

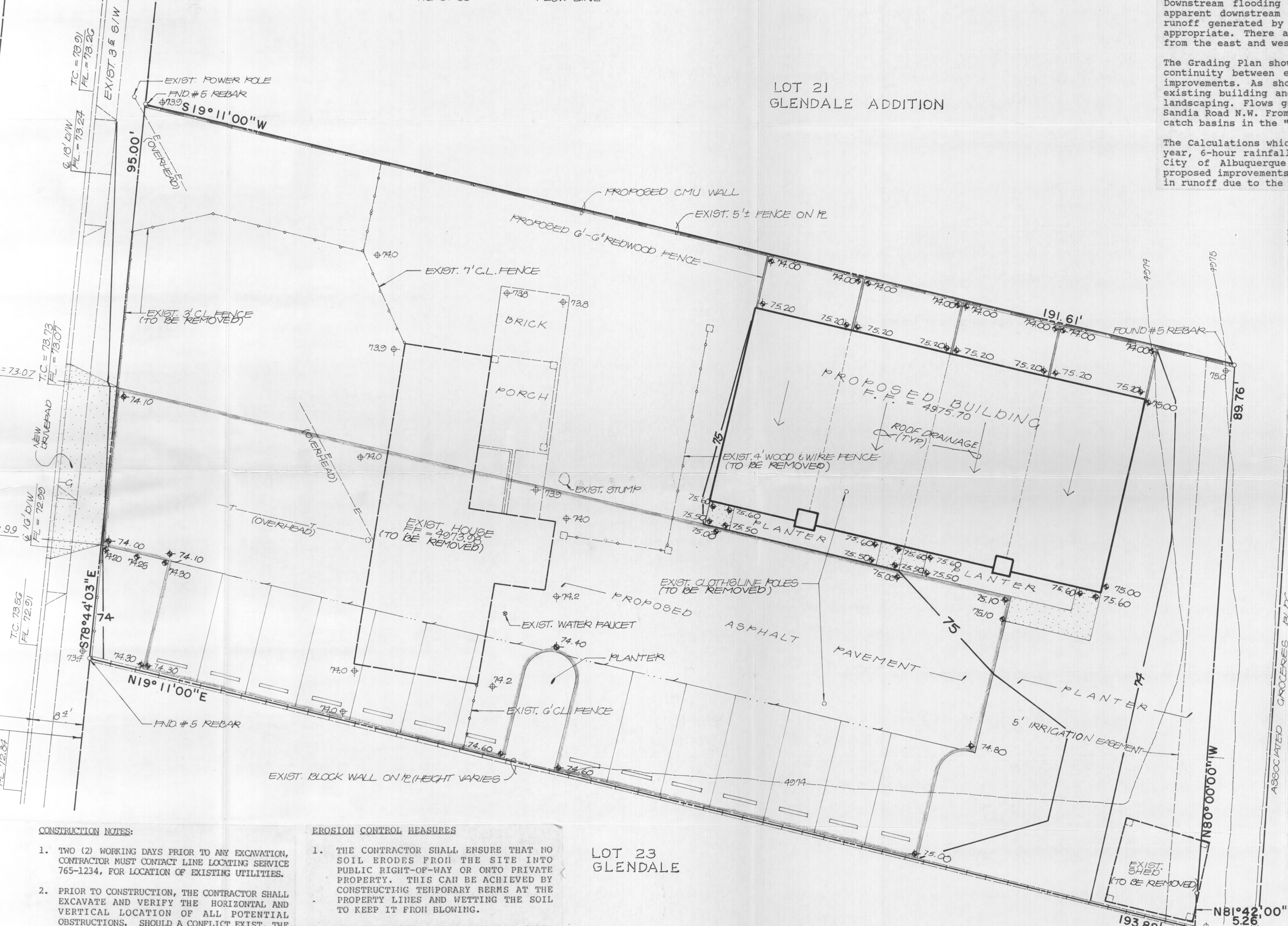
PROJECT BENCHMARK
STATION MARK IS A STANDARD NIMSHC BRASS TABLET STAMPED
"158 SANDIA RD. N.W. 158 SANDIA RD. N.W. 158 SANDIA RD. N.W."
LOCATED IN THE MEDIAN JUST NORTH OF THE
INTERSECTION OF SECOND STREET AND MONTANO RD. N.W. APPROX-
IMATELY 4' NORTH OF THE EXISTING TRAFFIC SIGNAL IN SECOND STREET.
ELEVATION = 4974.855 FT. (M.S.L.D.)

T.B.M.
EXISTING RIM ELEVATION OF MANHOLE LOCATED IN SANDIA RD. N.W.
AN EXTENSION OF THE N.W. PROPERTY CORNER AS SHOWN BELOW.
ELEVATION = 4973.30 FT. (M.S.L.D.)

LEGAL DESCRIPTION
LOT 22, GLENDALE ADDITION, 158 SANDIA RD. N.W.

LEGEND

- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR
- EXISTING CONTOUR
- SWALE
- PROPERTY LINE
- CONCRETE
- PROPOSED ASPHALT
- PROPOSED FENCE (CHAINLINK)
- EXISTING FENCE (CHAINLINK)
- TOP OF CURB
- FLOW LINE



- CONSTRUCTION NOTES:**
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-1234, 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 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.
- EROSION CONTROL MEASURES**
- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
 - 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.

DRAINAGE PLAN

The following items concerning the 158 Sandia Road N.W. Drainage Plan are contained hereon:

- Vicinity Map
- Grading Plan
- Calculations

The proposed improvements, as shown by the Vicinity Map, are located on the south side of Sandia Road N.W. between Placitas Road N.W. and Montano Road N.W. At present, the site is developed residentially. Much of the surrounding area is also developed, thereby making this an infill site. As shown by Plate F-15 of the Albuquerque Master Drainage Study, this site does not lie within a designated Flood Hazard Zone. There is an existing 18" storm drain system located in Sandia Road N.W. which discharges directly into the Alameda Drain. This system has a pair of catch basins located approximately one lot away on the common lot line between lots 23 and 24. These catch basins are situated in a sump condition within Sandia Road N.W. The 18" storm drain outfalls to the Alameda Drain approximately 700 feet away. This system is shown schematically on the Vicinity Map. Downstream flooding is not apparent and therefore does not appear to be a problem. Based upon apparent downstream capacity, the fact that the site is an infill site, and a minor increase in runoff generated by the proposed improvements, the free discharge of runoff from this site is appropriate. There are no offsite flows affecting the site. The existing block wall blocks flows from the east and west. The existing building blocks flows along the south property line.

The Grading Plan shows 1) existing and proposed grades indicated by contours at 1'0" intervals, 2) continuity between existing and proposed grades, and 3) the limit and character of the proposed improvements. As shown by this plan, the proposed improvements consists of the removal of an existing building and the construction of new apartment buildings, along with adjacent paving and landscaping. Flows generated by this site will be routed from south to north and discharged onto Sandia Road N.W. From that point, the runoff will flow west and enter the storm drain system via the catch basins in the "sump". This pattern of runoff is consistent with the existing site drainage.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The SCS Method has been used for this analysis in accordance with the City of Albuquerque Development Process Manual, Volume II. As shown by the calculations, the proposed improvements will result in a minor increase of runoff generated by this site. The increase in runoff due to the proposed improvements will be approximately 0.8 cfs.

CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey, Gm-Glendale clay loam
Plate: 21
Hydrologic Soil Group: B
Existing Pervious CN = 70 (DPM Plate 22.2 C-2)
Developed Pervious CN = 61 (DPM Plate 22.2 C-2)

Time of Concentration/Time to Peak

$T_c = 0.0078 L^{0.77} / S^{0.385}$ (Kirpich Equation)
 $T_p = T_c = 10$ min.

Point Rainfall

$P_6 = 2.2$ in. (DPM Plate 22.2 D-1)

Existing Condition

$A_{total} = 18,673$ sf = 0.43 Ac
 $A_{imp} = 1780$ sf; % impervious = 10 %
Composite CN = 73 (DPM Plate 22.2 C-3)
DRO = 0.45 in (DPM Plate 22.2 C-4)
 $q_p = 45.4 A / T_p = 1.95$ cfs/in runoff
 $Q_{100} = Q_{peak} = q_p$ (DRO) = 0.9 cfs
 $V_{100} = 3630$ (DRO)A = 700 cf

Developed Condition

$A_{total} = 18,673$ sf = 0.43 Ac
 $A_{imp} = 9040$ sf; % impervious = 48 %
Composite CN = 83 (DPM Plate 22.2 C-3)
DRO = 0.85 in (DPM Plate 22.2 C-4)
 $q_p = 45.4 A / T_p = 1.95$ cfs/in runoff
 $Q_{100} = Q_{peak} = q_p$ (DRO) = 1.7 cfs
 $V_{100} = 3630$ (DRO) A = 1325 cf

Comparison

$\Delta Q_{100} = 1.7 - 0.9 = 0.8$ cfs (increase)
 $\Delta V_{100} = 1325 - 700 = 625$ cf (increase)

TRACT A
GLENDALE ADDITION