



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

KEN SCHULTZ  
MAYOR

CLARENCE V. LITHGOW  
CHIEF  
ADMINISTRATIVE OFFICER

DAN WEAKS  
DEPUTY CAO  
PUBLIC SERVICES

FRED E. MONDRAGON  
DEPUTY CAO  
DEVELOPMENT & ENTERPRISE SERVICES

RAY R. BACA  
DEPUTY CAO  
PUBLIC SAFETY

August 4, 1989

James Nollenberger  
Black & Veatch  
1400 S. Potomac, Suite 200  
Aurora, Colorado 80012

RE: REVISED DRAINAGE PLAN FOR THOMAS WELL NO. 7  
(G-19/D23) REVISION DATED JUNE 1, 1989

Dear Mr. Nollenberger:

Based on the information provided on your resubmittal of July 31, 1989, the above referenced plan is approved for Building Permit.

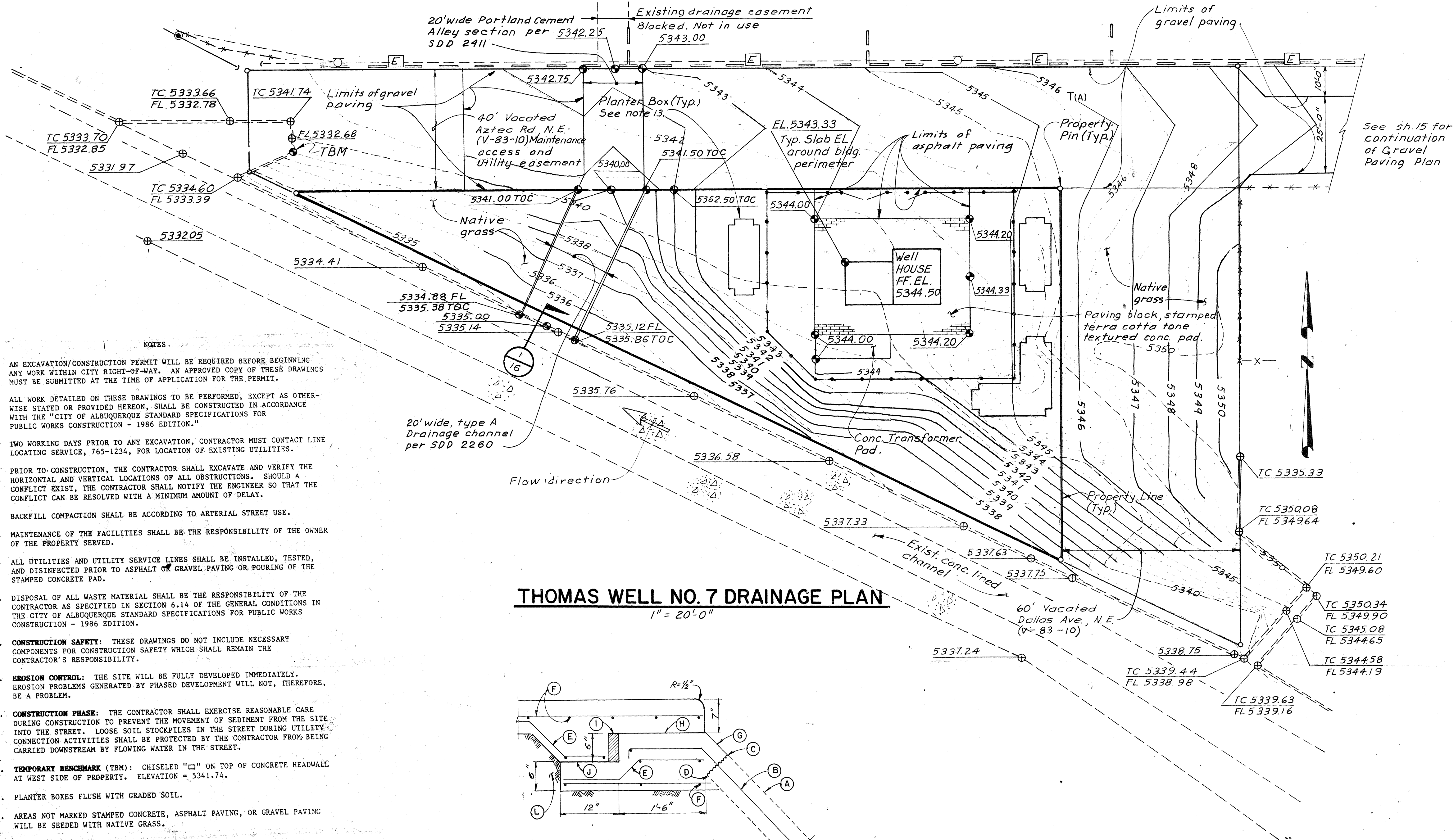
Please attach a copy of this plan to the construction sets prior to sign-off by Hydrology.

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

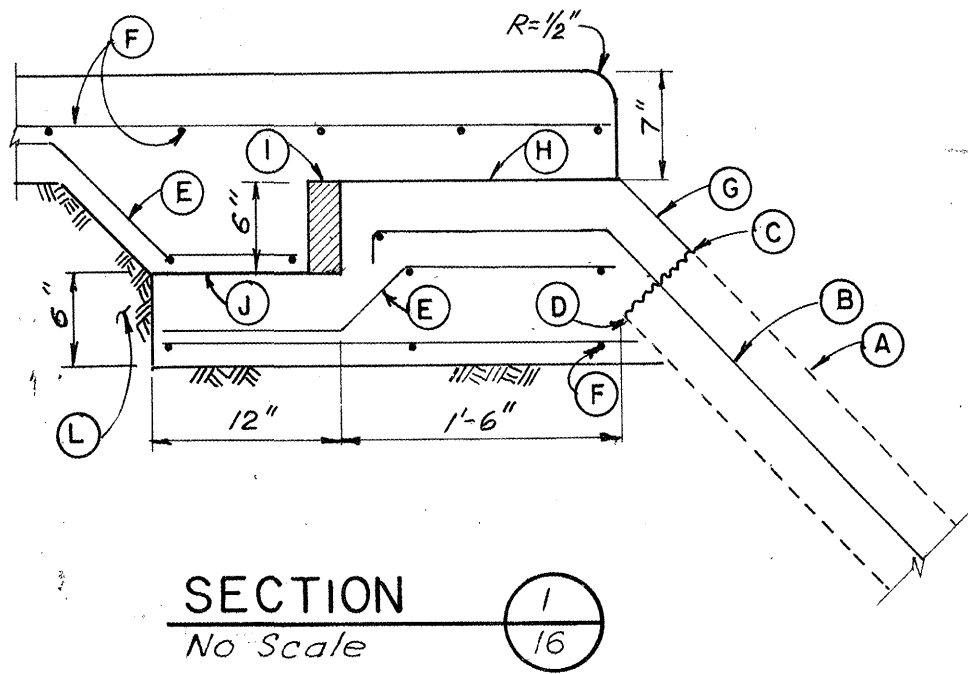
Cordially,

*Bernie J. Montoya*  
Bernie J. Montoya, C.E.  
Engineering Assistant

xc: Mike Mendoza  
BJM/bsj  
(WP+458)



THOMAS WELL NO. 7 DRAINAGE PLAN  
1" = 20' 0"



LEGEND

- EXIST. CURB AND GUTTER  
NEW BLOCK WALL  
EXIST. BLOCK WALL  
NEW CHAIN LINK FENCE  
EXIST. CHAIN LINK FENCE  
NEW CONTOUR LINES  
EXIST. CONTOUR LINES  
NEW SPOT ELEVATIONS  
EXIST. SPOT ELEVATIONS  
PROPERTY LINES (SIDE)  
PUBLIC EASEMENTS  
NOTE LEADERS  
MATCH LINES  
DIMENSION LINES  
SECTION CUT LINES  
NEW RESIDENTIAL PAVING  
EXIST. RESIDENTIAL PAVING  
NEW CONCRETE PAVING  
EXIST. CONCRETE PAVING  
RIGHT OF WAY LINES  
EXIST. FIELD FENCE

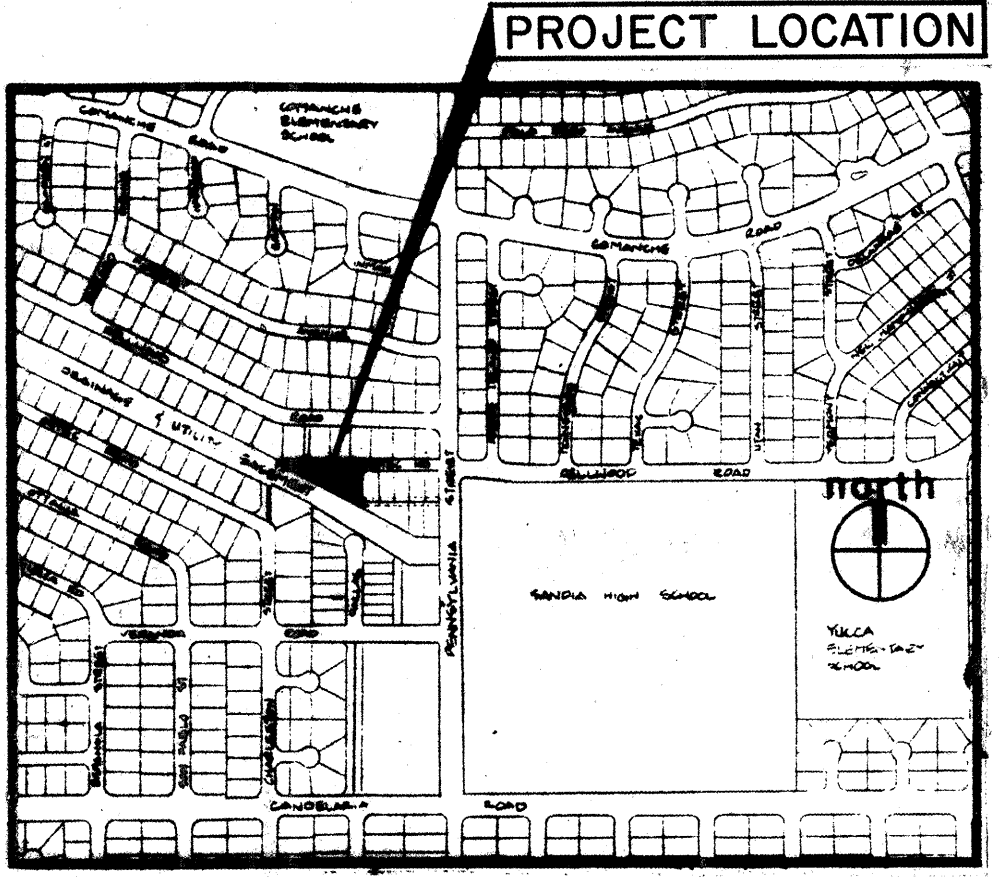
CALCULATED FLOWS

EXISTING CONDITIONS:  
USE T MINIMUM = 10 MINUTES  
I = 5.28 (100 YEAR FLOOD)  
A = 0.8565, ACRES  
C = 0.35  
Q = (5.28) (0.8565) (0.35) = 1.58 CFS

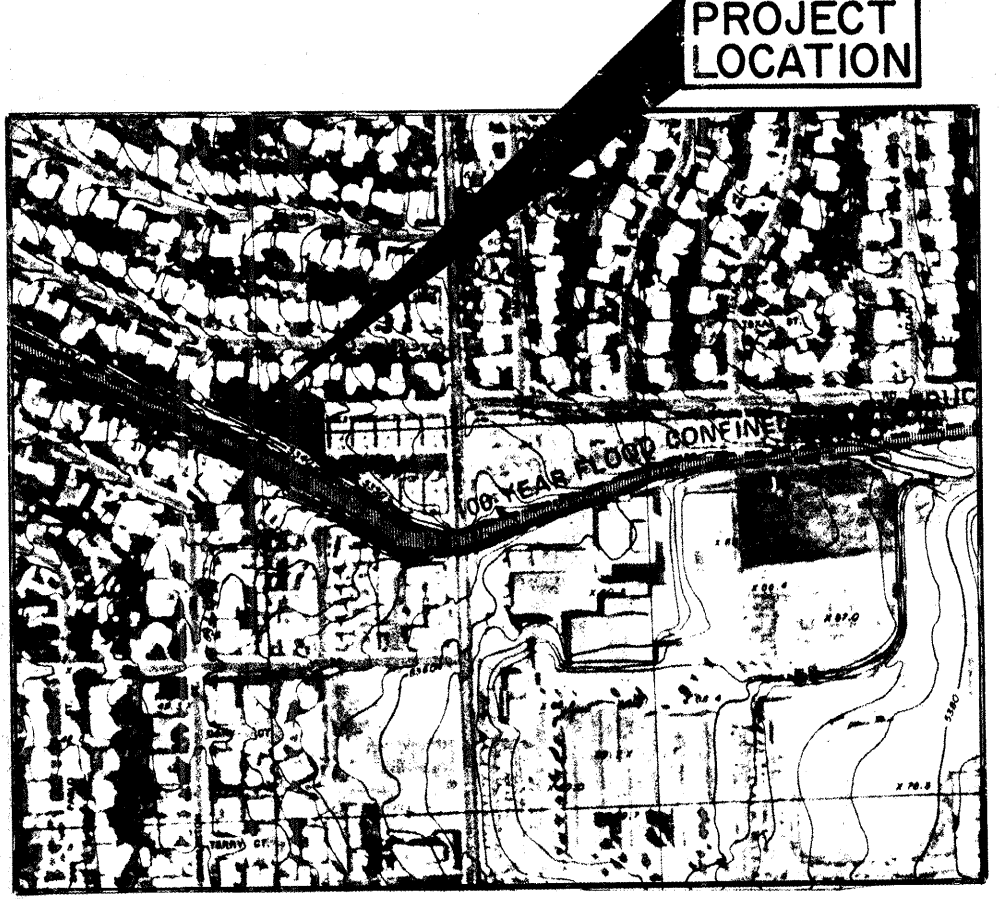
PROPOSED CONDITIONS:  
USE T MINIMUM = 10 MINUTES  
I = 5.28 (100 YEAR FLOOD)  
A = 0.8565, ACRES  
C = 0.85  
Q = (5.28) (0.8565) (0.85) = 3.84 CFS

PROJECT INFORMATION

- FUNCTION: WELL STATION  
LOCATION: NEAR THE INTERSECTION OF PENNSYLVANIA ST. AND AZTEC ROAD, AT THE DRAINAGE AND UTILITY EASEMENT  
LEGAL DESCRIPTION: TRACT 1, A PORTION OF BLOCK 42 OF BROAD ACRES  
ZONING ATLAS MAP: G-19-S  
TOTAL ACREAGE: 0.8565 ACRES  
TOTAL BUILDING AREA: 515 SQUARE FEET



VICINITY MAP  
No Scale



FLOOD HAZARD MAP  
AND OFFSITE FLOWS  
No Scale

PANEL 24 OF 50

Black & Veatch  
Engineers-Architects  
BV PROJECT NO. 13222.010

CITY OF ALBUQUERQUE  
MUNICIPAL DEVELOPMENT DEPARTMENT  
ENGINEERING DIVISION  
JUL 31 1989  
HYDROLOGY SECTION

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E. Design			Traffic		
A.C.E.-Hydrology			Water		
Traffic Engr.					
COA PROJECT NO.	3676	MAP NO. G-19-S	SHEET 16	OF 49	

- NOTES
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE DRAWINGS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THE PERMIT.
  - ALL WORK DETAILED ON THESE DRAWINGS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION."
  - TWO 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 LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
  - BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
  - MAINTENANCE OF THE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
  - ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED, TESTED, AND DISINFECTED PRIOR TO ASPHALT OR GRAVEL PAVING OR POURING OF THE STAMPED CONCRETE PAD.
  - DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 6.14 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION.
  - CONSTRUCTION SAFETY: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
  - EROSION CONTROL: THE SITE WILL BE FULLY DEVELOPED IMMEDIATELY. EROSION PROBLEMS GENERATED BY PHASED DEVELOPMENT WILL NOT, THEREFORE, BE A PROBLEM.
  - CONSTRUCTION PHASE: THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE SITE INTO THE STREET. LOOSE SOIL STOCKPILES IN THE STREET DURING UTILITY CONNECTION ACTIVITIES SHALL BE PROTECTED BY THE CONTRACTOR FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER IN THE STREET.
  - TEMPORARY BENCHMARK (TBM): CHISELED "C" ON TOP OF CONCRETE HEADWALL AT WEST SIDE OF PROPERTY. ELEVATION = 5341.74.
  - PLANTER BOXES FLUSH WITH GRADED SOIL.
  - AREAS NOT MARKED STAMPED CONCRETE, ASPHALT PAVING, OR GRAVEL PAVING WILL BE SEEDED WITH NATIVE GRASS.
- EXISTING CONDITIONS:
- THE PROPOSED SITE IS CURRENTLY UNDEVELOPED. THERE IS NO OFF-SITE FLOW ENTERING THE SITE DUE TO THE 100-YEAR OR SMALLER STORM.
- DEVELOPED CONDITIONS:
- THERE WILL BE NO OFF-SITE FLOW ONTO THIS PROPERTY. DEVELOPED FLOW WILL BE DIRECTED VIA THE NATIVE GRASS SWALE AND CONCRETE RUNDOWN INTO THE EXISTING DRAINAGE CHANNELS. THE NATIVE GRASS, STAMPED CONCRETE, PAVING, AND RUNDOWN WILL CONTROL EROSION.
- SITE GRADING NOTES:
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PHYSICALLY STAKE AND MARK THE DETERMINED LOCATIONS OF ALL UTILITY LINES AND VERIFY THEM WITH ALL PUBLIC UTILITIES. ANY DAMAGE TO THE EXISTING UTILITY LINES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
  - PRIOR TO START OF GRADING, ALL ACTIVELY GROWING, EXISTING GRASSES AND WEEDS WITHIN THE LIMITS OF THE SITE SHALL BE TREATED WITH "ROUND UP" HERBICIDE TO COMPLETELY KILL ALL VEGETATION.
  - CONTRACTOR SHALL FIELD VERIFY THE TOTAL EXTENT OF WORK TO BE PERFORMED AND EXISTING CONDITIONS PRIOR TO BID.
  - CONTRACTOR SHALL ESTABLISH TWO PERMANENT BENCHMARKS PRIOR TO BEGINNING EARTHWORK. A SURVEYING LEVEL SHALL BE AVAILABLE AT ALL TIMES TO SPOT CHECK ELEVATIONS WHEN REQUESTED BY THE ENGINEER.
- SITE GRADING PROCEDURES:
- PRIOR TO INSTALLATION OF THE IRRIGATION SYSTEM, THE SITE SHALL BE ROUGH GRADED TO  $\pm 1/10$  OF ONE FOOT.
  - AFTER INSTALLATION OF THE IRRIGATION SYSTEM IS COMPLETE, SOIL SHALL BE PREPARED IN ACCORDANCE WITH SPECIFICATIONS.
  - FINE GRADING WILL BE PERFORMED TO ASSURE A CONSISTENTLY UNIFORM SURFACE, FREE OF RIDGES OR DEPRESSIONS. INSPECTION OF THE FINE GRADING SHALL BE PERFORMED BY THE ENGINEER PRIOR TO SEEDING AND PLANTING. THE CONTRACTOR SHALL PROVIDE A SIGNED STATEMENT FROM A REGISTERED LAND SURVEYOR STATING THAT ALL SITE GRADING MEETS SPECIFIED GRADES.

- EXISTING CONCRETE CHANNEL.
- EXISTING REINFORCING TO REMAIN.
- SAW CUT EXISTING CONCRETE 1" TO 1.5" DEEP. BREAK OUT AND REMOVE EXISTING CONCRETE AND JOINT. CAREFULLY PRESERVE REINFORCING STEEL 18" FROM CUT.
- SANDBLAST EDGE OF EXISTING CONCRETE JUST PRIOR TO PLACING NEW CONCRETE.
- Z-BAR LOCATIONS IN TWO POSITIONS SHOWN. SECURELY TIE ALL CONNECTIONS AND SUPPORT SLEEPER MAT WITH CHAIRS.
- TIE REINFORCEMENT MATS TOGETHER IN DOWNSTREAM SLAB WITH 6" STANDARD "Z-CHairs", NUMBER 4 BAR AT 12" CENTER-CENTER.
- FORM AND POUR DOWN STREAM CONCRETE SECTION AS SHOWN WITH ALUMINUM FLOAT AND DRY BROOM FINISH. APPLY STEEL TROWEL FINISH TO BEARING PLATE SURFACE ONLY. BEARING PLATE SUPPORT MUST BE PARALLEL TO BEARING PLATE SURFACE ON SLEEPER. FORMS MUST REMAIN IN PLACE AT LEAST 12 HOURS FOLLOWING POUR.
- PLACE 25"x18" LOW DENSITY POLYETHYLENE BEARING PLATE AS SHOWN.
- PLACE POLYETHYLENE FOAM FILLER AS SHOWN. PLASTAZONE OR APPROVED EQUAL. DO NOT ANCHOR WITH NAILS OR BONDING AGENT. KEEP IN PLACE WITH FRESH CONCRETE WHEN POURING UPSTREAM SECTION. DO NOT ALLOW FRESH CONCRETE BETWEEN FILLER AND PREVIOUSLY POURED CONCRETE.
- LOW DENSITY POLYETHYLENE BEARING PLATE. 25"x10" PLACED FLAT ON SAME GRADE AS CHANNEL. CARE SHALL BE TAKEN NOT TO LOCK EDGE OF PLATE WITH CONCRETE FILLED HOLES OR FLASHING. COMPACT SOIL TO TOP PLANE OF PLATE.
- FORM AND POUR CONCRETE SLEEPER, STEEL TROWEL BEARING SURFACE SIDE ONLY. RECOMPACT ADJACENT SOIL.
- COMPACT SUBGRADE TO MINIMUM 95% PER ASTM D 1557.