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City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz
Mayor

UTILITY DEVELOPMENT DIVISION
HYDROLOGY SECTION
(505) 768-2650

March 23, 1987

Chris Weiss
Weiss-Hines Engineering, Inc.
1100 Alvarado, NE
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR TENNESSEE FOUR PLEXES
(K-19/D82) ENGINEER'S STAMP DATED MARCH 17, 1987

Dear Chris:

Based on the information provided on your submittal of March 17, 1987, the above referenced plan is approved for Building and Foundation Permit.

Please advise your client that he will be required to have a separate permit for construction within City Right-of-Way. Also, please provide this office with the approved filed copy of the replat.

Please attach a copy of this plan to the construction sets prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya

Bernie J. Montoya, C.E.
Engineering Assistant

cc: Becky Sandoval

BJM/bsj

FILE COPY

MEMORANDUM:

March 25, 1987

ENGINEERING GROUP

TO: Tom Aragon, Transportation System Division

FROM: Fred J. Aguirre, Hydrologist; Engineering Division/PWD

SUBJECT: PRIVATE DRAINAGE FACILITIES WITHIN PUBLIC RIGHTS-OF-WAY/EASEMENT
TENNESSEE STREET FOUR PLEXES - (K-19/D82)

Transmitted herewith, is a copy of the approved drainage plan for the referenced projects incorporating the S.O. 19 design.

In accordance with the new process, this plan is being submitted to you for permitting and inspection. Please provide this section with a signed-off copy per the signature block upon construction and acceptance by your office.

As you are aware, the signed-off S.O. 19 is required by this office for Certificate of Occupancy release; hence your expeditious processing of this plan would be greatly appreciated and would avoid any unnecessary delay in the release of the Certificate of Occupancy.

Thank you for your cooperation, and if you should have any questions and/or comments regarding the process, please feel free to call me at 768-2650.

FJA/bsj

Enclosures

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Tennesse 4-Plexes ZONE ATLAS/DRAINAGE FILE # K-19 / D82

LEGAL DESCRIPTION: Lots 31-A & 34-A, Block 15, Mesa Verde Addn.

CITY ADDRESS: 227, 231, 233 & 235 Tennessee N.E.

ENGINEERING FIRM: Weiss-Hines Engineering, Inc. CONTACT: Steve

ADDRESS: 1100 Alvarado N.E. PHONE: 266-3444

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: Voil Latin CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: Douglas H. Smith. CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

X YES

___ NO

X COPY OF CONFERENCE RECAP SHEET PROVIDED

RECEIVED
MAR 17 1987
HYDROLOGY SECTION

DRB NO. _____

EPC NO. _____

PROJECT NO. _____

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

X DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAIN PLAN

X GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

___ Resubmittal

CHECK TYPE OF APPROVAL SOUGHT:

___ SECTOR PLAN APPROVAL

___ SKETCH PLAT APPROVAL

___ PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

X BUILDING PERMIT APPROVAL

X FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER _____ (SPECIFY)

DATE SUBMITTED: March 17, 1987

BY: Weiss-Hines Eng. Inc.

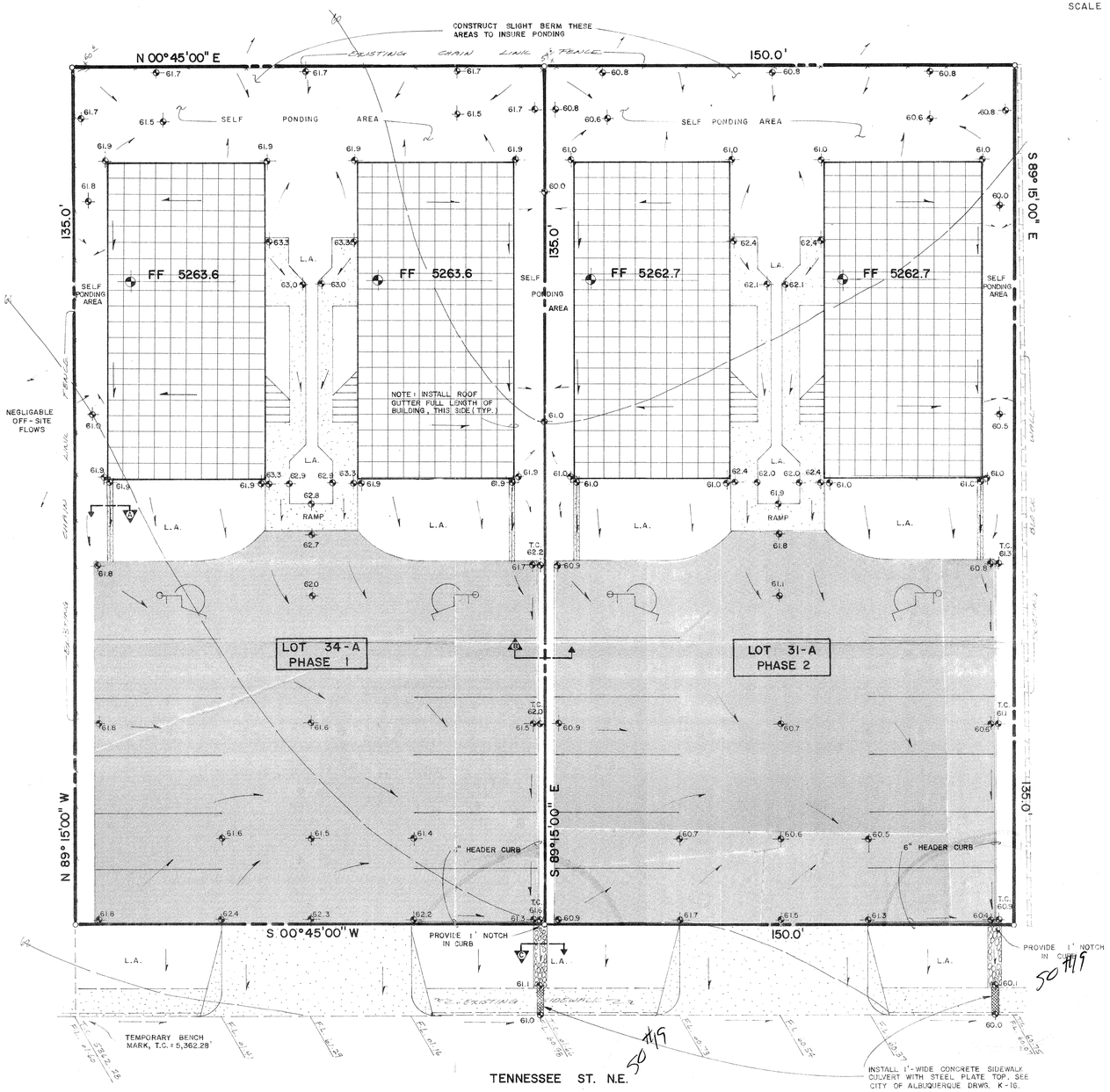
REV. 10/85

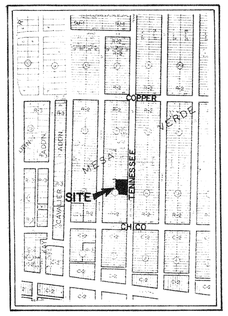
10

DATE RECEIVED _____

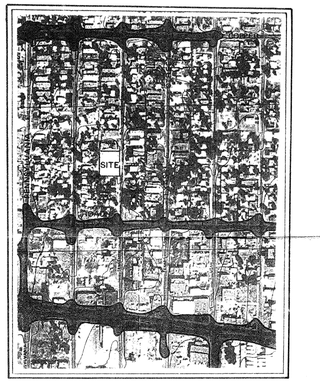
BY 3/17

SCALE 1" = 10'

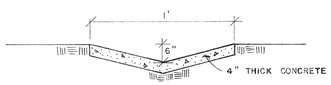




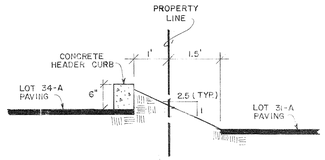
VICINITY MAP
K - 19
1" = 800'



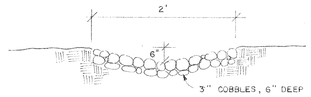
FLOOD HAZARD MAP
PANEL 30
1" = 800'



SECTION A
DOWNSPOUT DISCHARGE CHANNEL
N.T.S.



SECTION B
LOT LINE TRANSITION
N.T.S.



SECTION C
DRAINAGE CHANNEL
N.T.S.

NOTICE TO CONTRACTOR

1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with Albuquerque Interim Standard Specifications for Public Work Construction.
3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved within a minimum amount of delay.
5. Backfill compaction shall be according to _____ street use.
6. Maintenance of these facilities shall be the responsibility of the Owner of the property served.
7. Contractor is responsible for obtaining excavation permit for sidewalk culvert/drain.
8. Proof of acceptance will be required prior to sign off for Certificate of Occupancy (C.O.).

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

DESIGN APPROVAL: Duane J. Montoya 3/23/87
Hydrology Section — Date

INSPECTION APPROVAL: Jon Klatz 4-21-87 permit # 35552
Construction Section — Date

ACCEPTANCE: Russell B. Smith 7-31-87
Construction Section/Permits — Date

SCOPE:

The proposed improvements are comprised of four slab-on-grade frame construction four-plexes, two on each lot, along with paved parking lots, landscaped areas, and graveled self-ponding areas at the rear of the buildings.

The present site is vacant, unimproved land bordered by Tennessee Avenue on the east and residential properties to the north, west and south. A concrete block wall runs along the north property line, and chain-link fences along the south and west property lines.

The intent of this plan is to show:

a) Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.

b) The extent of proposed site improvements, including buildings, walks and pavement.

c) The flow rate/volume of rainfall runoff across or around these improvements and methods of handling these flows to meet City requirements for drainage management.

d) The relationship of onsite improvements with existing neighboring property to insure an orderly transition between proposed and surrounding grades.

GENERAL NOTES: Construction will be accomplished in two phases (Lots 31-A & 34-A). Runoff will not cross the lot lines, but will be separated to drain at the front of each lot to Tennessee Avenue.

LEGAL: Lots 31-A and 34-A in Block 15 of Mesa Verde Addition, City of Albuquerque.

SURVEYOR Douglas H. Smith Land Surveying, Albuquerque, NM.

B.M.: City of Albuquerque ACS brass disc 6-K19 set in a concrete cylinder in the ground on the west median nose of the intersection of Pennsylvania and Central. Elevation = 5,358.44'.

T.B.M.: Top of curb south property line projection Lot 34-A. Elevation = 5,362.28'

SOILS: From SCS Bernalillo County Soil Survey, Plate 31, soil type TgB, Hydrologic Soil Group 'B'.

FLOOD HAZARD: Site is not located within a flood hazard zone, as shown on FEMA Map #30.

OFF-SITE DRAINAGE: No offsite drainage will affect this property.

EROSION CONTROL: Contractor will be responsible for containing any sediment generated during construction by using either a fabric silt fence or by constructing a 1'-high earth berm across low points of discharge from each lot.

CALCULATIONS: Calculations are based on the City of Albuquerque D.P.M. Manual, Vol. II for the 100-year, 6-hour storm, using the Rational Formula to compare the existing and proposed runoff rates.

The majority of the site will drain to Tennessee Avenue. The pavement, roof areas, and walks will be routed to the street. Remaining area along the rear yards and side yard area will drain to slight depressions within the site along the west property line. This area will essentially become self-ponding in that there will be no improvements to increase the runoff volume to the depressions.

RATIONAL METHOD- Q = CIA

Area of site: 20,250 sq.ft. = 0.4649 Ac.

Run-off Coefficient:

Existing site:
Undeveloped Area = 20,250 ft²

$C_1 = \frac{20,250\ (.40)}{20,250} = 0.40$

Composite C = 0.40

Developed Site:
Roof Area = 5,000 ft²
Landscaped Area = 5,000 ft²
Paved Area = 10,200 ft²

$C_r = \frac{5,000\ (.90)}{20,250} = 0.22$

$C_l = \frac{5,050\ (.25)}{20,250} = 0.06$

$C_p = \frac{10,200\ (.95)}{20,250} = \frac{0.48}{}$

Composite C = 0.76

Rainfall Intensity:

$I = P_6\ (6.84)\ T_c^{-0.51} = 4.86$" per hour
where P_6 = 2.3" (DPM Vol. II)
T_c = 10 minutes

Existing Condition:

$Q_{100} = (0.40)(4.86)(.465)$
$= 0.9$ cfs

Developed Condition:

$Q_{100} = (0.76)(4.86)(.465)$
$= 1.7$ cfs

SUMMARY:

$Q_{100} = (1.7)-(0.9) = 0.8$ cfs (increase)

Site will be allowed to free discharge to Tennessee based on a predesign meeting with City Hydrology which outlined these reasons:

1. The site is an infill to an established area, and as such, has been accounted for in the Master Drainage Plan.
2. The State Fair flood detention improvements have been completed downstream from this area and has removed most of the downstream flooding shown on the present FEMA maps.

LEGEND

- SIDEWALK, CURB & GUTTER (EXISTING, PROPOSED)
- PROPOSED ASPHALT
- BUILDING (EXISTING, PROPOSED)
- PROPERTY LINE
- 12.7 X — EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- 12.5 — PROPOSED SPOT ELEVATION
- 10 — PROPOSED CONTOUR
- SURFACE FLOW DIRECTION (EXISTING, PROPOSED)
- L.A. — LANDSCAPED AREA
- T.G.W. — TOP OF GRADE WALL (LESS THAN 18" HIGH)
- T.R.W. — TOP OF RETAINING WALL (MORE THAN 18" HIGH)
- T.A. — TOP OF ASPHALT
- T.C. — TOP OF CURB
- F.L. — FLOW LINE
- F.F. — FINISHED FLOOR

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HYDROLOGY SECTION

K19/D82
Permit # 35552

WEISS-HINES ENGINEERING INC.
1100 ALVARADO N.E. SUITE B
ALBUQUERQUE, NEW MEXICO 87110
(505) 266 - 3444

REVISIONS | DATE
DESIGNED SC/CW 3/16/86
DRAWN SC 3/17/86
CHECKED

TENNESSEE STREET FOUR PLEXES
GRADING/DRAINAGE PLAN

CHRISTOPHER L. KEYES
NEW MEXICO
6805
REGISTERED PROFESSIONAL ENGINEER

SHEET 1 OF 1