

CITY OF ALBUQUERQUE



Planning Department
Suzanne Lubar, Director

Mayor Richard J. Berry

October 26, 2016

Fred C. Arfman, P.E.
Isaacson & Arfman, PA
128 Monroe St NE
Albuquerque, NM 87108

Re:

**Alice King Charter School
Request Permanent C.O. - Accepted
Engineer's Stamp dated: 8-5-16 (J19D085)
Certification dated: 10-25-16**

PO Box 1293

Albuquerque

Dear Mr. Arfman,

New Mexico 87103

Based upon the information provided in your submittal received 10/25/2016, the above referenced Certification received is acceptable for the release of permanent Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3686 or Totten Elliott at 924-3982.

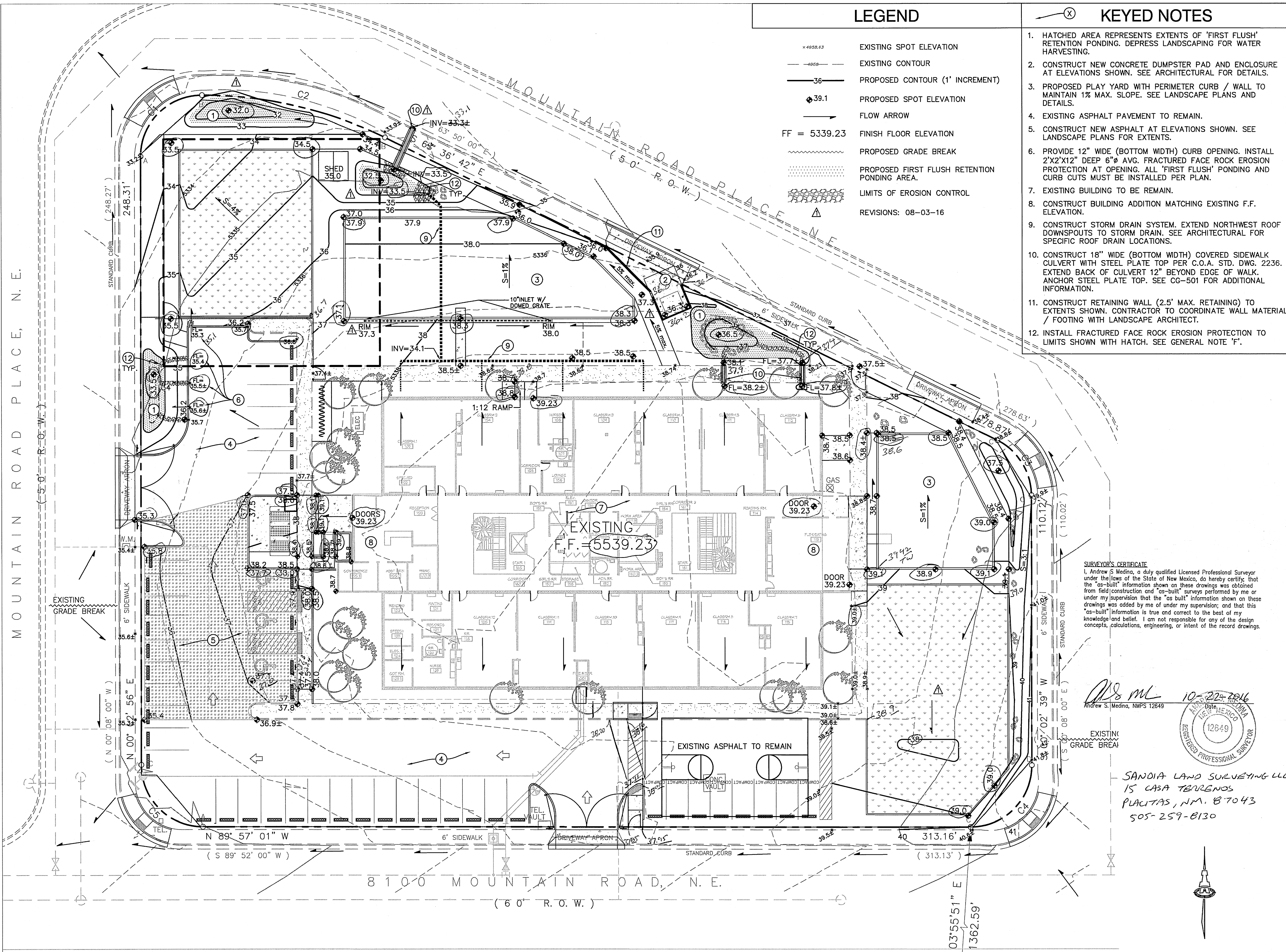
www.cabq.gov

Sincerely,

Abiel Carrillo, P.E.,
Principal Engineer, Planning Department
Development and Review Services

TE/AC

C: email, Cordova, Camille C.; Miranda, Rachel; Sandoval, Darlene M.; Blocker, Lois



PROJECT DATA

PROPERTY: THE SITE IS A FULLY DEVELOPED COMMERCIAL PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP J-19. THE SITE IS BOUND TO THE WEST, NORTH AND EAST BY MOUNTAIN ROAD PLACE NE AND TO THE SOUTH BY MOUNTAIN ROAD NE.

AREA: 1.9730 ACRES

PROPOSED IMPROVEMENTS: DEMOLITION OF ASPHALT PAVEMENT (NORTH AND EAST SIDES) TO BE REPLACED WITH LANDSCAPING AND PLAYGROUNDS FOR A CHARTER SCHOOL. THE EXISTING BUILDING WILL REMAIN WITH RENOVATIONS AND NEW ADDITIONS WILL BE CONSTRUCTED AT THE EAST AND WEST ENTRANCES.

LEGAL: LOT 1, MESA DEL NORTE HEIGHTS ADDITION NO. 11, ALBUQUERQUE, NM

ADDRESS: 8100 MOUNTAIN ROAD PLACE NE, ALBUQ., NM, 87110

BENCHMARK: ACS STA 9-J15 ALUMINUM DISK RIVETED TO AN ALUMINUM TUBE, PROJECTING 0.25 FEET ABOVE THE GROUND, AT THE NORTHWEST INTERSECTION OF LOMAS BLVD. NE, AND LEGION RD. NE. ELEV. 5093.057 (NAVD 1988)

TEMPORARY BENCHMARK: CP-6, A CONCRETE NAIL SET IN ASPHALT PAVING IN NORTHERN PARKING LOT ELEV. 5155.14

OFF-SITE: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP 3500020353H, DATED AUGUST 16, 2012, THE SITE IS LOCATED WITHIN FLOODZONE "X" DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

STORMWATER CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF "FIRST FLUSH" DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM.

FIRST FLUSH RETENTION PONDS WILL BE CONSTRUCTED WITHIN THE NORTH AND WEST LANDSCAPE AREAS TO SERVE THE NORTH DRAINAGE BASIN (NORTH HALF OF BUILDING AND NEW SITE IMPROVEMENTS).

STORM WATER FROM THE SOUTH DRAINAGE BASIN (SOUTH HALF OF THE BUILDING AND EXISTING ASPHALT PAVEMENT) WILL CONTINUE TO FREE DISCHARGE TO MOUNTAIN ROAD. THE CONSTRUCTION OF PARKING ISLANDS WITH CURB OPENINGS AND DEPRESSED LANDSCAPING WITHIN THE EXISTING ASPHALT PAVEMENT WILL SERVE TO CAPTURE A PORTION OF THE FIRST FLUSH. DUE TO THE INTRODUCTION OF PLAYGROUNDS, GRASS FIELDS AND GENERAL LANDSCAPING, THE 100-YEAR 6-HOUR DISCHARGE FROM THE PROPERTY WILL BE REDUCED. SEE CALCULATIONS ON SHEET CG-501.

ENGINEER: FRED C. ARFMAN, P.E., NMPE 7322
ISAACSON & ARFMAN, PA
128 MONROE NE, 87111
TELEPHONE: (505) 268-8828

SURVEYOR: THOMAS D. JOHNSTON, NMPS 14269
WAYJOHN SURVEYING, INC.
330 LOUISIANA BLVD. NE, 87108
TELEPHONE: (505) 255-2052

ALICE KING COMMUNITY SCHOOL

8100 MOUNTAIN ROAD N.E.

I, Fred C. Arfman, NMPE No. 7322 of the firm Isaacson & Arfman, P.A. hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 08-03-16. The record information edited onto the original design document has been obtained by Andrew S. Median, NMPS 12649 of the firm Sandia Land Surveying LLC. I further certify that I or a member of my firm under my direct supervision have visited the project site on 10-25-16 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for permanent Certificate of Occupancy.

4/25/16

FRED C. ARFMAN
NEW MEXICO
7322
REGISTERED PROFESSIONAL ENGINEER

4/25/16

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7322
REGISTERED PROFESSIONAL ENGINEER

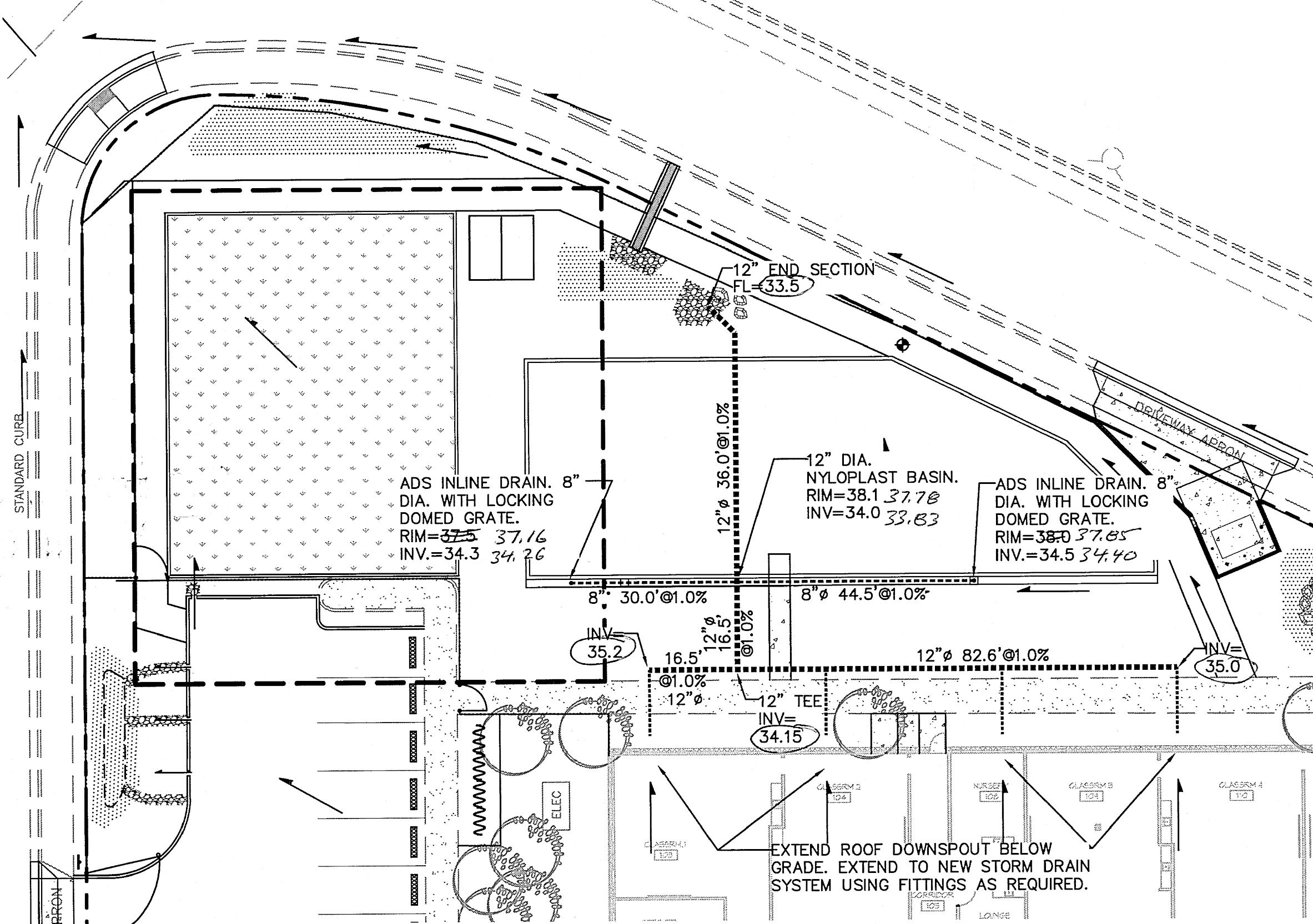
DATE: 08.03.2016
SHEET NAME

2157 CG-101
REVISED 2016 07-29
CG-101 GRADING &
DRAINAGE PLAN

1

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivil.com

STORM DRAIN DESIGN



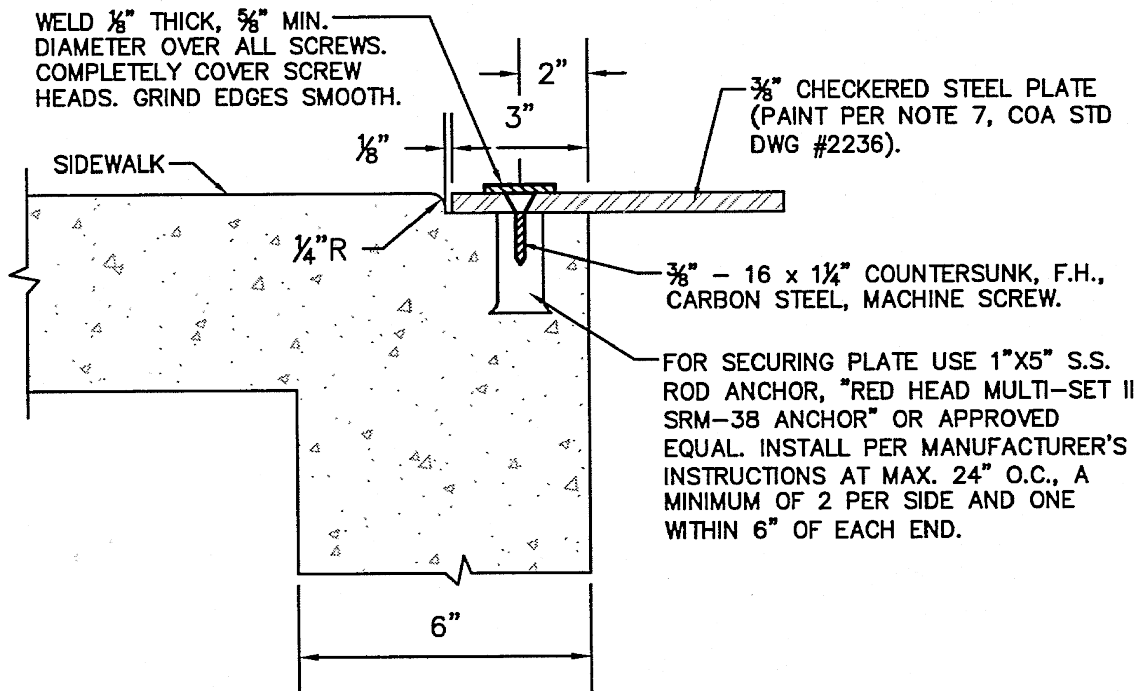
GENERAL GRADING AND STORM DRAIN NOTES

- A. PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.
- B. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR INSTRUCTIONS.
- C. THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE CITY OF ALBUQUERQUE REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), AN NPDES PERMIT, AND AN EROSION AND SEDIMENT CONTROL (ESC) PERMIT FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES MEET THE EPA THRESHOLD. (SWPPP, NPDES PERMIT, AND ESC PLAN BY OTHERS.) A CURRENT CITY-APPROVED ESC PERMIT MUST BE INCLUDED WITH THE CONTRACTOR'S SUBMITTAL FOR A ROUGH GRADING, GRADING, PAVING, BUILDING, OR WORK ORDER PERMIT. CONTRACTOR SHALL COORDINATE WITH OWNER TO DETERMINE WHO WILL PREPARE SWPPP AND INSPECT REQUIRED ELEMENTS.
- D. IF THE SITE IS SMALL ENOUGH NOT TO REQUIRE A SWPPP/NPDES PERMIT (LESS THAN ONE ACRE), THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR USING EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PUBLIC RIGHT-OF-WAY.
- E. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.
- F. WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS 'MATCH' OR '±', TRANSITIONS SHALL BE SMOOTH.
- G. PAVEMENT GRADES IN MARKED HANDICAPPED PARKING AREAS SHALL NOT EXCEED 2.0% IN ANY DIRECTION. FOR ALL ACCESSIBLE ROUTES, MAXIMUM ALLOWABLE CROSS SLOPE IS 2.0% AND MAXIMUM LONGITUDINAL SLOPE WITHOUT RAMP IS 5.0%. FOLLOW ALL ADA ACCESSIBILITY GUIDELINES OR CITY CODES, WHICHEVER IS MORE STRINGENT.
- H. ALL EROSION PROTECTION TO BE INSTALLED AS 6" AVG. DIA. ANGULAR FACED ROCK (F.F. ROCK) PLACED OVER GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.).
- I. SIDESLOPES STEEPER THAN 3:1 BUT LESS THAN 2:1 MUST HAVE PERMANENT EROSION PROTECTION INSTALLED, TYPICAL. NO SLOPE SHALL BE STEEPER THAN 2:1.
- J. FIRST FLUSH BASIN DESIGN PARAMETERS AND STORMWATER CONTROL MEASURES SHOWN ON THIS PLAN TO BE STRICTLY ADHERED TO FOR CERTIFICATION PURPOSES.
- K. POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBILITY OF THE FACILITIES OWNER. PERIODIC INSPECTION AND CERTIFICATIONS OF THE FACILITIES MAY BE REQUIRED BY THE CITY ENGINEER. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.
- L. FOR ENGINEER'S CERTIFICATION OF SUBSTANTIAL COMPLIANCE (FOR CERTIFICATE OF OCCUPANCY) CONTRACTOR SHALL PROVIDE AN AUTOCAD FORMAT AS-BUILT SURVEY PREPARED BY A LICENSED SURVEYOR WHICH INCLUDES:
 - M. AS-BUILT SPOT ELEVATIONS AT EACH DESIGN SPOT ELEVATION SHOWN ON THE APPROVED PLAN;
 - N. TOP AND BOTTOM ELEVATIONS AS REQUIRED TO DEFINE THE PERIMETER OF PONDS (TO BE USED BY ENGINEER TO CALCULATE AS-BUILT VOLUME PROVIDED);
 - O. ALL CONSTRUCTION, INCLUDING DRAIN INLETS, PIPES AND PONDS SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN IN ORDER TO RECEIVE ENGINEER'S CERTIFICATION.
- P. GRADING OF FIRST FLUSH BASINS WILL BE INSPECTED AS PART OF ENGINEER'S CERTIFICATION FOR CERTIFICATE OF OCCUPANCY. DURING LANDSCAPING, FIRST FLUSH BASINS WILL BE SMOOTHLY INTEGRATED INTO LANDSCAPING WHILE MAINTAINING REQUIRED TOP AND BOTTOM ELEVATION, VOLUME AND INLET / OVERFLOW ELEVATIONS.
- Q. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL WORK RELATED TO PROPOSED STORM DRAINS SHOWN ON THIS PLAN INCLUDING: TRENCHING, BACKFILL, SUPPORTS, INLETS, WATER QUALITY FEATURES, EROSION CONTROL FEATURES, TESTING AND CLEANING. ANY WORK NOT ACCEPTED BY THE ARCHITECT OR ENGINEER DUE TO IMPROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
- R. MINIMUM COVER FOR STORM DRAIN PIPES SHALL BE 12", UNLESS OTHERWISE NOTED.
- S. STORM DRAINS SHALL BE INSTALLED PRIOR TO SURFACE IMPROVEMENTS SUCH AS PAVEMENT, SIDEWALKS, AND LANDSCAPING.
- T. CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTIONS TO ROOF DOWNSPOUTS AND ALL NECESSARY FITTINGS. FITTING COSTS SHALL BE INCIDENTAL.
- U. TRENCHING, BORING, AND JACKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA SPEC. SECT. 700 / NMAPWA SPEC. SECT. 700 / LOCAL UTILITY COMPANY SPECIFICATIONS. ALL BACKFILL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY PER ASTM D-1557.
- V. ALL INLET AND AREA DRAIN RINGS & GRATES, MANHOLE RINGS & COVERS, AND OTHER SURFACE ITEMS FOR THE STORM DRAINS SHALL BE ADJUSTED TO FINISHED GRADE, UNLESS OTHERWISE NOTED ON THE PLANS.
- W. ALL STORM DRAIN CROSSINGS OF WATER AND SEWER LINES SHALL HAVE 18" MIN CLEARANCE. IF 18" CLEARANCE IS NOT POSSIBLE, CONTACT THE ENGINEER AND / OR ARCHITECT IMMEDIATELY.
- X. HDPE PIPE SHALL BE ADS N-12 (WATERTIGHT) OR ENGINEER APPROVED EQUIVALENT. HDPE PIPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- Y. PVC PIPES SHALL BE PVC SDR-35, INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- Z. STORM DRAINS SHALL BE INSTALLED AT INVERTS AND SLOPES SPECIFIED ON THE PLANS. THE PIPE SHALL DRAIN AT A CONSTANT SLOPE BETWEEN FITTINGS AND MANHOLES. THE PIPE SHALL DRAIN TOWARD THE OUTLET AT ALL LOCATIONS.

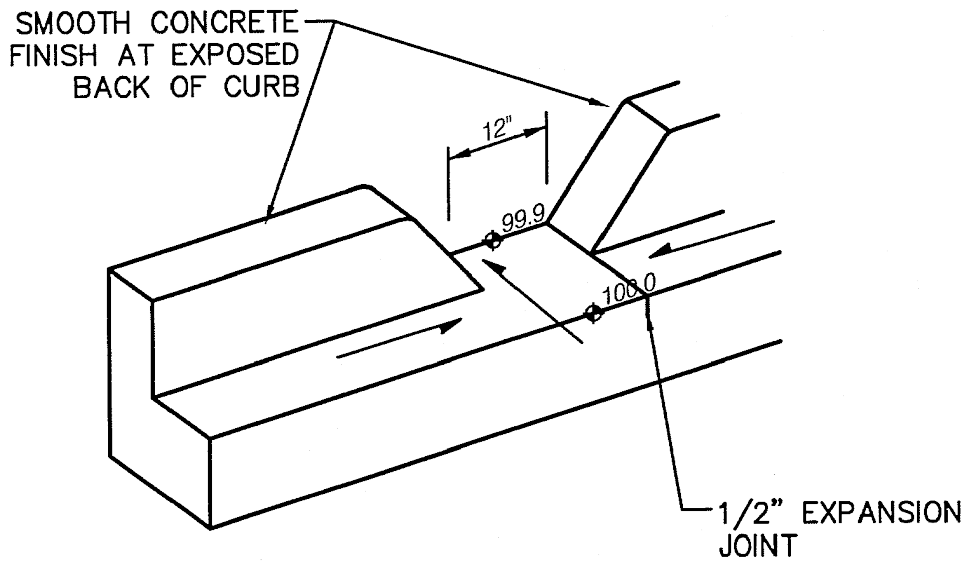
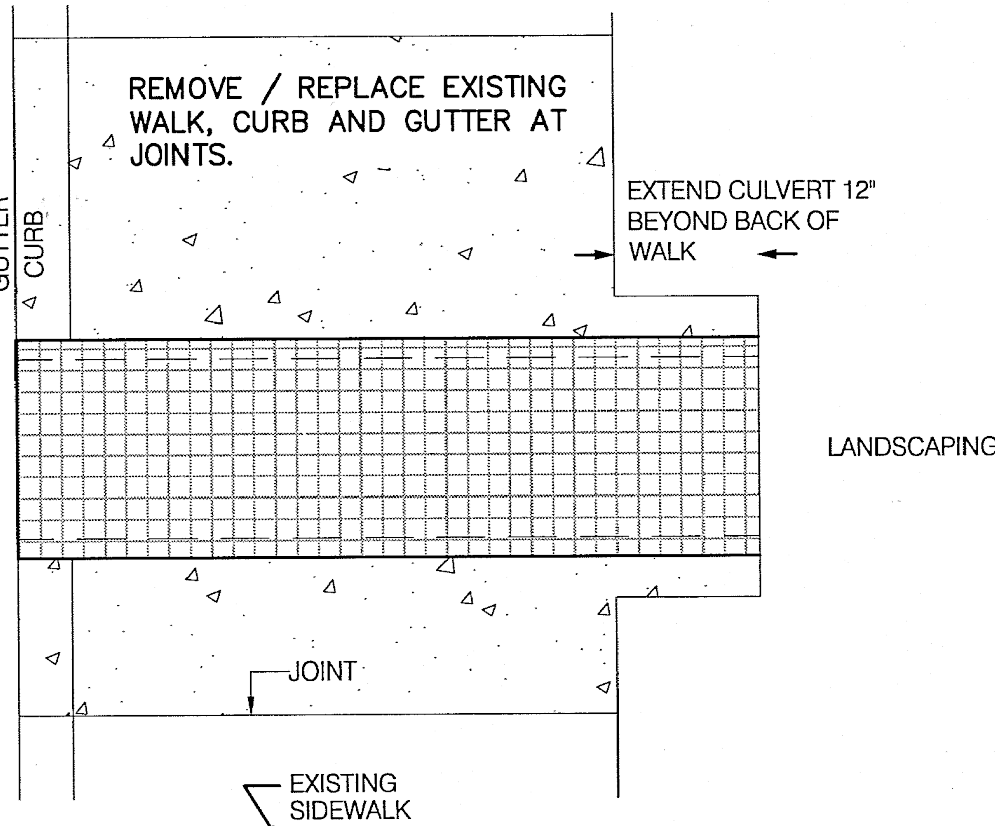
S.O.19 : NOTICE TO CONTRACTORS

- 1. AN EXCAVATION / CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
- 2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #8.
- 3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (CALL '811') FOR LOCATION OF EXISTING UTILITIES.
- 4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- 5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC / STREET USE.
- 6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- 7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
- 8. THE WORK IN THE CITY ROW MUST BE INSPECTED AND ACCEPTED. THE CONTRACTOR MUST CONTACT JASON RODRIGUEZ AT 235-8016 AND CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE INSPECTIONS.

APPROVAL	NAME	DATE
INSPECTOR		



- CONSTRUCT PER C.O.A. STD. DWG. 2236 MODIFIED AS FOLLOWS:
 - MODIFIED SECTION B-B FOR SECURING PLATE (SEE ABOVE).
 - EXTEND BACK OF CULVERT 12" BEYOND EDGE OF WALK (SEE BELOW).



- GENERAL NOTES
 - 1. EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE SHAPED WITH A 3/8" EDGING TOOL.

CURB OPENING

N.T.S.

COVERED SIDEWALK CULVERT

N.T.S.

AUG 08 2016

strata design llc

7322

711, Amsterdam St., Albuquerque, NM 87104

ISAACSON & ARFMAN, P.A.
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DATE: 08.03.2016

SHEET NAME

2157 CG-101
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GRADING &
DRAINAGE DETAILS

ALICE KING COMMUNITY SCHOOL
8100 MOUNTAIN ROAD N.E.

