

# CITY OF ALBUQUERQUE



September 27, 2005

Billy O. McCarty, P.E.  
BEAM Designs  
855 Polaris Blvd. SE  
Albuquerque, NM 87124

**Re: Lot 15-P1, Block 2, Paloma Del Sol Subdivision, 10409 Aventura Ct. NW  
Grading & Drainage Plan - Engineer's Stamp dated 9-14-05 (A12-D1)**

Dear Mr. McCarty,

Based upon the information provided in your submittal dated 9-19-05, the above referenced plan is approved for Easement Vacation action by the DRB. Prior to Building Permit approval, please address the following comments:

- Provide Wall Permit for structural retaining walls.
- Provide sections showing the proposed configurations of the structural retaining walls.
- Confirm that the proposed retaining wall footings can be constructed within the property boundary.

P.O. Box 1293

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

Albuquerque

New Mexico 87103

[www.cabq.gov](http://www.cabq.gov)

Sincerely,

Bradley L. Bingham, P.E.  
Principal Engineer, Planning Dept.  
Development and Building Services

cc: file

# GENERAL CONSTRUCTION NOTES

## GENERAL

CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS, INCLUDING A TOP SOIL DISTURBANCE PERMIT, PRIOR TO START OF CONSTRUCTION.

ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

REFERENCES MADE TO STANDARD SPECIFICATIONS AND STANDARD DRAWINGS REFER TO THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION WITH ALL UPDATES.

THE CONTRACTOR SHALL NOT INSTALL ITEMS AS SHOWN ON THESE PLANS WHEN IT IS OBVIOUS THAT FIELD CONDITIONS ARE DIFFERENT THAN SHOWN IN THE PLANS. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER IN A TIMELY MANNER, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY, INCLUDING ENGINEERING DESIGN FEES.

EXISTING SITE IMPROVEMENTS WHICH ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. REPAIRS SHALL BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION OF THE REPAIRS. REPAIRS SHALL BE ACCEPTED BY THE OWNER PRIOR TO FINAL PAYMENT.

EXISTING FENCING THAT IS NOT DESIGNATED FOR REMOVAL SHALL NOT BE DISTURBED. ANY FENCING THAT IS DISTURBED OR ALTERED BY THE CONTRACTOR SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IF THE CONTRACTOR DESIRES TO REMOVE FENCING TO ACCOMMODATE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN PERMISSION BEFORE THE FENCE IS REMOVED. CONTRACTOR SHALL RESTORE THE FENCE TO ITS ORIGINAL CONDITION AT THE EARLIEST OPPORTUNITY. WHILE ANY FENCING IS REMOVED, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SECURITY OF THE SITE UNTIL THE FENCE IS RESTORED.

## WORK WITHIN ADJACENT RIGHT-OF-WAY

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WITHIN ADJACENT RIGHT-OF-WAYS OR WITHIN PROPERTY NOT OWNED BY THE OWNER OF THE PROJECT SITE, THE CONTRACTOR SHALL ASSURE THAT ALL PERMITS AND PERMISSIONS REQUIRED HAVE BEEN OBTAINED IN WRITING.

## SURVEY MONUMENTS, PROPERTY CORNERS, BENCHMARKS

THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST SEVEN DAYS BEFORE BEGINNING ANY CONSTRUCTION ACTIVITY THAT COULD DAMAGE OR DISPLACE SURVEY MONUMENTS, PROPERTY CORNERS, OR PROJECT BENCHMARKS SO THESE ITEMS MAY BE RELOCATED.

ANY SURVEY MONUMENTS, PROPERTY CORNERS, OR BENCHMARKS THAT ARE NOT IDENTIFIED FOR RELOCATION ARE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE AND PROTECT. RELOCATION OR REPLACEMENT OF THESE ITEMS SHALL BE DONE BY THE OWNER'S SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

## DIMENSIONS

ALL DIMENSIONS TO CURBS ARE TO THE FLOWLINE UNLESS OTHERWISE NOTED.

ALL STATIONING IS TO THE CENTERLINE OF THE RIGHT-OF-WAY UNLESS OTHERWISE NOTED.

ALL SLOPES AND GRADES ARE IN PERCENT UNLESS OTHERWISE NOTED.

CURB ELEVATIONS ARE SHOWN AT THE FLOW LINE UNLESS OTHERWISE NOTED. SEE THE DETAIL SHEET TO DETERMINE THE CURB HEIGHT ABOVE FLOW LINE.

## SOILS

UNLESS OTHERWISE SPECIFIED, SUBGRADE, ENGINEERED FILL, AND STRUCTURAL FILL SHALL BE COMPACTED TO THE FOLLOWING SPECIFICATIONS OF THE ASTM D-1557 MAXIMUM DRY DENSITY.

MATERIAL/LOCATION	PERCENT COMPACTION
STRUCTURAL FILL IN THE BUILDING AREA	95%
SUBBASE FOR SLAB SUPPORT	95%
MISCELLANEOUS BACKFILL BELOW STRUCTURAL FILL OR ROADWAY PAVEMENT	95%
MISCELLANEOUS BACKFILL BELOW UNPAVED, NON-BUILDING AREAS	90%
ROADWAY PAVEMENT SUBGRADE	95%
SIDEWALK SUBGRADE	90%
CURB AND GUTTER SUBGRADE	95%

## PAVEMENT

WHEN ABUTTING NEW PAVEMENT TO EXISTING PAVEMENT, CUT EXISTING PAVEMENT EDGE TO A NEAT, STRAIGHT LINE AS NECESSARY TO REMOVE ANY BROKEN OR CRACKED PAVEMENT AND MATCH NEW PAVEMENT ELEVATION TO EXISTING.

ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED AND APPROVED PRIOR TO PAVING.

ALL WATER VALVE BOXES AND ELECTRICAL, TELEPHONE, TELEVISION, AND SEWER MANHOLES IN THE CONSTRUCTION AREA SHALL BE ADJUSTED TO FINISHED GRADE BEFORE PAVING.

WHEN SIDEWALK OR CURB AND GUTTER IS REMOVED, IT SHALL BE REMOVED TO EXISTING CONSTRUCTION JOINTS. CUTTING OR BREAKING SHALL NOT BE ALLOWED.

# ABBREVIATIONS

AD = AREA DRAIN  
AIP = ABANDONED IN PLACE  
BLDG = BUILDING  
BM = BENCHMARK  
CATV = CABLE TELEVISION LINE  
CMP = CORRUGATED METAL PIPE  
CO = CLEANOUT  
COA = CITY OF ALBUQUERQUE  
CONC = CONCRETE  
CL = CENTERLINE  
DIA = DIAMETER

DTL = DETAIL  
DWG = DRAWING  
E = ELECTRIC LINE  
ELEC. = ELECTRIC  
ELEV = ELEVATION  
EX = EXISTING  
FF = FINISHED FLOOR ELEVATION  
FG = FINISHED GRADE  
FH = FIRE HYDRANT  
FL = FLOW LINE  
GM = GAS METER

GV = GATE VALVE  
HI PT = HIGH POINT  
INV = INVERT ELEVATION  
LF = LINEAL FEET  
MH = MANHOLE  
NG = NATURAL GROUND  
OE = OVERHEAD ELECTRIC LINE  
PCC = PORTLAND CEMENT CONCRETE  
PP = POWER POLE  
PROP = PROPOSED  
PVC = POLYVINYL CHLORIDE PIPE

RCP = REINFORCED CONCRETE PIPE  
R/W = RIGHT-OF-WAY  
SAS = SANITARY SEWER  
SD = STORM DRAIN  
STA = STATION  
STD = STANDARD  
SW = SIDEWALK  
T = TELEPHONE  
TA = TOP OF ASPHALT PAVEMENT  
TAC = TOP OF ASPHALT CURB  
TC = TOP OF CONCRETE SLAB (PAVEMENT)

TCC = TOP OF CONCRETE CURB  
TG = TOP OF GRATE  
TS = TOP OF SIDEWALK  
TW = TOP OF WALL  
TYP = TYPICAL  
TB = TELEPHONE BOX  
UE = UNDERGROUND ELECTRIC  
UT = UNDERGROUND TELEPHONE  
W = WATER  
WM = WATER METER  
WV = WATER VALVE

## UTILITIES

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY BASED ON THE INFORMATION PROVIDED TO THE ENGINEER BY OTHERS. THIS INFORMATION MAY BE INACCURATE OR INCOMPLETE. ADDITIONALLY, UNDERGROUND LINES MAY EXIST THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ACCORDANCE WITH CHAPTER 62, ARTICLE 14-1, THROUGH 14-8, NMSA 1978.

THE CONTRACTOR SHALL CONTACT THE STATEWIDE UTILITY LOCATOR SERVICE AT 1-800-321-2537 AT LEAST TWO WORKING DAYS BEFORE BEGINNING CONSTRUCTION. AFTER THE UTILITIES ARE SPOTTED, THE CONTRACTOR SHALL EXPOSE ALL PERTINENT UTILITIES TO VERIFY THEIR VERTICAL AND HORIZONTAL LOCATION. IF A CONFLICT EXISTS BETWEEN EXISTING UTILITIES AND PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMAL DELAY.

THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DISTURBING ANY EXISTING UTILITIES, ABOVE OR BELOW GROUND. UTILITIES THAT ARE DAMAGED BY CARELESS CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

EXISTING VALVES SHALL ONLY BE OPERATED BY THE UTILITY COMPANY. CONTRACTOR SHALL NOTIFY THE UTILITY A MINIMUM OF TWO WORKING DAYS BEFORE ANY VALVE, NEW OR EXISTING, NEEDS TO BE OPERATED.

THE CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY INTERRUPTIONS WITH THE OWNER AND AFFECTED UTILITY COMPANY A MINIMUM OF THREE WORKING DAYS BEFORE THE INTERRUPTION.

THE CONTRACTOR SHALL MAINTAIN A RECORD DRAWING SET OF PLANS AND PROMPTLY LOCATE ALL UTILITIES, EXISTING OR NEW, IN THEIR CORRECT LOCATION, HORIZONTAL AND VERTICAL. THIS RECORD SET OF DRAWINGS SHALL BE MAINTAINED ON THE PROJECT SITE AND SHALL BE AVAILABLE TO THE OWNER AND ENGINEER AT ANY TIME DURING CONSTRUCTION.

## EROSION CONTROL, ENVIRONMENTAL PROTECTION, AND STORM WATER POLLUTION PREVENTION PLAN

THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PREPARE ANY DUST CONTROL OR EROSION CONTROL PERMITS REQUIRED FROM THE REGULATORY AGENCIES.

THE CONTRACTOR SHALL PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITH THE PUBLIC RIGHT-OF-WAY OR ADJACENT PROPERTY TO KEEP IT FROM WASHING OFF THE PROJECT SITE.

THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY BY CONSTRUCTION OF TEMPORARY EROSION CONTROL BERMS OR INSTALLING SILT FENCES AT THE PROPERTY LINES AND WETTING THE SOIL TO PREVENT IT FROM BLOWING.

WATERING, AS REQUIRED FOR CONSTRUCTION DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNMENT ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED.

ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY LANDSCAPING OR IMPERVIOUS SURFACES SHALL BE REVEGETATED WITH RECLAMATION SEEDING.

THE CONTRACTOR SHALL PROPERLY HANDLE AND DISPOSE OF ALL ASPHALT REMOVED ON THE PROJECT BY HAULING IT TO AN APPROVED DISPOSAL SITE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEW MEXICO SOLID WASTE ACT.

ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.), GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC., SHALL BE APPROPRIATELY DISPOSED OF OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY PERMITS REQUIRED FOR HAUL OR DISPOSAL OF WASTE PRODUCTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINT, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO EMERGENCY RESPONSE AT 1-800-219-6157.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.

## ACCESSIBLE FACILITIES

ALL SURFACES ALONG ACCESSIBLE ROUTES AND FOR HANDICAP RAMPS SHALL BE STABLE FIRM, SLIDE RESISTANT AND SHALL COMPLY WITH UNIFORM FEDERAL ACCESSIBILITY STANDARDS, PARAGRAPH 4.5.

LONGITUDINAL SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS, EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:20. CROSS SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:48. SLOPES IN ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND PASSENGER LOADING ZONES SHALL NOT BE STEEPER THAN 1:48 IN ALL DIRECTIONS.

THE SITE SHALL COMPLY WITH ANSI A117.1-1992, "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES".

## TRAFFIC CONTROL

THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TRAFFIC CONTROL PLANS. ALL SIGNS, BARRICADES, CHANNELIZATION DEVICES, SIGN FRAMES AND ERECTION OF SUCH DEVICES SHALL CONFORM TO THE REQUIREMENTS OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" LATEST EDITION. PRIOR TO CONSTRUCTION, TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE GOVERNING AUTHORITY.

# DRAINAGE INFORMATION

## LOCATION & DESCRIPTION

THE PROPOSED SITE IS 0.6854 ACRES LOCATED SOUTH OF MCMAHON BOULEVARD AND WEST OF GOLF COURSE ROAD AS SHOWN ON THE VICINITY MAP ON SHEET 2. THE LOT HAS BEEN MASS GRADED AS PART OF THE PALOMA DEL SOL SUBDIVISION. THIS GRADING AND DRAINAGE PLAN HAS BEEN PREPARED IN SUPPORT OF REPLACING THE LOT TO MOVE THE LIMIT OF THE SLOPE EASEMENT 30' NORTH AND OBTAIN THE BUILDING PERMIT FOR THE RESIDENCE.

## FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0108E, DATED NOVEMBER 19, 2003 IS NOT WITHIN ANY DESIGNATED 100-YEAR FLOODPLAIN. A PORTION OF THIS PANEL WITH THE SITE DESIGNATED ON IT IS INCLUDED ON THIS SHEET.

## METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATION METHOD AS DOCUMENTED IN THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

## PRECIPITATION

THE 100-YR, 6-HOUR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS SINCE PONDING IS NOT PROPOSED. THIS SITE IS WITHIN ZONE 1 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. TABLES WITHIN THIS SECTION WERE USED TO ESTABLISH THE 6-HOUR PRECIPITATION, 10-DAY PRECIPITATION, EXCESS PRECIPITATION, AND PEAK DISCHARGE.

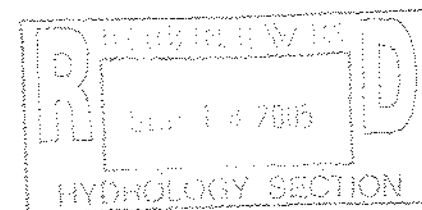
## EXISTING DRAINAGE

THE SITE IS UNDEVELOPED BUT HAS BEEN MASS GRADED. THE NORTH END OF THE SITE CONTAINS A SLOPE EASEMENT AND 3.1 SLOPE FROM MCMAHON BOULEVARD TO THE EXISTING PAD ELEVATION FOR THE LOT. GULF WALLS ALONG THE PROPERTY LINES ARE REQUIRED AS PART OF THE BUILDING PERMIT FOR THIS SUBDIVISION. THESE WALLS HAVE ALREADY BEEN CONSTRUCTED ALONG THE NORTH AND SOUTH SIDES OF THE SITE. THE EAST AND WEST SIDES WILL BE CONSTRUCTED AS PART OF THIS DEVELOPMENT. THEREFORE, THERE ARE NO OFFSITE FLOWS ENTERING THIS PROPERTY.

THIS SITE IS WITHIN BASIN 102.1 OF THE "REVISED DRAINAGE REPORT FOR PALOMA DEL SOL ADDENDUM TO JUNE 1995 AND NOVEMBER 1995 REPORTS," PREPARED BY COMMUNITY SCIENCES CORPORATION, JANUARY 1996, REVISED 03/08/96 (DRAINAGE FILE A12/D1). THIS REPORT IDENTIFIES FULLY DEVELOPED LAND TREATMENTS OF A=0%, B=30%, C=30%, AND D=28% IN TABLE 1A. THEREFORE, THESE LAND TREATMENTS WERE USED IN THE 10-YEAR HYDROLOGIC CALCULATIONS BELOW TO DETERMINE THE ALLOWABLE DISCHARGE FROM THIS SITE. ALL RUNOFF WILL BE DIRECTED TO AVENTURA COURT IN ACCORDANCE WITH THE APPROVED DRAINAGE PLAN FOR THE SUBDIVISION.

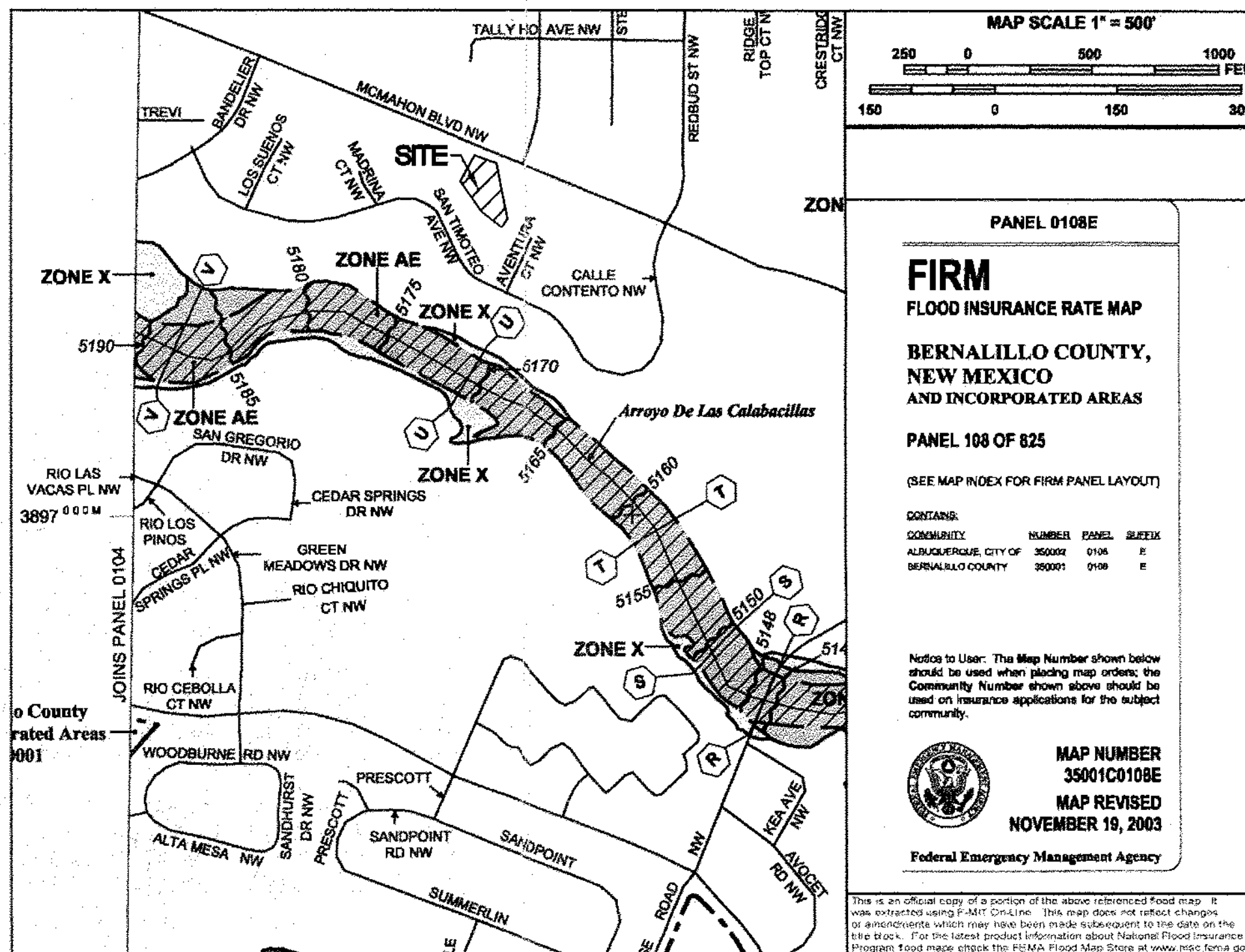
## DEVELOPED CONDITIONS AND LANDSCAPE REQUIREMENTS

THE PROPOSED DEVELOPMENT WILL DECREASE THE SLOPE BY 30', THEREBY DECREASING THE STEEP SLOPE TYPE C LAND TREATMENT BY 4,600 SQUARE FEET. THERE WILL ALSO BE A 580 SQUARE FOOT SWIMMING POOL IN THE BACK YARD THAT DOES NOT CONTRIBUTE TO THE RUNOFF. THE SITE CONTAINS 11,900 SQUARE FEET OF TYPE C LAND TREATMENT (REAR YARD SLOPE AND GRAVEL DRIVEWAYS) AND 8,525 SQUARE FEET OF IMPERVIOUS SURFACE (TYPE D LAND TREATMENT). THIS INCLUDES ROOFS AND CONCRETE SURFACES. THIS LEAVES 8850 SQUARE FEET FOR LANDSCAPING AROUND THE PERIMETER OF THE HOUSE. THIS LANDSCAPE AREA MUST BE LANDSCAPED WITH PERMEABLE MATERIAL SUCH AS SOD, NATIVE PLANTS, OR BARK MULCH (TYPE B LAND TREATMENT) IN ORDER TO MEET THE SUBDIVISION DRAINAGE REQUIREMENTS. GRAVEL ON FABRIC SHALL NOT BE PERMITTED UNLESS THE LANDSCAPE DESIGN INCORPORATES WATER HARVESTING AREAS OR A DETENTION POND IS PROVIDED ON THE PROPERTY AND APPROVED BY THE CITY OF ALBUQUERQUE. BY RESTRICTING THE LANDSCAPING IN THIS MANNER, THE SITE CAN BE DEVELOPED ACCORDING TO THIS PLAN AND MEET THE DRAINAGE REQUIREMENTS ESTABLISHED FOR THE PALOMA DEL SOL SUBDIVISION.

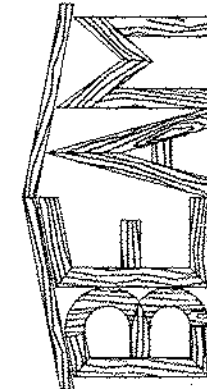


## 100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V (10 day) (acre-ft)	V (10 day) (cu-ft)	Q (cfs)
		A (%)	B (%)	C (%)	D (%)						
ALLOWABLE CONDITIONS											
SITE	0.6854	0.00	36.00	36.00	28.00	1.15	0.07	2,869	0.09	3,883	2.05
PROPOSED CONDITIONS											
SITE	0.6721	0.00	29.89	41.00	29.11	1.18	0.07	2,878	0.09	3,922	2.05
EXCESS PRECIP.											
		0.44	0.67	0.96	1.97	E (in)					
PEAK DISCHARGE		1.29	2.03	2.87	4.37	Q <sub>10</sub> (cfs)					
WEIGHTED E (in) = (E <sub>A</sub> )(%A) + (E <sub>B</sub> )(%B) + (E <sub>C</sub> )(%C) + (E <sub>D</sub> )(%D)											
V <sub>6hr</sub> (acre-ft) = (WEIGHTED E)(AREA)/12										ZONE = 1.20	
V <sub>10day</sub> (acre-ft) = V <sub>6hr</sub> + (A <sub>6hr</sub> )(P <sub>6hr</sub> - P <sub>10day</sub> )/12										P <sub>6hr</sub> (in.) = 2.26	
Q (cfs) = (Q <sub>10</sub> )(A <sub>6</sub> ) + (Q <sub>10</sub> )(A <sub>6</sub> ) + (Q <sub>10</sub> )(A <sub>6</sub> ) + (Q <sub>10</sub> )(A <sub>6</sub> )										P <sub>10day</sub> (in.) = 3.67	



855 POLARIS BLVD., SE  
ALBUQUERQUE, NM 87124  
PHONE (505) 263-1111  
FAX (505) 263-1992  
boarddesign@earthlink.net



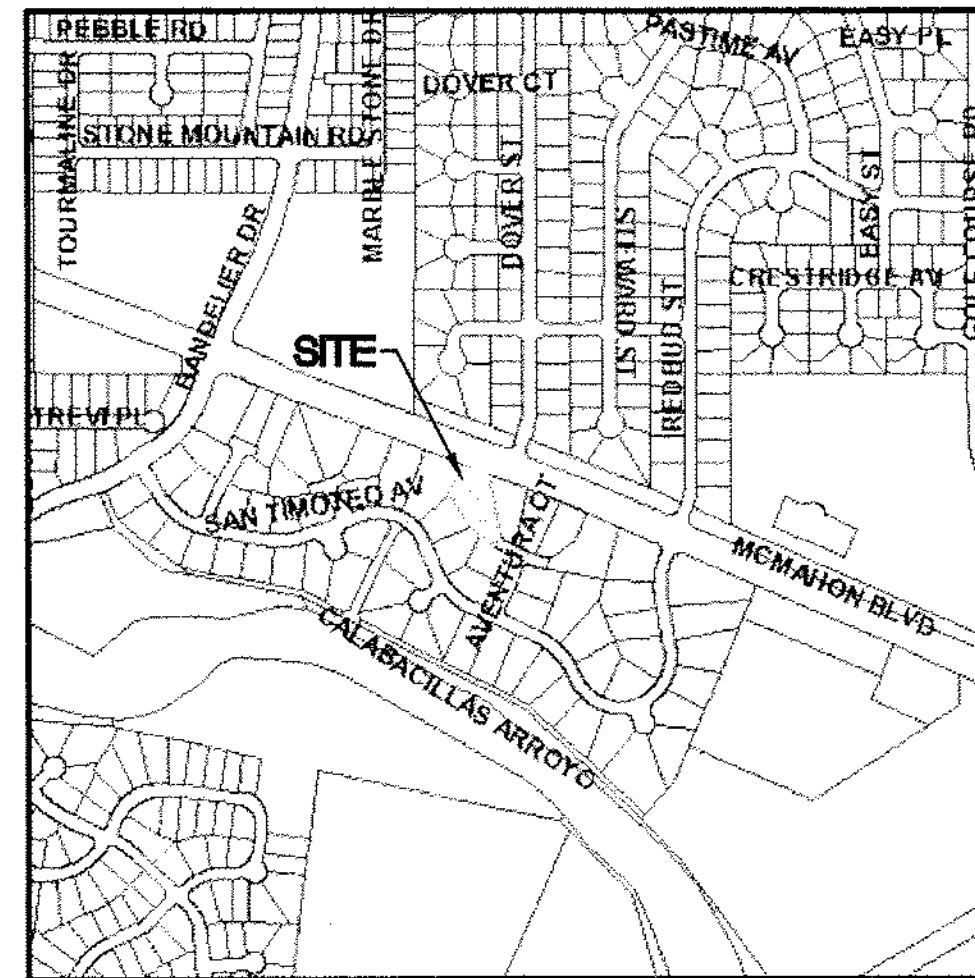
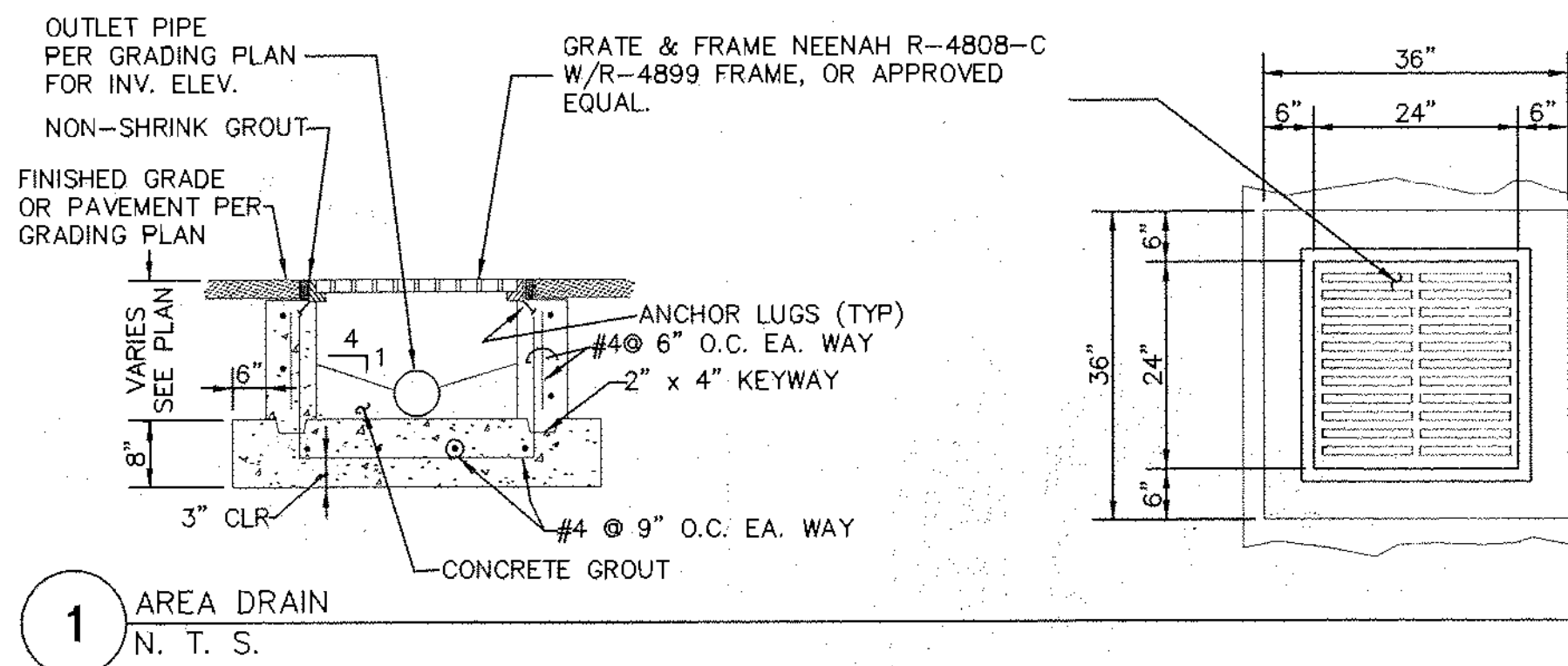
BUILDING  
ENGINEERING  
ARCHITECTURAL  
MUNICIPAL  
DESIGNS

REVISION	DATE	DESCRIPTION

FILE NAME: TROY\_CD.DWG (09/14/05)

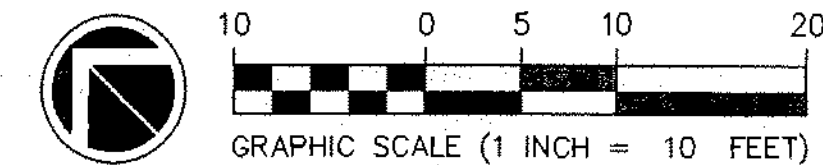


Mcmahon Boulevard NW



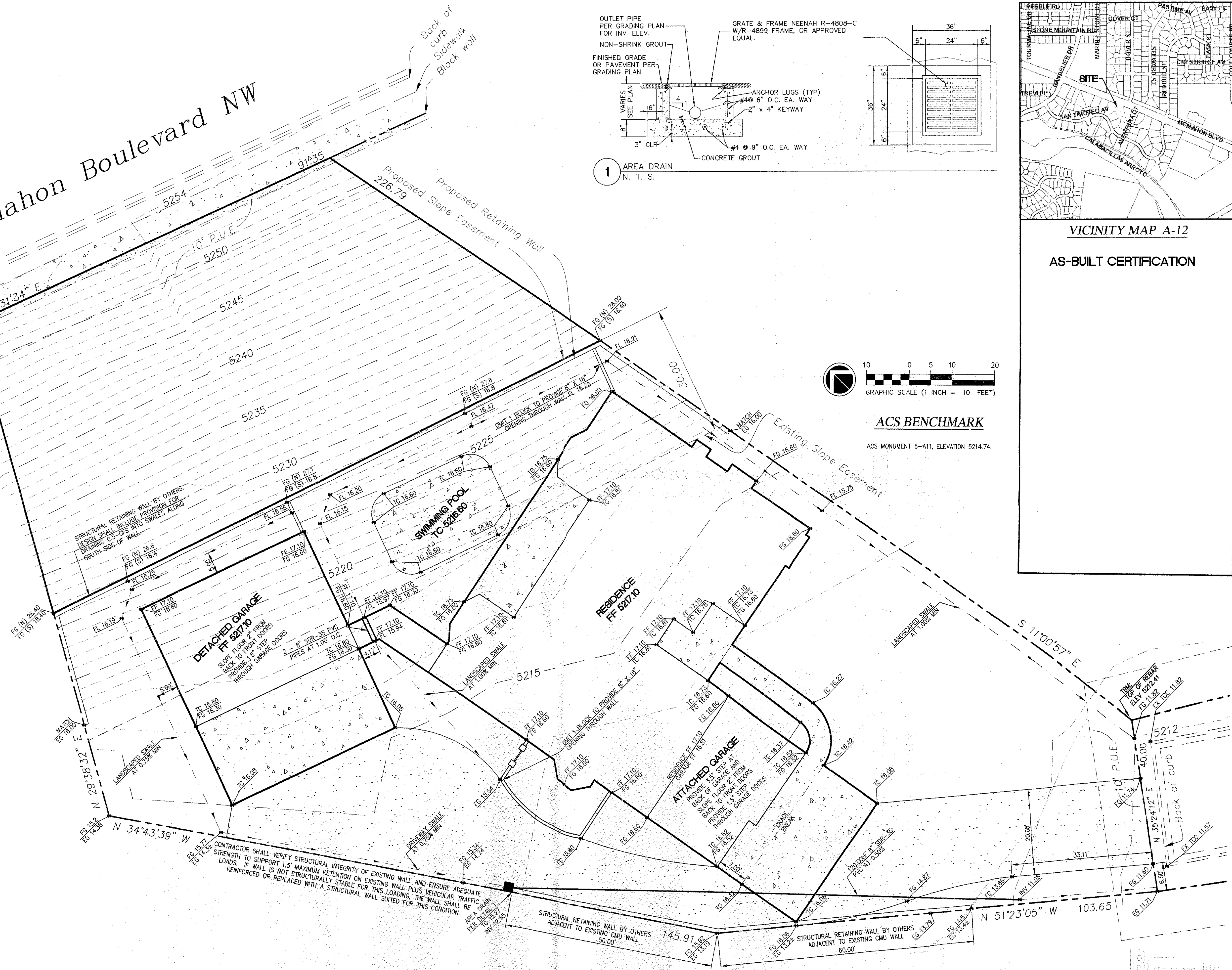
VICINITY MAP A-12

AS-BUILT CERTIFICATION

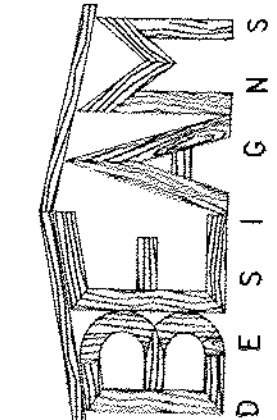


ACS BENCHMARK

ACS MONUMENT 6-A11, ELEVATION 5214.74.



855 POLARIS BLVD., SE  
RIO RANCHO, NM 87124  
PHONE (505) 895-0391  
FAX (505) 994-3952  
beamedesign@earthlink.net



REVISION DATE DESCRIPTION


FILE NAME: PROJ\_CD.DWG (09/14/05)