City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 11, 1994

Gary R. Bittner
Jeff Mortensen & Assoc.
6010B Midway Park Blvd. NE
Albuquerque, NM 87109

RE: BUILDING PERMIT FOR DWIGHT RESIDENCE (K-23/D51) ENGINEER'S STAMP DATED 10/5/94

Dear Mr. Bittner:

Based upon your 10/6/94 submittal, the referenced project is approved for Building Permit. Please be advised that prior to Certificate of Occupancy release, we will need Engineer's Certification per the Certification Checklist.

If I can be of further assistance feel free to contact me at 768-3622.

Cordially,

Scott Davis
PWD, Hydrology Division

c: Andrew Garcia
File

(wp+8869)

DRAINAGE INFORMATION SHEET

8829 940761

PROJECT TITLE: DWIGHT RESIDENCE ZONE ATLAS/DRNG. FILE #: K23 / D51

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: LOT 11, BLOCK 7, SANDIA MANOR

CITY ADDRESS: _____

ENGINEERING FIRM: JEFF MORTENSEN & ASSOC. CONTACT: GARY R. BITTNER

ADDRESS: 6010B MIDWAY PARK BLVD N.E. PHONE: 345-4250

OWNER: BENTON DWIGHT CONTACT: ARCHITECT

ADDRESS: _____ PHONE: _____

ARCHITECT: DAVID ABBOTT CONTACT: _____

ADDRESS: 4807 GLENWOOD HILLS DR. N.E. PHONE: 298-2039

SURVEYOR: RON FORSTBAUER CONTACT: ARCHITECT

ADDRESS: _____ PHONE: _____

CONTRACTOR: NOT SELECTED CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT
✓ DRAINAGE PLAN
___ CONCEPTUAL GRADING & DRAINAGE PLAN
✓ GRADING PLAN
___ EROSION CONTROL PLAN
___ ENGINEER'S CERTIFICATION
___ OTHER

PRE-DESIGN MEETING:

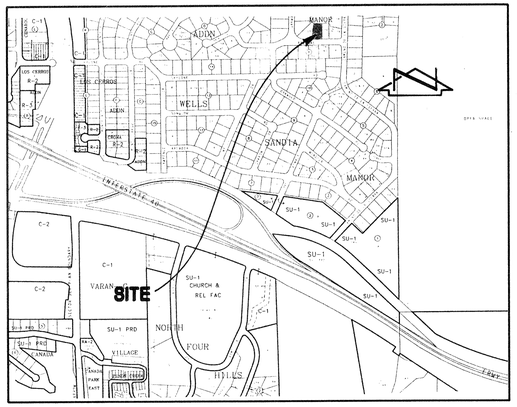
___ YES
✓ NO
___ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL
___ PRELIMINARY PLAT APPROVAL
___ S. DEV. PLAN FOR SUB'D. APPROVAL
___ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
___ SECTOR PLAN APPROVAL
___ FINAL PLAT APPROVAL
___ FOUNDATION PERMIT APPROVAL
✓ BUILDING PERMIT APPROVAL
___ CERTIFICATE OF OCCUPANCY APPROVAL
___ GRADING PERMIT APPROVAL
___ PAVING PERMIT APPROVAL
___ S.A.D. DRAINAGE REPORT
___ DRAINAGE REQUIREMENTS
___ OTHER _____ (SPECIFY)

DATE SUBMITTED: 10/5/94

BY: GARY R. BITTNER



VICINITY MAP K23

SCALE: 1" = 750'(approx.)

LEGAL DESCRIPTION

LOT 11, BLOCK 7
SANDIA MANOR
ALBUQUERQUE, NEW MEXICO
MARCH 1994

BENCHMARK

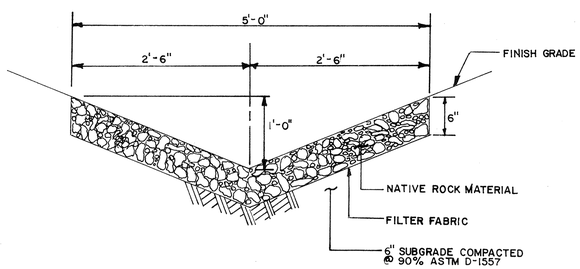
Benchmark – City of Albuquerque – 15–k23 – a square chiseled Road Ne, about 175' East of the intersection with Cenaroca Court on top of concrete curb located on the North side of Piedras Elevation = 5795.46 FEET (M.S.L.D.)

T.B.M.

Top of rebar located at the southeast property corner.
Elevation = 5868.01 FEET (M.S.L.D.)

LEGEND

FL	FLOW LINE
TC	TOP OF CONCRETE
+5852.01	EXISTING SPOT ELEVATION
54	EXISTING CONTOUR
TW	TOP OF WALL
	PROPOSED SPOT ELEVATION
54	PROPOSED CONTOUR
	RETAINING WALL
	FLOW DIRECTION
	ROOF DRAINAGE



⚠ TYPICAL INVERT SECTION
SCALE: 1" = 1'

DRAINAGE PLAN

The following items concerning the Dwight Residence Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located on Piedras Road N.E., east of the intersection with Oakwood Pl. N.E. At present, the site is undeveloped. The site lies in a residential infill area.

Review of Panel 31 of 50 of the National Flood Insurance Program National Flood Insurance Rate Maps for the City of Albuquerque, New Mexico, dated October 14, 1993, indicates the site does not lie in or upstream of a designated 100–year flood hazard zone.

The Grading Plan shows: 1) existing and proposed grades indicated by spot elevations and contours at 2'0" intervals, 2) the limit and character of the existing improvements, and 3) the continuity between existing and proposed grades. As shown by this plan, the proposed development consists of a single family residence with a concrete driveway and retaining walls. Excess native material comprising mostly of rock, will be used to stabilize slopes on the developed site and create a rock garden along Piedras Road N.E. The inverts and rock garden shall have filter fabric installed prior to lining and backfill with the native material. Presently, the site drains in a southeasterly direction and shall continue in their historic patterns on the undisturbed portion of the site, but shall be diverted southward for discharge into Piedras Road N.E. in the developed portion of the site. The site lies in an infill area, and the minor increase in runoff is not expected to effect storm drain capacity downstream. Review of the Storm Drain Facilities Map show inlets in Turner Drive N.E. and Skyline Road N.E. downstream from the site. This system discharges directly into the Tramway Channel.

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, the proposed improvements will result in a minor increase in runoff generated by this site.

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 4
2. $P_{6,100} = P_{360}$ = 2.90 in.
3. Total Area (A_T) = 0.33 acres
4. Existing Land Treatment

Treatment	Area (sf/ac)	%
C	14,500/0.33	100.0

5. Developed Land Treatment

Treatment	Area (sf/ac)	%
C	9,850/0.23	69.7
D	4,650/0.10	30.3

Existing Condition

1. Volume

$E_W=(E_AA_A+E_BA_B+E_CA_C+E_DA_D)/A_T$

$E_W = (1.46(0.33))/0.33 = 1.46$ in.

$V_{100} = (E_W/12)A_T$

$V_{100} = (1.46/12)0.33 = 0.0402$ ac.ft.; 1,750 cf

2. Peak Discharge

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

$Q_p = Q_{100} = 3.73(0.33) = 1.2$ cfs

Developed Condition

1. Volume

$E_W = (1.46(0.23)+2.64(0.10))/0.33 = 1.82$ in.

$E_W=(E_AA_A+E_BA_B+E_CA_C+E_DA_D)/A_T$

$V_{100} = (1.82/12)0.33 = 0.0501$ ac.ft.; 2,180 cf

$V_{100} = (E_W/12)A_T$

2. Peak Discharge

$Q_p = Q_{100} = 3.14(0.23)+5.25(0.10) = 1.4$ cfs

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

Comparison

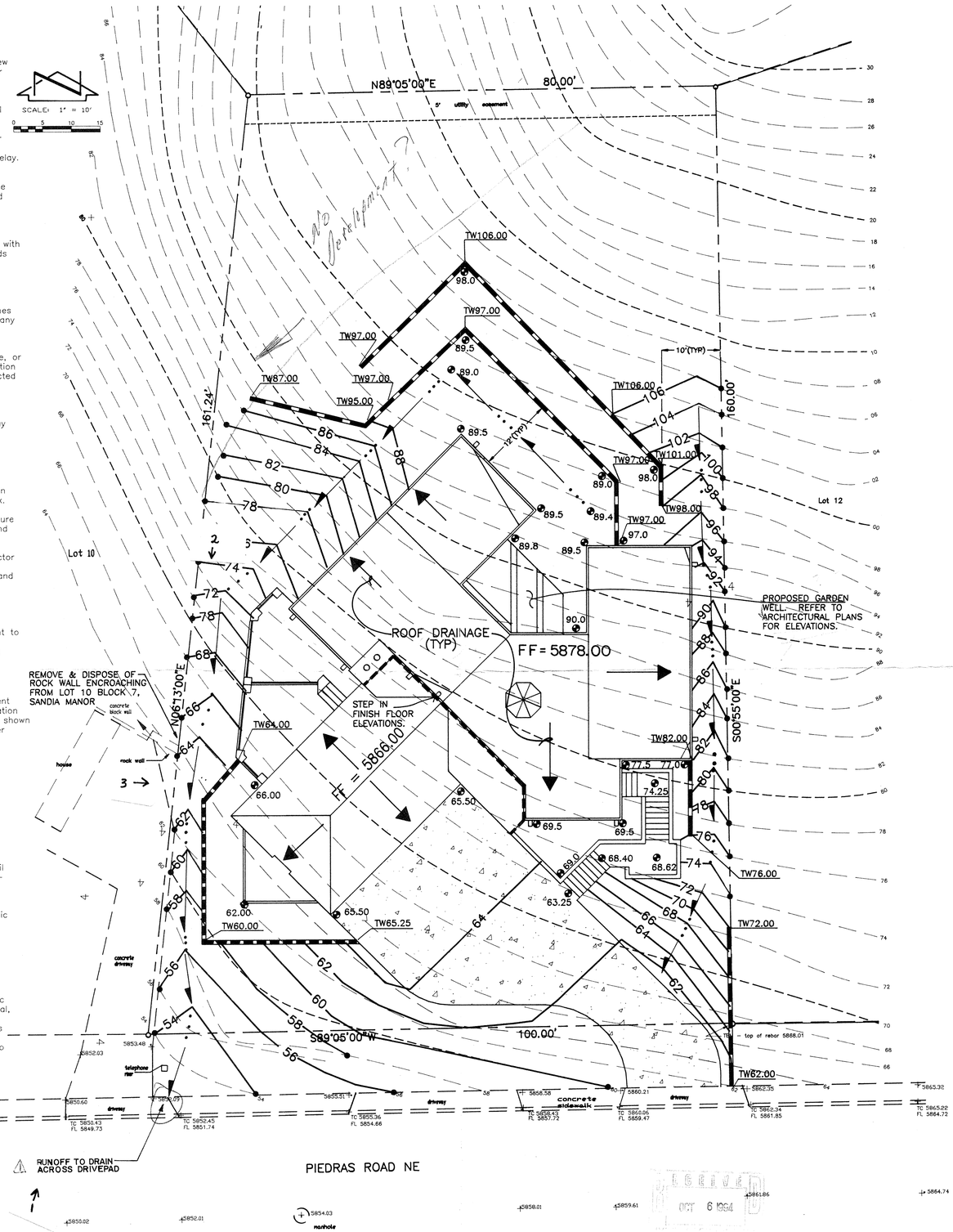
1. $\Delta V_{100} = 2180-1750 = 430$ cf (increase)
2. $\Delta Q_{100} = 1.4-1.2 = 0.2$ cfs (increase)

Construction Notes:

1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260–1990, 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, rules 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 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.
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.
7. This is not a boundary survey. Apparent property corners are shown for orientation only. Topographic and boundary data shown is from survey by Ronald A. Forstbauer Surveying Company, March 1994.

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 1012 "Native Grass Seeding". This will be considered incidental to construction, therefore, no separate payment will be made.



JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
9-9-94
10-05-94

RECEIVED OCT 6 1994

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

GRADING AND DRAINAGE PLAN
DWIGHT RESIDENCE

DESIGNED BY G.R.B.
DRAWN BY C.J.H.
APPROVED BY J.G.M.

NO.	DATE	BY	REVISIONS
⚠	10/94	GRB	ADD NOTE AND TYPICAL SECTION

JOB NO. 940761
DATE 08-1994
SHEET 1 OF 1