



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: _____ **Building Permit #:** _____ **City Drainage #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: _____

City Address: _____

Engineering Firm: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

- ☐ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR
- ☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

STARBUCKS COFFEE COMPANY
PORTION OF PARCEL I-A, TRACT BB
MONARCH VILLAGE CONT 0.5785 ACRES
CITY OF ALBUQUERQUE, COUNTY OF BERNALILLO, STATE OF NEW MEXICO
SITE CONSTRUCTION PLAN

PEAK DISCHARGE CALCULATIONS

TABLE A-9 METHOD

| | | |
|----------------------|----------------------|-------------------|
| PRECIPITATION ZONE: | 4 | (ADPM, FIG. A-1) |
| LAND TREATMENT: | D | (ADPM, TABLE A-4) |
| WATERSHED AREA: | 0.58 AC. | |
| Tc: | 12 MIN. | (ADPM, SECT. A.6) |
| PEAK DISCHARGE RATE: | 100-YR = 5.25 CFS/AC | (ADPM, TABLE A-9) |
| | 10-YR = 3.57 CFS/AC | (ADPM, TABLE A-9) |
| | 2-YR = 2.17 CFS/AC | (ADPM, TABLE A-9) |
| PEAK DISCHARGE: | 100-YR = 3.05 CFS | |
| | 10-YR = 2.07 CFS | |
| | 2-YR = 1.26 CFS | |

RATIONAL METHOD

| | | |
|-----------------------|---------------------|--------------------|
| RATIONAL COEFFICIENT: | 100-YR = 0.94 | (ADPM, TABLE A-11) |
| | 10-YR = 0.93 | (ADPM, TABLE A-11) |
| | 2-YR = 0.93 | (ADPM, TABLE A-11) |
| RAINFALL INTENSITY: | 100-YR = 5.61 IN/HR | (ADPM, TABLE A-10) |
| | 10-YR = 3.83 IN/HR | (ADPM, TABLE A-10) |
| | 2-YR = 2.34 IN/HR | (ADPM, TABLE A-10) |
| PEAK DISCHARGE: | 100-YR = 3.06 CFS | |
| | 10-YR = 2.07 CFS | |
| | 2-YR = 1.26 CFS | |

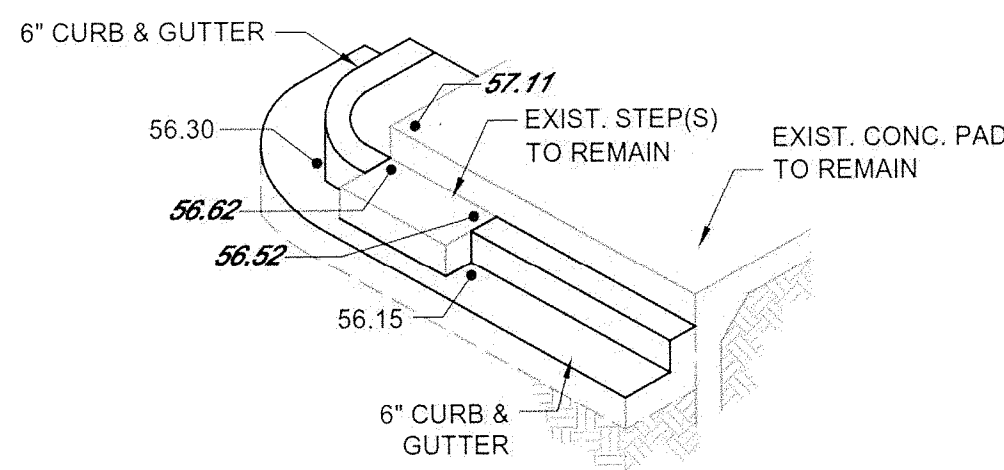
(ADPM = ALBUQUERQUE DEVELOPMENT PROCESS MANUAL)

OUTLET CALCULATIONS

PERFORATED PLATE

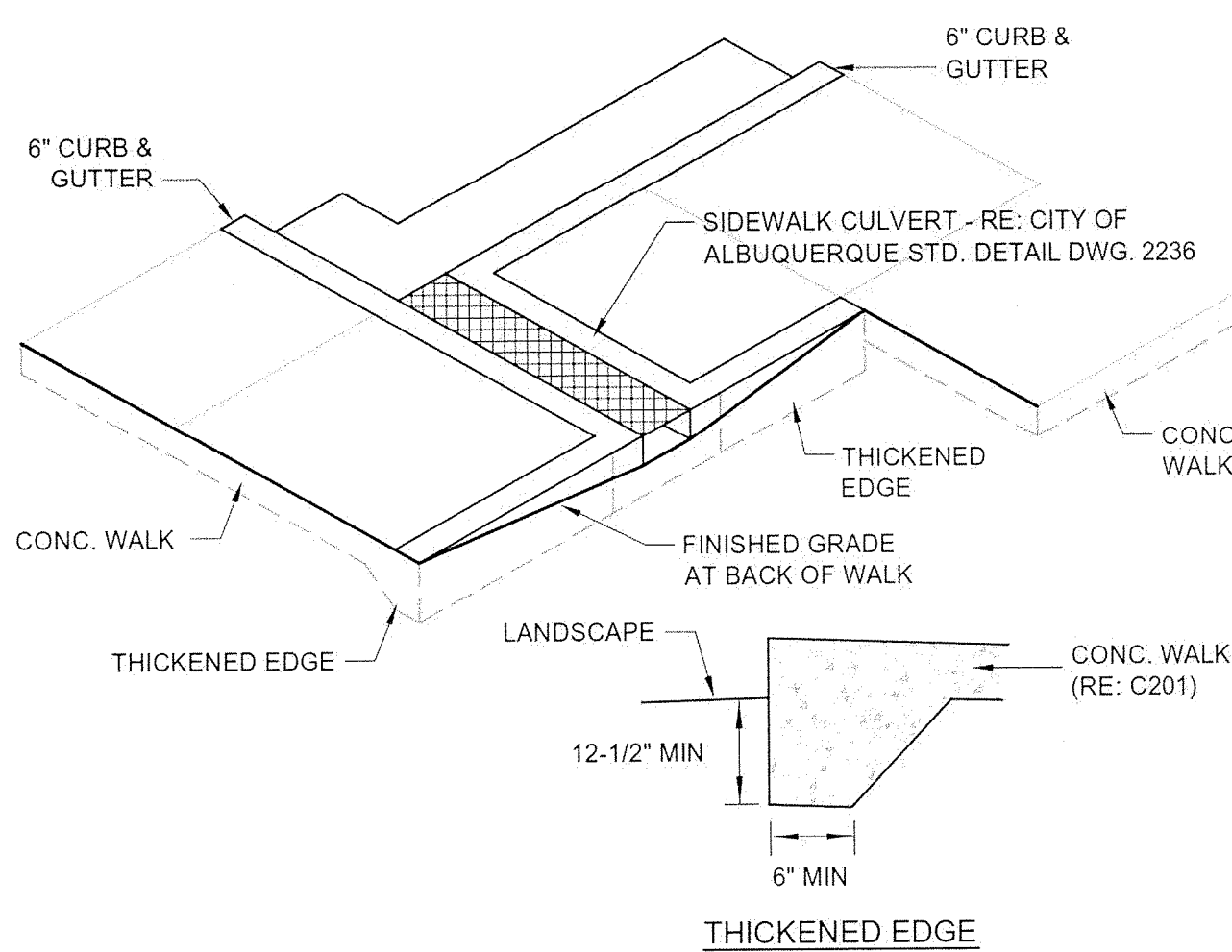
| | | |
|-------------------------|--------------------------|------------------------------------|
| VOLUME: | 497 CF (0.0114 AC-FT) | |
| HEIGHT: | 1.37 FT (53.72 TO 52.35) | |
| Td (DRAIN TIME): | 40 HR | |
| S (SLOPE): | 0.5% | |
| Ao (OPEN AREA PER ROW): | 0.048 SQ.IN. | (UDFCD, DCM, VOL. III, EQ. EDB-3) |
| ORIFICE DIAMETER: | 0.25 IN. | (UDFCD, DCM, VOL. III, TABLE OS-1) |
| WEIR | | |
| PEAK DISCHARGE: | 3.06 CFS | |
| C (WEIR COEFFICIENT): | 3.33 | |
| LENGTH: | 6.25 FT. | |
| H (HEIGHT OF WEIR): | 0.28 FT. | |

(UDFCD, DCM = URBAN DRAINAGE FLOOD CONTROL DISTRICT, DRAINAGE CRITERIA MANUAL)



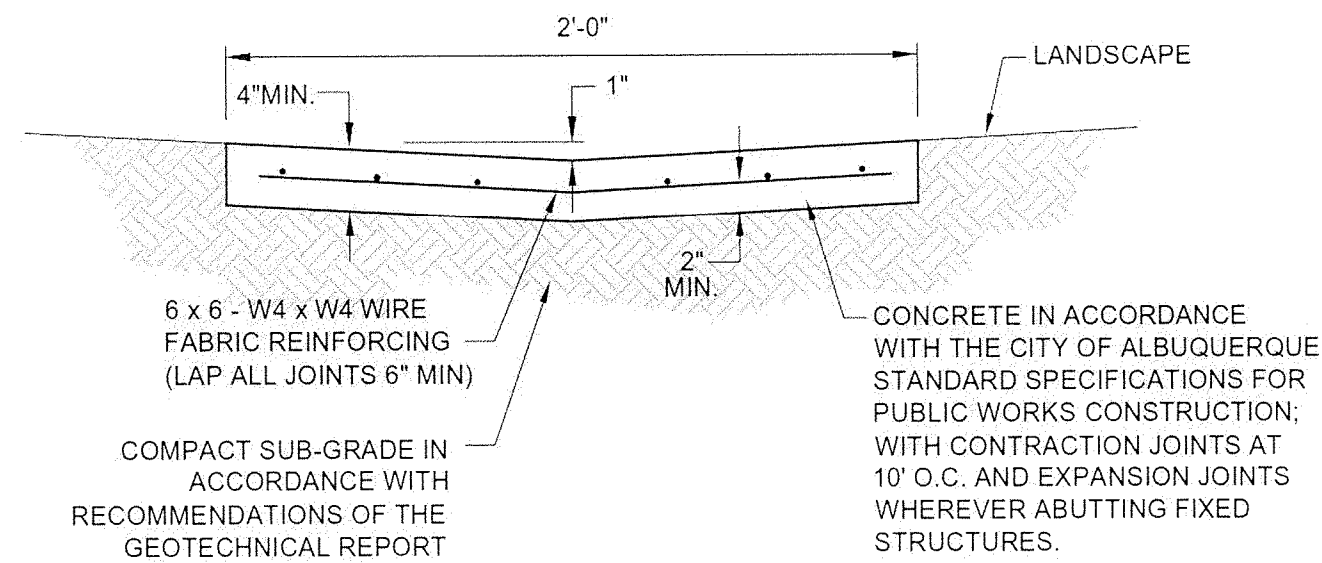
EXISTING STEP DETAIL

NOT TO SCALE



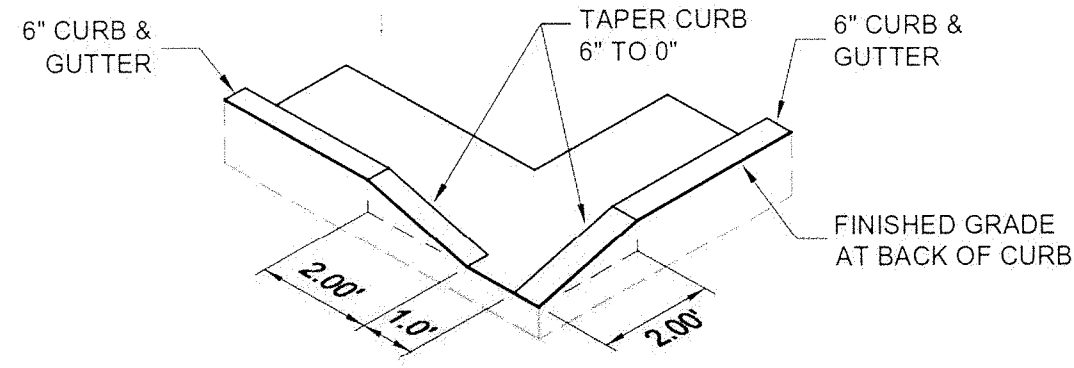
SIDEWALK CULVERT

NOT TO SCALE

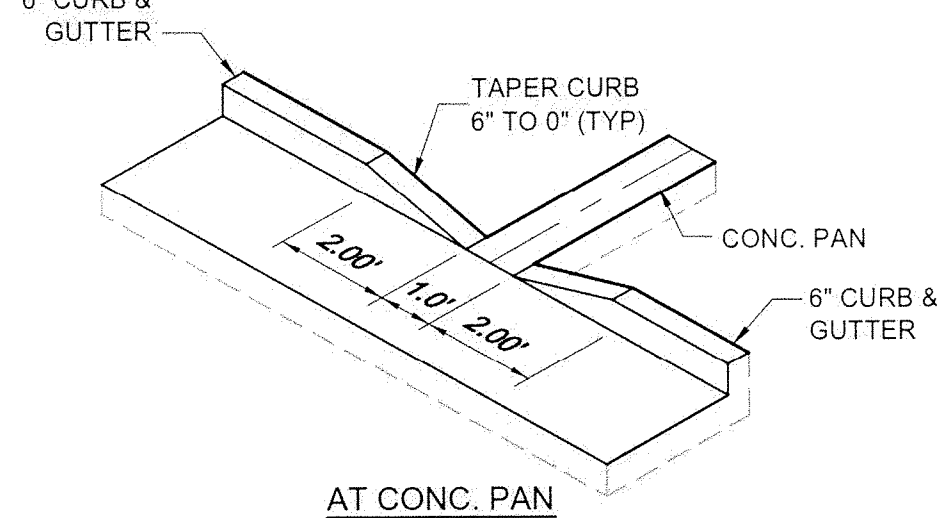


PRIVATE VALLEY PAN

NOT TO SCALE



AT CORNER

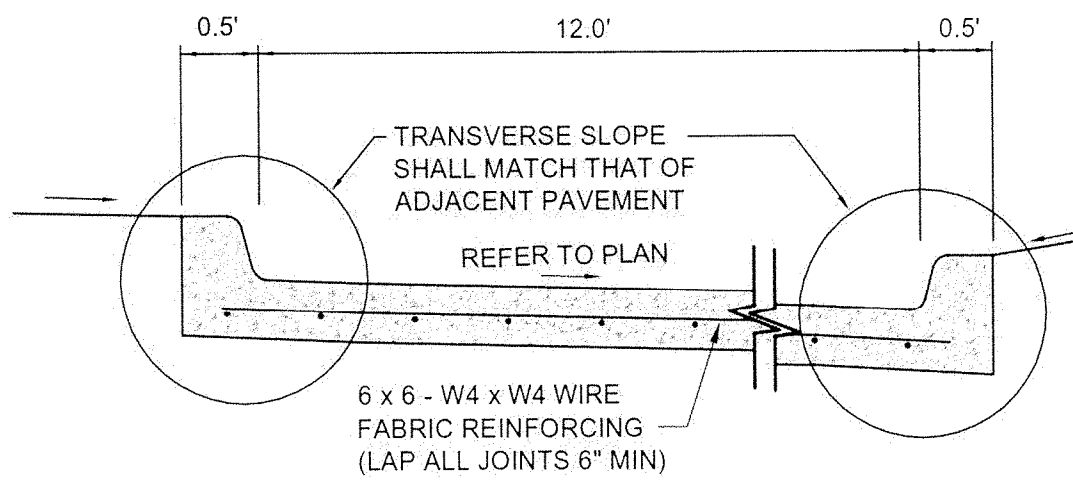
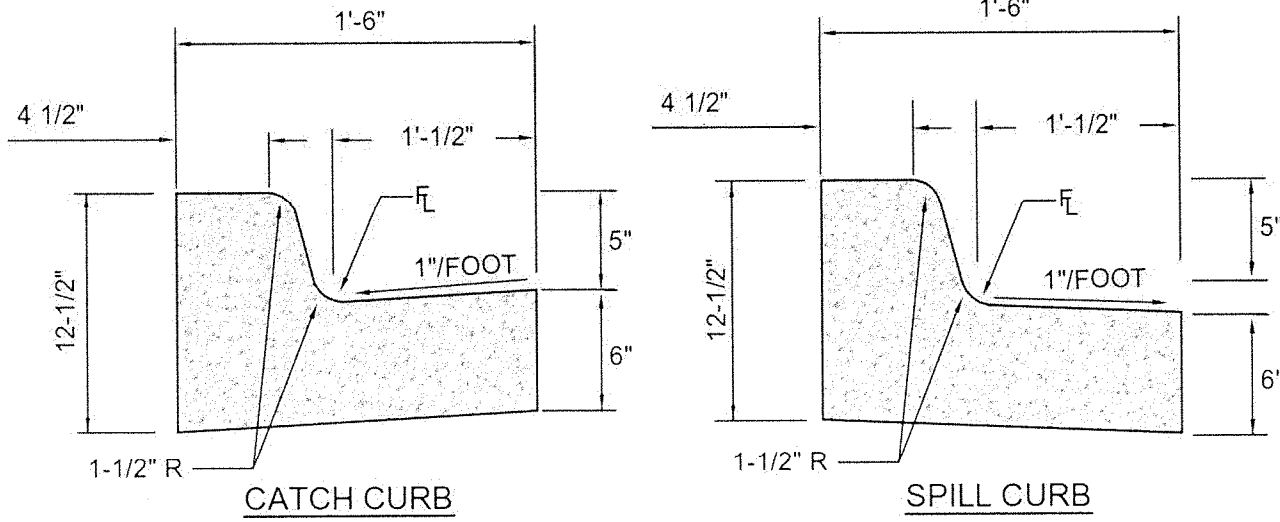


AT CONC. PAN

COMPACT SUBGRADE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT

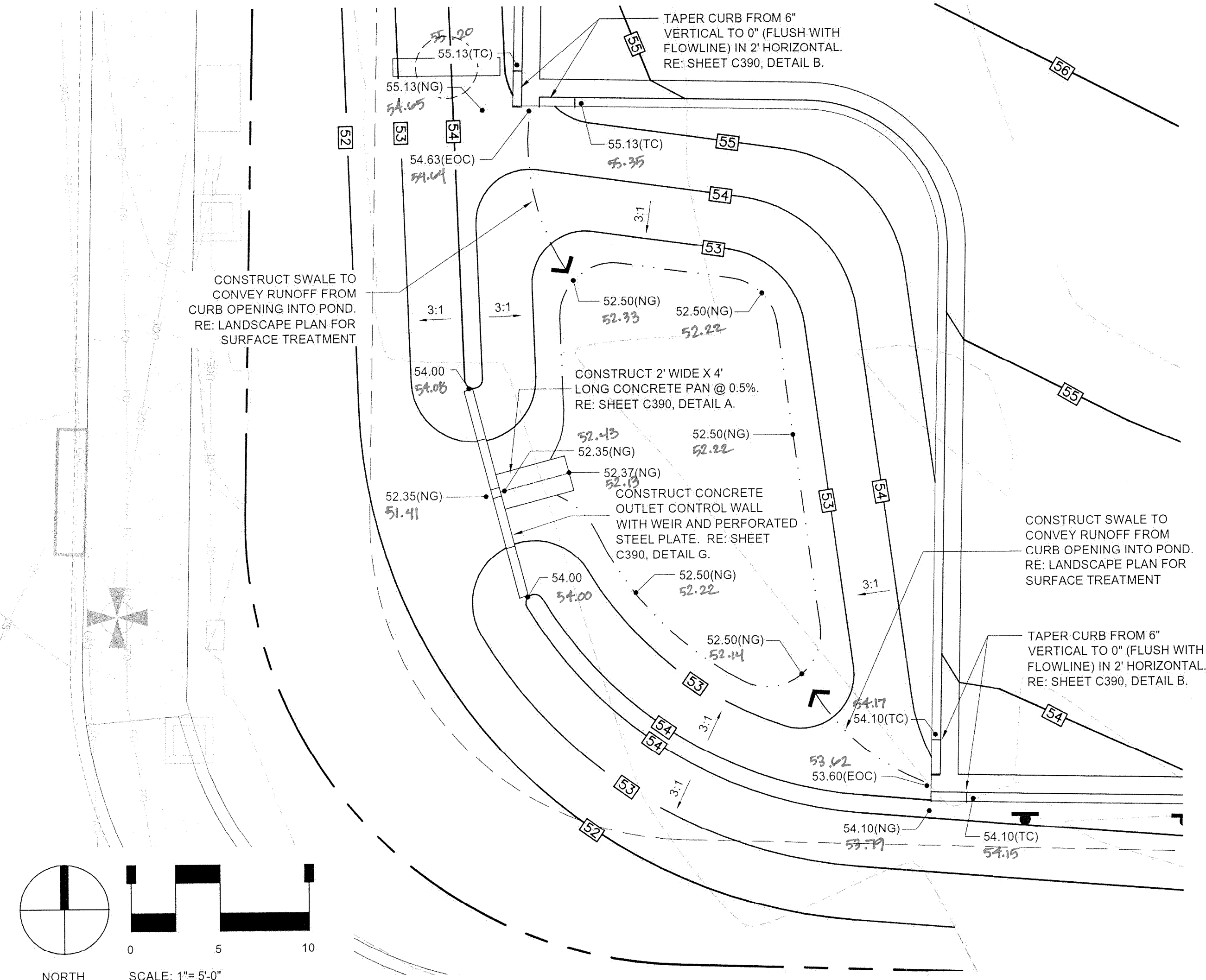
CURB OPENING

NOT TO SCALE



PRIVATE CURB & GUTTER

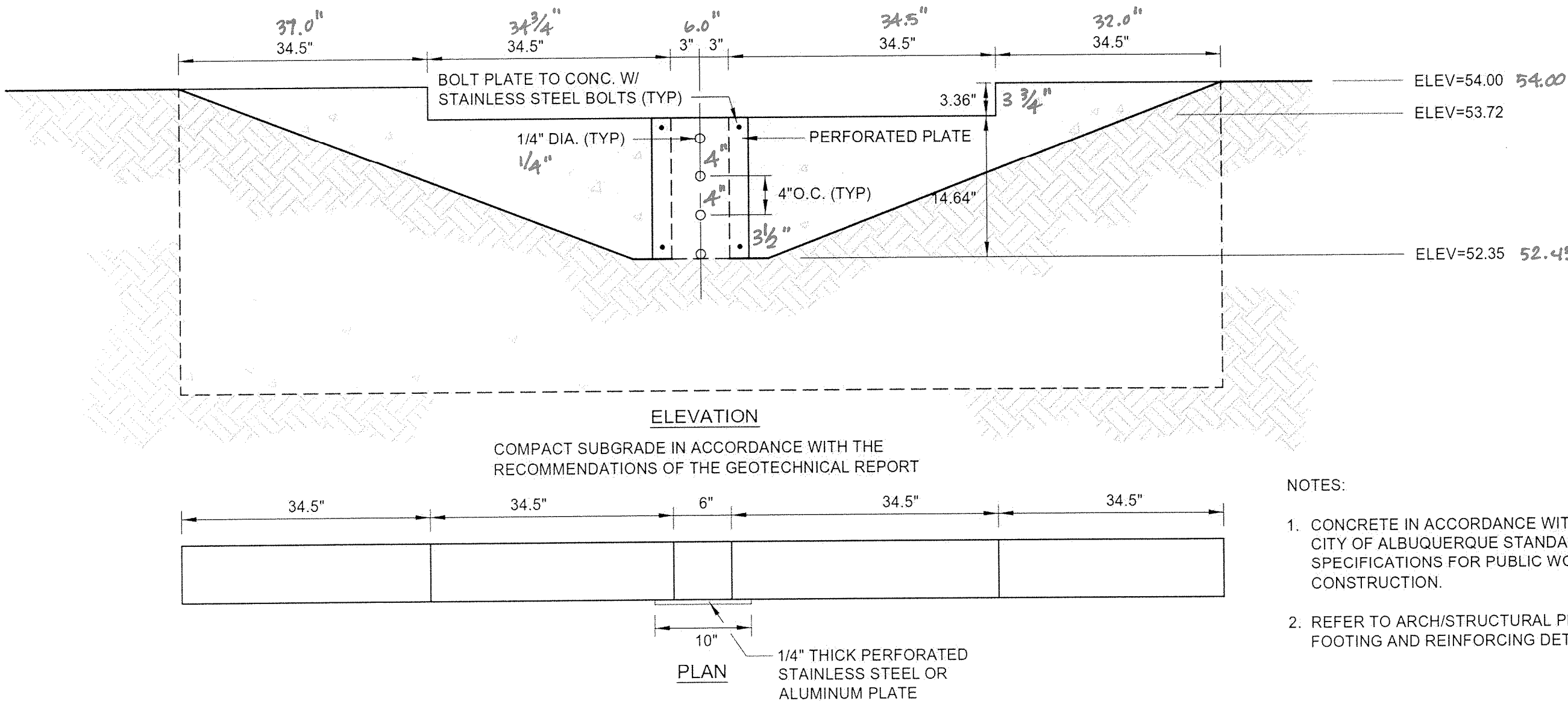
NOT TO SCALE



WATER QUALITY POND

NOT TO SCALE

AS-BUILT INFORMATION AS SHOWN
PROVIDED BY NM REGISTERED LAND
SURVEYOR THOMAS D. JOHNSTON, #14269



OUTLET CONTROL WALL

NOT TO SCALE

NOTES:

1. CONCRETE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. REFER TO ARCH/STRUCTURAL PLANS FOR FOOTING AND REINFORCING DETAIL.

I have reviewed a copy of the Grading As-Built, dated October 5, 2015, prepared and stamped by Thomas D. Johnston, New Mexico Registered Land Surveyor No. 14269, and provided the same as-built information on the red-lined as-built plan.

The review is intended only to determine if the improvements as described solely by the as-built plan are in substantial compliance with the overall design intent of the grading and drainage aspects of the project as described on the approved plan(s) and in support of a request for a Certificate of Occupancy.

Upon review it has been found that the 2-foot wide concrete pan on the east side of the building conveys runoff entirely to the south rather than portions to the south and portions to the north. Portions of the pan are also constructed with a flat slope. The finished grade elevations of and near the trash enclosure suggest portions of the adjacent drive aisle may contribute minor runoff to the enclosure. The pond elevations indicate a lower pond bottom and a lower pond weir than described on the approved plans; however, calculations indicate provision of the design volume. In addition and as approved by the city, the ATM that previously existed at the southeast corner of the site has been removed. These and other deviations from the grading and drainage design described on the approved plan(s) represent discrepancies which are minor in nature and/or should impact maintenance of the property rather than the overall drainage design intent.

Based on the review described herein, of the information listed herein, and of this information only, it appears the improvements associated with the grading and drainage aspects of the project have been graded and will drain in substantial compliance with the overall design intent of the approved plan(s).

Sterling Design Associates, Inc.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS

2009 W. Littleton Blvd. #300
Littleton, CO 80120
303.794.4727 ph
www.SterlingDesignAssociates.com

PREPARED UNDER THE DIRECT SUPERVISION OF
JAY M. NEWELL, P.E.
NEW MEXICO REGISTRATION NO. 21372
FOR & ON BEHALF OF STERLING DESIGN ASSOCIATES, LLC



STERLING DESIGN ASSOCIATES, LLC

| | | |
|----------------------------|----------------|---------|
| ISSUES & REVISIONS | | |
| NO: 1 | DATE: 03/12/15 | BY: JLO |
| DESCRIPTION: CITY COMMENTS | | |
| NO: 2 | DATE: 10/13/15 | BY: JMN |
| DESCRIPTION: AS-BUILT | | |
| NO: 3 | DATE: | BY: |
| DESCRIPTION: | | |
| NO: 4 | DATE: | BY: |
| DESCRIPTION: | | |
| NO: 5 | DATE: | BY: |
| DESCRIPTION: | | |
| NO: 6 | DATE: | BY: |
| DESCRIPTION: | | |

| | |
|----------------------|---------------|
| DATE: 09/23/14 | SCALE: |
| PROJECT MANAGER: JLO | PROJECT NO: |
| DRAWN BY: JMN | DRAWING FILE: |

PROJECT:

63433-001
STARBUCKS DRIVE-THRU
700 JUAN TABO NE
ALBUQUERQUE, NM 87123

DEVELOPER:
STARBUCKS COFFEE COMPANY
2401 UTAH AVENUE SOUTH
SEATTLE, WA 98134
(206) 318-1575

SHEET TITLE:
GRADING DETAILS
AS-BUILT
SHEET NUMBER:
C390

STARBUCKS COFFEE COMPANY
PORTION OF PARCEL 1-A, TRACT BB
MONARCH VILLAGE CONT 0.5785 ACRES
CITY OF ALBUQUERQUE, COUNTY OF BERNALILLO, STATE OF NEW MEXICO
SITE CONSTRUCTION PLAN

GENERAL NOTES

- REFER TO SHEET C100 FOR ADDITIONAL PROJECT GENERAL NOTES.
- IF, DURING THE OVERLOT GRADING PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER IMMEDIATELY FOR RECOMMENDATIONS.
- ALL EARTHWORK, GRADING, OVERLOT GRADING, BACKFILLING, FILLING, EXCAVATION, COMPACTION, PAVEMENT, AND FLATWORK CONSTRUCTION WILL BE IN ACCORDANCE WITH THE RECOMMENDATIONS FROM THE GEOTECHNICAL INVESTIGATION PREPARED SPECIFICALLY FOR THIS SITE.
- ALL CONCRETE PAVEMENT, CONCRETE FLATWORK, CONCRETE STRUCTURES AND CONCRETE UTILITIES SHALL BE IN ACCORDANCE WITH THE MATERIAL RECOMMENDATIONS FROM THE GEOTECHNICAL INVESTIGATION PREPARED SPECIFICALLY FOR THIS SITE AND THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION PREPARED SPECIFICALLY FOR THIS SITE.
- SPOT ELEVATIONS SHALL TAKE PRECEDENCE OVER CONTOURS AND SLOPES SHOWN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SPOT ELEVATIONS WHICH DO NOT APPEAR TO BE CONSISTENT WITH THE CONTOURS AND SLOPES. SPOT ELEVATIONS AND SPECIFIC PROFILE DESIGN SHALL BE USED FOR SETTING ELEVATIONS OF CURB AND GUTTER AND UTILITIES.
- SPOT ELEVATIONS REPRESENT FLOWLINE (BOTTOM FACE OF CURB) WHERE SHOWN AT CURB AND GUTTER UNLESS OTHERWISE NOTED.
- CONTOURS SHOWN ARE FOR FINISHED PAVING, SIDEWALK, SLAB, OR GROUND. ADJUSTMENT TO SUBGRADE IS THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING HIS OWN ESTIMATE OF EARTHWORK QUANTITIES.
- REFER TO SITE PLAN FOR EXTENT OF PAVEMENT AND PAVEMENT SECTIONS.
- GRADES WITHIN ASPHALT PAVING AREAS SHALL BE CONSTRUCTED TO WITHIN 0.10 FEET OF THE DESIGN GRADE. HOWEVER, THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL PAVEMENT AREAS AND ALONG CURBS. ALL CURBS SHALL BE BUILT IN ACCORDANCE WITH THE PLAN. CURBS OR PAVEMENT AREAS WHICH DO NOT PROVIDE PROPER DRAINAGE MUST BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL HAVE FORMS CHECKED BY A SURVEYOR FOR CURB AND GUTTER ADJACENT TO EXISTING ASPHALT OR CONCRETE. THE CROSS SLOPE SHALL NOT BE LESS THAN 2% OR GREATER THAN 4% FROM THE EXISTING SAWCUT LINE TO THE PROPOSED LIP OF GUTTER. DO NOT PLACE CONCRETE IN FORMS THAT HAVE BEEN CHECKED TO BE OR APPEAR IN ANY WAY INCORRECT. CONTACT THE ENGINEER IMMEDIATELY IF A PROBLEM SHOULD ARISE.
- THE CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- THE CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL LANDSCAPED AND PAVED AREA.
- ALL DISTURBED AREAS THAT ARE NOT DESIGNATED TO BE PAVED SHALL BE LANDSCAPED OR SEEDED, ACCORDING TO THE LANDSCAPE PLAN.
- EXISTING DRAINAGE STRUCTURES SHALL BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- IF ANY EXISTING STRUCTURES, SIDEWALK, AND/OR CURB AND GUTTER MODIFIED OR TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER PRIOR TO PROJECT CLOSEOUT.
- ALL GRATES, MANHOLE RIMS, VALVE BOXES, VALVE COVERS, CLEANOUTS, AND VAULT OR BOX COVERS SHALL BE ADJUSTED TO 'AS CONSTRUCTED' FINISHED GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.
- NO PROPOSED SLOPE IN LANDSCAPED AREAS OR OPEN SPACE SHALL EXCEED THREE (3) HORIZONTAL FEET TO ONE (1) VERTICAL FOOT, OR AS OTHERWISE SPECIFIED BY LOCAL CRITERIA.
- THE CONTRACTOR SHALL PROTECT THE PROJECT BENCHMARK THROUGHOUT CONSTRUCTION AND SET ADDITIONAL PROJECT BENCHMARKS AS NECESSARY TO MAINTAIN VERTICAL CONTROL THROUGHOUT THE DURATION OF THE PROJECT.
- THE CONTRACTOR SHALL FILL AND COMPACT BASEMENTS, CESSPOOLS, AND OTHER LARGE EXCAVATED AREAS WITH CLEAN FILL SUITABLE TO THE OWNER, AND IN ACCORDANCE WITH RECOMMENDATIONS OBTAINED FROM THE GEOTECHNICAL REPORT OR GEOTECHNICAL ENGINEER AND GRADE TO MATCH EXISTING OR PROPOSED FINISH GRADE; OR CONFIRM SUCH WORK HAS BEEN PERFORMED PRIOR TO CONSTRUCTION.

GRADING NARRATIVE

EXISTING SITE TOPOGRAPHY GENERALLY SLOPES AT APPROXIMATELY 6% FROM THE EAST TO THE WEST ACROSS THE EXISTING PAVED PARKING LOT. EXISTING PERIMETER LANDSCAPE AREAS ARE STEEPER.

PROPOSED GRADING IMPROVEMENTS INCLUDE PROVIDING A RELATIVELY FLAT PAD FOR THE PROPOSED BUILDING, PEDESTRIAN, AND ASSOCIATED ADA ACCESS AREAS. PROPOSED PERIMETER DRIVE AND PARKING AREAS INCLUDE SLOPES OF 1% TO 6%. PERIMETER LANDSCAPE AREAS THEREFORE INCLUDE SLOPES OF UP TO 3:1. A PROPOSED RETAINING WALL (MAXIMUM HEIGHT EQUALS APPROXIMATELY 4.5 FEET) IS REQUIRED TO ACCOMMODATE THE PROPOSED GRADES IN THE NORTHEAST CORNER OF THE SITE. CUT AND FILL DEPTHS ARE BOTH PROPOSED TO BE APPROXIMATELY 3-FEET MAXIMUM. THE SITE WILL GENERALLY CONVEY STORMWATER RUNOFF IN CONFORMANCE WITH THE EXISTING DRAINAGE SYSTEM. RUNOFF WILL BE CONVEYED AS SHEET FLOW ACROSS THE PAVED AREAS TO LOW POINTS ALONG THE PERIMETER CURB AND GUTTER. THREE CURB OPENINGS WILL DIRECT RUNOFF TO AND ACROSS THE PERIMETER LANDSCAPE AREAS BEFORE DISCHARGING AS SURFACE FLOW TO THE PUBLIC STREET STORM SEWER SYSTEM.

THE REQUIRED FIRST FLUSH VOLUME WILL BE PROVIDED IN AN ON-SITE POND DOWNSTREAM OF TWO OF THE PROPOSED CURB OPENINGS AND WILL DISCHARGE ACROSS THE PERIMETER LANDSCAPE AREAS AS SURFACE FLOW TO THE PUBLIC STREET STORM SEWER SYSTEM.

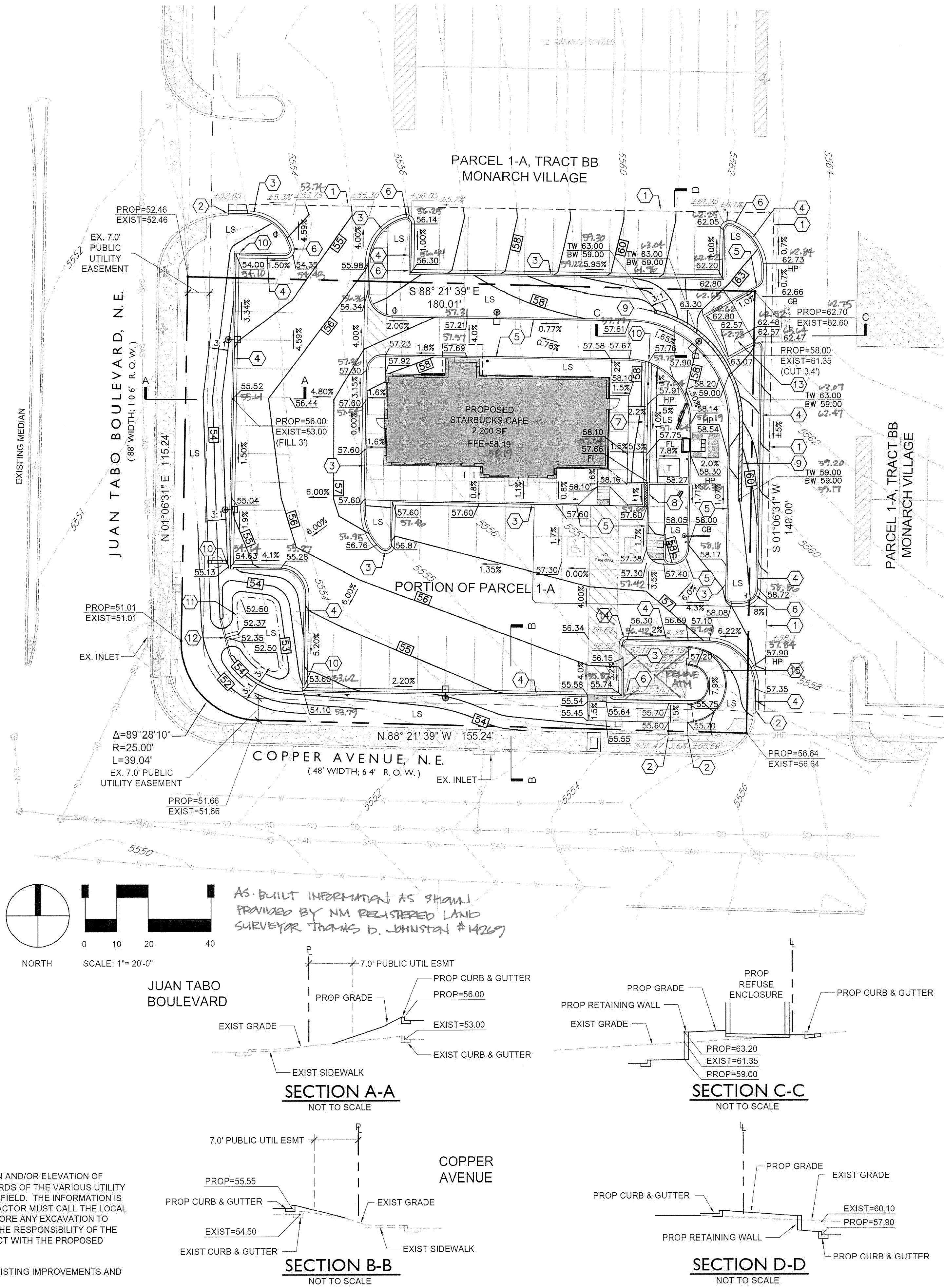
A METAL PLATE PERFORATED WITH 0.25" DIA. HOLES AT 4" ON CENTER VERTICALLY WILL CONTROL THE RELEASE OF THE FIRST FLUSH VOLUME TO DISCHARGE OVER 40 HOURS. RUNOFF IN EXCESS OF THE FIRST FLUSH WILL DISCHARGE THROUGH A CONCRETE WEIR OPENING.

REFER TO THE DRAINAGE SUMMARY ON THIS SHEET, AND THE PEAK DISCHARGE AND OUTLET CALCULATIONS ON SHEET C390 FOR ADDITIONAL INFORMATION.

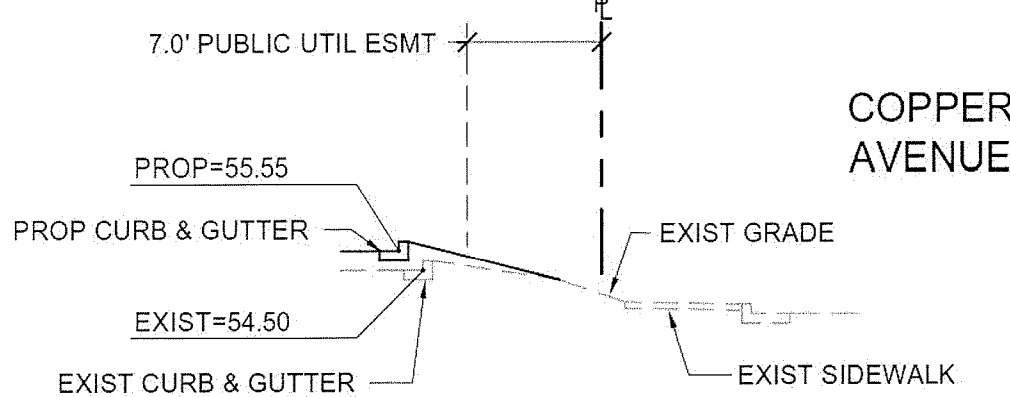
CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER (1-800-245-4545) AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS AND UTILITIES AND SHALL REPAIR ANY DAMAGE AT HIS EXPENSE.

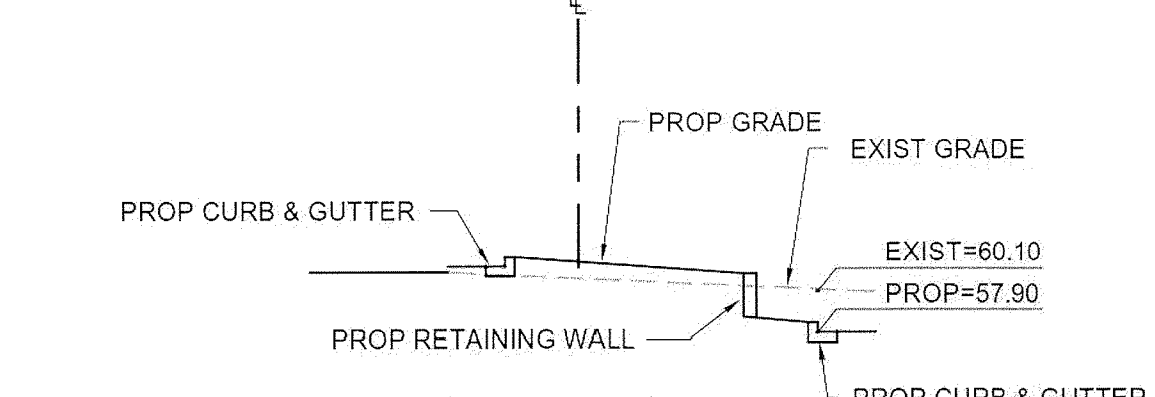


SECTION A-A
NOT TO SCALE



SECTION B-B
NOT TO SCALE

SECTION C-C
NOT TO SCALE



SECTION D-D
NOT TO SCALE

CONSTRUCTION NOTES

- SAWCUT AND/OR REMOVE EXISTING PAVEMENT, CONCRETE, CURB RAMPS, AND/OR CURB & GUTTER TO NEAREST JOINT, OR TO LIMITS AS SHOWN.
- CONSTRUCT IMPROVEMENTS TO MATCH LINE AND GRADE OF EXISTING PAVEMENT, WALK, AND/OR CURB & GUTTER.
- CONSTRUCT 6-INCH CONCRETE CURB & GUTTER WITH 1-FOOT SPILL PAN. RE: SHEET C390, DETAIL C.
- CONSTRUCT 6-INCH CONCRETE CURB & GUTTER WITH 1-FOOT CATCH PAN. RE: SHEET C390, DETAIL C.
- CONSTRUCT 6-INCH CONCRETE INTEGRAL CURB. RE: SHEET C390, DETAIL C.
- CONSTRUCT TRANSITION FROM CATCH TO SPILL PAN. FIELD VERIFY THAT RUNOFF WILL COMPLETELY EXIT PAN ONTO ADJACENT PAVEMENT.
- CONSTRUCT 2-FOOT WIDE CONCRETE PAN AS SHOWN. RE: SHEET C390, DETAIL A.
- CONSTRUCT 1-FOOT WIDE (SINGLE) SIDEWALK CULVERT WITH STEEL PLATE TOP AND WITHOUT V-SHAPED INVERT. DEPTH OF CULVERT OPENING SHALL BE CONSISTENT 6" FROM TOP OF TOP PLATE TO INVERT. FULL WIDTH OF CULVERT (1') SHALL SLOPE CONSISTENTLY WITH ADJACENT SIDEWALK CROSS SLOPE FROM BACK OF WALK TO FLOWLINE OF CURB & GUTTER. RE: CITY OF ALBUQUERQUE STANDARD DETAIL DWG. 2236 AND SHEET C390, DETAIL E FOR ADDITIONAL DETAIL.
- CONSTRUCT RETAINING WALL. RE: ARCH/STRUCTURAL PLANS.
- CONSTRUCT 1.0' CURB OPENING. RE: SHEET C390, DETAIL B.
- CONSTRUCT WATER QUALITY POND. RE: SHEET C390, DETAIL F.
- CONSTRUCT CONCRETE OUTLET CONTROL WALL WITH WEIR AND PERFORATED STEEL PLATE. RE: SHEET C390, DETAIL G.
- CONSTRUCT REFUSE ENCLOSURE DRAIN AT LOW POINT. RE: SHEET C501.
- EXISTING CONCRETE STEPS TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION. RE: SHEET C390, DETAIL D.
- CONSTRUCT RAMP AND RAILING. RE: SHEET C201.

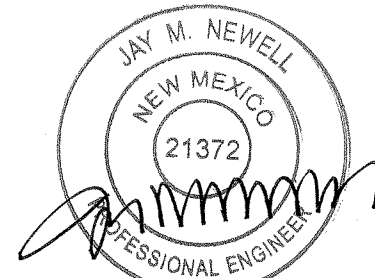
LEGEND

| | |
|-----|-------------------------------|
| --- | PROPERTY LINE |
| --- | EASEMENT LINE |
| --- | EXIST. CURB & GUTTER |
| --- | PROP. CURB & GUTTER |
| --- | EXIST. SIDEWALK |
| --- | PROP. SIDEWALK |
| --- | EXIST. LIGHT POLE |
| --- | PROP. LIGHT POLE |
| --- | EXIST. SIGN |
| --- | PROP. SIGN |
| --- | PROP. BOLLARD |
| --- | LANDSCAPE AREA |
| --- | PROP. HANDICAP PARKING SYMBOL |
| --- | EXIST. OVERHEAD POWER |
| --- | EXIST. WATER VALVE |
| --- | EXIST. POWER POLE |
| --- | EXIST. FIRE HYDRANT |
| --- | EXIST. ELECTRIC METER |
| --- | EXIST. TRAFFIC SIGNAL BOX |
| --- | EXIST. ELECTRIC VAULT |
| --- | EXIST. TRAFFIC SIGNAL POLE |
| --- | EXIST. MANHOLE |
| --- | EXIST. INLET |
| --- | PROP. CONTOUR |
| --- | EXIST. CONTOUR |
| --- | PROP. SAWCUT LINE |
| --- | PROP. TRANSFORMER |

DRAINAGE SUMMARY

(RE: SHEET C390 FOR ADDITIONAL)

| | | | |
|--|-------------------------|-----------|-------------|
| LOT AREA | = 0.58 ACRE | | |
| LOT IMPERVIOUS AREA | = 17,543 SF (0.40 ACRE) | | |
| FIRST FLUSH VOLUME REQ'D (0.34" X IMP. AREA) | = 497 CF | | |
| FIRST FLUSH VOLUME PROVIDED | ELEV (FT) | AREA (SF) | VOLUME (CF) |
| | 53.0 | 367 | 501 |
| | 54.0 | 649 | |
| (FIRST FLUSH VOLUME ELEV. | = 53.72 | | 497) |



I have reviewed a copy of the Grading As-Built, dated October 5, 2015, prepared and stamped by Thomas D. Johnston, New Mexico Registered Land Surveyor No. 14269, and provided the same as-built information on the red-lined as-built plan.

The review is intended only to determine if the improvements as described solely by the as-built plan are in substantial compliance with the overall design intent of the grading and drainage aspects of the project as described on the approved plan(s) and in support of a request for a Certificate of Occupancy.

Upon review it has been found that the 2-foot wide concrete pan on the east side of the building conveys runoff entirely to the south rather than portions to the south and portions to the north. Portions of the pan are also constructed with a flat slope. The finished grade elevations of and near the trash enclosure suggest portions of the adjacent drive aisle may contribute minor runoff to the enclosure. The pond elevations indicate a lower pond bottom and a lower pond weir than described on the approved plans; however, calculations indicate provision of the design volume. In addition and as approved by the city, the ATM that previously existed at the southeast corner of the site has been removed. These and other deviations from the grading and drainage design described on the approved plan(s) represent discrepancies which are minor in nature and/or should impact maintenance of the property rather than the overall drainage design intent.

Based on the review described herein, of the information listed herein, and of this information only, it appears the improvements associated with the grading and drainage aspects of the project have been graded and will drain in substantial compliance with the overall design intent of the approved plan(s).



2009 W. Litterton Blvd. #300
Littleton, CO 80120
303.794.4727 ph
www.SterlingDesignAssociates.com

PREPARED UNDER THE DIRECT SUPERVISION OF
JAY M. NEWELL, P.E.
NEW MEXICO REGISTRATION NO. 21372
FOR & ON BEHALF OF STERLING DESIGN ASSOCIATES, LLC



| | | | |
|---------------------------------|----------------|---------|--|
| STERLING DESIGN ASSOCIATES, LLC | | | |
| ISSUES & REVISIONS | | | |
| NO: 1 | DATE: 03/12/15 | BY: JLO | |
| DESCRIPTION: CITY COMMENTS | | | |
| NO: 2 | DATE: 10/13/15 | BY: JMN | |
| DESCRIPTION: AS-BUILT | | | |
| NO: 3 | DATE: | BY: | |
| DESCRIPTION: | | | |
| NO: 4 | DATE: | BY: | |
| DESCRIPTION: | | | |
| NO: 5 | DATE: | BY: | |
| DESCRIPTION: | | | |
| NO: 6 | DATE: | BY: | |
| DESCRIPTION: | | | |

PROJECT:

63433-001
STARBUCKS DRIVE-THRU
700 JUAN TABO NE
ALBUQUERQUE, NM 87123

DEVELOPER:
STARBUCKS COFFEE COMPANY
2401 UTAH AVENUE SOUTH
SEATTLE, WA 98134
(206) 318-1575

SHEET TITLE:
GRADING & DRAINAGE PLAN
AS-BUILT
SHEET NUMBER:
C301

CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

STARBUCKS COFFEE COMPANY
PORTION OF PARCEL 1-A, TRACT BB
MONARCH VILLAGE CONT 0.5785 ACRES
CITY OF ALBUQUERQUE, COUNTY OF BERNALILLO, STATE OF NEW MEXICO
SITE CONSTRUCTION PLAN

GENERAL NOTES

- REFER TO SHEET C100 FOR ADDITIONAL PROJECT GENERAL NOTES.
- IF, DURING THE OVERLOT GRADING PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER IMMEDIATELY FOR RECOMMENDATIONS.
- ALL EARTHWORK, GRADING, OVERLOT GRADING, BACKFILLING, FILLING, EXCAVATION, COMPACTION, PAVEMENT, AND FLATWORK CONSTRUCTION WILL BE IN ACCORDANCE WITH THE RECOMMENDATIONS FROM THE GEOTECHNICAL INVESTIGATION PREPARED SPECIFICALLY FOR THIS SITE.
- ALL CONCRETE PAVEMENT, CONCRETE FLATWORK, CONCRETE STRUCTURES AND CONCRETE UTILITIES SHALL BE IN ACCORDANCE WITH THE MATERIAL RECOMMENDATIONS FROM THE GEOTECHNICAL INVESTIGATION PREPARED SPECIFICALLY FOR THIS SITE AND THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION PREPARED SPECIFICALLY FOR THIS SITE.
- SPOT ELEVATIONS SHALL TAKE PRECEDENCE OVER CONTOURS AND SLOPES SHOWN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SPOT ELEVATIONS WHICH DO NOT APPEAR TO BE CONSISTENT WITH THE CONTOURS AND SLOPES. SPOT ELEVATIONS AND SPECIFIC PROFILE DESIGN SHALL BE USED FOR SETTING ELEVATIONS OF CURB AND GUTTER AND UTILITIES.
- SPOT ELEVATIONS REPRESENT FLOWLINE (BOTTOM FACE OF CURB) WHERE SHOWN AT CURB AND GUTTER UNLESS OTHERWISE NOTED.
- CONTOURS SHOWN ARE FOR FINISHED PAVING, SIDEWALK, SLAB, OR GROUND. ADJUSTMENT TO SUBGRADE IS THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING HIS OWN ESTIMATE OF EARTHWORK QUANTITIES.
- REFER TO SITE PLAN FOR EXTENT OF PAVEMENT AND PAVEMENT SECTIONS.
- GRADES WITHIN ASPHALT PAVING AREAS SHALL BE CONSTRUCTED TO WITHIN 0.10 FEET OF THE DESIGN GRADE. HOWEVER, THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL PAVEMENT AREAS AND ALONG CURBS. ALL CURBS SHALL BE BUILT IN ACCORDANCE WITH THE PLAN. CURBS OR PAVEMENT AREAS WHICH DO NOT PROVIDE PROPER DRAINAGE MUST BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL HAVE FORMS CHECKED BY A SURVEYOR FOR CURB AND GUTTER ADJACENT TO EXISTING ASPHALT OR CONCRETE. THE CROSS SLOPE SHALL NOT BE LESS THAN 2% OR GREATER THAN 4% FROM THE EXISTING SAWCUT LINE TO THE PROPOSED LIP OF GUTTER. DO NOT PLACE CONCRETE IN FORMS THAT HAVE BEEN CHECKED TO BE OR APPEAR IN ANY WAY INCORRECT. CONTACT THE ENGINEER IMMEDIATELY IF A PROBLEM SHOULD ARISE.
- THE CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- THE CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL LANDSCAPED AND PAVED AREA.
- ALL DISTURBED AREAS THAT ARE NOT DESIGNATED TO BE PAVED SHALL BE LANDSCAPED OR SEEDED, ACCORDING TO THE LANDSCAPE PLAN.
- EXISTING DRAINAGE STRUCTURES SHALL BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- IF ANY EXISTING STRUCTURES, SIDEWALK, AND/OR CURB AND GUTTER MODIFIED OR TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER PRIOR TO PROJECT CLOSEOUT.
- ALL GRATES, MANHOLE RIMS, VALVE BOXES, VALVE COVERS, CLEANOUTS, AND VAULT OR BOX COVERS SHALL BE ADJUSTED TO "AS CONSTRUCTED" FINISHED GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.
- NO PROPOSED SLOPE IN LANDSCAPED AREAS OR OPEN SPACE SHALL EXCEED THREE (3) HORIZONTAL FEET TO ONE (1) VERTICAL FOOT, OR AS OTHERWISE SPECIFIED BY LOCAL CRITERIA.
- THE CONTRACTOR SHALL PROTECT THE PROJECT BENCHMARK THROUGHOUT CONSTRUCTION AND SET ADDITIONAL PROJECT BENCHMARKS AS NECESSARY TO MAINTAIN VERTICAL CONTROL THROUGHOUT THE DURATION OF THE PROJECT.
- THE CONTRACTOR SHALL FILL AND COMPACT BASEMENTS, CESSPOOLS, AND OTHER LARGE EXCAVATED AREAS WITH CLEAN FILL SUITABLE TO THE OWNER, AND IN ACCORDANCE WITH RECOMMENDATIONS OBTAINED FROM THE GEOTECHNICAL REPORT OR GEOTECHNICAL ENGINEER AND GRADE TO MATCH EXISTING OR PROPOSED FINISH GRADE; OR CONFIRM SUCH WORK HAS BEEN PERFORMED PRIOR TO CONSTRUCTION.

GRADING NARRATIVE

EXISTING SITE TOPOGRAPHY GENERALLY SLOPES AT APPROXIMATELY 6% FROM THE EAST TO THE WEST ACROSS THE EXISTING PAVED PARKING LOT. EXISTING PERIMETER LANDSCAPE AREAS ARE STEEPER.

PROPOSED GRADING IMPROVEMENTS INCLUDE PROVIDING A RELATIVELY FLAT PAD FOR THE PROPOSED BUILDING, PEDESTRIAN, AND ASSOCIATED ADA ACCESS AREAS. PROPOSED PERIMETER DRIVE AND PARKING AREAS INCLUDE SLOPES OF 1% TO 6%. PERIMETER LANDSCAPE AREAS THEREFORE INCLUDE SLOPES OF UP TO 3:1. A PROPOSED RETAINING WALL (MAXIMUM HEIGHT EQUALS APPROXIMATELY 4.5-FEET) IS REQUIRED TO ACCOMMODATE THE PROPOSED GRADES IN THE NORTHEAST CORNER OF THE SITE. CUT AND FILL DEPTHS ARE BOTH PROPOSED TO BE APPROXIMATELY 3-FEET MAXIMUM. THE SITE WILL GENERALLY CONVEY STORMWATER RUNOFF IN CONFORMANCE WITH THE EXISTING DRAINAGE SYSTEM. RUNOFF WILL BE CONVEYED AS SHEET FLOW ACROSS THE PAVED AREAS TO LOW POINTS ALONG THE PERIMETER CURB AND GUTTER. THREE CURB OPENINGS WILL DIRECT RUNOFF TO AND ACROSS THE PERIMETER LANDSCAPE AREAS BEFORE DISCHARGING AS SURFACE FLOW TO THE PUBLIC STREET STORM SEWER SYSTEM.

THE REQUIRED FIRST FLUSH VOLUME WILL BE PROVIDED IN AN ON-SITE POND DOWNSTREAM OF TWO OF THE PROPOSED CURB OPENINGS AND WILL DISCHARGE ACROSS THE PERIMETER LANDSCAPE AREAS AS SURFACE FLOW TO THE PUBLIC STREET STORM SEWER SYSTEM.

A METAL PLATE PERFORATED WITH 0.25" DIA. HOLES AT 4" ON CENTER VERTICALLY WILL CONTROL THE RELEASE OF THE FIRST FLUSH VOLUME TO DISCHARGE OVER 40 HOURS. RUNOFF IN EXCESS OF THE FIRST FLUSH WILL DISCHARGE THROUGH A CONCRETE WEIR OPENING.

REFER TO THE DRAINAGE SUMMARY ON THIS SHEET, AND THE PEAK DISCHARGE AND OUTLET CALCULATIONS ON SHEET C390 FOR ADDITIONAL INFORMATION.

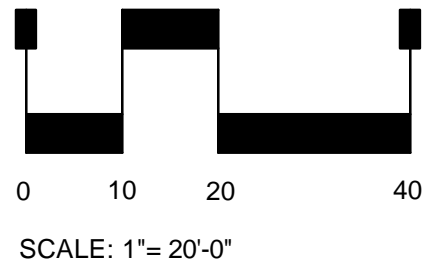
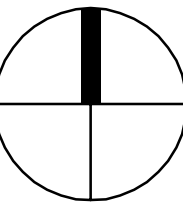
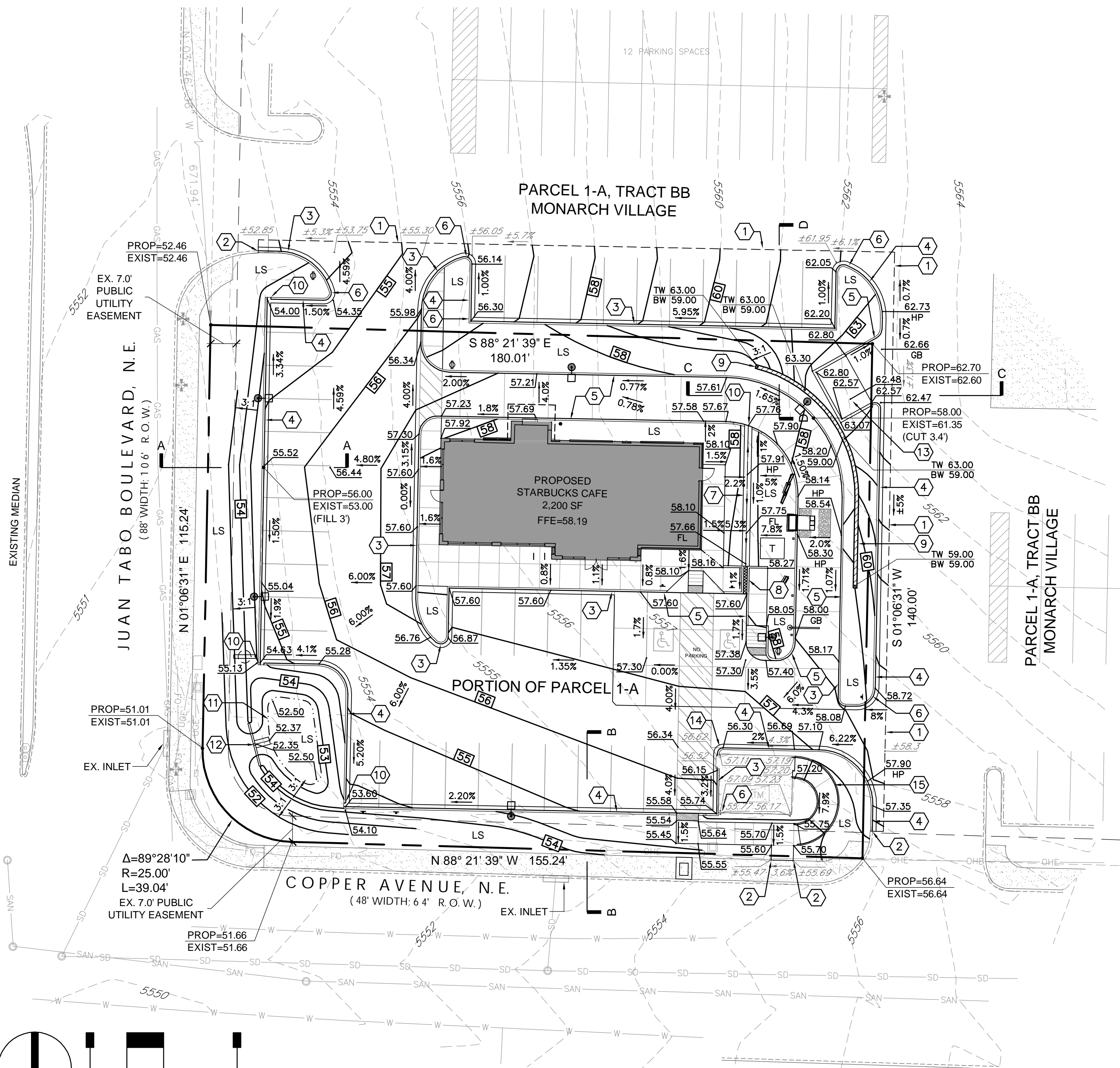


CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER (1-800-245-4545) AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

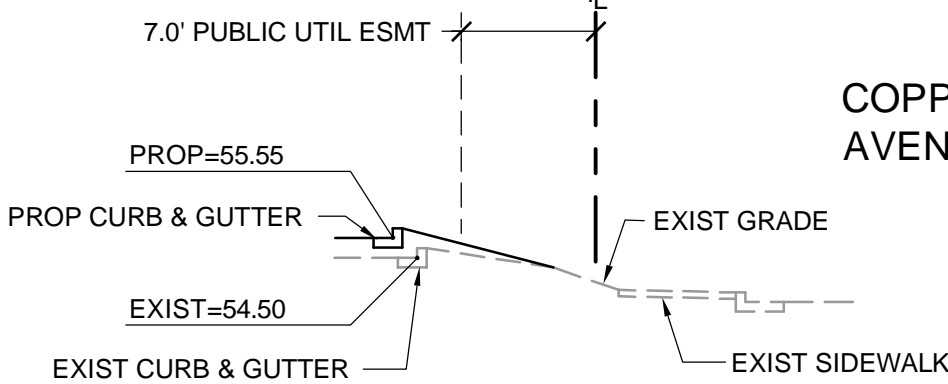
THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS AND UTILITIES AND SHALL REPAIR ANY DAMAGE AT HIS EXPENSE.



JUAN TABO BOULEVARD

SECTION A-A

NOT TO SCALE



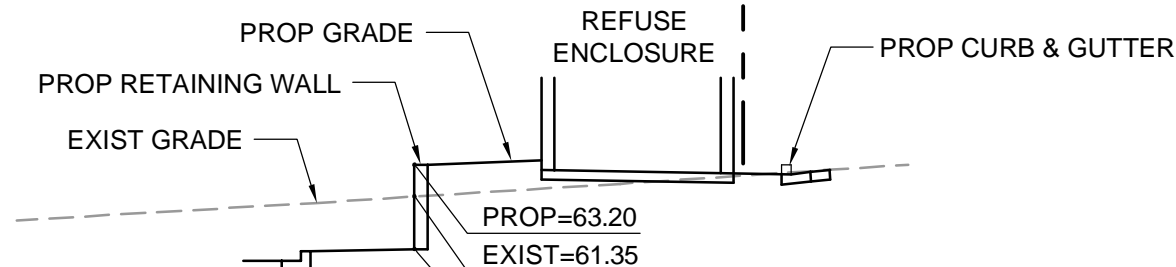
SECTION B-B

NOT TO SCALE

COPPER AVENUE

SECTION C-C

NOT TO SCALE



SECTION D-D

NOT TO SCALE

CONSTRUCTION NOTES

- SAWCUT AND/OR REMOVE EXISTING PAVEMENT, CONCRETE, CURB RAMPS, AND/OR CURB & GUTTER TO NEAREST JOINT, OR TO LIMITS AS SHOWN.
- CONSTRUCT IMPROVEMENTS TO MATCH LINE AND GRADE OF EXISTING PAVEMENT, WALK, AND/OR CURB & GUTTER.
- CONSTRUCT 6-INCH CONCRETE CURB & GUTTER WITH 1-FOOT SPILL PAN. RE: SHEET C390, DETAIL C.
- CONSTRUCT 6-INCH CONCRETE CURB & GUTTER WITH 1-FOOT CATCH PAN. RE: SHEET C390, DETAIL C.
- CONSTRUCT 6-INCH CONCRETE INTEGRAL CURB. RE: SHEET C390, DETAIL C.
- CONSTRUCT TRANSITION FROM CATCH TO SPILL PAN. FIELD VERIFY THAT RUNOFF WILL COMPLETELY EXIT PAN ONTO ADJACENT PAVEMENT.
- CONSTRUCT 2-FOOT WIDE CONCRETE PAN AS SHOWN. RE: SHEET C390, DETAIL A.
- CONSTRUCT 1-FOOT WIDE (SINGLE) SIDEWALK CULVERT WITH STEEL PLATE TOP AND WITHOUT V-SHAPED INVERT. DEPTH OF CULVERT OPENING SHALL BE CONSISTENT 6" FROM TOP OF TOP PLATE TO INVERT. FULL WIDTH OF CULVERT (1') SHALL SLOPE CONSISTENTLY WITH ADJACENT SIDEWALK CROSS SLOPE FROM BACK OF WALK TO FLOWLINE OF CURB & GUTTER. RE: CITY OF ALBUQUERQUE STANDARD DETAIL DWG. 2236 AND SHEET C390, DETAIL E FOR ADDITIONAL DETAIL.
- CONSTRUCT RETAINING WALL. RE: ARCH/STRUCTURAL PLANS.
- CONSTRUCT 1.0' CURB OPENING. RE: SHEET C390, DETAIL B.
- CONSTRUCT WATER QUALITY POND. RE: SHEET C390, DETAIL F.
- CONSTRUCT CONCRETE OUTLET CONTROL WALL WITH WEIR AND PERFORATED STEEL PLATE. RE: SHEET C390, DETAIL G.
- CONSTRUCT REFUSE ENCLOSURE DRAIN AT LOW POINT. RE: SHEET C501.
- EXISTING CONCRETE STEPS TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION. RE: SHEET C390, DETAIL D.
- CONSTRUCT RAMP AND RAILING. RE: SHEET C201.

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- EXIST. CURB & GUTTER
- PROP. CURB & GUTTER
- EXIST. SIDEWALK
- PROP. SIDEWALK
- EXIST. LIGHT POLE
- PROP. LIGHT POLE
- EXIST. SIGN
- PROP. SIGN
- PROP. BOLLARD
- LANDSCAPE AREA
- PROP. HANDICAP PARKING SYMBOL
- EXIST. OVERHEAD POWER
- EXIST. WATER VALVE
- EXIST. POWER POLE
- EXIST. FIRE HYDRANT
- EXIST. ELECTRIC METER
- EXIST. TRAFFIC SIGNAL BOX
- EXIST. ELECTRIC VAULT
- EXIST. TRAFFIC SIGNAL POLE
- EXIST. MANHOLE
- EXIST. INLET
- PROP. CONTOUR
- EXIST. CONTOUR
- PROP. SAWCUT LINE
- PROP. TRANSFORMER

DRAINAGE SUMMARY

(RE: SHEET C390 FOR ADDITIONAL)

| | | | |
|--|-------------------------|-----------|-------------|
| LOT AREA | = 0.58 ACRE | | |
| LOT IMPERVIOUS AREA | = 17,543 SF (0.40 ACRE) | | |
| FIRST FLUSH VOLUME REQ'D (0.34" X IMP. AREA) | = 497 CF | | |
| FIRST FLUSH VOLUME PROVIDED | ELEV (FT) | AREA (SF) | VOLUME (CF) |
| | 53.0 | 367 | 501 |
| | 54.0 | 649 | |
| (FIRST FLUSH VOLUME ELEV. | = 53.72 | | 497) |



2009 W. Littleton Blvd. #300
Littleton, CO 80120
303.794.4727 ph
www.SterlingDesignAssociates.com

PREPARED UNDER THE DIRECT SUPERVISION OF
JAY M. NEWELL, P.E.
NEW MEXICO REGISTRATION NO. 21372
FOR & ON BEHALF OF STERLING DESIGN ASSOCIATES, LLC



STERLING DESIGN ASSOCIATES, LLC

| | |
|----------------------------|----------------|
| ISSUES & REVISIONS | |
| NO: 1 | DATE: 03/12/15 |
| DESCRIPTION: CITY COMMENTS | BY: JLO |
| NO: 2 | DATE: |
| DESCRIPTION: | BY: |
| NO: 3 | DATE: |
| DESCRIPTION: | BY: |
| NO: 4 | DATE: |
| DESCRIPTION: | BY: |
| NO: 5 | DATE: |
| DESCRIPTION: | BY: |
| NO: 6 | DATE: |
| DESCRIPTION: | BY: |

| | |
|----------------------|--------------------|
| DATE: 09/23/14 | SCALE: 1" = 20'-0" |
| PROJECT MANAGER: JLO | PROJECT NO: |
| DRAWN BY: JMN | DRAWING FILE: |

PROJECT:



63433-001
STARBUCKS DRIVE-THRU
700 JUAN TABO NE
ALBUQUERQUE, NM 87123

DEVELOPER:

STARBUCKS COFFEE COMPANY
2401 UTAH AVENUE SOUTH
SEATTLE, WA 98134
(206) 318-1575

SHEET TITLE:

GRADING & DRAINAGE PLAN

SHEET NUMBER:

C301

STARBUCKS COFFEE COMPANY
PORTION OF PARCEL 1-A, TRACT BB
MONARCH VILLAGE CONT 0.5785 ACRES
CITY OF ALBUQUERQUE, COUNTY OF BERNALILLO, STATE OF NEW MEXICO
SITE CONSTRUCTION PLAN

PEAK DISCHARGE CALCULATIONS

TABLE A-9 METHOD

| | | |
|---------------------|----------|-------------------|
| PRECIPITATION ZONE: | 4 | (ADPM, FIG. A-1) |
| LAND TREATMENT: | D | (ADPM, TABLE A-4) |
| WATERSHED AREA: | 0.58 AC. | |
| Tc: | 12 MIN. | (ADPM, SECT. A.6) |

| | | |
|----------------------|----------------------|-------------------|
| PEAK DISCHARGE RATE: | 100-YR = 5.25 CFS/AC | (ADPM, TABLE A-9) |
| | 10-YR = 3.57 CFS/AC | (ADPM, TABLE A-9) |
| | 2-YR = 2.17 CFS/AC | (ADPM, TABLE A-9) |
| PEAK DISCHARGE: | 100-YR = 3.05 CFS | |
| | 10-YR = 2.07 CFS | |
| | 2-YR = 1.26 CFS | |

RATIONAL METHOD

| | | |
|-----------------------|---------------|--------------------|
| RATIONAL COEFFICIENT: | 100-YR = 0.94 | (ADPM, TABLE A-11) |
| | 10-YR = 0.93 | (ADPM, TABLE A-11) |
| | 2-YR = 0.93 | (ADPM, TABLE A-11) |

| | | |
|---------------------|---------------------|--------------------|
| RAINFALL INTENSITY: | 100-YR = 5.61 IN/HR | (ADPM, TABLE A-10) |
| | 10-YR = 3.83 IN/HR | (ADPM, TABLE A-10) |
| | 2-YR = 2.34 IN/HR | (ADPM, TABLE A-10) |

| | | |
|-----------------|-------------------|--|
| PEAK DISCHARGE: | 100-YR = 3.06 CFS | |
| | 10-YR = 2.07 CFS | |
| | 2-YR = 1.26 CFS | |

(ADPM = ALBUQUERQUE DEVELOPMENT PROCESS MANUAL)

OUTLET CALCULATIONS

PERFORATED PLATE

| | | |
|------------------|--------------------------|--|
| VOLUME: | 497 CF (0.0114 AC-FT) | |
| HEIGHT: | 1.37 FT (53.72 TO 52.35) | |
| Td (DRAIN TIME): | 40 HR | |
| S (SLOPE): | 0.5% | |

| | | |
|-------------------------|--------------|-----------------------------------|
| Ao (OPEN AREA PER ROW): | 0.048 SQ.IN. | (UDFCD, DCM, VOL. III, EQ. EDB-3) |
|-------------------------|--------------|-----------------------------------|

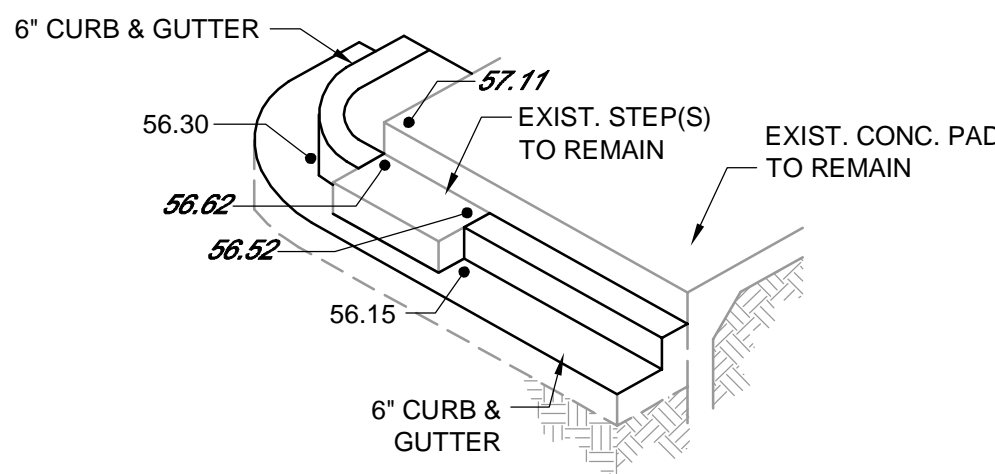
| | | |
|-------------------|----------|------------------------------------|
| ORIFICE DIAMETER: | 0.25 IN. | (UDFCD, DCM, VOL. III, TABLE OS-1) |
|-------------------|----------|------------------------------------|

WEIR

| | |
|-----------------------|----------|
| PEAK DISCHARGE: | 3.06 CFS |
| C (WEIR COEFFICIENT): | 3.33 |
| LENGTH: | 6.25 FT. |

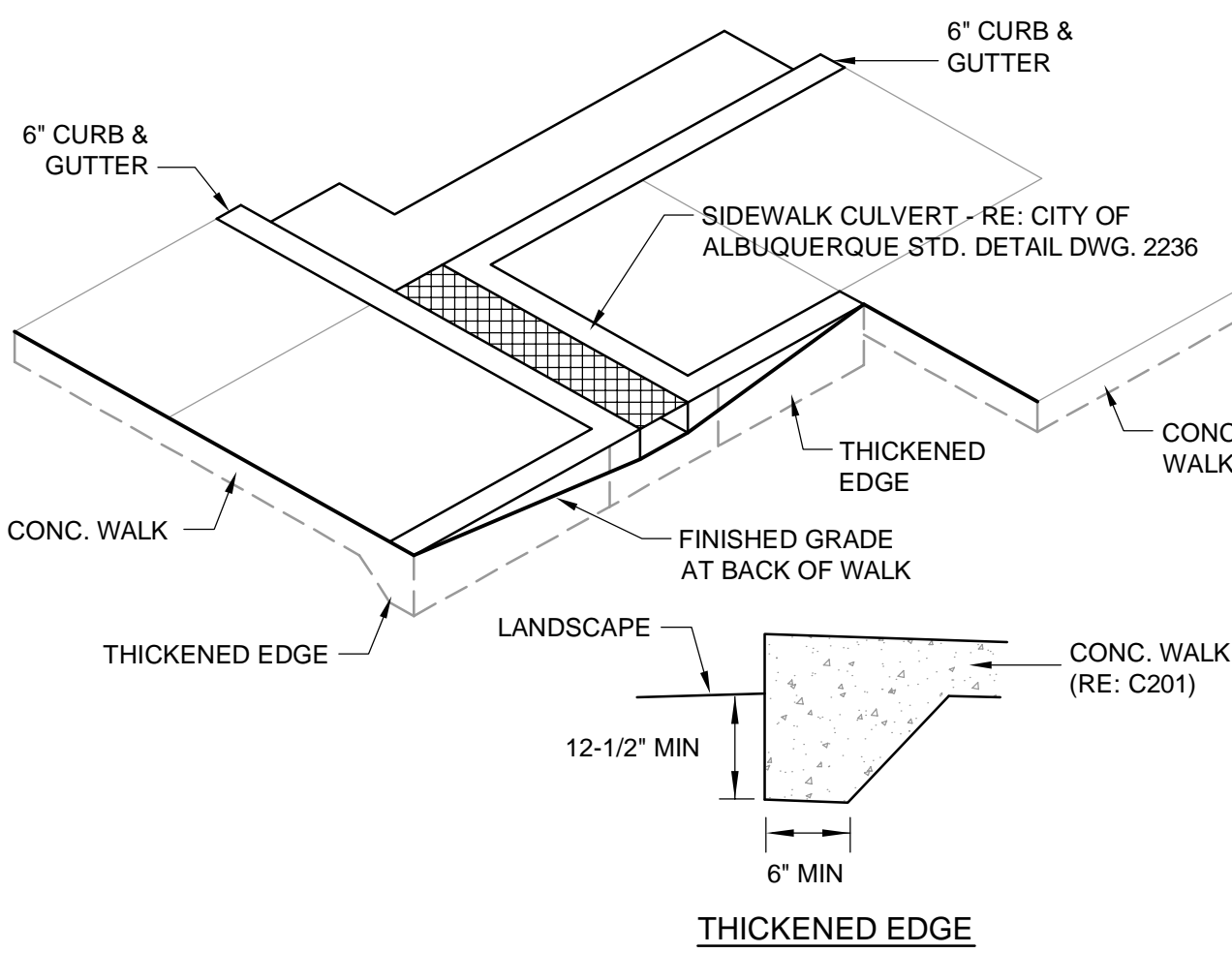
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|---------------------|----------|
| H (HEIGHT OF WEIR): | 0.28 FT. |
|---------------------|----------|

(UDFCD, DCM = URBAN DRAINAGE FLOOD CONTROL DISTRICT, DRAINAGE CRITERIA MANUAL)



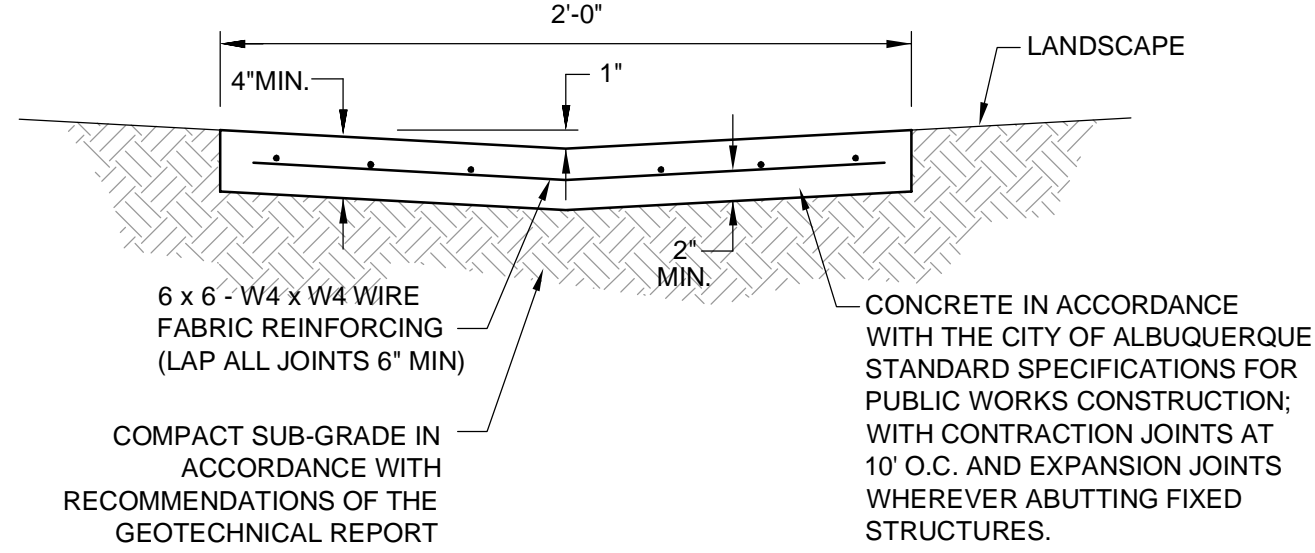
EXISTING STEP DETAIL

NOT TO SCALE



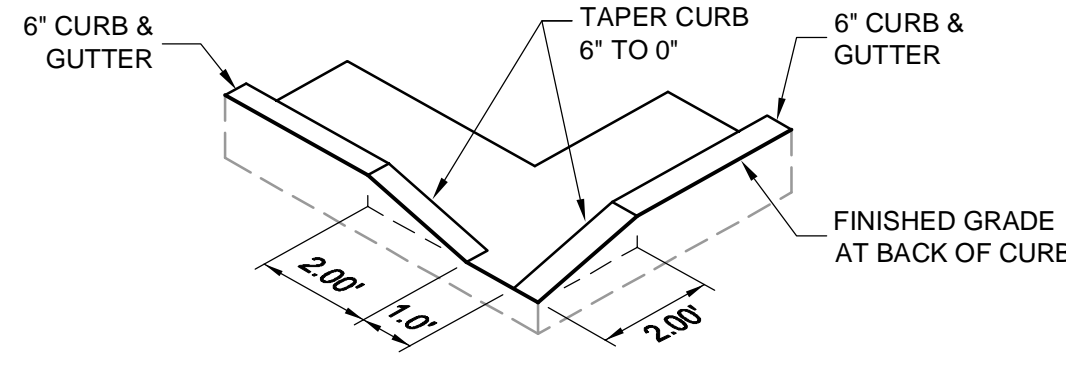
PEAK DISCHARGE CALCULATIONS

NOT TO SCALE

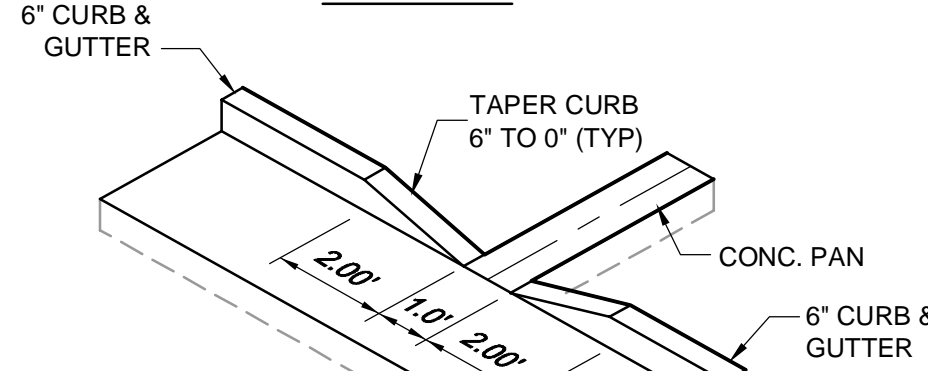


PRIVATE VALLEY PAN

NOT TO SCALE



AT CORNER

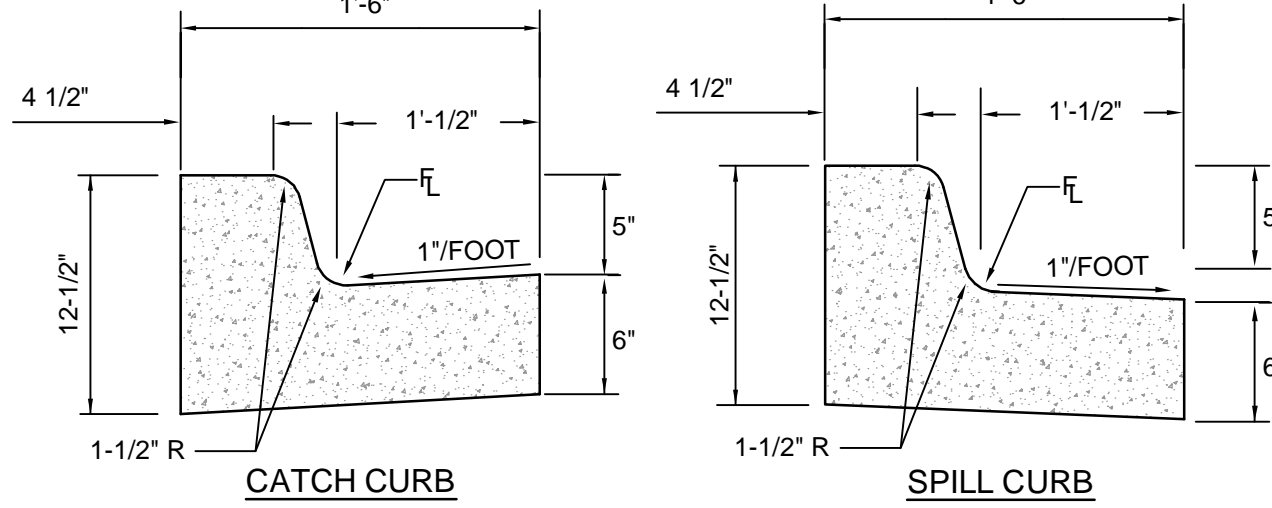


AT CONC. PAN

COMPACT SUBGRADE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT

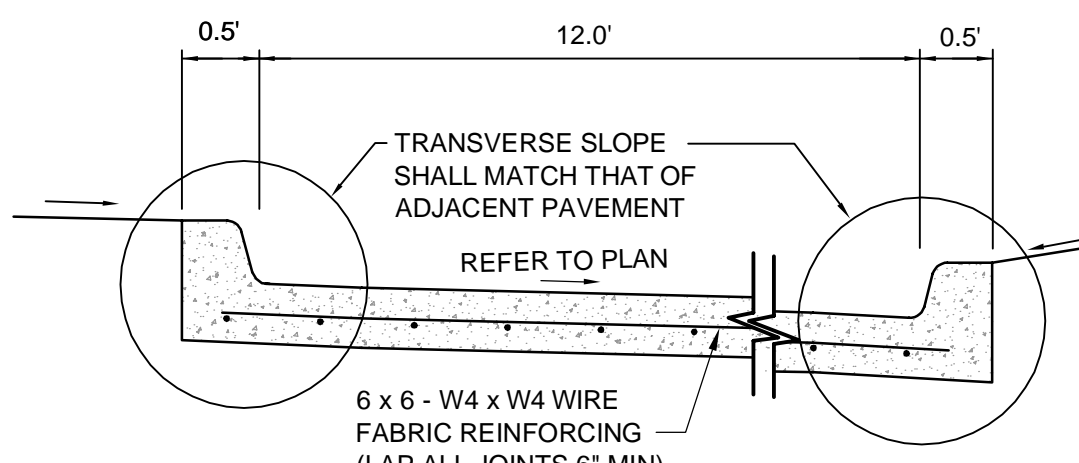
CURB OPENING

NOT TO SCALE



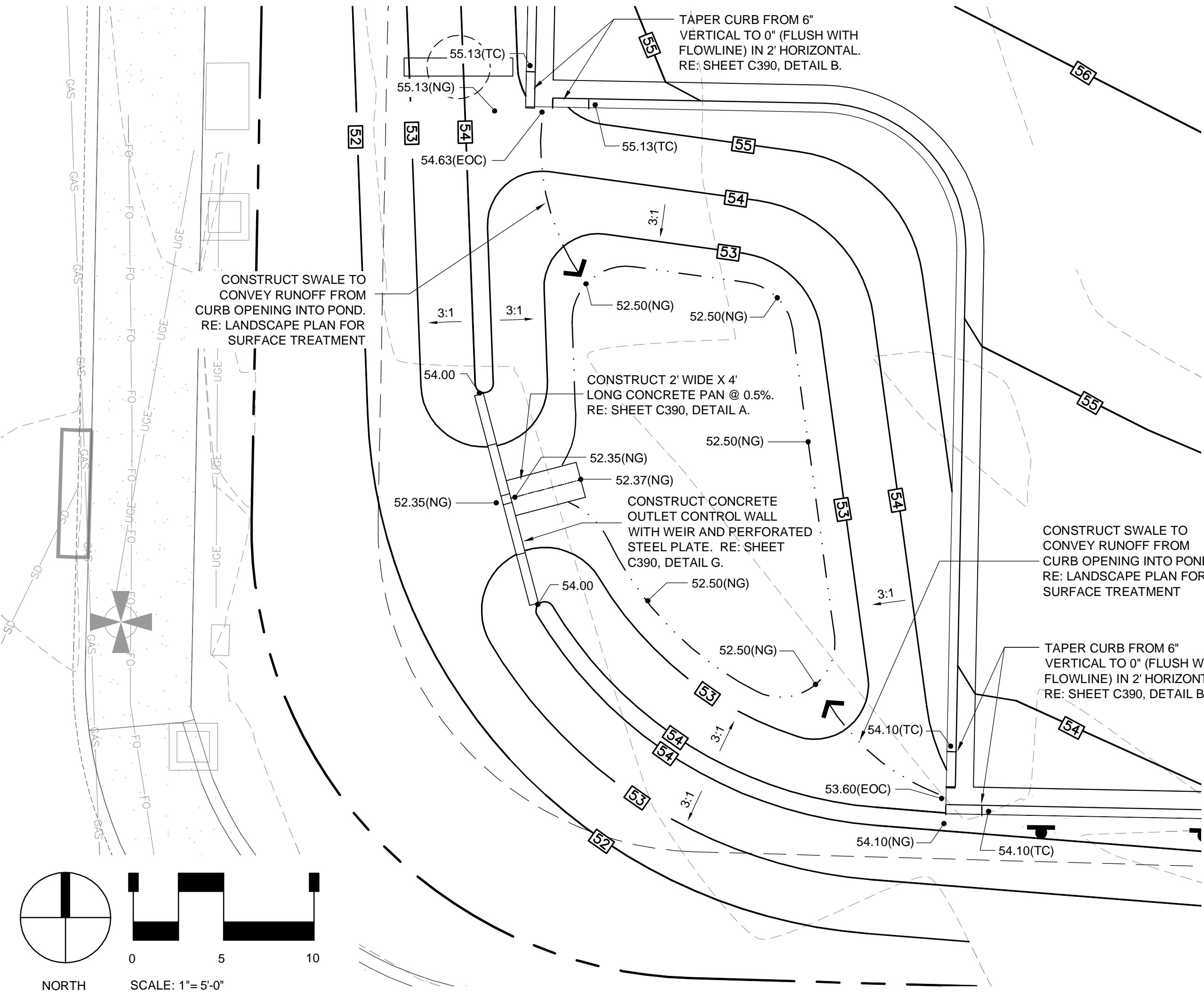
CATCH CURB

SPILL CURB



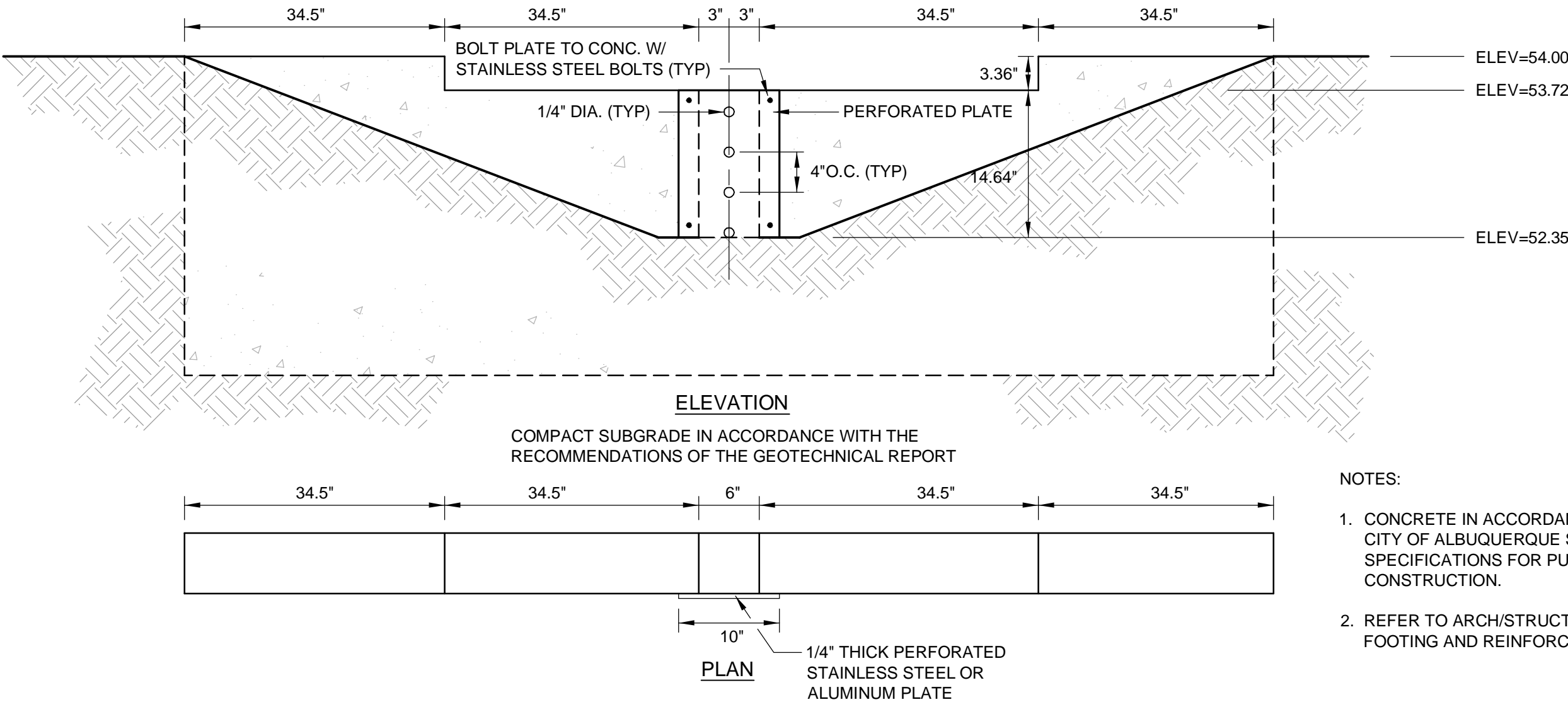
PRIVATE CURB & GUTTER

NOT TO SCALE



WATER QUALITY POND

NOT TO SCALE



OUTLET CONTROL WALL

NOT TO SCALE

NOTES:

1. CONCRETE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. REFER TO ARCH/STRUCTURAL PLANS FOR FOOTING AND REINFORCING DETAIL.

Sterling Design Associates, Inc
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS

2009 W. Littleton Blvd. #300
Littleton, CO 80120
303.794.4727 ph
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STERLING DESIGN ASSOCIATES, LLC

| | | |
|----------------------------|----------------|---------|
| ISSUES & REVISIONS | | |
| NO: 1 | DATE: 03/12/15 | BY: JLO |
| DESCRIPTION: CITY COMMENTS | | |
| NO: 2 | DATE: | BY: |
| DESCRIPTION: | | |
| NO: 3 | DATE: | BY: |
| DESCRIPTION: | | |
| NO: 4 | DATE: | BY: |
| DESCRIPTION: | | |
| NO: 5 | DATE: | BY: |
| DESCRIPTION: | | |
| NO: 6 | DATE: | BY: |
| DESCRIPTION: | | |

| | |
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| JMN | |

PROJECT:



63433-001

STARBUCKS DRIVE-THRU
700 JUAN TABO NE
ALBUQUERQUE, NM 87123

DEVELOPER:
STARBUCKS COFFEE COMPANY
2401 UTAH AVENUE SOUTH
SEATTLE, WA 98134
(206) 318-1575

SHEET TITLE:
GRADING DETAILS

SHEET NUMBER:

C390

CITY OF ALBUQUERQUE

Planning Department

Suzanne Lubar, Director



Mayor Richard J. Berry

October 19, 2015

Jay Newell, P.E.
Sterling Design Associates, LLC
2009 W. Littleton Blvd. Suite 300
Littleton, CO 80120

**RE: Starbucks
700 Juan Tabo Blvd. NE
Grading and Drainage Plan
Engineers Stamp Date 3/12/15 (K22D006B)
Certification Dated 10/19/15**

PO Box 1293

Dear Mr. Newell,

Albuquerque

Based upon the information provided in your submittal received 10/19/15, this certification is approved for Permanent Certificate of Occupancy.

New Mexico 87103

If you have any questions, please contact me at 924-3695 or Rudy Rael at 924-3977.

www.cabq.gov

Sincerely,

Rita Harmon, P.E.
Senior Engineer, Hydrology
Planning Department

RR/RH
C: File