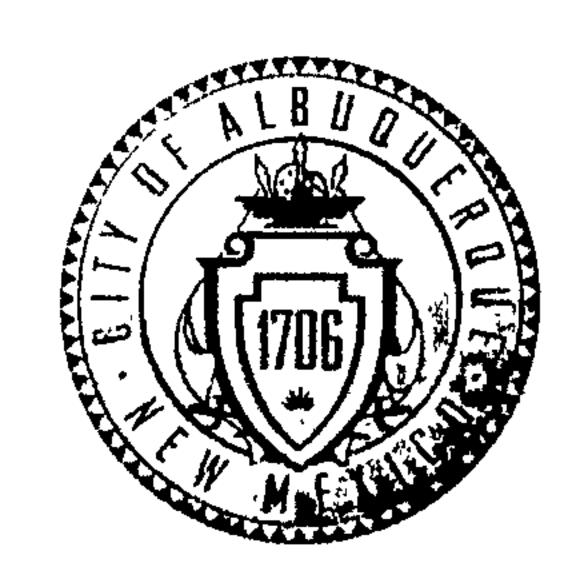
CITY OF ALBUQUERQUE



Planning Department Transportation Development Services

August 22, 2014

Genevieve Donart, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, NM 87108

Re: Applebee's, 5916 Holly Ave NE

30-Day Temporary Certificate of Occupancy- Transportation Development

DRB Project Number 1004772 (C18-D073A)

Certification dated 08-22-14

Dear Ms. Donart,

Based upon the information provided in your submittal received 08-22-14, Transportation Development has no objection to the issuance of a <u>30-day Temporary Certificate of Occupancy</u>. This letter serves as a "green tag" from Transportation Development for a <u>30-day Temporary Certificate of Occupancy</u> to be issued by the Building and Safety Division.

Albuquerque

PO Box 1293

Once corrections are complete resubmit acceptable package along with fully completed Drainage Transportation Information Sheet to front counter personnel for log in and evaluation by Transportation. A digital copy must be included with each submittal. If you have any questions, please contact me at (505) 924-3991.

New Mexico 87103

Sincerely,

www.cabq.gov

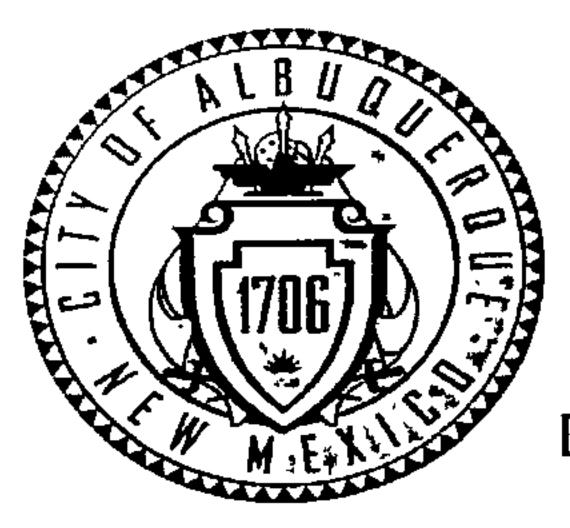
Kristal D. Metro, P.E.

Traffic Engineer, Planning Dept. Development Review Services

C: CO Clerk

File

1



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

| Project Title: Applebee's at Holly Place | Building Permit #: T201392320 City Drainage #: C18/D |
|--|--|
| DRB#: EPC#: | Work Order#: |
| Legal Description: Lot 20, Block 18, Tract A, Unit B, No | rth Albuquerque Acres & Tract B, Holly Place |
| City Address: | |
| Engineering Firm: Isaacson & Arfman, P.A. | Contact: Genny Donart |
| Address: 128 Monroe Street, NE - Albu | querque, NM 87108 |
| Phone#: (505) 268-8828 Fax#: N/A | E-mail: gennyd@iacivil.com |
| Owner: Apple Investors Group | Contact: Michael D. McGough |
| Address: 917 Ravenwood Way - Canton, GA 30115 | |
| Phone#: (770) 547-5920 Fax#: N/A | E-mail: michael.mcgough@appleig.com |
| Architect: Klover Architects, Inc. | Contact: Chad Renoux |
| Address: 10955 Lowell Ave., Suite 700 - Overland Pa | rk, KS 66210 |
| Phone#: (913) 649-8181 Fax#: | E-mail: |
| Surveyor: Surv-Tek, Inc. | Contact: Russ P. Hugg |
| Address: 9384 Valley View Drive NW - Albuquerque, | |
| Phone#: (505) 897-3366 Fax#: | E-mail: |
| Contractor: | Contact: |
| Address: | |
| Phone#: Fax#: | E-mail: |
| TYPE OF SUBMITTAL: | CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT: |
| DRAINAGE REPORT | SIA/FINANCIAL GUARANTEE RELEASE |
| DRAINAGE PLAN 1st SUBMITTAL | PRELIMINARY PLAT APPROVAL |
| DRAINAGE PLAN RESUBMITTAL | S. DEV. PLAN FOR SUB'D APPROVAL |
| CONCEPTUAL G & D PLAN | S. DEV. FOR BLDG. PERMIT APPROVAL |
| GRADING PLAN | SECTOR PLAN APPROVAL |
| EROSION & SEDIMENT CONTROL PLAN (ESC) | FINAL PLAT APPROVAL |
| ENGINEER'S CERT (HYDROLOGY) | CERTIFICATE OF OCCUPANCY (PERM) |
| CLOMR/LOMR | CERTIFICATE OF OCCUPANCY (FERM) AUG 2, 2 2014 |
| TRAFFIC CIRCULATION LAYOUT (TCL) | FOUNDATION PERMIT APPROVAL |
| ENGINEER'S CERT (TCL) | BUILDING PERMIT APPROVAL LAND DEVELOPMENT SECTION |
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| ENGINEER'S CERT (ESC) | PAVING PERMIT APPROVAL ESC PERMIT APPROVAL |
| SO-19 | WORK ORDER APPROVAL ESC CERT. ACCEPTANCE |
| OTHER (SPECIFY) | GRADING CERTIFICATION OTHER (SPECIFY) |
| WAS A PRE-DESIGN CONFERENCE ATTENDED: | Yes X No Copy Provided |
| DATE SUBMITTED: August 22, 2014 | By: Genevieve Donart |
| | for Isaacson & Arfman P A |

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following

- Conceptual Grading and Drainage Plan Required for approval of Site Development Plans greater than five (5) acres and Sector Plans

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Cherne, Curtis

From: Cherne, Curtis

Sent: Friday, August 22, 2014 1:17 PM

To: 'Genny Donart'

Cc: bills@ventureconstruction.com; Quintana, Carol S.

Subject: 5916 Holly Ave. NE Hydrology 30 day Temp Co approval

Genny/Carol,

I am approving a 30-day Temp CO for the Applebee's at 5916 Holly Ave NE

Curtis

From: Genny Donart [mailto:gennyd@iacivil.com]

Sent: Friday, August 22, 2014 11:58 AM

To: Cherne, Curtis

Cc: bills@ventureconstruction.com

Subject: Applebee's at Holly Place - drainage cert

Good morning Curtis,

I have walked the site for the Applebee's at 5916 Holly Ave NE on 08/21/14.

It drains in substantial compliance with the approved Grading & Drainage plan dated 11/19/14. The as-built survey is imminent, and the certification should be to you this afternoon.

Genny Donart, P.E. Registered Engineer



Consulting Engineering Associates 128 Monroe St. N.E. Albuquerque, NM 87108 Phone: (505)268-8828

Fax: (505)268-2632 gennyd@iacivil.com

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Recipient acknowledges that any attached electronic files may not contain all of the information on the approved construction documents and are not intended to be relied upon as a replacement for the approved construction documents(s).

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Cherne, Curtis

From:

Cherne, Curtis

Sent:

Friday, August 22, 2014 1:17 PM

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'Genny Donart'

Cc:

bills@ventureconstruction.com; Quintana, Carol S.

Subject:

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Isaacson & Arfman, P.A.

Consulting Engineering Associates 128 Monroe St. N.E. Albuquerque, NM 87108 Phone: (505)268-8828 Fax: (505)268-2632

gennyd@iacivil.com

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CITY OF ALBUQUERQUE

PLANNING DEPARTMENT - Development Review Services



December 10, 2013

Richard J. Berry, Mayor

Ms. Genny Donart, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, New Mexico 87108

RE: Applebee's at Holly Place

C18-D073A

North Alb. Acres, Tract A, Unit B, Block 18, Lot 20 & Holly Place, Tract B Grading & Drainage Plan for Building Permit

PE Stamp: 11/19/2013

Dear Ms. Donart:

Based upon the information provided in your submittal received 11-20-2013, the above referenced Grading and Drainage Plan is approved for Building Permit.

PO Box 1293

Please attach a copy of this approved plan to the Building Permit construction sets prior to sign-off by Hydrology.

Albuquerque

Since this site exceeds 1.0 acres, a separate Erosion and Sediment Control (ESC) Plan, prepared by a registered NM Professional Engineer, must be submitted to and approved by Planning Department's Storm Water Quality Engineer. This approval will also be required prior to release of Building Permit.

NM 87103

Prior to Certificate of Occupancy release, an Engineer's Certification of Grading on this site, in accordance with this revised plan, will be required per the DPM checklist.

www.cabq.gov

If you have questions, please email me at grolson@cabq.gov or phone 505-924-3994.

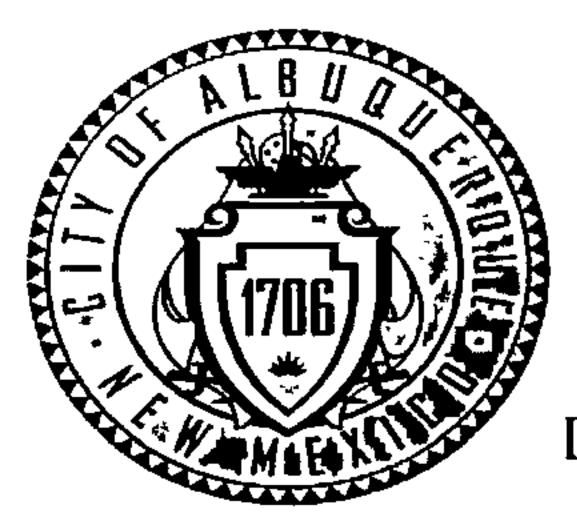
Sincerely, 17/12

Gregory R. Olson, P.E.

Senior Engineer

Orig: Drainage file C18/D073A

c.pdf Addressee via Email GennyD@IAcivil.com



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

C1800734

| Project Title: Applebee's at Holly Place | Building Permit #: T201392320 City Drainage #: C18/D |
|---|--|
| DRB#: EPC#: | Work Order#: |
| Legal Description: Lot 20, Block 18, Tract A, Unit B, North | Albuquerque Acres & Tract B, Holly Place |
| City Address: | |
| Engineering Firm: Isaacson & Arfman, P.A. | Contact: Genny Donart |
| Address: 128 Monroe Street, NE - Albuqu | erque, NM 87108 |
| Phone#: (505) 268-8828 Fax#: N/A | E-mail: gennyd@iacivil.com |
| Owner: Apple Investors Group | Contact: Michael D. McGough |
| Address: 917 Ravenwood Way - Canton, GA 30115 | |
| Phone#: (770) 547-5920 Fax#: N/A | E-mail: michael.mcgough@appleig.com |
| Architect: Klover Architects, Inc. | Contact: Chad Renoux |
| Address: 10955 Lowell Ave., Suite 700 - Overland Park, | |
| Phone#: (913) 649-8181 Fax#: | E-mail: |
| Surveyor: Surv-Tek, Inc. | Contact: Russ P. Hugg |
| Address: 9384 Valley View Drive NW - Albuquerque, NN | <i>N</i> 87114 |
| Phone#: (505) 897-3366 Fax#: | E-mail: |
| Contractor: | Contact: |
| Address: | <u></u> |
| Phone#: Fax#: | E-mail: |
| TYPE OF SUBMITTAL: | CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT: |
| DRAINAGE REPORT | SIA/FINANCIAL GUARANTEE RELEASE |
| DRAINAGE PLAN 1st SUBMITTAL | PRELIMINARY PLAT APPROVAL |
| X DRAINAGE PLAN RESUBMITTAL | S. DEV. PLAN FOR SUB'D APPROVAL |
| CONCEPTUAL G & D PLAN | S. DEV. FOR BLDG. PERMIT APPROVAL [[]] [그 [] [그 [] [] |
| GRADING PLAN | SECTOR PLAN APPROVAL |
| EROSION & SEDIMENT CONTROL PLAN (ESC) | FINAL PLAT APPROVAL NOV 2 0 2013 |
| ENGINEER'S CERT (HYDROLOGY) | CERTIFICATE OF OCCUPANCY (PERM) |
| CLOMR/LOMR | CERTIFICATE OF OCCUPANCY (TCL TEMP) LAND DEVELOPMENT SECTION |
| TRAFFIC CIRCULATION LAYOUT (TCL) | FOUNDATION PERMIT APPROVAL |
| ENGINEER'S CERT (TCL) | X BUILDING PERMIT APPROVAL |
| ENGINEER'S CERT (DRB SITE PLAN) | X GRADING PERMIT APPROVAL SO-19 APPROVAL |
| ENGINEER'S CERT (ESC) | PAVING PERMIT APPROVAL ESC PERMIT APPROVAL ^ |
| SO-19 | WORK ORDER APPROVAL ESC CERT. ACCEPTANCE |
| OTHER (SPECIFY) | GRADING CERTIFICATION OTHER (SPECIFY) |
| WAS A PRE-DESIGN CONFERENCE ATTENDED: | Yes X No Copy Provided |
| DATE SUBMITTED: November 19, 2013 | By: Genevieve Donart |
| | for Isaacson & Arfman, P A Plats shall be accompanied by a drainage submittal. The particular nature, location, and |

scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following

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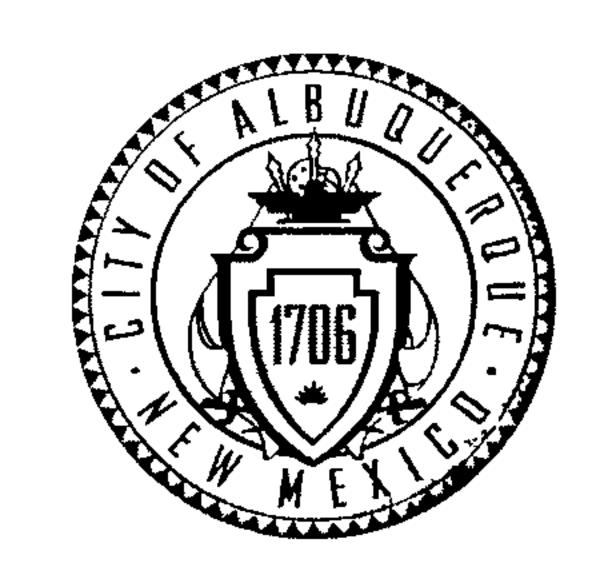
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Drainage Report Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more

project less than 1-acre than are part of a larger common plan of development

CITY OF ALBUQUERQUE

September 5, 2014



Genny Donart, PE Isaacson & Arfman, PA 128 Monroe St NE Albuquerque, NM 87108

Re: Applebee's at Holly Place

Lot 20 Holly Place

Request Permanent C.O. - Accepted

Engineer's Stamp dated: 11-19-13 (C18D073A)

Certification dated: 8-26-14

Dear Ms. Donart,

Based on the Certification received 9/2/2014, the site is acceptable for release of Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3986 or Rudy Rael at 924-3977.

PO Box 1293

Albuquerque

New Mexico 87103

Sincerely,

Curtis Cherne, P.E.

Principal Engineer, Planning Dept. Development and Review Services

RR/CC

www.cabq.gov

email



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

C18D073A

| Project Title: Applebee's at Holly Place | Building Permit #: T201392320 City Drainage #: C18/D |
|---|--|
| DRB#: | Work Order#: |
| Legal Description: Lot 20, Block 18, Tract A, Unit B, North | Albuquerque Acres & Tract B, Holly Place |
| City Address: | |
| Engineering Firm: Isaacson & Arfman, P.A. | Contact: Genny Donart |
| Address: 128 Monroe Street, NE - Albuqu | uerque, NM 87108 |
| Phone#: (505) 268-8828 Fax#: N/A | E-mail: gennyd@iacivil.com |
| Owner: Apple Investors Group | Contact: Michael D. McGough |
| Address: 917 Ravenwood Way - Canton, GA 30115 | |
| Phone#: (770) 547-5920 Fax#: N/A | E-mail: michael.mcgough@appleig.com |
| Architect: Klover Architects, Inc. | Contact: Chad Renoux |
| Address: 10955 Lowell Ave., Suite 700 - Overland Park | , KS 66210 |
| Phone#: (913) 649-8181 Fax#: | E-mail: |
| Surveyor: Surv-Tek, Inc. | Contact: Russ P. Hugg |
| Address: 9384 Valley View Drive NW - Albuquerque, N | VI 87114 |
| Phone#: (505) 897-3366 Fax#: | E-mail: |
| Contractor: | Contact: |
| Address: | |
| Phone#: Fax#: | E-mail: |
| TYPE OF SUBMITTAL: | CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT: |
| DRAINAGE REPORT | SIA/FINANCIAL GUARANTEE RELEASE |
| DRAINAGE PLAN 1st SUBMITTAL | PRELIMINARY PLAT APPROVAL |
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| X ENGINEER'S CERT (HYDROLOGY) | X CERTIFICATE OF OCCUPANCY (PERM) |
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| OTHER (SPECIFY) | GRADING CERTIFICATION OTHER (SPECIFY) |
| WAS A PRE-DESIGN CONFERENCE ATTENDED: | Yes X No Copy Provided |
| DATE SUBMITTED: August 26, 2014 | By: Genevieve Donart |
| Dequests for approvals of Site Development Plans and/or Subdivision | for Isaacson & Arfman, P A Plats shall be accompanied by a drainage submittal. The particular nature, location, and |

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Genny Donart

From: Cherne, Curtis < CCherne@cabq.gov>

To: Genny Donart

Sent: Tuesday, August 26, 2014 4:48 PM

Subject: Read: RE: Applebee's at Holly Place - Final Drainage & TCL certifications

Your message

To: Ortiz, Monica

Cc: Cherne, Curtis; Metro, Kristal D.;

bills@ventureconstruction.com

Subject: RE: Applebee's at Holly Place - Final Drainage & TCL

certifications

Sent: Tue, 26 Aug 2014 16:05:37 -0600

was read on Tue, 26 Aug 2014 16:48:08 -0600



CITY OF ALBUQUERQUE



Planning Department Transportation Development Services

September 4, 2014

Genevieve Donart, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, NM 87108

Re: Applebee's at Holly, 5916 Holly Ave. NE

Certificate of Occupancy – Transportation Development

Site Plan for Building Permit dated 12-04-13 (1004772) (C18-D073A)

Certification dated 08-26-14

Dear Mrs. Donart,

Based upon the information provided in your submittal received 08-27-14, Transportation Development has no objection to the issuance of a <u>Permanent Certificate of Occupancy</u>. This letter serves as a "green tag" from Transportation Development for a <u>Permanent Certificate of Occupancy</u> to be issued by the Building

and Safety Division.

If you have any questions, please contact me at (505)924-3630.

New Mexico 87103

PO Box 1293

Albuquerque

Racquel M. Michel, P.E.

www.cabq.gov Senior Engineer, Planning Dept.

Sincerely,

Development Review Services

c: File

CO Clerk



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

C18D073A

| Project Title: Applebee's at Holly Place | Building Permit #: T201392320 City Drainage #: C18/D |
|--|--|
| DRB#: | Work Order#: |
| Legal Description: Lot 20, Block 18, Tract A, Unit B, North Albuqu | uerque Acres & Tract B, Holly Place |
| City Address: 59/10 Hollos/Auc DE | |
| Engineering Firm: Isaacson & Arfman, P.A. | Contact: Genny Donart |
| Address: 128 Monroe Street, NE - Albuquerque, | |
| Phone#: (505) 268-8828 Fax#: N/A | E-mail: gennyd@iacivil.com |
| Annie Investore Croup | Contact: Michael D. McGough |
| Owner: Apple Investors Group Address: 917 Ravenwood Way - Canton, GA 30115 | Contact. Wholiad D. Woodag. |
| Address: 917 Ravenwood Way - Canton, GA 30115 Phone#: (770) 547-5920 Fax#: N/A | E-mail: michael.mcgough@appleig.com |
| 1 Hones. (110) Out Out | |
| Architect: Klover Architects, Inc. | Contact: Chad Renoux |
| Address: 10955 Lowell Ave., Suite 700 - Overland Park, KS 6 | |
| Phone#: (913) 649-8181 Fax#: | E-mail: |
| Surveyor: Surv-Tek, Inc. | Contact: Russ P. Hugg |
| Address: 9384 Valley View Drive NW - Albuquerque, NM 871 | 14 |
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| WAS A PRE-DESIGN CONFERENCE ATTENDED: | Yes X No Copy Provided |
| | enevieve Donart |
| | r Isaacson & Arfman, P A |

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Genny Donart

From:

Genny Donart <gennyd@iacivil.com>

Sent:

Tuesday, August 26, 2014 4:06 PM

To:

'Ortiz, Monica A.'

Cc:

Curtis Cherne (CCherne@CABQ.gov); Kristal Metro (KMetro@cabq.gov);

bills@ventureconstruction.com

Subject:

RE: Applebee's at Holly Place - Final Drainage & TCL certifications

Hi Monica,

Please click the link below to download the pdf's for the drainage and TCL certifications for Permanent CO for Applebee's at Holly Place.

https://iacivil.sharefile.com/d/se1fe7d3e9544e38a

Genny Donart, P.E. Registered Engineer



Isaacson & Arfman, P.A.

Consulting Engineering Associates 128 Monroe St. N.E. Albuquerque, NM 87108

Phone: (505)268-8828 Fax: (505)268-2632 gennyd@iacivil.com

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Recipient acknowledges that any attached electronic files may not contain all of the information on the approved construction documents and are not intended to be relied upon as a replacement for the approved construction documents(s).

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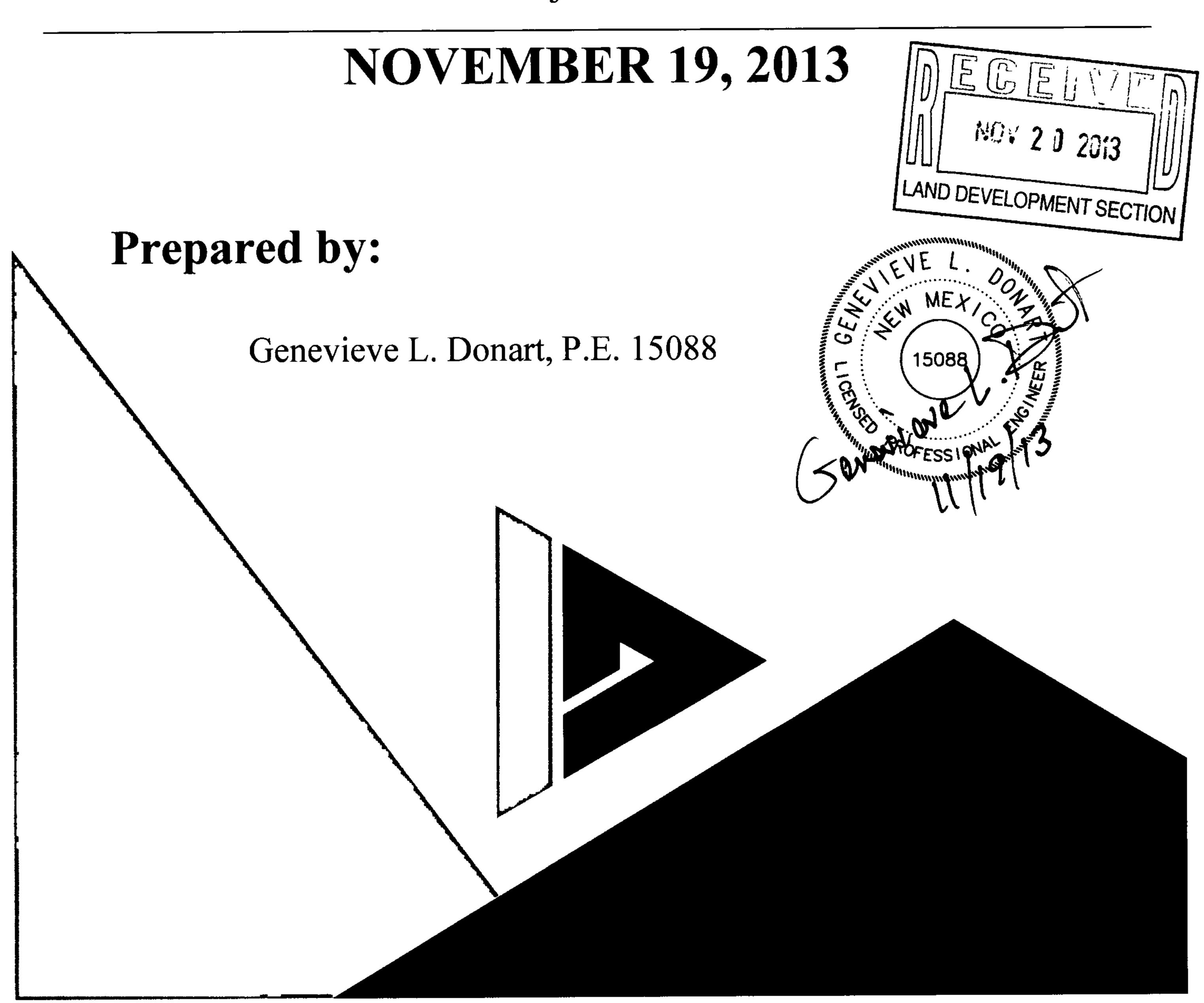


SUPPLEMENTAL INFORMATION FOR

APPLEBEE'S AT HOLLY PLACE

ALBUQUERQUE, NEW MEXICO

I&A Project No.: 1985



ISAACSON & ARFMAN, P.A.

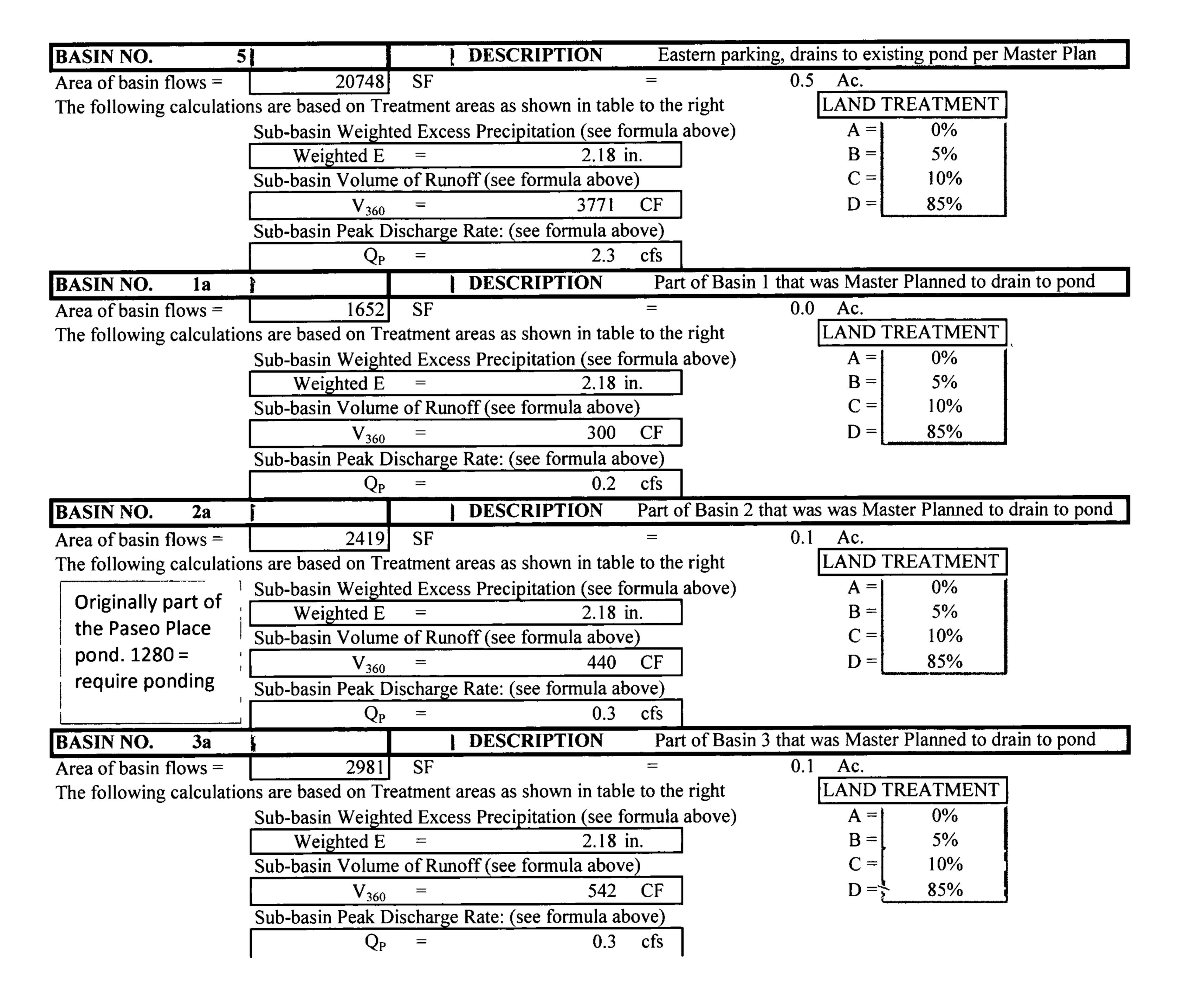
Consulting Engineering Associates

CALCULATIONS: Applebee's at Holly Place:

| <u></u> _ | 30 DC31 | gn Criteria for C | ity of A | lbuquerque Section 2 | .4.2, DI | ivi, voi 2, dated | Jan., 15 | 773 |
|---|--------------|---|----------|--|--------------------|---------------------|----------|----------------------|
| | | | | ON-SIT | E | | | |
| AREA OF SITE: | | | | 70938.83 | SF | = | 1.629 | X 4.629 c+3/Ac= 754c |
| | | | | 100-year, 6-hour | | | | |
| HISTORIC FLO | DWS: | | | DEVELOPED FLO | DWS: | | | EXCESS PRECIP: |
| | | Treatment SF | % | | | Treatment SF | % | Precip. Zone 3 |
| Area A | = | 0 | 0% | Area A | = | 0 | 0% | $E_A = 0.66$ |
| Area B | = | 0 | 0% | Area B | = | 3547 | 5% | $E_{\rm B} = 0.92$ |
| Area C | = | 70938.83 | 100% | Area C | = | 7094 | 10% | $E_C = 1.29$ |
| Area D | = | 0 | 0% | Area D | = | 60298 | 85% | $E_{\rm D} = 2.36$ |
| Total Area | = | 70938.83 | 100% | Total Area | = | 70938.83 | 100% | |
| On-Site Weighted | d Exces | - | | ar, 6-Hour Storm) $F \cdot A \cdot + F \cdot A \cdot + F \cdot A$ | \ _ + F_ | Δ_ | | |
| On-Site Weighted | d Exces | s Precipitation (Weighted E = | | $E_A A_A + E_B A_B + E_C A$ | | AD | | |
| On-Site Weighted Historic E | d Exces | Weighted E = | | | | A _D 2.18 | in. | |
| | - | Weighted E = 1.29 | | $\frac{E_A A_A + E_B A_B + E_C A_B}{A_A + A_B + A_C}$ | + A _D | | in. | |
| Historic E | - | Weighted E = 1.29 | in. | $\frac{E_A A_A + E_B A_B + E_C A_A}{A_A + A_B + A_C}$ Developed E | + A _D | | | |
| Historic E On-Site Volume of Historic V ₃₆₀ | of Rune = | Weighted E = $\frac{1.29}{0.000}$ off: V360 = $\frac{7626}{0.000}$ Rate: Qp = Q _{pA} | in. | $\frac{E_A A_A + E_B A_B + E_C A_A}{A_A + A_B + A_C}$ $\frac{A_A + A_B + A_C}{Developed E}$ $\frac{E*A / 12}{A_A + A_B + A_C}$ | + A _D = | 12893 | | |

The overall site consists of 1.62853145087236 acre(s) located in Zone 3 which is designated as properties D. The 100-year, 6hour historic discharge is 5.6 cfs. The proposed developed discharge is 7.7 cfs.

| BASIN NO. 1 | | DESCRIPTION | Total area including Basin 1a | | | | |
|---|--|---|---|--|--|--|--|
| Area of basin flows = | 6019 | SF = | 0.1 Ac. | | | | |
| The following calculatio | he following calculations are based on Treatment areas as shown in table to the right LAND TREATMENT | | | | | | |
| | Sub-basin Weigh | ted Excess Precipitation (see formula abov | A = 0% | | | | |
| | Weighted E | = 2.18 in. | B = 5% | | | | |
| | Sub-basin Volum | e of Runoff (see formula above) | C = 10% | | | | |
| | V ₃₆₀ | = 1094 CF | D = 85% | | | | |
| | Sub-basin Peak I | Discharge Rate: (see formula above) | | | | | |
| | Q_{P} | = 0.7 cfs | | | | | |
| BASIN NO. 2 | | DESCRIPTION | Total area including Basin 2a | | | | |
| Area of basin flows = | 3462 | SF = | 0.1 Ac. | | | | |
| The following calculation | ns are based on Tr | eatment areas as shown in table to the right | t LAND TREATMENT | | | | |
| | Sub-basin Weigh | ted Excess Precipitation (see formula abov | A = 10% | | | | |
| | Weighted E | = 2.18 in. | B = 5% | | | | |
| | Sub-basin Volum | e of Runoff (see formula above) | C = 10% | | | | |
| | V ₃₆₀ | = 629 CF | D = 85% | | | | |
| | Sub-basin Peak I | Discharge Rate: (see formula above) | | | | | |
| | Q_{P} | = 0.4 cfs | | | | | |
| | | · · · · · · · · · · · · · · · · · · · | | | | | |
| BASIN NO. 3 | | DESCRIPTION | Total area including Basin 3a | | | | |
| BASIN NO. Area of basin flows = | 29017 | · · · · · · · · · · · · · · · · · · · | Total area including Basin 3a 0.7 Ac. | | | | |
| Area of basin flows = | | · · · · · · · · · · · · · · · · · · · | 0.7 Ac. | | | | |
| Area of basin flows = | ns are based on Tr | SF = | 0.7 Ac. t LAND TREATMENT | | | | |
| Area of basin flows = | ns are based on Tr | SF eatment areas as shown in table to the righted Excess Precipitation (see formula above | t 0.7 Ac. LAND TREATMENT | | | | |
| Area of basin flows = | ns are based on Tr Sub-basin Weigh Weighted E | SF eatment areas as shown in table to the righted Excess Precipitation (see formula above | 0.7 Ac. t LAND TREATMENT (e) A = 0% | | | | |
| Area of basin flows = | ns are based on Tr Sub-basin Weigh Weighted E | reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. The of Runoff (see formula above) | t | | | | |
| Area of basin flows = | ns are based on Tr Sub-basin Weigh Weighted E Sub-basin Volum V ₃₆₀ | reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. The of Runoff (see formula above) | t | | | | |
| Area of basin flows = | ns are based on Tr Sub-basin Weigh Weighted E Sub-basin Volum V ₃₆₀ | SF reatment areas as shown in table to the right ted Excess Precipitation (see formula abov = 2.18 in. re of Runoff (see formula above) = 5274 CF | t | | | | |
| Area of basin flows = | ns are based on Tr Sub-basin Weigh Weighted E Sub-basin Volum V ₃₆₀ | SF reatment areas as shown in table to the right ted Excess Precipitation (see formula abov = 2.18 in. re of Runoff (see formula above) = 5274 CF Discharge Rate: (see formula above) = 3.2 cfs | t | | | | |
| Area of basin flows = The following calculation | ns are based on Tr Sub-basin Weigh Weighted E Sub-basin Volum V ₃₆₀ | reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. ne of Runoff (see formula above) = 5274 CF Discharge Rate: (see formula above) = 3.2 cfs DESCRIPTION P | t LAND TREATMENT (e) $A = \begin{bmatrix} 0\% \\ B = 5\% \\ C = 10\% \\ D = 85\% \end{bmatrix}$ | | | | |
| Area of basin flows = The following calculation BASIN NO. Area of basin flows = | ns are based on Tr Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak I Q _P | reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. ne of Runoff (see formula above) = 5274 CF Discharge Rate: (see formula above) = 3.2 cfs DESCRIPTION P | t LAND TREATMENT (e) $A = \begin{bmatrix} 0\% \\ B = 5\% \\ C = 10\% \\ D = 85\% \end{bmatrix}$ ortion that drains north, includes building 0.3 Ac. | | | | |
| Area of basin flows = The following calculation BASIN NO. Area of basin flows = | ns are based on Tr Sub-basin Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak I Q _P | SF = reatment areas as shown in table to the right ted Excess Precipitation (see formula above = 2.18 in. re of Runoff (see formula above) = 5274 CF Discharge Rate: (see formula above) = 3.2 cfs DESCRIPTION Process SF = 100000000000000000000000000000000000 | t LAND TREATMENT A = 0% B = 5% C = 10% D = 85% ortion that drains north, includes building 0.3 Ac. LAND TREATMENT | | | | |
| Area of basin flows = The following calculation BASIN NO. Area of basin flows = | ns are based on Tr Sub-basin Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak I Q _P | reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. re of Runoff (see formula above) = 5274 CF Discharge Rate: (see formula above) = 3.2 cfs Prescription SF = reatment areas as shown in table to the right ted Excess Precipitation (see formula above) | t LAND TREATMENT A = 0% B = 5% C = 10% D = 85% ortion that drains north, includes building 0.3 Ac. LAND TREATMENT | | | | |
| Area of basin flows = The following calculation BASIN NO. Area of basin flows = | Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak I Q _P 11693 Ins are based on Tr Sub-basin Weighted E Weighted E | reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. re of Runoff (see formula above) = 5274 CF Discharge Rate: (see formula above) = 3.2 cfs Prescription SF = reatment areas as shown in table to the right ted Excess Precipitation (see formula above) | t LAND TREATMENT (e) A = 0% B = 5% C = 10% D = 85% ortion that drains north, includes building 0.3 Ac. t LAND TREATMENT (e) A = 0% | | | | |
| Area of basin flows = The following calculation BASIN NO. Area of basin flows = | Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak I Q _P 11693 Ins are based on Tr Sub-basin Weighted E Weighted E | reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. re of Runoff (see formula above) = 5274 CF Discharge Rate: (see formula above) = 3.2 cfs DESCRIPTION SF = reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. | t LAND TREATMENT A = 0% B = 5% C = 10% D = 85% ortion that drains north, includes building 0.3 Ac. t LAND TREATMENT A = 0% B = 5% | | | | |
| Area of basin flows = The following calculation BASIN NO. Area of basin flows = | Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak E Q _P 11693 Ins are based on Tr Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ | reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. ne of Runoff (see formula above) = 5274 CF Discharge Rate: (see formula above) = 3.2 cfs DESCRIPTION Proceed the right ted Excess Precipitation (see formula above) = 2.18 in. ne of Runoff (see formula above) | t LAND TREATMENT A = 0% B = 5% C = 10% D = 85% ortion that drains north, includes building 0.3 Ac. t LAND TREATMENT A = 0% B = 5% C = 10% C = 10% | | | | |
| Area of basin flows = The following calculation BASIN NO. Area of basin flows = | Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak E Q _P 11693 Ins are based on Tr Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ | reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. te of Runoff (see formula above) = 5274 CF Discharge Rate: (see formula above) = 3.2 cfs DESCRIPTION SF = reatment areas as shown in table to the right ted Excess Precipitation (see formula above) = 2.18 in. te of Runoff (see formula above) = 2.18 in. te of Runoff (see formula above) = 2125 CF | t LAND TREATMENT A = 0% B = 5% C = 10% D = 85% ortion that drains north, includes building 0.3 Ac. t LAND TREATMENT A = 0% B = 5% C = 10% C = 10% | | | | |



| Basin No. | Description | Discharge (Q) | Comments | |
|-----------|---|---------------|---|--------------------------------|
| 1 | Total area including Basin 1a | 0.7 | | |
| 2 | Total area including Basin 2a | 0.4 | | |
| 3 | Total area including Basin 3a | 3.2 | | |
| 4 | Portion that drains north, includes building | 1.3 | | |
| 5 | Eastern parking, drains to existing pond per Master Plan | 2.3 | Drains to existing pond per Master Plan | |
| 1a | Part of Basin 1 that was Master Planned to drain to pond | 0.2 | No longer drains to existing pond | |
| 2a | Part of Basin 2 that was was Master Planned to drain to pond | 0.3 | No longer drains to existing pond | |
| 3a | Part of Basin 3 that was Master Planned to drain to pond | 0.3 | No longer drains to existing pond | |
| OTAL DI | SCHARGE BASINS 1-4 | 5.5 | CFS | - Lot 20 allowa 4:629 afs/A |
| | SCHARGE BASINS 1a-3a (Part of Master Planned SUB-BASIN 2) | 0.8 | CFS | 4-679 06-11 |
| | Portion of Basins 1-4 allowed to free discharge [(1-4) - (1a-3a)] | 4.7 | CFS | -: 37,572 5.5. |
| OTAL DI | SCHARGE BASINS 1-3 | 4.2 | CFS | =D 3.99c.Ss Fre |

0.80

0.45

0.35

5.11

CFS

CFS

CFS

CFS

Sub-Basin 2 discharge from pond allowed by Master Plan

Amount of discharge constriction needed for Basins 1-4

Reduced discharge from pond by inlet constriction

ALLOWED DISCHARGE BASINS 1-4

CALCULATIONS: Applebee's at Holly Place: 0 HYDROGRAPH FOR SMALL WATERSHED DPM SECTION 22-2 * PAGE A-13/14

BASINS 1 - 4

Base time, t_B, for a small watershed hydrograph is,

tB =
$$(2.107 * E * A / Q_P) - (0.25 * A_D / A)$$

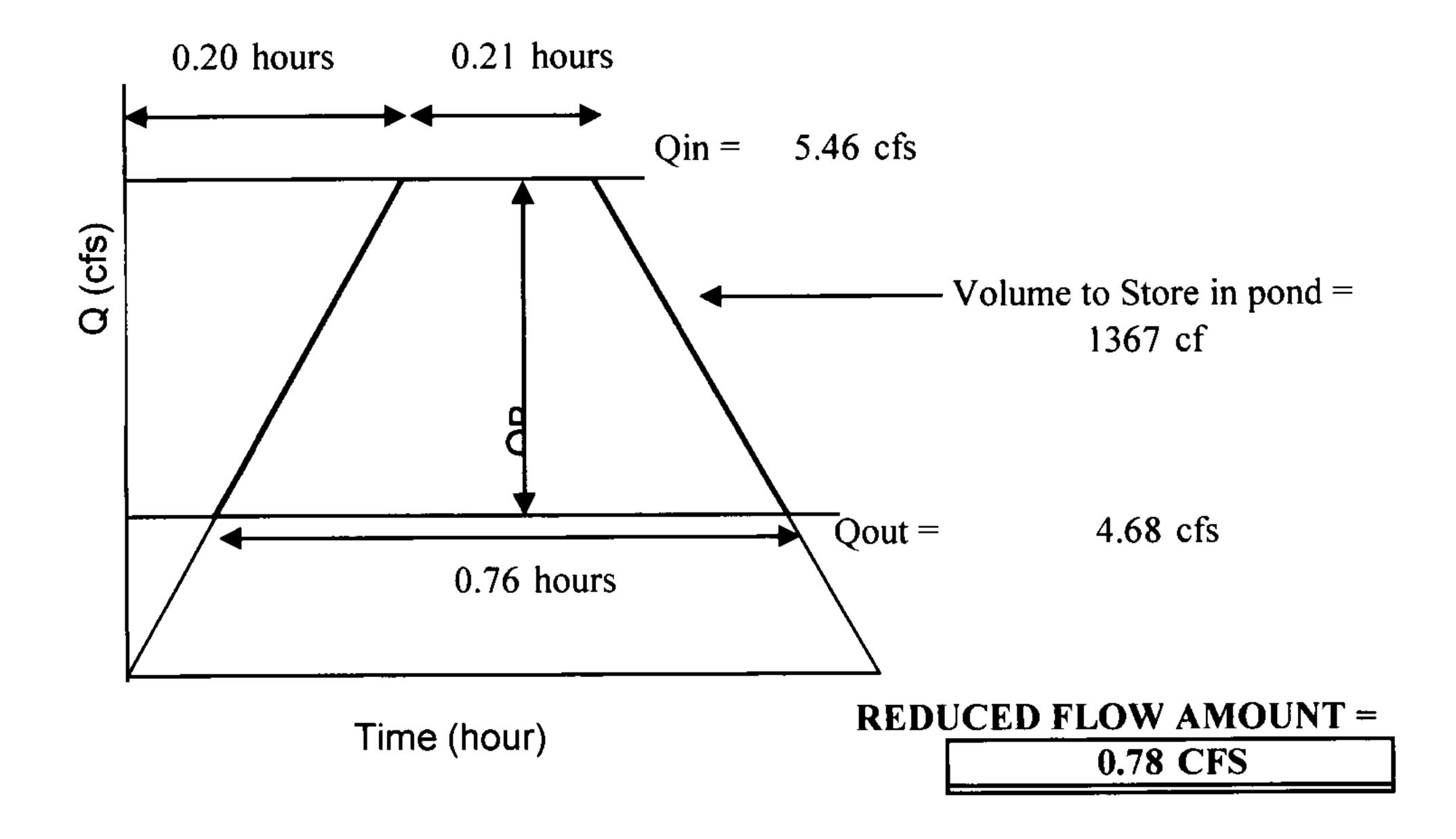
Where $E = 2.18$ inches
 $A = 1.15$ acres
 $A_D = 0.98$ acres
 $Q_P = 5.5$ cfs

 $t_B = 0.76 \text{ hours}$

E is the excess precipitation in inches (from DPM TABLE A-8), Q_P is the peak flow, A_D is the area (acres) of treatment D, and A_T is the total area in acres. Using the time of concentration, t_C (hours), the time to peak in hours is:

$$t_P = (0.7 * tC) + ((1.6 - (A_D/A)) / 12)$$
Where $t_C = 0.20 \text{ hours}$
 $t_P = 0.20 \text{ hours}$

Continue the peak for $0.25 * A_D / A_T$ hours. When A_D is zero, the hydrograph will be triangular. When A_D is not zero, the hyrograph will be trapezoidal. see the graph below:



| PO | ND #1 NOR | TH OF BLDG |
|---------|-----------|---------------|
| Contour | Area | Volume |
| 5220.00 | 723.95 | |
| 5219.00 | 346.67 | 535 CF |
| TOTAL V | OL. | 535 CF |

| POND #3 | | | | |
|---------|--------|--------------|--|--|
| Contour | Area | Volume | | |
| 5218.50 | 168.95 | | | |
| 5218.00 | 48.26 | 54 CF | | |
| 5217.80 | 0 | 5 CF | | |
| TOTAL V | OL. | 59 CF | | |

| POND #5 | | | | |
|-------------------|--------|--------|--|--|
| Contour | Area | Volume | | |
| 5217.00 | 351.14 | | | |
| 5216.50 | 90.23 | 110 CF | | |
| 5216.10 | 0 | 18 CF | | |
| TOTAL VOL. 128 CF | | | | |

| POND #7 | | | | |
|---------|-------|--------|--|--|
| Contour | Area | Volume | | |
| 5219.00 | 184.5 | | | |
| 5218.50 | 34.9 | 55 CF | | |
| 5218.40 | 0 | 2 CF | | |
| | | | | |
| TOTAL V | OL. | 57 CF | | |

| POND #9 | | | | |
|---------|------|--------|--|--|
| Contour | Area | Volume | | |
| 5219.50 | 26.8 | | | |
| 5219.30 | 0 | 3 CF | | |
| TOTAL V | OL. | 3 CF | | |

| PONI |) #2 PARKI | NG LOT - WEST |
|---------|------------|---------------|
| Contour | Area | Volume |
| 5217.00 | 2302.8 | |
| 5216.70 | 463.23 | 415 CF |
| 5216.50 | 0 | 46 CF |
| | | |
| TOTAL V | OL. | 461 CF |

| | PON | D #4 |
|---------|-------|--------|
| Contour | Area | Volume |
| 5219.00 | 205 | |
| 5218.50 | 60.63 | 66 CF |
| 5218.20 | 0 | 9 CF |
| | | |
| TOTAL V | OL. | 76 CF |

| | PON | D #6 |
|---------|-------|--------|
| Contour | Area | Volume |
| 5218.00 | 143.8 | |
| 5217.60 | 0 | 29 CF |
| | | |
| TOTAL V | OL. | 29 CF |

| | PON | D #8 |
|---------|------|--------|
| Contour | Area | Volume |
| 5219.30 | 98 | |
| 5219.00 | 35.2 | 20 CF |
| 5218.80 | 0 | 4 CF |
| TOTAL V | OL. | 24 CF |

TOTAL BASINS 1-3 PONDING 777 CF
TOTAL BASIN 4 PONDING 594 CF

TOTAL PONDING 1371 C

1371 CF 1367 Rag dV

EXISITNG DETENTION POND

OUTLET PIPE OPENING CAPACITY CALCULATIONS

| Using orifice equation | Q=CA | * (2gh)^0.5 |
|------------------------|---|-------------|
| С | ======================================= | 0.6 |
| A | = | 0.05 |
| g | = | 32.2 |
| h | = | 4.15 |
| Q | = | 0.48 |
| Clogging Factor | = | |
| Qclog | = | |

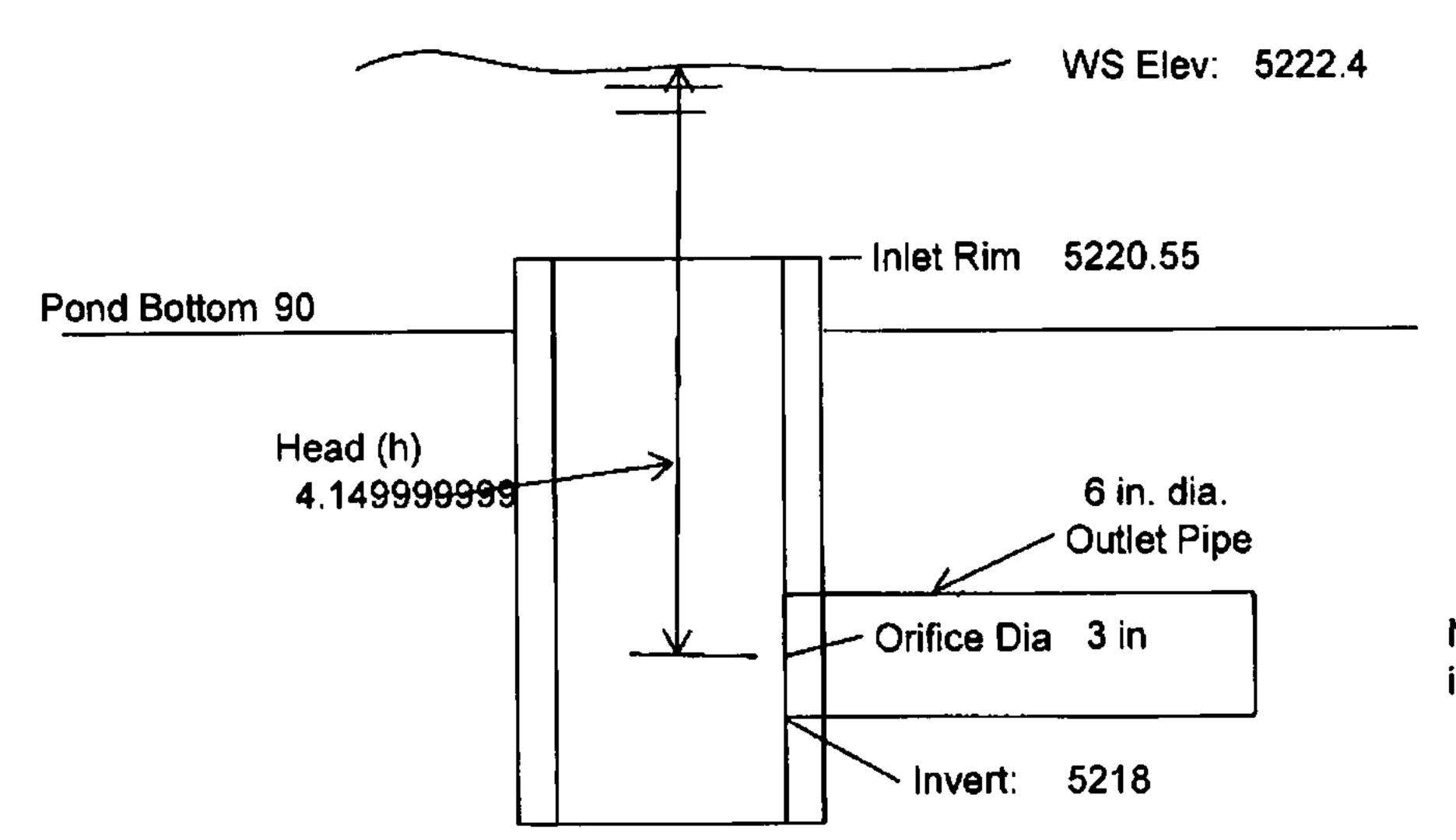
Note: The above calculations reserves 0.5' head. The following chart refers to head values from 0.1' to 1.0' for additional info.

| h = 0.5' | 0.17 | cfs |
|----------|------|-----|
| h = 1.0' | 0.24 | ¢fs |
| h = 1.5' | 0.29 | cfs |

h = 0.5' — 0.17 cfs h = 1.0' — 0.24 cfs h = 1.5' — 0.29 cfs

Existing Pond discharge per Master Plan =
Pond discharge with new outlet restriction =
Minimum flow reduction by new site =

0.80 cfs 0.48 cfs 0.32 cfs



Note: Orifice is centered in outlet pipe opening

CALCULATIONS: Applebee's at Holly Place: 0 HYDROGRAPH FOR SMALL WATERSHED DPM SECTION 22-2 * PAGE A-13/14

Base time, t_B, for a small watershed hydrograph is,

tB =
$$(2.107 * E * A / Q_P) - (0.25 * A_D / A)$$

Where $E = 2.18$ inches
 $A = 1.15$ acres
 $A_D = 0.98$ acres
 $Q_P = 5.5$ cfs

BASINS 1 - 4

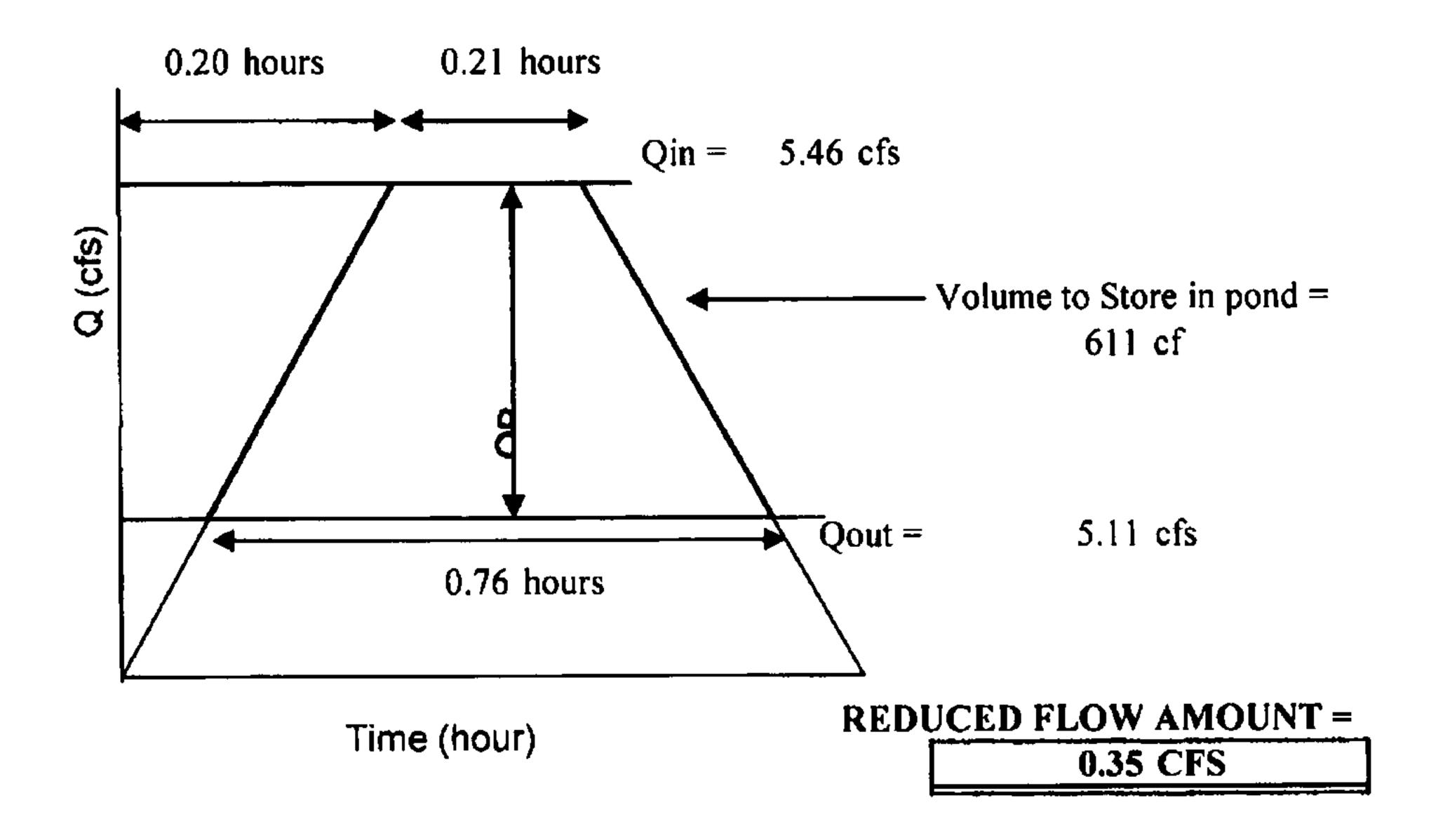
 $t_B = 0.76 \text{ hours}$

E is the excess precipitation in inches (from DPM TABLE A-8), Q_P is the peak flow, A_D is the area (acres) of treatment D, and A_T is the total area in acres. Using the time of concentration, t_C (hours), the time to peak in hours is:

$$t_P = (0.7 * tC) + ((1.6 - (A_D/A)) / 12)$$

Where $t_C = 0.20 \text{ hours}$
 $t_P = 0.20 \text{ hours}$

Continue the peak for $0.25 * A_D / A_T$ hours. When A_D is zero, the hydrograph will be triangular. When A_D is not zero, the hyrograph will be trapezoidal. see the graph below:



INFLOW / OUTFLOW HYDROGRAPH

CURB OPENING CAPACITY CALCULATION

C =

L =

Weir equation:

 $Q=CLH^{3/2}$

Constant

3.33

Curb height

H = 0.5 feet

Opening Length

1.00 feet

Q= 1.2 cfs

WESTERLY PARKING LOT POND - 4" PIPES

OUTLET PIPE OPENING CAPACITY CALCULATIONS

| Using orifice equation | Q=CA | * (2gh)^0.5 |
|------------------------|------|-------------|
| С | = | 0.6 |
| Α | = | 0.09 |
| g | == | 32.2 |
| h | = | 0.3333333 |
| Q | = | 0.24 |
| Clogging Factor | == | |
| Qclog | = | |

Note: The above calculations references 0.5' head. The following chart refers to head values from 0.1' to 1.0' for additional info.

| | | | _ | |
|-------------|------|-----|-----------------|------|
| h = 0.5' —— | 0.30 | cfs | x2 = | 0.59 |
| h = 1.0' | 0.42 | çfş | $\mathbf{x2} =$ | 0.84 |
| h = 1.5' | 0.51 | cfs | x2 = | 1.03 |

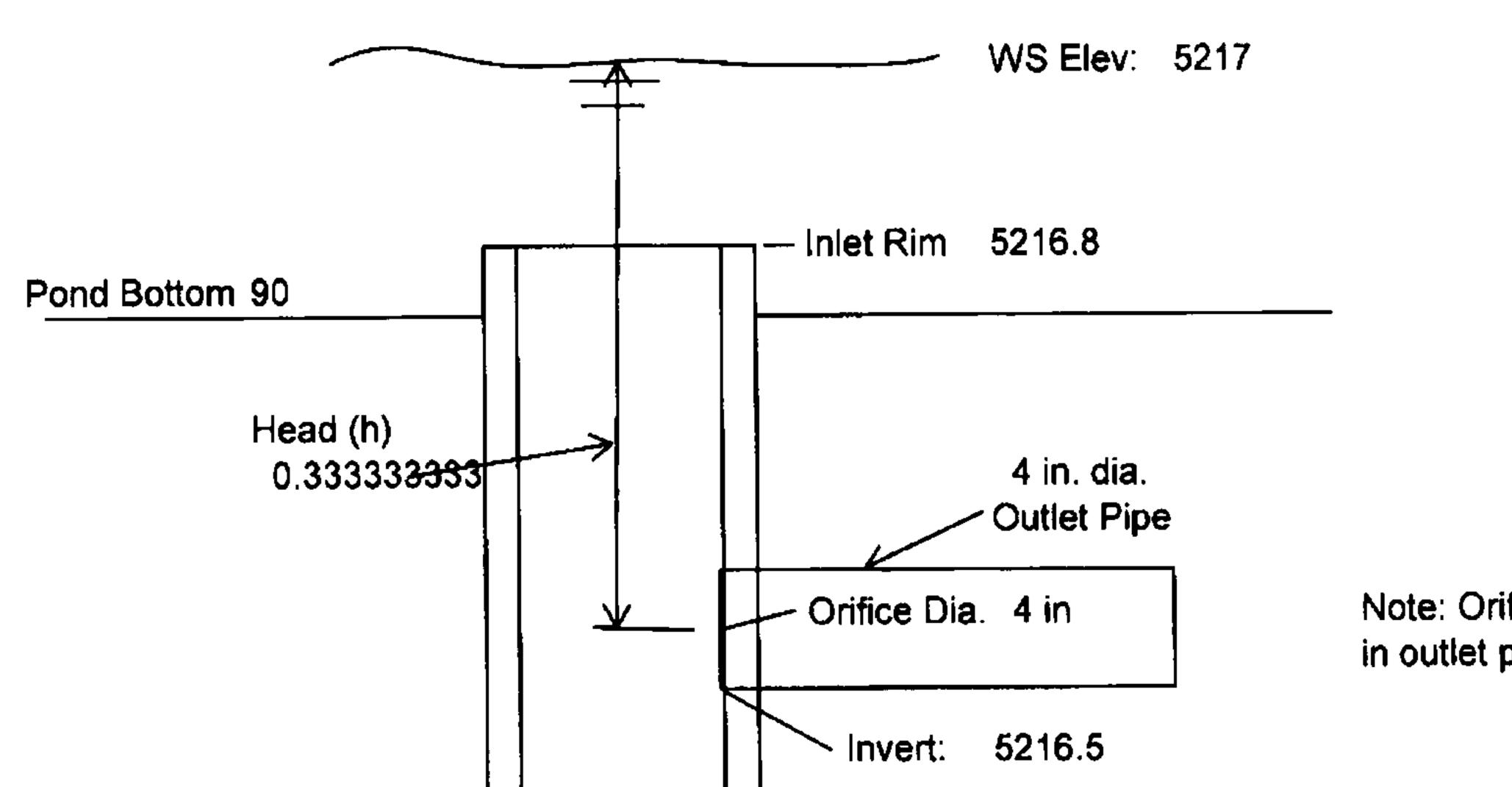
4" discharge pipes through curb from westerly parking lot pond:

0.24 cfs each

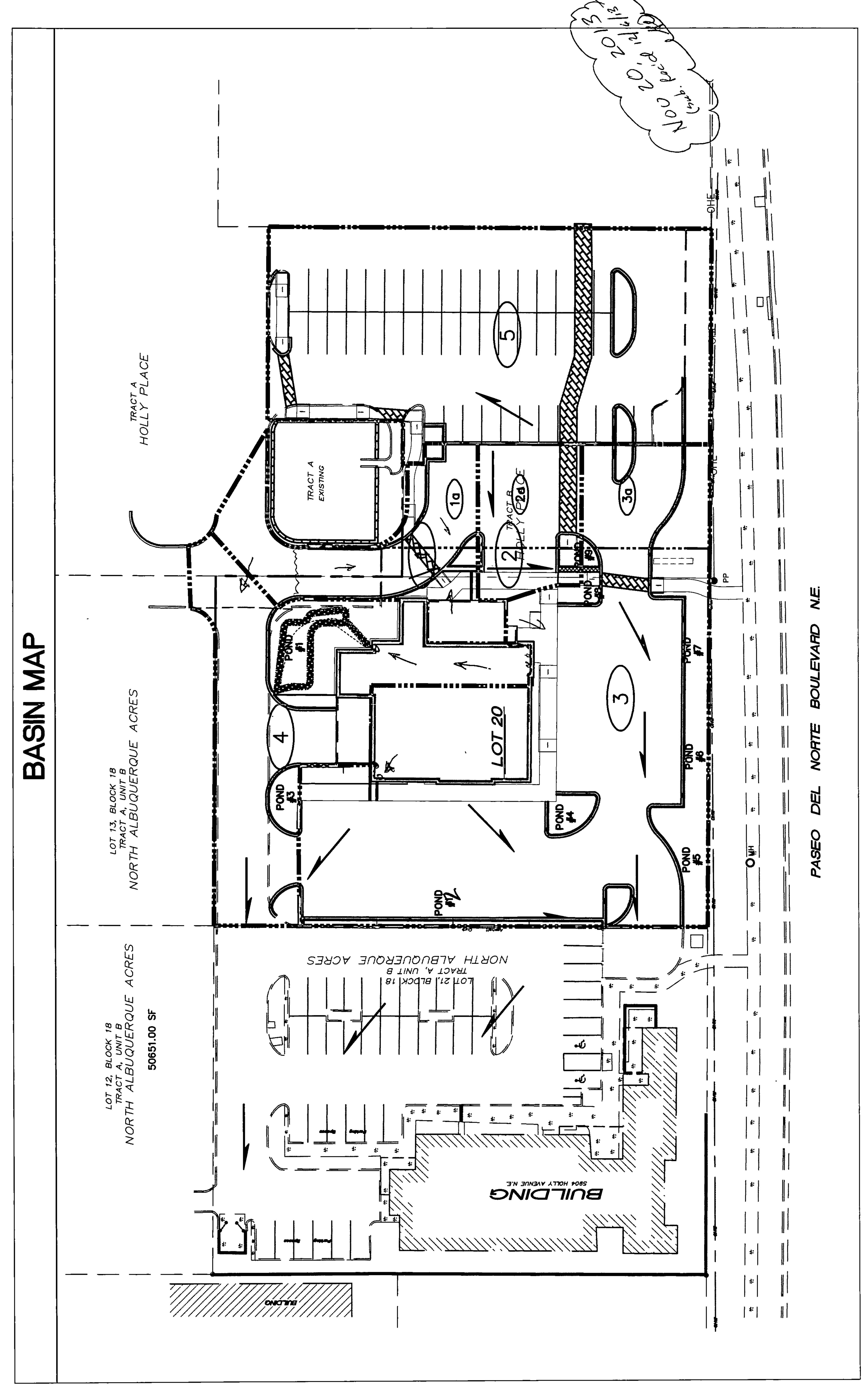
cfs

cfs

cfs

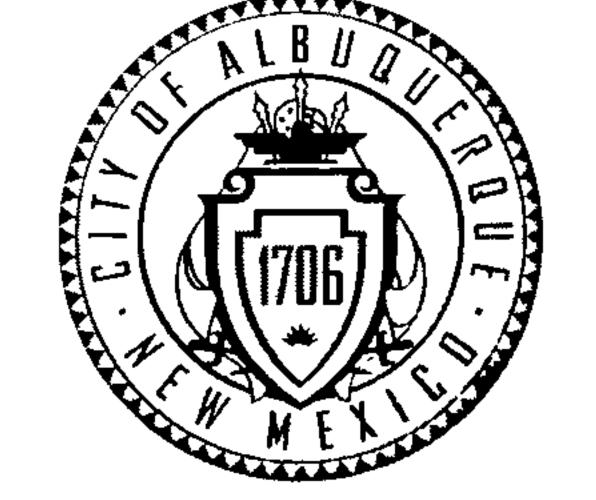


Note: Orifice is centered in outlet pipe opening



CITY OF ALBUQUERQUE

PLANNING DEPARTMENT - Development Review Services



November 13, 2013

Richard J. Berry, Mayor

Ms. Genny Donart, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. NE
Albuquerque, New Mexico 87108

RE: Applebee's at Holly Place

B13-D022A
Place, Tract B

North Alb. Acres, Tract A, Unit B, Block 18, Lot 20 & Holly Place, Tract B Conceptual Grading & Drainage Plan for Site Development Plan

PE Stamp: 10/23/2013

Dear Ms. Donart:

Based upon the information provided in your submittal received 10-23-2013 and supporting documentation received 10/28/13, the above referenced is approved for Site Development Plan for DRB action.

PO Box 1293

A separate submittal will be required for Building Permit. Per your discussion your discussions with Curtis Cherne and comments on my 9/23/13 letter, there are a few issues to be resolved on this plan for us to approve it for Building Permit. See the back of this letter for a brief summary of those points.

Albuquerque

If you have questions, please email me at grolson@cabq.gov or phone 505-924-3994.

New Mexico 87103

Sincerely,

www.cabq.gov

Gregory R. Olson, P.E.

Senior Engineer

Orig:

Drainage file C18/D073A

c.pdf

Addressee via Email GennyD@IAcivil.com

Please review and address the following issues for Building Permit approval:

- 1. Ponding along the western edge of the site proposes rundown pipes that will be exposed above grade, west of the curb. Reference Detail 5 on Sheet CG-501. Stabilize this design for Building permit.
- 2. Clarify developed site flow conditions: On the Basin Map, label the new basin discharge points and rates at detention pond inlets and outlets, and where flows enter and leave the site.
- 3. Please advise your client that because this site exceeds 1.0 acre, any Grading or Building on this site will require a Storm Water Pollution Prevention Plan (SWPPP). Also, an Erosion and Sediment Control (ESC) Plan, prepared by a NM Registered Professional Engineer, must be submitted to and approved by this office, prior to Building Permit approval **and** start of grading.



City of Albuquerque

Planning Department

Development & Building Services Division

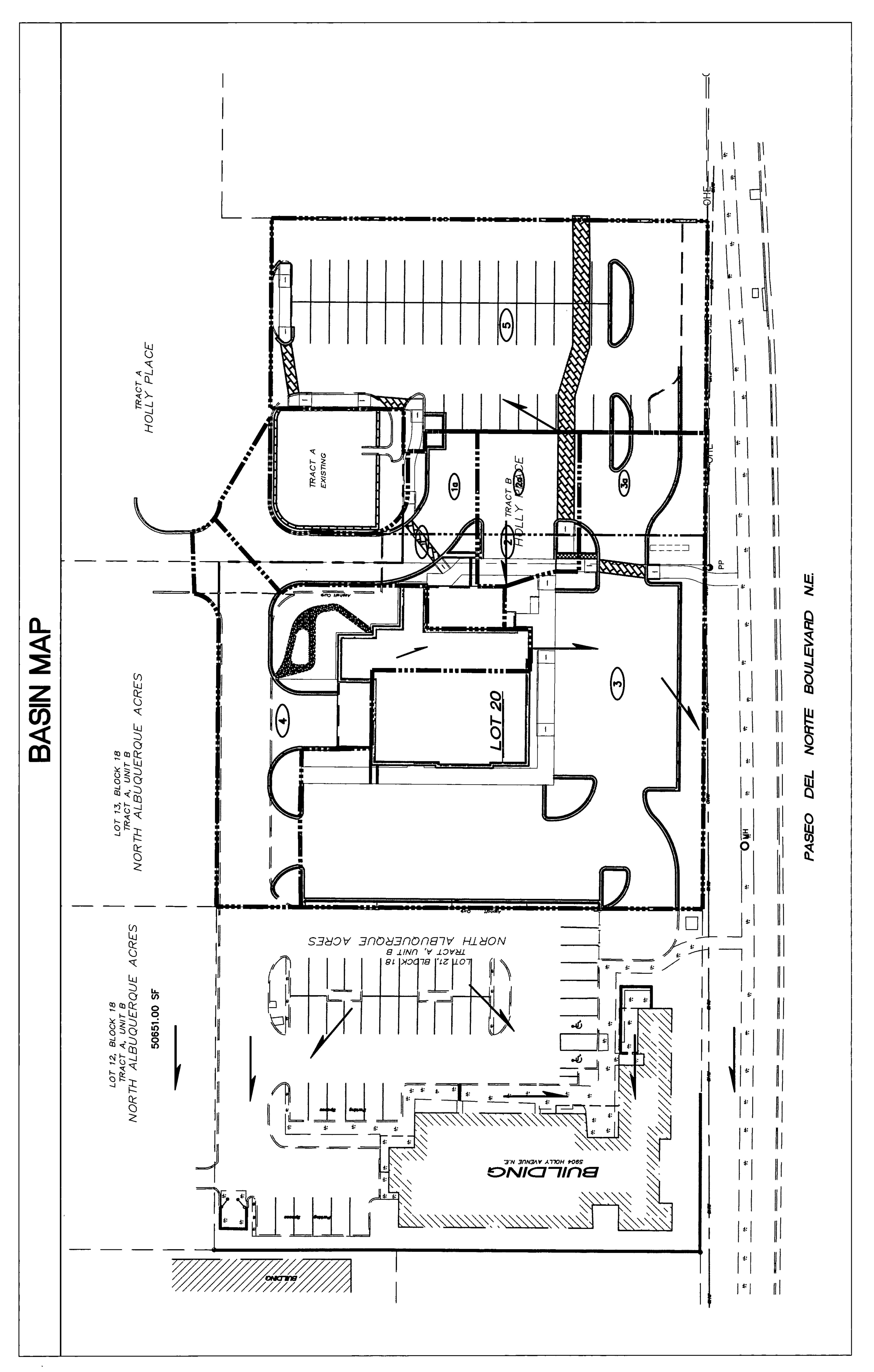
DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

| Project Title: Applebee's at Holly Place | Building Permit #: T201392320 City Drainage #: C18/D @ 73 |
|---|--|
| DRB#: EPC# | : Work Order#: |
| Legal Description: Lot 20, Block 18, Tract A, Unit | B, North Albuquerque Acres & Tract B, Holly Place |
| City Address: | |
| Engineering Firm: Isaacson & Arfman, P.A. | Contact: Genny Donart |
| Address: 128 Monroe Street, NE | - Albuquerque, NM 87108 |
| Phone#: (505) 268-8828 Fax# | N/A E-mail: gennyd@iacivil.com |
| Owner: Apple Investors Group | Contact: Michael D. McGough |
| Address: 917 Ravenwood Way - Canton, GA 3 | 0115 |
| Phone#: (770) 547-5920 Fax# | N/A E-mail: michael.mcgough@appleig.com |
| Architect: Klover Architects, Inc. | Contact: Chad Renoux |
| Address: 10955 Lowell Ave., Suite 700 - Overla | nd Park, KS 66210 |
| Phone#: (913) 649-8181 Fax# | E-mail: |
| Surveyor: Surv-Tek, Inc. | Contact: Russ P. Hugg |
| Address: 9384 Valley View Drive NW - Albuque | rque, NM 87114 |
| Phone#: (505) 897-3366 Fax# | E-mail: |
| Contractor: | Contact: |
| Address: | |
| Phone#: Fax# | E-mail: |
| TYPE OF SUBMITTAL: DRAINAGE REPORT DRAINAGE PLAN 1st SUBMITTAL X DRAINAGE PLAN RESUBMITTAL X CONCEPTUAL G & D PLAN GRADING PLAN EROSION & SEDIMENT CONTROL PLAN (EST ENGINEER'S CERT (HYDROLOGY) CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) ENGINEER'S CERT (DRB SITE PLAN) ENGINEER'S CERT (ESC) SO-19 OTHER (SPECIFY) | CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT: SIA/FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL S. DEV. PLAN FOR SUB'D APPROVAL SECTOR PLAN APPROVAL SECTOR PLAN APPROVAL CERTIFICATE OF OCCUPANCY (PERM) CERTIFICATE OF OCCUPANCY (TCL TE FOUNDATION PERMIT APPROVAL X BUILDING PERMIT APPROVAL X GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL GRADING CERTIFICATION CHECK TYPE OF APPROVAL SIA/FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL OCT 2 3 2013 CCT 2 3 20 |
| WAS A PRE-DESIGN CONFERENCE ATTENDED: DATE SUBMITTED: October 23, 2013 | Yes X No Copy Provided By: Genevieve Donart for Isaacson & Arfman, P.A |

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following

- 1. Conceptual Grading and Drainage Plan Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres
- 3 Drainage Report Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
- 4 Erosion and Sediment Control Plan: Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development



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I talker to Gray.

The agrees Dufant 5 on Sheet 501 work work - more of a Blds Remit Shing.

I wish he paratin was alot

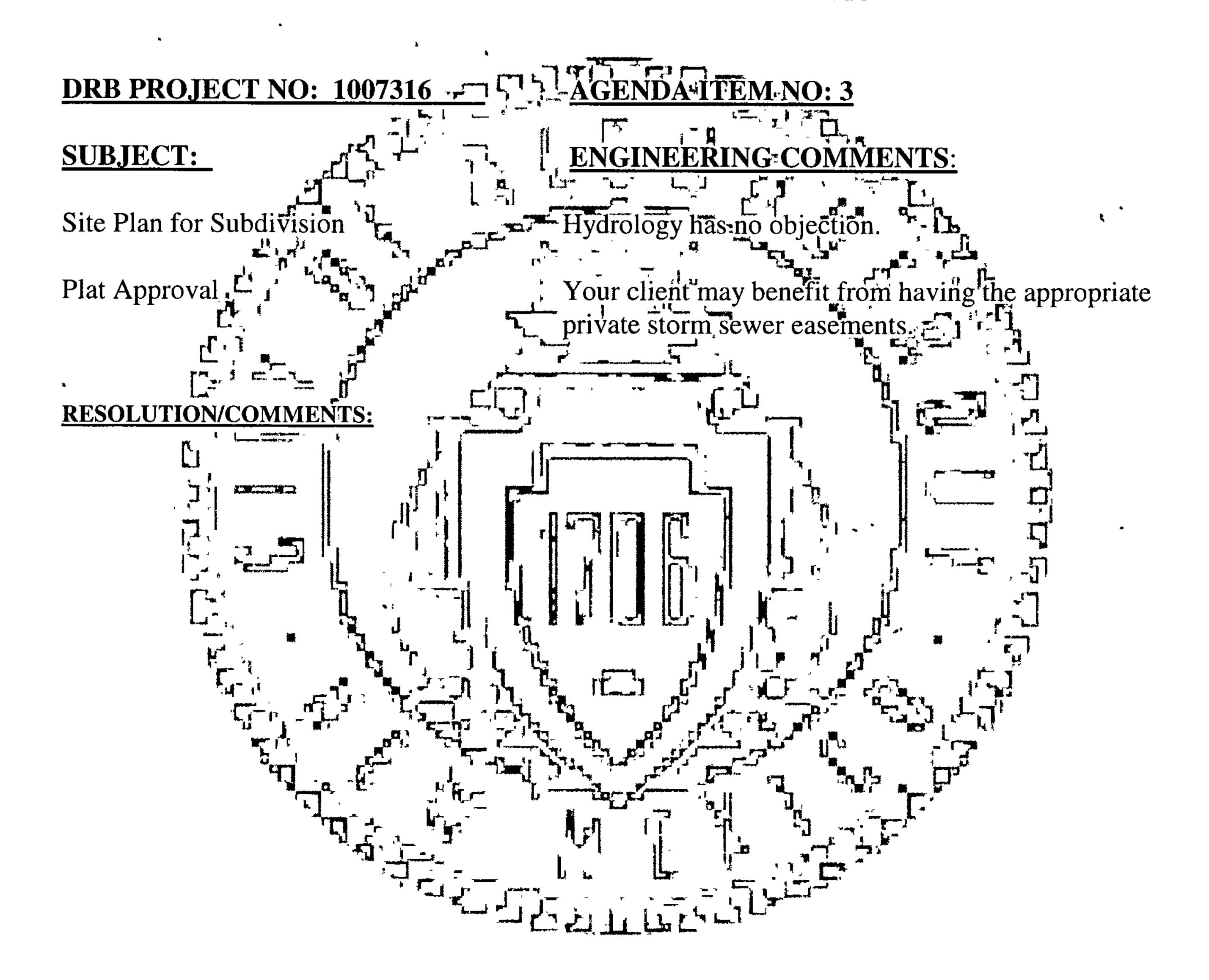
en only offens allowed Y. Auster are new to do 7 amount of pandry.

Cut

CITY OF ALBUQUERQUE PLANNING DEPARTMENT

HYDROLOGY DEVELOPMENT SECTION

DEVELOPMENT REVIEW BOARD MEMO



SIGNED:

DATE: 10-16-13

Curtis Cherne
Hydrology Section
City Engineer Designee
AMAFCA Designee
924-3986

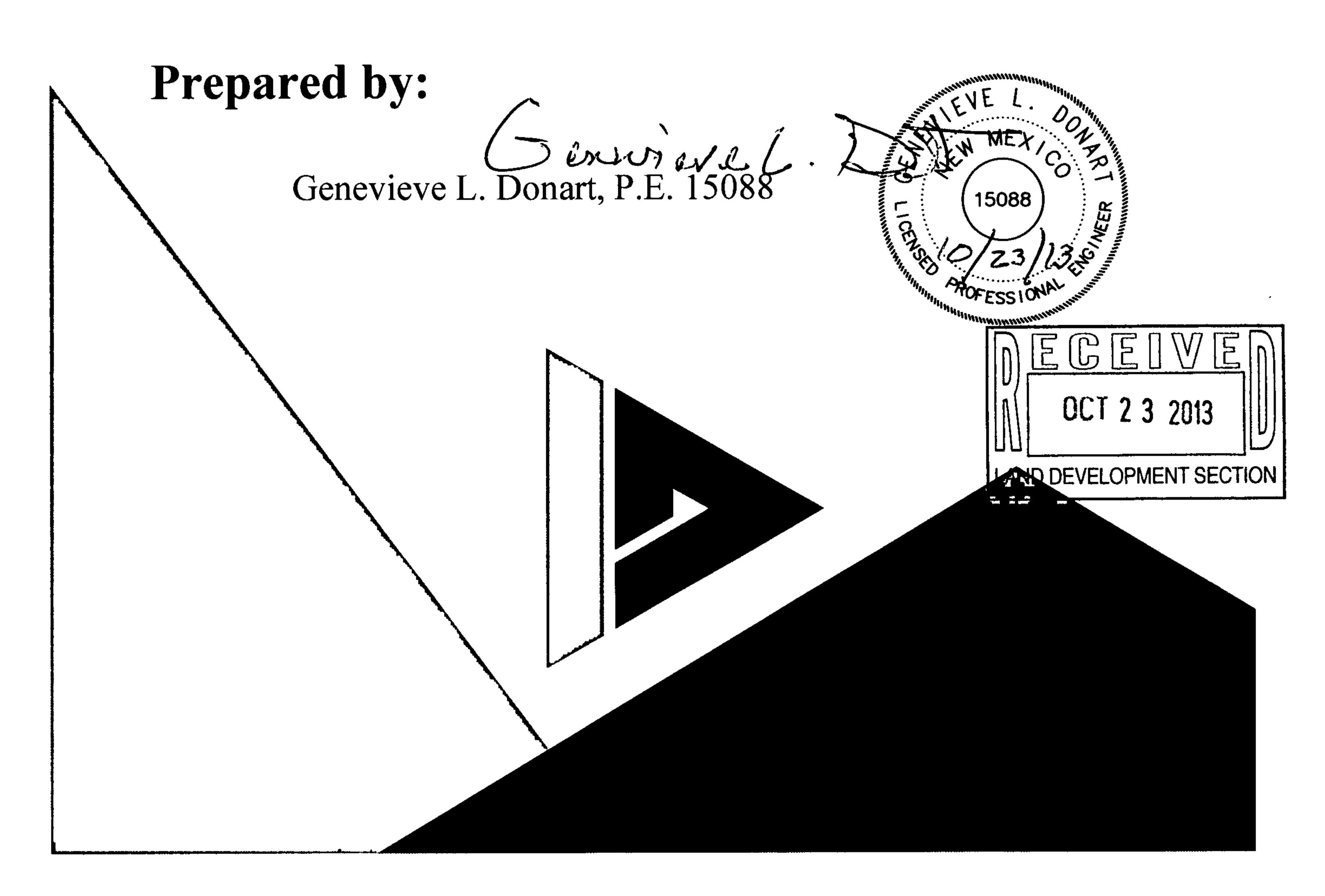
SUPPLEMENTAL INFORMATION FOR

APPLEBEE'S AT HOLLY PLACE

ALBUQUERQUE, NEW MEXICO

I&A Project No.: 1985

OCTOBER 23, 2013



ISAACSON & ARFMAN, P.A.

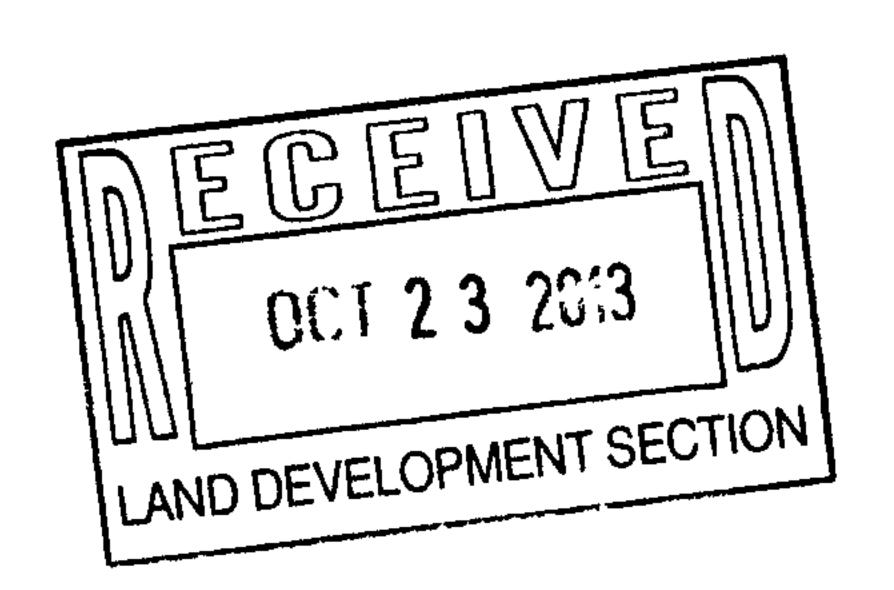
Consulting Engineering Associates

1985 DPM Calculations - 100 yr 6 hr - REVISED.xlsm

| | \mathbf{C} | LCU | LATIONS: Appleb | ee's at | Holly Place : | | | |
|--|--|-------------------|---|-------------------------------|----------------|----------|-----------------------|---|
| Based on Drainage De | | | | | | Jan., 19 | 993 | |
| | | • | ON-SITI | | | | | |
| AREA OF SITE: | | | 70938.83 | SF | = | 1.629 | | |
| | | | 100-year, 6-hour | | | | | |
| HISTORIC FLOWS | | | DEVELOPED FLO | WS: | | | EXCESS PRECIP: | |
| | Treatment SF | % | | | Treatment SF | % | Precip. Zone | 3 |
| Area A = | 0 | 0% | Area A | = | 0 | 0% | $E_A = 0.66$ | |
| Area B = | 0 | 0% | Area B | = | 3547 | 5% | $E_{\rm B} = 0.92$ | |
| Area C = | 70938.83 | 100% | Area C | = | 7094 | 10% | $E_{\rm C} = 1.29$ | |
| Area D = | 0 | 0% | Area D | = | 60298 | 85% | $E_{\rm D} = 2.36$ | |
| Total Area = | 70938.83 | 100% | Total Area | = | 70938.83 | 100% | | |
| On-Site Weighted Exc | ess Precipitation (10 Weighted E = | | ar, 6-Hour Storm) E _A A _A + E _B A _B + E _C A | _C + E _D | A _D | | | |
| | ······································ | | $A_A + A_B + A_C$ | ⊦ A _D | | | | |
| Historic E = | 1.29 | in. | Developed E | | 2.18 | in. | | |
| On-Site Volume of Ru | noff: V360 = | | E*A / 12 | | | | | |
| Historic V ₃₆₀ = | 7626 | CF | Developed V ₃₆₀ | = | 12893 | CF | | |
| On-Site Peak Discharg For Precipitation Zone | • | A+Q _{pE} | $_{3}A_{B}+Q_{pC}A_{C}+Q_{pD}A_{D}$ | 43,560 | | | | |
| $Q_{pA} =$ | 1.87 | | Q_{pC} | = | 3.45 | | | |
| $Q_{pB} =$ | 2.60 | | $Q_{\mathfrak{p}D}$ | = | 5.02 | | | |

5.6 CFS Developed Q_p

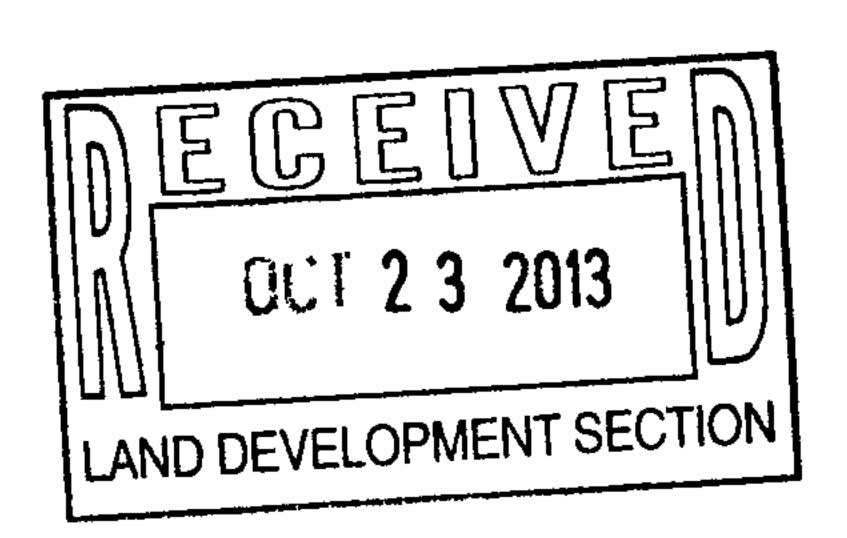
Historic Q_p



7.722 CFS

1985 DPM Calculations - 100 yr 6 hr - REVISED.xlsm

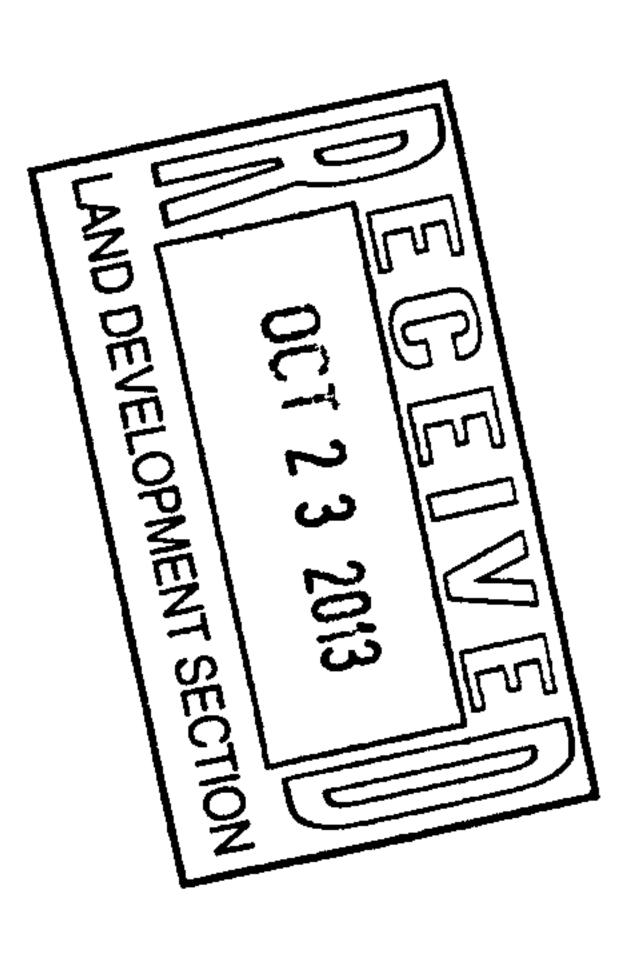
| BASIN NO. 1 | | DESCRIPTION | Total area including Basin 1a |
|---------------------------|--------------------|--|--|
| Area of basin flows = | 6019 | SF = | 0.1 Ac. |
| The following calculation | ns are based on Tr | eatment areas as shown in table to the right | LAND TREATMENT |
| | Sub-basin Weight | ted Excess Precipitation (see formula above) | A = 0% |
| | Weighted E | = 2.18 in. | B = 5% |
| | Sub-basin Volum | e of Runoff (see formula above) | C = 10% |
| | V ₃₆₀ | = 1094 CF | D = 85% |
| | Sub-basin Peak D | Discharge Rate: (see formula above) | |
| | Q_{P} | = 0.7 cfs | |
| BASIN NO. 2 | | DESCRIPTION | Total area including Basin 2a |
| Area of basin flows = | 3462 | SF = | 0.1 Ac. |
| The following calculation | ns are based on Tr | eatment areas as shown in table to the right | LAND TREATMENT |
| | Sub-basin Weigh | ted Excess Precipitation (see formula above) | A = 0% |
| | Weighted E | = 2.18 in. | B = 5% |
| | Sub-basin Volum | e of Runoff (see formula above) | C = 10% |
| | V ₃₆₀ | = 629 CF | D = 85% |
| | Sub-basin Peak D | Discharge Rate: (see formula above) | |
| | Q_{P} | = 0.4 cfs | |
| BASIN NO. 3 | | DESCRIPTION | Total area including Basin 3a |
| Area of basin flows = | 29017 | SF = | 0.7 Ac. |
| The following calculation | ns are based on Tr | eatment areas as shown in table to the right | LAND TREATMENT |
| | Sub-basin Weigh | ted Excess Precipitation (see formula above) | A = 0% |
| | Weighted E | = 2.18 in. | B = 5% |
| | Sub-basin Volum | e of Runoff (see formula above) | C = 10% |
| | V_{360} | = 5274 CF | D = 85% |
| | Sub-basin Peak I | Discharge Rate: (see formula above) | |
| | Q_{P} | = 3.2 cfs | |
| BASIN NO. 4 | | DESCRIPTION Port | ion that drains north, includes building |
| Area of basin flows = | 11693 | SF = | 0.3 Ac. |
| The following calculation | ns are based on Tr | eatment areas as shown in table to the right | LAND TREATMENT |
| | Sub-basin Weigh | ted Excess Precipitation (see formula above) | A = 10% |
| | Weighted E | = 2.18 in. | B = 5% |
| | Sub-basin Volum | e of Runoff (see formula above) | C = 10% |
| | V ₃₆₀ | = 2125 CF | D = 85% |
| | Sub-basin Peak I | Discharge Rate: (see formula above) | |
| | Q_{P} | = 1.3 cfs | |
| | 1 | | |



| BASIN NO. 5 | | DESCRIPTION | Eastern parkir | g, drains to existing pond per Master | Plan |
|---|--|--|--|---|--------|
| Area of basin flows = | 20748 | SF | = | 0.5 Ac. | |
| The following calculation | ns are based on Tr | eatment areas as shown in tab | e to the right | LAND TREATMENT | |
| | Sub-basin Weight | ted Excess Precipitation (see f | ormula above) | A = 0% | |
| | Weighted E | | | B = 5% | |
| | Sub-basin Volum | e of Runoff (see formula abov | e) | C = 10% | |
| | V ₃₆₀ | = 3771 | CF | D = 85% | |
| | Sub-basin Peak D | Discharge Rate: (see formula al | oove) | | |
| | Q_{P} | = 2.3 | cfs | | |
| BASIN NO. 1a | | DESCRIPTION | Part of Basin 1 | that was Master Planned to drain to p | pond |
| Area of basin flows = | 1652 | SF | = | 0.0 Ac. | |
| The following calculation | ns are based on Tr | eatment areas as shown in tabl | e to the right | LAND TREATMENT | |
| | Sub-basin Weight | ted Excess Precipitation (see f | ormula above) | A = 0% | |
| | Weighted E | = 2.18 | in. | B = 5% | |
| | Sub-basin Volum | e of Runoff (see formula abov | e) | C = 10% | |
| | V_{360} | = 300 | CF | D = 85% | |
| | Sub-basin Peak D | Discharge Rate: (see formula al | ove) | | |
| | | - 0.2 | , C ₂ | | |
| | Q _P | - 0.2 | cfs | | |
| BASIN NO. 2a | VP | DESCRIPTION | <u> </u> | nat was was Master Planned to drain to | o pond |
| BASIN NO. 2a Area of basin flows = | 2419 | DESCRIPTION | <u> </u> | nat was was Master Planned to drain to 0.1 Ac. | o pond |
| Area of basin flows = | | DESCRIPTION | Part of Basin 2 tl | O 1 A | o pond |
| Area of basin flows = The following calculation | ns are based on Tr | DESCRIPTION SF | Part of Basin 2 tl = e to the right | 0.1 Ac. | o pond |
| Area of basin flows = The following calculation Originally part of | ns are based on Tr | DESCRIPTION SF eatment areas as shown in tableted Excess Precipitation (see form) | Part of Basin 2 the eto the right ormula above) | 0.1 Ac. LAND TREATMENT | o pond |
| Area of basin flows = The following calculation Originally part of the Paseo Place | ns are based on Tra Sub-basin Weight Weighted E | DESCRIPTION SF eatment areas as shown in tableted Excess Precipitation (see f | Part of Basin 2 the eto the right ormula above) in. | 0.1 Ac. LAND TREATMENT A = 0% | o pond |
| Area of basin flows = The following calculation Originally part of the Paseo Place pond. 1280 = | ns are based on Tra Sub-basin Weight Weighted E | DESCRIPTION SF eatment areas as shown in table ted Excess Precipitation (see find a second s | Part of Basin 2 the eto the right ormula above) in. | 0.1 Ac. LAND TREATMENT A = 0% B = 5% | o pond |
| Area of basin flows = The following calculation Originally part of the Paseo Place | ns are based on Translation Sub-basin Weighted E Sub-basin Volum V ₃₆₀ | DESCRIPTION SF eatment areas as shown in table ted Excess Precipitation (see find a second s | Part of Basin 2 the eto the right ormula above) in. e) CF | 0.1 Ac. LAND TREATMENT A = 0% B = 5% C = 10% | o pond |
| Area of basin flows = The following calculation Originally part of the Paseo Place pond. 1280 = | ns are based on Translation Sub-basin Weighted E Sub-basin Volum V ₃₆₀ | DESCRIPTION SF eatment areas as shown in table ted Excess Precipitation (see find the second | Part of Basin 2 the eto the right ormula above) in. e) CF | 0.1 Ac. LAND TREATMENT A = 0% B = 5% C = 10% | o pond |
| Area of basin flows = The following calculation Originally part of the Paseo Place pond. 1280 = | ns are based on Translation Sub-basin Weighted E Sub-basin Volum V ₃₆₀ | DESCRIPTION SF eatment areas as shown in table ted Excess Precipitation (see formula above e of Runoff (see formula above e e e e e e e e e e e e e e e e e e | Part of Basin 2 the set of the right ormula above) in. e) CF ove) cfs | 0.1 Ac. LAND TREATMENT A = 0% B = 5% C = 10% | |
| Area of basin flows = The following calculation Originally part of the Paseo Place pond. 1280 = require ponding | ns are based on Translation Sub-basin Weighted E Sub-basin Volum V ₃₆₀ | DESCRIPTION SF eatment areas as shown in table ted Excess Precipitation (see from 1 above 1 above 2 a | Part of Basin 2 the set of the right ormula above) in. e) CF ove) cfs | 0.1 Ac. LAND TREATMENT A = 0% B = 5% C = 10% D = 85% | |
| Area of basin flows = The following calculation Originally part of the Paseo Place pond. 1280 = require ponding BASIN NO. 3a Area of basin flows = | ns are based on Transbub-basin Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak D Q _P | DESCRIPTION SF eatment areas as shown in table ted Excess Precipitation (see from 1 above 1 above 2 a | Part of Basin 2 the eto the right ormula above) in. e) CF ove) cfs Part of Basin 3 | 0.1 Ac. LAND TREATMENT A = 0% B = 5% C = 10% D = 85% that was Master Planned to drain to p | |
| Area of basin flows = The following calculation Originally part of the Paseo Place pond. 1280 = require ponding BASIN NO. 3a Area of basin flows = The following calculation | ns are based on Translation Sub-basin Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak D Q _P 2981 as are based on Translation | DESCRIPTION SF eatment areas as shown in table ted Excess Precipitation (see from the end of the e | Part of Basin 2 the eto the right ormula above) in. e) CF ove) cfs Part of Basin 3 = e to the right | 0.1 Ac. LAND TREATMENT A = 0% B = 5% C = 10% D = 85% that was Master Planned to drain to page 1.1 Ac. | |
| Area of basin flows = The following calculation Originally part of the Paseo Place pond. 1280 = require ponding BASIN NO. 3a Area of basin flows = The following calculation | Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak D Q _P 2981 as are based on Tra Sub-basin Weight Weighted E | DESCRIPTION SF reatment areas as shown in table ted Excess Precipitation (see from the second secon | Part of Basin 2 the eto the right ormula above) CF ove) cfs Part of Basin 3 = e to the right ormula above) in. | 0.1 Ac. LAND TREATMENT A = 0% B = 5% C = 10% D = 85% that was Master Planned to drain to possible to the control of the | |
| Area of basin flows = The following calculation Originally part of the Paseo Place pond. 1280 = require ponding BASIN NO. 3a Area of basin flows = The following calculation | Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak D Q _P 2981 as are based on Tra Sub-basin Weight Weighted E | DESCRIPTION SF eatment areas as shown in table ted Excess Precipitation (see from the end of the e | Part of Basin 2 the eto the right ormula above) CF ove) cfs Part of Basin 3 = e to the right ormula above) in. | 0.1 Ac. LAND TREATMENT A = 0% B = 5% C = 10% D = 85% that was Master Planned to drain to possible to the control of the | |
| Area of basin flows = The following calculation Originally part of the Paseo Place pond. 1280 = require ponding BASIN NO. 3a Area of basin flows = The following calculation | Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak D Q _P 2981 as are based on Tra Sub-basin Weight Weighted E | DESCRIPTION SF reatment areas as shown in table ted Excess Precipitation (see from the second secon | Part of Basin 2 the eto the right ormula above) CF ove) cfs Part of Basin 3 = e to the right ormula above) in. | 0.1 Ac. LAND TREATMENT | |
| Area of basin flows = The following calculation Originally part of the Paseo Place pond. 1280 = require ponding BASIN NO. 3a Area of basin flows = The following calculation | Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ Sub-basin Peak D Q _P 2981 as are based on Tre Sub-basin Weight Weighted E Sub-basin Volum V ₃₆₀ | DESCRIPTION SF eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 Description (see formula above = 440 Discharge Rate: (see formula above = 0.3 DESCRIPTION SF The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 The eatment areas as shown in table ted Excess Precipitation (see formula above = 2.18 | Part of Basin 2 the eto the right ormula above) CF Part of Basin 3 = e to the right ormula above) in. e) CF CF CF CF CF CF CF CF CF C | 0.1 Ac. LAND TREATMENT | |



| BASIN SUMMARY | | | |
|---|--|---------------|---|
| Basin No. | Description | Discharge (Q) | Comments |
| 1 | Total area including Basin 1a | 0.7 | |
| 2 | Total area including Basin 2a | 0.4 | |
| 3 | Total area including Basin 3a | 3.2 | |
| 4 | Portion that drains north, includes building | 1.3 | |
| 5 | Eastern parking, drains to existing pond per Master Plan | 2.3 | Drains to existing pond per Master Plan |
| 1a | Part of Basin 1 that was Master Planned to drain to pond | 0.2 | No longer drains to existing pond |
| 2a | Part of Basin 2 that was was Master Planned to drain to pond | 0.3 | No longer drains to existing pond |
| 3a | Part of Basin 3 that was Master Planned to drain to pond | 0.3 | No longer drains to existing pond |
| TOTAL DISCHARGE BASINS 1-4 | | 5.5 | CFS |
| TOTAL DISCHARGE BASINS 1a-3a (Part of Master Planned SUB-BASIN 2) | | 0.8 | _CFS |
| Portion of Basins 1-4 allowed to free discharge [(1-4) - (1a-3a)] | | 4.7 | CFS |
| TOTAL DISCHARGE BASINS 1-3 | | 4.2 | CFS |
| Sub-Basin 2 discharge from pond allowed by Master Plan | | 0.80 | CFS |
| Reduced discharge from pond by inlet constriction | | 0.45 | _CFS |
| | Amount of discharge constriction needed for Basins 1-4 | 0.35 | CFS |
| ALLOWEI | DISCHARGE BASINS 1-4 | 5.11 | CFS |



EXISITNG DETENTION POND

OUTLET PIPE OPENING CAPACITY CALCULATIONS

| Using orifice equation | ı Q=CA | * (2gh)^0.5 |
|------------------------|--------|-------------|
| C | == | 0.6 |
| A | = | 0.05 |
| g | = | 32.2 |
| h | = | 4.15 |
| Q | = | 0.48 |
| Clogging Factor | = | |
| Qclog | = | |

Note: The above calculations references 0.5' head. The following chart refers to head values from 0.1' to 1.0' for additional info.

| h = 0.5' | 0.17 | cfs |
|----------|------|-----|
| h = 1.0' | 0.24 | cfs |
| h = 1.5' | 0.29 | cfs |

h = 0.5' \longrightarrow 0.17 cfs h = 1.0' \longrightarrow 0.24 cfs h = 1.5' 0.29 cfs

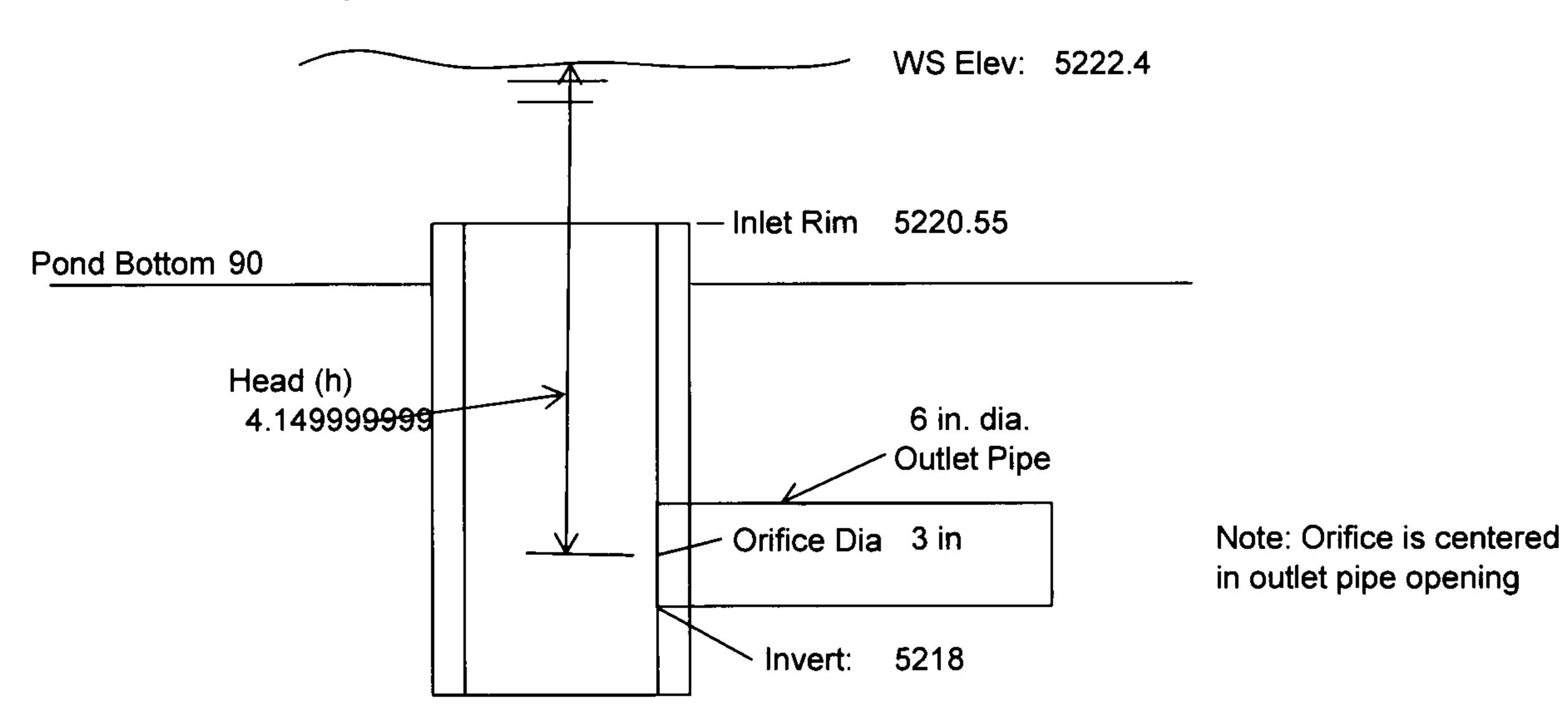
Existing Pond discharge per Master Plan =

Pond discharge with new outlet restriction =

Minimum flow reduction by new site =

0.80 cfs 0.48 cfs

Minimum flow reduction by new site = 0.32 cfs





CALCULATIONS: Applebee's at Holly Place: 0 HYDROGRAPH FOR SMALL WATERSHED DPM SECTION 22-2 * PAGE A-13/14

Base time, t_B, for a small watershed hydrograph is,

$$tB = (2.107 * E * A / Q_P) - (0.25 * A_D / A)$$

Where

| | 117 QP) (0.23 | **D / **) | |
|--------------|---------------|-------------|--|
| E A | = 1 | 2.18 inches | |
| Α | = | 1.15 acres | |
| A_{Γ} |) = | 0.98 acres | |
| Q_{P} | = | 5.5; cfs | |

BASINS 1 - 4

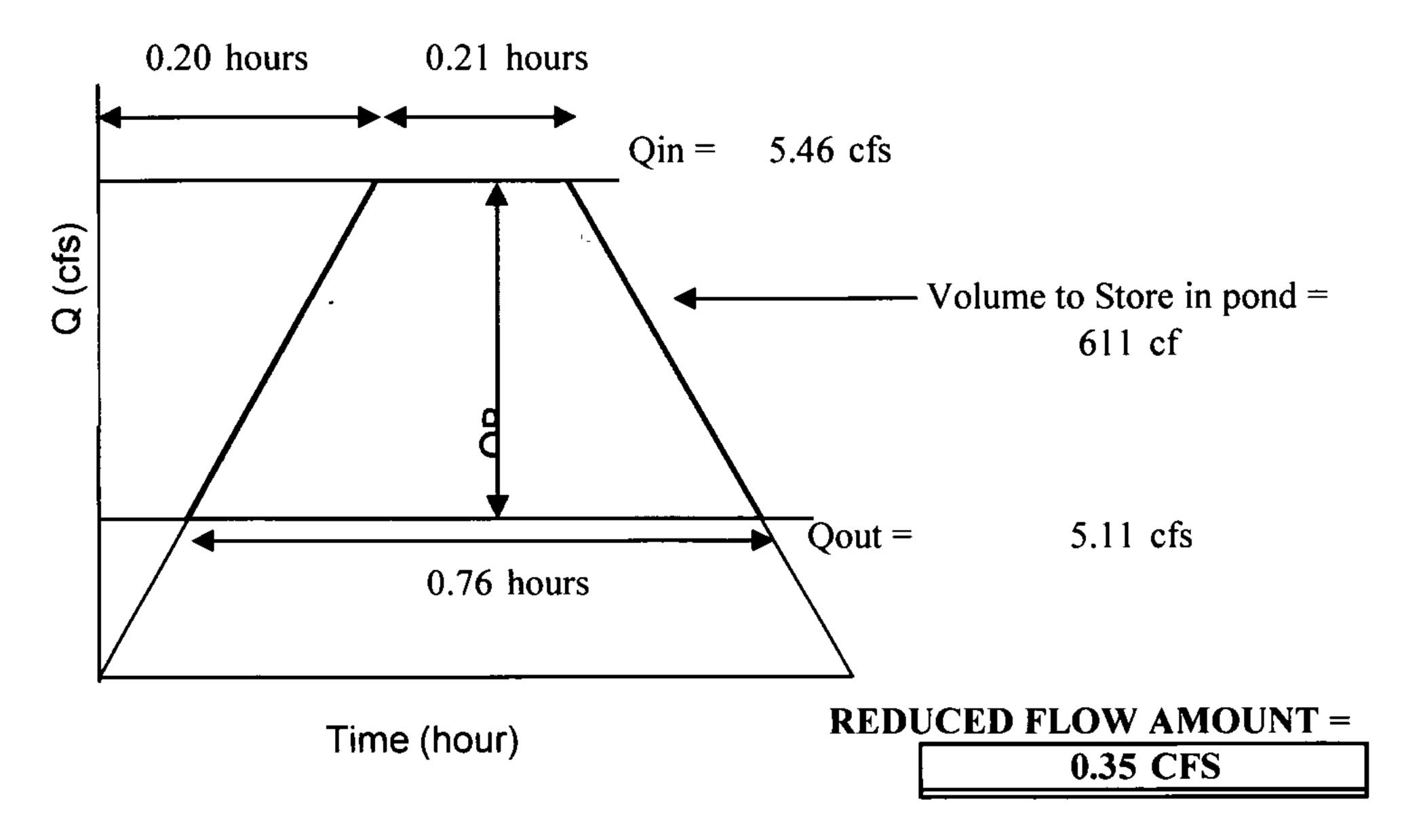
$$t_{\rm B} = 0.76 \text{ hours}$$

E is the excess precipitation in inches (from DPM TABLE A-8), Q_P is the peak flow, A_D is the area (acres) of treatment D, and A_T is the total area in acres. Using the time of concentration, t_C (hours), the time to peak in hours is:

$$t_P = (0.7 * tC) + ((1.6 - (A_D / A)) / 12)$$

Where $t_C = 0.20 \text{ hours}$
 $t_P = 0.20 \text{ hours}$

Continue the peak for $0.25 * A_D / A_T$ hours. When A_D is zero, the hydrograph will be triangular. When A_D is not zero, the hyrograph will be trapezoidal. see the graph below:



INFLOW / OUTFLOW HYDROGRAPH



CURB OPENING CAPACITY CALCULATION

Weir equation:

 $Q=CLH^{3/2}$

Constant

C = 3.33

Curb height

H =

0.5 **feet**

Opening Length

L =

1.00 feet

Q= 1.2 cfs

2×1.2 = 2,4 3×.24 = .72 3.12 cits disscharge from east pond



WESTERLY PARKING LOT POND - 4" PIPES

OUTLET PIPE OPENING CAPACITY CALCULATIONS

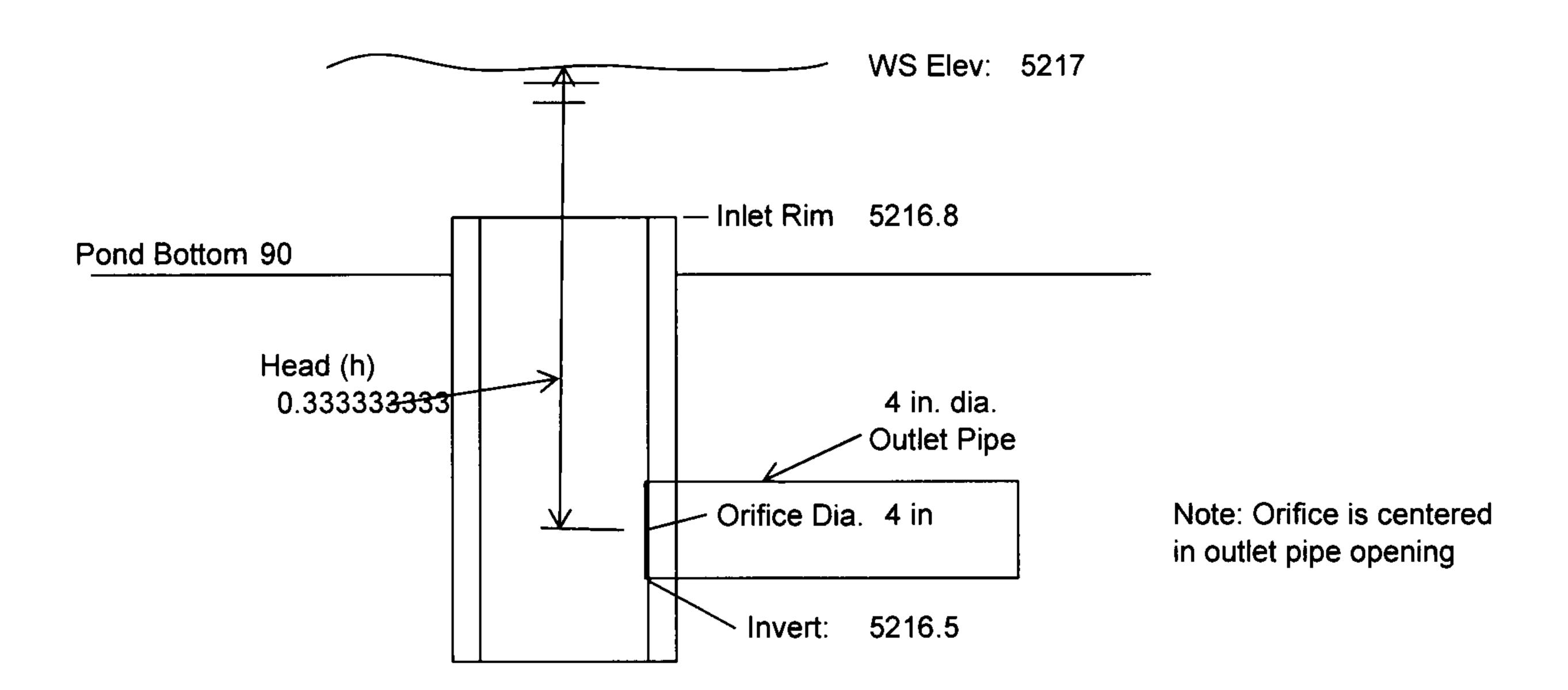
| Using orifice equation | n Q=CA | * (2gh)^0.5 |
|------------------------|--------|-------------|
| C | = | 0.6 |
| A | = | 0.09 |
| g | | 32.2 |
| h | = | 0.3333333 |
| Q | _ | 0.24 |
| Clogging Factor | = | |
| Qclog | = | |

Note: The above calculations references 0.5' head. The following chart refers to head values from 0.1' to 1.0' for additional info.

| h = 0.5' | 0.30 | cfs | $x_2 =$ | 0.59 | ¢fs |
|----------|------|-----|--------------------|------|-----|
| h = 1.0' | 0.42 | cfs | $\mathbf{x}_{2} =$ | 0.84 | cfs |
| h = 1.5' | 0.51 | cfs | x2 = | 1.03 | cfs |

4" discharge pipes through curb from westerly parking lot pond:

0.24 cfs each



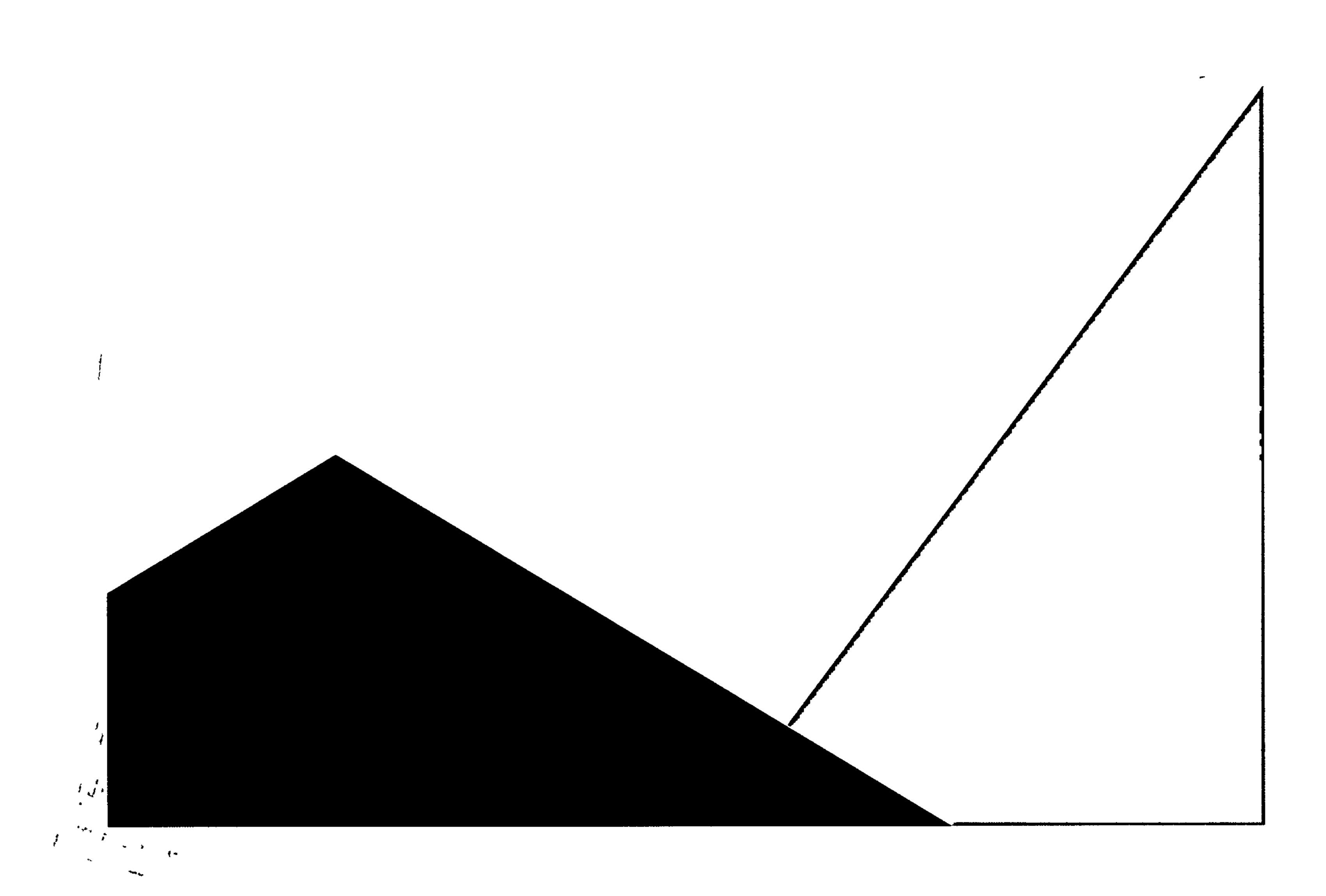


| POND NORTH OF BLDG | | | | |
|--------------------|-------|------------|--|--|
| Contour | Area | rea Volume | | |
| 5220.00 | 411.9 | | | |
| 5219.30 | 118.3 | 186 CF | | |
| | | | | |
| TOTAL VOL. | | 186 CF | | |

| PARKING LOT POND - WEST | | | |
|-------------------------|---------|--------|--|
| Contour | Area | Volume | |
| 5217.00 | 2302.8 | | |
| 5216.70 | 463.23 | 415 CF | |
| 5216.50 | 0 46 CF | | |
| | • | | |
| TOTAL V | OL. | 461 CF | |



OCT 23 2013
LAND DEVELOPMENT SECTION

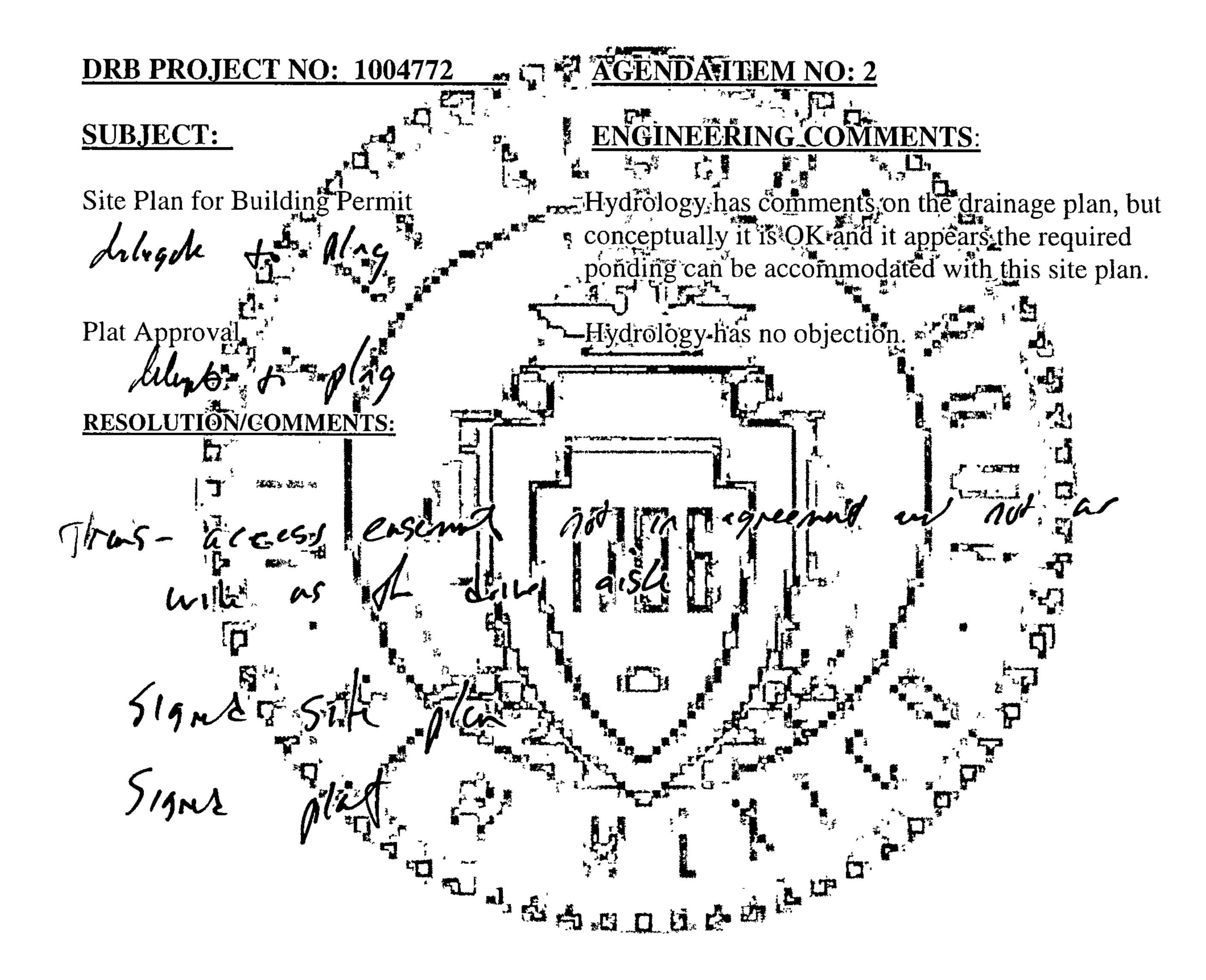


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CITY OF ALBUQUERQUE PLANNING DEPARTMENT

HYDROLOGY DEVELOPMENT SECTION

DEVELOPMENT REVIEW BOARD MEMO



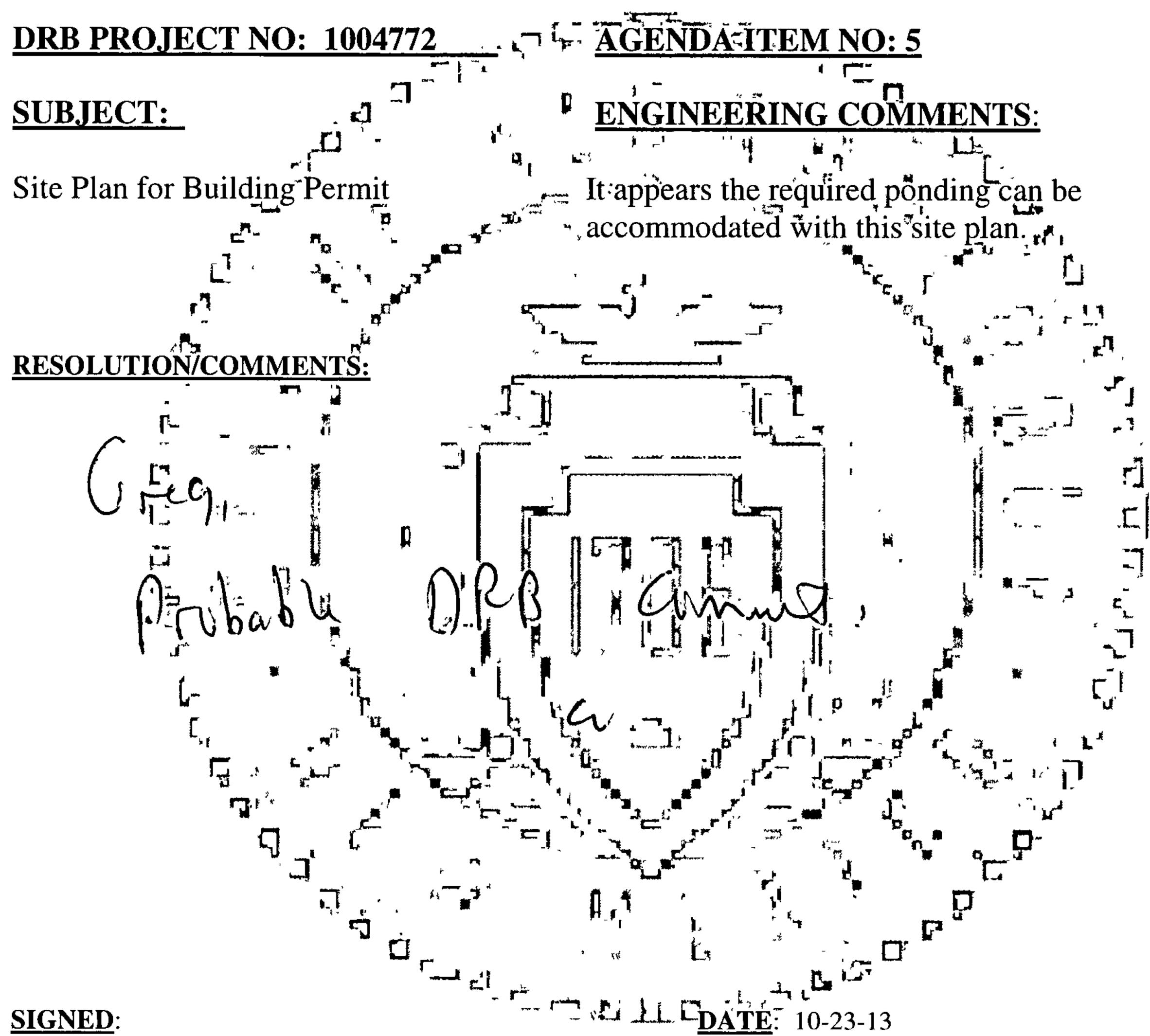
SIGNED:

Curtis Cherne
Hydrology Section
City Engineer Designee
AMAFCA Designee
924-3986

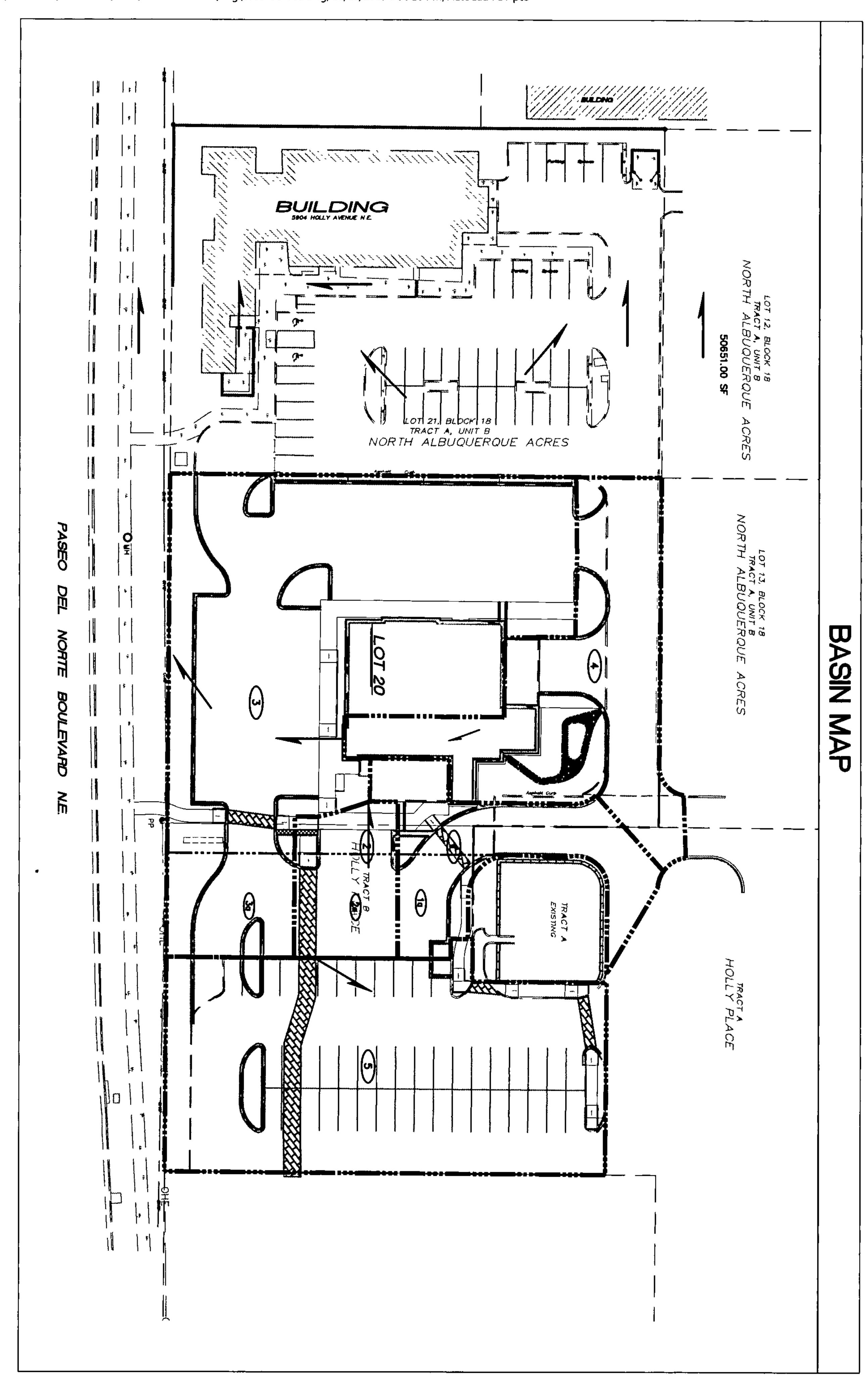
DATE: 11-13-13

CITY OF ALBUQUERQUE PLANNING DEPARTMENT

HYDROLOGY DEVELOPMENT SECTION DEVELOPMENT REVIEW BOARD MEMO



Curtis Cherne
Hydrology Section
City Engineer Designee
AMAFCA Designee
924-3986



CITY OF ALBUQUERQUE

PLANNING DEPARTMENT - Development Review Services

October 16, 2013



Richard J. Berry, Mayor

Ms. Genny Donart, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, New Mexico 87108

RE: Applebee's at Holly Place

B13-D022A

North Alb. Acres, Tract A, Unit B, Block 18, Lot 20 & Holly Place, Tract B Conceptual Grading & Drainage Plan for Site Development Plan, Grading Permit and Building Permit PE Stamp: 9/20/2013

Dear Ms. Donart:

Based upon the information provided in your submittal received 09-23-2013, the above referenced plan cannot be approved for Site Development Plan, Grading Permit, nor Building Permit.

PO Box 1293

Per our discussion of 10-15-13, incorporation of Holly Place Tract B into this plan has introduced additional runoff, which cannot be discharged to Lot 21, west of the site, at the proposed rate. Since you are considering detention ponding along the west side of Lot 20, I have framed the following comments in that perspective.

Albuquerque

Please review and address the following issues for Site Plan and Building Permit approval:

New Mexico 87103

www.cabq.gov

- 1. A portion of Tract B included in drainage Basins 1, 2 and 3, was master planned ("Holly Place Commercial Phase II," 10/26/07 by Fred Arfman) to drain to, and be detained in, the existing detention pond on Tract A. Routing of these additional flows through Applebee's site (Lot 20) will require detention prior to discharging onto Lot 21. Lot 21 and it's outfall channel were designed an with assumed runoff rate of 4.629 cfs/acre from Lot 20, only.
- 2. Revise your Basin map on CG-501 to show the "offsite" flows that enter Basin 5, which constitute the remainder of Sub-Basin 2 from the 2007 analysis. Basin 5 should also include the area of the existing detention pond. Revise calculations accordingly.
- 3. Refine the "PROJECT INFORMATION, Proposed Conditions:" on CG-101 to reflect the above constraints, rather than "FREE DISCHARGE."

 $M_{1 \text{ of } 2}$

October 16, 2013

C18-D073A - Applebee's at Holly Place

Page 2

4. Label the new basin discharge points and rates at detention pond inlets and outlets, and where flows enter and leave the site.

5. CG-501: Dimension the thickness on the Rock Swale, Detail 2.

Please advise your client that because this site exceeds 1.0 acre, any Grading or Building on this site will require a Storm Water Pollution Prevention Plan (SWPPP). Also, an Erosion and Sediment Control (ESC) Plan, prepared by a NM Registered Professional Engineer, must be submitted to and approved by this office, prior to Building Permit approval and start of grading.

If you have questions, please email me at grolson@cabq.gov or phone 505-924-3994.

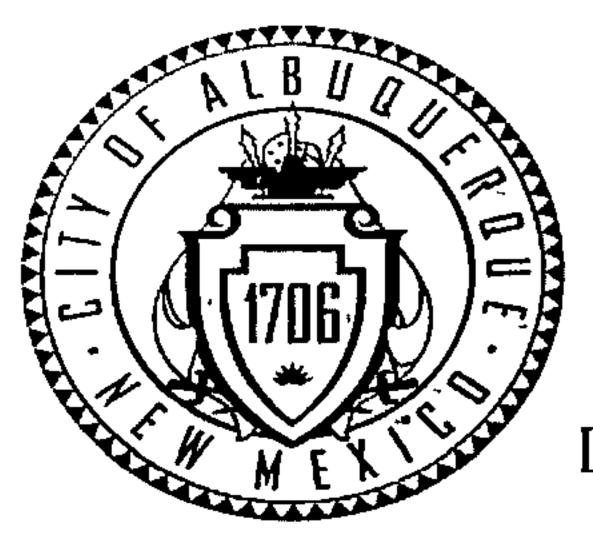
Sincerely,

Gregory R. Olson, P.E.

Senior Engineer

Orig: Drainage file C18/D073A

c.pdf Addressee via Email GennyD@IAcivil.com



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

| Project Title: Applebee's at Holly Place | <u> </u> | Building Permit #: 13 | 201392320 | City Drainage #: C18/D/C/ |
|---|---------------------------------------|---|---------------|---|
| DRB#: | EPC#: | | Work Order#: | |
| Legal Description: Lot 20, Block 18, Trac | ct A, Unit B, North A | Ibuquerque Acres & Tract B, | Holly Place | · · · · · · · · · · · · · · · · · · · |
| City Address: | <u> </u> | | | |
| Engineering Firm: Isaacson & Arfman, | P.A. | · · · · · · · · · · · · · · · · · · · | Contact: Gen | ny Donart |
| Address: 128 Monroe S | treet, NE - Albuquer | que, NM 87108 | | |
| Phone#: (505) 268-882 | 28 Fax#: N/A | | E-mail: genn | yd@iacivil.com |
| Owner: Apple Investors Group | | | Contact: Mich | nael D. McGough |
| Address: 917 Ravenwood Way - Canto | on, GA 30115 | · · · · · · · · · · · · · · · · · · · | | |
| Phone#: (770) 547-5920 | Fax#: <u>N/A</u> | | E-mail: mich | ael.mcgough@appleig.com |
| Architect: Klover Architects, Inc. | <u> </u> | | Contact: Cha | d Renoux |
| Address: 10955 Lowell Ave., Suite 700 |) - Overland Park, K | S 66210 | | |
| Phone#: (913) 649-8181 | Fax#: | | E-mail: | |
| Surveyor: Surv-Tek, Inc. | | | Contact: Rus | s P. Hugg |
| Address: 9384 Valley View Drive NW - | - Albuquerque, NM | 87114 | | |
| Phone#: (505) 897-3366 | Fax#: | | E-mail: | · |
| Contractor: | · · · · · · · · · · · · · · · · · · · | <u> </u> | Contact: | i |
| Address: | Fax#: | · - · · · · · · · · · · · · · · · · · · | E-mail: | |
| Phone#: | ΓαX#. | <u> </u> | L'-man. | · |
| TYPE OF SUBMITTAL: | | CHECK TYPE OF APPROVA | | |
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| X DRAINAGE PLAN 1st SUBMITTAL DRAINAGE PLAN RESUBMITTAL | <u> </u> | S. DEV. PLAN FOR SUB'D A | | |
| X CONCEPTUAL G & D PLAN —— | | S. DEV. FOR BLDG. PERMI | | 3 <u> </u> |
| GRADING PLAN | | SECTOR PLAN APPROVAL | | |
| EROSION & SEDIMENT CONTROL | PLAN (ESC) | FINAL PLAT APPROVAL | IIn/ St | P 2 3 2013 \ \ \ \ \ \ |
| ENGINEER'S CERT (HYDROLOGY | · · · · · · · · · · · · · · · · · · · | | NOVERERM) | TOTION! |
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| TRAFFIC CIRCULATION LAYOUT | (TCL) | FOUNDATION PERMIT API | PROVAL | |
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| ENGINEER'S CERT (DRB SITE PLA | (N) | GRADING PERMIT APPRO | VAL | SO-19 APPROVAL |
| ENGINEER'S CERT (ESC) | | PAVING PERMIT APPROVA | A L | ESC PERMIT APPROVAL |
| SO-19 | | WORK ORDER APPROVAL | | ESC CERT. ACCEPTANCE |
| OTHER (SPECIFY) | | GRADING CERTIFICATION | 1 | OTHER (SPECIFY) |
| WAS A PRE-DESIGN CONFERENCE ATT | ENDED: | Yes X No Co | py Provided | |
| DATE SUBMITTED: September 23, 20 | | Genevieve Donart | _ - | |
| | | for Isaacson & Arfman, P.A | 1 | |

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following

- 1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
- 2 Drainage Plans Required for building permits, grading permits, paving permits and site plans less than five (5) acres
- 3 Drainage Report. Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
- 4. Erosion and Sediment Control Plan: Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

