

DRAINAGE CERTIFICATION

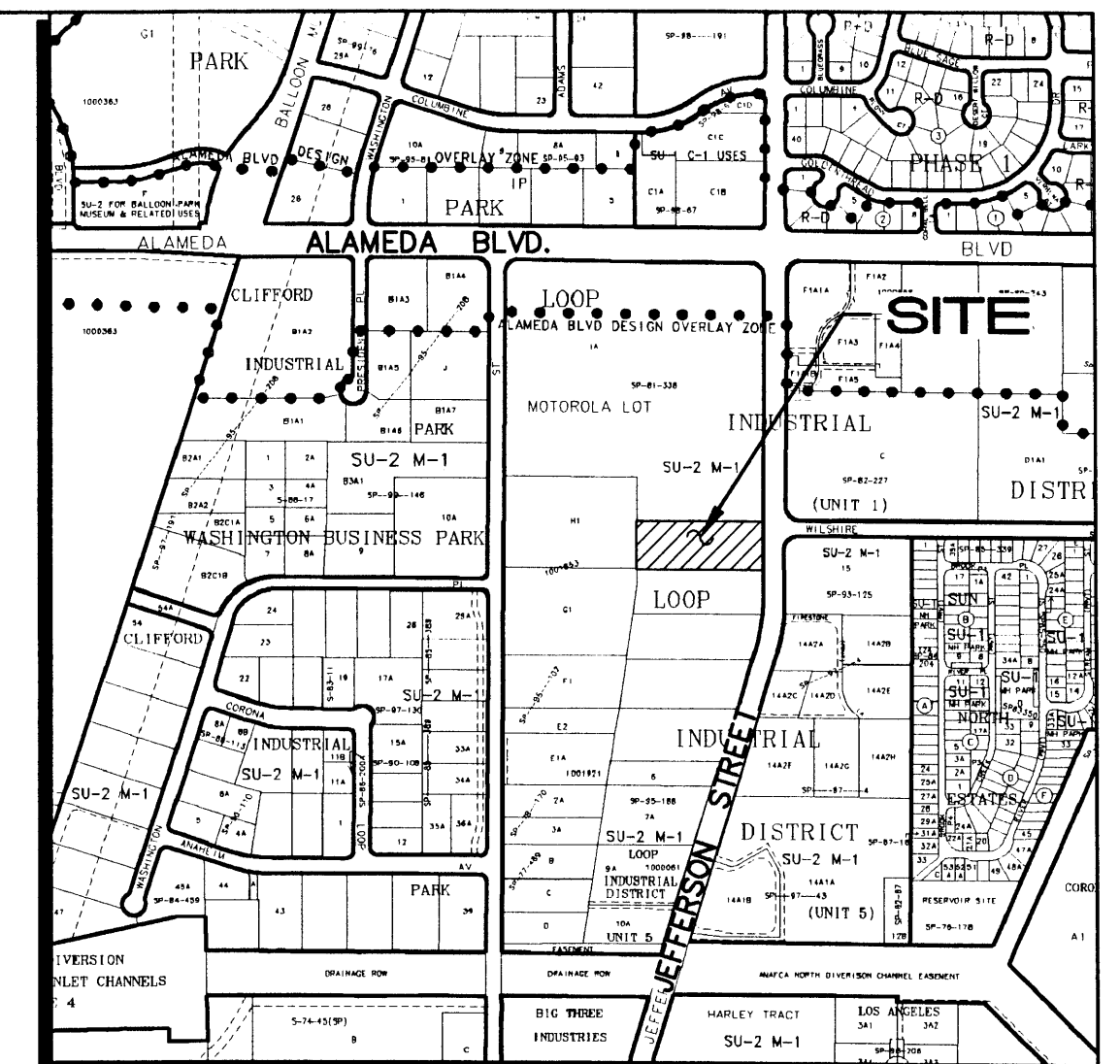
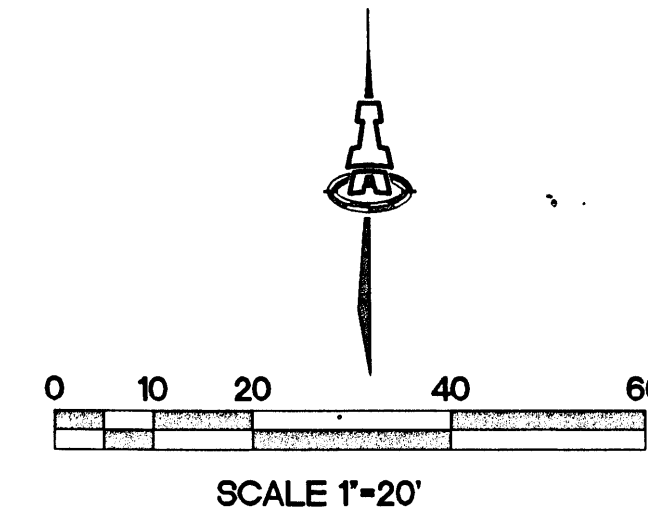
I, Scott M. McGee, NMPE 10519, of the firm Isaacson & Arfman, P.A., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated April 24, 2006. The record information edited onto the original design document has been obtained by Larry Medrano, NMPS 11993, of the firm Precision Surveys, Inc. I further certify that I have personally visited the project site on 03/12/07 and have determined by visual inspection that the survey data provided is 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 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 are advised to obtain independent verification of its accuracy before using it for any other purpose.

Scott M. McGee
Scott M. McGee, PE NMPE 10519
03/12/07
Date



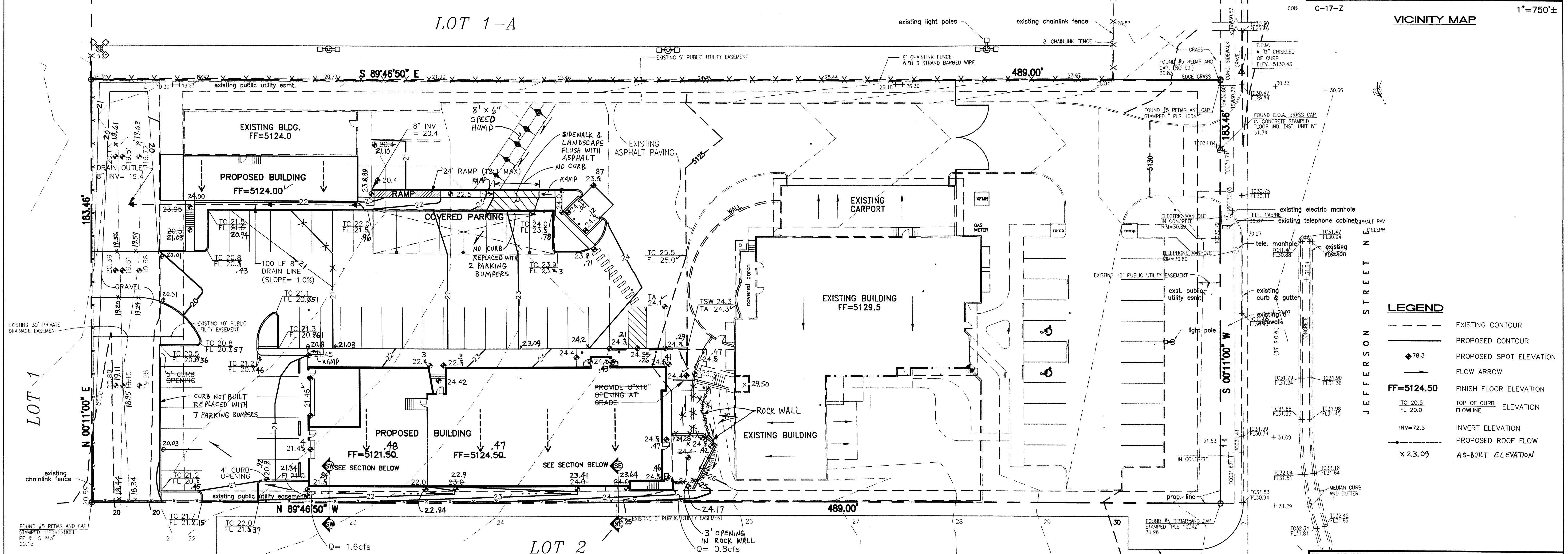
CALCULATIONS: Dions Corporate Addition : 04-20-06			
Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993			
ON-SITE			
AREA OF SITE:	89712 SF	=	2.1 Ac.
HISTORIC FLOWS:		DEVELOPED FLOWS:	EXCESS PRECIP:
On-Site Historic Land Condition		On-Site Developed Land Condition	Precip. Zone 2
Area a = 0 SF		Area a = 0 SF	Ea = 0.53
Area b = 14354 SF		Area b = 14354 SF	Eb = 0.78
Area c = 33193 SF		Area c = 9868 SF	Ec = 1.13
Area d = 42165 SF		Area d = 65490 SF	Ed = 2.12
Total Area = 89712 SF		Total Area = 89712 SF	
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)			
Weighted E =		EaAa + EbAb + EcAc + EdAd	
		Aa + Ab + Ac + Ad	
Historic E =	1.54 in.	Developed E =	1.80 in.
On-Site Volume of Runoff: V360 = E*A / 12			
Historic V360 =	11508 CF	Developed V360 =	13432 CF
On-Site Peak Discharge Rate: Qp = QpaAa + QpbAb + QpcAc + QpdAd / 43,560			
For Precipitation Zone 2			
Qpa =	1.56	Qpc =	3.14
Qpb =	2.28	Qpd =	4.70
Historic Qp =	7.7 CFS	Developed Qp =	8.5 CFS



VICINITY MAP

1"=750'

LOT 1-A



LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- FLOW ARROW
- FINISH FLOOR ELEVATION
- TOP OF CURB ELEVATION
- INVERT ELEVATION
- PROPOSED ROOF FLOW
- AS-BUILT ELEVATION

LEGAL DESCRIPTION: LOT 1, UNIT V, LOOP INDUSTRIAL DISTRICT

ADDRESS: 8525 JEFFERSON NE.

SURVEYS: JEFF MORTENSON & ASSOCS. DATED 08/99.

OFFSITE FLOWS: NO OFFSITE FLOWS ENTER THIS SITE.

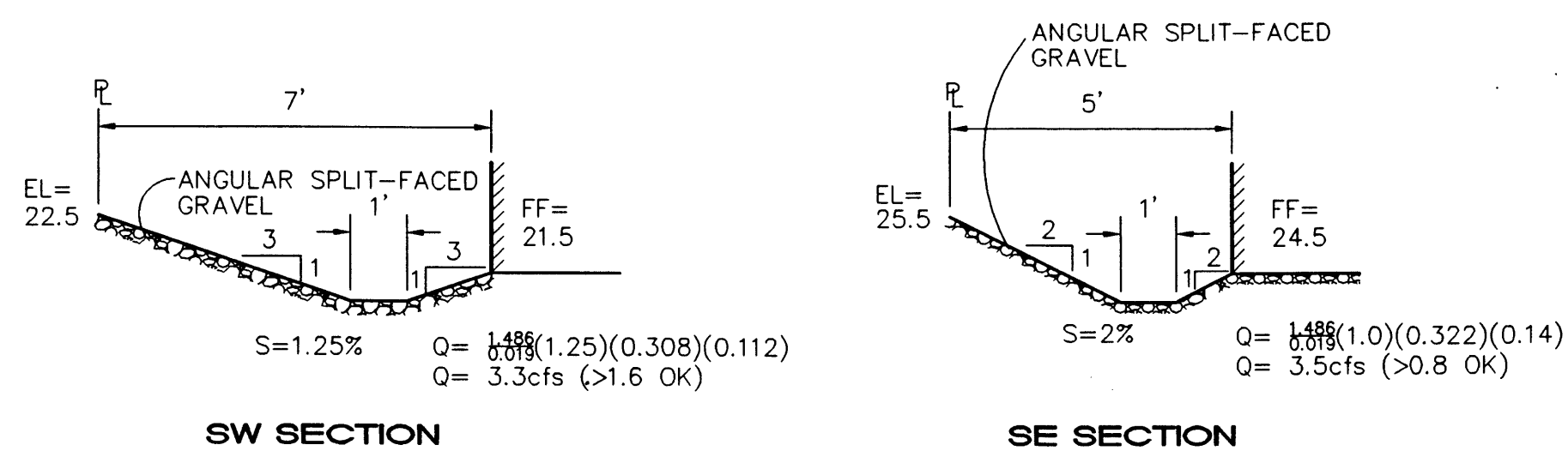
FLOODPLAIN: PER FEMA PANEL 137, THIS SITE IS WITHIN ZONE X, LOCATED OUTSIDE THE 100-YEAR FLOODPLAIN.

EXISTING CONDITIONS:

THE SITE IS PARTIALLY DEVELOPED WITH AN OFFICE BUILDING, STORAGE BUILDING, PAVED PARKING, AND ASSOCIATED LANDSCAPING. RUNOFF FLOWS WEST TO AN EXISTING PRIVATE DRAINAGE EASEMENT ALONG THE WEST SIDE OF THE SITE THAT OUTFALLS TO THE DOMINGO BACA ARROYO LOCATED SOUTH OF THE SITE. THE MASTER DRAINAGE PLAN (C17/D12) ALLOWS FREE DISCHARGE FROM SITES DEVELOPED WITH UP TO 73% IMPERVIOUS AREA.

PROPOSED CONDITIONS:

A 9,800 SF BUILDING IS PROPOSED ALONG THE SOUTH PROPERTY LINE. ADDITIONAL PAVED PARKING AND A STORAGE BUILDING ADDITION ARE ALSO PROPOSED. THE PROPOSED IMPROVEMENTS INCREASE THE IMPERVIOUS AREA TO 73%, WHICH IS THE MAXIMUM ALLOWED WITHOUT ONSITE DETENTION REQUIREMENTS. RUNOFF WILL CONTINUE TO DISCHARGE WEST TO THE PRIVATE DRAINAGE EASEMENT PER HISTORICAL PATTERNS.



DRAINAGE SWALE DETAILS

SCALE: 1"=3'

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8928 Fax. 505-268-2632
1524GRD.DWGdlp 04.24.06

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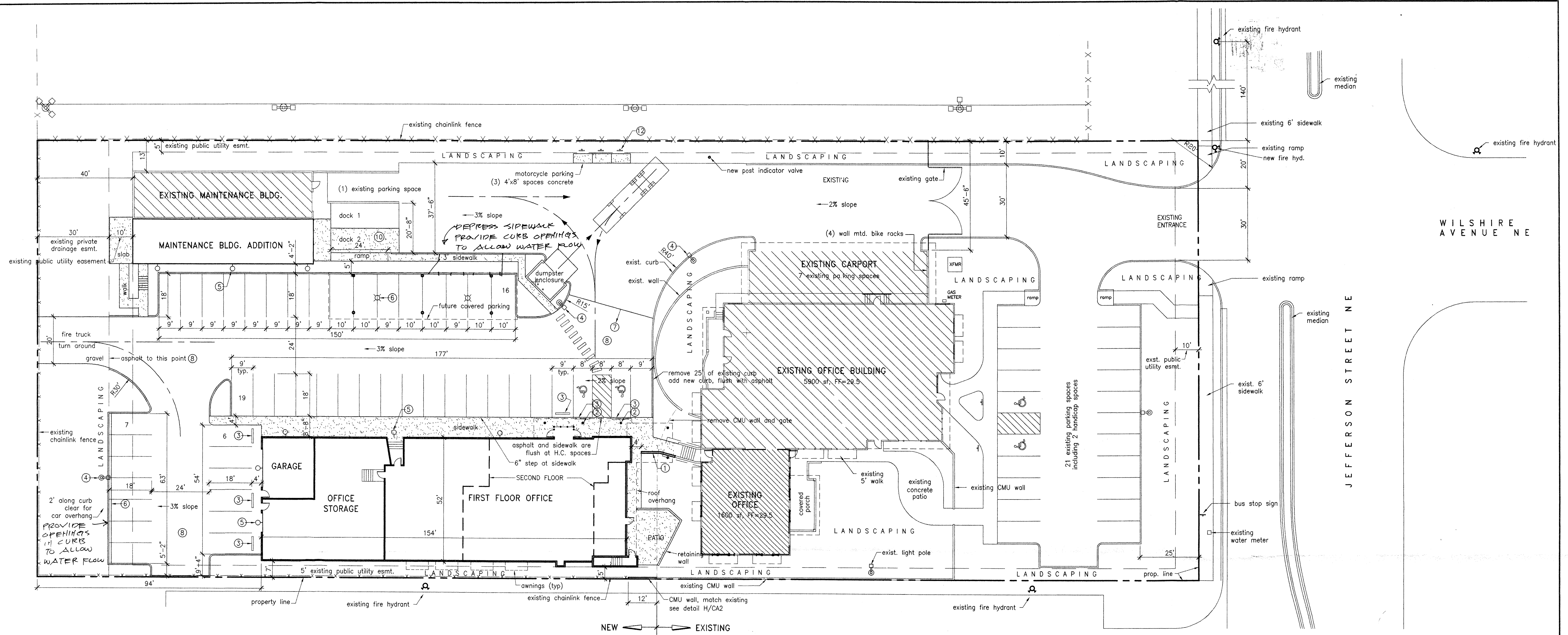
DION'S CORPORATE ADDITION
ALEX HARRISON

GRADING AND DRAINAGE PLAN

Date:	No. Revision:	Date:	Job No.
Drawn By:			
Chk By:			

PAGE

SH. CI. OF



SITE PLAN

SCALE: 1" = 20'

ADDRESS: 8525 Jefferson St. NE, Albuquerque, NM
LEGAL DESCRIPTION: Lot 1, Unit V, Loop Industrial District

KEYED NOTES

- ① CMU wall, match existing wall, height, split-face, color
- ② H.C. parking signs (see Sheet G2), mount on 8" columns
- ③ parking bumpers
- ④ light pole (see Electrical)
- ⑤ wall mounted site light (see Bldg Elevations and Electrical)
- ⑥ Light mounted on parking cover (see Electrical)
- ⑦ From this line remove asphalt, concrete, dumpster enclosure, light pole and base, basketball goal - return light and goal to Owner
- ⑧ 2" asphalt over 4" base
- ⑨ curb and gutter (all other curb to be header curb)
- ⑩ Sloped concrete slab
- ⑪ Any asphalt patching in this area is to be 3" asphalt over 6" base
- ⑫ Motorcycle Parking sign 12" x 18"

Concrete - grey, broom finish

PARKING SPACE CALCULATIONS

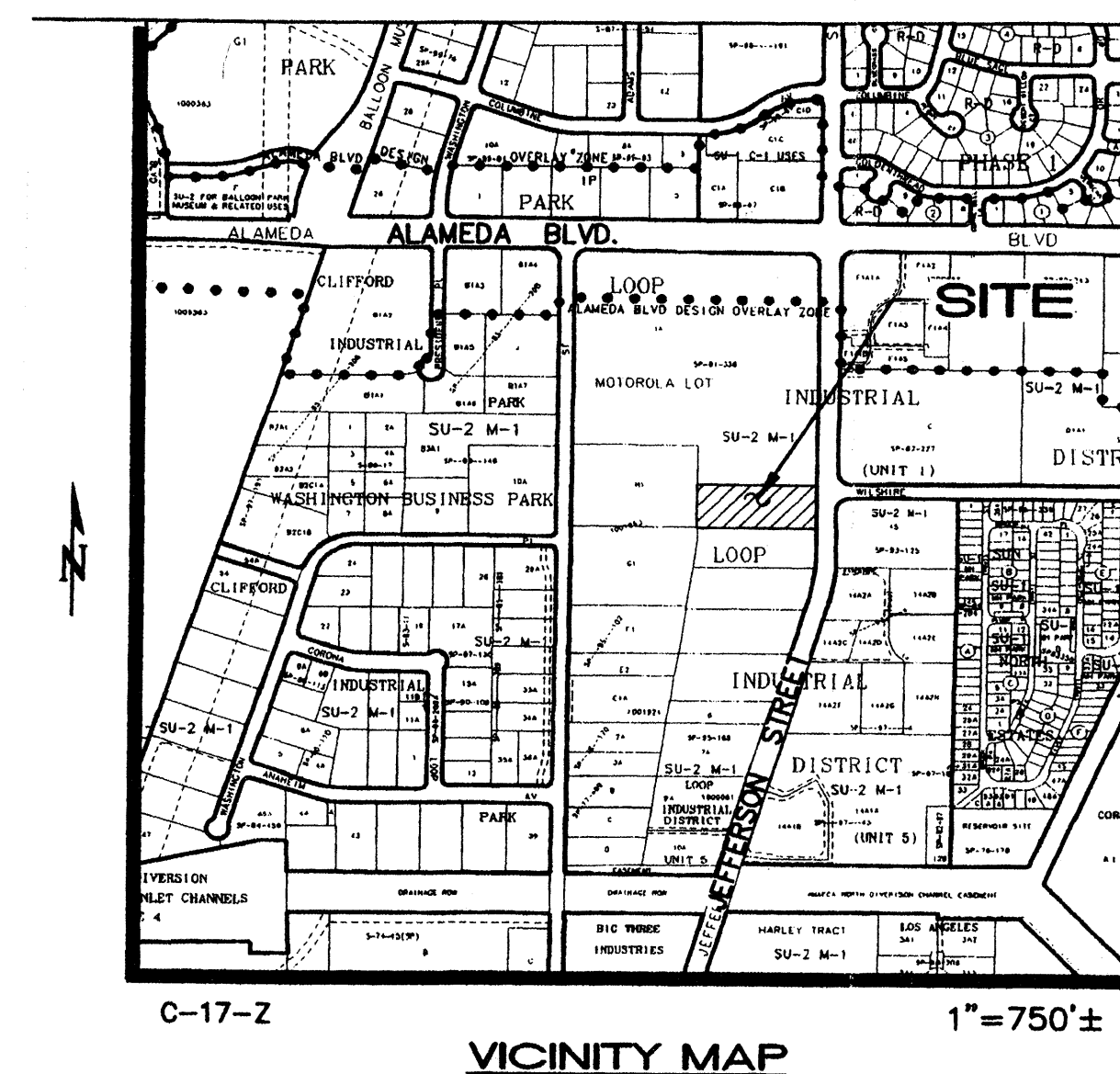
	S.F.		Spaces
First Floor Office	5102	/ 200	25.5
First Floor Storage	2080	/ 2000	1.0
Second Floor Office	2600	/ 300	8.7
Existing Maintenance Bldg	1394	/ 1000	1.4
New Maintenance Bldg	1344	/ 1000	1.3
Existing Office	7500	/ 200	37.5
Total			76
Bus Stop reduction (10%)			-7.6
Total Spaces Required			69
Total Spaces Provided			77
H.C. Spaces Provided			4
Bicycle Spaces (69/20=4)			4
Motorcycle Spaces Provided			3

PLANNING HISTORY

ZA-82-348
ZX-70-33
Z-70-124
S-70-40

AREAS

Existing Buildings: 8,894 sf
New Buildings: 11,701 sf
Site: 2 acres

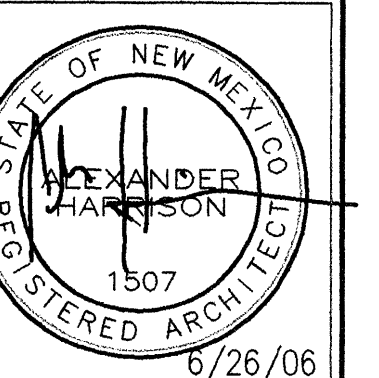


TRAFFIC CIRCULATION LAYOUT
APPROVED

Signed: 6-30-06 Date: 6/26/06

**ALEXANDER HARRISON
ARCHITECT**
8605 Mountain Road NE, Albuquerque, NM 87112, 299-6322

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proj: 503
file: Const Docs\TC1 - Traffic Circulation Plan
date: June 26, 2006
revisions:

Dion's Corporate Headquarters
Albuquerque, New Mexico

TRAFFIC CIRCULATION PLAN
sheet number
TC1
of 1 sheets

Construction Notes:

- Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990 (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.
- 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 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 ponding adjacent to the structure. For construction details, refer to landscaping plan.

- Contractor shall notify the City Surveyor not less than seven (7) days prior to starting work in order that the City Surveyor may take necessary measures to insure the preservation of survey monuments. Contractor shall not disturb permanent survey monuments without the consent of the City Surveyor and shall notify the City Surveyor and bear the expense of replacing any that may be disturbed without permission. Replacement shall be done only by the City Surveyor. When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, Contractor shall, at his own expense, adjust the monument cover to the new grade unless otherwise specified. Refer to Section 4.4 of the Specifications.

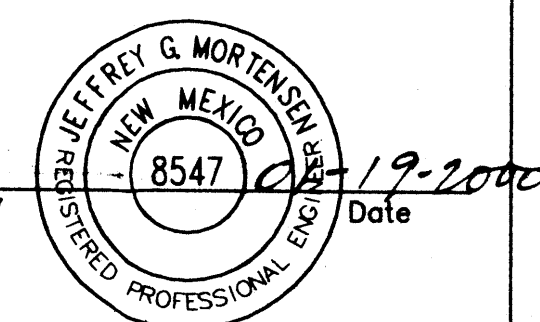
Erosion Control Measures:

- 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.
- Any areas of excess disturbance (traffic access, storage yard excavated material, etc.) shall be re-seeded according to C.O.A. Specification 1012 "Native Grass Seeding". This will be considered incidental to construction, therefore, no separate payment will be made.

CERTIFICATION FOR TEMPORARY C.O.

As indicated by the as-built information shown hereon, this project has been graded and drained in substantial compliance with the approved Plan with the exception of the finished grading of the landscaped areas which is still pending. It is based upon personal observation of site conditions on January 14, 2000 and this evaluation of as-constructed conditions that issuance of a Temporary Certificate of Occupancy is hereby recommended. A Recertification and resubmittal will be required for issuance of a Permanent Certificate of Occupancy. The as-built information shown hereon has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief.

Jeffrey G. Mortensen, NMPE 8547

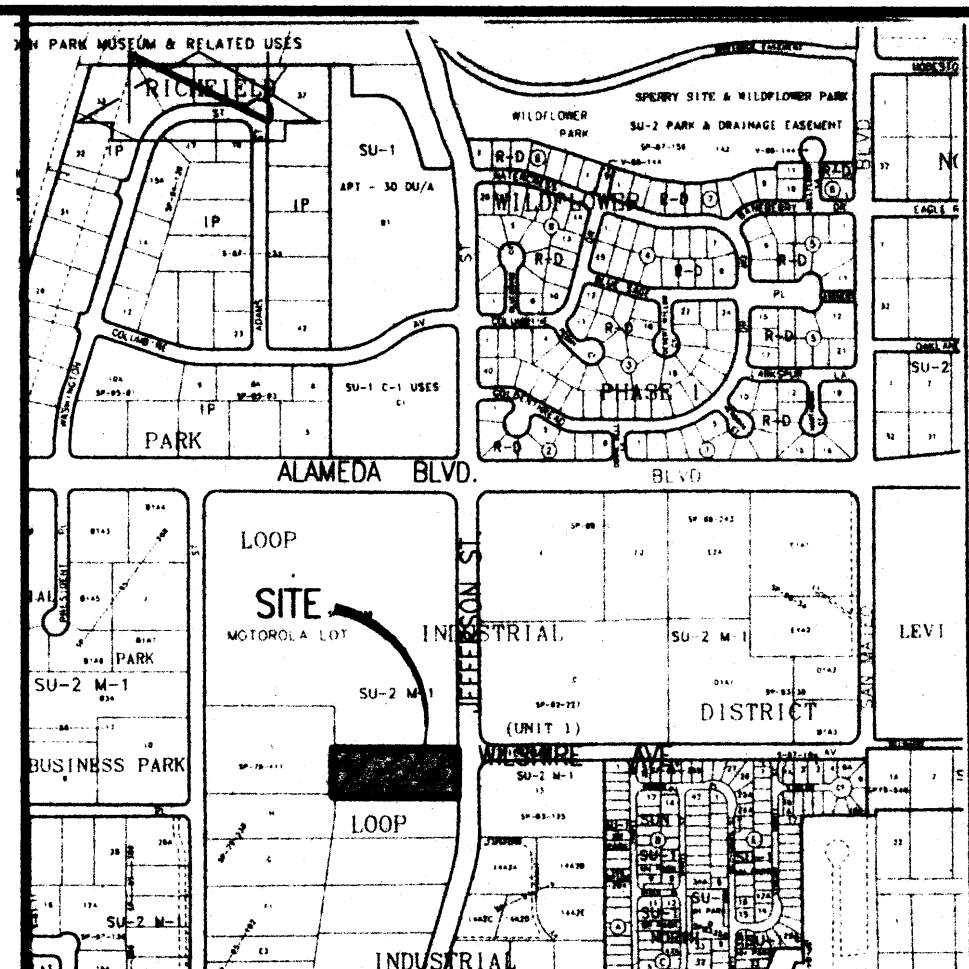


AS-BUILT LEGEND

- TA4.56 AS-BUILT ELEVATION
- TC5.10 AS-BUILT ELEVATION
- TA4.60 AS-BUILT ELEVATION
- 04.00 AS-BUILT=AS-DESIGNED ELEVATION

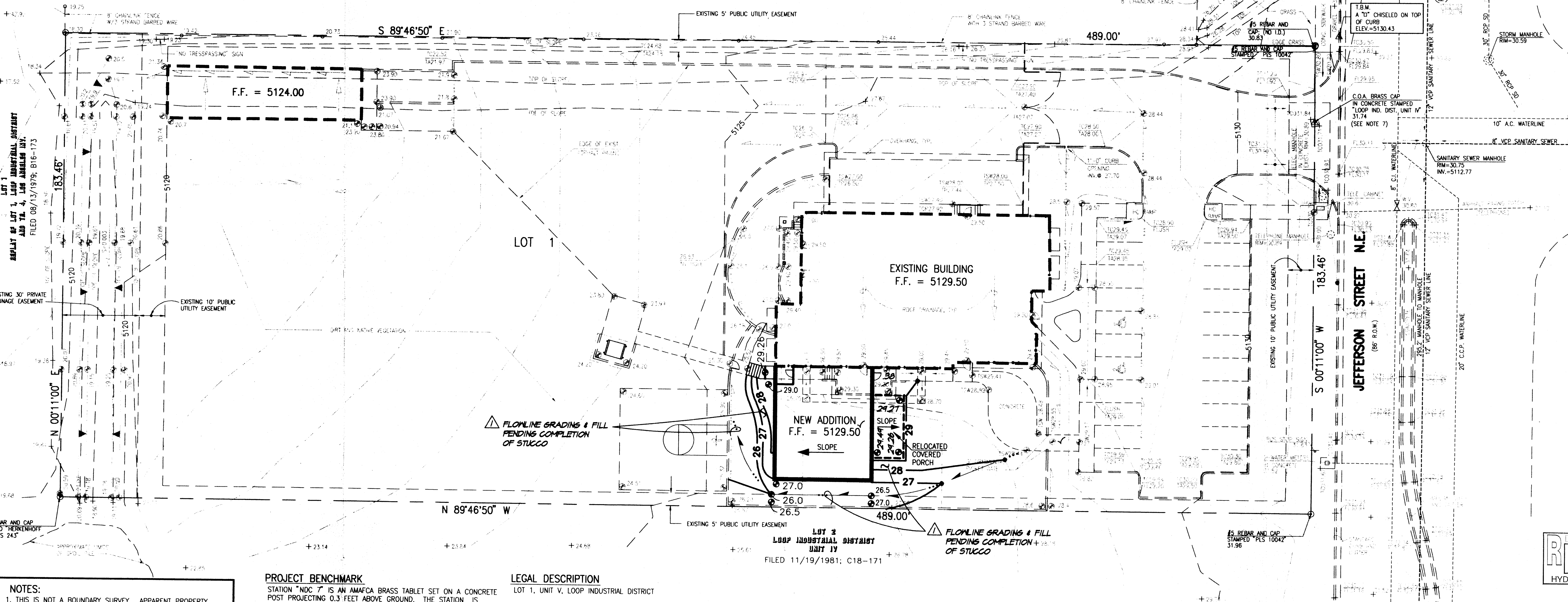
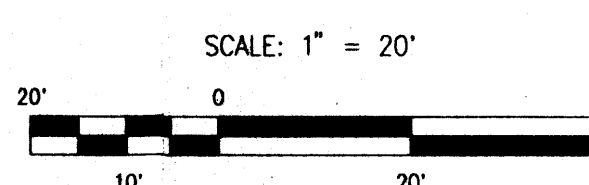
LEGEND

- TOP OF CURB
- FLOWLINE
- TOP OF CONCRETE
- WATER METER
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- TOP OF ASPHALT
- TOP OF CONCRETE PAVING
- EXISTING DIRECTION OF FLOW
- EXISTING SLOPE
- EXISTING ROOF DRAINAGE
- PROPOSED ROOF DRAINAGE
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED FLOWLINE



VICINITY MAP
SCALE: 1" = 750'

C-17



- NOTES:**
- THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. BOUNDARY DATA SHOWN IS BASED UPON THE PLAT OF SURVEY PREPARED BY HALL SURVEYING CO. IN OCTOBER, 1996.
 - WATER, SANITARY SEWER AND STORM DRAIN LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. LOCATION AND SIZE DATA WAS TAKEN FROM CITY OF ALBUQUERQUE DISTRIBUTION MAPS.

PROJECT BENCHMARK

STATION "NDC 7" IS AN AMAFCA BRASS TABLET SET ON A CONCRETE POST PROJECTING 0.3 FEET ABOVE GROUND. THE STATION IS LOCATED AT THE RICHFIELD ROAD BRIDGE OVER THE AMAFCA NORTH DIVERSION CHANNEL APPROXIMATELY 2.5 FEET SOUTH OF THE BRIDGE. ELEVATION = 5062.6 FEET (M.S.L.D.)

T.B.M.

A "T" CHISELED ON TOP OF THE CURB NEAR THE NORTHEAST PROPERTY CORNER AS SHOWN ON THE DRAWING ABOVE. ELEVATION = 5130.43 FEET (M.S.L.D.)

LEGAL DESCRIPTION

LOT 1, UNIT V, LOOP INDUSTRIAL DISTRICT

STREET ADDRESS

8525 JEFFERSON NE

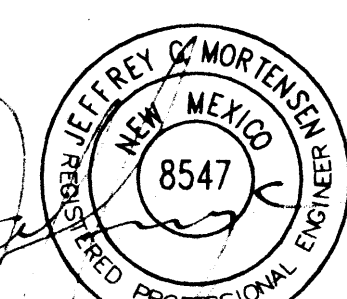
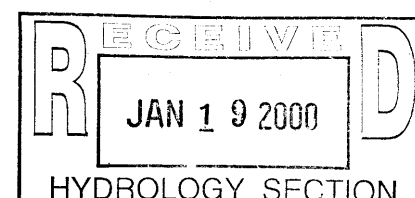
GRADING AND DRAINAGE PLAN

DION'S CORPORATE HEADQUARTERS ADDITION

DESIGNED BY	NO.	DATE	BY	REVISIONS	JOB NO.
J.G.M.	1	1/10	J.G.M.	AS-BUILT & CERTIFY FOR TEMP C.O.	970704
DRAWN BY					DATE
S.G.H.					08-1999
APPROVED BY					SHEET
J.G.M.					1 OF 2



JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, N.M. 87109
ENGINEERS & SURVEYORS (905) 345-4290



08-20-99



JEFF MORTENSEN & ASSOCIATES, INC.
1001-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 349-4250

DRAINAGE PLAN AND CALCULATIONS
DION'S CORPORATE HEADQUARTERS ADDITION

DESIGNED BY	NO.	DATE	BY	REVISIONS	JOB NO.
J.G.M.	1	01/00	JEM		970704
DRAWN BY					DATE
D.L.M.					08-1999
APPROVED BY					SHEET
J.G.M.					2 OF 2

DRAINAGE PLAN

I. INTRODUCTION AND EXECUTIVE SUMMARY

THIS PROJECT, LOCATED ALONG THE I-25 CORRIDOR, REPRESENTS A MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA. THE DRAINAGE CONCEPT WILL BE CONSISTENT WITH THE PREVIOUSLY APPROVED SITE SPECIFIC (C17/D13G) AND MASTER DRAINAGE (C17/D12) PLANS FOR THIS SITE. THESE PRECEDING PLANS ADDRESS ONSITE AND OFFSITE FLOWS AS WELL AS DOWNSTREAM CAPACITY. THE SITE WILL DISCHARGE ITS RUNOFF TO AN EXISTING PRIVATE DRAINAGE EASEMENT THAT OUTFALLS TO THE DOMINGO BACA ARROYO TO THE SOUTH OF THE SITE.

THIS SUBMITTAL IS MADE IN SUPPORT OF A BUILDING PERMIT FOR THE PROPOSED ADDITION.

II. PROJECT DESCRIPTION

AS SHOWN BY THE VICINITY MAP, THE SITE IS LOCATED ON THE WEST SIDE OF JEFFERSON NE JUST SOUTH OF ALAMEDA BLVD. NE. THE CURRENT LEGAL DESCRIPTION IS LOT 1, LOOP INDUSTRIAL DISTRICT, UNIT V. AS SHOWN BY PANEL 137 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO, SEPTEMBER 20, 1996, THIS SITE DOES NOT LIE WITHIN NOR ADVERSELY IMPACT A DESIGNATED FLOOD HAZARD ZONE (ZONE A).

III. BACKGROUND DOCUMENTS

THE FOLLOWING IS A BRIEF LIST OF DRAINAGE PLANS RELEVANT TO THE DEVELOPMENT OF THIS SITE:

1. MASTER DRAINAGE PLAN PREPARED BY LEEDSHILL HERKENHOFF (C17/D12). THIS PLAN STATES THAT "LOTS 1-11 SHALL BE DEVELOPED SUCH THAT ONSITE STORM WATERS FLOW WEST INTO THE PRIVATE DRAINAGE EASEMENT AND FROM THERE INTO THE DOMINGO BACA ARROYO THROUGH A SOFT LINED CHANNEL. THERE IS NO PONDING REQUIREMENT FOR ANY OF THESE LOTS PROVIDED THEY CONFORM TO THE EXTENT OF DEVELOPMENT AS MENTIONED UNDER 'GENERAL' AND 'RECOMMENDATIONS.'" THESE RECOMMENDATIONS STATE THAT THE TOTAL IMPERVIOUS LAND TREATMENT CANNOT EXCEED 73% OR ELSE ONSITE DETENTION IS REQUIRED.
2. GRADING AND DRAINAGE PLAN (C17/D13G) FOR "DION'S CORPORATE HEADQUARTERS" DATED 03-10-99 PREPARED BY THIS OFFICE AND SUBSEQUENTLY CERTIFIED BY THE UNDERSIGNED ON 08-13-98. THIS PLAN VALIDATES THE DRAINAGE CONCEPTS SET FORTH BY THE MASTER DRAINAGE PLAN AND ESTABLISHES THE EXISTING CONDITIONS OF THE SITE BASED UPON THE PREVIOUS DEVELOPMENT.

IV. EXISTING CONDITIONS

THE EXISTING CONDITIONS OF THE SITE ARE ILLUSTRATED BY THE ABOVE REFERENCED DRAINAGE CERTIFICATION DATED 08-13-98. AT PRESENT, THE SITE DISCHARGES ITS DEVELOPED RUNOFF TO AN EXISTING PRIVATE DRAINAGE EASEMENT LOCATED ALONG THE WEST PROPERTY LINE OF THE SITE. FROM THIS POINT, THE RUNOFF FLOWS SOUTH WITHIN THE SOFT LINED EASEMENT TO ENTER THE DOMINGO BACA ARROYO, THE OUTFALL.

V. DEVELOPED CONDITIONS

THE PROPOSED DEVELOPMENT CONSISTS OF AN ATTACHED BUILDING ADDITION TO THE LARGE OFFICE BUILDING ON SITE. THE ADDITION IS LOCATED AT THE SOUTHWEST CORNER OF THE EXISTING BUILDING WITHIN A LANDSCAPED COURTYARD AREA. ROOF RUNOFF WILL BE DIRECTED TO THE WEST. COURTYARD RUNOFF WILL BE DIRECTED AROUND THE ADDITION TO DISCHARGE AT THE EXISTING GATE WEST OF THE ADDITION. FROM THIS POINT, RUNOFF WILL FLOW ACROSS EXISTING PAVING AND WILL EVENTUALLY REACH THE ABOVE REFERENCED PRIVATE DRAINAGE EASEMENT. FROM THIS POINT, THE RUNOFF WILL FOLLOW THE PATTERN DESCRIBED ABOVE UNDER "EXISTING CONDITIONS".

DRAINAGE PLAN (CONTINUED)

VI. GRADING PLAN

THE GRADING PLAN SHOWS 1.) EXISTING GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS COMPILED FROM THE PREVIOUSLY APPROVED GRADING AND DRAINAGE PLAN AND DRAINAGE CERTIFICATION FOR THE SITE PREPARED BY THIS OFFICE, 2.) PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS, 3.) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS COMPILED FROM THE PREVIOUSLY APPROVED GRADING AND DRAINAGE PLAN AND DRAINAGE CERTIFICATION PREPARED BY THIS OFFICE, 4.) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS, AND 5.) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. THIS PLAN ILLUSTRATES THE DRAINAGE PATTERNS DESCRIBED IN THE SECTION ABOVE.

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 SHOWN BY THESE CALCULATIONS, THERE WILL BE A SLIGHT INCREASE IN RUNOFF ASSOCIATED WITH THE PROPOSED CONSTRUCTION. FURTHERMORE, THE PERCENTAGE OF IMPERVIOUS LAND TREATMENT FALLS WELL BELOW THE THRESHOLD VALUE SET FORTH IN THE MASTER DRAINAGE PLAN.

VII. CONCLUSION

THE CONTINUED FREE DISCHARGE OF RUNOFF FROM THIS SITE TO THE DOMINGO BACA ARROYO IS APPROPRIATE DUE TO FOLLOWING FACTORS:
1. MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA
2. NEGLIGIBLE INCREASE IN DEVELOPED RUNOFF
3. PROXIMITY TO DOWNSTREAM FACILITIES AND APPARENT DOWNSTREAM CAPACITY
4. CONFORMANCE WITH PREVIOUSLY APPROVED PLANS
5. NO IMPACT ON DOWNSTREAM FLOOD ZONES
THE PRIVATE DRAINAGE EASEMENT REFERENCED ABOVE IS OWNED, OPERATED AND MAINTAINED BY EACH UNDERLYING PROPERTY OWNER. THE DOMINGO BACA ARROYO IS PUBLICLY OWNED, OPERATED AND MAINTAINED.

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 2
2. $P_{6,100} = P_{360} = 2.35$ in.
3. Total Area (A_T) = 89,710 sf/2.06 ac
4. Existing Land Treatment

Treatment	Area (sf/ac)	%
B	16,310/0.37	18
C	33,390/0.77	37
D	40,010/0.92	45

5. Developed Land Treatment

Treatment	Area (sf/ac)	%
B	16,310/0.37	18
C	31,887/0.73	35
D	41,513/0.95	47

Existing Condition

1. Volume

$$E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$
$$E_w = [(0.78)(0.37) + (1.13)(0.77) + (2.12)(0.92)] / 2.06 = 1.51 \text{ in.}$$
$$V_{100} = (E_w / 12) A_T$$
$$V_{100} = (1.51 / 12) 2.06 = 0.2591 \text{ ac.ft.}; 11,290 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$
$$Q_p = Q_{100} = (2.28)(0.37) + (3.14)(0.77) + (4.70)(0.92) = 7.6 \text{ cfs}$$

Developed Condition

1. Volume

$$E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$
$$E_w = [(0.78)(0.37) + (1.13)(0.73) + (2.12)(0.95)] / 2.06 = 1.52 \text{ in.}$$
$$V_{100} = (E_w / 12) A_T$$
$$V_{100} = (1.52 / 12) 2.06 = 0.2609 \text{ ac.ft.}; 11,370 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$
$$Q_p = Q_{100} = (2.28)(0.37) + (3.14)(0.73) + (4.70)(0.95) = 7.6 \text{ cfs}$$

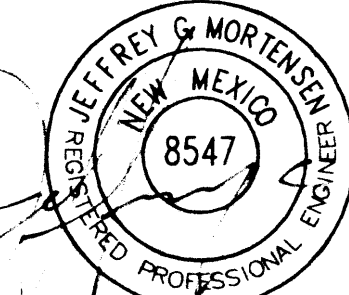
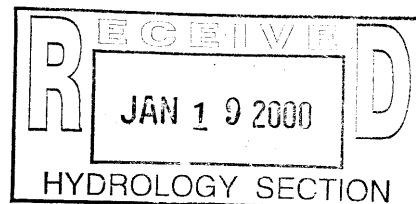
Comparison

1. $\Delta V_{100} = 11,370 - 11,290 = 80 \text{ cf} = 0.0018 \text{ ac.ft. (increase)}$
2. $\Delta Q_{100} = 7.6 - 7.6 = 0 \text{ (NO CHANGE)}$

CERTIFICATION FOR TEMPORARY C.O.

As indicated by the as-built information shown hereon, this project has been graded and drained in substantial compliance with the approved Plan with the exception of the finished grading of the landscaped areas which is still pending. It is based upon personal observation of site conditions on January 14, 2000 and this evaluation of as-constructed conditions that issuance of a Temporary Certificate of Occupancy is hereby recommended. A Recertification and resubmittal will be required for issuance of a Permanent Certificate of Occupancy. The as-built information shown hereon has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief.

Jeffrey G. Mortensen, NMPE 8547
Date 01-19-2000



08-2099

1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1390 (Albuquerque Area) 1-800-321-ALERT(2537) (Statewide), for location of existing utilities.
2. 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.
3. All work on this project shall be performed in accordance with applicable federal, state and local laws, codes and regulations concerning construction safety and health.
4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
5. 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 no information may be incomplete or may be obsolete by the time construction commences. The engineer has conducted only 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.
6. 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 ponding adjacent to the structure. For construction details, refer to landscaping plan.

Erosion Control Measures:

1. The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property.
2. 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.
3. The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.
4. Any areas of excess disturbance (traffic access, storage yard, excavated material, etc.) shall be re-seeded according to C.O.A. specification 10.2 "Native Grass Seeding". This will be considered incidental to construction, therefore, no separate payment will be made.

AS INDICATED BY THE AS-BUILT INFORMATION SHOWN HEREON, THE MAJORITY OF THIS SITE HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN. SEVERAL AREAS REQUIRING CORRECTION ARE NOTED. THESE AREAS MUST BE CORRECTED AND RECERTIFIED PRIOR TO ISSUANCE OF A PERMANENT CERTIFICATE OF OCCUPANCY.

As indicated by the as-built information shown hereon, this project has been graded and drained in substantial compliance with the approved Plan. Definitions noted in the previous certification have been verified as being satisfied. It is based upon this examination of as-constructed conditions that issuance of a Permanent Certificate of Occupancy is hereby recommended. The as-built information shown hereon has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief.

1. THE PRIVATE ENTRANCE MUST BE RECONSTRUCTED TO PROVIDE A WATERLOK AT MINIMUM ELEVATION 5131.0.
2. THE ASPHALT PAVING AT THE FRONT OF THE BUILDING MUST BE WATER FLOWN) TESTED IN THE PRESENCE OF THE ENGINEER IN ORDER TO DEMONSTRATE THAT THIS AREA HAS POSITIVE DRAINAGE. IF THE AREA DOES NOT HAVE POSITIVE DRAINAGE, THEN THE CONTRACTOR SHALL REMOVE AND REPAVE THIS AREA TO THE REQUIRED ACCORDANCE WITH THE DESIGN GRADES AS APPROVED.
3. THE ENCLOSED COURTYARD AREA AT THE NORTHWEST CORNER OF THE BUILDING MUST BE REGRADED FOR POSITIVE DRAINAGE.
4. THE PRIVATE DRAINAGE EASEMENT AT THE WEST EDGE OF THE PROPERTY MUST BE REGRADED IN ACCORDANCE WITH SECTION A-A AS APPEARS OF SHEET 2 OF 2 OF THE APPROVED PLANS.
5. ADD SPLASHLOK AT NORTHWEST CORNER OF OUTBUILDING.
6. THE ABOVE CORRECTIONS MUST BE VERIFIED AND RECERTIFIED FOLLOWING SATISFACTORILY COMPLETION.

BASED UPON THE INFORMATION PRESENTED ABOVE, ISSUANCE OF A TEMPORARY CERTIFICATE OF OCCUPANCY IS HEREBY RECOMMENDED. PERMANENT CERTIFICATE OF OCCUPANCY SHOULD BE WITHHELD UNTIL SUCH TIME AS ALL CORRECTIONS HAVE BEEN MADE AND THE PROJECT RECERTIFIED. THE ABOVE INFORMATION WAS OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

LOT 1-A
LOOP INDUSTRIAL DISTRICT
UNIT IV
FILED 11/19/1981; C19-23

JEFFREY G. MORTENSEN, NMPE 854

EXISTING 5' PUBLIC UTILITY EASEMENT

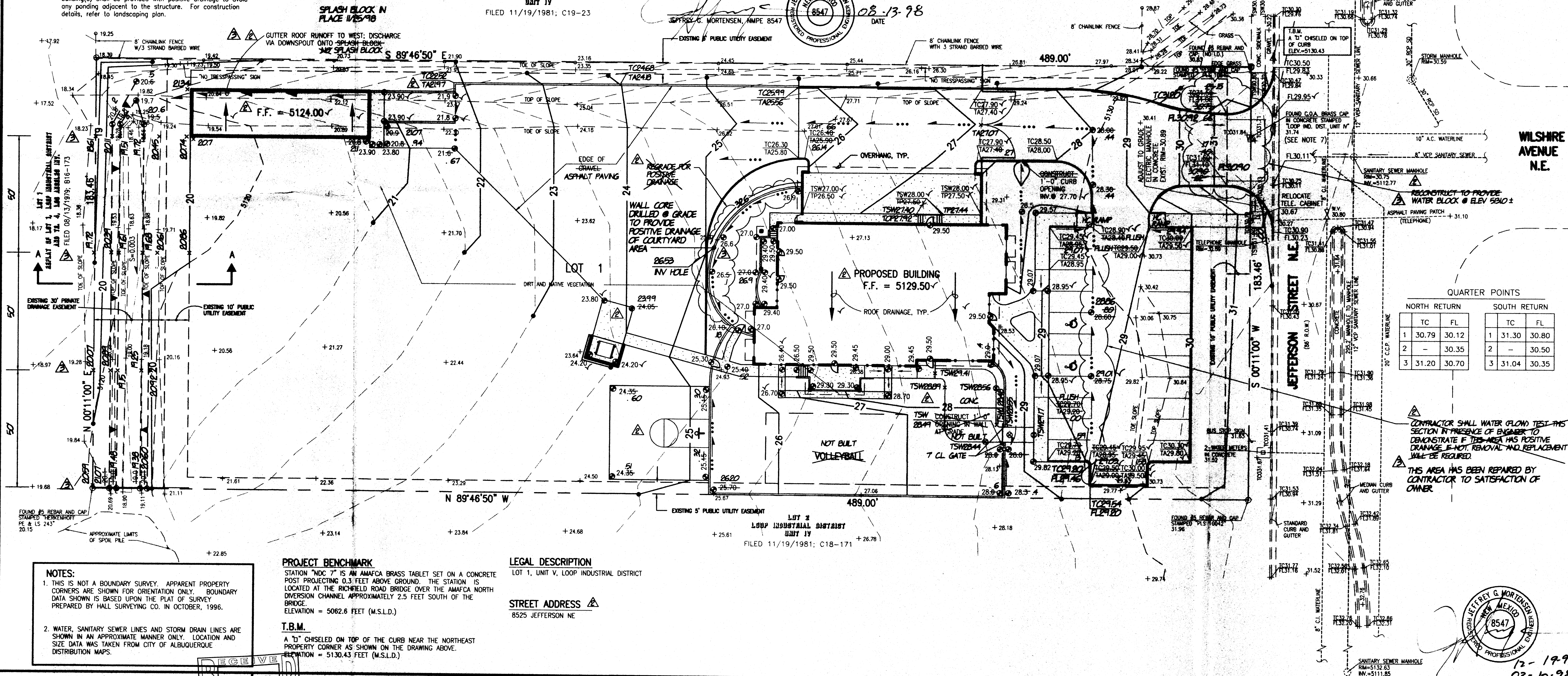
08-13-98
DATE

TO CURB
 FLOWLINE
 TOP OF CONCRETE
 WATER METER
 EXISTING SPOT ELEVATION
 EXISTING CENTER
 TOP OF ASPHALT
 TOP OF CONCRETE PAVING
 PROPOSED SPOT ELEVATION
 PROPOSED DIRECTION OF FLOW
 PROPOSED CONTOUR
 PROPOSED CONCRETE
 PROPOSED SLOPE
 AS-BUILT ELEVATION
 HIGH POINT
 AS-BUILT - AS-DESIGNED
 TOP OF PLATFORM
 TOP OF SIDEWALK

SCALE: 1" = 20'

VICINITY MAP
SCALE: 1" = 750'

C-17




1. THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. BOUNDARY DATA SHOWN IS BASED UPON THE PLAT OF SURVEY PREPARED BY HALL SURVEYING CO. IN OCTOBER, 1996.

2. WATER, SANITARY SEWER LINES AND STORM DRAIN LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. LOCATION AND SIZE DATA WAS TAKEN FROM CITY OF ALBUQUERQUE DISTRIBUTION MAPS.

STATION "NOC 7" IS AN AMAFCA BRASS TABLET SET ON A CONCRETE POST PROJECTING 0.3 FEET ABOVE GROUND. THE STATION IS LOCATED AT THE RICHFIELD ROAD BRIDGE OVER THE AMAFCA NORTH DIVERSION CHANNEL APPROXIMATELY 2.5 FEET SOUTH OF THE BRIDGE.
ELEVATION = 5062.6 FEET (M.S.L.D.)

A "D" CHISELED ON TOP OF THE CURB NEAR THE NORTHEAST
PROPERTY CORNER AS SHOWN ON THE DRAWING ABOVE.
ELEVATION = 5130.43 FEET (M.S.L.D.)

LOT 1, UNIT V, LOOP INDUSTRIAL DISTRICT

STREET ADDRESS 
8525 JEFFERSON NE

File Path:	E:\DATA\GCM1\970702\	Plot Date:	08-11-1998
File Name:	970703A2.DWG	Plot Time:	3:28 pm



JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

GRADING AND DRAINAGE PLAN
DION'S CORPORATE HEADQUARTERS

DESIGNED BY J.G.M.

DRAWN BY S.G.

APPROVED BY J.G.M.

NO.	DATE	BY	REVISIONS	JOB NO.
△	3/78	JGM	TRAFFIC COMMENTS	97070.
△	8/78	JGM	ASBUILT AND CERTIFY FOR TEMP. CO.	DATE 12-199
△	11/78	JGM	RE-CERTIFY	SHEET 1 OF

DRAINAGE PLAN

The following items concerning the Dion's Corporate Headquarters Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located on the west side of Jefferson Street N.E., between Paseo del Norte and Alameda. The present legal description is "Lot 1, Loop Industrial District, Unit V".

As shown by Panel 137 of 825 of the National Flood Insurance Program Flood Insurance Rate Maps published by F.E.M.A. for Bernalillo County, New Mexico dated September 20, 1996, this site does not lie within a designated flood hazard zone. As stated by the Master Drainage Plan prepared by Leadshill Herkenhoff, C17/D12, "Lots 1-11 shall be developed such that onsite storm waters flow west into the private drainage easement and from there into the Domingo Baca Arroyo through a soft lined channel. There is no ponding requirement for any of these lots provided they conform to the extent of the development as mentioned under 'General' and 'Recommendations.' These recommendations state that the total impervious land treatment cannot exceed 73%, or else onsite detention is required. In the proposed condition, the site will have a 45% total impervious area, therefore, no onsite detention facilities are proposed. In addition, a bottom width of ten feet will be graded for the onsite drainage easement as required per the above referenced Master Drainage Plan.

The Grading Plan shows: 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements, and 4) continuity between existing and proposed grades. As shown by this plan, the proposed construction consists of an office building with associated parking and landscaping. Developed flows for the site are directed to the west toward an existing private drainage easement. This easement outfalls into the North Diversion Channel located south of the site.

Offsite flows do not enter the site from any direction. The east boundary of the site is bordered by Jefferson Street, a fully developed road. The topography for the north border of the site is such that it parallels the site and does not allow flows to enter the site. The property to the south (Lot 2) was under construction at the time of the survey (Hydrology file C17/D13E) and should not contribute offsite flows in its developed condition. At the time of the survey, there was a spoils pile on the adjacent property which blocks flows from Lot 1 within the drainage easement. This pile must be removed as part of the grading of Lot 2. The land to the west is topographically lower, hence does not contribute offsite flows.

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 shown by these calculations, there will be an increase in the peak rate and total volume of runoff generated by the site.

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 2
2. $P_{6,100} = P_{360} = 2.35$ in.
3. Total Area (A_t) = 89,710 sf/2.06 ac

4. Existing Land Treatment	Area (sf/ac)	%
C	89,710/2.06	100

5. Developed Land Treatment	Area (sf/ac)	%
B	16,310/0.37	18
C	33,390/0.77	37
D	40,010/0.92	45

Existing Condition

1. Volume

$$E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_t$$

$$E_w = (1.13)(2.06) / 2.06 = 1.13 \text{ in.}$$

$$V_{100} = (E_w / 12) A_t$$

$$V_{100} = (1.13 / 12) 2.06 = 0.1940 \text{ ac.ft.}; 8,450 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (3.14)(2.06) = 6.5 \text{ cfs}$$

Developed Condition

1. Volume

$$E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_t$$

$$E_w = [(0.78)(0.37) + (1.13)(0.77) + (2.12)(0.92)] / 2.06 = 1.51 \text{ in.}$$

$$V_{100} = (E_w / 12) A_t$$

$$V_{100} = (1.51 / 12) 2.06 = 0.2591 \text{ ac.ft.}; 11,290 \text{ cf}$$

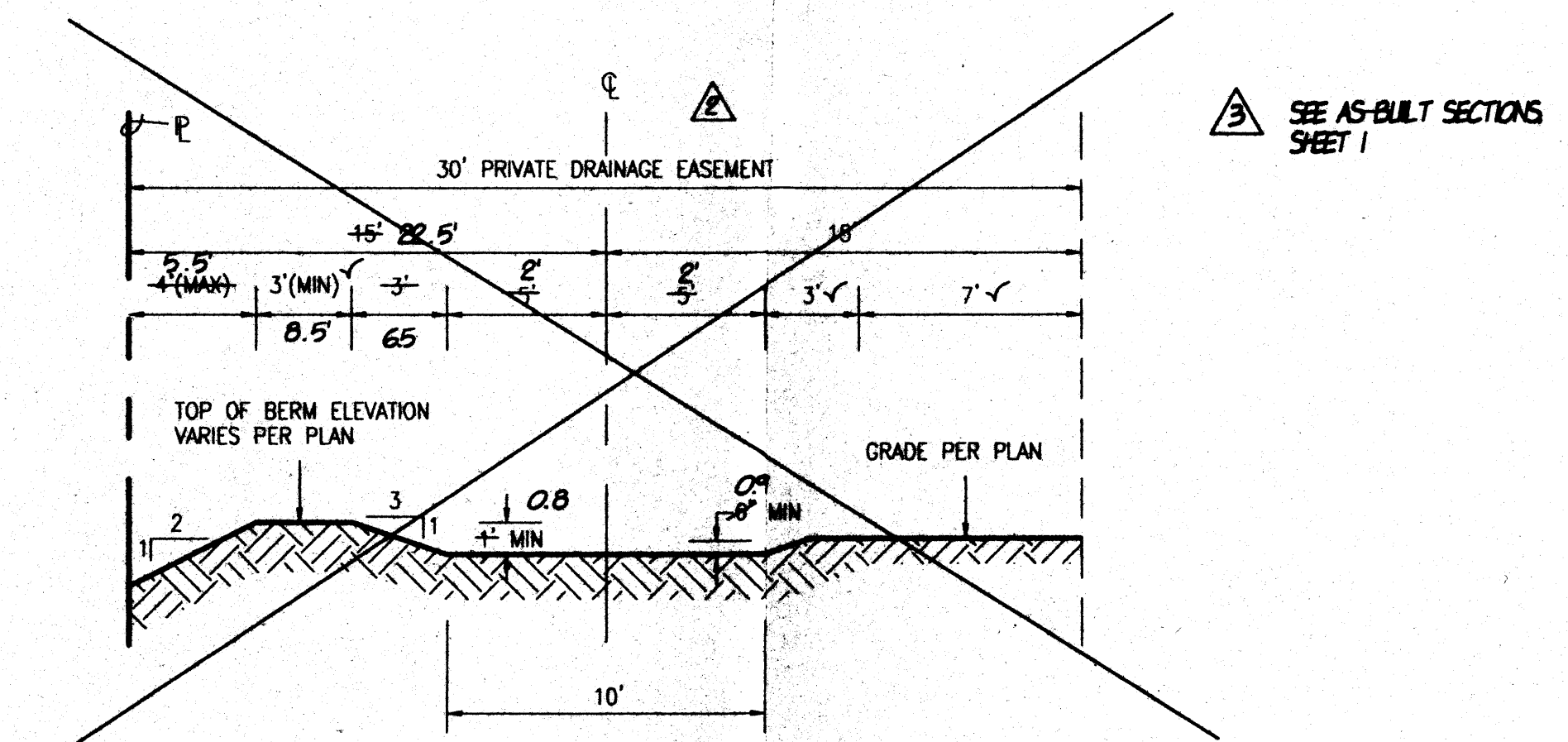
2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (2.28)(0.37) + (3.14)(0.77) + (4.70)(0.92) = 7.6 \text{ cfs}$$

Comparison

1. $\Delta V_{100} = 11,290 - 8,450 = 2,840 \text{ cf} = 0.0851 \text{ ac.ft. (increase)}$
2. $\Delta Q_{100} = 7.6 - 6.5 = 1.1 \text{ cfs (increase)}$



SECTION A-A
SCALE: 1"=5'

CHANNEL CAPACITY AT DEPTH = 0.5':

$$\begin{aligned} d &= 0.5' \\ n &= 0.030 \\ S &= 0.0030 \\ A &= 5.75 \text{ sf} \\ P &= 13.16 \text{ ft} \\ Q &= (1.49/n)AR^{2/3}S^{1/2} = 9.00 \text{ cfs} > Q_{100} \end{aligned}$$

DRAINAGE CERTIFICATION

AS INDICATED BY THE AS-BUILT INFORMATION SHOWN HEREON, THE MAJORITY OF THIS SITE HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN. SEVERAL AREAS REQUIRING CORRECTION ARE NOTED. THESE AREAS MUST BE CORRECTED AND RECERTIFIED PRIOR TO ISSUANCE OF A PERMANENT CERTIFICATE OF OCCUPANCY.

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5. ADD SPLASHERLOCK AT NORTHWEST CORNER OF OUTBUILDING.
6. THE ABOVE CORRECTIONS MUST BE VERIFIED AND RECERTIFIED FOLLOWING SATISFACTORILY COMPLETION.

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JEFFREY G. MORTENSEN, NMPE 8547
DATE: 03-13-98

RECERTIFICATION

As indicated by the as-built information shown hereon, this project has been graded and drained in substantial compliance with the approved Plan. Deficiencies noted in the previous certification have been verified as being satisfied. It is based upon this evaluation of as-constructed conditions that issuance of a Permanent Certificate of Occupancy is hereby recommended. The as-built information shown hereon has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief.

JEFFREY G. MORTENSEN, NMPE 8547
DATE: 12-03-98

JEFFREY G. MORTENSEN, NMPE 8547
DATE: 12-19-97
03-10-98



JEFF MORTENSEN & ASSOCIATES, INC.
1000-10 MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 348-4250

DRAINAGE PLAN, CALCULATIONS AND SECTIONS DION'S CORPORATE HEADQUARTERS

DESIGNED BY	DATE	BY	REVISIONS	JOB NO.
J.G.M./G.M.	3/98	J.G.M.	ADJUST CALCULATIONS FOR INCREASE IN ASPHALT PAVING.	970702 3
D.L.M.	8/98	J.G.M.	AS-BUILT AND CERTIFY FOR TEMP CO.	12-1997
J.G.M.	1/98	J.G.M.	RECERTIFY	2 OF 2