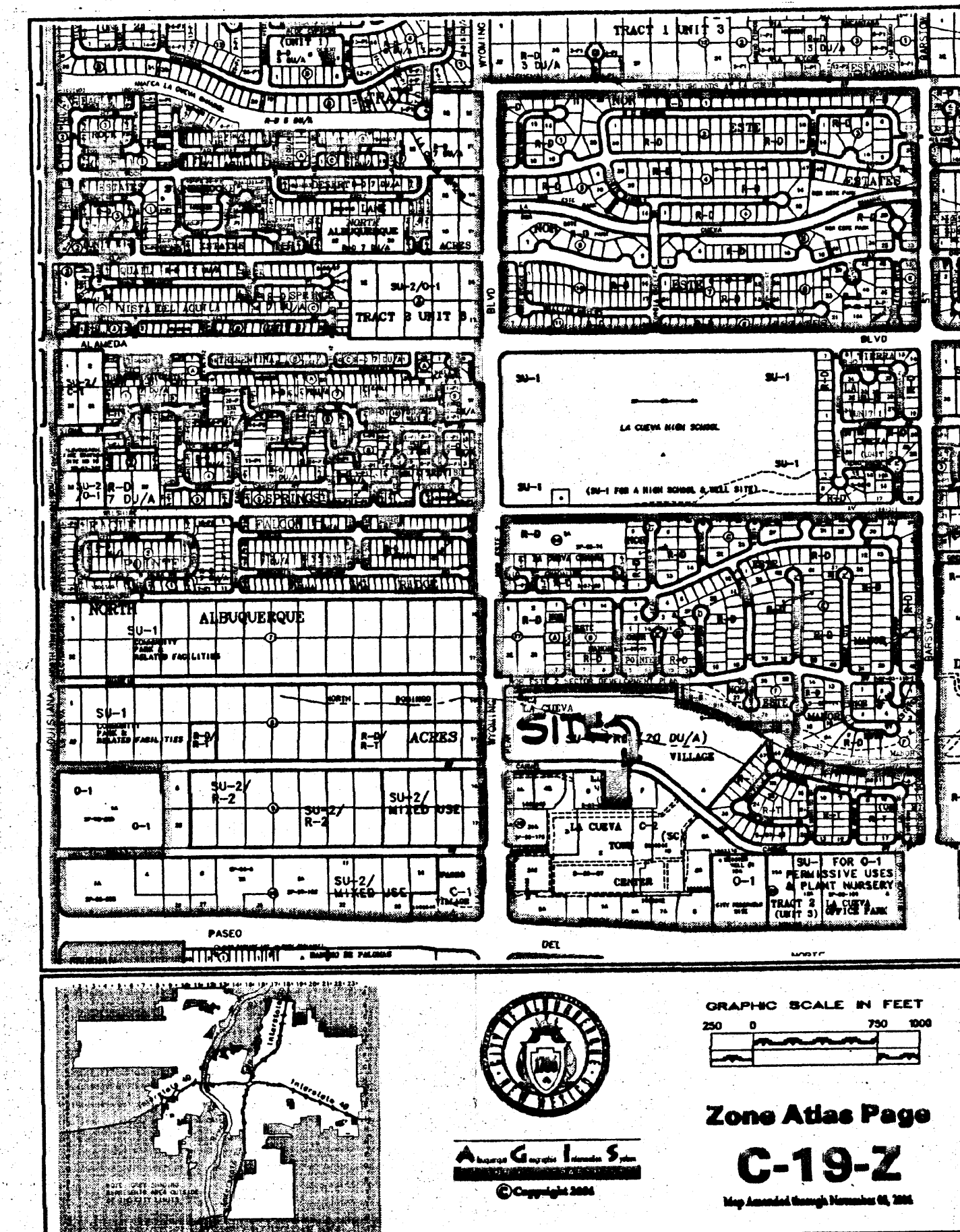
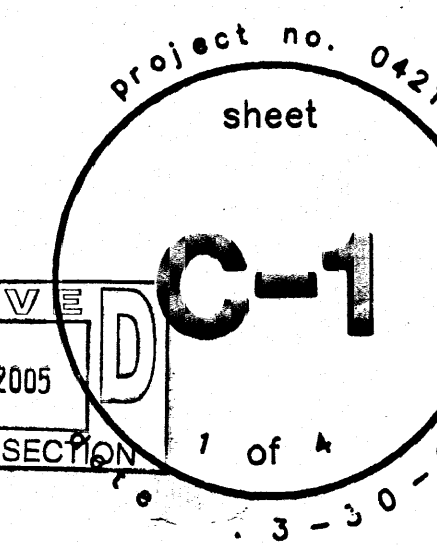


5921 LOMAS BLVD. N.E. SUITE B ALBUQUERQUE N.M. 87110 (505) 255-5040 FAX (505) 255-5040

DR. GARZA'S MEDICAL OFFICES
TRACT E LA CUEVA VILLAGE UNIT 1
ALBUQUERQUE, NEW MEXICO

SANDERS & ASSOCIATES ARCHITECTS, P.C.



ZONING:
C-2 FOR SC

LEGAL DESCRIPTION

TRACT E, LA CUEVA VILLAGE UNIT 1 SECTION 10
T. 11 N. R. 4E. N.M.P.M. BERNALILLO COUNTY, NM.

SHEET INDEX

C-1 SITE PLAN
C-2 SITE LANDSCAPING PLAN
C-3 SITE GRADING PLAN
A-1 BUILDING ELEVATIONS

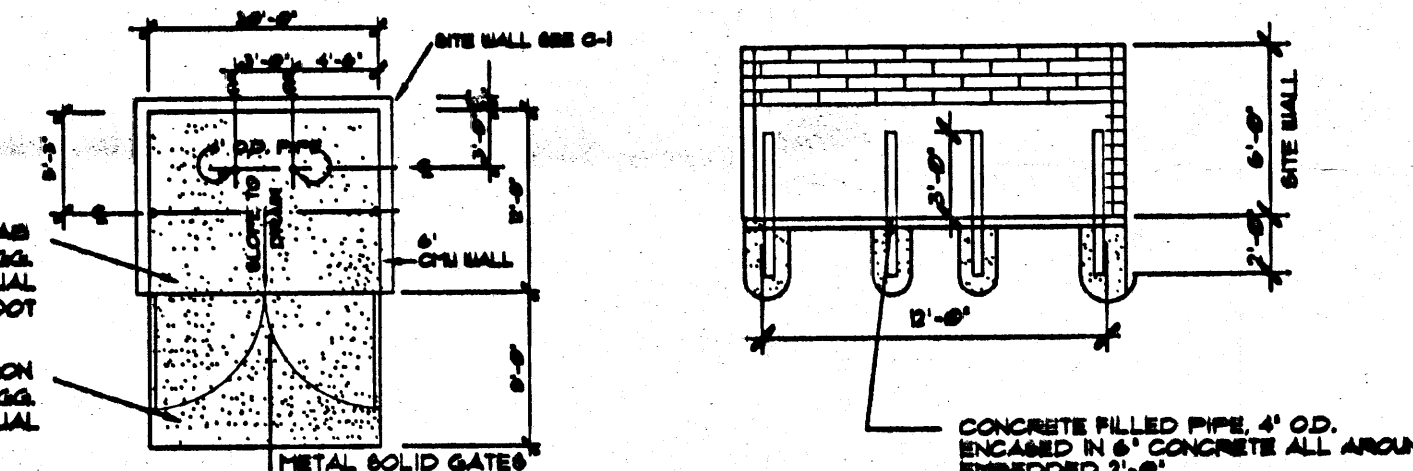
PARKING REQUIREMENTS

PHASE 1	
2500 S.F. DOCTOR'S OFFICE	5 SPACES
2500 S.F. RETAIL 1 SPACE PER 200 S.F.	13 SPACES
18 SPACES REQUIRED	
PHASE 2	
4000 S.F. RETAIL 1 SPACE PER 200 S.F.	20 SPACES
TOTAL REQUIRED PHASE 1 & 2	38 SPACES
TOTAL PROVIDED PHASE 1	18 SPACES
TOTAL PROVIDED PHASE 2	20 SPACES
TOTAL PROVIDED PHASE 1 & 2	38 SPACES
HANDICAP SPACES PHASE 1	2 SPACES (1 VAN)
HANDICAP SPACES PHASE 2	1 SPACES
BICYCLE: 1 SPACE PER 20 CARS TOTAL: 2 REQ. 2 PROVIDED	

LEGEND

○	LIGHT POLE
■	PHASE 1 CONCRETE WALK
■	PHASE 1 ASPHALT DRIVE

1 SITE LIGHTING DETAIL
NOT TO SCALE

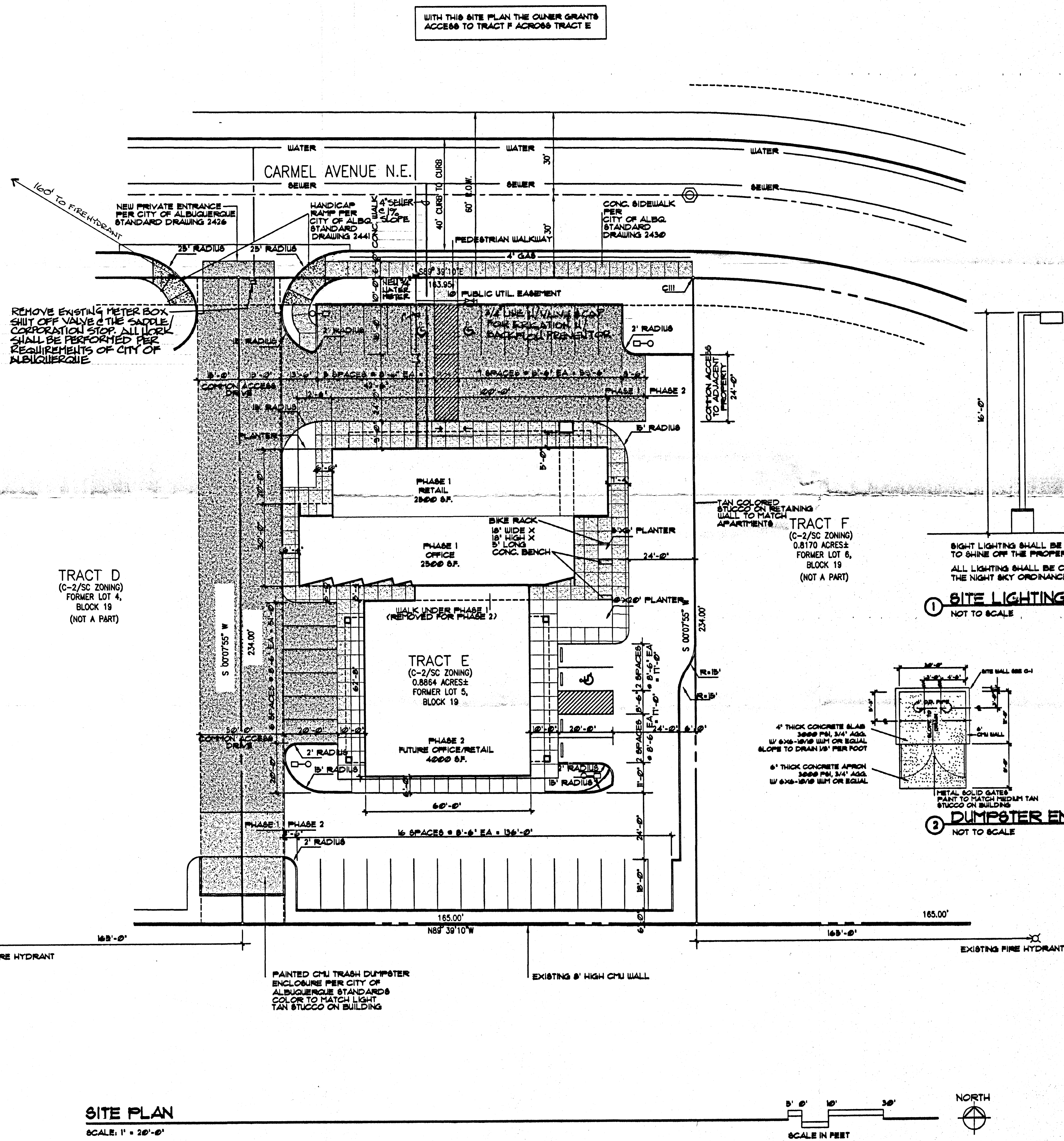


2 DUMPSTER ENCLOSURE
NOT TO SCALE

PROJECT NUMBER	1000163		
APPLICATION NUMBER	05-00554		
This plan is consistent with the specific Site Development Plan approved by the Environmental Planning Commission (EPC), dated _____ and the Findings and Conditions in the Official Notification of Decisions are satisfied.			
Is an Infrastructure List required? () Yes (X) No If yes, then a set of approved DRG plans with a work order is required for any construction within Public Right-of-Way or for construction of public improvements.			
DRG SITE DEVELOPMENT PLAN SIGNOFF APPROVAL:			
Environmental Health	Date	Michael Helton	Date
Traffic Engineering	Date	Roger A. Rhee	Date
Parks & Recreation Dept.	Date	Rudolph Byrum	Date
City Engineer	Date	Christina Sandoval	Date
DRG Chairperson/Planning Department	Date	4-20-05	Date

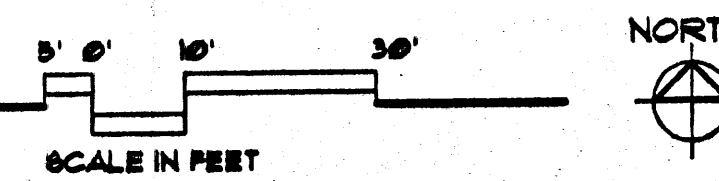
signature block 12/6/05

SITE PLAN FOR BUILDING PERMIT



SITE PLAN

SCALE: 1" = 20'-0"



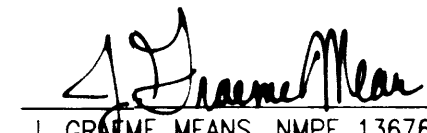
1008 SITEPLAN.dwg, 3/30/2005 1:33:45 PM, HP designed 130



ENGINEER'S DRAINAGE CERTIFICATION FOR PERMANENT C.O. 7920 CARMEL AVE NE

I, J. GRAEME MEANS, NMPE 13676, OF THE FIRM JEFF MORTENSEN & ASSOCIATES, INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 04/12/2005. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED UNDER THE DIRECT SUPERVISION OF CHARLES G. CALA, JR., PS, ALSO OF THE FIRM JEFF MORTENSEN & ASSOCIATES, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON SEPTEMBER 30, 2005 AND DETERMINED BY VISUAL INSPECTION THAT THE DATA PROVIDED APPEARS TO BE 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 PERMANENT CERTIFICATE OF OCCUPANCY.

THIS CERTIFICATION DOES NOT INCLUDE WORK CONSTRUCTED WITHIN THE PUBLIC RIGHT-OF-WAY WHICH WAS INSPECTED BY SEPARATE PROCESS. THE RECORD INFORMATION PRESENTED HEREIN IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT AND DOES NOT ADDRESS COMPLIANCE WITH A.D.A. GUIDELINES. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.


J. GRAEME MEANS, NMPE 13676
10/21/2005
DATE



HYDROLOGY FILE C19/D11/D10



JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. NE.
ALBUQUERQUE NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 345-4250
FAX: 505 345-4254 ESTABLISHED 1977

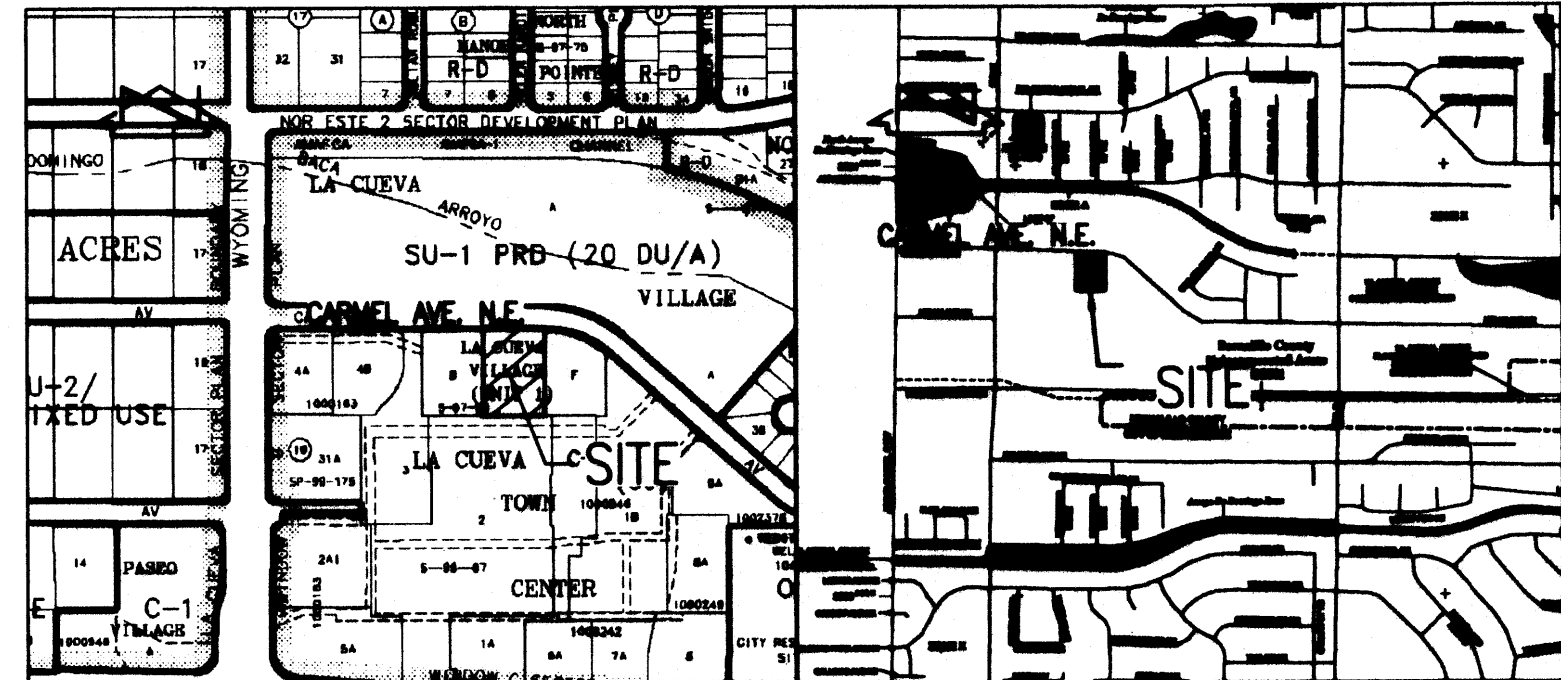
SUPPLEMENTAL SITE AND DRAINAGE INFORMATION
DR. GARZA'S OFFICE

DESIGNED BY G.M.
DRAWN BY JLP
APPROVED BY G.M.

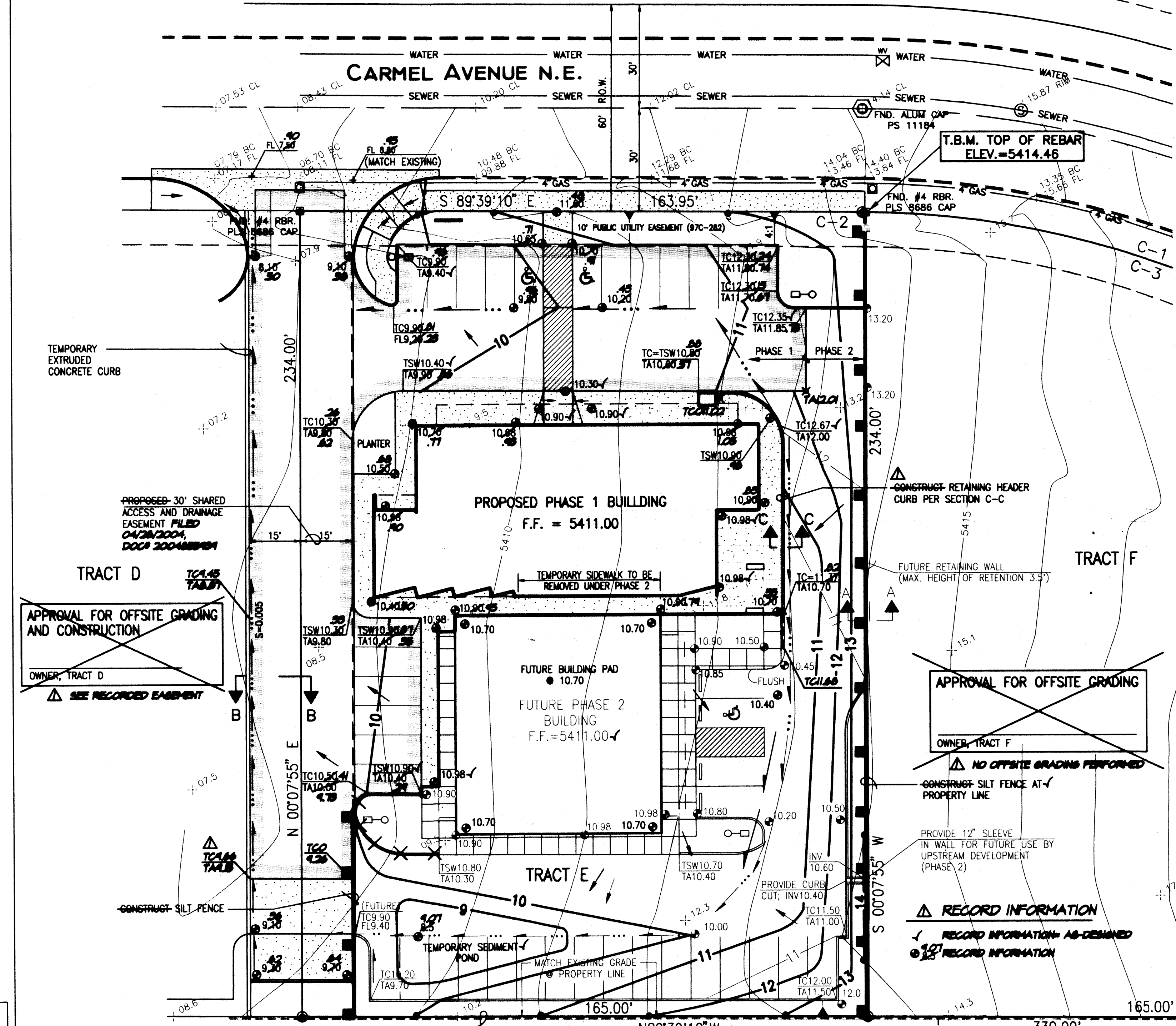
NO.	DATE	BY	REVISIONS
1	10/05	G.M.	ENS. CERT. FOR PERMANENT C.O.

JOB NO. 2004.112.2
DATE 10-2005
SHEET C.3.A. OF

Plot Date: 10-20-2005
Plot Time: 10:45 am
File Path: E:\JMA\JMA12A
File Name: 411224B.DWG



VICINITY MAP
SCALE: 1"=750'

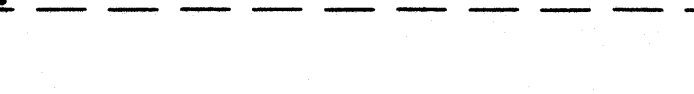


CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	CHORD BEARING
C-1	179.12	270.00	38°00'39"	175.85	N70°38'52"W
C-2	1.05	270.00	00°13'24"	1.05	S89°32'28"E
C-3	178.07	270.00	37°47'15"	174.86	S70°32'09"E

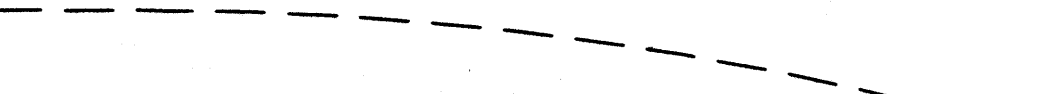
NOTE:
THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. BOUNDARY AND TOPOGRAPHIC INFORMATION WAS PROVIDED BY SURVEYS SOUTHWEST, LTD., A.L.T.A./A.C.S.M. LAND TITLE SURVEY OF TRACTS E & F, LA CUEVA VILLAGE, UNIT 1, DATED SEPTEMBER 23, 2003. ACTUAL FIELD CONDITIONS MUST BE VERIFIED BY OWNER AND / OR CONTRACTOR.

JMA #2004.112.1
JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY DRIVE, SUITE 100, ALBUQUERQUE, N.M. 87109
ENGINEERS & SURVEYORS (GMS) 345-4250
FAX: 345-4254 (ESTABLISHED 1977)

LEGAL DESCRIPTION
TRACT E, LA CUEVA VILLAGE, UNIT 1, SECTION 18, T. 11 N., R. 4 E., N.M.P.M. BERNALILLO COUNTY, N.M.
PROJECT BENCHMARK = T.B.M.
TOP OF REBAR LOCATED AT THE NORTHEAST CORNER OF TRACT E AS SHOWN BELOW.
ELEVATION = 5414.46' M.S.L.D.



- LEGEND**
- NEW BUILDING ENVELOPE
 - RIGHT OF WAY LINE
 - PUBLIC EASEMENT LINE
 - EXISTING CONTOUR
 - EXISTING FLOWLINE ELEVATION
 - PROPOSED SPOT ELEVATION
 - PROPOSED CONTOUR
 - PROPOSED FLOWLINE
 - PROPOSED ROOF DRAINAGE
 - PROPOSED CONCRETE
 - PROPOSED RETAINING WALL
 - PROPOSED PRIVACY WALL
 - EXISTING CMU WALL
 - PROPOSED PAVEMENT



I. EXECUTIVE SUMMARY AND INTRODUCTION
THE PROPOSED DEVELOPMENT IS LOCATED WITHIN THE WINDOW G SECTOR PLAN AREA OF NORTH ALBUQUERQUE ACRES AND REQUIRES SITE DEVELOPMENT PLAN APPROVAL THROUGH EPC AND DRB. THE SITE WILL DISCHARGE FREELY TO EXISTING PUBLIC DRAINAGE IMPROVEMENTS IN WYOMING BLVD NE SIZED FOR THIS DISCHARGE. CARMEL AVENUE NE AND WYOMING BLVD NE ARE EXISTING FULLY DEVELOPED PUBLIC STREETS CONSTRUCTED BY DPM 57290. OFFSITE FLOWS FROM THE UNDEVELOPED UPSTREAM PROPERTY WILL BE ACCEPTED BY THIS SITE IN THE EXISTING AND DEVELOPED CONDITIONS. THE PURPOSE OF THIS PLAN IS TO OBTAIN BUILDING PERMIT APPROVAL.

II. PROJECT DESCRIPTION:
AS SHOWN BY VICINITY MAP C-19 LOCATED HEREON, THE SITE IS LOCATED IN THE LA CUEVA TOWN CENTER ON THE SOUTH SIDE OF CARMEL AVENUE NE APPROXIMATELY 700 FT EAST OF WYOMING BLVD NE. THE WINDOW AND LA CUEVA TOWN CENTER MASTER DRAINAGE PLANS ADDRESS SITE DRAINAGE REQUIREMENTS. THE EXISTING LEGAL DESCRIPTION IS TRACT E, LA CUEVA VILLAGE, UNIT 1. THE SITE IS ZONED C-2 (SHOPPING CENTER) AND THE PROPOSED DEVELOPMENT IS CONSISTENT WITH THE ZONING. AS SHOWN BY PANEL 141 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS, BERNALILLO COUNTY, NEW MEXICO, AND INCORPORATED AREAS, DATED SEPTEMBER 20, 1996, THE SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE.

III. BACKGROUND DOCUMENTS
THE FOLLOWING IS A LIST OF DOCUMENTS RELATED TO THE SITE AND SURROUNDING AREA. THIS LIST MAY NOT BE INCLUSIVE, HOWEVER, REPRESENTS A SUMMARY OF RELEVANT PLANS AND DOCUMENTS WHICH ARE KNOWN TO THE ENGINEER AT THE TIME OF PLAN PREPARATION.

A. WINDOW G MASTER DRAINAGE PLAN BY JEFF MORTENSEN & ASSOCIATES (JMA) DATED JANUARY 9, 1997 (FILE C19/D11). AS SHOWN BY THIS PLAN, THE AREA OF THE LA CUEVA TOWN CENTER SHOPPING CENTER NORTH OF THE VACATED HOLLY AVENUE NE ROW SHALL DRAIN INTERNALLY TO THE NW CORNER OF THE SHOPPING CENTER TO A STUBOUT PROVIDED BY THE PUBLIC STORM DRAIN IN WYOMING BLVD NE. THE WYOMING STORM DRAIN OUTLETS TO THE NORTH DOMINGO BACA ARROYO (NDBA) SOIL CEMENT CHANNEL, AS DEMONSTRATED BY THE MDP, THE WYOMING STORM DRAIN AND THE NDBA CHANNEL ARE BOTH SIZED FOR FREE DISCHARGE OF DEVELOPED RUNOFF.

B. LA CUEVA TOWN CENTER MASTER DRAINAGE PLAN BY TIERRA WEST DATED FEBRUARY 23, 1999 (FILE C-19/D110). AS SHOWN BY THIS PLAN, A PRIVATE STORM DRAIN WAS SUBROUTED THROUGH THE LA CUEVA TOWN CENTER WITHIN AN EASEMENT TO A STORM INLET LOCATED IN THE DRIVEWAY AT THE WEST SIDE OF TRACT D, LA CUEVA VILLAGE, UNIT 1. THIS STORM DRAIN IS SIZED FOR AND INTENDED FOR USE BY TRACTS D, E AND F, LA CUEVA VILLAGE, UNIT 1.

C. PRE-DESIGN CONFERENCE WITH DR. BINGHAM, CITY HYDROLOGIST, NOVEMBER 18, 2004. ONE FINDING FROM THE CONFERENCE WAS THAT SITE RUNOFF CAN BE DIRECTLY DISCHARGED TO CARMEL AVENUE NE IF AN IMPROVED OUTFALL ACROSS TRACT D IS NOT AVAILABLE AT THE TIME OF DEVELOPMENT DUE TO TIMING OR COOPERATION ISSUES. THIS DISCHARGE OF ADDITIONAL SURFACE FLOWS TO CARMEL WILL REQUIRE A DOWNSTREAM CAPACITY ANALYSIS. A COPY OF THE CONFERENCE RECAP IS INCLUDED WITH THIS SUBMITTAL.

D. CONCEPTUAL GRADING AND DRAINAGE PLAN FOR DR. GARZA'S MEDICAL OFFICES BY JMA DATED 11-29-2004. (HYDROLOGY FILE C19-D11010). THIS PLAN WAS APPROVED FOR SITE DEVELOPMENT PLAN FOR BUILDING PERMIT ACTION THE DRB.

THE PROPOSED CONSTRUCTION OF AN OFFICE PARK DEVELOPMENT DRAINING DIRECTLY AND FREELY TO PERMANENT WYOMING AVENUE NE DRAINAGE IMPROVEMENTS AS PROPOSED AND DESCRIBED HEREIN IS IN ACCORDANCE WITH THE POLICIES AND REQUIREMENTS OF THE ABOVE LISTED DOCUMENTS.

V. EXISTING CONDITIONS:
THE SITE IS UNDEVELOPED WITH A SPARSE GROUND COVER OF NATIVE VEGETATION. THE SITE SLOPES FROM EAST TO WEST. THERE IS AN EXISTING CHU SCREEN WALL ALONG THE SOUTH PROPERTY LINE. THE SITE IS FRONTED ON THE NORTH BY CARMEL AVENUE NE, A FULLY DEVELOPED PUBLIC STREET. EXISTING SITE RUNOFF SHEET DRAINS FROM EAST TO WEST ONTO TRACT D WHICH LIES TOPOGRAPHICALLY LOWER. THE SITE ACCEPTS OFFSITE UNDEVELOPED SHEET FLOW RUNOFF FROM TRACT F (0.8 AC) TO THE EAST. THE DESIGNATED OUTFALL FOR DEVELOPED RUNOFF FROM THIS SITE IS TO AN EXISTING PRIVATE SINGLE "C" STORM INLET LOCATED IN AN EXISTING ENTRANCE ROAD LOCATED ON THE WEST (DOWNSTREAM) SIDE OF TRACT D. THIS INLET DRAINS TO A PRIVATE STORM DRAIN LOCATED WITHIN A PRIVATE STORM DRAINAGE EASEMENT THAT BENEFITS TRACTS D, E AND F. AS INDICATED BY THE LA CUEVA TOWN CENTER MDP (REF. B), THE PRIVATE STORM DRAIN IS SIZED FOR FULLY DEVELOPED RUNOFF FROM TRACTS D, E AND F, AND IS CONNECTED TO THE PUBLIC WYOMING BLVD STORM DRAIN, AS INDICATED BY THE WINDOW G MDP (REF. A). THE WYOMING STORM DRAIN AND ITS OUTFALL TO THE NDBA SOIL CEMENT CHANNEL WAS SIZED FOR THE FREE DISCHARGE OF DEVELOPED RUNOFF FROM THE PORTION OF THE SHOPPING CENTER NORTH OF THE VACATED HOLLY AVENUE NE ALIGNMENT.

VII. DEVELOPED CONDITIONS
THE PROPOSED IMPROVEMENTS CONSIST OF THE PHASE 1 CONSTRUCTION OF A 2-BUILDING OFFICE COMPLEX WITH PAVED PARKING AND LANDSCAPING IMPROVEMENTS. IT IS CURRENTLY PROPOSED TO SHARE A COMMON ENTRANCE TO CARMEL WITH A PROPOSED DEVELOPMENT ON TRACT D AND TO ALLOW THROUGH ACCESS TO TRACT F. CONSTRUCTION OF THE PRIVATE ENTRANCE AND THE SHARED DRIVE ASLE ON TRACT D WILL REQUIRE THE PROPERTY OWNER'S PERMISSION. OFFSITE GRADING ON TRACT F WILL ALSO REQUIRE PERMISSION.

THE DEVELOPED OUTFALL FOR THIS SITE IS TO THE AMAFCA MAINTAINED NDBA SOIL CEMENT CHANNEL VIA PUBLIC (CITY) STORM DRAIN IN WYOMING BLVD NE. ALTHOUGH THE WINDOW G AND LA CUEVA TOWN CENTER MDP'S BOTH IDENTIFIED THE RUNOFF FROM TRACTS D, E AND F TO REACH THE WYOMING STORM DRAIN VIA PRIVATE INTERNAL STORM DRAIN, THE EXISTING PRIVATE STORM DRAIN AND ASSOCIATED EASEMENT IN THE LA CUEVA TOWN CENTER CURRENTLY END NEAR THE WEST PROPERTY LINE OF THE UNDEVELOPED TRACT D AND ARE THEREFORE NOT CURRENTLY ACCESSIBLE TO TRACT E WITHOUT THE CONSTRUCTION OF PAVING AND/OR DRAINAGE IMPROVEMENTS ON, ACROSS, OR UNDER TRACT D. IT IS THE INTENT OF THIS PROJECT TO COOPERATE WITH THE DEVELOPER OF TRACT D TO OBTAIN AN EASEMENT AND MAKE PROVISIONS FOR TRACT D TO ACCEPT OVERLAND SURFACE RUNOFF FROM TRACTS E AND F IN ACCORDANCE WITH THE MASTER DRAINAGE PLANS, BUT BECAUSE WE CAN NOT ENSURE THE TIMING OR COOPERATION WITH TRACT D, THE SITE HAS BEEN DESIGNED TO DRAIN TO CARMEL AVENUE NE WITH THE FLEXIBILITY TO EASILY REDIRECT SITE RUNOFF ACROSS TRACT D IF THE DOWNSTREAM OUTFALL AND EASEMENT BECOME AVAILABLE. DEVELOPED SITE RUNOFF WILL DRAIN FROM EAST TO WEST TO THE PROPOSED SHARED ACCESS ROAD. A TEMPORARY EXTRUDED CONCRETE CURB WILL BE CONSTRUCTED ON THE WEST SIDE OF THE ROAD TO DIVERT RUNOFF TO CARMEL. WHEN TRACT D DEVELOPS AND TAKES ACCESS TO THE SHARED ROAD, THEIR CONSTRUCTION CAN EITHER ALLOW THE RUNOFF TO ENTER THE SITE VIA NEW CURB OPENINGS, OR CAN INSTEAD CONSTRUCT VALLEY GUTTERS ACROSS THE OPENINGS SO THAT NUISANCE FLOWS WILL CONTINUE TO DRAIN TO THE NORTH.

IN ORDER TO MAINTAIN REASONABLE SITE SLOPES FOR VEHICULAR, PEDESTRIAN, AND HANDICAPPED ACCESSIBILITY, PHASE 2 DEVELOPMENT WILL REQUIRE CONSTRUCTION OF A RETAINING WALL AT THE EAST PROPERTY LINE. THE WALL WILL RETAIN A MAXIMUM OF 3.5 FEET.

AS REQUIRED BY THE WINDOW G AND LA CUEVA TOWN CENTER MASTER DRAINAGE PLANS (REFS A&B), UNDEVELOPED EXISTING OFFSITE FLOWS FROM TRACT F TO THE EAST WILL BE ACCEPTED BY THIS SITE IN THE INTERIM AND DEVELOPED CONDITIONS. WHEN THE UPSTREAM TRACT DEVELOPS, THEY SHALL DISCHARGE THEIR DEVELOPED RUNOFF INTO THE SHARED DRIVE OR ONE OF THE 10" SLEEVES THAT WILL BE PROVIDED IN THE RETAINING WALL AT THE EAST PROPERTY LINE.

VI. GRADING PLAN
THE CALCULATIONS, WHICH APPEAR HEREON, ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY, 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF FLOW AND VOLUME OF RUNOFF GENERATED. AS DEMONSTRATED BY REFERENCES A AND B, THE PUBLIC STORM DRAIN IN WYOMING IS SIZED FOR FREE DISCHARGE OF FULLY DEVELOPED RUNOFF FROM THIS SITE. UNLESS AN AGREEMENT IS REACHED WITH THE DEVELOPER OF TRACT D TO ACCEPT SITE RUNOFF, ADDITIONAL CALCULATIONS MUST BE PROVIDED AS PART OF THE BUILDING PERMIT SUBMITTAL TO DEMONSTRATE THAT THE CARMEL AND WYOMING STORM INLETS CAN ACCEPT THE ADDITIONAL RUNOFF.

IX. CONCLUSIONS
1) THE PROPOSED SITE IMPROVEMENTS AND DRAINAGE CONCEPT ARE CONSISTENT WITH THE DEVELOPMENT CRITERIA ESTABLISHED BY PREVIOUSLY APPROVED PLANS FOR NDBA, WINDOW G, AND LA CUEVA TOWN CENTER DEVELOPMENT.
2) DEVELOPED RUNOFF FROM THIS SITE WILL DRAIN FREELY TO EXISTING PERMANENT PUBLIC CARMEL AVENUE NE AND WYOMING BLVD NE PAVING AND STORM DRAINAGE IMPROVEMENTS.
3) IF POSSIBLE, BUT NOT REQUIRED, DEVELOPMENT OF THIS SITE WILL BE COORDINATED WITH THAT OF TRACT D TO THE WEST. THE DESIGNATED OUTFALL FOR DEVELOPED RUNOFF FROM TRACT E REQUIRED DRAINING ACROSS TRACT D, AND WILL THEREFORE REQUIRE PROVISIONS TO ACCEPT THE RUNOFF FROM TRACT E AND DELIVER IT ACROSS TRACT D TO THE DESIGNATED OUTFALL.
4) THIS PROJECT IS DESIGNED TO DRAIN TO CARMEL AVENUE NE WITH THE FLEXIBILITY TO DIVERT RUNOFF IN THE FUTURE TO TRACT D IF PROVISIONS ARE MADE TO ACCEPT THE RUNOFF IN ACCORDANCE WITH THE APPROVED MASTER PLANS.
5) THERE ARE NO DPM DESIGN VARIANCES, DRAINAGE EASEMENTS OR DRAINAGE COVENANTS ANTICIPATED AT THIS TIME.

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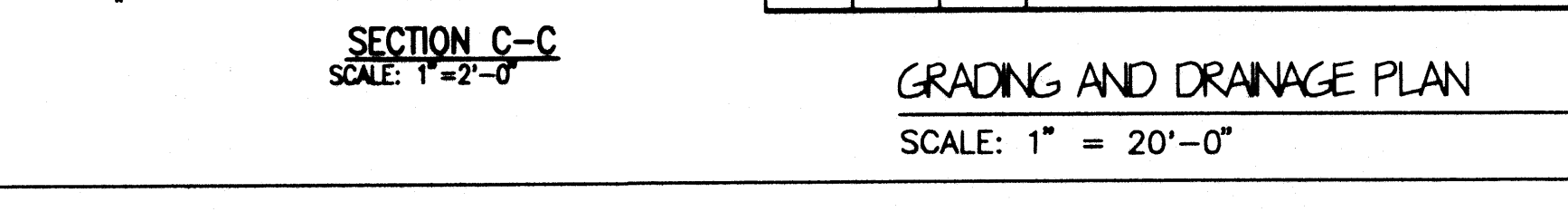
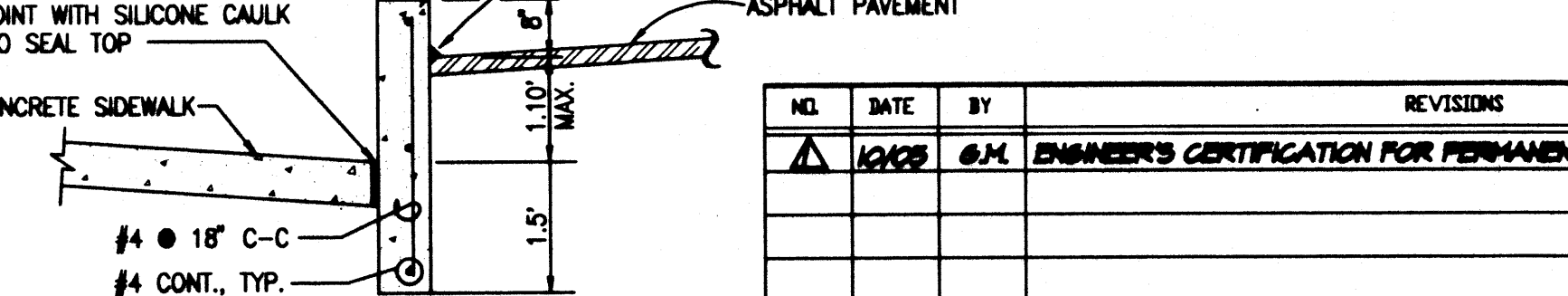
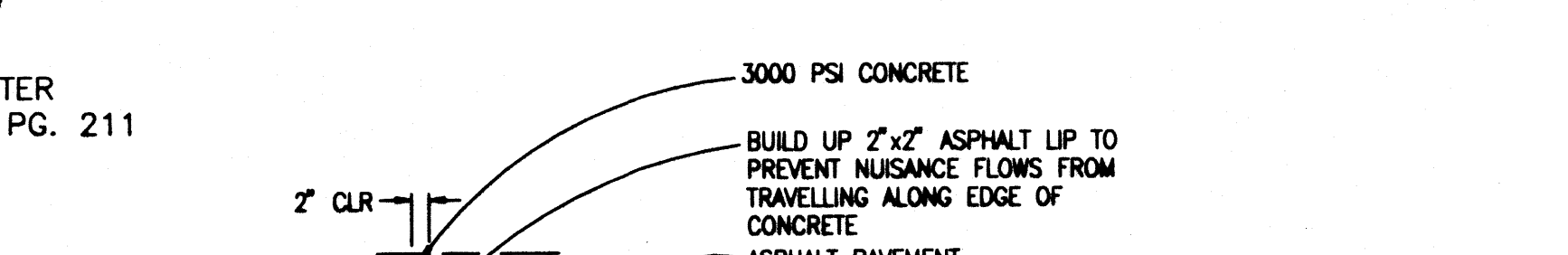
IN ORDER TO MAINTAIN REASONABLE SITE SLOPES FOR VEHICULAR, PEDESTRIAN, AND HANDICAPPED ACCESSIBILITY, PHASE 2 DEVELOPMENT WILL REQUIRE CONSTRUCTION OF A RETAINING WALL AT THE EAST PROPERTY LINE. THE WALL WILL RETAIN A MAXIMUM OF 3.5 FEET.

AS REQUIRED BY THE WINDOW G AND LA CUEVA TOWN CENTER MASTER DRAINAGE PLANS (REFS A&B), UNDEVELOPED EXISTING OFFSITE FLOWS FROM TRACT F TO THE EAST WILL BE ACCEPTED BY THIS SITE IN THE INTERIM AND DEVELOPED CONDITIONS. WHEN THE UPSTREAM TRACT DEVELOPS, THEY SHALL DISCHARGE THEIR DEVELOPED RUNOFF INTO THE SHARED DRIVE OR ONE OF THE 10" SLEEVES THAT WILL BE PROVIDED IN THE RETAINING WALL AT THE EAST PROPERTY LINE.

VI. GRADING PLAN
THE CALCULATIONS, WHICH APPEAR HEREON, ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY, 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF FLOW AND VOLUME OF RUNOFF GENERATED. AS DEMONSTRATED BY REFERENCES A AND B, THE PUBLIC STORM DRAIN IN WYOMING IS SIZED FOR FREE DISCHARGE OF FULLY DEVELOPED RUNOFF FROM THIS SITE. UNLESS AN AGREEMENT IS REACHED WITH THE DEVELOPER OF TRACT D TO ACCEPT SITE RUNOFF, ADDITIONAL CALCULATIONS MUST BE PROVIDED AS PART OF THE BUILDING PERMIT SUBMITTAL TO DEMONSTRATE THAT THE CARMEL AND WYOMING STORM INLETS CAN ACCEPT THE ADDITIONAL RUNOFF.

IX. CONCLUSIONS
1) THE PROPOSED SITE IMPROVEMENTS AND DRAINAGE CONCEPT ARE CONSISTENT WITH THE DEVELOPMENT CRITERIA ESTABLISHED BY PREVIOUSLY APPROVED PLANS FOR NDBA, WINDOW G, AND LA CUEVA TOWN CENTER DEVELOPMENT.
2) DEVELOPED RUNOFF FROM THIS SITE WILL DRAIN FREELY TO EXISTING PERMANENT PUBLIC CARMEL AVENUE NE AND WYOMING BLVD NE PAVING AND STORM DRAINAGE IMPROVEMENTS.
3) IF POSSIBLE, BUT NOT REQUIRED, DEVELOPMENT OF THIS SITE WILL BE COORDINATED WITH THAT OF TRACT D TO THE WEST. THE DESIGNATED OUTFALL FOR DEVELOPED RUNOFF FROM TRACT E REQUIRED DRAINING ACROSS TRACT D, AND WILL THEREFORE REQUIRE PROVISIONS TO ACCEPT THE RUNOFF FROM TRACT E AND DELIVER IT ACROSS TRACT D TO THE DESIGNATED OUTFALL.
4) THIS PROJECT IS DESIGNED TO DRAIN TO CARMEL AVENUE NE WITH THE FLEXIBILITY TO DIVERT RUNOFF IN THE FUTURE TO TRACT D IF PROVISIONS ARE MADE TO ACCEPT THE RUNOFF IN ACCORDANCE WITH THE APPROVED MASTER PLANS.
5) THERE ARE NO DPM DESIGN VARIANCES, DRAINAGE EASEMENTS OR DRAINAGE COVENANTS ANTICIPATED AT THIS TIME.

RECORD INFORMATION
RECORD INFORMATION AS DESIGNED
RECORD INFORMATION



CALCULATIONS

I. PRECIPITATION ZONE = 3

II. $P_{6,100} = P_{360} = 2.60$

III. TOTAL AREA (A_T) = 38612 SF/0.8864 AC

IV. EXISTING LAND TREATMENT

TREATMENT	AREA (SF/AC)	%
C	38612/0.8864	100

V. DEVELOPED LAND TREATMENT

TREATMENT	AREA (SF/AC)	%
B	5792/0.1330	15
D	32820/0.7534	85

VI. EXISTING CONDITION

A. VOLUME
 $E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$
 $E_w = [1.29(0.8864)] / 0.8864 = 1.29$ IN
 $V_{100} = (E_w / 12) A_T$
 $V_{100} = (1.29 / 12) 0.8864 = 0.0953$ ac-ft = 4150 CF

B. PEAK DISCHARGE
 $Q_p = Q_A A_A + Q_B A_B + Q_C A_C + Q_D A_D$
 $Q_p = Q_{100} = 3.45(0.8864) = 3.1$ cfs

VII. DEVELOPED CONDITION

A. VOLUME
 $E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$
 $E_w = [0.92(0.1330) + 2.38(0.7534)] / 0.8864 = 2.14$ IN
 $V_{100} = (E_w / 12) A_T$
 $V_{100} = (2.14 / 12) 0.8864 = 0.1584$ ac-ft = 6900 CF

B. PEAK DISCHARGE
 $Q_p = Q_A A_A + Q_B A_B + Q_C A_C + Q_D A_D$
 $Q_p = Q_{100} = 2.60(0.1330) + 5.02(0.7534) = 4.1$ cfs

VIII. COMPARISON

A. VOLUME
 $\Delta V_{100} = 6900$ CF - 4150 CF = 2750 CF (INCREASE)

B. PEAK DISCHARGE
 $\Delta Q_{100} = 4.1$ cfs - 3.1 cfs = 1.0 cfs (INCREASE)

CONSTRUCTION NOTES:

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 280-1990 (ALBUQUERQUE AREA), 1-800-321-ALERT(2537) (STATEWIDE), FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE. BY THE TIME CONSTRUCTION COMMENCES, THE ENGINEER HAS CONDUCTED ONLY A PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDS ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.

EROSION CONTROL MEASURES:

- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
- THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
- WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.
- UNLESS FINAL STABILIZATION IS OTHERWISE PROVIDED FOR, ANY AREAS OF EXCESS DISTURBANCE (TRAFFIC ACCESS, STORAGE YARD, EXCAVATED MATERIAL, ETC.) SHALL BE RE-SEEDING ACCORDING TO C.O.A. SPECIFICATION 1012 "NATIVE GRASS SEEDING". THIS WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.

REVISIONS

NO.	DATE	BY	REVISIONS
1	10/20/05	J.M.	ENGINEER'S CERTIFICATION FOR PERMANENT C.O.

ENGINEER'S CERTIFICATION FOR PERMANENT C.O.

I, JEFF MORTENSEN, A PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I AM THE ENGINEER OF RECORD FOR THE ABOVE PROJECT, AND THAT I HAVE REVIEWED AND APPROVED THE SUBMITTAL FOR THE PERMANENT C.O. OF THE ABOVE PROJECT.

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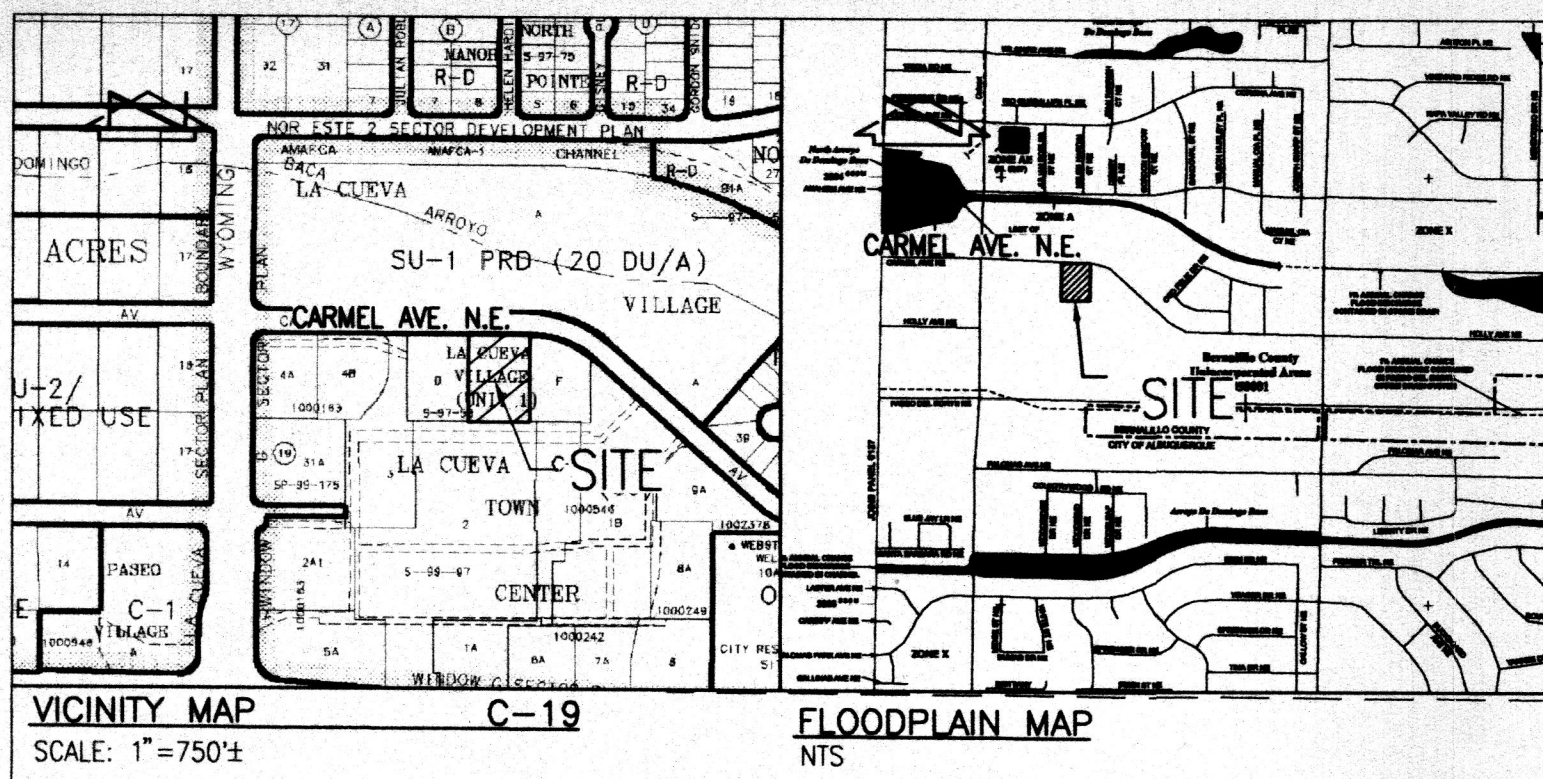
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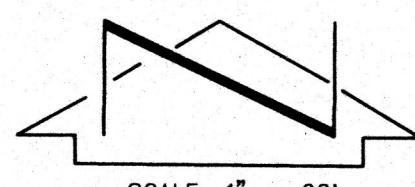
NOTARY PUBLIC

DR. GARZA'S MEDICAL OFFICES
TRACT E LA CUEVA VILLAGE UNIT 1
ALBUQUERQUE, NEW MEXICO
SANDERS & ASSOCIATES ARCHITECTS, P.C. 5921 LOMAS BLVD. N.E. SUITE B ALBUQUERQUE N.M. 87110 (505) 255-5040 FAX (505) 255-5040



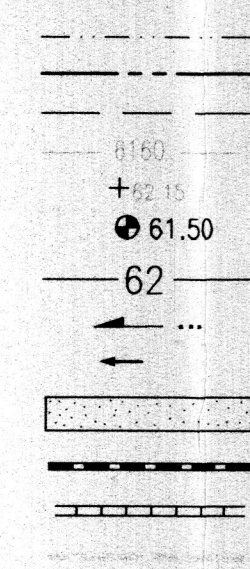
LEGAL DESCRIPTION

TRACT E, LA CUEVA VILLAGE, UNIT 1, SECTION 18, T. 11 N. R. 4 E. N.M.P.M. BERNALILLO COUNTY, N.M.
PROJECT BENCHMARK = T.B.M.
TOP OF REBAR LOCATED AT THE NORTHEAST CORNER OF TRACT E AS SHOWN BELOW.
ELEVATION = 5414.46' M.S.L.D.



LEGEND

NEW BUILDING ENVELOPE
RIGHT OF WAY LINE
PUBLIC EASEMENT LINE
EXISTING CONTOUR
EXISTING FLOWLINE ELEVATION
PROPOSED SPOT ELEVATION
PROPOSED CONTOUR
PROPOSED FLOWLINE
ROOF DRAINAGE
PROPOSED CONCRETE
PROPOSED RETAINING WALL
PROPOSED PRIVACY WALL
EXISTING CMU WALL



I. EXECUTIVE SUMMARY AND INTRODUCTION

THE PROPOSED DEVELOPMENT IS LOCATED WITHIN THE WINDOW G SECTOR PLAN AREA OF NORTH ALBUQUERQUE ACRES AND REQUIRES SITE DEVELOPMENT PLAN APPROVAL THROUGH EPC AND DRB. THE SITE WILL DISCHARGE FREELY TO EXISTING PUBLIC DRAINAGE IMPROVEMENTS IN WYOMING BLVD NE SIZED FOR THIS DISCHARGE. CARMEL AVENUE NE AND WYOMING BLVD NE ARE EXISTING FULLY DEVELOPED PUBLIC STREETS CONSTRUCTED BY CPN 572983. OFFSITE FLOWS FROM THE UNDEVELOPED UPSTREAM PROPERTY WILL BE ACCEPTED BY THIS SITE IN THE EXISTING AND DEVELOPED CONDITIONS. THE PURPOSE OF THIS CONCEPTUAL DRAINAGE PLAN IS TO OBTAIN SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

II. PROJECT DESCRIPTION:

AS SHOWN BY VICINITY MAP C-19 LOCATED HEREON, THE SITE IS LOCATED IN THE LA CUEVA TOWN CENTER ON THE SOUTH SIDE OF CARMEL AVENUE NE APPROXIMATELY 700 FT EAST OF WYOMING BLVD NE. THE WINDOW G AND LA CUEVA TOWN CENTER MASTER DRAINAGE PLANS ADDRESS SITE DRAINAGE REQUIREMENTS. THE EXISTING LEGAL DESCRIPTION IS TRACT E, LA CUEVA VILLAGE, UNIT 1. THE SITE IS ZONED C-2 (SHOPPING CENTER) AND THE PROPOSED DEVELOPMENT IS CONSISTENT WITH THE ZONING. AS SHOWN BY PANEL 141 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS, BERNALILLO COUNTY, NEW MEXICO, AND INCORPORATED AREAS, DATED SEPTEMBER 20, 1996, THE SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE.

III. BACKGROUND DOCUMENTS

THE FOLLOWING IS A LIST OF DOCUMENTS RELATED TO THE SITE AND SURROUNDING AREA. THIS LIST MAY NOT BE INCLUSIVE, HOWEVER, REPRESENTS A SUMMARY OF RELEVANT PLANS AND DOCUMENTS WHICH ARE KNOWN TO THE ENGINEER AT THE TIME OF PLAN PREPARATION.

A. WINDOW G MASTER DRAINAGE PLAN BY JEFF MORTENSEN & ASSOCIATES (JMA) DATED JANUARY 9, 1997 (FILE C19/D11). AS SHOWN BY THIS PLAN, THE AREA OF THE LA CUEVA TOWN CENTER SHOPPING CENTER NORTH OF THE VACATED HOLLY AVENUE NE ROW SHALL DRAIN INTERNALLY TO THE NW CORNER OF THE SHOPPING CENTER TO A STUBOUT PROVIDED BY THE PUBLIC STORM DRAIN IN WYOMING BLVD NE. THE WYOMING STORM DRAIN OUTLETS TO THE NORTH DOMINGO BACA ARROYO (NDBA) SOIL CEMENT CHANNEL. AS DEMONSTRATED BY THE MDP, THE WYOMING STORM DRAIN AND THE NDBA CHANNEL ARE BOTH SIZED FOR FREE DISCHARGE OF DEVELOPED RUNOFF.

B. LA CUEVA TOWN CENTER MASTER DRAINAGE PLAN BY TERRA WEST DATED FEBRUARY 23, 1999 (FILE C-19/D11D). AS SHOWN BY THIS PLAN, A PRIVATE STORM DRAIN WAS EXTENDED FROM THE WYOMING STUBOUT THROUGH THE LA CUEVA TOWN CENTER WITHIN AN EASEMENT TO A STORM INLET LOCATED IN THE DRIVEWAY AT THE WEST SIDE OF TRACT D, LA CUEVA VILLAGE, UNIT 1. THIS STORM DRAIN IS SIZED FOR AND INTENDED FOR USE BY TRACTS D, E AND F, LA CUEVA VILLAGE, UNIT 1.

C. PRE-DESIGN CONFERENCE WITH BRAD BINGHAM, CITY HYDROLOGIST, NOVEMBER 18, 2004. ONE FINDING FROM THE CONFERENCE WAS THAT SITE RUNOFF CAN BE DIRECTLY DISCHARGED TO CARMEL AVENUE NE IF AN IMPROVED OUTFALL ACROSS TRACT D IS NOT AVAILABLE AT THE TIME OF DEVELOPMENT DUE TO TIMING OR COOPERATION ISSUES. THIS DISCHARGE OF ADDITIONAL SURFACE FLOWS WILL REQUIRE A DOWNSIDE CAPACITY ANALYSIS. A COPY OF THE CONFERENCE RECAP IS INCLUDED WITH THIS SUBMITTAL.

THE PROPOSED CONSTRUCTION OF AN OFFICE PARK DEVELOPMENT DRAINING DIRECTLY AND FREELY TO PERMANENT WYOMING AVENUE NE DRAINAGE IMPROVEMENTS AS PROPOSED AND DESCRIBED HEREIN IS IN ACCORDANCE WITH THE POLICIES AND REQUIREMENTS OF THE ABOVE LISTED DOCUMENTS.

IV. EXISTING CONDITIONS:

THE SITE IS UNDEVELOPED WITH A SPARSE GROUND COVER OF NATIVE VEGETATION. THE SITE SLOPES FROM EAST TO WEST. THERE IS AN EXISTING CMU SCREEN WALL ALONG THE SOUTH PROPERTY LINE. THE SITE IS FRONTED ON THE NORTH BY CARMEL AVENUE NE, A FULLY DEVELOPED PUBLIC STREET. EXISTING SITE RUNOFF SHEET DRAINS FROM EAST TO WEST ONTO TRACT D WHICH LIES TOPOGRAPHICALLY LOWER. THE SITE ACCEPTS OFFSITE FLOW RUNOFF FROM TRACT F (0.8 AC) TO THE EAST. THE DESIGNATED OUTFALL FOR DEVELOPED RUNOFF FROM THIS SITE IS TO AN EXISTING PRIVATE SINGLE "C" STORM INLET LOCATED IN AN EXISTING ENTRANCE ROAD LOCATED ON THE WEST (DOWNSIDE) SIDE OF TRACT D. THIS INLET DRAINS TO A PRIVATE STORM DRAIN LOCATED WITHIN A PRIVATE STORM DRAINAGE EASEMENT THAT BENEFITS TRACTS D, E AND F. AS INDICATED BY THE LA CUEVA TOWN CENTER MDP (REF. B), THE PRIVATE STORM DRAIN IS SIZED FOR FULLY DEVELOPED RUNOFF FROM TRACTS D, E AND F, AND IS CONNECTED TO THE PUBLIC WYOMING BLVD STORM DRAIN. AS INDICATED BY THE WINDOW G MDP (REF. A), THE WYOMING STORM DRAIN AND ITS OUTFALL TO THE NDBA SOIL CEMENT CHANNEL WAS SIZED FOR THE FREE DISCHARGE OF DEVELOPED RUNOFF FROM THE PORTION OF THE SHOPPING CENTER NORTH OF THE VACATED HOLLY AVENUE NE ALIGNMENT.

V. DEVELOPED CONDITIONS

THE PROPOSED IMPROVEMENTS CONSIST OF THE CONSTRUCTION OF A 2-BUILDING OFFICE COMPLEX WITH PAVED PARKING AND LANDSCAPING IMPROVEMENTS. IT IS CURRENTLY PROPOSED TO SHARE A COMMON ENTRANCE TO CARMEL WITH A PROPOSED DEVELOPMENT ON TRACT D. CONSTRUCTION OF THE PRIVATE ENTRANCE AND THE SHARED DRIVE ASLE ON TRACT D WILL REQUIRE THE PROPERTY OWNER'S PERMISSION.

THE DEVELOPED OUTFALL FOR THIS SITE IS TO THE AMAFCA MAINTAINED NDBA SOIL CEMENT CHANNEL VIA PUBLIC (CITY) STORM DRAIN IN WYOMING BLVD NE. ALTHOUGH THE WINDOW G AND LA CUEVA TOWN CENTER MDP'S BOTH IDENTIFIED THE RUNOFF FROM TRACTS D, E AND F TO REACH THE WYOMING STORM DRAIN VIA PRIVATE INTERNAL STORM DRAIN, THE EXISTING PRIVATE STORM DRAIN AND ASSOCIATED EASEMENT IN THE LA CUEVA TOWN CENTER CURRENTLY END NEAR THE WEST PROPERTY LINE OF THE UNDEVELOPED TRACT D AND ARE THEREFORE NOT CURRENTLY ACCESSIBLE TO TRACT E WITHOUT THE CONSTRUCTION OF PAVING AND/OR DRAINAGE IMPROVEMENTS ON ACROSS, OR UNDER TRACT D. IT IS THE INTENT OF THIS PROJECT TO COOPERATE WITH THE DEVELOPER OF TRACT D TO OBTAIN AN EASEMENT AND MAKE PROVISIONS FOR TRACT D TO ACCEPT OVERLAND SURFACE RUNOFF FROM TRACTS E AND F IN ACCORDANCE WITH THE MASTER DRAINAGE PLANS. BUT BECAUSE WE CAN NOT ENSURE THE TIMING OR COOPERATION WITH THE TRACT D DEVELOPMENT, THE SITE HAS BEEN DESIGNED TO DRAIN TO CARMEL AVENUE NE WITH THE FLEXIBILITY TO EASILY REDIRECT SITE RUNOFF ACROSS TRACT D IF THE DOWNSIDE OUTFALL AND EASEMENT BECOME AVAILABLE. DEVELOPED SITE RUNOFF WILL DRAIN FROM EAST TO WEST TO THE PROPOSED SHARED ACCESS ROAD. A TEMPORARY EXTRUDED CONCRETE CURB WILL BE CONSTRUCTED ON THE WEST EDGE OF THE ROAD TO DIVERT RUNOFF TO CARMEL. WHEN TRACT D DEVELOPS AND TAKES ACCESS TO THE SHARED ROAD, THEIR CONSTRUCTION CAN EITHER ALLOW THE RUNOFF TO ENTER THE SITE VIA NEW CURB OPENINGS, OR CAN INSTEAD CONSTRUCT VALLEY GUTTERS ACROSS THE OPENINGS SO THAT NUISANCE FLOWS WILL CONTINUE TO DRAIN TO THE NORTH.

IN ORDER TO MAINTAIN REASONABLE SITE SLOPES FOR VEHICULAR, PEDESTRIAN, AND HANDICAPPED ACCESSIBILITY, SITE DEVELOPMENT WILL REQUIRE CONSTRUCTION OF A RETAINING WALL AT THE EAST PROPERTY LINE. THE WALL WILL RETAIN A MAXIMUM OF 4.5 FEET.

AS REQUIRED BY THE WINDOW G AND LA CUEVA TOWN CENTER MASTER DRAINAGE PLANS (REFS A&B), UNDEVELOPED EXISTING OFFSITE FLOWS FORM TRACT F TO THE EAST WILL BE ACCEPTED BY THIS SITE IN BOTH THE INTERIM AND DEVELOPED CONDITIONS. WHEN THE UPSTREAM TRACT DEVELOPS, THEY SHALL DISCHARGE THEIR DEVELOPED RUNOFF INTO ONE OR BOTH OF THE 10" SLEEVES THAT WILL BE PROVIDED IN THE RETAINING WALL AT THE EAST PROPERTY LINE.

VI. CONCEPTUAL GRADING PLAN

THE GRADING PLAN HEREON SHOWS: 1) EXISTING GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1 FT. 0 IN INTERVALS FROM THE TOPOGRAPHIC EXHIBIT OF TRACTS E&F, LA CUEVA VILLAGE, UNIT 1, BY SURVEYS SOUTHWEST, LTD., DATED 10/14/2003, 2) PROPOSED GRADES INDICATED BY FINISHED FLOOR ELEVATIONS, SPOT ELEVATIONS, AND FLOWLINE, 3) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS AS SHOWN BY THE AFOREMENTIONED SURVEY, AND 4) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS.

VII. CALCULATIONS

THE CALCULATIONS, WHICH APPEAR HEREON, ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY, 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS DEMONSTRATED BY REFERENCES A AND B, THE PUBLIC STORM DRAIN IN WYOMING IS SIZED FOR FREE DISCHARGE OF FULLY DEVELOPED RUNOFF FROM THIS SITE. UNLESS AN AGREEMENT IS REACHED WITH THE DEVELOPER OF TRACT D TO ACCEPT SITE RUNOFF, ADDITIONAL CALCULATIONS MUST BE PROVIDED AS PART OF THE BUILDING PERMIT SUBMITTAL TO DEMONSTRATE THAT THE CARMEL AND WYOMING STORM INLETS CAN ACCEPT THE ADDITIONAL RUNOFF.

IX. CONCLUSIONS

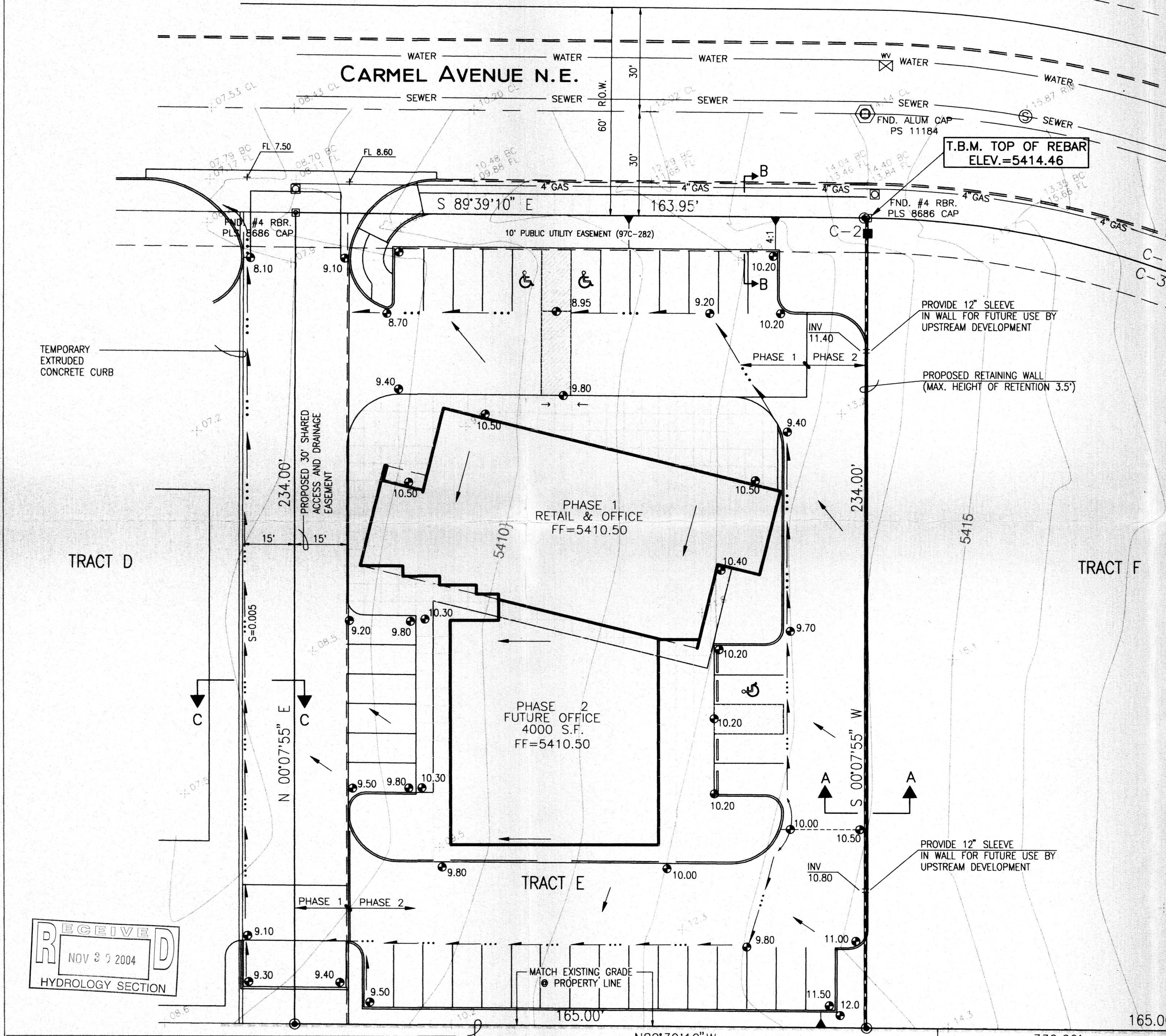
1) THE PROPOSED SITE IMPROVEMENTS AND DRAINAGE CONCEPT ARE CONSISTENT WITH THE DEVELOPMENT CRITERIA ESTABLISHED BY PREVIOUSLY APPROVED PLANS FOR NDBA, WINDOW G, AND LA CUEVA TOWN CENTER DEVELOPMENT.
2) DEVELOPED RUNOFF FROM THIS SITE WILL DRAIN FREELY TO EXISTING PERMANENT PUBLIC CARMEL AVENUE NE AND WYOMING BLVD NE PAVING AND STORM DRAINAGE IMPROVEMENTS.
3) IF POSSIBLE, BUT NOT REQUIRED, DEVELOPMENT OF THIS SITE WILL BE COORDINATED WITH THAT OF TRACT D TO THE WEST. THE DESIGNATED OUTFALL FOR DEVELOPED RUNOFF FROM TRACT E REQUIRED DRAINING ACROSS TRACT D, AND WILL THEREFORE REQUIRE PROVISIONS TO ACCEPT THE RUNOFF FROM TRACT E AND DELIVER IT ACROSS TRACT D TO THE DESIGNATED OUTFALL.
4) THIS PROJECT IS DESIGNED TO DRAIN TO CARMEL AVENUE NE WITH THE FLEXIBILITY TO DIVERT RUNOFF IN THE FUTURE TO TRACT D IF PROVISIONS ARE MADE TO ACCEPT THE RUNOFF IN ACCORDANCE WITH THE APPROVED MASTER PLANS.
5) THERE ARE NO DPM DESIGN VARIANCES, DRAINAGE EASEMENTS OR DRAINAGE COVENANTS ANTICIPATED AT THIS TIME.
6) A SEPARATE DRAINAGE SUBMITTAL WILL BE MADE FOR BUILDING PERMIT APPROVAL. THIS SUBMITTAL WILL NEED TO DEMONSTRATE DOWNSIDE INLET CAPACITIES UNLESS AN AGREEMENT CAN BE REACHED WITH THE DEVELOPER OF TRACT D TO ACCEPT THE DEVELOPED RUNOFF FROM THIS SITE.

CALCULATIONS

I. PRECIPITATION ZONE = 3
II. $P_{6,100} = P_{360} = 2.60$
III. TOTAL AREA (A_T) = 38612 SF/0.8864 AC
IV. EXISTING LAND TREATMENT
TREATMENT AREA (SF/AC) %
C 38612/0.8864 100
V. DEVELOPED LAND TREATMENT
TREATMENT AREA (SF/AC) %
B 5792/0.1330 15
D 32820/0.7534 85
VI. EXISTING CONDITION
A. VOLUME
 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$
 $E_W = [1.29(0.8864)] / 0.8864 = 1.29$ IN
 $V_{100} = (E_W / 12) A_T$
 $V_{100} = (1.29 / 12) 0.8864 = 0.0953$ ac-ft = 4150 CF
B. PEAK DISCHARGE
 $Q_P = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
 $Q_P = Q_{100} = 3.45(0.8864) = 3.1$ cfs
VII. DEVELOPED CONDITION
A. VOLUME
 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$
 $E_W = [0.92(0.1330) + 2.36(0.7534)] / 0.8864 = 2.14$ IN
 $V_{100} = (E_W / 12) A_T$
 $V_{100} = (2.14 / 12) 0.8864 = 0.1584$ ac-ft = 6900 CF
B. PEAK DISCHARGE
 $Q_P = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
 $Q_P = Q_{100} = 2.60(0.1330) + 5.02(0.7534) = 4.1$ cfs
VIII. COMPARISON
A. VOLUME
 $\Delta V_{100} = 6900$ CF - 4150 CF = 2750 CF (INCREASE)
B. PEAK DISCHARGE
 $\Delta Q_{100} = 4.1$ cfs - 3.1 cfs = 1.0 cfs (INCREASE)

Erosion Control Measures:

- The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property.
- The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
- The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.



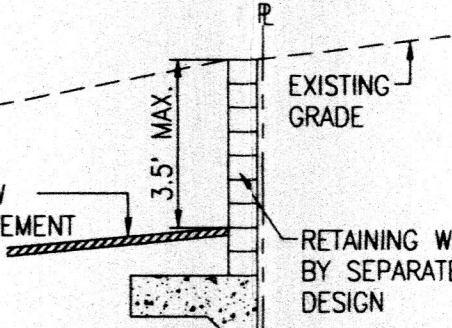
CURVE	LENGTH	RADIUS	DELTA	CHORD	CHORD BEARING
C-1	179.12	270.00	38°00'39"	175.85	N70°38'52"W
C-2	1.05	270.00	00°13'24"	1.05	S89°32'28"E
C-3	178.07	270.00	37°47'15"	174.86	S70°32'09"E

NOTE:
THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. BOUNDARY AND TOPOGRAPHIC INFORMATION WAS PROVIDED BY SURVEYS SOUTHWEST, LTD., A.L.T.A./A.C.S.M. LAND TITLE SURVEY OF TRACTS E & F, LA CUEVA VILLAGE, UNIT 1, DATED SEPTEMBER 23, 2003. ACTUAL FIELD CONDITIONS MUST BE VERIFIED BY OWNER AND / OR CONTRACTOR.

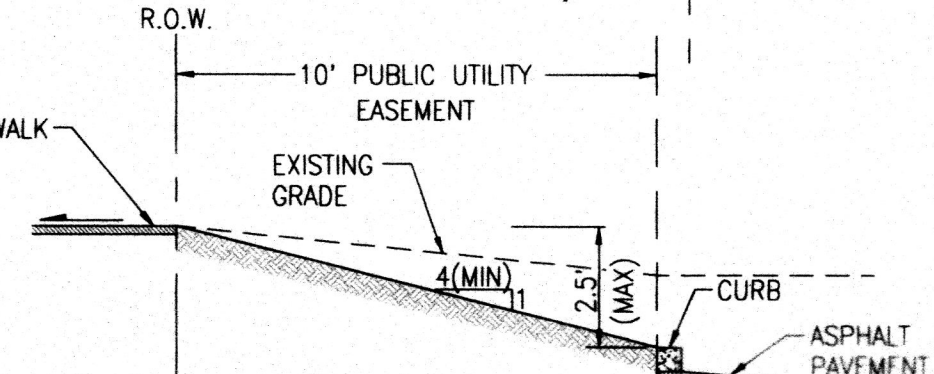


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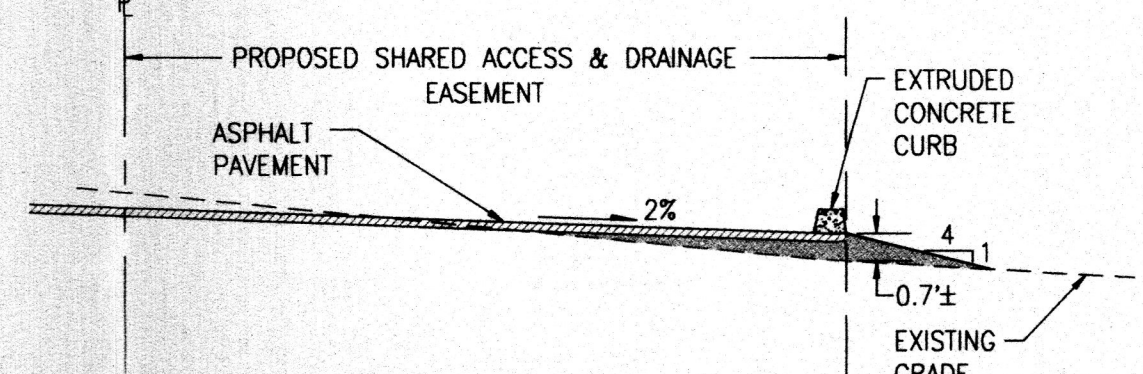
JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. NE
ALBUQUERQUE, NM 87109
ENGINEERS & SURVEYORS (C60) 245-4250
FAX: 505 345-4254 CE ESTABLISHED 1977



SECTION A-A
SCALE: 1" = 4'



SECTION B-B
SCALE: 1" = 4'



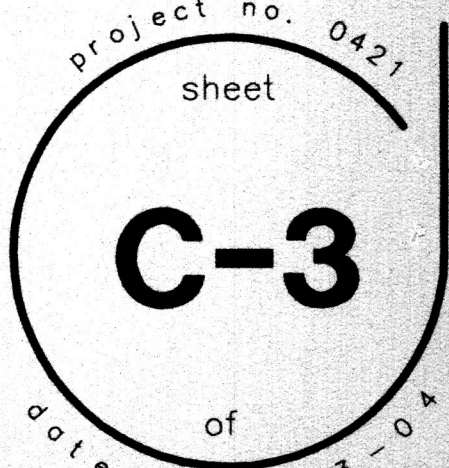
SECTION C-C
SCALE: 1" = 4'

CONCEPTUAL GRADING AND DRAINAGE PLAN
SCALE: 1" = 20'-0"

DR. GARZA'S MEDICAL OFFICES

TRACT E LA CUEVA VILLAGE UNIT 1
ALBUQUERQUE, NEW MEXICO

SANDERS & ASSOCIATES ARCHITECTS, P.C.



Project no. 0421
sheet
C-3
date 11-03-04