



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 25, 2000

Arthur Blessen, P.E.
Claudio Vigil Architects
1305 Tijeras Ave., NW
Albuquerque, NM 87102-2882

RE: ENGINEER'S CERTIFICATION FOR MERIDIAN BUSINESS PARK, LOT 15, 7400
MERIDIAN PLACE (K-10/ D035), ENGINEER'S STAMP DATED 10/26/99,
CERTIFICATION DATED 10/20/2000.

Dear Mr. Blessen,

Based upon the information provided in your submittal dated October 20, 2000, the Engineering Certification for Certificate of Occupancy for the project referred to above is approved.

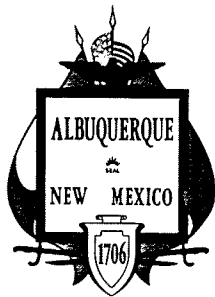
If you have any questions, please call me at 924-3988.

Sincerely,

Stuart Reeder, P.E.

Stuart Reeder, P.E.
Hydrology Division

xc: Whitney Reiersen
✓ File



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 12, 2000

J. A. Blessen, P.E.
Claudio Vigil Architects
1305 Tijeras NW
Albuquerque, NM 87102-2882

***RE: MERIDIAN BUSINESS PARK, LOT 15 (K10-D35). GRADING AND DRAINAGE
PLAN FOR SITE DEVELOPMENT PLAN FOR BUILDING PERMIT AND
BUILDING PERMIT APPROVALS. ENGINEER'S STAMP DATED OCTOBER 29,
1999 WITH Resubmittal STAMPED DECEMBER 16, 1999.***

Dear Mr. Blessen:

Based on the information provided on your December 29, 1999 submittal, the above referenced plan is approved for Site Development Plan for Building Permit and for Building Permit.

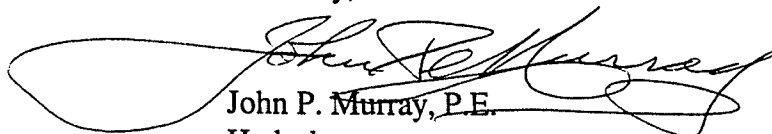
Although the system is private, maintenance, especially of the orifices, is a concern. The owner should be apprised of that need so that the system will continue to function as you planned.

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

Prior to Certificate of Occupancy approval, an Engineer's Certification per the DPM will be required.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,


John P. Murray, P.E.
Hydrology

c:  WR
File

GRADING AND DRAINAGE PLAN - LOT 15

DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING THE LOT-15, MERIDIAN-BUSINESS-PARK GRADING AND DRAINAGE PLAN ARE CONTAINED HEREON:

1. VICINITY MAP
2. GRADING PLAN
3. CALCULATIONS

THE PROPOSED IMPROVEMENTS, AS SHOWN BY THE VICINITY MAP, ARE LOCATED ON THE SOUTH SIDE OF MERIDIAN PLACE N.W. THE SITE IS UNDEVELOPED. THE LAND SLOPES FROM NORTHWEST TO SOUTHWEST AT A APPROXIMATE SLOPE OF 1.2%. THE SITE WAS IN A FLOOD HAZARD ZONE, BUT THE CONSTRUCTION OF THE UNSER DIVERSION CHANNEL REMOVED THE SITE FROM THE FLOOD HAZARD ZONE.

THE MASTER DRAINAGE PLAN FOR THIS SUBDIVISION WAS PREPARED BY EASTERLING AND ASSOCIATES. THE MASTER PLAN ESTABLISHED A DISCHARGE RATE OF 0.10 CFS/ACRE AND REQUIRES TEMPORARY DIVERSION DITCHES AND PONDS TO CONTROL THE RUNOFF BE CONSTRUCTED ON EACH LOT.

THIS SITE IS HIGHER THAN THE LAND TO THE SOUTH AND EAST, AND THE STREET TO THE NORTH PREVENTS OFF SITE FLOWS FROM THAT DIRECTION. EXISTING DITCHES AND POND HAVE BEEN CONSTRUCTED ON THE SITE TO THE WEST, THEREFORE THE OFF SITE FLOWS ARE NOT CONSIDERED SIGNIFICANT.

THE GRADING PLAN SHOWS:

1. THE EXISTING AND PROPOSED GRADES, INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS.
2. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
3. THE LIMIT AND CHARACTER OF EXISTING IMPROVEMENTS, AND
4. THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS.

THE PROPOSED IMPROVEMENTS CONSIST OF A WAREHOUSE / OFFICE WITH ASSOCIATED ASSOCIATED PARKING AND LANDSCAPING. THE SITE IS DIVIDED IN TO TWO DRAINAGE BASINS. BASIN A TO THE NORTH, 30% OF THE SITE, AND BASIN B TO THE SOUTH, 70% OF THE SITE. BASIN A FLOWS TO A POND ALONG THE NORTH PROPERTY LINE, AND BASIN B FLOWS TO A POND ALONG THE EAST PROPERTY LINE. THE DISCHARGE IS CONTROLLED BY ORIFICES TO CONFORM TO THE DISCHARGE LIMIT OF 0.10 CFS/ACRE.

THE CALCULATIONS BELOW ANALYZE THE EXISTING AND PROPOSED CONDITIONS FOR THE 6-HOUR, 100 YEAR RAINFALL EVENT. THE ANALYSIS IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL VOLUME II, AS SHOWN BY THESE CALCULATIONS, THE RATE AND VOLUME OF RUNOFF WILL INCREASE, BUT THE POND(S) WITH CONTROLLED OUTLETS WILL MITIGATE THE INCREASES. THIS PLAN IS IN CONFORMANCE WITH THE MASTER DRAINAGE PLAN.

CALCULATIONS

PRECIPITATION ZONE = 1
TOTAL SITE AREA = 2.8305 ACRES

BASIN A (NORTH)

AREA = 0.566 ACRES

EXISTING CONDITIONS

LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (0.566) / 12 = 0.021 ACRE FEET
Q = 1.29 (1.00) (0.566) = 0.73 CFS

DEVELOPED CONDITIONS

LAND TREATMENT B=16% D=84%
E = 0.67 (0.16) + 1.97 (0.84) = 1.76 INCHES
V = 1.66 (0.566) / 12 = 0.083 ACRE FEET
Q = [2.03 (0.16) + 4.37 (0.84)] (0.566) = 2.26 CFS
INCREASE IN VOLUME OF RUNOFF = 0.083 - 0.021 = 0.062 ACRE FT
INCREASE IN RATE OF RUNOFF = 2.26 - 0.73 = 1.53 CFS

POND VOLUME

REQUIRED V = (0.083) (43560) = 3,615 CF
VOLUME @ ELEV 5106.5 V=0.5*(3291)+0.5*(3291+6586)*0.4=3620 CF

ORIFICE SIZES

0.057 = 0.60 A $\sqrt{2 (32.2) (1)}$ DIA = 1.35 INCHES

BASIN B (SOUTH)

AREA = 2.264 ACRES

EXISTING CONDITIONS

LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (2.264) / 12 = 0.083 ACRE FEET
Q = 1.29 (1.00) (2.264) = 2.92 CFS

DEVELOPED CONDITIONS

LAND TREATMENT B=8% D=92%
E = 0.67 (0.08) + 1.97 (0.92) = 1.86 INCHES
V = 1.86 (2.264) / 12 = 0.351 ACRE FEET
Q = [2.03 (0.08) + 4.37 (0.92)] (2.264) = 9.45 CFS
INCREASE IN VOLUME OF RUNOFF = 0.351 - 0.083 = 0.268 ACRE FT
INCREASE IN RATE OF RUNOFF = 9.45 - 2.92 = 6.53 CFS

POND VOLUME

REQUIRED V = (0.351) (43560) = 15,290 CF
VOLUME @ ELEV 5103.80 V= 0.5*(68+2*1620+8444)+0.5*(8444+15768)*0.8 = 15560 CF

ORIFICE SIZES

0.2264 = 0.60 A $\sqrt{2 (32.2) (2.8)}$ DIA = 2.25 INCHES

NORTH



GRADING & DRAINAGE PLAN

OCTOBER 26, 1999

1"=20'-0"

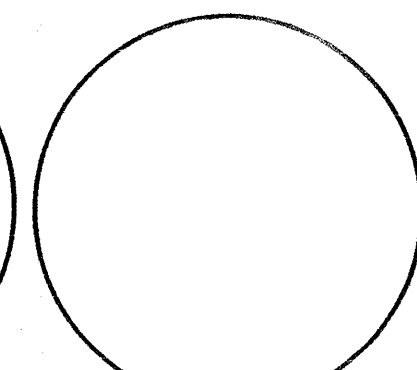
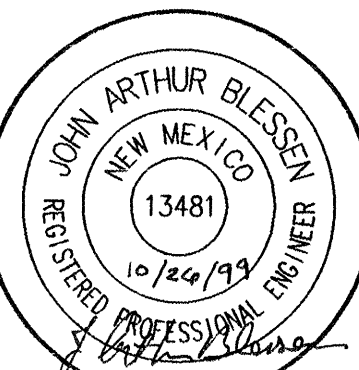
CLAUDIO VIGIL ARCHITECTS

BRUNACINI CONSTRUCTION

MERIDIAN LOT 15

7400 MERIDIAN PLACE

ALBUQUERQUE, NEW MEXICO

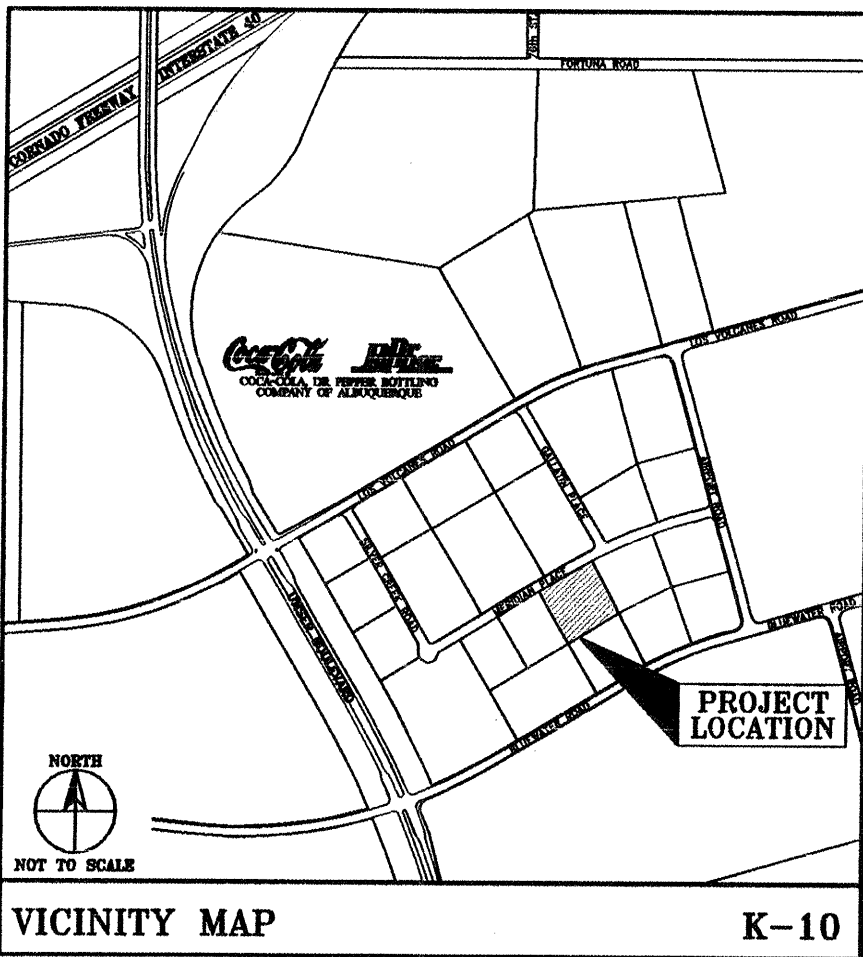


SHEET

C-1

1305 Tijeras NW Albuquerque, NM 87102-2882

Phone: 505/842-1113 Fax: 505/842-1330



ADDRESS:
7400 MERIDIAN PLACE NW
LEGAL DESCRIPTION:
LOT 15, MERIDIAN BUSINESS PARK

BENCH MARK:
ACS MONUMENT 10-K10 LOCATED AT THE SOUTHEAST CORNER OF UNSER BLDV. AND LOS VOLCANES ROAD
ELEVATION = 5142.79 FT.

LEGEND:

- EXISTING SPOT ELEVATION
- NEW SPOT ELEVATION
- EXISTING CONTOUR
- NEW CONTOUR
- SWALE
- VERIFIED ELEVATION
- AS BUILT ELEVATION
- BASIN BOUNDARY
- PROPERTY LINE

- FLOW LINE
- GROUND
- INVERT
- TOP OF ASPHALT
- TOP OF CURB
- TOP OF GRATE
- TOP OF CONCRETE SLAB
- TOP OF WALL
- TEMPORARY BENCH MARK

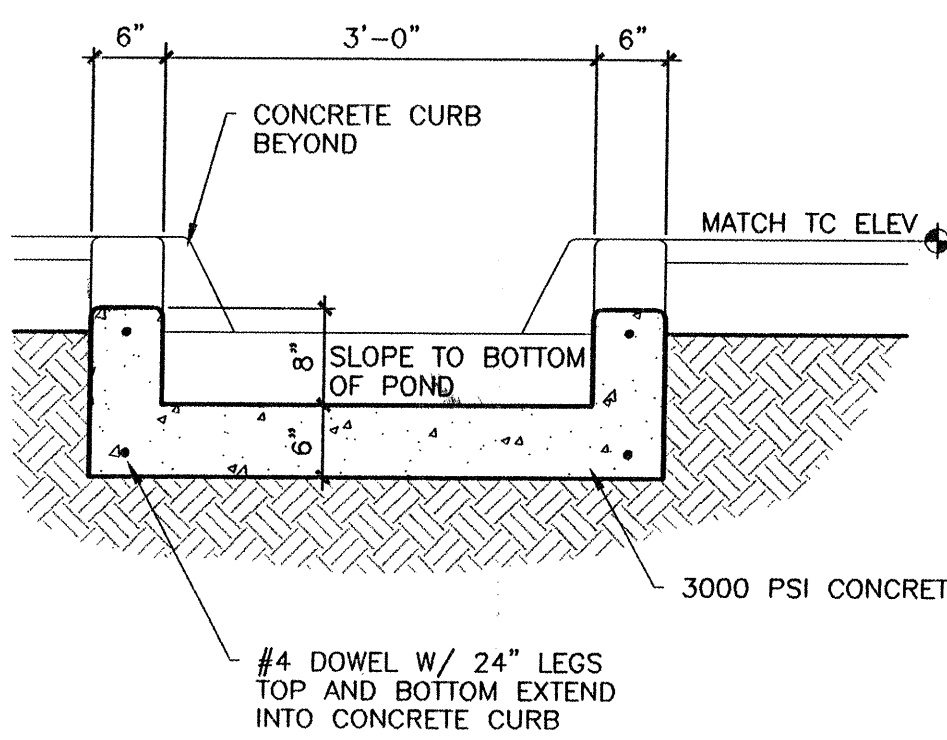
PONDS SHALL BE LANDSCAPED WITH GRAVEL AND FILTER CLOTH AS PER THE LANDSCAPE DRAWINGS

Engineer's Certification for
Permanent Certificate of Occupancy
Meridian Lot 15

I hereby certify that I have inspected the site grading and drainage improvements and that they have been constructed and are expected to function in accordance with the intent of the approved Grading and Drainage Plan. Proposed contours have not been revised to reflect the as-constructed information and should be considered approximate. Spot elevations which have not been revised should be considered approximate. As Built elevations were provided by Surv-Tek.



John Arthur Blessen, PE
NM PE# 13481
10/26/99 date



CONCRETE RUNDOWN

SCALE: 3/4" = 1'-0"

