2ND STREET LOFTS WATER & SEWER PLANS

CITY OF ALBUQUERQUE, NM

AUGUST, 2001

GENERAL NOTES

- All work detailed on these plans, 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 through most recent update and will be referred to herein as "Standard Specifications"
- 2) All construction within City Right-of-Way or easements must be done from approved work order documents from the City.
- 3) All work on this project shall be performed in accordance with applicable federal, State and local laws, ordinances, rules and regulations concerning Construction Safety and Health.
- Contractor agrees that he shall assume the sole and complete responsibility for the job site conditions during the course of construction of this project, including safety of all persons and property. This requirement shall apply continuously and not be limited to normal working hours. Contractor shall defend, indemnify, and hold harmless the Owner and Engineer from any and all liability, real or alleged, in connection with the performance of work on this project, except liability arising from the sole negligence of the Owner or Engineer.
- 5) All excavation, trenching and shoring activities must be accomplished in accordance with OSHA 29CFR 1926.650 Subpart P.
- 6) An Excavation/Construction Permit will be required before beginning any work with the City Right-of-Way.
- 7) Contractor shall secure a "Topsoil Disturbance Permit" prior to beginning construction.
- 8) Permit requests may be denied or delayed due to conflicts with other projects in the area.
- 9) Contractor shall notify the Engineer not less than seven (7) days prior to starting work in order that the Engineer may take necessary measures to insure the preservation of survey monuments. Contractor shall not disturb permanent survey monuments without the consent of the Engineer and shall notify the Engineer and bear the expense of replacing any that may be disturbed without permission. Only the City Surveyor shall replace survey monuments. When a change is made in the finished elevations 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 Standard Specifications, Section 4.4.
- 10) Contractor shall coordinate with the Water Systems Division (857-8200) five (5) working days prior to any work that may affect existing City Public water or sewer utilities. Contractor shall be responsible for timing and coordination of water shutoff. Existing City valves to be operated by City Personnel only.
- 11) Five (5) working days prior to beginning construction, Contractor shall submit to Construction Coordination Division a detailed construction schedule.
- 12) Contractor shall determine in advance of his construction if overhead utility lines, support structures, poles, guys, etc., are an obstruction to construction operations. If any obstruction to construction operations is evident. The Contractor shall be responsible for coordinating with the appropriate utility owner to remove or support the utility obstruction. Any cost associated with this effort shall be the responsibility of the Contractor.

- 13) Contractor shall assist the Engineer/Inspector in the recording of Data on all utility lines and accessories as required by the City of Albuquerque for the preparation of "As Constructed" drawings. Contractor shall not cover utility lines and accessories until all data has been recorded
- 14) Two (2) working days prior to construction, Contractor shall obtain a Barricading Permit from the Construction Coordination Division. Contractor shall notify Barricade Engineer (758-2551) prior to occupying an intersection. Refer to Section 19 of Standard Specifications.
- Prior to construction, Contractor shall excavate and verify the horizontal and vertical locations of all pertinent existing utilities and/or obstructions. Should a conflict exist, the Contractor shall notify the Engineer so the conflict can be resolved with a minimum amount of delay.
- 16) Existing utility line locations are shown in an approximate manner only and such lines may exist where none are shown. The location of any such existing lines is based upon information provided by the utility company, the Owner or by others, and the information may be incomplete or may be obsolete by the time construction commences.
- 17) The Engineer has undertaken no field verification of the location, depth, size or type of existing underground utility lines, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. Contractor shall inform itself of the location of any utility lines in or near the area or the work in advance of and during excavation work. Contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities.
- 18) Contractor shall support all existing, underground utility lines which become exposed during construction. Payment for supporting work shall be incidental to waterline and/or sewer line costs.
- 19) Contractor is to support and maintain the integrity of all underground telephone, electric cables and cable television utilities at no additional cost to the Owner. Cable is to be supported at a maximum of every fifteen (15) feet. Contractor shall coordinate with and make necessary payment (if any), to utility owner for de-energization of cable or support or cables by the utility owner.
- 20) PNM will provide, at no cost to the City or the Contractor, the required personnel for inspection or observation deemed necessary by PNM while the Contractor is exposing PNM's cables. However, the Contractor shall be charged the total cost associated with repairs to any damaged cables or for any cost associated with supporting or relocating the poles and cable during construction.
- 21) Proposed waterline materials shall be either PVC pipe meeting AWWA C900 requirements (6"-12") or Ductile Iron Pipe, thickness Class 50 (6"-16"). AWWA C-150 Concrete Cylinder (16") AWWA
- 22) All fittings on waterline shall be restrained joints as noted on the plans.
- 23) All utilities and utility service shall be installed prior to paving.
- 24) All final backfill for trenches shall be compacted to a minimum of 90% maximum density per ASTM D-1557, and as directed by Standard Specifications Section 701.13.2 and Standard Drawing No. 2315.
- 25) Contractor shall promptly clean up and material excavated within the public right-of-way or private roadway easements so that the excavated material is not susceptible to being washed down the street or into public drainage facilities.
- 26) Contractor shall conduct his operations in a manner which will minimize interference with local traffic.

SURVEYOR'S CERTIFICATION



"I, Anthony L. Harris, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby Certify that the as-built information shown on these drawings was Obtained from field construction and as-built surveys performed By me or under my supervision, that the as-built information Shown on these drawings was added by me or under my supervision, Harris Surveying Inc. is not responsible for any of the design concepts, Calculations, engineering, or intent of the record drawings.



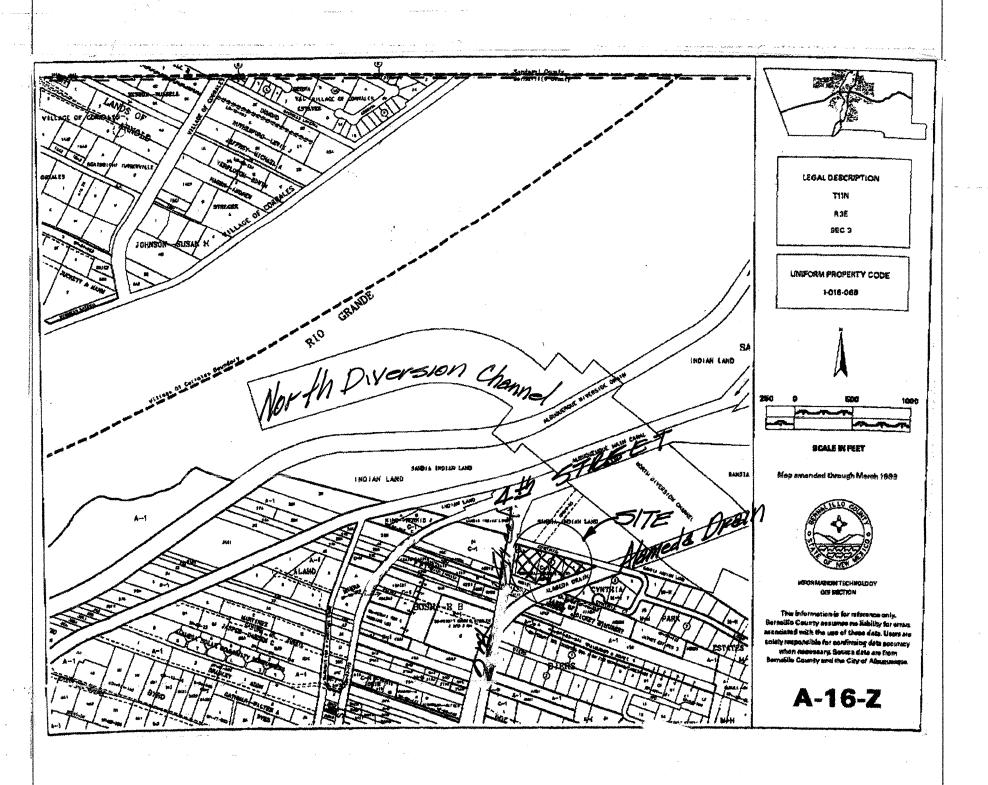
- All existing signs, markers, delineators, etc., within the construction limits shall be removed, stored
- When abutting existing pavement to new, saw cut existing pavement to a straight edge and at a right angle, or as approved by the Field Engineer. Removal of broken or cracked pavement will also be required.
- 29) At his own expense, Contractor shall assume responsibility for any damage to existing pavement, pavement markings, curb and gutter, handicap ramps, and sidewalk during construction apart from those sections indicated for removal on the plans and shall repair or replace, per Standard
- 30) All street striping, altered or destroyed, shall be replaced with plastic reflectorized pavement markings by Contractor to the same location as the existing, or as indicated by this plan set.
- 31) Contractor shall maintain a graffiti-free work site. Contractor shall promptly remove any and all graffiti from equipment, whether permanent or temporary.
- 32) The Contractor shall have all existing utilities located by calling New Mexico One Call System, Inc., 260-1990, 48 hours in advance of any excavation. No excavation shall be done until all utilities have been located.

General Notes - Bernalillo County

- This project is subject to the requirements of County Ordinance No. 95-12 and Ordinance No. 96-3. The contractor is responsible for acquiring all permits necessary. The contractor shall call 848-1500 for more information.
- The contractor shall submit a traffic control plan to the County Traffic Control Manager at least 72 hours prior to the commencement of work. Traffic control plans shall be prepared in accordance with noted requirements and by certified personnel and must be approved prior to commencement of work on the project. Call 848-1504 for further information.
- A daily traffic control log shall be maintained by the contractor reflecting the types and locations of all traffic control devices, signs, barricades, etc., being used on the project in compliance with the approved traffic control plan. This log shall be submitted to the Bernalillo County Traffic Control Manager upon completion of the project construction or when so requested by the project or the Bernalillo County Traffic Control Manager.
- 4) Contractor shall provide a weekly construction activity schedule to Bernalillo County Public Works Division, Attention: Hoss Foster.
- 5) The contractor shall file weekly written reports to the Traffic Control Manager describing the traffic control plan that will be in effect for the following week.
- Subject to the approved Traffic Control Plan, at least one lane shall be open to traffic at all times. The contractor shall provide proper signage and flagman and shall maintain the traffic lane in such a manner as to assure proper safety to the traveling public on all affected roads. The contractor shall provide access to all private and public property at all times, except when grading, excavation and backfill operations are being conducted immediately in front of the property, in which case access will not be denied for more than 4 hours without approval of the
- 7) Traffic lanes provided during construction shall be maintained in such a condition under all weather conditions so as to permit the reasonable passage of passenger vehicles, and shall be kept graded and smooth and watered several times daily to control dust.
- 8) County inspection is required. Applicant will obtain permits at Bernalillo County Public Works Division, 848-1520.
- 9) A Bernalillo County inspector must verify asphalt section prior to repair and replacement.



* FOR UTILITY WORK ONLY



LOCATION MAP

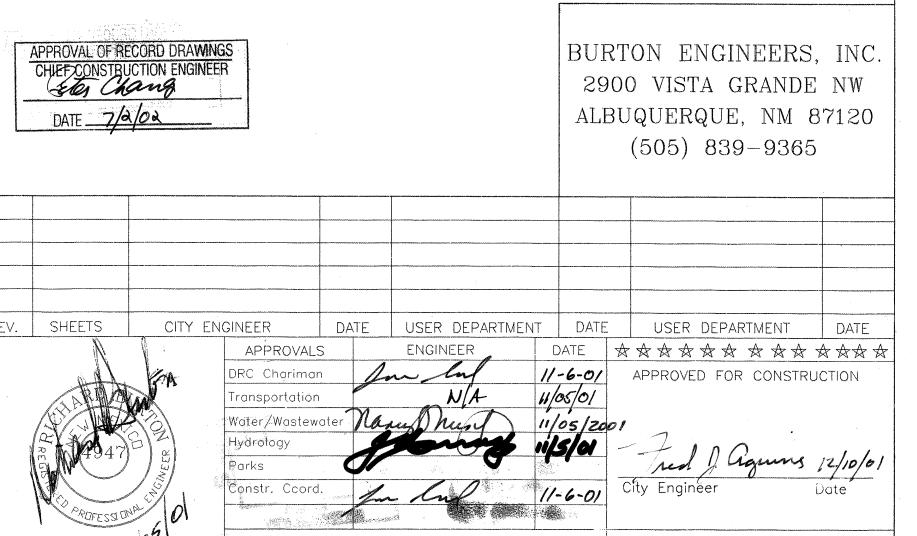
INDEX TO DRAWINGS

- I. TITLE SHEET
- 2. EXISTING UTILITIES SITE PLAN
- 3. WATER & SEWER SITE PLAN

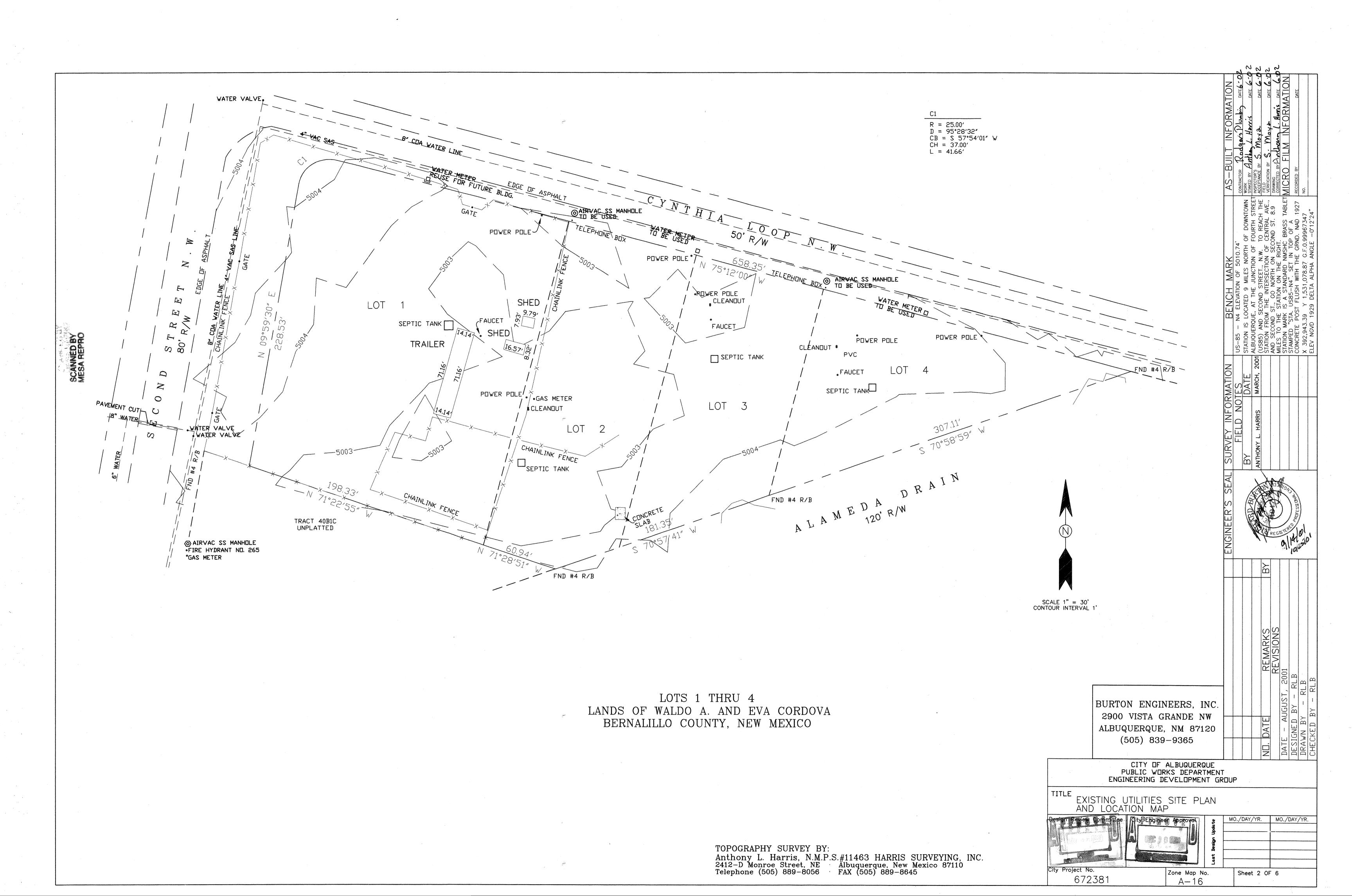
City Project No.

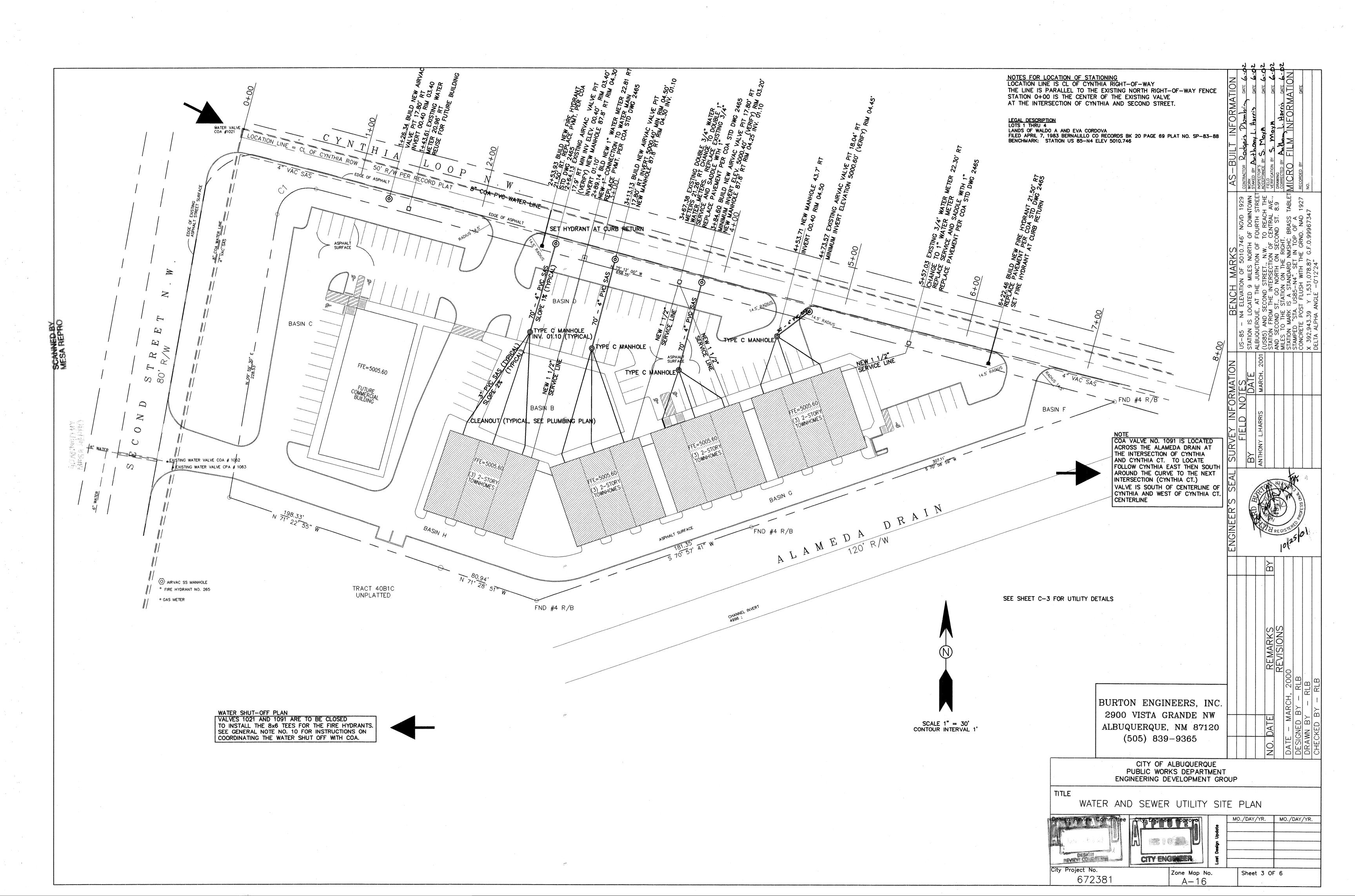
672381

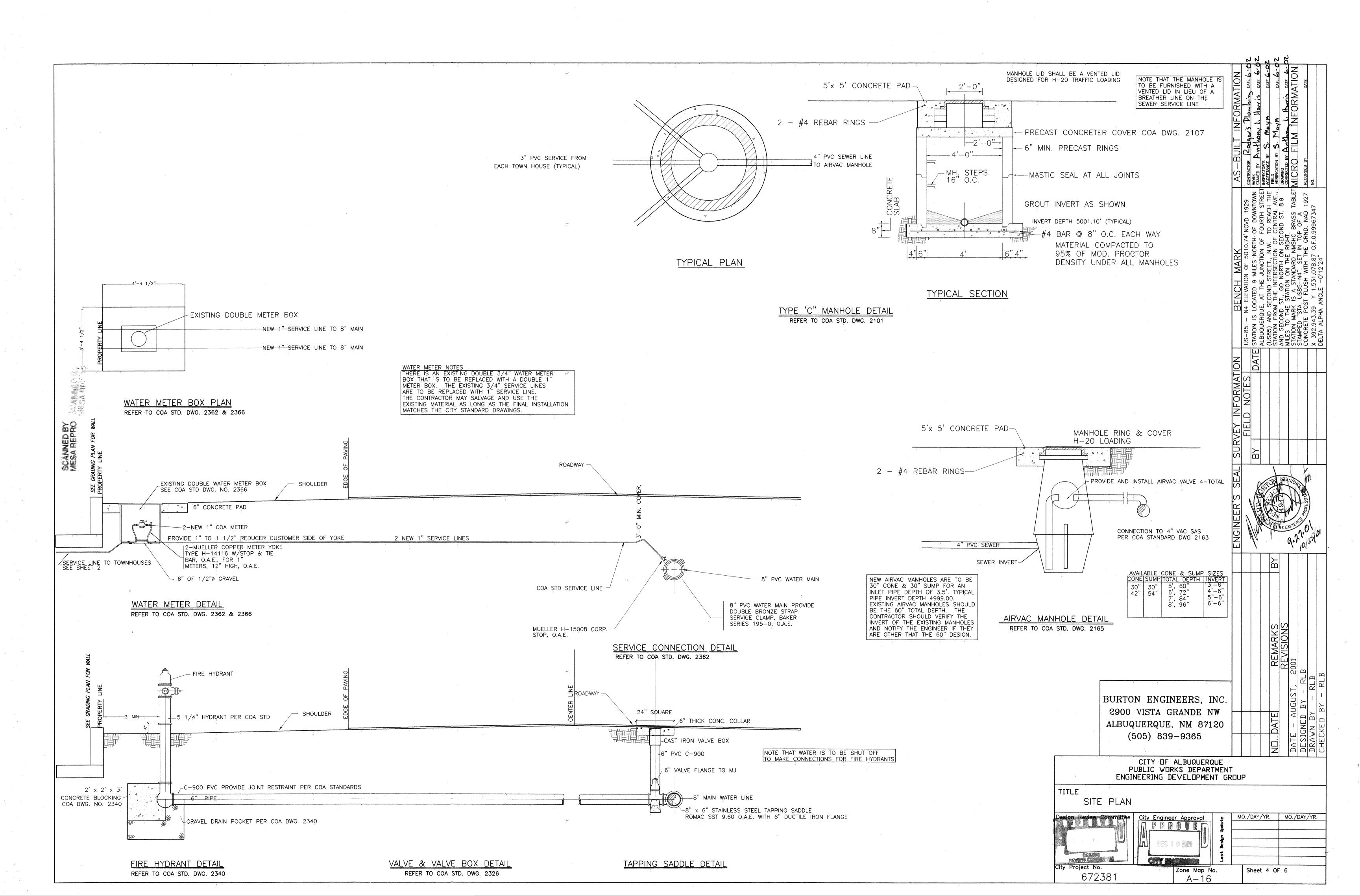
- 4. TYPICAL DETAILS
- 5. SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS
- 6. TYPICAL TRAFFIC CONTROL AND SIGNING EXAMPLES



SHEET 1 OF 6



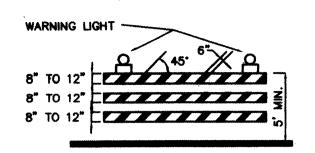




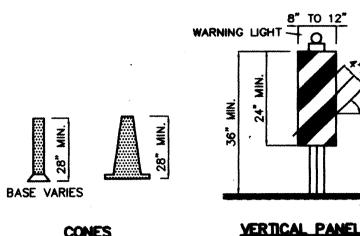
- 2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.
- 3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
- CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
- 5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.
- 6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
- 7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.
- 8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
- 9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
- 10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.
- 11. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.
- 12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.
- 13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELLED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
- 14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
- 15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
- 16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
- 17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION' COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
- 18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
- 19. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.
- 20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

grand the same of the same of

- 21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- 22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING: 1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER
- 23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.
- 24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TOMIT'S PLACEMENT AND MAINTENANCE.
- 25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.
- 26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGTH AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.
- 27 CONTRACTOR SHALL MAINTAIN A GRAFFITI FREE WORKSITE, ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY. 4



TYPE III BARRICADE



8" TO 12"

HIGH LEVEL WARNING DEVICE

LEGEND

WORK AREA

BARRICADE - TYPE I, TYPE II, OR BARREL

BARRICADE - TYPE III VERTICAL PANEL

WARNING SIGN DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL

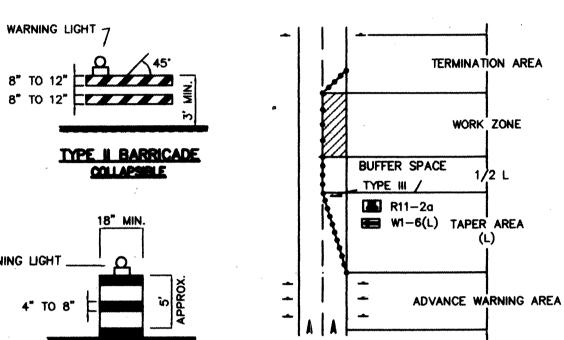
TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET FLAGMAN POSITION

SPACING BETWEEN BARRICADES- A DISTANCE MEASURED IN FEET

EQUAL TO THE SPEED LIMIT OF THE STREET

TAPER LENGTH - SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.



TRAFFIC CONTROL ELEMENTS

TAPER REQUIREMENTS TAPER LENGTH (L) MINIMUM MAYIMUM DEVICE

SPEED LIMIT (MPH)	(FEET)			NUMBER	SPACING IN FEET	
	10' LANE	11' LANE	12' LANÉ	OF DEVICES FOR TAPER	ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

, ,	SPEED MILES PER HOUR	MINIMUM DIS BETWEEN SIGNS	TANCE IN FEET FROM LAST SIGN TO TAPER		
•	0-20	10 X SPEED LIMIT	10 X SPEED LIMIT		
	25-30	10 X SPEED LIMIT	10 X SPEED LIMIT		
	30-35	10 X SPEED LIMIT	10 X SPEED LIMIT		
	40-45	10 X SPEED LIMIT	10 X SPEED LIMIT		
	50-60	10 X SPEED LIMIT	10 X SPEED LIMIT		

TAPER CRITERIA

TYPE OF TAPER TAPER LENGTH

UPSTREAM TAPER: MERGING TAPER SHIFTING TAPER SHOULDER TAPER

L MINIMUM 1/2 L MINIMUM 1/2 L MINIMUM 100 FEET MAXIMUM

 $L = \frac{WS}{60}$

 $L = W \times S$

TWO-WAY TRAFFIC TAPER DOWNSTREAM TAPERS 100 FEET PER LANE

85-PERCENTILE SPEED IN MPH

TAPER LENGTH COMPUTATION

SPEED LIMIT 40 MPH OR LESS 45 MPH OR GREATER

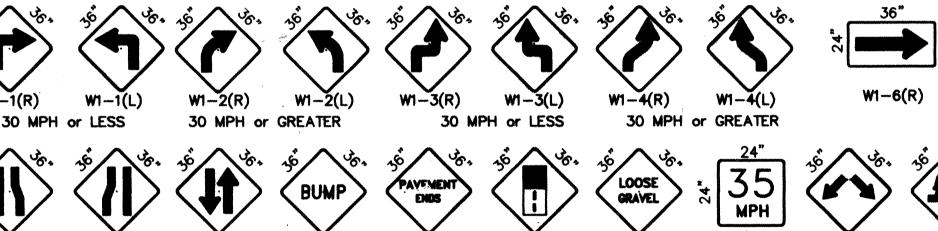
L = TAPER LENGTH W = WIDTH OF OFFSET IN FEET S = POSTED SPEED OR OFF-PEAK

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP

SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS

DESIGN REVIEW COMMITEE | CITY ENGINEER APPROVAL SHEET 672381

SIGN FACE DETAILS



CLOSED AMEAD



TRIGHT TWO LANES CLOSED AHEAD

W20-5(2R)



W20-5(2L)

NO TURNS

LANE

CLOSED

R11-2a



MUST

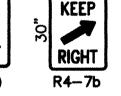
TURN RIGHT

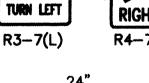


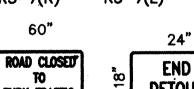


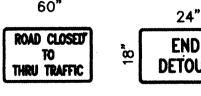


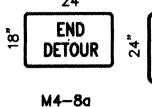
W1-6(L)

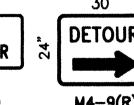


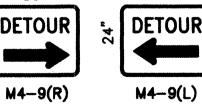




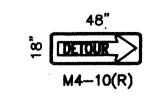


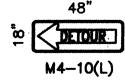




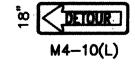


KEEP









ROAD CONSTRUCTION AHEAD

ENTER

THRU TRAFFIC KEEP LEFT SPECIAL

ONE WAY

WAY

ROAD CLOSED AHEAD

SPECIAL

ACCESS TO

CONE WAY

W20-4

REDUCED

SPEED

AHEAD

SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

ALL CONSTRUCTION WARNING SIGNS

ROAD

CLOSED

CONSTRUCTION

