "Interim Outline of Grading and Drainage Criteria, City of Grand Junction, July, 1992":

1. The final overall discharge flow rates from the site after completion of the development must not exceed the discharge rates which occurred prior to the development under storm recurrence intervals of both 2 and 100 years. This must be the case for all storm durations.

2. Runoff must not overtop curbs nor extend beyond the paved section.

3. The maximum flow depth in gutters during runoff from a storm with a recurrence interval of 2 years will not exceed 6 inches.

4. The maximum depth of flow or ponding will not exceed 1 foot in trafficked areas during the 100 year event.

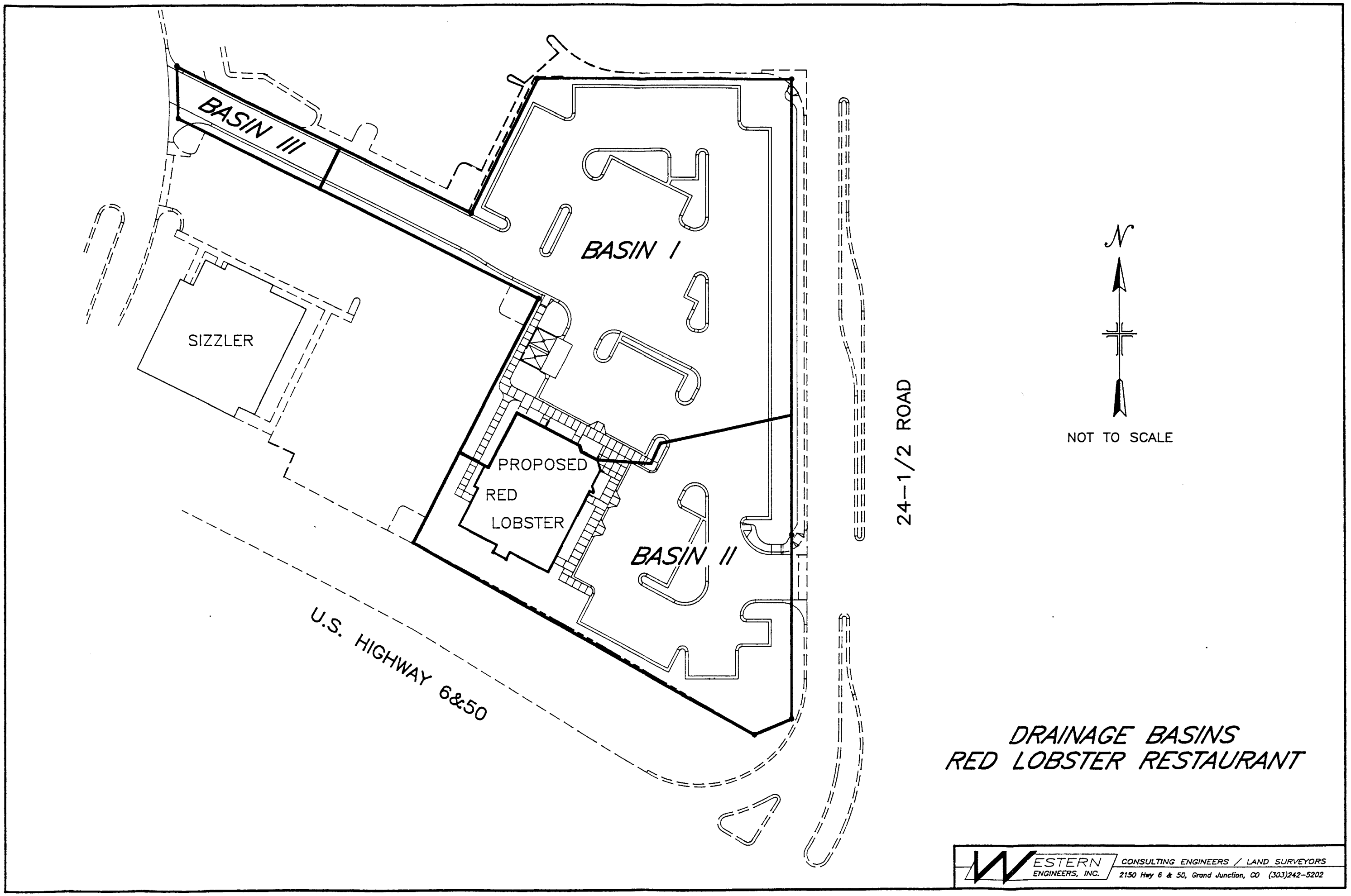
5. An emergency traffic lane shall be maintained with less than 6 inch water depth during the 100 year event.

The proposed detention ponds necessary to achieve these requirements are shown on the Drainage Plan and the capacity data is shown on Figure 11, in the Appendix. The detention pond for basin 1 is created by a depression in the northeast parking area. The maximum capacity of the proposed detention pond for basin 1 without exceeding the 1 foot depth limitation is about 5,000 cu. ft. The maximum capacity of the proposed detention pond for basin 2 without backing water into the parking area is about 3,200 cubic feet. Metered discharge control will be provided for both detention ponds by means of a 2 inch diameter orifice draining from a catch basin into the existing dedicated storm drain system.

It can be seen from the above summary that for all storm events and with all calculation methods used, the off-site discharge under the final proposed

conditions will be less than that which would have occurred during the same storms under the original conditions. Pond overflow is not anticipated for any of the storm events considered. All other criteria listed above are satisfied with the proposed system. The detention ponds and outlet control will be maintained by personnel from Red Lobster.

APPENDIX



DRAINAGE BASINS
RED LOBSTER RESTAURANT

WESTERN ENGINEERS, INC.
CONSULTING ENGINEERS / LAND SURVEYORS
2150 Hwy 6 & 50, Grand Junction, CO (303)242-5202

RED LOBSTER

UNDEVELOPED CONDITIONS

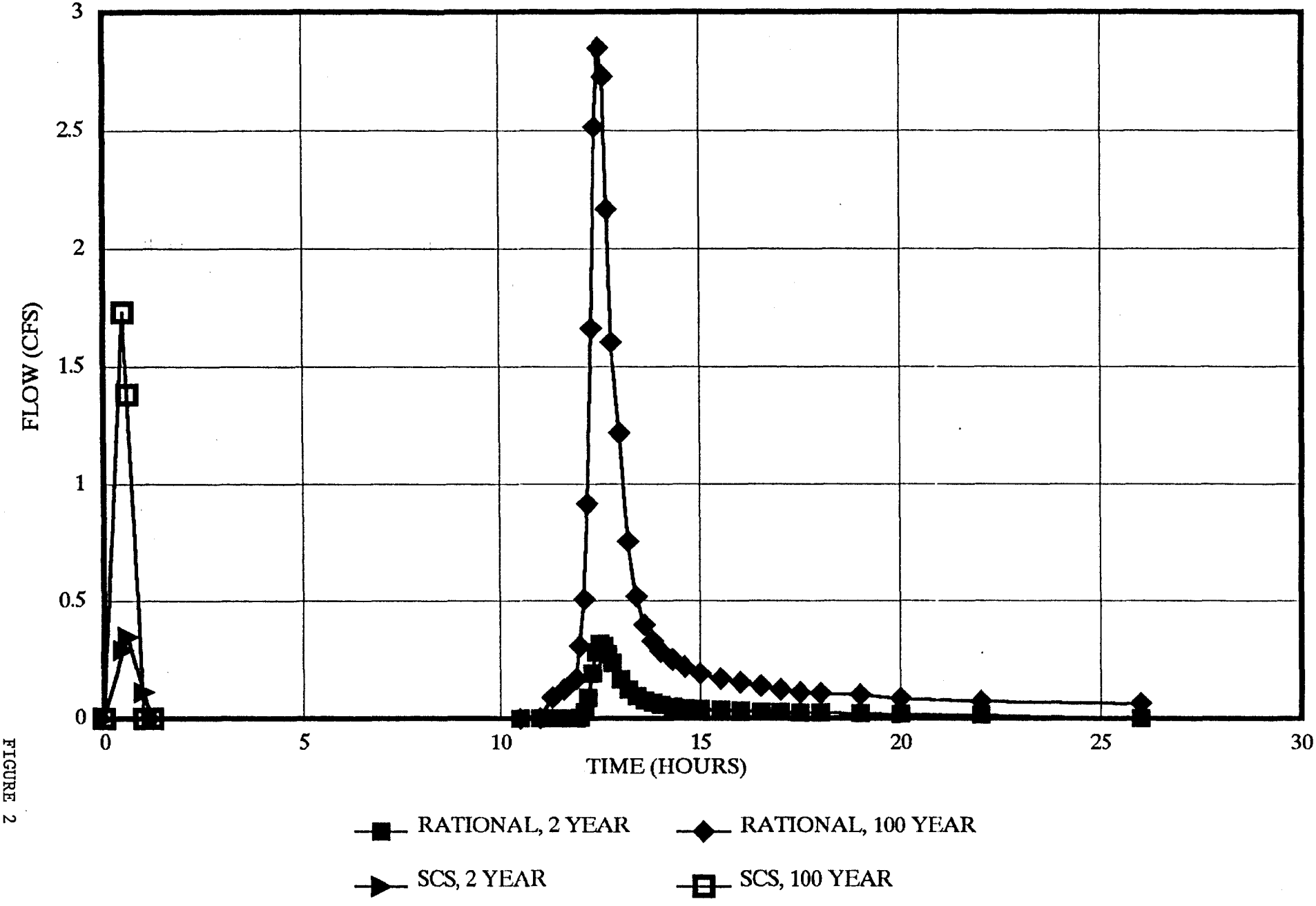


FIGURE 2

RED LOBSTER RESTAURANT

SCS METHOD, FINAL CONDITIONS, 2 YR

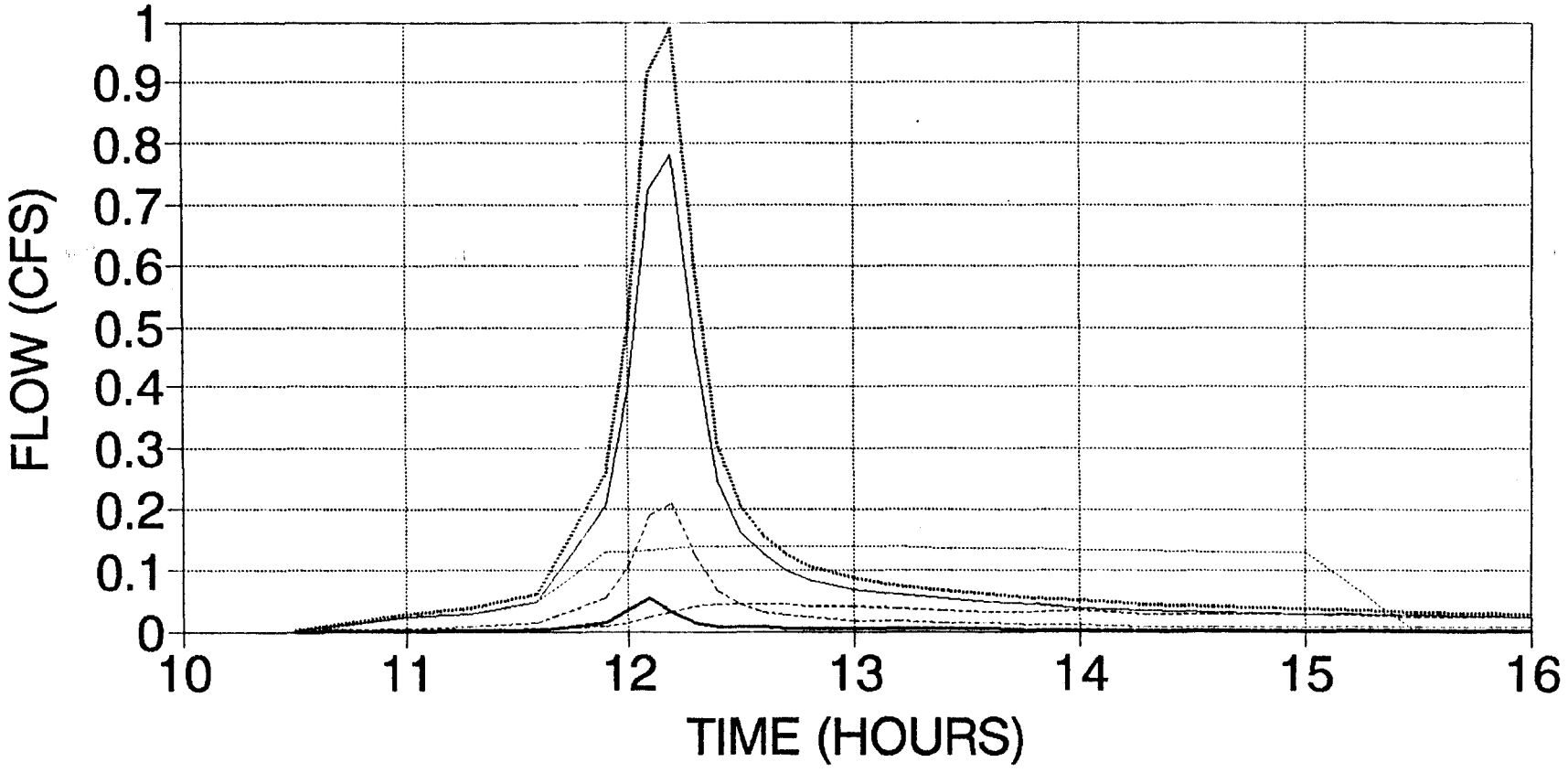


FIGURE 3

RED LOBSTER RESTAURANT

SCS METHOD, FINAL CONDITIONS, 2 YR

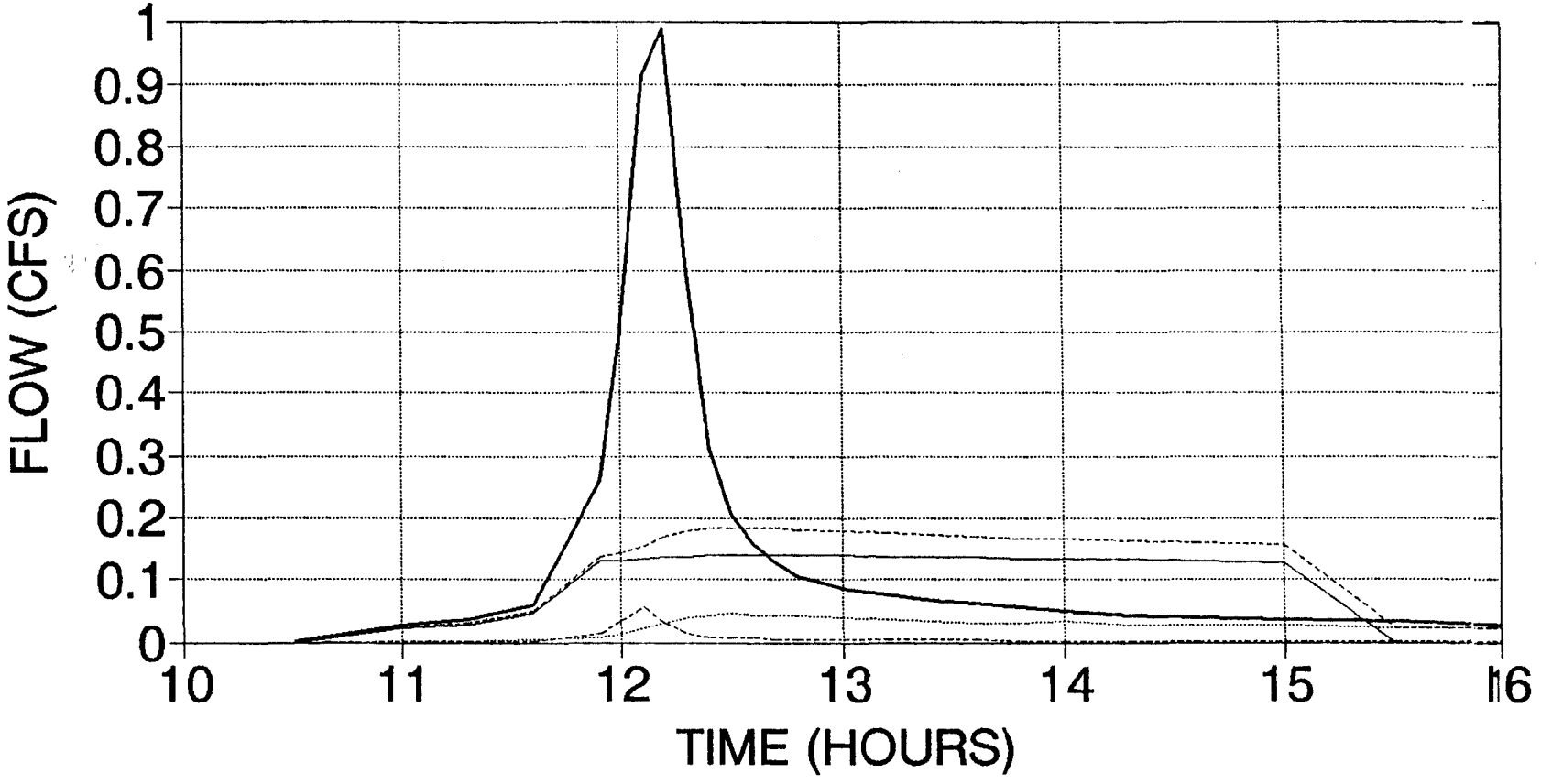


FIGURE 4

RED LOBSTER RESTAURANT

SCS METHOD, FINAL CONDITIONS, 100 YR

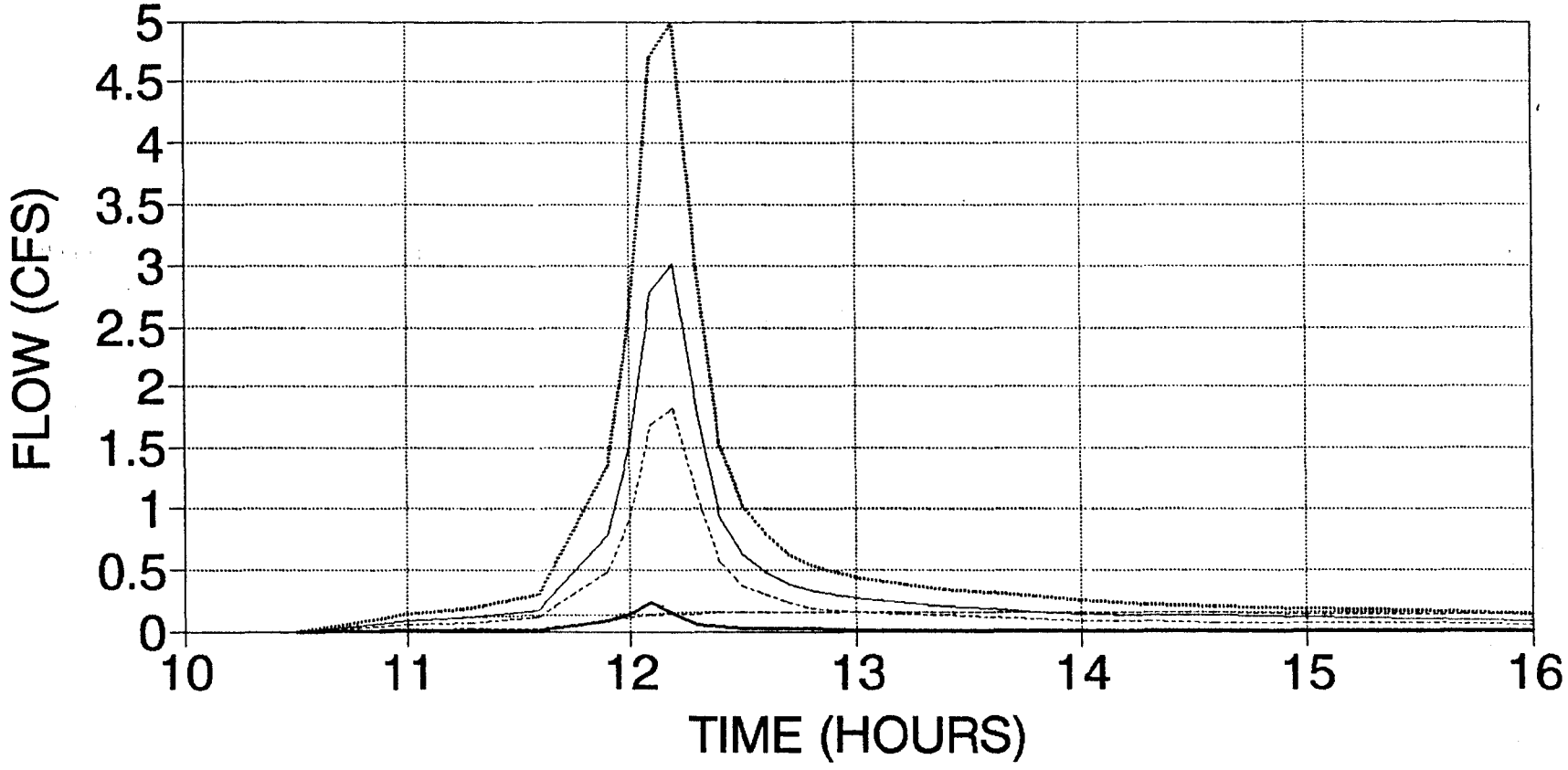


FIGURE 5

RED LOBSTER RESTAURANT

SCS METHOD, FINAL CONDITIONS, 100 YR

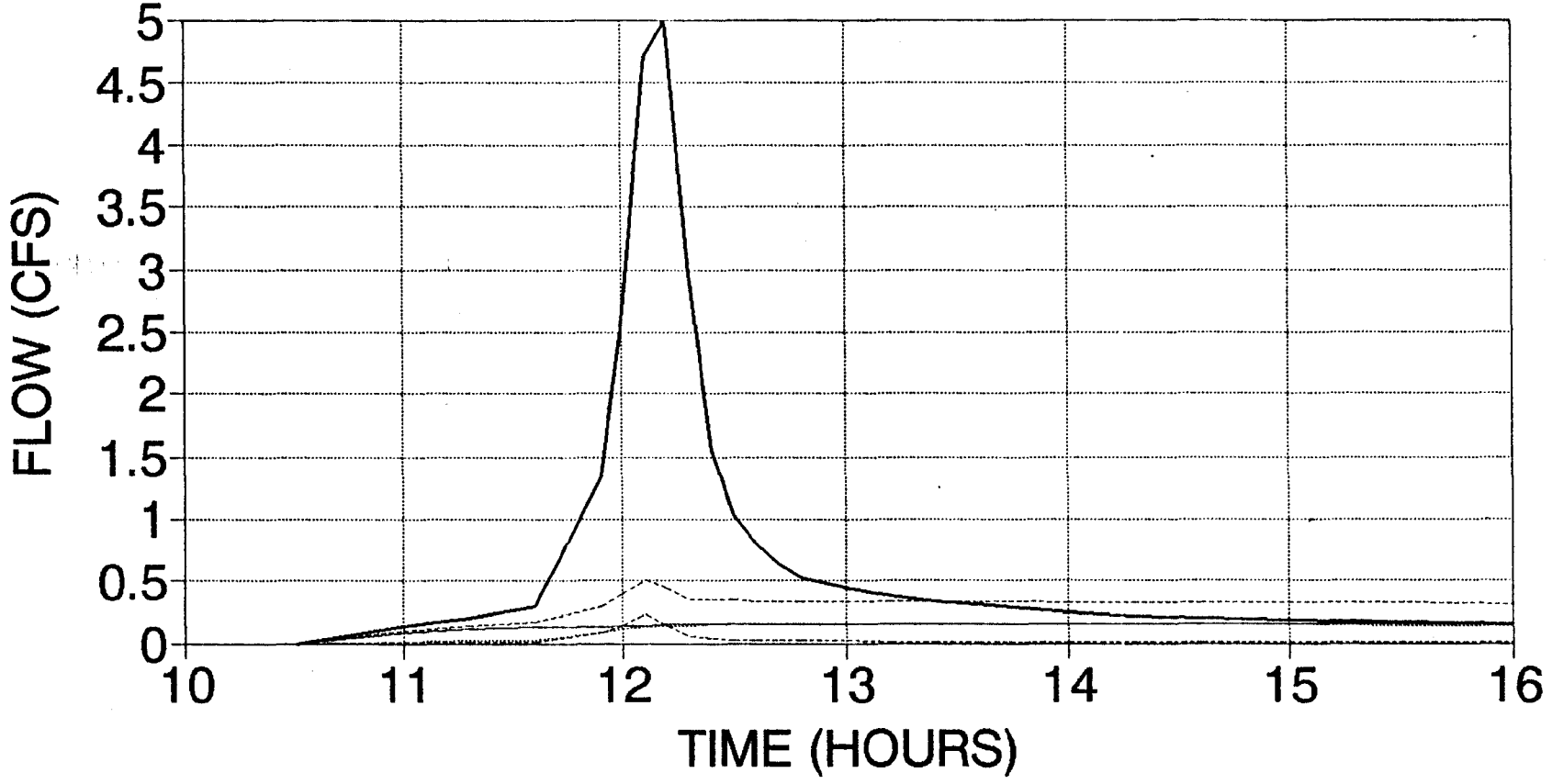


FIGURE 6

RED LOBSTER RESTAURANT

MOD RATIONAL, FINAL COND, 2 YR, 50 MIN

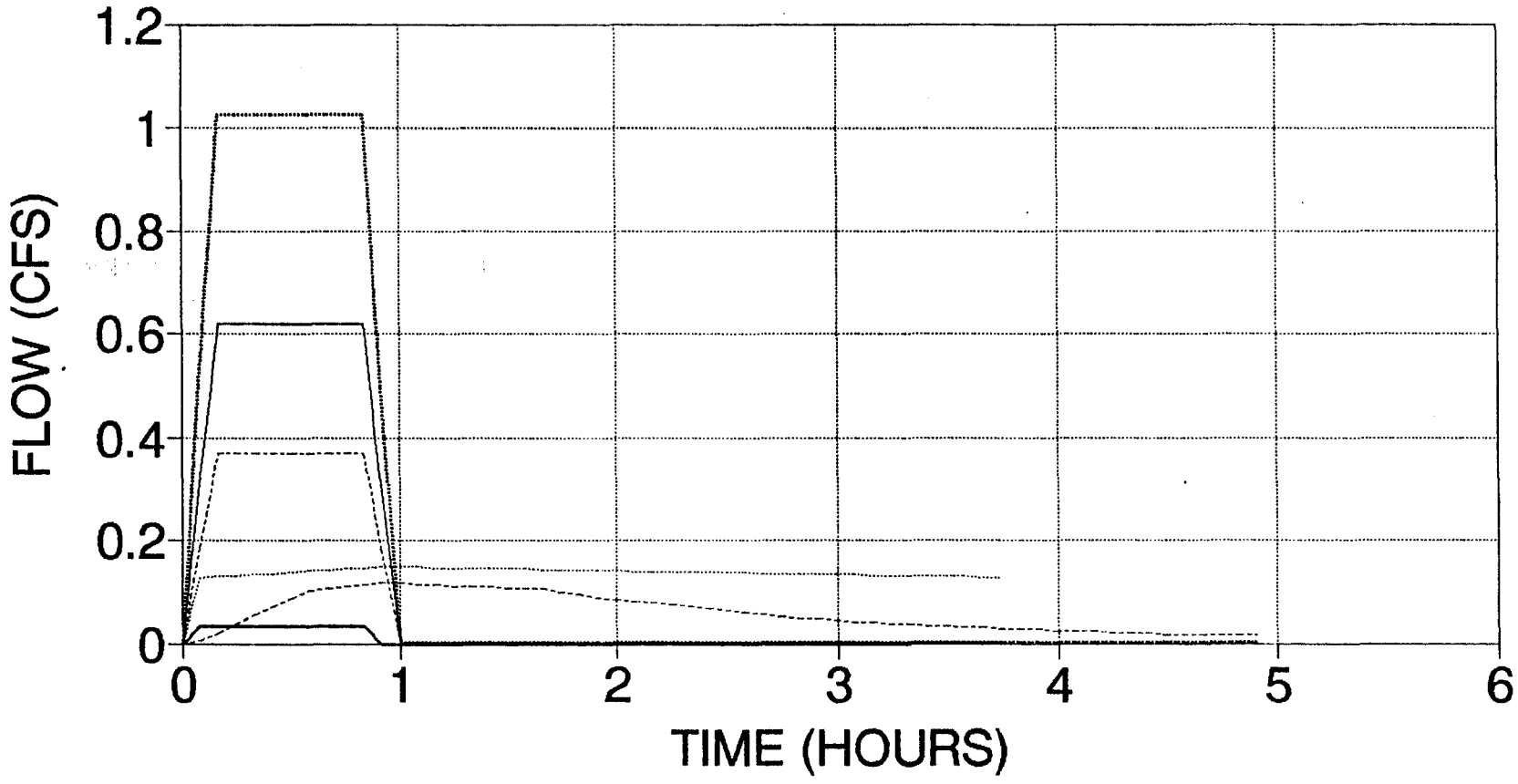
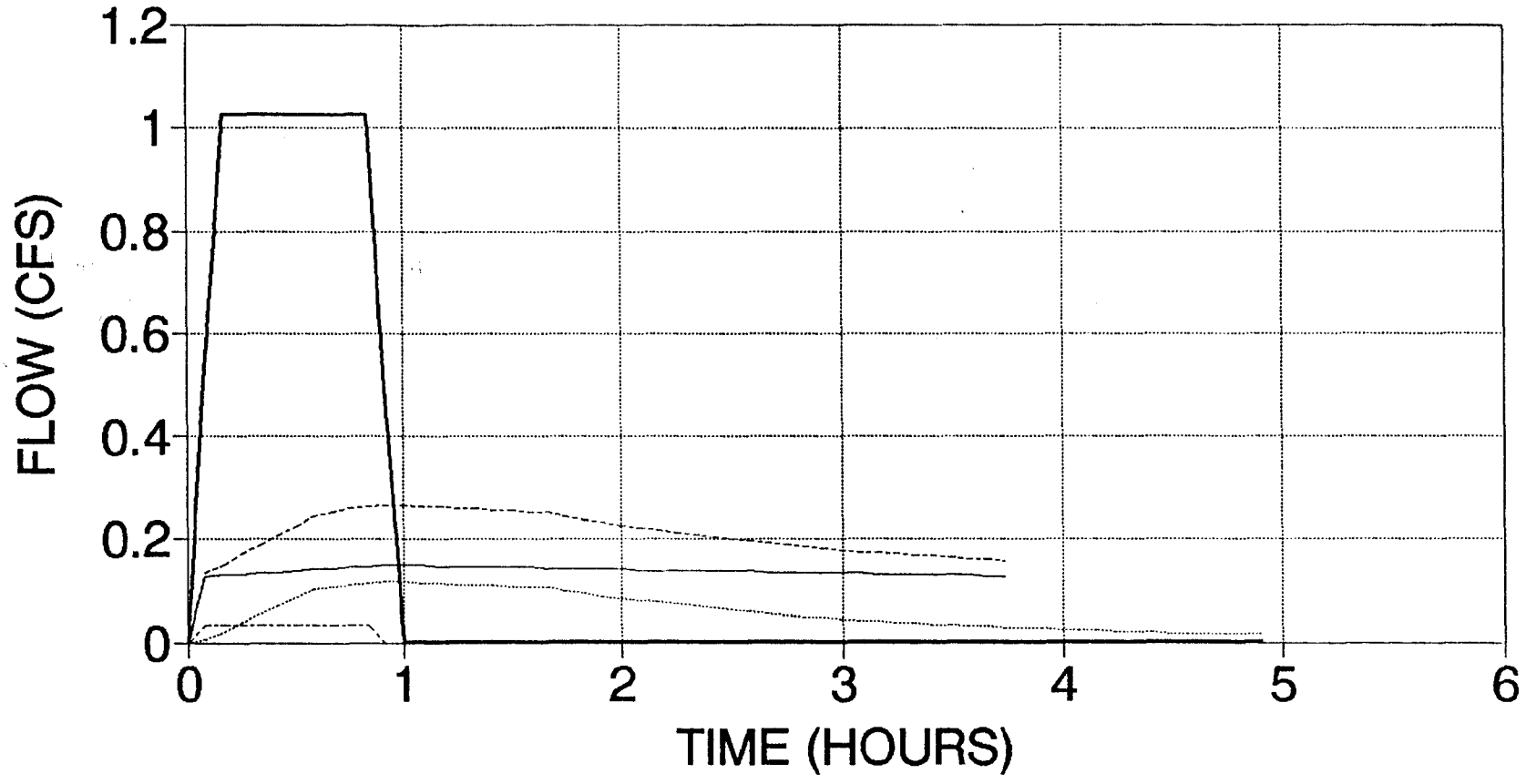


FIGURE 7

RED LOBSTER RESTAURANT

MOD RATIONAL, FINAL COND, 2 YR, 50 MIN



BASIN 1 OUTFLO
BASIN 2 OUTFLO
BASIN 3 FLOW
COMBINED OUT
COMBINED INFL

FIGURE 8

RED LOBSTER RESTAURANT

MOD RATIONAL,FINAL COND, 100 YR, 80 MIN

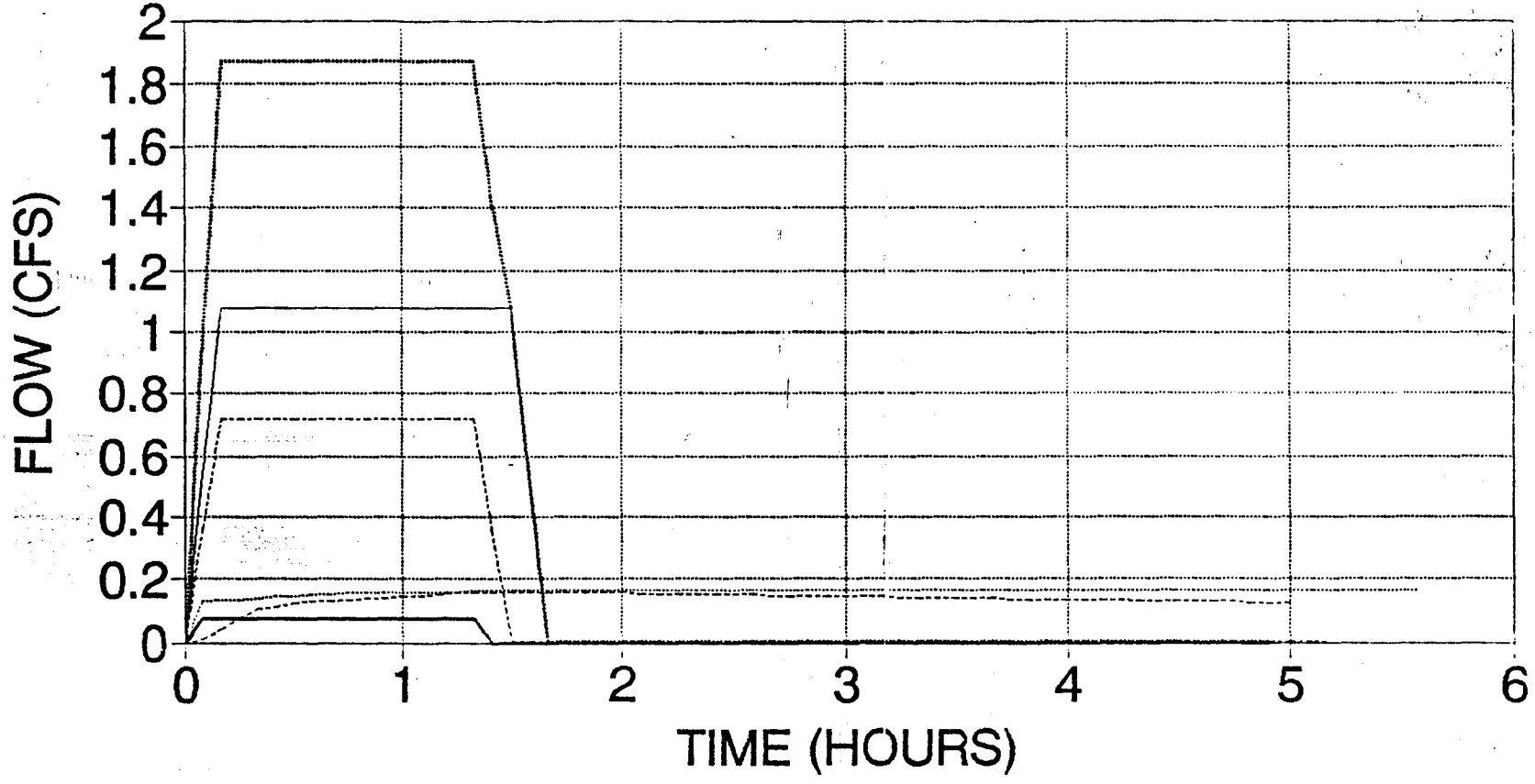
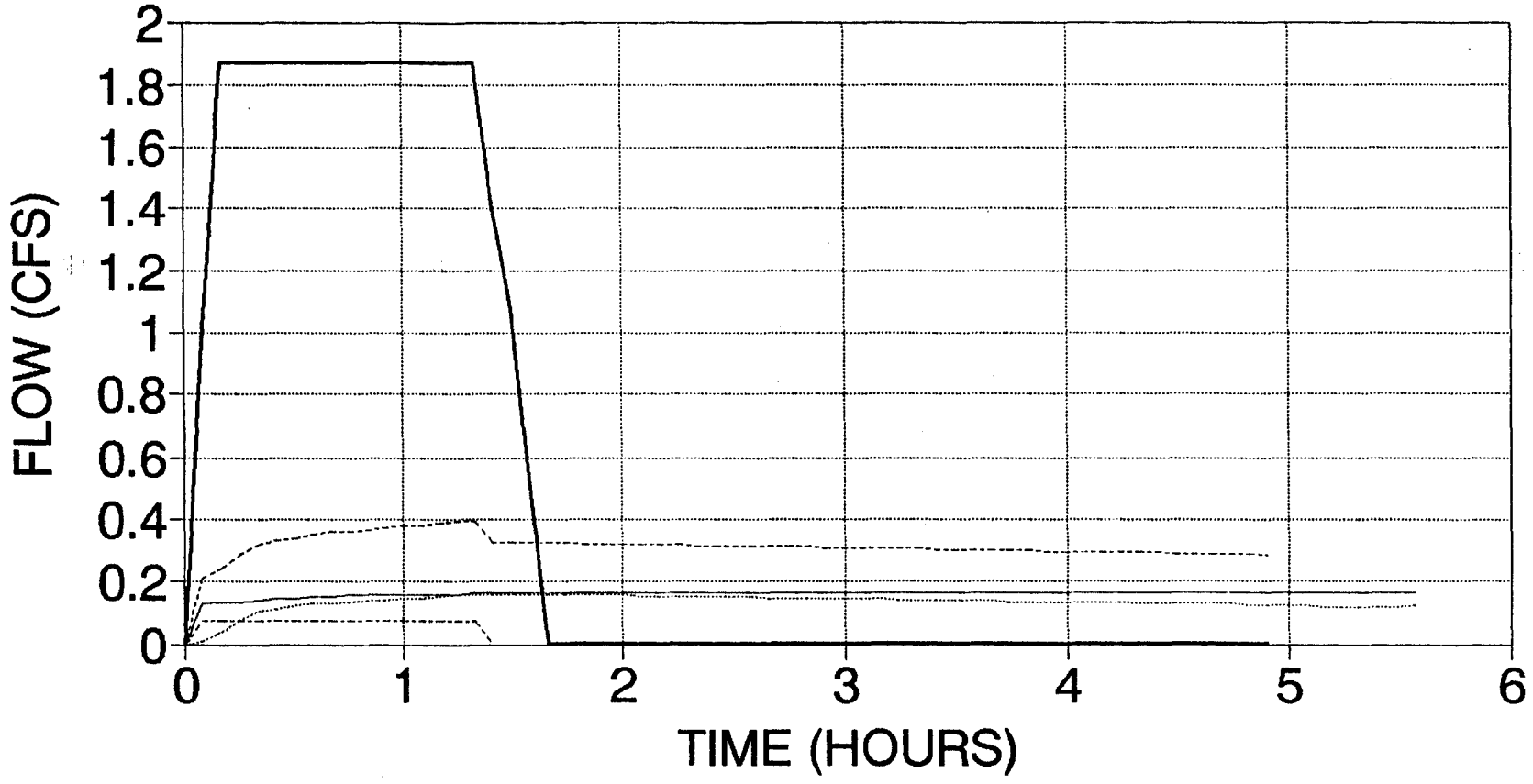


FIGURE 9

RED LOBSTER RESTAURANT

MOD RATIONAL,FINAL COND, 100 YR, 80 MIN



BASIN 1 OUTFLO
BASIN 2 OUTFLO
BASIN 3 FLOW
COMBINED OUT
COMBINED INFL

FIGURE 10

RED LOBSTER RESTAURANT

DETENTION POND CAPACITY

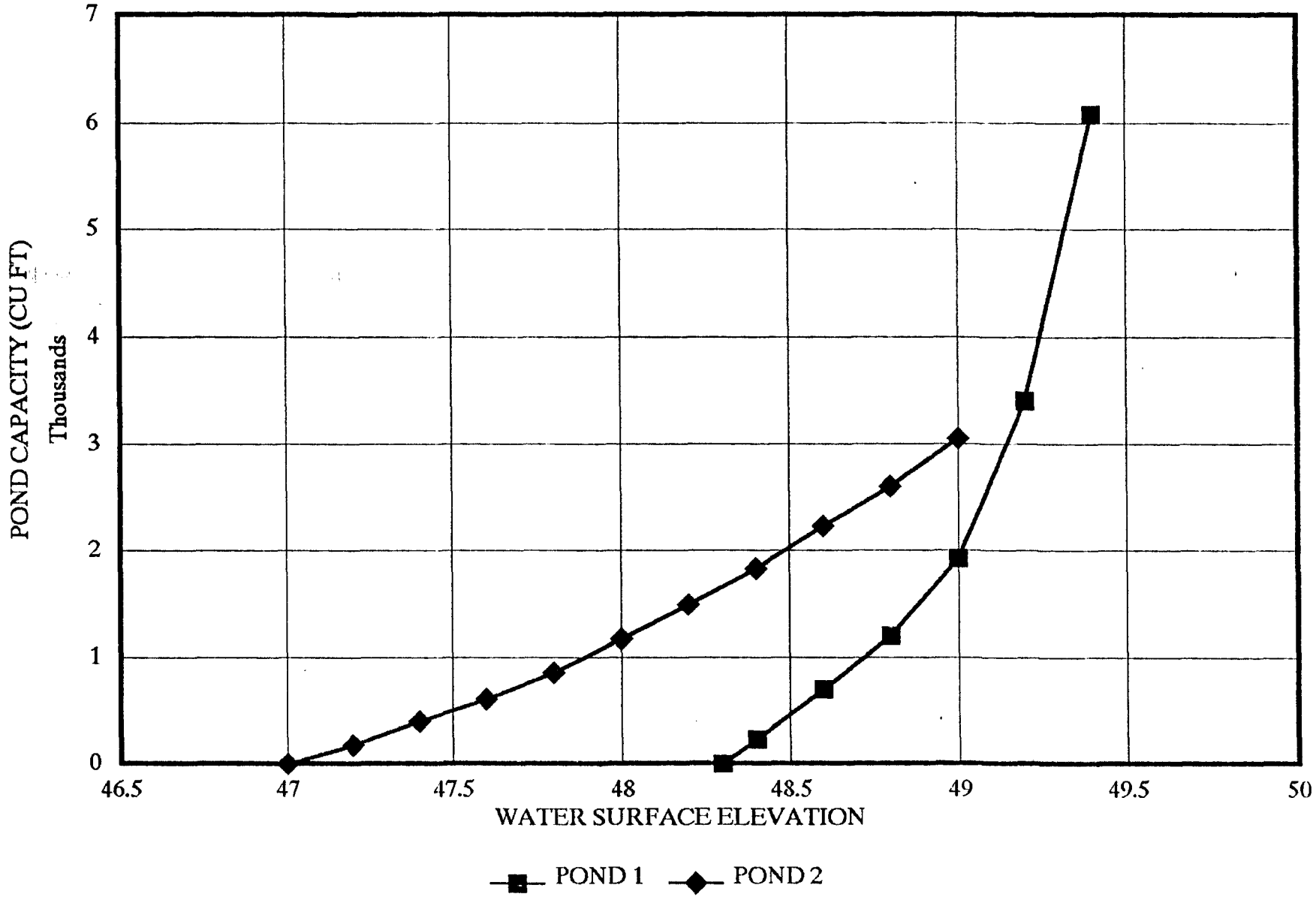


FIGURE 11

RED LOBSTER RESTAURANT

DETENTION POND 1, DISCHARGE CAPACITY

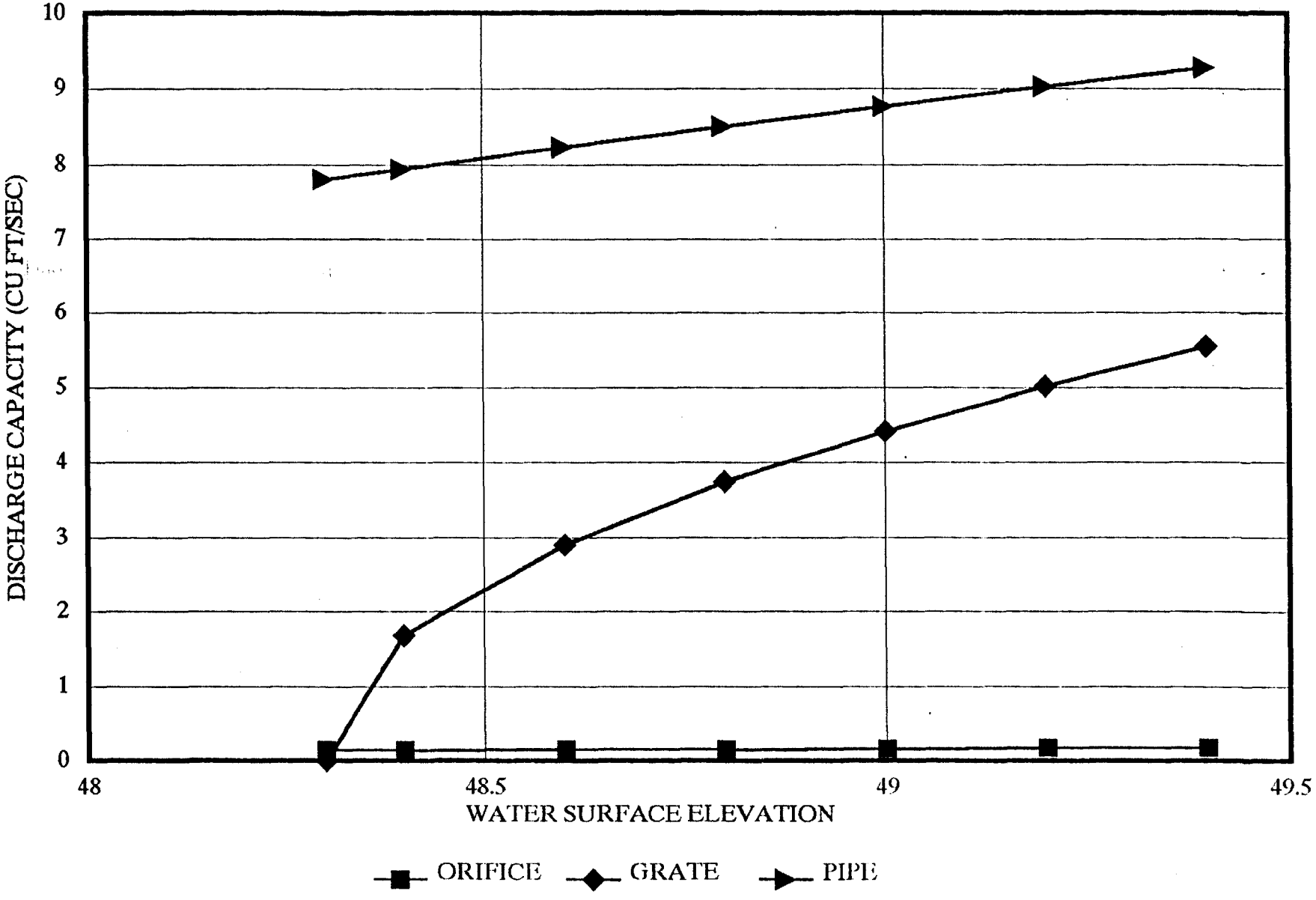


FIGURE 12

RED LOBSTER RESTAURANT

DETENTION POND 2, DISCHARGE CAPACITY

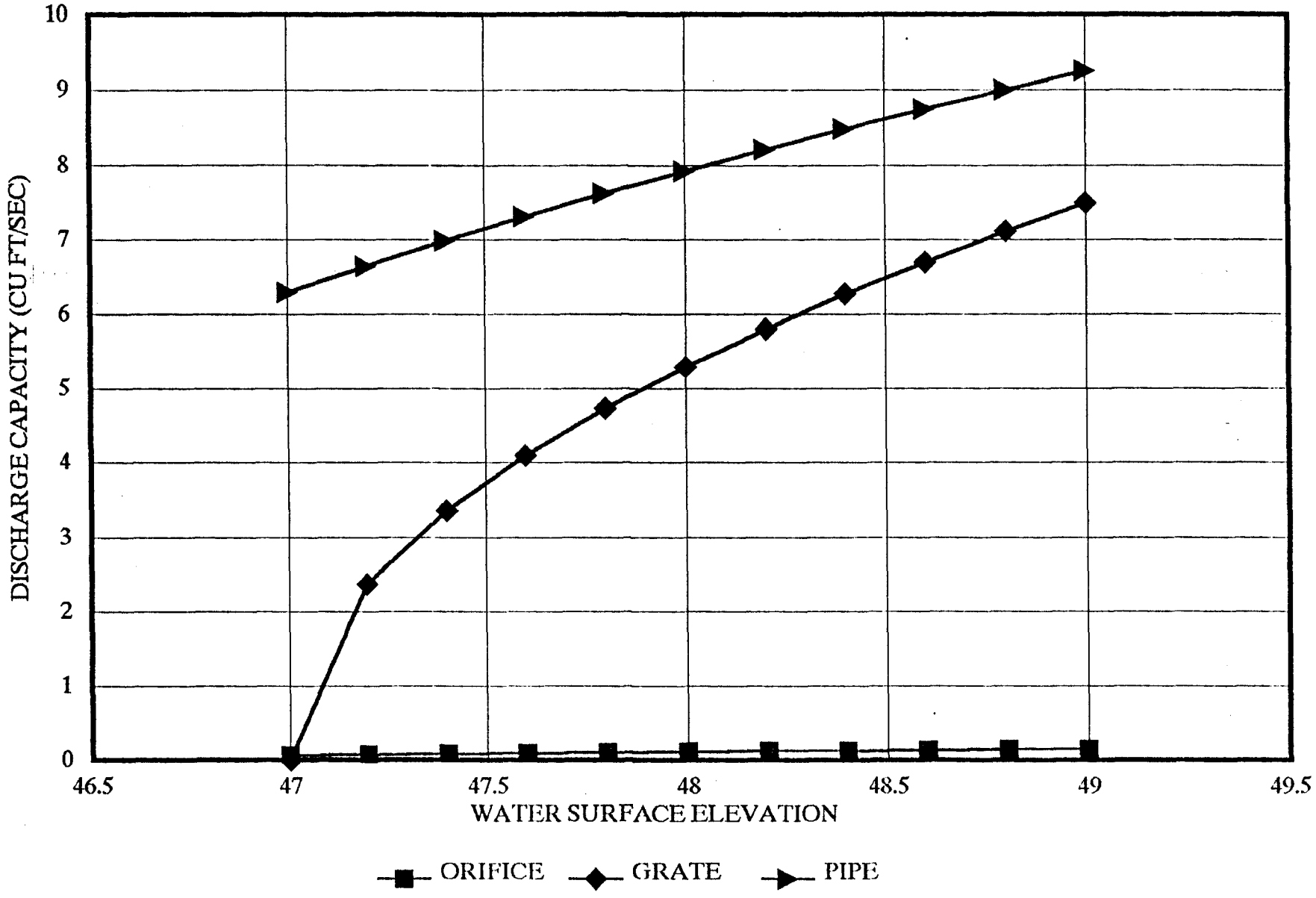
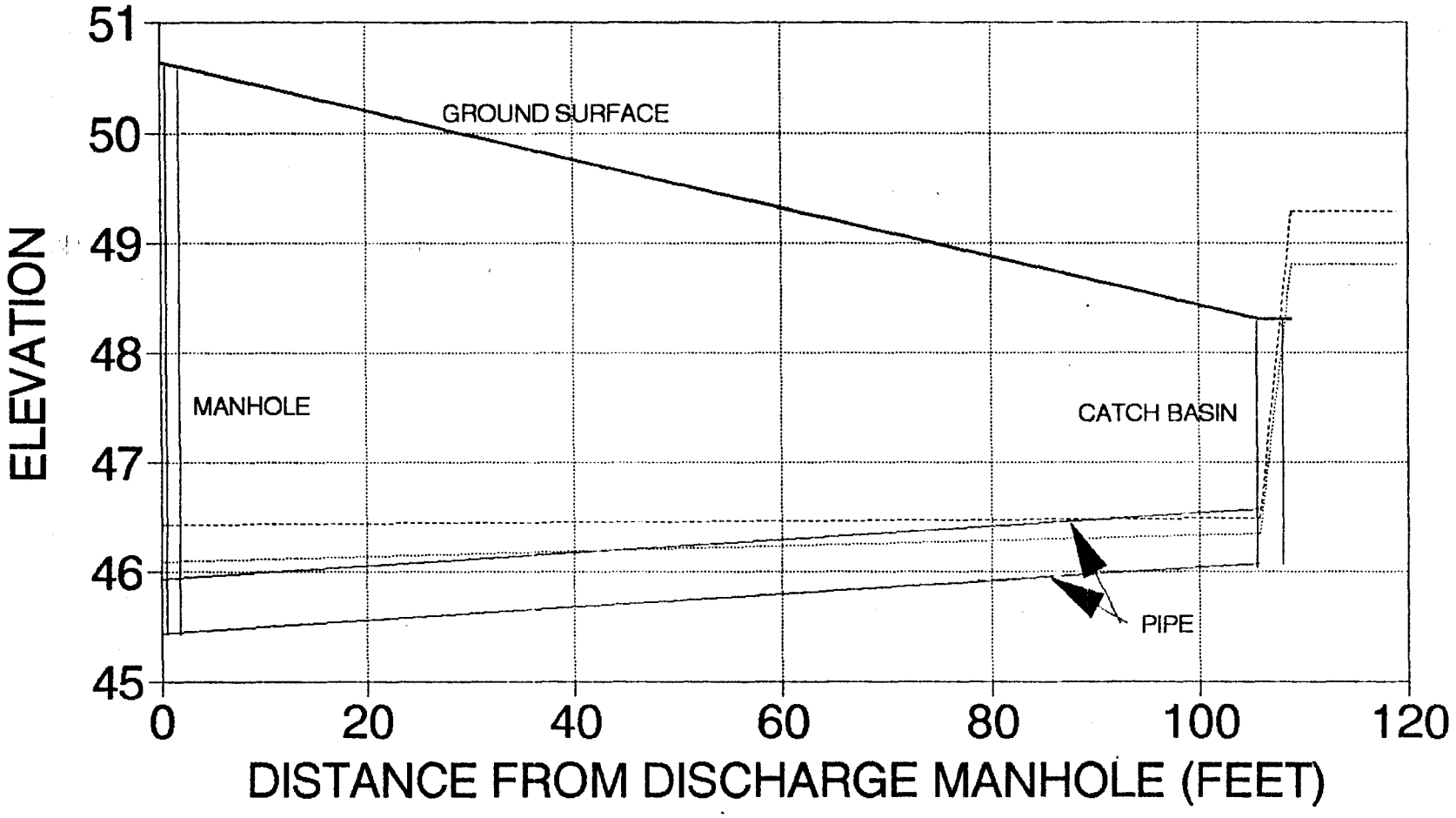


FIGURE 13

RED LOBSTER RESTAURANT

HYDRAULIC GRADE LINE, POND 1 DISCHARGE



2-YEAR HYD GR LINE ..... 100 YR HYD GR LINE

FIGURE 14

RED LOBSTER RESTAURANT

HYDRAULIC GRADE LINE, POND 2 DISCHARGE

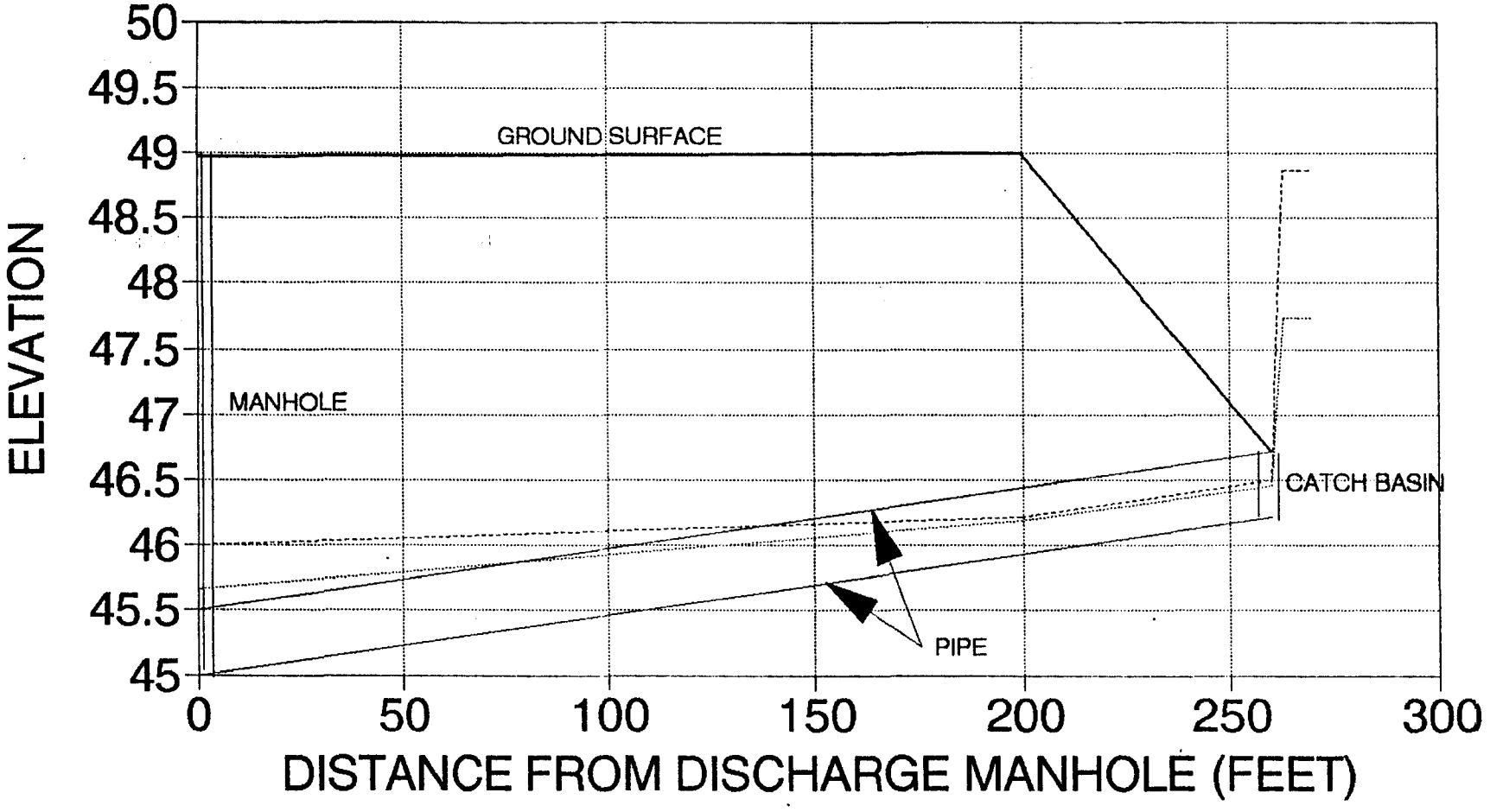


FIGURE 15

RED LOBSTER
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)
GRAVEL	0.25	85.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
CONCRETE SLAB	0.90	98.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
CURB & GUTTER	0.90	98.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
SIDEWALK	0.90	98.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
ASPHALT	0.90	98.00	1.00	79.37	0.714	77.778	0.44	52.38	0.471	51.333	0.06	75.00	0.675	73.500
ROOF	0.90	98.00	0.00	0.00	0.000	0.000	0.14	16.67	0.150	16.333	0.00	0.00	0.000	0.000
MULCH	0.20	61.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
DIRT	0.20	85.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
LAWN 7%	0.20	81.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
LAWN 2%	0.15	78.00	0.26	20.63	0.031	16.095	0.26	30.95	0.046	24.143	0.02	25.00	0.038	19.500
UNKEMPT LAWN	0.20	81.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
TOTAL			1.26	100.00	0.745	93.873	0.84	100.00	0.668	91.810	0.08	100.00	0.713	93.000

RED LOBSTER
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)
GRAVEL	0.55	85.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
CONCRETE SLAB	0.95	98.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
CURB & GUTTER	0.95	98.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
SIDEWALK	0.95	98.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
ASPHALT	0.95	98.00	1.00	79.37	0.754	77.778	0.44	52.38	0.498	51.333	0.06	75.00	0.713	73.500
ROOF	0.95	98.00	0.00	0.00	0.000	0.000	0.14	16.67	0.158	16.333	0.00	0.00	0.000	0.000
MULCH	0.35	61.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
DIRT	0.35	85.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
LAWN 7%	0.35	81.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
LAWN 2%	0.25	78.00	0.26	20.63	0.052	16.095	0.26	30.95	0.077	24.143	0.02	25.00	0.063	19.500
UNKEMPT LAWN	0.35	81.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.000
TOTAL			1.26	100.00	0.806	93.873	0.84	100.00	0.733	91.810	0.08	100.00	0.775	93.000

TABLE 1

RED LOBSTER
UNDEVELOPED CONDITIONS (2 YEAR STORM)
HYDROLOGY STUDY

GROUND SURFACE COVER TYPE	RATIONAL RUNOFF COEFFICIEN	SCS RUNOFF CURVE NUMBER (24 HR)	AREA (ACRES)	PERCENT	RATIONAL WEIGHTING FACTOR	SCS RUNOFF WEIGHTING FACTOR (24 HR)
GRAVEL	0.25	85.00	0.00	0.00	0.000	0.000
CONCRETE SLAB	0.90	98.00	0.00	0.00	0.000	0.000
CURB & GUTTER	0.90	98.00	0.00	0.00	0.000	0.000
SIDEWALK	0.90	98.00	0.00	0.00	0.000	0.000
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
MULCH	0.20	61.00	0.00	0.00	0.000	0.000
DIRT	0.20	88.00	2.18	100.00	0.200	88.000
LAWN 7%	0.20	81.00	0.00	0.00	0.000	0.000
LAWN 2%	0.15	78.00	0.00	0.00	0.000	0.000
UNKEMPT LAWN	0.20	81.00	0.00	0.00	0.000	0.000
TOTAL			2.18	100.00	0.200	88.000

RED LOBSTER
UNDEVELOPED CONDITIONS (100 YEAR STORM)
HYDROLOGY STUDY

GROUND SURFACE COVER TYPE	RATIONAL RUNOFF COEFFICIEN	SCS RUNOFF CURVE NUMBER (24 HR)	AREA (ACRES)	PERCENT	RATIONAL WEIGHTING FACTOR	SCS RUNOFF WEIGHTING FACTOR (24 HR)
GRAVEL	0.55	85.00	0.00	0.00	0.000 0.000	0.000
CONCRETE SLAB	0.95	98.00	0.00	0.00	0.000	0.000
CURB & GUTTER	0.95	98.00	0.00	0.00	0.000	0.000
SIDEWALK	0.95	98.00	0.00	0.00	0.000	0.000
ASPHALT	0.95	98.00	0.00	0.00	0.000	0.000
ROOF	0.95	98.00	0.00	0.00	0.000	0.000
MULCH	0.35	61.00	0.00	0.00	0.000	0.000
DIRT	0.35	90.00	2.18	100.00	0.350	90.000
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
UNKEMPT LAWN	0.35	81.00	0.00	0.00	0.000	0.000
TOTAL			2.18	100.00	0.350	90.000

TABLE 2

RED LOBSTER RESTAURANT
FINAL CONDITIONS
HYDROLOGY STUDY

BASIN PARAMETER	BASIN 1	BASIN 2	BASIN 3
AREA (ACRES)	1.26	0.84	0.08
AREA (SQUARE MILES)	0.0020	0.0013	0.0001
MAXIMUM ELEVATION	4550.30	4551.00	4550.00
MINIMUM ELEVATION	4548.30	4549.00	4546.50
LONGEST WATER COURSE			
LENGTH (FEET)	240.00	200.00	100.00
SLOPE	0.0083	0.0100	0.0350
2 YR TIME OF CONCENTRATION (MIN)	12.00	11.00	4.00
100 YR TIME OF CONCENTRATION (MIN)	10.00	9.00	3.00
2-YEAR RAINFALL			
RATIONAL METHOD (INCH/HR--50 MIN))	0.66	0.66	0.66
SCS METHOD (INCH/24 HOUR)	1.00	1.00	1.00
100-YEAR RAINFALL			
RATIONAL METHOD (INCH/HR)	1.17	1.17	1.17
SCS METHOD (INCH/24 HOUR)	2.56	2.56	2.56
RUNOFF--SCS METHOD (INCH)			
24 HOUR			
2-YEAR	0.500	0.390	0.450
100-YEAR	1.910	1.730	1.840
2-YEAR PEAK FLOW (CFS)			
RATIONAL METHOD (50 MIN)	0.62	0.37	0.04
SCS METHOD (24 HOUR)	0.78	0.21	0.05
100-YEAR PEAK FLOW (CFS)			
RATIONAL METHOD (80 MIN)	1.19	0.72	0.07
SCS METHOD (24 HOUR)	3.02	1.83	0.23
2-YEAR RUNOFF VOLUME (CU. FT.)			
RATIONAL METHOD (50 MIN)	1857.00	1113.00	107.00
SCS METHOD (24 HOUR)	2240.00	595.00	133.00
100-YEAR RUNOFF VOLUME (CU. FT.)			
RATIONAL METHOD (80 MIN)	5711.00	3451.00	352.00
SCS METHOD (24 HOUR)	8635.00	5234.00	532.00
2-YEAR OFF-SITE DISCHARGE (CFS)			
RATIONAL METHOD (50 MIN)	0.15	0.12	0.04
SCS METHOD (24 HOUR)	0.14	0.05	0.05
100-YEAR OFF-SITE DISCHARGE (CFS)			
RATIONAL METHOD (80 MIN)	0.17	0.16	0.07
SCS METHOD (24 HOUR)	0.16	0.16	0.23

TABLE 3

RED LOBSTER RESTAURANT
ORIGINAL CONDITIONS
HYDROLOGY STUDY

BASIN PARAMETER	
AREA (ACRES)	2.18
AREA (SQUARE MILES)	0.0034
MAXIMUM ELEVATION	4549.80
MINIMUM ELEVATION	4547.50
LONGEST WATER COURSE	
LENGTH (FEET)	410.00
SLOPE	0.0056
2 YR TIME OF CONCENTRATION (MIN)	36.00
100 YR TIME OF CONCENTRATION (MIN)	30.00
2-YEAR RAINFALL	
RATIONAL METHOD (INCH/HR)	0.80
SCS METHOD (INCH/24 HOUR)	0.00
100-YEAR RAINFALL	
RATIONAL METHOD (INCH/HR)	2.27
SCS METHOD (INCH/24 HOUR)	2.56
RUNOFF--SCS METHOD (INCH)	
24 HOUR	
2-YEAR	0.250
100-YEAR	1.580
2-YEAR PEAK FLOW (CFS)	
RATIONAL METHOD	0.35
SCS METHOD (24 HOUR)	0.32
100-YEAR PEAK FLOW (CFS)	
RATIONAL METHOD	1.73
SCS METHOD (24 HOUR)	2.85
2-YEAR RUNOFF VOLUME (CU. FT.)	
RATIONAL METHOD	734.00
SCS METHOD (24 HOUR)	1987.00
100-YEAR RUNOFF VOLUME (CU. FT.)	
RATIONAL METHOD	3120.00
SCS METHOD (24 HOUR)	13250.00
2-YEAR OFF-SITE DISCHARGE (CFS)	
RATIONAL METHOD	0.35
SCS METHOD (24 HOUR)	0.32
100-YEAR OFF-SITE DISCHARGE (CFS)	
RATIONAL METHOD	1.73
SCS METHOD (24 HOUR)	2.85

TABLE 4

ERR ERR

RED LOBSTER RESTAURANT, UNDEVELOPED CONDITIONS
2 YEAR STORM, SCS METHOD

SCS TR 20: FOR Tc=0.6, Ia/P=.3 AND Tt=0, 24 HR STORM

AREA (SQ MI)	CN	S	P	Q	UNIT Qp	Qp	Ia/P
0.0034	88	1.363636	1	0.252964	369.8	0.318057 0	0.272727

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)
10.5	0.001	
11	8.6E-07	0.900774
11.3	8.6E-07	0.000929
11.6	8.6E-07	0.000929
11.9	0.000516	0.279316
12	0.004988	0.990873
12.1	0.029415	6.192569
12.2	0.09134	21.73592
12.3	0.191626	50.93388
12.4	0.28331	85.48842
12.5	0.318057	108.2461
12.6	0.307736	112.6428
12.7	0.274021	104.7163
12.8	0.235146	91.65002
13	0.166683	144.6584
13.2	0.123163	104.3448
13.4	0.096501	79.07911
13.6	0.079643	63.41191
13.8	0.06829	53.25609
14	0.060722	46.44427
14.3	0.051605	60.65622
14.6	0.045412	52.38914
15	0.040596	61.92569
15.5	0.036811	69.6664
16	0.033371	63.16421
16.5	0.029931	56.97164
17	0.027006	51.24351
17.5	0.026146	47.8376
18	0.024426	45.51538
19	0.021846	83.29006
20	0.019266	74.0012
22	0.016342	128.1862
26	3.4E-07	117.6613
		1987.482

TABLE 5

RED LOBSTER RESTAURANT, UNDEVELOPED CONDITIONS
100 YEAR STORM, SCS METHOD

SCS TR 20: FOR Tc=0.5, Ia/P=.1 AND Tt=0, 24 HR STORM

AREA (SQ MI)	CN	S	P	Q	UNIT Qp	Qp	Ia/P
0.0034	90	1.111111	2.56	1.584628	529	2.850111	0.086806

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)
10.5	0	
11	0.0001	0.09
11.3	0.091591	49.5134
11.6	0.123918	116.3751
11.9	0.172407	160.0157
12	0.307101	86.3115
12.1	0.506447	146.4386
12.2	0.915915	256.0251
12.3	1.659422	463.5607
12.4	2.516072	751.5889
12.5	2.850111	965.913
12.6	2.731581	1004.705
12.7	2.165869	881.5411
12.8	1.600157	677.8847
13	1.217628	1014.403
13.2	0.754283	709.8879
13.4	0.517222	457.7419
13.6	0.398692	329.7293
13.8	0.328652	261.8439
14	0.28555	221.1126
14.3	0.253224	290.9376
14.6	0.220897	256.0251
15	0.193958	298.696
15.5	0.172407	329.7293
16	0.156244	295.7866
16.5	0.140081	266.6928
17	0.123918	237.5991
17.5	0.113142	213.3543
18	0.107755	198.8074
19	0.102367	378.2189
20	0.086204	339.4273
22	0.075428	581.8753
26	0.064653	1008.584
		13250.41

TABLE 6

0 LOBSTER RESTAURANT, UNDEVELOPED CONDITIONS
YEAR STORM, RATIONAL METHOD

DIFIED RATIIONAL METHOD WITH Tc=35 MIN AND STORM DURATION 35 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
2.18	0.2	0.8	1	0.3488

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)
0	0	
0.083	0.049632	7.415035
0.167	0.099862	22.60353
0.25	0.149494	37.25385
0.333	0.199126	52.08392
0.417	0.249356	67.81059
0.5	0.298989	81.92273
0.5833	0.3488	97.12941
0.6667	0.299153	97.27063
0.75	0.249344	82.24151
0.833	0.199714	67.08921
0.9167	0.149666	52.63759
0.9997	0.100036	37.30553
1.0827	0.050407	22.47623
1.1657	0.000777	7.64692
1.2487	0.001	0.265533
1.3317	0.001	0.2988
1.4147	0.001	0.2988
1.4977	0.001	0.2988
1.5807	0.001	0.2988
		734.3474

TABLE 7

RED LOBSTER RESTAURANT, UNDEVELOPED CONDITIONS
100 YEAR STORM, RATIONAL METHOD

MODIFIED RATIIONAL METHOD WITH Tc=30 MIN AND STORM DURATION 30 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
2.18	0.35	2.27	1	1.73201

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)
0	0	
0.083	0.287514	42.95454
0.167	0.578491	130.94
0.25	0.866005	215.8078
0.333	1.153519	301.7168
0.417	1.444496	392.8199
0.5	1.73201	474.57
0.5833	1.443457	476.1295
0.6667	1.154558	390.014
0.75	0.866005	302.9632
0.833	0.578491	215.8078
0.9167	0.288553	130.6289
0.9997	0.001	43.2592
1.0827	0.001	0.2988
1.1657	0.001	0.2988
1.2487	0.001	0.2988
1.3317	0.001	0.2988
1.4147	0.001	0.2988
1.4977	0.001	0.2988
1.5807	0.001	0.2988
		3119.703

TABLE 8

DETENTION BASIN RATING:

BASIN RATING (ONLY 5 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5829
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12066
0.5	0.14057
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2161

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
SCS TR 20: FOR Tc=0.2, Ia/P=.2 AND Tt=0, 24 HR STORM

AREA (SQ MI)	CN	S	P	Q	UNIT Qp	Qp	Ia/P
0.00197	92.87	0.553031	1	0.496475	800	0.782444	0.130606
						0	

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)
10.5	0.001			0			0	0					
11	0.022495	21.14575	0	0	0	0.491538	0.000178	0.022949	20.65421	0	0.976755	0	0.491538
11.3	0.03032	28.5201	0.000178	0.491538	0.022949	0.634033	0.00023	0.029602	28.37761	-1.7E-18	0.995004	-0.7E-20	0.634033
11.6	0.045969	41.1957	0.00023	0.634033	0.029602	0.985995	0.000358	0.046035	40.84374	-6.9E-18	0.991456	-5.9E-20	0.985995
11.9	0.264414	135.2064	0.000358	0.985995	0.046035	41.55399	0.015079	0.129222	94.63841	0	0.699955	0	41.55399
12	0.394156	107.7426	0.015079	41.55399	0.129222	102.6176	0.037238	0.130106	46.67898	0	0.433245	0	102.6176
12.1	0.722782	201.0491	0.037238	102.6176	0.130106	256.4277	0.093053	0.132333	47.23898	-1.0E-17	0.234962	-8.0E-18	256.4277
12.2	0.782444	270.941	0.093053	256.4277	0.132333	479.1484	0.173874	0.135558	48.2203	-1.0E-17	0.177973	-8.6E-18	479.1484
12.3	0.470445	225.5201	0.173874	479.1484	0.135558	655.4083	0.237836	0.13811	49.26013	0	0.218429	0	655.4083
12.4	0.244514	128.6926	0.237836	655.4083	0.13811	734.1761	0.26642	0.13925	49.92478	-4.5E-17	0.387938	-2.8E-17	734.1761
12.5	0.162357	73.2368	0.26642	734.1761	0.13925	757.2228	0.274783	0.139584	50.19012	-7.3E-17	0.685313	-2.3E-17	757.2228
12.6	0.125191	51.7597	0.274783	757.2228	0.139584	757.2228	0.274783	0.139584	50.2502	1.508507	1	2.7E-17	757.2228
12.7	0.099762	40.4915	0.274783	757.2228	0.139584	747.4895	0.271251	0.139443	50.22482	6.6E-17	1.240379	1.6E-17	747.4895
12.8	0.084118	33.3974	0.271251	747.4895	0.139443	730.4219	0.265061	0.139196	50.13501	1.4E-17	1.515376	7.3E-18	730.4219
13	0.068464	54.9276	0.265061	730.4219	0.139196	685.3702	0.24871	0.138544	99.83611	-2.1E-17	1.800328	-1.7E-17	685.3702
13.2	0.059661	46.1251	0.24871	685.3702	0.138544	622.025	0.225771	0.137771	99.4703	1.2E-16	2.156598	2.9E-17	622.025
13.4	0.052815	40.4915	0.225771	622.025	0.137771	573.6257	0.208159	0.136926	98.09602	1.4E-17	2.442261	6.1E-18	573.6257
13.6	0.047925	36.2663	0.208159	573.6257	0.136926	511.6287	0.185661	0.136028	99.13257	6.9E-18	2.709492	4.9E-18	511.6287
13.8	0.043034	32.7453	0.185661	511.6287	0.136028	446.772	0.162126	0.135009	97.60265	-6.9E-18	2.986643	-6.8E-18	446.772
14	0.038122	29.5764	0.162126	446.772	0.135009	379.4354	0.13769	0.134114	96.31201	4.9E-17	3.2767	1.3E-17	379.4354
14.3	0.034232	39.61125	0.13769	379.4354	0.134114	275.02	0.0998	0.132602	144.0266	1.4E-17	3.636003	8.8E-18	275.02
14.6	0.032276	35.9142	0.0998	275.02	0.132602	168.5563	0.061166	0.131061	142.3779	0	3.964389	0	168.5563
15	0.029342	44.3646	0.061166	168.5563	0.131061	25.68306	0.00932	0.128992	187.2279	0	4.220494	0	25.68306
15.5	0.026408	50.17425	0.00932	25.68306	0.128992	-40.2355	-0.0146	0	116.0928	6.9E-18	2.313792	2.2E-18	-40.2355
16	0.023473	44.89275	-0.0146	-40.2355	0	0	0	0	0	0	0	0	0
16.5	0.020539	39.61125	0	0	0	0	0	0	0	0	0	0	0
17	0.019561	36.09025	0	0	0	0	0	0	0	0	0	0	0
17.5	0.018583	34.32975	0	0	0	0	0	0	0	0	0	0	0
18	0.017605	32.56925	0	0	0	0	0	0	0	0	0	0	0
19	0.015649	59.857	0	0	0	0	0	0	0	0	0	0	0
20	0.012715	51.0545	0	0	0	0	0	0	0	0	0	0	0
22	0.011737	88.025	0	0	0	0	0	0	0	0	0	0	0
26	0	84.504	0	0	0	0	0	0	0	0	0	0	0
		2239.728											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 9

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	1929
1	5029
2	6000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12066
0.5	0.14057
1	0.1661
1.5	0.18145
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
SCS TR 20: FOR Tc=0.2, Ia/P=.1 AND Tt=0, 24 HR STORM

AREA (SQ MI)	CN	S	P	Q	UNIT Qp	Qp	Ia/P
0.00197	93.87	0.653031	2.56	1.914712	600	3.017586 0	0.051018

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)
10.5	0			0			0	0					
11	0.086756	78.08003	0	0	0	1.814987	0.000659	0.084739	76.26504	0	0.976755	0	1.814987
11.3	0.116931	109.991	0.000659	1.814987	0.084739	2.519746	0.000914	0.117643	109.2862	-1.4E-17	0.993593	-8.9E-20	2.519746
11.6	0.177283	158.8759	0.000914	2.519746	0.117643	28.19313	0.010231	0.129028	133.2025	0	0.838406	0	28.19313
11.9	0.788344	521.4388	0.010231	28.19313	0.129028	407.3171	0.147808	0.134518	142.3148	1.4E-17	0.272927	1.0E-17	407.3171
12	1.520109	415.5215	0.147808	407.3171	0.134518	773.4581	0.280674	0.139819	49.38058	2.8E-17	0.11884	2.4E-17	773.4581
12.1	2.787495	775.3686	0.280674	773.4581	0.139819	1496.645	0.543106	0.150081	52.18264	1.4E-17	0.0673	1.3E-17	1496.645
12.2	3.017586	1044.914	0.543106	1496.645	0.150081	2486.201	0.753749	0.157466	55.35859	3.1E-17	0.052979	3.9E-17	2486.201
12.3	1.814323	869.7436	0.753749	2486.201	0.157466	3298.762	0.832131	0.160215	57.18258	-5.6E-17	0.065746	-5.2E-17	3298.762
12.4	0.942996	496.3174	0.832131	3298.762	0.160215	3737.135	0.874418	0.161697	57.94409	6.6E-17	0.116748	5.8E-17	3737.135
12.5	0.626149	282.446	0.874418	3737.135	0.161697	3961.233	0.896035	0.162455	58.34738	1.2E-16	0.206579	9.4E-17	3961.233
12.6	0.482014	199.6123	0.896035	3961.233	0.162455	4102.277	0.909841	0.162932	58.56966	-4.2E-17	0.293418	-2.9E-17	4102.277
12.7	0.384742	156.1601	0.909841	4102.277	0.162932	4199.722	0.919041	0.163262	58.71484	-5.9E-17	0.375991	-3.7E-17	4199.722
12.8	0.32489	127.6439	0.919041	4199.722	0.163262	4268.55	0.925568	0.163494	58.81606	2.3E-16	0.460783	1.3E-16	4268.55
12.9	0.284699	111.8845	0.925568	4268.55	0.163494	4362.554	0.934748	0.163812	117.0994	6.9E-17	0.556208	3.1E-17	4362.554
13	0.230961	177.8687	0.934748	4362.554	0.163812	4422.423	0.940523	0.164015	118.0177	3.0E-16	0.663443	2.0E-16	4422.423
13.4	0.203687	156.1601	0.940523	4422.423	0.164015	4460.446	0.944191	0.164143	118.1359	6.5E-16	0.756512	1.6E-16	4460.446
13.6	0.184927	139.8651	0.944191	4460.446	0.164143	4482.102	0.94628	0.164217	118.2036	1.1E-15	0.845168	1.7E-16	4482.102
13.8	0.165967	126.286	0.94628	4482.102	0.164217	4490.142	0.947056	0.164244	118.2457	3.1E-15	0.926333	2.0E-16	4490.142
14	0.150879	114.0647	0.947056	4490.142	0.164244	4485.956	0.946652	0.16423	118.2504	-5.7E-15	1.008696	-2.1E-16	4485.956
14.3	0.132019	152.7653	0.946652	4485.956	0.16423	4461.399	0.944283	0.164147	177.3221	-1.1E-15	1.160756	-1.7E-16	4461.399
14.6	0.124475	138.5072	0.944283	4461.399	0.164147	4422.698	0.94055	0.164016	177.2076	-4.3E-16	1.279411	-1.2E-16	4422.698
15	0.113159	171.0971	0.94055	4422.698	0.164016	4357.771	0.934287	0.163796	236.0245	-3.1E-16	1.379477	-1.2E-16	4357.771
15.5	0.101844	193.5027	0.934287	4357.771	0.163796	4256.748	0.924542	0.163454	294.5255	-3.6E-16	1.522074	-1.9E-16	4256.748
16	0.090529	173.124	0.924542	4256.748	0.163454	4136.031	0.912897	0.163046	293.8505	1.1E-16	1.697244	7.7E-17	4136.031
16.5	0.079212	152.7452	0.912897	4136.031	0.163046	3995.741	0.899364	0.162572	293.0561	2.8E-17	1.918342	2.5E-17	3995.741
17	0.07544	139.1861	0.899364	3995.741	0.162572	3842.763	0.884607	0.162054	292.1634	-1.1E-15	2.099084	-1.1E-16	3842.763
17.5	0.071668	132.3966	0.884607	3842.763	0.162054	3683.946	0.869287	0.161517	291.2144	-5.0E-16	2.199561	-1.0E-16	3683.946
18	0.067896	125.607	0.869287	3683.946	0.161517	3519.323	0.853407	0.16096	290.2299	-3.3E-16	2.310619	-1.0E-16	3519.323
19	0.060352	230.8453	0.853407	3519.323	0.16096	3172.82	0.819983	0.159789	577.3482	-1.7E-16	2.501018	-8.3E-17	3172.82
20	0.049036	196.8975	0.819983	3172.82	0.159789	2796.767	0.783707	0.158517	572.9497	5.6E-17	2.909889	5.1E-17	2796.767
22	0.045264	339.4784	0.783707	2796.767	0.158517	2004.57	0.70729	0.155838	1131.676	-1.1E-16	3.333572	-3.7E-17	2004.57
26	0	325.8992	0.70729	2004.57	0.155838	255.7161	0.092795	0.132323	2074.753	0	6.366241	0	255.7161
							ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 10

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5039
2	6000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 5 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR		Qp
1.26	0.745	1.95	1	1	1.830465

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					
0.083	0.915233	136.7357	0	0	0	117.2608	0.042552	0.130354	19.47495	1.7E-18	0.142428	1.5E-18	117.2608
0.167	0.915233	276.7663	0.042552	117.2608	0.130354	354.0905	0.128493	0.133777	39.93661	-1.0E-17	0.144297	-8.9E-18	354.0905
0.25	0.001	136.8851	0.128493	354.0905	0.133777	450.7944	0.163585	0.135174	40.18121	1.0E-17	0.29354	7.4E-18	450.7944
0.333	0.001	0.2988	0.163585	450.7944	0.135174	410.7896	0.149068	0.134596	40.30362	3.5E-18	134.8849	3.1E-18	410.7896
0.417	0.001	0.3024	0.149068	410.7896	0.134596	370.4783	0.13444	0.134013	40.61373	-4.5E-17	134.3047	-1.4E-17	370.4783
0.5	0.001	0.2988	0.13444	370.4783	0.134013	330.8195	0.120049	0.13344	39.95759	-1.4E-17	133.7269	-1.0E-17	330.8195
0.5833	0.001	0.29988	0.120049	330.8195	0.13344	291.1891	0.105667	0.132868	39.93022	-6.2E-17	133.154	-9.6E-18	291.1891
0.6667	0.001	0.30024	0.105667	291.1891	0.132868	251.6829	0.091331	0.132297	39.80649	-1.0E-17	132.5822	-6.1E-18	251.6829
0.75	0.001	0.29988	0.091331	251.6829	0.132297	212.3947	0.077074	0.131729	39.58804	-2.8E-14	132.013	-3.5E-16	212.3947
0.833	0.001	0.2988	0.077074	212.3947	0.131729	173.417	0.06293	0.131166	39.27651	-7.5E-16	131.4475	-3.4E-16	173.417
0.9167	0.001	0.30132	0.06293	173.417	0.131166	134.2806	0.048728	0.1306	39.4377	-3.9E-16	130.8831	-3.4E-16	134.2806
1	0.001	0.29988	0.048728	134.2806	0.1306	95.5001	0.034655	0.13004	39.08041	-1.1E-15	130.3202	-3.5E-16	95.5001
		553.0872											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 11a

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5009
2	6000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14057
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 10 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
1.26	0.745	1.52	1	1.426824

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	0.001			0			0	0					
0.083	0.713412	106.7332	0	0	0	87.32283	0.031688	0.129922	19.41032	3.5E-18	0.181858	2.8E-18	87.32283
0.167	1.426824	323.6037	0.031688	87.32283	0.129922	371.0183	0.134636	0.134021	39.90818	1.0E-17	0.123324	9.1E-18	371.0183
0.25	0.713412	319.7513	0.134636	371.0183	0.134021	650.1215	0.235918	0.138054	40.64807	1.7E-17	0.127124	1.5E-17	650.1215
0.333	0.001	106.7332	0.235918	650.1215	0.138054	715.463	0.259629	0.138998	41.39167	-2.8E-17	0.387805	-1.7E-17	715.462
0.417	0.001	0.3024	0.259629	715.463	0.138998	673.8233	0.244519	0.138397	41.94215	-1.7E-17	138.6976	-1.2E-17	673.8233
0.5	0.001	0.2988	0.244519	673.8233	0.138397	632.8576	0.229653	0.137805	41.2645	-2.3E-16	138.1068	-2.3E-17	632.8576
0.5833	0.001	0.29988	0.229653	632.8576	0.137805	591.9212	0.214798	0.137213	41.2362	-1.0E-17	137.509	-5.3E-18	591.9212
0.6667	0.001	0.30024	0.214798	591.9212	0.137213	551.1131	0.199989	0.136624	41.10838	1.4E-17	136.9184	1.3E-17	551.1131
0.75	0.001	0.29988	0.199989	551.1131	0.136624	510.5302	0.185262	0.136037	40.98275	-1.7E-17	136.3304	-5.7E-18	510.5302
0.833	0.001	0.2988	0.185262	510.5302	0.136037	470.268	0.170652	0.135455	40.56098	-1.0E-17	135.7463	-7.8E-18	470.268
0.9167	0.001	0.29832	0.170652	470.268	0.135455	429.842	0.155982	0.134871	40.78274	-8.3E-17	135.1633	-1.4E-17	429.842
1	0.001	0.29988	0.155982	429.842	0.134871	389.7835	0.141446	0.134292	40.35839	-2.1E-17	134.5818	-1.3E-17	389.7835
		859.2224											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 11b

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5039
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 15 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.26	0.745	1.28	1	1.201536

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					
0.083	0.600768	89.75474	0	0	0	70.38099	0.02554	0.129677	19.37374	-1.7E-18	0.215852	-1.4E-18	70.38099
0.167	1.201536	272.5084	0.02554	70.38099	0.129677	303.1664	0.110014	0.133041	39.72292	3.5E-18	0.145768	3.0E-18	303.1664
0.25	1.201536	359.019	0.110014	303.1664	0.133041	621.7451	0.22562	0.137644	40.44033	-1.4E-17	0.112641	-1.2E-17	621.7451
0.333	0.600768	269.2642	0.22562	621.7451	0.137644	849.3897	0.308229	0.140934	41.61953	2.8E-17	0.154568	2.3E-17	849.3897
0.417	0.001	90.98732	0.308229	849.3897	0.140934	897.6533	0.325743	0.141631	42.72379	3.8E-17	0.469558	2.0E-17	897.6533
0.5	0.001	0.2988	0.325743	897.6533	0.141631	855.7232	0.310527	0.141025	42.22884	-4.5E-17	141.3281	-1.5E-17	855.7232
0.5833	0.001	0.29988	0.310527	855.7232	0.141025	813.8233	0.295322	0.14042	42.19985	-2.8E-17	140.7225	-2.0E-17	813.8233
0.6667	0.001	0.30024	0.295322	813.8233	0.14042	772.0545	0.280165	0.139816	42.06901	-2.1E-16	140.1179	-2.5E-17	772.0545
0.75	0.001	0.29988	0.280165	772.0545	0.139816	730.5163	0.265091	0.139216	41.83807	-1.4E-17	139.5161	-7.2E-18	730.5163
0.833	0.001	0.2988	0.265091	730.5163	0.139216	689.3063	0.250137	0.13862	41.50876	-2.1E-17	138.9182	-1.9E-17	689.3063
0.9167	0.001	0.30132	0.250137	689.3063	0.13862	647.9286	0.235122	0.138023	41.67904	-5.9E-17	138.3215	-1.9E-17	647.9286
1	0.001	0.29908	0.235122	647.9286	0.138023	606.9271	0.220243	0.13743	41.30137	-1.7E-17	137.7263	-1.3E-17	606.9271
		1082.632											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 11c

DETENTION BASIN RATING:

BASIN RATING (ONLY 5 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5639
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 20 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
1.26	0.745	1.11	1	1.041957

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					
0.083	0.520979	77.83419	0	0	0	58.48612	0.021224	0.129505	19.34307	0	0.248531	0	58.48612
0.167	1.041957	236.3158	0.021224	58.48612	0.129505	255.2098	0.092611	0.132348	39.59216	-3.5E-18	0.167539	-2.9E-18	255.2098
0.25	1.041957	311.3368	0.092611	255.2098	0.132348	526.4156	0.191027	0.136267	40.131	2.4E-17	0.128899	2.1E-17	526.4156
0.333	1.041957	311.3368	0.191027	526.4156	0.136267	796.4529	0.289019	0.140169	41.29945	-1.7E-17	0.132652	-1.5E-17	796.4529
0.417	0.520979	236.3158	0.289019	796.4529	0.140169	989.9589	0.359239	0.142965	42.8098	-2.1E-17	0.181155	-1.7E-17	989.9589
0.5	0.001	77.98359	0.359239	989.9589	0.142965	1025.149	0.372008	0.143473	42.79387	3.8E-17	0.548755	1.7E-17	1025.149
0.5833	0.001	0.29988	0.372008	1025.149	0.143473	982.5161	0.356538	0.142857	42.93243	1.4E-16	142.1654	2.4E-17	982.5161
0.6667	0.001	0.30024	0.356538	982.5161	0.142857	940.017	0.341116	0.142243	42.7993	1.4E-17	142.5503	7.6E-18	940.017
0.75	0.001	0.29988	0.341116	940.017	0.142243	897.7526	0.325779	0.141633	42.56433	-6.9E-18	141.9379	-3.5E-18	897.7526
0.833	0.001	0.2988	0.325779	897.7526	0.141633	855.8221	0.310563	0.141027	42.22927	4.5E-17	141.3296	1.5E-17	855.8221
0.9167	0.001	0.30132	0.310563	855.8221	0.141027	813.7209	0.295285	0.140418	42.40248	2.1E-17	140.7224	1.5E-17	813.7209
1	0.001	0.29988	0.295285	813.7209	0.140418	772.0026	0.280146	0.139815	42.01824	-1.9E-16	140.1168	-8.2E-17	772.0026
		1252.923											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 11d

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5029
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12066
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 30 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.26	0.745	0.88	1	0.826056

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					
0.083	0.413028	61.70638	0	0	0	42.39306	0.015384	0.129273	19.31332	0	0.312987	0	42.39306
0.167	0.826056	187.3495	0.015384	42.39306	0.129273	190.3273	0.069066	0.13141	39.41524	6.9E-18	0.210383	5.5E-18	190.3273
0.25	0.826056	246.8255	0.069066	190.3273	0.13141	397.4404	0.144224	0.134403	39.7125	3.5E-18	0.160893	2.9E-18	397.4404
0.333	0.826056	246.8255	0.144224	397.4404	0.134403	603.6611	0.219058	0.137383	40.60481	1.4E-17	0.164508	1.2E-17	603.6611
0.417	0.826056	249.7993	0.219058	603.6611	0.137383	811.4618	0.294465	0.140386	41.9986	2.1E-17	0.168129	1.7E-17	811.4618
0.5	0.826056	246.8255	0.294465	811.4618	0.140386	1015.899	0.368652	0.14334	42.38856	0	0.171735	0	1015.899
0.5833	0.413028	185.7883	0.368652	1015.899	0.14334	1158.394	0.420361	0.145399	43.29345	3.8E-17	0.233026	2.9E-17	1158.394
0.6667	0.001	62.15308	0.420361	1158.394	0.145399	1176.853	0.427059	0.145665	43.69457	1.8E-16	0.703006	5.3E-17	1176.853
0.75	0.001	0.29988	0.427059	1176.853	0.145665	1133.563	0.41135	0.14504	43.58838	0.001329	146	4.7E-17	1133.563
0.833	0.001	0.2988	0.41135	1133.563	0.14504	1090.617	0.395766	0.144419	43.24523	-2.1E-17	144.7297	-1.5E-17	1090.617
0.9167	0.001	0.30132	0.395766	1090.617	0.144419	1047.495	0.380118	0.143796	43.42257	4.8E-16	144.1070	5.2E-17	1047.495
1	0.001	0.29988	0.380118	1047.495	0.143796	1004.766	0.364612	0.143179	43.02985	3.5E-18	143.4876	1.7E-18	1004.766
		1408.474											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 11e

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5039
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12066
0.5	0.14057
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 40 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
1.26	0.745	0.76	1	0.713412

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					
0.083	0.356706	53.29188	0	0	0	33.99668	0.012337	0.129151	19.2952	0	0.362066	0	33.99668
0.167	0.713412	161.8018	0.012337	33.99668	0.129151	156.4756	0.056782	0.130921	39.32293	0	0.243031	0	156.4756
0.25	0.713412	213.1675	0.056782	156.4756	0.130921	330.1489	0.119805	0.133431	39.49415	1.4E-17	0.185273	1.1E-17	330.1489
0.333	0.713412	213.1675	0.119805	330.1489	0.133431	503.0741	0.182557	0.135929	40.24239	-1.0E-17	0.188782	-8.4E-18	503.0741
0.417	0.713412	215.7358	0.182557	503.0741	0.135929	677.3241	0.245789	0.138447	41.48576	-1.7E-17	0.192299	-1.4E-17	677.3241
0.5	0.713412	213.1675	0.245789	677.3241	0.138447	848.7535	0.307998	0.140924	41.73814	-1.4E-17	0.1958	-1.1E-17	848.7535
0.5833	0.713412	213.938	0.307998	848.7535	0.140924	1020.06	0.370162	0.1434	42.63159	-6.9E-18	0.199271	-5.6E-18	1020.06
0.6667	0.713412	214.1948	0.370162	1020.06	0.1434	1190.83	0.432181	0.145867	43.42491	3.1E-17	0.202735	2.5E-17	1190.83
0.75	0.356706	160.4535	0.432181	1190.83	0.145867	1307.288	0.474392	0.14755	43.99506	-3.1E-17	0.274192	-2.5E-17	1307.288
0.833	0.001	53.44128	0.474392	1307.288	0.14755	1316.621	0.477779	0.147685	44.10817	2.5E-16	0.825358	1.3E-17	1316.621
0.9167	0.001	0.30132	0.477779	1316.621	0.147685	1272.517	0.461774	0.147048	44.40447	0.00139	148	5.3E-17	1272.517
1	0.001	0.29938	0.461774	1272.517	0.147048	1228.815	0.445915	0.146416	44.80282	-1.7E-17	146.7301	-1.3E-17	1228.815
		1712.961											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 11f

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5039
2	8050
3	8888
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.13866
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 50 MIN

AREA (ACRES)	C	I SOIL HOIS FACTOR		Qp
1.25	0.745	0.66	1	0.619542

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				
0.083	0.309771	46.27979	0	0	0	26.9997	0.009798	0.12905	19.28009	0	0.416599	0	26.9997
0.167	0.619542	140.5121	0.009798	26.9997	0.12905	128.2658	0.046545	0.130513	39.24601	-6.9E-18	0.279307	-5.0E-18	128.2658
0.25	0.619542	185.1191	0.046545	128.2658	0.130513	274.0728	0.099456	0.13262	39.31219	6.9E-18	0.212362	5.5E-18	274.0728
0.333	0.619542	185.1191	0.099456	274.0728	0.13262	419.2515	0.152139	0.134718	39.94037	-1.7E-17	0.215755	-1.6E-17	419.2515
0.417	0.619542	187.3495	0.152139	419.2515	0.134718	565.5426	0.205225	0.136832	41.0504	-6.9E-18	0.219154	-5.4E-18	565.5426
0.5	0.619542	185.1191	0.205225	565.5426	0.136832	709.4657	0.257453	0.138912	41.19613	-3.1E-17	0.222538	-2.4E-17	709.4657
0.5833	0.619542	185.7883	0.257453	709.4657	0.138912	853.2855	0.309642	0.14099	41.96846	-2.8E-17	0.225894	-2.1E-17	853.2855
0.6667	0.619542	186.0113	0.309642	853.2855	0.14099	996.6549	0.361668	0.143062	42.64102	-2.8E-17	0.229243	-2.1E-17	996.6549
0.75	0.619542	185.7883	0.361668	996.6549	0.143062	1139.233	0.413407	0.145122	43.21024	2.1E-17	0.232579	1.6E-17	1139.233
0.833	0.619542	185.1191	0.413407	1139.233	0.145122	1280.684	0.464738	0.147166	43.66779	3.5E-18	0.23589	2.7E-18	1280.684
0.9167	0.309771	140.0103	0.464738	1280.684	0.147166	1376.143	0.499278	0.148535	44.55102	1.7E-17	0.318624	1.3E-17	1376.143
1	0.001	46.597	0.499278	1376.143	0.148545	1278.19	0.500121	0.148574	44.55009	-1.2E-15	0.956072	-9.3E-16	1278.19
1.083	0.001	0.2988	0.500121	1278.19	0.148574	1334.189	0.484154	0.147939	44.29908	-1.7E-16	148.2566	-4.3E-17	1334.189
1.166	0.001	0.2988	0.484154	1334.189	0.147939	1290.379	0.469256	0.147306	44.10959	1.4E-17	147.6225	8.8E-18	1290.379
1.249	0.001	0.2988	0.469256	1290.379	0.147306	1246.757	0.452426	0.146676	43.92084	2.1E-17	146.9908	2.1E-17	1246.757
1.332	0.001	0.2988	0.452426	1246.757	0.146676	1203.322	0.436664	0.146048	43.7329	-7.6E-17	146.3618	-2.8E-17	1203.322
1.415	0.001	0.2988	0.436664	1203.322	0.146048	1160.075	0.420971	0.145423	43.54577	-5.2E-17	145.7355	-3.8E-17	1160.075
1.498	0.001	0.2988	0.420971	1160.075	0.145423	1117.015	0.4053+5	0.144801	43.35945	-4.8E-16	145.1119	-4.5E-17	1117.015
1.581	0.001	0.2988	0.405345	1117.015	0.144801	1074.14	0.389786	0.144181	43.17393	-9.7E-17	144.4911	-4.8E-17	1074.14
1.664	0.001	0.2988	0.389786	1074.14	0.144181	1031.449	0.374295	0.143564	42.98921	-3.1E-17	143.8729	-2.7E-17	1031.449
1.747	0.001	0.2988	0.374295	1031.449	0.143564	988.9428	0.35887	0.14295	42.80528	-3.3E-17	143.2573	-2.1E-17	988.9428
1.83	0.001	0.2988	0.35887	988.9428	0.14295	946.6195	0.343511	0.142339	42.62215	-3.8E-17	142.6444	-2.5E-17	946.6195
1.913	0.001	0.2988	0.343511	946.6195	0.142339	904.4785	0.328219	0.14173	42.43981	-8.9E-16	142.0342	-2.7E-17	904.4785
1.996	0.001	0.2988	0.328219	904.4785	0.14173	862.519	0.312993	0.141123	42.25825	-4.9E-17	141.4265	-2.1E-17	862.519
2.079	0.001	0.2988	0.312993	862.519	0.141123	820.7403	0.297832	0.14052	42.07747	3.5E-18	140.8215	2.9E-18	820.7403
2.162	0.001	0.2988	0.297832	820.7403	0.14052	779.1417	0.282737	0.139919	41.89748	-9.0E-17	140.2191	-2.0E-17	779.1417
2.245	0.001	0.2988	0.282737	779.1417	0.139919	737.7222	0.267706	0.13932	41.71825	-1.4E-17	139.6193	-8.6E-18	737.7222
2.328	0.001	0.2988	0.267706	737.7222	0.13932	696.4812	0.252741	0.138724	41.5398	-1.2E-15	139.0221	-2.7E-17	696.4812
2.411	0.001	0.2988	0.252741	696.4812	0.138724	655.4179	0.23784	0.138131	41.36212	-5.2E-17	138.4275	-2.2E-17	655.4179
2.494	0.001	0.2988	0.23784	655.4179	0.138131	614.5315	0.223003	0.13754	41.18521	-1.6E-17	137.8354	-8.7E-18	614.5315
2.577	0.001	0.2988	0.223003	614.5315	0.13754	573.8212	0.20823	0.136952	41.00905	-6.6E-17	137.2458	-1.6E-17	573.8212
2.66	0.001	0.2988	0.20823	573.8212	0.136952	533.2864	0.19352	0.136366	40.83366	-1.4E-17	136.6588	-9.1E-18	533.2864
2.743	0.001	0.2988	0.19352	533.2864	0.136366	492.9261	0.178074	0.135783	40.65902	-1.9E-16	136.0744	-1.4E-17	492.9261
2.826	0.001	0.2988	0.178074	492.9261	0.135783	452.7398	0.164291	0.135202	40.48514	-2.8E-17	135.4924	-1.4E-17	452.7398
2.909	0.001	0.2988	0.164291	452.7398	0.135202	412.7266	0.149771	0.134624	40.312	1.0E-17	134.913	9.5E-18	412.7266
2.992	0.001	0.2988	0.149771	412.7266	0.134624	372.8858	0.135314	0.134048	40.13961	-3.5E-17	134.336	-1.2E-17	372.8858
3.075	0.001	0.2988	0.135314	372.8858	0.134048	333.2166	0.120918	0.133475	39.96796	-1.7E-17	133.7616	-1.3E-17	333.2166
3.158	0.001	0.2988	0.120918	333.2166	0.133475	293.7184	0.106585	0.132904	39.79705	-7.3E-17	133.1896	-1.4E-17	293.7184
3.241	0.001	0.2988	0.106585	293.7184	0.132904	254.3903	0.092314	0.132336	39.62688	-3.5E-18	132.6201	-2.2E-18	254.3903
3.324	0.001	0.2988	0.092314	254.3903	0.132336	215.2317	0.078104	0.13177	39.45744	-2.6E-16	132.053	-1.4E-17	215.2317
3.407	0.001	0.2988	0.078104	215.2317	0.13177	176.2417	0.063955	0.131207	39.28873	-4.2E-17	131.4884	-2.0E-17	176.2417
3.49	0.001	0.2988	0.063955	176.2417	0.131207	137.4198	0.049867	0.130646	39.12075	-1.4E-17	130.9262	-1.3E-17	137.4198
3.573	0.001	0.2988	0.049867	137.4198	0.130646	98.7651	0.03584	0.130087	38.95349	-4.2E-17	130.3664	-1.5E-17	98.7651

TABLE 11g

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5035
2	6000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 60 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.26	0.745	0.56	1	0.525672

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					
0.083	0.262836	39.2677	0	0	0	20.00271	0.007259	0.128949	19.26499	0	0.490606	0	20.00271
0.167	0.525672	119.2224	0.007259	20.00271	0.128949	100.056	0.036309	0.130106	39.16909	-2.5E-18	0.328538	-2.3E-18	100.056
0.25	0.525672	157.0708	0.036309	100.056	0.130106	217.9966	0.079107	0.13181	39.13023	3.5E-18	0.249125	2.6E-18	217.9966
0.333	0.525672	157.0708	0.079107	217.9966	0.13181	335.429	0.121721	0.133507	39.63836	-1.7E-17	0.25236	-1.3E-17	335.429
0.417	0.525672	158.9632	0.121721	335.429	0.133507	453.7612	0.164662	0.135217	40.63104	0	0.2556	0	453.7612
0.5	0.525672	157.0708	0.164662	453.7612	0.135217	570.1779	0.206907	0.136899	40.65411	3.5E-18	0.259827	2.6E-18	570.1779
0.5833	0.525672	157.6385	0.206907	570.1779	0.136899	686.5111	0.249123	0.13858	41.30534	-2.4E-17	0.262026	-1.8E-17	686.5111
0.6667	0.525672	157.8278	0.249123	686.5111	0.13858	802.48	0.291206	0.140256	41.85084	-2.0E-17	0.265219	-2.0E-17	802.48
0.75	0.525672	157.6385	0.291206	802.48	0.140256	917.8087	0.333057	0.141922	42.30979	5.9E-18	0.268398	5.1E-18	917.8087
0.833	0.525672	157.0708	0.333057	917.8087	0.141922	1032.226	0.374577	0.143576	42.65339	1.0E-17	0.271555	7.6E-18	1032.226
0.9167	0.525672	153.2955	0.374577	1032.226	0.143576	1147.109	0.416266	0.145236	43.51232	-1.7E-17	0.274707	-1.3E-17	1147.109
1	0.525672	157.6385	0.416266	1147.109	0.145236	1260.948	0.457576	0.146881	43.79993	-7.3E-17	0.27705	-5.6E-17	1260.948
1.083	0.262836	117.8031	0.457576	1260.948	0.146881	1334.704	0.48434	0.147946	44.04717	6.9E-18	0.279905	4.3E-18	1334.704
1.166	0.001	39.4171	0.48434	1334.704	0.147946	1329.925	0.482606	0.147877	44.19608	3.5E-16	1.121241	4.3E-17	1329.925
1.249	0.001	0.2908	0.482606	1329.925	0.147877	1286.132	0.466714	0.147245	44.09122	0.000886	146	5.5E-17	1286.132
1.332	0.001	0.2908	0.466714	1286.132	0.147245	1242.528	0.450891	0.146614	43.90254	-5.9E-17	146.9295	-5.5E-17	1242.528
1.415	0.001	0.2908	0.450891	1242.528	0.146614	1199.112	0.435137	0.145987	43.71468	1.0E-16	146.3008	9.3E-17	1199.112
1.498	0.001	0.2908	0.435137	1199.112	0.145987	1155.883	0.41945	0.145362	43.52763	6.6E-17	145.6748	4.4E-17	1155.883
		1893.291				1893.291	0.687042	0.155128	0	0	0	0	1893.291

TABLE 11h

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5000
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1551
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 70 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.26	0.745	0.5	1	0.46935

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					
0.083	0.234675	35.06045	0	0	0	15.80452	0.005735	0.128888	19.25592	0	0.549221	0	15.80452
0.167	0.46935	106.4486	0.005735	15.80452	0.128888	83.13016	0.030166	0.129861	39.12294	-3.5E-18	0.367529	-2.2E-18	83.13016
0.25	0.46935	140.2418	0.030166	83.13016	0.129861	184.3509	0.066898	0.131324	39.02105	0	0.270241	0	184.3509
0.333	0.46935	140.2418	0.066898	184.3509	0.131324	285.1355	0.103471	0.13278	39.45715	-1.4E-17	0.291351	-1.0E-17	285.1355
0.417	0.46935	141.9314	0.103471	285.1355	0.13278	386.6923	0.140324	0.134248	40.37462	6.9E-18	0.284466	5.0E-18	386.6923
0.5	0.46935	140.2418	0.140324	386.6923	0.134248	486.6052	0.17658	0.135691	40.32891	-1.0E-17	0.287567	-7.4E-18	486.6052
0.5833	0.46935	140.7487	0.17658	486.6052	0.135691	586.4464	0.212811	0.137134	40.90747	3.5E-18	0.290642	2.5E-18	586.4464
0.6667	0.46935	140.9176	0.212811	586.4464	0.137134	685.975	0.248928	0.138572	41.38965	-3.1E-17	0.293711	-2.2E-17	685.975
0.75	0.46935	140.7487	0.248928	685.975	0.138572	784.9542	0.284846	0.140003	41.76952	-6.9E-18	0.296767	-4.9E-18	784.9542
0.833	0.46935	140.2418	0.284846	784.9542	0.140003	883.1512	0.32048	0.141422	42.04476	-3.8E-17	0.299802	-2.7E-17	883.1512
0.9167	0.46935	141.4245	0.32048	883.1512	0.141422	981.748	0.356259	0.142846	42.82778	-2.4E-17	0.302831	-1.7E-17	981.748
1	0.46935	142.7487	0.356259	981.748	0.142846	1079.448	0.391713	0.144258	43.04841	-2.4E-17	0.305858	-1.7E-17	1079.448
1.083	0.46935	140.2418	0.391713	1079.448	0.144258	1176.376	0.426886	0.145659	43.31254	6.9E-18	0.308849	4.9E-18	1176.376
1.166	0.46935	140.2418	0.426886	1176.376	0.145659	1272.887	0.461908	0.147053	43.73114	-4.5E-17	0.311827	-3.1E-17	1272.887
1.249	0.234675	105.1813	0.461908	1272.887	0.147053	1368.997	0.484084	0.147936	44.07142	-7.3E-17	0.419004	-4.8E-17	1368.997
1.332	0.001	35.20904	0.484084	1368.997	0.147936	1325.023	0.466827	0.147007	44.18397	-1.7E-16	1.254875	-4.3E-17	1325.023
1.415	0.001	0.1988	0.466827	1325.023	0.147007	1281.252	0.449744	0.147174	44.0791	-2.1E-17	147.1993	-1.5E-17	1281.252
1.498	0.001	0.1988	0.449744	1281.252	0.147174	1237.669	0.449128	0.145544	43.88152	2.1E-17	146.8592	1.0E-17	1237.669
		1970.468				1970.468	0.704	0.155722	0	0	0	0	1970.468

TABLE 11i

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5039
2	6000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 90 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.26	0.745	0.53	1	0.497511

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					
0.083	0.248755	37.16407	0	0	0	17.90362	0.006497	0.128919	19.26045	-1.7E-18	0.518255	-8.4E-19	17.90362
0.167	0.497511	112.8355	0.006497	17.90362	0.128919	91.5931	0.033238	0.129984	39.14602	-3.5E-18	0.34693	-2.3E-18	91.5931
0.25	0.497511	148.6563	0.033238	91.5931	0.129984	201.1737	0.073002	0.131567	39.07564	-3.5E-18	0.262359	-1.6E-18	201.1737
0.333	0.497511	148.6563	0.073002	201.1737	0.131567	310.2823	0.112596	0.133144	39.54775	-1.7E-17	0.266035	-1.3E-17	310.2823
0.417	0.497511	150.4473	0.112596	310.2823	0.133144	420.2268	0.152493	0.134732	40.50283	3.5E-18	0.269216	2.5E-18	420.2268
0.5	0.497511	148.6563	0.152493	420.2268	0.134732	528.3916	0.191744	0.136295	40.49151	6.9E-18	0.272383	5.0E-18	528.3916
0.5833	0.497511	149.1936	0.191744	528.3916	0.136295	636.4787	0.230967	0.137857	41.1064	-3.5E-18	0.275524	-2.5E-18	636.4787
0.6667	0.497511	149.3727	0.230967	636.4787	0.137857	744.2275	0.270067	0.139414	41.62395	6.9E-18	0.278658	5.0E-18	744.2275
0.75	0.497511	149.1936	0.270067	744.2275	0.139414	851.3814	0.308951	0.140962	42.03985	-1.7E-17	0.281779	-1.2E-17	851.3814
0.833	0.497511	148.6563	0.308951	851.3814	0.140962	957.6807	0.347528	0.142499	42.34908	0	0.284879	0	957.6807
0.9167	0.497511	149.91	0.347528	957.6807	0.142499	1064.429	0.386262	0.144041	43.17005	0	0.287973	0	1064.429
1	0.497511	149.1936	0.386262	1064.429	0.144041	1170.198	0.424644	0.145569	43.42417	-1.4E-17	0.291059	-9.8E-18	1170.198
1.083	0.497511	148.6563	0.424644	1170.198	0.145569	1275.122	0.462723	0.147086	43.72265	-2.1E-17	0.294119	-1.5E-17	1275.122
1.166	0.497511	148.6563	0.462723	1275.122	0.147086	1379.614	0.500637	0.148592	44.17429	-3.1E-17	0.297157	-2.2E-17	1379.614
1.249	0.497511	148.6563	0.500637	1379.614	0.148592	1483.673	0.538399	0.149916	44.59719	1.4E-17	0.300002	9.7E-18	1483.673
1.332	0.497511	148.6563	0.538399	1483.673	0.149916	1587.337	0.576017	0.151235	44.99202	2.8E-17	0.302658	1.9E-17	1587.337
1.415	0.248755	111.4922	0.576017	1587.337	0.151235	1653.514	0.600031	0.152077	45.31485	-5.6E-17	0.40844	-3.2E-17	1653.514
1.498	0.1	52.10407	0.600031	1653.514	0.152077	1660.165	0.602445	0.152162	45.45228	-3.3E-16	0.872356	-4.2E-17	1660.165
1.581	0.1	29.88	0.602445	1660.165	0.152162	1644.609	0.596799	0.151964	45.43635	-2.1E-17	1.520627	-1.1E-17	1644.609
1.664	0.1	29.88	0.596799	1644.609	0.151964	1629.112	0.591176	0.151767	45.37732	-1.0E-16	1.518652	-5.4E-17	1629.112
1.747	0.1	29.88	0.591176	1629.112	0.151767	1613.673	0.585573	0.15157	45.31852	3.5E-18	1.516684	1.8E-18	1613.673
1.83	0.1	29.88	0.585573	1613.673	0.15157	1598.293	0.579992	0.151375	45.25994	-9.0E-17	1.514724	-4.6E-17	1598.293
1.913	0.1	29.88	0.579992	1598.293	0.151375	1582.971	0.574432	0.15118	45.20159	-4.3E-17	1.512771	-2.1E-17	1582.971
2	0.1	31.32	0.574432	1582.971	0.15118	1566.974	0.568627	0.150976	47.31758	-7.6E-17	1.510778	-3.9E-17	1566.974
2.083	0.1	29.88	0.568627	1566.974	0.150976	1551.771	0.56311	0.150783	45.08275	-5.9E-17	1.508794	-3.0E-17	1551.771
2.166	0.1	29.88	0.56311	1551.771	0.150783	1536.626	0.557614	0.15059	45.02507	-5.9E-17	1.506863	-3.0E-17	1536.626
2.249	0.1	29.88	0.557614	1536.626	0.15059	1521.538	0.552139	0.150398	44.9676	-7.6E-17	1.50494	-3.9E-17	1521.538
2.332	0.1	29.88	0.552139	1521.538	0.150398	1506.508	0.546685	0.150207	44.91036	-1.0E-16	1.503024	-5.2E-17	1506.508
2.415	0.1	29.88	0.546685	1506.508	0.150207	1491.535	0.541252	0.150016	44.85333	-3.5E-18	1.501115	-1.7E-18	1491.535
		2730.277				2730.277	0.777294	0.158292	0	0	0	0	

TABLE 11j

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.[illegible]	[illegible]
1	5009
[illegible]	6000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.19195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 90 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.26	0.745	0.48	1	0.450576

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					
0.083	0.225288	33.65803	0	0	0	14.40513	0.005227	0.128868	19.2529	0	0.572015	0	14.40513
0.167	0.450576	102.1986	0.005227	14.40513	0.128868	77.48821	0.028119	0.12978	39.10756	-3.5E-18	0.382692	-2.1E-18	77.48821
0.25	0.450576	134.6321	0.028119	77.48821	0.12978	173.1357	0.062828	0.131162	38.98466	0	0.289564	0	173.1357
0.333	0.450576	134.6321	0.062828	173.1357	0.131162	268.371	0.097387	0.132538	39.39674	-6.9E-18	0.292625	-4.9E-18	268.371
0.417	0.450576	136.2542	0.097387	268.371	0.132538	364.3361	0.132211	0.133925	40.28915	-3.5E-18	0.295691	-2.4E-18	364.3361
0.5	0.450576	134.6321	0.132211	364.3361	0.133925	458.7477	0.166471	0.135289	40.2205	-1.7E-17	0.298744	-1.2E-17	458.7477
0.5833	0.450576	135.1187	0.166471	458.7477	0.135289	553.0916	0.200707	0.136652	40.77484	-3.1E-17	0.30177	-2.2E-17	553.0916
0.6667	0.450576	135.2809	0.200707	553.0916	0.136652	647.14	0.234836	0.138011	41.23246	-3.8E-17	0.304791	-2.7E-17	647.14
0.75	0.450576	135.1187	0.234836	647.14	0.138011	740.6693	0.268776	0.139363	41.58943	-3.1E-17	0.307799	-2.2E-17	740.6693
0.833	0.450576	134.6321	0.268776	740.6693	0.139363	833.4596	0.302448	0.140703	41.84188	3.5E-18	0.310787	2.4E-18	833.4596
0.9167	0.450576	135.7676	0.302448	833.4596	0.140703	926.6275	0.336257	0.14205	42.5996	1.4E-17	0.313769	9.5E-18	926.6275
1	0.450576	135.1187	0.336257	926.6275	0.14205	1018.948	0.369758	0.143384	42.7979	-1.0E-17	0.316743	-7.1E-18	1018.948
1.083	0.450576	134.6321	0.369758	1018.948	0.143384	1110.54	0.402995	0.144707	43.0408	-6.9E-18	0.319692	-4.7E-18	1110.54
1.166	0.450576	134.6321	0.402995	1110.54	0.144707	1201.736	0.436089	0.146025	43.43541	2.4E-17	0.322623	1.6E-17	1201.736
1.249	0.450576	134.6321	0.436089	1201.736	0.146025	1292.54	0.46904	0.147337	43.82832	2.4E-17	0.325541	1.6E-17	1292.54
1.332	0.450576	134.6321	0.46904	1292.54	0.147337	1382.954	0.50185	0.148635	44.21822	-3.8E-17	0.328437	-2.6E-17	1382.954
1.415	0.450576	134.6321	0.50185	1382.954	0.148635	1473.003	0.534527	0.149781	44.58325	1.4E-17	0.331149	9.2E-18	1473.003
1.498	0.450576	134.6321	0.534527	1473.003	0.149781	1562.71	0.56708	0.150922	44.92493	3.5E-18	0.333687	2.3E-18	1562.71
1.581	0.225288	100.9741	0.56708	1562.71	0.150922	1618.483	0.587319	0.151631	45.20145	-5.9E-17	0.447654	-3.3E-17	1618.483
1.664	0.1	40.59803	0.587319	1618.483	0.151631	1621.767	0.588511	0.151673	45.3137	-7.0E-16	0.932419	-5.3E-17	1621.767
1.747	0.1	29.88	0.588511	1621.767	0.151673	1606.356	0.582913	0.151477	45.29065	-1.0E-16	1.515751	-5.2E-17	1606.356
1.83	0.1	29.88	0.582918	1606.356	0.151477	1591.004	0.577347	0.151282	45.23218	-2.1E-17	1.513795	-1.1E-17	1591.004
1.913	0.1	29.88	0.577347	1591.004	0.151282	1575.71	0.571797	0.151087	45.17393	-3.1E-17	1.511845	-1.5E-17	1575.71
2	0.1	31.32	0.571797	1575.71	0.151087	1559.742	0.566003	0.150884	47.2887	-2.1E-17	1.509856	-1.1E-17	1559.742
2.083	0.1	29.88	0.566003	1559.742	0.150884	1544.566	0.560496	0.150691	45.05531	0	1.507875	0	1544.566
2.166	0.1	29.88	0.560496	1544.566	0.150691	1529.449	0.55501	0.150499	44.99773	0	1.505948	0	1529.449
2.249	0.1	29.88	0.55501	1529.449	0.150499	1514.388	0.549545	0.150307	44.94037	-9.7E-17	1.504028	-4.9E-17	1514.388
2.332	0.1	29.88	0.549545	1514.388	0.150307	1499.385	0.5441	0.150116	44.88323	0	1.502116	0	1499.385
2.415	0.1	29.88	0.5441	1499.385	0.150116	1484.439	0.538677	0.149926	44.8263	-2.8E-17	1.500211	-1.4E-17	1484.439
		2714.761				2714.761	0.775797	0.158239	0	0	0	0	

TABLE 11k

DETENTION BASIN RATING:

BASIN RATING (ONLY 5 POINTS

DEPTH	VOLUME
0	0
0.5	1259
1	5033
2	6000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19652
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 120 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
1.26	0.745	0.36	1	0.337932

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					
0.083	0.168966	25.24352	0	0	0	6.008745	0.00218	0.128747	19.23478	0	0.761969	0	6.008745
0.167	0.337932	76.64298	0.00218	6.008745	0.128747	43.63647	0.015835	0.129291	39.01525	-3.5E-18	0.509052	-1.7E-18	43.63647
0.25	0.337932	100.9741	0.015835	43.63647	0.129291	105.8442	0.038409	0.130189	38.76621	-3.5E-18	0.383923	-2.1E-18	105.8442
0.333	0.337932	100.9741	0.038409	105.8442	0.130189	167.784	0.060886	0.131084	39.03432	-6.9E-18	0.386578	-4.3E-18	167.784
0.417	0.337932	102.1906	0.060886	167.784	0.131084	230.1983	0.083535	0.131986	39.77631	-6.9E-18	0.389236	-4.3E-18	230.1983
0.5	0.337932	100.9741	0.083535	230.1983	0.131986	291.6023	0.105817	0.132874	39.57008	-1.4E-17	0.391884	-8.6E-18	291.6023
0.5833	0.337932	101.339	0.105817	291.6023	0.132874	352.9623	0.128084	0.13376	39.97909	-6.9E-18	0.394508	-4.3E-18	352.9623
0.6667	0.337932	101.4607	0.128084	352.9623	0.13376	414.1361	0.15028	0.134644	40.29288	-6.9E-18	0.397128	-4.3E-18	414.1361
0.75	0.337932	101.339	0.15028	414.1361	0.134644	474.9603	0.172355	0.135523	40.50389	-3.5E-18	0.399736	-2.1E-18	474.9603
0.833	0.337932	100.9741	0.172355	474.9603	0.135523	535.3097	0.194254	0.136395	40.62451	-2.1E-17	0.402327	-1.3E-17	535.3097
0.9167	0.337932	101.8257	0.194254	535.3097	0.136395	595.9049	0.216243	0.137271	41.22052	-6.9E-18	0.404913	-4.3E-18	595.9049
1	0.337932	101.339	0.216243	595.9049	0.137271	655.9491	0.238032	0.138138	41.29486	-1.4E-17	0.407492	-8.6E-18	655.9491
1.083	0.337932	100.9741	0.238032	655.9491	0.138138	715.5188	0.259849	0.138999	41.40427	-2.8E-17	0.410049	-1.7E-17	715.5188
1.166	0.337932	100.9741	0.259849	715.5188	0.138999	774.6318	0.281173	0.139856	41.66102	-6.9E-18	0.412591	-4.3E-18	774.6318
1.249	0.337932	100.9741	0.281173	774.6318	0.139856	833.8894	0.302604	0.14071	41.91656	-2.4E-17	0.415122	-1.4E-17	833.8894
1.332	0.337932	100.9741	0.302604	833.8894	0.14071	892.6925	0.323942	0.141559	42.171	0	0.417642	0	892.6925
1.415	0.337932	100.9741	0.323942	892.6925	0.141559	951.2422	0.345189	0.142405	42.42484	-3.5E-17	0.420151	-2.0E-17	951.2422
1.498	0.337932	100.9741	0.345189	951.2422	0.142405	1009.54	0.366344	0.143248	42.6766	-4.2E-17	0.422649	-2.4E-17	1009.54
1.581	0.337932	100.9741	0.366344	1009.54	0.143248	1067.586	0.387408	0.144087	42.92776	-2.8E-17	0.425136	-1.6E-17	1067.586
1.664	0.337932	100.9741	0.387408	1067.586	0.144087	1125.382	0.408381	0.144922	43.17705	-8.0E-17	0.427613	-4.6E-17	1125.382
1.747	0.337932	100.9741	0.408381	1125.382	0.144922	1182.929	0.429264	0.145753	43.42685	-6.9E-18	0.430079	-4.0E-18	1182.929
1.83	0.337932	100.9741	0.429264	1182.929	0.145753	1240.229	0.450057	0.146581	43.67479	-6.9E-17	0.432535	-3.9E-17	1240.229
1.913	0.337932	100.9741	0.450057	1240.229	0.146581	1297.281	0.47076	0.147406	43.92165	-7.3E-17	0.434979	-4.1E-17	1297.281
2	0.337932	100.8403	0.47076	1297.281	0.147406	1356.819	0.492366	0.148266	46.30219	-4.5E-17	0.437472	-2.9E-17	1356.819
2.083	0.168966	75.73056	0.492366	1356.819	0.148266	1308.103	0.503747	0.148701	44.36693	-5.2E-17	0.585852	-2.2E-17	1308.102
2.166	0.1	40.18352	0.503747	1308.103	0.148701	1303.943	0.502208	0.148647	44.42291	-5.1E-16	1.105526	-5.4E-17	1303.943
2.249	0.1	29.88	0.502208	1303.943	0.148647	1369.436	0.496944	0.148448	44.3861	-6.2E-17	1.485479	-3.0E-17	1369.436
2.332	0.1	29.88	0.496944	1369.436	0.148448	1354.991	0.491702	0.14824	44.32517	-4.5E-17	1.48344	-2.2E-17	1354.991
2.415	0.1	29.88	0.491702	1354.991	0.14824	1340.608	0.486483	0.148032	44.26294	-9.0E-17	1.481357	-4.3E-17	1340.608
		2537.386				2537.386	0.758607	0.15764	0	0	0	0	

TABLE 11L

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1229
1	5039
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 5 MIN

AREA (ACRES)	C	I	SOIL NOES FACTOR	Qp
1.26	0.806	4.95	1	5.027622

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					
0.083	2.513511	375.5135	0	0	0	355.5292	0.129015	0.133797	19.99933	-5.3E-18	0.053221	-4.9E-18	355.5292
0.167	2.513511	760.0857	0.129015	355.5292	0.133797	1073.586	0.389585	0.144173	42.02917	3.8E-17	0.055295	3.6E-17	1073.586
0.25	0.001	375.6679	0.389585	1073.586	0.144173	1405.465	0.510019	0.148921	43.73832	-1.0E-17	0.116561	-9.3E-18	1405.465
0.333	0.001	0.2988	0.510019	1405.465	0.148921	1361.355	0.494012	0.148332	44.40957	-8.3E-17	148.6264	-5.2E-17	1361.355
0.417	0.001	0.3024	0.494012	1361.355	0.148332	1316.899	0.477879	0.147689	44.75833	-5.3E-15	148.0103	-5.5E-17	1316.899
0.5	0.001	0.2988	0.477879	1316.899	0.147689	1273.162	0.462008	0.147057	44.0351	-1.4E-16	147.3732	-5.3E-17	1273.162
0.5833	0.001	0.29988	0.462008	1273.162	0.147057	1229.457	0.446148	0.146426	44.00481	-2.4E-17	146.7414	-1.8E-17	1229.457
0.6667	0.001	0.30024	0.446148	1229.457	0.146426	1185.889	0.430338	0.145796	43.86832	-4.2E-16	146.1108	-4.7E-17	1185.889
0.75	0.001	0.29988	0.430338	1185.889	0.145796	1142.562	0.414615	0.14517	43.62745	-6.8E-17	145.483	-2.8E-17	1142.562
0.833	0.001	0.2938	0.414615	1142.562	0.14517	1099.577	0.399017	0.144549	43.284	3.5E-18	144.8594	3.0E-18	1099.577
0.9167	0.001	0.30132	0.399017	1099.577	0.144549	1056.416	0.383355	0.143925	43.4615	-1.5E-16	144.227	-3.8E-17	1056.416
1	0.001	0.29908	0.383355	1056.416	0.143925	1013.649	0.367835	0.143307	43.06762	6.9E-18	143.6162	4.3E-18	1013.649
		1512.972											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 12a

DETENTION BASIN RATING:

BASIN RATING (ONLY 5 POINTS

DEPTH	VOLUME
0	0
0.7	1328
1	5039
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH To=10 MIN AND STORM DURATION IN MIN

AREA (ACRES)	C	I	SOIL NOIS FACTOR	Qp
1.24	0.806	3.0	1	3.059123

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	0.001			0		0	0	0					
0.083	1.929564	288.4263	0	0	0	268.6245	0.097479	0.132542	19.80172	-1.0E-17	0.068654	-9.7E-18	268.6245
0.167	3.859128	875.2502	0.097479	268.6245	0.132542	1101.973	0.399887	0.144583	41.90132	-4.2E-17	0.047874	-4.0E-17	1101.973
0.25	1.929564	864.8306	0.399887	1101.973	0.144583	1921.973	0.69745	0.155493	44.83137	-3.1E-17	0.051838	-3.0E-17	1921.973
0.333	0.001	288.4263	0.69745	1921.973	0.155493	2163.806	0.72265	0.156376	46.59318	6.6E-17	0.161543	5.5E-17	2163.806
0.417	0.001	0.3024	0.72265	2163.806	0.156376	2116.844	0.71812	0.156217	47.26412	-2.4E-16	156.2967	-7.0E-17	2116.844
0.5	0.001	0.2988	0.71812	2116.844	0.156217	2070.489	0.713648	0.156061	46.6543	-6.8E-16	156.1389	-9.4E-17	2070.489
0.5833	0.001	0.29908	0.713648	2070.489	0.156061	2024.013	0.709165	0.155903	46.77586	3.5E-17	155.9819	3.4E-17	2024.013
0.6667	0.001	0.30024	0.709165	2024.013	0.155903	1977.528	0.704681	0.155746	46.78482	-6.6E-17	155.8247	-5.4E-17	1977.528
0.75	0.001	0.29988	0.704681	1977.528	0.155746	1931.146	0.700207	0.155589	46.68163	0	155.6677	0	1931.146
0.833	0.001	0.2988	0.700207	1931.146	0.155589	1885.04	0.695848	0.155433	46.46543	-1.3E-16	155.306	-8.9E-17	1885.04
0.9167	0.001	0.30132	0.695848	1885.04	0.155433	1838.718	0.691538	0.155278	46.22285	-2.3E-17	154.728	-2.0E-17	1838.718
1	0.001	0.29908	0.691538	1838.718	0.155278	1792.794	0.687273	0.155124	45.98307	-2.0E-16	154.1412	-4.8E-17	1792.794
		2219.235											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 12b

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5039
2	6000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12086
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2161

REC LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION IS MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.26	0.806	3.24	1	3.290414

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					
0.083	1.645207	245.794	0	0	0	226.0841	0.082042	0.131927	19.70988	-3.5E-18	0.080189	-8.3E-18	226.0841
0.167	3.290414	746.266	0.082042	226.0841	0.131927	930.9154	0.337813	0.142112	41.43464	-2.4E-17	0.055523	-2.3E-17	930.9154
0.25	3.290414	983.1758	0.337813	930.9154	0.142112	1869.728	0.678491	0.154828	44.26278	4.5E-17	0.045122	4.3E-17	1869.728
0.333	1.645207	737.3819	0.678491	1869.728	0.154828	2560.416	0.760908	0.157717	46.69428	6.9E-18	0.063324	6.5E-18	2560.416
0.417	0.001	248.9065	0.760908	2560.416	0.157717	2761.526	0.780308	0.158398	47.79659	-1.1E-16	0.192026	-8.7E-17	2761.526
0.5	0.001	0.2988	0.780308	2761.526	0.158398	2714.519	0.775774	0.158239	47.30545	-1.5E-16	158.3181	-4.7E-17	2714.519
0.5833	0.001	0.29908	0.775774	2714.519	0.158239	2667.391	0.771227	0.158079	47.4297	-5.3E-16	158.1539	-8.4E-17	2667.391
0.6667	0.001	0.30024	0.771227	2667.391	0.158079	2620.253	0.76668	0.15792	47.42778	-1.0E-16	157.9995	-1.8E-16	2620.253
0.75	0.001	0.29908	0.76668	2620.253	0.15792	2573.22	0.762143	0.157761	47.33214	8.3E-17	157.8403	7.6E-17	2573.22
0.833	0.001	0.2988	0.762143	2573.22	0.157761	2526.403	0.757627	0.157602	47.11526	-5.6E-17	157.6816	-3.8E-17	2526.403
0.9167	0.001	0.30132	0.757627	2526.403	0.157602	2479.24	0.753079	0.157443	47.46472	-1.8E-16	157.5227	-9.4E-17	2479.24
1	0.001	0.29938	0.753079	2479.24	0.157443	2432.35	0.748555	0.157284	47.17982	-2.2E-16	157.3636	-7.3E-17	2432.35
		2963.623											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 12c

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1909
1	5039
2	6000
3	9000
4	10000

DISCHARGE RATING
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12366
0.5	0.14057
1	0.1561
1.5	0.18195
2	0.19633
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 20 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.26	0.806	2.84	1	2.88419

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					
0.083	1.442095	215.449	0	0	0	195.8045	0.071054	0.131489	19.64451	0	0.091179	0	195.8045
0.167	2.88419	654.1344	0.071054	195.8045	0.131489	808.8371	0.293513	0.140348	41.10176	2.1E-17	0.062834	2.0E-17	808.8371
0.25	2.88419	861.7961	0.293513	808.8371	0.140348	1626.995	0.590408	0.15174	43.63785	3.5E-17	0.050636	3.3E-17	1626.995
0.333	2.88419	861.7961	0.590408	1626.995	0.15174	2442.618	0.749545	0.157319	46.17338	-9.0E-17	0.053578	-8.5E-17	2442.618
0.417	1.442095	654.1344	0.749545	2442.618	0.157319	3048.869	0.808026	0.159369	47.88329	6.6E-17	0.073201	6.1E-17	3048.869
0.5	0.001	215.5984	0.808026	3048.869	0.159369	3216.763	0.824222	0.159937	47.70441	5.6E-17	0.221265	4.3E-17	3216.763
0.5833	0.001	0.29988	0.824222	3216.763	0.159937	3169.125	0.819626	0.159776	47.93781	1.7E-17	159.8567	1.5E-17	3169.125
0.6667	0.001	0.30024	0.819626	3169.125	0.159776	3121.479	0.81503	0.159615	47.94698	2.5E-17	159.6955	2.4E-17	3121.479
0.75	0.001	0.29988	0.81503	3121.479	0.159615	3073.937	0.810444	0.159454	47.84122	-1.3E-16	159.5346	-6.9E-17	3073.937
0.833	0.001	0.2988	0.810444	3073.937	0.159454	3026.615	0.805879	0.159294	47.621	-1.2E-16	159.3741	-4.4E-17	3026.615
0.9167	0.001	0.30132	0.805879	3026.615	0.159294	2978.942	0.801281	0.159133	47.97422	-5.2E-16	159.2135	-1.1E-16	2978.942
1	0.001	0.29908	0.801281	2978.942	0.159133	2931.545	0.796709	0.158973	47.69674	-2.1E-15	159.0527	-1.1E-16	2931.545
		3464.708											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 12d

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1959
1	5659
2	6000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.13366
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19859
2.5	0.2161

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 30 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.09	0.806	2.87	1	2.305321

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					
0.083	1.152661	172.2075	0	0	0	152.6561	0.055396	0.130866	19.55136	-1.7E-18	0.112534	-1.5E-18	152.6561
0.167	2.305321	522.8468	0.055396	152.6561	0.130866	634.8756	0.230385	0.137834	40.62741	1.7E-17	0.077704	1.3E-17	634.8756
0.25	2.305321	688.83	0.230385	634.8756	0.137834	1281.126	0.464898	0.147172	42.57992	-4.9E-17	0.061815	-4.3E-17	1281.126
0.333	2.305321	688.83	0.464898	1281.126	0.147172	1924.732	0.698451	0.155528	45.22237	-1.7E-17	0.065652	-1.6E-17	1924.732
0.417	2.305321	697.1291	0.698451	1924.732	0.155528	2574.491	0.762266	0.157765	47.36986	5.9E-17	0.06795	5.5E-17	2574.491
0.5	2.305321	688.83	0.762266	2574.491	0.157765	3215.857	0.824134	0.159934	47.46426	-3.1E-17	0.068906	-2.9E-17	3215.857
0.5833	1.152661	518.4898	0.824134	3215.857	0.159934	3686.147	0.8695	0.161525	48.19953	-3.1E-17	0.092961	-2.8E-17	3686.147
0.6667	0.001	172.1075	0.8695	3686.147	0.161525	3810.776	0.881522	0.161946	48.55944	3.5E-18	0.280386	2.5E-18	3810.776
0.75	0.001	0.2988	0.881522	3810.776	0.161946	3762.535	0.876868	0.161783	48.53995	-9.4E-17	161.8646	-8.1E-17	3762.535
0.833	0.001	0.2988	0.876868	3762.535	0.161783	3714.518	0.872236	0.161621	48.5165	3.8E-17	161.7819	3.7E-17	3714.518
0.9167	0.001	0.30132	0.872236	3714.518	0.161621	3666.144	0.86757	0.161457	48.47307	-1.3E-16	161.5588	-6.9E-17	3666.144
1	0.001	0.29903	0.86757	3666.144	0.161457	3618.051	0.862931	0.161294	48.39884	-1.7E-16	161.3757	-6.4E-17	3618.051
		4151.551											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 12e

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.5	1825
1	5000
2	5000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12086
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 30 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.25	0.806	1.94	1	1.970186

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					
0.083	0.985093	147.1729	0	0	0	127.6755	0.046331	0.120505	19.49743	1.7E-18	0.13248	1.5E-18	127.6755
0.167	1.970186	446.8383	0.046331	127.6755	0.130505	534.161	0.193838	0.136379	40.35279	2.4E-17	0.090307	2.2E-17	534.161
0.25	1.970186	588.6917	0.193838	534.161	0.136379	1080.922	0.392248	0.144279	41.93029	-1.0E-17	0.071226	-9.7E-18	1080.922
0.333	1.970186	588.6917	0.392248	1080.922	0.144279	1625.392	0.589826	0.151719	44.22219	4.9E-17	0.075119	4.5E-17	1625.392
0.417	1.970186	595.7844	0.589826	1625.392	0.151719	2174.587	0.72369	0.156413	46.58954	8.0E-17	0.078199	7.4E-17	2174.587
0.5	1.970186	588.6917	0.72369	2174.587	0.156413	2716.269	0.775942	0.158245	47.00977	-2.8E-17	0.079855	-2.6E-17	2716.269
0.5833	1.970186	590.8195	0.775942	2716.269	0.158245	3259.358	0.82833	0.160081	47.72977	1.0E-17	0.080706	9.6E-18	3259.358
0.6667	1.970186	591.5208	0.82833	3259.358	0.160081	3802.549	0.880728	0.161918	48.33858	-1.1E-16	0.081718	-9.9E-17	3802.549
0.75	0.985093	443.1146	0.880728	3802.549	0.161918	4196.907	0.918769	0.163252	48.75605	8.8E-17	0.11003	8.4E-17	4196.907
0.833	0.001	147.3222	0.918769	4196.907	0.163252	4295.4	0.92827	0.163585	48.82948	9.5E-18	0.031447	2.9E-18	4295.4
0.9167	0.001	0.30132	0.92827	4295.4	0.163585	4246.435	0.923547	0.16342	49.25553	-1.4E-16	163.5023	-7.3E-17	4246.435
1	0.001	0.29938	0.923547	4246.435	0.16342	4197.753	0.918851	0.163255	48.98157	-5.8E-16	163.0372	-3.1E-16	4197.753
		4729.257											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 12f

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5039
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12066
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 50 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.25	0.806	1.64	1	1.665518

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					
0.083	0.832759	124.4142	0	0	0	104.9658	0.03809	0.130177	19.44841	-1.7E-18	0.15632	-1.5E-18	104.9658
0.167	1.665518	377.7396	0.03809	104.9658	0.130177	442.6023	0.160613	0.135056	40.10313		0	0.106166	0	442.6023
0.25	1.665518	497.6569	0.160613	442.6023	0.135056	898.9194	0.326202	0.141649	41.33972	-6.9E-18	0.0830b9	-6.3E-18	898.9194
0.333	1.665518	497.6569	0.326202	898.9194	0.141649	1353.271	0.491078	0.148215	43.30569	3.8E-17	0.087019	3.5E-17	1353.271
0.417	1.665518	503.6528	0.491078	1353.271	0.148215	1811.216	0.657258	0.154083	45.70749		0	0.090752	0	1811.216
0.5	1.665518	497.6569	0.657258	1811.216	0.154083	2262.44	0.732165	0.15671	46.4325	7.6E-17	0.099362	6.9E-17	2262.44
0.5833	1.665518	499.4557	0.732165	2262.44	0.15671	2714.673	0.775788	0.158239	47.22343	6.9E-17	0.09455	6.2E-17	2714.673
0.6667	1.665518	500.0552	0.775788	2714.673	0.158239	3166.988	0.81942	0.159769	47.73936	7.6E-17	0.095468	6.9E-17	3166.988
0.75	1.665518	499.4557	0.81942	3166.988	0.159769	3618.304	0.862955	0.161295	48.14035	-3.5E-18	0.096336	-3.1E-18	3618.304
0.833	1.665518	497.6569	0.862955	3618.304	0.161295	4067.539	0.90629	0.162815	48.42199	-1.0E-17	0.0973	-9.4E-18	4067.539
0.9167	0.832759	276.3995	0.90629	4067.539	0.162815	4394.703	0.937849	0.163921	49.22597	2.8E-17	0.130784	2.5E-17	4394.703
1	0.001	125.0139	0.937849	4394.703	0.163921	4470.522	0.945163	0.164177	49.19507	6.6E-17	0.390517	6.0E-17	4470.522
1.083	0.001	0.2988	0.945162	4470.522	0.164177	4421.789	0.940462	0.164013	49.03159	-2.2E-15	164.095	-2.1E-16	4421.789
1.166	0.001	0.2988	0.940462	4421.789	0.164013	4373.106	0.935766	0.163848	48.98237	-1.2E-16	163.9302	-1.1E-16	4373.106
1.249	0.001	0.2988	0.935766	4373.106	0.163848	4324.471	0.931074	0.163683	48.93319	8.7E-17	163.7657	8.3E-17	4324.471
		4997.701				4997.701	0.996016	0.16596	0	0	0	0	4997.701

TABLE 12g

DETENTION BASIN RATING:

BASIN RATING (ONLY 5 POINTS

DEPTH	VOLUME
0	0
0.1	1929
1	5089
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12966
0.5	0.14057
1	0.1661
1.5	0.19155
2	0.19653
2.5	0.2161

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 60 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
1.26	0.806	1.43	1	1.452251

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				
0.083	0.726125	108.4831	0	0	0	89.06905	0.032322	0.129947	19.41409	-3.5E-18	0.17896	-2.8E-18	89.06905
0.167	1.452251	329.3705	0.032322	89.06905	0.129947	378.5112	0.137355	0.134129	39.92037	-6.9E-18	0.121226	-6.1E-18	378.5112
0.25	1.452251	433.9325	0.137355	378.5112	0.134129	771.5174	0.27997	0.139808	40.92632	1.0E-17	0.094315	9.4E-18	771.5174
0.333	1.452251	433.9325	0.27997	771.5174	0.139808	1162.83	0.421971	0.145463	42.61953	-2.4E-17	0.098217	-2.2E-17	1162.83
0.417	1.452251	439.1606	0.421971	1162.83	0.145463	1557.188	0.565076	0.150852	44.80274	-3.1E-17	0.102019	-2.8E-17	1557.188
0.5	1.452251	433.9325	0.565076	1557.188	0.150852	1945.331	0.701575	0.155637	45.78943	3.1E-17	0.105522	2.8E-17	1945.331
0.5833	1.452251	435.501	0.701575	1945.331	0.155637	2333.963	0.739064	0.156952	46.86957	5.2E-17	0.107622	4.6E-17	2333.963
0.6667	1.452251	436.0238	0.739064	2333.963	0.156952	2722.666	0.776559	0.158266	47.32049	6.6E-17	0.108527	5.9E-17	2722.666
0.75	1.452251	435.501	0.776559	2722.666	0.158266	3110.51	0.813972	0.159578	47.65753	3.5E-18	0.109432	3.1E-18	3110.51
0.833	1.452251	433.9325	0.813972	3110.51	0.159578	3496.565	0.851212	0.160883	47.87693	-6.6E-17	0.110033	-5.9E-17	3496.565
0.9167	1.452251	427.5922	0.851212	3496.565	0.160883	3885.482	0.888728	0.162199	48.67558	3.1E-17	0.111226	2.8E-17	3885.482
1	1.452251	435.501	0.888728	3885.482	0.162199	4272.146	0.926027	0.163507	48.83625	1.2E-16	0.112108	1.1E-16	4272.146
1.083	0.726125	325.4494	0.926027	4272.146	0.163507	4548.6	0.952695	0.164441	48.99548	-1.4E-16	0.150547	-1.2E-16	4548.6
1.166	0.001	108.6335	0.952695	4548.6	0.164441	4608.068	0.958421	0.164643	49.16516	-1.1E-16	0.452582	-6.1E-17	4608.068
1.249	0.001	0.2988	0.958421	4608.068	0.164643	4559.196	0.953717	0.164477	49.17051	-1.6E-16	164.5199	-8.7E-17	4559.196
1.332	0.001	0.2988	0.953717	4559.196	0.164477	4510.324	0.949007	0.164312	49.12115	-3.1E-16	164.3947	-1.2E-16	4510.324
1.415	0.001	0.2988	0.949007	4510.324	0.164312	4461.601	0.944302	0.164147	49.07184	-7.9E-16	164.2297	-1.9E-16	4461.601
1.498	0.001	0.2988	0.944302	4461.601	0.164147	4412.877	0.939602	0.163982	49.02258	-3.2E-15	164.0648	-3.1E-16	4412.877
		5228.14				5228.14	1.196016	0.172339	0	0	0	0	5228.14

TABLE 12h

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5039
2	5000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14057
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 70 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Up
1.26	0.806	1.9	1	1.320228

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					
0.083	0.660114	98.62103	0	0	0	79.22819	0.028751	0.129805	19.39284	1.7E-18	0.19664	1.4E-18	79.22819
0.167	1.320228	299.4277	0.028751	79.22819	0.129805	338.8357	0.122957	0.133556	39.82019	2.8E-17	0.132988	2.4E-17	338.8357
0.25	1.320228	394.4841	0.122957	338.8357	0.133556	692.6494	0.25135	0.138669	40.67041	-4.9E-17	0.103098	-4.4E-17	692.6494
0.333	1.320228	394.4841	0.25135	692.6494	0.138669	1044.939	0.37919	0.143759	42.19476	3.8E-17	0.106962	3.4E-17	1044.939
0.417	1.320228	399.2369	0.37919	1044.939	0.143759	1399.933	0.508011	0.148851	44.24266	1.4E-17	0.110618	1.2E-17	1399.933
0.5	1.320228	394.4841	0.508011	1399.933	0.148851	1749.277	0.634782	0.153295	45.14066	-1.0E-17	0.11443	-9.2E-18	1749.277
0.5833	1.320228	395.91	0.634782	1749.277	0.153295	2098.787	0.716378	0.156156	46.39918	-1.1E-16	0.117196	-9.5E-17	2098.787
0.6667	1.320228	396.3829	0.716378	2098.787	0.156156	2448.111	0.750075	0.157338	47.0617	-2.4E-17	0.118727	-2.1E-17	2448.111
0.75	1.320228	395.91	0.750075	2448.111	0.157338	2796.662	0.783697	0.158516	47.35916	6.6E-17	0.119621	5.8E-17	2796.662
0.833	1.320228	394.4841	0.783697	2796.662	0.158516	3143.606	0.817165	0.15959	47.54001	-6.9E-17	0.120512	-6.1E-17	3143.606
0.9167	1.320228	397.3111	0.817165	3143.606	0.15959	3493.121	0.85028	0.160672	48.19532	-5.2E-17	0.121494	-4.6E-17	3493.121
1	1.320228	395.91	0.85028	3493.121	0.160672	3840.613	0.8844	0.162047	48.41846	1.4E-17	0.122547	1.2E-17	3840.613
1.083	1.320228	394.4841	0.8844	3840.613	0.162047	4186.502	0.917765	0.163217	48.59448	9.7E-17	0.123535	8.5E-17	4186.502
1.166	1.320228	394.4841	0.917765	4186.502	0.163217	4532.043	0.951097	0.164385	48.94079	-2.1E-16	0.12467	-1.8E-16	4532.043
1.249	0.660114	295.3821	0.951097	4532.043	0.164385	4778.663	0.974887	0.16522	49.24299	-3.9E-17	0.166436	-3.5E-17	4778.663
1.332	0.1	113.561	0.974887	4778.663	0.16522	4842.824	0.981076	0.165437	49.40022	-2.3E-16	0.435089	-1.9E-16	4842.824
1.415	0.1	29.38	0.981076	4842.824	0.165437	4823.281	0.979191	0.16537	49.42255	-2.5E-16	1.654035	-1.8E-16	4823.281
1.498	0.1	29.38	0.979191	4823.281	0.16537	4803.758	0.977308	0.165304	49.40282	-2.9E-16	1.652074	-1.9E-16	4803.758
		5615.301				5615.301	1.599689	0.184857	0	0	0	0	5615.301

TABLE 12i

DETENTION BASIN RATING:

BASIN RATING (ONLY 5 POINTS

DEPTH	VOLUME
0	0
0.7	1929
1	5039
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.18199
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 30 MIN

AREA (acres)	C	I	SOIL MOIS FACTOR	Qp
1.26	0.806	1.17	1	1.188205

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				
0.083	0.594103	88.75893		0	0	69.38723	0.025179	0.129663	19.3716	-3.5E-18	0.21825	-2.7E-18	69.38723
0.167	1.188205	269.4849	0.025179	69.38723	0.129663	299.1603	0.10856	0.132903	39.712	1.0E-17	0.147363	8.9E-18	299.1603
0.25	1.188205	355.0357	0.10856	299.1603	0.132903	613.7815	0.22273	0.137529	40.41449	3.5E-18	0.113602	3.1E-18	613.7815
0.333	1.188205	355.0357	0.22273	613.7815	0.137529	927.0472	0.336409	0.142056	41.76999	6.9E-18	0.11765	6.1E-18	927.0472
0.417	1.188205	359.3133	0.336409	927.0472	0.142056	1242.713	0.450959	0.146617	43.64735	-1.0E-17	0.121474	-9.1E-18	1242.713
0.5	1.188205	355.0357	0.450959	1242.713	0.146617	1553.314	0.56367	0.150802	44.43447	3.5E-18	0.125155	3.0E-18	1553.314
0.5833	1.188205	356.319	0.56367	1553.314	0.150802	1863.818	0.676247	0.154753	45.31492	-2.4E-17	0.128578	-2.1E-17	1863.818
0.6667	1.188205	356.7467	0.676247	1863.818	0.154753	2173.853	0.723619	0.15641	46.71176	-6.2E-17	0.130938	-5.4E-17	2173.853
0.75	1.188205	356.319	0.723619	2173.853	0.15641	2483.111	0.753451	0.157456	47.06108	-6.6E-17	0.132076	-5.7E-17	2483.111
0.833	1.188205	355.0357	0.753451	2483.111	0.157456	2790.944	0.783146	0.158497	47.20039	-1.4E-17	0.132954	-1.2E-17	2790.944
0.9167	1.188205	358.03	0.783146	2790.944	0.158497	3101.057	0.81306	0.159546	47.91636	4.5E-17	0.133833	3.9E-17	3101.057
1	1.188205	356.319	0.81306	3101.057	0.159546	3409.375	0.842001	0.160589	48.00097	8.7E-17	0.134712	7.5E-17	3409.375
1.083	1.188205	355.0357	0.842001	3409.375	0.160589	3716.272	0.872406	0.161627	48.13695	-5.6E-17	0.135589	-4.8E-17	3716.272
1.166	1.188205	355.0357	0.872406	3716.272	0.161627	4022.859	0.90198	0.162663	48.44892	8.3E-17	0.136462	7.2E-17	4022.859
1.249	1.188205	355.0357	0.90198	4022.859	0.162663	4329.136	0.931524	0.163699	48.75853	-1.3E-16	0.137334	-1.1E-16	4329.136
1.332	1.188205	355.0357	0.931524	4329.136	0.163699	4635.104	0.961039	0.164734	49.06792	1.0E-16	0.138206	8.8E-17	4635.104
1.415	0.594103	266.2768	0.961039	4635.104	0.164734	4852.048	0.981966	0.165468	49.33214	-5.2E-17	0.1389e6	-4.5E-17	4852.048
1.498	0.1	102.6909	0.981966	4852.048	0.165468	4906.278	0.987197	0.165651	49.46916	-1.4E-16	0.477046	-7.1E-17	4906.278
1.581	0.1	29.88	0.987197	4906.278	0.165651	4886.671	0.985206	0.165585	49.48665	-2.8E-16	1.65618	-1.9E-16	4886.671
1.664	0.1	29.88	0.985206	4886.671	0.165585	4867.085	0.983417	0.165519	49.46685	-2.6E-16	1.655517	-1.7E-16	4867.085
1.747	0.1	29.88	0.983417	4867.085	0.165519	4847.518	0.981529	0.165452	49.44707	8.0E-17	1.654855	5.2E-17	4847.518
1.83	0.1	29.88	0.981529	4847.518	0.165452	4827.97	0.979643	0.165386	49.4273	-8.7E-17	1.654194	-5.7E-17	4827.97
1.913	0.1	29.88	0.979643	4827.97	0.165386	4808.443	0.97776	0.16532	49.40756	9.4E-17	1.653533	6.1E-17	4808.443
2	0.1	31.32	0.97776	4808.443	0.16532	4787.995	0.975787	0.165251	51.76748	-1.6E-16	1.652857	-1.0E-16	4787.995
2.083	0.1	29.88	0.975787	4787.995	0.165251	4768.508	0.973908	0.165185	49.36718	6.9E-18	1.652182	4.5E-18	4768.508
2.166	0.1	29.88	0.973908	4768.508	0.165185	4749.041	0.97203	0.165119	49.3475	-1.0E-16	1.651523	-6.8E-17	4749.041
2.249	0.1	29.88	0.97203	4749.041	0.165119	4729.593	0.970154	0.165054	49.32784	-6.2E-17	1.650865	-4.1E-17	4729.593
2.332	0.1	29.88	0.970154	4729.593	0.165054	4710.165	0.96828	0.164988	49.3082	0	1.650207	0	4710.165
2.415	0.1	29.88	0.96828	4710.165	0.164988	4690.756	0.966407	0.164922	49.28857	-1.9E-16	1.649551	-1.3E-16	4690.756
		6041.672				6041.672	2.020836	0.197095	0	0	0	0	

TABLE 12j

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
0.7	1029
1	5000
2	5000
3	8000
4	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0.12966
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 90 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
1.26	0.806	1.06	1	1.076494

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					
0.083	0.538247	80.41407	0	0	0	61.06045	0.022158	0.129542	19.35362	1.7E-18	0.240675	1.3E-18	61.06045
0.167	1.076494	244.1487	0.022158	61.06045	0.129542	265.5887	0.096377	0.132498	39.62046	6.9E-18	0.16228	5.8E-18	265.5887
0.25	1.076494	321.6563	0.096377	265.5887	0.132498	547.0471	0.198514	0.136565	40.19795	0	0.124972	0	547.0471
0.333	1.076494	321.6563	0.198514	547.0471	0.136565	827.2928	0.30021	0.140614	41.41057	2.1E-17	0.128742	1.8E-17	827.2928
0.417	1.076494	325.5317	0.30021	827.2928	0.140614	1109.686	0.402685	0.144695	43.13876	1.7E-17	0.132518	1.5E-17	1109.686
0.5	1.076494	321.6563	0.402685	1109.686	0.144695	1387.51	0.503503	0.148693	43.83213	-5.9E-17	0.13627	-5.1E-17	1387.51
0.5833	1.076494	322.8189	0.503503	1387.51	0.148693	1665.209	0.604275	0.152226	45.11975	-4.9E-17	0.139768	-4.2E-17	1665.209
0.6667	1.076494	323.2064	0.604275	1665.209	0.152226	1942.201	0.701273	0.155627	46.21482	-4.5E-17	0.142989	-3.9E-17	1942.201
0.75	1.076494	322.8189	0.701273	1942.201	0.155627	2218.21	0.797098	0.15656	46.38929	2.4E-17	0.145002	2.1E-17	2219.21
0.833	1.076494	321.6563	0.797098	2218.21	0.15656	2492.948	0.7544	0.157409	46.91098	-2.4E-17	0.145867	-2.1E-17	2492.948
0.9167	1.076494	324.3391	0.7544	2492.948	0.157409	2769.701	0.781099	0.158425	47.59569	-3.0E-17	0.146788	-2.6E-17	2769.701
1	1.076494	322.8189	0.781099	2769.701	0.158425	3044.892	0.807842	0.159356	47.64021	-1.1E-16	0.1476	-9.9E-17	3044.892
1.083	1.076494	321.6563	0.807842	3044.892	0.159356	3318.794	0.834064	0.160282	47.75395	-3.7E-17	0.148463	-3.2E-17	3318.794
1.166	1.076494	321.6563	0.834064	3318.794	0.160282	3592.42	0.860458	0.161208	48.0006	-2.6E-17	0.149228	-2.3E-17	3592.42
1.249	1.076494	321.6563	0.860458	3592.42	0.161208	3865.769	0.886827	0.162132	48.20697	-1.2E-16	0.150162	-1.1E-16	3865.769
1.332	1.076494	321.6563	0.886827	3865.769	0.162132	4138.842	0.912968	0.163056	48.58006	-1.0E-17	0.15104	-8.9E-18	4138.842
1.415	1.076494	321.6563	0.912968	4138.842	0.163056	4411.64	0.939403	0.163978	48.85607	-8.3E-17	0.151898	-7.1E-17	4411.64
1.498	1.076494	321.6563	0.939403	4411.64	0.163978	4684.162	0.965771	0.1649	49.1344	1.2E-16	0.152754	1.0E-16	4684.162
1.501	0.538247	241.2422	0.965771	4684.162	0.1649	4876.035	0.98428	0.165549	49.28905	-2.7E-16	0.204645	-2.2E-16	4876.035
1.664	0.1	95.35407	0.98428	4876.035	0.165549	4921.9	0.988704	0.165704	49.48917	-2.5E-16	0.519004	-1.2E-16	4921.9
1.747	0.1	29.88	0.988704	4921.9	0.165704	4902.277	0.986811	0.165638	49.50243	-7.3E-17	1.656708	-4.8E-17	4902.277
1.83	0.1	29.88	0.986811	4902.277	0.165638	4882.675	0.98492	0.165571	49.48261	-2.9E-16	1.656045	-1.9E-16	4882.675
1.913	0.1	29.88	0.98492	4882.675	0.165571	4863.092	0.983031	0.165505	49.46281	0	1.655382	0	4863.092
2	0.1	31.32	0.983031	4863.092	0.165505	4842.586	0.981053	0.165436	51.82533	-2.4E-16	1.654704	-1.5E-16	4842.586
2.083	0.1	29.88	0.981053	4842.586	0.165436	4823.044	0.979168	0.16537	49.42232	9.0E-17	1.654027	5.2E-17	4823.044
2.166	0.1	29.88	0.979168	4823.044	0.16537	4803.522	0.977285	0.165304	49.40258	-2.6E-16	1.653366	-1.7E-16	4803.522
2.249	0.1	29.88	0.977285	4803.522	0.165304	4784.019	0.975404	0.165238	49.38287	-2.5E-16	1.652706	-1.6E-16	4784.019
2.332	0.1	29.88	0.975404	4784.019	0.165238	4764.536	0.973524	0.165172	49.36317	-2.8E-16	1.652047	-1.9E-16	4764.536
2.415	0.1	29.88	0.973524	4764.536	0.165172	4745.072	0.971647	0.165106	49.34349	-2.4E-16	1.651389	-1.5E-16	4745.072
2.498	0.1	29.88	0.971647	4745.072	0.165106	4725.628	0.969771	0.16504	49.32383	-1.0E-17	1.650731	-6.8E-18	4725.628
2.581	0.1	29.88	0.969771	4725.628	0.16504	4706.204	0.967897	0.164974	49.30419	-2.1E-16	1.650073	-1.4E-16	4706.204
2.664	0.1	29.88	0.967897	4706.204	0.164974	4686.799	0.966026	0.164909	49.28457	-5.9E-17	1.649417	-3.8E-17	4686.799
2.747	0.1	29.88	0.966026	4686.799	0.164909	4667.414	0.964156	0.164843	49.26497	-1.4E-17	1.648761	-9.0E-18	4667.414
2.83	0.1	29.88	0.964156	4667.414	0.164843	4648.049	0.962288	0.164778	49.24539	5.6E-17	1.648106	3.6E-17	4648.049
2.913	0.1	29.88	0.962288	4648.049	0.164778	4628.703	0.960422	0.164712	49.22583	-2.8E-17	1.647451	-1.8E-17	4628.703
2.996	0.1	29.88	0.960422	4628.703	0.164712	4609.377	0.958557	0.164647	49.20629	-2.9E-16	1.646797	-1.9E-16	4609.377
3.079	0.1	29.88	0.958557	4609.377	0.164647	4590.07	0.956695	0.164582	49.18677	-2.5E-16	1.646144	-1.6E-16	4590.07
3.162	0.1	29.88	0.956695	4590.07	0.164582	4570.783	0.954834	0.164516	49.16727	-2.2E-16	1.645491	-1.4E-16	4570.783
3.245	0.1	29.88	0.954834	4570.783	0.164516	4551.515	0.952976	0.164451	49.14779	-8.3E-17	1.644839	-5.4E-17	4551.515
3.328	0.1	29.88	0.952976	4551.515	0.164451	4532.267	0.951119	0.164386	49.12833	-3.2E-16	1.644188	-2.0E-16	4532.267
3.411	0.1	29.88	0.951119	4532.267	0.164386	4513.038	0.949264	0.164321	49.10889	-2.6E-16	1.643537	-1.7E-16	4513.038
3.494	0.1	29.88	0.949264	4513.038	0.164321	4493.828	0.947411	0.164256	49.08947	-5.9E-17	1.642887	-3.8E-17	4493.828
3.577	0.1	29.88	0.947411	4493.828	0.164256	4474.638	0.94556	0.164191	49.07007	5.6E-17	1.642238	3.6E-17	4474.638

TABLE 12k

RETENTION BASIN RATING:

BASIN RATING (ONLY 5 POINTS

DEPTH	VOLUME
0	0
0.7	1909
1	5039
2	6000
3	8000
4	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0.12866
0.5	0.14857
1	0.1661
1.5	0.18195
2	0.19653
2.5	0.2101

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 1
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 120 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Wp
1.26	0.806	0.78	1	0.792137

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					
0.083	0.396068	59.17262	0	0	0	39.86475	0.014466	0.129236	19.30787	-1.7E-18	0.326297	-1.2E-18	39.86475
0.167	0.792137	179.6566	0.014466	39.86475	0.129236	180.1339	0.065367	0.131263	29.38745	0	0.219237	0	180.1339
0.25	0.792137	236.6905	0.065367	180.1339	0.131263	377.1777	0.136871	0.13411	29.64675	1.0E-17	0.167505	8.7E-18	377.1777
0.333	0.792137	236.6905	0.136871	377.1777	0.13411	573.3725	0.209067	0.136945	29.69568	2.1E-17	0.171091	1.7E-17	573.3725
0.417	0.792137	239.5422	0.209067	573.3725	0.136945	771.0705	0.279808	0.139802	31.84417	-2.4E-17	0.174684	-2.0E-17	771.0705
0.5	0.792137	236.6905	0.279808	771.0705	0.139802	965.5682	0.350388	0.142612	32.19271	3.5E-18	0.178261	2.9E-18	965.5682
0.5833	0.792137	237.546	0.350388	965.5682	0.142612	1159.926	0.420917	0.145421	32.19772	2.1E-17	0.181808	1.7E-17	1159.926
0.6667	0.792137	237.8212	0.420917	1159.926	0.145421	1353.676	0.491225	0.148221	32.08146	-1.7E-17	0.185348	-1.4E-17	1353.676
0.75	0.792137	237.546	0.491225	1353.676	0.148221	1546.4	0.561161	0.150713	28.0223	-4.2E-17	0.188639	-3.5E-17	1546.4
0.833	0.792137	236.6905	0.561161	1546.4	0.150714	1737.693	0.630578	0.153148	28.39704	-6.2E-17	0.191799	-5.0E-17	1737.693
0.9167	0.792137	238.6067	0.630578	1737.693	0.153148	1929.366	0.700084	0.155585	28.51271	3.5E-17	0.194974	2.9E-17	1929.366
1	0.792137	237.546	0.700084	1929.366	0.155585	2120.659	0.769488	0.15823	28.75556	-1.1E-16	0.198019	-9.2E-17	2120.659
1.083	0.792137	236.6905	0.769488	2120.659	0.15823	2310.572	0.838809	0.160872	28.77754	-1.4E-16	0.201032	-1.1E-16	2310.572
1.166	0.792137	236.6905	0.838809	2310.572	0.160872	2500.293	0.908109	0.163514	28.78336	-6.9E-18	0.204042	-5.6E-18	2500.293
1.249	0.792137	236.6905	0.908109	2500.293	0.163514	2689.822	0.977391	0.166155	28.78338	-7.6E-17	0.207052	-6.1E-17	2689.822
1.332	0.792137	236.6905	0.977391	2689.822	0.166155	2879.16	1.046655	0.168795	28.78338	-1.2E-16	0.21006	-9.8E-17	2879.16
1.415	0.792137	236.6905	0.791655	2879.16	0.168795	3068.307	0.809901	0.171435	28.78338	-3.8E-17	0.213068	-3.0E-17	3068.307
1.498	0.792137	236.6905	0.809901	3068.307	0.171435	3257.263	0.828128	0.174074	28.78338	-6.9E-17	0.216076	-5.5E-17	3257.263
1.581	0.792137	236.6905	0.828128	3257.263	0.174074	3446.028	0.846337	0.176713	28.78338	-1.3E-16	0.219082	-1.1E-16	3446.028
1.664	0.792137	236.6905	0.846337	3446.028	0.176713	3634.602	0.864528	0.17935	28.78338	-1.2E-16	0.222087	-9.7E-17	3634.602
1.747	0.792137	236.6905	0.864528	3634.602	0.17935	3822.986	0.8827	0.181987	28.78338	-3.5E-18	0.225092	-2.8E-18	3822.986
1.83	0.792137	236.6905	0.8827	3822.986	0.181987	4011.179	0.900853	0.184624	28.78338	-8.3E-17	0.228096	-6.6E-17	4011.179
1.913	0.792137	236.6905	0.900853	4011.179	0.184624	4199.183	0.918989	0.18726	28.78338	-2.0E-16	0.231099	-2.2E-16	4199.183
2	0.792137	248.0972	0.918989	4199.183	0.18726	4396.043	0.937978	0.189926	51.23721	1.5E-16	0.206521	1.2E-16	4396.043
2.083	0.396068	177.5179	0.937978	4396.043	0.189926	4524.515	0.950371	0.18436	49.04586	-6.8E-17	0.176257	-4.8E-17	4524.515
2.166	0.1	74.11262	0.950371	4524.515	0.16436	4549.504	0.952782	0.164445	49.1234	-3.6E-16	0.662821	-1.2E-16	4549.504
2.249	0.1	29.88	0.952782	4549.504	0.164445	4530.258	0.950925	0.164379	49.1263	2.4E-17	1.64412	1.6E-17	4530.258
2.332	0.1	29.88	0.950925	4530.258	0.164379	4511.031	0.949071	0.164314	49.10686	-2.2E-16	1.643469	-1.4E-16	4511.031
2.415	0.1	29.88	0.949071	4511.031	0.164314	4491.824	0.947218	0.164249	49.08744	-2.6E-16	1.642919	-1.7E-16	4491.824
		5807.252				5807.252	1.79943	0.190681	0	0	0	0	

TABLE 12L

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.123661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
SCS TR 20: FOR Tc=0.2, Ia/P=.2 AND Tt=0, 24 HR STORM

AREA (SQ MI)	CN	S	P	Q	UNIT Qp	Qp	Ia/P
0.00132	91.8	0.893246	1	0.393455	400	0.207744	0.178649
						0	

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)
10.5	0.001			0			0	0					
11	0.005973	6.275385	0	0	0	5.400351	0.004628	0.000972	0.875034	-2.2E-19	0.139439	-1.9E-19	5.40035131
11.3	0.00805	7.572281	0.004628	5.400351	0.000972	11.34469	0.009721	0.002042	1.627946	0	0.214988	0	11.3446863
11.6	0.012205	10.93774	0.009721	11.34469	0.002042	19.30288	0.016541	0.003475	2.979545	1.1E-18	0.27241	7.9E-19	19.3028809
11.9	0.054273	35.89822	0.016541	19.30288	0.003475	48.59965	0.041645	0.00875	6.601458	-1.7E-18	0.183894	-1.4E-18	48.5996451
12	0.104651	28.6064	0.041645	48.59965	0.00875	73.25709	0.062774	0.013189	3.948955	-2.0E-18	0.138044	-1.7E-18	73.2570858
12.1	0.191904	53.37991	0.062774	73.25709	0.013189	120.3625	0.103138	0.02167	6.27454	-2.2E-18	0.117545	-1.9E-18	120.362455
12.2	0.207744	71.93667	0.103138	120.3625	0.02167	182.4849	0.156371	0.032854	9.814235	3.5E-18	0.136429	3.0E-18	182.484892
12.3	0.124906	59.87711	0.156371	182.4849	0.032854	229.0263	0.196252	0.041233	13.33566	-4.3E-18	0.222717	-3.4E-18	229.026349
12.4	0.06492	34.16875	0.196252	229.0263	0.041233	247.7446	0.212292	0.044603	15.4505	-3.5E-18	0.452182	-1.9E-18	247.744602
12.5	0.043107	19.44487	0.212292	247.7446	0.044603	251.026	0.215104	0.045194	16.16343	-3.5E-17	0.831244	-5.9E-18	251.02604
12.6	0.033239	13.74229	0.215104	251.026	0.045194	248.5779	0.213006	0.044753	16.19044	-2.6E-05	1.178145	-4.6E-06	248.577913
12.7	0.026487	10.75077	0.213006	248.5779	0.044753	243.3859	0.208557	0.043818	15.94284	-1.4E-05	1.482947	-6.9E-06	243.38585
12.8	0.022333	8.787586	0.208557	243.3859	0.043818	236.6182	0.202758	0.0426	15.55527	-1.1E-05	1.770139	-8.3E-06	236.618174
13	0.018178	14.58365	0.202758	236.6182	0.0426	221.5054	0.189808	0.039879	29.6924	0.004076	2.626575	0.000149	221.505569
13.2	0.015841	12.24653	0.189808	221.5054	0.039879	206.041	0.176556	0.037095	27.7106	0.000257	2.262778	0.000068	206.041099
13.4	0.014023	10.75077	0.176556	206.041	0.037095	191.0554	0.163715	0.034397	25.73704	-0.00065	2.393829	-0.00025	191.055148
13.6	0.012724	9.62895	0.163715	191.0554	0.034397	178.5326	0.152984	0.032142	23.95414	-1.80241	2.095476	-0.17009	178.360538
13.8	0.011426	8.694101	0.152984	178.5326	0.032142	183.0211	0.15683	0.03295	23.43341	-19.2278	0.839248	-2.09091	179.930218
14	0.010387	7.852736	0.15683	183.0211	0.03295	186.3634	0.159694	0.033552	23.94095	-19.4305	0.877497	-2.38028	183.983109
14.3	0.009089	10.51706	0.159694	186.3634	0.033552	164.2376	0.140735	0.029569	34.0853	-1.44246	2.850057	-1.22617	163.011439
14.6	0.008569	9.535465	0.140735	164.2376	0.029569	165.3861	0.141719	0.029776	32.04589	-23.6589	0.965402	-0.81854	164.567514
15	0.00779	11.7791	0.141719	165.3861	0.029776	166.0159	0.142259	0.029889	42.95836	-31.8091	0.985551	-0.45961	165.55625
15.5	0.007011	13.32161	0.142259	166.0159	0.029889	131.2729	0.112487	0.023634	48.1705	-0.10593	3.587441	-0.06223	131.210666
16	0.006232	11.91933	0.112487	131.2729	0.023634	133.0422	0.114004	0.023952	42.8277	-32.6777	0.960226	-1.29645	131.745781
16.5	0.005453	10.51706	0.114004	133.0422	0.023952	106.098	0.090915	0.019102	38.74855	-1.2873	3.282564	-0.36374	105.734297
17	0.005194	9.582208	0.090915	106.098	0.019102	106.4955	0.091256	0.019173	34.4471	-25.2623	0.988595	-0.28813	106.207329
17.5	0.004934	9.114783	0.091256	106.4955	0.019173	107.2296	0.091885	0.019305	34.63046	-26.2499	0.97924	-0.54496	106.684681
18	0.004674	8.647358	0.091885	107.2296	0.019305	108.6883	0.093135	0.019568	34.98576	-27.797	0.959977	-1.11253	107.575734
19	0.004155	15.89244	0.093135	108.6883	0.019568	68.71222	0.058879	0.012371	57.48936	-1.62088	3.282607	-0.45807	68.254149
20	0.003376	13.55532	0.058879	68.71222	0.012371	45.59445	0.03907	0.008209	37.04284	-0.36975	2.660155	-0.24409	45.3503578
22	0.003116	23.37124	0.03907	45.59445	0.008209	23.94738	0.02052	0.004311	45.0722	-0.05389	1.924096	-0.0498	23.8975752
26	0	22.43639	0.02052	23.94738	0.004311	6.682402	0.005726	0.001203	39.70421	-0.00284	1.76941	-0.00219	6.68021328
		595.3241											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 13

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
SCS TR 20: FOR Tc=0.2, Ia/P=.1 AND Tt=0, 24 HR STORM

AREA (SQ MI)	CN	S	P	Q	UNIT Qp	Qp	Ia/P
0.00132	91.8	0.893246	2.56	1.731765	800	1.828744	0.069785
						0	

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)
10.5	0			0			0	0					
11	0.052576	47.31874	0	0	0	40.72066	0.034893	0.007331	6.598079	8.7E-19	0.139439	7.5E-19	40.7206602
11.3	0.070864	66.6577	0.034893	40.72066	0.007331	94.25598	0.080768	0.01697	13.12238	-2.6E-18	0.196862	-2.1E-18	94.2559835
11.6	0.107439	96.28335	0.080768	94.25598	0.01697	165.3049	0.141649	0.029761	25.23441	-1.7E-18	0.262085	-1.3E-18	165.304917
11.9	0.477759	316.0069	0.141649	165.3049	0.029761	424.018	0.36334	0.076339	57.29376	-3.5E-18	0.181305	-2.8E-18	424.018043
12	0.92123	251.818	0.36334	424.018	0.076339	642.7543	0.550775	0.107449	33.08174	-2.1E-17	0.131372	-1.8E-17	642.754292
12.1	1.689302	469.8957	0.550775	642.7543	0.107449	1070.85	0.91761	0.124771	41.79947	2.4E-17	0.088955	2.2E-17	1070.85048
12.2	1.828744	633.2482	0.91761	1070.85	0.124771	1656.617	1.260158	0.139017	47.48179	1.4E-17	0.074981	1.3E-17	1656.61685
12.3	1.099532	527.0896	1.260158	1656.617	0.139017	2131.862	1.512679	0.14901	51.84481	-9.0E-17	0.098361	-8.1E-17	2131.86164
12.4	0.571482	300.7826	1.512679	2131.862	0.14901	2378.175	1.643557	0.1536	54.46964	-1.0E-17	0.101093	-8.5E-18	2378.1746
12.5	0.379464	171.1794	1.643557	2378.175	0.1536	2493.662	1.704921	0.155752	55.68324	-5.6E-17	0.325309	-3.7E-17	2493.66176
12.6	0.292599	120.9714	1.704921	2493.662	0.155752	2553.346	1.739291	0.156957	56.28759	-1.5E-16	0.465297	-8.0E-17	2553.34556
12.7	0.233165	94.63748	1.739291	2553.346	0.156957	2596.351	1.759485	0.157665	56.63204	-2.2E-16	0.59841	-8.9E-17	2596.35099
12.8	0.19659	77.35585	1.759485	2596.351	0.157665	2616.878	1.770392	0.158048	56.82033	-2.0E-16	0.734636	-5.4E-17	2616.87846
13	0.160015	128.3778	1.770392	2616.878	0.158048	2631.365	1.77809	0.158318	113.8917	-7.8E-16	0.88716	-8.8E-17	2631.3646
13.2	0.139442	107.8044	1.77809	2631.365	0.158318	2625.221	1.774825	0.158203	113.9476	-1.9E-15	1.056985	-1.1E-16	2625.22141
13.4	0.12344	94.63748	1.774825	2625.221	0.158203	2606.081	1.764655	0.157847	113.778	-3.9E-16	1.202251	-7.9E-17	2606.08088
13.6	0.112011	84.76226	1.764655	2606.081	0.157847	2577.386	1.749408	0.157312	113.4571	-2.8E-16	1.338523	-9.6E-17	2577.28605
13.8	0.100581	76.53292	1.749408	2577.386	0.157312	2540.899	1.730021	0.156632	113.0198	-6.9E-17	1.476748	-3.3E-17	2540.89915
14	0.091437	69.12651	1.730021	2540.899	0.156632	2497.541	1.706983	0.155824	112.4842	-4.9E-17	1.627222	-3.0E-17	2497.54149
14.3	0.080008	92.58014	1.706983	2497.541	0.155824	2422.586	1.667155	0.154427	167.5357	8.3E-17	1.809628	6.7E-17	2422.58598
14.6	0.075436	83.93933	1.667155	2422.586	0.154427	2340.569	1.623576	0.152899	165.956	-5.6E-17	1.977095	-5.4E-17	2340.56926
15	0.068578	103.6898	1.623576	2340.569	0.152899	2225.627	1.562501	0.150757	218.6321	-8.6E-16	2.108521	-9.3E-17	2225.62695
15.5	0.06172	117.2682	1.562501	2225.627	0.150757	2074.15	1.482014	0.147849	268.7451	-2.8E-16	2.291714	-8.1E-17	2074.15001
16	0.054852	104.9242	1.482014	2074.15	0.147849	1915.958	1.397958	0.144503	263.1165	-2.8E-17	2.507682	-1.4E-17	1915.9577
16.5	0.048005	92.58014	1.397958	1915.958	0.144503	1751.562	1.310607	0.141026	256.9755	-5.6E-17	2.775708	-4.3E-17	1751.56237
17	0.045719	84.3508	1.310607	1751.562	0.141026	1585.234	1.222228	0.137507	250.6796	1.4E-17	2.97187	1.3E-17	1585.23358
17.5	0.043433	80.23612	1.222228	1585.234	0.137507	1421.081	1.135006	0.134035	244.3883	-4.1E-15	3.045864	-1.9E-16	1421.08139
18	0.041147	76.12145	1.135006	1421.081	0.134035	1259.024	1.048897	0.130607	238.1784	-2.2E-15	3.128926	-2.8E-16	1259.02446
19	0.036575	139.8989	1.048897	1259.024	0.130607	948.1776	0.812492	0.119807	450.7457	-1.5E-15	3.22194	-3.3E-16	948.177607
20	0.029717	119.3255	0.812492	948.1776	0.119807	657.3779	0.563306	0.10804	410.1252	-6.9E-16	3.437029	-3.0E-16	657.377889
22	0.027431	205.7336	0.563306	657.3779	0.10804	287.6991	0.246529	0.051796	575.4124	-2.2E-16	2.79688	-1.8E-16	287.699149
26	0	197.5043	0.246529	287.6991	0.051796	48.89254	0.041896	0.008802	436.3109	1.1E-16	2.209121	2.3E-17	48.8925425
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 14

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 5 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.668	1.95	1	1.094184

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					
0.083	0.547092	81.73554	0	0	0	79.59465	0.068205	0.01433	2.140892	-2.8E-18	0.026193	-2.7E-18	79.5946532
0.167	0.547092	165.4406	0.068205	79.59465	0.01433	236.4325	0.202599	0.042566	8.602733	1.9E-17	0.051999	1.8E-17	236.432541
0.25	0.001	81.88494	0.202599	236.4325	0.042566	303.787	0.260314	0.054693	14.53052	-2.4E-17	0.17745	-2.0E-17	303.78697
0.333	0.001	0.2988	0.260314	303.787	0.054693	288.1638	0.246927	0.05188	15.92195	-2.1E-17	53.28633	-6.0E-18	288.163815
0.417	0.001	0.3024	0.246927	288.1638	0.05188	273.1854	0.234092	0.049183	15.28077	-2.2E-17	50.53163	-1.2E-17	273.185449
0.5	0.001	0.2988	0.234092	273.1854	0.049183	259.1654	0.222078	0.046659	14.31887	7.8E-18	47.92125	7.2E-18	259.16538
0.5833	0.001	0.29988	0.222078	259.1654	0.046659	245.833	0.210654	0.044259	13.63225	-8.7E-19	45.45903	-4.0E-19	245.833006
0.6667	0.001	0.30024	0.210654	245.833	0.044259	233.1868	0.199817	0.041982	12.94649	-5.2E-17	43.12048	-6.3E-18	233.186752
0.75	0.001	0.29988	0.199817	233.1868	0.041982	221.2201	0.189563	0.039828	12.26655	1.7E-18	40.90487	1.6E-18	221.220079
0.833	0.001	0.2988	0.189563	221.2201	0.039828	209.9223	0.179882	0.037794	11.59662	3.5E-18	38.81064	2.8E-18	209.922258
0.9167	0.001	0.30132	0.179882	209.9223	0.037794	199.1284	0.170633	0.03585	11.0952	8.7E-19	36.82199	7.1E-19	199.128376
1	0.001	0.29988	0.170633	199.1284	0.03585	188.9522	0.161913	0.034018	10.4761	-7.8E-18	34.9343	-7.3E-18	188.952158
		331.7611											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 15a

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 10 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.668	1.52	1	0.852902

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	0.001			0			0	0					
0.083	0.426451	63.86121	0	0	0	62.1885	0.053289	0.011196	1.672711	1.4E-18	0.026193	1.4E-18	62.1884985
0.167	0.852902	193.4383	0.053289	62.1885	0.011196	247.2046	0.211829	0.044506	8.422143	3.5E-18	0.043539	3.3E-18	247.20462
0.25	0.426451	191.1354	0.211829	247.2046	0.044506	420.3836	0.360226	0.075684	17.95641	-1.4E-17	0.093946	-1.3E-17	420.383639
0.333	0.001	63.86121	0.360226	420.3836	0.075684	460.55	0.394644	0.082916	23.69485	-1.4E-17	0.371037	-8.7E-18	460.549998
0.417	0.001	0.3024	0.394644	460.55	0.082916	436.4351	0.37398	0.078574	24.41728	3.5E-18	80.74496	2.6E-18	436.435122
0.5	0.001	0.2988	0.37398	436.4351	0.078574	413.8631	0.354638	0.07451	22.87084	-2.4E-17	76.54229	-1.3E-17	413.863086
0.5833	0.001	0.29988	0.354638	413.8631	0.07451	392.3982	0.336245	0.070646	21.76474	-3.5E-18	72.57817	-2.0E-18	392.398224
0.6667	0.001	0.30024	0.336245	392.3982	0.070646	372.038	0.318799	0.06698	20.66046	-5.2E-18	68.81315	-4.2E-18	372.038004
0.75	0.001	0.29988	0.318799	372.038	0.06698	352.7719	0.30229	0.063512	19.56599	-5.4E-17	65.24606	-1.3E-17	352.771695
0.833	0.001	0.2988	0.30229	352.7719	0.063512	334.5826	0.286703	0.060237	18.48807	-6.9E-18	61.8744	-6.1E-18	334.582625
0.9167	0.001	0.30132	0.286703	334.5826	0.060237	317.2047	0.271812	0.057108	17.67926	-1.7E-17	58.6727	-1.2E-17	317.204686
1	0.001	0.29988	0.271812	317.2047	0.057108	300.8212	0.257773	0.054159	16.68339	3.5E-18	55.63356	2.2E-18	300.821175
		514.6973											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 15b

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 15 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.668	1.28	1	0.718234

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					
0.083	0.359117	53.65205	0	0	0	52.24675	0.04477	0.009406	1.405303	-3.3E-19	0.026193	-3.2E-19	52.2467467
0.167	0.718234	162.8954	0.04477	52.24675	0.009406	208.0563	0.178283	0.037458	7.085838	-3.9E-18	0.043499	-3.7E-18	208.056289
0.25	0.718234	214.6082	0.178283	208.0563	0.037458	406.1441	0.348024	0.073121	16.52041	1.2E-17	0.076979	1.1E-17	406.144078
0.333	0.359117	160.9561	0.348024	406.1441	0.073121	541.6081	0.464103	0.097509	25.4921	-2.8E-17	0.158379	-2.3E-17	541.608129
0.417	0.001	54.44966	0.464103	541.6081	0.097509	565.9095	0.484927	0.101884	30.14829	-5.2E-17	0.553691	-2.3E-17	565.909504
0.5	0.001	0.2988	0.484927	565.9095	0.101884	536.5548	0.459773	0.096599	29.65346	-6.1E-17	99.24183	-1.5E-17	536.554846
0.5833	0.001	0.29988	0.459773	536.5548	0.096599	508.6401	0.435853	0.091574	28.21467	-1.5E-16	94.08653	-1.3E-17	508.640056
0.6667	0.001	0.30024	0.435853	508.6401	0.091574	482.1618	0.413164	0.086807	26.77846	-4.9E-17	89.19018	-9.2E-18	482.161838
0.75	0.001	0.29988	0.413164	482.1618	0.086807	457.1065	0.391694	0.082296	25.35522	-1.7E-17	84.55122	-9.6E-18	457.106499
0.833	0.001	0.2988	0.391694	457.1065	0.082296	433.4516	0.371424	0.078037	23.95372	-6.8E-17	80.16641	-1.1E-17	433.451576
0.9167	0.001	0.30132	0.371424	433.4516	0.078037	410.8518	0.352058	0.073968	22.90112	-5.8E-06	76.00118	-6.8E-09	410.851785
1	0.001	0.29988	0.352058	410.8518	0.073968	389.5452	0.333801	0.070132	21.60644	-1.3E-07	72.05024	-6.4E-09	389.545228
		648.6602											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 15c

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.129661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 20 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.668	1.11	1	0.622843

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					
0.083	0.311422	46.52639	0	0	0	45.30773	0.038824	0.008157	1.218661	-1.1E-19	0.026193	-1.1E-19	45.3077257
0.167	0.622843	141.2608	0.038824	45.30773	0.008157	180.4238	0.154605	0.032483	6.14475	-5.6E-18	0.043499	-5.4E-18	180.423813
0.25	0.622843	186.1055	0.154605	180.4238	0.032483	352.2031	0.301802	0.063409	14.32629	-6.9E-18	0.076979	-6.4E-18	352.203068
0.333	0.622843	186.1055	0.301802	352.2031	0.063409	514.9835	0.441288	0.092716	23.32509	-2.6E-17	0.125333	-2.3E-17	514.983525
0.417	0.311422	141.2608	0.441288	514.9835	0.092716	626.0815	0.536488	0.106774	30.16287	-1.9E-17	0.213526	-1.5E-17	626.08149
0.5	0.001	46.67579	0.536488	626.0815	0.106774	640.7644	0.54907	0.107368	31.99287	-4.5E-17	0.685428	-1.4E-17	640.764402
0.5833	0.001	0.29988	0.54907	640.7644	0.107368	609.059	0.521901	0.106085	32.00524	-1.7E-17	106.7268	-1.3E-17	609.059044
0.6667	0.001	0.30024	0.521901	609.059	0.106085	577.8171	0.49513	0.104028	31.54223	-4.4E-16	105.0567	-2.5E-17	577.817053
0.75	0.001	0.29988	0.49513	577.8171	0.104028	547.7331	0.469351	0.098612	30.38383	-7.5E-17	101.32	-2.4E-17	547.733101
0.833	0.001	0.2988	0.469351	547.7331	0.098612	519.3306	0.445013	0.093498	28.70127	-4.8E-16	96.05513	-2.6E-17	519.33063
0.9167	0.001	0.30132	0.445013	519.3306	0.093498	492.195	0.421761	0.088613	27.4369	-2.2E-16	91.05569	-1.2E-17	492.195049
1	0.001	0.29988	0.421761	492.195	0.088613	466.6123	0.399839	0.084007	25.88267	-3.1E-17	86.31008	-9.7E-18	466.612261
		749.7349											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 15d

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 30 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.668	0.88	1	0.493786

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					
0.083	0.246893	36.88578	0	0	0	35.91964	0.030779	0.006467	0.966146	7.0E-19	0.026193	6.9E-19	35.9196384
0.167	0.493786	111.9906	0.030779	35.91964	0.006467	143.0387	0.12257	0.025752	4.871514	3.0E-18	0.043499	2.9E-18	143.038699
0.25	0.493786	147.5431	0.12257	143.0387	0.025752	279.2241	0.239267	0.05027	11.35778	-9.5E-18	0.076979	-8.8E-18	279.224054
0.333	0.493786	147.5431	0.239267	279.2241	0.05027	408.2752	0.34985	0.073504	18.49196	5.2E-18	0.125333	4.6E-18	408.275227
0.417	0.493786	149.3208	0.34985	408.2752	0.073504	532.0003	0.45587	0.095779	25.59571	-2.1E-17	0.171414	-1.7E-17	532.000287
0.5	0.493786	147.5431	0.45587	532.0003	0.095779	649.1425	0.556249	0.107707	30.4009	-1.9E-17	0.206048	-1.5E-17	649.142521
0.5833	0.246893	111.0573	0.556249	649.1425	0.107707	727.4257	0.62333	0.110875	32.77419	-1.7E-17	0.295111	-1.2E-17	727.425654
0.6667	0.001	37.21367	0.62333	727.4257	0.110875	731.3266	0.626672	0.111033	33.31273	-2.3E-16	0.895175	-2.4E-17	731.326587
0.75	0.001	0.29988	0.626672	731.3266	0.111033	698.529	0.598568	0.109706	33.09748	-2.8E-17	110.3691	-1.0E-17	698.528991
0.833	0.001	0.2988	0.598568	698.529	0.109706	666.2429	0.570902	0.108399	32.58484	-4.9E-16	109.0524	-2.5E-17	666.242947
0.9167	0.001	0.30132	0.570902	666.2429	0.108399	634.0775	0.54334	0.107098	32.46676	-6.9E-18	107.7484	-5.2E-18	634.077511
1	0.001	0.29988	0.54334	634.0775	0.107098	602.4528	0.516241	0.105818	31.92459	-4.3E-17	106.4579	-2.0E-17	602.452801
		890.2974				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 15e

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 40 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.668	0.76	1	0.426451

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						
0.083	0.213226	31.8559	0	0	0	31.02151	0.026582	0.005585	0.834399	2.7E-19	0.026193	2.6E-19	31.0215059
0.167	0.426451	96.71913	0.026582	31.02151	0.005585	123.5334	0.105856	0.022241	4.207216	-3.0E-18	0.043499	-2.9E-18	123.533422
0.25	0.426451	127.4236	0.105856	123.5334	0.022241	241.148	0.206639	0.043415	9.808994	6.1E-18	0.076979	5.6E-18	241.148046
0.333	0.426451	127.4236	0.206639	241.148	0.043415	352.6013	0.302143	0.063481	15.97033	-1.1E-17	0.125333	-9.9E-18	352.601333
0.417	0.426451	128.9588	0.302143	352.6013	0.063481	459.4548	0.393706	0.082719	22.10538	-1.4E-17	0.171414	-1.1E-17	459.454794
0.5	0.426451	127.4236	0.393706	459.4548	0.082719	559.4719	0.47941	0.100725	27.40651	1.7E-17	0.215082	1.4E-17	559.471903
0.5833	0.426451	127.8842	0.47941	559.4719	0.100725	656.0617	0.562178	0.107987	31.29435	-2.9E-17	0.244709	-2.2E-17	656.061738
0.6667	0.426451	128.0377	0.562178	656.0617	0.107987	751.1001	0.643616	0.111833	32.99936	-3.1E-17	0.257732	-2.3E-17	751.100083
0.75	0.213226	95.91314	0.643616	751.1001	0.111833	813.1007	0.696744	0.114341	33.91254	-1.0E-17	0.353576	-6.7E-18	813.100686
0.833	0.001	32.0053	0.696744	813.1007	0.114341	810.9538	0.694905	0.114254	34.15222	-3.8E-16	1.06708	-2.6E-17	810.953768
0.9167	0.001	0.30132	0.694905	810.9538	0.114254	777.0347	0.665839	0.112882	34.22039	-1.0E-17	113.5683	-5.9E-18	777.034696
1	0.001	0.29988	0.665839	777.0347	0.112882	743.6858	0.637263	0.111533	33.64875	-9.7E-17	112.2074	-2.0E-17	743.68583
		1024.246											

TABLE 15f

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8060
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

ERR ERR ERR ERR ERR ERR ERR ERR

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 50 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.04	0.668	0.66	1	0.370339

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						
0.083	0.18517	27.66434	0	0	0	26.93973	0.023085	0.00485	0.724609	-4.9E-19	0.026193	-4.8E-19	26.9397288
0.167	0.370339	83.99293	0.023085	26.93973	0.00485	107.279	0.091927	0.019314	3.653635	-3.5E-18	0.043499	-3.3E-18	107.279024
0.25	0.370339	110.6574	0.091927	107.279	0.019314	209.418	0.17945	0.037703	8.518337	-4.3E-18	0.076979	-4.0E-18	209.41804
0.333	0.370339	110.6574	0.17945	209.418	0.037703	306.2064	0.262388	0.055128	13.86897	2.6E-18	0.125333	2.3E-18	306.20642
0.417	0.370339	111.9906	0.262388	306.2064	0.055128	399.0002	0.341902	0.071835	19.19678	-1.6E-17	0.171414	-1.3E-17	399.000216
0.5	0.370339	110.6574	0.341902	399.0002	0.071835	485.8572	0.41633	0.087472	23.80039	-1.7E-17	0.215082	-1.4E-17	485.857179
0.5833	0.370339	111.0573	0.41633	485.8572	0.087472	568.4537	0.487107	0.102342	28.46075	-8.7E-18	0.256271	-6.5E-18	568.453745
0.6667	0.370339	111.1906	0.487107	568.4537	0.102342	648.118	0.555371	0.107666	31.52642	0	0.283535	0	648.117966
0.75	0.370339	111.0573	0.555371	648.118	0.107666	726.4135	0.622462	0.110834	32.76183	-6.9E-18	0.294999	-4.9E-18	726.413455
0.833	0.370339	110.6574	0.622462	726.4135	0.110834	803.4877	0.688507	0.113952	33.58306	-1.0E-17	0.303487	-7.2E-18	803.487748
0.9167	0.18517	83.69296	0.688507	803.4877	0.113952	852.5455	0.730545	0.115937	34.6352	-3.8E-17	0.413836	-2.2E-17	852.545508
1	0.001	27.91427	0.730545	852.5455	0.115937	845.7338	0.724708	0.115662	34.72598	-7.3E-17	1.244022	-1.8E-17	845.733798
1.083	0.001	0.2988	0.724708	845.7338	0.115662	811.6787	0.695526	0.114284	34.35387	-3.5E-18	114.9728	-3.4E-18	811.678725
1.166	0.001	0.2988	0.695526	811.6787	0.114284	778.0329	0.666695	0.112922	33.94462	-4.5E-17	113.6031	-2.7E-17	778.032908
1.249	0.001	0.2988	0.666695	778.0329	0.112922	744.7914	0.63821	0.111577	33.54028	-1.1E-16	112.2499	-2.7E-17	744.791428
1.332	0.001	0.2988	0.63821	744.7914	0.111577	711.9494	0.610068	0.110249	33.1408	6.9E-18	110.913	6.3E-18	711.949427
1.415	0.001	0.2988	0.610068	711.9494	0.110249	679.5021	0.582264	0.108936	32.74612	6.9E-18	109.5921	4.1E-18	679.502104
1.498	0.001	0.2988	0.582264	679.5021	0.108936	647.4447	0.554794	0.107639	32.35619	-9.0E-17	108.2871	-2.6E-17	647.444715
1.581	0.001	0.2988	0.554794	647.4447	0.107639	615.7726	0.527654	0.106357	31.97094	-6.9E-18	106.9978	-6.9E-18	615.772576
1.664	0.001	0.2988	0.527654	615.7726	0.106357	584.4811	0.500841	0.105091	31.59032	-6.9E-18	105.724	-5.0E-18	584.481055
1.747	0.001	0.2988	0.500841	584.4811	0.105091	554.1734	0.47487	0.099771	30.60642	-5.4E-17	102.4311	-2.3E-17	554.173433
1.83	0.001	0.2988	0.47487	554.1734	0.099771	525.4336	0.450243	0.094597	29.03865	-1.5E-16	97.18425	-2.7E-17	525.43358
1.913	0.001	0.2988	0.450243	525.4336	0.094597	498.1993	0.426906	0.089694	27.53309	-7.6E-17	92.14556	-1.1E-17	498.199287
1.996	0.001	0.2988	0.426906	498.1993	0.089694	472.3917	0.404792	0.085048	26.1064	-3.1E-17	87.37082	-1.2E-17	472.391684
2.079	0.001	0.2988	0.404792	472.3917	0.085048	447.936	0.383836	0.080645	24.75445	6.9E-18	82.84622	5.9E-18	447.936034
2.162	0.001	0.2988	0.383836	447.936	0.080645	424.7615	0.363977	0.076473	23.47332	-2.3E-17	78.55864	-1.3E-17	424.761513
2.245	0.001	0.2988	0.363977	424.7615	0.076473	402.801	0.345159	0.072519	22.2593	-8.7E-18	74.49567	-4.3E-18	402.801008
2.328	0.001	0.2988	0.345159	402.801	0.072519	381.9909	0.327327	0.068772	21.10889	-1.7E-18	70.64553	-1.1E-18	381.990923
2.411	0.001	0.2988	0.327327	381.9909	0.068772	362.271	0.310429	0.065222	20.01873	6.9E-18	66.9971	6.9E-18	362.27099
2.494	0.001	0.2988	0.310429	362.271	0.065222	343.5841	0.294417	0.061858	18.98569	-1.2E-17	63.53978	-6.6E-18	343.584103
2.577	0.001	0.2988	0.294417	343.5841	0.061858	325.8761	0.279243	0.05867	18.00676	-3.3E-17	60.26359	-8.7E-18	325.876143
2.66	0.001	0.2988	0.279243	325.8761	0.05867	309.0958	0.264864	0.055648	17.07911	-6.2E-17	57.15902	-9.9E-18	309.095829
2.743	0.001	0.2988	0.264864	309.0958	0.055648	293.1946	0.251238	0.052786	16.20006	-5.7E-17	54.21708	-1.2E-17	293.194565
2.826	0.001	0.2988	0.251238	293.1946	0.052786	278.1263	0.238326	0.050073	15.36706	-2.6E-17	51.42926	-1.1E-17	278.126302
2.909	0.001	0.2988	0.238326	278.1263	0.050073	263.8474	0.22609	0.047502	14.5777	0	48.78748	0	263.847403
2.992	0.001	0.2988	0.22609	263.8474	0.047502	250.3165	0.214496	0.045066	13.82969	-1.8E-17	46.2841	-5.2E-18	250.316515
3.075	0.001	0.2988	0.214496	250.3165	0.045066	237.4945	0.203509	0.042758	13.12086	6.1E-18	43.91185	5.5E-18	237.494454
3.158	0.001	0.2988	0.203509	237.4945	0.042758	225.3441	0.193097	0.04057	12.44917	-3.5E-18	41.66388	-2.3E-18	225.344087
3.241	0.001	0.2988	0.193097	225.3441	0.04057	213.8302	0.183231	0.038497	11.81266	-5.2E-18	39.53367	-2.8E-18	213.830226
3.324	0.001	0.2988	0.183231	213.8302	0.038497	202.9195	0.173881	0.036533	11.2095	-1.2E-17	37.51505	-6.3E-18	202.919529
3.407	0.001	0.2988	0.173881	202.9195	0.036533	192.5804	0.165022	0.034671	10.63793	-7.8E-18	35.60218	-4.7E-18	192.580398

TABLE 15g

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 60 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.668	0.56	1	0.314227

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					
0.083	0.157114	23.47277	0	0	0	22.85795	0.019587	0.004115	0.61482	7.6E-19	0.026193	7.4E-19	22.8579517
0.167	0.314227	71.26673	0.019587	22.85795	0.004115	91.02463	0.077999	0.016388	3.100054	-3.5E-18	0.043499	-3.3E-18	91.0246266
0.25	0.314227	93.89109	0.077999	91.02463	0.016388	177.688	0.152261	0.03199	7.22768	1.3E-18	0.076979	1.2E-18	177.688034
0.333	0.314227	93.89109	0.152261	177.688	0.03199	259.8115	0.222632	0.046776	11.76761	-1.7E-18	0.125333	-1.5E-18	259.811508
0.417	0.314227	95.02231	0.222632	259.8115	0.046776	338.5456	0.290099	0.060951	16.28818	-6.9E-18	0.171414	-5.7E-18	338.545637
0.5	0.314227	93.89109	0.290099	338.5456	0.060951	412.2425	0.35325	0.074219	20.19427	0	0.215082	0	412.242455
0.5833	0.314227	94.23045	0.35325	412.2425	0.074219	482.3244	0.413303	0.086836	24.14852	-5.2E-18	0.256271	-3.9E-18	482.324389
0.6667	0.314227	94.34357	0.413303	482.3244	0.086836	548.7997	0.470255	0.098804	27.86825	-3.3E-17	0.295391	-2.3E-17	548.799715
0.75	0.314227	94.23045	0.470265	548.7997	0.098804	612.2895	0.52467	0.106216	30.7407	3.5E-18	0.326229	2.3E-18	612.289471
0.833	0.314227	93.89109	0.52467	612.2895	0.106216	674.0697	0.577609	0.108716	32.11083	-6.9E-18	0.342001	-4.6E-18	674.069725
0.9167	0.314227	94.68294	0.577609	674.0697	0.108716	735.6192	0.630351	0.111206	33.13347	-2.8E-17	0.349941	-1.8E-17	735.619193
1	0.314227	94.23045	0.630351	735.6192	0.111206	796.134	0.682206	0.113655	33.71568	-3.5E-18	0.3578	-2.2E-18	796.133966
1.083	0.157114	70.41032	0.682206	796.134	0.113655	832.3731	0.713259	0.115121	34.17914	-3.1E-17	0.485373	-1.6E-17	832.373143
1.166	0.001	23.62217	0.713259	832.3731	0.115121	821.6619	0.70408	0.114688	34.33346	-5.6E-17	1.453442	-2.5E-17	821.661859
1.249	0.001	0.2988	0.70408	821.6619	0.114688	787.8961	0.675147	0.113322	34.06459	-9.2E-07	114.0043	-3.9E-09	787.896071
1.332	0.001	0.2988	0.675147	787.8961	0.113322	754.5361	0.64656	0.111972	33.65881	-6.1E-09	112.6466	-3.9E-09	754.536061
1.415	0.001	0.2988	0.64656	754.5361	0.111972	721.577	0.618318	0.110638	33.25791	-1.3E-08	111.3049	-3.9E-09	721.576954
1.498	0.001	0.2988	0.618318	721.577	0.110638	689.0139	0.590415	0.109321	32.86182	-4.0E-09	109.9793	-3.9E-09	689.013932
		1132.28				1132.28	0.970248	0.127256	0	0	0	0	1132.27972

TABLE 15h

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 70 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
8.91	0.607	0.6	1	3.245022

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					
0.083	1.622511	242.4031	0	0	0	236.0539	0.202274	0.042498	6.349243	-4.3E-19	0.026193	-4.2E-19	236.0539
0.167	3.245022	735.971	0.202274	236.0539	0.042498	947.4886	0.811901	0.119779	24.53632	-1.6E-17	0.033239	-1.5E-17	947.488565
0.25	3.245022	969.6126	0.811901	947.4886	0.119779	1877.738	1.37765	0.143694	39.36292	1.0E-17	0.040597	1.0E-17	1877.73822
0.333	3.245022	969.6126	1.37765	1877.738	0.143694	2801.756	1.868627	0.161493	45.59501	-4.5E-17	0.047024	-4.3E-17	2801.75578
0.417	3.245022	981.2947	1.868627	2801.756	0.161493	3732.408	2.231585	0.173443	50.6424	2.4E-17	0.051608	2.3E-17	3732.40803
0.5	3.245022	969.6126	2.231585	3732.408	0.173443	4648.725	2.542096	0.183289	53.29579	1.7E-17	0.054966	1.6E-17	4648.72482
0.5833	3.245022	973.1172	2.542096	4648.725	0.183289	5565.401	2.852728	0.193138	56.44142	1.4E-16	0.058001	1.3E-16	5565.4006
0.6667	3.245022	974.2854	2.852728	5565.401	0.193138	6479.855	3.239928	0.205415	59.83075	1.4E-16	0.06141	1.3E-16	6479.85525
0.75	3.245022	973.1172	3.239928	6479.855	0.205415	7389.211	3.694606	0.219831	63.76142	1.2E-16	0.065523	1.1E-16	7389.21102
0.833	3.245022	969.6126	3.694606	7389.211	0.219831	8291.002	4.145501	0.234128	67.82151	1.6E-16	0.069947	1.5E-16	8291.00209
0.9167	3.245022	977.79	4.145501	8291.002	0.234128	9196.083	4.598041	0.248477	72.70919	2.4E-16	0.074361	2.2E-16	9196.08293
1	3.245022	973.1172	4.598041	9196.083	0.248477	10092.56	5.046278	0.262689	76.64413	-3.1E-16	0.078761	-2.8E-16	10092.556
1.083	3.245022	969.6126	5.046278	10092.56	0.262689	10981.57	5.490786	0.276783	80.59705	9.7E-17	0.083123	8.9E-17	10981.5715
1.166	3.245022	969.6126	5.490786	10981.57	0.276783	11866.39	5.933193	0.29081	84.79839	-3.9E-16	0.087456	-3.5E-16	11866.3857
1.249	1.622511	727.2094	5.933193	11866.39	0.29081	12505.19	6.252594	0.300937	88.40709	-2.1E-17	0.12157	-1.9E-17	12505.188
1.332	0.1	257.3431	6.252594	12505.19	0.300937	12672.22	6.336108	0.303585	90.31571	-2.8E-16	0.350954	-1.8E-16	12672.2155
1.415	0.1	29.88	6.336108	12672.22	0.303585	12611.53	6.305764	0.302623	90.56757	-4.4E-14	3.031043	-1.4E-15	12611.5279
1.498	0.1	29.88	6.305764	12611.53	0.302623	12551.13	6.275564	0.301666	90.28077	-2.7E-09	3.021445	-5.8E-11	12551.1271
		13693.08				13693.08	6.846542	0.31977	0	0	0	0	13693.0838

TABLE 15i

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 80 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
8.91	0.607	0.53	1	2.866436

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					
0.083	1.433218	214.1228	0	0	0	208.5143	0.178675	0.03754	5.608498	-2.2E-18	0.026193	-2.1E-18	208.514279
0.167	2.866436	650.1077	0.178675	208.5143	0.03754	835.5203	0.715956	0.115249	23.10165	2.1E-17	0.035535	2.0E-17	835.52034
0.25	2.866436	856.4911	0.715956	835.5203	0.115249	1654.032	1.258784	0.138963	37.97914	-3.5E-17	0.044343	-3.3E-17	1654.03231
0.333	2.866436	856.4911	1.258784	1654.032	0.138963	2466.569	1.690525	0.155247	43.95488	-6.2E-17	0.05132	-5.9E-17	2466.56853
0.417	2.866436	866.8103	1.690525	2466.569	0.155247	3284.409	2.079773	0.16863	48.97016	-1.1E-16	0.056495	-1.0E-16	3284.40865
0.5	2.866436	856.4911	2.079773	3284.409	0.16863	4089.221	2.352498	0.177277	51.67852	8.3E-17	0.060337	7.8E-17	4089.22124
0.5833	2.866436	859.5869	2.352498	4089.221	0.177277	4894.349	2.62533	0.185928	54.45896	-2.4E-17	0.063355	-2.3E-17	4894.34913
0.6667	2.866436	860.6138	2.62533	4894.349	0.185928	5697.849	2.897611	0.194561	57.119	-1.8E-16	0.06637	-1.7E-16	5697.84891
0.75	2.866436	859.5869	2.897611	5697.849	0.194561	6497.422	3.248711	0.205693	60.01415	-4.9E-17	0.069817	-4.5E-17	6497.42162
0.833	2.866436	856.4911	3.248711	6497.422	0.205693	7290.573	3.645286	0.218268	63.33977	-2.0E-16	0.073953	-1.9E-16	7290.57296
0.9167	2.866436	863.7145	3.645286	7290.573	0.218268	8086.618	4.043309	0.230888	67.66973	5.6E-17	0.078347	5.1E-17	8086.61775
1	2.866436	859.5869	4.043309	8086.618	0.230888	8875.092	4.437546	0.243388	71.11286	2.5E-16	0.082729	2.3E-16	8875.09175
1.083	2.866436	856.4911	4.437546	8875.092	0.243388	9657.007	4.828503	0.255784	74.57623	-3.5E-16	0.087072	-3.2E-16	9657.00663
1.166	2.866436	856.4911	4.828503	9657.007	0.255784	10435.23	5.217613	0.268121	78.27142	-1.7E-16	0.091386	-1.5E-16	10435.2263
1.249	2.866436	856.4911	5.217613	10435.23	0.268121	11209.77	5.604884	0.2804	81.94916	-1.2E-16	0.09568	-1.1E-16	11209.7683
1.332	2.866436	856.4911	5.604884	11209.77	0.2804	11980.65	5.990325	0.292622	85.60951	-4.9E-16	0.099954	-4.4E-16	11980.6499
1.415	1.433218	642.3683	5.990325	11980.65	0.292622	12534.27	6.267136	0.301398	88.74661	-6.9E-18	0.138155	-6.0E-18	12534.2716
1.498	0.1	229.0628	6.267136	12534.27	0.301398	12672.95	6.336474	0.303597	90.38633	-6.2E-16	0.394592	-3.7E-16	12672.948
1.581	0.1	29.88	6.336474	12672.95	0.303597	12612.26	6.306128	0.302635	90.57103	-3.7E-14	3.031159	-1.1E-15	12612.257
1.664	0.1	29.88	6.306128	12612.26	0.302635	12551.85	6.275926	0.301677	90.28422	-2.1E-09	3.02156	-4.6E-11	12551.8528
1.747	0.1	29.88	6.275926	12551.85	0.301677	12491.73	6.245867	0.300724	89.99676	-1.1E-05	3.012006	-1.3E-07	12491.734
1.83	0.1	29.88	6.245867	12491.73	0.300724	12431.91	6.215954	0.299776	89.71467	-0.00878	3.001617	-1.4E-05	12431.9081
1.913	0.1	29.88	6.215954	12431.91	0.299776	12372.36	6.186178	0.298832	89.43192	-1.4E-05	2.993035	-1.4E-05	12372.3562
2	0.1	31.32	6.186178	12372.36	0.298832	12310.24	6.155118	0.297847	93.43982	-1.4E-05	2.98339	-1.4E-05	12310.2364
2.083	0.1	29.88	6.155118	12310.24	0.297847	12251.26	6.12563	0.296912	88.85692	-1.4E-05	2.973791	-1.4E-05	12251.2595
2.166	0.1	29.88	6.12563	12251.26	0.296912	12192.56	6.096281	0.295981	88.57821	-1.4E-05	2.964463	-1.4E-05	12192.5613
2.249	0.1	29.88	6.096281	12192.56	0.295981	12134.14	6.06707	0.295055	88.30081	-1.5E-05	2.95518	-1.4E-05	12134.1405
2.332	0.1	29.88	6.06707	12134.14	0.295055	12076	6.037998	0.294133	88.02472	-1.5E-05	2.94594	-1.4E-05	12075.9958
2.415	0.1	29.88	6.037998	12076	0.294133	12018.13	6.009063	0.293216	87.74994	-1.5E-05	2.936744	-1.4E-05	12018.1259
		14087.61				ERR	ERR	ERR	ERR	ERR	ERR	ERR	

TABLE 15j

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 90 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
8.91	0.607	0.48	1	2.596018

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					
0.083	1.298009	193.9225	0	0	0	188.8431	0.161819	0.033999	5.079395	-6.1E-18	0.026193	-5.9E-18	188.84312
0.167	2.596018	588.7768	0.161819	188.8431	0.033999	755.543	0.647423	0.112012	22.07688	2.8E-17	0.037496	2.7E-17	755.543037
0.25	2.596018	775.6901	0.647423	755.543	0.112012	1494.242	1.17388	0.135583	36.99072	2.1E-17	0.047687	2.0E-17	1494.24238
0.333	2.596018	775.6901	1.17388	1494.242	0.135583	2227.149	1.56331	0.150785	42.78337	3.5E-18	0.055155	3.3E-18	2227.14907
0.417	2.596018	785.0357	1.56331	2227.149	0.150785	2964.51	1.955106	0.164526	47.67506	-1.1E-16	0.06073	-1.0E-16	2964.50973
0.5	2.596018	775.6901	1.955106	2964.51	0.164526	3689.776	2.217138	0.172985	50.4242	-2.1E-17	0.065006	-1.9E-17	3689.77559
0.5833	2.596018	778.4938	2.217138	3689.776	0.172985	4415.226	2.46297	0.18078	53.04357	9.0E-17	0.068136	8.4E-17	4415.22578
0.6667	2.596018	779.4203	2.46297	4415.226	0.18078	5139.209	2.708305	0.188559	55.44512	-3.8E-17	0.071136	-3.5E-17	5139.20893
0.75	2.596018	778.4938	2.708305	5139.209	0.188559	5859.997	2.952557	0.196303	57.70621	-5.2E-17	0.074125	-4.8E-17	5859.99653
0.833	2.596018	775.6901	2.952557	5859.997	0.196302	6575.443	3.287722	0.20693	60.24309	-5.9E-17	0.077664	-5.4E-17	6575.4435
0.9167	2.596018	782.232	3.287722	6575.443	0.20693	7293.608	3.646804	0.218316	64.06756	1.1E-16	0.081904	1.0E-16	7293.60796
1	2.596018	778.4938	3.646804	7293.608	0.218316	8004.942	4.002471	0.229593	67.15941	-1.5E-16	0.086268	-1.4E-16	8004.94231
1.083	2.596018	775.6901	4.002471	8004.942	0.229593	8710.359	4.35518	0.240776	70.27313	-4.4E-16	0.090594	-4.0E-16	8710.35924
1.166	2.596018	775.6901	4.35518	8710.359	0.240776	9412.442	4.706221	0.251907	73.60681	-4.2E-16	0.094892	-3.8E-16	9412.44264
1.249	2.596018	775.6901	4.706221	9412.442	0.251907	10111.21	5.055604	0.262984	76.92473	-1.2E-16	0.099169	-1.1E-16	10111.2073
1.332	2.596018	775.6901	5.055604	10111.21	0.262984	10806.67	5.403335	0.27401	80.22698	-1.9E-16	0.103427	-1.7E-16	10806.6709
1.415	2.596018	775.6901	5.403335	10806.67	0.27401	11498.85	5.749424	0.284983	83.51361	-2.4E-16	0.107664	-2.2E-16	11498.8473
1.498	2.596018	775.6901	5.749424	11498.85	0.284983	12187.75	6.093876	0.295905	86.78472	-3.0E-16	0.111881	-2.6E-16	12187.7527
1.581	1.298009	581.7675	6.093876	12187.75	0.295905	12679.94	6.339969	0.303708	89.58215	-3.3E-16	0.153983	-2.8E-16	12679.9381
1.664	0.1	208.8625	6.339969	12679.94	0.303708	12797.77	6.398887	0.305576	91.02699	-1.5E-16	0.435823	-8.6E-17	12797.7736
1.747	0.1	29.88	6.398887	12797.77	0.305576	12736.49	6.368246	0.304604	91.16094	-8.3E-15	3.050902	-4.2E-16	12736.4927
1.83	0.1	29.88	6.368246	12736.49	0.304604	12675.5	6.337751	0.303637	90.87134	-1.0E-14	3.041209	-4.2E-16	12675.5013
1.913	0.1	29.88	6.337751	12675.5	0.303637	12614.8	6.307399	0.302675	90.5831	-2.9E-13	3.031563	-9.3E-15	12614.7982
2	0.1	31.32	6.307399	12614.8	0.302675	12551.48	6.275739	0.301671	94.64064	-8.4E-09	3.021732	-1.8E-10	12551.4776
2.083	0.1	29.88	6.275739	12551.48	0.301671	12491.36	6.24568	0.300718	89.99699	-0.00016	3.011932	-1.9E-06	12491.3608
2.166	0.1	29.88	6.24568	12491.36	0.300718	12431.54	6.215768	0.29977	89.7129	-0.00746	3.00169	-1.3E-05	12431.5353
2.249	0.1	29.88	6.215768	12431.54	0.29977	12371.99	6.185993	0.298826	89.43016	-1.3E-05	2.992976	-1.3E-05	12371.9852
2.332	0.1	29.88	6.185993	12371.99	0.298826	12312.72	6.156358	0.297886	89.14874	-1.3E-05	2.983558	-1.3E-05	12312.7164
2.415	0.1	29.88	6.156358	12312.72	0.297886	12253.73	6.126864	0.296951	88.86864	-1.3E-05	2.974184	-1.2E-05	12253.7278
		14282.77				ERR	ERR	ERR	ERR	ERR	ERR	ERR	

TABLE 15k

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 120 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
8.91	0.607	0.36	1	1.947013

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					
0.083	0.973507	145.4419	0	0	0	141.6323	0.121364	0.025499	3.809546	2.2E-18	0.026193	2.1E-18	141.63234
0.167	1.947013	441.5826	0.121364	141.6323	0.025499	564.0064	0.483296	0.101542	19.20854	2.6E-17	0.043499	2.5E-17	564.006393
0.25	1.947013	581.7675	0.483296	564.0064	0.101542	1111.716	0.952627	0.126424	34.05807	-4.9E-17	0.058542	-4.6E-17	1111.71587
0.333	1.947013	581.7675	0.952627	1111.716	0.126424	1653.835	1.25868	0.138958	39.64813	3.8E-17	0.068151	3.6E-17	1653.83528
0.417	1.947013	588.7768	1.25868	1653.835	0.138958	2198.882	1.54829	0.150258	43.72959	2.4E-17	0.074272	2.2E-17	2198.88248
0.5	1.947013	581.7675	1.54829	2198.882	0.150258	2734.262	1.832764	0.160235	46.38777	-3.8E-17	0.079736	-3.5E-17	2734.26225
0.5833	1.947013	583.8703	1.832764	2734.262	0.160235	3268.848	2.074499	0.168463	49.28498	-8.3E-17	0.084411	-7.6E-17	3268.84759
0.6667	1.947013	584.5712	2.074499	3268.848	0.168463	3801.98	2.255161	0.174191	51.43916	-6.9E-18	0.087995	-6.3E-18	3801.97967
0.75	1.947013	583.8703	2.255161	3801.98	0.174191	4332.759	2.435025	0.179894	53.09147	-1.7E-16	0.09093	-1.6E-16	4332.75852
0.833	1.947013	581.7675	2.435025	4332.759	0.179894	4859.928	2.613666	0.185558	54.59851	1.2E-16	0.093849	1.1E-16	4859.92755
0.9167	1.947013	586.374	2.613666	4859.928	0.185558	5389.831	2.793233	0.191252	56.77013	-3.8E-17	0.096766	-3.4E-17	5389.83143
1	1.947013	583.8703	2.793233	5389.831	0.191252	5915.502	2.971366	0.1969	58.19939	6.9E-17	0.099679	6.2E-17	5915.50236
1.083	1.947013	581.7675	2.971366	5915.502	0.1969	6437.265	3.218632	0.20474	60.00491	-2.0E-16	0.103142	-1.8E-16	6437.26499
1.166	1.947013	581.7675	3.218632	6437.265	0.20474	6956.626	3.478313	0.212973	62.40633	-6.2E-17	0.10727	-5.6E-17	6956.62621
1.249	1.947013	581.7675	3.478313	6956.626	0.212973	7473.533	3.736767	0.221168	64.86074	4.9E-17	0.111489	4.3E-17	7473.53301
1.332	1.947013	581.7675	3.736767	7473.533	0.221168	7987.997	3.993998	0.229324	67.30356	1.0E-16	0.115688	9.2E-17	7987.997
1.415	1.947013	581.7675	3.993998	7987.997	0.229324	8500.03	4.250015	0.237442	69.73482	2.6E-16	0.119867	2.3E-16	8500.02972
1.498	1.947013	581.7675	4.250015	8500.03	0.237442	9009.643	4.504821	0.245521	72.1546	1.6E-16	0.124027	1.4E-16	9009.64266
1.581	1.947013	581.7675	4.504821	9009.643	0.245521	9516.847	4.758424	0.253562	74.56295	-4.2E-16	0.128166	-3.7E-16	9516.84726
1.664	1.947013	581.7675	4.758424	9516.847	0.253562	10021.65	5.010827	0.261565	76.95991	2.6E-16	0.132286	2.3E-16	10021.6549
1.747	1.947013	581.7675	5.010827	10021.65	0.261565	10524.08	5.262038	0.26953	79.34554	3.4E-16	0.136387	2.9E-16	10524.0769
1.83	1.947013	581.7675	5.262038	10524.08	0.26953	11024.12	5.512062	0.277457	81.7199	1.1E-16	0.140468	9.5E-17	11024.1245
1.913	1.947013	581.7675	5.512062	11024.12	0.277457	11521.81	5.760905	0.285347	84.08304	2.6E-16	0.14453	2.3E-16	11521.809
2	1.947013	609.8045	5.760905	11521.81	0.285347	12040.95	6.020477	0.293578	90.65967	-1.4E-16	0.14867	-1.2E-16	12040.9539
2.083	0.973507	436.3257	6.020477	12040.95	0.293578	12388.73	6.194367	0.299091	88.54474	3.1E-16	0.202933	2.5E-16	12388.7348
2.166	0.1	160.3819	6.194367	12388.73	0.299091	12459.58	6.22979	0.300214	89.53626	-8.5E-16	0.558269	-3.7E-16	12459.5805
2.249	0.1	29.88	6.22979	12459.58	0.300214	12399.9	6.199949	0.299268	89.5627	-2.1E-16	2.997413	-2.1E-16	12399.8978
2.332	0.1	29.88	6.199949	12399.9	0.299268	12340.5	6.170249	0.298326	89.28065	1.2E-16	2.987973	1.2E-16	12340.4971
2.415	0.1	29.88	6.170249	12340.5	0.298326	12281.38	6.140689	0.297389	88.99993	3.5E-16	2.978579	3.4E-16	12281.3772
		14121.32					ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 15L

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 5 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.773	4.95	1	3.214134

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					
0.083	1.607067	240.0958	0	0	0	233.807	0.200349	0.042094	6.288807	3.0E-18	0.026193	3.0E-18	233.807
0.167	1.607067	485.9771	0.200349	233.807	0.042094	696.8423	0.597123	0.109637	22.94173	1.9E-17	0.047207	1.8E-17	696.8423
0.25	0.001	240.2452	0.597123	696.8423	0.109637	903.0812	0.773848	0.117982	24.00635	-6.9E-18	0.141548	-6.0E-18	903.0812
0.333	0.001	0.2988	0.773848	903.0812	0.117982	868.3369	0.744076	0.116576	35.04304	-8.7E-17	117.2793	-2.4E-17	868.3369
0.417	0.001	0.3024	0.744076	868.3369	0.116576	833.5992	0.714309	0.115171	35.04017	-2.8E-17	115.8736	-2.4E-17	833.5992
0.5	0.001	0.2988	0.714309	833.5992	0.115171	799.6899	0.685253	0.113799	34.20805	-4.2E-17	114.4848	-2.0E-17	799.6899
0.5833	0.001	0.29988	0.685253	799.6899	0.113799	766.0678	0.656442	0.112438	33.92198	-1.9E-16	113.1185	-2.3E-17	766.0678
0.6667	0.001	0.30024	0.656442	766.0678	0.112438	732.8116	0.627945	0.111093	33.55647	-1.7E-17	111.7655	-1.3E-17	732.8116
0.75	0.001	0.29988	0.627945	732.8116	0.111093	699.9961	0.599825	0.109765	33.11539	-2.1E-17	110.4288	-8.9E-18	699.9961
0.833	0.001	0.2988	0.599825	699.9961	0.109765	667.6924	0.572144	0.108458	32.60247	-2.5E-16	109.1114	-2.7E-17	667.6924
0.9167	0.001	0.30132	0.572144	667.6924	0.108458	635.5094	0.544567	0.107156	32.38432	-1.0E-17	107.8067	-3.4E-18	635.5094
1	0.001	0.29988	0.544567	635.5094	0.107156	603.8674	0.517453	0.105875	31.94186	-1.4E-17	106.5155	-7.2E-18	603.8674
		969.0181											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 16a

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 10 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.733	3.8	1	2.339736

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	0.001			0		0		0					
0.083	1.169868	174.9277	0	0	0	170.3458	0.145969	0.030663	4.581865	5.6E-18	0.026193	5.5E-18	170.3458
0.167	2.339736	530.6521	0.145969	170.3458	0.030668	679.8874	0.582594	0.108951	21.1105	-6.9E-18	0.039782	-6.7E-18	679.8874
0.25	1.169868	524.3348	0.582594	679.8874	0.108951	1168.718	1.000913	0.128697	35.50469	-3.8E-17	0.067714	-3.6E-17	1168.718
0.333	0.001	174.9277	1.000913	1168.718	0.128697	1304.761	1.073199	0.131575	38.88465	0	0.22229	0	1304.761
0.417	0.001	0.3024	1.073199	1304.761	0.131575	1265.401	1.052285	0.130742	39.66235	-3.1E-16	131.1586	-4.9E-17	1265.401
0.5	0.001	0.2988	1.052285	1265.401	0.130742	1226.756	1.031751	0.129925	38.94367	-1.6E-16	130.3336	-5.4E-17	1226.756
0.5833	0.001	0.29988	1.031751	1226.756	0.129925	1188.216	1.011273	0.12911	38.83964	-1.0E-17	129.5173	-5.4E-18	1188.216
0.6667	0.001	0.30024	1.011273	1188.216	0.12911	1149.923	0.985367	0.12797	38.5928	-1.0E-17	128.5398	-5.6E-18	1149.923
0.75	0.001	0.29988	0.985367	1149.923	0.12797	1112.077	0.952927	0.126439	38.14603	-2.6E-16	127.2042	-5.3E-17	1112.077
0.833	0.001	0.2988	0.952927	1112.077	0.126439	1074.821	0.921012	0.124931	37.55465	-2.1E-17	125.6049	-1.4E-17	1074.821
0.9167	0.001	0.30132	0.921012	1074.821	0.124931	1037.705	0.889207	0.123429	37.418	-2.3E-16	124.1803	-4.1E-17	1037.705
1	0.001	0.29988	0.889207	1037.705	0.123429	1001.212	0.857937	0.121953	36.7926	1.4E-17	122.6911	9.6E-18	1001.212
		1407.244											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 16b

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 15 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.733	3.24	1	1.994933

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						
0.083	0.997466	149.0215	0	0	0	145.1182	0.124351	0.026127	3.903306	1.7E-18	0.026193	1.7E-18	145.1182
0.167	1.994933	452.4508	0.124351	145.1182	0.026127	577.8876	0.495191	0.104041	19.6313	-2.3E-17	0.043499	-2.2E-17	577.8876
0.25	1.994933	596.0359	0.495191	577.8876	0.104041	1139.375	0.976328	0.127543	34.59864	-1.4E-17	0.058043	-1.3E-17	1139.375
0.333	0.997466	447.0644	0.976328	1139.375	0.127543	1546.962	1.201893	0.136698	39.4776	-3.5E-18	0.088304	-3.2E-18	1546.962
0.417	0.001	150.9681	1.201893	1546.962	0.136698	1656.243	1.259959	0.139009	41.68692	-4.2E-17	0.276131	-3.9E-17	1656.243
0.5	0.001	0.2988	1.259959	1656.243	0.139009	1615.136	1.238117	0.13814	41.40609	-6.2E-17	138.5746	-3.6E-17	1615.136
0.5833	0.001	0.29908	1.238117	1615.136	0.13814	1574.14	1.216334	0.137273	41.29536	-3.1E-17	137.7063	-2.2E-17	1574.14
0.6667	0.001	0.30024	1.216334	1574.14	0.137273	1533.355	1.194663	0.13641	41.08525	6.9E-18	136.8414	5.8E-18	1533.355
0.75	0.001	0.29988	1.194663	1533.355	0.13641	1492.877	1.173155	0.135554	40.77826	2.5E-17	135.9819	2.4E-17	1492.877
0.833	0.001	0.2988	1.173155	1492.877	0.135554	1452.799	1.151859	0.134706	40.37682	-3.3E-16	135.13	-4.3E-17	1452.799
0.9167	0.001	0.30132	1.151859	1452.799	0.134706	1412.638	1.13052	0.133857	40.46166	-1.3E-16	134.2814	-3.6E-17	1412.638
1	0.001	0.29988	1.13052	1412.638	0.133857	1372.923	1.109417	0.133017	40.01497	-9.4E-17	133.4366	-4.1E-17	1372.923
		1797.69											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 16c

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN C
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 20 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
0.84	0.733	2.84	1	1.748645

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					
0.083	0.874322	130.6238	0	0	0	127.2024	0.103999	0.022901	3.421416	2.8E-18	0.026193	2.7E-18	127.2024
0.167	1.748645	396.5926	0.108999	127.2024	0.022901	506.5435	0.434056	0.091196	17.25151	3.8E-17	0.043499	3.7E-17	506.5435
0.25	1.748645	522.4951	0.434056	506.5435	0.091196	997.2182	0.854514	0.121791	31.82032	-5.2E-17	0.060901	-4.9E-17	997.2182
0.333	1.748645	522.4951	0.854514	997.2182	0.121791	1481.303	1.167005	0.135309	38.41077	2.1E-17	0.073514	1.9E-17	1481.303
0.417	0.874322	396.5926	1.167005	1481.303	0.135309	1835.844	1.35539	0.142808	42.05133	-3.5E-18	0.106022	-3.1E-18	1835.844
0.5	0.001	130.7732	1.35529	1835.844	0.142808	1923.668	1.402055	0.144666	42.94863	-3.5E-17	0.328421	-2.9E-17	1923.668
0.5833	0.001	0.29988	1.402055	1923.668	0.144666	1880.722	1.379236	0.143757	43.2462	-1.6E-16	144.2117	-3.4E-17	1880.722
0.6667	0.001	0.30024	1.379236	1880.722	0.143757	1837.996	1.356534	0.142854	43.02608	-1.6E-16	143.3056	-4.8E-17	1837.996
0.75	0.001	0.29988	1.356534	1837.996	0.142854	1795.592	1.334002	0.141957	42.7045	-4.9E-17	142.4053	-2.0E-17	1795.592
0.833	0.001	0.29988	1.334002	1795.592	0.141957	1753.606	1.311693	0.141069	42.38482	0	141.5128	0	1753.606
0.9167	0.001	0.30132	1.311693	1753.606	0.141069	1711.535	1.289338	0.140179	42.37277	1.0E-17	140.6228	6.5E-18	1711.535
1	0.001	0.29988	1.289338	1711.535	0.140179	1669.93	1.267232	0.139299	41.90489	-5.2E-17	139.7388	-3.8E-17	1669.93
		2101.372											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 16d

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.120661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 30 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
0.84	0.733	2.27	1	1.397684

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					
0.083	0.698842	104.407	0	0	0	101.6723	0.087123	0.018305	2.734724	-2.6E-18	0.026193	-2.5E-18	101.6723
0.167	1.397684	316.9948	0.087123	101.6723	0.018305	404.8781	0.346939	0.072893	13.78906	-7.8E-18	0.043499	-7.5E-18	404.8781
0.25	1.397684	417.6281	0.346939	404.8781	0.072893	794.645	0.68093	0.113595	27.36121	-2.9E-17	0.066713	-2.8E-17	794.645
0.333	1.397684	417.6281	0.68093	794.645	0.113595	1176.051	1.004809	0.128852	36.22158	-5.2E-17	0.086732	-4.8E-17	1176.051
0.417	1.397684	422.6598	1.004809	1176.051	0.128852	1558.523	1.208036	0.136942	40.18817	1.4E-17	0.095084	1.3E-17	1558.523
0.5	1.397684	417.6281	1.208036	1558.523	0.136942	1934.046	1.40757	0.144885	42.10507	-5.6E-17	0.10002	-5.0E-17	1934.046
0.5833	0.698842	314.3532	1.40757	1934.046	0.144885	2294.131	1.551079	0.150256	44.26853	5.9E-17	0.140824	5.1E-17	2294.131
0.6667	0.001	105.0603	1.551079	2294.131	0.150256	2263.881	1.532827	0.15147	45.31011	-8.0E-17	0.431277	-4.5E-17	2263.881
0.75	0.001	0.29988	1.532827	2263.881	0.15147	2218.884	1.538918	0.150631	45.29701	-2.0E-15	151.0504	-1.0E-16	2218.884
0.833	0.001	0.2988	1.538918	2218.884	0.150631	2174.298	1.535228	0.1498	44.98447	-3.2E-16	158.2157	-6.8E-17	2174.298
0.9167	0.001	0.30132	1.535228	2174.298	0.1498	2129.587	1.51147	0.148967	45.0123	-1.2E-16	149.3837	-4.7E-17	2129.587
1	0.001	0.29988	1.51147	2129.587	0.148967	2085.347	1.487963	0.148086	44.5401	-1.1E-16	140.5264	-5.7E-17	2085.347
		2517.559											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 16e

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.123661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 40 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.733	1.94	1	1.194497

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					
0.083	0.597248	89.22891	0	0	0	86.89175	0.074457	0.015644	2.337165	1.3E-18	0.026193	1.3E-18	86.89175
0.167	1.194497	270.9119	0.074457	86.89175	0.015644	346.0191	0.296503	0.062296	11.78448	-8.7E-19	0.043499	-8.3E-19	346.0191
0.25	1.194497	356.9156	0.296503	346.0191	0.062296	677.3657	0.580433	0.108849	25.5691	-5.2E-18	0.071639	-4.8E-18	677.3657
0.333	1.194497	356.9156	0.580433	677.3657	0.108849	999.808	0.856734	0.121896	34.47333	2.1E-17	0.096587	1.9E-17	999.808
0.417	1.194497	361.2158	0.856734	999.808	0.121896	1322.642	1.0827	0.131953	38.38197	-6.9E-18	0.106258	-6.2E-18	1322.642
0.5	1.194497	356.9156	1.0827	1322.642	0.131953	1639.13	1.250866	0.138647	40.4277	-4.2E-17	0.11327	-3.7E-17	1639.13
0.5833	1.194497	358.2057	1.250866	1639.13	0.138647	1954.757	1.418574	0.145323	42.57858	-4.9E-17	0.118866	-4.3E-17	1954.757
0.6667	1.194497	358.6357	1.418574	1954.757	0.145323	2268.824	1.585454	0.151562	44.56242	6.2E-17	0.124272	5.5E-17	2268.824
0.75	0.597248	268.6543	1.585454	2268.824	0.151562	2491.406	1.703723	0.15571	46.07229	-1.2E-16	0.171493	-1.0E-16	2491.406
0.833	0.001	89.37831	1.703723	2491.406	0.15571	2534.139	1.726429	0.156506	46.64503	-5.9E-17	0.521803	-2.8E-17	2534.139
0.9167	0.001	0.30132	1.726429	2534.139	0.156506	2487.414	1.701601	0.155635	47.02721	-1.6E-15	156.0707	-1.1E-16	2487.414
1	0.001	0.29908	1.701601	2487.414	0.155635	2441.171	1.67703	0.154774	46.5427	-4.8E-16	155.2044	-9.9E-17	2441.171
		2867.579											
						ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

TABLE 16f -

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	9000
5	18000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.126661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 50 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR	Qp
0.84	0.733	1.64	1	1.009781

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					
0.083	0.50489	75.43063	0	0	0	73.45488	0.062943	0.013225	1.975747	-1.4E-18	0.026192	-1.4E-18	73.45488
0.167	1.009781	229.0183	0.062943	73.45488	0.013225	292.511	0.250652	0.052663	9.962139	-1.4E-17	0.043699	-1.3E-17	292.511
0.25	1.009781	301.7225	0.250652	292.511	0.052663	571.0071	0.489295	0.102802	23.22642	0	0.076979	0	571.0071
0.333	1.009781	301.7225	0.489295	571.0071	0.102802	840.125	0.719901	0.115435	32.60459	3.5E-18	0.108062	3.1E-18	840.125
0.417	1.009781	305.3577	0.719901	840.125	0.115435	1108.931	0.950241	0.126311	36.55202	-3.5E-17	0.119702	-3.1E-17	1108.931
0.5	1.009781	301.7225	0.950241	1108.931	0.126311	1371.913	1.18888	0.132995	38.7404	-3.8E-17	0.128097	-3.3E-17	1371.913
0.5833	1.009781	302.8131	1.18888	1371.913	0.132995	1634.012	1.248147	0.138539	40.71336	1.4E-17	0.134452	1.2E-17	1634.012
0.6667	1.009781	303.1766	1.248147	1634.012	0.138539	1894.766	1.386698	0.144055	42.42296	-5.6E-17	0.139928	-4.8E-17	1894.766
0.75	1.009781	302.8131	1.386698	1894.766	0.144055	2153.576	1.524217	0.149414	44.0027	-1.3E-16	0.145313	-1.1E-16	2153.576
0.833	1.009781	301.7225	1.524217	2153.576	0.149414	2409.94	1.660436	0.154192	45.35869	8.3E-17	0.150332	7.1E-17	2409.94
0.9167	0.50489	228.2004	1.660436	2409.94	0.154192	2591.17	1.756732	0.157569	46.96981	-5.9E-17	0.205827	-4.7E-17	2591.17
1	0.001	75.85321	1.756732	2591.17	0.157569	2619.692	1.771887	0.1581	47.33143	-2.7E-16	0.623987	-1.0E-16	2619.692
1.083	0.001	0.2988	1.771887	2619.692	0.1581	2572.881	1.747014	0.157228	47.11005	-5.2E-17	157.6641	-3.5E-17	2572.881
1.166	0.001	0.2988	1.747014	2572.881	0.157228	2526.33	1.722279	0.15636	46.85612	-8.3E-17	156.7942	-6.6E-17	2526.33
1.249	0.001	0.2988	1.722279	2526.33	0.15636	2480.037	1.697682	0.155498	46.59163	8.7E-17	155.9291	8.1E-17	2480.037
		3030.449				3030.449	1.990143	0.165755	0	0	0	0	3030.449

TABLE 16g

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1157
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.120661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 60 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.733	1.43	1	0.88048

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					
0.083	0.44024	65.77183	0	0	0	64.04907	0.054884	0.011531	1.722755	-3.3E-18	0.026193	-3.2E-18	64.04907
0.167	0.88048	199.6928	0.054884	64.04907	0.011531	255.0553	0.218556	0.045919	8.686499	2.6E-18	0.043499	2.5E-18	255.0553
0.25	0.88048	263.0873	0.218556	255.0553	0.045919	497.8903	0.426641	0.089638	20.2523	1.4E-17	0.076979	1.3E-17	497.8903
0.333	0.88048	263.0873	0.426641	497.8903	0.089638	730.9994	0.626392	0.111019	29.97826	5.2E-18	0.113948	4.6E-18	730.9994
0.417	0.88048	266.257	0.626392	730.9994	0.111019	962.2693	0.824567	0.129107	34.98714	-1.4E-17	0.131404	-1.2E-17	962.2693
0.5	0.88048	263.0873	0.824567	962.2693	0.129107	1188.084	1.011203	0.129107	37.2729	2.4E-17	0.141675	2.1E-17	1188.084
0.5833	0.88048	264.0382	1.011203	1188.084	0.129107	1412.693	1.130549	0.133858	39.42892	0	0.14933	0	1412.693
0.6667	0.88048	264.3552	1.130549	1412.693	0.133858	1636.149	1.249282	0.138584	40.89901	-2.8E-17	0.154712	-2.3E-17	1636.149
0.75	0.88048	264.0382	1.249282	1636.149	0.138584	1857.925	1.367123	0.143275	42.26203	3.1E-17	0.16006	2.6E-17	1857.925
0.833	0.88048	263.0873	1.367123	1857.925	0.143275	2077.508	1.483798	0.14792	43.50456	1.4E-17	0.165362	1.2E-17	2077.508
0.9167	0.88048	265.2061	1.483798	2077.508	0.14792	2297.613	1.600751	0.152098	45.20074	-6.9E-18	0.170372	-5.8E-18	2297.613
1	0.88048	264.0382	1.600751	2297.613	0.152098	2515.432	1.716489	0.156157	46.21986	8.0E-17	0.17505	6.6E-17	2515.432
1.083	0.44024	197.3155	1.716489	2515.432	0.156157	2665.669	1.796317	0.158957	47.07811	-6.6E-17	0.220593	-5.0E-17	2665.669
1.166	0.001	65.92123	1.796317	2665.669	0.158957	2684.043	1.80608	0.1593	47.54754	-2.2E-16	0.721278	-6.1E-17	2684.043
1.249	0.001	0.2988	1.80608	2684.043	0.1593	2636.874	1.781017	0.158421	47.46737	-1.0E-17	158.06	-9.0E-18	2636.874
1.332	0.001	0.2988	1.781017	2636.874	0.158421	2589.968	1.756093	0.157546	47.20545	-5.2E-17	157.9834	-5.1E-17	2589.968
1.415	0.001	0.2988	1.756093	2589.968	0.157546	2543.321	1.731308	0.156677	46.94499	-8.0E-16	157.1118	-9.0E-17	2543.321
1.498	0.001	0.2988	1.731308	2543.321	0.156677	2496.934	1.70666	0.155813	46.68598	-2.8E-16	156.2449	-6.9E-17	2496.934
		3170.279				3170.279	2.041098	0.167404	0	0	0	0	3170.279

TABLE 16h

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3949
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.120661
1.5	0.148565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 70 MIN

AREA (ACRES)	C	I	SOIL MOIS FACTOR		Qp
0.84	0.733	1.3		1	0.800436

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					
0.083	0.400218	59.79257	0	0	0	58.22643	0.049094	0.010483	1.566141	3.3E-19	0.026193	3.3E-19	58.22643
0.167	0.800436	181.5309	0.049894	58.22643	0.010483	231.8685	0.198688	0.041745	7.896818	-6.5E-18	0.043499	-6.2E-18	231.8685
0.25	0.800436	239.1703	0.198688	231.8685	0.041745	452.6276	0.387856	0.081489	18.41119	1.0E-17	0.076979	9.6E-18	452.6276
0.333	0.800436	239.1703	0.387856	452.6276	0.081489	663.4454	0.568505	0.108286	28.35244	-1.6E-17	0.118545	-1.4E-17	663.4454
0.417	0.800436	242.0518	0.568505	663.4454	0.108286	871.4789	0.746769	0.116703	34.01841	-6.9E-18	0.140542	-6.0E-18	871.4789
0.5	0.800436	239.1703	0.746769	871.4789	0.116703	1074.551	0.92078	0.12492	36.09858	4.5E-17	0.150933	3.8E-17	1074.551
0.5833	0.800436	240.0347	0.92078	1074.551	0.12492	1276.217	1.058032	0.130971	38.36034	-2.4E-17	0.159845	-2.0E-17	1276.217
0.6667	0.800436	240.3229	1.058032	1276.217	0.130971	1476.581	1.164496	0.135209	39.95897	1.4E-17	0.166272	1.2E-17	1476.581
0.75	0.800436	240.0347	1.164496	1476.581	0.135209	1675.438	1.270159	0.139415	41.1772	6.9E-18	0.171547	5.7E-18	1675.438
0.833	0.800436	239.1703	1.270159	1675.438	0.139415	1872.329	1.374776	0.14358	42.2795	-4.9E-17	0.176776	-4.0E-17	1872.329
0.9167	0.800436	241.1074	1.374776	1872.329	0.14358	2069.624	1.479609	0.147753	43.09224	4.2E-17	0.181984	3.4E-17	2069.624
1	0.800436	240.0347	1.479609	2069.624	0.147753	2264.791	1.583211	0.151487	44.86001	-8.3E-17	0.186923	-6.8E-17	2264.791
1.083	0.800436	239.1703	1.583211	2264.791	0.151487	2458.159	1.686057	0.15509	45.90257	-4.5E-17	0.191506	-3.8E-17	2458.159
1.166	0.800436	239.1703	1.686057	2458.159	0.15509	2650.453	1.788232	0.158674	46.87629	4.9E-17	0.195995	3.9E-17	2650.453
1.249	0.800218	179.0777	1.788232	2650.453	0.158674	2782.052	1.858158	0.161126	47.77804	-1.0E-16	0.200359	-7.4E-17	2782.052
1.332	0.001	59.94197	1.858158	2782.052	0.161126	2793.817	1.864409	0.161345	48.17718	-5.5E-16	0.80373	-1.1E-16	2793.817
1.415	0.001	0.2988	1.864409	2793.817	0.161345	2746.039	1.839022	0.160455	48.07692	-1.2E-16	160.9	-1.1E-16	2746.039
1.498	0.001	0.2988	1.839022	2746.039	0.160455	2698.526	1.813776	0.159569	47.81162	-3.3E-10	160.0121	-4.0E-12	2698.526
		3359.937				3359.937	2.105367	0.169441	0	0	0	0	3359.937

TABLE 16i

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1187
2	3049
3	6000
4	8888
5	10000

DISCHARGE RATING:
(5 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.120661
1.5	0.1485e5
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 80 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.733	1.17	1	0.720392

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					
0.083	0.360196	53.81331	0	0	0	52.40379	0.044905	0.009435	1.409527	4.3E-19	0.026193	4.2E-19	52.40379
0.167	0.720392	163.385	0.044905	52.40379	0.009435	208.6816	0.178819	0.03757	7.107136	-8.7E-19	0.043499	-8.3E-19	208.6816
0.25	0.720392	215.2532	0.178819	208.6816	0.03757	407.3648	0.34907	0.07334	16.57007	8.7E-18	0.076979	8.0E-18	407.3648
0.333	0.720392	215.2532	0.34907	407.3648	0.07334	595.8915	0.510618	0.105553	26.72662	-2.9E-17	0.124164	-2.6E-17	595.8915
0.417	0.720392	217.8467	0.510618	595.8915	0.105553	780.6884	0.66897	0.11303	33.04967	1.0E-17	0.151711	8.8E-18	780.6884
0.5	0.720392	215.2532	0.66897	780.6884	0.11303	961.0779	0.823546	0.120329	34.8638	1.0E-17	0.161966	8.7E-18	961.0779
0.5833	0.720392	216.0313	0.823546	961.0779	0.120329	1139.94	0.976812	0.127566	37.16936	0	0.172055	0	1139.94
0.6667	0.720392	216.2906	0.976812	1139.94	0.127566	1317.288	1.079856	0.13184	38.942	4.2E-17	0.180045	3.4E-17	1317.288
0.75	0.720392	216.0313	1.079856	1317.288	0.13184	1493.226	1.17334	0.135561	40.09411	6.9E-18	0.185594	5.7E-18	1493.226
0.833	0.720392	215.2532	1.17334	1493.226	0.135561	1667.423	1.265899	0.139246	41.05617	4.2E-17	0.190734	3.4E-17	1667.423
0.9167	0.720392	217.0686	1.265899	1667.423	0.139246	1841.978	1.358649	0.142938	42.51281	-6.2E-17	0.195854	-5.2E-17	1841.978
1	0.720392	216.0313	1.358649	1841.978	0.142938	2014.597	1.45027	0.146589	43.4117	-6.6E-17	0.200951	-5.3E-17	2014.597
1.083	0.720392	215.2532	1.45027	2014.597	0.146589	2185.538	1.5412	0.15001	44.31139	-1.1E-16	0.205859	-9.1E-17	2185.538
1.166	0.720392	215.2532	1.5412	2185.538	0.15001	2355.496	1.631507	0.153177	45.2961	4.2E-17	0.210402	3.3E-17	2355.496
1.249	0.720392	215.2532	1.631507	2355.496	0.153177	2524.509	1.721812	0.156227	46.19383	-4.9E-17	0.214816	-3.9E-17	2524.509
1.332	0.720392	215.2532	1.721812	2524.509	0.156227	2692.584	1.810618	0.159459	47.17831	-1.2E-16	0.219176	-9.8E-17	2692.584
1.415	0.360196	161.4399	1.810618	2692.584	0.159459	2806.062	1.870915	0.161573	47.96218	-1.7E-17	0.29709	-1.2E-17	2806.062
1.498	0.001	53.96271	1.870915	2806.062	0.161573	2811.731	1.873927	0.161679	48.2939	-9.3E-16	0.894949	-9.8E-17	2811.731
1.581	0.001	0.2988	1.873927	2811.731	0.161679	2763.853	1.848487	0.160787	48.17638	-3.8E-16	161.2329	-8.9E-17	2763.853
1.664	0.001	0.2988	1.848487	2763.853	0.160787	2716.241	1.823189	0.1599	47.91853	-1.7E-16	160.3491	-6.0E-17	2716.241
1.747	0.001	0.2988	1.823189	2716.241	0.1599	2668.894	1.798031	0.159017	47.64616	-3.8E-17	159.4584	-1.7E-17	2668.894
1.83	0.001	0.2988	1.798031	2668.894	0.159017	2621.809	1.773012	0.15814	47.38225	-1.4E-16	158.5785	-8.0E-17	2621.809
1.913	0.001	0.2988	1.773012	2621.809	0.15814	2574.986	1.748133	0.157267	47.1218	-1.0E-16	157.7035	-7.1E-17	2574.986
2	0.001	0.3132	1.748133	2574.986	0.157267	2526.186	1.722203	0.156358	49.11368	-6.9E-18	156.8125	-5.6E-18	2526.186
2.083	0.001	0.2988	1.722203	2526.186	0.156358	2479.894	1.697606	0.155495	46.59083	-8.7E-17	155.9265	-8.0E-17	2479.894
2.166	0.001	0.2988	1.697606	2479.894	0.155495	2433.859	1.673145	0.154637	46.33378	-1.7E-15	155.0662	-1.1E-16	2433.859
2.249	0.001	0.2988	1.673145	2433.859	0.154637	2388.08	1.64882	0.153784	46.07816	-3.5E-16	154.2107	-7.5E-17	2388.08
2.332	0.001	0.2988	1.64882	2388.08	0.153784	2342.554	1.62463	0.152936	45.82396	-2.8E-16	153.36	-1.0E-16	2342.554
2.415	0.001	0.2988	1.62463	2342.554	0.152936	2297.282	1.600575	0.152092	45.57118	-1.4E-16	152.514	-7.0E-17	2297.282
2.498	0.001	0.2988	1.600575	2297.282	0.152092	2252.261	1.576653	0.151253	45.31979	-4.2E-17	151.6727	-2.8E-17	2252.261
2.581	0.001	0.2988	1.576653	2252.261	0.151253	2207.49	1.552864	0.150419	45.0698	-8.3E-17	150.836	-7.0E-17	2207.49
2.664	0.001	0.2988	1.552864	2207.49	0.150419	2162.968	1.529207	0.149589	44.8212	-9.6E-07	150.0035	-3.4E-09	2162.968
2.747	0.001	0.2988	1.529207	2162.968	0.149589	2118.692	1.505681	0.148764	44.57398	-1.9E-08	149.1766	-3.4E-09	2118.692
2.83	0.001	0.2988	1.505681	2118.692	0.148764	2074.676	1.482293	0.14786	44.31563	-1.1E-08	148.312	-3.4E-09	2074.676
2.913	0.001	0.2988	1.482293	2074.676	0.14786	2030.932	1.45905	0.146935	44.04232	-8.7E-09	147.3973	-3.4E-09	2030.932
2.996	0.001	0.2988	1.45905	2030.932	0.146935	1987.464	1.435953	0.146015	43.76673	-7.3E-09	146.475	-3.4E-09	1987.464
3.079	0.001	0.2988	1.435953	1987.464	0.146015	1944.27	1.413002	0.145102	43.49287	-6.2E-09	145.5585	-3.4E-09	1944.27
3.162	0.001	0.2988	1.413002	1944.27	0.145102	1901.348	1.390196	0.144194	43.22073	-5.3E-09	144.6477	-3.4E-09	1901.348
3.245	0.001	0.2988	1.390196	1901.348	0.144194	1858.697	1.367533	0.143292	42.95031	-4.6E-09	143.7427	-3.4E-09	1858.697
3.328	0.001	0.2988	1.367533	1858.697	0.143292	1816.314	1.345013	0.142395	42.6816	-4.1E-09	142.8434	-3.4E-09	1816.314
3.411	0.001	0.2988	1.345013	1816.314	0.142395	1774.198	1.322634	0.141504	42.41458	-3.6E-09	141.9497	-3.4E-09	1774.198
3.494	0.001	0.2988	1.322634	1774.198	0.141504	1732.348	1.300397	0.140619	42.14923	-5.8E-08	141.0617	-3.6E-09	1732.348

TABLE 16j

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1157
2	3049
3	5900
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.140565
2	0.186101
2.5	0.191954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 90 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.733	1.06	1	0.652663

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					
0.083	0.326332	48.75394	0	0	0	47.47693	0.040682	0.008548	1.277007	1.6E-18	0.026193	1.6E-18	47.47693
0.167	0.652663	148.024	0.040683	47.47693	0.008548	189.062	0.162097	0.034038	6.438944	8.7E-19	0.043499	8.2E-19	189.062
0.25	0.652663	195.0158	0.162097	189.062	0.034038	369.0656	0.316252	0.066445	15.0122	-1.7E-18	0.076979	-1.6E-18	369.0656
0.333	0.652663	195.0158	0.316252	369.0656	0.066445	539.6395	0.462416	0.097155	24.44183	5.2E-18	0.125033	4.6E-18	539.6395
0.417	0.652663	197.3654	0.462416	539.6395	0.097155	705.6838	0.604699	0.109995	31.32104	-1.0E-17	0.158696	-8.9E-18	705.6838
0.5	0.652663	195.0158	0.604699	705.6838	0.109995	866.8587	0.74281	0.116517	33.84083	-2.1E-17	0.173529	-1.7E-17	866.8587
0.5833	0.652663	195.7206	0.74281	866.8587	0.116517	1026.669	0.879751	0.122983	35.91053	-5.9E-17	0.183479	-4.8E-17	1026.669
0.6667	0.652663	195.9556	0.879751	1026.669	0.122983	1184.791	1.009453	0.129837	37.83325	-6.9E-18	0.193071	-5.5E-18	1184.791
0.75	0.652663	195.7208	1.009453	1184.791	0.129837	1341.32	1.092625	0.132348	39.18912	3.1E-17	0.200245	2.5E-17	1341.32
0.833	0.652663	195.0158	1.092625	1341.32	0.132348	1496.3	1.174973	0.135626	40.03697	-2.4E-17	0.205033	-1.9E-17	1496.3
0.9167	0.652663	195.0605	1.174973	1496.3	0.135626	1651.599	1.257491	0.138911	41.3818	-4.9E-17	0.212511	-3.9E-17	1651.599
1	0.652663	195.7206	1.257491	1651.599	0.138911	1805.176	1.339094	0.14216	42.14978	-2.1E-17	0.215926	-1.7E-17	1805.176
1.083	0.652663	195.0158	1.339094	1805.176	0.14216	1957.234	1.41989	0.145376	42.95779	-1.0E-17	0.220078	-8.1E-18	1957.234
1.166	0.652663	195.0158	1.41989	1957.234	0.145376	2108.334	1.500177	0.148571	43.81567	-3.8E-17	0.224518	-3.0E-17	2108.334
1.249	0.652663	195.0158	1.500177	2108.334	0.148571	2258.528	1.579998	0.15137	44.61122	7.8E-17	0.228592	6.2E-17	2258.528
1.332	0.652663	195.0158	1.579998	2258.528	0.15137	2407.909	1.659356	0.154154	45.64526	3.8E-17	0.234059	2.9E-17	2407.909
1.415	0.652663	195.0158	1.659356	2407.909	0.154154	2556.45	1.738284	0.156922	46.47468	-7.6E-17	0.238312	-5.8E-17	2556.45
1.498	0.652663	195.0158	1.738284	2556.45	0.156922	2704.166	1.816773	0.159675	47.29949	7.3E-17	0.242542	5.5E-17	2704.166
1.581	0.326332	146.2618	1.816773	2704.166	0.159675	2802.444	1.868992	0.161506	47.98436	-1.4E-16	0.328072	-9.8E-17	2802.444
1.664	0.001	48.90334	1.868992	2802.444	0.161506	2803.087	1.869334	0.161518	48.25976	-2.6E-06	0.98684	-3.4E-08	2803.087
1.747	0.001	0.2988	1.869334	2803.087	0.161518	2755.258	1.84392	0.160627	48.12839	-5.8E-07	161.0719	-4.1E-08	2755.258
1.83	0.001	0.2988	1.84392	2755.258	0.160627	2707.694	1.818647	0.15974	47.86281	-2.4E-07	160.1832	-4.6E-08	2707.694
1.913	0.001	0.2988	1.818647	2707.694	0.15974	2660.394	1.793514	0.158859	47.5987	-1.5E-07	159.2994	-4.6E-08	2660.394
2	0.001	0.3132	1.793514	2660.394	0.158859	2611.096	1.76732	0.15794	49.61071	-1.2E-07	158.3994	-4.8E-08	2611.096
2.083	0.001	0.2988	1.76732	2611.096	0.15794	2564.333	1.742472	0.157069	47.06232	-9.6E-08	157.5044	-4.9E-08	2564.333
2.166	0.001	0.2988	1.742472	2564.333	0.157069	2517.829	1.717762	0.156202	46.80265	-7.8E-08	156.6353	-4.9E-08	2517.829
2.249	0.001	0.2988	1.717762	2517.829	0.156202	2471.583	1.69319	0.15534	46.54443	-6.5E-08	155.7711	-5.0E-08	2471.583
2.332	0.001	0.2988	1.69319	2471.583	0.15534	2425.594	1.668754	0.154483	46.28764	-5.5E-08	154.9117	-5.0E-08	2425.594
2.415	0.001	0.2988	1.668754	2425.594	0.154483	2379.861	1.644453	0.153631	46.03227	-1.2E-06	154.0565	-6.6E-08	2379.861
2.498	0.001	0.2988	1.644453	2379.861	0.153631	2334.381	1.620288	0.152783	45.77833	-3.4E-07	153.2071	-7.1E-08	2334.381
2.581	0.001	0.2988	1.620288	2334.381	0.152783	2289.154	1.596256	0.151941	45.52579	-2.0E-07	152.362	-7.2E-08	2289.154
2.664	0.001	0.2988	1.596256	2289.154	0.151941	2244.179	1.572358	0.151103	45.27466	-1.4E-07	151.5215	-7.4E-08	2244.179
2.747	0.001	0.2988	1.572358	2244.179	0.151103	2199.452	1.548593	0.150269	45.02492	-1.1E-07	150.6858	-7.6E-08	2199.452
2.83	0.001	0.2988	1.548593	2199.452	0.150269	2154.975	1.52496	0.14944	44.77657	-8.9E-08	149.8546	-7.6E-08	2154.975
2.913	0.001	0.2988	1.52496	2154.975	0.14944	2110.744	1.501458	0.148616	44.5296	-6.1E-06	149.0251	-1.5E-07	2110.744
2.996	0.001	0.2988	1.501458	2110.744	0.148616	2066.774	1.478095	0.147693	44.26854	-1.1E-06	148.1539	-1.6E-07	2066.774
3.079	0.001	0.2988	1.478095	2066.774	0.147693	2023.08	1.454878	0.146769	43.99254	-7.4E-07	147.2304	-1.7E-07	2023.08
3.162	0.001	0.2988	1.454878	2023.08	0.146769	1979.662	1.431808	0.14585	43.71726	-5.6E-07	146.3092	-1.7E-07	1979.662
3.245	0.001	0.2988	1.431808	1979.662	0.14585	1936.517	1.408883	0.144938	43.44371	-4.5E-07	145.3937	-1.8E-07	1936.517
3.328	0.001	0.2988	1.408883	1936.517	0.144938	1893.644	1.386102	0.144031	43.17189	-3.7E-07	144.4841	-1.8E-07	1893.644
3.411	0.001	0.2988	1.386102	1893.644	0.144031	1851.041	1.363465	0.14313	42.90178	-3.1E-07	143.5801	-1.8E-07	1851.041
3.494	0.001	0.2988	1.363465	1851.041	0.14313	1808.706	1.34097	0.142234	42.63337	-2.7E-07	142.6818	-1.8E-07	1808.706

TABLE 16k

DETENTION BASIN RATING:

BASIN RATING (ONLY 6 POINTS

DEPTH	VOLUME
0	0
1	1167
2	3049
3	6000
4	8000
5	10000

DISCHARGE RATING:
(6 POINTS ONLY)

DEPTH	FLOW
0	0
0.5	0.105051
1	0.128661
1.5	0.140565
2	0.166101
2.5	0.181954

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 2
MODIFIED RATIONAL METHOD WITH Tc=10 MIN AND STORM DURATION 120 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.84	0.733	0.78	1	0.480262

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					
0.083	0.240131	35.87554	0	0	0	34.93586	0.029936	0.00629	0.939805	1.6E-19	0.026193	1.6E-19	34.93586
0.167	0.480262	108.9223	0.029936	34.93586	0.00629	139.1211	0.119213	0.025047	4.738691	6.5E-18	0.043499	6.2E-18	139.1211
0.25	0.480262	143.5022	0.119213	139.1211	0.025047	271.5766	0.232713	0.048894	11.04671	1.7E-18	0.076979	1.6E-18	271.5766
0.333	0.480262	143.5022	0.232713	271.5766	0.048894	397.0932	0.340268	0.071491	17.9855	-1.6E-17	0.125333	-1.4E-17	397.0932
0.417	0.480262	145.2311	0.340268	397.0932	0.071491	517.4296	0.443384	0.093156	24.89468	2.4E-17	0.171414	2.0E-17	517.4296
0.5	0.480262	143.5022	0.443384	517.4296	0.093156	631.0323	0.54073	0.106974	29.89951	5.2E-18	0.208356	4.1E-18	631.0323
0.5833	0.480262	144.0098	0.54073	631.0323	0.106974	742.2986	0.636074	0.111477	32.75455	0	0.227429	0	742.2986
0.6667	0.480262	144.1537	0.636074	742.2986	0.111477	852.3541	0.730381	0.11593	34.13022	-2.1E-17	0.236752	-1.6E-17	852.3541
0.75	0.480262	144.1538	0.730381	852.3541	0.11593	960.9511	0.823437	0.120224	35.42283	-2.4E-17	0.245963	-1.9E-17	960.9511
0.833	0.480262	143.5022	0.823437	960.9511	0.120224	1067.854	0.915042	0.124549	36.59097	-5.9E-17	0.255031	-4.6E-17	1067.854
0.9167	0.480262	144.0124	0.915042	1067.854	0.124549	1174.38	1.008921	0.128817	38.18723	2.8E-17	0.263884	2.2E-17	1174.38
1	0.480262	144.0098	1.008921	1174.38	0.128817	1279.438	1.059744	0.131039	38.96284	-5.2E-17	0.270536	-4.0E-17	1279.438
1.083	0.480262	143.5022	1.059744	1279.438	0.131039	1383.456	1.115014	0.133239	39.43822	-3.1E-17	0.27514	-2.4E-17	1383.456
1.166	0.480262	143.5022	1.115014	1383.456	0.133239	1486.82	1.169936	0.135426	40.13857	1.7E-17	0.279707	1.3E-17	1486.82
1.249	0.480262	143.5022	1.169936	1486.82	0.135426	1587.532	1.224512	0.137598	40.78779	2.8E-17	0.284245	2.2E-17	1587.532
1.332	0.480262	143.5022	1.224512	1589.532	0.137598	1691.598	1.278745	0.139757	41.4369	-4.5E-17	0.288755	-3.2E-17	1691.598
1.415	0.480262	143.5022	1.278745	1691.598	0.139757	1793.02	1.332635	0.141902	42.07994	2.8E-17	0.293236	2.0E-17	1793.02
1.498	0.480262	143.5022	1.332635	1793.02	0.141902	1893.803	1.386187	0.144034	42.71893	-3.5E-18	0.297688	-2.4E-18	1893.803
1.581	0.480262	143.5022	1.386187	1893.803	0.144034	1993.951	1.4394	0.146153	43.35389	-1.4E-17	0.302112	-9.7E-18	1993.951
1.664	0.480262	143.5022	1.4394	1993.951	0.146153	2093.469	1.492279	0.148257	43.98485	-8.0E-17	0.30651	-5.5E-17	2093.469
1.747	0.480262	143.5022	1.492279	2093.469	0.148257	2192.391	1.544841	0.150137	44.58021	-2.1E-17	0.310659	-1.4E-17	2192.391
1.83	0.480262	143.5022	1.544841	2192.391	0.150137	2290.758	1.597108	0.151971	45.13494	1.0E-17	0.314524	7.1E-18	2290.758
1.913	0.480262	143.5022	1.597108	2290.758	0.151971	2388.579	1.649086	0.153793	45.68115	-1.2E-16	0.318331	-8.0E-17	2388.579
2	0.480262	150.4179	1.649086	2388.579	0.153793	2490.531	1.703258	0.155693	46.46564	-3.5E-17	0.322207	-2.4E-17	2490.531
2.083	0.240131	107.6266	1.703258	2490.531	0.155693	2551.467	1.735636	0.156829	46.69083	-1.7E-16	0.433822	-9.8E-17	2551.467
2.166	0.001	36.02494	1.735636	2551.467	0.156829	2540.662	1.729895	0.156628	46.8304	-3.5E-16	1.299944	-1.1E-16	2540.662
2.249	0.001	0.2988	1.729895	2540.662	0.156628	2494.289	1.705255	0.155763	46.67121	-5.4E-16	156.1955	-1.1E-16	2494.289
2.332	0.001	0.2988	1.705255	2494.289	0.155763	2448.174	1.680751	0.154904	46.41372	-1.4E-16	155.3337	-4.5E-17	2448.174
2.415	0.001	0.2988	1.680751	2448.174	0.154904	2402.315	1.656384	0.154049	46.15765	-3.8E-17	154.4768	-1.8E-17	2402.315
		3458.497				3458.497	2.138766	0.1705	0	0	0	0	

TABLE 16L

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 3
SCS TR 20: FOR Tc=0.1, Ia/P=.2 AND Tt=0, 24 HR STORM

AREA (SQ MI)	CN	S	P	Q	UNIT Qp	Qp	Ia/P
0.000125	93	0.752688	1	0.450386	973	0.054778	0.150538

TIME (HOURS)	INFLOW (CFS)
10.5	0
11	0.000876
11.3	0.000957
11.6	0.001492
11.9	0.013757
12	0.034201
12.1	0.054778
12.2	0.032287
12.3	0.012217
12.4	0.00898
12.5	0.007657
12.6	0.006474
12.7	0.005433
12.8	0.00487
13	0.004279
13.2	0.003744
13.4	0.003378
13.6	0.003068
13.8	0.002815
14	0.002562
14.3	0.002388
14.6	0.002196
15	0.001999
15.5	0.001802
16	0.001605
16.5	0.001464
17	0.001407
17.5	0.001323
18	0.001267
19	0.001098
20	0.000929
22	0.000873
26	0

TABLE 17

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 3
SCS TR 20: FOR Tc=0.1, Ia/P=.1 AND Tt=0, 24 HR STORM

AREA (SQ MI)	CN	S	P	Q	UNIT Qp	Qp	Ia/P
0.000125	93	0.752688	2.56	1.835937	1010	0.231707 0	0.058804

TIME (HOURS)	INFLOW (CFS)
10.5	0
11	0.005508
11.3	0.007803
11.6	0.012163
11.9	0.07665
12	0.148481
12.1	0.231787
12.2	0.142974
12.3	0.0498
12.4	0.033735
12.5	0.028228
12.6	0.023867
12.7	0.019736
12.8	0.017441
13	0.015146
13.2	0.013081
13.4	0.011704
13.6	0.010557
13.8	0.009639
14	0.008721
14.3	0.007803
14.6	0.007344
15	0.006655
15.5	0.005967
16	0.005278
16.5	0.004819
17	0.00459
17.5	0.00436
18	0.004131
19	0.003442
20	0.002983
22	0.002754
26	0

TABLE 18

REG LOBSTER RESTAURANT, FINAL CONDITIONS, 2 YEAR STORM, BASIN 3
MODIFIED RATIONAL METHOD WITH Tc=5 MIN AND STORM DURATION 50 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.08	0.713	0.62	1	0.035365

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)
0	0	
0.083	0.035365	5.283501
0.167	0.035365	10.69432
0.25	0.035365	10.567
0.333	0.035365	10.567
0.417	0.035365	10.69432
0.5	0.035365	10.567
0.5833	0.035365	10.6052
0.6667	0.035365	10.61793
0.75	0.035365	10.6052
0.833	0.035365	10.567
0.9167	0.001	5.473721
1	0.001	0.29988
1.083	0.001	0.2988
1.166	0.001	0.2988
1.249	0.001	0.2988
		107.4435

TABLE 19

RED LOBSTER RESTAURANT, FINAL CONDITIONS, 100 YEAR STORM, BASIN 3
MODIFIED RATIONAL METHOD WITH Tc=5 MIN AND STORM DURATION 30 MIN

AREA (ACRES)	C	i	SOIL MOIS FACTOR	Qp
0.08	0.775	1.17	1	0.07254

TIME (HOURS)	INFLOW (CFS)	INCREMENT INFLOW VOLUME (CU FT)
0	0	
0.083	0.07254	10.83748
0.167	0.07254	21.9361
0.25	0.07254	21.67495
0.333	0.07254	21.67495
0.417	0.07254	21.9361
0.5	0.07254	21.67495
0.5833	0.07254	21.7533
0.6667	0.07254	21.77941
0.75	0.07254	21.7533
0.833	0.07254	21.67495
0.9167	0.07254	21.85775
1	0.07254	21.7533
1.083	0.07254	21.67495
1.166	0.07254	21.67495
1.249	0.07254	21.67495
1.332	0.07254	21.67495
1.415	0.001	10.98688
1.498	0.001	0.2988
1.581	0.001	0.2988
1.664	0.001	0.2988
1.747	0.001	0.2988
1.83	0.001	0.2988
1.913	0.001	0.2988
2	0.001	0.3132
2.083	0.001	0.2988
2.166	0.001	0.2988
2.249	0.001	0.2988
2.332	0.001	0.2988
2.415	0.001	0.2988
		351.5932

TABLE 20

DEVELOPMENT APPLICATION

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

[A] Receipt _____
Date _____
Rec'd By _____
File No. #75 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:	
[ ] Planned Development	[ ] ODP [ ] Prelim [ ] Final				
[X] Conditional Use		2.18 ac	Mesa Mall - NW corner 6#50/24½	HO	Restaurant
[ ] Zone of Annex					
[ ] Text Amendment					
[ ] Special Use					
[ ] Vacation					[ ] Right-of-Way [ ] Easement

[X] PROPERTY OWNER	[X] DEVELOPER	[X] REPRESENTATIVE
X THE EQUITABLE LIFE ASSURANCE SOCIETY OF THE UNITED STATES	X GENERAL MILLS RESTAURANTS, INC.	X RON GATES
Name	Name	Name
c/o GENERAL GROWTH MANAGEMENT, INC.	5900 LAKE ELLENOR DRIVE	5900 LAKE ELLENOR DRIVE
400 South Highway 169, Ste.800		
Address	Address	Address
MINNEAPOLIS, MINNESOTA 55426	ORLANDO, FL 32809	ORLANDO, FL 32809
City/State/Zip	City/State/Zip	City/State/Zip
612/525-1200	407/851-0370	407/851-0370
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.

GENERAL ~~MILLS~~ RESTAURANTS, INC.

X _____ 11/6/92
Signature of Person Completing Application — Date

RON GATES, SITE DEVELOPMENT ADMINISTRATOR

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

GERARD M. MATELSKI
INVESTMENT OFFICER

A

1-800-562-7837 x 7157
Fax - (407) 850-5380

Paul Peterson - Mesa Mall
242-0008
2424 Vs Hwy 6 & 50
Mesa Mall 81505

Larry - Western Engineers 242-5202
FAX 242-1672

Chuck Dunn - CDOT - see if City or State has jurisdiction

1-800-562-7837
ext 7189

General Mills Restaurants, Inc.

Red Lobster The Olive Garden

RON GATES
Site Development Administrator

Mailing Address
P.O. Box 593330
Orlando, FL 32859-3330

5900 Lake Ellenor Drive
Orlando, FL 32809
~~(407) 851-0370~~

2945-092-10-015
McDonald's
PO Box 66207
AMF Ohare Airport
Chicago, Ill. 60666

2945-092-10-016
Sizzler
c/o Country Management Int.
198 North 100 East

2945-092-10-016
Sizzler
c/o Country Management Int.
198 North 100 East
St. George, Utah 84770

2945-092-10-018
Sizzler
Intermountain SFSH
310 East 4500 South
Murray, Utah 86107

2945-092-10-019
Toys "R" Us
461 From Road
Paramus, New Jersey 07652

2945-092-10-011
General Growth - Equitable
c/o GGMC Agent
PO Box 1536
Des Moines, Iowa 50306

2945-092-10-003
J.C. Penney Property, Inc.
PO Box 65900
Dallas, Texas 75265-9000

2945-091-03-003,004,019
Henry P. Lackey & Co.
756 Flower Street
Grand Junction, Colorado 81506

2945-091-03-002
Arrow Gas Co.
PO Box 1777
Roswell, NM 88201

2945-091-03-001
Richard A. & Connie Salazar
2039 Surrey Court
Grand Jct, Colo. 81503

2945-091-05-006,008
Valley Federal Savings & Loan
RTC - Reciever ATTN: K.Taylor
1515 Academy Blvd.
Colo. Springs, Colo. 80909

2945-092-00-157,158
MCM Acquisition Corp., Inc.
2449 U.S. Hwy 6&50
Grand Junction, CO 81505

2945-091-00-104
Reed-Miller Inc.
P.O. Box 157
Grand Junction, CO 81502

General Mills Restaurants, Inc.
Mr. Ron Gates
PO Box 593330
Orlando, Florida 32859-3330

LR Gebhart
Western Engineers, Inc
2150 Highway 6&50
Grand Jct., Colo. 81505

Robert K. Wallin
Color Country Mgmt Int'l
PO Box 381
St George, Utah 84771

Larry M. Follett
Color Country Mgmt Int'l
1967 E. Oak Drive
Sandy, Utah 84092

#75 92

Remove

H

WESTERN ENGINEERS, INC. SINCE 1052
CONSULTING ENGINEERS / LAND SURVEYORS
2150 Hwy. 6 & 50, Grand Junction, CO 81505-9422 • 303/242-5202 • FAX 242-1672

Narrative for a
CONDITIONAL USE PERMIT
Grand Junction, Colorado

PROPOSAL

The proposed project by General Mills Restaurants, Inc. entails the construction of a Red Lobster Restaurant. The restaurant is virtually a household name and specializes in seafood cuisine. Red Lobster is a family oriented, full service restaurant serving lunch and dinner seven days a week. (Sunday-Thursday, 11:00am-10:30pm and Friday-Saturday, 11:00am-11:00pm). The 6,160 square foot facility with seating for 210 guests will be the focus of the project which will provide an excellent opportunity for both family and individual dining. The full service restaurant will be an attractive complement to the retail and entertainment community around the Mesa Mall.

The Conditional Use Permit is being sought as a requirement for providing alcoholic beverages in a fine dining environment to enhance the guests gourmet experience. Although sales of alcoholic beverages comprise only a small percentage of total sales, the ability to obtain a license to sell liquor is a pre-requisite to establishing a Red Lobster Restaurant in Grand Junction. In conjunction with the filing of this Conditional Use Permit, General Mills Restaurants, Inc. will apply with the City of Grand Junction for a Hotel/Restaurant Liquor License with extended hours.

LOCATION

Located at the northwest corner of 24-1/2 Road and U.S. Highway 6&50, (The Mall, between **Sizzler** and **Toys "R" Us**) the restaurant will serve local clientele as well as visitors from the Interstate Highway System. The adjacent retail stores and movie theaters indicate that the area is well utilized by consumers and that full service dining will be a much appreciated service.

SCHEDULE

While detailed construction documents have been formalized, contractor selection is pending. However, construction is expected to commence soon after approval of the Conditional Use Permit,

possibly as soon as January or February of 1993 and proceed toward an early Spring completion, approximately 120 construction days.

AREA IMPACT

There are no facilities within one mile that may be sensitive to the type of service offered. As has already been stated, this restaurant will actually provide a benefit to the consuming public by offering complementary services to shoppers and entertainment seekers alike. Traffic access has been well planned with several access points being provided. The present empty lot will be replaced with a handsome building and pleasing landscape that will augment the business corridor along Highway 6&50.

In addition to providing quality seafood cuisine, Red Lobster will provide employment for approximately 100 persons. All managers and employees who work with alcoholic beverages receive alcohol awareness education, which includes: proper carding procedures; recognizing and handling of intoxicated guests; and all applicable liquor laws.

TRAFFIC ANALYSIS

As previously mentioned, traffic access has been well planned. The ability to access the property from 24-1/2 Road is enhanced by the existing median break just north of the intersection with the Highway 6&50. Sufficient stacking lanes already exist along the raised median to allow for left and right turns required to enter and exit the property through a previously constructed driveway cut. Additional access will be provided by a driveway connecting to an existing Mall entrance from Highway 6&50, allowing convenient access to the retail facilities in the Mall. As far as any increase in traffic, the restaurant hopes to attract many customers shopping at the mall. A small increase of traffic density may be expected during limited hours of peak dining. A full traffic study has been presented to the City and details regarding traffic count will be found there.

DEVELOPMENT GUIDELINES

The development plans will conform to all City specifications and guidelines for minimum standards regarding parking, access, lighting, landscaping, and utility connections and will adhere to recommendations from the review and approval of the plan as submitted with this application. Utility connections are available

from adjacent facilities serving the Mesa Mall in general. Surface drainage will be controlled through curbing, piping and channeling detention of runoff and directed to existing drainage facilities along Highway 6&50. Adequate lighting will be provided to insure public safety and security. Pedestrian access along 24-1\2 Road will be improved by the provision of sidewalks along the entire frontage. Irrigation water will be provided by Mesa Mall and will be distributed underground and pressurized. With addition of landscaping features to the plan, the entire visual impact of the present street corner will by vastly improved.

PRE-SUBMITTAL COMMENTS - RED LOBSTER
NOVEMBER 20, 1992

Chris Freshley
503-222-9881

COMMUNITY DEVELOPMENT DEPARTMENT

GENERAL

Additional information required for submittal:

- Completed application
- Application fee
- Project narrative
- Elevation drawings
- Revised Traffic Study (to include Toys 'R Us)
- Drainage Study
- Geotechnical Report
- Improvements Agreement
- Appraisal of raw land value
- Floodplain Permit application
- Sign details
- Show sign placement on site plan (if applicable)
- Show sign placement on building elevations
- Lighting standard(s) detail
- Dumpster screening detail and/or provide height/material information on site plan
- Other items as indicated on Action Sheet

SITE PLAN

1. Pursue shared access/parking (west) with adjacent Sizzler restaurant.

2. Improve traffic flow in/out of 24-1/2 Road access (also see Development Engineer comments).

   - Left turn in to site from 24-1/2 Road - need more stacking distance in median
   - Provide Right Turn Only sign for vehicles entering site from 24-1/2 Road
   - Revise geometry of north side of 24-1/2 Road entrance

3. Note on site plan: square footage of landscaping (existing and proposed) and percentage of landscaping (existing and proposed).

LANDSCAPE/IRRIGATION PLANS

1. Originally, Red Lobster suggested they would like to provide landscaping in the US 6 & 50 right-of-way. This would enhance the visibility of the US 6 & 50 intersection for Red Lobster and general Mall traffic. The City would encourage Red Lobster to pursue this if it is acceptable with the Colorado Department of Transportation.

2. If west entrance drive remains the same, pavement must be wider (22' min.) so planting strips on either side will be too narrow. Move all plantings to south side of drive to provide wider planting strip and accommodate full driveway width.

3. Recommended species revisions:

still used - ok Amur Maple might be stressed in high salt soil on this site unless improved soil is used

Royalty Crab → Use Radiant/Red Splendor/Royalty instead of Pink Spires Crab

- Use Blue Creeper, Hughes or Blue Chip instead of Blue Danube juniper

- Use Dwarf Mugo Pine or substitute low juniper

Still have periwinkle ok - Substitute groundcovers: Sedum, Ice Plant, Snow-in-Summer, Sages, Penstemon

4. Place Compact European Cranberry on north side of building unless there is a large overhang on the south/southwest facade. Spirea can take sun better than Cranberry.

5. Throughout interior, use variety of mugo pines which are lower or substitute other low shrubs - for visibility.

6. Plants labled as "JBC" should be "JB"?

7. East side of plan does not conform to City Code (40% shrubs), however, due to additional plantings within parking lot, this requirement can be waived. The large, grassy area is easier to maintain than small patches between shrub beds.

8. If geometry of north side of 24-1/2 Road entrance is revised, provide low shrubs to match south side of entrance.

9. Where is the Manual Drain Valve (detail shown) located on the Irrigation Plan? This is required for winterization in this climate (stop and waste valve often used).

10. What is the break in the parking island just northeast of the building for? It is not indicated on other plan sheets.

drainage

CITY DEVELOPMENT ENGINEER

SITE PLAN

1. Provide 11-foot minimum width left turn lane for 2 vehicles (50' storage, 60' transition) in north median at west entrance.

2. Revise turning radii on both sides of west entrance.

3. Widen pavement of west entrance drive to 22 feet minimum (24 feet preferred).

4. For easier truck access, suggest removing landscape island closest to west entry drive. Replace with painted median.

5. Revise turning radius on north side of east entrance and eliminate 4 parking stalls to allow for traffic stacking at entrance. Use full available radius from existing curb return to back of parking (approximately 29-foot radius).

6. Do not need to provide sidewalk on south side of east entrance.

7. Remove portion of median at US 6 & 50 and 24-1/2 Road and provide 75' left turn lane with a 60' transition. This results in a straight curb to the remaining portion of the median.

8. Provide C & G coordinates; or full curve data, dimensioning and ties to property lines.

9. Change Note 3 to read "According to the F.E.M.A. study, the property . . ."

GRADING AND DRAINAGE PLAN

1. Check and revise dimensions on valley pan detail.

2. Provide coordinates of storm drain system.

3. Note that reads: Storm Drain conveyances are shown on Sheet C6 of C6. Should this be Sheet 3 of 5?

4. Change Note 3 to read "According to the F.E.M.A. study, the property . . ."

UTILITY COMPOSITE

1. Rather than go to the expense of all the 6" pipe, why not release the roof runoff direct?

2. What elevation are the perimeter drains at? Will the storm runoff surcharge the perimeter drain in significant storms? The drains ought to be above the top of curb at nearby catch basin inlets, such as at 47.11 + 0.5 = 47.61 or above.

3. A 4" sewer line and a 6" storm drain conflict.

4. Pipe cover is shallow. Address this problem.

5. An easement is required for the sewer line across the property to the north if it is to be public, or an agreement only if it is private. Please submit necessary supporting documents.

6. Submit a detail of the grease trap.

7. Will gas service be provided? Other utilities?

8. Revise Note 3 to read "According to the F.E.M.A. study, the property . . ."

628-5090

Color Country Man[illegible]ment Int'l. 1967 E. Oak Manor Drive, San[illegible], Utah 84092 (801) 572-5457
P.O. 381 St. George 84771

Sizzler®

Sizzler

405 EAST ST. GEORGE BLVD
ST. GEORGE UTAH 84770

August 19, 1992

tment

)1-2668

We have been advised that General Mills is developing a Red Lobster Restaurant on the corner of Highway 6 & 50 and 24 1/2 Road next to our Sizzler in Grand Junction. We were further advised that in connection with General Mill's development they were building an access road from their property to the Mall Entrance Drive #1 adjacent to or near our access drive to the Mall Entrance Drive #1.

Although, we have not seen the plans for General Mills development, from the information we do have, it is our opinion that having two access roads from the Mall Entrance Drive #1 so close together will cause a serious traffic hazard and should not be approved by the Planning Department. With cars turning both left and right into and out of both accesses will certainly cause many accidents. It is our position that one access could serve both properties with much less confusion and traffic problems.

If we can provide further information or be involved in future discussions on the matter, we would be happy to do so. Thank you for your time and attention to this matter.

Sincerely,

Larry M. Follett, Partner

cc: Robert K Wallin
Brad J. Osmundson, General Growth Management, Inc.

RED LOBSTER SIGNS

TOTAL SIGNAGE ALLOWED

6 & 50 FRONTAGE :	273' x 1.5 =	409.5 sf
24-1/2 RD FRONTAGE :	440' x 1.5 =	660.0 sf
	Total	1069.5 sf

PROPOSED SIGNS

Monument Sign	50 sf
<u>West Elevation</u>	
Red Lobster	48 sf
<u>East Elevation</u>	
Red Lobster	48 sf (on angled entry)
Red Lobster	31 sf
<u>North Elevation</u>	
Red Lobster	48 sf (on angled entry)
<u>South Elevation</u>	
Lobster Logo	24 sf
Red Lobster	48 sf
TOTAL SIGNAGE USED	297 sf

IMPROVEMENTS LIST/DETAIL

NAME OF DEVELOPMENT:
DATE:
PRINTED NAME OF PERSON PREPARING THIS MATERIAL:

	UNITS	TOTAL QTY.	UNIT PRICE	TOTAL AMOUNT
I. SANITARY SEWER				
1. Connection to Existing Manhole(s)				
2. PVC sanitary sewer main (inc. trenching, bedding & backfill)				
3. Sanitary sewer manhole(s)				
4. Asphalt roadway restoration				
5. Driveway restoration				
6. Clearing & grubbing				
7. Utility adjustments				
8. Sewer Services (Inc. trenching bedding & backfill)				
II. DOMESTIC WATER				
1. Connect to existing water lines				
2. Asphalt roadway restoration				
3. Roadway cut and patch				
4. Sub-base				
5. Water main (inc. excavation, bedding, backfill, valves & appurtenances)				
6. utility adjustments				
7. clearing & grubbing				
8. Water services (inc. excavation, bedding, backfill, valves & appurtenances)				
III. STREETS				
1. Asphalt				
2. Base Course				
3. Retaining walls				
3. Curbs				
4. Gutters				
5. Sub-base				
6. Sub-grade stabilization				
7. Signs and other traffic control devices				
8. Earthwork & completion (including embankment)				
9. Clearing and grubbing				
10. Utility adjustments				
11. Sidewalks				
12. Storm Drainage System				
13. Street Lights				
IV. LANDSCAPING				
V. INCIDENTALS				
1. Engineering				
2. Surveying				
3. Developer's inspection costs				
4. Recording Costs				
5. Bonds				
6. Rights-of-way/easements				
7. City inspection services				
8. Permit fees				
9. Quality control testing				
10. Irrigation System				
11. Traffic Control				
12. Newsletters				

MesaMall
2424 US 6 & 50 • Grand Junction, CO 81505• (303) 242-0008

December 11, 1992

Kris Ashbeck
Community Development Department
City of Grand Junction
250 N. 5th St.
Grand Junction, CO 81501

Dear Kris:

This is in regard to our phone conversation today concerning the Red Lobster access road.

On December 9, 1992, Don Benson and Dan Owen, with General Growth Management, Inc. and Bob Wallin, with Sizzler Restaurants, met to discuss issues concerning the Sizzler Restaurant and the proposed Red Lobster Restaurant. In their conversation, they agreed that a right turn only leaving the Red Lobster onto the mall entrance would help to eliminate traffic confusion and/or accidents. Also discussed was a left turn lane to stack 3 autos from the mall median to turn into the Red Lobster access road. This would also help to elimiate some traffic congestion.

If you have any questions, please call.

Sincerely,

GENERAL GROWTH MANAGEMENT, INC.

Paul Petersen
Operations Director

PP/pz

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT

DEC 14 1992

REVIEW COMMENTS

FILE NO. #75-92 **TITLE HEADING: Red Lobster Restaurant**

ACTIVITY: Conditional Use Permit & Site Plan Review

LOCATION: 575 24 1/2 Road (Mesa Mall)

PETITIONER: General Mills Restaurants, Inc. (Red Lobster)

PETITIONER'S ADDRESS/TELEPHONE: 5900 Lake Ellenor Drive
Orlando, FL 32809

ENGINEER/REPRESENTATIVE: c/o Larry Gebhard, Western Engineers, Inc.
2150 Hwy. 6 & 50
Grand Junction, CO 81505

STAFF REPRESENTATIVE: Kristen Ashbeck

NOTE: WRITTEN RESPONSE BY THE PETITIONER TO THE REVIEW COMMENTS IS REQUIRED ON OR BEFORE 5:00 P.M., October 24, 1992

CITY AGENCIES:

CITY ATTORNEY **12/16/92**
Dan Wilson **244-1505**

No comments received at this date.

CITY FIRE DEPARTMENT **12/16/92**
George Bennett **244-1400**

No problems at this time. A Fire Department Clearance Form and Fire Flow Survey will need to be completed prior to issuance of Building Permit. A stamped set of plans is required to complete the survey and clearance form.

CITY PARKS & RECREATION **12/16/92**
Don Hobbs **244-1542**

Attached appraisal $455,000. x 5% = $22,750. due for Open Space Fees.

POLICE DEPARTMENT **12/16/92**
Marty Currie **244-3563**

No problems.

DEVELOPMENT ENGINEER **12/16/92**
Gerald Williams **244-1590**

1. On-site curbing and area lighting do not need to be included in the Improvement Agreement. However, asphalt and concrete work for the off-site medians and curb returns should be added.

2. A left-turn storage lane which could accommodate two vehicles must be provided in the mall entrance road median.

3. The on-site curb return north of the 24 1/2 Road entrance shall begin at the existing curb return from 24 1/2 Road, and have a radius of approximately 29 feet. The two parking places in that location shall be removed.

4. If the 8" Sewer Line and manhole are to be public, a 20' wide easement must be provided. This would be across Toys R Us and on the Red Lobster site. Also, the service tap may not tie into the manhole.

5. Please specify pipe material to be used for sewer and storm drain. Also, the storm drain is very shallow from the north inlet. What special construction measures, if any, are proposed?

6. Due to the minimal drainage flows anticipated, the storm drain lines could be smaller than the 6" and 8" pipes specified.

7. The Drainage Report is approved.

8. See attached changes to the Development Improvements Agreement.

CITY UTILITIES ENGINEER **12/16/92**
Bill Cheney **244-1590**

Water - Ute Water

Sewer - "Plant Investment Fee" for sewer is calculated as follows:
.14 x 210 seats x $750. = $22,050.

An Industrial Pretreatment Permit will be required prior to operation. An approved grease trap will also be required. Contact Emily Whittman for information on grease trap and industrial pretreatment, 244-1489 at Persigo Treatment Facility.

A recorded easement across Toys R Us and to the manhole on the Red Lobster will be required. Minimum easement width is 15', centered on line.

CITY TRAFFIC ENGINEER **12/16/92**
Dave Tontoli **244-1567**

No comments received at this date.

COMMUNITY DEVELOPMENT DEPARTMENT **10/12/92**
Kristen Ashbeck **244-1437**

See attached comments.

COUNTY & STATE AGENCIES:

BUILDING DEPARTMENT 12/16/92
Bob Lee 244-1656

No comments received at this date.

MESA COUNTY HEALTH DEPARTMENT 12/16/92
Dana A. Black, Sanitarian 248-6964

Section 10-401, page 72, of the Rules and Regulations Governing The Sanitation of Food Service Establishments in the State of Colorado, Effective Date: July 31, 1990, states the following:

> "Submission of Plans. It shall be necessary to submit to the Department detailed plans and specifications of a proposed newly constructed food service establishment and/or the affected areas of any extensively remodeled food service establishment. Each food service operator, or person intending lkto become a food service operatior, shall be responsible for submitting all plans and specifications. Those assisting an operator may submit plans and specifications on the operator's authority. The Deparment shall be consulted before preparation of palns and specifications. Approval of both plans and specifications is necessary before construction begins. A minimum of two (2) weeks shall be necessary for the Department to review and approve plans. Any revision of plans shall be submitted for review and modification or approval."

COLORADO DEPARTMENT OF TRANSPORTATION DATE 12/16/92
R. Perske, W. Spanicek 248-7232

The Colorado Department of Transportation has no comments other than "the sooner, the better".

OTHER REVIEW AGENCIES:

GRAND JUNCTION DRAINAGE 12/16/92
John Ballagh 242-4343

The drainage district is not directly affected by the proposed development at the Hwy 6 & 50/24 1/2 Road site. The drainage evaluation is appropriate and seems to provide the information necessary the evaluate the plans.

GRAND VALLEY IRRIGATION 12/16/92
Phil Bertrand 242-2762

No comments received at this date.

FLOODPLAIN ADMINISTRATION 12/16/92
Karl Metzner 244-1439

Application meets all requirements for a floodplain permit. Even so, lobsters do quite well in high water situations.

PUBLIC SERVICE COMPANY 12/16/92
Harold Ball 244-2693

No comments received.

U.S. WEST 12/16/92
Leon Peach 244-4964

No comments at this time.

UTE WATER 12/16/92
Gary R. Mathews 242-7491

The locations of the backflow preventer needs changed. The location will be after the meter and not before. The backflow preventer is maintained by the owner and not Ute Water.

POLICIES AND FEES IN EFFECT AT THE TIME OF APPLICATION WILL APPLY.

MESA MALL 12/16/92
Paul Petersen, Operations Director 242-0008

See attached letter.

75-92 COMMUNITY DEVELOPMENT DEPARTMENT
Kristen Ashbeck 244-1437

GENERAL

1. The total signage proposed (249 square feet) is well within that allowed on this parcel. Section 5-7 of the Zoning and Development Code allows a development through a Conditional Use permit to aggregate the total sign allowance for a parcel and redistribute that allowance on the parcel. This allows the petitioner to have signs on four sides of the building.

2. All review agency summary sheet comments must be addressed by the petitioner and written response to the comments must be in the Community Development Department office by Monday at 5 pm, December 28, 1992.

3. An Open Space fee of $22,750 (5% of $455,000) must be paid prior to issuance of a building permit.

4. The improvements agreement and guarantee must be signed and executed prior to issuance of a building permit.

5. The improvements agreement must include cost of off-site improvements in medians on mall ring road and the potential changes on 24-1/2 Road.

6. An easement must be recorded for the sanitary sewer line across the property to the north prior to issuance of a Planning Clearance for a Building Permit.

6. All recording fees are to be paid by the petitioner.

SITE PLAN

1. Improve traffic flow in/out of 24-1/2 Road access:

   - Provide traffic counts for left turn vehicles into Red Lobster site 6 months from opening date; then, if warranted, median must be altered to provide more stacking distance.
   - Revise geometry of north side of 24-1/2 Road entrance.

2. The City Floodplain Administrator must approve this site plan as to Floodplain Regulations.

3. The number of parking spaces is sufficient. 128 spaces are proposed and 70 spaces are required. The number of accessible spaces and the dimensions of those spaces as proposed meet ADA requirements.
4. Indicate wall signs (2) on corner awning above angled entry.

LANDSCAPE/IRRIGATION PLANS

The pre-submittal landscape and irrigation plans were not revised for the December 1, 1992 submittal. Thus, some of the following comments are reiterated.

1. Base map used must correspond to site plan e.g. planting strip along south side of entry drive and radius of curve on north side of 24-1/2 Road entry.

2. Recommended species revisions:

   - Amur Maple might be stressed in high salt soil on this site unless improved soil is used
   - Use Radiant/Red Splendor/Royalty instead of Pink Spires Crab
   - Use Blue Creeper, Hughes or Blue Chip instead of Blue Danube juniper
   - Use Dwarf Mugo Pine or substitute low juniper
   - Substitute groundcovers: Sedum, Ice Plant, Snow-in-Summer, Sages, Penstemon

3. Place Compact European Cranberry on north side of building unless there is a large overhang on the south/southwest facade. Spirea can take sun better than Cranberry.

4. Throughout interior, use variety of mugo pines which are lower or substitute other low shrubs - for visibility.

5. Plants labled as "JBC" should be "JB"?

6. The total amount of landscaping shown is adequate; however, the east side of plan does not conform to City Code (40% shrubs). Due to additional plantings within parking lot, this requirement can be waived. The large, grassy area is preferred as it is easier to maintain than small patches between shrub beds.

7. Once the geometry of north side of 24-1/2 Road entrance is revised, provide low shrubs to match south side of entrance.

8. Where is the Manual Drain Valve (detail shown) located on the Irrigation Plan? This is required for winterization in this climate (stop and waste valve often used).

9. What is the break in the parking island just northeast of the building for? It is not indicated on other plan sheets.

December 23, 1992

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

Mr. Paul Petersen, Operations Director
Mesa Mall
2424 U.S. Highway 6 & 50
Grand Junction, Colorado 81505

Dear Mr. Petersen,

Upon review of the plan submitted for development of a Red Lobster restaurant at 575 24-1/2 Road, the City of Grand Junction Community Development and Engineering staff has the following remarks concerning the access to the parcel from the Mesa Mall ring road entrance.

1) While the City would prefer that the north side of this access have a minimum 20-foot radius, it will not require this if it results in encroachment on the property to the north (Toys 'R Us) and requires relocation of the storm water detention surface outlet located at this intersection. The City will, however, require that the developer provide the maximum radius allowable without this encroachment.

2) The City is <u>not</u> recommending that there be a right turn only out of the Red Lobster site onto the Mesa Mall ring road entrance. While there are still safety concerns with this situation, the alternative is a shared access with the parcel to the south (The Sizzler) which does not present a workable solution at this time. Traffic should be allowed to make both right and left turns out of the Red Lobster site for purposes of truck traffic (the only point which has sufficient radius for trucks to exit the site) and so that the signal on U.S. Highway 6 & 50 at the Mall entrance is accessible to exiting traffic. A right turn only restriction out of the Red Lobster site would be contrary to the natural flow of traffic wishing to exit the site. With a right turn only, traffic would likely exit the Mall onto 24-1/2 Road north of Toys 'R Us which is already the busiest exit point and which has no signal. Thus, the City feels that splitting the traffic by allowing both left and right turns out of the Red Lobster site is the more desirable situation.

Should you have further questions regarding these issues, please contact me at the Community Development Department.

Sincerely,

Kristen

Kristen Ashbeck
Planner

xc: Gerald Williams

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

RESPONSE TO
REVIEW COMMENTS

RED LOBSTER RESTAURANT
Conditional Use Permit
575 24-1/2 Road (Mesa Mall)

December 28, 1992

CITY FIRE DEPARTMENT

The fire department will be supplied with a stamped set of plans for review and approval before application to build.

CITY PARKS & RECREATION

The payment of the Open Space Fees will be paid preceding application for a building permit.

DEVELOPMENT ENGINEER

1. The Improvements Agreement will be revised according to the off-site and ROW improvements.
2. A left turn storage lane in the Mall median will be provided.
3. The entrance on 24-1/2 Road will be modified with an approximate radius of 29' on the right hand side.
4. A minimum of 15' will be provided for an easement for the sewer line through Toys R Us. The service line will not be connected to the manhole.
5. The storm drain and sewer service will be PVC pipe. In areas of shallow construction, storm lines will be encased with flow-crete.
6. Smaller storm drain lines are under consideration.

CITY UTILITY ENGINEER

The "Plant Investment Fee" will be paid. Emily Whittman will be contacted with regards to the grease trap and pretreatment requirements. A minimum 15' easement is being developed at this time.

COMMUNITY DEVELOPMENT DEPARTMENT

GENERAL
Open Space Fee will be paid prior to application for building permit. Improvement agreement and guarantee reflecting the medians in the Mall and 24-1/2 Road will be signed and executed before application for a building permit. The easement for the sanitary sewer will be resolved preceding the application for building permit.

SITE PLAN

1. Six months from opening date, the traffic situation at the 24-1/2 Road entrance will be evaluated for possible alterations of the median if necessary for public safety.
4. The two wall signs on the angled entry will be indicated on the site plan.

LANDSCAPE/IRRIGATION PLANS

The landscape architect is waiting for resolution and approval of site plan change before making hard copy revisions. The pre-submittal comments have been reviewed by the landscape architect and there are no objections. The revised landscape and irrigation plan will be submitted for approval before application for building permit.

MESA COUNTY HEALTH DEPARTMENT

Appropriate submittal will be made to the health department for approval prior to application for building permit.

UTE WATER

The location of the backflow preventer will be positioned after the water meter. General Mills will be responsible for maintaining the backflow preventer.

MESA MALL

The elimination of a left hand turn (through opposing traffic) for any intersection is undoubtedly safer. The traffic volumes for this particular intersection may not warrant this restriction. There is no physical way to deter this movement other than the posting of signs. The elimination of a left turn will force people wishing to travel west on 6&50 to use the 24-1/2 Road exit or to make a circuitous route via the ring road.

STAFF REVIEW

FILE: 75-92
DATE: December 30, 1992

REQUEST: Conditional Use - Liquor License
LOCATION: 575 24-1/2 Road

APPLICANT: General Mills Restaurants, Inc. (Red Lobster)

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Business - Restaurant

SURROUNDING LAND USE:

NORTH:	Business - Retail
SOUTH:	Commercial - Vacant
EAST:	Commercial - Mixed Use
WEST:	Business - Restaurant

EXISTING ZONING: Highway Oriented (H.O.)

PROPOSED ZONING: Highway Oriented (H.O.)

SURROUNDING ZONING:

NORTH:	Highway Oriented (H.O.)
SOUTH:	Light Commercial (C-1)
EAST:	Highway Oriented (H.O.)
WEST:	Highway Oriented (H.O.)

RELATIONSHIP TO COMPREHENSIVE PLAN:

The infill of commercial development proposed by this project is consistent with the existing and intended uses and zoning along the U.S. Highway 6 & 50 corridor. This project will result in a currently vacant lot being improved, developed, and landscaped.

STAFF ANALYSIS:

Circulation. Two access points are proposed; one at an existing curb cut on 24-1/2 Road, and one off the mall ring road. Neither are very desirable locations for access, but given the property is surrounded by existing development, and the configuration of the lot, the two access points as shown are the best alternatives which could be

developed. The petitioner has made some revisions to the plan which have mitigated some safety concerns of City staff and the adjacent property tenants such as providing adequate turning radii at the entries, a stop sign at the mall ring road intersection, and a left hand turn pocket in the median on the mall road. If, after six months of operation, traffic generated by the Red Lobster restaurant warrants it, the developer will provide additional stacking distance in the left hand turn pocket in the median on 24-1/2 Road.

Landscaping. Landscaping within the parking area meets code requirements and the total amount of landscaping shown is above that required by code. The petitioner has no objections to staff review comments which primarily recommended revision of some plant species; however, a revised landscape plan which corresponds to changes made to the site plan (e.g. increase in turning radii at entry points and width of entry drive off mall ring road) must be submitted prior to issuance of a building permit.

Parking. The total number of parking spaces required is 70. The total number of parking spaces proposed is 126. In compliance with ADA requirements, 5 accessible spaces, including 1 with an 8-foot aisle are provided.

Utilities/Grading and Drainage. The primary outstanding issue regarding utilities is the easement for the sanitary sewer line through the property to the north of the Red Lobster site (Toys 'R Us). A minimum 15-foot easement is required unless the line is to be privately maintained. The grading and drainage plan and report have been approved.

Floodplain. The Red Lobster site lies in the floodway of the Horizon Drive Channel per the July 1992 Flood Insurance Rate Maps and has a base flood elevation of 4549.7 feet. In order to meet the requirements of the National Flood Insurance Program, the Red Lobster building must be constructed at least one foot above that elevation. As indicated on the Grading and Drainage and Site Plans, the finished floor elevation of the building will be 4552 feet. Thus, the project meets the flood insurance requirements. All documentation has been submitted, reviewed and approved for a Floodplain Permit.

Signage. The total signage proposed (297 square feet) is well within that allowed on this parcel. Section 5-7 of the Zoning and Development Code allows a development through a Conditional Use permit to aggregate the total sign allowance for a parcel and redistribute that allowance on the parcel--such as on four sides of the building.

Open Space Fee. An appraisal for the property has been submitted and the open space fee has been calculated to be $22,750.

STAFF RECOMMENDATION: Approval with the following conditions: 1) Submittal of a revised Improvements Agreement which reflects off-site median improvments required on the Mall Entrance Road and potentially required on 24-1/2 Road. 2) Submittal of a revised Landscape Plan which corresponds to the Site Plan and addresses staff review comments. 3) Resolution of the 15-foot easement for the sanitary sewer line across the Toys 'R Us parcel. 4) Payment of the Plant Investment and Open Space Fees prior to applying for a building permit. 5) Adequately address all other review agency comments.

FF

ACTION SHEET

ACRES 2.18
UNITS N/A
DENSITY N/A

CONDITIONAL USE

FILE NUMBER #75 92
ZONE HO
TAX SCHEDULE # 2945 09 10 017

ACTIVITY Conditional Use for Liquor License & Site Plan Review - Red Lobster
PHASE
COMMON LOCATION Mesa Mall - NW Corner Hwy 6 & 50 & 24½ Road 575 24½ Rd
DATE SUBMITTED DATE MAILED OUT DATE POSTED
DAY REVIEW PERIOD RETURN BY
OPEN SPACE DEDICATION (acreage) OPEN SPACE FEE REQUIRED $ PAID RECEIPT #
RECORDING FEE REQUIRED $ PAID (Date) DATE RECORDED

REVIEW AGENCIES

	A	B	D	E	G	H	I	M	N	O	Q	S	T	U	V	X	Y	Z	BB	CC	DD	FF
● Community Development	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
● Development Engineer (2 sets)	●	●					●	●	●	●	●	●	●	●	●	●	●	●		●		
● 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	●	●						●	●	●	●	●			●			●		●		
○ School District 51	●	●						●	●	●	●	●			●			●		●		
● Irrigation Grand Valley	●	●						●	●	●	●	●	●		●			●		●		
● Drainage Grand Junction	●	●						●	●	●	●	●	●		●			●		●		
● Water (Ute) Clifton)	●	●						●	●	●	●	●	●		●			●		●		
○ Sewer Dist. (FV, CGV, OM)	●	●						●	●	●	●	●	●		●			●		●		
● U.S. West	●	●						●	●	●	●	●	●		●			●		●		
● Public Service (2 sets)	●	●						●	●	●	●	●	●		●			●		●		
● State Dept. of Transportation	●	●						●	●	●	●	●			●			●		●		
○ State Geological Survey	●	●						●	●	●	●	●			●			●		●		
○ State Health Department	●	●						●	●	●	●	●			●			●		●		
● City Property Agent	●	●						●	●	●	●	●	●		●		●	●		●		
● City Utilities Engineer	●	●						●	●	●	●	●	●		●		●	●		●		
● City Attorney	●	●		●				●	●	●	●	●						●		●		
● Building Department	●	●								●	●	●			●			●		●		
○ DDA	●	●								●	●			●	●			●		●		
● GJPC (7 packets)	●	●								●				●	●		●	●		●	●	✗
○ CIC (1 packet)	●	●								●				●	●					●	●	
○ County Surveyor	●				●																	
○ Other	●	●								●	●	●						●		●	●	
○ 27 Packets																						
○																						

TOTALS

BOARDS PC
DATE 1/5/93

Approval - subject to review sheet comments

STAFF

2 checks: $50 sign deposit (refundable)
$560 fee
both payable to City of Grand Junction

APPLICATION FEE REQUIREMENTS

January 14, 1993

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

Mr. Ron Gates, Site Development Administrator
General Mills Restaurants, Inc.
PO Box 593330
Orlando, Florida 32859-3330

Dear Mr. Gates,

At the January 5, 1993 hearing, the Grand Junction Planning Commission approved your application for a Conditional Use Permit for a Restaurant (Red Lobster) with a Liquor License at 575 24-1/2 Road in Grand Junction. This approval is subject to the following requirements being adequately met:

1. Submit a revised Improvements Agreement which includes off-site median improvments required on the Mall Entrance Road and potentially required on 24-1/2 Road.
2. Submit a revised Landscape Plan which corresponds to the Site Plan and addresses staff review comments.
3. Resolution, if possible, of the 15-foot easement for the sanitary sewer line across the Toys 'R Us parcel by March 19, 1993.
4. Payment of the Plant Investment Fee ($22,050) and the Open Space Fee ($22,750) prior to applying for a Building Permit.

In addition to the above items, the petitioner must meet the following requirements:

5. Submit a Letter of Credit relative to the Improvements Agreement.
6. Obtain necessary approvals from the Mesa County Health Department and the Grand Junction Fire Department.
7. Provide one (1) full size mylar and one (1) 11" x 17" reduced mylar of the Site Plan.
8. Provide payment for recordation of the Improvements Agreement ($5.00 per page) and the Site Plan ($10.00) made payable to the Mesa County Clerk and Recorder.
9. Obtain Sign Permits for all permanent signs on the site.
10. Six months from the opening date of the Red Lobster restaurant, the developer is required to provide vehicle counts in order to determine whether additional stacking space in the left hand turn pocket of the median on 24-1/2 Road is warranted.

Please call if you have any questions regarding these requirments.

Sincerely,

Kristen

Kristen Ashbeck, Planner

xc: Larry Gebhart, Western Engineers

General Mills Restaurants, Inc.

General Offices
5900 Lake Ellenor Drive
P.O. Box 593330
Orlando, FL 32859-3330
(407) 851-0370

January 18, 1993

VIA: REGULAR MAIL

Ms. Kristen Ashbeck
City of Grand Junction
250 North Fifth Street
Grand Junction, CO 81501-2668

RE: PROPOSED RED LOBSTER RESTAURANT
575 - 24½ ROAD
GRAND JUNCTION, CO 81505

Dear Ms. Ashbeck:

Enclosed please find Development Improvements Agreement executed by General Mills Restaurants, Inc. Once the City has executed same, please forward a copy to me for our files.

The required Letter of Credit from a Colorado Bank will be directed directly to you from the bank in a few days.

Should you have any questions or need additional information, please contact me at 800-562-7837, Extension 7189.

Sincerely,

Ron Gates
Site Development Administrator

RG/lp

Enclosure

MEMORANDUM

DATE: 22 JANUARY 1993

TO: MARK ACHEN
FROM: KRISTEN ASHBECK

RE: Request your signature on Red Lobster Improvements Agreement

General Mills Restaurants, Inc. (Red Lobster) received Planning Commission approval on January 5, 1993 for a Conditional Use Permit (Liquor License) in a Highway Oriented (HO) zone allowing them to construct a 210-seat restaurant on a 2.18-acre parcel at Mesa Mall. As part of the approval they are required to construct certain improvements on and off site for which an Improvements Agreement and Guarantee is required.

Attached is a signed copy of the improvements agreement. The signed exhibit will then be recorded and will be kept in the development file. The letter of credit is currently being prepared by a Colorado bank as required per the City Zoning and Development Code.

CONDITIONAL USE PROCESS CHECKLIST

COMPLETE		DATE / NOTES
☒	PRE-APPLICATION CONFERENCE	
☒	SUBMITTAL	
☒	FEE	
☒	SIGN DEPOSIT	
☐	FILE NUMBER ON ASSESSOR MAP	
☒	PACKETS TO REVIEW AGENCIES	
☒	SITE CHECK	12/8
☒	REVIEW COMMENTS DUE	12/16
☒	DEVELOPMENT REVIEW MEETING	12/15
☒	REVIEW COMMENTS TO PETITIONER	
☒	LEGAL ADVERTISEMENT	
☒	NOTICE TO SURROUNDING PROPERTY OWNERS	
☒	PICK UP PUBLIC NOTICE SIGN	
☒	POST PUBLIC NOTICE SIGN	
☒	PETITIONER'S RESPONSE TO COMMENTS	12/28
☒	STAFF REPORT	12/30
1/5 ☒	PLANNING COMMISSION HEARING	Approved subject to review agency comments
☒	RETURN PUBLIC NOTICE SIGN	
☒	PC MINUTES IN FILE	
N/A ☐	CITY COUNCIL COVER SHEET (if applicable)	
N/A ☐	LEGAL ADVERTISEMENT	
N/A ☐	CITY COUNCIL HEARING (if applicable)	
N/A ☐	COUNCIL MINUTES IN FILE	
☒	ROUTE IMPROVEMENTS AGREEMENT FOR SIGNATURES	
☒	LETTER OF CREDIT / CASH ESCROW	
☒	OPEN SPACE FEE	
☐	REVIEW FILE FOR COMPLETENESS	
☒	PLANNING CLEARANCE MAY BE ISSUED AS OF	2/19/93
☐	SITE CHECK	
☐	CERTIFICATE OF OCCUPANCY	
☐	COMPUTER FILE INDEX	
☐	ROLODEX	

RECORD AS APPLICABLE

☒	Recordation Fee
☐	Letter Granting Approval
☒	Site Plan
☒	Improvements Agreement
N/A ☐	Covenants
N/A ☐	Avigation Easement
N/A ☐	Easements
N/A ☐	Other

File No. 75-92 Address 575 24½ Rd - Mesa Mall Staff Assigned Kris

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

February 26, 1993

Don Benson
General Manager
Mesa Mall
2424 U.S. Highway 6 & 50
Grand Junction, CO 81505

Re: West entrance to Red Lobster

Dear Mr. Benson:

We understand that the 20 foot curb return radius that we required for approval of the Red Lobster site plan has resulted in complications.

As previously required, the curb would encroach slightly on the property which is currently leased by the Sizzler, the managers of which have indicated they are in opposition. In order to avoid violation of current lease agreements, and also to allow development of Red Lobster at the Mall site, you have requested that we accept a smaller curb return radius.

Although the small radius (11 feet +/-) is undesirable, there does not appear to be another solution that is both reasonable and more acceptable. Therefore, we hereby revise our previous requirement from a 20 foot radius to the largest radius that can be constructed without encroaching or interfering with survey pins.

If you have any additional questions or concerns regarding this matter, please call at 244-1591.

Sincerely,

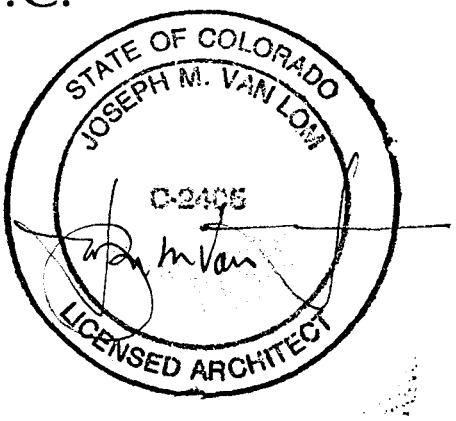
Gerald R Williams

Gerald Williams, P.E.
City Development Engineer

xc: Kristen Ashbeck, City Planner

ARCHITECTS
VAN LOM /
EDWARDS
A.I.A.,P.C.

34 N.W. First Avenue Suite 309 Portland, Oregon 97209 503/226-0590
Fax 503/273-8649



REVISION NO. 3
Issued 02-09-93

RED LOBSTER RESTAURANT
Mesa Mall
U.S. Highway 6 & 50 at 24-1/2 Road
Grand Junction, Colorado

ARCHITECTS VAN LOM/EDWARDS A.I.A., P.C.
34 N.W. First Avenue, Suite 309
Portland, Oregon 97209

Please incorporate the following revisions and/or corrections into the Contract Documents for the above referenced project. Covers drawing revisions dated 02-09-93. (Purpose: City requested revisions.)

DRAWINGS:

Sheet L2

1. Add note regarding location of Manual Drain Valves to detail No. 3.

2. Add note regarding winterization of system to detail No. 4, and to coupler at Control Valve No. 1 on plan.

END OF REVISION NO. 3

237LBSTR.GJ\REV.3

March 31, 1993

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

Mr. Jeff L. Krantz
Young Electric Sign Company
1148 South 300 West
PO Box 25728
Salt Lake City, Utah 84125-0728

Dear Mr. Krantz,

Per our conversation on March 29, 1993, I am providing you with the following information regarding the signs for the proposed Red Lobster restaurant in Grand Junction.

1) Since the plans approved by the City of Grand Junction Planning Commission did not reflect the proposed relocation of the monument sign and an additional sign on the northeast elevation, the request to make these changes must be reviewed through a Minor Change process through the Community Development Department. The process fee is $50.00 and the petitioner must provide information regarding the changes in the form of drawings (8-1/2" x 11") and a letter which describe the proposed revisions.

2) As we discussed, a sign permit form must be filled out for each building facade and for the monument sign (total 5 permits). Each sign must be permitted including those on the pre-built awning and the lobster logo. Thus, some of the forms will permit two signs.

3) The total fee for sign permits will be $80.00 (total 8 signs at $10.00 per sign).

Should you have additional questions regarding this information, please do not hesitate to contact me.

Sincerely,

Kristen

Kristen Ashbeck
Planner

xc: Ron Gates, General Mills Restaurants

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

April 21, 1993

Mr. Ron Gates, Site Development Administrator
General Mills Restaurants, Inc.
PO Box 593330
Orlando, Florida 32859-3330

Dear Mr. Gates,

As discussed in our telephone conversation, the revision to the building size (6,171 square feet to 4,077 square feet) of the proposed Red Lobster restaurant in Grand Junction can be accomplished through a Minor Change process. This is an administrative process (see attached) which will require the following:

1) $50.00 processing fee

2) Notification of all persons who testified at the January 5, 1993 Planning Commission hearing. (I will do this as soon as we receive word from you that the revisions are ready to proceed).

3) Re-submittal of the following documents:

Site Plan (2 copies)
Mylars of Site Plan (1 - full size; 1 - 11"x 17")
Recording Fee for Site Plan ($10.00 payable to Mesa County Clerk and Recorder)
Landscape Plan (1)
Building Elevations/Signage Details (1)

It will not be necessary to revise any of the engineering drawings (e.g. grading and drainage, utilities) unless the revisions affect any of the parking and/or driving areas on the site.

Please give me a call if you have any questions regarding this process and when you are ready to proceed with the notification.

Sincerely,

Kristen Ashbeck
Planner

yesco®

SALT LAKE
1148 SOUTH 300 WEST
POST OFFICE BOX 25728
SALT LAKE CITY, UTAH 84125
TELEPHONE (801) 487-8481
FAX (801) 467-3447
LICENSE #C-278

September 1, 1993

Ms. Kristen Ashbeck
Grand Junction Community Development
250 North Fifth St.
Grand Junction, CO 81501-2668

SUBJECT: Minor Changes to the sign plan for the Red Lobster at 575 24 1/2 Road

Dear Kristen,

Attached please find our complete sign plan for the property. We at YESCO are not providing the awning. However, I have included the awning on our permit application for each facade. I have enclosed the complete package of four sets of building letters, one lobster logo, one monument sign, one directional sign.

The changes from the original plan are the directional sign and the fourth set of building letters. I have enclosed your $50.00 process fee for this adjustment.

Also attached please find six permit applications and the appropriate $90.00 permit fee. Please return to my attention the sign permits. I appreciate your help on this matter.

Sincerely,

YOUNG ELECTRIC SIGN COMPANY

Jeff L. Krantz
Account Executive

JLK;jo
enclosures

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

DATE: Sept 2 1993

TIME: 11:20a

FACSIMILE TRANSMISSION COVER SHEET

To: Steve Hale

Location: General Mills

Telephone Number: (____)_____

FAX Number: (510) 687-2942

From: Kristen, Community Development

FAX Number: (303) 244-1599

Telephone Number: (303)_____

Number of Pages 4
(Including Cover Sheet)

SPECIAL INSTRUCTIONS: For your information. Could you please send me a mailing address for you? Thanks!

If the telecopy you received is incomplete or illegible, please call _____.

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

September 2, 1993

Mr. Jeff L. Krantz
Young Electric Sign Company
1148 South 300 West
PO Box 25728
Salt Lake City, Utah 84125-0728

Dear Mr. Krantz,

Per our telephone conversation on September 1, 1993, I am providing you with the enclosed information regarding a directional sign for the proposed Red Lobster restaurant in Grand Junction. The sign cannot be greater than 3 square feet in area. There is no height limitation except if the sign is to be placed within the sight distance triangle (typically 40 feet). If the sign is within the triangle, it cannot exceed a height of 30 inches.

A proposal of a sign greater than 3 square feet would require that a variance request be heard by the Board of Appeals (earliest meeting October 13, 1993). Typically, Staff has supported and the Board has approved signs up to a size of 4 to 5 square feet with such requests.

As previously discussed, a Minor Change process will be required for signage on a fourth facade of the building.

Should you have additional questions regarding this information, please do not hesitate to contact me.

Sincerely,

Kristen

Kristen Ashbeck
Planner

xc: Steve Hale, General Mills Corporation

E. Are erected after adoption of this Code and do not comply with the provisions of this regulation; or

F. Flash, move, blink, change color, chase, or have other animation effects, except the following:

1. Time and temperature signs;

2. Revolving signs which do not exceed the rate of seven revolutions per minute. Such rotating signs shall be engineered to maintain rotations at a rate not to exceed seven revolutions per minute under a wind load of thirty pounds per square foot. Revolving beacon lights are not permitted.

5-7-3 EXEMPTIONS - The following signs are exempt from all the provisions of this Code, except as otherwise required by construction or safety regulations, or the following requirements:

A. Public Signs: Signs of a non-commercial nature, erected by, or on the order of, a public officer in the performance of his duty, such as, but not limited to, safety signs, danger signs, trespassing signs, traffic signs, memorial plaques, signs of historical interest, informational signs and the like.

B. Institutional: Permanent signs which set forth only the name of a public, charitable, educational or religious institution, located entirely upon the premises of that institution, and which do not exceed an area of twenty-four square feet per street frontage. If mounted on a building, these signs shall be flat wall signs and shall not project above the roof line; if ground mounted, the top shall be no more than six feet above ground level.

C. Integral: Names of buildings, dates of erection, monumental citations, commemorative tablets and the like when carved into stone, concrete or similar material or made of metal or other permanent-type construction and made an integral part of the structure.

D. Private Traffic Direction: Signs directing traffic movement into a premise or within a premise, not exceeding three square feet in area for each sign. Illumination of these signs shall be permitted in accordance with the section on illumination. Horizontal directional signs on, and flush with, paved areas are exempt from these standards.

E. A nameplate, not exceeding two square feet in area, containing only the name of the resident, title of person conducting a permitted home occupation, name of building and name of agent.

March 31, 1993

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

Mr. Jeff L. Krantz
Young Electric Sign Company
1148 South 300 West
PO Box 25728
Salt Lake City, Utah 84125-0728

Dear Mr. Krantz,

Per our conversation on March 29, 1993, I am providing you with the following information regarding the signs for the proposed Red Lobster restaurant in Grand Junction.

1) Since the plans approved by the City of Grand Junction Planning Commission did not reflect the proposed relocation of the monument sign and an additional sign on the northeast elevation, the request to make these changes must be reviewed through a Minor Change process through the Community Development Department. The process fee is $50.00 and the petitioner must provide information regarding the changes in the form of drawings (8-1/2" x 11") and a letter which describe the proposed revisions.

2) As we discussed, a sign permit form must be filled out for each building facade and for the monument sign (total 5 permits). Each sign must be permitted including those on the pre-built awning and the lobster logo. Thus, some of the forms will permit two signs.

3) The total fee for sign permits will be $80.00 (total 8 signs at $10.00 per sign).

Should you have additional questions regarding this information, please do not hesitate to contact me.

Sincerely,

Kristen

Kristen Ashbeck
Planner

xc: Ron Gates, General Mills Restaurants

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

DATE: Sept 2 1993

TIME: 11:15a

FACSIMILE TRANSMISSION COVER SHEET

To: Jeff Krantz

Location: Utah

Telephone Number: (____) _____

FAX Number: (801) 467-3447

From: Kristen, Community Development

FAX Number: (303) 244-1599

Telephone Number: (303) 244-1437

Number of Pages 3
(Including Cover Sheet)

SPECIAL INSTRUCTIONS: _____

If the telecopy you received is incomplete or illegible, please call _____.

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

September 2, 1993

Mr. Jeff L. Krantz
Young Electric Sign Company
1148 South 300 West
PO Box 25728
Salt Lake City, Utah 84125-0728

Dear Mr. Krantz,

Per our telephone conversation on September 1, 1993, I am providing you with the enclosed information regarding a directional sign for the proposed Red Lobster restaurant in Grand Junction. The sign cannot be greater than 3 square feet in area. There is no height limitation except if the sign is to be placed within the sight distance triangle (typically 40 feet). If the sign is within the triangle, it cannot exceed a height of 30 inches.

A proposal of a sign greater than 3 square feet would require that a variance request be heard by the Board of Appeals (earliest meeting October 13, 1993). Typically, Staff has supported and the Board has approved signs up to a size of 4 to 5 square feet with such requests.

As previously discussed, a Minor Change process will be required for signage on a fourth facade of the building.

Should you have additional questions regarding this information, please do not hesitate to contact me.

Sincerely,

Kristen

Kristen Ashbeck
Planner

xc: Steve Hale, General Mills Corporation

E. Are erected after adoption of this Code and do not comply with the provisions of this regulation; or

F. Flash, move, blink, change color, chase, or have other animation effects, except the following:

1. Time and temperature signs;

2. Revolving signs which do not exceed the rate of seven revolutions per minute. Such rotating signs shall be engineered to maintain rotations at a rate not to exceed seven revolutions per minute under a wind load of thirty pounds per square foot. Revolving beacon lights are not permitted.

5-7-3 EXEMPTIONS - The following signs are exempt from all the provisions of this Code, except as otherwise required by construction or safety regulations, or the following requirements:

A. Public Signs: Signs of a non-commercial nature, erected by, or on the order of, a public officer in the performance of his duty, such as, but not limited to, safety signs, danger signs, trespassing signs, traffic signs, memorial plaques, signs of historical interest, informational signs and the like.

B. Institutional: Permanent signs which set forth only the name of a public, charitable, educational or religious institution, located entirely upon the premises of that institution, and which do not exceed an area of twenty-four square feet per street frontage. If mounted on a building, these signs shall be flat wall signs and shall not project above the roof line; if ground mounted, the top shall be no more than six feet above ground level.

C. Integral: Names of buildings, dates of erection, monumental citations, commemorative tablets and the like when carved into stone, concrete or similar material or made of metal or other permanent-type construction and made an integral part of the structure.

D. Private Traffic Direction: Signs directing traffic movement into a premise or within a premise, not exceeding three square feet in area for each sign. Illumination of these signs shall be permitted in accordance with the section on illumination. Horizontal directional signs on, and flush with, paved areas are exempt from these standards.

E. A nameplate, not exceeding two square feet in area, containing only the name of the resident, title of person conducting a permitted home occupation, name of building and name of agent.

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

September 14, 1993

Mr. Steve Hale
General Mills Restaurants, Inc.
1485-G Enea Court Suite 1341
Concord, California 94520

Dear Steve,

Yesterday morning (September 13) I issued a planning clearance for a "foundation only" building permit for the Red Lobster here in Grand Junction. As previously discussed, a full building permit can be issued once we receive and record the revised/updated Improvements Agreement and Letter of Credit.

An additional outstanding item identified by City Engineering is the need for Red Lobster to secure an easement or agreement for the sewer line through the Toys "R" Us parcel to the north. We do not have record that this has been done. Without such an easement or agreement, Red Lobster is building at its own risk--sewer service may not be available and a Certificate of Occupancy cannot be issued unless there is service to the building. If this has already been addressed, please provide me with a copy of the document for our file.

Should you have additional questions regarding this information, please do not hesitate to contact me.

Sincerely,

Kristen

Kristen Ashbeck
Planner

xc: City Engineering

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

December 22, 1992

Paul Petersen
General Growth Management
Mesa Mall
2424 U.S. Highway 6&50
Grand Junction, CO 81503

Re: Sewer Easements for Red Lobster

Dear Mr. Petersen:

A City requirement for the Red Lobster proposal was that easements for the sanitary sewer line across Toys R Us and the Red Lobster site be granted prior to approval. Based on our phone conversation of December 21, 1992, the City is granting a 90 day extension from this date to secure the easements as requested. The proposal will not be delayed by Public Works - Utilities due to the lack of an adequate easement.

The City will not be responsible for the future upkeep and maintenance of the sewer line from Toys R Us to Red Lobster if an easement is not in place by March 19, 1993.

Please contact me at 244-1590 if you have any questions on the above.

Sincerely,
FOR THE CITY OF GRAND JUNCTION

Bill Cheney

Bill Cheney
Utility Engineer

cc: City of Grand Junction - Community Development

SunBank, N.A.
International Banking Division
P.O. Box 3833
Orlando, Florida 32802
Telex: 441511
S.W.I.F.T Address: SNBOUS33

September 14, 1993

Colorado National Bank
Attn: Julia Beemer, International Dept.
950 17th Street, Mail Code CNDT0441
Colorado National Bank Bldg.
Denver, Colorado 80202

Re: Letter of Credit No. SP13854, Amendment No. 01
Your Ref. FC9888

Dear Ms. Beemer:

Enclosed is our above referenced letter of credit amendment which we are forwarding to you today via overnight courier. Please advise the beneficiary extending your confirmation. Please send me copies of your original confirmation letter, your amendment advice and invoice for your fee which we will remit upon receipt.

Please call me at 407-237-4326 should you have any questions concerning the above.

Very truly yours,

Cynthia F. Dillon

Cynthia F. Dillon
Assistant Vice President
Letter of Credit Manager

Enclosures

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

September 30, 1993

To Whom It May Concern,

This letter is to serve as notice that General Mills Restaurants, Inc. has made application for a Minor Change to the site plan approved with the Conditional Use for the proposed Red Lobster restaurant at 575 24-1/2 Road in Grand Junction, Colorado. The changes involve revisions to the signage plan. The changes are still within the total signage allowed for the site.

A requirement of the Minor Change process is notification of each person who testified at the public hearing held January 5, 1993. Any comments or concerns you may have are requested to be made within 7 days of the date of this letter. Please contact the Grand Junction Community Development Department at (303) 244-1430 if you have questions regarding this item.

Sincerely,

Kristen

Kristen Ashbeck
Planner

encl

yesco®

SALT LAKE
1148 SOUTH 300 WEST
POST OFFICE BOX 25728
SALT LAKE CITY, UTAH 84125
TELEPHONE (801) 487-8481
FAX (801) 467-3447
LICENSE #C-278

September 27, 1993

Ms. Kristen Ashbeck
Grand Junction Community Development
250 North Fifth St.
Grand Junction, CO 81501-2668

SUBJECT: Minor Changes to the sign plan for the Red Lobster at 575 1/2 Road

Dear Kristen,

Attached please find our sign plan for the new Red Lobster. There are two minor changes to the plan which are in addition to the original package which was approved by the Planning Department earlier this year. The two changes are:

1. An additional 3 sq. foot 2'6" high directional sign which will be located off of the Mesa Mall entrance.

2. A fourth set of building letters for identification on the northeast building elevation.

If you have any questions or comments please contact me at 1-800-444-3847.

Sincerely,

YOUNG ELECTRIC SIGN COMPANY

Jeff L. Krantz
Account Executive

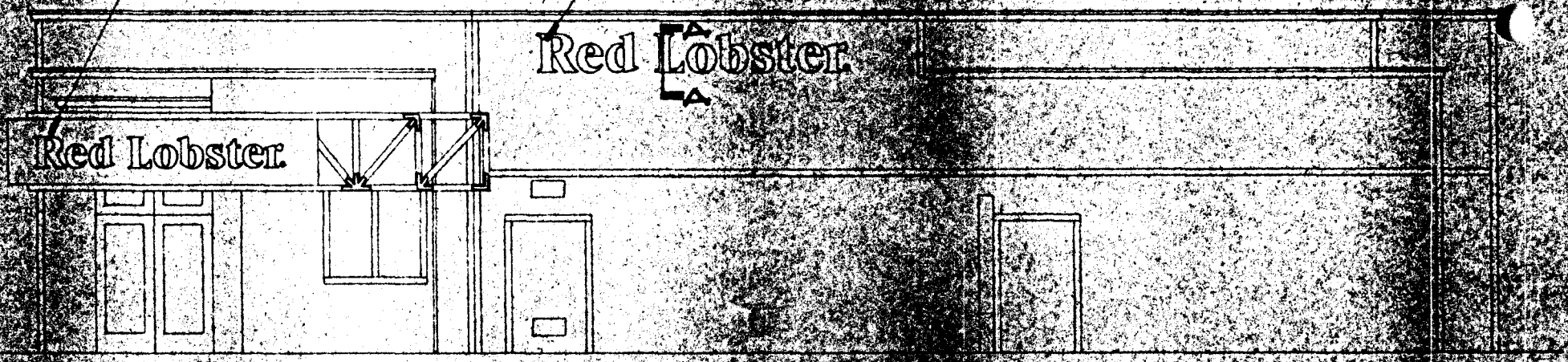
JLK;jo
enclosure

EAST ELEVATION

SCALE 1/8" = 1'-0"

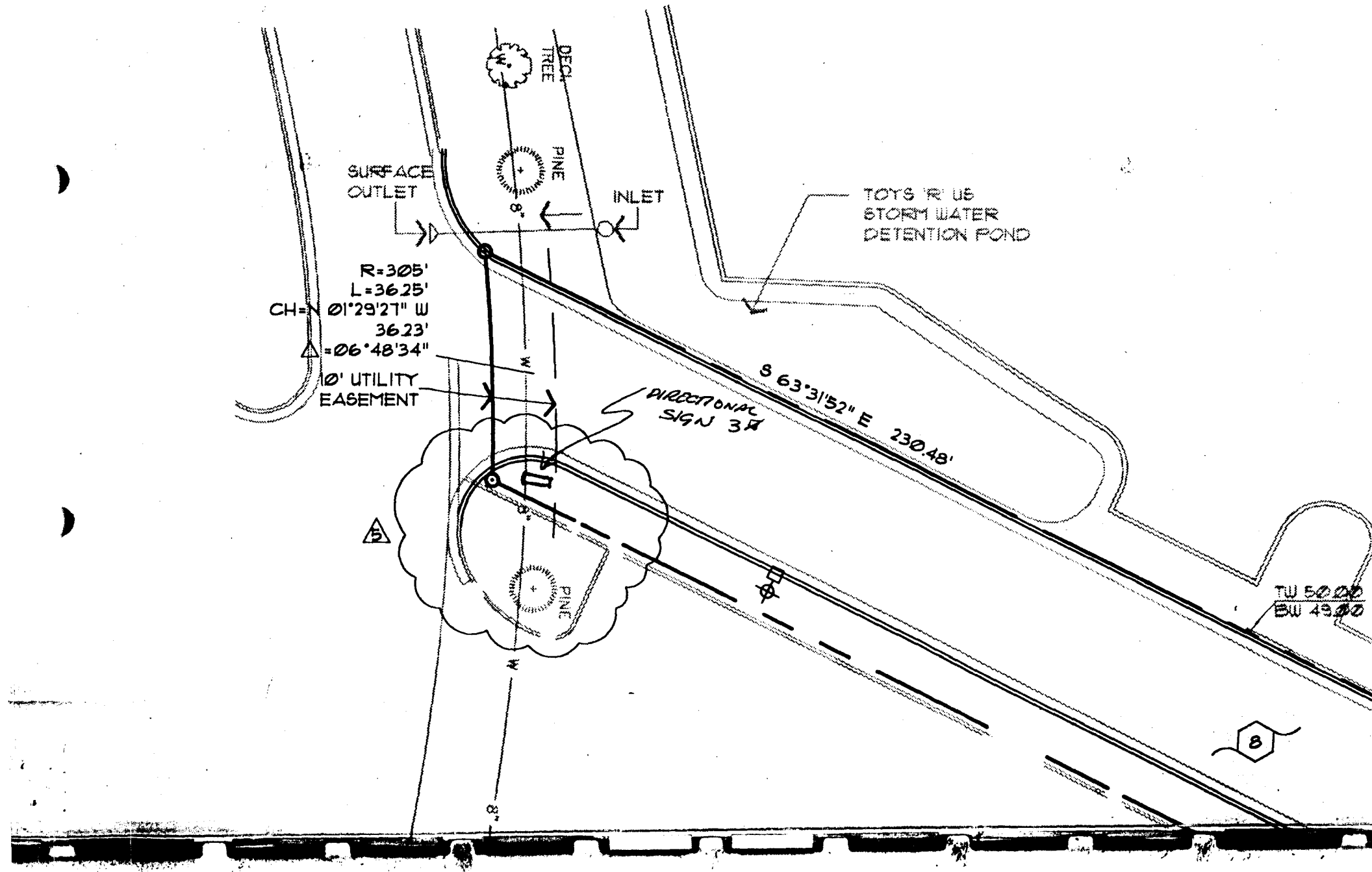
AWNING TO BE SUPPLIED BY OTHERS

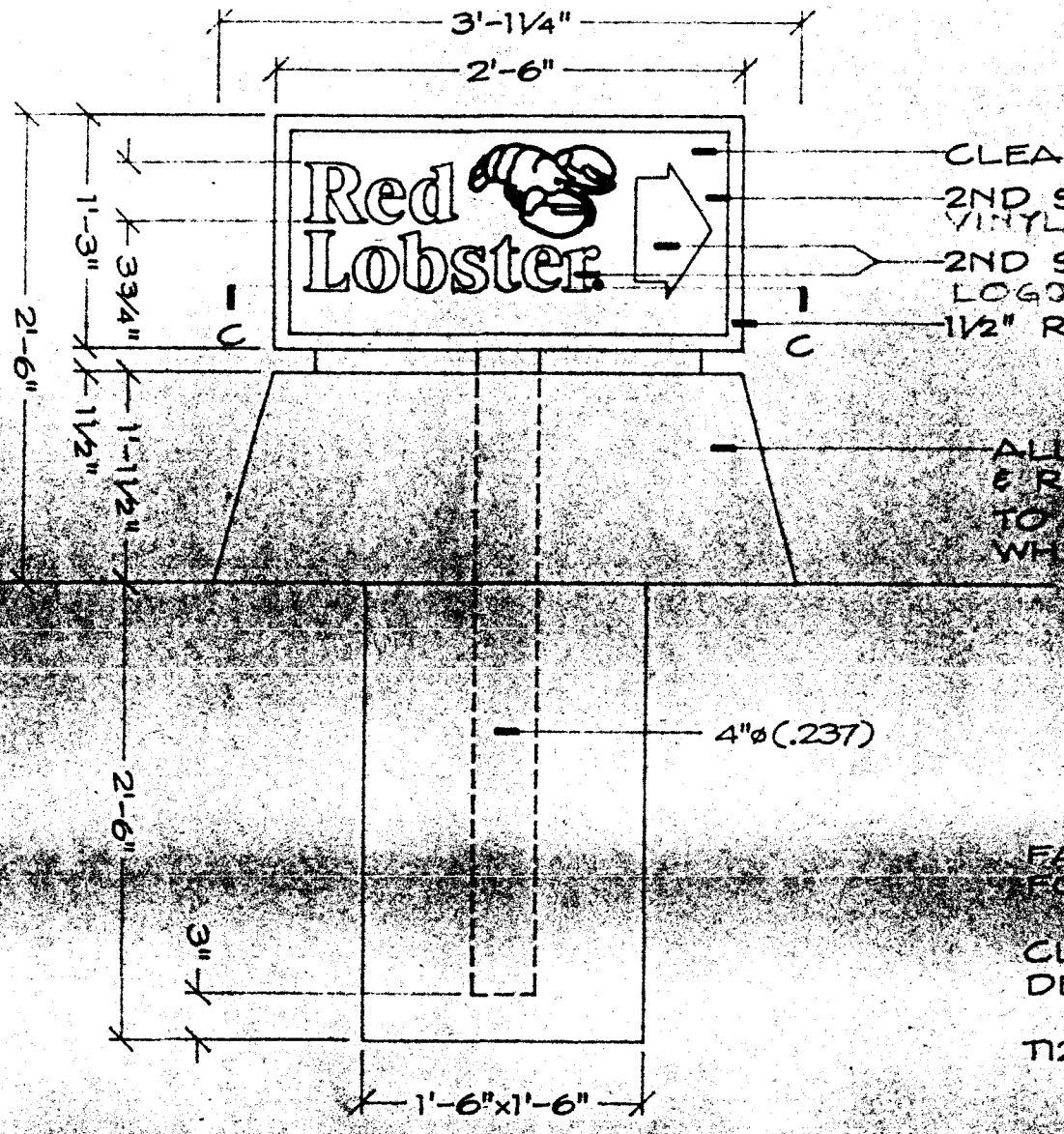
2'-6" HIGH OPEN CHANNEL LETTERS, RED LOBSTER ELECTRICAL REQUIREMENTS 3 TRANSFORMERS 8.8 AMPS @ 120 VOLTS (1) 20 AMP. CIRCUIT



NORTH ELEVATION

SCALE 1/8" =


DEC. TREE
PINE
SURFACE OUTLET
INLET
TOYS 'R' US STORM WATER DETENTION POND
R=305'
L=36.25'
CH=N 01°29'27" W 36.23'
Δ=06°48'34"
10' UTILITY EASEMENT
DIRECTIONAL SIGN 3
S 63°31'52" E 230.48'
PINE
TW 50.00
BW 49.00
8



D/F DIRECTIONAL DISPLAY

SCALE 1"=1'-0"

October 8, 1993

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

Mr. Jeff L. Krantz
Young Electric Sign Company
1148 South 300 West
PO Box 25728
Salt Lake City, Utah 84125-0728

Dear Mr. Krantz,

By this letter, the Grand Junction Community Development Department is granting approval of a Minor Change for signage at the proposed Red Lobster restaurant at 575 24-1/2 Road in Grand Junction. Enclosed please find copies of the Sign Permits and a receipt for the Minor Change and permit fees. The copies of the sign permits must be submitted to the Building Department as the proposed signs require separate building permits.

Should you have additional questions regarding this information, please do not hesitate to contact me.

Sincerely,

Kristen

Kristen Ashbeck
Planner

encl
xc: Ron Gates, General Mills Restaurants
Steve Hale, General Mills Restaurants

November 14, 1993

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

Mr. Don Bowen
Harmon and Sons Construction
c/o General Mills
Red Lobster Site
575 24 1/2 Road
Grand Junction, Colorado 81505

RE: Change in setbacks for Red Lobster

Dear Mr. Bowen:

Pursuant to our discussion on November 13, 1993, the changes in setbacks for the Red Lobster Restaurant at 575 24 1/2 Road, Grand Junction are approved. Those changes are understood to be as follows: A decrease of 6 feet in the setback to the south property line and a decrease of 3 feet in the setback to the west property line. Our understanding is that the new setbacks proposed are 14 feet from property line on the south and 17 feet from property line on the west. With these decreases in setbacks the building still meets minimum requirements for front yard (65 feet from centerline of R.O.W.) and side yard (15 feet from property line) setbacks in the Highway Oriented (H.O.) Zone.

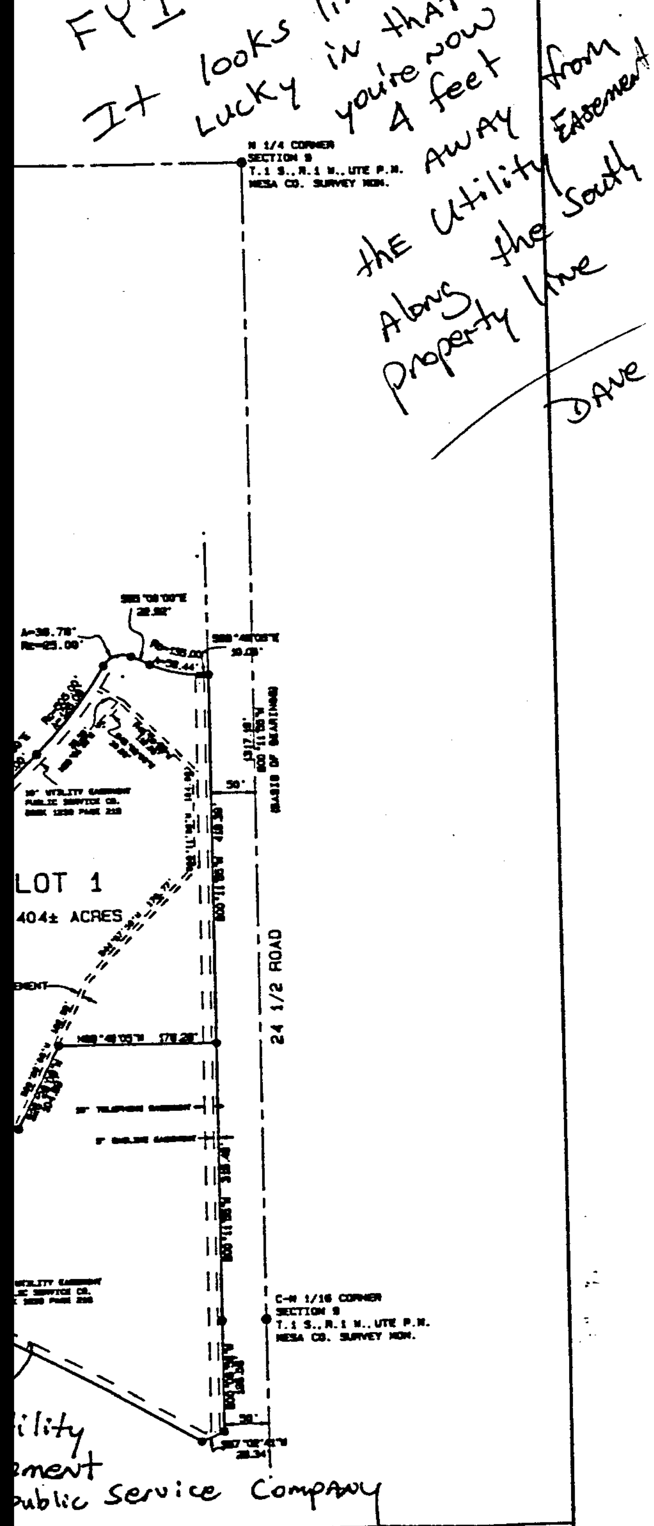
Due the building now being located 6 feet to the south and 3 feet to the west of the originally approved location, there will need to be an additional 6 feet of landscaping installed on the north side of the building between the building and the parking lot and 3 feet of landscaping installed along the east side of the building between the building and the parking lot. A revised site plan and landscaping plan showing all such changes is required. Please submit the revised site plan and landscaping plan to our office by November 1, 1993.

If you have any questions, please contact me at your earliest convenience.

Respectfully,

Dave Thornton
Senior Planner

cc: file #75-92



MESA MALL MINOR SUBDIVISION

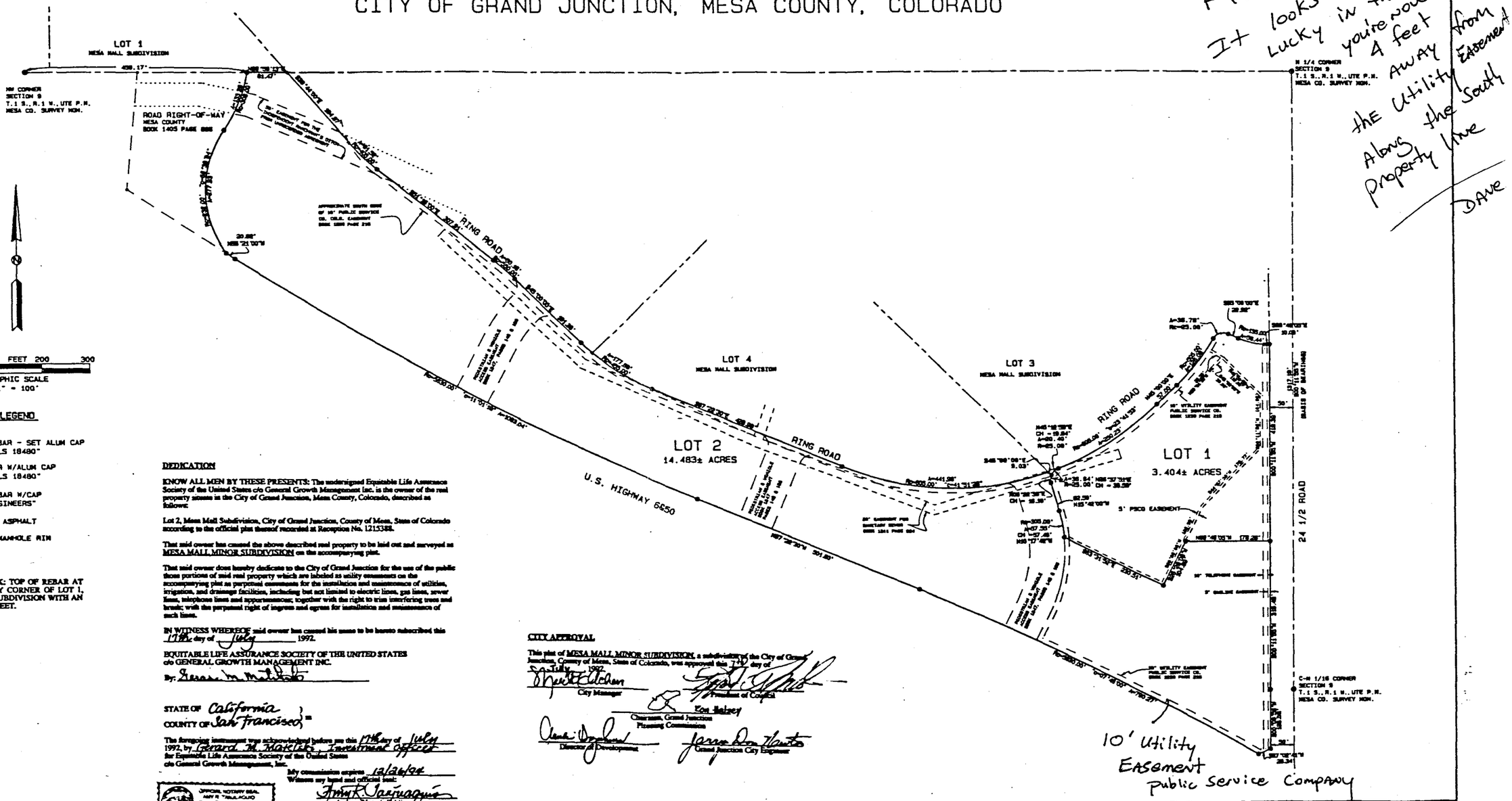
GRAND JUNCTION, COLORADO

MESA MALL MINOR SUBDIVISION

A REPLAT OF A PORTION OF LOT 2, MESA MALL SUBDIVISION

CITY OF GRAND JUNCTION, MESA COUNTY, COLORADO

Don,
FYI
It looks like your lucky in that you're now 4 feet away from the Utility Easement along the South property line
Dave



0 100 FEET 200 300

GRAPHIC SCALE
1" = 100'

LEGEND

- ● FOUND #5 REBAR - SET ALUM CAP "THOMPSON PLS 18480"
- ● SET #5 REBAR W/ALUM CAP "THOMPSON PLS 18480"
- ● FOUND #5 REBAR W/CAP "WESTERN ENGINEERS"
- ● SET NAIL IN ASPHALT
- ■ CUT "X" ON MANHOLE RIM

PROJECT BENCHMARK: TOP OF REBAR AT THE NORTHEASTERLY CORNER OF LOT 1, MESA MALL MINOR SUBDIVISION WITH AN ELEVATION = 4532.33 FEET.

DEDICATION

KNOW ALL MEN BY THESE PRESENTS: The undersigned Equitable Life Assurance Society of the United States c/o General Growth Management Inc. is the owner of the real property shown in the City of Grand Junction, Mesa County, Colorado, described as follows:

Lot 2, Mesa Mall Subdivision, City of Grand Junction, County of Mesa, State of Colorado according to the official plat thereof recorded at Reception No. 1215388.

That said owner has caused the above described real property to be laid out and surveyed as MESA MALL MINOR SUBDIVISION on the accompanying plat.

That said owner does hereby dedicate to the City of Grand Junction for the use of the public those portions of said real property which are labeled as utility easements on the accompanying plat as perpetual easements for the installation and maintenance of utilities, irrigation, and drainage facilities, including but not limited to electric lines, gas lines, sewer lines, telephone lines and appurtenances; together with the right to trim interfering trees and brush; with the perpetual right of ingress and egress for installation and maintenance of such lines.

IN WITNESS WHEREOF said owner has caused his name to be hereto subscribed this 17th day of July 1992.

EQUITABLE LIFE ASSURANCE SOCIETY OF THE UNITED STATES
c/o GENERAL GROWTH MANAGEMENT INC.

By: Gerard M. Matiello

STATE OF California)
COUNTY OF San Francisco) ss

The foregoing instrument was acknowledged before me this 17th day of July 1992, by Gerard M. Matiello, Investment Officer for Equitable Life Assurance Society of the United States c/o General Growth Management, Inc.

My commission expires 12/26/94
Witness my hand and official seal:
Notary Public
Address One Bush Street, Suite 1200 San Francisco, CA 94104

OFFICIAL NOTARY SEAL
MARY R. TRUJILLO
Notary Public — California
SAN FRANCISCO COUNTY
My Comm. Expires DEC 26 1994

CITY APPROVAL

This plat of MESA MALL MINOR SUBDIVISION, a subdivision of the City of Grand Junction, County of Mesa, State of Colorado, was approved this 7th day of July 1992.

City Manager

President of Council

Ken Halsey
Chairman, Grand Junction Planning Commission

Director of Development

Grand Junction City Engineer

SURVEYOR'S STATEMENT

I, Kenneth Scott Thompson, being a registered Professional Land Surveyor in the State of Colorado, do hereby state that this subdivision plat and survey of MESA MALL MINOR SUBDIVISION were made by me and/or under my direct supervision, and that to the best of my knowledge and belief both are accurate and conform to all applicable laws and regulations of the State of Colorado and to all applicable requirements of the zoning and development code of the City of Grand Junction.

Date: July 29, 1992

Kenneth Scott Thompson PLS #18480

KENNETH SCOTT THOMPSON 18480 REGISTERED LAND SURVEYOR STATE OF COLORADO

Reception #1609574

CLERK AND RECORDER'S CERTIFICATE

I hereby certify that this instrument was filed in my office at 11:07 o'clock A.M. this 27 day of JULY, 1992, and is duly recorded in Plat Book No. 14 at Page No. 64

Drawer Z-56

Clerk and Recorder

Deputy

Fees $ 10.00

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

MESA MALL MINOR SUBDIVISION

GRAND JUNCTION, COLORADO

THOMPSON SURVEYING
529 25 1/2 Road - #B203
Grand Junction CO 81505 (303) 243-6067

Designed By DRS	Checked By KST	Job No. 0170-002
Drawn By TMODEL	Date 06/03/92	Sheet 1 of 1

58-58-92

Bill Cheney -

Have you heard anything re: #3 ?

Kris

January 14, 1993

Mr. Ron Gates, Site Development Administrator
General Mills Restaurants, Inc.
PO Box 593330
Orlando, Florida 32859-3330

Dear Mr. Gates,

At the January 5, 1993 hearing, the Grand Junction Planning Commission approved your application for a Conditional Use Permit for a Restaurant (Red Lobster) with a Liquor License at 575 24-1/2 Road in Grand Junction. This approval is subject to the following requirements being adequately met:

1. Submit a revised Improvements Agreement which includes off-site median improvments required on the Mall Entrance Road and potentially required on 24-1/2 Road.
2. Submit a revised Landscape Plan which corresponds to the Site Plan and addresses staff review comments.
3. Resolution, if possible, of the 15-foot easement for the sanitary sewer line across the Toys 'R Us parcel by March 19, 1993.
4. Payment of the Plant Investment Fee ($22,050) and the Open Space Fee ($22,750) prior to applying for a Building Permit.

In addition to the above items, the petitioner must meet the following requirements:

5. Submit a Letter of Credit relative to the Improvements Agreement.
6. Obtain necessary approvals from the Mesa County Health Department and the Grand Junction Fire Department.
7. Provide one (1) full size mylar and one (1) 11" x 17" reduced mylar of the Site Plan.
8. Provide payment for recordation of the Improvements Agreement ($5.00 per page) and the Site Plan ($10.00) made payable to the Mesa County Clerk and Recorder.
9. Obtain Sign Permits for all permanent signs on the site.
10. Six months from the opening date of the Red Lobster restaurant, the developer is required to provide vehicle counts in order to determine whether additional stacking space in the left hand turn pocket of the median on 24-1/2 Road is warranted.

Please call if you have any questions regarding these requirments.

Sincerely,

Kristen Ashbeck, Planner

xc: Larry Gebhart, Western Engineers

TRANSACTION REPORT

JAN-21-94 FRI 14:36

SEND

#	DATE	S. T.	NAME	TIME	PGS	NOTE	DP
01	JAN-21	14:35	918014673447420	53"		OK	

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

DATE: 1/21/94

TIME: 2:35p

FACSIMILE TRANSMISSION COVER SHEET

To: Jeff Krantz

Location: Utah

Telephone Number: (____) ________

FAX Number: (801) 467-3447

From: Kristen Ashbeck

FAX Number: (303) 244-1599

Telephone Number: (303) 244-1437

Number of Pages 2
(Including Cover Sheet)

SPECIAL INSTRUCTIONS: [illegible] orlando
Steve H[illegible]
407-[illegible]-[illegible]
[illegible] -215-[illegible]

If the telecopy you received [illegible] please call ________.

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

January 21, 1994

Mr. Jeff Krantz
Young Electric Sign Company
1148 South 300 West
PO Box 25728
Salt Lake City, Utah 84125-0728

Dear Jeff,

I have reviewed the drawings and information you provided me of the entry canopy for the Red Lobster restaurant in Grand Junction. We have no problems with the change to the awning material. It appears that the change is simply an aesthetic feature that will not affect the overall character or structural elements of the building. In addition, the actual sign area will remain the same. Therefore, there are no further requirements--the permits, as issued, will remain in effect. Thank you for the opportunity to review the revisions.

Sincerely,

Kristen Ashbeck
Planner

General Mills Restaurants, Inc.

General Offices
5900 Lake Ellenor Drive
P.O. Box 593330
Orlando, FL 32859-3330
(407) 851-0370

GMRI FAX MESSAGE

SITE DEVELOPMENT DEPARTMENT

Fax No: (407) 856-6758

Date: 1/21/94

Please deliver immediately the following 3 **pages (including cover page) to:**

Company: CITY OF GRAND JUNCTION

Attn: KRISTIAN ASHBECK

801-467-3447

Fax No. 303-244-1599

From: JOE BOCH FOR JEFF KRANTZ (YOUNG ELECTRIC SIGN CO)

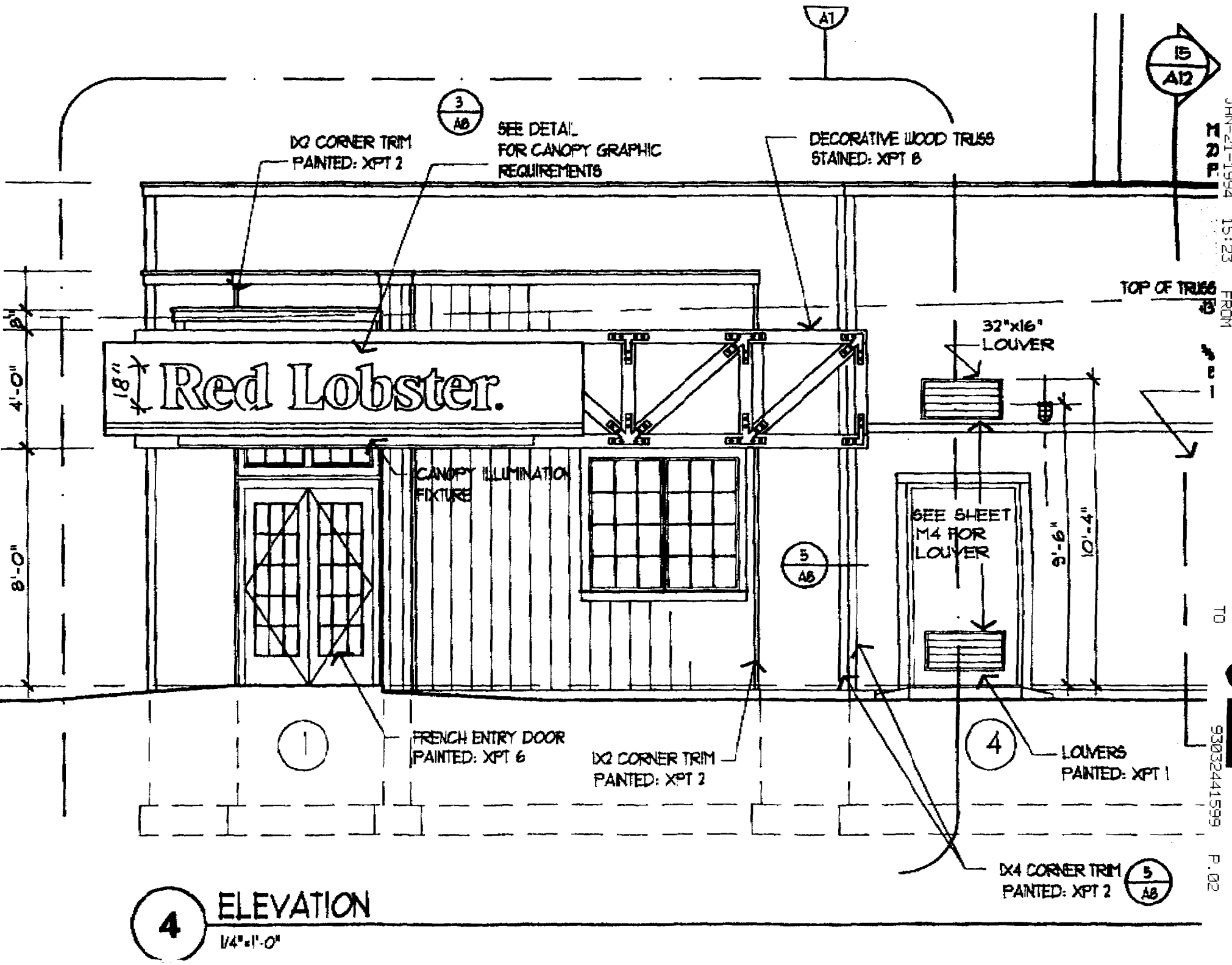
Subject: RED LOBSTER AWNING SIGNAGE CHANGE

Comments: INFORMATION SUBMITTED TO YOU PER REQUEST OF JEFF KRANTZ OF YOUNG ELECTRIC SIGN COMPANY---FOR YOUR INFORMATION

THE "RED LOBSTER" LETTER SIZE WILL REMAIN THE SAME AND IN THE SAME RELATIVE AREA (AND IN ADDITION THE WHITE LETTER COLOR WILL REMAIN THE SAME).

MR KRANTZ WILL CONTACT YOU TO DISCUSS THE MATTER FURTHER.

If all pages are not received, please contact the sender above.

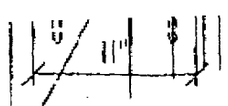


4 ELEVATION

1/4"=1'-0"

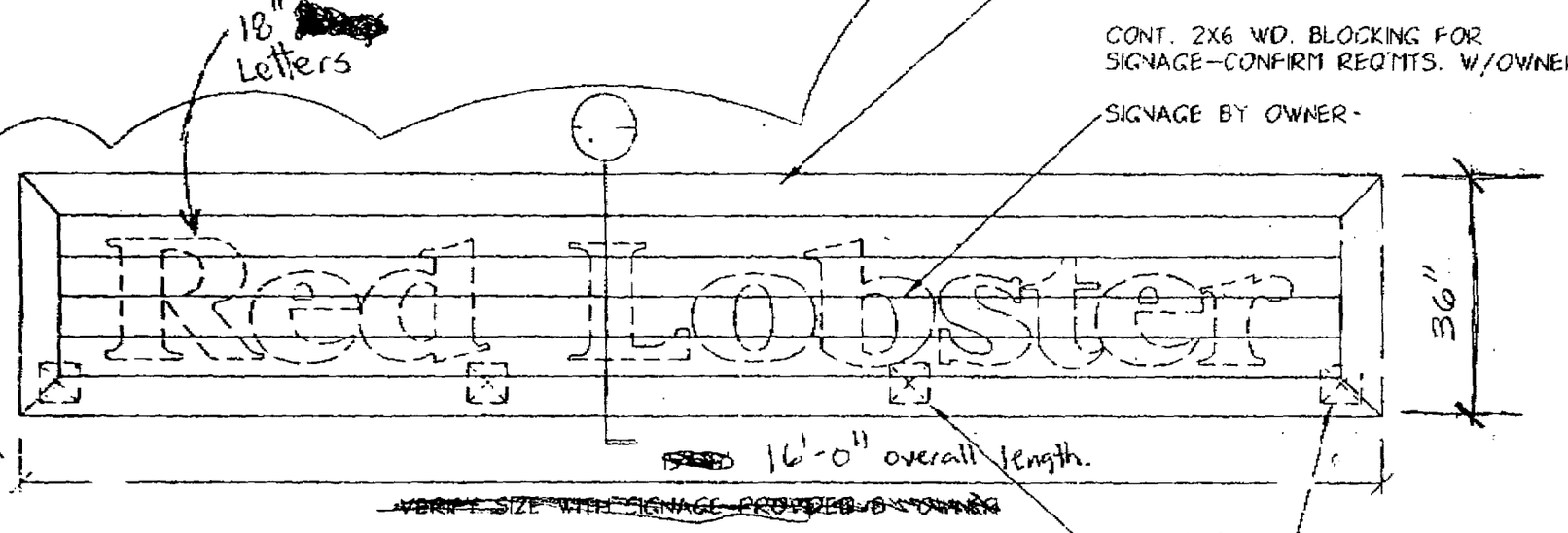
GALV. FLASHING/CAP
2X6 CONT. NAILER
5/8" X 5 1/2" GREY BOARDS OVER 15# FELT ON 3/4" CDX PLYWD.
NAILER BLOCKING AS REQ'D.
7-1/2
SECTION
1" = 1'-0"
6
A-7
36"
ELEVATION

WOOD POST:
1/4"X6"XII" STL. PLATE W/
1/4"X4"LX5"H VERT. STL.
PLATE FASTEN TO TOP OF
POST W/4 1/2"X6" LAG
BOLTS. 1/2" DIA. BOLTS
(2) AT TRUSS TYP.



SECTION THROUGH TRUSS

SCALE: 1" = 1'-0"



5/4" X 5 1/2" GREY BOARD TRIM-MITRE @ CORNERS & RABBIT TO FIT OVER PLYWD. EDGE

CONT. 2X6 WD. BLOCKING FOR SIGNAGE-CONFIRM REQ'MTS. W/OWNER

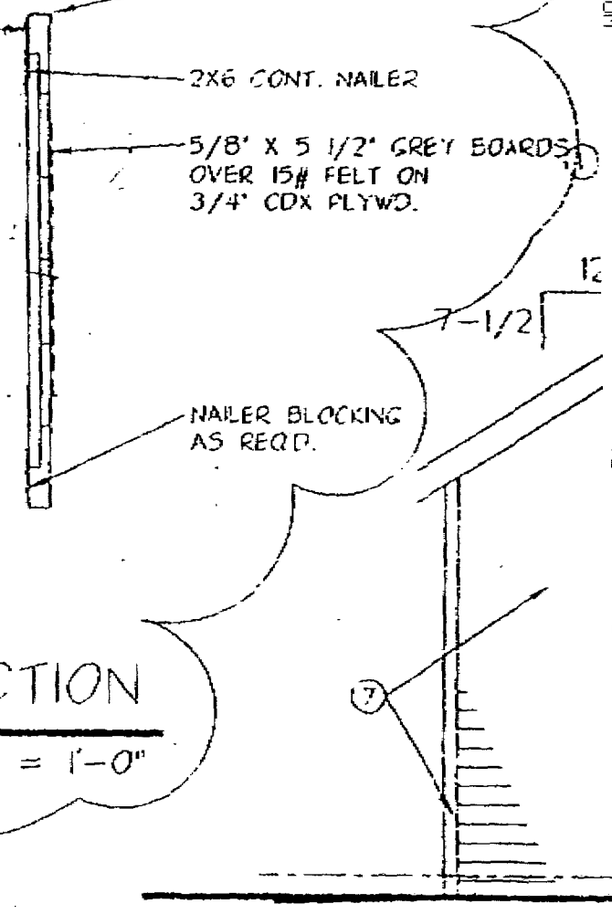
SIGNAGE BY OWNER-

VERIFY SIZE WITH SIGNAGE PROVIDED BY OWNER

NAILER BLOCKING AS REQ'D.

DETAIL AT SIGNAGE

1/2" = 1'-0"



SECTION

1" = 1'-0"

ELEVATION

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

March 1, 1994

Mr. Steve Hale Chris Fortmueller
General Mills Restaurants, Inc.
1485-G Enea Court Suite 1341
Concord, California 94520

Dear Mr. Hale,

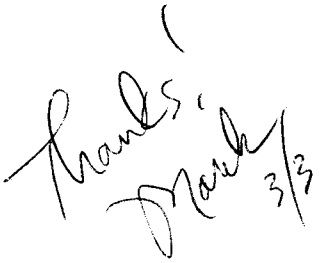
Upon reviewing the file to complete the Certificate of Occupancy site check on the Red Lobster here in Grand Junction, I discovered that we will need to re-execute the Improvements Agreement. Although the letter of credit does not expire until August 24, 1994, the Agreement itself expired 150 days after September 30, 1993. Since not all of the improvements are completed, we will need to execute the form so that is it expires about the same time as the Letter of Credit (6 months). Attached are the pages that need to be signed by General Mills--the rest of the form will remain the same. This time we only need to record the cover page. When you return the signed pages, please include a check made payable to the Mesa County Clerk and Recorder in the amount of $5.00 for the recording fee.

Please give me a call if you have any questions.

Sincerely,

Kristen

Kristen Ashbeck
Planner



MEMORANDUM

DATE: MARCH 3, 1994

TO: MARK ACHEN
FROM: KRISTEN ASHBECK

RE: Request your signature (again) on Red Lobster Improvements Agreement

Attached is yet another rendition of the Improvements Agreement and Guarantee for your signature. Upon reviewing the file in order to do a site inspection for Certificate of Occupancy, it was discovered that, although Red Lobster's revised Letter of Credit expires in August 1994, the revised agreement expired at the end of February. Consequently, and since not all improvements have been completed, it was necessary to execute a new Improvements Agreement. The numbers have not changed, just the date of expiration. In case anyone asks you . . . Red Lobster is scheduled to open March 28.

August 23, 1994

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

Mr. Chris Fortmueller
General Mills Restaurants, Inc.
5900 Lake Ellenor Drive
Orlando, Florida 32809

RE: Red Lobster - Grand Junction, Colorado

Dear Mr. Fortmueller,

As you are aware, the Red Lobster opened in Grand Junction at the end of March of this year. You may have noticed that there was an overwhelming response by our community that it had finally opened. I haven't been by on a lunch hour or a weekend evening when the waiting line wasn't outside the door!

You may not be as familiar with the history of this project. At the January 1993 Grand Junction Planning Commission meeting there was discussion of whether the traffic impact of this project would warrant changes to the median in the adjacent 24-1/2 Road to provide additional stacking space in the left turn lane. Rather than requiring the street work up front, the Commission decided that it could be looked at a later date. Therefore, a condition of the approval of the Conditional Use Permit/Site Plan review for the Red Lobster was ". . . six months from the opening date of the Red Lobster restaurant, the developer is required to provide vehicle counts in order to determine whether additional stacking space in the left hand turn pocket of the median on 24-1/2 Road is warranted."

The Grand Junction Red Lobster opened on March 29, 1994; thus, we are rapidly approaching that 6-month time frame. Please let me know at your earliest convenience when you will be able to provide some traffic counts for us so that we can determine whether any further improvements are required of you. Failure to comply with this requirement may result in the City taking necessary actions to revoke the Conditional Use Permit that was required for this use on its present site. Of course, the City's desire is simply to ensure that you comply with City Code and the Permit as approved. I look forward to hearing from you soon.

Sincerely,

Kristen

Kristen Ashbeck
Planner

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

September 29, 1994

City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501

Attn: Kristen Ashbeck, Planner.

RE: Red Lobster, Grand Junction, CO.

Kristen:

In your letter dated August 23, 1994 to Mr. Chris Fortmueller of General Mills Restaurants, Inc., you pointed out to Mr. Fortmueller a condition of the approval of the Conditional Use Permit for the Red Lobster restaurant. This condition required the developer to provide vehicle counts within six months from the opening date in order to determine whether additional stacking space in the left hand turn pocket of the median on 24-1/2 Road is warranted.

I contacted Jody Kliska, City of Grand Junction Development Engineer in order to determine the scope of work necessary to satisfy the City's requirements. Jody stated that the City required vehicle counts at the 24 1/2 Road and Red Lobster driveway intersection. The City is particularly interested in south bound traffic on 24 1/2 Road vs north bound traffic executing a left turn movement into the Red Lobster Restaurant. The vehicle counts may be submitted to the City with a cover letter describing Western's procedure and any noteworthy observations. Western Engineers is not required to draw any conclusions or make recommendations based on the data collected.

In order for Western Engineers to provide valid information to the City, it was necessary to verify vehicle counts during anticipated peak business hours for both weekday and weekends. Vehicle counts were conducted during periods when lunch and evening meals are served.

While Western was conducting vehicle counts, observations were made on frequency and number of vehicles stacked within the left turn pocket of 24 1/2 Road. During the °weekend peak hour (4:15 to 5:15 P.M.) two vehicles, approximately every 15 minutes, would be stacked in the left-turn pocket waiting to execute their movement. These stacked vehicles were able to complete the left-turn movement within one minute of entering the left turn lane and did not appear to restrict northbound traffic on 24 1/2 Road. During the time periods Western was conducting vehicle counts, only once did stacking of vehicles within the left-turn pocket exceed two. Observance of vehicle counts revealed three vehicles were stacked during the 5:15 to 5:30 time frame during the weekday vehicle count. In this instance the third vehicle extended into the northbound lane resulting in restricted traffic flow. This condition existed for approximately 30 seconds before a gap was

available for the left turning vehicles. Once this gap was available, all three vehicles were able to execute consecutive left-turn movements. Following is a summary of observed vehicle counts:

EXISTING TRAFFIC VOLUMES
24 1/2 ROAD AND RED LOBSTER DRIVEWAY

	Saturday September 17, 1994		Tuesday September 20, 1994	
	SOUTHBOUND	NORTHBOUND LEFT TURN	SOUTHBOUND	NORTHBOUND LEFT TURN
10:45 to 11:45 A.M.	209	17	N/A	N/A
11:00 to 12:00 P.M.	235	19	175	19
11:15 to 12:15 P.M.	238	19	195	14
11:30 to 12:30 P.M.	240	20	189	14
11:45 to 12:45 P.M.	261	19	196	13
12:00 to 1:00 P.M.	258	17	221	13
12:15 to 1:15 P.M.	269	21	197	13
12:30 to 1:30 P.M.	266	18	194	13
12:45 to 1:45 P.M.	250	23	219	13
1:00 to 2:00 P.M.	260	14	200	7
4:00 to 5:00 P.M.	360	29	204	7
4:15 to 5:15 P.M.	***353***	***38***	199	9
4:30 to 5:30 P.M.	350	31	198	16
4:45 to 5:45 P.M.	334	33	209	15
5:00 to 6:00 P.M.	303	24	199	19
5:15 to 6:15 P.M.	298	20	183	22
5:30 to 6:30 P.M.	264	27	175	18
5:45 to 6:45 P.M.	241	26	142	17
6:00 to 7:00 P.M.	223	31	142	15

Also included are the traffic count sheets identifying Western's traffic counts and Figure 1 which identifies directional traffic counts during the weekend peak hour. If you have any questions regarding the supplied information, please call.

Submitted By:
WESTERN ENGINEERS, INC.

Gayle Lyman
Staff Engineer

xc: Jody Kliska, City of Grand Junction Development Engineer
Chris Fortmueller, General Mills Restaurant, Inc.
File

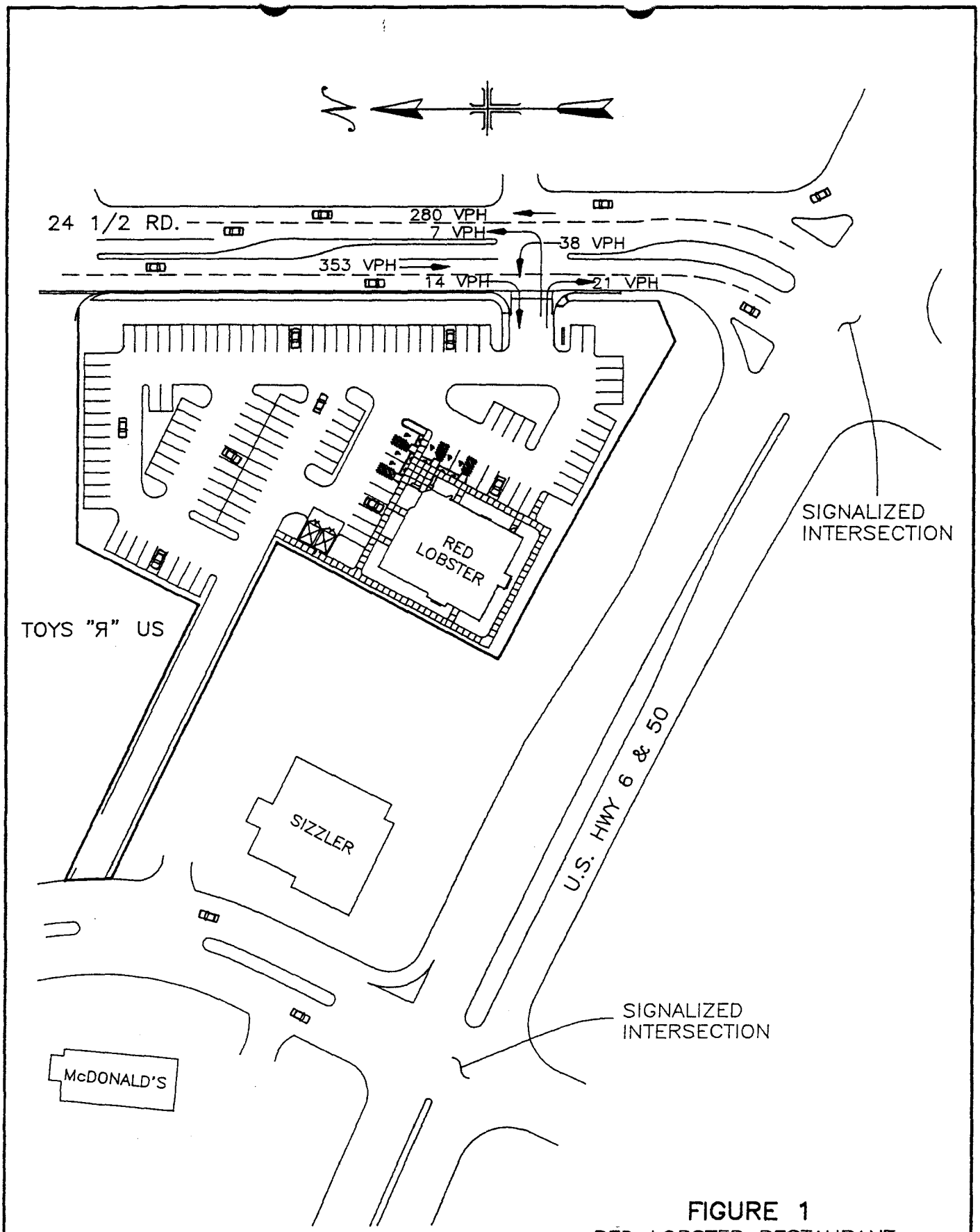


FIGURE 1
RED LOBSTER RESTAURANT
OBSERVED VEHICLE COUNTS
WEEKEND PEAK HOUR OF GENERATOR

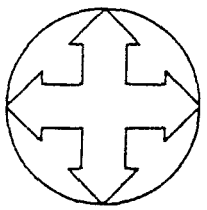
WESTERN ENGINEERS, INC.

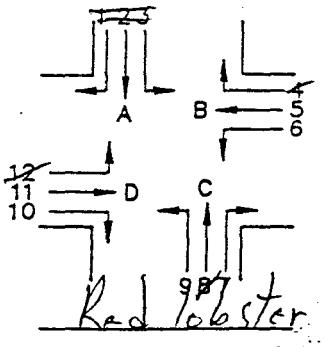
INTERSECTION VOLUME COUNT

DATE: 9-17-94

Weather: Fair, cool

10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45	1:00	1:15	TOTAL
1											
2											
3											
4											
5	75	87	87	82	79	97	105	97	100	101	
6	2	4	4	7	4	4	5	6	2	8	
7	0	1	0	2	0	0	3	3	1	3	
8											
9	0	0	1	0	1	0	1	2	1	2	
10	3	1	1	3	2	5	8	4	0	2	
11	45	48	61	55	71	51	63	76	68	62	
12											
TOTAL	125	141	154	149	157	157	185	188	172	178	
A	0	0	0	0	0	0	0	0	0	0	
B	77	91	91	89	83	101	110	103	102	109	
C	0	1	1	2	1	0	4	5	2	5	
D	48	49	62	58	73	56	71	80	68	64	
TOTAL	125	141	154	=149	157	157	185	188	172	179	





24 Road

Red Lobster

SB
OBSERVER

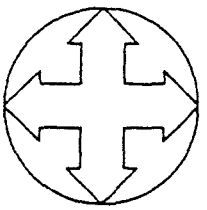
INTERSECTION

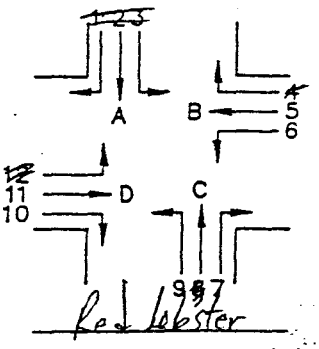
INTERSECTION VOLUME COUNT

DATE: 9-17-94

Weather: Fair, Cool.

	1:30	1:45	2:00	2:15							TOTAL
1											
2											
3											
4											
5	101	82	100	105							
6	2	2	2	3							
7	4	9	3	3							
8											
9	1	0	2	3							
10	3	3	3	3							
11	60	60	78	73							
12											
TOTAL	171	156	188	190							
A	0	0	0	0							
B	103	84	102	108							
C	5	9	5	6							
D	63	63	81	76							
TOTAL	171	156	188	190							





24 Road

SB
OBSERVER

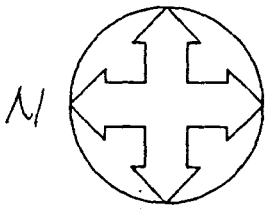
INTERSECTION

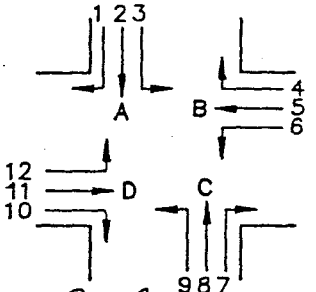
INTERSECTION VOLUME COUNT

DATE: 9-17-94

Saturday

4:00	4:15	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15	6:30	TOTAL
1											
2											
3											
4											
5	96	69	63	76	72	63	59	55	52	44	
6	4	9	4	12	13	2	6	3	9	9	
7	1	6	3	6	6	5	5	8	7	13	
8											
9.	1	3	0	2	2	6	1	5	5	2	
10	2	4	8	10	6	17	10	7	3	3	
11	84	87	94	95	77	84	78	64	72	50	
12											
TOTAL	188	178	172	201	176	177	159	142	148	121	
A	0	0	0	0	0	0	0	0	0	0	
B	100	78	67	88	85	65	65	58	61	53	
C	2	9	3	8	8	11	6	13	12	15	
D	86	91	102	105	83	101	88	71	75	53	
TOTAL	188	178	172	201	176	177	159	142	148	121	





24 Road

Red Lobster

G Lyman
OBSERVER

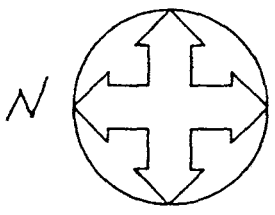
INTERSECTION

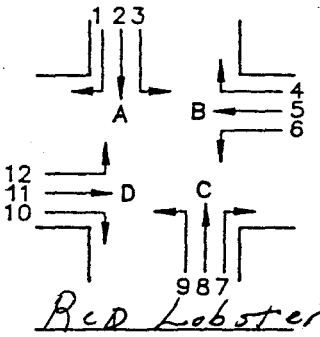
INTERSECTION VOLUME COUNT

PAGE 2 OF 2

DATE: 9-17-94
Saturday

	6:45	7:00								TOTAL
1										
2										
3										
4										
5	47	52								748
6	5	8								84
7	6	7								73
8										
9	6	4								37
10	7	3								80
11	55	46								886
12										
TOTAL	126	120								1,908
A	0	0								0
B	52	60								832
C	12	11								110
D	62	49								866
TOTAL	126	120								1,908





24 Road

Red Lobster

G Lyman
OBSERVER

INTERSECTION

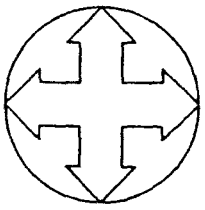
WEI/FORM/55

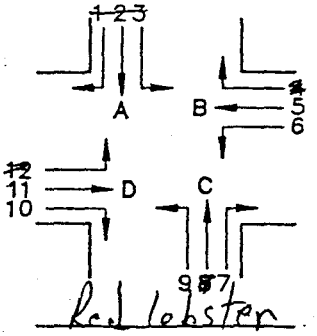
INTERSECTION VOLUME COUNT

PAGE 1 OF 2

DATE: 9-20-94
Tuesday

11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45	1:00	1:15	1:30	TOTAL
1											
2											
3											
4											
5	52	58	59	66	63	68	52	67	64	57	
6	3	8	4	4	3	3	4	3	3	3	
7	0	2	1	2	2	4	2	5	2	4	
8											
9	1	0	1	0	4	3	1	5	0	1	
10	3	5	0	2	3	2	2	2	5	2	
11	53	50	41	31	73	44	48	56	49	46	
12											
TOTAL	112	123	106	105	148	124	109	138	123	113	
A	0	0	0	0	0	0	0	0	0	0	
B	55	66	63	70	66	71	56	70	67	60	
C	1	2	2	2	6	7	3	10	2	5	
D	56	55	41	33	76	46	50	58	54	48	
TOTAL	112	123	106	105	148	124	109	138	123	113	





24 Road

G.B.G
OBSERVER

INTERSECTION

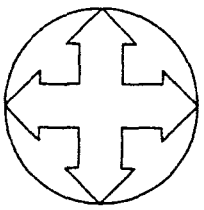
WEI/FORM/55

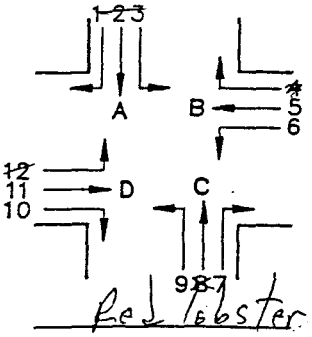
INTERSECTION VOLUME COUNT

PAGE 2 OF 2

DATE: 9-21-94
Tuesday

	1:45	2:00									TOTAL
1											
2											
3											
4											
5	58	77									
6	1	0									
7	9	3									
8											
9	1	1									
10	4	1									
11	68	37									
12											
TOTAL	141	119									
A	0	0									
B	59	77									
C	10	4									
D	72	38									
TOTAL	141	119									





24 Road

Red Lobster

GBG
OBSERVER

INTERSECTION

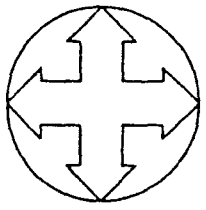
WEI/FORM/55

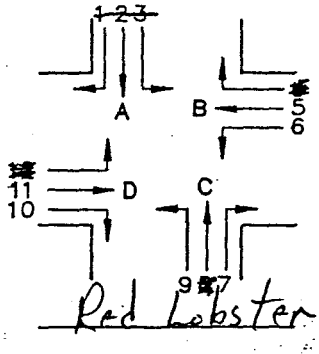
INTERSECTION VOLUME COUNT

PAGE 1 OF 2

DATE: 9-20-94
Tuesday

4:00	4:15	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15	6:30	TOTAL
1											
2											
3											
4											
5	56	65	61	62	57	54	58	35	42	46	
6	1	2	1	3	3	9	3	4	6	5	
7	3	4	2	3	2	1	3	1	1	2	
8											
9	0	2	0	1	5	0	0	1	0	2	
10	3	0	0	0	2	9	4	2	8	1	
11	60	50	44	50	55	49	55	40	39	41	
12											
TOTAL	123	123	108	119	124	122	123	83	96	97	
A	0	0	0	6	0	0	0	0	0	0	
B	57	67	62	65	60	63	61	39	48	51	
C	3	6	2	4	7	1	3	2	1	4	
D	63	50	44	50	57	58	59	42	47	42	
TOTAL	123	123	108	119	124	122	123	83	96	97	





24 Road

Red Lobster

GBG
OBSERVER

INTERSECTION

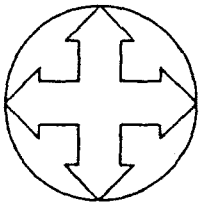
WEI/FORM/55

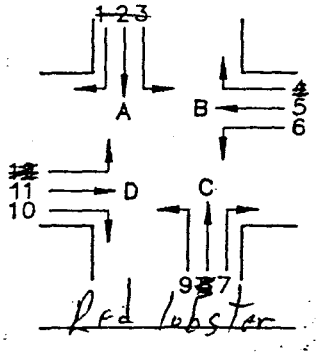
INTERSECTION VOLUME COUNT

PAGE 2 OF 2

DATE: 9-20-94
Tuesday

	6:45	7:00									TOTAL
1											
2											
3											
4											
5	45	50									
6	2	2									
7	5	4									
8											
9	3	1									
10	3	6									
11	22	40									
12	~~80~~	~~103~~									
TOTAL	80	103									
A	0	0									
B	47	52									
C	8	5									
D	25	46									
TOTAL	80	103									





24 Road

G.B.G.
OBSERVER

INTERSECTION

WEI/FORM/55

October 17, 1994

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

Mr. Chris Fortmueller
General Mills Restaurants, Inc.
5900 Lake Ellenor Drive
Orlando, Florida 32809

RE: Red Lobster - Grand Junction, Colorado

Dear Mr. Fortmueller,

Western Engineers, Inc. provided the City with traffic counts as required by the Planning Commssion in approving the Conditional Use Permit for the Red Lobster here in Grand Junction. Thank you for your prompt attention to this matter. Upon review of that information, the City sees no need for General Mills Restaurants, Inc. to do any off-site improvements to the 24-1/2 Road median--existing conditions are adequate to handle the traffic.

The only other outstanding item is the Release of Improvements Agreement and Guarantee for the project. I forwarded the paperwork to the Utility Engineer, Mr. Bill Cheney for signature but he questioned whether the sewer line easement across the Toys "R" Us property had been resolved. If he hasn't contacted you already regarding this issue, I would suggest that you contact Mr. Cheney at (303) 244-1590 at your earliest convenience so that the Agreement and Letter of Credit can be released.

Again, it has been a pleasure working with you. The City looks forward to another opportunity to work with General Mills Restaurants, Inc. in our community.

Sincerely,

Kristen

Kristen Ashbeck
Planner

xc: Gayle Lyman, Western Engineers, Inc.
Jody Kliska, Development Engineer

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (970)244-1599

October 4, 1996

Ron Gates, Site Development Administrator
General Mills Restaurants
P.O. Box 593330
Orlando, Florida 32859-3330
(407)-851-0370

Project: **Grand Junction Colorado Red Lobster** SPR 92-75
Subject: **Sanitary sewer easement information request**

Dear Mr. Gates:

A few weeks ago you made a request for the City of Grand Junction to provide you a legal description for the sanitary sewer easement across the Toys-R-Us site north of the Grand Junction Colorado Red Lobster site.

After further review of project files, it would be impossible for us to provide this information without mobilizing our surveyors. As this information should already be on file with Western Engineers, the engineering firm that designed the Red Lobster site, you should be contacting Western Engineers for this information. Mr. Bruce Marvin, the principal at Western Engineers, can be reached at (970)-242-5202 or by writing 2150 Hwy 6 & 50, Grand Junction, CO 81505-9422.

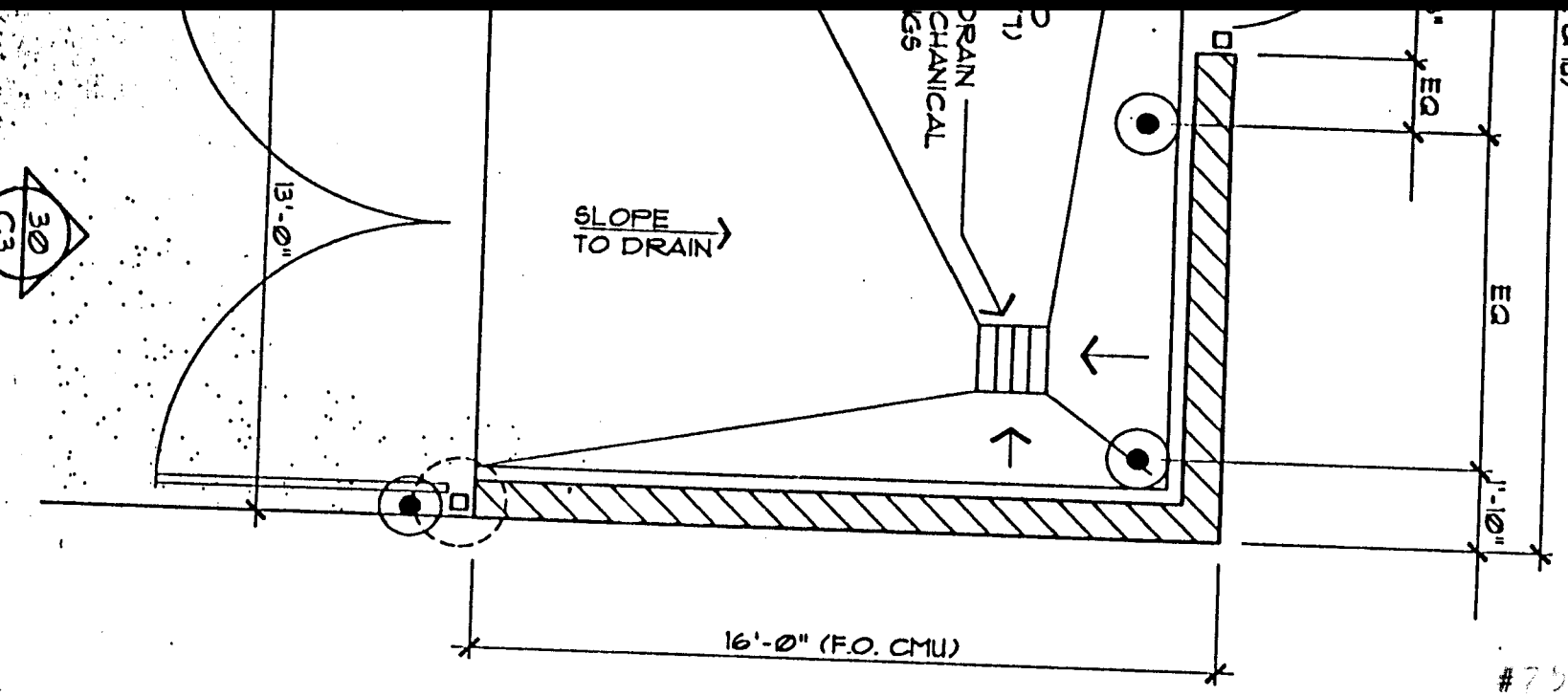
As my predecessor, Bill Cheney, stated in his December 22, 1992 letter, this line will not be maintained by the City of Grand Junction until a 15' sanitary sewer easement is dedicated to, and accepted by, the City of Grand Junction.

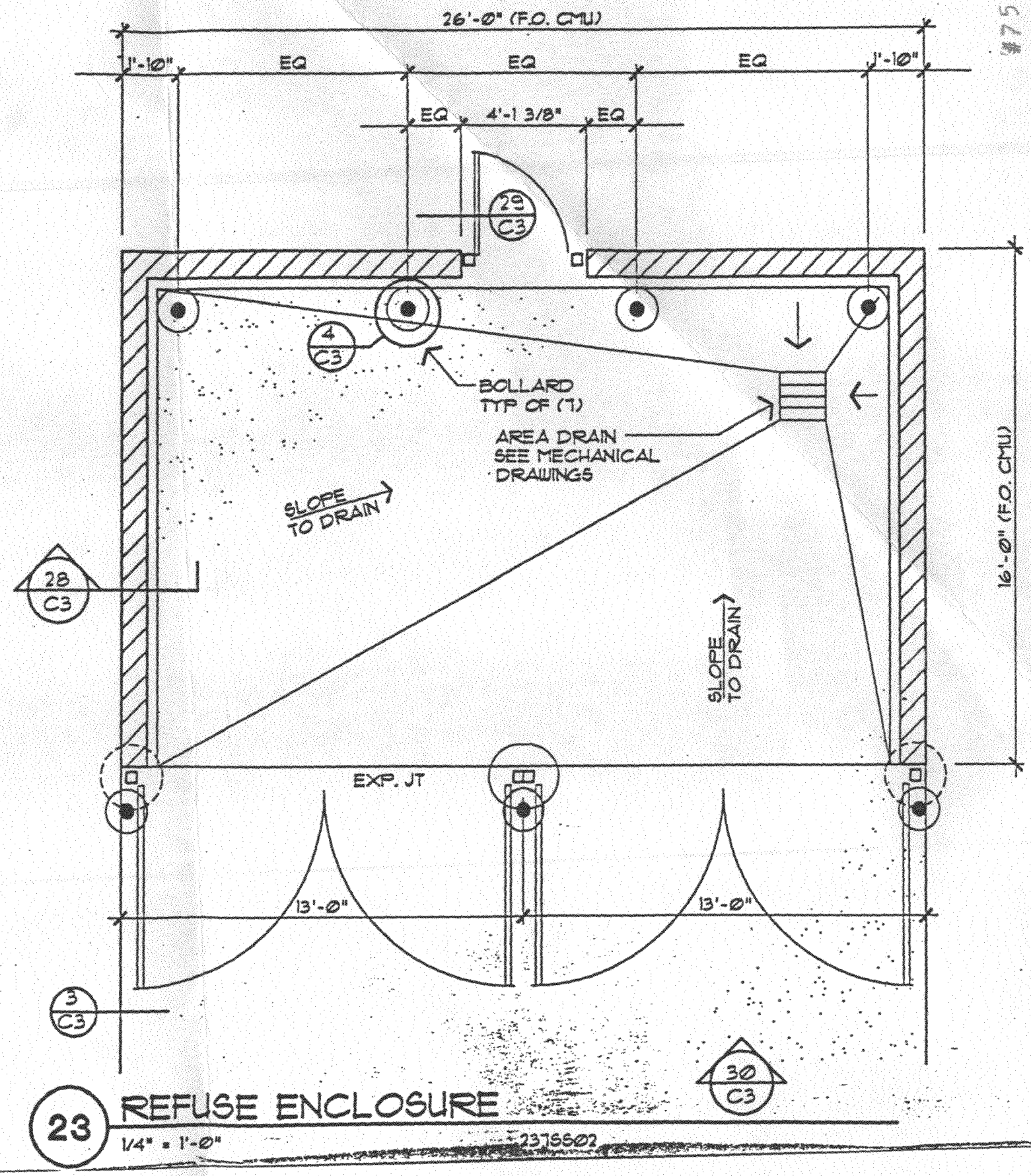
If you have any questions please give a me call at (970)-244-1590.

Sincerely,

Trent Prall, P.E.
Utility Engineer

cc: Kristen Ashbeck, Community Development

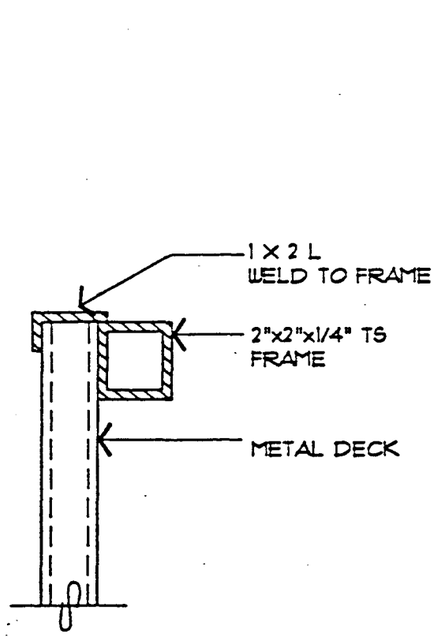

SLOPE
TO DRAIN
13'-0"
EQ
EQ
1'-10"
16'-0" (F.O. CMU)



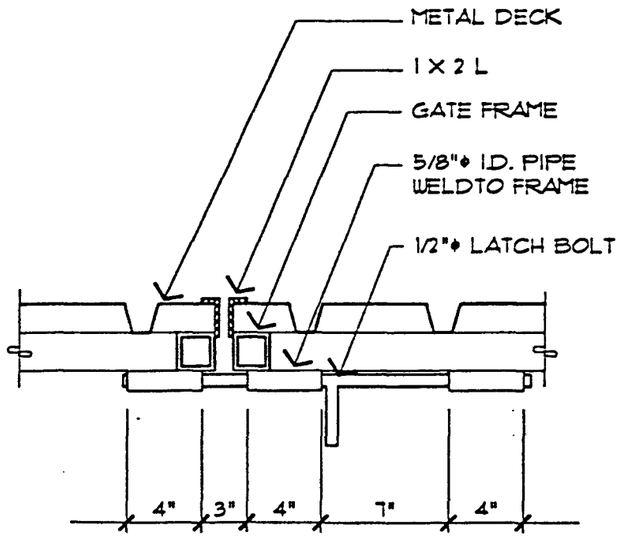
23 REFUSE ENCLOSURE

1/4" = 1'-0"

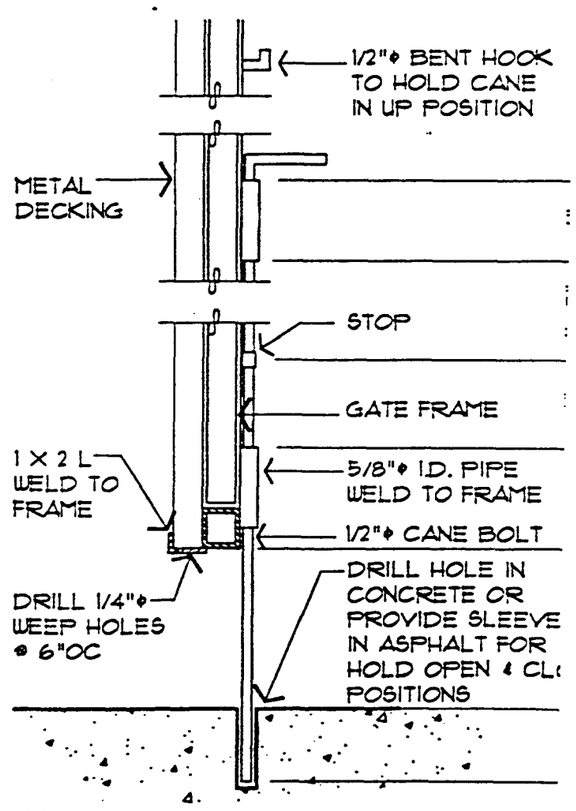
#75 92



24 GATE TOP
3" = 1'-0"
RM15C055



25 GATE LATCH
1 1/2" = 1'-0"
RM15C048



26 CANE BOLT
1 1/2" = 1'-0"

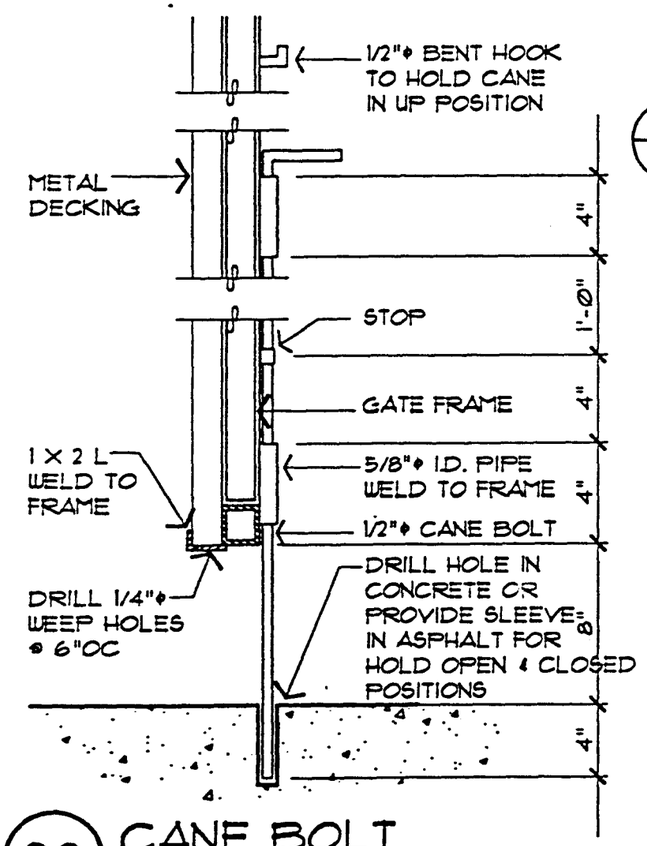
File / Plot date: 23TC3DT / 10-28-92

K

E

IPE
AME

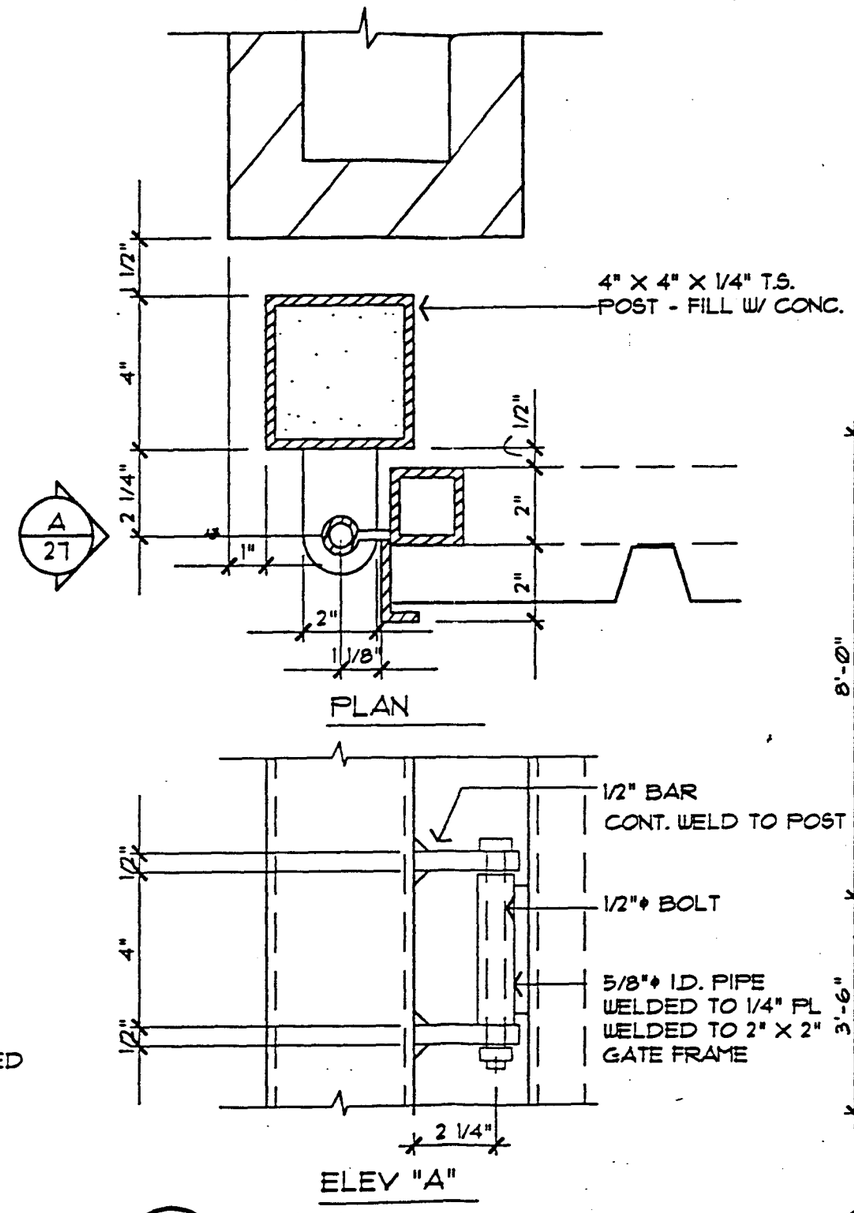
I BOLT



26 CANE BOLT

1 1/2" = 1'-0"

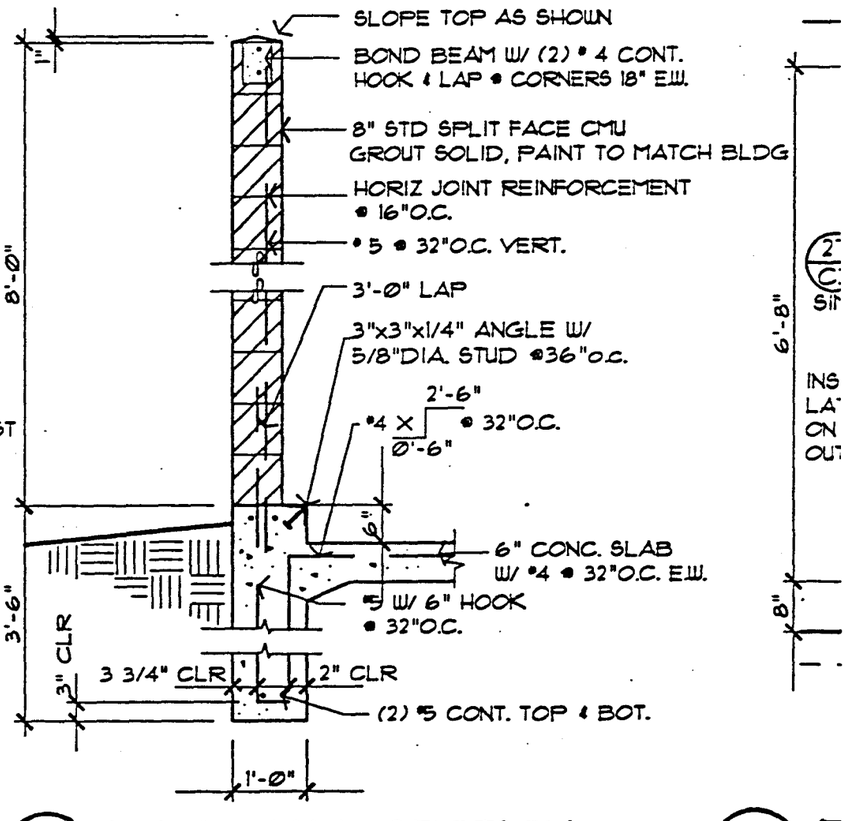
RM15C048



27 HINGE

3" = 1'-0"

RM15C047



28 ENCL WALL SECTION

1/2" = 1'-0"

RM15C050

29 E

1/2

INS
LA
NO
6'-8"
8"

= AS SHOWN

M W/ (2) #4 CONT.
= @ CORNERS 18" E.W.

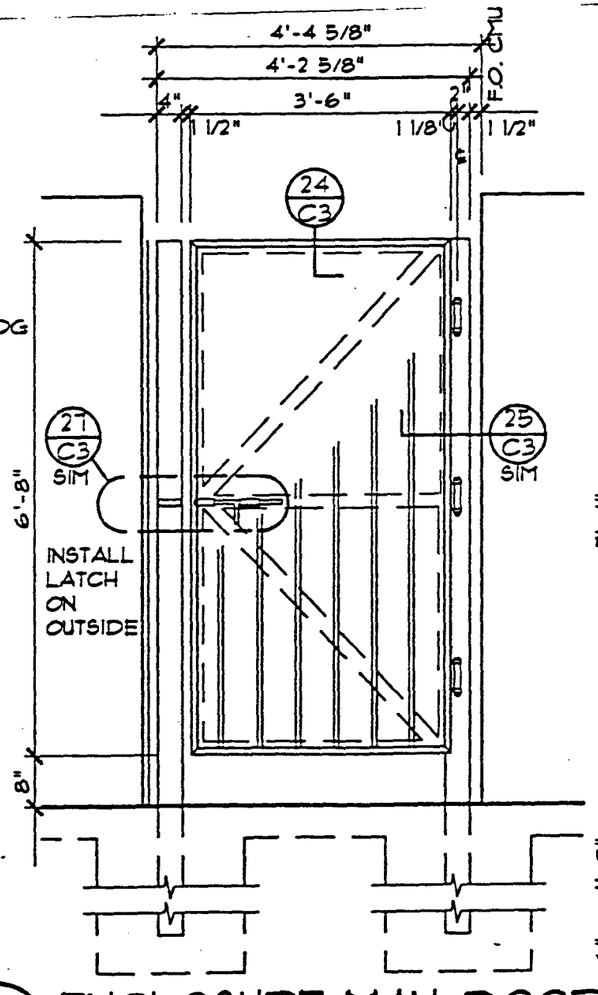
IT FACE CMU
ID, PAINT TO MATCH BLDG
NT REINFORCEMENT

C. VERT.

ANGLE W/
TUD @36"O.C.
"
32"O.C.

– 6" CONC. SLAB
W/ #4 @ 32"O.C. E.W.
OOK

NT. TOP & BOT.

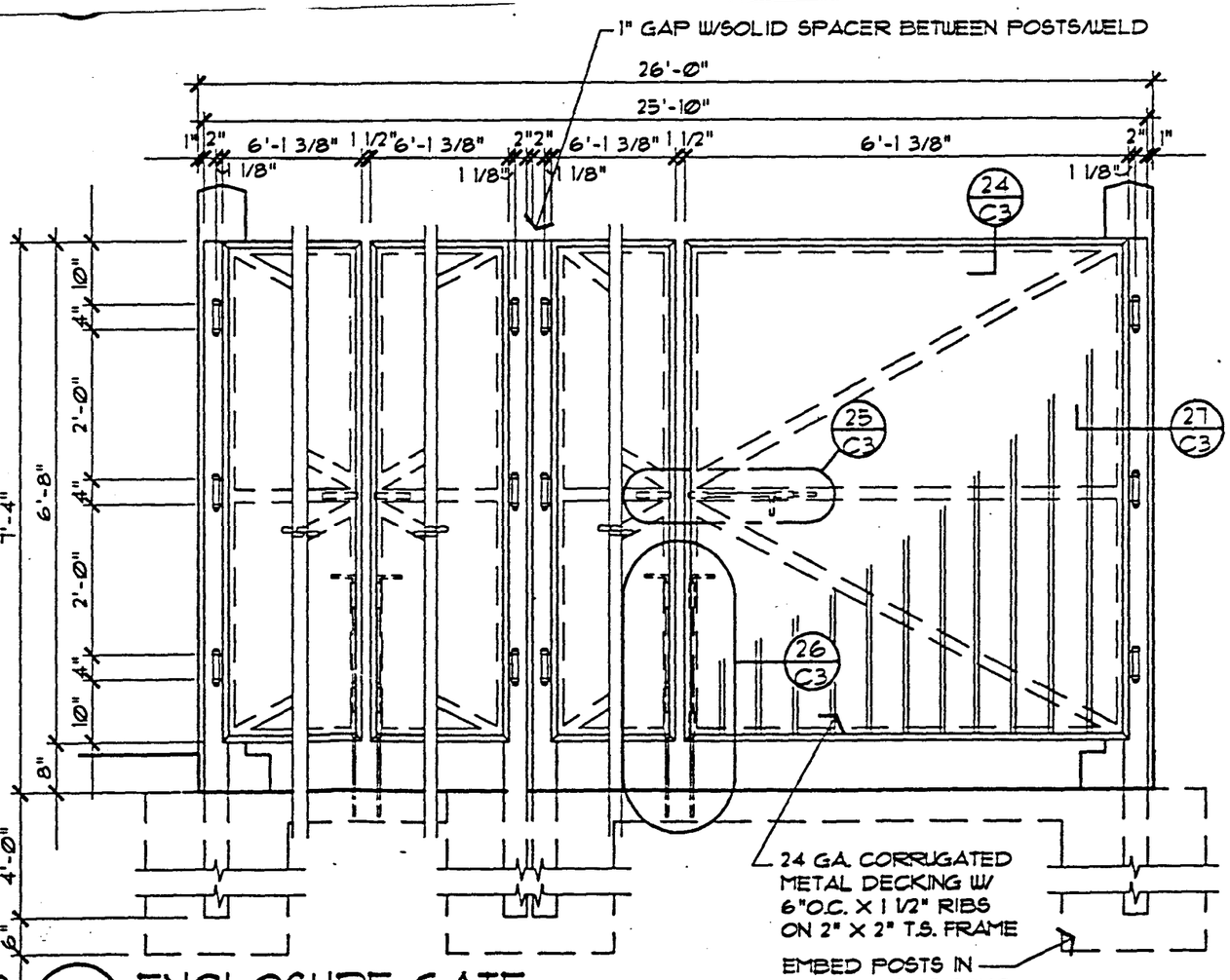


TION

RM1SC050

29 ENCLOSURE MAN-DOOR

1/2" = 1'-0"



2375S01

30 ENCLOSURE GATE

1/2" = 1'-0"

RM1SC046

Job No. 23

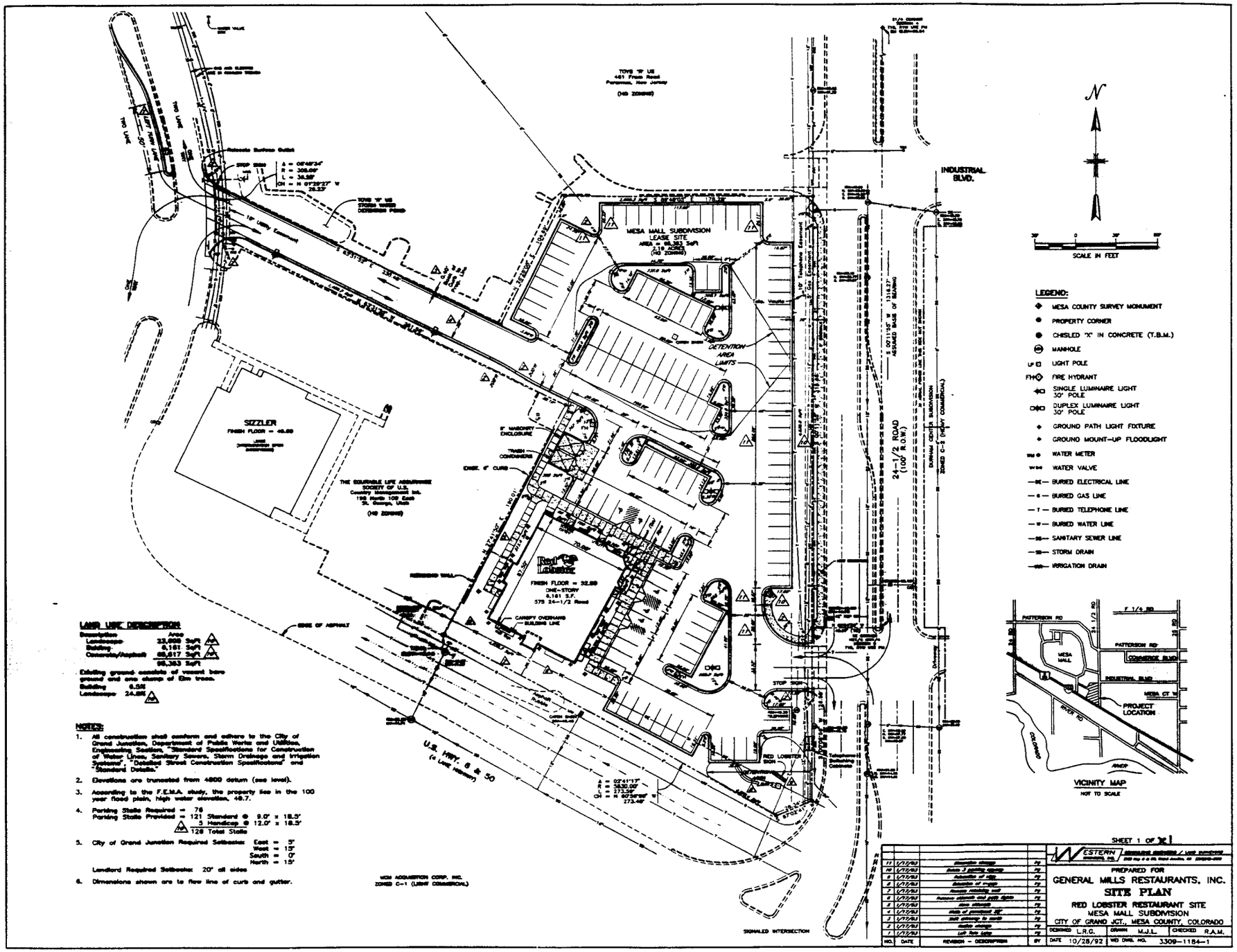
Date: 10-28-

Rev:

SITE DETA

Sheet No.

C3



75-92

Book: 2
Page: 27
Drawer: W-73

- P.T. WD. NAILER

- VENT PIPE

FLASHING

NGS

4

- SOLDER LEAD COUNTER FLASHING COLLAR TO COUPLING

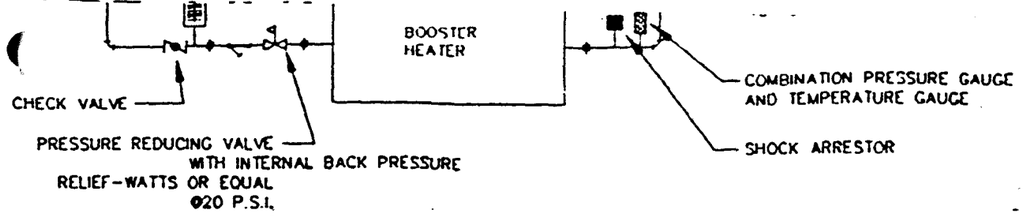
- LEAD FLASHING (3LB.)

- FLASHING TO ROOF

ETRATION

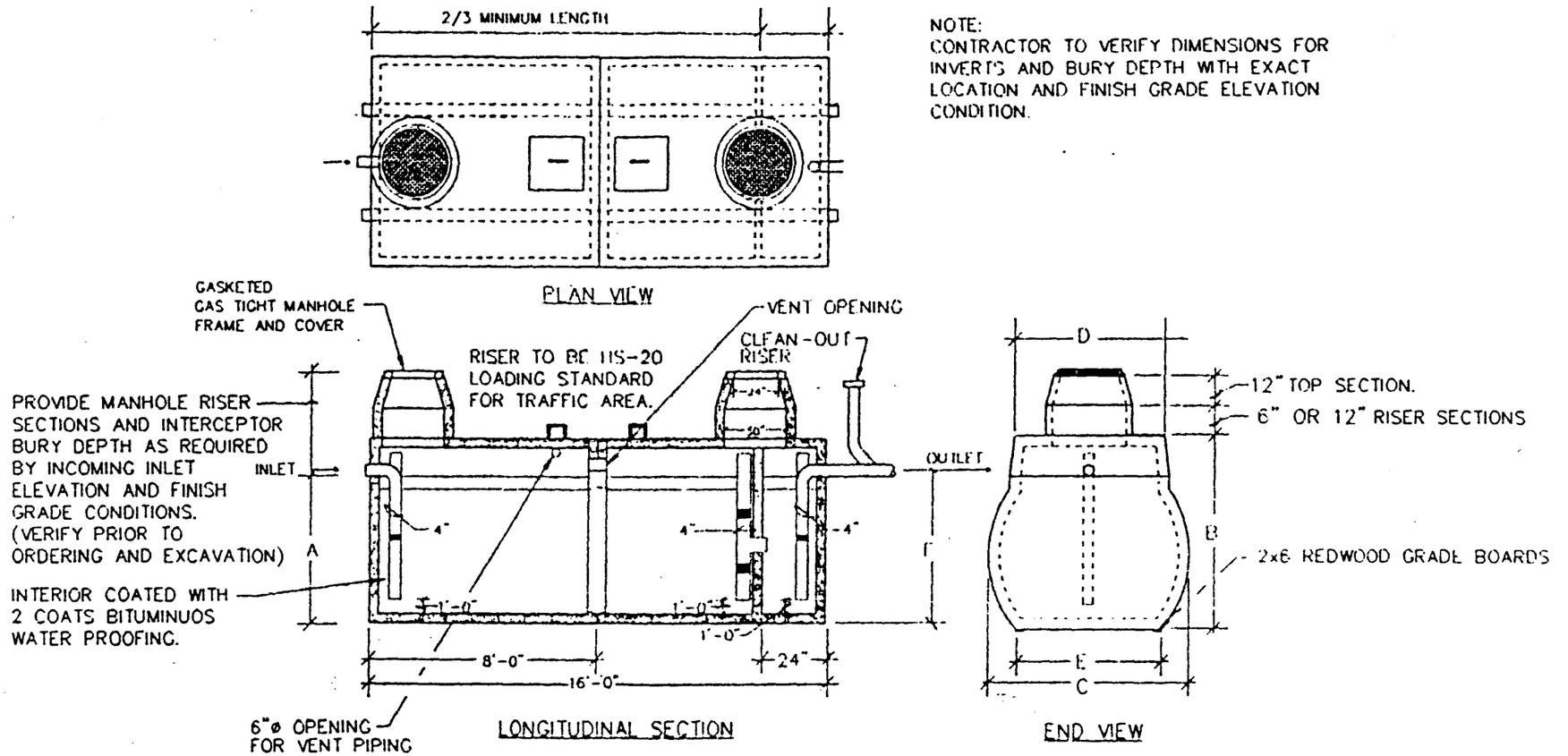
- SODA LINES BY OTHER

- CAP PROVIDE HOLES IN CAP FOR SODA LINES



12 DISHWASHER BOOSTER HEATER DETAIL

NTS



NOTE:
CONTRACTOR TO VERIFY DIMENSIONS FOR INVERTS AND BURY DEPTH WITH EXACT LOCATION AND FINISH GRADE ELEVATION CONDITION.

13 3000 GALLON GREASE INTERCEPTOR

NTS

GREASE INTERCEPTOR NOTES

1 MATERIAL SPECIFICATIONS:

A. THE GREASE INTERCEPTOR TANK SHALL BE PRECAST OF CONCRETE WHICH HAS A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS USING A TYPE II PORTLAND CEMENT.

B. EXTERNAL LOADINGS CONTROL REBAR DESIGN (NOTE NO. 3 AND DRAWING NO. 8023). REBAR SHALL MEET ASTM A-615.

C. THE CONTROL OF SHRINKAGE CRACKS SHALL ACCOMPLISHED THROUGH THE USE OF EITHER WELDED WIRE MESH OR "FIBERMESH" FIBERS.

1. THE WELDED WIRE MESH SHALL MEET THE CRITERIA OF ASTM A-185.

2. "FIBERMESH" BRAND FIBERS SHALL BE USED AT A CONCENTRATION OF 1.5 POUNDS OF "FIBERMESH" PER CUBIC YARD OF CONCRETE.

2 STRUCTURAL SPECIFICATIONS:

A LIGHT-DUTY GREASE INTERCEPTOR TANK SHALL BE CAPABLE OF SUPPORTING AN EARTH LOAD OF THREE (3) FEET.

B. HEAVY-DUTY GREASE INTERCEPTOR TANK SHALL BE CAPABLE OF SUPPORTING (WITHOUT THE ADDITION OF A TRAFFIC SLAB)

1. A H-20 TRUCK LOADING, IN ADDITION TO THREE (3) FEET OF EARTH COVER, OR

2 A LOAD OF 8' OF EARTH.

3 LOADINGS, TRAFFIC SLABS, MANHOLES AND RISERS

A. ALLOWABLE EXTERNAL LOADS TO TANK IN FEET OF EARTH AND H-20 TRUCK LOADINGS FOR USE WITH.

1. A NO TRAFFIC SLAB CONDITION, AND

2. A COMBINATION TRAFFIC SLAB AND TRAFFIC MANHOLE CONDITION. SEE DRAWING NO. 8022.

B TRAFFIC SLAB AND TRAFFIC MANHOLES (NOTTINGHAM RECOMMENDS THAT THEY BE USED TOGETHER) SEE DRAWING NO 8022.

C RISER SYSTEM SHOWN SEE DRAWING NO. 8080 ALTERNATIVE RISER SYSTEMS. SEE DRAWINGS NO. 8049, 8051, AND 8081

4 THE MINIMUM PROTECTIVE COATING REQUIREMENTS FOR THE CONCRETE GREASE INTERCEPTOR TANKS ARE AS FOLLOWS:

A. THE COATING SHALL MEET THE CRITERIA SPECIFIED IN ASTM C-309.

B. THE COATING SHALL COVER ALL INTERNAL SURFACES.

5 INTERNAL PIPING AND FITTINGS SHALL BE MADE OF 4" PVC PLASTIC OR ABS PLASTIC, AND IN ACCORDANCE WITH STANDARDS OF LOCAL AND STATE INSPECTION AGENCIES.

6 THE PRECAST CONCRETE UNIT SHALL BE PLACED ON LEVEL UNDISTURBED SOIL OR ON AN APPROVED COMPACTED FILL.

7 CEMENT MORTAR SHALL BE APPLIED BY M.C. NOTTINGHAM TO THE JOINT BETWEEN THE CAP AND THE TANK. THIS JOINT SHALL BE A MINIMUM OF 2" ABOVE THE STATIC WATER LEVEL.

8 THE GREASE INTERCEPTOR IS LISTED AND APPROVED BY THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO).

9 TWO 2x6 REDWOOD GRADE BOARDS SHALL BE PLACED BELOW THE GREASE INTERCEPTOR TANK ALONG THE LONG DIMENSION, UNDER THE FOLLOWING CONDITIONS:

A. A H-20 TRUCK LOADING WITH 3' OF EARTH COVER, OR

B. AN EARTH COVER OF 8', AND/OR

C. A GREASE INTERCEPTOR TANK BATTERY SETUP (TWO OR MORE TANKS USED IN A SERIES).

10 THE CROSSOVER PIPE SHALL BE A TEE-SECTION, AS SHOWN. THE INLET TO THIS TEE SHALL BE 1'-0" FROM THE TANK BOTTOM

11 THE SEPARATION WALL IS PLACED AT A DISTANCE OF 67% OF THE LENGTH OF THE TANK MEASURED FROM THE INLET SIDE.

12 EACH GREASE INTERCEPTOR SHALL BE INSTALLED IN STRICT ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.

13 THE INTERCEPTOR SHALL BE INSTALLED ON LEVEL UNISTURBED SOIL WITH A TOTAL LOAD BEARING CAPACITY OF A MINIMUN OF 2000 LB./SQ/FT/ THE INTERCEPTORS SHALL BE SET ON A LAYER OF PEA GRAVEL 12" MINIMUM IN. THICKNESS.

14 CARE SHALL BE TAKEN NOT TO DROP THE INTERCEPTOR INTO THE HOLE AND NOT TO OTHERWISE DAMAGE THE INTERCETOR DURING BACKFILL.

15 THE WYE FITTING IN THE INLET SIDE OF THE INTERCEPTORS SHALL BE LEVEL AND BEDDED ON A LAYER OF PEA GRAVEL 12" IN DEPTH OVER COMPACTED SOIL. THIS AREA OF BACKFILL SHALL BE MECHANICALLY COMPACTED UNLESS OTHERWISE APPROVED.

16 EACH GREASE INTERCEPTOR SHALL BE SO INSTALLED AND CONNECTED THAT IT SHALL BE EASILY ACCESSIBLE FOR INSPECTION, CLEANING AND REMOVAL AT ALL TIMES. INTERCEPTORS SHALL BE PLACED AS CLOSE AS PRACTICAL TO THE FIXTURES SERVED. MANHOLE COVERS SHALL BE GAS TIGHT IN CONSTRUCTION AND HAVE A MINIMUM OPENING OF 24" IN DIAMETER

17 VENTING FOR GREASE INTERCEPTOR SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL CODE REQUIREMENTS.

18 GREASE INTERCEPTORS LOCATED IN A PAVED AREA SHALL COMPLY WITH HS-20 LOADING STANDARDS.

NOTE: ALL DRAWING NO'S REFERENCED ABOVE ARE M.C. NOTTINGHAM STANDARD DETAILS.

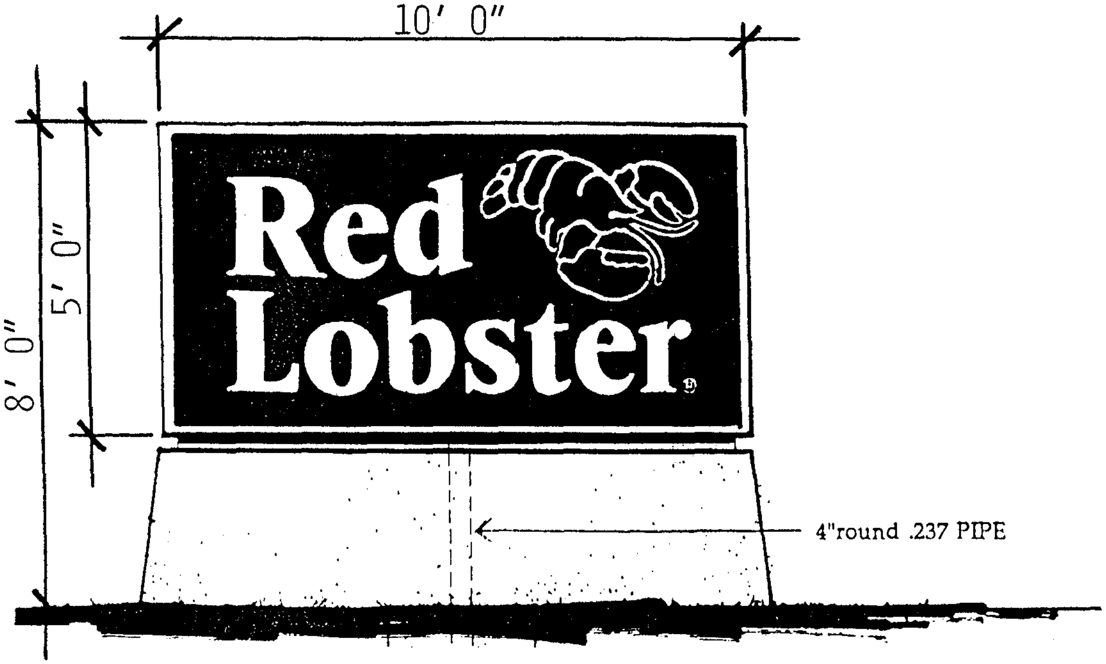
CAPACITY IN	A	B	C	D	E	F	EXCAVATION SPECS.	DEPTH BELOW INLET	LENGTH	WIDTH
	5'-0"	6'-0"	6'-11"	5'-3"	4'-11"	4'-10"		5'-0"	19'-0"	10'-0"

GENERAL NOTES

A INSTALL 3000 GALLON CONCRETE GREASE INTERCEPTOR VAULT PRE-MAUFACURED BY M.C. NOTTINGHAM (MODEL #B-3000) OR UTILITY VAULT CO. (MODEL #814GA) OR APPROVED.

B SUBMIT SHOP DRAWINGS TO LOCAL INSPECTION OFFICIAL FOR REVIEW AND APPROVAL PRIOR TO ORDERING AND INSTALLATION.

ARCHITECT
VAN LOM

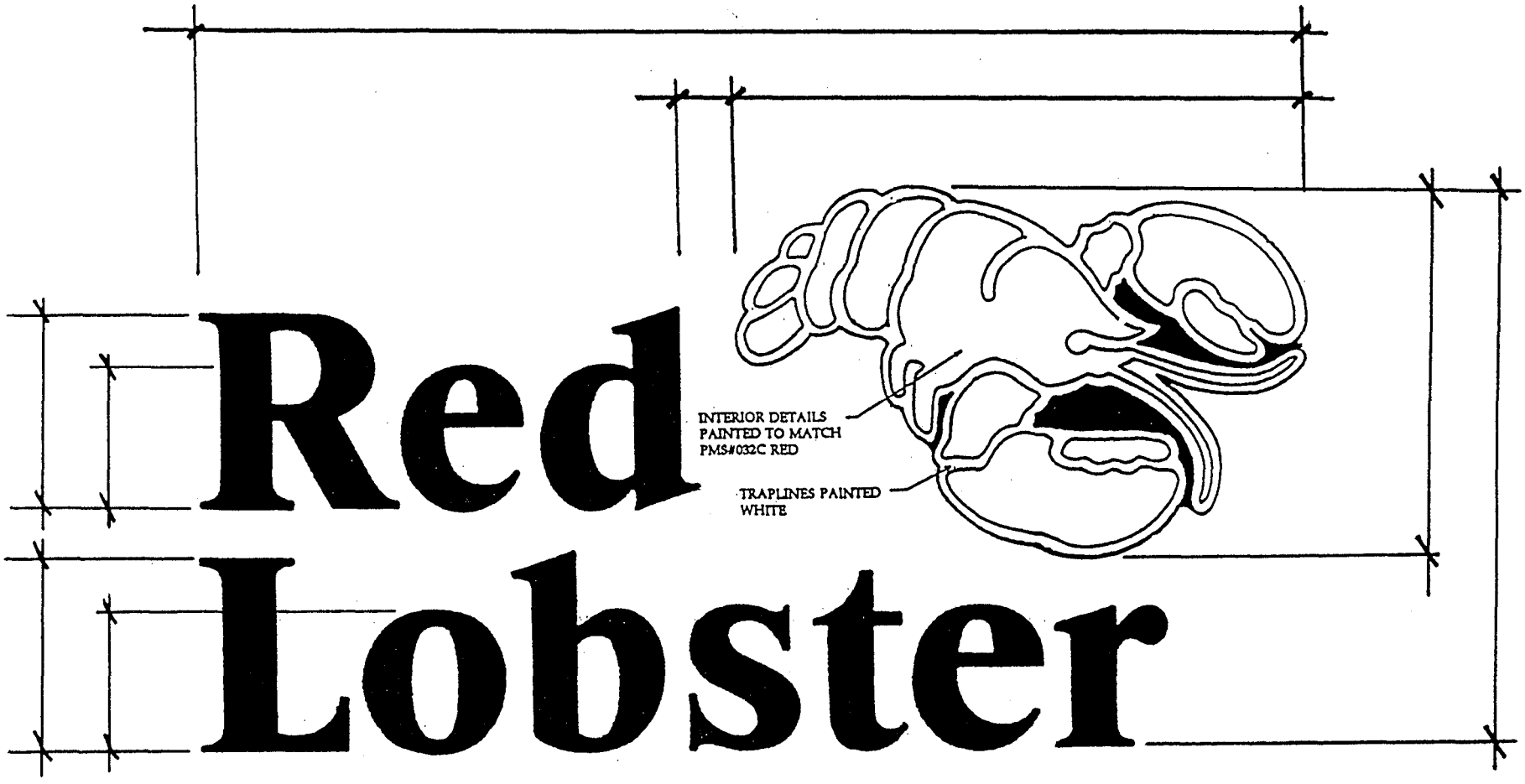


GENERAL SPECIFICATIONS

CABINET:
24" DOUBLE FACE CONVENTIONAL CONSTRUCTION CABINET WITH FILLERS AND RETAINERS PAINTED TO MATCH CAPE COD GREY

FACES:
PAN FORMED AND EMBOSSED POLYCARBONATE DECORATED 2nd SURFACE TO MATCH COLORS AS FOLLOWS;
BACKGROUND - PMS#293-C BLUE (OPAQUE)
COPY - WHITE (EMBOSSED)
LOGO - PMS#032-C RED (EMBOSSED)
TRAPLINES IN AND AROUND LOBSTER - WHITE (OPAQUE)

ILLUMINATION:
INTERNAL ILLUMINATION WITH C.W./H.O. FLUORESCENT LAMPS AND BALLASTS



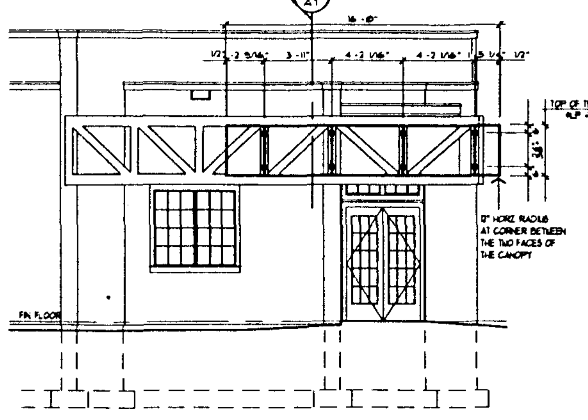
LETTER WITH LOGO ELEVATION

☐ GENERAL SPECIFICATIONS FOR STANDARD LTRS.
OPEN FACE 'H'- STYLE CHANNEL LETTERS
FABRICATED OF ALUMINUM SHEET METAL WITH INTERIORS AND RETURNS PAINTED TO MATCH PMS#032C RED

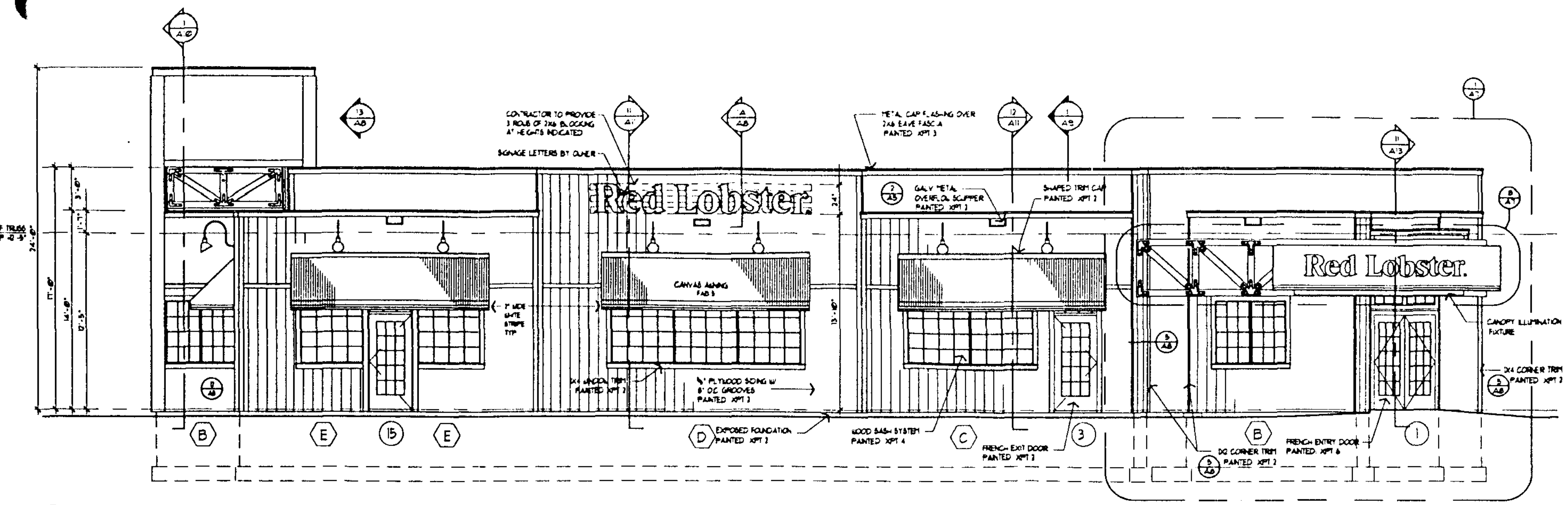
ILLUMINATION IS 15mm. CLEAR RED NEON, OUTLINE EFFECT WITH TRANSFORMERS BEING SELF CONTAINED

☐ GENERAL SPECIFICATIONS FOR STANDARD LOGO
OPEN FACE 'H'- STYLE FREE FORM CHANNEL
FABRICATED OF SHEET ALUMINUM PAINTED TO MATCH AS FOLLOWS; RETURNS (INSIDE & OUT) TO BE WHITE, 'UNLESS SPECIFIED DIFFERENTLY'
LOBSTER (INTERIOR DETAILS) - TO MATCH PMS#032C RED, WITH WHITE TRAP LINES
RELIEF OR DARK AREAS - TO MATCH CAPE COD GREY (MATCHING BUILDING)

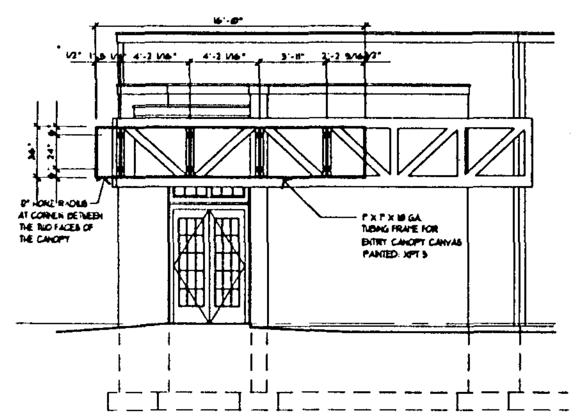
LOBSTER TO BE ILLUMINATED WITH 13mm. CLEAR RED NEON WITH SELF CONTAINED TRANSFORMER



1 ELEVATION - ENTRY CANOPY FRAME
1/4"=1'-0"



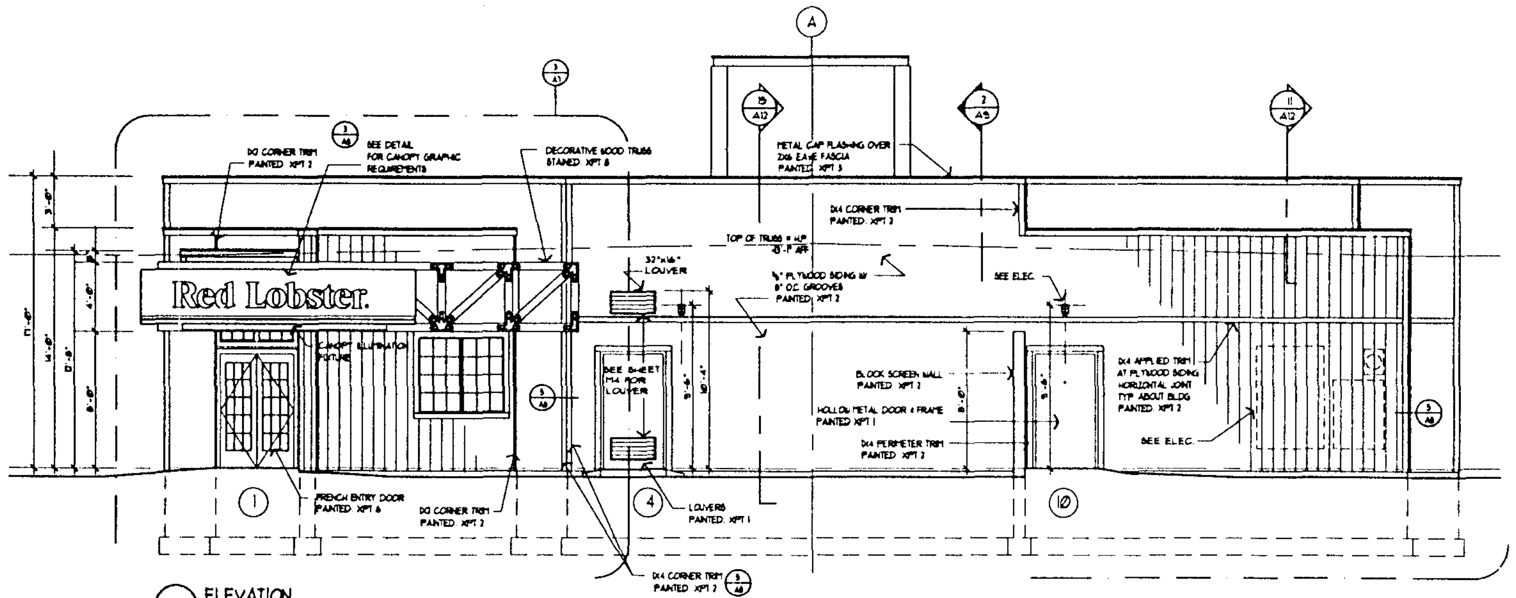
2 ELEVATION
1/4"=1'-0"



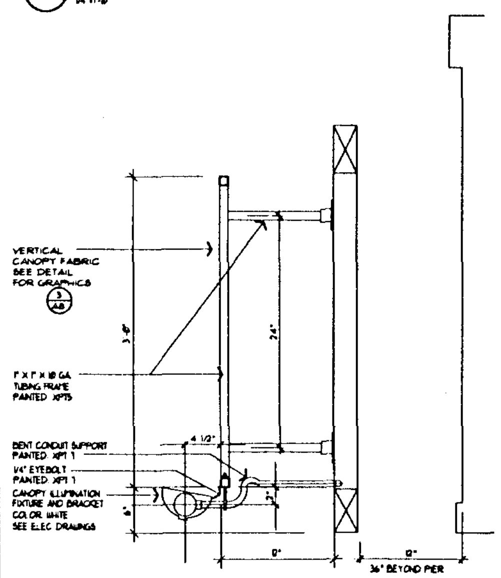
3 ELEVATION - ENTRY CANOPY FRAME
1/4"=1'-0"

EXTERIOR COLOR SCHEDULE

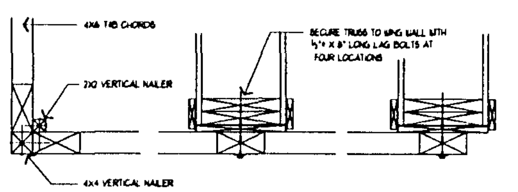
MARK	ITEM FINISHED	MFR.	COLOR
XPT 1	METAL DOORS & FRAME	OLYMPIC	"CAPE COD GREY" SATIN ACRYLIC LATEX
XPT 2	PLYWOOD SIDING, VERTICAL WOOD TRIM, WINDOW TRIM & SUBSILLS, WOOD TOWER COLUMN TRIM, EXIT DOORS	OLYMPIC	"CAPE COD GREY" ACRYLIC LATEX TOP OF TRUSS ELP +2'-5"
XPT 3	PARAPET WOOD TRIM AND METAL CAP FLASHING	OLYMPIC	"NAVAHO WHITE" ACRYLIC LATEX
XPT 4	WINDOW SASH, MUNTINS AND FRAME	OLYMPIC	"NAVAHO WHITE" SATIN ACRYLIC LATEX
XPT 5	CANOPY FRAME	OLYMPIC	"HERITAGE BLUE" ACRYLIC LATEX
XPT 6	FRENCH ENTRY DOORS	BENJAMIN MOORE	"RED MAHOGANY" 241 21 FIN. FLOOR STAIN
XPT 7	DECORATIVE STEEL PLATES AND BOLTS	OLYMPIC	BLACK ACRYLIC LATEX
XPT 8	DECORATIVE WOOD TRUSSES AT ENTRY AND TOWER	BENJAMIN MOORE	"SEQUOIA REDWOOD" 24 SEMI-TRANSPARENT STAIN



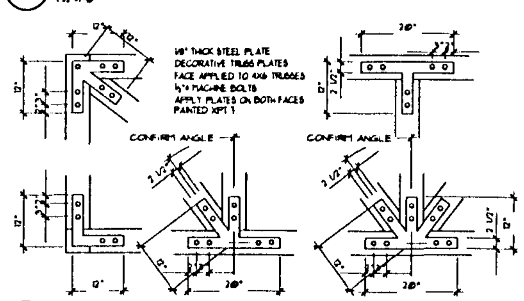
4 ELEVATION
1/4"=1'-0"



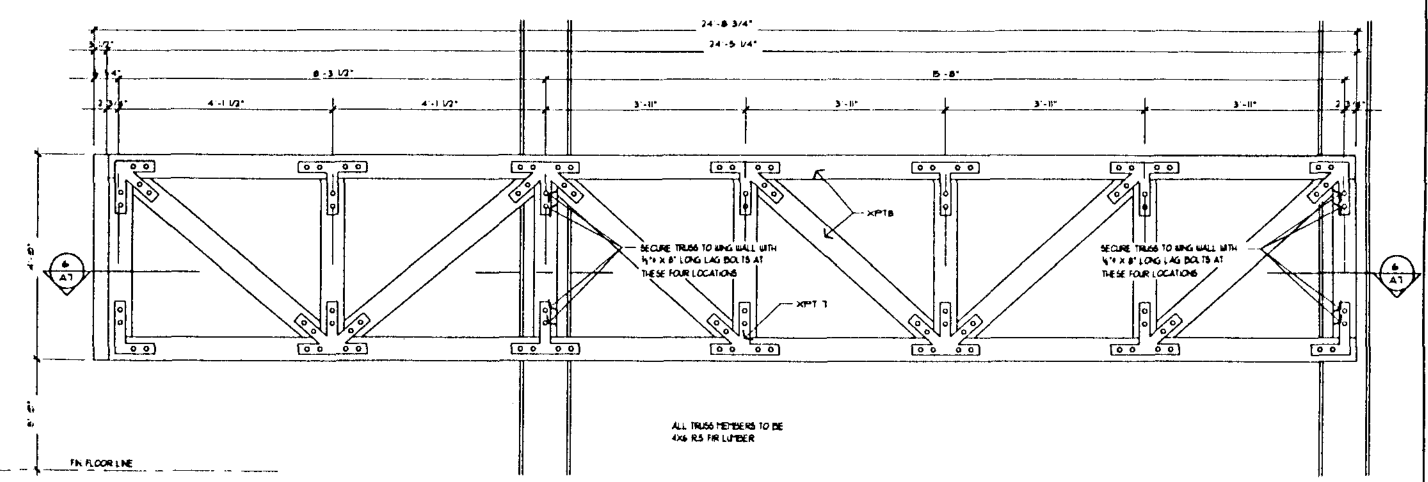
5 ENTRY CANOPY
1 1/2"=1'-0"



6 CONN. DETAIL
1 1/2"=1'-0"



7 ENTRY TRUSSES - CONNECTION PLATES
N.T.S.



8 DETAIL ELEVATION OF ENTRY TRUSS
3/4"=1'-0"

ARCHITECTS VAN LOM / EDWARDS A.I.A., P.C.
34 N.W. First Avenue Suite 308 Portland, Oregon 97209 503/226-0580

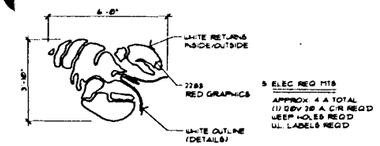
Red Lobster.

U.S. HWY 6 & 50 @ 24 ½ RD. (MESA MALL)
GRAND JUNCTION, COLORADO

Job No.
Date:
Rev:

EXTERIOR ELEVATIONS

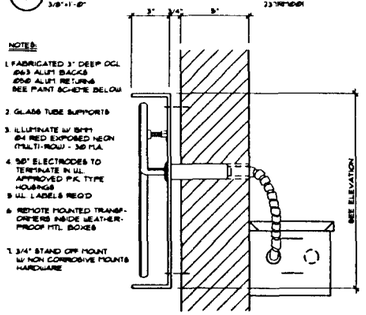
Sheet No.
A7



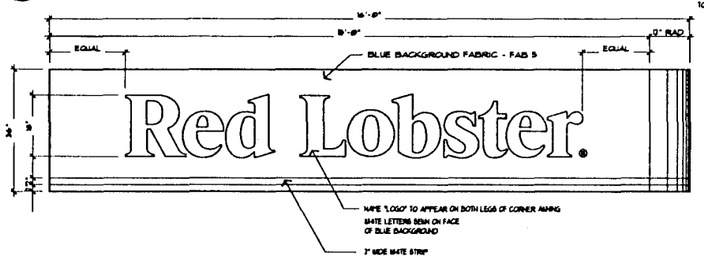
5 ELEC REQ MTG
APPROX. 4 A TOTAL (1) 120V 20 A CIR REQ'D
WEEP HOLES REQ'D
UL LABELS REQ'D

NOTES:
1 FABRICATED SELF CONTAINED OCL "CRITTER" W/ .040 ALUM RETURNS (8" DEEP) / .063 ALUM BACKS INSIDE RETURNS: PTD WHITE OUTSIDE RETURNS: PTD WHITE
2 EXPOSED 15MM RED #4 NEON W/ UL APPROVED 30 MA NEON TRANSF. INSIDE CHANNEL
3 RED 7283 AND WHITE DETAILS ARE PTD AS SHOWN = 1 EXPT.
4 USE NON CORROSIVE MOUNTG. HARDWARE 3/4" STANDOFFS (USE SILICONE CAULK @ ALL PENETRATIONS)

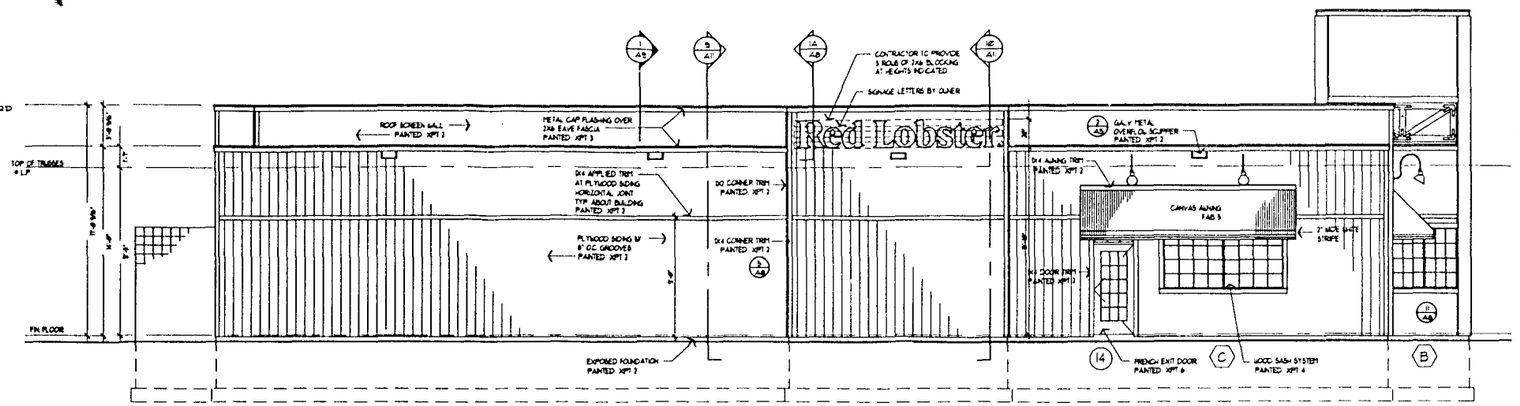
1 DETAIL • LOBSTER LOGO SIGN
3/8"=1'-0" 237ARCH01



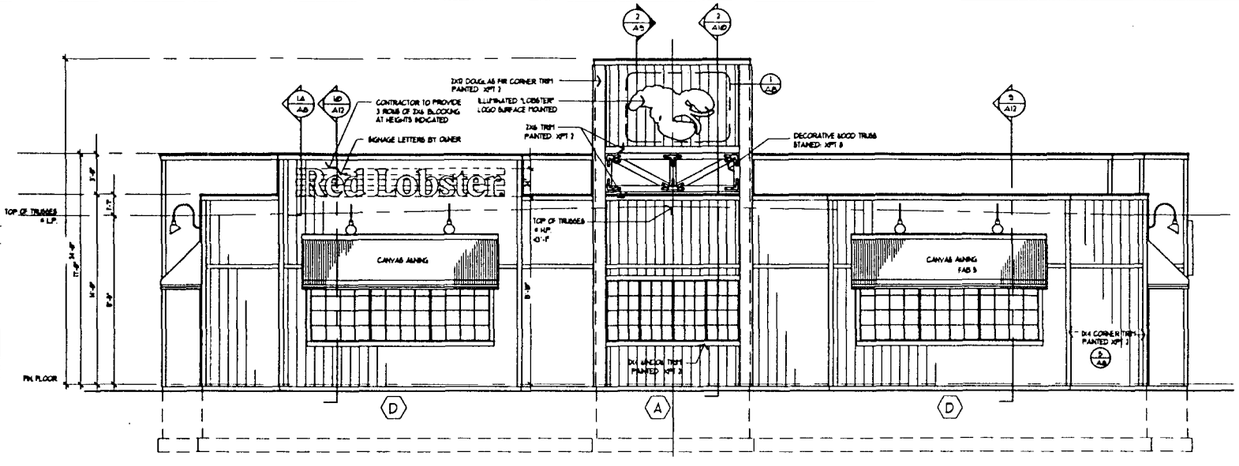
1A DETAIL • ILLUMINATED TEXT SIGN
N.T.S. 237ARCH02



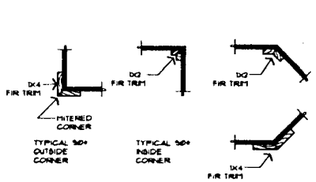
3 ELEVATION - VERTICAL CANVAS CANOPY AT ENTRY
1/4"=1'-0"



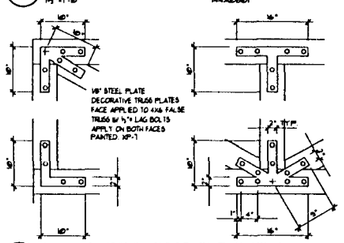
2 ELEVATION
1/4"=1'-0"



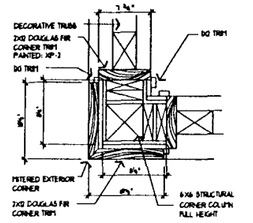
4 ELEVATION
1/4"=1'-0"



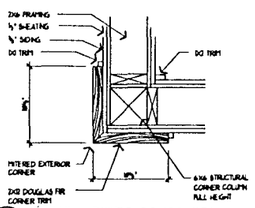
5 EXTERIOR WALL TRIM
1½"=1'-0" 144ARCH01



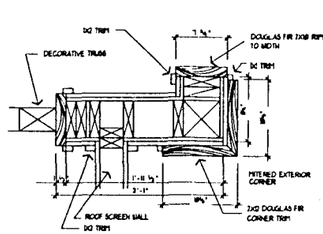
8 TOWER TRUSSES DECORATIVE PLATING
1 1/2"=1'-0"



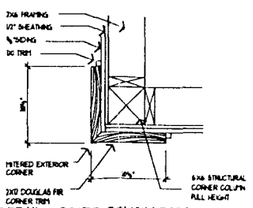
6 DETAIL - TOWER COL. TRIM
1 1/2"=1'-0"



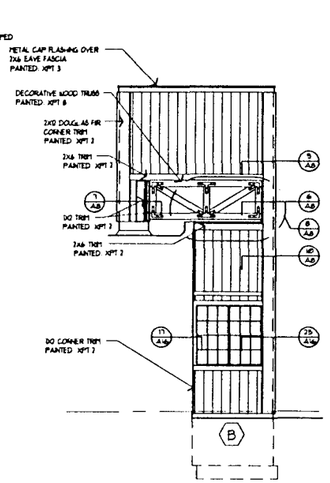
9 DETAIL - TOWER COLUMN TRIM
1 1/2"=1'-0"



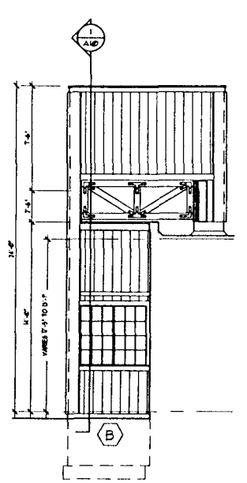
7 DETAIL - TOWER COL. TRIM
1 1/2"=1'-0"



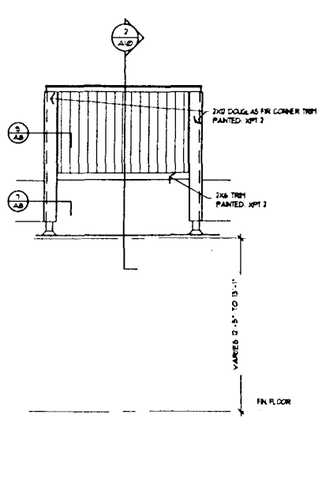
10 DETAIL - TOWER COLUMN TRIM
1 1/2"=1'-0"



11 SIDE FACE OF TOWER
1/4"=1'-0"



12 SIDE FACE OF TOWER
1/4"=1'-0"



13 BACK FACE OF TOWER
1/4"=1'-0"

ARCHITECTS
VAN LOM / EDWARDS
A.I.A., P.C.
24 NW First Avenue Suite 308 Portland, Oregon 97209 503/224-0560

U.S. HWY 6 & 50 @ 24 ½ RD. (MESA MALL)
GRAND JUNCTION, COLORADO

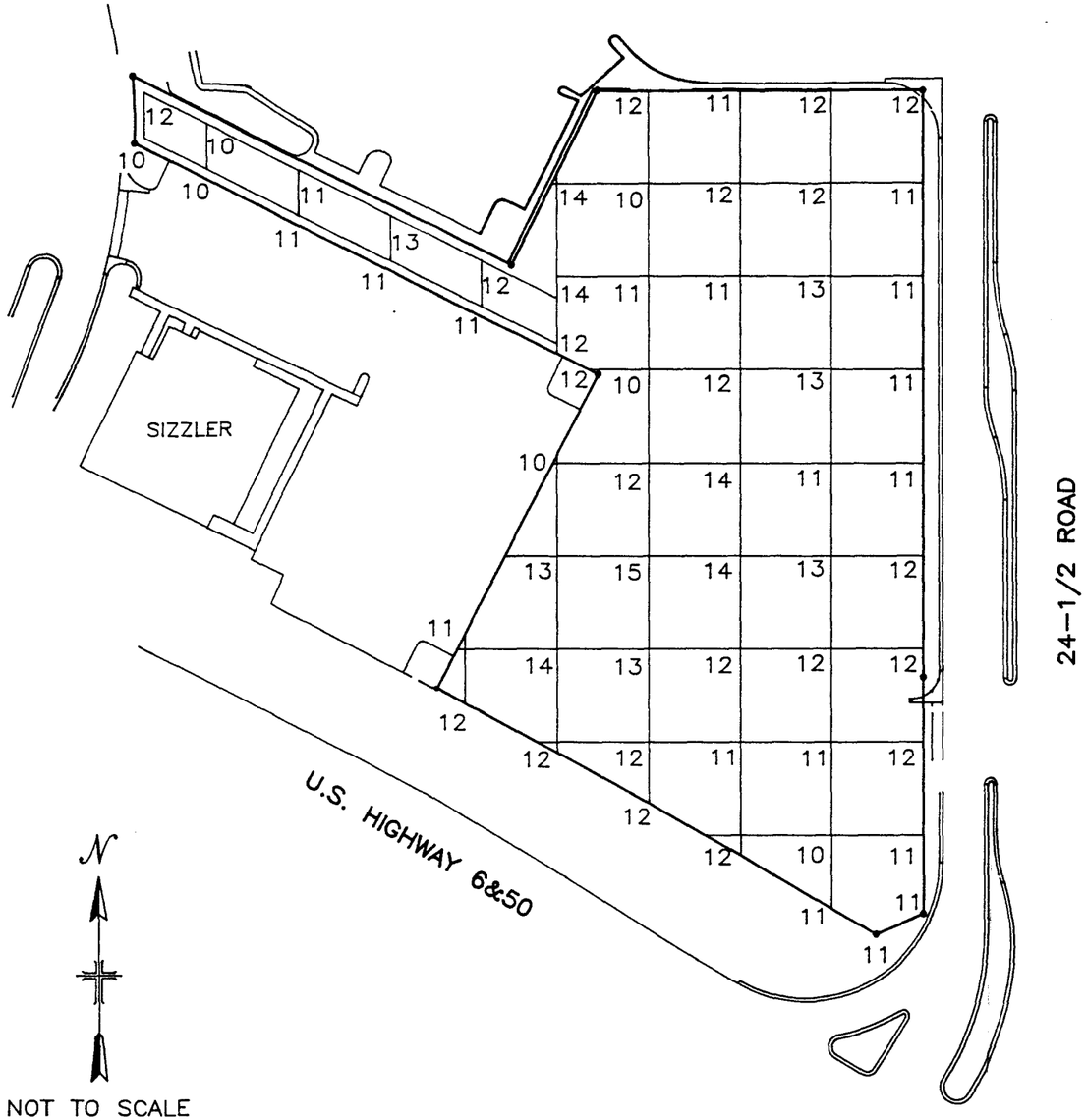
Red Lobster.

Job No. 237 L vM
Date: 10 28 92
Rev:

EXTERIOR ELEVATIONS & DETAILS

Sheet No.
A8
of A26

File / Plot date: 237ARCH / 10-28-92



PROPERTY OWNER: GENERAL GROWTH MANAGEMENT, INC.

OWNERS REPRESENTATIVE: GENERAL MILLS RESTAURANTS, INC.

DATE OF SURVEY: FEBRUARY 3, 1993

INSTRUMENT: LUDLUM MEASURMENTS INC., MODEL NO. 19, SERIAL NO. 18423

CALIBRATED BY: LUDLUM MEASUREMENTS INC., SWEETWATER, TEXAS, 11/23/81 WITH A Cs137 SOURCE TRACEABLE TO NBS 142 Mr/Hr @ 1 METER TFN224008–OCT. 2, 1980

SURVEY RESULTS: READINGS VARIED FROM 10 TO 15 MICROROENTGENS/HR AT 25 RANGE SETTING.

COMMENTS: THE MAP THIS SHEET SHOWS IS THE GRID LAYOUT OF THE RADIATION SURVEY AND SPOT READINGS. NO ANOMALOUS AREAS WERE FOUND WITHIN THE PROPOSED PROPERTY.

LEGEND:

APPROX. GRID OF SURVEY AND LOCATION OF SPOT READINGS

12 READING IN MICROROENTGENS/HR.

RECEIVED GRAND JUNCTION PLANNING DEPARTMENT

FEB 0 8 1993

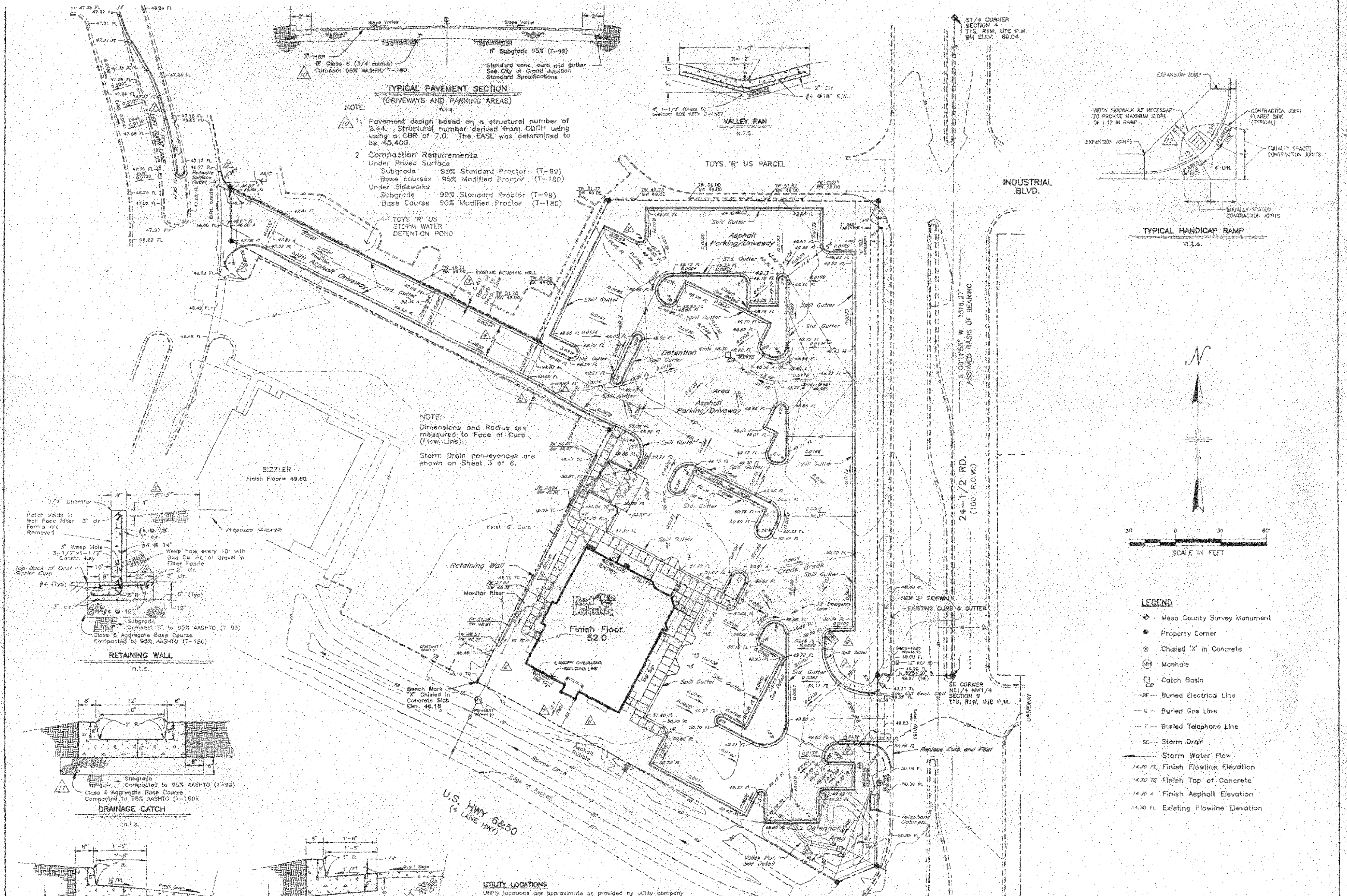
BRUCE D. MARVIN, P.E. (14856)

BRUCE D. MARVIN REGISTERED 14856 PROFESSIONAL ENGINEER STATE OF COLORADO

RADIATION SURVEY OF RED LOBSTER SITE AT MESA MALL

WESTERN ENGINEERS, INC.

GRAND JUNCTION, CO. 2–3–93



NOTE:

1. Pavement design based on a structural number of 2.44. Structural number derived from CDOH using using a CBR of 7.0. The EASL was determined to be 45,400.
2. Compaction Requirements
   Under Paved Surface
   Subgrade 95% Standard Proctor (T-99)
   Base courses 95% Modified Proctor (T-180)
   Under Sidewalks
   Subgrade 90% Standard Proctor (T-99)
   Base Course 90% Modified Proctor (T-180)

NOTE:
Dimensions and Radius are measured to Face of Curb (Flow Line).

Storm Drain conveyances are shown on Sheet 3 of 6.

LEGEND

- Mesa County Survey Monument
- Property Corner
- Chisled 'X' in Concrete
- Manhole
- Catch Basin
- —BE— Buried Electrical Line
- —G— Buried Gas Line
- —T— Buried Telephone Line
- —SD— Storm Drain
- Storm Water Flow
- 14.30 FL Finish Flowline Elevation
- 14.30 TC Finish Top of Concrete
- 14.30 A Finish Asphalt Elevation
- 14.30 FL Existing Flowline Elevation

UTILITY LOCATIONS

Utility locations are approximate as provided by utility company location plans. Verify and field locate prior to any excavation, grading or drilling. Utility Notification Center must be called two business days in advance, 1-800-922-1987.

NOTES:

1. All construction shall conform and adhere to the City of Grand Junction, Department of Public Works and Utilities, Engineering Section, "Standard Specifications for Construction of Water Lines, Sanitary Sewers, Storm Drainage and Irrigation Systems", "Detailed Street Construction Specificatons" and "Standard Details."
2. Elevations are truncated from 4500 datum (sea level).
3. According to the F.E.M.A. study, the property lies in the 100 year flood plain, high water elevation, 49.7.

SHEET 2 OF 4

12	1/17/93	City standard change	lrg
11	1/17/93	Revised catch detail	lrg
10	1/17/93	Revised pavement section	lrg
9	1/17/93	Delete 3 parking spaces	lrg
8	1/17/93	Extension of v-pan	lrg
7	1/17/93	Remove retaining wall	lrg
6	1/17/93	Remove sidewalk and path lights	lrg
5	1/17/93	Move sidewalk	lrg
4	1/17/93	[illegible]	

WESTERN ENGINEERS, INC. CONSULTING ENGINEERS / LAND SURVEYORS
2150 Hwy 6 & 50, Grand Junction, CO (303)242-5202

PREPARED FOR

GENERAL MILLS RESTAURANTS, INC.

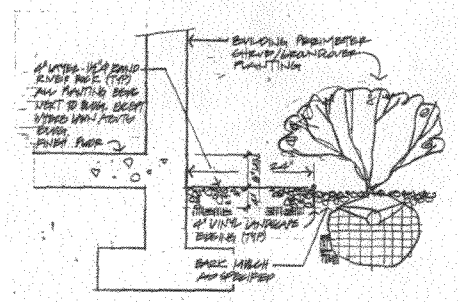
GRADING & DRAINAGE PLAN

RED LOBSTER RESTAURANT SITE

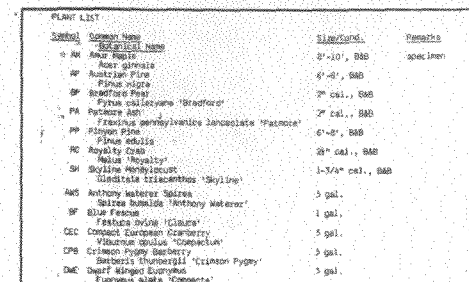
PLANT LIST

Symbol	Common Name / Botanical Name	Size/Cond.	Remarks
☆ AR	Amur Maple Acer ginnala	8'-10', B&B	specimen
AP	Austrian Pine Pinus nigra	6'-8', B&B	
BP	Bradford Pear Pyrus calleryana 'Bradford'	2" cal., B&B	
PA	Patmore Ash Fraxinus pennsylvanica lanceolata 'Patmore'	2" cal., B&B	
PP	Pinyon Pine Pinus edulis	6'-8', B&B	
RC	Royalty Crab Malus 'Royalty'	2½" cal., B&B	
SH	Skyline Honeylocust Gleditsia triacanthos 'Skyline'	1-3/4" cal., B&B	
AWS	Anthony Waterer Spirea Spirea bumalda 'Anthony Waterer'	5 gal.	
BF	Blue Fescue Festuca ovina 'Glauca'	1 gal.	
CEC	Compact European Cranberry Viburnum opulus 'Compactum'	5 gal.	
DPB	Crimson Pygmy Barberry Berberis thunbergii 'Crimson Pygmy'	3 gal.	
DWE	Dwarf Winged Euonymus Euonymus alata 'Compacta'	5 gal.	
JB	Japanese Barberry Berberis thunbergii	5 gal.	
JP	Jackman's Potentilla Potentilla fruticosa 'Jackman's'	5 gal.	
KB	Kobold Barberry Berberis thunbergii 'Kobold'	3 gal.	
MEP	Mount Everest Potentilla Potentilla fruticosa 'Mount Everest'	5 gal.	
MP	Mugho Pine (Dwarf) Pinus mugo var pumilo	21"-24"	spread
MS	Montgomery Spruce Picea pungens 'Montgomery'	21"-24"	spread
OG	Oregon Grape Mahonia aquifolium	5 gal.	
RLB	Red Leaf Barberry Berberis thunbergii 'Atropurpurea'	5 gal.	
SS	Snowmound Spirea Spirea bumalda 'Snowmound'	5 gal.	
	Blue Chip Juniper Juniperus horizontalis 'Blue Chip'	2 gal.	24" o.c.
	Periwinkle Vinca minor	4" pot	12" o.c.
	Sod		
	Dragon's Blood Sedum Sedum 'Dragon's Blood'	4" pot	12" o.c.

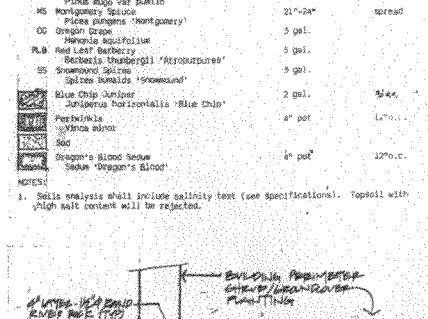
NOTES:
1. Soils analysis shall include salinity test (see specifications). Topsoil with ≥high salt content will be rejected.



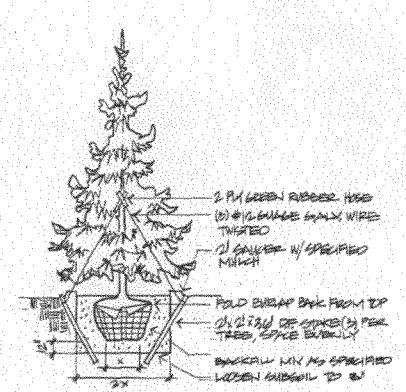
1/L1 EDGING DETAIL
no scale



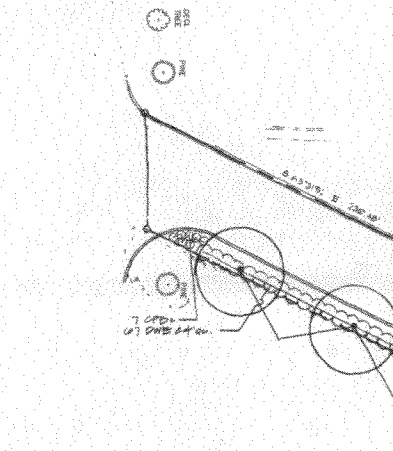
2/L1 SHRUB/GROUNDCOVER PLANTING
no scale



3/L1 GROUNDCOVER PLANTING
no scale



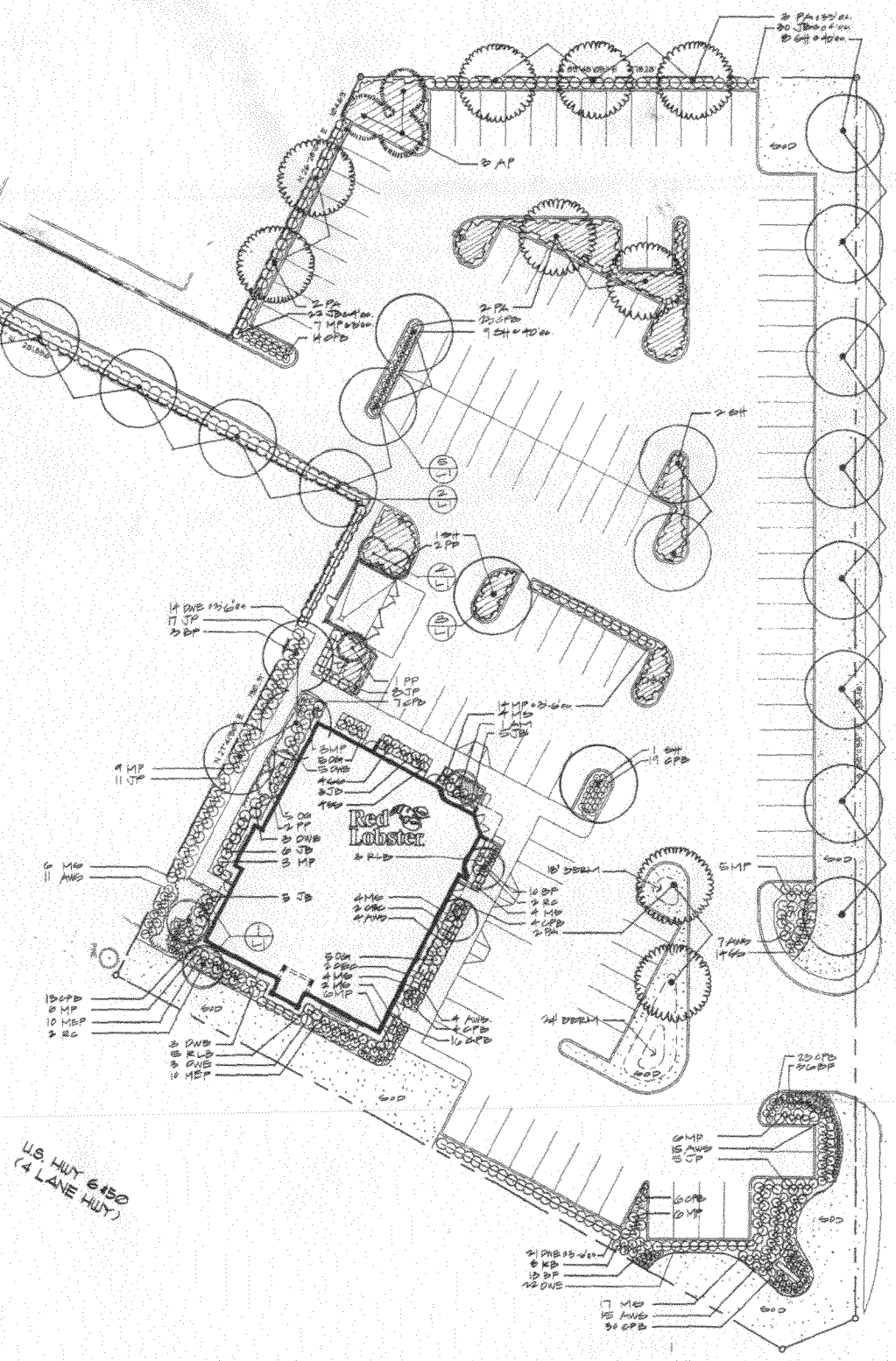
4/L1 CONIFER TREE PLANTING
no scale



5/L1 DECIDUOUS TREE PLANTING
no scale

N
W E
S

LANDSCAPE PLAN
1"=20'-0"



RECEIVED GRAND JUNCTION PLANNING DEPARTMENT
FEB 02 1993
FINAL

ARCHITECTS
VAN LOM / EDWARDS
A.I.A., P.C.
34 N.W. First Avenue Suite 300 Portland, Oregon 97209 (503) 228-0050

U.S. HWY 6 & 50 @ 24 1/2 RD. (MESA MALL)
GRAND JUNCTION, COLORADO

Red Lobster.

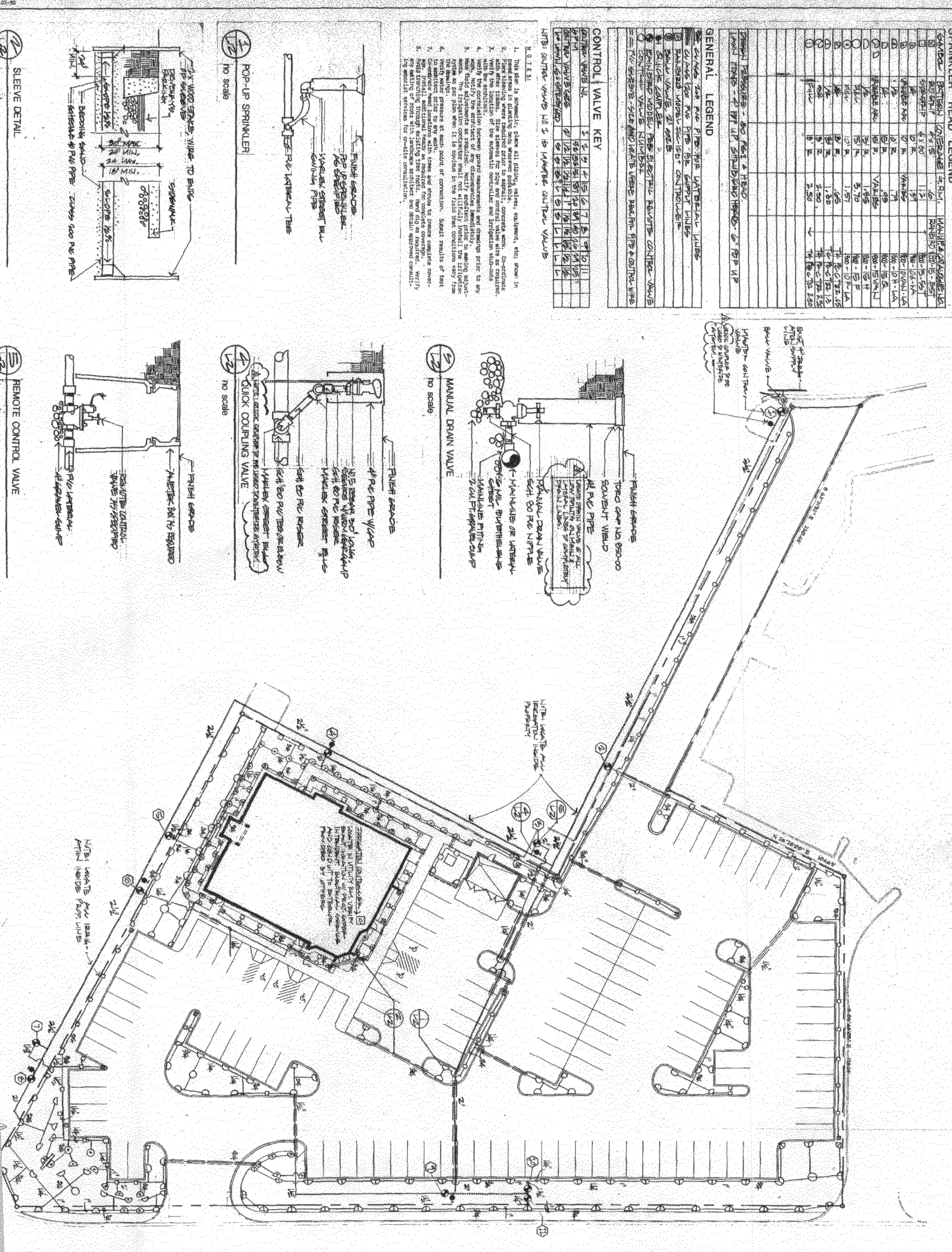
Job No. 237-L-LM
Date: 12-28-92
Rev:
1 1-8-93
2 1-29-93

LANDSCAPE PLAN

Sheet No.
L1
of 2

File / Plot date: 237LP / 12-22-92

#75-92



Job No.	237-L-LL
Date:	10-28-91
Rev.	
△	1-9-92
△	1-29-92
△	2-9-92

Red Lobster.

U.S. HWY 6 & 50 @ 24 1/2 RD. (MESA MALL)
GRAND JUNCTION, COLORADO

ARCHITECTS VAN LOM / EDWARDS A.I.A., P.C.
34 N.W. First Avenue Suite 309 Portland, Oregon 97209 503/226-0590