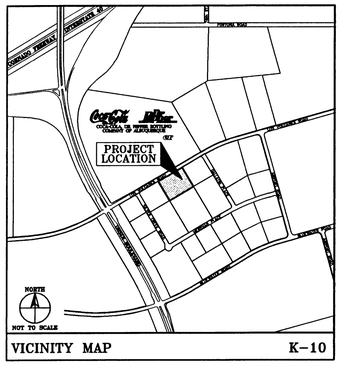


VICINITY MAP K-10

ADDRESS:
7500 LOS VOLCANES ROAD NW

LEGAL DESCRIPTION:
LOT 2, 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 (SLD 1929)

LEGEND:

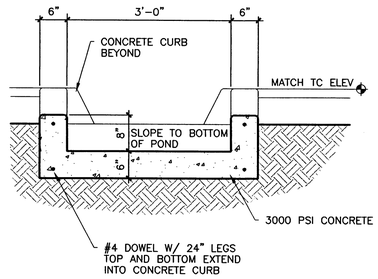
5123.5	EXISTING SPOT ELEVATION
• 51.00	NEW SPOT ELEVATION
51	EXISTING CONTOUR
51	NEW CONTOUR
	SWALE
51.0 ✓	VERIFIED ELEVATION
51.0	AS BUILT ELEVATION
	BASIN BOUNDARY
	PROPERTY LINE
FL	FLOW LINE
GND	GROUND
INV	INVERT
TA	TOP OF ASPHALT
TC	TOP OF CURB
TG	TOP OF GRATE
TS	TOP OF CONCRETE SLAB
TW	TOP OF WALL
TBM	TEMPORARY BENCH MARK

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

NORTH

0 15' 30' 60'

SCALE: 1" = 30'



1 CONCRETE RUNDOWN

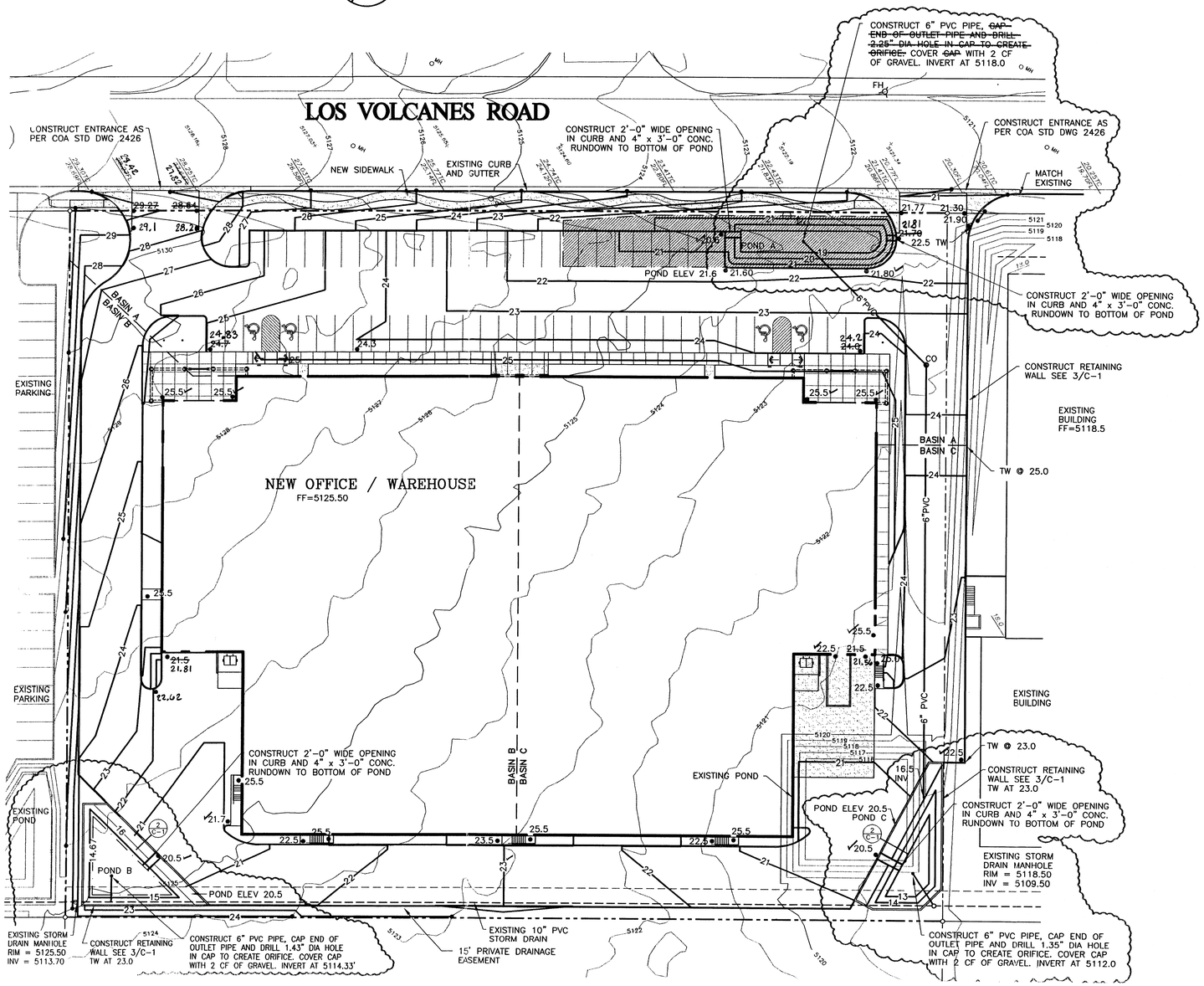
SCALE: 3/4" = 1'-0"

Engineer's Certification for
Permanent Certificate of Occupancy
Iron Mountain New Storage Facility – Lot 2

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.

JOHN ARTHUR BLESSEN NEW MEXICO 13481 REGISTERED PROFESSIONAL ENGINEER

J Arthur Blessen, PE — 9/14/00 date
NM PE# 13481



GRADING AND DRAINAGE PLAN – LOT 2

DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING THE LOT-2, 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 SOUTHEAST AT A APPROXIMATE SLOPE OF 2.2%. THE SITE WAS IN A FLOOD HAZARD ZONE, BUT THE CONSTRUCTION OF THE UNSER DIVERSION CHANNEL REMOVED THE SITE FROM THE FLOOR 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.

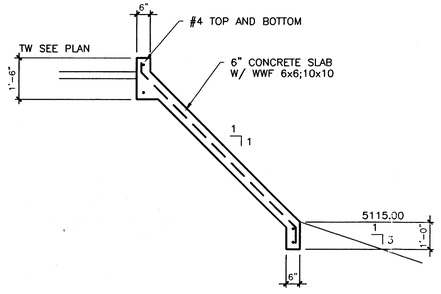
THIS SITE IS HIGHER THAN THE LAND TO THE SOUTH AND EAST, AND THE STREET TO THE NORTH PREVENTS OFF SITE FLOWS FROM THAT DIRECTION. THE SITE TO THE WEST HAS BEEN DEVELOPED. THEREFORE THE OFF SITE FLOWS ARE NOT CONSIDERED SIGNIFICANT.

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.

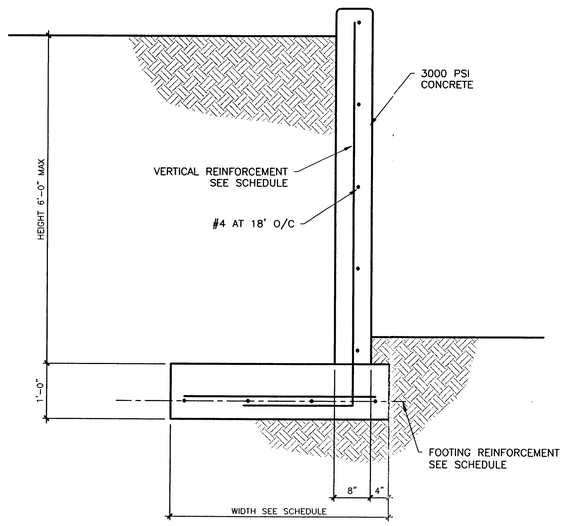
THE PROPOSED IMPROVEMENTS CONSIST OF A WAREHOUSE / OFFICE WITH ASSOCIATED ASSOCIATED PARKING AND LANDSCAPING. THE SITE IS DIVIDED IN TO THREE DRAINAGE BASINS. BASIN A TO THE NORTH, 24% OF THE SITE, BASIN B TO THE SOUTHWEST, 39% OF THE SITE, AND BASIN C TO THE SOUTHEAST, 37% OF THE SITE. BASIN A FLOWS TO A POND ALONG THE NORTH PROPERTY LINE. BASIN B FLOWS TO A POND AT THE SOUTHWEST CORNER, AND BASIN C FLOWS TO A POND AT THE SOUTHEAST CORNER. EACH POND HAS A CONTROLLED DISCHARGE TO THE PRIVATE STORM DRAIN SYSTEM. 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 POIND(S) WITH CONTROLLED OUTLETS WILL MITIGATE THE INCREASES. THIS PLAN IS IN CONFORMANCE WITH THE MASTER DRAINAGE PLAN.



2 POND DETAIL

3/4"=1'-0"



TYPE A

3 RETAILING WALL DETAIL

3/4"=1'-0"

CALCULATIONS
PRECIPITATION ZONE = 1
TOTAL SITE AREA = 3.4740 ACRES

BASIN A (NORTH)
AREA = 0.829 ACRES
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (0.829) / 12 = 0.031 ACRE FEET
Q = 1.29 (1.00) (0.829) = 1.07 CFS
DEVELOPED CONDITIONS
LAND TREATMENT B=24% D=76%
E = 0.67 (0.24) + 1.97 (0.76) = 1.66 INCHES
V = 1.66(0.829) / 12 = 0.115 ACRE FEET
Q = [2.03 (0.24) + 4.37 (0.76] (0.829) = 3.16 CFS
INCREASE IN VOLUME OF RUNOFF = 0.115 – 0.031 = 0.084 ACRE FT
INCREASE IN RATE OF RUNOFF = 3.16 – 1.07 = 2.09 CFS
POND VOLUME
REQUIRED V= (0.115) (43560) = 5,009 CF
VOLUME @ ELEV 5121.5
V=0.5*(4088+2574)*0.6+0.5*(2574+2*1227+2*727)=5,240 CF
ORIFICE SIZES
0.083 = 0.60 A $\sqrt{2\ (32.2)\ (3.6)}$ DIA = 1.29 INCHES

BASIN B (SOUTH WEST)
AREA = 1.363 ACRES
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (1.363) / 12 = 0.050 ACRE FEET
Q = 1.29 (1.00) (1.363) = 1.76 CFS
DEVELOPED CONDITIONS
LAND TREATMENT B=12% D=88%
E = 0.67 (0.12) + 1.97 (0.88) = 1.82 INCHES
V = 1.82 (1.363) / 12 = 0.207 ACRE FEET
Q = [2.03 (0.12) + 4.37 (0.88)] (1.363) = 5.58 CFS
INCREASE IN VOLUME OF RUNOFF = 0.207 – 0.050 = 0.157 ACRE FT
INCREASE IN RATE OF RUNOFF = 5.58 – 1.76 = 3.83 CFS
POND VOLUME
REQUIRED V= (0.207) (43560) = 8,993 CF
VOLUME @ ELEV 5120.50 As Built Volume 8997CF
V=0.5*(1653+1547)*0.5+0.5*(1547+2*(1477+1407+1336+1266+1196+861)+488)=~~9,360~~ CF
ORIFICE SIZES
0.1363 = 0.60 A $\sqrt{2\ (32.2)\ (6.17)}$ DIA = 1.43 INCHES

BASIN C (SOUTH EAST)
AREA = 1.282 ACRES
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (1.282) / 12 = 0.047 ACRE FEET
Q = 1.29 (1.00) (1.282) = 1.65 CFS
DEVELOPED CONDITIONS
LAND TREATMENT B=9% D=91%
E = 0.67 (0.09) + 1.97 (0.91) = 1.85 INCHES
V = 1.85 (1.282) / 12 = 0.198 ACRE FEET
Q = [2.03 (0.08) + 4.37 (0.92)] (2.264) = 5.33 CFS
INCREASE IN VOLUME OF RUNOFF = 0.198 – 0.047 = 0.151 ACRE FT
INCREASE IN RATE OF RUNOFF = 5.33 – 1.65 = 3.68 CFS
POND VOLUME
REQUIRED V= (0.198) (43560) = 8,626 CF
VOLUME @ ELEV 5120.5 As Built Volume 8640CF
V=0.5*(1795+1718)*0.5+0.5*(1718+2*(1641+1563+1484+1405+1326+822)+436)=~~8,831~~ CF
ORIFICE SIZES
0.1282 = 0.60 A $\sqrt{2\ (32.2)\ (8.5)}$ DIA = 1.35 INCHES

RETAINING WALL SCHEDULE

TYPE	RETAINED HEIGHT "H"	FOOTING WIDTH "W"	FOOTING REINFORCEMENT LONGITUDINAL	FOOTING REINFORCEMENT TRANSVERSE	WALL REINFORCEMENT
A	6'-0" MAX	4'-0"	FOUR #5	#4 AT 16" O/C	#5 AT 12" O/C
A	5'-0" MAX	3'-0"	THREE #5	#4 AT 32" O/C	#5 AT 16" O/C
A	3'-0" MAX	2'-0"	THREE #5	#4 AT 48" O/C	#5 AT 16" O/C

NORTH

GRADING & DRAINAGE PLAN

NOVEMBER 30, 1999 1"=30'-0"

RECEIVED SEP 14 2000 HYDROLOGY SECTION

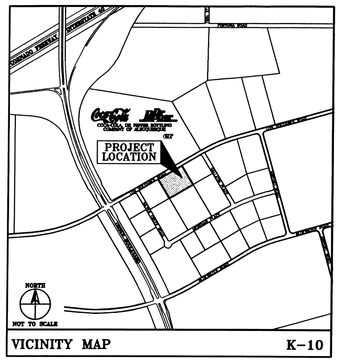
CLAUDIO VIGIL ARCHITECTS

IRON MOUNTAIN
NEW STORAGE FACILITY
7500 LOS VOLCANES
ALBUQUERQUE, NEW MEXICO

JOHN ARTHUR BLESSEN NEW MEXICO 13481 REGISTERED PROFESSIONAL ENGINEER 11/30/99

SHEET C-1

1305 Tijeras NW Albuquerque, NM 87102-2882
Phone: 505/842-1113 Fax: 505/842-1330



VICINITY MAP K-10

LEGEND:

- EXISTING SPOT ELEVATION
- • 51.00 NEW SPOT ELEVATION
- —51— EXISTING CONTOUR
- —51— NEW CONTOUR
- SWALE
- 51.0 ✓ VERIFIED ELEVATION
- ~~51.0~~ AS BUILT ELEVATION
- BASIN BOUNDARY
- PROPERTY LINE

FL	FLOW LINE
GND	GROUND
INV	INVERT
TA	TOP OF ASPHALT
TC	TOP OF CURB
TG	TOP OF GRATE
TS	TOP OF CONCRETE SLAB
TW	TOP OF WALL
TBM	TEMPORARY BENCH MARK

ADDRESS:
7500 LOS VOLCANES ROAD NW

LEGAL DESCRIPTION:
LOT 2, MERIDIAN BUSINESS PARK

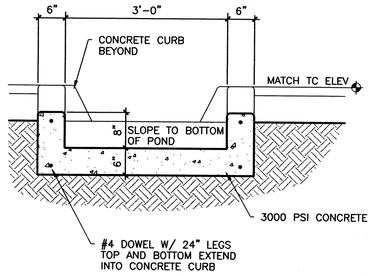
BENCH MARK:
ACS MONUMENT 10-K10 LOCATED AT THE SOUTHEAST CORNER OF UNSER BLDV. AND LOS VOLCANES ROAD
ELEVATION = 5142.79 FT (SLD 1929)

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

NORTH

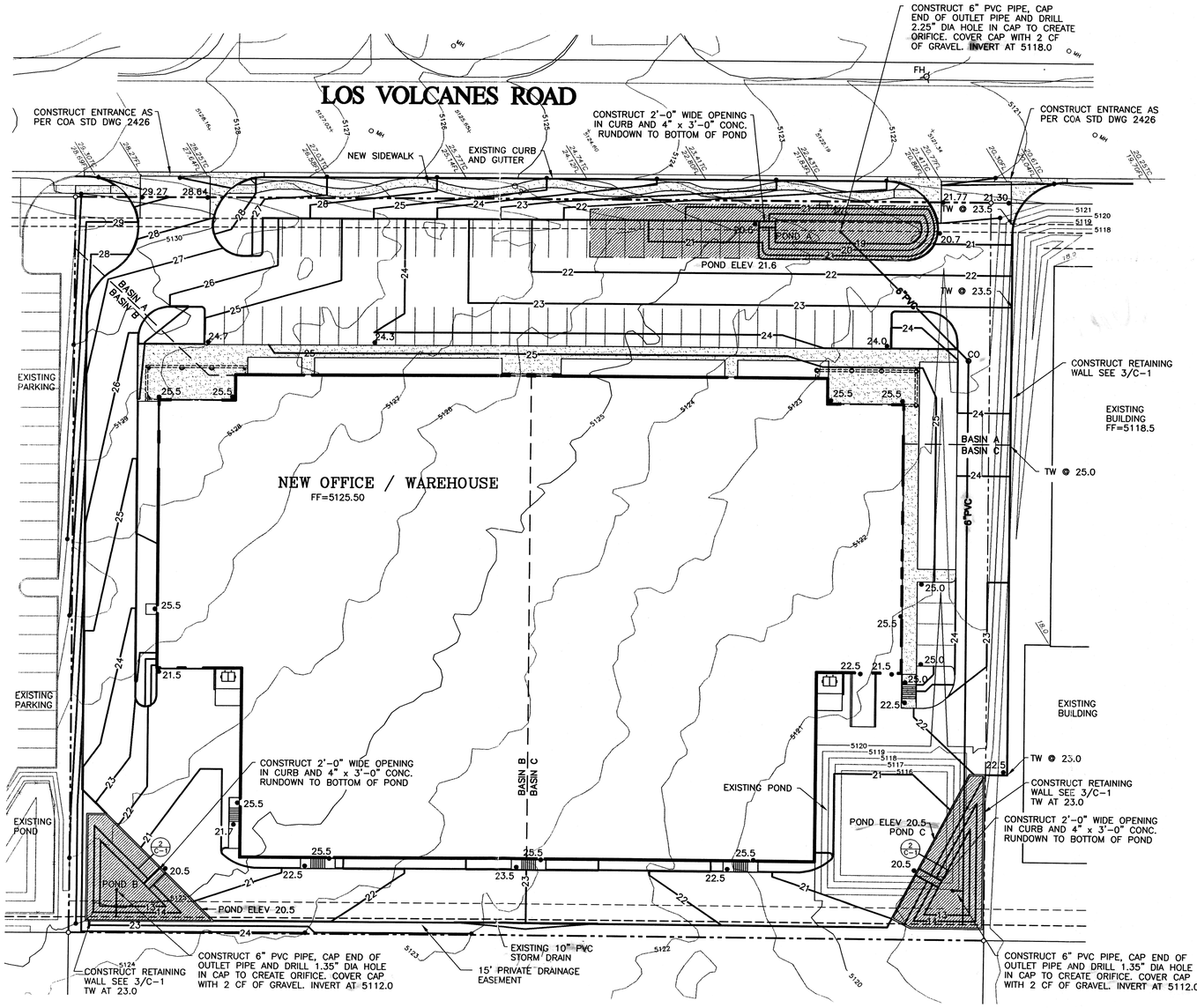
0 15' 30' 60'

SCALE: 1" = 30'



1 CONCRETE RUNDOWN

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



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GRADING AND DRAINAGE PLAN – LOT 2

DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING THE LOT-2, MERIDIAN BUSINESS PARK GRADING AND DRAINAGE PLAN ARE CONTAINED HEREON:

1. VICINITY MAP
2. GRADING PLAN
3. CALCULATIONS

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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. THE SITE TO THE WEST HAS BEEN DEVELOPED. 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 THREE DRAINAGE BASINS. BASIN A TO THE NORTH, 24% OF THE SITE, BASIN B TO THE SOUTHWEST, 39% OF THE SITE, AND BASIN C TO THE SOUTHEAST, 37% OF THE SITE. BASIN A FLOWS TO A POND ALONG THE NORTH PROPERTY LINE. BASIN B FLOWS TO A POND AT THE SOUTHWEST CORNER, AND BASIN C FLOWS TO A POND AT THE SOUTHEAST CORNER. EACH POND HAS A CONTROLLED DISCHARGE TO THE PRIVATE STORM DRAIN SYSTEM. THE DISCHARGE IS CONTROLLED BY ORIFICES TO CONFORM TO THE DISCHARGE LIMIT OF 0.10 CFS/ACRE.

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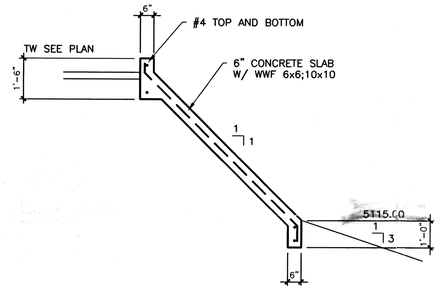

2 POND DETAIL

3/4"=1'-0"

CALCULATIONS
PRECIPITATION ZONE = 1
TOTAL SITE AREA = 3.4740 ACRES

BASIN A (NORTH)
AREA = 0.829 ACRES
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (0.829) / 12 = 0.031 ACRE FEET
Q = 1.29 (1.00) (0.829) = 1.07 CFS
DEVELOPED CONDITIONS
LAND TREATMENT B=24% D=76%
E = 0.67 (0.24) + 1.97 (0.76) = 1.66 INCHES
V = 1.66(0.829) / 12 = 0.115 ACRE FEET
Q = [2.03 (0.24) + 4.37 (0.76)] (0.829) = 3.16 CFS
INCREASE IN VOLUME OF RUNOFF = 0.115 – 0.031 = 0.084 ACRE FT
INCREASE IN RATE OF RUNOFF = 3.16 – 1.07 = 2.09 CFS
POND VOLUME
REQUIRED V= (0.115) (43560) = 5,009 CF
VOLUME @ ELEV 5121.5
V=0.5*(4088+2574)*0.6+0.5*(2574+2*1227+2*727)=5,240 CF
ORIFICE SIZES
0.083 = 0.60 A $\sqrt{2\ (32.2)\ (3.6)}$ DIA = 1.29 INCHES

BASIN B (SOUTH WEST)
AREA = 1.363 ACRES
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (1.363) / 12 = 0.050 ACRE FEET
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DEVELOPED CONDITIONS
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POND VOLUME
REQUIRED V= (0.207) (43560) = 8,993 CF
VOLUME @ ELEV 5120.50
V=0.5*(1653+1547)*0.5+0.5*(1547+2*(1477+1407+1336+1266+1196+861)+488)=9,360 CF
ORIFICE SIZES
0.1363 = 0.60 A $\sqrt{2\ (32.2)\ (8.5)}$ DIA = 1.33 INCHES

BASIN C (SOUTH EAST)
AREA = 1.282 ACRES
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (1.282) / 12 = 0.047 ACRE FEET
Q = 1.29 (1.00) (1.282) = 1.65 CFS
DEVELOPED CONDITIONS
LAND TREATMENT B=9% D=91%
E = 0.67 (0.09) + 1.97 (0.91) = 1.85 INCHES
V = 1.85 (1.282) / 12 = 0.198 ACRE FEET
Q = [2.03 (0.08) + 4.37 (0.92)] (2.264) = 5.33 CFS
INCREASE IN VOLUME OF RUNOFF = 0.198 – 0.047 = 0.151 ACRE FT
INCREASE IN RATE OF RUNOFF = 5.33 – 1.65 = 3.68 CFS
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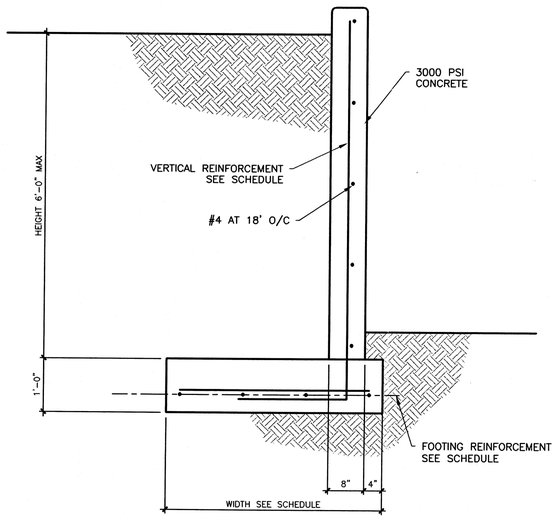
VOLUME @ ELEV 5120.5
V=0.5*(1795+1718)*0.5+0.5*(1718+2*(1641+1563+1484+1405+1326+822)+436)=8,831 CF
ORIFICE SIZES
0.1282 = 0.60 A $\sqrt{2\ (32.2)\ (8.5)}$ DIA = 1.29 INCHES

RETAINING WALL SCHEDULE

TYPE	RETAINED HEIGHT "H"	FOOTING WIDTH "W"	FOOTING REINFORCEMENT LONGITUDINAL	FOOTING REINFORCEMENT TRANSVERSE	WALL REINFORCEMENT
A	6'-0" MAX	4'-0"	FOUR #5	#4 AT 16" O/C	#5 AT 12" O/C
A	5'-0" MAX	3'-0"	THREE #5	#4 AT 32" O/C	#5 AT 16" O/C
A	3'-0" MAX	2'-0"	THREE #5	#4 AT 48" O/C	#5 AT 16" O/C



TYPE A

3 RETAILING WALL DETAIL

3/4"=1'-0"

NORTH

GRADING & DRAINAGE PLAN

NOVEMBER 30, 1999 1"=30'-0"

CLAUDIO VIGIL ARCHITECTS

RECEIVED NOV 30 1999

IRON MOUNTAIN

NEW STORAGE FACILITY

7500 LOS VOLCANES
ALBUQUERQUE, NEW MEXICO

JOHN ARTHUR BLESSEN NEW MEXICO 13481 REGISTERED PROFESSIONAL ENGINEER 11-30-99

SHEET C-1

1305 Tijeras NW Albuquerque, NM 87102-2882
Phone: 505/842-1113 Fax: 505/842-1330