

#### CITY OF ALBUQUERQUE PLANNING DEPARTMENT

HYDROLOGY DEVELOPMENT SECTION DEVELOPMENT REVIEW BOARD MEMO

DRB PROJECT NO: 1003916

SUBJECT:

Vacation of Public Easement

MN

**Bulk Land Variance** 

MAI

Plat Approval

MN

PO Box 1293

Albuquerque

NM 87103

for appear period and red, Marst interim Nude

www.cabq.govRESOLUTION/COMMENTS:

**AGENDA ITEM NO: 1** 

**ENGINEERING COMMENTS:** 

Hydrology has no objection.

Tracts 1 and 2 are Zoned R-2, and do not qualify for a Bulk Land Variance.

Hydrology has an approved Conceptual Drainage Report, 12-2-11 for plat approval.

Since all public improvements are built except storm drain, the private storm drain connections to the public storm drain will be required at Building Permit including; The construction plans are to be submitted to DRC prior to the Building Permit being approved and the Work Order is to be accepted prior to the first CO being issued.

Hydrology if waiting to see the revised plat.

SIGNED:

Curtis Cherne Hydrology Section City Engineer Designee AMAFCA Designee 924-3968 process for approvals

DATE: 12-14-11 3-12-12

#### Cherne, Curtis

From: Kurt Browning [kbrowning@titan-development.com]

Sent: Thursday, December 01, 2011 10:47 AM

To: Cloud, Jack W.

Cc: Cherne, Curtis; Fred Arfman; Drew Dolan; Ben Spencer; Dourte, Richard H.

Subject: 2:30 Friday -RE: Meeting?- Deferral-Old Del Rey (Santa Monica) Bulk Plat -DRB-

#### Hi Jack-

Thanks for getting back to us. This infill tract is 60 acres and how it will develop is TBD but we need the zone change for anything to happen. Alignments of possible storm drains either onsite or within ROW is conceptual only. Fred will submit the revised conceptual drainage plan today and lets plan on meeting Friday at 2:30.

I understand that Fred and Curtis have talked briefly about the revised conceptual drainage plan and a key point is the R2 area will be private drainage to the existing SD outfalls, so the issue is only the private stub connection (five feet?) to serve this area.....similar to a water or sewer connection. (Fred- comments?) I agree, the balance of the 60 acres will be subdivided in the future at which time an SIA and FG are required for these areas.

As stated below, perhaps a note on the plat stating that the R2 must have a private connection to the existing storm drain facilities. (Although this would be required anyway for any R2 project to function.) We have added similar pertinent notes in the past.

Please note, as part of the EPC required bulk plat for the zone change boundaries, Richard requested that a "conceptual" drainage plan be prepared for this 60 acre infill tract so that a "drainage roadmap" was in the City file. I think the intent was to show that the tract could drain and that adequate facilities do exist at the NW corner. (Afterall, it used to be a 60 acre MHP and it drained.)

Lastly, we need help in understanding the "City's exposure" and concerns here.

- Any development in the R2 area will require design and construction of a private drainage connection no different than any stand alone site elsewhere.
- Any development of the upper RLT, RT areas will require platting (SIA and FG), design and construction for drainage.

Thank you for working with us on this issue and allowing us to defer one week. We look forward to meeting with you Friday at 2:30. Please call if we can discuss further. Regards,

Kurt

Del Rey Investments, LLC

KURT BROWNING, P.E., Broker
DIRECTOR OF DEVELOPMENT/CONSTRUCTION

Titan Development / Argus Development 6300 Riverside Plaza Lane NW, Ste. 200

Albuquerque, NM 87120 (O) 505.998.0163 (C)505.379.8009 KBROWNING@TITAN-DEVELOPMENT.COM



**From:** Cloud, Jack W. [mailto:jcloud@cabq.gov] **Sent:** Thursday, December 01, 2011 9:41 AM

To: Kurt Browning

**Cc:** Cherne, Curtis; Fred Arfman; Drew Dolan; Ben Spencer; Dourte, Richard H. **Subject:** RE: Meeting?- Deferral-Old Del Rey (Santa Monica) Bulk Plat -DRB-

#### Kurt -

The proposal you describe for a storm drain <u>internal to your site</u> adjacent to Derrickson would need more than a blanket cross-lot drainage easement (that type of easement is for surface flows only) - an additional dimensioned/ defined Private Drainage Easement would be needed for a storm drain, otherwise the future developer of proposed Tract 3 would have to build a public storm drain in Derrickson R-O-W.

To address any obligation for the stub of storm drains in City R-O-W, in accordance with the Subdivision Ordinance a bulk land subdivision is for land where the DRB expects "further subdivision or zoning site development plan approval." - the proposed R-2 portion of this land does not meet the criteria of the ordinance or the DPM, which states "parcels zoned for multi-family apartment or non-residential use must be 40 acres or larger in size" in order to qualify for the waiving of infrastructure improvements. The DRB cannot waive required infrastructure in violation of the Subdivision Ordinance.

The reference in the DPM's 'NOTICE OF SUBDIVISION PLAT CONDITIONS" is for "*development* permits" (typically grading), not necessarily building permits; proposed Tracts 3-4 *do* qualify for a bulk land variance, therefore the bulk land notice on the plat would need to be specific to these tracts only.

Curtis (and the DRB) will still need to review the revised Grading and Drainage Plan prior to meeting with you and Fred - we have 11 new submittals to review for next week, but if Fred submits his plan today (Thursday) Curtis and I could meet with you all at 2:30 on Friday.

- Jack Cloud, Chair

**Development Review Board** 

From: Kurt Browning [mailto:kbrowning@titan-development.com]

Sent: Wednesday, November 30, 2011 11:52 AM

To: Cloud, Jack W.

Cc: Cherne, Curtis; Fred Arfman; Drew Dolan; Ben Spencer

Subject: Meeting?- Deferral-Old Del Rey (Santa Monica) Bulk Plat -DRB-

Hi Jack-

Thank you for allowing us the deferral this morning as I think we can find a solution to this issue. As I stated at the hearing, this bulk plat is a requirement of the EPC to establish the zoning lines when we changed the zoning from Mobile Home Park to Residential and the site is already surrounded by existing infrastructure. (It's an infill site.)

As we wait for the economy to rebound, we do not know overall how this block will develop, however, Fred did prepare a "Conceptual" drainage plan at Richard's request with some options. As I stated, we do know that the entire site can drain adequately to the existing Storm Drains at the NW corner. We have already requested Fred revise his concept plan to show any proposed Derrickson SD <u>internal to our site</u> (preferred)....which will be easier for us to access in the future anyway. Therefore future infrastructure will be onsite.

For any proposed development, short stubs or tie-ins (5-10 feet- see attached in red) will need to be made to the SD lines/inlets as well as the existing water/sewer trunklines.

<u>To address any obligation regarding this stub</u>, I suggest that the blanket cross-lot drainage easement note on the bulk plat be expanded to address this short tie-in obligation. This along with the Bulk Land variance language (which references permit) should suffice for the R-2 concern. We will prepare a revised note for your review and concurrence.

Fred will finish his edited concept plan by tomorrow showing the main SD ONSITE and we would like to meet with you and Curtis late Thurs (4pm?) or Friday morning (9am?) to review. Please let us know what might work for you and thanks again for your time.

Regards, Kurt

Del Rey Investments, LLC

KURT BROWNING, P.E., Broker
DIRECTOR OF DEVELOPMENT/CONSTRUCTION

Titan Development / Argus Development 6300 Riverside Plaza Lane NW, Ste. 200 Albuquerque, NM 87120 (O) 505.998.0163 (C)505.379.8009 KBROWNING@TITAN-DEVELOPMENT.COM



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CONCOR

1. Fred C. Cutzer

2. 2-2-11

NO INF, List Requires

| PROJECT TITLE: Santa Monica Place Tracts 1-4 DRB#: EPC#:  | ZONE MAP/DRG.FILE# <u>D-18-Z</u> <u>D-18/0059</u><br>WORK ORDER#:  |  |
|---|--|--|
| LEGAL DESCRIPTION: (Existing) Blocks 18 and 19, Tract A, Unit A, North Albuquerque Acres  CITY ADDRESS:   |  |  |
| ENGINEERING FIRM: <u>ISAACSON AND ARFMAN</u> ADDRESS: <u>128 MONROE N.E.</u> CITY, STATE: <u>ALBUQUERQUE, NM</u>  | PHONE: <u>268-8828</u>   |  |
| OWNER: <u>Titan Development</u> ADDRESS: <u>6300 Riverside Plaza Lane NW - #200</u> CITY, STATE: <u>Albuquerque, NM</u>   | PHONE:   |  |
| ARCHITECT: NA ADDRESS:CITY, STATE:  | PHONE:   |  |
| SURVEYOR: Surv-Tek, Inc. ADDRESS: CITY, STATE:  | PHONE: 897-3366  |  |
| CONTRACTOR: NAADDRESS:CITY, STATE:  | PHONE:   |  |
| TYPE OF SUBMITTAL:  DRAINAGE REPORT DRAINAGE PLAN 1st SUBMITTAL DRAINAGE PLAN RESUBMITTAL CONCEPTUAL G & D PLAN RESUBMITTAL RESUBMITTAL CONCEPTUAL G & D PLAN RESUBMITTAL | CHECK TYPE OF APPROVAL SOUGHT:  SIA/FINANCIAL GUARANTEE RELEASE  PRELIMINARY PLAT APPROVAL  S. DEV. PLAN FOR SUB'D APPROVAL  S. DEV. FOR BLDG. PERMIT APPROVAL  SECTOR PLAN APPROVAL  FINAL PLAT APPROVAL  FOUNDATION PERMIT APPROVAL  BUILDING PERMIT APPROVAL  CERTIFICATE OF OCCUPANCY (PERM)  CERTIFICATE OF OCCUPANCY (TEMP)  GRADING PERMIT APPROVAL  PAVING PERMIT APPROVAL  WORK ORDER APPROVAL  OTHER (SPECIFY) |  |
|   | NOV 1 2011   |  |
| SUBMITTED BY: <u>Åsa Nilsson-Weber, PE</u> Isaacson & Arfman, P.A.  | HYDRDATE: November 18, 2011  |  |
|   | bdivision Plats shall be accompanied by a drainage submittal. The  |  |

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 define 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.

December 6, 2011



Asa Nilsson-Weber, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, NM 87108

Re: Santa Monica Place Tracts 1-4, Conceptual Drainage Report Engineer's Stamp dated 12-2-2011 (D18/D054)

Dear Ms. Weber,

Copy: e-mail

Based upon the information provided in your submittal received 12-2-11, the above referenced report is approved for Final Plat action by the DRB.

As agreed upon, private storm drain connecting to the storm drain in San Pedro or Derickson will be required when Tract(s) 1 and /or 2 develop. The Work Order should be submitted for Preliminary Review before the Building Permit is approved. The Work Order should be accepted prior to the first Certificate of Occupancy being issued.

Tracts 3 and 4 will go through DRB and the appropriate drainage infrastructure will be required as part of the platting process.

If you have any questions, you can contact me at 924-3986

Albuquerque

PO Box 1293

NM 87103

www.cabq.gov

Cute or Cheve

Curtis Cherne, P.E.

Principal Engineer, Planning Dept. Development and Building Services

| PROJECT TITLE: Santa Monica Place Tracts 1-4 DRB#: EPC#:  | ZONE MAP/DRG.FILE# <u>D-18-</u> DO5 <sup>2</sup> .  WORK ORDER#:   |
|---|--|
| LEGAL DESCRIPTION: (Existing) Blocks 18 and 19, Trac CITY ADDRESS:  |  |
| ENGINEERING FIRM: ISAACSON AND ARFMAN  ADDRESS: 128 MONROE N.E.  CITY, STATE: ALBUQUERQUE, NM  OWNER: Titan Development  ADDRESS: 6300 Riverside Plaza Lane NW - #200  CITY, STATE: Albuquerque, NM  ARCHITECT: NA  ADDRESS:  | CONTACT:   |
| CITY, STATE:  SURVEYOR: Surv-Tek, Inc.  ADDRESS:  CITY, STATE:  CONTRACTOR: N/A  ADDRESS:  CITY, STATE:   | ZIP CODE:  CONTACT: Russ P. Hugg, PHONE: 897-3366  ZIP CODE:  CONTACT: PHONE: ZIP CODE:  |
| TYPE OF SUBMITTAL:  DRAINAGE REPORT  DRAINAGE PLAN 1st SUBMITTAL  DRAINAGE PLAN RESUBMITTAL  CONCEPTUAL G & D PLAN  GRADING PLAN  EROSION CONTROL PLAN  ENGINEER'S CERT (HYDROLOGY)  CLOMR/LOMR  TRAFFIC CIRCULATION LAYOUT  ENGINEER/ARCHITECT CERT (TCL)  ENGINEER/ARCHITECT CERT (DRB S.P.)  ENGINEER/ARCHITECT CERT (AA)  OTHER (SPECIFY) | CHECK TYPE OF APPROVAL SOUGHT:  SIA/FINANCIAL GUARANTEE RELEASE  PRELIMINARY PLAT APPROVAL  S. DEV. PLAN FOR SUB'D APPROVAL  S. DEV. FOR BLDG. PERMIT APPROVAL  SECTOR PLAN APPROVAL  FINAL PLAT APPROVAL  FOUNDATION PERMIT APPROVAL  BUILDING PERMIT APPROVAL  CERTIFICATE OF OCCUPANCY (PERM)  CERTIFICATE OF OCCUPANCY (TEMP)  GRADING PERMIT APPROVAL  PAVING PERMIT APPROVAL  WORK ORDER APPROVAL  OTHER (SPECIFY) |
| WAS A PRE-DESIGN CONFERENCE ATTENDED:  YES NO COPY PROVIDED  SUBMITTED BY: <u>Åsa Nilsson-Weber, PE</u>   | DATE: December 1, 2011   |

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 define 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.

April 26, 2012

Asa Nilsson-Weber, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, NM 87108

Re: **Broadstone Santa Monica Place** 

**Grading and Drainage Plan** 

Engineer's Stamp dated 4-10-2012 (D18/D054)

Dear Ms. Nilsson-Weber,

Based upon the information provided in your submittal received 4-10-2012, the above referenced submittal is approved for Grading Permit and Building Permit.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge for disturbing one acre or more and a Topsoil Disturbance Permit for disturbing 3/4 of an acre or more. Please attach a copy of the approved plans to the construction sets prior to sign-off by Hydrology. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

Albuquerque's MS4 Permit became effective March 1st, 2012. Grading and Drainage Plans and Drainage Reports will have to comply with the requirements of the new permit (http://www.cabq.gov/planning/landcoord/documents/EPA-NMS000101-FinalPermit.pdf).

If you have any questions, you can contact me at 924-3695.

Sincerely,

Shahab Biazar, P.E.

Senior Engineer, Planning Dept. Development and Building Services

C: e-mail

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Albuquerque - Making History 1706-2006

| PROJECT TITLE: Broadstone Santa Monica DRB#: EPC#:  | ZONE MAP/DRG.FILE# D-18-1054 WORK ORDER#:  |
|---|--|
| LEGAL DESCRIPTION: Tract 2, Santa Monica Place CITY ADDRESS: Santa Monica Ave. & San Pedro Blvd   |  |
| ENGINEERING FIRM: <u>ISAACSON AND ARFMAN</u> ADDRESS: <u>128 MONROE N.E.</u> CITY, STATE: <u>ALBUQUERQUE, NM</u>  | CONTACT: <u>Åsa Nilsson-Weber</u> PHONE: <u>268-8828</u> ZIP CODE: <u>87108</u>  |
| OWNER: <u>Titan Development</u> ADDRESS: <u>6300 Riverside Plaza Lane NW - #200</u> CITY, STATE: <u>Albuquerque</u> , NM  | CONTACT: Kurt Browning PHONE: ZIP CODE: 87120  |
| ARCHITECT: ADDRESS: CITY, STATE:  | CONTACT: PHONE: ZIP CODE:  |
| SURVEYOR: Surv-Tek, Inc. ADDRESS:   | CONTACT: Russ P. Hugg, PHONE: 897-3366 ZIP CODE:   |
| CONTRACTOR: N/AADDRESS:CITY, STATE:   | CONTACT:PHONE:ZIP CODE:  |
| TYPE OF SUBMITTAL:  DRAINAGE REPORT  DRAINAGE PLAN I <sup>SI</sup> SUBMITTAL  DRAINAGE PLAN RESUBMITTAL  CONCEPTUAL G & D PLAN  GRADING PLAN  EROSION CONTROL PLAN  ENGINEER'S CERT (HYDROLOGY)  CLOMR/LOMR  TRAFFIC CIRCULATION LAYOUT  ENGINEER/ARCHITECT CERT (TCL)  ENGINEER/ARCHITECT CERT (DRB S.P.)  ENGINEER/ARCHITECT CERT (AA)  OTHER (SPECIFY) Supplemental Calculations | CHECK TYPE OF APPROVAL SOUGHT:  SIA/FINANCIAL GUARANTEE RELEASE  PRELIMINARY PLAT APPROVAL  S. DEV. PLAN FOR SUB'D APPROVAL  S. DEV. FOR BLDG. PERMIT APPROVAL  SECTOR PLAN APPROVAL  FINAL PLAT APPROVAL  FOUNDATION PERMIT APPROVAL  BUILDING PERMIT APPROVAL  CERTIFICATE OF OCCUPANCY (PERM)  CERTIFICATE OF OCCUPANCY (TEMP)  GRADING PERMIT APPROVAL  BUILDING PERMIT APPROVAL  CERTIFICATE OF OCCUPANCY (TEMP)  GRADING PERMIT APPROVAL  WORK ORDER APPROVAL  OTHER (SPECIFY) |
| WAS A PRE-DESIGN CONFERENCE ATTENDED:  YES  NO COPY PROVIDED  | APR 1 0 2012  HYDROLOGY SECTION  |
| SUBMITTED BY: <u>Åsa Nilsson-Weber, PE</u><br>Isaacson & Arfman, P.A.   | DATE: April 10, 2012   |

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 define 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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- 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.



### Isaacson & Arfman, P.A.

**Consulting Engineering Associates** 

Thomas O. Isaacson, PE (Ret.) & LS (Ret.) \* Fred C. Arfman, PE \* Åsa Nilsson-Weber, PE

April 10, 2012

Mr. Curtis Cherne, P.E. Planning Dept. Development and Building Services City of Albuquerque P.O. Box 1293 Albuquerque, NM 87102

Re: Broadstone Santa Monica—D18/D054

Dear Mr. Cherne,

This letter is in reference to your comments for the referenced project dated 4/2/12 (attached). Please see below for responses to your comments.

- 1. The intent of the storm drain outfall structure is to dissipate the velocity of the storm drain discharge and overflow it to the south paved drive over a 6.5-foot wide weir. Flow remaining in the lower 6 inches will pass to the north via the proposed 4-inch drainline. The peak flow in the 4-inch pipe is 0.5 cfs and the remaining flows of 21.0 cfs discharges via the weir. See Supplemental Calculations for weir overflow and 4-inch orifice calculations. Based on these calculations, the water surface elevation will be 63.0—one foot above the flowline elevation. The curb adjacent to the weir will be 12 inches high with transitions to the top of wall elevation of 64.5.
- 2. Off-site contours have been referenced on the plan to clearly show the grade transition to the north. This includes the area at the northwest corner of the site.
- 3. All units have pitched roofs which drain to all sides. A shallow swale has been added on the west side of the northwest corner unit to pass roof discharge to the north.
- 4. Keyed note #8 has been modified to clearly indicate that all parking islands will have depressed landscaping to harvest stormwater which falls on them. These numerous water harvesting areas will help to reduce the peak flow within San Pedro. We have not provided curb cuts in the islands for the following reasons.
  - a. Landscaping would need to be depressed more than 6" below top of curb to accept and retain street flow.
  - b. Openings would permit stormwater to pass from the landscaping to the pavement.

Mr. Curtis Cherne April 10, 2012 Page 2

- c. None of the islands have capacity to detain significant additional volume.
- d. Based on the soils report for this site, we do not want to introduce additional detention/infiltration within the building areas.

Please call or email me @ asaw@iacivil.com with any additional questions or comments. Thank you.

Sincerely,

ISAACSON & ARFMAN P.A.

Åsa Nilsson-Weber, P.E.

Attachments:

Grading Plans & Supplemental Calculations

dea Clilsson-Weber

April 2, 2012



Asa Nilsson-Weber, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, NM 87108

Re: **Broadstone Santa Monica Place** 

**Grading and Drainage Plan** 

**Engineer's Stamp dated 3-7-2012 (D18/D054)** 

Dear Ms. Nilsson-Weber,

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 3-8-12, the above referenced report can not be approved for Grading Permit and Building Permit until the following comments are addressed.

- Pond calculations are needed for the small pond just north of the entrance/exit on San Pedro. What is the WSE?
- How are the proposed contours tying in with the contours to the north of this site at the NW corner?
- Provide the direction of roof flows for the units in the NW corner. These flows should not drain over the sidewalk.
- Are all landscape areas being depressed as well as the areas with sidewalk culverts? Can the small islands in the parking lots contain a 1' cut in the curb to accept flows? This would assist in lowering the flows entering San Pedro for the first 6 hours and would also help with the new EPA regulations and the MS 4 permit coming in the near future.

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

Sincerely, Cent a cler

Curtis Cherne, P.E.

Principal Engineer, Planning Dept. Development and Building Services

Copy: e-mail

### SUPPLEMENTAL CALCULATIONS

**FOR** 

## BROADSTONE SANTA MONICA San Pedro Blvd. and Santa Monica Ave. NE

BY



Consulting Engineering Associates

Thomas O. Isaacson, PE (Ret.) & LS (Ret) Fred C. Arfman, PE Åsa Nilsson-Weber, PE

I&A Project No. 1900

Prepared by:

Åsa Nilsson-Weber, PE

Date

- WEIR CALCULATIONS FOR STILLING BASIN NORTH OF SAN PEDRO ENTRANCE
- ORIFICE CALCULATIONS FOR 4" PIPE FROM STILLING BASIN TO SIDEWALK CULVERT NORTH OF SAN PEDRO ENTRANCE

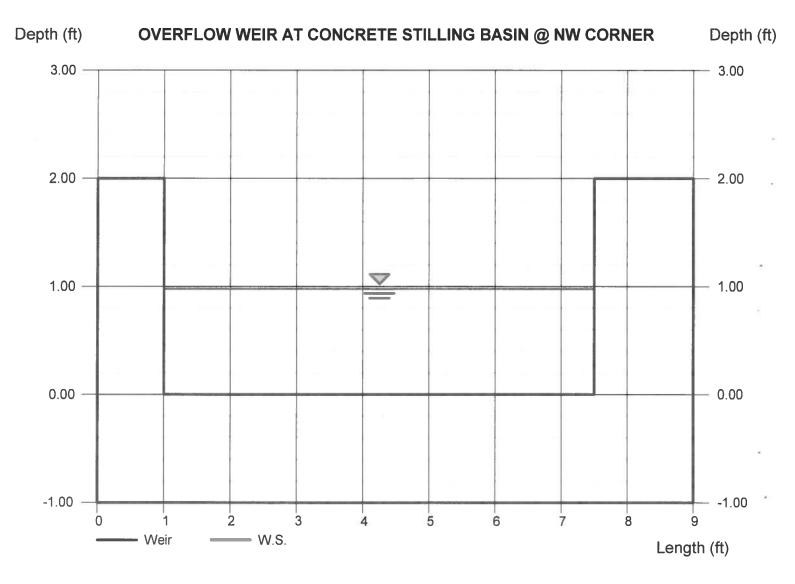
### Weir Report

Hydraflow Express Extension for AutoCAD® Civil 3D® 2012 by Autodesk, Inc.

Tuesday, Apr 10 2012

### OVERFLOW WEIR AT CONCRETE STILLING BASIN @ NW CORNER

| Rectangular Weir   |         | Highlighted     |         |
|--------------------|---------|-----------------|---------|
| Crest              | = Sharp | Depth (ft)      | = 0.98  |
| Bottom Length (ft) | = 6.50  | Q (cfs)         | = 21.00 |
| Total Depth (ft)   | = 2.00  | Area (sqft)     | = 6.37  |
| ,                  |         | Velocity (ft/s) | = 3.30  |
| Calculations       |         | Top Width (ft)  | = 6.50  |
| Weir Coeff. Cw     | = 3.33  |                 |         |
| Compute by:        | Known Q |                 |         |
| Known Q (cfs)      | = 21.00 |                 |         |



#### **BROADSTONE SANTA MONICA**

#### ORIFICE EQUATION - 4" PIPE FROM STILLING BASIN TO SIDEWALK CULVERT

The Orifice Equation is used to calculate the Flow at the opening of a Channel  $Q = C*A * (2*g*h) ^0.5$ Where Q 0.52 cfs C 0.6 (indicating that the opening will function at 60% capacity) Α 0.0872665 sq.ft. 32.2 ft/sec^2 g ft h 1.55 depth of flow at opening from the center of culvert

Inv 4" pipe=61.3; WSEL=63.0

April 2, 2012



Asa Nilsson-Weber, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, NM 87108

Re: Broadstone Santa Monica Place
Grading and Drainage Plan
Engineer's Stamp dated 3-7-2012 (D18/D054)

Dear Ms. Nilsson-Weber,

Based upon the information provided in your submittal received 3-8-12, the above referenced report can not be approved for Grading Permit and Building Permit until the following comments are addressed.

- Pond calculations are needed for the small pond just north of the entrance/exit on San Pedro. What is the WSE?
- How are the proposed contours tying in with the contours to the north of this site at the NW corner?
- Provide the direction of roof flows for the units in the NW corner. These flows should not drain over the sidewalk.
- Are all landscape areas being depressed as well as the areas with sidewalk culverts? Can the small islands in the parking lots contain a 1' cut in the curb to accept flows? This would assist in lowering the flows entering San Pedro for the first 6 hours and would also help with the new EPA regulations and the MS 4 permit coming in the near future.

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

Sincerely,

Curtis Cherne, P.E.

Principal Engineer, Planning Dept. Development and Building Services

Copy: e-mail

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

| PROJECT TITLE: Santa Monica Place Tracts 1-4 DRB#: EPC#: EPC#:  | ZONE MAP/DRG.FILE# <u>D-18-</u> <u>0054</u><br>WORK ORDER#:   |
|---|---|
| LEGAL DESCRIPTION: Tracts 2, Santa Monica Place   |   |
| CITY ADDRESS. Same Maria A. R.C. D. I. D. I.  |   |
| ENGINEERING FIRM: <u>ISAACSON AND ARFMAN</u> ADDRESS: <u>128 MONROE N.E.</u> CITY, STATE: <u>ALBUQUERQUE, NM</u>  | CONTACT: <u>Åsa Nilsson-Weber</u> PHONE: <u>268-8828</u> ZIP CODE: <u>87108</u>   |
| OWNER: Titan Development  | CONTACT: Kurt Browning  |
| ADDRESS: 6300 Riverside Plaza Lane NW - #200  | PHONE:  |
| CITY, STATE: Albuquerque, NM  | PHONE: ZIP CODE: 87120  |
| ARCHITECT: NA   | CONTACT:  |
| ADDRESS:  | THORE.  |
| CITY, STATE:  | ZIP CODE:   |
| SURVEYOR: Surv-Tek, Inc.  | CONTACT: Russ P. Hugg,  |
| ADDRESS:  | PHONE: <u>897-3366</u>  |
| ADDRESS:CITY, STATE:  | ZIP CODE:   |
| CONTRACTOR: N/A   | CONTACT:  |
| ADDRESS:  | PHONE:  |
| CITY, STATE:  | ZIP CODE:   |
| TYPE OF SUBMITTAL:  DRAINAGE REPORT  DRAINAGE PLAN 1st SUBMITTAL  DRAINAGE PLAN RESUBMITTAL  CONCEPTUAL G & D PLAN  GRADING PLAN  EROSION CONTROL PLAN  ENGINEER'S CERT (HYDROLOGY)  CLOMR/LOMR  TRAFFIC CIRCULATION LAYOUT  ENGINEER/ARCHITECT CERT (TCL)  ENGINEER/ARCHITECT CERT (DRB S.P.)  ENGINEER/ARCHITECT CERT (AA)  OTHER (SPECIFY) | CHECK TYPE OF APPROVAL SOUGHT:  SIA/FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL S. DEV. PLAN FOR SUB'D APPROVAL S. DEV. FOR BLDG. PERMIT APPROVAL SECTOR PLAN APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM) CERTIFICATE OF OCCUPANCY (TEMP) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIFY) Mater Plan Approval |
| WAS A PRE-DESIGN CONFERENCE ATTENDED:  YES NO COPY PROVIDED   | HYDROLOGY SECTION   |
| SUBMITTED BY: <u>Åsa Nilsson-Weber, PE</u>  | DATE: March 8, 2012   |

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 define 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.

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March 30, 2012

Asa Nilsson-Weber, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, NM 87108

Re: Santa Monica Tracts 1-4

**Master Drainage Report** 

**Engineer's Stamp dated 2-21-12 (D18/D054)** 

Dear Mrs. Nilsson-Weber,

Based upon the information provided in your submittal received 2-21-12, the above referenced plan is approved for Work Order.

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

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Sincerely,

Curtis Cherne, P.E., CFM.

Cut a char

Principal Engineer, Planning Dept. Development and Building Services

C: File

| PROJECT TITLE: Santa Monica Place Tracts 1-4 DRB#: EPC#:  | ZONE MAP/DRG.FILE# <u>D-18-Z</u> <u>D-18 / Do54</u><br>WORK ORDER#:   |
|---|---|
|   |   |
| ENGINEERING FIRM: ISAACSON AND ARFMANADDRESS: 128 MONROE N.ECITY, STATE: ALBUQUERQUE, NM  | CONTACT: <u>Åsa Nilsson-Weber</u> PHONE: <u>268-8828</u> ZIP CODE: <u>87108</u>   |
| OWNER: <u>Titan Development</u> ADDRESS: <u>6300 Riverside Plaza Lane NW - #200</u> CITY, STATE: <u>Albuquerque</u> , NM  | CONTACT: Kurt Browning PHONE: ZIP CODE: 87120   |
| ARCHITECT: NA ADDRESS:CITY, STATE:  | CONTACT: PHONE: ZIP CODE:   |
| SURVEYOR: Surv-Tek, Inc. ADDRESS: CITY, STATE:  | CONTACT: Russ P. Hugg, PHONE: 897-3366 ZIP CODE:  |
| CONTRACTOR: N/AADDRESS:CITY, STATE:   | CONTACT: PHONE: ZIP CODE:   |
| TYPE OF SUBMITTAL:  DRAINAGE REPORT  DRAINAGE PLAN 1 <sup>SI</sup> SUBMITTAL  DRAINAGE PLAN RESUBMITTAL  CONCEPTUAL G & D PLAN  GRADING PLAN  EROSION CONTROL PLAN  ENGINEER'S CERT (HYDROLOGY)  CLOMR/LOMR  TRAFFIC CIRCULATION LAYOUT  ENGINEER/ARCHITECT CERT (TCL)  ENGINEER/ARCHITECT CERT (DRB S.P.)  ENGINEER/ARCHITECT CERT (AA)  OTHER (SPECIFY) | CHECK TYPE OF APPROVAL SOUGHT:  SIA/FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL  S. DEV. PLAN FOR SUB'D APPROVAL  S. DEV. FOR BLDG. PERMIT APPROVAL  SECTOR PLAN APPROVAL FINAL PLAT APPROVAL  FOUNDATION PERMIT APPROVAL  BUILDING PERMIT APPROVAL  CERTIFICATE OF OCCUPANCY (PERM)  CERTIFICATE OF OCCUPANCY (TEMP)  GRADING PERMIT APPROVAL  PAVING PERMIT APPROVAL  WORK ORDER APPROVAL  OTHER (SPECIFY) Mater Plan Approvall |
| WAS A PRE-DESIGN CONFERENCE ATTENDED:  ☐ YES ☐ NO ☐ COPY PROVIDED   | FEB 1 1 2012  |
| SUBMITTED BY: <u>Åsa Nilsson-Weber, PE</u>  | DATE: February 21, 2011   |
| Isaacson & Arfman, P.A. Requests for approvals of Site Development Plans and/or Subdivis particular nature, location and scope to the proposed development 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.

#### Cherne, Curtis

From:

Cherne, Curtis

Sent:

Friday, March 22, 2013 1:56 PM

To:

'Fred Arfman'

Cc:

Sims, Timothy E.

Subject:

RE: Broadstone Santa Monica

Attachments: image001.jpg

Fred,

I offer the following comments.

- 1. The Building No.s block should be bigger as you will not be able to write more than a couple.
- 2. I would like a hand written signature and date for each certification.
- 3. You could place your seal on this block and write on the top of it.
- 4. Seems you could delete the paragraph that begins with "This certification dated....'

The "rolling" cert is good so that we can replace an older cert with this one and the file will not get to thick.

Curtis

From: Fred Arfman [mailto:freda@iacivil.com] Sent: Wednesday, March 13, 2013 1:58 PM

To: Cherne, Curtis

Subject: Broadstone Santa Monica

Curtis,

Please find attached our modified certification for multiple "Rolling" certs that we find appropriate for use on the subject project. Each signature and date will be inserted electronically to provide a running chronology of the total project. Each submittal will be accompanied by an updated plan showing the as-built grades and the individual limits of each cert.

Please reply with your thought s or concurrence with our methodology.

Fred

Fred C. Arfman, P.E.

Principal/ President Isaacson & Arfman, P.A.

Consulting Engineering Associates

128 Monroe St. N.E. Albuquerque, NM 8/108 Phone: (505)268-8828 Fax: (505)268-2632

freda@lacivil.com

#### **DRAINAGE CERTIFICATION**

I, Fred C. Arfman, NMPE 7322, of the firm Isaacson & Arfman, P.A., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated April 10, 2012. The record information edited onto the original design document has been obtained by Russ P. Hugg, NMPS 9750, of the firm Surv-Tek, Inc. I further certify that I have personally visited the project site at various times as documented below and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Permanent Certification of Occupancy for those individual buildings listed below.

This certification dated March 8, 2013 covers the initial building as identified table shown hereon and subsequent building certifications shall be identified in the table as a rolling certification.

| Building<br>No(=) | Certification / DATE | Date of |
|-------------------|----------------------|---------|
| ita               | of all them          |         |
|                   |                      |         |
|                   |                      |         |
|                   |                      |         |
|                   |                      |         |
|                   |                      |         |
|                   |                      |         |

adhun

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

| red C. Arfman      | NMPE 7322 |
|--------------------|-----------|
|                    |           |
| Time to the second |           |
| Date               |           |

I met w/ Fred Ardman.

It is ok to accept a phusing plan for C.O. Approvala There will be two phases.

proposed agreemed, see letter classed 126-11, The work where should be accepted prior to the first C.O. Pantral Work Order acceptance, including 50 is direction is acceptance. Fred agreed.

Cut che 220-13



August 28, 2012

Fred C. Arfman, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, NM 87108

Re: Broadstone Santa Monica Place, Wall Permit
Grading and Drainage Plan
Engineer's Stamp dated 08-09-2012 (D18/D054)

Dear Mr. Arfman,

PO Box 1293

Based upon the information provided in your submittal received 08-09-2012, the above referenced submittal is approved for Grading and Wall Permit. Please attach a copy of the approved plans to the construction sets prior to sign-off by Hydrology.

Albuquerque

If you have any questions, you can contact me at 924-3695.

NM 87103

www.cabq.gov

Sincerely,

Shahab Biazar, P.E.

Senior Engineer, Planning Dept. Development and Building Services

C: e-mail

| PROJECT TITLE: Santa Monica Place Tracts 1-4 DRB#: EPC#: EPC#:  | ZONE MAP/DRG.FILE# <u>D-18 / D054</u><br>WORK ORDER#:   |
|---|---|
| LEGAL DESCRIPTION: Tracts 2, Santa Monica Place CITY ADDRESS: Santa Monica Ave, & San Pedro Blvd  |   |
| ENGINEERING FIRM: ISAACSON AND ARFMANADDRESS: 128 MONROE N.ECITY, STATE: ALBUQUERQUE, NM  | CONTACT: <u>Åsa Nilsson-Weber</u><br>PHONE: <u>268-8828</u><br>ZIP CODE: <u>87108</u>   |
| OWNER: Titan Development  ADDRESS: 6300 Riverside Plaza Lane NW - #200  CITY, STATE: Albuquerque, NM  | CONTACT: Kurt Browning PHONE: ZIP CODE: 87120   |
| ARCHITECT: NA ADDRESS:CITY, STATE:  | CONTACT:PHONE:ZIP CODE:   |
| SURVEYOR: Surv-Tek, Inc. ADDRESS: CITY, STATE:  | CONTACT: Russ P. Hugg, PHONE: 897-3366 ZIP CODE:  |
| CONTRACTOR: N/A ADDRESS: CITY, STATE:   | CONTACT:PHONE:ZIP CODE:   |
| TYPE OF SUBMITTAL:  DRAINAGE REPORT  DRAINAGE PLAN 1 <sup>ST</sup> SUBMITTAL  DRAINAGE PLAN RESUBMITTAL  CONCEPTUAL G & D PLAN  GRADING PLAN  EROSION CONTROL PLAN  ENGINEER'S CERT (HYDROLOGY)  CLOMR/LOMR  TRAFFIC CIRCULATION LAYOUT  ENGINEER/ARCHITECT CERT (TCL)  ENGINEER/ARCHITECT CERT (DRB S.P.)  ENGINEER/ARCHITECT CERT (AA)  OTHER (SPECIFY)SUPPLEMENTAL INFO. | CHECK TYPE OF APPROVAL SOUGHT:  SIA/FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL S. DEV. PLAN FOR SUB'D APPROVAL S. DEV. FOR BLDG. PERMIT APPROVAL SECTOR PLAN APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM) CERTIFICATE OF OCCUPANCY (TEMP) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIFY) GRADING WALL PERMIT |
| WAS A PRE-DESIGN CONFERENCE ATTENDED:  ☐ YES ☐ NO ☐ COPY PROVIDED   | AUG 0 3 2012  HYDROLOGY   |
| SUBMITTED BY: Fred C. Arfman, PE  | DATE: August 9, SECTION   |

Isaacson & Arfman, P.A.
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