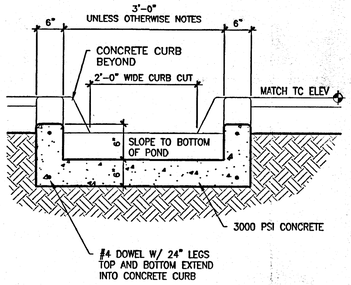
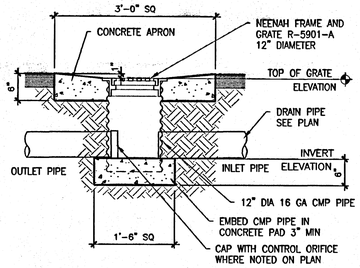
LEGEND:

51.0	EXISTING SPOT ELEVATION
• 51.00	NEW SPOT ELEVATION
—51—	EXISTING CONTOUR
—51—	NEW CONTOUR
	SWALE
✓	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
	GRAVEL



1 CONCRETE RUNDOWN
3/4"=1'-0"



2 CATCH BASIN
3/4"=1'-0"

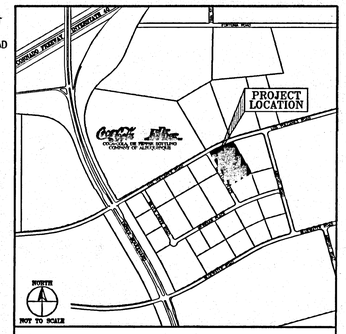
ADDRESS:
7300 GALLATIN DRIVE, NW

LEGAL DESCRIPTION:
LOT 7A, MERIDIAN BUSINESS PARK

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

CONSTRUCTION NOTES

1. TWO WORKING DAY PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL FOR LOCATION OF EXISTING UTILITIES.
2. ALL WORK WITHIN THE CITY RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE CITY OF ALBUQUERQUE STANDARD AND PROCEDURE.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS, LAWS, AND RULES CONCERNING SAFETY AND HEALTH.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE EXISTING SITE CONDITIONS AND INFORM THE ARCHITECT / ENGINEER OF ANY DISCREPANCY BETWEEN THE INFORMATION SHOWN THE PLANS AND THOSE OF THE EXISTING SITE.
5. THE OWNER SHALL VERIFY LOCATIONS OF PONDS WITH GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH ANY CONSTRUCTION WORK ON THIS PROJECT, AND INFORM THE ARCHITECT / ENGINEER OF ANY ADDITIONAL REQUIREMENTS.



VICINITY MAP K-10

K-10/D39

GRADING AND DRAINAGE PLAN – LOT 7A

DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING THE LOT-7A, 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 NORTH SIDE OF MERIDIAN PLACE N.W. THE SITE IS UNDEVELOPED. THE LAND SLOPES FROM WEST TO EAST AT AN APPROXIMATE SLOPE OF 1.5%. 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 EAST AND SOUTH. THE STREETS TO THE NORTH AND WEST PREVENTS OFF SITE FLOWS FROM THOSE DIRECTIONS. THEREFORE 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 PARKING AND LANDSCAPING. THE RUNOFF FROM FROM THE SITE FLOW TO DETENTION POND A LOCATED AT THE EAST CORNER OF THE SITE. THE POND DISCHARGES TO A PRIVATE STORM DRAIN AT A RATE OF 0.58 CFS (0.1 CFS/ACRE).

THE CALCULATIONS 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 INCREASE. THIS PLAN IS IN CONFORMANCE WITH THE MASTER DRAINAGE PLAN.

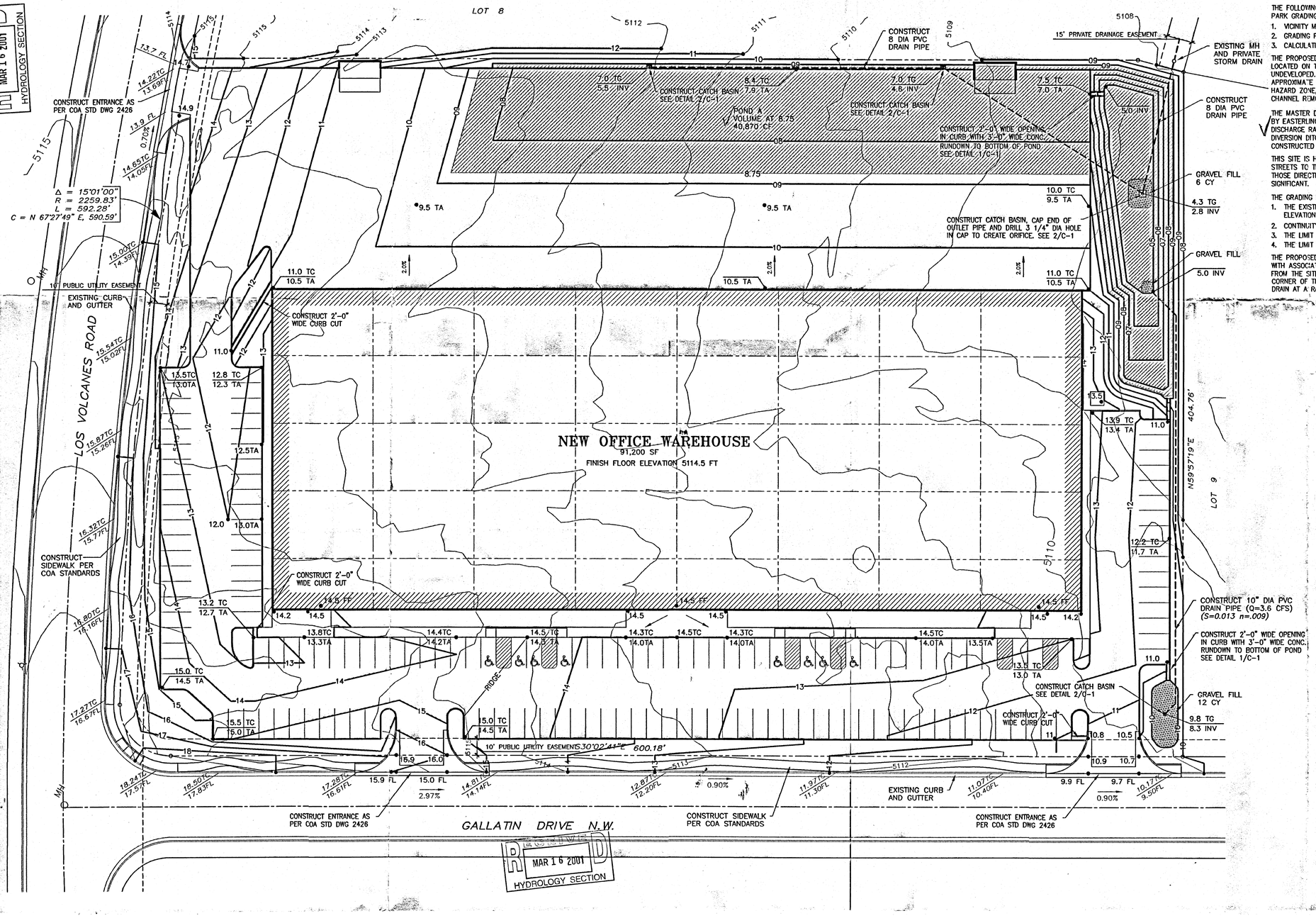
CALCULATIONS
PRECIPITATION ZONE = 1
TOTAL SITE AREA = 5.818 ACRES

BASIN A
AREA = 5.818 ACRES
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (5.818) / 12 = 0.213 ACRE FEET
Q = 1.29 (1.00) (5.818) = 7.51 CFS
DEVELOPED CONDITIONS
LAND TREATMENT B=10% D=90%
E = 0.67 (0.10) + 1.97 (0.90) = 1.84 INCHES
V = 1.84 (5.818) / 12 = 0.892 ACRE FEET
Q = [2.03 (0.10) + 4.37 (0.90)] (5.818) = 24.06 CFS
INCREASE IN VOLUME OF RUNOFF = 0.679 ACRE FT
INCREASE IN RATE OF RUNOFF = 16.56 CFS

POND VOLUME BASIN A
T_c= 0.2 HR 0.25 Ad/At = 0.25(0.90) = 0.225 HR
T_b= 2.107 E At/Qp – 0.25 Ad/At = 0.712 HR
T_p= (0.7 Tc)+((1.6–Ad/At))/12) = 0.198 HR
$V_{required}$= 39,602 CF

VOLUME @ ELEV 5108.75
$V_{at\ dock}$=[0.5*(23432+14772)*0.75]+[0.5*(14772)*1]= 21,713 CF
V_{pond} =[0.5*(7637+6722)*0.75]
+[0.5*(6722)+5175+3807+(0.5*2679)]= 19,157 CF
TOTAL POND VOLUME POND A = 21,713 + 10,157 = 40,870 CF

DISCHARGE PIPE SIZES AT POND A
Q= 0.1*5.818=0.58 CFS = 0.60 A $\sqrt{2\ (32.2)\ (3.85)}$
DIA = 0.27 INCHES USE 3 1/4" DIA ORIFICE



NORTH

GRADING AND DRAINAGE PLAN

MARCH 15, 2001 1"=30'-0"

SCALE: 1" = 30'

CLAUDIO VIGIL ARCHITECTS

MERIDIAN LOT 7A
NEW OFFICE WAREHOUSE
7300 GALLATIN DRIVE, N.W.
ALBUQUERQUE, NEW MEXICO

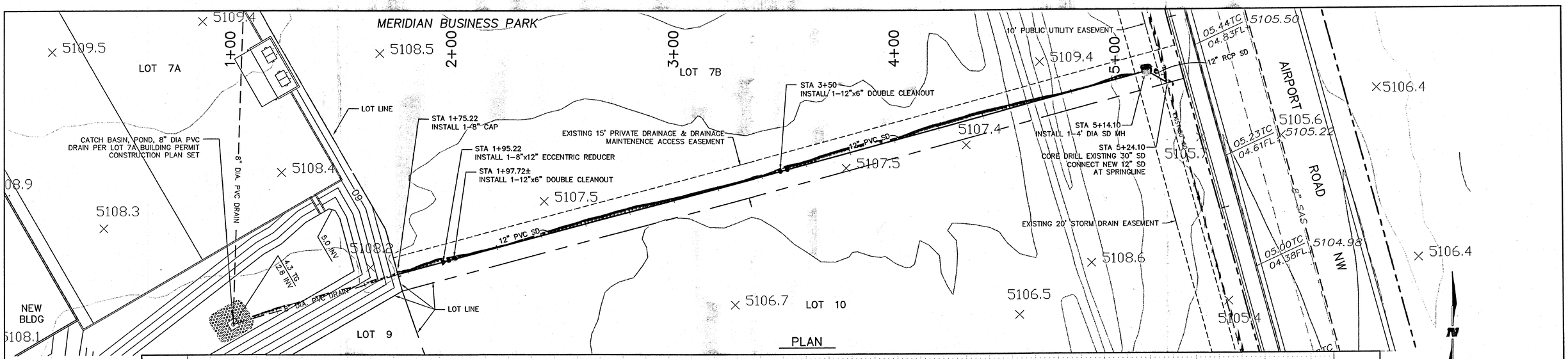
JOHN ARTHUR BLESSEN NEW MEXICO 13481 REGISTERED PROFESSIONAL ENGINEER 3/15/01

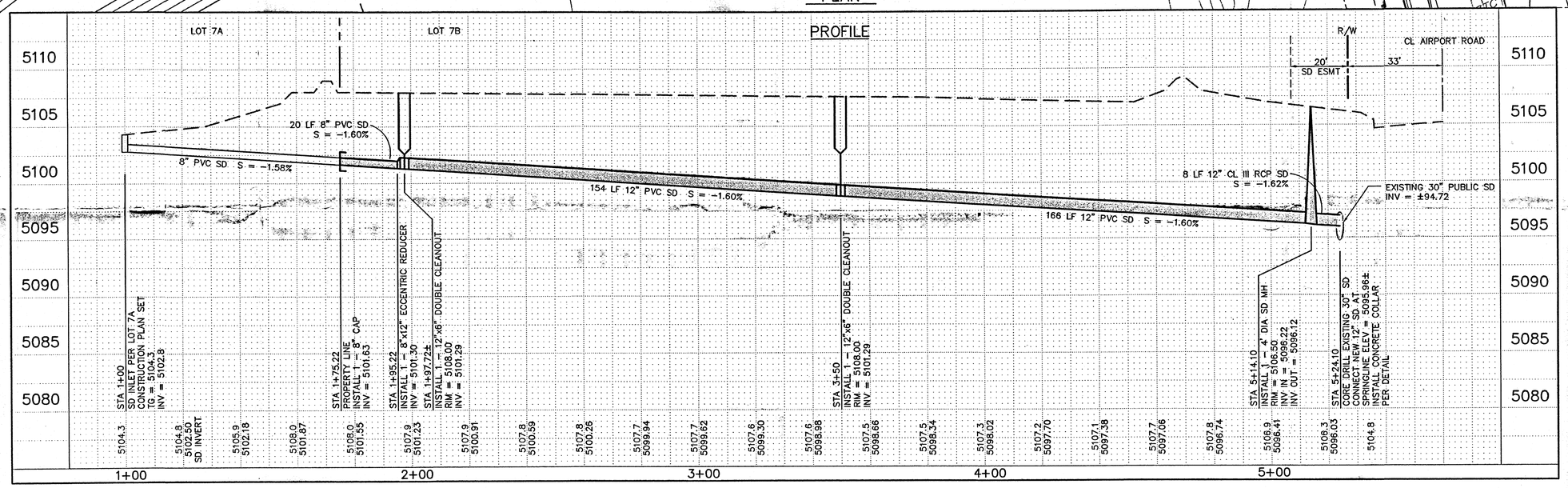
SHEET C-1
PROJECT NUMBER 01010

1305 Tijeras NW Albuquerque, NM 87102-2832
Phone: 505/842-1113 Fax: 505/842-1330

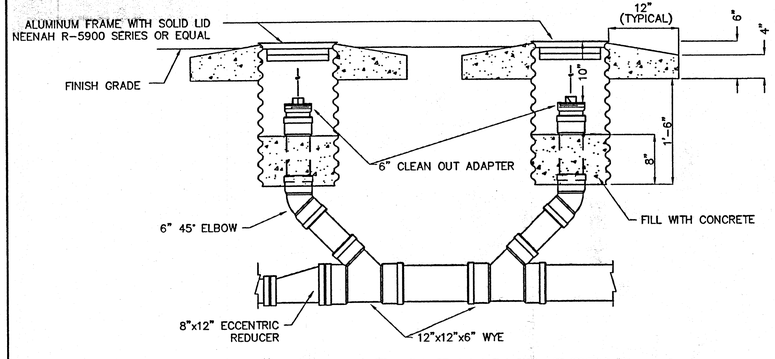
RECEIVED MAR 16 2001 HYDROLOGY SECTION

C:\SDSK\PROJ\Brunacini\lot-7\civil\lot7-01-GRD.dwg Thu Mar 15 14:26:26 2001



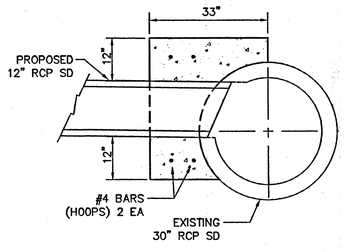


SCALE:
HORIZ: 1" = 20'
VERT: 1" = 5'



6" DOUBLE CLEANOUT DETAIL W/ 12"x8" REDUCER

NTS



CONCRETE COLLAR DETAIL

NTS

NOTICE TO CONTRACTORS

1. *An excavation/barricade permit will be required before beginning any work within City right-of-way.*
2. *All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with "City of Albuquerque Standard Specification for Public Works Construction, 1986" latest revision.*
3. *Two working days prior to any excavation, contractor must contact New Mexico One Call Systems, Inc. 260-1990, for location of existing utilities.*
4. *Prior to construction, the contractor will excavate and verify the horizontal and vertical locations of all contruction. Should a conflict exist, the contractor will notify the Construction Engineer so that the conflict can be resolved with a minimum amount of delay.*
5. *Backfill compaction shall be according to traffic/street use.*
6. *Maintenance of these facilities shall be the responsibility of the Owner of the property served.*
7. *Work on arterial streets shall be performed on a 24 hour basis.*

APPROVAL	NAME	DATE
INSPECTOR		

WCEA #X4218018
APRIL 2004

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E.
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 898-8021

DANIEL S. ALVAREZ 11955 REGISTERED PROFESSIONAL ENGINEER 4/29/04

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

MERIDIAN BUSINESS PARK LOTS 7A & 7B SO #19

Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	Of
XXXX.XX	J-10	1	1

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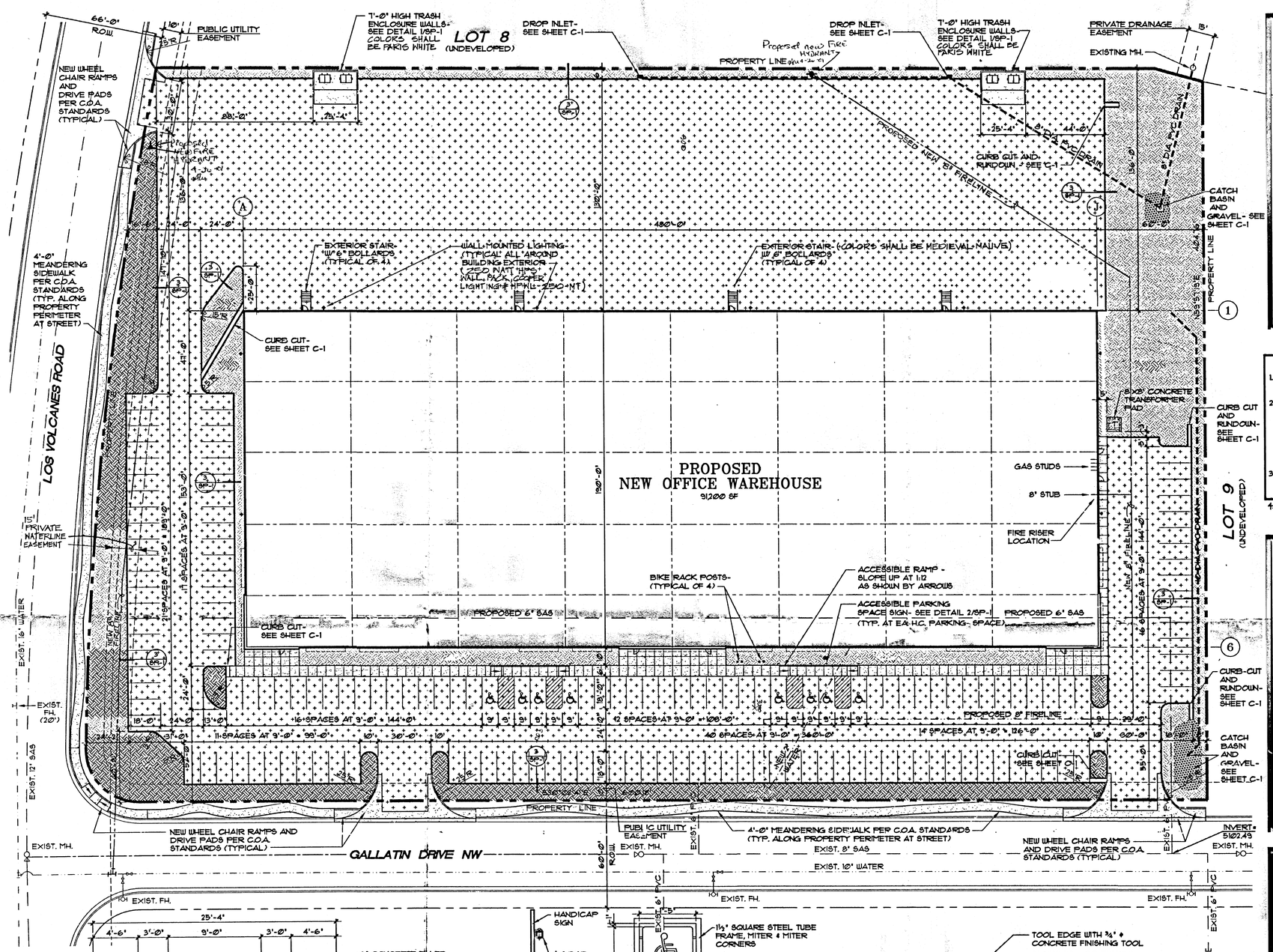


SIGNATURE BLOCK

01450-00000-00570

D.R.B. CASE NO. 1001186
E.P.C. CASE NO. Z-92-57

THIS PLAN IS CONSISTENT WITH THE SPECIFIC SITE DEVELOPMENT PLAN APPROVAL BY THE ENVIRONMENTAL PLANNING COMMISSION (EPC) ON October 15, 1992 AND THAT THE FINDINGS AND CONDITIONS IN THE OFFICIAL NOTICE; NOTIFICATION OF DECISION HAVE BEEN COMPLIED WITH:

SITE DEVELOPMENT PLAN

	DATE
TRAFFIC ENGINEER, TRANSPORTATION DIVISION	5/22/01
PARKS & RECREATION DEPARTMENT	5/3/01
PUBLIC WORKS, WATER UTILITIES DIVISION	5/22/01
CITY ENGINEER, ENGINEERING DIVISION / AMAFCA	4/30/01
CITY PLANNER, ALBUQUERQUE	6/21/01

APPROVAL AND CONDITIONAL ACCEPTANCE: AS SPECIFIED BY THE DEVELOPMENT PROCESS MANUAL.

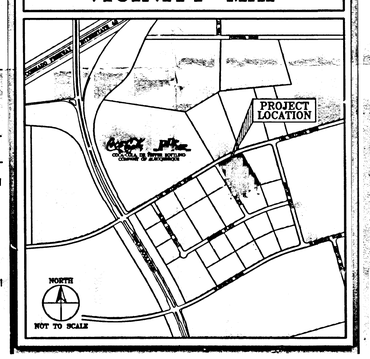
PNZ(10706) 4/96

4-27-2001

NOTE:

1. ALL ASPHALT AND CONCRETE CONSTRUCTION MUST BE 100% COMPLETE BEFORE INITIAL CALL FOR TEMPORARY C.O.
2. "AN AS-BUILT COPY OF THE APPROVED TCL(TRAFFIC CIRCULATION LAYOUT) MUST BE SUBMITTED BY THE DESIGNER OF RECORD, AS REQUIRED BY TRANSPORTATION DEVELOPMENT, (INCLUDING RANDOM FIELD CHECKS) WILL BE MADE BEFORE A FINAL CERTIFICATE OF OCCUPANCY IS ISSUED." PLEASE CALL THIS OFFICE TO OBTAIN TEMPORARY C.O.
3. OVERHEAD DOCK DOORS MUST BE INSTALLED ON THE INTERIOR SIDE. THE RETRACTING EQUIPMENT MUST NOT APPEAR ON THE EXTERIOR.
4. NO FUGITIVE LIGHT WILL BE ALLOWED TO ESCAPE THE SITE.

VICINITY MAP



SITE PLAN LEGEND

- INDICATES EXTENT OF LANDSCAPE AREAS. FOR SIZE OF EACH AREA, SEE LANDSCAPE PLAN.
- INDICATES EXTENT OF ASPHALTIC CONCRETE PAVING. 2" ASPHALT OVER 6" BASE COURSE.
- INDICATES EXTENT OF CONCRETE PAVING AND CONCRETE SIDEWALKS. CONTROL JOINTS AS SHOWN.
- PROPERTY LINE.
- EASEMENT BOUNDARIES.
- WATER LINE.
- SEWER LINE.
- UNDERGROUND RCP OR PVC - SEE GRADING AND DRAINAGE PLANS.
- ELEC — UNDERGROUND ELECTRICAL LINE

PROJECT INFORMATION

PROJECT: MERIDIAN BUSINESS PARK
NEW OFFICE WAREHOUSE BUILDING SHELL

LOCATION: 7300 GALLATIN DRIVE, NW.
ALBUQUERQUE, NEW MEXICO
LOCATED BETWEEN AIRPORT ROAD AND GALLATIN DRIVE

OWNER: BRUNACINI CONSTRUCTION CO.
7600 LOS VOLCANES ROAD, NW, SUITE D
ALBUQUERQUE, NEW MEXICO 87121

ARCHITECT: CLAUDIO VIGIL ARCHITECTS
1801 RIO GRANDE BOULEVARD, NW, SUITE 2
ALBUQUERQUE, NEW MEXICO 87104

LEGAL DESCRIPTION: LOT 7A MERIDIAN BUSINESS PARK

ZONING ATLAS MAP: K-10-Z

CURRENT ZONING CLASSIFICATION:
IP, INDUSTRIAL PARK ZONE

PROPOSED ZONING CLASSIFICATION:
IP, INDUSTRIAL PARK ZONE

BUILDING FUNCTION: BUILDING SHELL FOR FUTURE OFFICE WAREHOUSE SPACE.

CONSTRUCTION TYPE: TYPE II-N CONSTRUCTION WITH 100% AUTOMATIC FIRE SPRINKLER SYSTEM.

ALLOWABLE AREA:
GROUP B AND S-1 OCCUPANCIES, TYPE II-N CONSTRUCTION, 100% AUTOMATIC FIRE SPRINKLER SYSTEM AND MINIMUM 60'-0" YARDS ON ALL SIDES =
UNLIMITED AREA

TOTAL BUILDING AREA: 91,200 SQUARE FEET
TOTAL LOT AREA: 253,444 SQUARE FEET, 5.8 ACRES
NET LOT AREA: 162,244 S.F.
TOTAL PARKING/PAVED AREA: 119,385 S.F.
TOTAL LANDSCAPE AREA REQUIRED: 24,336.6 S.F.
TOTAL LANDSCAPE AREA PROVIDED: 35,751 S.F.
LANDSCAPE TO PARKING AREA RATIO: 3.3 TO 1

PARKING ANALYSIS:
OFFICE AREA - 9120/200 = 45.6 SPACES
WAREHOUSE AREA - 82,080/2000 = 41.0 SPACES
TOTAL = 87 SPACES
TOTAL PARKING SPACES REQUIRED = 87 PARKING SPACES
TOTAL PARKING SPACES PROVIDED = 155 PARKING SPACES
(INCLUDES 8 VAN ACCESSIBLE PARKING SPACES)

PARKING SPACE SIZES:
REGULAR CAR PARKING SPACES = 9'-0" x 18'-0" WITH A 2'-0" OVERHANG.
VAN ACCESSIBLE HANDICAP PARKING SPACE = 9'-0" x 18'-0" WITH A 2'-0" OVERHANG AND A 9'-0" WIDE ACCESS STRIP.

BICYCLE SPACES:
REQUIRED PARKING - 87/20 = 4.35 BICYCLES
TOTAL BICYCLE SPACES REQUIRED = 5 BICYCLE SPACES
TOTAL BICYCLE SPACES PROVIDED = 8 BICYCLE SPACES
4 BIKE RACK POSTS AT 2 BICYCLES PER POST

NORTH

0 15' 30' 60'
SCALE: 1" = 30'

SITE PLAN

APRIL 26, 2001 — 1"=30'-0"

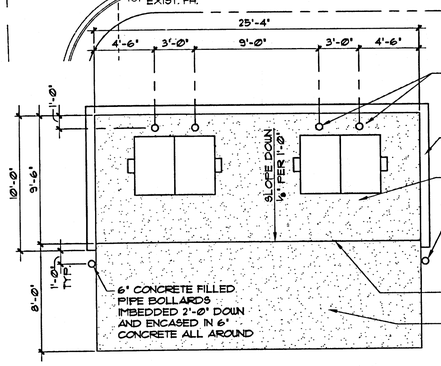
CLAUDIO VIGIL ARCHITECTS

MERIDIAN LOT 7A
NEW OFFICE WAREHOUSE
7300 GALLATIN DRIVE NW
ALBUQUERQUE, NEW MEXICO

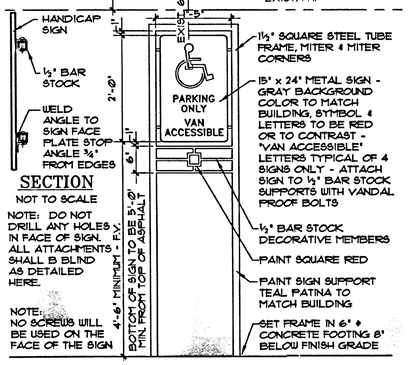
SHEET
SP-1
PROJECT NUMBER
01010

OWNERSHIP OF INSTRUMENTS OF SERVICE
All design concepts, details, plans, specifications, computer files, field data, notes and other documents and instruments prepared by Claudio Vigil Architects, P.C. as instruments of service shall remain the property of Claudio Vigil Architects, P.C. Claudio Vigil Architects, P.C. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

1801 Rio Grande NW, #2, Albuquerque, NM 87104
Phone: 505/842-1113 Fax: 505/842-1330



1 **TRASH ENCLOSURE PLAN**
SCALE: 3/16" = 1'-0"

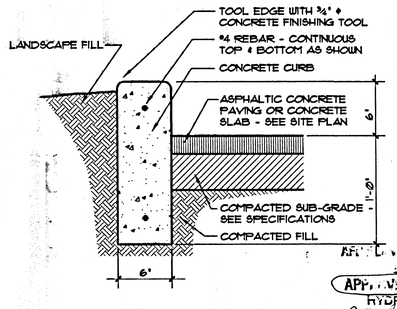


SECTION
NOT TO SCALE

NOTE: DO NOT DRILL ANY HOLES IN FACE OF SIGN. ALL ATTACHMENTS SHALL BE BLIND AS DETAILED HERE.

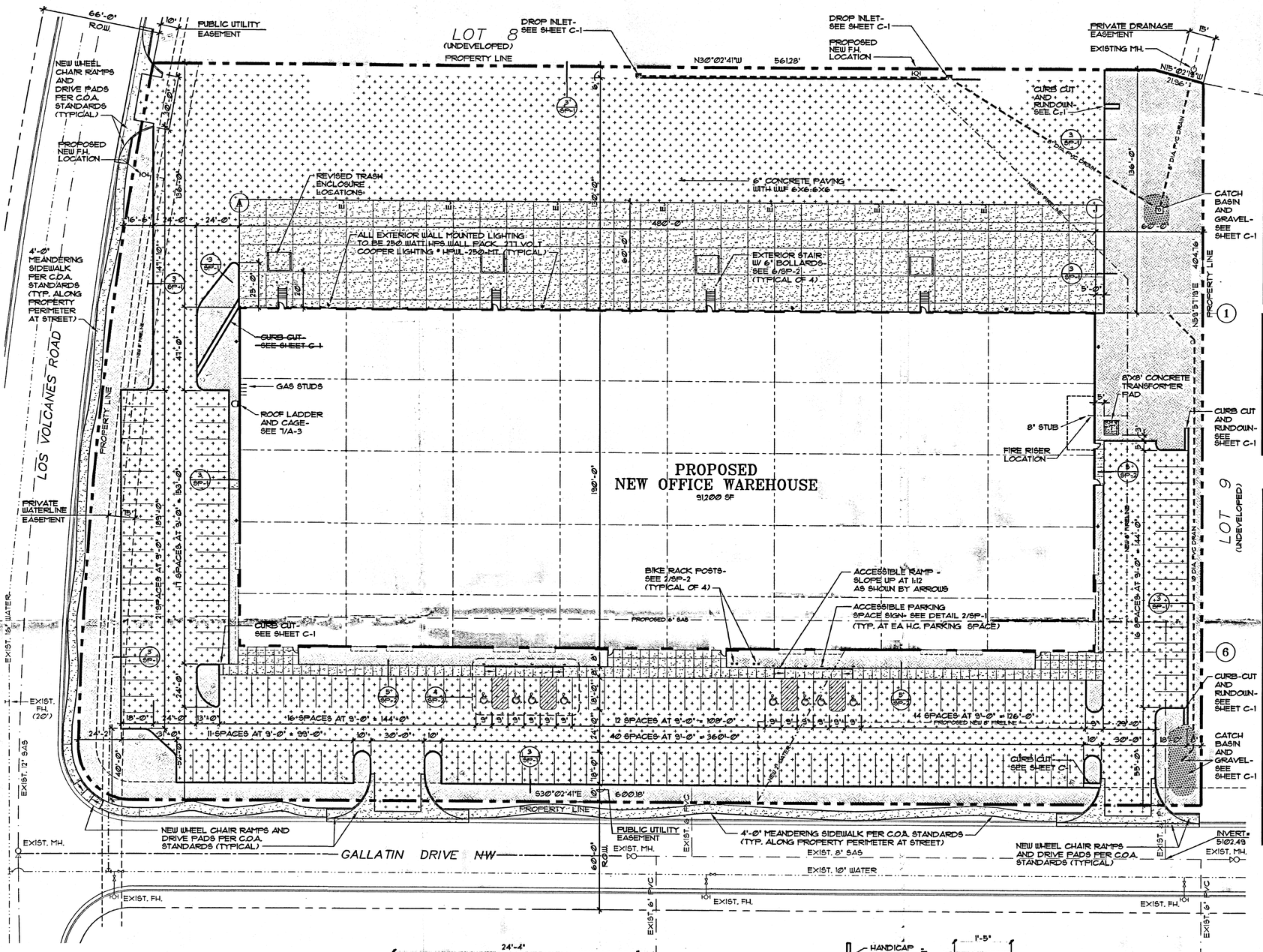
NOTE: NO SCREWS WILL BE USED ON THE FACE OF THE SIGN

2 **HANDICAP PARKING SIGN**
SCALE: 3/4" = 1'-0"

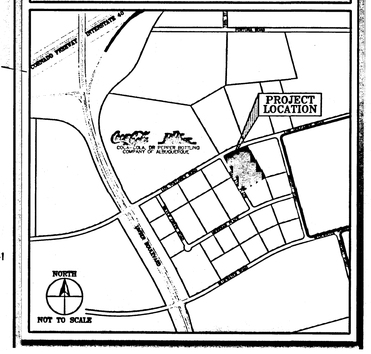


3 **TYPICAL STAND-UP CURB**
SCALE: 1-1/2" = 1'-0"

APPROVED
HYDRANT(S) ONLY
P.C. 4-26-01



VICINITY MAP



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- WATER LINE.
- SEWER LINE.
- UNDERGROUND RCP OR PVC - SEE GRADING AND DRAINAGE PLANS.
- ELEC — UNDERGROUND ELECTRICAL LINE

PROJECT INFORMATION

PROJECT: MERIDIAN BUSINESS PARK
NEW OFFICE WAREHOUSE BUILDING SHELL

LOCATION: 540 GALLATIN PLACE NW
ALBUQUERQUE, NEW MEXICO
LOCATED BETWEEN AIRPORT ROAD NW AND GALLATIN PLACE NW

OWNER: BRUNACINI CONSTRUCTION CO.
7600 LOS VOLCANES ROAD, N.W., SUITE D
ALBUQUERQUE, NEW MEXICO 87121

ARCHITECT: CLAUDIO VIGIL ARCHITECTS
1801 RIO GRANDE BOULEVARD, N.W., SUITE 2
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4 BIKE RACK POSTS AT 2 BICYCLES PER POST

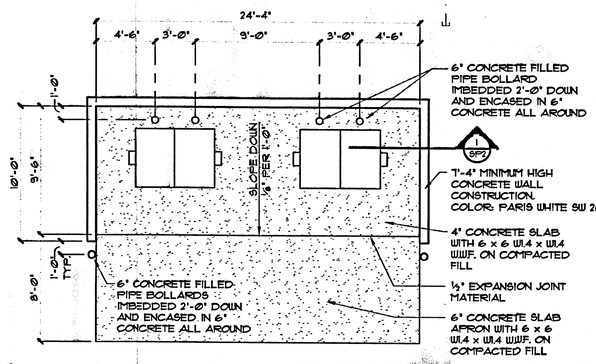
AS BUILT 7/27/04

NORTH

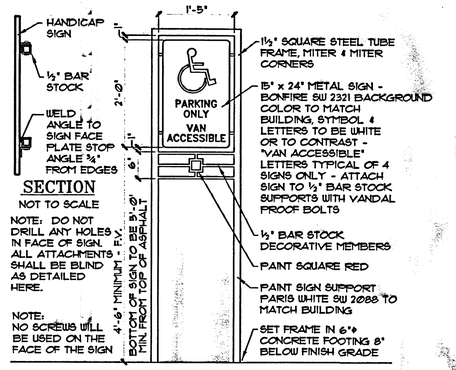
0 15' 30' 60'
SCALE: 1" = 30'

SITE PLAN

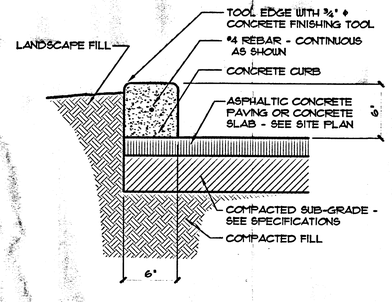
SEPTEMBER 7, 2001 — 1"=30'-0"



1 **TRASH ENCLOSURE PLAN**
SCALE: 3/16" = 1'-0"



2 **HANDICAP PARKING SIGN**
SCALE: 3/4" = 1'-0"



3 **EXTRUDED STAND-UP CURB**
SCALE: 1-1/2" = 1'-0"

CLAUDIO VIGIL ARCHITECTS

MERIDIAN LOT 7A
NEW OFFICE WAREHOUSE
540 GALLATIN PLACE NW
ALBUQUERQUE, NEW MEXICO

STATE OF NEW MEXICO — CLAUDIO ANTONIO VIGIL 1236 — REGISTERED ARCHITECT — 12/6/04

DRAINAGE AUG 02 2004 HYDROLOGY SECTION

SHEET
SP-1
REV 1/15/04
PROJECT NUMBER 01010

OWNERSHIP OF INSTRUMENTS OF SERVICE
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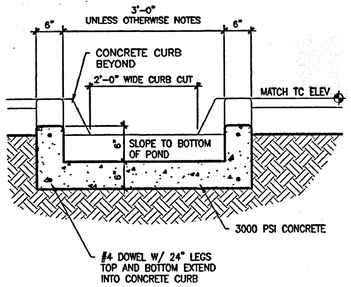
1801 Rio Grande NW, #2, Albuquerque, NM 87104
Phone: 505/842-1113 Fax: 505/842-1330

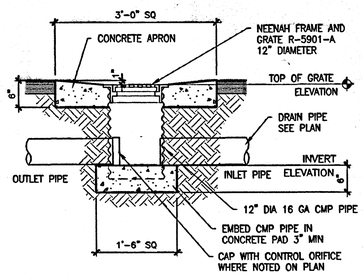
LEGEND:

51.0	EXISTING SPOT ELEVATION
• 51.00	NEW SPOT ELEVATION
51	EXISTING CONTOUR
51	NEW CONTOUR
	SWALE
✓	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
	GRAVEL



1 CONCRETE RUNDOWN

3/4"=1'-0"



2 CATCH BASIN

3/4"=1'-0"

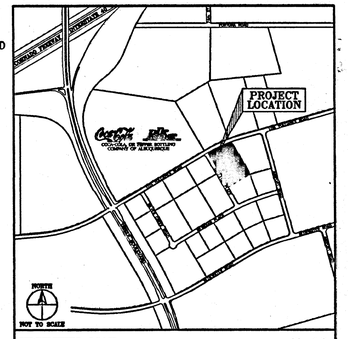
ADDRESS:
7300 GALLATIN DRIVE, NW

LEGAL DESCRIPTION:
LOT 7A, MERIDIAN BUSINESS PARK

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

CONSTRUCTION NOTES

1. TWO WORKING DAY PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL FOR LOCATION OF EXISTING UTILITIES.
2. ALL WORK WITHIN THE CITY RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE CITY OF ALBUQUERQUE STANDARD AND PROCEDURE.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS, LAWS, AND RULES CONCERNING SAFETY AND HEALTH.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE EXISTING SITE CONDITIONS AND INFORM THE ARCHITECT / ENGINEER OF ANY DISCREPANCY BETWEEN THE INFORMATION SHOWN THE PLANS AND THOSE OF THE EXISTING SITE.
5. THE OWNER SHALL VERIFY LOCATIONS OF PONDS WITH GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH ANY CONSTRUCTION WORK ON THIS PROJECT, AND INFORM THE ARCHITECT / ENGINEER OF ANY ADDITIONAL REQUIREMENTS.



VICINITY MAP K-10

GRADING AND DRAINAGE PLAN – LOT 7A

DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING THE LOT-7A, 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 NORTH SIDE OF MERIDIAN PLACE N.W. THE SITE IS UNDEVELOPED. THE LAND SLOPES FROM WEST TO EAST AT AN APPROXIMATE SLOPE OF 1.5%. 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 EAST AND SOUTH. THE STREETS TO THE NORTH AND WEST PREVENTS OFF SITE FLOWS FROM THOSE DIRECTIONS. THEREFORE 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 PARKING AND LANDSCAPING. THE RUNOFF FROM FROM THE SITE FLOW TO DETENTION POND A LOCATED AT THE EAST CORNER OF THE SITE. THE POND DISCHARGES TO A PRIVATE STORM DRAIN AT A RATE OF 0.58 CFS (0.1 CFS/ACRE).

THE CALCULATIONS 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 INCREASE. THIS PLAN IS IN CONFORMANCE WITH THE MASTER DRAINAGE PLAN.

CALCULATIONS

PRECIPITATION ZONE = 1
TOTAL SITE AREA = 5.818 ACRES

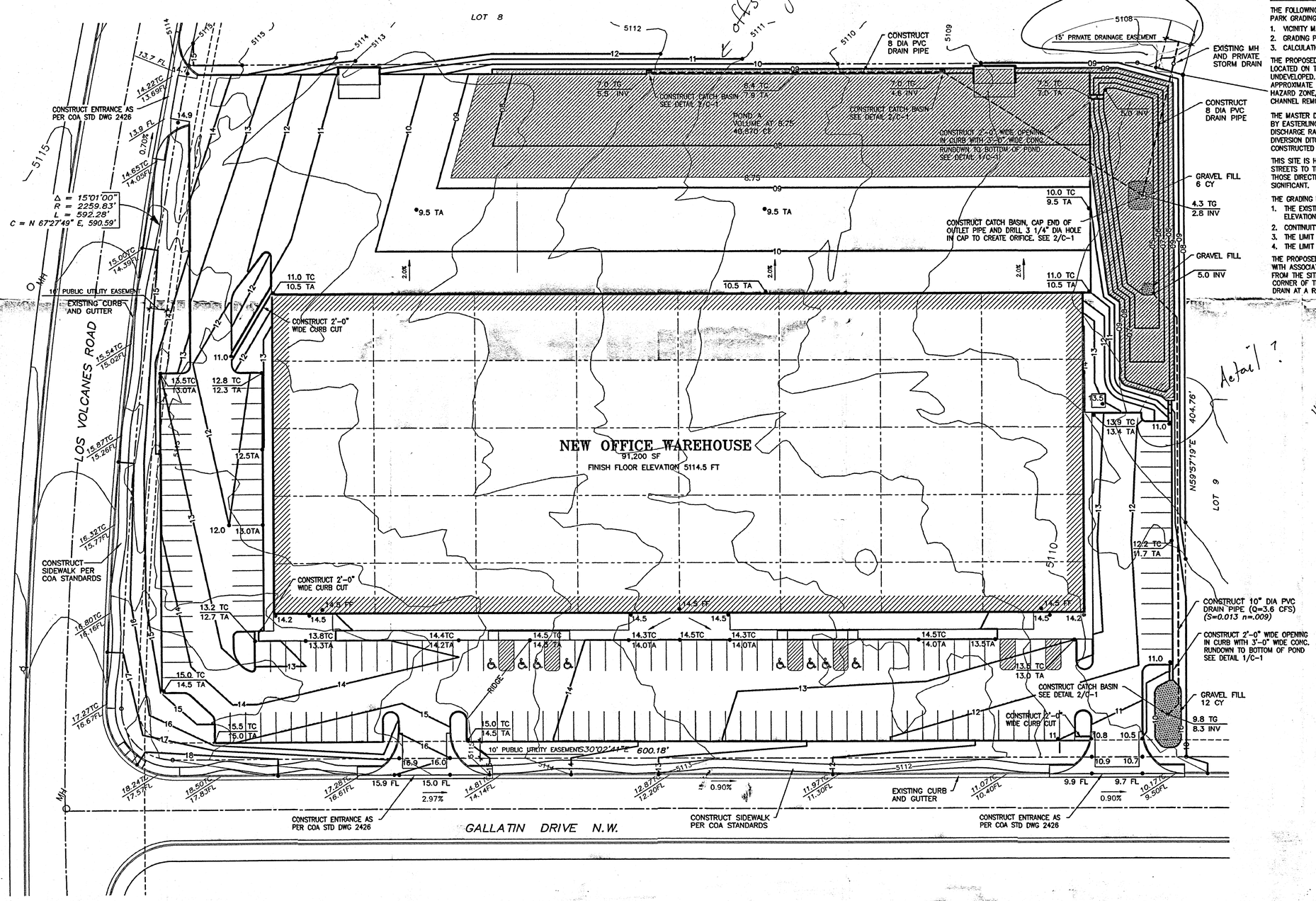
BASIN A
AREA = 5.818 ACRES
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (5.818) / 12 = 0.213 ACRE FEET
Q = 1.29 (1.00) (5.818) = 7.51 CFS
DEVELOPED CONDITIONS
LAND TREATMENT B=10% D=90%
E = 0.67 (0.10) + 1.97 (0.90) = 1.84 INCHES
V = 1.84 (5.818) / 12 = 0.892 ACRE FEET
Q = [2.03 (0.10) + 4.37 (0.90)] (5.818) = 24.06 CFS
INCREASE IN VOLUME OF RUNOFF = 0.679 ACRE FT
INCREASE IN RATE OF RUNOFF = 16.56 CFS

POND VOLUME BASIN A

T_c= 0.2 HR 0.25 Ad/At = 0.25(0.90) = 0.225 HR
T_b= 2.107 E At/Qp – 0.25 Ad/At = 0.712 HR
T_p= (0.7 Tc)+((1.6–Ad/At))/12) = 0.198 HR
$V_{required}$= 39,602 CF

VOLUME @ ELEV 5108.75
$V_{at\ dock}$=[0.5*(23432+14772)*0.75]+[0.5*(14772)*1]= 21,713 CF
V_{pond} =[0.5*(7637+6722)*0.75]
+[0.5*(6722)+5175+3807+(0.5*2679)]= 19,157 CF
TOTAL POND VOLUME POND A = 21,713 + 10,157 = 40,870 CF

DISCHARGE PIPE SIZES AT POND A
Q= 0.1*5.818=0.58 CFS = 0.60 A $\sqrt{2\ (32.2)\ (3.85)}$
DIA = 0.27 INCHES USE 3 1/4" DIA ORIFICE



Detail ?

required Volume for Pond

offsite grading ?

Master plan name ?

NORTH

GRADING AND DRAINAGE PLAN

MARCH 15, 2001 1"=30'-0"

0 15' 30' 60'
SCALE: 1" = 30'

CLAUDIO VIGIL ARCHITECTS

MERIDIAN LOT 7A
NEW OFFICE WAREHOUSE
7300 GALLATIN DRIVE, N.W.
ALBUQUERQUE, NEW MEXICO

JOHN ARTHUR BLESSEN NEW MEXICO 13481 REGISTERED PROFESSIONAL ENGINEER 3/15/01

SHEET
C-1
PROJECT NUMBER 01010

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

C:\SOSK\PROJ\Brunacini\lot-7\civil\lot7-C1-GRD.dwg Thu Mar 15 14:26:26 2001

LEGEND:

51.0	EXISTING SPOT ELEVATION
• 51.00	NEW SPOT ELEVATION
51	EXISTING CONTOUR
51	NEW CONTOUR
	SWALE
✓	VERIFIED ELEVATION
51.0 Ø.46	AS BUILT ELEVATION
	BASIN BOUNDARY
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INV	INVERT
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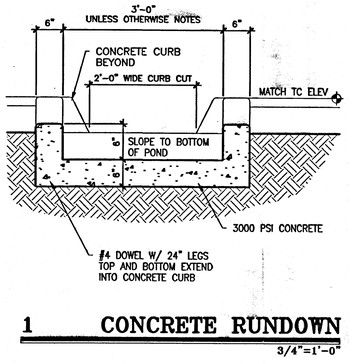

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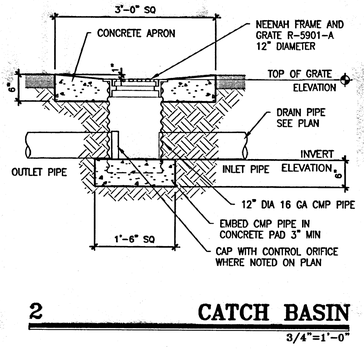
3/4"=1'-0"



2 CATCH BASIN
3/4"=1'-0"

I, JOHN ARTHUR BLESSEN, NMPE 13481, OF THE FIRM CLAUDIO VIGIL ARCHITECTS, HEREBY CERTIFY THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 3/15/01. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENTS HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY.

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 ASE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OR ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

J Arthur Blessen 7/27/04
J Arthur Blessen, PE date
NM PE# 13481

JOHN ARTHUR BLESSEN NEW MEXICO 13481 REGISTERED PROFESSIONAL ENGINEER

ADDRESS:
7300 GALLATIN DRIVE, NW

LEGAL DESCRIPTION:
LOT 7A, MERIDIAN BUSINESS PARK

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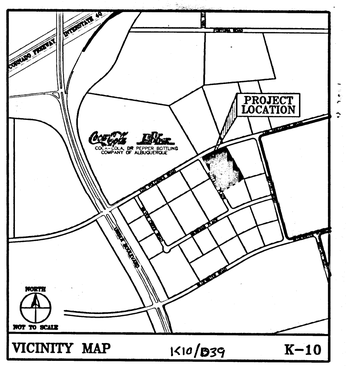

VICINITY MAP K10/D39 K-10

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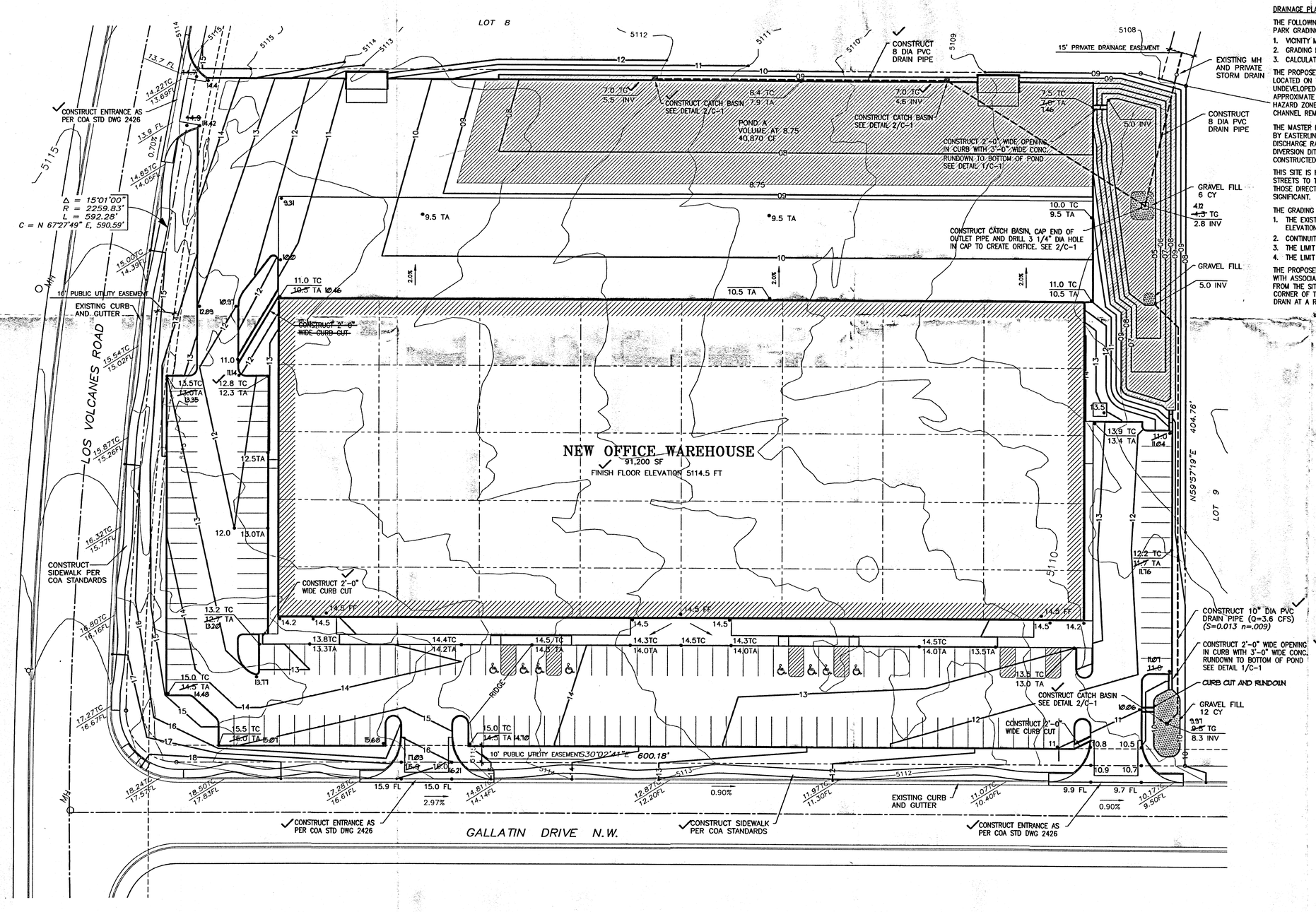

AS BUILT 7/27/04

NORTH

GRADING AND DRAINAGE PLAN

MARCH 15, 2001 1"=30'-0"

RECEIVED HYDROLOGY SECTION

SCALE: 1" = 30'

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