CITY OF ALBUQUERQUE

October 14, 2004

Mr. Arthur Blessen, P.E.
CLAUDIO VIGIL ARCHITECTS
1801 Rio Grande Blvd. NW
Albuquerque, NM 87104

Re: WYOMING OFFICE PARK
Wyoming Blvd. and Palomas Ave. NE
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 11/14/2003 (D-19/D022)
Certification dated 10/13/2004

Dear Mr. Blessen,

Based upon the information provided in your submittal received 10/14/2004, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3982.

Sincerely,

Arlene V. Portillo
Plan Checker, Planning Dept. - Hydrology
Development and Building Services

C: Phyllis Villanueva
File

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

CITY OF ALBUQUERQUE

December 13, 2005

John Arthur Blessen, PE
Claudio Vigil Architects
1801 Rio Grande Blvd NW
Albuquerque, NM 87104

Re: Wyoming Office Park, North Alb. Acres
Grading and Drainage Plan
Engineer's Stamp dated 12-09-05 (D19-D22)

Dear Mr. Blessen,

Based upon the information provided in your submittal received 12-09-05, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. Also, prior to Certificate of Occupancy release, Engineer Certification of the grading plan per the DPM checklist will be required.

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

Sincerely,

Rudy E. Rael, Associate Engineer
Planning Department.
Building and Development Services

C: File

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 2, 2004

John Arthur Blessen, P.E.
Claudio Vigil Architects
1801 Rio Grande Blvd. NW
Albuquerque, NM 87104

Re: Wyoming Office Park, Tract X-1-B North Albuquerque Acres, Grading and Drainage Report

Engineer's Stamp dated 11-14-03 (D19/D22)

Dear Mr. Blessen,

Based upon the information provided in your submittal received 11-17-03, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. Refer to the attachment that is provided with this letter for details. If you have any questions regarding this permit please feel free to call the Public Works Hydrology section at 768-3654 (Charles Caruso) or 768-3645 (Brian Wolfe).

If you have any questions, you can contact me at 924-3981.

Sincerely,

Kristal D. Metro
Engineering Associate, Planning Dept.
Development and Building Services

C: Charles Caruso, Public Works Hydrology
File

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 23, 2003

John Arthur Blessen, PE
Claudio Vigil Architects
1801 Rio Grande NW
Albuquerque, NM 87104

Re: Wyoming Office Park Drainage Report
Engineer's Stamp dated 8-20-03, (D19/D22)

Dear Mr. Blessen,

Based upon the information provided in your submittal dated 8-21-03, the above referenced plan is approved for Site Development Plan for Building Permit action by the DRB.

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

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, Planning Dept
Development and Building

C: file

Drainage Report

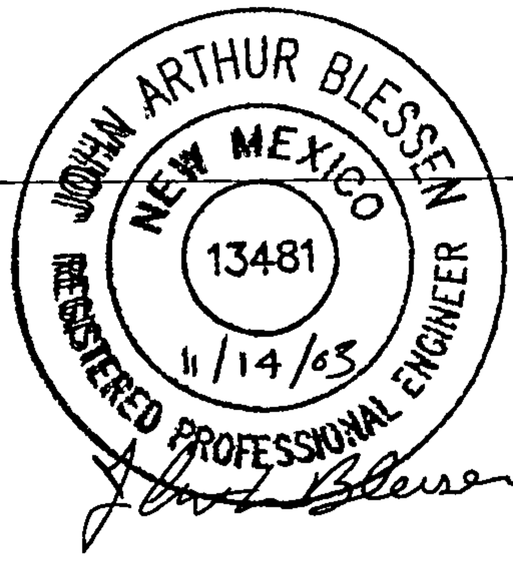
for

Phase 1
Tract X-1-B
North Albuquerque Acres

File #D19/D22
Wyoming Bldv. and Palomas

Albuquerque, New Mexico

November 14, 2003



Wyoming Office Park
Tract X-1-B North Albuquerque Acres - Phase 1

1. Location
   Tracts X-1-B-1, X-1-B-2, X-1-B-3, & X-1-B-4
   Formerly Tract X-1-B North Albuquerque Acres
   Albuquerque, New Mexico
   3.0 acres east side of Wyoming Bldv. south of Paseo del Norte

2. Existing Site Conditions:
   The existing site is undeveloped and slopes form east to west at an approximate rate of 3.5%. The site does not lie within a flood hazard zone (Panel 137 of 825). The site is higher than lands to the south and the street to the west: the lands to the north have been developed, and the existing block wall along the east property line prevent office site flows from entering the site; therefore office site flows are considered negligible. ← off site ?

   Two previous grading plans have been approved for this site. The first plan filed in 1988 by Tom Mann, and the second filed in 1999 by Chaves Grieves. Both submittals required that all runoff be conveyed to the Domingo Baca Channel to the south of the site, without retaining any flow.

3. Developed Conditions:
   The proposed Phase 1 development consists of the one story office buildings located in Tract X-1-B-3 with associated parking and landscaping; the retaining walls along the east and south property line; and rough grading of Tracts X-1-B-1, X-1-B-2, and X-1-B-4.

The site has been divided into five subbasins. Basin A1, B1, B2, and B3 discharge into the existing 24" diameter private storm drain which discharges into the Domingo Baca Channel. Basin C1 surface drains to the Domingo Baca Channel Right-of-Way to the south.

Basin A1
The flows from Basin A1 surface flows to a drop inlet located at the north drive entrance. The drop inlet discharges into the existing 24" private storm drain via a 8" pvc pipe. Phase 1 discharge are based assuming a Type C ground cover for the undeveloped areas. Q_{100}=3.1 cfs. (Developed Q_{100}=3.7 cfs).

Basin B1
The flows from Basin B1 surface flows to a drop inlet located at the south east corner of the side. The drop inlet discharges to the drop inlet at the south drive entrance via an 8" pvc pipe. Phase 1 discharge are based assuming a Type C ground cover for the undeveloped areas. Q_{100}=1.1 cfs. (Developed Q_{100}=1.5 cfs).

Basin B2 & B3
The flows from Basin B2 surface flows to a drop inlet located at the south drive entrance. Phase 1 discharge are based assuming a Type C ground cover for the undeveloped areas.
Basin B2 Q_{100}=6.0 cfs (Developed Q_{100}=6.9 cfs)
Basin B3 Q_{100}=1.6 cfs (Developed Q_{100}=1.6 cfs) (Basin B3 is fully developed)

The combined runoff from basins B1, B2, & B2 discharge into the existing 24" private storm drain via a 12" dia pvc pipe Q_{100}=8.7 cfs (Developed Q_{100}=10.0 cfs).

Basin C.

Basin C1 is comprised of the sloped grade along building C. The runoff from basin C1 sheet flows onto the Domingo Baca Channel Right-of-Way at a rate of 0.23 cfs.

4. Summary / Conclusion

The proposed development will increase the volume of runoff from the site. This runoff will be discharged into the Domingo Baca Channel. The proposed runoff for the site for Phase 1 construction is 12 csf (4.00 cfs per acre). (Developed Q_{100}=14 cfs, 4.67 cfs per acre)

Phase 1? What's included in Phase 2?

Tract X-1-B North Albuquerque Acres 11/11/03

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN A1 PHASE 1

Precipitation Zone 3
Basin Area = 0.822 acres

Existing Treatment			Improved Conditions Treatment		
Area of A =	0 sf	0%	Area of A =	0 sf	0%
Area of B =	0 sf	0%	Area of B =	1096 sf	3%
Area of C =	35785 sf	100%	Area of C =	26090 sf	73%
Area of D =	0 sf	0%	Area of D =	8599 sf	24%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions Treatment	% of Area		En	Improved Conditions Treatment	% of Area		En
A	0.00 x	0.66 =	0.00	A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00	B	0.03 x	0.912 =	0.03
C	1.00 x	1.29 =	1.29	C	0.73 x	1.29 =	0.94
D	0.00 x	2.36 =	0.00	D	0.24 x	2.36 =	0.57
		E =	1.29			E =	1.54

Volume V = E A / 12

Ve =	1.290 x	0.822 /	12 =	0.088 acre ft	3847 cf
Vi =	1.536 x	0.822 /	12 =	0.105 acre ft	4579 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q	Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00	A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00	B	0.03 x	2.6 =	0.08
C	1.00 x	3.45 =	3.45	C	0.73 x	3.45 =	2.52
D	0.00 x	5.02 =	0.00	D	0.24 x	5.02 =	1.21
		q =	3.45			q =	3.80

Peak Rate Qp = q A

Qp(e) =	3.45 x	0.822 =	2.83 cfs
Qp(i) =	3.80 x	0.822 =	3.12 cfs

Excess Volume = 0.017 acre ft
Excess Rate = 0.29 cfs

tc = 0.2 hr
tb = (2.107 *E*At/Qp)-(0.25*Ad/At) = 0.791 hr
tp = (0.7*tc)+((1.6-(Ad/At))/12) = 0.253 hr

Discharge Rate	4.54 cfs / acre	x	0.822 =	3.7297

Volume 4784 cf
Discharged - 4760 cf

Pond Volume 24 cf

TRACK X-1-B North Albuquerque Acres 11/11/03

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN B1 PHASE 1

Precipitation Zone 3
Basin Area = 0.320 acres

Existing Treatment			Improved Conditions Treatment		
Area of A =	0 sf	0%	Area of A =	0 sf	0%
Area of B =	0 sf	0%	Area of B =	0 sf	0%
Area of C =	13920 sf	100%	Area of C =	13920 sf	100%
Area of D =	0 sf	0%	Area of D =	0 sf	0%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions Treatment	% of Area		En	Improved Conditions Treatment	% of Area		En
A	0.00 x	0.66 =	0.00	A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00	B	0.00 x	0.912 =	0.00
C	1.00 x	1.29 =	1.29	C	1.00 x	1.29 =	1.29
D	0.00 x	2.36 =	0.00	D	0.00 x	2.36 =	0.00
		E =	1.29			E =	1.29

Volume V = E A / 12

Ve =	1.290 x	0.32 /	12 =	0.034 acre ft	1496 cf
Vi =	1.290 x	0.32 /	12 =	0.034 acre ft	1496 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q	Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00	A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00	B	0.00 x	2.6 =	0.00
C	1.00 x	3.45 =	3.45	C	1.00 x	3.45 =	3.45
D	0.00 x	5.02 =	0.00	D	0.00 x	5.02 =	0.00
		q =	3.45			q =	3.45

Peak Rate Qp = q A

Qp(e) =	3.45 x	0.32 =	1.10 cfs
Qp(i) =	3.45 x	0.32 =	1.10 cfs

Excess Volume = 0.000 acre ft
Excess Rate = 0.00 cfs

tc = 0.2 hr
tb = (2.107 *E*At/Qp)-(0.25*Ad/At) = 0.788 hr
tp = (0.7*tc)+((1.6-(Ad/At))/12) = 0.273 hr

Discharge Rate	4.57 cfs / acre	x	0.320 =	1.4604

Volume 1563 cf
Discharged - 1399 cf

Pond Voulme **165** cf

Tract X-1-B North Albuquerque Acres 11/11/03

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN B2 PHASE 1

Precipitation Zone 3
Basin Area = 1.467 acres

Existing Treatment			Improved Conditions Treatment		
Area of A =	0 sf	0%	Area of A =	0 sf	0%
Area of B =	0 sf	0%	Area of B =	4100 sf	6%
Area of C =	63924 sf	100%	Area of C =	31848 sf	50%
Area of D =	0 sf	0%	Area of D =	27976 sf	44%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions Treatment	% of Area		En	Improved Conditions Treatment	% of Area		En
A	0.00 x	0.66 =	0.00	A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00	B	0.06 x	0.912 =	0.06
C	1.00 x	1.29 =	1.29	C	0.50 x	1.29 =	0.64
D	0.00 x	2.36 =	0.00	D	0.44 x	2.36 =	1.03
		E =	1.29			E =	1.73

Volume V = E A / 12

Ve =	1.290 x	1.467 /	12 =	0.158 acre ft	6872 cf
Vi =	1.734 x	1.467 /	12 =	0.212 acre ft	9237 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q	Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00	A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00	B	0.06 x	2.6 =	0.17
C	1.00 x	3.45 =	3.45	C	0.50 x	3.45 =	1.72
D	0.00 x	5.02 =	0.00	D	0.44 x	5.02 =	2.20
		q =	3.45			q =	4.08

Peak Rate Qp = q A

Qp(e) =	3.45 x	1.467 =	5.06 cfs
Qp(i) =	4.08 x	1.467 =	5.99 cfs

Excess Volume = 0.054 acre ft
Excess Rate = 0.93 cfs

tc =	0.2 hr	
tb =	(2.107 *E*At/Qp)-(0.25*Ad/At) =	0.786 hr
tp =	(0.7*tc)+((1.6-(Ad/At))/12) =	0.237 hr

Discharge Rate	4.71 cfs / acre	x	1.467 =	6.9119

Volume Discharged	-	9651 cf 9841 cf
Pond Voulme		**-190** cf

11/11/03

TRACK X-1-B North Albuquerque Acres

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN B3 PHASE 1

Precipitation Zone 3
Basin Area = 0.323 acres

Existing Treatment			Improved Conditions Treatment		
Area of A =	0 sf	0%	Area of A =	0 sf	0%
Area of B =	0 sf	0%	Area of B =	1374 sf	10%
Area of C =	14088 sf	100%	Area of C =	0 sf	0%
Area of D =	0 sf	0%	Area of D =	12714 sf	90%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions Treatment	% of Area		En	Improved Conditions Treatment	% of Area		En
A	0.00 x	0.66 =	0.00	A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00	B	0.10 x	0.912 =	0.09
C	1.00 x	1.29 =	1.29	C	0.00 x	1.29 =	0.00
D	0.00 x	2.36 =	0.00	D	0.90 x	2.36 =	2.13
		E =	1.29			E =	2.22

Volume V = E A / 12

Ve =	1.290 x	0.323 /	12 =	0.035 acre ft	1514 cf
Vi =	2.219 x	0.323 /	12 =	0.060 acre ft	2605 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q	Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00	A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00	B	0.10 x	2.6 =	0.25
C	1.00 x	3.45 =	3.45	C	0.00 x	3.45 =	0.00
D	0.00 x	5.02 =	0.00	D	0.90 x	5.02 =	4.53
		q =	3.45			q =	4.78

Peak Rate Qp = q A

Qp(e) =	3.45 x	0.323 =	1.12 cfs	
Qp(i) =	4.78 x	0.323 =	1.55 cfs	

Excess Volume = 0.025 acre ft
Excess Rate = 0.43 cfs

tc =	0.2 hr		
tb =	(2.107 *E*At/Qp)-(0.25*Ad/At) =		0.752 hr
tp =	(0.7*tc)+((1.6-(Ad/At))/12)	=	0.198 hr

Discharge Rate 4.78 cfs / acre x 0.323 = 1.5459

Volume 2722 cf
Discharged - 2720 cf

Pond Voulme 1 cf

TRACK X-1-B North Albuquerque Acres 11/11/03

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN C1 PHASE 1

Precipitation Zone 3
Basin Area = 0.068 acres

Existing Treatment			Improved Conditions Treatment		
Area of A =	0 sf	0%	Area of A =	0 sf	0%
Area of B =	0 sf	0%	Area of B =	0 sf	0%
Area of C =	2961 sf	100%	Area of C =	2961 sf	100%
Area of D =	0 sf	0%	Area of D =	0 sf	0%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions Treatment	% of Area		En	Improved Conditions Treatment	% of Area		En
A	0.00 x	0.66 =	0.00	A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00	B	0.00 x	0.912 =	0.00
C	1.00 x	1.29 =	1.29	C	1.00 x	1.29 =	1.29
D	0.00 x	2.36 =	0.00	D	0.00 x	2.36 =	0.00
		E =	1.29			E =	1.29

Volume V = E A / 12

Ve =	1.290 x	0.068 /	12 =	0.007 acre ft	318 cf
Vi =	1.290 x	0.068 /	12 =	0.007 acre ft	318 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q	Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00	A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00	B	0.00 x	2.6 =	0.00
C	1.00 x	3.45 =	3.45	C	1.00 x	3.45 =	3.45
D	0.00 x	5.02 =	0.00	D	0.00 x	5.02 =	0.00
		q =	3.45			q =	3.45

Peak Rate Qp = q A

Qp(e) =	3.45 x	0.068 =	0.23 cfs
Qp(i) =	3.45 x	0.068 =	0.23 cfs

Excess Volume = 0.000 acre ft
Excess Rate = 0.00 cfs

tc =	0.2 hr	
tb =	(2.107 *E*At/Qp)-(0.25*Ad/At) =	0.788 hr
tp =	(0.7*tc)+((1.6-(Ad/At))/12) =	0.273 hr

Discharge Rate 3.45 cfs / acre x 0.068 = 0.2345

Volume 333 cf
Discharged - 333 cf

Pond Voulme **0** cf

CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services Section

ALBUQUERQUE
Making History

October 15, 2004

Claudio Antonio Vigil, Registered Architect
1801 Rio Grande Blvd
Albuquerque, NM 87104

Re: Certification Submittal for Final Building Certificate of Occupancy for
Wyoming Office Park-Bank of The West, [D-19 / D-22]
Wyoming and Palomas Ave. NE
Architect's Stamp Dated 10/14/04

Dear Mr. Vigil:

The TCL / Letter of Certification submitted on October 14, 2004 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Sincerely,

Nilo E. Salgado-Fernandez, P.E.
Senior Traffic Engineer
Development and Building Services
Planning Department

c: Engineer
Hydrology file
CO Clerk

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

CLAUDIO VIGIL ARCHITECTS

October 14, 2004

Nilo Salgaeto
600 2nd. St. N.W.
Transportation Department
Building and Inspection
Albuquerque, New Mexico

RE: Traffic Certification - PROJECT #1002716 DRB 03DRB 01550
Wyoming Office Park - Bank of The West
Tract X-1-B-3 North Albuquerque Acres

Dear Nilo Salgaeto,

On October 13, 2004 this office made an inspection of the completed improvements to the Tract X-1-B-3 North Albuquerque Acres . All work necessary to support the facility has been completed and is in substantial compliance with the approved Site Plan.

The work is complete and ready for occupancy.

Sincerely,

Claudio Vigil
President

STATE OF NEW MEXICO
CLAUDIO ANTONIO VIGIL
1236
10/14/04
REGISTERED ARCHITECT

RECEIVED
OCT 14 2004
HYDROLOGY SECTION

CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services Section

July 31, 2006

John Arthur Blessen, P.E.
1801 Rio Grande Blvd NW
Albuquerque, NM 87104

Re: Certification Submittal for Final Building Certificate of Occupancy for Office Bldg@Wyoming Office Park(Bldg A), [D-19 / D22]
7930 Wyoming Blvd NE
Engineer's Stamp Dated 07/17/06

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Dear Mr. Blessen:

The TCL / Letter of Certification submitted on July 31, 2006 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Sincerely,

Nilo E. Salgado-Fernandez, P.E.
Senior Traffic Engineer
Development and Building Services
Planning Department

c: Engineer
Hydrology file
CO Clerk

July 17, 2006

Phillip J. Lovato
Transportation Department Building and Inspection
600 2nd. St. N.W
Albuquerque, New Mexico

RE: Traffic Certification
Office Building
7930 Wyoming Blvd. NE

Dear Phillip Lovato:

On July 17, 2006, this office made an inspection of the completed improvements to the Office Building. All work necessary to support the facility has been completed, except as noted below, and is in substantial compliance with the DRB approved Site Plan.

- The landscaping around the site was in progress.

This work is scheduled to be completed by July 21, 2006.

The work is complete, except as noted above, and ready for a Final Certificate of Occupancy.

Sincerely,

J. Arthur Blessen PE
Claudio Vigil Architect

JOHN ARTHUR BLESSEN
NEW MEXICO
13481
7-17-06
REGISTERED PROFESSIONAL ENGINEER

RECEIVED
JUL 24 2006
HYDROLOGY SECTION

CITY OF ALBUQUERQUE

February 16, 2007

J. Arthur Blessen, P.E.
J. Arthur Blessen Engineering
11930 Menaul NE Suite 109
Albuquerque, NM 87112

Re: Wyoming Office Park Phase 3
~~**7220 Wyoming Blvd NE**~~ 7920 Wyoming Blvd NE 2-23-07
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 12/9/05 (D-19/D022)
Certification dated 2/15/07

Mr. Blessen,

Based upon the information provided in your submittal received 2/15/07, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

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

Sincerely,

Curtis A. Cherne
Engineering Associate - Hydrology
Development and Building Services

C: Katrina Sigala
File

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

CITY OF ALBUQUERQUE

September 7, 2007

J. Arthur Blessen, P.E.
J. Arthur Blessen Engineering
11930 Menaul Blvd. NE, Suite 109
Albuquerque, NM 87112

Re: Wyoming Office Park Phase 4
7910 Wyoming Blvd NE
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 12/9/05 (D-19/D022)
Certification dated 9/5/07

Mr. Blessen,

Based upon the information provided in your submittal received 9/6/07, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

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

Sincerely,

Curtis A. Cherne, P.E.
Engineering Associate Hydrology
Development and Building Services

C: CO Clerk
File

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

CITY OF ALBUQUERQUE

December 13, 2005

John Arthur Blessen, PE
Claudio Vigil Architects
1801 Rio Grande Blvd NW
Albuquerque, NM 87104

Re: Wyoming Office Park, North Alb. Acres Pit 3 & 4
Grading and Drainage Plan
Engineer's Stamp dated 12-09-05 (D19-D22)

Dear Mr. Blessen,

Based upon the information provided in your submittal received 12-09-05, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. Also, prior to Certificate of Occupancy release, Engineer Certification of the grading plan per the DPM checklist will be required.

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

Sincerely,

Rudy E. Rael, Associate Engineer
Planning Department.
Building and Development Services

C: File

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

Drainage Report

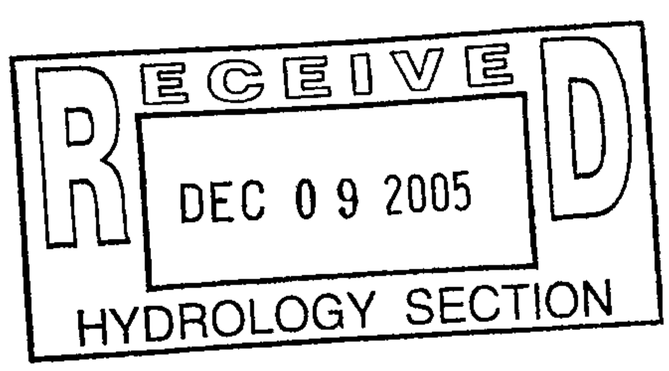
for

Phase 3 & 4
Tract X-1-B-1
North Albuquerque Acres

File #D19/D22
Wyoming Bldv. and Palomas

Albuquerque, New Mexico

December 9, 2005



Wyoming Office Park
Tract X-1-B-1 North Albuquerque Acres - Phase 3 and 4

1. Location
   Tracts X-1-B-1, X-1-B-2, X-1-B-3, & X-1-B-4
   Formerly Tract X-1-B North Albuquerque Acres
   Albuquerque, New Mexico
   3.0 acres east side of Wyoming Bldv. south of Paseo del Norte

2. Existing Site Conditions:
   The existing site is undeveloped and slopes form north to south at an approximate rate of 2.0%. The site dose not lie within a flood hazard zone (Panel 137 of 825). The site is higher than lands to the south and the street to the west: the lands to the north have been developed, and the existing block wall along the east property line prevent office site flows from entering the site; therefore office site flows are considered negligible.

   Three previous grading plans have been approved for this site. The first plan filed in 1988 by Tom Mann, and the second filed in 1999 by Chaves Grieves. Both submittals required that all runoff be conveyed to the Domingo Baca Channel to the south of the site, without retaining any flow. The final plan filed in August of 2003 by Claudio Vigil Architect provided a master drainage plan for the entire site.

   Phase 1 of the development is complete. Phase one consisted of the one story office buildings located in Tract X-1-B-3 with associated parking and landscaping; the retaining walls along the east and south property line; and rough grading of Tracts X-1-B-1, X-1-B-2, and X-1-B-4.

   Phase 2 of the development was previously approved for construction and consisted of the one story office buildings located in Tract X-1-B-1 with associated parking and landscaping.

3. Developed Conditions:

   The site has been divided into five subbasins. Basin A1, B1, B2, and B3 discharge into the existing 24" diameter private storm drain which discharges into the Domingo Baca Channel. Basin C1 surface drains to the Domingo Baca Channel Right-of-Way to the south.

   The proposed Phase 3 development consist of the one story office buildings located in Tract X-1-B-2 (Basin B2) with associated parking and landscaping.

   The proposed Phase 4 development consist of the one story office buildings located in Tract X-1-B-2 (Basin B1) with associated parking and landscaping

   Basin A1 Unchanged
   The flows from Basin A1 surface flows to a drop inlet located at the north drive entrance. The drop inlet discharges into the existing 24" private storm drain via a 8" pvc pipe. Existing developed Q_{100}=3.7 cfs.

Basin B1

Phase 4 will complete the development of Basin B1. The flows from Basin B1 surface flows to a drop inlet located at the south east corner of the side. The drop inlet discharges to the drop inlet at the south drive entrance via an 8" pvc pipe. Exiting discharge based on type C ground cover for the undeveloped areas. Q_{100}=1.1 cfs. The developed discharge from Basin B1 is Q_{100}=1.5 cfs.

Basin B2

Phase 3 will complete the development of Basin B2. The flows from Basin B2 surface flows to a drop inlet located at the south drive entrance. The existing discharge based on type C ground cover for the undeveloped areas. The developed discharge from Basin B2 is Q_{100}=6.9 cfs

Basin B3 Unchanged

The runoff from Basin B3 flows to a drop inlet located at the south drive entrance.

Basin B3 Q_{100}=1.6 cfs (Developed Q_{100}=1.6 cfs) (Basin B3 is fully developed)

The combined runoff from basins B1, B2, & B2 discharge into the existing 24" private storm drain via a 12" dia pvc pipe. Developed flow Q_{100}=10.0 cfs.

Basin C Unchanged

Basin C1 is comprised of the sloped grade along building C. The runoff from basin C1 sheet flows onto the Domingo Baca Channel Right-of-Way at a rate of 0.23 cfs.

4. Summary / Conclusion

The proposed development will increase the volume of runoff from the site. This runoff will be discharged into the Domingo Baca Channel. The proposed runoff for the site for Phase 3 and 4 construction is 14 csf (4.7 cfs per acre).

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN B2 PHASE 3

Precipitation Zone 3
Basin Area = 1.467 acres

Existing
Treatment

Area of A =	0 sf	0%
Area of B =	0 sf	0%
Area of C =	63924 sf	100%
Area of D =	0 sf	0%

Improved Conditions
Treatment

Area of A =	0 sf	0%
Area of B =	8177 sf	13%
Area of C =	0 sf	0%
Area of D =	55747 sf	87%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions

Treatment	% of Area		En
A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00
C	1.00 x	1.29 =	1.29
D	0.00 x	2.36 =	0.00
		E =	1.29

Improved Conditions

Treatment	% of Area		En
A	0.00 x	0.66 =	0.00
B	0.13 x	0.912 =	0.12
C	0.00 x	1.29 =	0.00
D	0.87 x	2.36 =	2.06
		E =	2.17

Volume V = E A / 12

Ve =	1.290 x	1.4675 /	12 =	0.158 acre ft	6872 cf
Vi =	2.175 x	1.4675 /	12 =	0.266 acre ft	11585 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00
C	1.00 x	3.45 =	3.45
D	0.00 x	5.02 =	0.00
		q =	3.45

Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00
B	0.13 x	2.6 =	0.33
C	0.00 x	3.45 =	0.00
D	0.87 x	5.02 =	4.38
		q =	4.71

Peak Rate Qp = q A

Qp(e) =	3.45 x	1.4675 =	5.06 cfs
Qp(i) =	4.71 x	1.4675 =	6.91 cfs

Excess Volume = 0.108 acre ft
Excess Rate = 1.85 cfs

tc = 0.2 hr
tb = (2.107 *E*At/Qp)-(0.25*Ad/At) = 0.755 hr
tp = (0.7*tc)+((1.6-(Ad/At))/12) = 0.201 hr

Discharge Rate 4.71 cfs / acre x 1.467 = 6.9119

Volume Discharged 12104 cf - 12103 cf

Pond Voulme 1 cf

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN B1 PHASE 4

Precipitation Zone 3
Basin Area = 0.320 acres

Existing Treatment			Improved Conditions Treatment		
Area of A =	0 sf	0%	Area of A =	0 sf	0%
Area of B =	0 sf	0%	Area of B =	2595 sf	19%
Area of C =	13920 sf	100%	Area of C =	0 sf	0%
Area of D =	0 sf	0%	Area of D =	11325 sf	81%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions Treatment	% of Area			En	Improved Conditions Treatment	% of Area			En
A	0.00	x	0.66 =	0.00	A	0.00	x	0.66 =	0.00
B	0.00	x	0.912 =	0.00	B	0.19	x	0.912 =	0.17
C	1.00	x	1.29 =	1.29	C	0.00	x	1.29 =	0.00
D	0.00	x	2.36 =	0.00	D	0.81	x	2.36 =	1.92
			E =	1.29				E =	2.09

Volume V = E A / 12

Ve =	1.290	x	0.3196 /	12 =	0.034	acre ft	1496 cf
Vi =	2.090	x	0.3196 /	12 =	0.056	acre ft	2424 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area			Q	Treatment	% of Area			Q
A	0.00	x	1.87 =	0.00	A	0.00	x	1.87 =	0.00
B	0.00	x	2.6 =	0.00	B	0.19	x	2.6 =	0.48
C	1.00	x	3.45 =	3.45	C	0.00	x	3.45 =	0.00
D	0.00	x	5.02 =	0.00	D	0.81	x	5.02 =	4.08
			q =	3.45				q =	4.57

Peak Rate Qp = q A

Qp(e) =	3.45	x	0.3196 =	1.10	cfs
Qp(i) =	4.57	x	0.3196 =	1.46	cfs

Excess Volume = 0.021 acre ft
Excess Rate = 0.36 cfs

tc = 0.2 hr
tb = (2.107 *E*At/Qp)-(0.25*Ad/At) = 0.760 hr
tp = (0.7*tc)+((1.6-(Ad/At))/12) = 0.206 hr

Discharge Rate 4.57 cfs / acre x 0.320 = 1.4604

Volume Discharged 2533 cf - 2533 cf

Pond Voulme -0 cf

Drainage Report

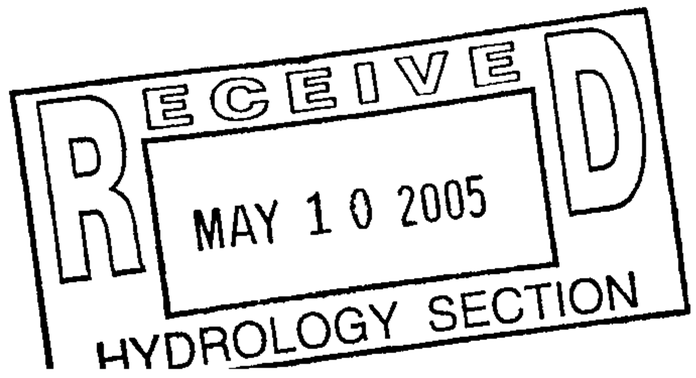
for

Phase 2
Tract X-1-B-1
North Albuquerque Acres

File #D19/D22
Wyoming Bldv. and Palomas

Albuquerque, New Mexico

May 2, 2005



Wyoming Office Park
Tract X-1-B-1 North Albuquerque Acres - Phase 2

1. Location
   Tracts X-1-B-1, X-1-B-2, X-1-B-3, & X-1-B-4
   Formerly Tract X-1-B North Albuquerque Acres
   Albuquerque, New Mexico
   3.0 acres east side of Wyoming Bldv. south of Paseo del Norte

2. Existing Site Conditions:
   The existing site is undeveloped and slopes form north to south at an approximate rate of 2.0%. The site does not lie within a flood hazard zone (Panel 137 of 825). The site is higher than lands to the south and the street to the west: the lands to the north have been developed, and the existing block wall along the east property line prevent offsite flows from entering the site; therefore offsite flows are considered negligible.

   Three previous grading plans have been approved for this site. The first plan filed in 1988 by Tom Mann, and the second filed in 1999 by Chaves Grieves. Both submittals required that all runoff be conveyed to the Domingo Baca Channel to the south of the site, without retaining any flow. The final plan filed in August of 2003 by Claudio Vigil Architect provided a master drainage plan for the entire site.

   Phase 1 of the development is complete. Phase one consisted of the one story office buildings located in Tract X-1-B-3 with associated parking and landscaping; the retaining walls along the east and south property line; and rough grading of Tracts X-1-B-1, X-1-B-2, and X-1-B-4.

3. Developed Conditions:
   The site has been divided into five subbasins. Basin A1, B1, B2, and B3 discharge into the existing 24" diameter private storm drain which discharges into the Domingo Baca Channel. Basin C1 surface drains to the Domingo Baca Channel Right-of-Way to the south.

   The proposed Phase 2 development consist of the one story office buildings located in Tract X-1-B-1 (Basin A1) with associated parking and landscaping.

   Basin A1
   The flows from Basin A1 surface flows to a drop inlet located at the north drive entrance. The drop inlet discharges into the existing 24" private storm drain via a 8" pvc pipe. Phase 2 discharge developed Q_{100}=3.7 cfs.

   Basin B1 Unchanged
   The flows from Basin B1 surface flows to a drop inlet located at the south east corner of the side. The drop inlet discharges to the drop inlet at the south drive entrance via an 8" pvc pipe. Exiting discharge based on type C ground cover for the undeveloped areas. Q_{100}=1.1 cfs. (Developed Q_{100}=1.5 cfs).

Basin B2 & B3 Unchanged

The flows from Basin B2 surface flows to a drop inlet located at the south drive entrance. The existing discharge based on type C ground cover for the undeveloped areas.

Basin B2 Q_{100}=6.0 cfs (Developed Q_{100}=6.9 cfs)

Basin B3 Q_{100}=1.6 cfs (Developed Q_{100}=1.6 cfs) (Basin B3 is fully developed)

The combined runoff from basins B1, B2, & ~~B2~~ B3 discharge into the existing 24" private storm drain via a 12" dia pvc pipe Q_{100}=8.7 cfs (Developed Q_{100}=10.0 cfs).

Basin C Unchanged

Basin C1 is comprised of the sloped grade along building C. The runoff from basin C1 sheet flows onto the Domingo Baca Channel Right-of-Way at a rate of 0.23 cfs.

4. Summary / Conclusion

   The proposed development will increase the volume of runoff from the site. This runoff will be discharged into the Domingo Baca Channel. The proposed runoff for the site for Phase 2 construction is 12.6 csf (4.2 cfs per acre). (Discharge when fully developed Q_{100}=14 cfs, 4.67 cfs per acre)

Drainage Calculation

City of Albuquerque DPM 1997 edition

Wyoming Office Park Basin A1

Precipitation Zone 3 ✓

Basin Area = 0.822 acres

Existing Treatment

Area of A =	0 sf	0%
Area of B =	1096 sf	3%
Area of C =	26090 sf	73%
Area of D =	8599 sf	24%

Improved Conditions Treatment

Area of A =	0 sf	0%
Area of B =	7141 sf	20%
Area of C =	0 sf	0%
Area of D =	28644 sf	80%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions

Treatment	% of Area		En	
A	0.00	x	0.66 ✓	0.00
B	0.03	x	0.912 ✓	0.03
C	0.73	x	1.29 ✓	0.94
D	0.24	x	2.36 ✓	0.57
			E =	1.54

Improved Conditions

Treatment	% of Area		En	
A	0.00	x	0.66 ✓	0.00
B	0.20	x	0.912 ✓	0.18
C	0.00	x	1.29 ✓	0.00
D	0.80	x	2.36 ✓	1.89
			E =	2.07

Volume V = E A / 12

Ve =	1.536	x	0.8215 /	12 =	0.105 acre ft	4579 cf
Vi =	2.071	x	0.8215 /	12 =	0.142 acre ft	6176 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q	
A	0.00	x	1.87 ✓	0.00
B	0.03	x	2.6 ✓	0.08
C	0.73	x	3.45 ✓	2.52
D	0.24	x	5.02 ✓	1.21
			q =	3.80

Treatment	% of Area		Q	
A	0.00	x	1.87 ✓	0.00
B	0.20	x	2.6 ✓	0.52
C	0.00	x	3.45 ✓	0.00
D	0.80	x	5.02 ✓	4.02
			q =	4.54

Peak Rate Qp = q A

Qp(e) = EXISTING	3.80	x	0.8215 =	3.12	cfs
Qp(i) = IMPROVED	4.54	x	0.8215 =	3.73	cfs

Excess Volume = 0.037 acre ft

Excess Rate = 0.60 cfs

tc =	0.2 hr		
tb =	(2.107 *E*At/Qp)-(0.25*Ad/At) =		0.762 hr
tp =	(0.7*tc)+((1.6-(Ad/At))/12)	=	0.207 hr

Discharge Rate 3.80 cfs / acre x 0.822 = 3.2049

Volume Discharged - 6453 cf 6002 cf

Pond Voulme **450** cf

CITY OF ALBUQUERQUE

July 31, 2006

Mr. Arthur Blessen, P.E.
CLAUDIO VIGIL ARCHITECTS
1801 Rio Grande Blvd. NW
Albuquerque, NM 87104

Re: WYOMING OFFICE PARK, TRACT X-1-B-1
7930 Wyoming Blvd. NE
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 05/02/2005 (D-19/D022)
Certification dated 07/14/2006

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

Dear Mr. Blessen,

Based upon the information provided in your submittal received 07/17/2006, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3982.

Sincerely,

Arlene V. Portillo
Plan Checker, Planning Dept. - Hydrology
Development and Building Services

C: CO Clerk
File

CITY OF ALBUQUERQUE

May 24, 2005

John Arthur Blessen, P.E.
Claudio Vigil Architects
1801 Rio Grande Blvd. NW
Albuquerque, NM 87104

Tr. X-1-B-1

Re: Office Building Shell – Wyoming Office Park, 7930 Wyoming Blvd. NE
Grading and Drainage Plan - Engineer's Stamp dated 5-2-05 (D19-D22)

Dear Mr. Blessen,

Based upon the information provided in your submittal dated 5-10-05, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. Prior to release of the Certificate of Occupancy an Engineer's Certification of the grading plan per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3990.

Sincerely,

Phillip J. Lovato, E.I.
Associate Engineer, Planning Department
Development and Building Services

C: file

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

Drainage Report

for

Tract X-1-B
North Albuquerque Acres

Wyoming Bldv. and Palomas

Albuquerque, New Mexico

August 20, 2003

Wyoming Office Park
Tract X-1-B North Albuquerque Acres

1. Location
   Tract X-1-B North Albuquerque Acres
   Albuquerque, New Mexico
   3.0 acres east side of Wyoming Bldv. south of Paseo del Norte

2. Existing Site Conditions:
   The existing site is undeveloped and slopes form east to west at an approximate rate of 3.5%. The site dose not lie within a flood hazard zone (Panel 137 of 825). The site is higher than lands to the south and the street to the west: the lands to the north have been developed, and the existing block wall along the east property line prevent office site flows from entering the site; therefore office site flows are considered negligible.

   Two previous grading plans have been approved for this site. The first plan filed in 1988 by Tom Mann, and the second filed in 1999 by Chaves Grieves. Both submittals required that all runoff be conveyed to the Domingo Baca Channel to the south of the site, without retaining any flow.

3. Developed Conditions:
   The proposed development consist of four one story office buildings with associated parking and landscaping. The proposed development will be a phased constructions.

   The site has been divided into five subbasins. Basin A1, B1, B2, and B3 discharge into the existing 24" diameter private storm drain which discharges into the Domingo Baca Channel. Basin C1 surface drains to the Domingo Baca Channel Right-of-Way to the south.

   Basin A1
   The flows from Basin A1 surface flows to a drop inlet located at the north drive entrance. The drop inlet discharges into the existing 24" private storm drain via a 8" pvc pipe. Q_{100}=3.7 cfs.

   Basin B1
   The flows from Basin B1 surface flows to a drop inlet located at the south east corner of the side. The drop inlet discharges to the drop inlet at the south drive entrance via an 8" pvc pipe. Q_{100}=1.5 cfs.

   Basin B2 & B3
   The flows from Basin B2 surface flows to a drop inlet located at the south drive entrance.

   The combined runoff from basins B1, B2, & B2 discharge into the existing 24" private storm drain via a 12" dia pvc pipe Q_{100}=10 cfs.

   Basin C.
   Basin C1 is comprised of the sloped grade along building C. The runoff from basin C1 sheet flows onto the Domingo Baca Channel Right-of-Way at a rate of 0.23 cfs.

4. Summary / Conclusion
   The proposed development will increase the volume of runoff from the site. This runoff will be discharged into the Domingo Baca Channel. The proposed runoff for the site is 14 csf (4.67 cfs per acre).

Tract X-1-B North Albuquerque Acres 8/20/03

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN A1

Precipitation Zone 3

Basin Area = 0.822 acres

Existing Treatment

Area of A =	0 sf	0%
Area of B =	0 sf	0%
Area of C =	35785 sf	100%
Area of D =	0 sf	0%

Improved Conditions Treatment

Area of A =	0 sf	0%
Area of B =	7141 sf	20%
Area of C =	0 sf	0%
Area of D =	28644 sf	80%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions

Treatment	% of Area		En
A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00
C	1.00 x	1.29 =	1.29
D	0.00 x	2.36 =	0.00
		E =	1.29

Improved Conditions

Treatment	% of Area		En
A	0.00 x	0.66 =	0.00
B	0.20 x	0.912 =	0.18
C	0.00 x	1.29 =	0.00
D	0.80 x	2.36 =	1.89
		E =	2.07

Volume V = E A / 12

Ve =	1.290 x	0.822 /	12 =	0.088 acre ft	3847 cf
Vi =	2.071 x	0.822 /	12 =	0.142 acre ft	6176 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00
C	1.00 x	3.45 =	3.45
D	0.00 x	5.02 =	0.00
		q =	3.45

Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00
B	0.20 x	2.6 =	0.52
C	0.00 x	3.45 =	0.00
D	0.80 x	5.02 =	4.02
		q =	4.54

Peak Rate Qp = q A

Qp(e) =	3.45 x	0.822 =	2.83 cfs
Qp(i) =	4.54 x	0.822 =	3.73 cfs

Excess Volume = 0.053 acre ft

Excess Rate = 0.89 cfs

tc =	0.2 hr	
tb =	(2.107 *E*At/Qp)-(0.25*Ad/At) =	0.762 hr
tp =	(0.7*tc)+((1.6-(Ad/At))/12) =	0.207 hr

Discharge Rate	4.54 cfs / acre	x	0.822 =	3.7297

Volume Discharged - 6453 cf / 6454 cf

Pond Voulme **-2** cf

TRACK X-1-B North Albuquerque Acres 8/20/03

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN B1

Precipitation Zone 3
Basin Area = 0.320 acres

Existing Treatment			Improved Conditions Treatment		
Area of A =	0 sf	0%	Area of A =	0 sf	0%
Area of B =	0 sf	0%	Area of B =	2595 sf	19%
Area of C =	13920 sf	100%	Area of C =	0 sf	0%
Area of D =	0 sf	0%	Area of D =	11325 sf	81%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions Treatment	% of Area		En	Improved Conditions Treatment	% of Area		En
A	0.00 x	0.66 =	0.00	A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00	B	0.19 x	0.912 =	0.17
C	1.00 x	1.29 =	1.29	C	0.00 x	1.29 =	0.00
D	0.00 x	2.36 =	0.00	D	0.81 x	2.36 =	1.92
		E =	1.29			E =	2.09

Volume V = E A / 12

Ve =	1.290 x	0.32 /	12 =	0.034 acre ft	1496 cf
Vi =	2.090 x	0.32 /	12 =	0.056 acre ft	2424 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q	Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00	A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00	B	0.19 x	2.6 =	0.48
C	1.00 x	3.45 =	3.45	C	0.00 x	3.45 =	0.00
D	0.00 x	5.02 =	0.00	D	0.81 x	5.02 =	4.08
		q =	3.45			q =	4.57

Peak Rate Qp = q A

Qp(e) =	3.45 x	0.32 =	1.10 cfs
Qp(i) =	4.57 x	0.32 =	1.46 cfs

Excess Volume = 0.021 acre ft
Excess Rate = 0.36 cfs

tc =	0.2 hr	
tb =	(2.107 *E*At/Qp)-(0.25*Ad/At) =	0.760 hr
tp =	(0.7*tc)+((1.6-(Ad/At))/12) =	0.206 hr

Discharge Rate	4.57 cfs / acre	x	0.320 =	1.4604

Volume 2533 cf
Discharged - 2533 cf

Pond Voulme **0** cf

Tract X-1-B North Albuquerque Acres 8/20/03

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN B2

Precipitation Zone 3

Basin Area = 1.467 acres

Existing Treatment

Area of A =	0 sf	0%
Area of B =	0 sf	0%
Area of C =	63924 sf	100%
Area of D =	0 sf	0%

Improved Conditions Treatment

Area of A =	0 sf	0%
Area of B =	8177 sf	13%
Area of C =	0 sf	0%
Area of D =	55747 sf	87%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions

Treatment	% of Area		En
A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00
C	1.00 x	1.29 =	1.29
D	0.00 x	2.36 =	0.00
		E =	1.29

Improved Conditions

Treatment	% of Area		En
A	0.00 x	0.66 =	0.00
B	0.13 x	0.912 =	0.12
C	0.00 x	1.29 =	0.00
D	0.87 x	2.36 =	2.06
		E =	2.17

Volume V = E A / 12

Ve =	1.290 x	1.467 /	12 =	0.158 acre ft	6872 cf
Vi =	2.175 x	1.467 /	12 =	0.266 acre ft	11585 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00
C	1.00 x	3.45 =	3.45
D	0.00 x	5.02 =	0.00
		q =	3.45

Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00
B	0.13 x	2.6 =	0.33
C	0.00 x	3.45 =	0.00
D	0.87 x	5.02 =	4.38
		q =	4.71

Peak Rate Qp = q A

Qp(e) =	3.45 x	1.467 =	5.06 cfs
Qp(i) =	4.71 x	1.467 =	6.91 cfs

Excess Volume = 0.108 acre ft

Excess Rate = 1.85 cfs

tc = 0.2 hr

tb = (2.107 *E*At/Qp)-(0.25*Ad/At) = 0.755 hr

tp = (0.7*tc)+((1.6-(Ad/At))/12) = 0.201 hr

Discharge Rate 4.71 cfs / acre x 1.467 = 6.9119

Volume 12104 cf

Discharged - 12103 cf

Pond Voulme **1** cf

TRACK X-1-B North Albuquerque Acres 8/20/03

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN B3

Precipitation Zone 3
Basin Area = 0.323 acres

Existing
Treatment

Area of A =	0 sf	0%
Area of B =	0 sf	0%
Area of C =	14088 sf	100%
Area of D =	0 sf	0%

Improved Conditions
Treatment

Area of A =	0 sf	0%
Area of B =	1374 sf	10%
Area of C =	0 sf	0%
Area of D =	12714 sf	90%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions

Treatment	% of Area		En
A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00
C	1.00 x	1.29 =	1.29
D	0.00 x	2.36 =	0.00
		E =	1.29

Improved Conditions

Treatment	% of Area		En
A	0.00 x	0.66 =	0.00
B	0.10 x	0.912 =	0.09
C	0.00 x	1.29 =	0.00
D	0.90 x	2.36 =	2.13
		E =	2.22

Volume V = E A / 12

Ve =	1.290 x	0.323 /	12 =	0.035 acre ft	1514 cf
Vi =	2.219 x	0.323 /	12 =	0.060 acre ft	2605 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00
C	1.00 x	3.45 =	3.45
D	0.00 x	5.02 =	0.00
		q =	3.45

Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00
B	0.10 x	2.6 =	0.25
C	0.00 x	3.45 =	0.00
D	0.90 x	5.02 =	4.53
		q =	4.78

Peak Rate Qp = q A

Qp(e) =	3.45 x	0.323 =	1.12 cfs
Qp(i) =	4.78 x	0.323 =	1.55 cfs

Excess Volume = 0.025 acre ft
Excess Rate = 0.43 cfs

tc = 0.2 hr
tb = (2.107 *E*At/Qp)-(0.25*Ad/At) = 0.752 hr
tp = (0.7*tc)+((1.6-(Ad/At))/12) = 0.198 hr

Discharge Rate 4.78 cfs / acre x 0.323 = 1.5459

Volume Discharged 2722 cf - 2720 cf

Pond Voulme **1** cf

TRACK X-1-B North Albuquerque Acres 8/20/03

Drainage Calculation

City of Albuquerque DPM 1997 edition

WYOMING OFFICE PARK BASIN C1

Precipitation Zone 3
Basin Area = 0.068 acres

Existing
Treatment

Area of A =	0 sf	0%
Area of B =	0 sf	0%
Area of C =	2961 sf	100%
Area of D =	0 sf	0%

Improved Conditions
Treatment

Area of A =	0 sf	0%
Area of B =	0 sf	0%
Area of C =	2961 sf	100%
Area of D =	0 sf	0%

Excess Precipitation, E (inches) 6 hr - 100 yr storm table A-8

Existing Conditions

Treatment	% of Area		En
A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00
C	1.00 x	1.29 =	1.29
D	0.00 x	2.36 =	0.00
		E =	1.29

Improved Conditions

Treatment	% of Area		En
A	0.00 x	0.66 =	0.00
B	0.00 x	0.912 =	0.00
C	1.00 x	1.29 =	1.29
D	0.00 x	2.36 =	0.00
		E =	1.29

Volume V = E A / 12

Ve =	1.290 x	0.068 /	12 =	0.007 acre ft	318 cf
Vi =	1.290 x	0.068 /	12 =	0.007 acre ft	318 cf

Discharge Rate, Q (cfs / acre) 100 yr storm table A-9

Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00
C	1.00 x	3.45 =	3.45
D	0.00 x	5.02 =	0.00
		q =	3.45

Treatment	% of Area		Q
A	0.00 x	1.87 =	0.00
B	0.00 x	2.6 =	0.00
C	1.00 x	3.45 =	3.45
D	0.00 x	5.02 =	0.00
		q =	3.45

Peak Rate Qp = q A

Qp(e) =	3.45 x	0.068 =	0.23 cfs
Qp(i) =	3.45 x	0.068 =	0.23 cfs

Excess Volume = 0.000 acre ft
Excess Rate = 0.00 cfs

tc =	0.2 hr	
tb =	(2.107 *E*At/Qp)-(0.25*Ad/At) =	0.788 hr
tp =	(0.7*tc)+((1.6-(Ad/At))/12) =	0.273 hr

Discharge Rate	3.45 cfs / acre	x	0.068 =	0.2345

Volume Discharged - 333 cf
333 cf

Pond Voulme **0** cf

Pipe Capacity

per Manning Equation
PVC Pipe

Q=(1.486/n)(slope)^0.5 (Area)(Hydralic Radius)^0.67

n =	0.009	Area=	0.35 sq ft
slope =	0.0285 ft/ft	Rh=	0.17 ft
Pipe Dia =	8 in	Qfull=	2.95 cfs
		Qmax=	*3.18 cfs*

		Pipe Dia in						
	Slope	4	6	B1 8	10	B 12	18	24
0.10%	0.001	0.087	0.256	0.552	1.001	1.627	4.798	10.333
0.50%	0.005	0.194	0.573	1.234	2.238	3.639	10.729	23.106
1.00%	0.010	0.275	0.810	1.745	3.165	5.146	15.173	32.677
1.50%	0.015	0.337	0.993	2.138	3.876	6.303	18.583	40.021
2.00%	0.020	0.389	1.146	2.468	4.476	7.278	21.458	46.212
B1→ 2.50%	0.025	0.435	1.281	2.760	5.004	8.137	23.991	51.667
3.00%	0.030	0.476	1.404	3.023	5.482	8.914	26.280	56.598
3.50%	0.035	0.514	1.516	3.266	5.921	9.628	28.386	61.133
B 4.00%	0.040	0.550	1.621	3.491	6.330	10.293	30.346	65.354
5.00%	0.050	0.615	1.812	3.903	7.077	11.507	33.928	73.068
5.50%	0.055	0.645	1.901	4.094	7.422	12.069	35.584	76.634
6.00%	0.060	0.673	1.985	4.276	7.752	12.606	37.166	80.041
6.50%	0.065	0.701	2.066	4.450	8.069	13.120	38.684	83.310
7.00%	0.070	0.727	2.144	4.618	8.373	13.616	40.144	86.455
7.50%	0.075	0.753	2.220	4.780	8.667	14.094	41.553	89.489
8.00%	0.080	0.778	2.292	4.937	8.951	14.556	42.916	92.424
8.50%	0.085	0.801	2.363	5.089	9.227	15.004	44.236	95.268
9.00%	0.090	0.825	2.431	5.236	9.494	15.439	45.519	98.030
10.00%	0.100	0.869	2.563	5.520	10.008	16.274	47.981	103.333
20.00%	0.200	1.229	3.625	7.806	14.153	23.015	67.855	146.135
30.00%	0.300	1.506	4.439	9.560	17.334	28.187	83.106	178.978
40.00%	0.400	1.739	5.126	11.039	20.016	32.548	95.962	206.666

CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services Section

January 26, 2007

Claudio Antonio Vigil, Registered Architect
1801 Rio Grande NW
Albuquerque, NM 87104

Re: Certification Submittal for Final Building Certificate of Occupancy for Wyoming Office Park (Bldg B), [D-19 / D22]
7920 Wyoming NE
Architect's Stamp Dated 01/25/07

Dear Mr. Vigil:

The TCL / Letter of Certification submitted on January 25, 2007 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Sincerely,

Nilo E. Salgado-Fernandez, P.E.
Senior Traffic Engineer
Development and Building Services
Planning Department

c: Engineer
Hydrology file
CO Clerk

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

CLAUDIO VIGIL ARCHITECTS

January 25, 2007

Nilo Salgado-Fernandez
Development & Building Services Division
600 2nd St. NW
Albuquerque, New Mexico

RE: Traffic Certification
Office Building
7920 Wyoming Blvd. NE

Dear Mr. Salgado-Fernandez:

On January 25, 2007, this office inspected the site of the above-mentioned office building. All work necessary to support the facility has been completed, and the site work is in substantial compliance with the DRB approved Site Plan. Noted below are the items still in progress. This work is scheduled to be completed by January 31, 2007.

- The guardrail and handrails at stair and ramp have not been installed.

The work is complete, except as noted above, and ready for a Final Certificate of Occupancy.

Sincerely,

Claudio Vigil
Architect

STATE OF NEW MEXICO
CLAUDIO ANTONIO VIGIL
1236
1/25/07
REGISTERED ARCHITECT

RECEIVED
JAN 25 2007
HYDROLOGY SECTION

Ambysis P.C., D.B.A. Claudio Vigil Architects

1801 Rio Grande Blvd., NW • Albuquerque, NM 87104 505/842-1113 Fax 505/842-1330

CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services Section

August 29, 2007

Claudio Antonio Vigil, Registered Architect
1801 Rio Grande Blvd NW
Albuquerque, NM 87104

Re: Certification Submittal for Final Building Certificate of Occupancy for Wyoming Office Park (Bldg C), [D-19 / D22]
7910 Wyoming Blvd
Architect's Stamp Dated 08/28/07

Dear Mr. Vigil:

The TCL / Letter of Certification submitted on August 28, 2007 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Sincerely,

Nilo E. Salgado-Fernandez, P.E.
Senior Traffic Engineer
Development and Building Services
Planning Department

c: Engineer
Hydrology file
CO Clerk

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

August 28, 2007

Traffic Engineer
Development and Building Services
600 2nd. St. N.W
Albuquerque, New Mexico

RE: TRAFFIC CERTIFICATION
Wyoming Office Park, Office Building
7910 Wyoming Blvd. NE

To whom it may concern:

I, Claudio Vigil, NM Registered Architect 1236, of the firm Claudio Vigil Architects, hereby certify that this project is in substantial compliance with and in accordance with the design intent of DRB approved site plan and permit set. The record information documented and edited onto the approved DRB Site Plan has been obtained by Ed Avila of the firm Claudio Vigil Architects. I further certify that I have personally visited the project site on August 27, 2007 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 Certificate of Occupancy.

All work necessary to support the facility has been completed, and is in substantial compliance with the approved TCL.

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

Signature of Engineer or Architect

8/28/07
Date

ENGINEER'S OR ARCHITECT'S STAMP