

CONSTRUCTION PLANS FOR MAVERIK, INC. - SITE CODE CO-0258

I-25 & COUNTY LINE ROAD MONUMENT, CO
EL PASO COUNTY, CO
LOCATED AT I-25 & COUNTY LINE RD.

Remove Construction Plans, title Site Development Plan

HORROCKS ENGINEERS
555 South Bluff St. Suite 101
St. George, UT 84770
(435) 966-7888
www.horrocks.com

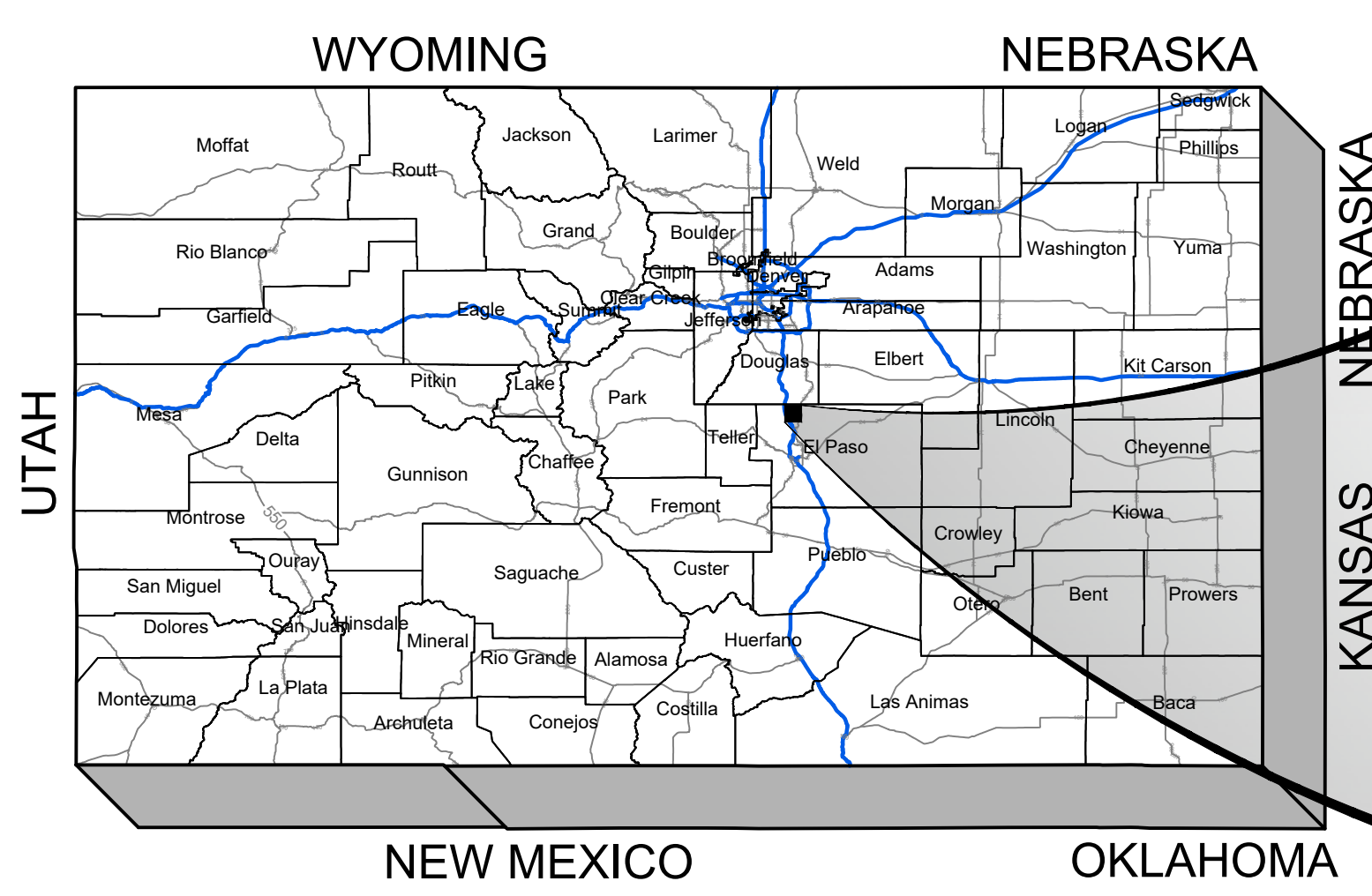
WARNING
IF THIS BAR DOES NOT MEASURE 2" THEN DRAWING IS NOT TO SCALE

REVISIONS	DATE	REV #	DATE

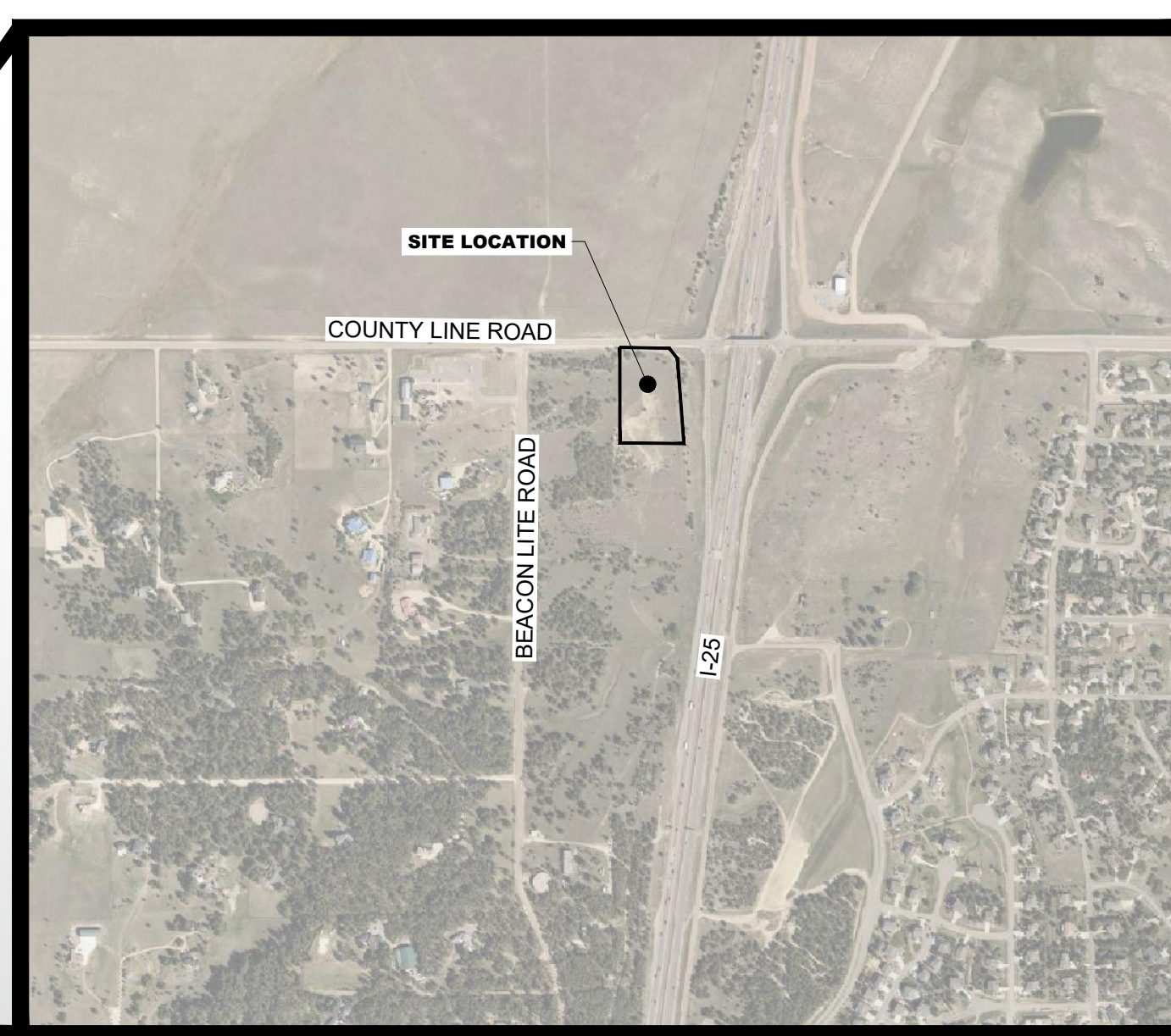
**PRELIMINARY
NOT FOR
CONSTRUCTION**

MAVERIK, INC. - SITE CODE CO-0258
I-25 & COUNTY LINE ROAD
MONUMENT, CO
COVER SHEET & SHEET INDEX

C.O.O
PAGE 1



STATE MAP



VICINITY MAP



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32	E-1.9	ELECTRICAL CUT SHEETS
33	E-2.0	ELECTRICAL CUT SHEETS
34	E-2.1	ELECTRICAL CUT SHEETS
35	E-2.2	ELECTRICAL CUT SHEETS

OWNER/APPLICANT:

MAVERIK, INC.
185 S STATE STREET, SUITE 800
SALT LAKE CITY, UT
(801) 683-3237
CONTACT: PAUL HEYWOOD

CIVIL ENGINEER:

HORROCKS ENGINEERS
2162 West Grove Pkwy., Suite 400
Pleasant Grove, UT 84062
(801) 763-5100
CONTACT: SCOTT DUFFIN, PE

LANDSCAPE ARCHITECT:

HORROCKS ENGINEERS
2162 West Grove Pkwy., Suite 400
Pleasant Grove, UT 84062
(801) 763-5100
CONTACT: ZACH SCOTT, PLA

Add legal description, benchmark & basis of bearings.

Add floodplain statement.

ENGINEER'S NOTICE TO CONTRACTOR
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE DRAWINGS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE DRAWINGS AND WE ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OF THEIR DEPICTED LOCATION ON THESE DRAWINGS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN, AND ALL OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE DRAWINGS BY VERIFICATION OF THEIR LOCATION IN THE FIELD PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

LEGAL NOTICE TO CONTRACTOR
USE OF THE INFORMATION CONTAINED IN THIS INSTRUMENT FOR OTHER THAN THE SPECIFIC PURPOSE FOR WHICH IT WAS INTENDED AND FOR OTHER THAN THE CLIENT FOR WHOM IT WAS PREPARED IS FORBIDDEN UNLESS EXPRESSLY PERMITTED IN WRITING IN ADVANCE TO HORROCKS ENGINEERS. HORROCKS ENGINEERS SHALL HAVE NO LIABILITY TO ANY USE OF THIS INFORMATION WITHOUT THEIR WRITTEN CONSENT.

Add PCD File No. PPR-21-054



Know what's below.
Call before you dig.



GENERAL NOTES

1. THE BOUNDARY FOR MAVERIK SITE CODE #0258 IS BASED ON INFORMATION PROVIDED BY ROSENBERG ASSOCIATES.
2. EXISTING TOPOGRAPHY IS BASED ON THE ALTA PERFORMED BY ROSENBERG ASSOCIATES.
3. ALL CONSTRUCTION SHALL COMPLY WITH EL PASO COUNTY CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND CONSTRUCTION SPECIFICATIONS. WHEN REQUIREMENTS IN THE CONSTRUCTIONS SPECIFICATIONS, DESIGN STANDARDS, OR CONSTRUCTION DRAWINGS CONFLICT THEN THE MORE STRINGENT REQUIREMENT SHALL APPLY.
4. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO THE COMMENCEMENT OF ANY WORK ON THE PROJECT.
5. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR ANY AND ALL DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
6. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE DRAINAGE IMPROVEMENTS ARE IN PLACE AND FUNCTIONING.
7. ALL CONTRACTORS WORKING WITHIN THE PROJECT BOUNDARIES ARE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, SAFETY DEVICES AND CONTROL OF TRAFFIC WITHIN AND AROUND THE CONSTRUCTION AREA.
8. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES A COPY OF THE APPROVED CONSTRUCTION PLANS ON WHICH IS RECORDED THE ACTUAL LOCATIONS OF THE CONSTRUCTED UTILITIES AND ANY OTHER UTILITIES ENCOUNTERED. THE CONTRACTOR SHALL PROVIDE THESE LOCATIONS TO THE DESIGN ENGINEER.
9. THE CONTRACTOR(S) SHALL REMOVE ALL OBSTRUCTIONS, BOTH ABOVE AND BELOW GROUND, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THIS SHALL INCLUDE CLEARING AND GRUBBING WHICH CONSISTS OF CLEARING THE GROUND SURFACE OF ALL TREES, STUMPS, BRUSH, UNDERGROWTH, HEDGES, HEAVY GROWTH OF GRASS OR WEEDS, FENCES, STRUCTURES, DEBRIS, RUBBISH, AND SUCH MATERIAL WHICH IN THE OPINION OF THE ENGINEER, IS UNSUITABLE FOR THE FOUNDATION OF PAVEMENTS. ALL MATERIAL NOT SUITABLE FOR FUTURE USE ON SITE SHALL BE DISPOSED OF OFF SITE.
10. OWNER/DEVELOPER/CONTRACTOR IS REQUIRED TO CALL BLUE STAKES OF COLORADO (811) 1-800-922-1987 AT LEAST (2) BUSINESS DAYS PRIOR TO CONSTRUCTION, TO DETERMINE LOCATION OF UNDERGROUND UTILITIES.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL RECOMMENDATIONS WITHIN THE GEOTECHNICAL REPORT.
12. GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF WORK AND BETWEEN TRADES. SUB-CONTRACTORS ARE ALSO RESPONSIBLE FOR COORDINATION WITH OTHER TRADES AND DISCIPLINES INCLUDED IN THE CONTRACT DOCUMENTS. IF ANY DISCREPANCIES ARE FOUND, THE GENERAL CONTRACTOR IS TO NOTIFY ENGINEER IMMEDIATELY BEFORE COMMENCEMENT OF WORK. NO EXTRA COSTS TO THE PROJECT WILL BE INCURRED DUE TO FAILURE OF GENERAL CONTRACTOR AND/OR SUB-CONTRACTORS TO REVIEW CONTRACT DOCUMENTS AND COORDINATE WITH OTHER TRADES.
13. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND CITY STANDARDS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COPY OF "RECORD DRAWINGS" PLANS TO THE APPROPRIATE AGENCIES PRIOR TO FINAL ACCEPTANCE OF WORK.

UTILITY NOTES

WATER NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO "THE INTERNATIONAL PLUMBING CODE", AND THE "UNIFORM BUILDING CODE" LATEST EDITION.
2. THE POTABLE WATER SUPPLY TO LAWN IRRIGATION SYSTEMS SHALL BE PROTECTED AGAINST BACKFLOW PER THE "INTERNATIONAL PLUMBING CODE (IPC)" SECTION 608.16.5 AND FIRE SPRINKLER SYSTEMS PER (IPC) 608.16.4.
3. 14 GAUGE WIRE SHALL BE TAPED TO ALL WATER LINES FOR LOCATING PURPOSES. THE WIRE SHALL ALSO BE BROUGHT UP AT EACH VALVE BOX AND HYDRANT.
4. THRUST RESTRAINT ON THE NEW PIPELINE WILL BE AS SHOWN ON THE DETAILS. USE MEGA-LUG ON THE FITTINGS AND FIELD LOCK GASKETS ON THE REQUIRED LENGTH OF RESTRAINED PIPE.
5. ANY CHANGES MADE IN THE FIELD MUST BE FIRST APPROVED AND DOCUMENTED BY EL PASO COUNTY WATER SERVICES REPRESENTATIVE.
6. ALL NEW FIRE HYDRANTS SHALL BE INSTALLED AT THE CORRECT HEIGHT. RISERS WILL NOT BE ALLOWED.
7. IRRIGATION WATER WORKS MAY REQUIRE ADDITIONAL APPROVALS FROM RESPECTIVE IRRIGATION COMPANIES. RAISE ALL UTILITIES, SUCH AS MANHOLES, METER SETTERS, FIRE HYDRANTS, WATER VALVE LIDS, ETC. TO ROADWAY OR PROJECT FINISHED GRADE AS MAY BE APPLICABLE.
8. RAISE ALL UTILITIES, SUCH AS MANHOLES, METER SETTERS, FIRE HYDRANTS, WATER VALVE LIDS, ETC. TO ROADWAY OR PROJECT FINISHED GRADE AS MAY BE APPLICABLE.

SEWER NOTES

1. ALL NEW SEWER SYSTEMS WILL BE MANDREL AND AIR TESTED.
2. SEWER LENGTHS AND SLOPES ON THE PROFILE VIEWS ARE MEASURED FROM CENTER-CENTER OF MANHOLES.

UTILITY NOTES

POWER NOTES

1. PRIMARY POWER FROM SWITCH TO SWITCH SHALL BE 750 WIRE IN 4" CONDUIT.
2. PRIMARY POWER FROM VAULT TO TRANSFORMER SHALL BE 1/0 WIRE IN 4" CONDUIT UNLESS OTHERWISE NOTED. ALL WIRE SHALL HAVE A TEMPERATURE RATING OF 90°C
3. SECONDARY POWER FROM TRANSFORMER TO METER (90°C TEMP. RATING):
 - A. FOR C.T. CONNECTIONS (SERVICES > 400 AMPS) - SECONDARY CONDUIT AND WIRE SHALL BE SIZED BY BUILDING ELECTRICAL ENGINEER.
 - B. FOR COMMERCIAL < 400 AMPS - SIZED BY XCEL ENERGY BASED ON LOAD CALC'S.
4. CONTRACTOR TO FOLLOW ALL BLUE STAKES PROTOCOLS.
5. THE POWER DESIGN ON THIS UTILITY PLAN IS CONSIDERED BY XCEL ENERGY AS PRELIMINARY AND NON-BIDABLE UNTIL ACCOMPANIED BY A XCEL ENERGY APPROVAL.
6. ALL PRIMARY UNDERGROUND POWER WORK/INTALLATION MUST BE COMPLETED BY A CONTRACTOR THAT HAS BEEN PREQUALIFIED BY XCEL ENERGY AND MEET ALL XCEL ENERGY STANDARDS. ALL OVERHEAD WORK/INSTALLATION MUST BE COMPLETED BY XCEL ENERGY.
7. ALL WORK DONE BY XCEL ENERGY WILL BE PREPAID BY THE DEVELOPER.
8. ALL JUC TRENCHES WILL BE BACKFILLED AND COMPACTED IN 6" TO 8" LIFTS TO A COMPACTION OF 95% IN ROADWAYS/SIDEWALKS AND 90% BEHIND SIDEWALK. TESTING IS TO BE DONE AT MIDDLE AND TOP OF TRENCH.
9. ALL CHANGES TO EXISTING GRADES NEAR EXISTING POWER UTILITIES MUST BE APPROVED BY XCEL ENERGY PRIOR TO CONSTRUCTION.
10. ANY IN FIELD CHANGES TO THE APPROVED POWER DESIGN WILL BE AT THE DEVELOPER'S EXPENSE AND MUST BE PRE-APPROVED AND DOCUMENTED BY XCEL ENERGY PRIOR TO INSTALLATION.

GRADING & DRAINAGE NOTES

- A. HORROCKS ENGINEERS HAS PREPARED GRADING PLANS AND SIZED DRAINAGE FACILITY SHOWN ON THIS PLAN TO CONTAIN THE RUNOFF FROM THE APPLICABLE DESIGN STORM EVENT.
- B. THESE PLANS HAVE BEEN PREPARED BASED ON A GEOTECHNICAL REPORT TITLED, MAVERIK, INC. BY GEOSTRATA WITH JOB NO. 1092-068.
- C. IT IS THE PROPERTY OWNER'S RESPONSIBILITY (DEVELOPER, HOMEOWNER, HOMEOWNERS ASSOC. ETC.) TO COMPLETE AND MAINTAIN THE FINAL GRADING ON THEIR PROPERTY IN ACCORDANCE WITH THE DRAINAGE CONCEPT IDENTIFIED IN THE GRADING AND DRAINAGE PLAN AND GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. THE PROPERTY OWNER IS RESPONSIBLE, IN PERPETUITY, FOR INSPECTING AND MAINTAINING PROPER DRAINAGE DURING CONSTRUCTION AND WHEN RE-GRADING OR MAKING MODIFICATIONS TO DRAINAGE FACILITIES THAT EFFECTS THEIR PROPERTY.
- D. ALL IMPORTED STRUCTURAL FILL, IF REQUIRED, SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO DELIVERY TO THE SITE
- E. THE GRADING AND DRAINAGE PLANS DO NOT IDENTIFY THE CONSTRUCTION METHODS, EQUIPMENT, PROCEDURES, AND OR SEQUENCING TO BE EMPLOYED BY THE CONTRACTOR. ALL GRADING OPERATIONS INCLUDING BUT NOT LIMITED TO SITE PREPARATION, SCARIFICATION, EXCAVATION, OVER-EXCAVATION, PLACEMENT, OF FILLS, AND COMPACTION OF FILLS, SHALL BE PERFORMED BY THE CONTRACTOR IN CONFORMANCE WITH THE GEOTECHNICAL REPORT DESCRIBED ABOVE AND ONSITE FIELD OBSERVATIONS AS REQUIRED BY THE GEOTECHNICAL FIRM.
- F. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY HORROCKS ENGINEERS IMMEDIATELY IF THERE ARE ANY CONFLICTS BETWEEN THE REQUIREMENTS OF THE GRADING AND DRAINAGE PLANS AND THE REQUIREMENTS OF THE GEOTECHNICAL REPORT OR GEOTECHNICAL FIELD OBSERVATIONS.
- G. ALL EXCAVATION, GRADING, AND FILL OPERATIONS WITHIN THE BUILDING AREA SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER TO VERIFY SUBSOIL CONDITIONS AND DETERMINE ADEQUACY OF SITE PREPARATION, SUITABILITY OF FILL MATERIALS AND COMPLIANCE WITH COMPACTION REQUIREMENTS.
- H. THE CONTRACTOR SHALL PROVIDE SUITABLE METHODS & EQUIPMENT TO CONTROL DUST AND AIR POLLUTION CAUSED BY CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL ALSO PROVIDE SUITABLE MUD AND DIRT CONTAINMENT TO MAINTAIN THE WORK SITE. ACCESS ROADWAYS AND ADJACENT PROPERTIES IN A CLEAN CONDITION.
- I. ALL EXCAVATION AND GRADING SHALL BE IN ACCORDANCE WITH THE CURRENT REQUIREMENTS OF EL PASO COUNTY CODES, UNIFORM BUILDING CODES, AND THE GEOTECHNICAL INVESTIGATION STUDY.
- J. THE GEOTECHNICAL ENGINEER SHALL PROVIDE A FINAL GRADING REPORT TO CONFIRM WORK HAS BEEN PERFORMED IN CONFORMANCE WITH THEIR RECOMMENDATIONS.

UTILITIES:

STORM WATER
 EL PASO COUNTY
 3275 AKERS DRIVE
 COLORADO SPRINGS, CO 80922
 719-520-6460

NATURAL GAS & ELECTRIC
 XCEL ENERGY
 6TH & TYLER, 28TH FLOOR
 AMARILLO, TX 79101
 1-877-354-6395

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HORROCKS ENGINEERS

555 South Bluff St., Suite 101
 St. George, UT 84770

(435) 966-7888
 www.horrocks.com

WARNING

IF THIS BAR DOES NOT MEASURE 2" THEN DRAWING IS NOT TO SCALE

REVISIONS	REV #	DATE
DESIGNED	TMD	SEP 3, 2021
DRAWN	TMD	
CHECKED	RP	
PROJECT	CO-2658-2008	

SEE GENERAL NOTES SHEET

PRELIMINARY NOT FOR CONSTRUCTION

MAVERIK, INC. - SITE CODE CO-0258

I-25 & COUNTY LINE ROAD
 MONUMENT, CO

GENERAL NOTES



C.0.1

SEWER

Table with columns for EXISTING and PROPOSED sewer pipe sizes (4 inch to 36 inch) and service laterals.

STORM

Table with columns for EXISTING and PROPOSED storm pipe sizes (4 inch to 72 inch) and land drains.

WATER

Table with columns for EXISTING and PROPOSED water pipe sizes (3/4 inch to 72 inch) and service laterals.

IRRIGATION

Table with columns for EXISTING and PROPOSED irrigation pipe sizes (1 inch to 36 inch) and service laterals.

POWER

Table with columns for EXISTING and PROPOSED power lines (overhead and underground) including overhead cable TV and underground cable TV.

GAS

Table with columns for EXISTING and PROPOSED gas lines (1 inch to 12 inch) including high pressure.

COMMUNICATIONS

Table with columns for EXISTING and PROPOSED communication lines (overhead and underground) including fiber optic and telephone.

MISCELLANEOUS

Table with columns for EXISTING and PROPOSED miscellaneous features (demo, trench, slope, flowline, pavement, guardrail, tracks, contours).

HATCH PATTERNS

Table of hatch patterns for various materials like building/pad, concrete sidewalk, decorative brick, pool deck, xeriscape, landscape areas, heavy/light duty pavement, ADA ramps, riprap, and gravel.

SURFACE FEATURES

Table of surface features including cut lines, fill lines, limits of disturbance, ditches, grade breaks, high water marks, fences, walls, right of way, centerlines, curbs, gutters, parcel lines, property boundaries, paint stripes, traffic signals, and construction keynote tags.

STANDARD SYMBOLS

Table of standard symbols for existing and proposed features, including electrical manholes, fiber optic manholes, telephone manholes, cable TV manholes, electrical power poles, signal poles, electrical boxes, fiber optic boxes, junction boxes, telephone boxes, telephone pedestals, cable TV boxes, light poles, gas manholes, gas meters, cleanouts, sewer manholes, irrigation manholes, irrigation boxes, water manholes, water meters, fire hydrants, gate valves, crosses, tees, bends, reducers, caps, plugs, storm drain manholes, area drain rounds, drop inlets, curb inlets, curb inlets with options, curb double inlets, curb double inlets with options, combo boxes, oil/water sand/grease, oil/water sand/grease with options, flared ends, signs, bollards, bore holes, and test pits.

DETAIL REFERENCE



ABBREVIATIONS

Table of abbreviations for various engineering terms like algebraic grade change, aggregate base course, asphaltic cement, building corner, back of curb return, base flood elevation, basement finish floor elevation, benchmark, begin point, butterfly valve, begin vertical curve, begin vertical curve elevation, begin vertical curve station, begin vertical profile, bottom of visible wall, curb & gutter, centerline, catch basin, clear, cleanout, concrete, copper, cubic yard, diameter, dip, ductile iron pipe, drawing, east or easting, elevation, edge of concrete, edge of pavement, end point, easement, end vertical curve, end vertical curve elevation, end vertical curve station, end vertical profile, existing, finished floor elevation, flange end, finished grade elevation, flow line, flange joint, force main, feet per second, foot or feet, future, gas line, grade break, garage finished floor elevation, gate valve, hydraulic grade line, horizontal, high point, high water mark, inside diameter, inches, irrigation (pressurized) non-potable, vertical curve coefficient, length, linear feet, landscape, low point, left, maximum, manufacturer, million gallons per day, middle, manhole, minimum, mechanical joint, north or northing, friction factor, not applicable, not to scale, on center, outside diameter, overall high point, overall low point, point of curve, point of compound curve, phase, point of intersection, property line, point of reverse curve, point of tangency, public utility easement, polyvinyl chloride, point of vertical intersection, rate of flow, radius, right of way, revision, right, slope, sidewalk, storm drain, storm drain manhole, section, specifications, sanitary sewer manhole, sanitary sewer, streetlight, station, standard, sight visibility easement, temporary bench mark, top of concrete, top back of curb, temporary, top of asphalt, top of footing, top of grate, top of retaining wall, top of wall, typical, untreated base course, velocity, vertical curve, vertical, water, with.

CALLOUTS

Table of callouts for proposed building finished floor elevation, proposed TBC spot elevation, proposed EOP spot elevation, and parking stall count.

HORROCKS ENGINEERS logo and contact information: 555 South Bluff St., Suite 101, St. George, UT 84770, (435) 966-7888, www.horrocks.com

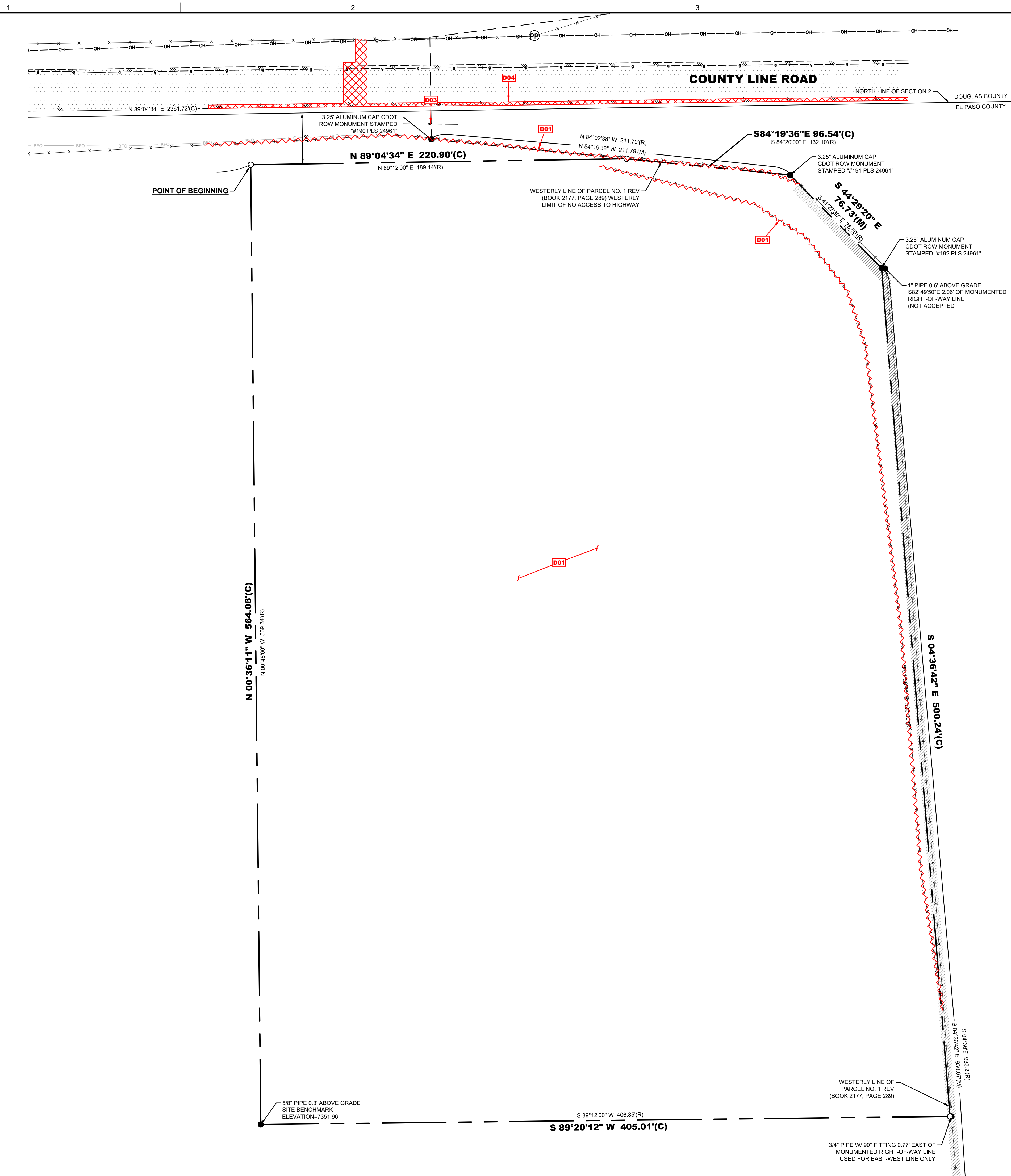
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Table with columns for REVISIONS (REV #, DATE) and DRAWING INFO (DATE, DESIGNED, DRAWN, CHECKED, PROJECT).

PRELIMINARY NOT FOR CONSTRUCTION

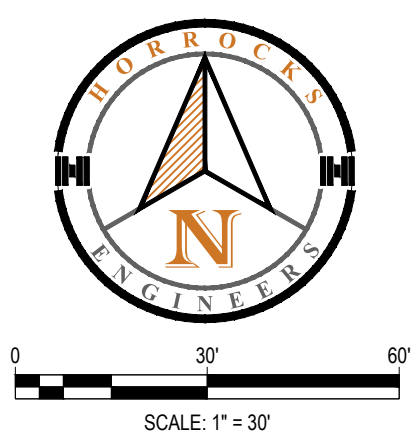
MAVERIK, INC. - SITE CODE CO-0258, I-25 & COUNTY LINE ROAD MONUMENT, CO, GENERAL LEGEND & ABBREVIATIONS

MAVERIK logo and C.O.2



Add keymap so can tell where next sheet is in relation to overall project

Not shown on this sheet



- DEMOLITION/EXISTING KEY NOTES:**
- D01 REMOVE AND DISCARD EXISTING FENCE
 - D02 REMOVE AND DISCARD SHRUBBERY, TREES, ETC. WITHIN LIMITS OF DISTURBANCE
 - D03 REMOVE AND DISCARD STORM DRAIN PIPE
 - D04 REMOVE AND DISCARD 2 FEET OF ASPHALT FOR ADDITIONAL ASPHALT TIE IN.

- ASPHALT DEMOLITION
- FENCE DEMOLITION

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PRELIMINARY
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MAVERIK, INC. - SITE CODE CO-0258
 I-25 & COUNTY LINE ROAD MONUMENT, CO
 EXISTING CONDITIONS AND DEMOLITION PLAN



C.1.0

key map

street name

Add hatch to legend and/or label

street name

Add hatch to legend and/or label

Spelling

18" RCP INV=7366.18
18" RCP INV=7363.46

18" CMP INV=7366.09

CURB & GUTTER
ASPHALT DRIVE

18" CMP INV=7367.65

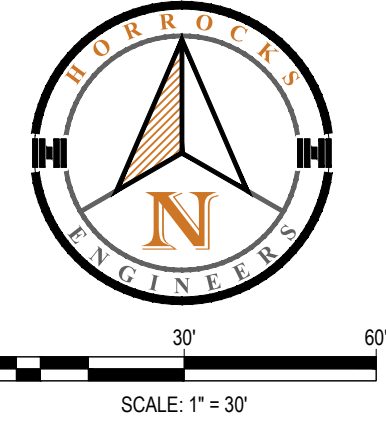
18" CMP INV=7366.48
12" HDPE INV=7367.58
12" HDPE INV=7368.81

12" HDPE INV=7369.04
12" HDPE INV=7367.30
18" CMP INV=7365.77

ASPHALT DRIVE

MAIN SITE

TREE LINE



DEMOLITION/EXISTING KEY NOTES:

- D01** REMOVE AND DISCARD SHRUBBERY, TREES, ETC. WITHIN LIMITS OF DISTURBANCE
- D02** REMOVE AND DISCARD 2 FEET OF GRAVEL FOR ADDITIONAL ASPHALT TIE IN.

ASPHALT DEMOLITION

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REVISIONS

REV #	DATE	DESCRIPTION

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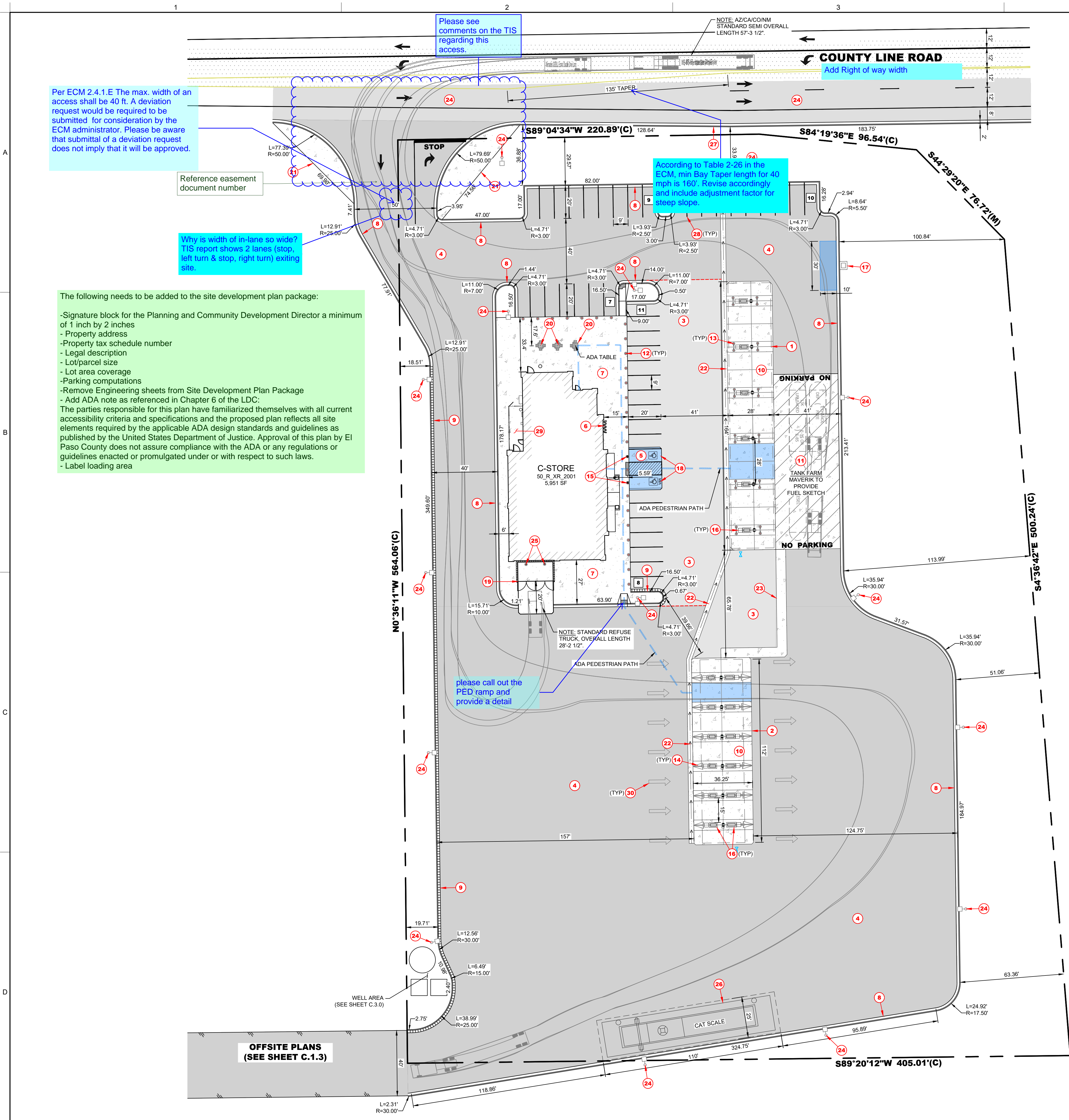
MAVERIK, INC. - SITE CODE CO-0258

I-25 & COUNTY LINE
ROAD MONUMENT, CO

EXISTING CONDITIONS AND DEMOLITION PLAN - OFFSITE



C.1.1



Per ECM 2.4.1.E The max. width of an access shall be 40 ft. A deviation request would be required to be submitted for consideration by the ECM administrator. Please be aware that submittal of a deviation request does not imply that it will be approved.

Reference easement document number

Why is width of in-lane so wide? TIS report shows 2 lanes (stop, left turn & stop, right turn) exiting site.

The following needs to be added to the site development plan package:

- Signature block for the Planning and Community Development Director a minimum of 1 inch by 2 inches
- Property address
- Property tax schedule number
- Legal description
- Lot/parcel size
- Lot area coverage
- Parking computations
- Remove Engineering sheets from Site Development Plan Package
- Add ADA note as referenced in Chapter 6 of the LDC:

The parties responsible for this plan have familiarized themselves with all current accessibility criteria and specifications and the proposed plan reflects all site elements required by the applicable ADA design standards and guidelines as published by the United States Department of Justice. Approval of this plan by El Paso County does not assure compliance with the ADA or any regulations or guidelines enacted or promulgated under or with respect to such laws.

- Label loading area

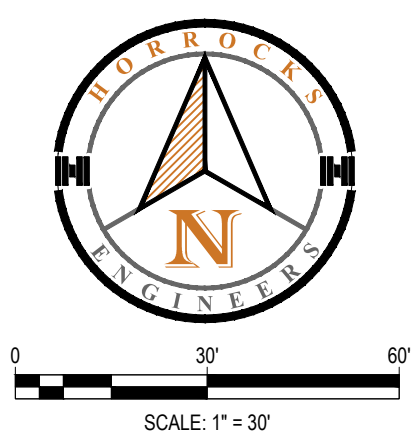
please call out the PED ramp and provide a detail

According to Table 2-26 in the ECM, min Bay Taper length for 40 mph is 160'. Revise accordingly and include adjustment factor for steep slope.

Add Right of way width

add all adjacent property owner information

OFFSITE PLANS (SEE SHEET C.1.3)



- SHEET NOTES:**
- SEE ARCHITECTURAL PLANS FOR BUILDING AND CODE SUMMARY INFORMATION.
 - TURNING TEMPLATE USING WB-67 TRUCK SHOWN FOR INFORMATION ONLY.
 - PARKING STALLS: 43, ADA STALLS: 2
 - FOLLOW M.U.T.C.D. REQUIREMENTS FOR ALL PAVEMENT MARKINGS.

- CONSTRUCTION KEY NOTES:**
- STRAIGHT FORECOURT FUEL ISLAND AND CANOPY (SEE ARCHITECTURAL PLANS)
 - STRAIGHT COMMERCIAL COURT FUEL ISLAND AND CANOPY (SEE ARCHITECTURAL PLANS)
 - ON-SITE ASPHALT PAVING MODERATE DUTY (DETAIL 3, SHEET C.4.0)
 - ON-SITE ASPHALT PAVING HEAVY DUTY (DETAIL 4, SHEET C.4.0)
 - CONCRETE PARKING STALL (DETAIL 5, SHEET C.4.0)
 - BIKE RACK (DETAIL 34, SHEET C.5.3)
 - CONCRETE WALKWAY - BUILDING (DETAIL 7, SHEET C.4.0)
 - CATCH TYPE CURB & GUTTER (DETAIL 1, SHEET C.4.0)
 - SPILL TYPE CURB & GUTTER (DETAIL 2, SHEET C.4.0)
 - CONCRETE PAD UNDER FUEL CANOPY (DETAIL 9, SHEET C.4.0)
 - CONCRETE PAD OVER UNDERGROUND FUEL TANKS (DETAIL 10, SHEET C.4.0)
 - REBOUNDING BOLLARD (DETAIL 15 AND 16-B, SHEET C.4.1)
 - HOOP BOLLARD (DETAIL 11, SHEET C.4.0)
 - WEDGE BOLLARD (DETAIL 13, SHEET C.4.1)
 - ADA PARKING SIGN WITH BOLLARD (DETAIL 16-A, SHEET C.4.1)
 - FUEL DISPENSER BASE (DETAIL 12, SHEET C.4.0)
 - KACTAIR AIR STATION FOUNDATION (DETAIL 20, SHEET C.4.1, PROVIDED BY MAVERIK)
 - ADA PARKING (DETAIL 17 & 18, SHEET C.4.1)
 - TRASH ENCLOSURE (SEE ARCHITECTURAL AND STRUCTURAL PLANS AND DETAIL 40, SHEET C.4.4)
 - PICNIC TABLE (PROVIDED BY MAVERIK)
 - CONCRETE RUNOUT PAD AND MOUNTABLE CURB (DETAIL 26, SHEET C.4.2)
 - CONCRETE WATERWAY (DETAIL 8, SHEET C.4.0)
 - PETROLEUM TRENCH CAP, COORDINATE FINAL LOCATION WITH FUEL SYSTEM DRAWINGS SHEET PE.10 (DETAIL 25, SHEET C.4.2)
 - TYPICAL LIGHT POLE AND BASE (DETAIL 19, SHEET C.4.1)
 - 6" PIPE BOLLARD (DETAIL 35, SHEET C.4.4)
 - CAT SCALE (SEE STRUCTURAL PLANS)
 - CURB AND GUTTER - TYPE A (SEE DETAIL 27, SHEET C.4.2)
 - 4 INCH WHITE SOLID LINE (PER MUTCD STANDARDS)
 - PROPOSED HOUSEKEEPING PAD, REFERENCE STRUCTURAL DRAWINGS FOR CONCRETE FOUNDATION, REFERENCE ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR EQUIPMENT DETAILS AND INSTALLATION, REFERENCE GRADING PLAN FOR SPOT ELEVATIONS.
 - PAVEMENT MARKINGS (PER MUTCD STANDARDS)
 - OFF-SITE ASPHALT PAVEMENT (DETAIL 24, SHEET C.4.2)

- SHEET LEGEND:**
- ASPHALT PAVEMENT (HEAVY DUTY)
 - ASPHALT PAVEMENT
 - CONCRETE SURFACE
 - ADA AREA NOT TO EXCEED 1.5% SLOPE IN ANY DIRECTION
 - ADA ROUTE NOT TO EXCEED 4.5% RUNNING SLOPE OR 1.5% CROSS SLOPE
 - ASPHALT PAVEMENT SECTION TRANSITION
 - SPILL TYPE CURB & GUTTER
 - PARKING STALL COUNT

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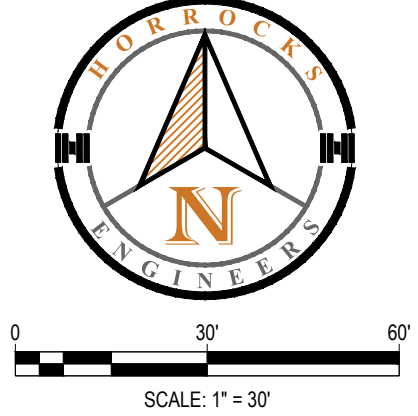
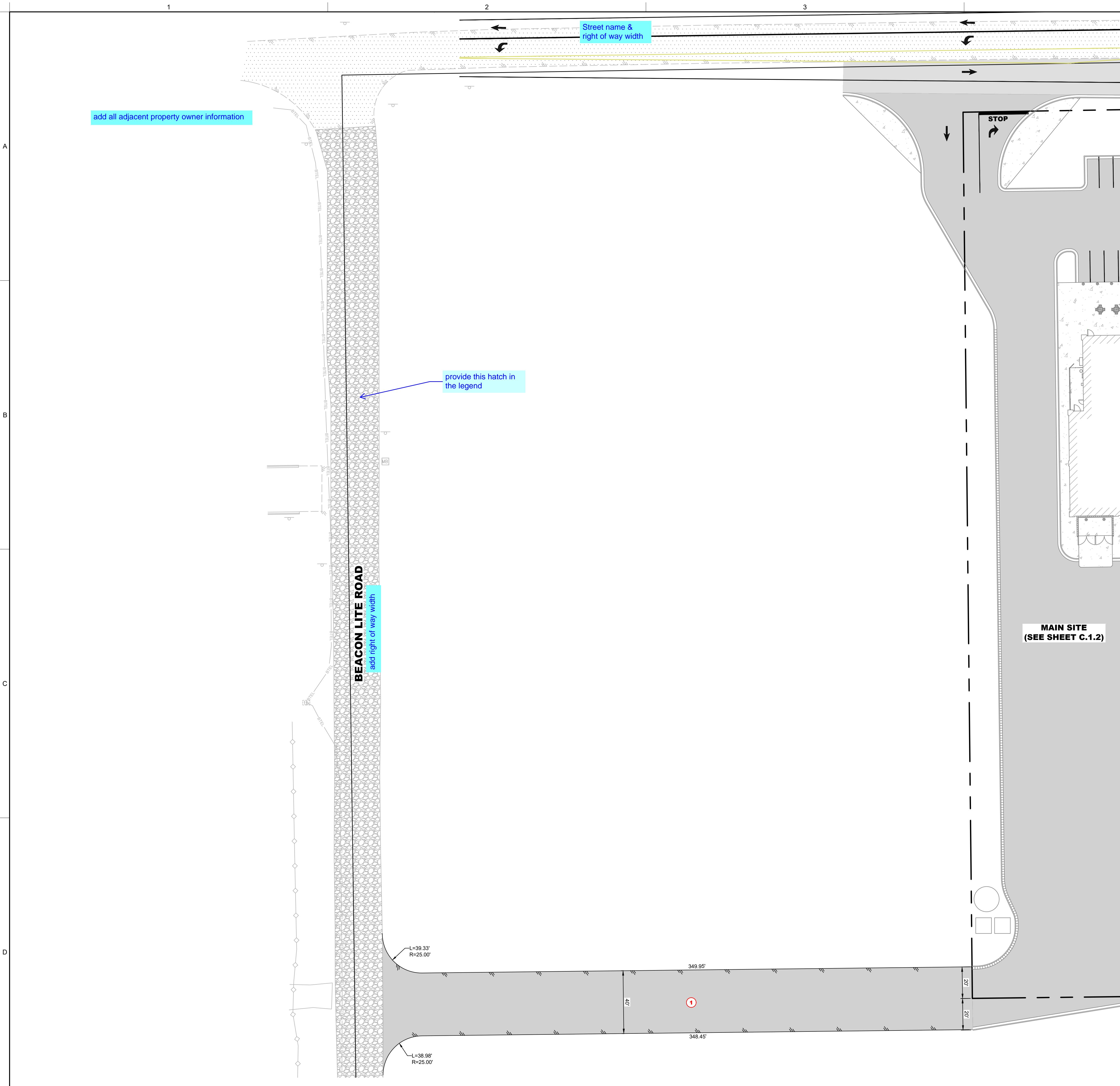
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SITE PLAN



C.1.2



- SHEET NOTES:**
1. BASIS OF BEARING: BEARINGS ARE BASED ON TWO FOUND 2" ALUMINUM CAPS ALONG THE WEST BOUNDARY OF THE PROPERTY. THE LINE BEARING NORTH 0°30'00" WEST BETWEEN THESE MONUMENTS WAS USED AS THE BASIS OF BEARING FOR THIS SITE.
 2. SEE ARCHITECTURAL PLANS FOR BUILDING AND CODE SUMMARY INFORMATION.
 3. TURNING TEMPLATE USING WB-67 TRUCK SHOWN FOR INFORMATION ONLY.
 4. PARKING STALLS: 44, ADA STALLS: 2
 5. FOLLOW M.U.T.C.D REQUIREMENTS FOR ALL PAVEMENT MARKINGS.

- CONSTRUCTION KEY NOTES:**
- ① ON-SITE ASPHALT PAVING HEAVY DUTY (DETAIL 4, SHEET C.4.0)

- SHEET LEGEND:**
- ASPHALT PAVEMENT (HEAVY DUTY)
 - Add hatches for concrete & gravel

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WARNING

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ROAD MONUMENT, CO
SITE PLAN - OFFSITE

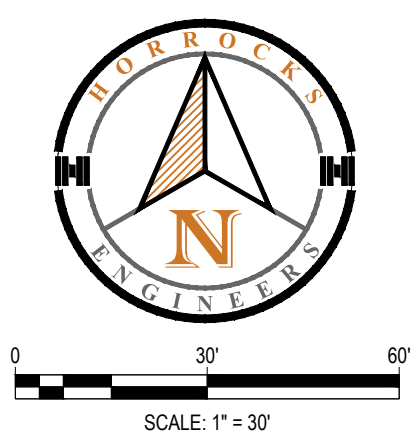


C.1.3

PAGE 7



erosion control shall be provided on slopes steeper than 3:1, typical where this occurs



SHEET NOTES:

1. STORM DRAIN AND UTILITIES SHOWN ON THIS SHEET FOR REFERENCE ONLY. SEE SHEET C.2.1 FOR STORM DRAIN DESIGN AND SHEET C.3.0 FOR UTILITIES.
2. SEE SHEET C.2.2 FOR CROSS SECTIONS AND STORM DRAIN PROFILES.
3. RAISE TO GRADE ALL MANHOLES, INLETS AND OTHER UTILITY COVERS.
4. SEE C.2.1 FOR BLOW UP VIEWS OF FUEL DISPENSER PADS.

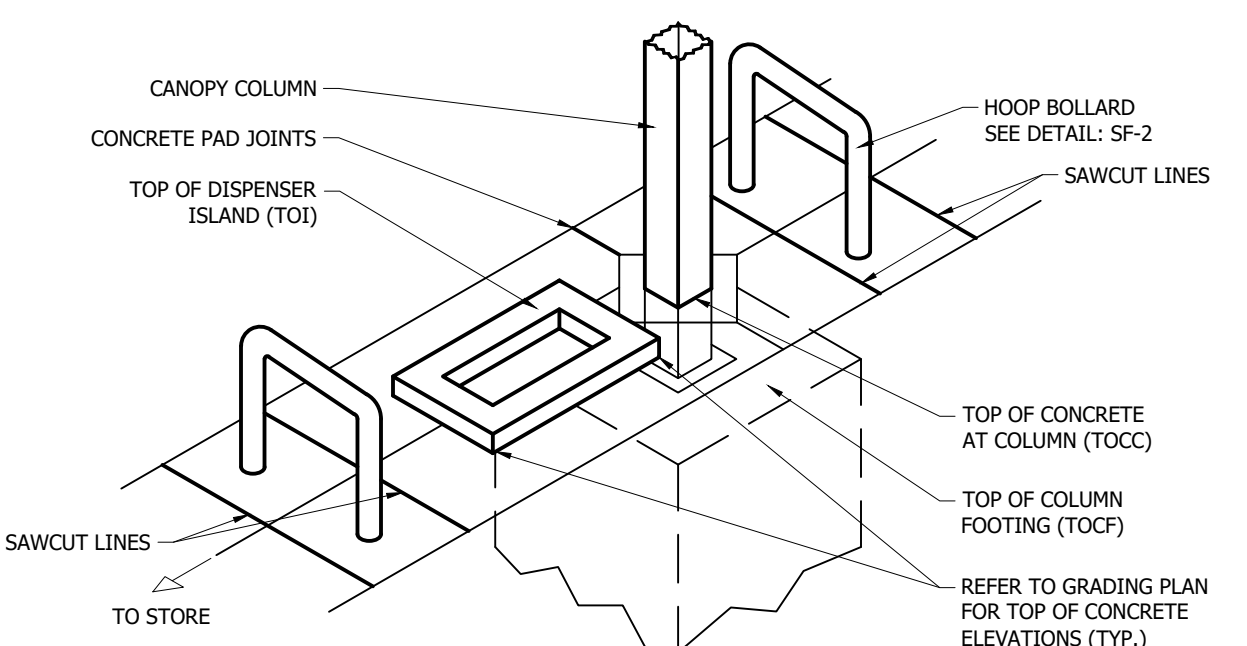
GRADING KEYNOTES

- G1 APPROXIMATE LIMITS OF DISTURBANCE
- G2 MATCH TO EXISTING (SAWCUT AS REQUIRED TO PROVIDE SMOOTH TRANSITION)
- G3 GRADING HIGH POINT
- G4 GRADING LOW POINT

CUT / FILL SUMMARY

NAME	2D AREA (FT ²)	CUT (YD ³)	FILL (YD ³)	NET CUT (YD ³)
FG vs. EXG	268.848	532	75.649	75.117

1. EARTHWORK VOLUMES SHOWN FOR INFORMATION ONLY. CONTRACTOR TO INDEPENDENTLY VERIFY CUT / FILL QUANTITIES.
2. UNADJUSTED EARTHWORK VOLUME SHOWN DOES NOT ACCOUNT FOR SHRINK AND/OR SWELL.
3. EARTHWORK VOLUMES SHOWN ARE BASED ON COMPARISON OF FINISH GRADE TO EXISTING GRADE AND DOES NOT ACCOUNT FOR BACK-OUT VOLUMES BENEATH PAVEMENT SECTIONS, SIDEWALKS, FOOTINGS, TRENCH SPOILS, ETC.



- NOTES:
1. TOP OF CONCRETE TO TOP OF SPOT & SPREAD FOOTING SEPARATION IS 3"
 2. 6" RAISED VERTICAL CONCRETE ISLAND WITH 1/2" INCH TOOLED EDGES AND CORNERS TO BE POURED FIRST 5'-0" x 3'-0" CONCRETE ISLAND (NO METAL FORM - VERIFY SIZE WITH DISPENSER MANUFACTURER)
 3. AFTER THE 5'-0" x 3'-0" FUEL ISLAND HAS BEEN POURED, SLOPE CONCRETE AWAY FROM ISLAND IN ALL (4) DIRECTIONS
 4. EVERY OTHER DISPENSER TO BE EQUIPPED WITH A FIRE EXTINGUISHER

FUEL DISPENSER ELEVATIONS

COLUMN #	TOC @ COLUMN	TOP OF COLUMN FTG.	TOP OF ISLAND CURB
C1	7339.84	7336.84	7340.34
C2	7340.24	7337.24	7340.74
C3	7340.60	7337.60	7341.10
C4	7340.89	7337.89	7341.39
C5	7341.17	7338.17	7341.67
C6	7341.45	7338.45	7341.95
C7	7341.99	7338.99	7342.49
C8	7342.13	7339.13	7342.63
C9	7342.27	7339.27	7342.77
C10	7342.42	7339.42	7342.92
C11	7342.56	7339.56	7343.06
C12	7342.70	7339.70	7343.20

OFFSITE PLANS (SEE SHEET C.2.1)

NOTE: PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY ENGINEER IF FIELD CONDITIONS DO NOT MATCH PLANS.



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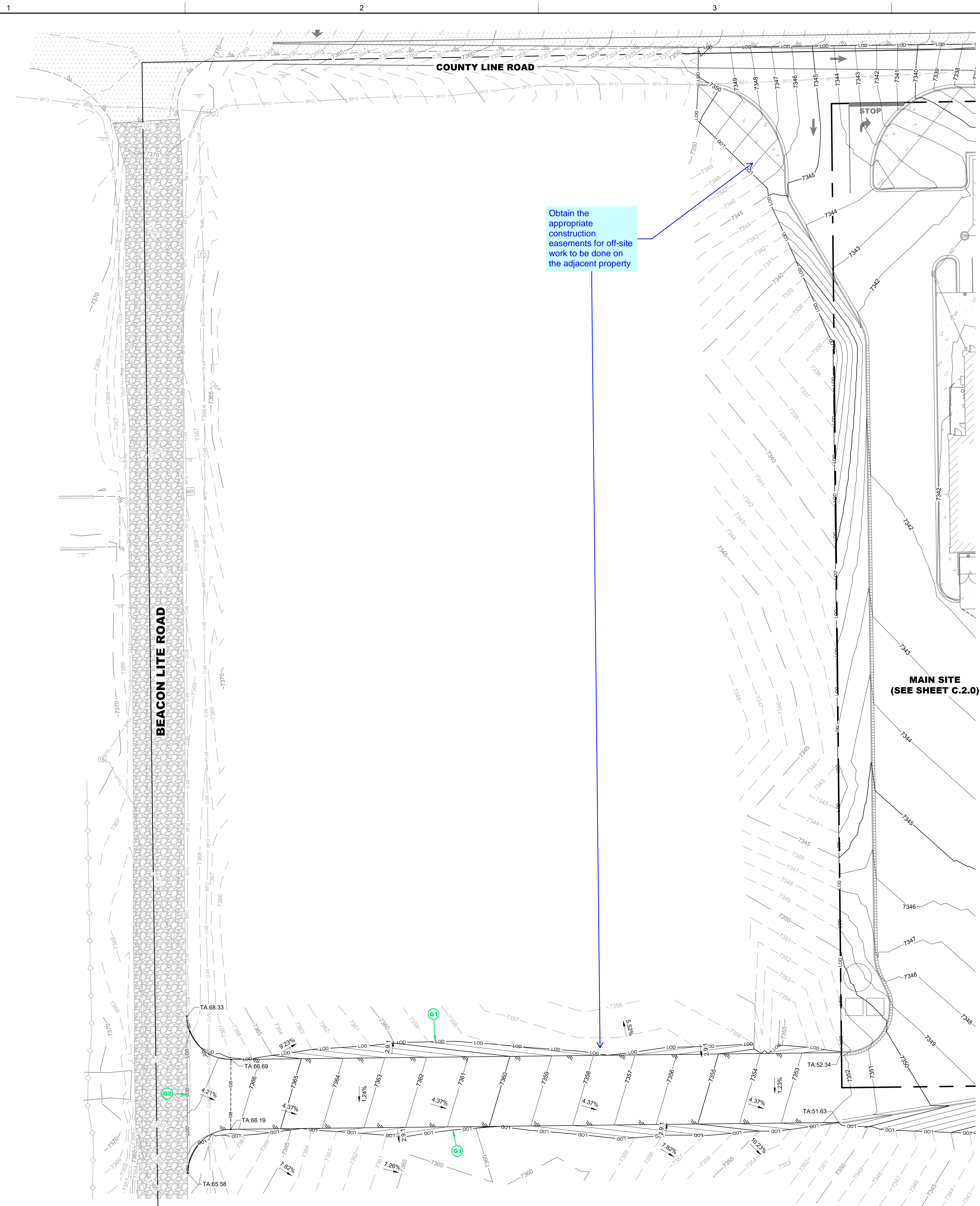
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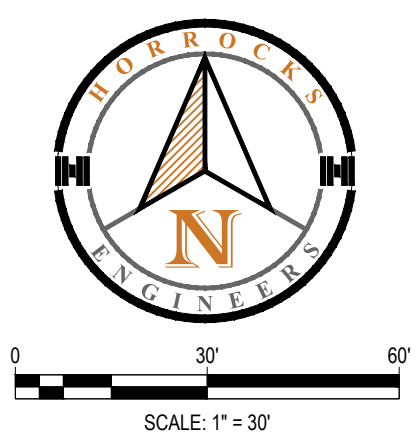
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GRADING PLAN

C.2.0



Obtain the appropriate construction easements for off-site work to be done on the adjacent property



- GRADING KEYNOTES**
- G1 APPROXIMATE LIMITS OF DISTURBANCE
 - G2 MATCH TO EXISTING (SAWCUT AS REQUIRED TO PROVIDE SMOOTH TRANSITION)

NOTE: PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY ENGINEER IF FIELD CONDITIONS DO NOT MATCH PLANS.



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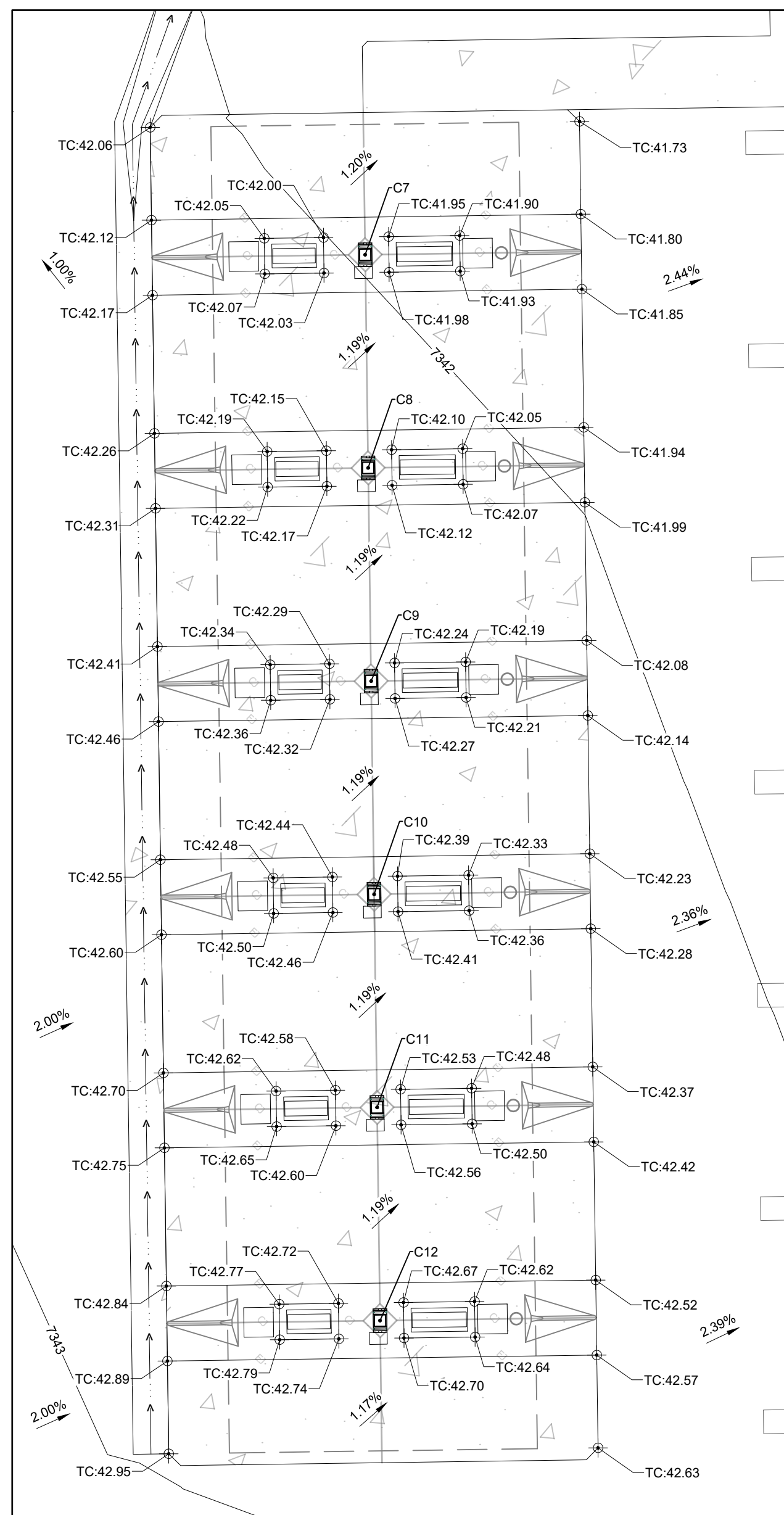
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PROJECT: CO-2658-2008			

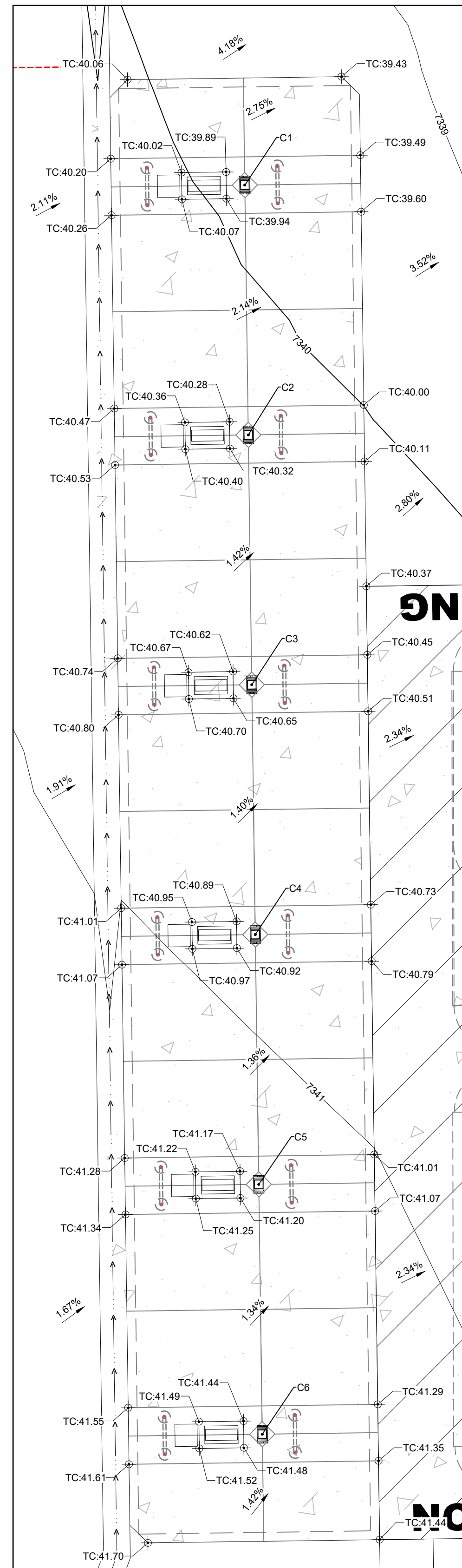
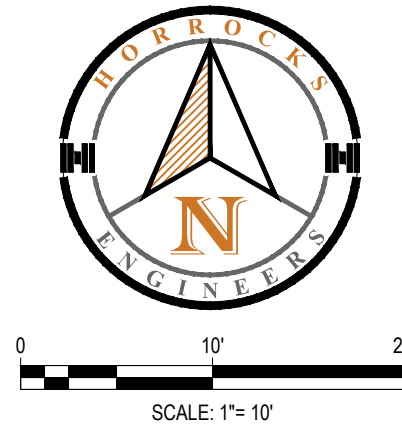
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 GRADING PLAN - OFFSITE

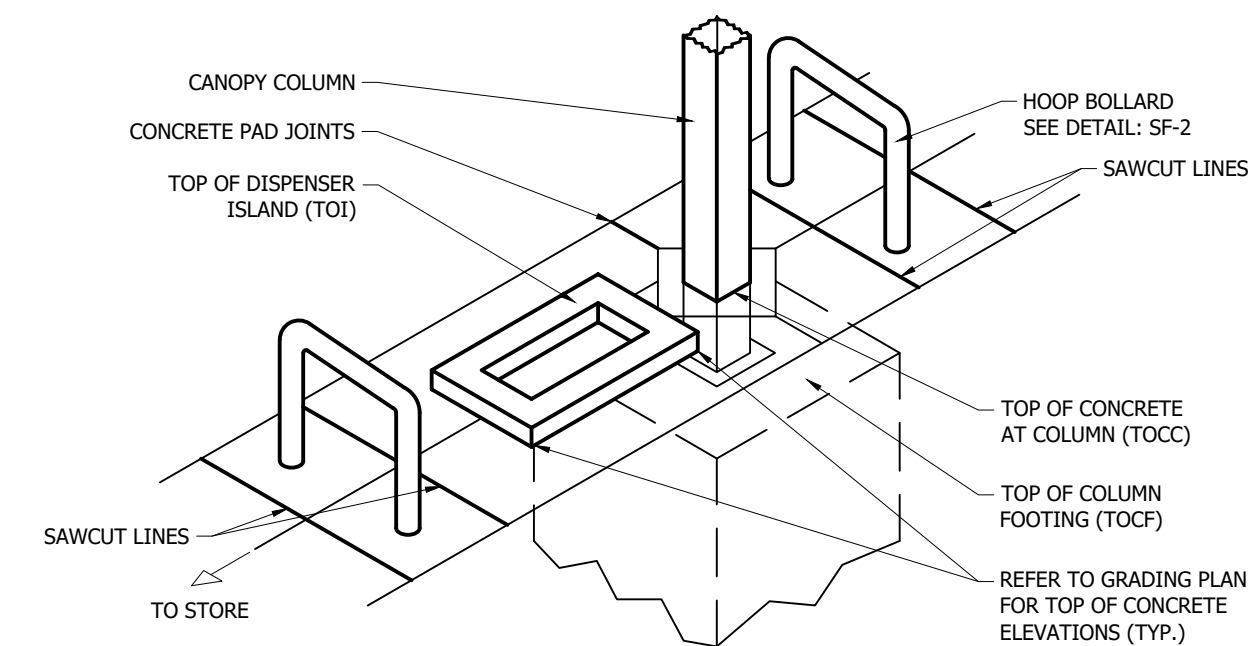
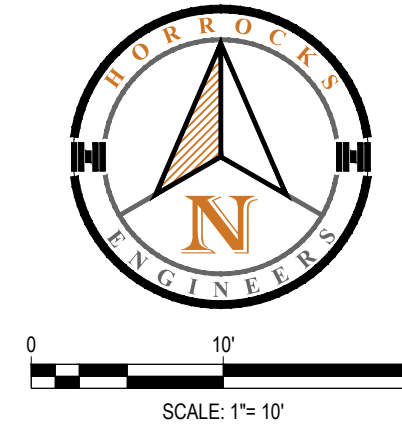
C.2.1
 PAGE 9



HI-FLOW GRADING



STRAIGHT FORECOURT GRADING



NOTES:

1. TOP OF CONCRETE TO TOP OF SPOT & SPREAD FOOTING SEPARATION IS 36"
2. 6" RAISED VERTICAL CONCRETE ISLAND WITH 1/2" -INCH TOOLED EDGES AND CORNERS TO BE POURED FIRST 5'-0" x 3'-0" CONCRETE ISLAND (NO METAL FORM - VERIFY SIZE WITH DISPENSER MANUFACTURER)
3. AFTER THE 5'-0" - 3'-0" FUEL ISLAND HAS BEEN POURED, SLOPE CONCRETE AWAY FROM ISLAND IN ALL (4) DIRECTIONS
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FUEL DISPENSER ELEVATIONS

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C8	7342.13	7339.13	7342.63
C9	7342.27	7339.27	7342.77
C10	7342.42	7339.42	7342.92
C11	7342.56	7339.56	7343.06
C12	7342.70	7339.70	7343.20

NOTE: PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY ENGINEER IF FIELD CONDITIONS DO NOT MATCH PLANS.



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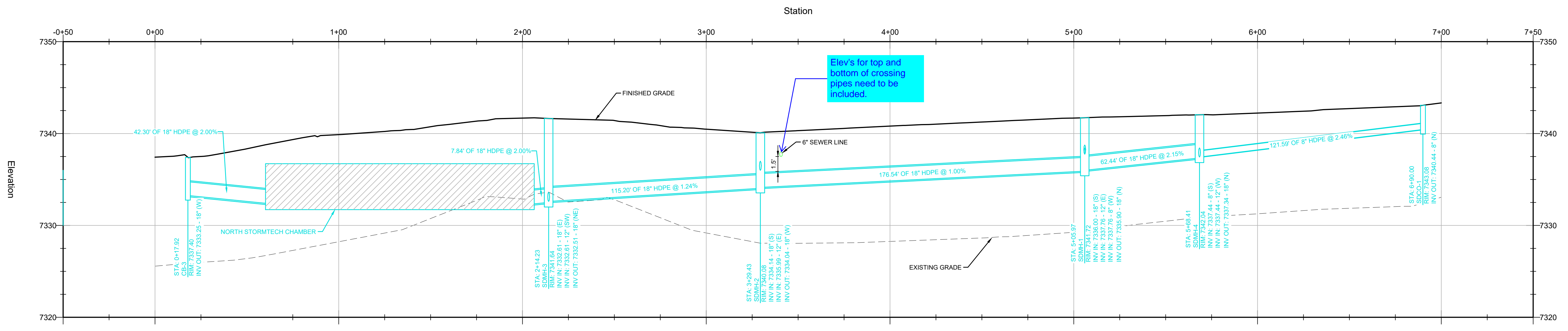
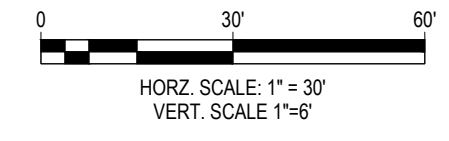
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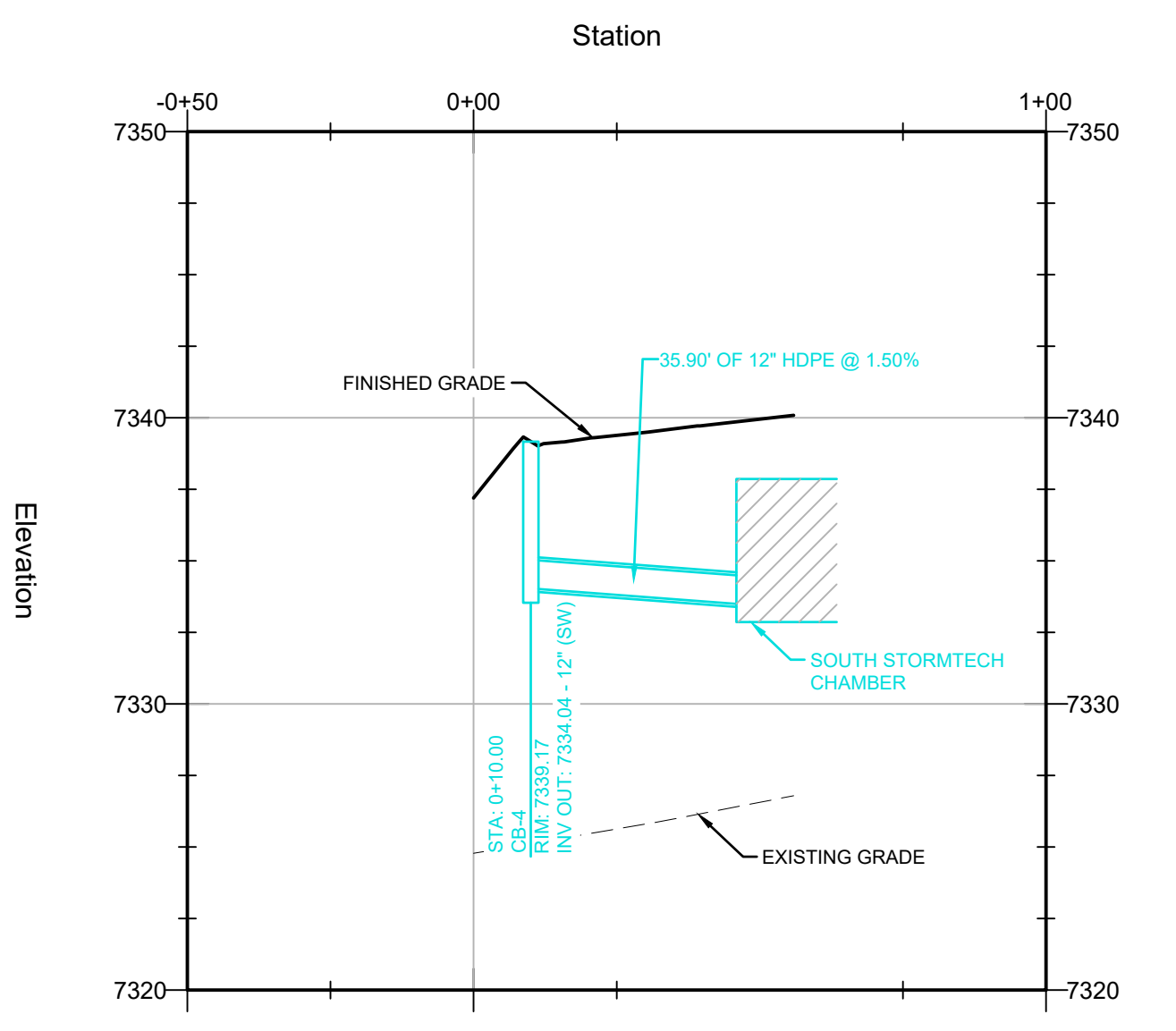
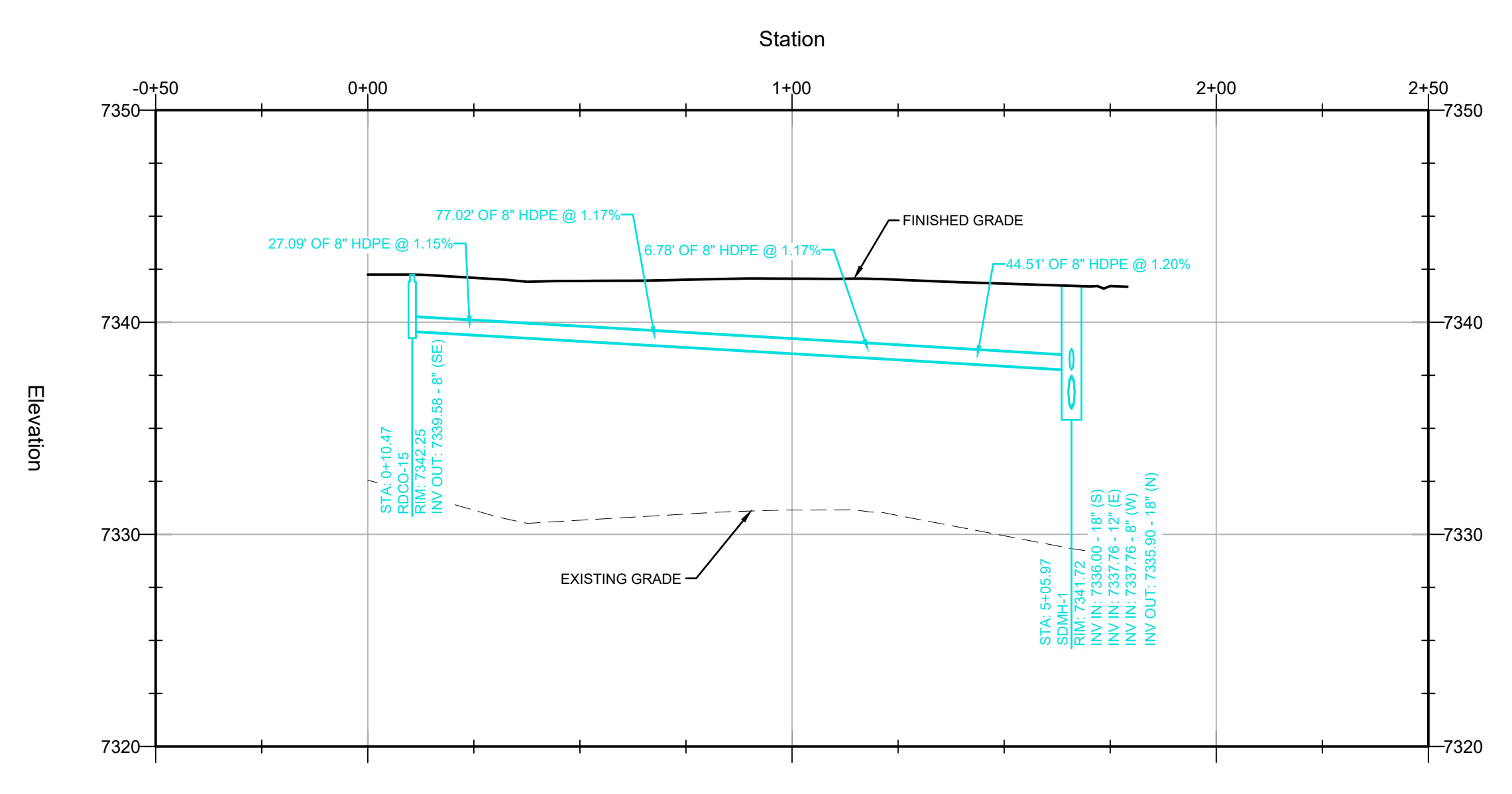
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FUEL DISPENSER GRADING PLAN



C.2.2



Elev's for top and bottom of crossing pipes need to be included.



Storm design calculations need to be included in drainage report.
 HGL's will need to be included for minor and major storm events.

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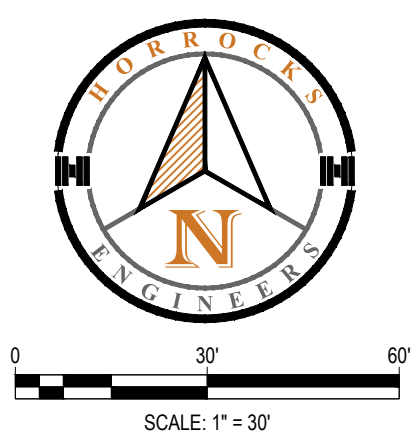
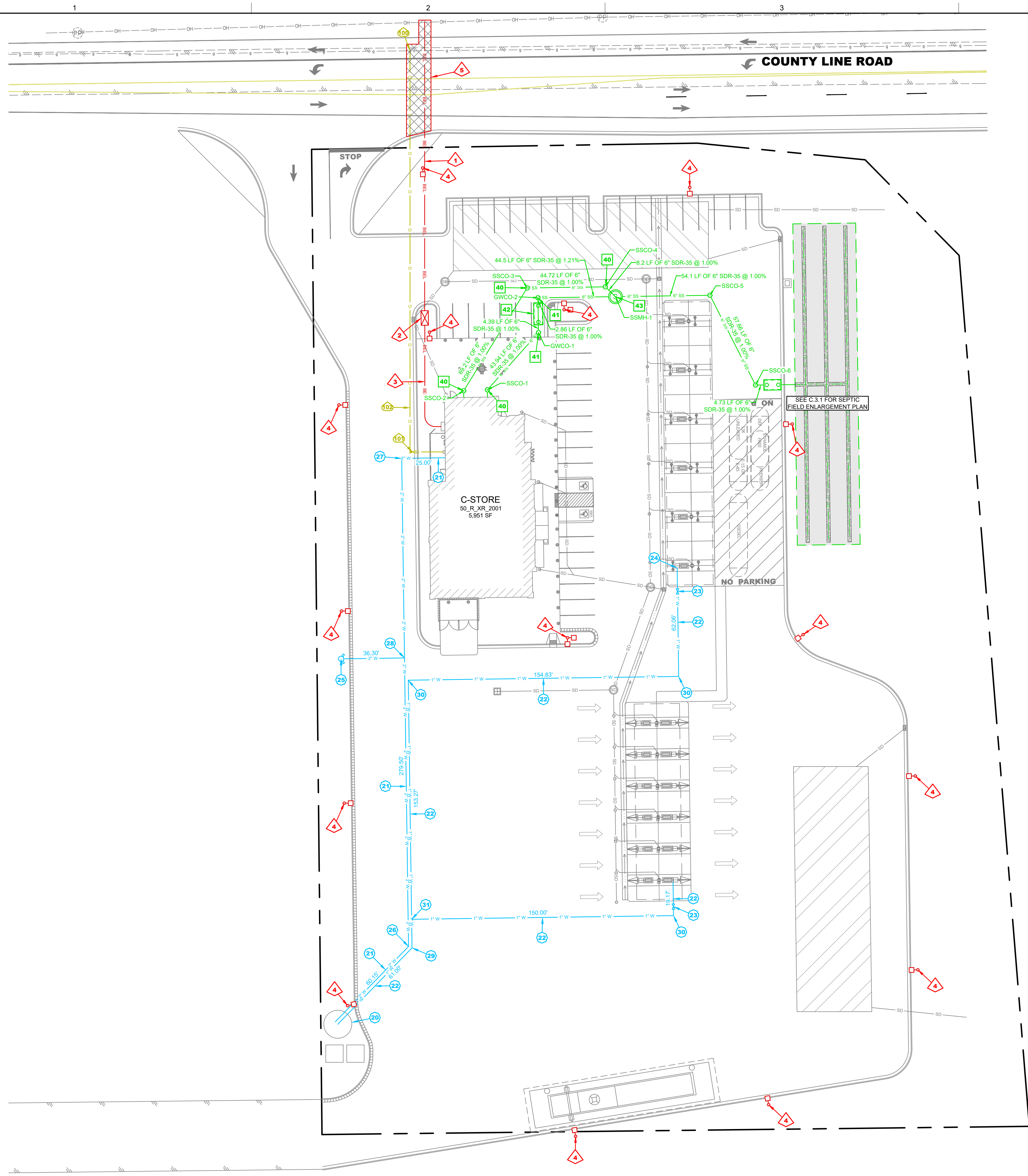
SEE GENERAL NOTES SHEET

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 I-25 & COUNTY LINE
 ROAD MONUMENT, CO
SECTIONS & PROFILES



C.2.4



SHEET NOTES:

- STORM DRAIN SHOWN ON THIS SHEET FOR REFERENCE ONLY. SEE GRADING PLAN SHEET C.2.1 FOR COMPLETE STORM DRAIN DESIGN INFORMATION.
- WHILE EVERY EFFORT HAS BEEN MADE TO ACCURATELY DEPICT THE LOCATIONS OF SEWER LATERAL CLEAN-OUTS, WATER METERS, IRRIGATION METERS, POWER BOXES AND FACILITIES, AND ALL OTHER SERVICES, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT ALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY (OR OTHER GOVERNING AGENCY) STANDARDS AND SPECIFICATIONS. IT IS REQUIRED THAT THE CONTRACTOR MEET WITH THE ENGINEER SUFFICIENTLY PRIOR TO INSTALLING THESE FACILITIES TO ENSURE PROPER COORDINATION AND PLACEMENT.
- WATER LINE CONNECTION SHOWN IS APPROXIMATE, CONTRACTOR TO VERIFY LOCATION PRIOR TO BEGINNING EXCAVATION.
- SEE SHEET C.3.1 FOR SEWER LINE PROFILE.
- CONTRACTOR TO COORDINATE WITH FUEL INSTALLATION CONTRACTOR AND GC FOR ALL ON-SITE TRENCHING AND FUEL SYSTEM INSTALLATION.
- EXISTING UTILITIES SHOWN PROVIDED TO HORROCKS ENGINEERS VIA ALTA SURVEY COMPLETED BY ROSENBERG. CONTRACTOR TO POTHOLE EXISTING BURIED FIBER OPTIC LINE TO VERIFY SIZE, QUANTITY, AND LOCATION PRIOR TO BEGINNING SEWER INSTALLATION.

WATER CONSTRUCTION KEY NOTES:

- 20 WATER WELL. PRODUCT AND SIZE TO BE DETERMINED.
- 21 2" PVC DOMESTIC WATER SUPPLY LINE (COORDINATE W/ PLUMBING PLANS)
- 22 1" PVC WATER SUPPLY LINE (COORDINATE W/ PLUMBING PLANS)
- 23 1" WATER VALVE
- 24 1" WOODFORD FROST PROOF YARD HYDRANT WITH 3/4" FEMALE BRASS CONNECTION AND RED HANDLE
- 25 FIRE HYDRANT (SEE DETAIL 38, SHEET C.4.4)
- 26 2" PVC 45° BEND
- 27 2" PVC 90° BEND
- 28 2" PVC TEE
- 29 1" PVC 45° BEND
- 30 1" PVC 90° BEND
- 31 1" PVC TEE

SEWER CONSTRUCTION KEY NOTES:

- 40 SEWER CLEANOUT, FRAME AND COVER - (SEE DETAIL 37, SHEET C.4.4)
- 41 GREASE WASTE CLEANOUT, FRAME AND COVER - (SEE DETAIL 22, SHEET C.4.2)
- 42 1,500 GAL. GREASE INTERCEPTOR (SEE PLUMBING PLANS)
- 43 SEWER MANHOLE (SEE DETAIL 28, SHEET C.4.2 AND DETAILS 30, 31, AND 32, SHEET C.4.3)

GAS CONSTRUCTION KEY NOTES:

- 100 CONNECT TO EXISTING GAS STUB
- 105 GAS VALVE PER GAS COMPANY STANDARDS
- 102 2" GAS SUPPLY LINE (COORDINATE W/ PLUMBING PLANS)

ELECTRICAL CONSTRUCTION KEY NOTES:

- ROUTE TWO (2) 4" CONDUIT FROM TRANSFORMER TO POWER UTILITY COMPANY. POINT OF CONNECTION LOCATION SHOWN FOR INFORMATION ONLY. OBTAIN FINAL POINT OF CONNECTION FROM UTILITY COMPANY REPRESENTATIVE.
- PROVIDE AND INSTALL 6"x6"x8" CONCRETE TRANSFORMER PAD AND VAULT. COORDINATE WITH UTILITY COMPANY PRIOR TO INSTALLATION.
- ELECTRICAL SERVICE TO BUILDING (SEE ELECTRICAL PLANS)
- TYPICAL LIGHT POLE AND BASE (SEE DETAIL 19, SHEET C.4.1)
- UTILITY TRENCH REPAIR ASPHALT PAVEMENT (DETAIL 33, SHEET C.4.3)

STRUCTURE TABLE		
STRUCTURE NAME:	DETAILS:	DESCRIPTION:
GWCO-1	RIM = 7341.35 INV IN = 7338.56 INV OUT = 7338.56	SEWER CLEANOUT
GWCO-2	RIM = 7341.12 INV IN = 7338.32 INV OUT = 7338.32	SEWER CLEANOUT
SSCO-1	RIM = 7342.17 INV OUT = 7339.00	SEWER CLEANOUT
SSCO-2	RIM = 7342.18 INV OUT = 7339.00	SEWER CLEANOUT
SSCO-3	RIM = 7341.20 INV OUT = 7338.31	SEWER CLEANOUT
SSCO-4	RIM = 7340.51 INV IN = 7337.86 INV OUT = 7337.86	SEWER CLEANOUT
SSCO-5	RIM = 7339.31 INV IN = 7337.14 INV OUT = 7337.14	SEWER CLEANOUT
SSCO-6	RIM = 7339.64 INV IN = 7336.56 INV OUT = 7336.56	SEWER CLEANOUT
SSMH-1	RIM = 7340.57 INV IN = 7337.78 INV OUT = 7337.68	SEWER MANHOLE

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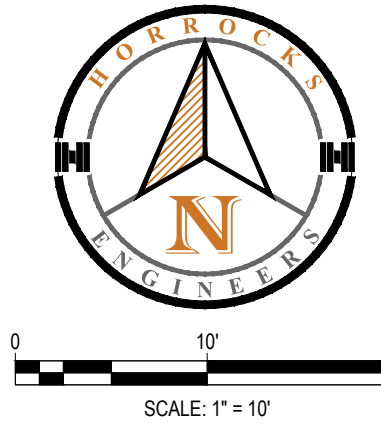
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 UTILITY PLAN



C.3.0



- SHEET NOTES:**
- WHILE EVERY EFFORT HAS BEEN MADE TO ACCURATELY DEPICT THE LOCATIONS OF SEWER LATERAL, CLEAN-OUTS, WATER METERS, IRRIGATION METERS, POWER BOXES AND FACILITIES, AND ALL OTHER SERVICES, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT ALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY (OR OTHER GOVERNING AGENCY) STANDARDS AND SPECIFICATIONS. IT IS REQUIRED THAT THE CONTRACTOR MEET WITH THE ENGINEER SUFFICIENTLY PRIOR TO INSTALLING THESE FACILITIES TO ENSURE PROPER COORDINATION AND PLACEMENT.
 - SEE THIS SHEET FOR SEWER LINE PROFILE.
 - EXISTING UTILITIES SHOWN PROVIDED TO HORROCKS ENGINEERS VIA ALTA SURVEY COMPLETED BY ROSENBERG. CONTRACTOR TO POT HOLE EXISTING BURIED FIBER OPTIC LINE TO VERIFY SIZE, QUANTITY, AND LOCATION PRIOR TO BEGINNING SEWER INSTALLATION.

- SEWER CONSTRUCTION KEY NOTES:**
- 40 SEWER CLEANOUT, FRAME AND COVER (SEE DETAIL 37, SHEET C.4.4)
 - 41 1500 GAL 5' x 8' (HS-20 TRAFFIC RATED) SEPTIC TANK (SEE DETAILS 41 AND 42, SHEET C.4.4)
 - 42 ADS ARC 18 SEPTIC LEACHING CHAMBER
 - 43 PLUG AND CAP AT END OF PERFORATED PIPE.
 - 44 2' TRENCH PER ARC 18 SEPTIC LEACHING CHAMBER DESIGN

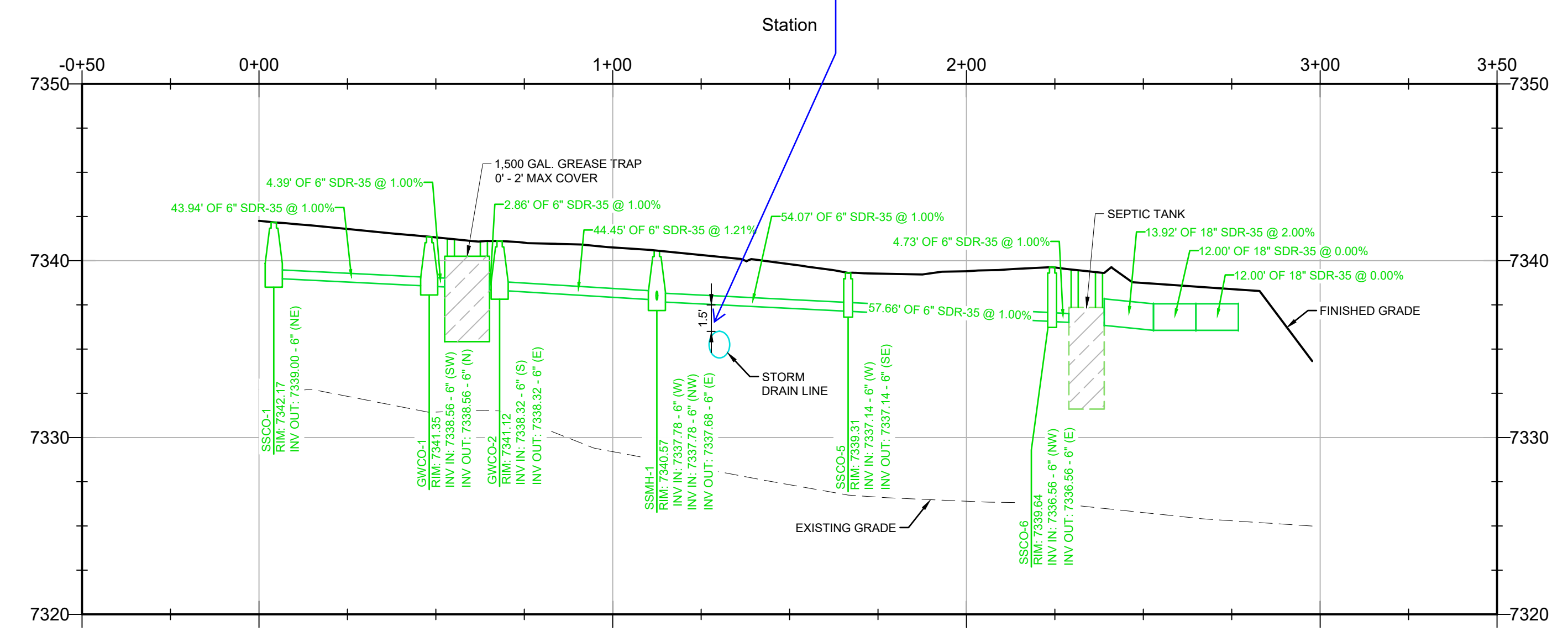
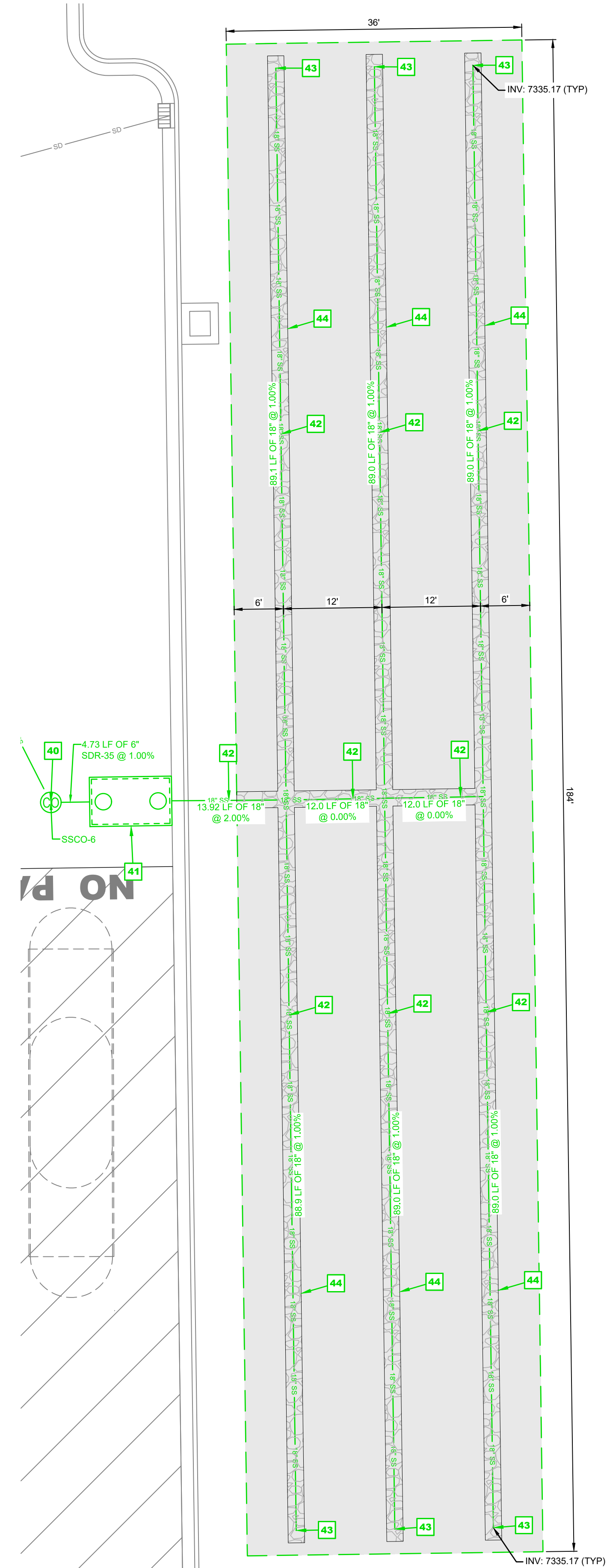
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SSCO-5	RIM = 7339.31 INV IN = 7337.14 INV OUT = 7337.14	SEWER CLEANOUT
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PROJECT: CO-2658-2008	

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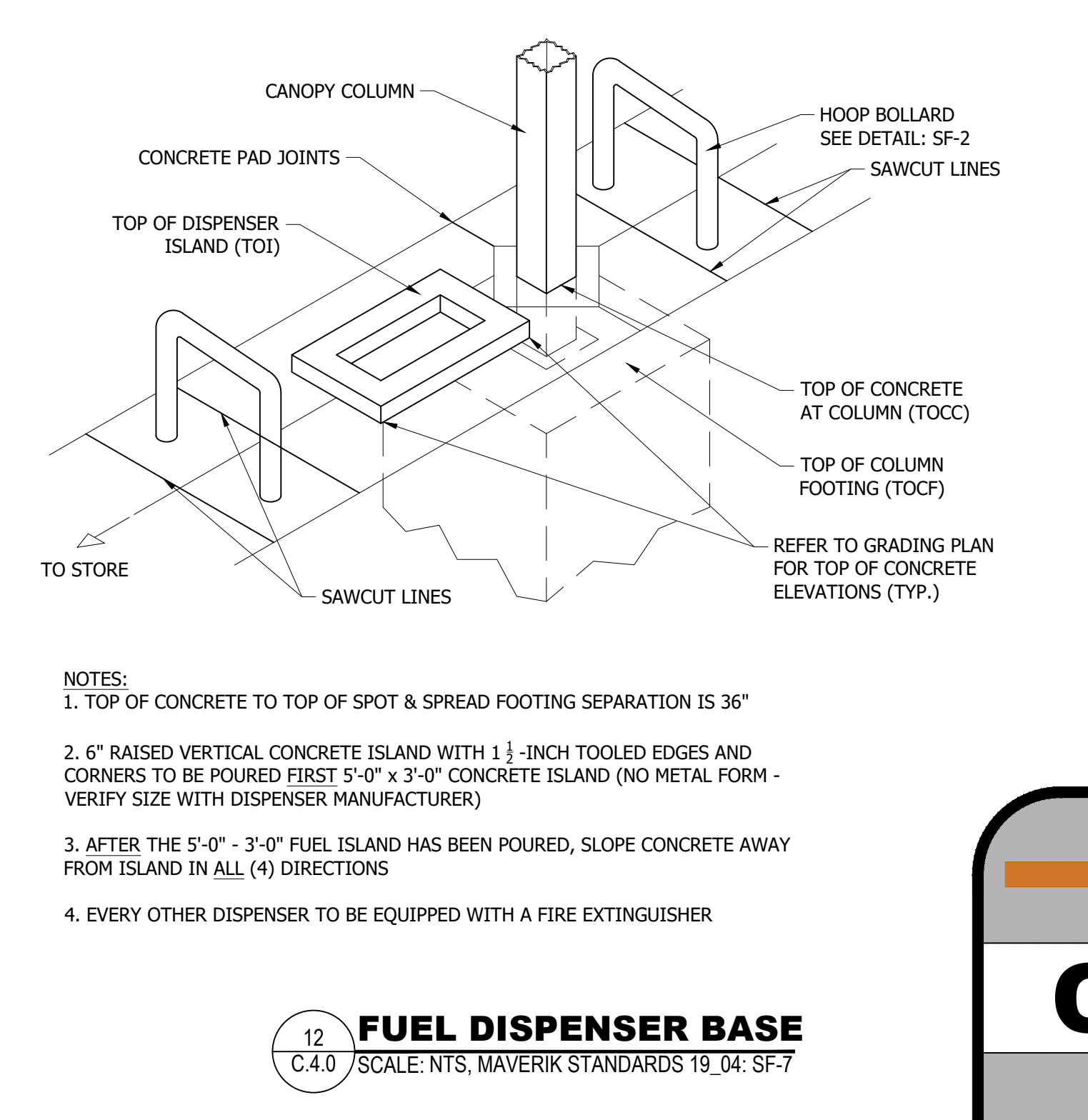
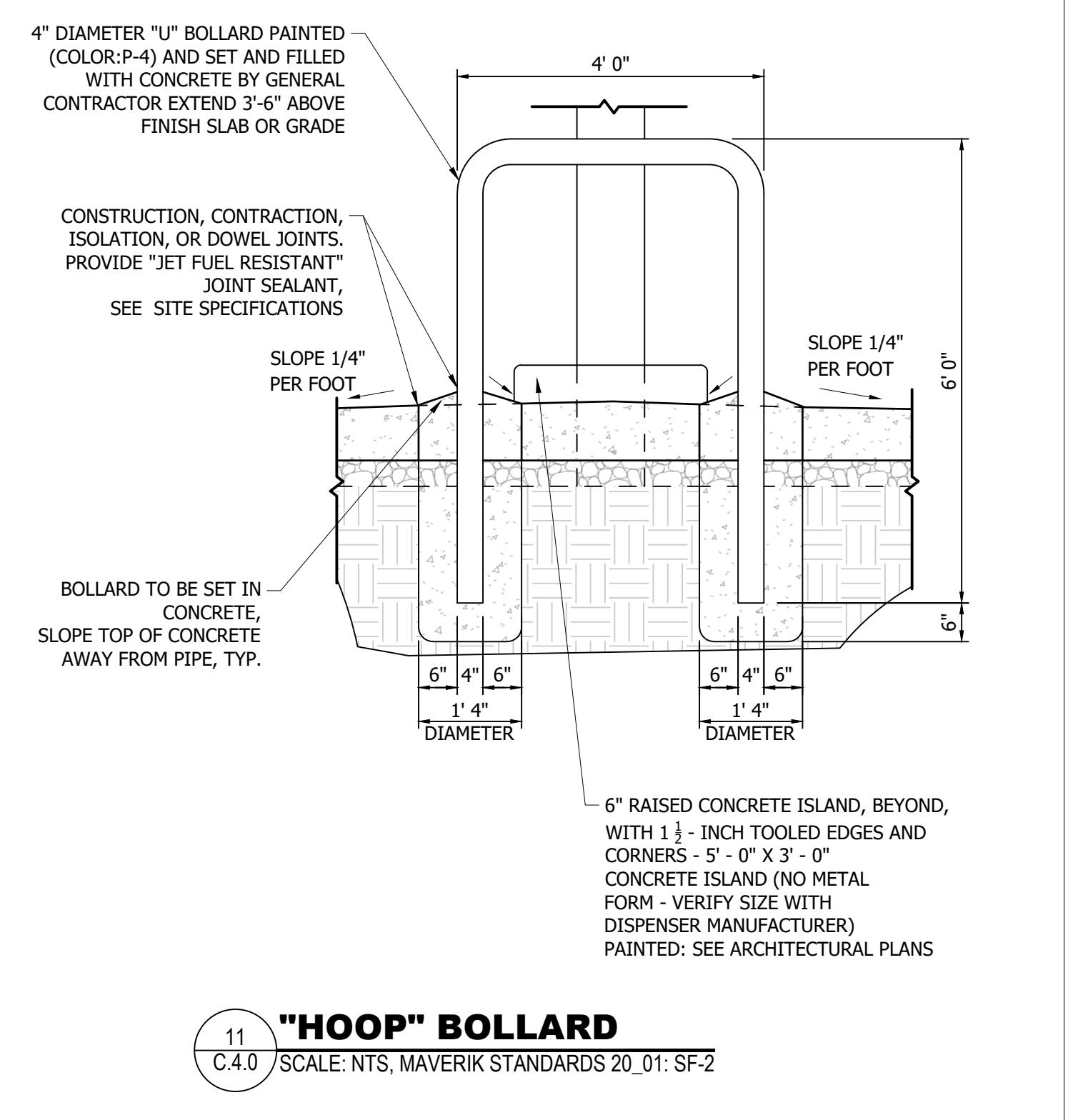
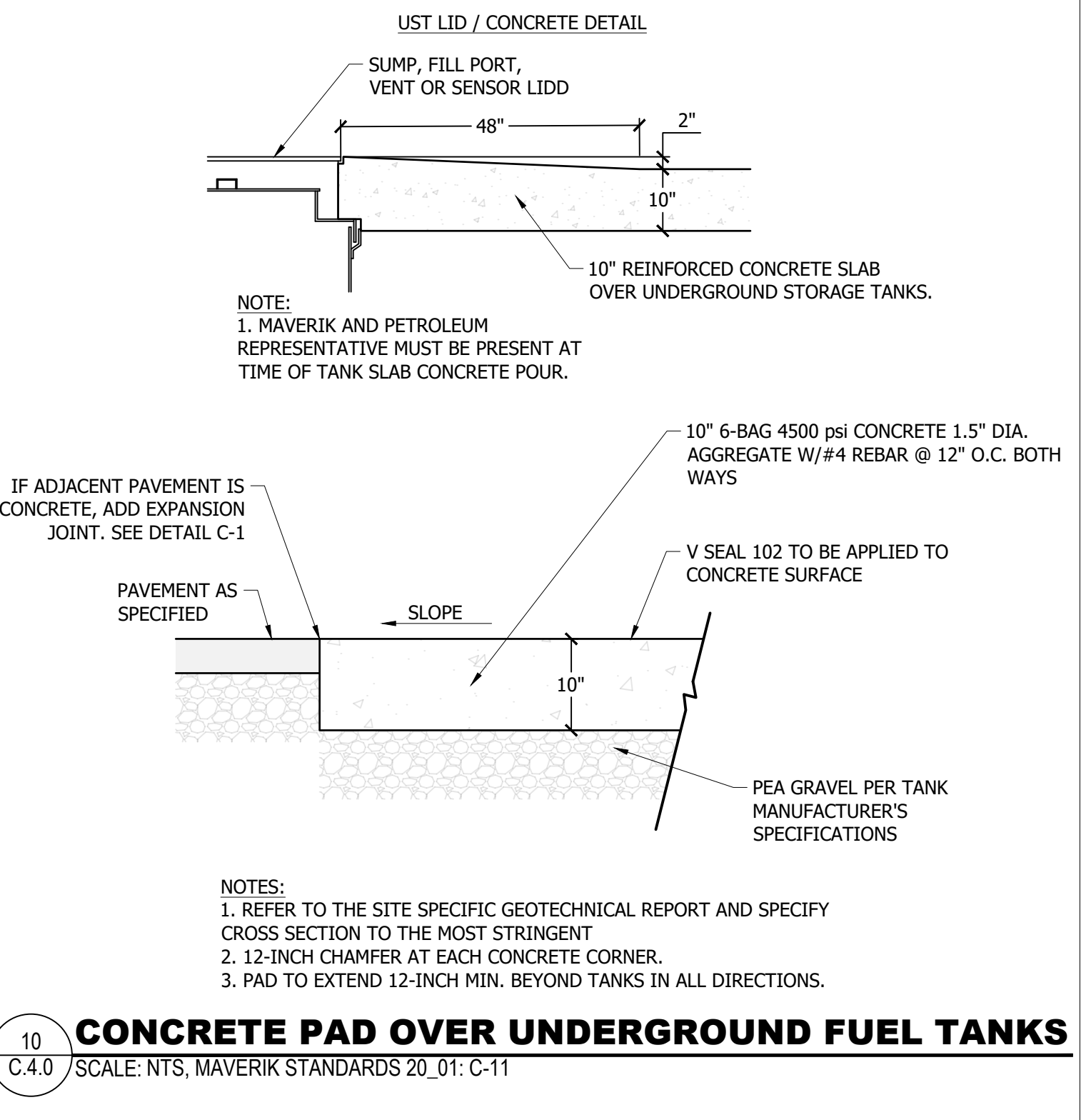
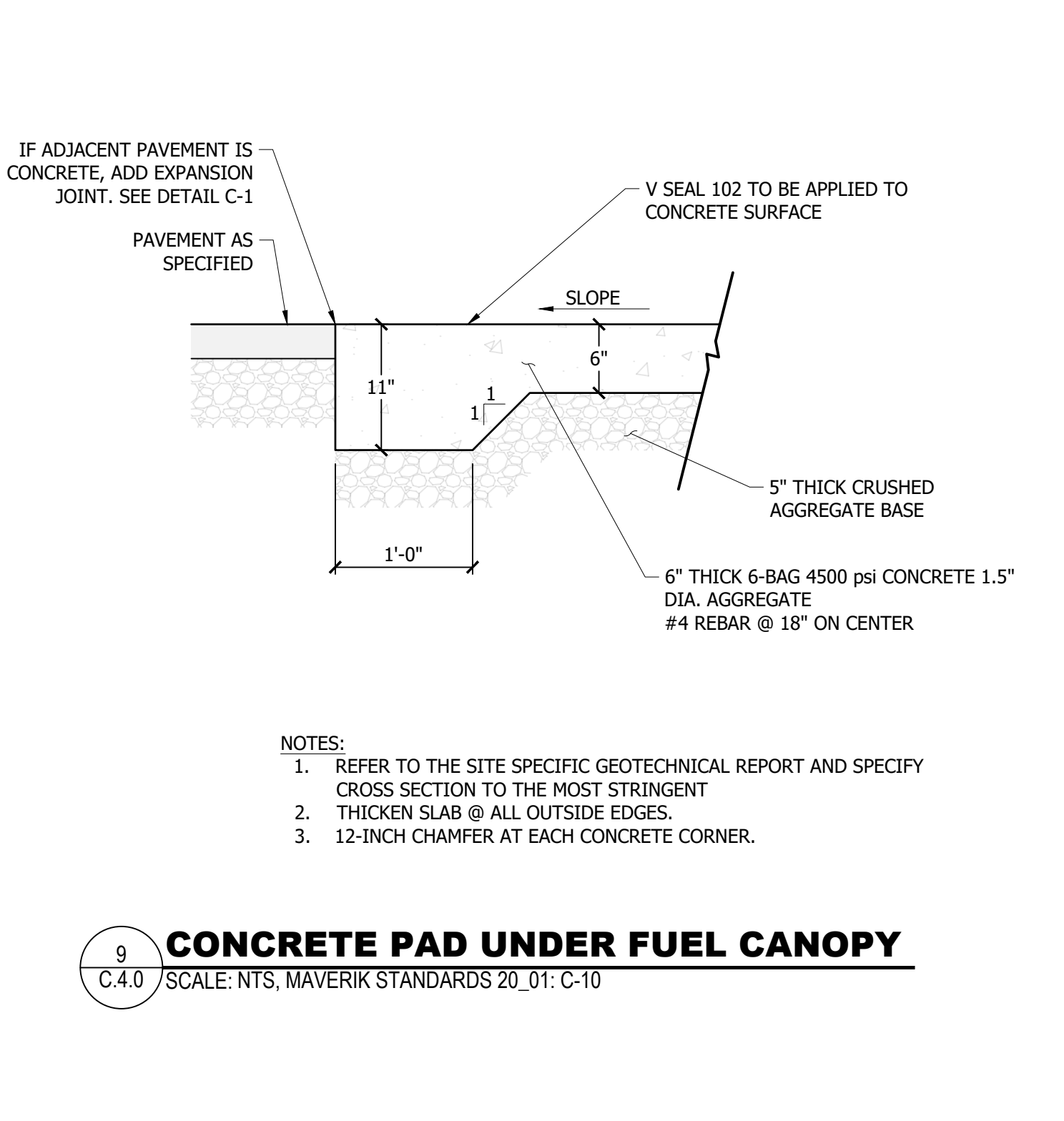
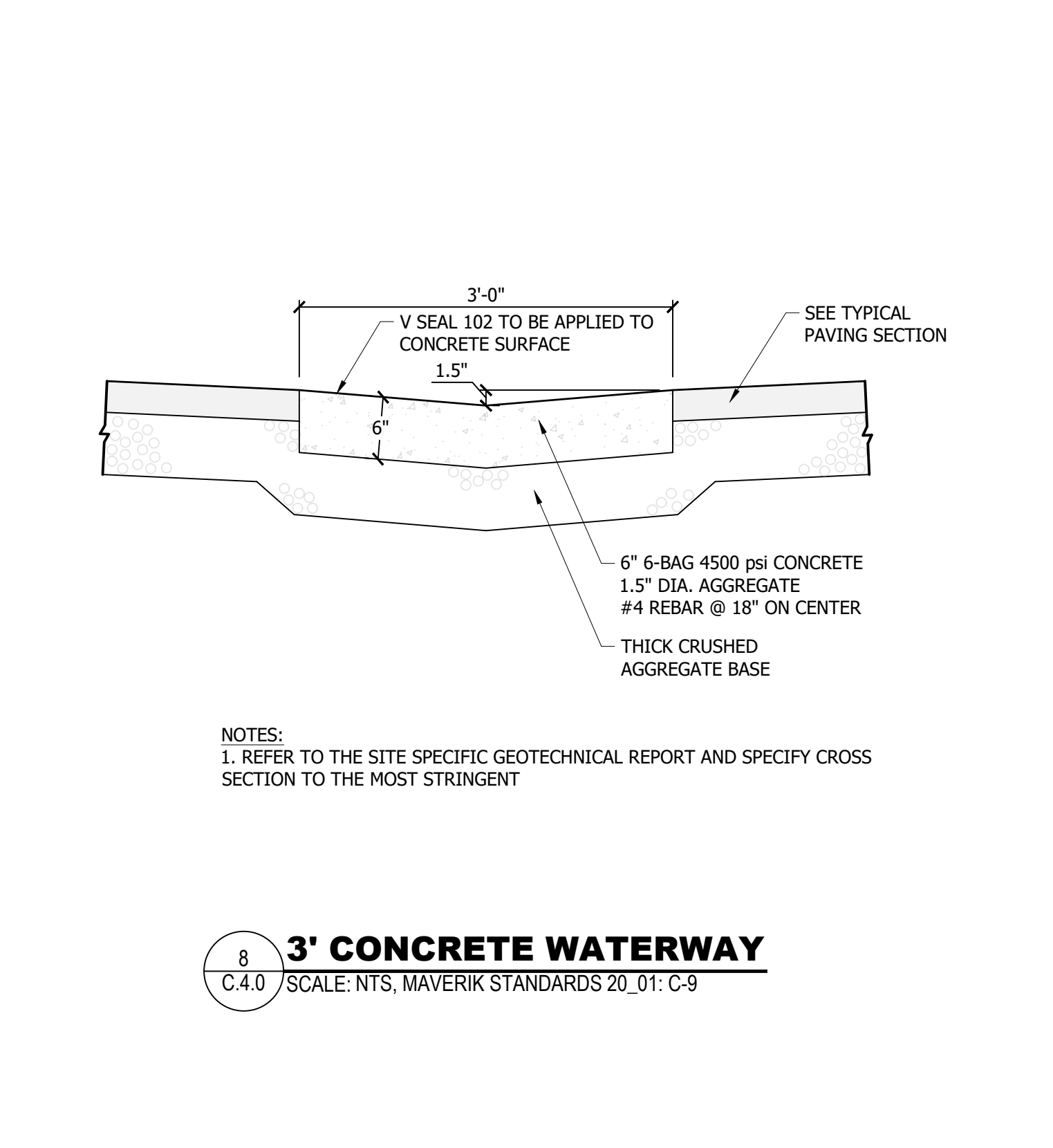
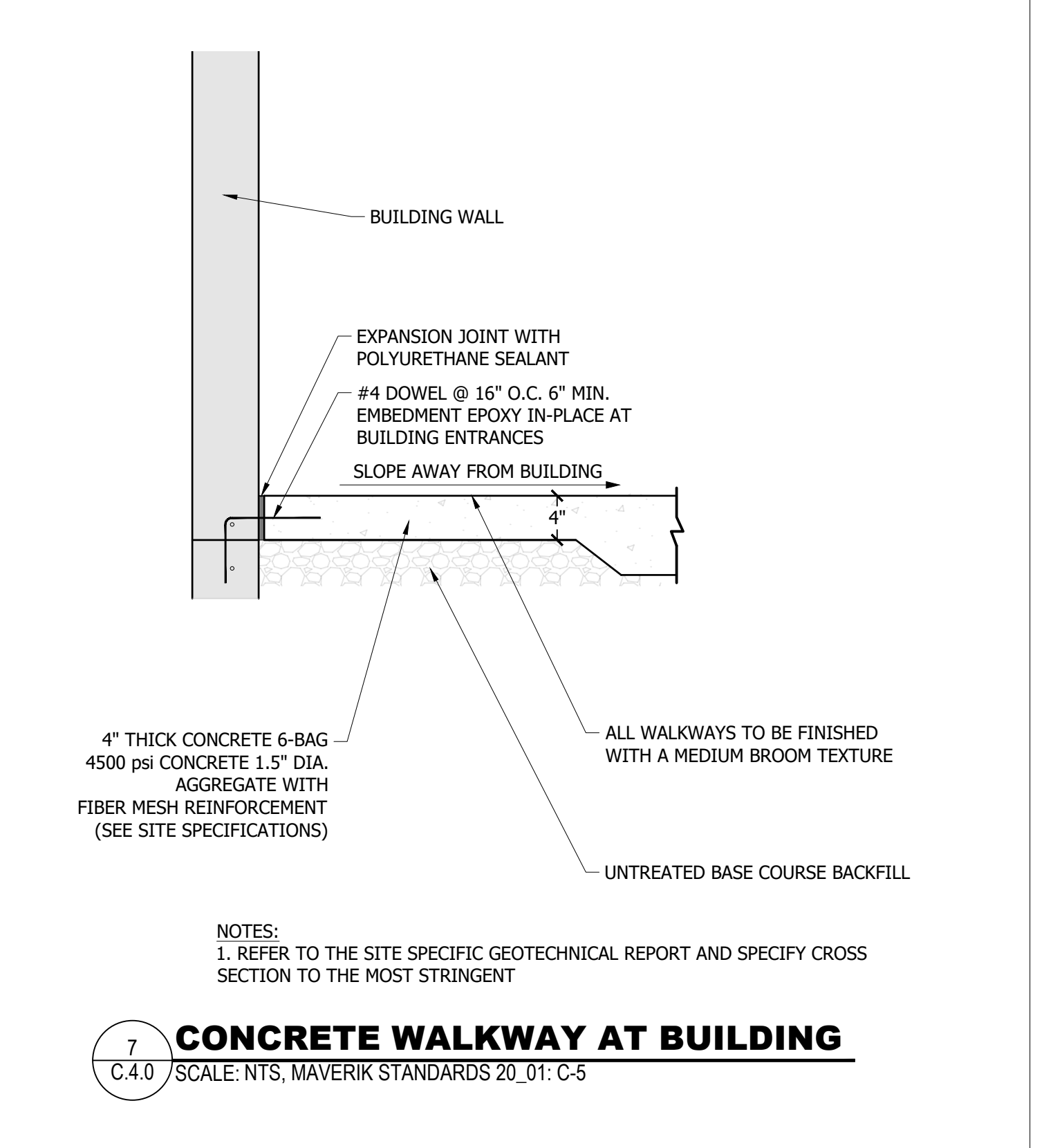
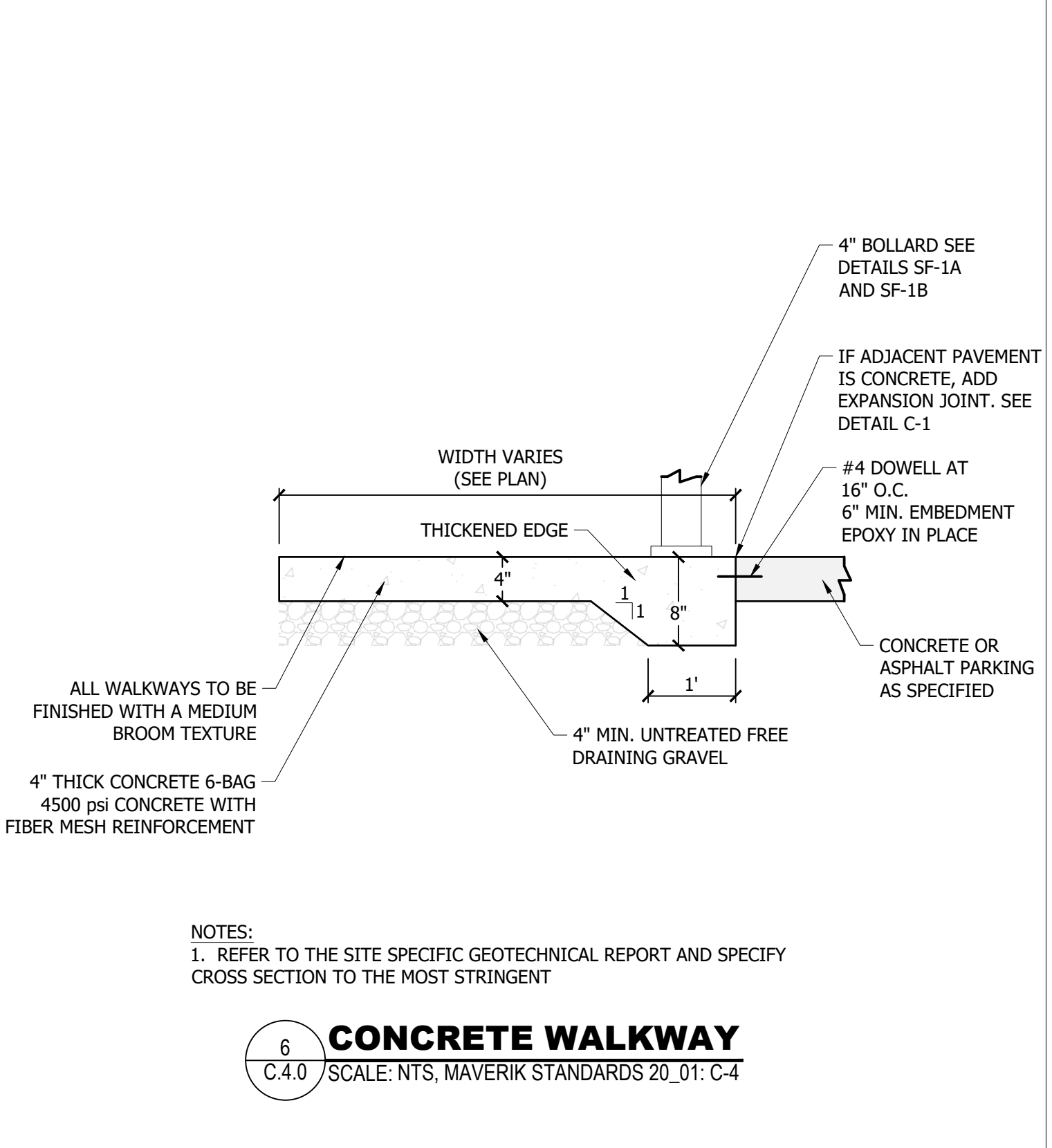
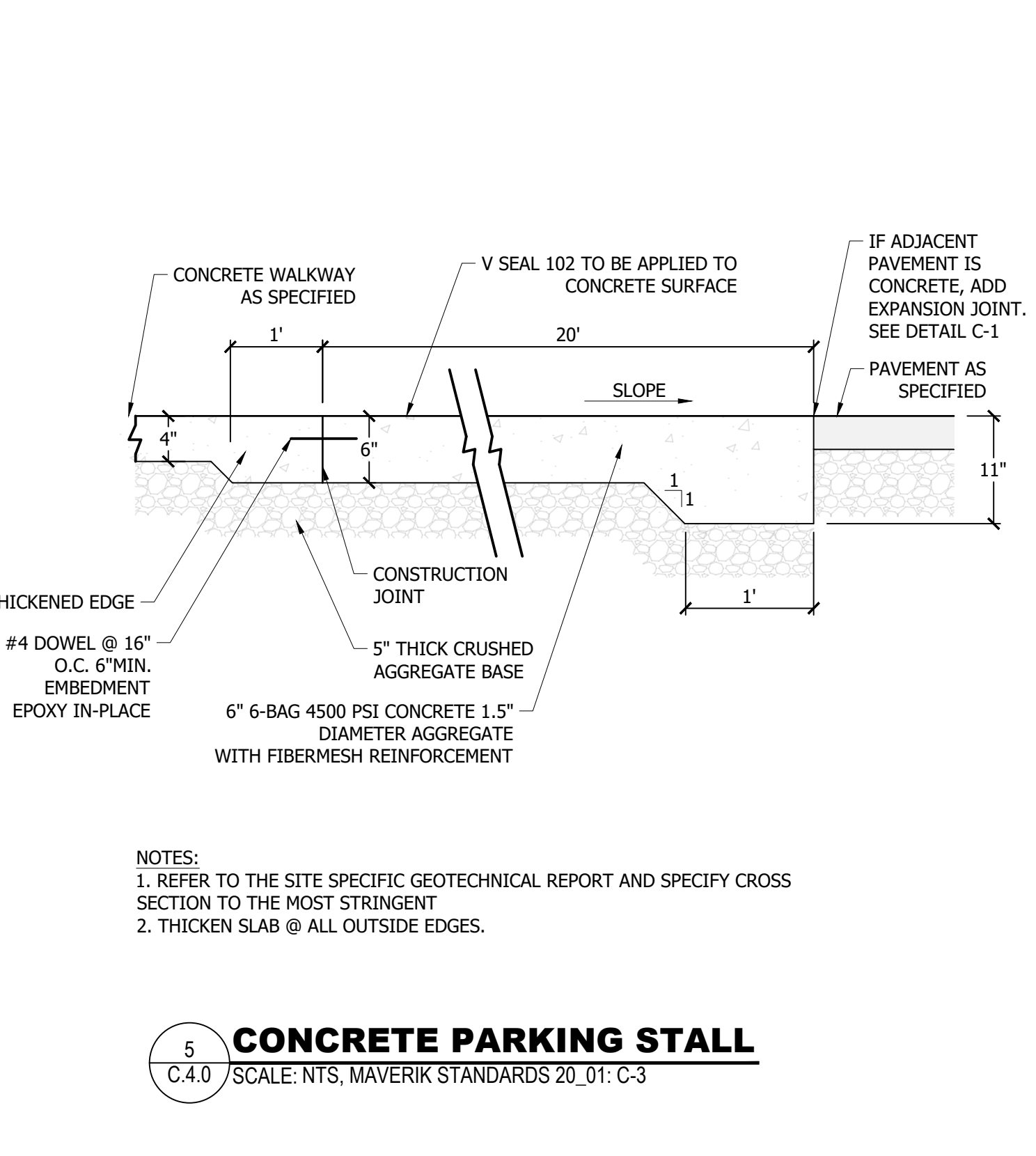
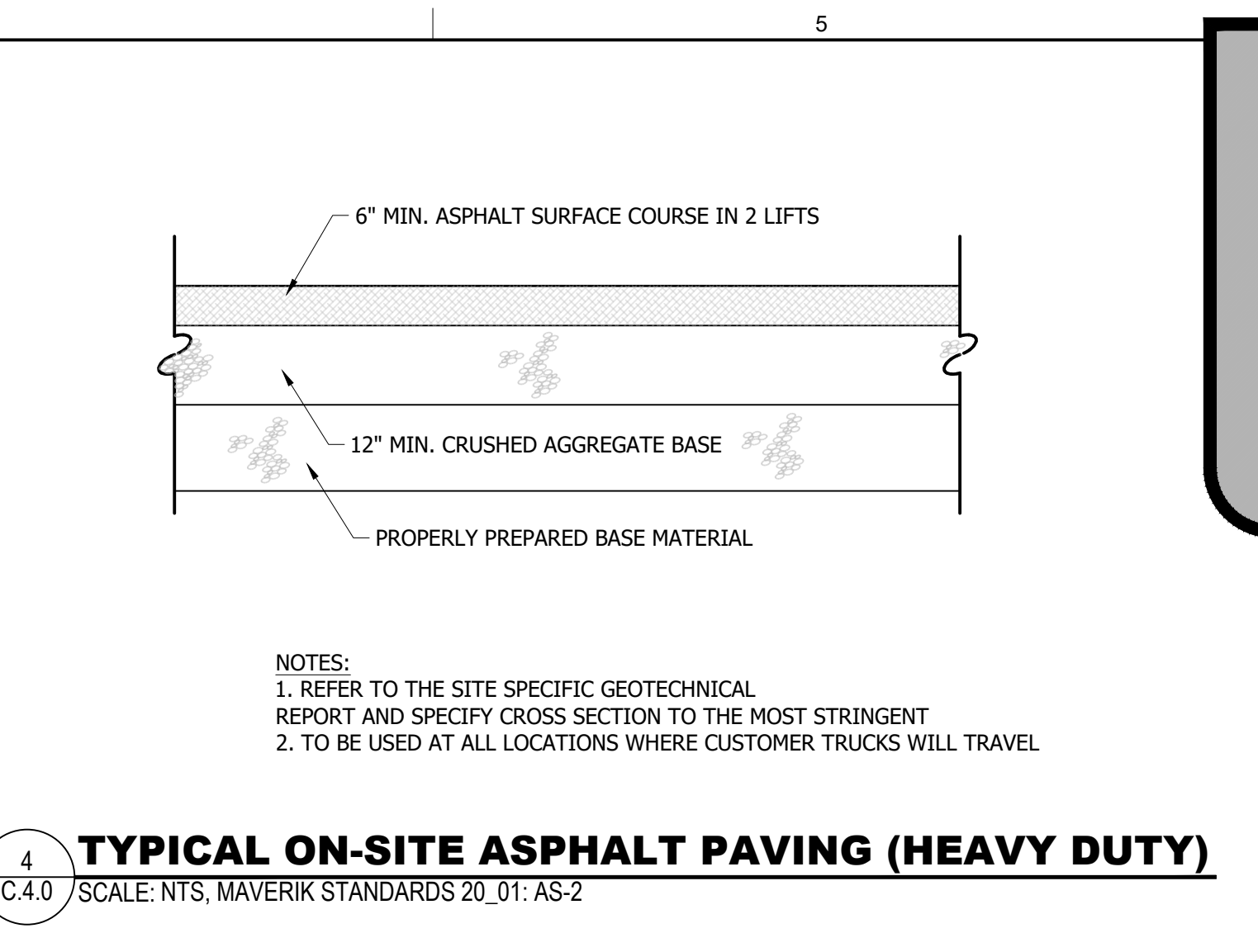
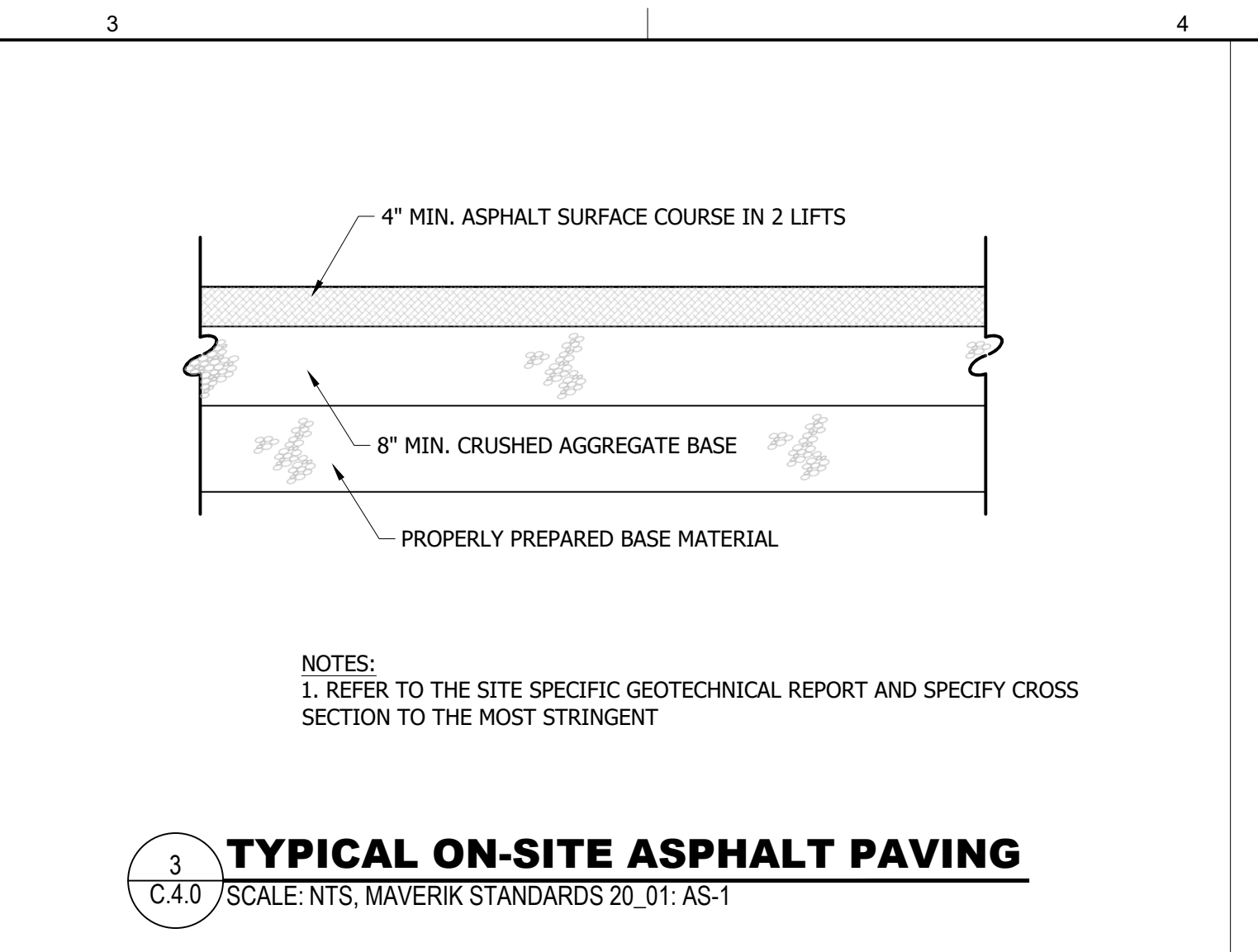
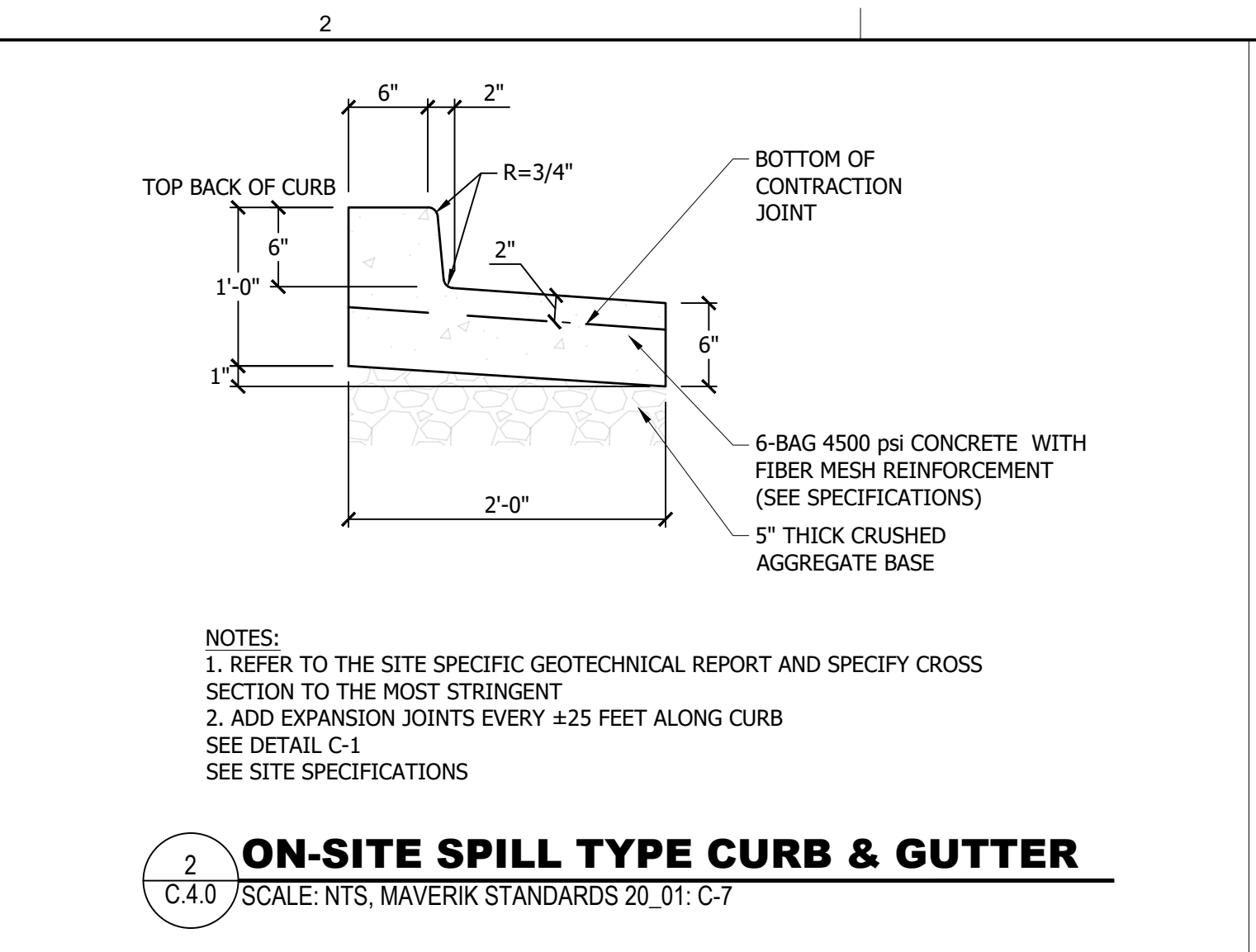
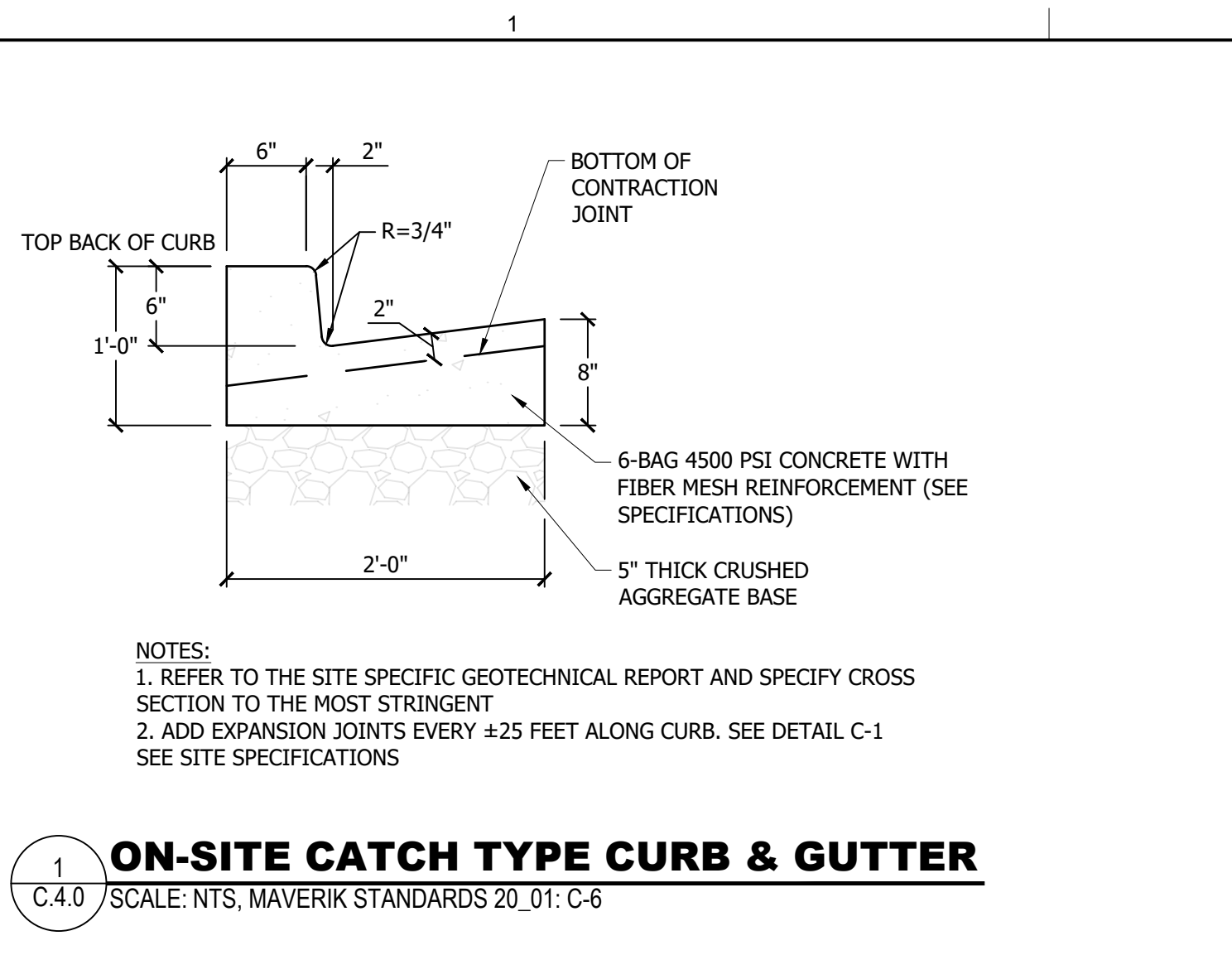
MAVERIK, INC. - SITE CODE CO-0258
 I-25 & COUNTY LINE
 ROAD MONUMENT, CO
 SEPTIC FIELD ENLARGEMENT PLAN & PROFILE



1 SEWER PROFILE
 C.3.0 SSCO-1 TO SEPTIC TANK
 HRZ SCALE: 1" = 30'
 VRT SCALE: 1" = 6'



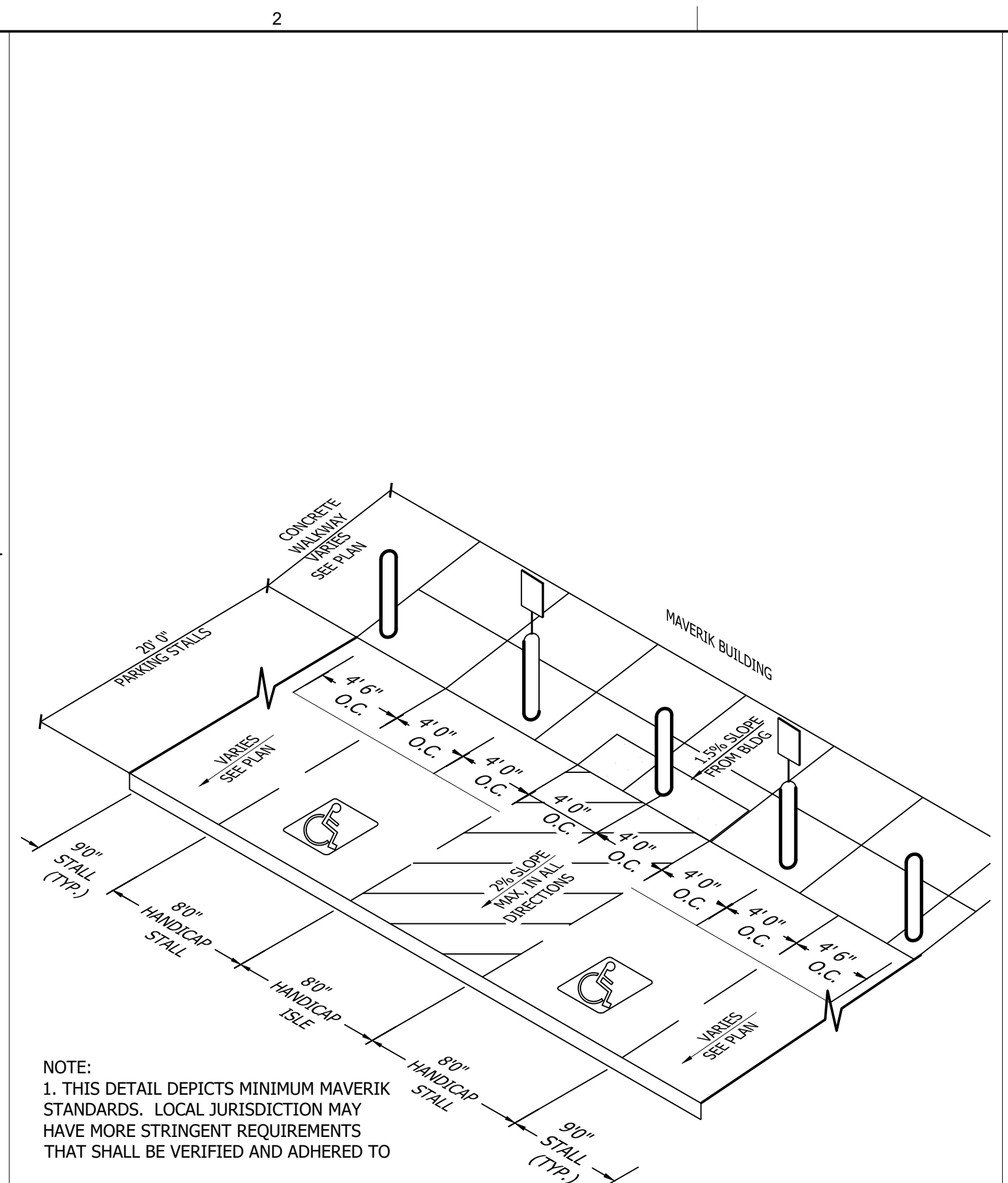
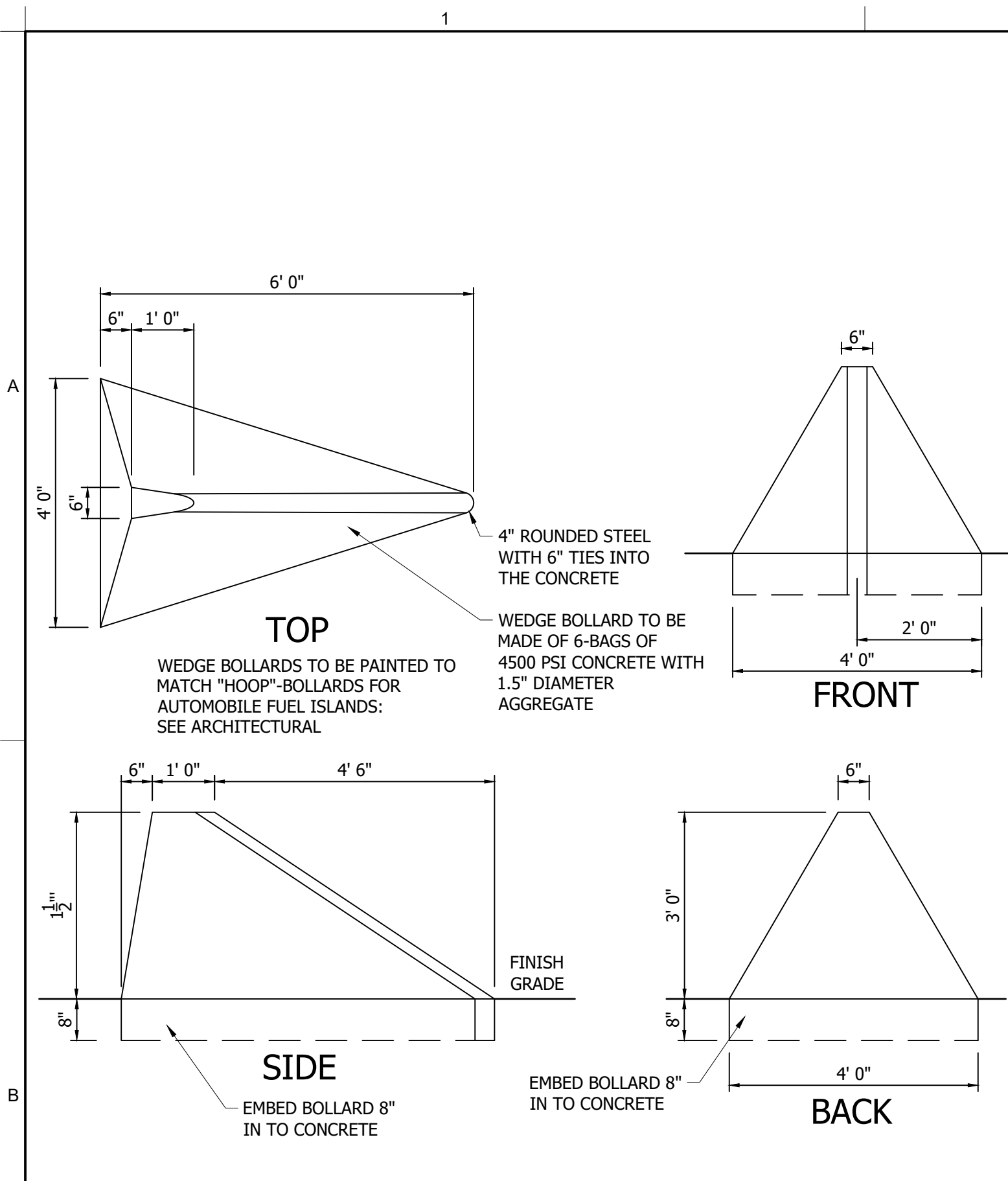
C.3.1



REVISIONS	REV #	DATE
DESIGNED	TMD	SEP 3, 2021
DRAWN	TMD	
CHECKED	RP	
PROJECT	CO-2658-2008	

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I-25 & COUNTY LINE ROAD MONUMENT, CO
SITE DETAILS



SlowStop® Rebounding Bollard – 4" (SS4Y-42)

Color: RAL 1023 Safety Yellow Bollard
RAL 9005 Black Base

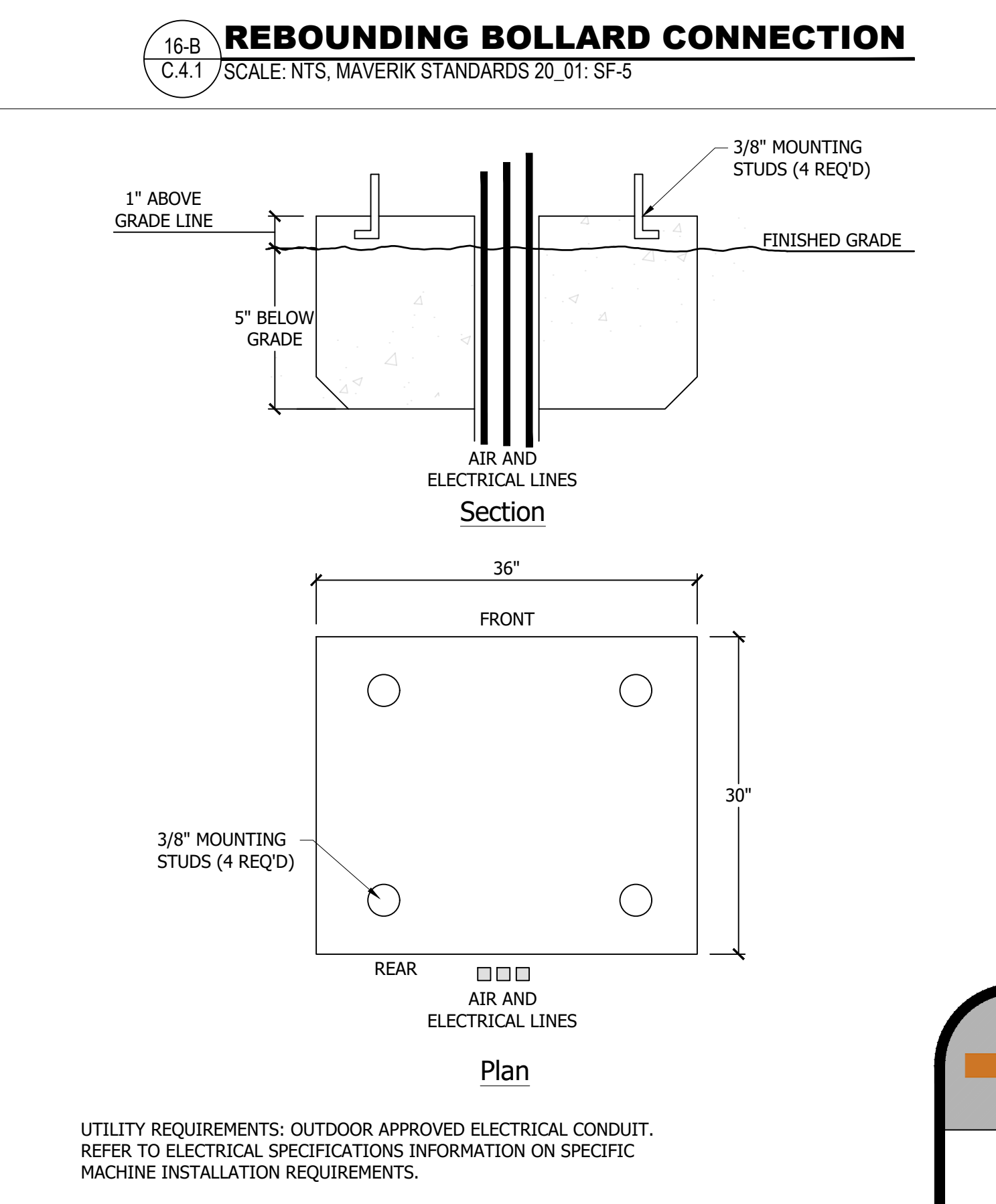
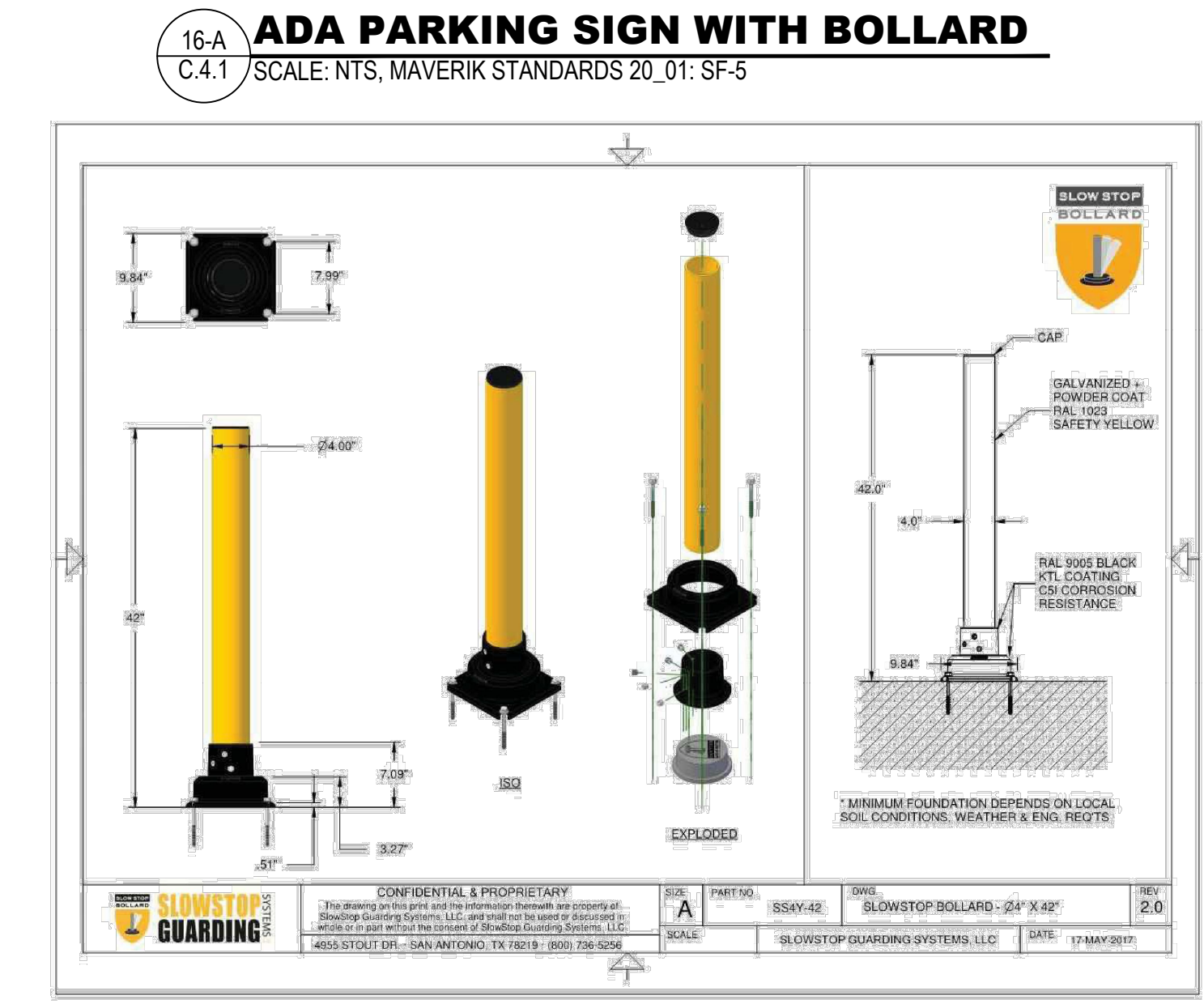
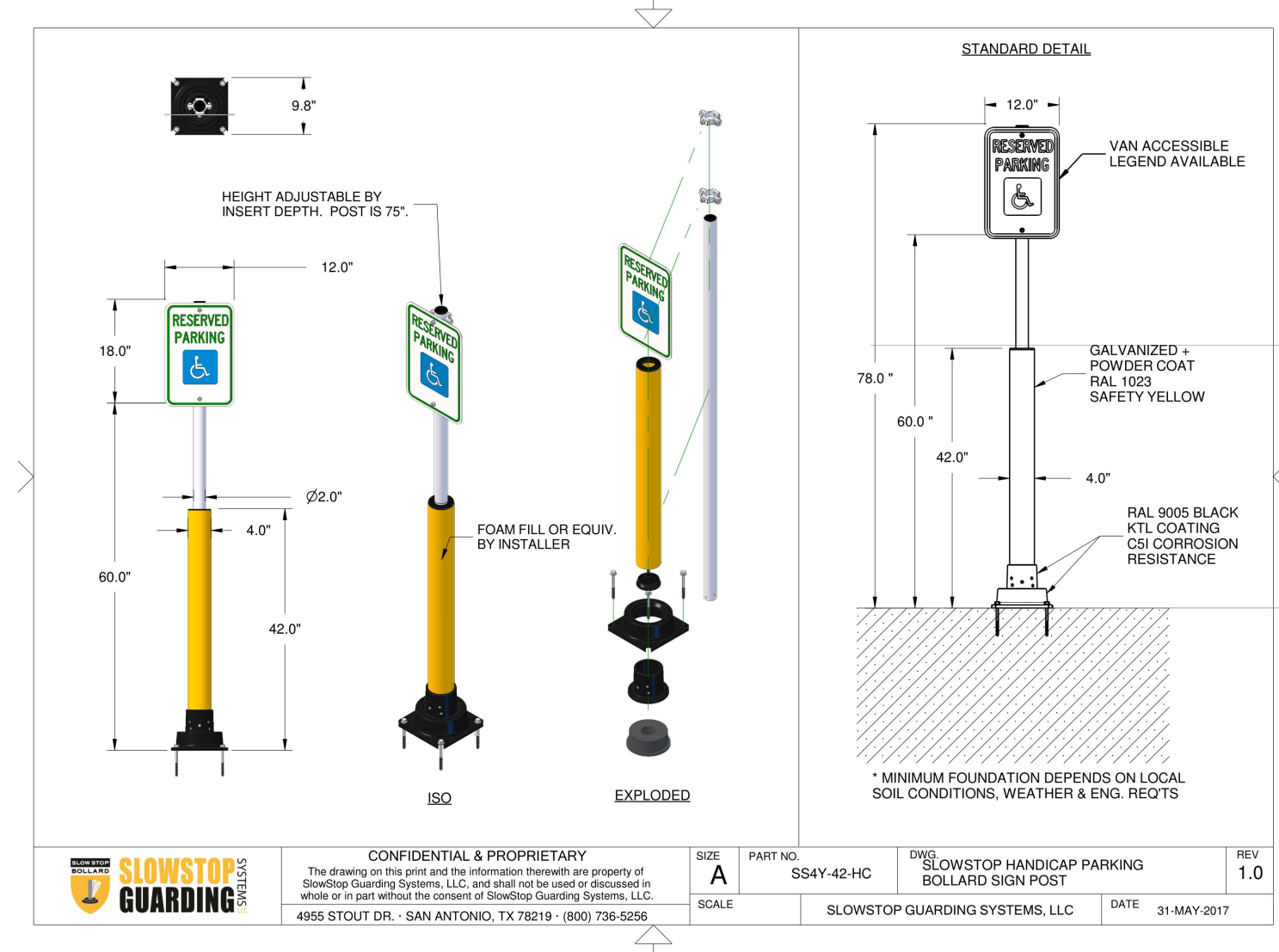
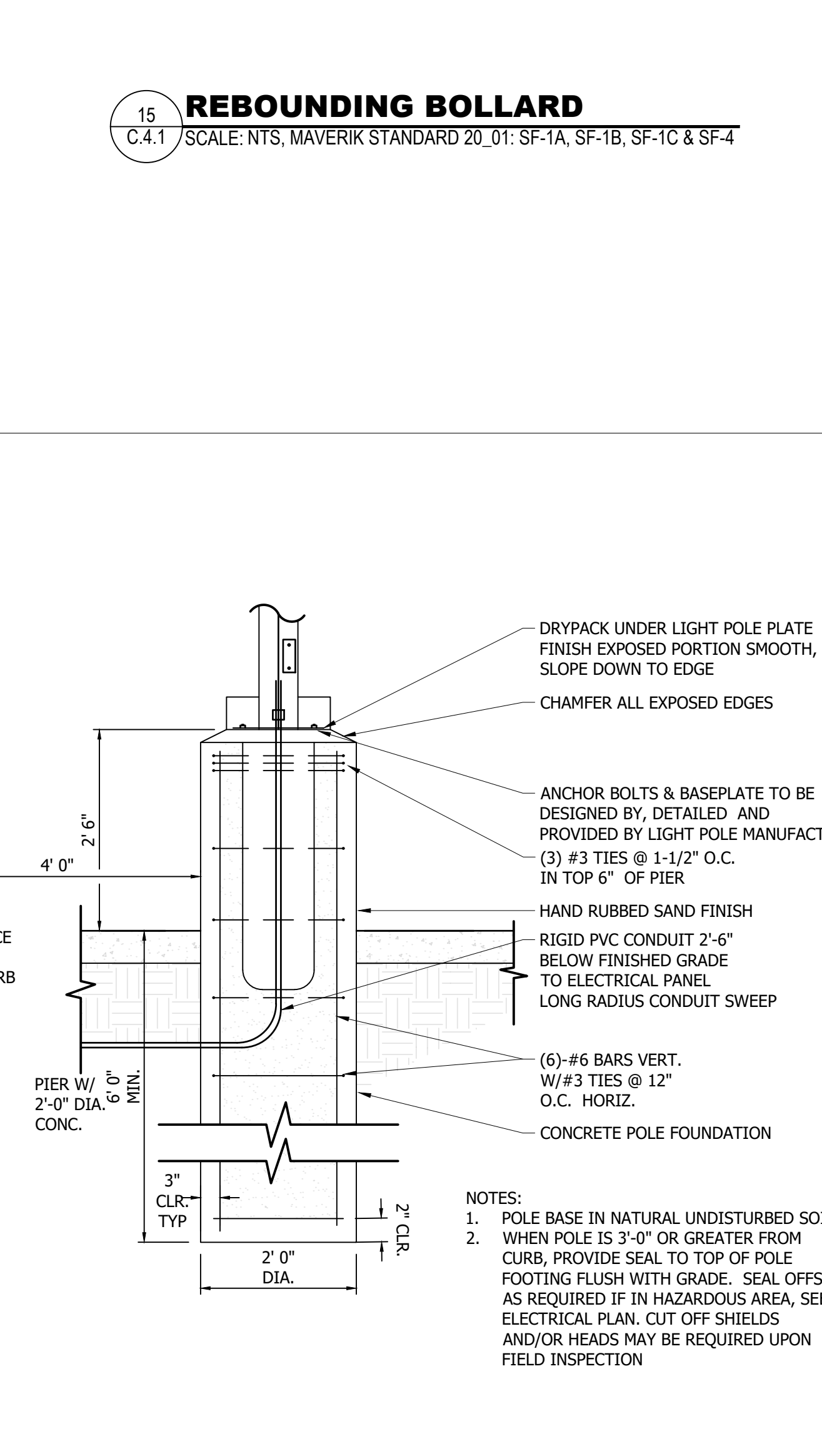
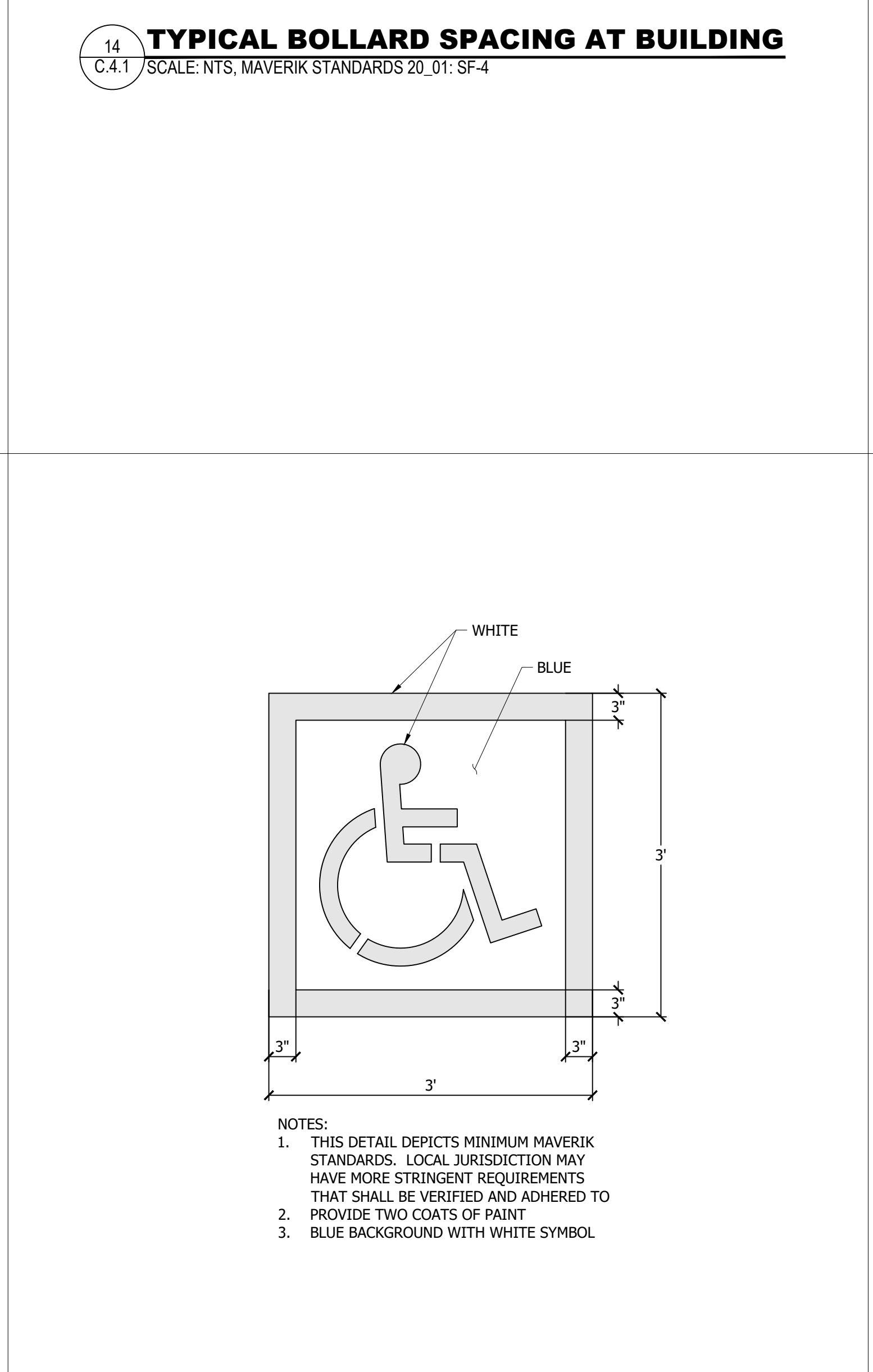
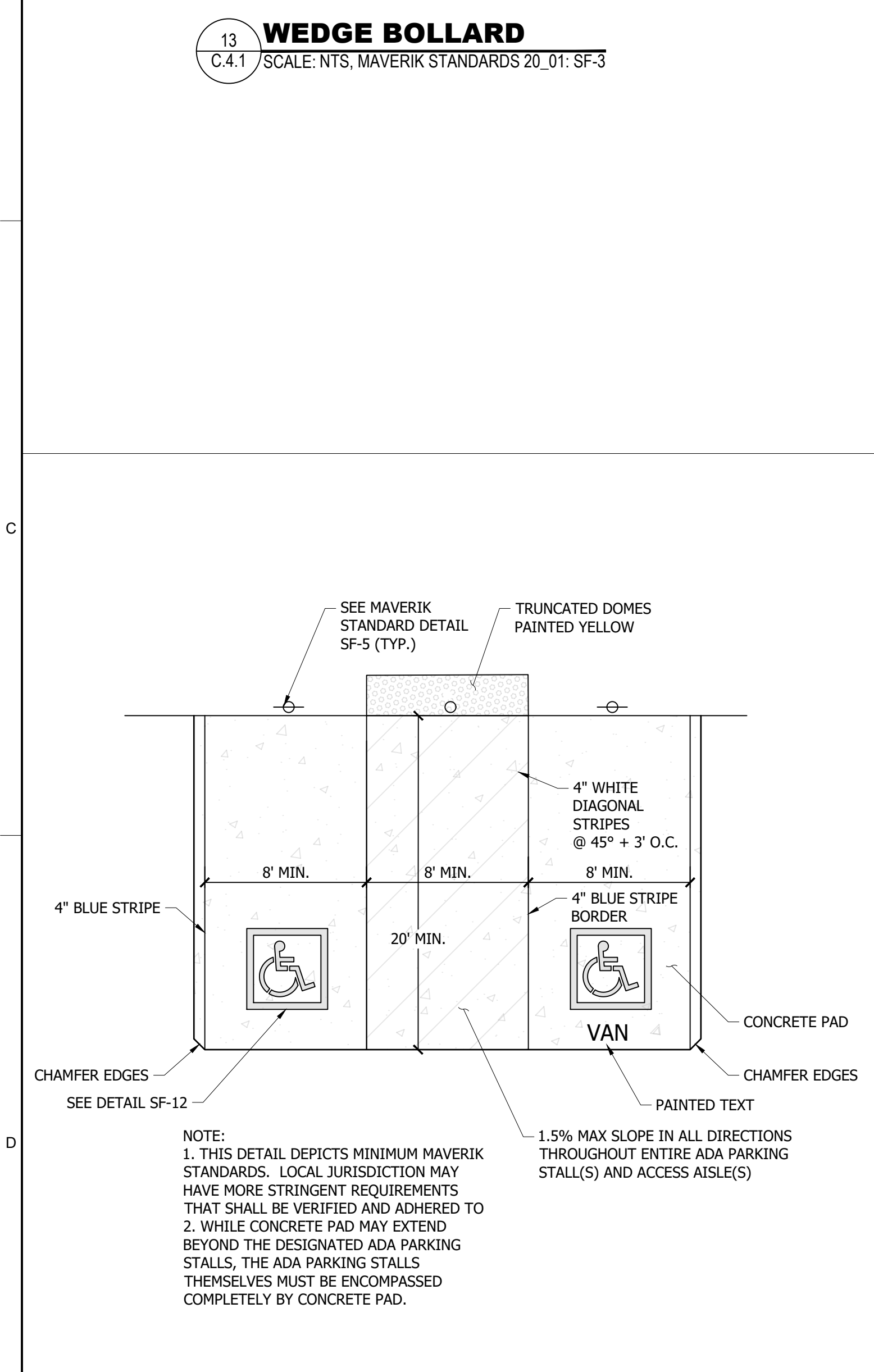
Diameter: 4" (3.5" ANSI Schedule 40 or Equiv.)
Height: 42"

Set Screws: 5 M16 x 2.00
8mm Hex

Cap: Black Plastic

MM/ft (ft)	1000	2000	3000	4000	5000	7000	10000	20000	30000
1.0									
1.5									
2.0									
2.5									
3.0									
3.5									
4.0									
4.5									
5.0									
5.5									
6.0									
6.5									

REBOUNDING BOLLARD
SCALE: NTS, MAVERIK STANDARD 20_01: SF-1A, SF-1B, SF-1C & SF-4



HORROCKS ENGINEERS
555 South Bluff St., Suite 101
St. George, UT 84770
(435) 966-7888
www.horrock.com

WARNING
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REVISIONS

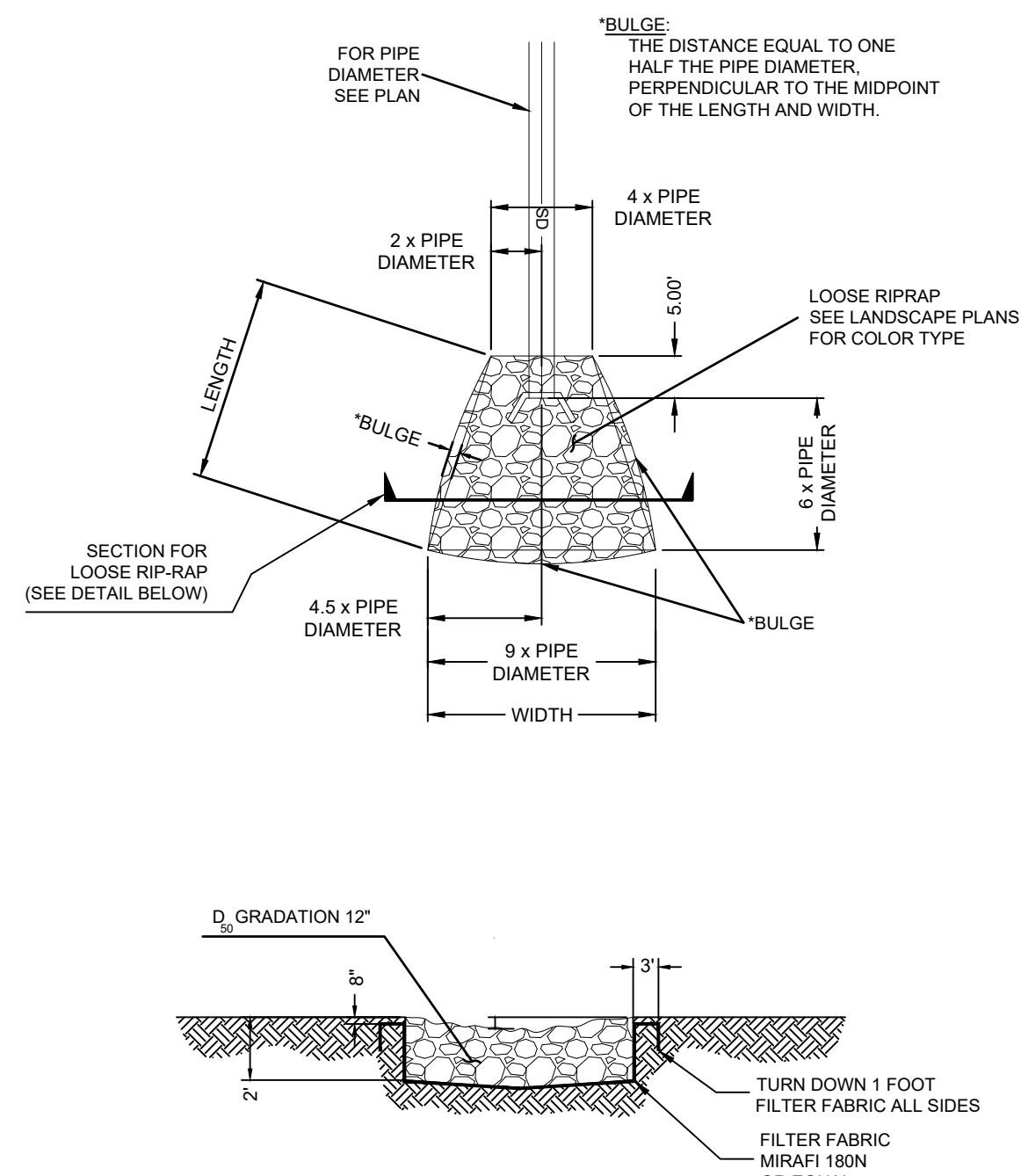
REV #	DATE	DESCRIPTION	DESIGNED	DRAWN	CHECKED	PROJECT
1	SEP 3, 2021	TMD	TMD	RP	CO-2658-2008	

PRELIMINARY NOT FOR CONSTRUCTION

MAVERIK, INC. - SITE CODE CO-0258
I-25 & COUNTY LINE ROAD
MONUMENT, CO
SITE DETAILS

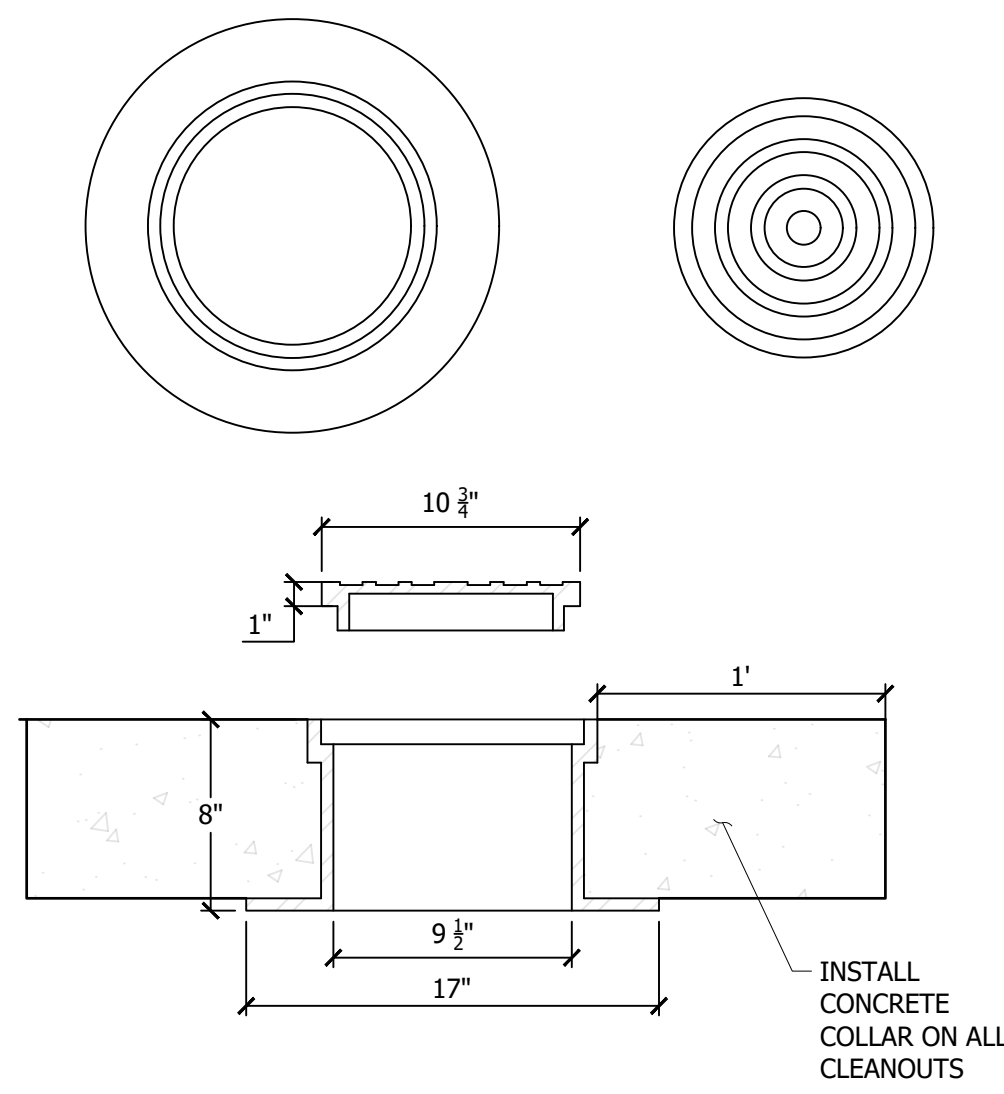
C.4.1

PAGE 16

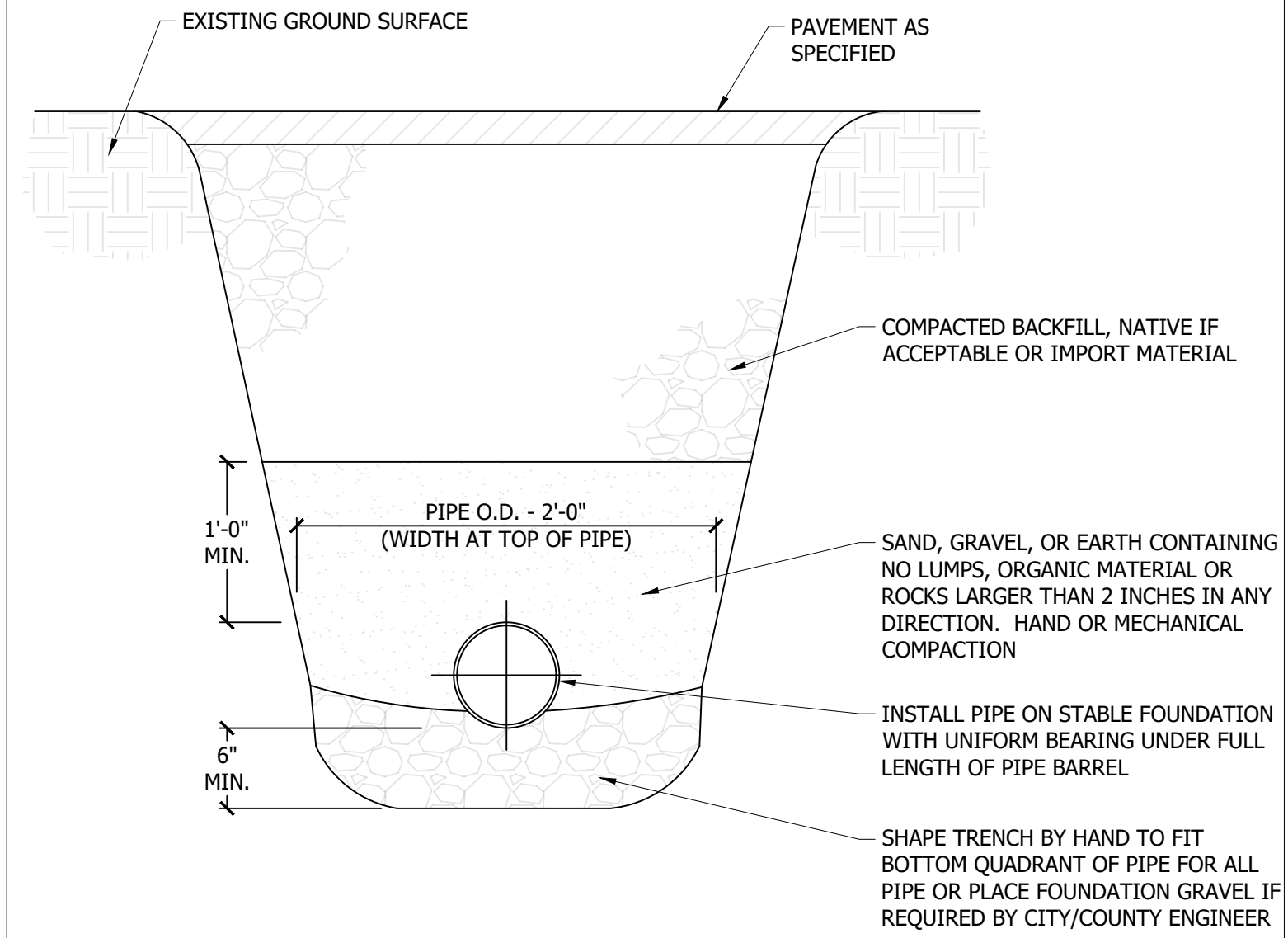


21 RIPRAP OUTLET PROTECTION
C.4.2 SCALE: NTS

H-8030 Cleanout Frame and Cover

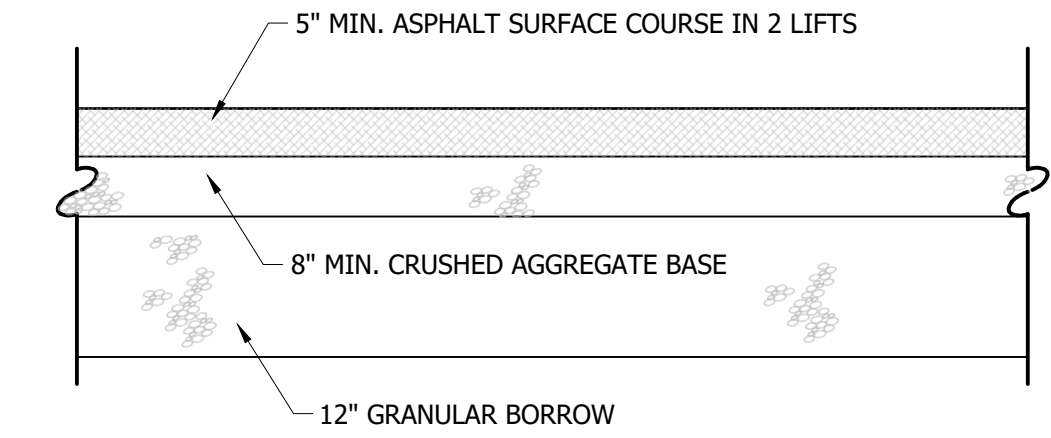


22 CLEAN-OUT FRAME AND COVER
C.4.2 SCALE: NTS, MAVERIK STANDARDS 20_01: UT-2

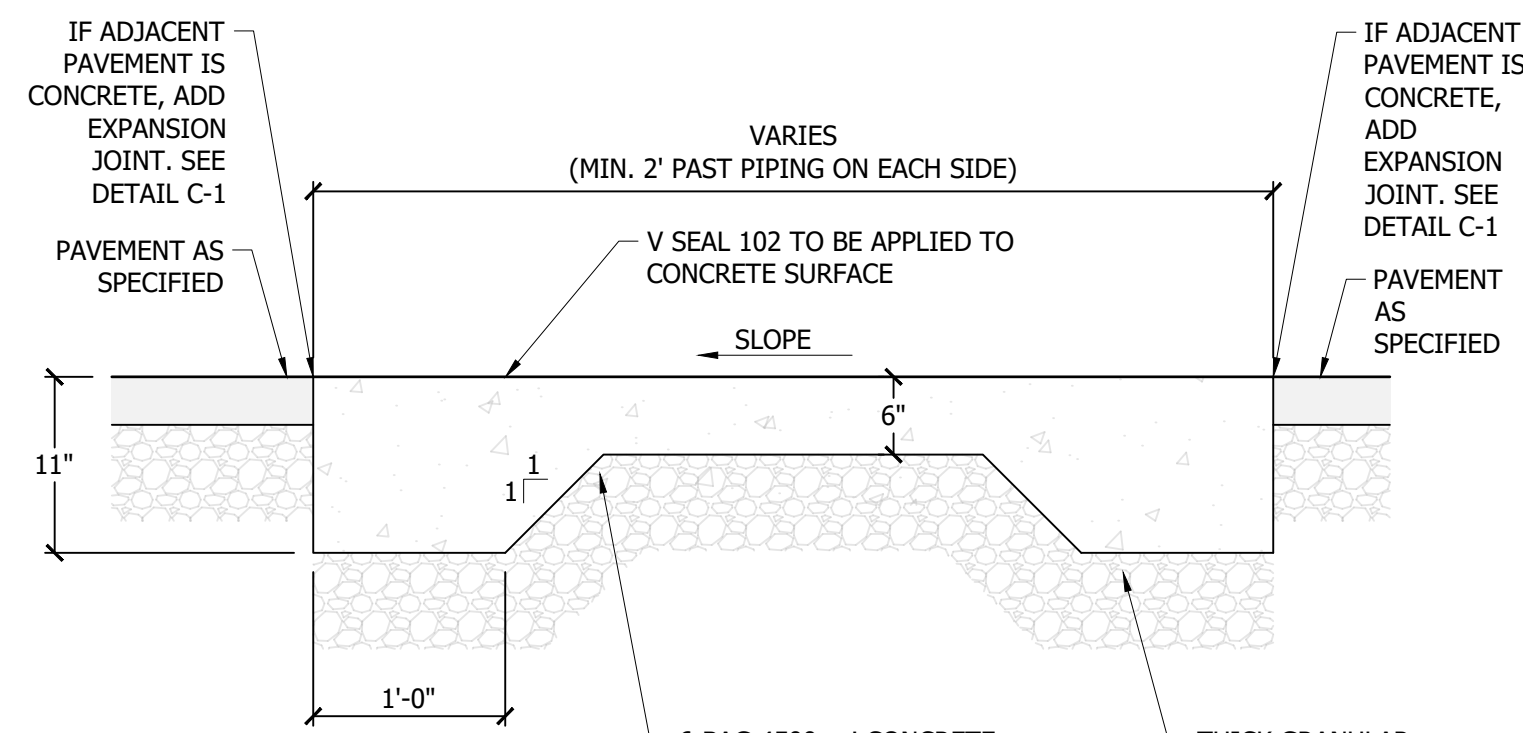


NOTES:
1. REFER TO THE SITE SPECIFIC GEOTECHNICAL REPORT
2. USE LOCAL JURISDICTION DETAIL

23 ON-SITE PIPE BED SECTION
C.4.2 SCALE: NTS, MAVERIK STANDARDS 19_04: UT-3

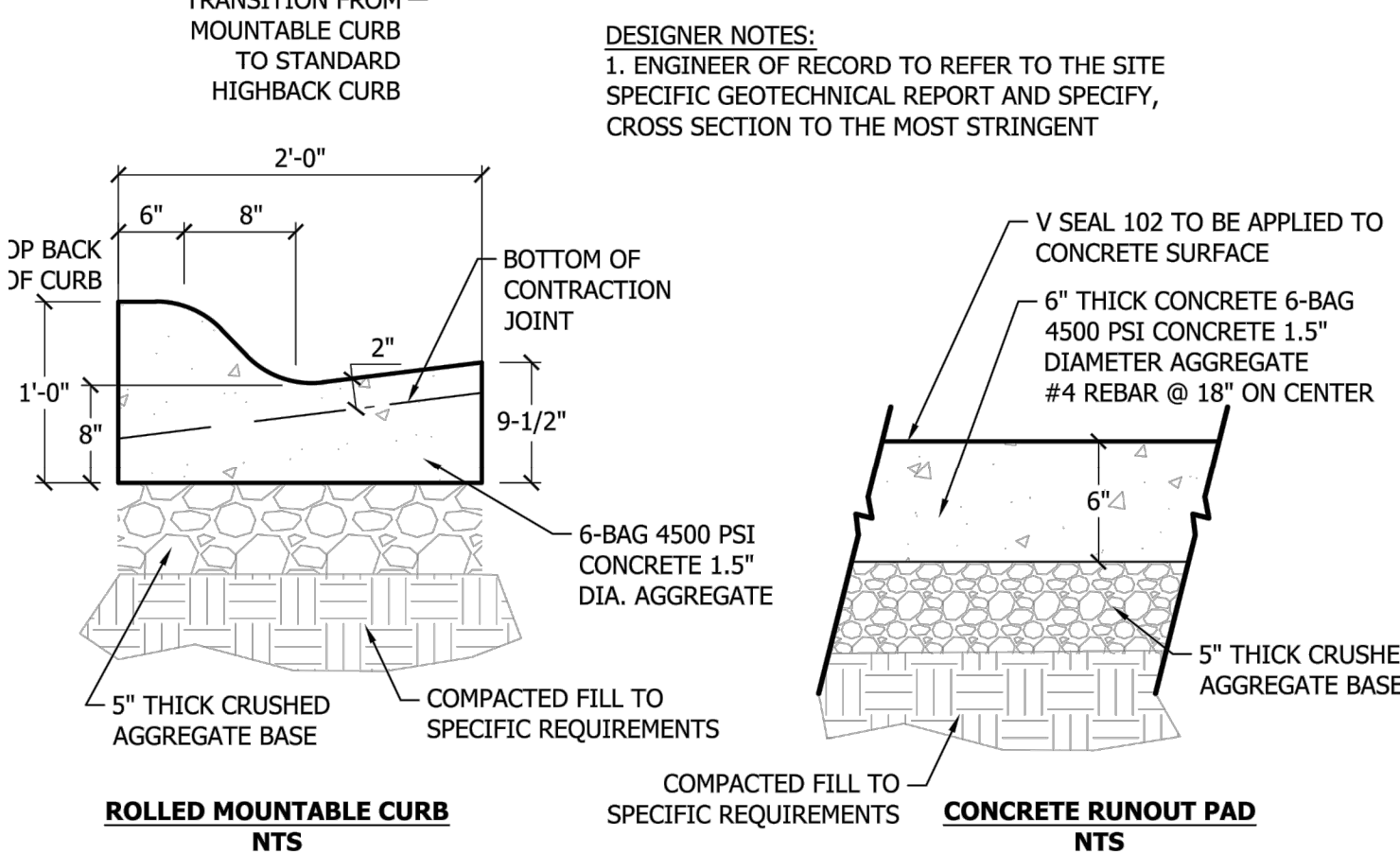
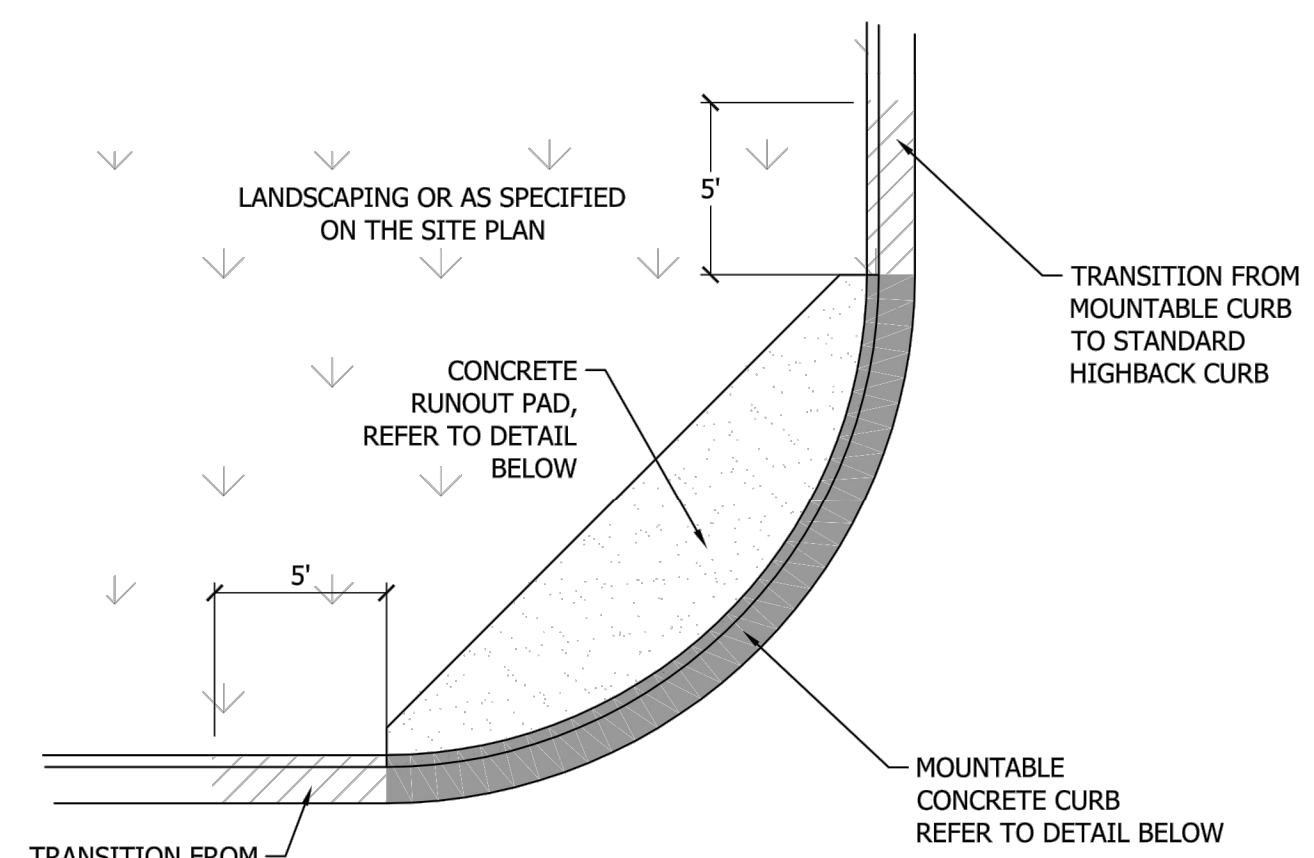


24 OFF-SITE ASPHALT PAVING
C.4.2 SCALE: NTS

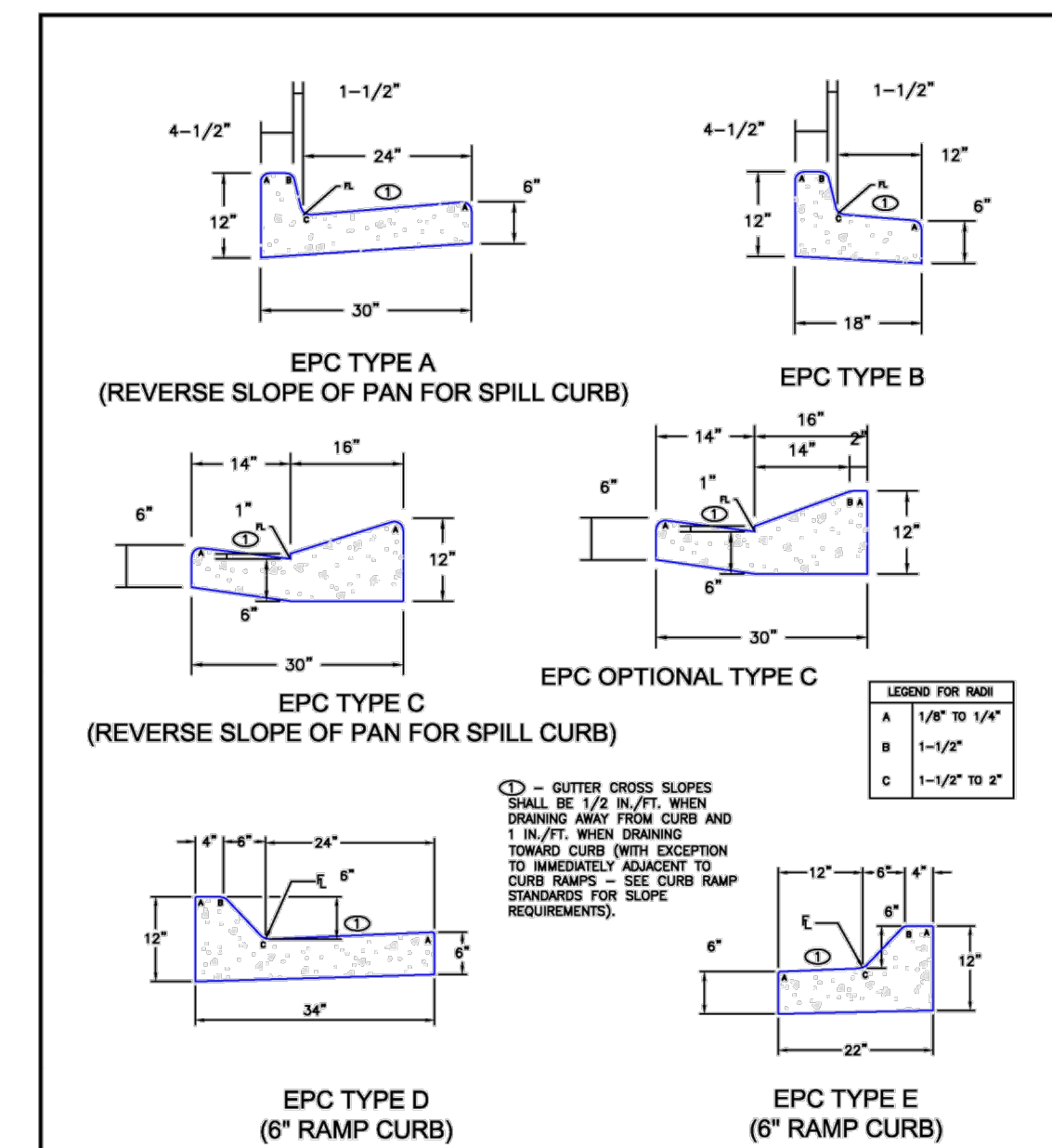


NOTES:
1. REFER TO THE SITE SPECIFIC GEOTECHNICAL REPORT AND SPECIFY CROSS SECTION TO THE MOST STRINGENT
2. THICKEN SLAB @ ALL OUTSIDE EDGES.
3. INSTALL "UNDERGROUND PETROLEUM" MARKERS EVERY 20 FEET ABOVE FUEL LINES OR PER NFPA CODE

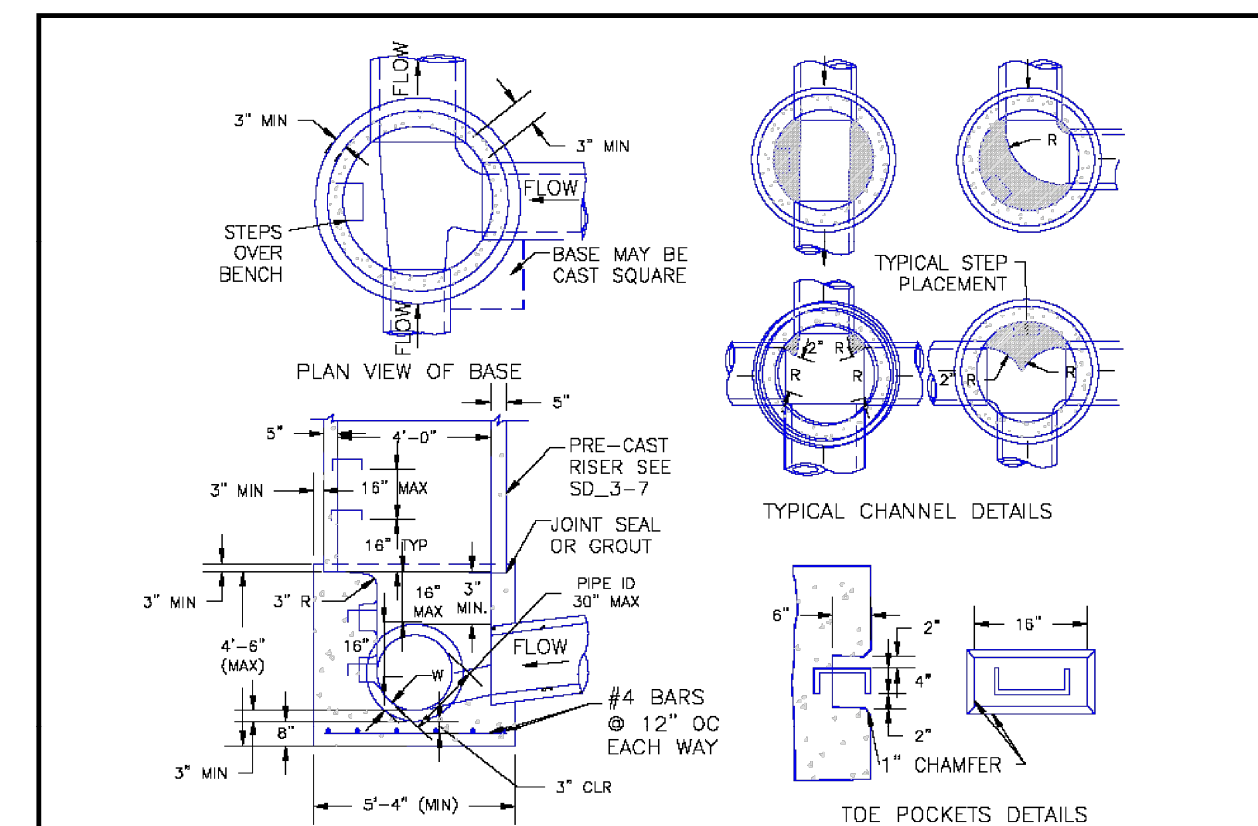
25 PETROLEUM TRENCH CAP SECTION
C.4.2 SCALE: NTS, MAVERIK STANDARDS 20_01: C-12



26 CONCRETE RUNOUT PAD AND MOUNTABLE CURB
C.4.2 SCALE: NTS, MAVERIK STANDARDS DETAIL C-8



27 TYPICAL CURB AND GUTTER - TYPE A
C.4.2 SCALE: NTS, EL PASO COUNTY



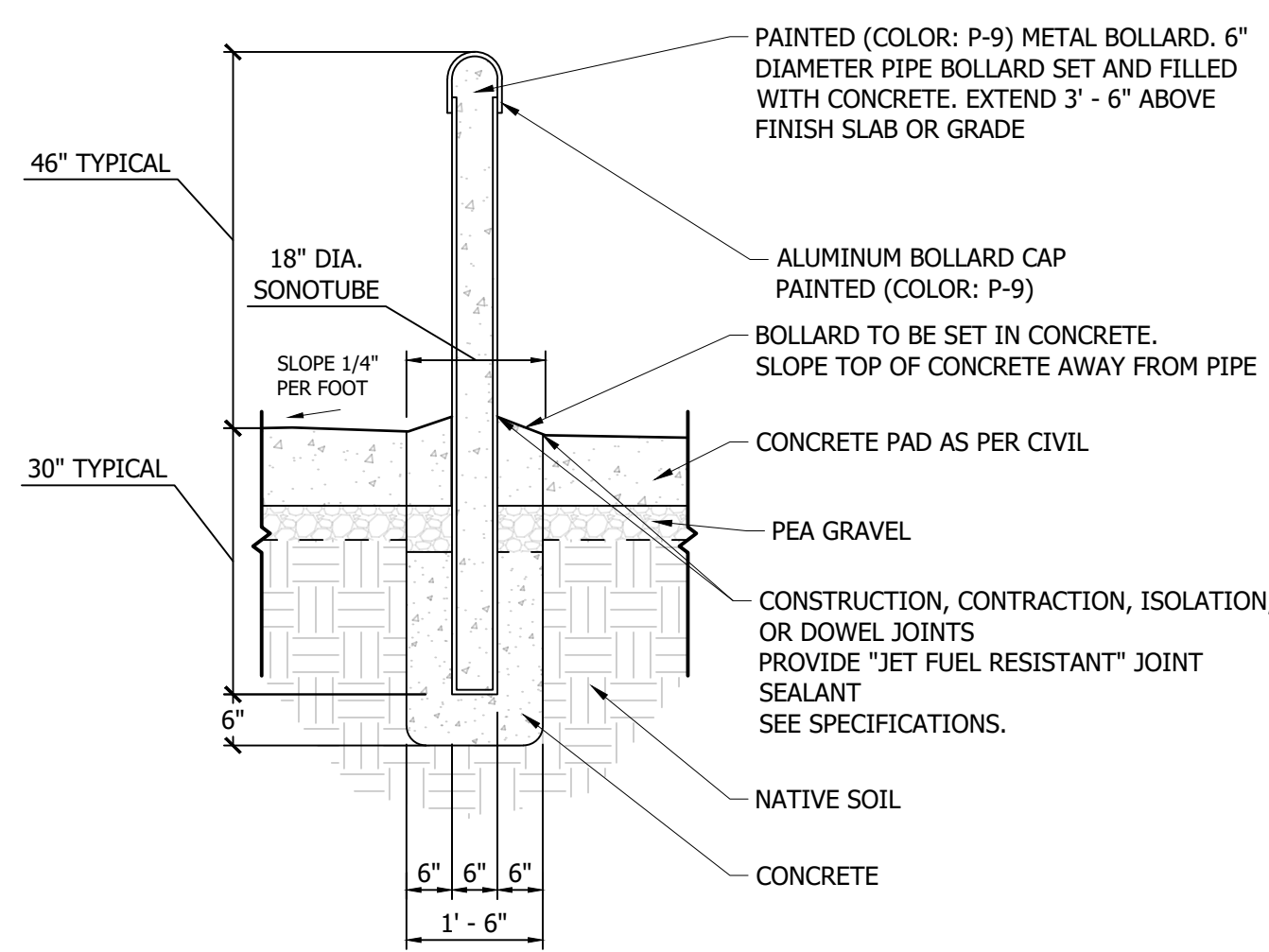
NOTES:
1. TYPE II MANHOLES SHALL BE USED WHEN APPROPRIATE AND TYPICALLY WHEN THE PIPE SIZES ARE 30" OR LESS INSIDE DIAMETER.
2. VIEW AND DETAILS ARE TYPICAL. DESIGN ENGINEER SHALL DETERMINE MANHOLE BASE CONFIGURATION AND DIMENSIONS FOR PARTICULAR PIPE SIZES AND ALIGNMENT.
3. EITHER LADDER OF STEPS SHALL BE INSTALLED WHEN MANHOLE DEPTH EXCEEDS 30". STEPS IN BASE SHALL BE INSTALLED IN "TOE POCKETS" (SEE DETAIL THIS SHEET). LOWEST STEP SHALL BE A MAXIMUM OF 16" ABOVE THE FLOOR.
4. PIPES SHALL BE TRIMMED TO FINAL SHAPE AND SET BEFORE MANHOLE IS POURED.
5. BENCH SHALL BE SLOPED TOWARD CENTER OF MANHOLE BASE (4:1 MAX., 1/2" PER FOOT, MIN.).
6. FLOOR OF MANHOLE SHALL BE TROWELED TO A SMOOTH, HARD SURFACE AND SHALL SLOPE TOWARDS THE OUTLET (6:1, 1/2" PER FT. MIN.). FLOOR SHALL BE SHAPED AND CHANNELLED; SEE DETAILS THIS SHEET.

28 STORM SEWER MANHOLE
C.4.2 SCALE: NTS, EL PASO COUNTY

WARNING	
IF THIS BAR DOES NOT MEASURE 2" THEN DRAWING IS NOT TO SCALE	
REVISIONS	DATE
REV #	DATE
DRAWING INFO	DESIGNED: TMD
DATE: SEP 3, 2021	DRAWN: TMD
	CHECKED: RP
	PROJECT: CO-2658-2008
	SEE GENERAL NOTES SHEET

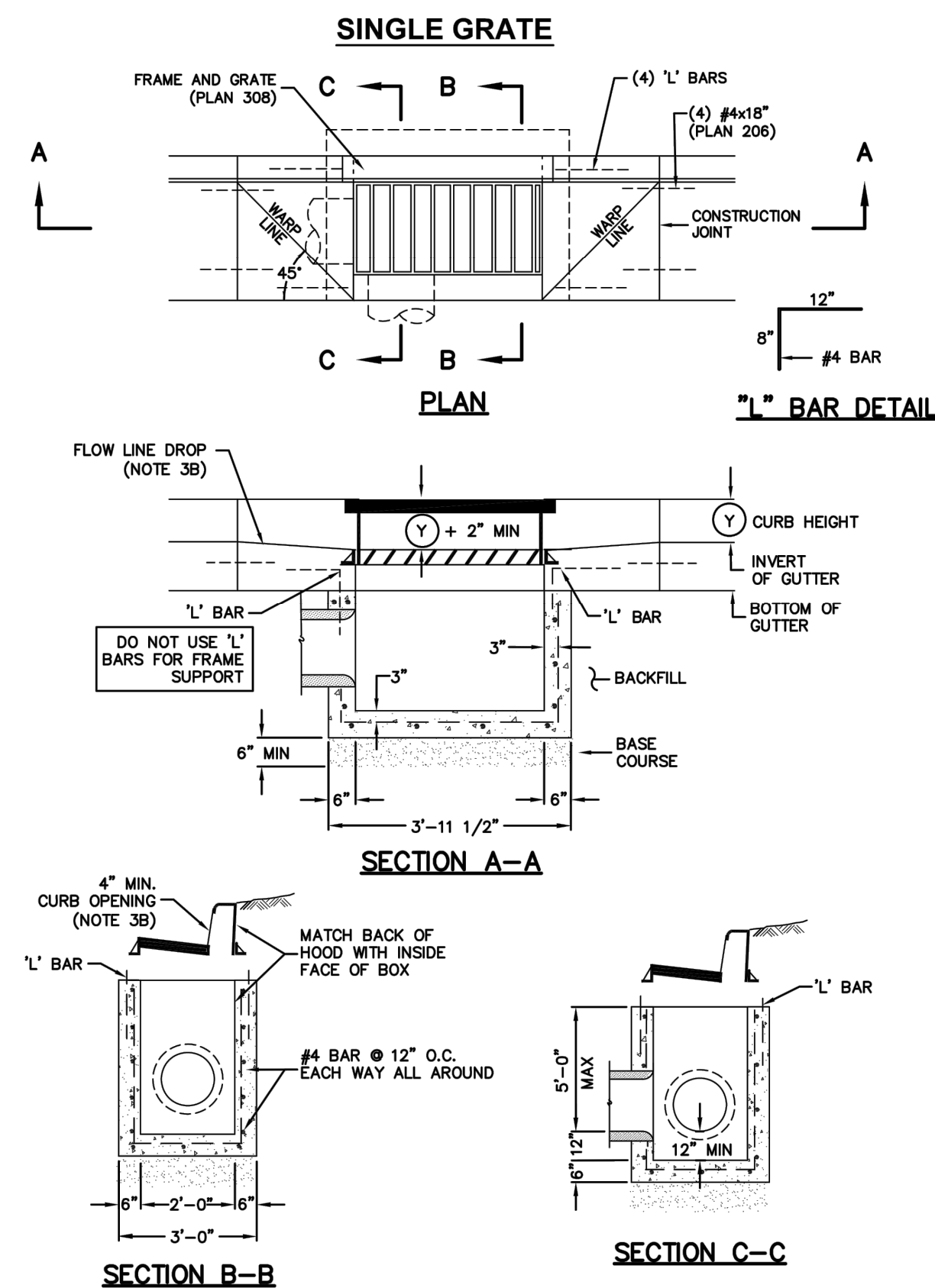
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MONUMENT, CO
SITE DETAILS

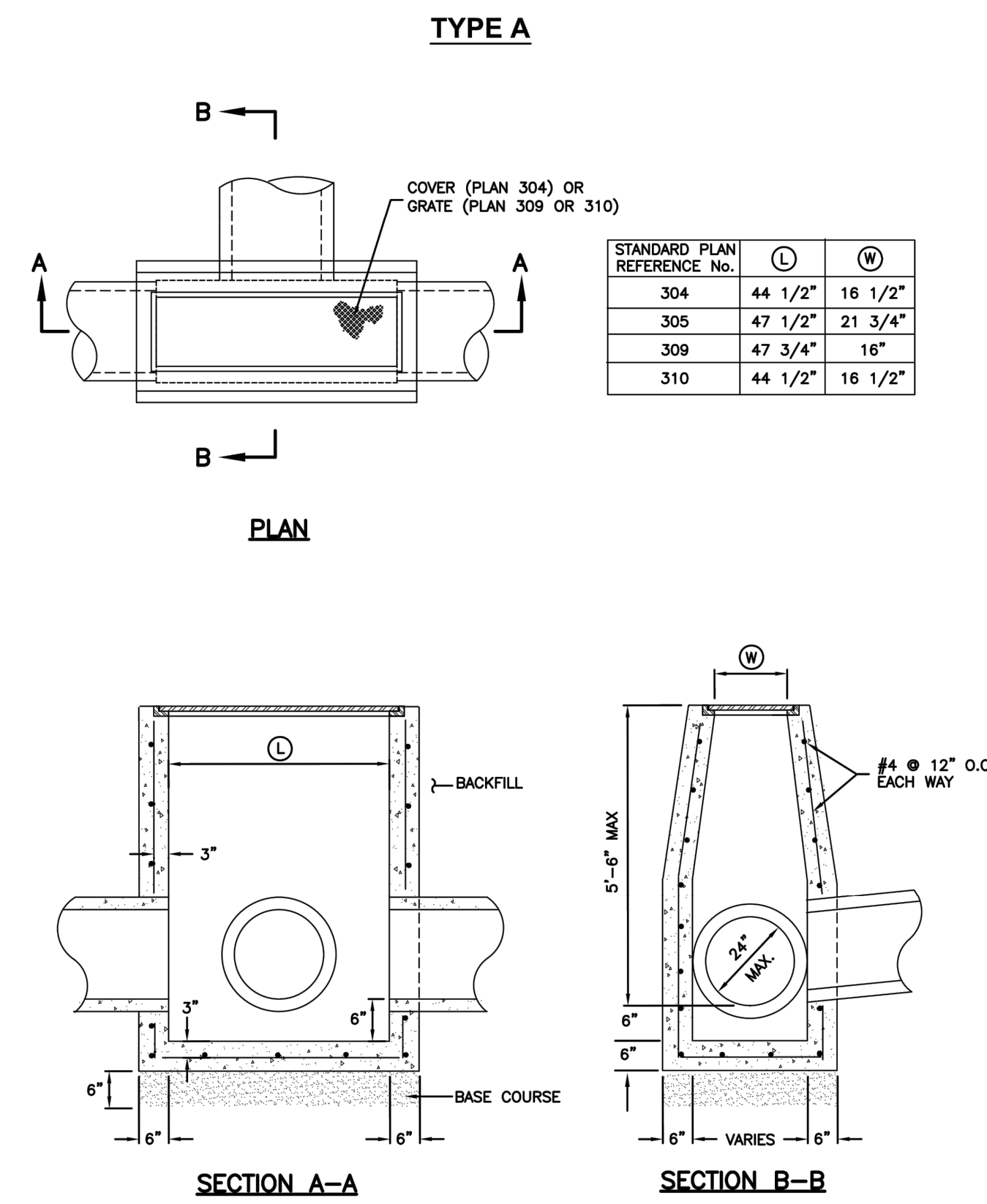


NOTES:
1. VERIFY BOLLARD LOCATION WITH SUB-GRADE AND SURFACE CONDITIONS. ADJUST ACCORDINGLY.

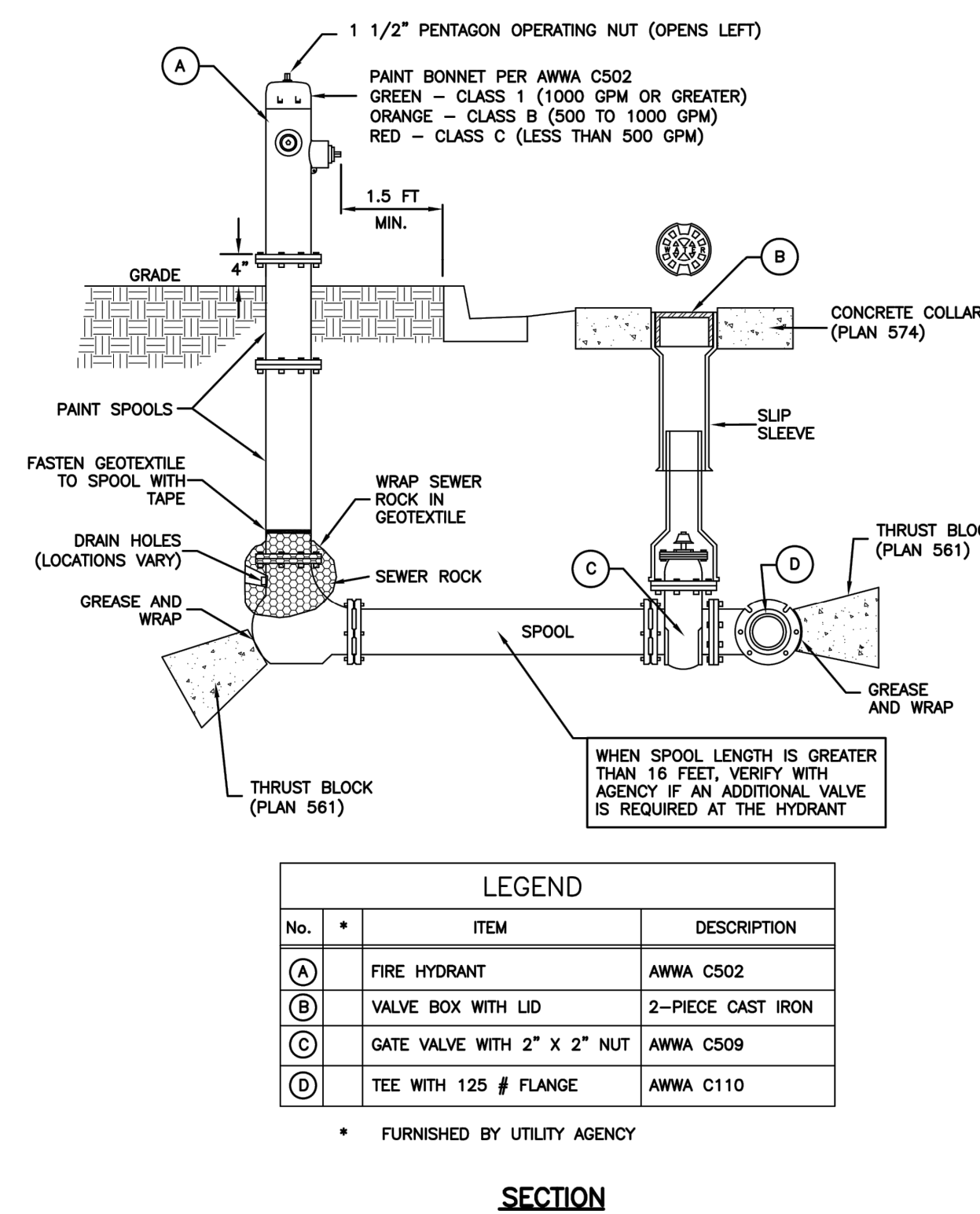
35 **PIPE BOLLARD**
C.4.4 SCALE: NTS, MAVERIK STANDARDS



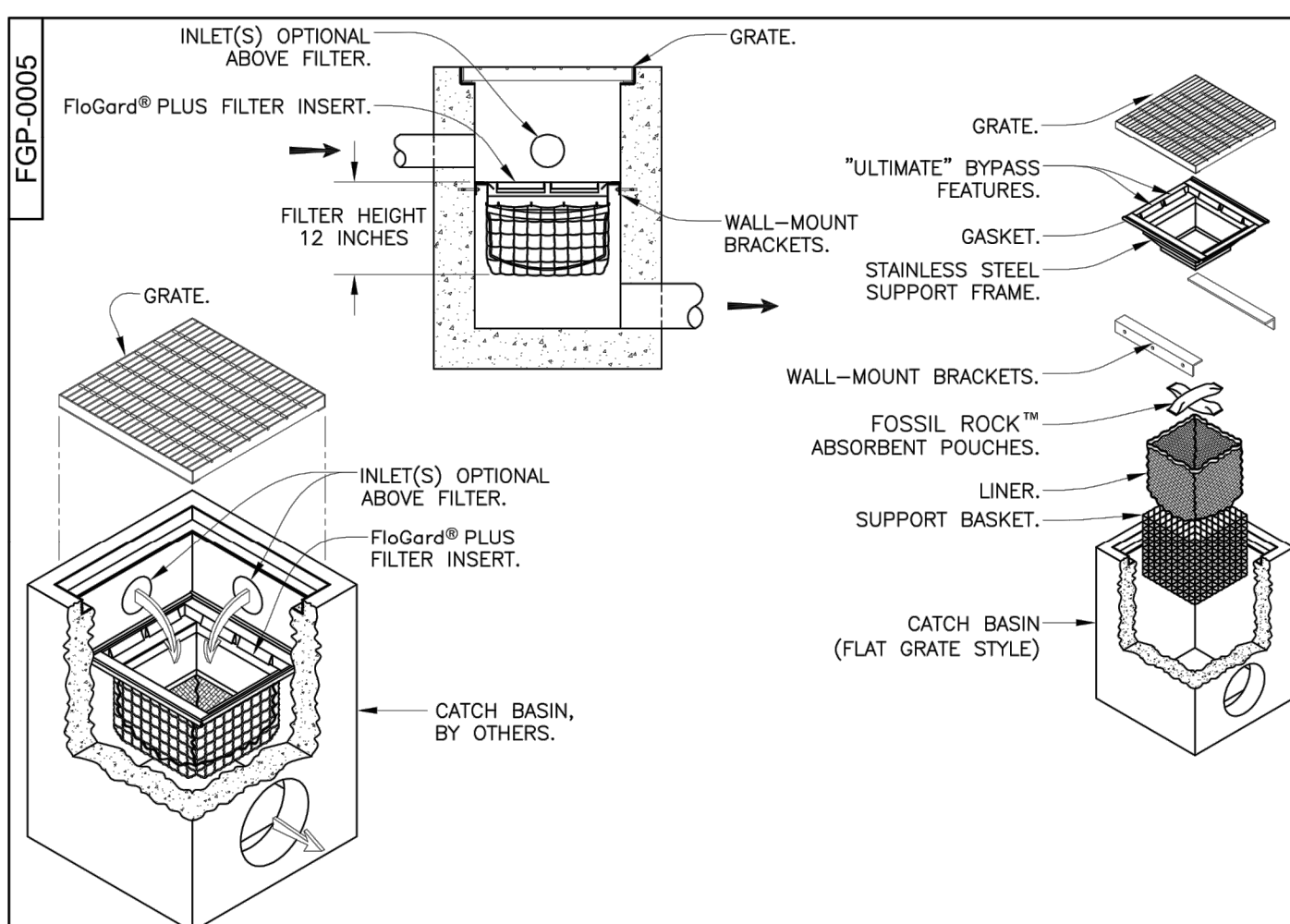
36 **APWA PLAN 315 CATCH BASIN**
C.4.4 SCALE: NTS



37 **APWA PLAN 331 CLEANOUT**
C.4.4 SCALE: NTS



38 **APWA PLAN 511 FIRE HYDRANT WITH VALVE**
C.4.4 SCALE: NTS



SPECIFIER CHART					
MODEL NO.	STANDARD & SHALLOW DEPTH (20 inches)			SHALLOW DEPTH (12 inches)	
	STANDARD DEPTH	INLET ID (Inch)	GRATE SIZE (Inch x Inch)	TOTAL BYPASS CAPACITY (Gals./Sec.)	SOLIDS STORAGE CAPACITY (Gals.)
FGP-1830W	18 X 30	18 X 30	6.9	2.3	1.6
FGP-24W	24 X 24	24 X 27	6.1	2.2	1.5
FGP-24SW	24 X 30	24 X 40	8.0	3.4	2.0
FGP-40W	48 X 48	54 X 54	18.0	8.8	4.9

- NOTES:
- Filter insert shall have a high flow bypass feature.
 - Filter support frame shall be constructed from stainless steel Type 304.
 - Filter medium shall be Fossil Rock™, installed and maintained in accordance with manufacturer specifications.
 - Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.

FloGard® Catch Basin Insert Filter Wall Mount Style

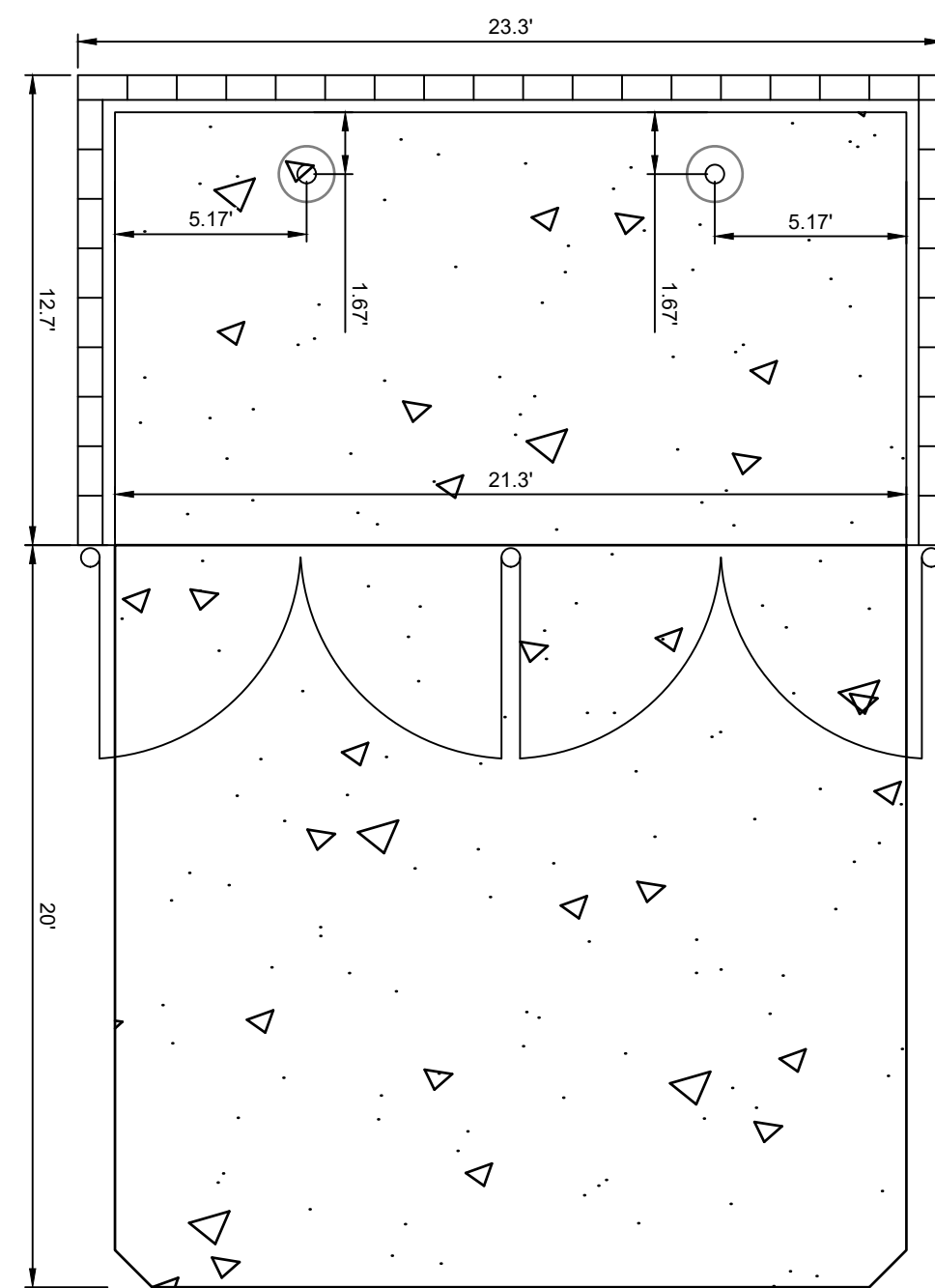
Oldcastle® Stormwater Solutions

1700 S. Yellowstone Hwy, Idaho Falls, Idaho 83402 | Phone: 208-522-9150 | Fax: 208-522-9701 | www.oldcastleprecast.com

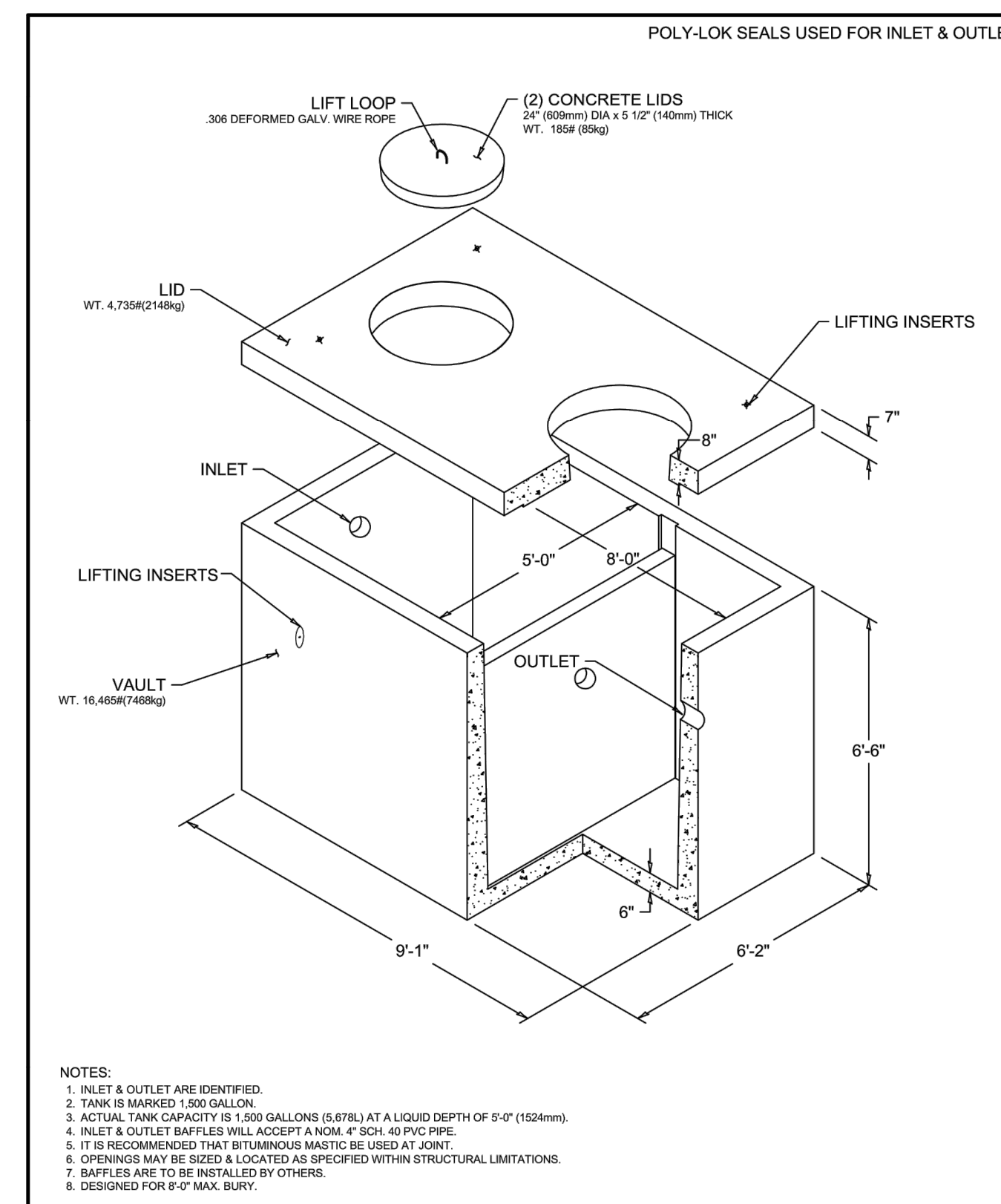
PROJECT NO.: EDO-0142 DATE: APR 7/15/16 SHEET 1 OF 1

39 **OLDCASTLE CATCH BASIN INSERT FILTER**
C.4.4 SCALE: NTS

Need elevation for dumpster to verify screening is being met.



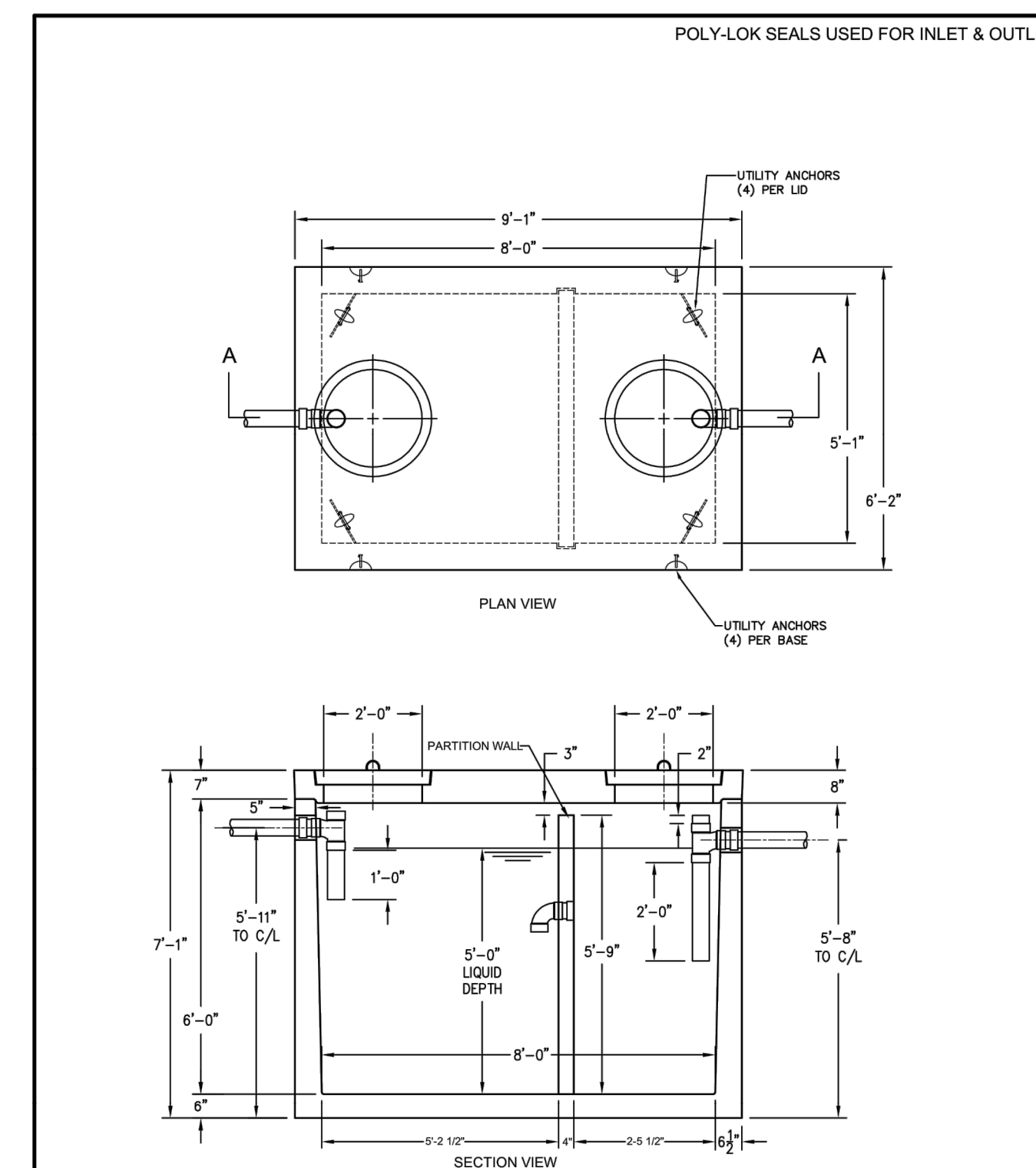
40 **DUPSTER ENCLOSURE PLAN**
C.4.4 SCALE: NTS



Oldcastle Precast® Septic Tank 1500 Gal 5' x 8' (HS-20 Traffic Rated) ISO View

FILE NAME: 230T8T05
ISSUE DATE: 11/2016
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41 **1500 GAL 5' x 8'**
C.4.4 SCALE: NTS



Oldcastle Precast® Septic Tank 1500 Gal 5' x 8' (HS-20 Traffic Rated)

FILE NAME: 230T8T05
ISSUE DATE: 11/2016
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42 **1500 GAL 5' x 8'**
C.4.4 SCALE: NTS

WARNING
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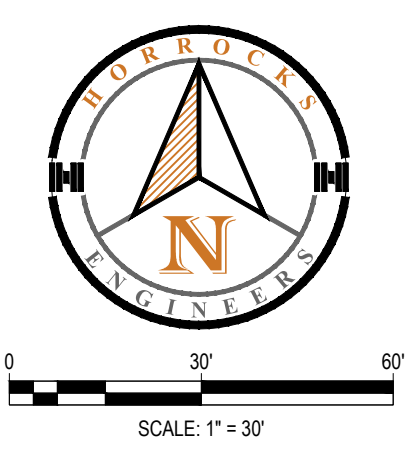
REVISIONS	REV #	DATE
DESIGNED	TMD	
DRAWN	TMD	
CHECKED	RP	
PROJECT	CO-2658-2008	

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MONUMENT, CO
SITE DETAILS

Oldcastle Precast® Septic Tank 1500 Gal 5' x 8' (HS-20 Traffic Rated)

FILE NAME: 230T8T05
ISSUE DATE: 11/2016
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EROSION CONTROL KEYNOTES

- A EARTH DIKE/BERM
- B CONSTRUCTION FENCE
- C INLET PROTECTION
- D CONCRETE WASHOUT AREA
- E STABILIZED CONSTRUCTION ENTRANCE

LEGEND

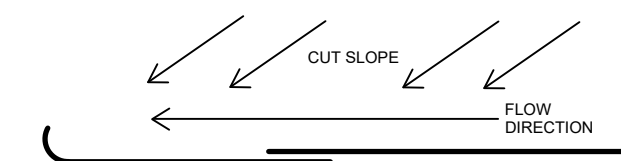
- EARTH DIKE/BERM (SEE DETAIL SHEET C.5.1)
- CONSTRUCTION FENCE
- PROPERTY BOUNDARY
- LIMITS OF DISTURBANCE
- DIRECTION OF EXISTING OVERLAND FLOW
- INLET PROTECTION (SEE DETAIL SHEET C.5.1)
- PORTABLE TOILET CONTAINMENT (SEE DETAIL SHEET C.5.1)
- JOBSITE DUMPSTER
- CONCRETE WASHOUT AREA (SEE DETAIL SHEET C.5.1)
- STABILIZED CONSTRUCTION ENTRANCE (SEE DETAIL SHEET C.5.1)
- MATERIAL STORAGE AREA
- STOCK PILE AREA

EROSION CONTROL NOTES

1. EROSION CONTROL GRAPHICS ARE SCHEMATIC AND DO NOT REFLECT EXACT PLACEMENT. ACTUAL PLACEMENT WILL BE DETERMINED IN FIELD.
2. SELECTION AND PLACEMENT OF EROSION CONTROL BMP'S CAN CHANGE BASED ON FIELD CONDITIONS AND CONSTRUCTION ACTIVITIES.
3. EROSION CONTROL DETAILS AS SHOWN ON SHEET C.5.1 ARE FOR REFERENCE ONLY AND ARE SUPERSEDED BY THE BMP'S OF THE JURISDICTIONAL ENTITY AS OUTLINED ON SHEET C.0.1.
4. ALL EROSION AND SEDIMENTATION CONTROL BMP'S SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE LATEST VERSION OF THE JURISDICTIONAL ENTITIES DESIGN GUIDELINES AS OUTLINED ON SHEET C.0.1.
5. PROTECT ALL TREES TO REMAIN. CONSTRUCT ACCESS WAYS OUTSIDE OF DRIP LINES. DO NOT STORE EQUIPMENT OR MATERIALS WITHIN DRIP LINES.
6. ALL STOCKPILES OF STRIPPING, TOPSOIL OR OTHER MATERIALS SHALL BE ENCLOSED WITH A SILT FENCE.
7. CONTRACTOR SHALL PROVIDE SUITABLE EQUIPMENT TO CONTROL DUST AND AIR POLLUTION CAUSED BY CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL ALSO PROVIDE SUITABLE MUD AND DIRT CONTAINMENT TO MAINTAIN WORK SITE, ACCESS ROADWAYS AND ADJACENT PROPERTIES. A WATER TRUCK WILL BE MAINTAINED AS NEEDED FOR DUST CONTROL PURPOSES.
8. SWEEP STREETS AS NEEDED OR AS DIRECTED
9. IT IS NOT INTENDED FOR THIS SITE TO RECEIVE ANY ONCOMING FLOW FROM OUTSIDE SOURCES NOT CONTAINED IN EXISTING FLOW STRUCTURES.
10. FIELD MARK LIMITS OF DISTURBANCE FOR APPROVAL BY LOCAL AUTHORITY AND OBTAIN APPROPRIATE STORM WATER MANAGEMENT PERMIT.
11. INSTALL SILT FENCE AND/OR ENVIRONMENTAL FENCE AROUND PERIMETER OF PROJECT AS INDICATED ON THIS PLAN SHEET.
12. INSTALL SEDIMENT CONTROL MEASURES INDICATED IN ALL EXISTING STORM DRAIN INLETS ADJACENT TO THE CONSTRUCTION SITE.
13. AS CONSTRUCTION OF NEW DRAINAGE ELEMENTS ARE COMPLETED, CONSTRUCT SEDIMENT PROTECTION AT ALL NEW INLETS.
14. AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WILL BE STABILIZED WITH NATIVE GRASS MATERIAL OUTSIDE THE STREET RIGHT OF WAY AND PAVEMENT AREAS OF PARKING AND DRIVEWAY AREAS. SITE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION ACTIVITIES TO BE COMPLETED WITHIN 14 DAYS OF FINISHING AN AREA TO THE FINAL LINES AND GRADES INDICATED ON THE GRADING PLAN. SEE LANDSCAPE PLANS.
15. LANDSCAPE ESTABLISHMENT. REMOVE TEMPORARY MEASURES AND CLEAN STORM DRAIN SYSTEM PRIOR TO RELEASING SYSTEM TO PROJECT OWNER. SEE LANDSCAPE PLANS.
16. THE BMP'S AND SITE WILL BE MONITORED REGULARLY. ANY ADDITIONAL BMP'S THAT ARE NEEDED WILL BE DETERMINED DURING REGULAR INSPECTIONS AND INSTALLED ACCORDING TO SPECIFICATIONS.
17. CONTRACTOR TO UTILIZE STABILIZED CONSTRUCTION ENTRANCE FOR VEHICLE TIRE WASH, AS NECESSARY.

LINEAR FIBER ROLL NOTES:

THE END OF THE ROLL SHOULD BE BENT TOWARD THE RUNOFF, FORMING A "HOOK" TO ACT AS A CHECK DAM



FIBER ROLLS SHOULD BE PLACED FLUSH END TO END, OR WITH THE UPSTREAM ROLL OVERLAPPING THE DOWNSTREAM ROLL.



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 St. George, UT 84770
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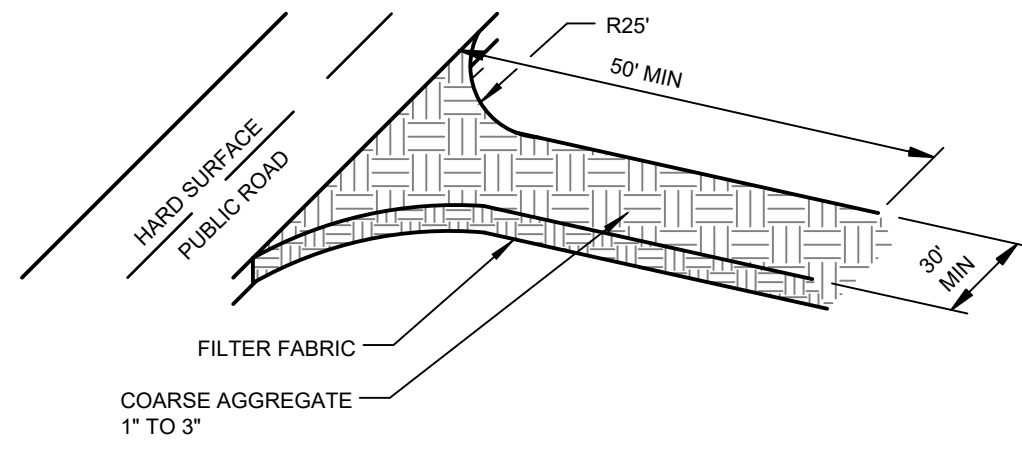
WARNING
 IF THIS BAR DOES NOT MEASURE 2" THEN DRAWING IS NOT TO SCALE

DATE	REV #	DATE	DESIGNED	TMD	DRAWN	TMD	CHECKED	RP	PROJECT
SEP 3, 2021									CO-2658-2008

PRELIMINARY NOT FOR CONSTRUCTION

MAVERIK, INC. - SITE CODE CO-0258
 I-25 & COUNTY LINE ROAD MONUMENT, CO
STORM WATER MANAGEMENT PLAN

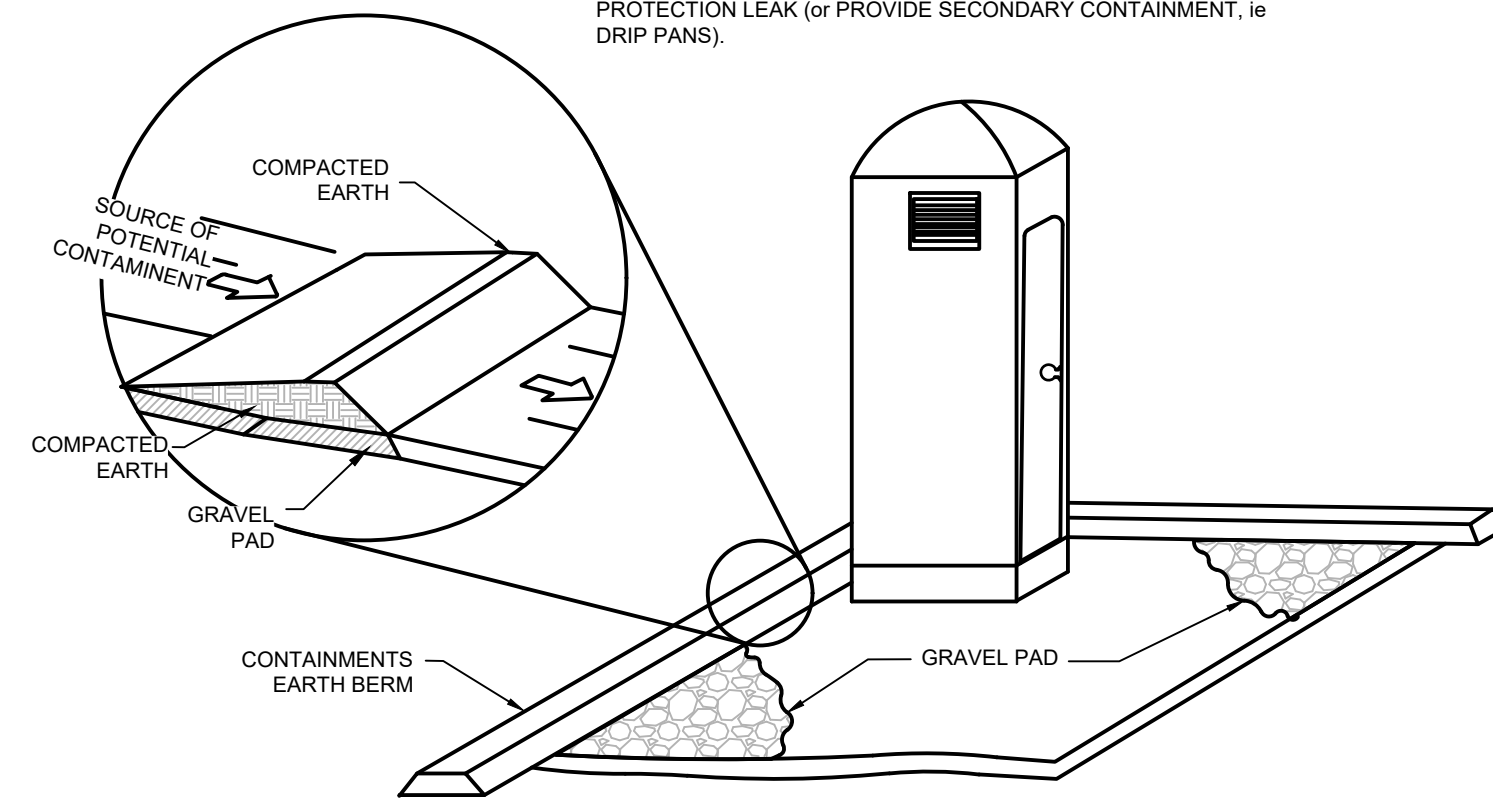
C.5.0



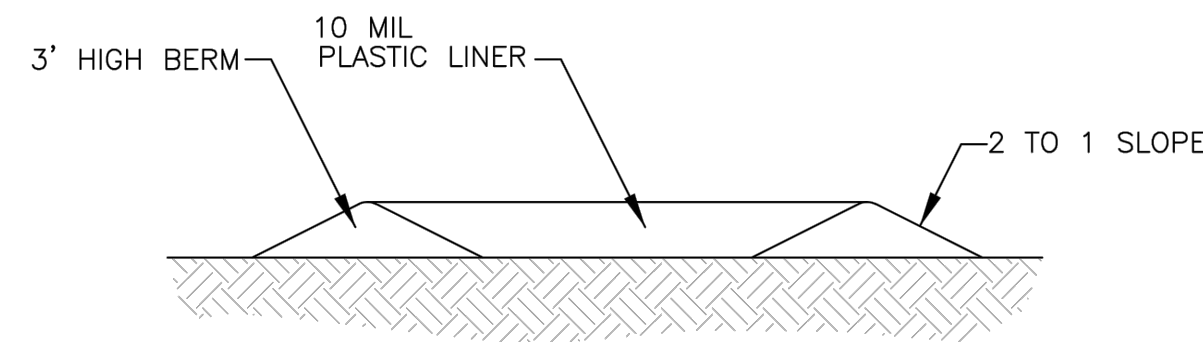
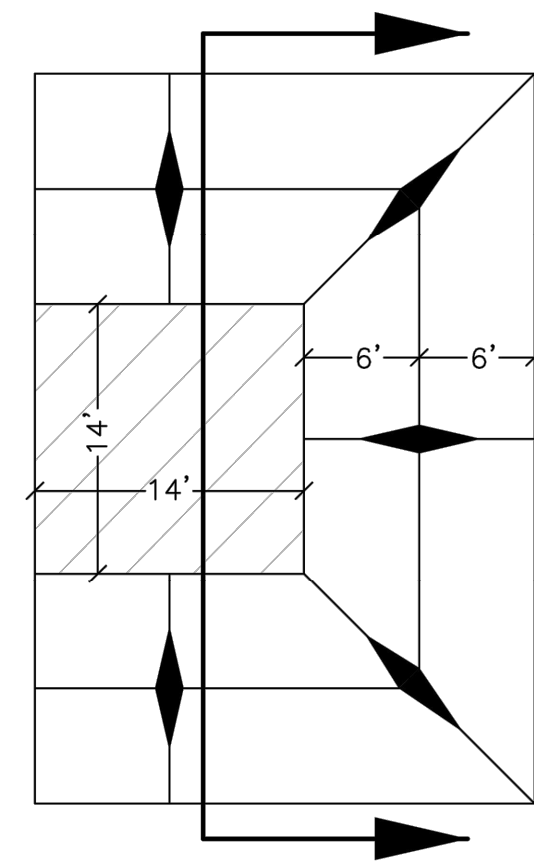
STABILIZED CONSTRUCTION ENTRANCE
N.T.S.

NOTES:

1. LOCATE PORTABLE TOILETS IN CONVENIENT LOCATIONS THROUGHOUT THE SITE.
2. PREPARE LEVEL GRAVEL SURFACE & PROVIDE CLEAR ACCESS TO THE TOILETS FOR SERVICING & FOR ON-SITE PERSONNEL.
3. CONSTRUCT EARTH BERM PERIMETER (SEE EARTH BERM BARRIER INFORMATION SHEET) CONTROL FOR SPILL PROTECTION LEAK (or PROVIDE SECONDARY CONTAINMENT, ie DRIP PANS).



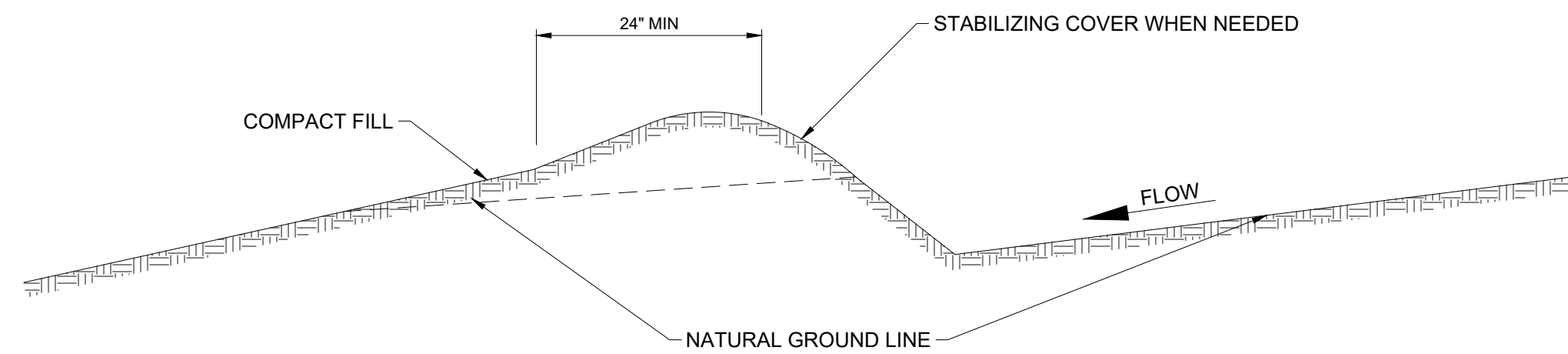
PORTABLE TOILET DETAIL
N.T.S.



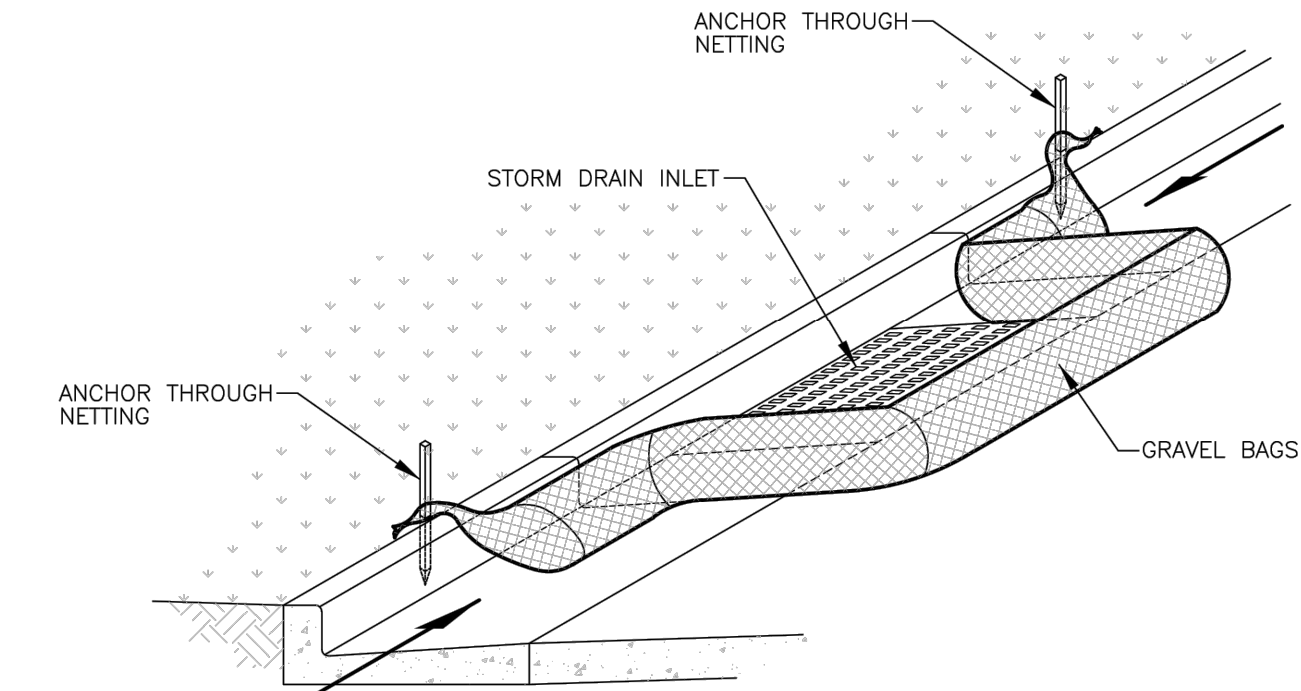
CONCRETE WASHOUT AREA
N.T.S.

NOTES:

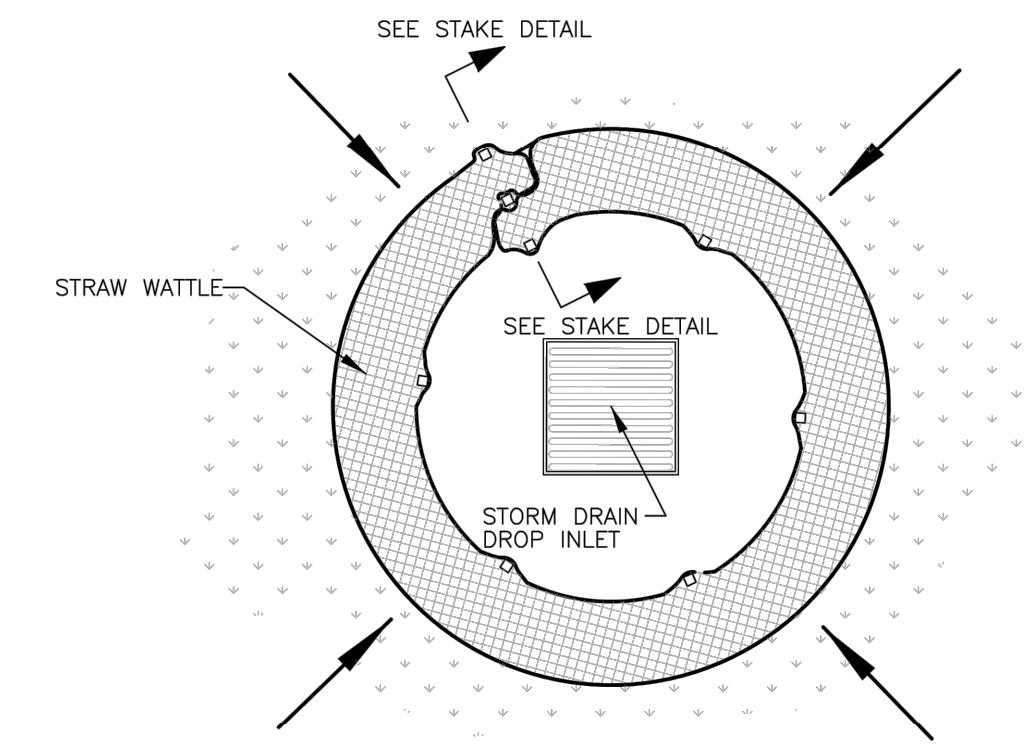
1. STABILIZE INLET, OUTLETS AND SLOPES.
2. PROPERLY COMPACT THE SUBGRADE.



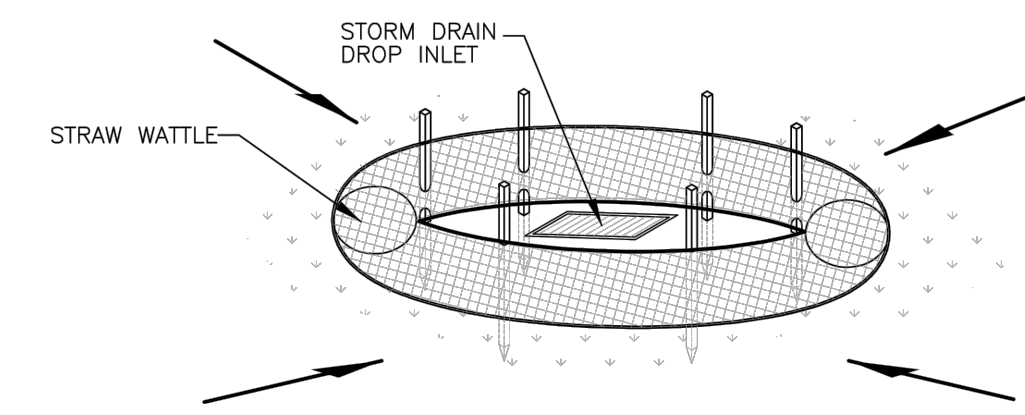
EARTH DIKE/BERM
N.T.S.



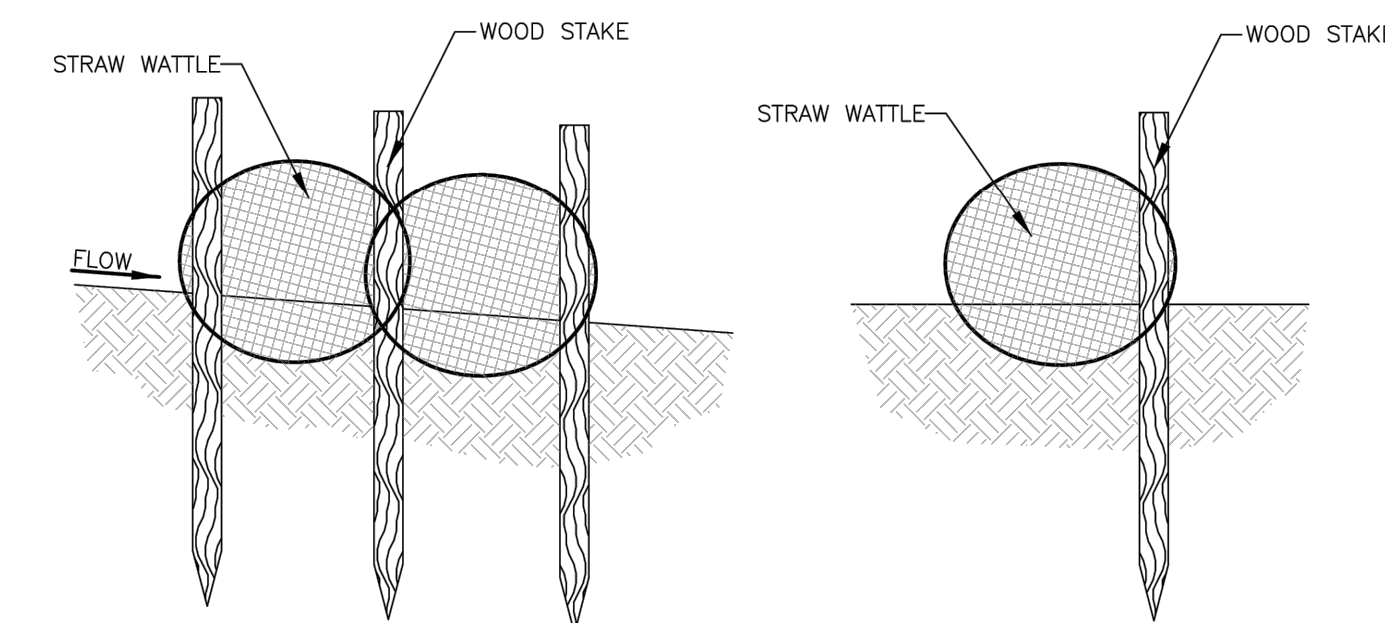
INLET BOX PROTECTION DETAIL
N.T.S.



Plan View



DROP INLET PROTECTION DETAIL
N.T.S.



STAKE DETAIL
N.T.S.

REVISIONS	REV #	DATE

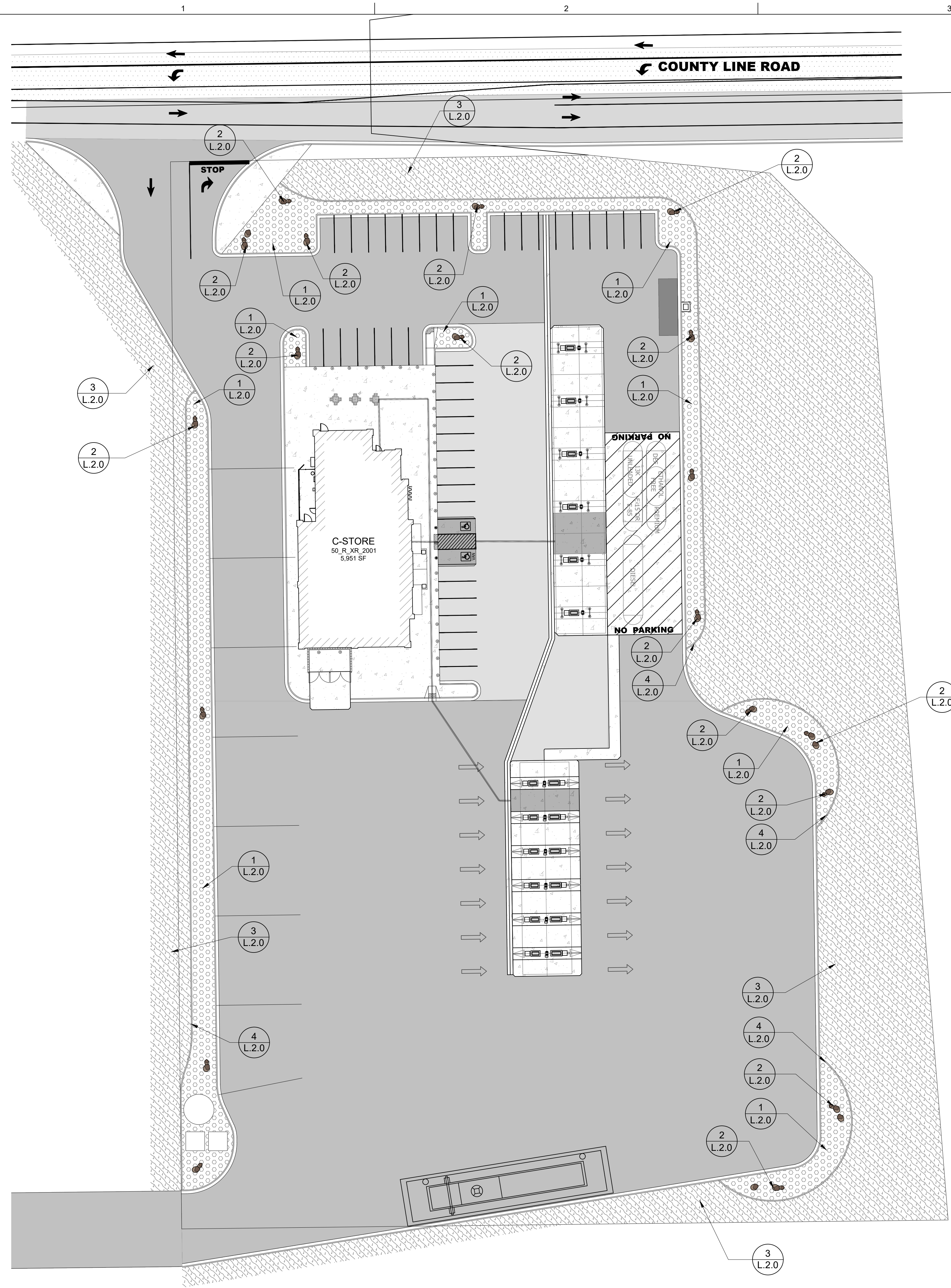
DRAWING INFO	DATE	DESIGNED	DRAWN	CHECKED	PROJECT
	SEP 3, 2021	TMD	TMD	RP	CO-2658-2008

PRELIMINARY
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MAVERIK, INC. - SITE CODE CO-0258
I-25 & COUNTY LINE ROAD, MONUMENT, CO
STORM WATER MANAGEMENT DETAILS



C.5.1



SITE INFORMATION AND CALCULATIONS

TOTAL SITE AREA: 4.93 ACRES / 215,161 SF
 PROVIDED LANDSCAPE AREA: 1.70 ACRES / 74,332 SF

REQUIREMENT	CALCULATION
5% OF THE LOT OR PARCEL SHALL BE LANDSCAPED	10,737 REQUIRED LANDSCAPE AREA, 74,332 SF PROVIDED (SOME FOR OFFSITE GRADING RESTORATION)
1 TREE PER 500 SF OF REQUIRED INTERNAL LANDSCAPE AREA	WELL SITE, PERMIT DOES NOT ALLOW FOR EXTERNAL WATERING. NO TREES PROPOSED.
50% OF REQUIRED TREES MAY BE SUBSTITUTED WITH SHRUBS. 10 (5 GALLON) SHRUBS PER TREE	WELL SITE, PERMIT DOES NOT ALLOW FOR EXTERNAL WATERING. NO SHRUBS PROPOSED. PROPOSED NATIVE SEED MIX CONTAINS SOME WOODY SHRUBS
75% LIVE COVER. 25% MAY BE ROCK, STONE, BARK, OR OTHER LANDSCAPE MATERIALS.	13,133 SF OF DECORATIVE LANDSCAPE ROCK (18% OF TOTAL LANDSCAPE AREA. 61,199 SF OF NATIVE SEED MIX (82%))

GENERAL LANDSCAPE NOTES

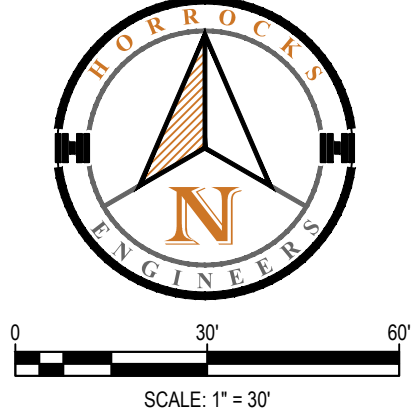
- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS FOR BIDDING AND INSTALLATION PURPOSES. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE QUANTITIES TO BE USED.
- OMIT WEED BARRIER FABRIC FROM ALL ROW TREE PLANTING AREAS.
- PLANT MATERIAL TO BE INSTALLED PER PLANT LEGEND. IF SUBSTITUTIONS ARE WANTED, PROPOSED CHANGES MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO PLANTING.
- TOPSOIL TO BE IMPLEMENTED AT THE FOLLOWING DEPTHS:
 - 6" DEPTH IN ALL PLANTER BED AREAS
 - 4" DEPTH IN ALL TURF SOO AREAS
 - 4" DEPTH IN ALL NEW SEED AREAS
 - 2" DEPTH IN ALL RESTORATION AREAS THAT WERE PREVIOUSLY VEGETATED.
- EDGING SHALL BE IMPLEMENTED BETWEEN ALL VARYING LANDSCAPE MATERIALS SUCH AS TURF GRASS AND BARK MULCH, BARK MULCH AND ROCK MULCH, TURF GRASS AND BROADCAST SEED, ETC. EXACT TYPE OF EDGING SHALL BE INDICATED ON THE PLANS. IF NO EDGING IS INDICATED ON THE PLANS A 4" X 6" SLIP FORMED SQUARE CONCRETE CURB SHALL BE USED.
- LANDSCAPE ROCK AND BARK MULCH COLOR AND TYPE TO BE APPROVED BY OWNER. SUBMIT SAMPLES FOR APPROVAL PRIOR TO INSTALLATION. MULCH MATERIAL SHALL BE IMPLEMENTED IN ALL PLANTER BED AREAS INDICATED ON THE PLANS AT THE FOLLOWING DEPTHS:
 - SHREDDED BARK MULCH: 4"
 - 1-2" DIAMETER FRACTURED STONE: 4"
 - 2-4" DIAMETER FRACTURED STONE: 4"
 - 1-2" COBBLE MULCH: 4"
 - 2-4" COBBLE MULCH: 6"
 - PULL MULCH MIN. OF 3" AWAY FROM BASE OF ALL PERENNIALS AND SHRUBS AND MIN. 6" AWAY FROM ALL TREES.
- ALL TREES SHALL BE INSTALLED IN PLANTER BED AREAS WITH SHREDDED BARK MULCH TOP DRESSING AND PER CITY DETAILS ON SHEET L.2.0.
- INSTALLATION SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL LAWS AND ORDINANCES.
- ALL MATERIALS SHALL BE NEW AND WITHOUT FLAWS OR DEFECTS OF THE QUALITY AND PERFORMANCE SPECIFIED, AND SHALL MEET THE REQUIREMENTS OF THIS SYSTEM. USE MATERIALS AS SPECIFIED. NO SUBSTITUTIONS SHALL BE PERMITTED WITHOUT WRITTEN PERMISSION OF THE OWNER OR LANDSCAPE ARCHITECT.
- BASE PLAN & LOCATION OF EXISTING EQUIPMENT ARE SCHEMATIC IN NATURE. FIELD VERIFY ALL BASE & EXISTING ELEMENTS PRIOR TO CONSTRUCTION & PROVIDE NECESSARY ADJUSTMENTS.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED ON A REGULAR SCHEDULE DURING THE FIRST GROWING SEASON.
- THE CONTRACTOR SHALL WARRANT ALL PLANT MATERIAL FOR ONE-YEAR AFTER DATE OF FINAL ACCEPTANCE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION AND AVOIDANCE OF ALL UNDERGROUND UTILITIES DURING THE INSTALLATION OF LANDSCAPE AND IRRIGATION ELEMENTS. SHOULD ANY DAMAGE OCCUR TO UNDERGROUND UTILITIES THE CONTRACTOR SHALL REPLACE OR REPAIR THE DAMAGE AT NO ADDITIONAL COST TO THE OWNER.
- TREES PLANTED ON SLOPES EXCEEDING 3:1 SHALL HAVE BOULDER RETAINING ON THE DOWNHILL PORTION OF THE SLOPE TO CREATE A LEVEL PLANTING AREA PER DETAILS.
- AREAS DISTURBED BY GRADING ACTIVITIES WHICH ARE NOT SHOWN ON THIS PLAN MUST BE STABILIZED VIA BROADCAST SEED WITH TACKIFIER PER DETAILS AND THE SEED MIX IN THE PLANS. SLOPES STEEPER THAN 2:1 SHALL HAVE EROSION CONTROL BLANKETS OVER THE SEED MIX AREAS PER DETAILS.

LEGEND

SYMBOL	DESCRIPTION	QTY
●	3-5' ACCENT BOULDER	42
○	4" DEPTH OF 1-2" FRACTURED LANDSCAPE ROCK SUBMIT SAMPLES TO OWNER PRIOR TO INSTALLATION	13,133 SF
▨	BROADCAST SEED MIX	61,199 SF

REVEGETATION SEED MIX

SEED NO.	COMMON NAME	BOTANICAL NAME	% OF MIX
G 1	Indian Ricegrass	Achnatherum hymenoides	10.00%
G 2	Crested Wheatgrass	Agropyron desertorum	15.00%
G 3	Blue Grama	Sporobolus cryptandrus	15.00%
G 4	Sideoats Grama	Bouteloua gracilis	15.00%
G 5	Mountain Brome	Bouteloua curtipendula	15.00%
F 6	Rocky Mountain Beeplant	Cleome serrulata	3.00%
G 7	Sulphur-Flower Buckwheat	Eriogonum umbellatum	3.00%
F 8	Blue Flax	Linum lewisii	3.00%
F 9	Chokecherry Lupine	Lupinus prunophilus	3.00%
G 10	Western Wheatgrass	Pascopyrum smithii	15.00%
F 11	Rocky Mountain Penstemon	Penstemon strictus	3.00%
			100.00%
			27 lbs/acre



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WARNING
 IF THIS BAR DOES NOT MEASURE 2" THEN DRAWING IS NOT TO SCALE

REVISIONS

REV #	DATE	DESCRIPTION
1	SEP 3, 2021	DESIGNED
2		DRAWN
3		CHECKED
4		PROJECT

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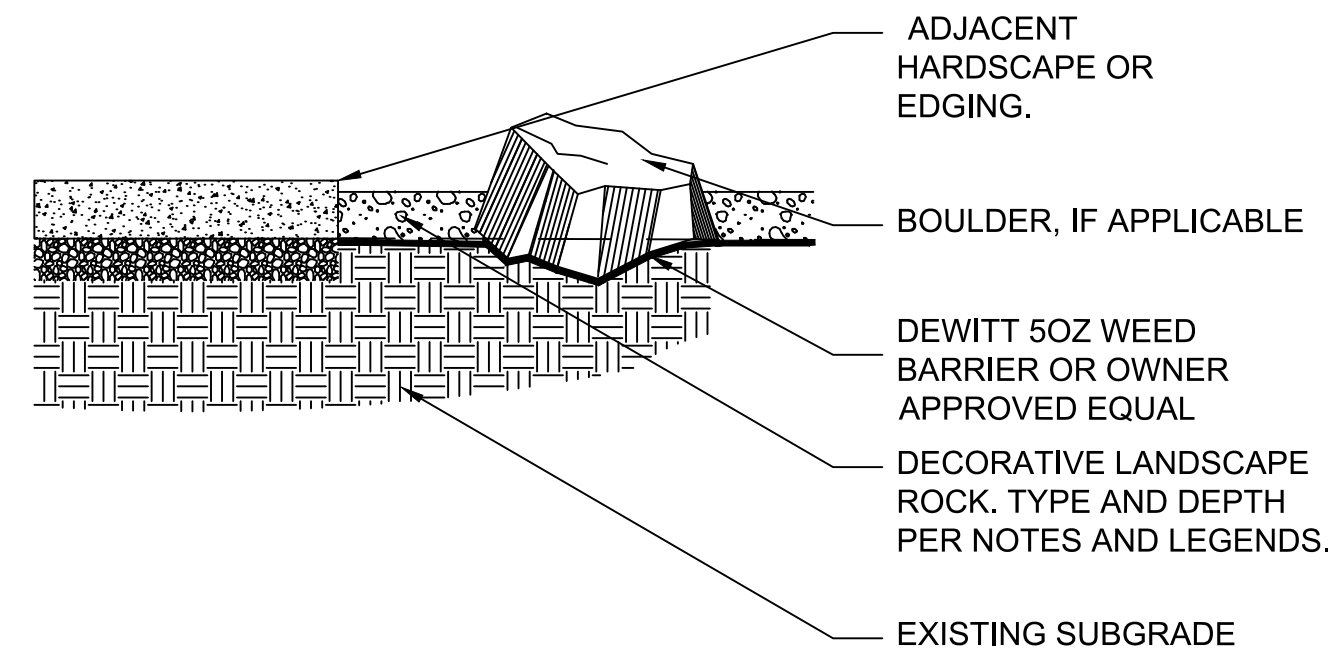
MAVERIK, INC. - SITE CODE CO-0258
 I-25 & COUNTY LINE ROAD MONUMENT, CO
 LANDSCAPE PLAN



L.1.0

NOTES:

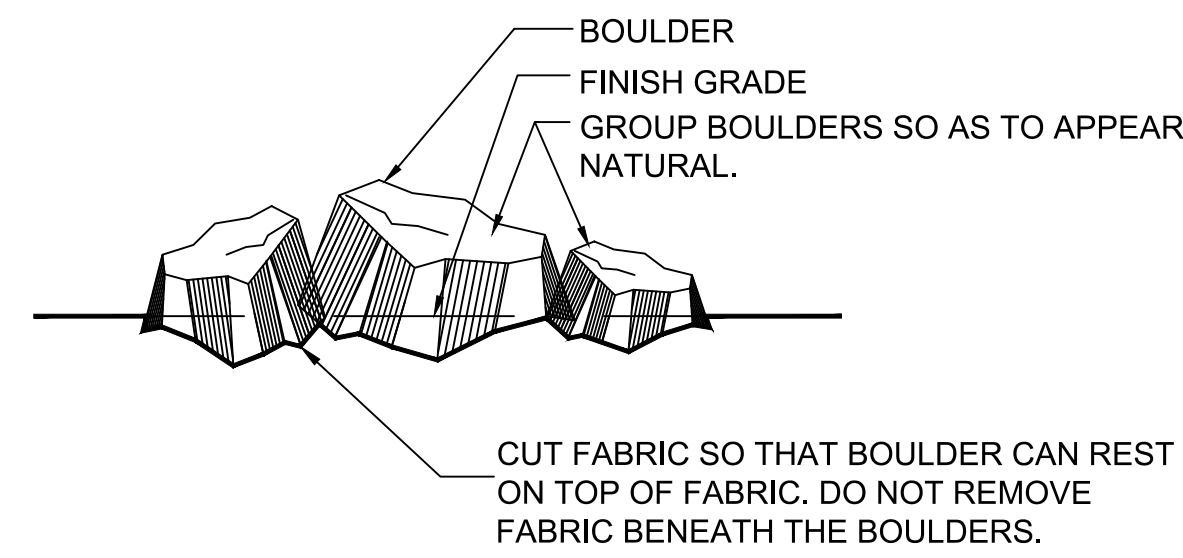
- KEEP TOP OF DECORATIVE ROCK 1/2" BELOW ADJACENT WALKS AND CURBS. DO NOT ALLOW MULCH TO TOUCH THE TRUNK OF ANY PLANT. INSTALL MULCH AFTER INSTALLATION OF WEED BARRIER FABRIC AND PLANT MATERIAL.
- CONTRACTOR TO ENSURE THAT TOP OF WEED BARRIER FABRIC IS FREE OF SOILS AND DEBRIS PRIOR TO PLACING MULCH.
- ROCK/STONE MULCH COLOR AND SIZE PER LEGEND AND SPECIFICATIONS.



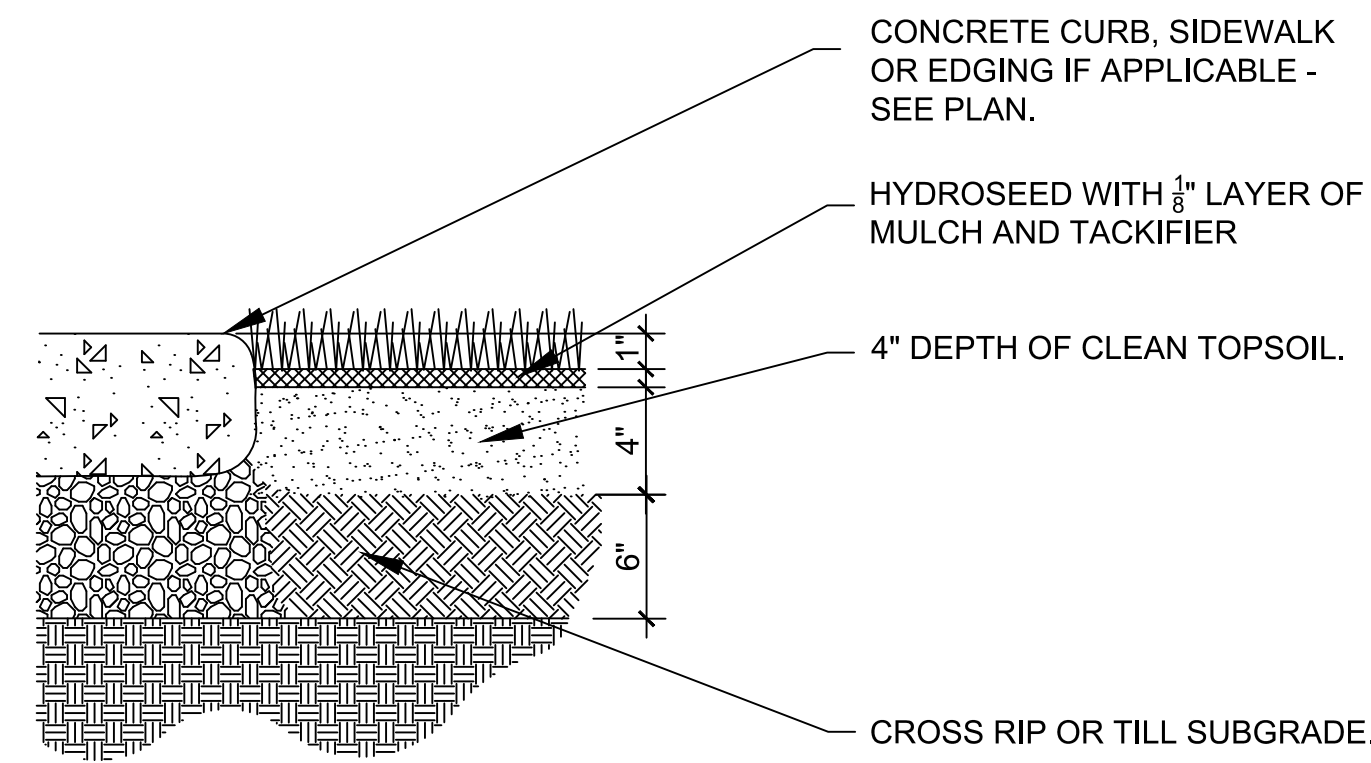
1 DECORATIVE LANDSCAPE ROCK
NOT TO SCALE P-CO-22

NOTES:

- PLACE ALL BOULDERS SUCH THAT 1/4 OF THE TOTAL MASS OF EACH BOULDER IS BELOW FINISH GRADE.



2 ACCENT BOULDERS
NOT TO SCALE P-CO-24



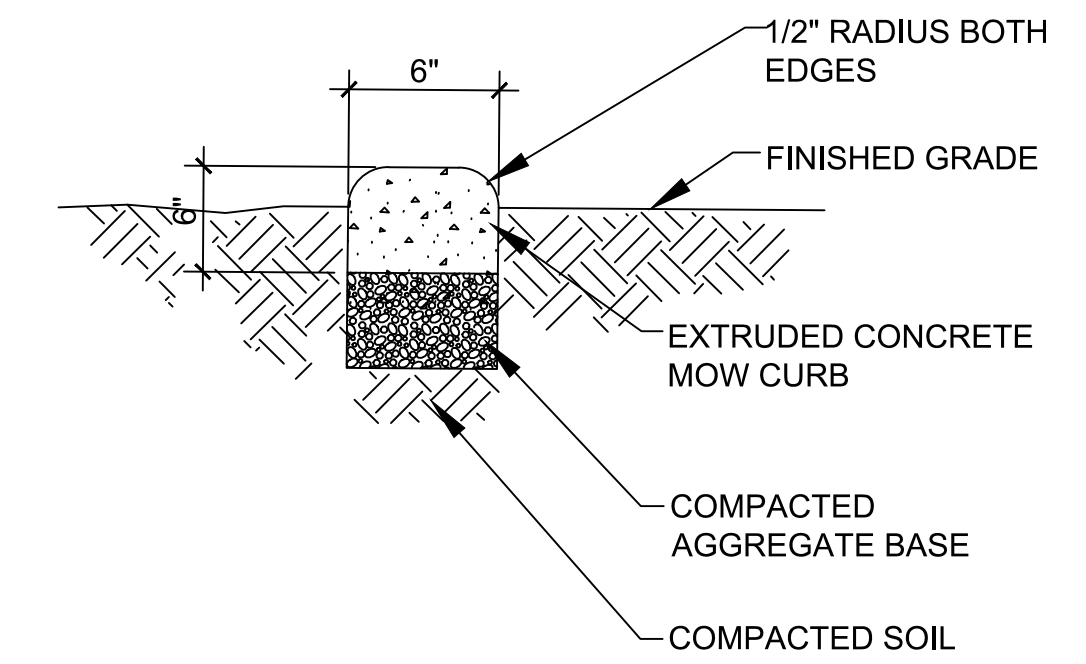
NOTES:

- ENSURE FINISH GRADE IS 1" BELOW TOP OF CURB, WALK, OR EDGING.
- SEED MIX SHALL BE PER PLANS.

3 HYDROSEED
NOT TO SCALE P-CO-30

NOTES:

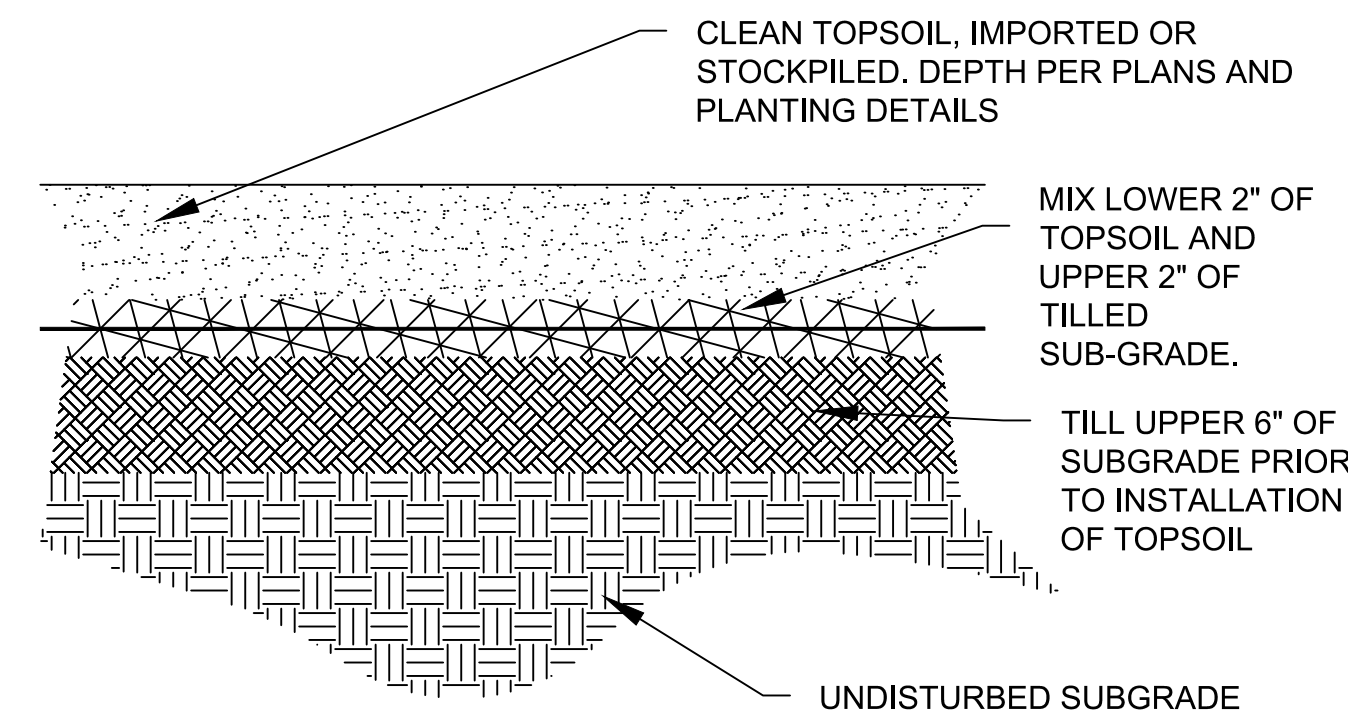
- WHEN INSTALLING CONCRETE MOWCURB FOR CURVED PLANTER BEDS MAKE SURE THAT CURVES ARE SMOOTH AND EVEN.
- LANDSCAPE ARCHITECT TO APPROVE PRIOR TO BACKFILL.



4 CONCRETE MOWCURB
NOT TO SCALE P-CO-31

NOTES:

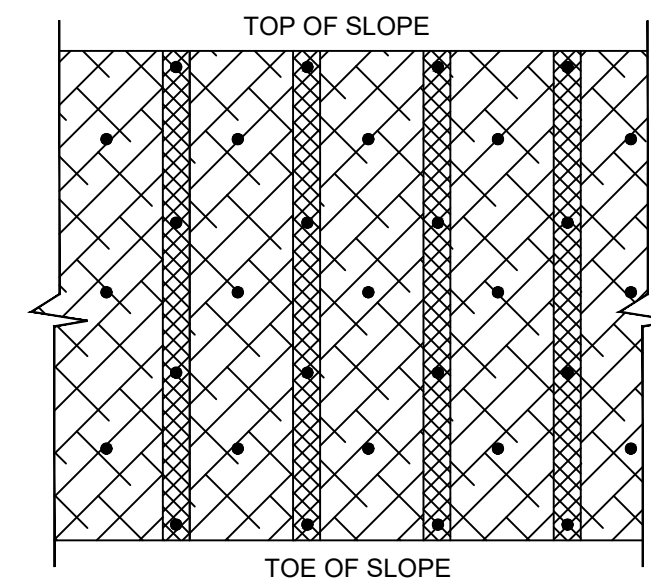
- ALL EROSION CONTROL FABRIC SHALL BE INSTALLED PARALLEL WITH THE DRAINAGE DIRECTION.
- KEY IN EROSION CONTROL FABRIC AT THE TOP AND TOE OF SLOPES AS SHOWN IN DETAILS.
- OVERLAP EDGES OF EROSION CONTROL FABRIC BY A MINIMUM OF 6 INCHES.
- ANCHOR PATTERN SHALL BE STAGGERED PATTERN AND WILL VARY IN DENSITY BASED ON THE SLOPE.
- ANCHORS SHALL BE APPLIED AT A DENSITY OF 2 ANCHORS PER YARD ON ALL SLOPES 2:1 OR GREATER.
- ANCHORS SHALL BE APPLIED AT A DENSITY OF 1.5 ANCHORS PER YARD ON ALL SLOPES 1:1 TO 2:1.
- ANCHORS SHALL BE APPLIED AT A DENSITY OF 1 ANCHOR PER YARD ON ALL SLOPES LESS THAN 1:1.



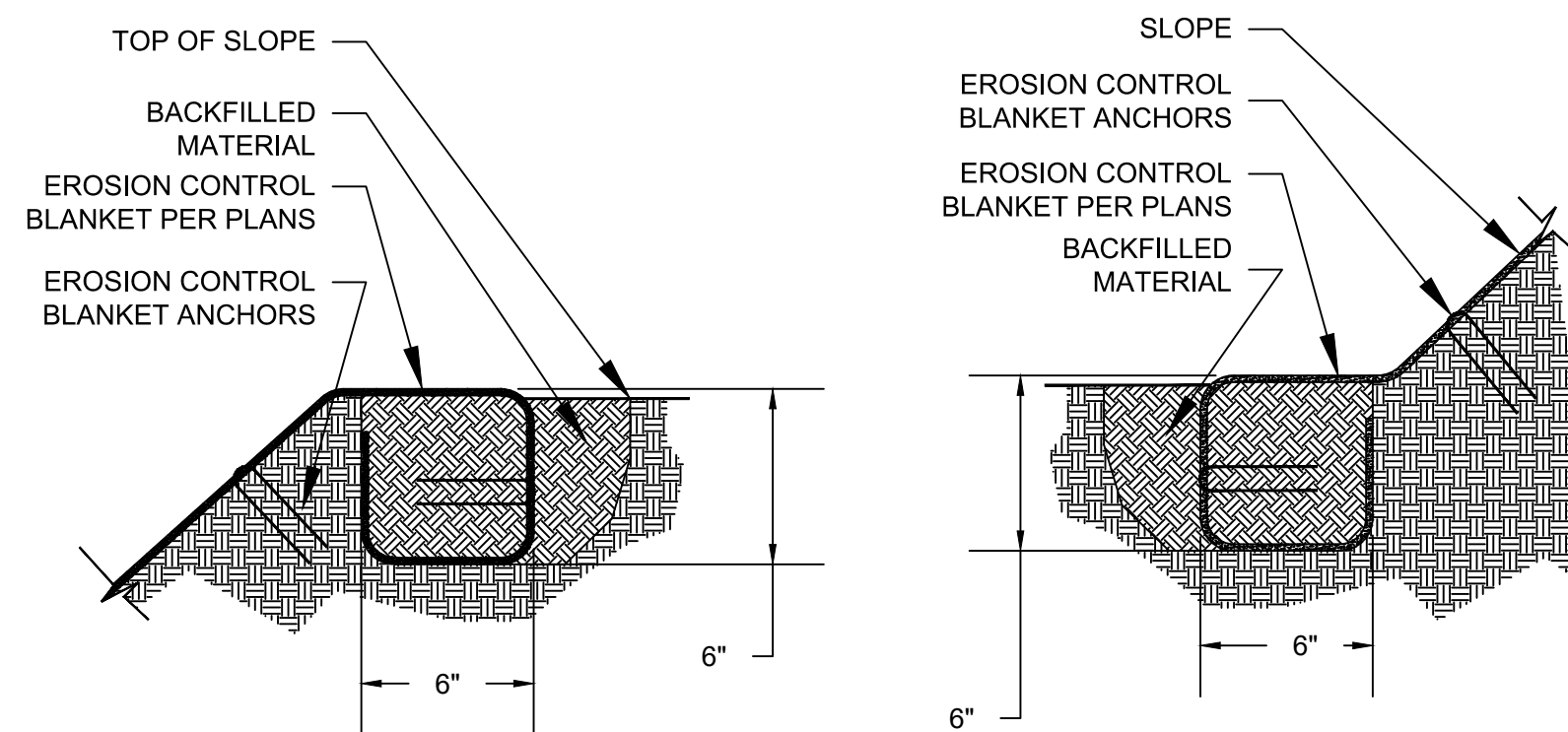
NOTES:

- CONFIRM SUBBASE FINISH GRADE WITH CONTRACTOR PRIOR TO INSTALLATION OF TOPSOIL.
- CONTRACTOR RESPONSIBLE TO LEAVE TOPSOIL FINISH GRADE AT THE CORRECT LEVEL TO ACCOMMODATE TURFGRASS OR MULCH AND STILL BE 1/2" - 1" BELOW ADJACENT HARDSCAPES.
- CONTRACTOR RESPONSIBLE TO COMPACT AND ALLOW SETTLING OF TOPSOIL AND SUB-GRADE PRIOR TO PLANTING, SEEDING, OR LAYING OF TURF SOD.

5 TOPSOIL
NOT TO SCALE P-CO-35



6 EROSION CONTROL BLANKET LAYOUT
NOT TO SCALE P-CO-90



7 EROSION CONTROL BLANKET TOP AND BOTTOM KEY IN
NOT TO SCALE P-CO-91

WARNING

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REVISIONS	REV #	DATE
DESIGNED	TMD	SEP 3, 2021
DRAWN	TMD	
CHECKED	RP	
PROJECT	CO-2658-2008	

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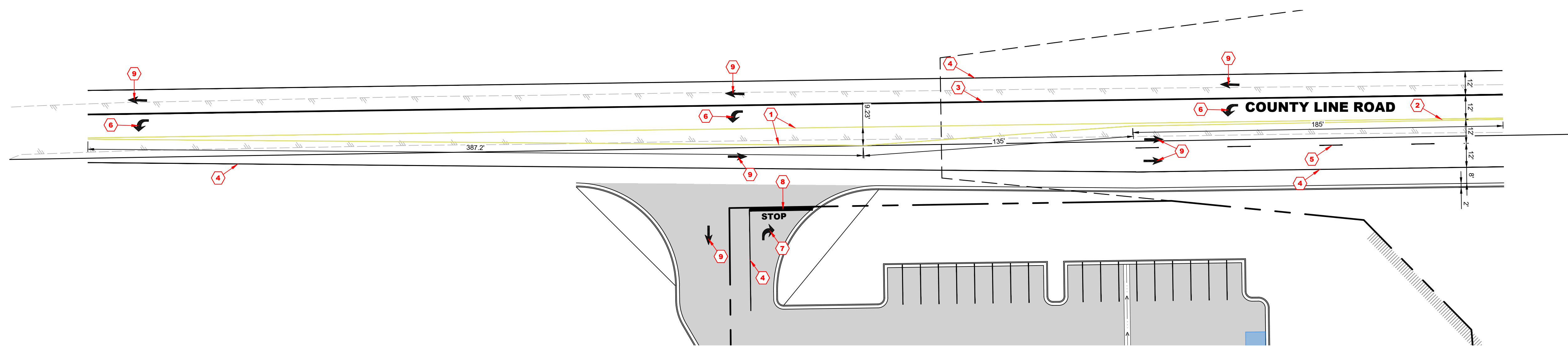
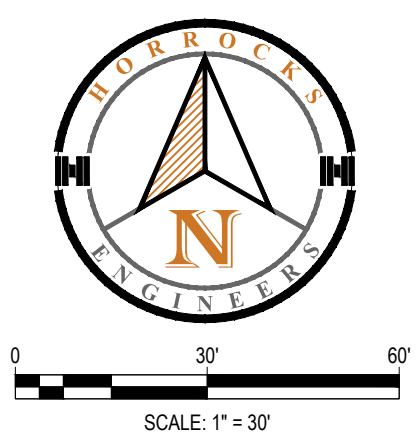
MAVERIK, INC. - SITE CODE CO-0258

I-25 & COUNTY LINE ROAD, MONUMENT, CO

LANDSCAPE DETAILS



L.2.0



STRIPING KEYNOTES

- 1 6 INCH YELLOW SOLID LINE
- 2 6 INCH DOUBLE YELLOW SOLID LINE
- 3 12 INCH WHITE SOLID LINE
- 4 4 INCH WHITE SOLID LINE
- 5 4 INCH WHITE SKIP LINE
- 6 LEFT TURN ARROW
- 7 RIGHT TURN ARROW
- 8 24 INCH WHITE SOLID STOP BAR
- 9 THRU TURN ARROW

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WARNING

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REVISIONS	REV #	DATE
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DRAWN	TMD	
CHECKED	RP	
PROJECT	CO-2658-2008	

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 I-25 & COUNTY LINE ROAD MONUMENT, CO
STRIPING PLAN

GENERAL NOTES

Facility Type	Speed	Edge Lines	Lane Lines	Center Lines	Acc Lines	Lane Drop/Aux Lines
2-Lane Facilities	All	6"	n/a	4"	n/a	n/a
3-Lane Facilities	All	6"	6"	4"	6"	8"
Multi-Lane Facilities > 50 MPH		6"	6"	4"	6"	8"
Multi-Lane Facilities ≤ 45 MPH		4"	4"	4"	4"	8"

1. MINIMUM LONGITUDINAL PAVEMENT MARKING WIDTH

2. CENTER LINES

3. LANE LINES

4. EDGE LINES

5. DOTTED EXTENSION LINES

6. CHANNELIZING LINES

7. CROSS-HATCHING LINES

8. PARKING LINES

9. STOP LINES

COMBINATION ACCEL-DECEL LANE

TYPICAL ENTRANCE AND EXIT RAMP MARKINGS

Computer File Information: Creation Date: 07/04/12, Created By: SCL, Last Modified By: EButto, CAD Ver.: MicroStation V8

Sheet Revisions: Date: 04/17/20, Line Width Update

Colorado Department of Transportation: 2829 W. Howard Pl., Denver, CO 80204, Phone: 303-757-9436, Fax: 303-757-9219

Traffic & Safety Engineering MKB

STANDARD PLAN NO. S-627-1, Standard Sheet No. 1 of 9

GENERAL NOTES

1. THE SPACING, IN THE TABLE APPLIES TO LEFT & RIGHT TURN LANES.

2. ** 'ONLY' MARKING IS OPTIONAL, CONTACT REGION TRAFFIC ENGINEER FOR DIRECTION.

3. WHEN ONE (1) ARROW IS USED, IT SHALL BE PLACED AT THE BEGINNING OF THE FULL WIDTH TURN LANE, OTHERWISE USE THE TABLE BELOW FOR ARROW PLACEMENT.

LENGTH (L)	LEFT AND RIGHT TURN ARROW NO. OF ARROWS PER LANE	SPACING (S)	NO. OF 'ONLY' PER LANE
L < 200'	1	NA	NA
200' - 350'	2	NA	1
350' - 650'	3	EVENLY SPACED	2
650' - 950'	4	BETWEEN	3
950' +	5	150'-300'	≥4

LEGEND: → Direction of Travel

ARROW PLACEMENTS AT INTERSECTIONS

Computer File Information: Creation Date: 02/08/17, Created By: MBhat, Last Modified By: EButto, CAD Ver.: MicroStation V8

Sheet Revisions: Date: , Comments:

Colorado Department of Transportation: 2829 W. Howard Pl., Denver, CO 80204, Phone: 303-757-9436, Fax: 303-757-9219

Traffic & Safety Engineering MKB

STANDARD PLAN NO. S-627-1, Standard Sheet No. 5 of 9



C.6.1



LCD6
6" LED Commercial Downlight

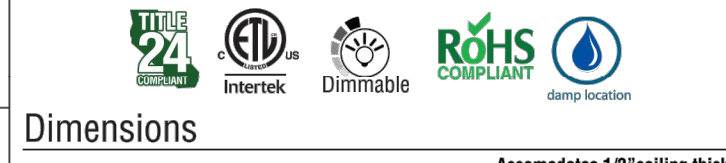


6 inch LED new construction downlight delivers superior performance and energy efficiency. Designed to use anodized aluminum reflectors delivering even illumination and low glare. The high performance luminaire offers 1000 up to 4000 lumens with color temperatures of 2700K, 3000K, 3500K, 4000K at 80 CRI. Standard driver offers universal (120-277V) and 0-10V dimming down to 1%. The LCD series is ideal for low to medium ceiling heights for retail, hospitality and commercial applications.

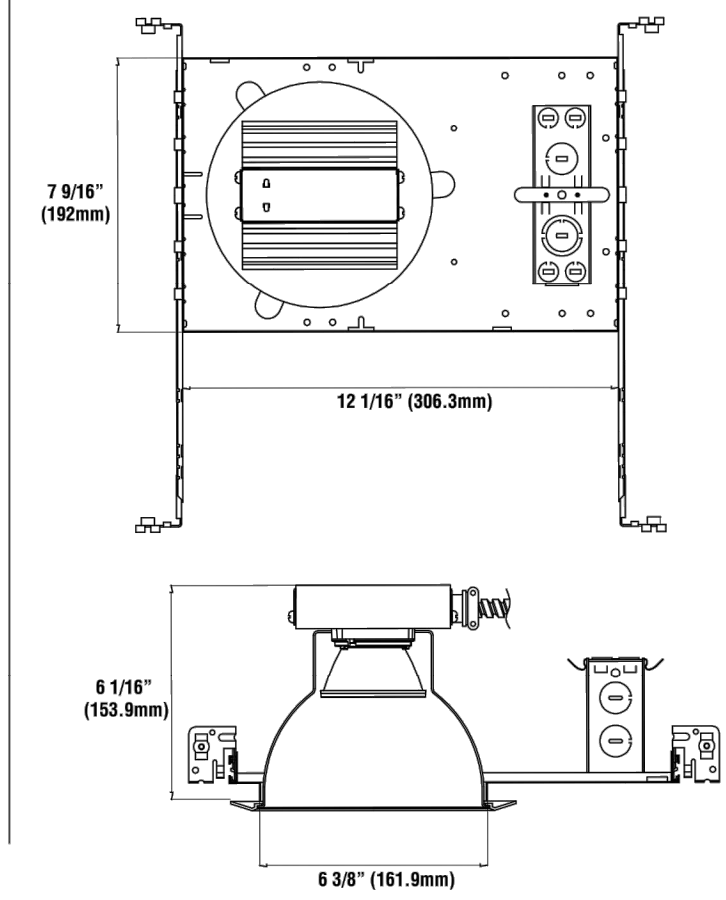
origIn[™]
Features & Specifications

- Optical System**
- LED source provides superior lumen output with maximum visual comfort.
 - Tailored spot, narrow flood, flood and wide flood beam optics designed for glare free illumination.
 - Choice of flanged or flangeless spun reflector utilizing heavy gauge highly reflective diffuse anodized aluminum to deliver low glare, even illumination of the space.
 - Reflectors are retained with three retention clips holding the flange tight to the finished ceiling surface.
 - Minimum CRI of 80.

- Electrical**
- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
 - 0-10 volt dimming (1% - 100%) standard.
 - Standard Universal Voltage (120-277 Vac) Input 50/60 Hz.
 - L70 Calculated Life: > 50k Hours projected @ 25°C per IESNA TM-21-11.
 - Total harmonic distortion: <20%
 - Power factor: > 90
 - Input power stays constant over life.
 - Compatible with Triac (forward-phase or leading-edge), ELV (reverse-phase or trailing edge) dimming only at 120 Vac.
 - Driver can be accessed from below plenum for servicing.
 - High-efficiency LEDs with integrated circuit board mount directly to an extruded aluminum heatsink to maximize heat dissipation and promote long life.
 - Remote Emergency Battery (120-277V) field installed is available to meet critical life safety lighting requirements. The 90-minute battery provides 7.8watts constant power to the LED system, ensuring code compliance. To calculate light output during emergency mode (EM battery 7.8 watts x LPW of fixture being powered - see spec sheet). Detailed wiring diagram and installation instructions located on website.



Accommodates 1/2" ceiling thickness



LCD6
6" LED Commercial Downlight

Features & Specifications (cont.)

- New Construction Housing/Plaster Frame**
- Designed for use in non-insulated ceiling where insulation must be kept a minimum of 3" from the fixture.
 - Junction box listed for (8) #12 AWG (four in, four out) 90°C conductors and thru branch wiring.
 - Junction box contains (5) 1/2" knockouts with trade pry-out slots and (4) Romex cable clamp knockouts.
 - Frame accommodates up to 1/2" ceiling thickness. Standard 24" nailer bars ship with each unit and field installed.

- Installation**
- 24" nailer bars provide stability and support for installation on joists, T-Gird and suspended ceilings.
 - Housings can be positioned at any point within the 24" joist span.
 - Score lines allow adjustments for 1/2" joists without tools.

- Warranty**
- LSI LED Fixtures carry a 5-year warranty.
 - 1 Year warranty on optional Emergency Battery. Test regularly in accordance with local codes.

- Listing**
- cETLus Listed to UL 1598 and UL 8750 standards for 25°C Ambient applications
 - RoHS Compliant.
 - EMC/RFI compliant with FCC 47CFR Part 15 Class B Consumer limits and Class A Commercial & Industrial.
 - Damp location rated.
 - Title 24 Compliant.

Performance

Lumen Package	120V	208V	240V	277V
14L	0.12	0.07	0.06	0.05
25L	0.18	0.11	0.09	0.08
32L	0.27	0.15	0.13	0.12
41L	0.35	0.20	0.18	0.15

*Electrical Data at 25C (77F) Actual Wattage may differ +/-10%

Lumen Pkg	Distribution	2700K CCT		3000K CCT		3500K CCT		4000K CCT	
		Delivered Lumens	Efficiency	Delivered Lumens	Efficiency	Delivered Lumens	Efficiency	Delivered Lumens	Efficiency
14L	SP	1184	84.6	1184	84.6	1467	104.8	1467	104.8
	NF	1156	82.6	1156	82.6	1432	102.3	1432	102.3
	FL	1192	82.3	1192	82.3	1429	102.0	1429	102.0
	WF	1079	77.4	1079	77.4	1337	95.3	1337	95.3
25L	SP	2066	50.9	2066	50.9	2560	116.4	2560	116.4
	NF	2017	51.7	2017	51.7	2499	113.6	2499	113.6
	FL	2011	51.4	2011	51.4	2492	113.3	2492	113.3
	WF	1883	45.6	1883	45.6	2333	106.0	2333	106.0
32L	SP	2665	83.3	2665	83.3	3302	103.2	3302	103.2
	NF	2602	81.5	2602	81.5	3254	100.9	3254	100.9
	FL	2594	81.1	2594	81.1	3215	100.5	3215	100.5
	WF	2429	75.9	2429	75.9	3010	94.1	3010	94.1
41L	SP	3409	81.2	3409	81.2	4224	100.6	4224	100.6
	NF	3328	79.2	3328	79.2	4123	98.2	4123	98.2
	FL	3318	79.0	3318	79.0	4112	97.9	4112	97.9
	WF	3107	74.0	3107	74.0	3849	91.6	3849	91.6

*LED Chips are frequently updated therefore values may change. Data is based on new Reflector.



LCD6
6" LED Commercial Downlight

Luminaire Ordering Guide

Typical Order Example: **LCD6 LED 25L UNV DIM1 35 NF TR6R HAZ**

Family Size	LED Gen	Lumen Package	Voltage	Driver	Color Temperature	CRI	Beam Optic*
LCD6-6" New Construction	LED	14L - 1400 25L - 2500 32L - 3200 41L - 4100	UNV-120-277V	DM1 - Dim to 1% (0-10V dimming)	35 - 300K 35 - 3500K 45 - 4000K	Blank - 80 CRI	SP - Spot NF - Narrow Flood FL - Flood WF - Wide Flood

Self-Flange	Reflector	Finish
TR6R - Open Reflector	TR6RW - Wall Wash*	SF HAZ - Haze semi-diffused SF SPC - Specular clear SF HAZ - Haze semi-diffused
Flangeless (ship standard w/ white plastic trim ring)	TR6R - Open Reflector	HAZ - Haze semi-diffused, white trim ring SPC - Specular clear, white trim ring
TR6RFL - Frosted Floating Lens*	TR6RFL - Frosted Floating Lens*	HAZ - Haze semi-diffused Reflector w/ Frosted Floating Lens, w/ integrated white metal trim ring (optional trim ring not compatible) SPC - Specular Clear Reflector w/ Frosted Floating Lens, w/ integrated white metal trim ring (optional trim ring not compatible)
TR6RW - Wall Wash*	TR6RW - Wall Wash*	HAZ - Haze semi-diffused wall wash reflector, white trim ring
TR6B - Baffle	TR6B - Baffle	WH - White baffle and white trim ring BL - Black Baffle and white trim ring
TR6BL - Baffle w/ Regressed Lens*	TR6BL - Baffle w/ Regressed Lens*	HAZ - Hazed semi-diffused WH - White baffle and white trim ring BL - Black baffle and white trim ring
TR6RL - Regressed Lens*	TR6RL - Regressed Lens*	SPC - Specular clear HAZ - Haze semi-diffused reflector w/ specular clear regressed lens and white trim ring SPC - Specular clear reflector w/ specular clear regressed lens and white trim ring

Accessory Ordering Information (Accessories are field installed)

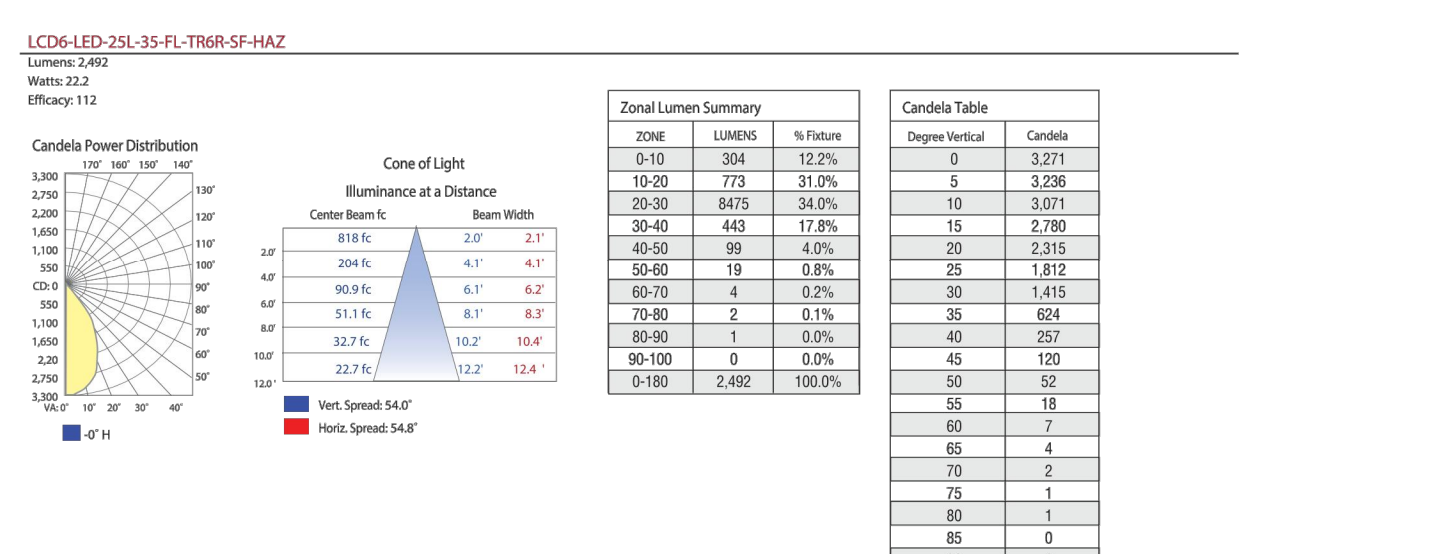
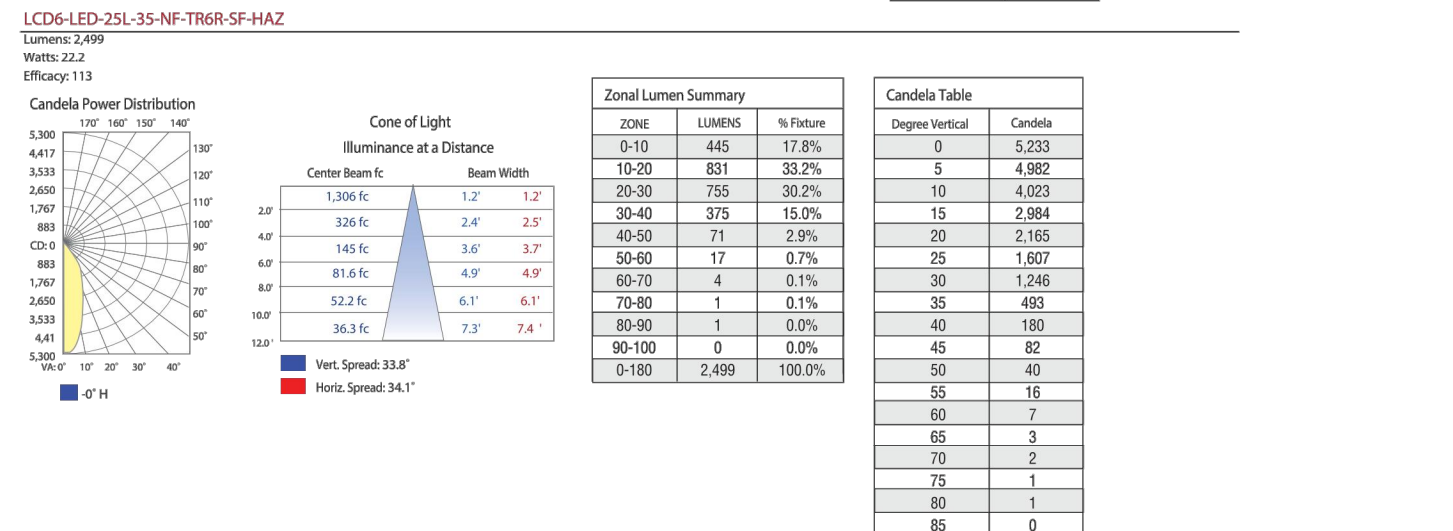
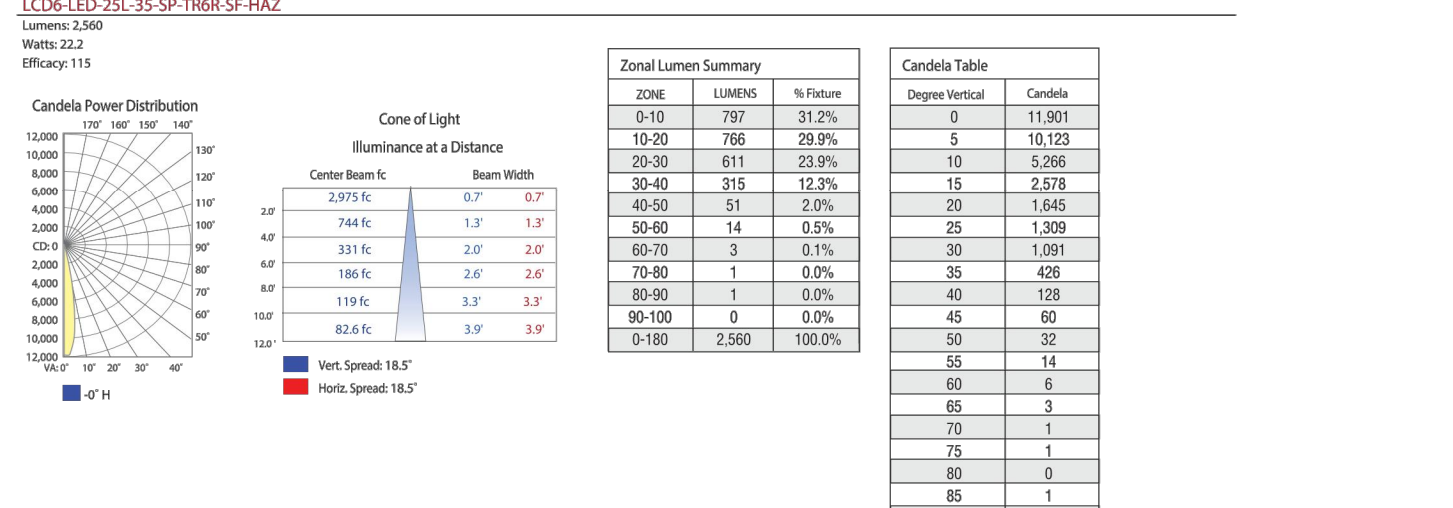
Description	Order Number
WH - White metal trim ring (only compatible w/flangeless trim)	616106
EM - Emergency Battery	608633

- NOTES:**
- Regressed lens trims are wet location listed. All other trims are rated for damp location.
 - TR6RW wall wash reflector comes with 40° integrated optic; additional beam optics not compatible.
 - TR6RFL Frosted floating lens comes with integrated white metal trim; accessory white metal trim ring not required.
 - Housing can ship ahead of the light engine and reflector.
 - 90 CRI requires 55 day leadtime & 100 MOD; Consult Factory.
 - Refer to IES Files for Beam Spread.



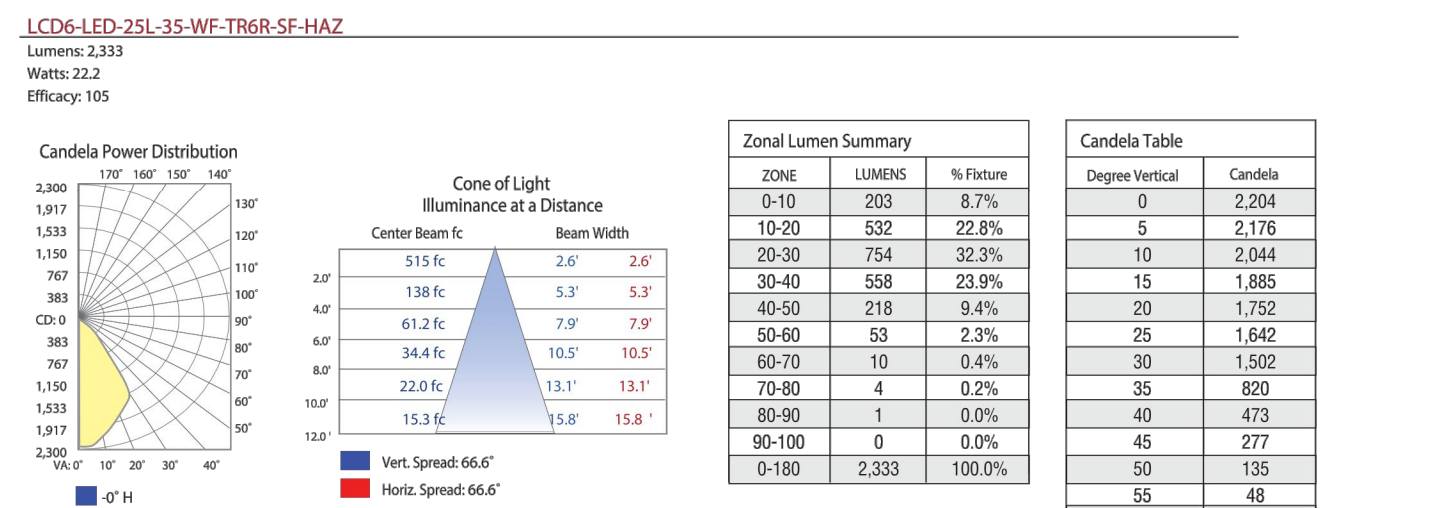
LCD6
6" LED Commercial Downlight

Photometry



LCD6
6" LED Commercial Downlight

Photometry (cont.)



- 6" Recessed Downlight Reflectors**
- TR6R - Open Reflector
Self-Flange or Flangeless
HAZ - Haze semi-diffused
SPC - Specular clear
 - TR6RFL - Frosted floating lens
Flangeless
HAZ - Haze semi-diffused
SPC - Specular clear
Integrated white metal trim ring
 - TR6BL - Baffle w/ regressed lens
Flangeless
HAZ - Haze semi-diffused
Choice of white or black baffle
Wet Location listed
 - TR6RW - Wall wash w/ Kick reflector
Self-Flange or Flangeless
HAZ - Haze semi-diffused
 - TR6B - Baffle
Flangeless
HAZ - Haze semi-diffused reflector
Choice of white or black baffle
 - TR6RL - Regressed lens w/specular clear reflector
Flangeless
HAZ - Haze semi-diffused
SPC - Specular clear
Wet Location listed



LCD6
6" LED Commercial Downlight



6 inch LED new construction downlight delivers superior performance and energy efficiency. Designed to use anodized aluminum reflectors delivering even illumination and low glare. The high performance luminaire offers 1000 up to 4000 lumens with color temperatures of 2700K, 3000K, 3500K, 4000K at 80 CRI. Standard driver offers universal (120-277V) and 0-10V dimming down to 1%. The LCD series is ideal for low to medium ceiling heights for retail, hospitality and commercial applications.

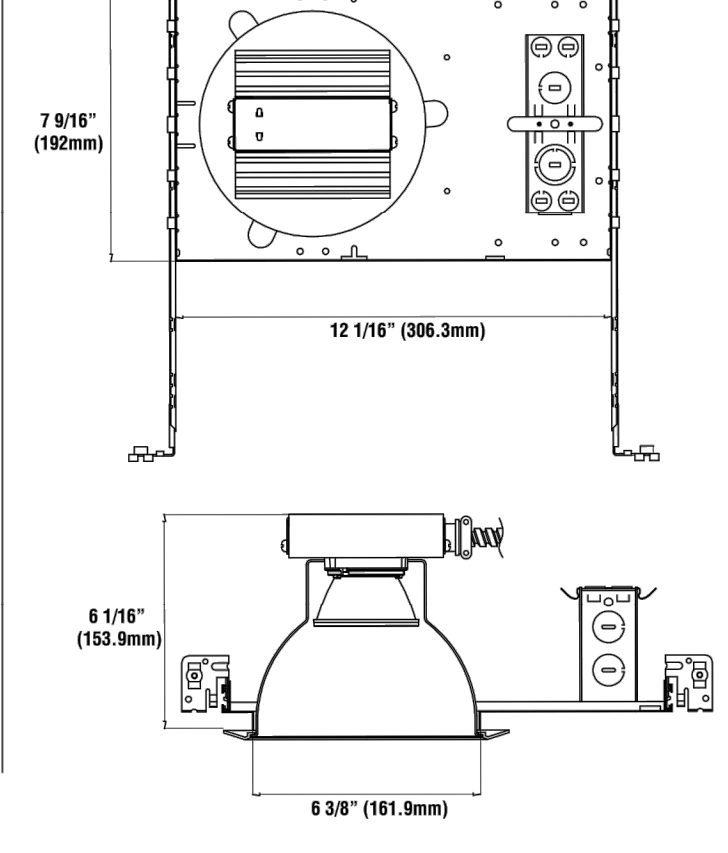
origIn[™]
Features & Specifications

- Optical System**
- LED source provides superior lumen output with maximum visual comfort.
 - Tailored spot, narrow flood, flood and wide flood beam optics designed for glare free illumination.
 - Choice of flanged or flangeless spun reflector utilizing heavy gauge highly reflective diffuse anodized aluminum to deliver low glare, even illumination of the space.
 - Reflectors are retained with three retention clips holding the flange tight to the finished ceiling surface.
 - Minimum CRI of 80.

- Electrical**
- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
 - 0-10 volt dimming (1% - 100%) standard.
 - Standard Universal Voltage (120-277 Vac) Input 50/60 Hz.
 - L70 Calculated Life: > 50k Hours projected @ 25°C per IESNA TM-21-11.
 - Total harmonic distortion: <20%
 - Power factor: > 90
 - Input power stays constant over life.
 - Compatible with Triac (forward-phase or leading-edge), ELV (reverse-phase or trailing edge) dimming only at 120 Vac.
 - Driver can be accessed from below plenum for servicing.
 - High-efficiency LEDs with integrated circuit board mount directly to an extruded aluminum heatsink to maximize heat dissipation and promote long life.
 - Remote Emergency Battery (120-277V) field installed is available to meet critical life safety lighting requirements. The 90-minute battery provides 7.8watts constant power to the LED system, ensuring code compliance. To calculate light output during emergency mode (EM battery 7.8 watts x LPW of fixture being powered - see spec sheet). Detailed wiring diagram and installation instructions located on website.



Accommodates 1/2" ceiling thickness



WARNING
 IF THIS BAR DOES NOT MEASURE 2" THEN DRAWING IS NOT TO SCALE

REVISIONS

REV #	DATE	DESCRIPTION
1	SEP 3, 2021	TMD
2		TMD
3		RP

PRELIMINARY
NOT FOR CONSTRUCTION

MAVERIK, INC. - SITE CODE CO-0258
 I-25 & COUNTY LINE ROAD
 MONUMENT, CO
ELECTRICAL CUT SHEETS

E-1.3



LCD6 6" LED Commercial Downlight

Features & Specifications (cont.)

New Construction Housing/Plaster Frame

- Designed for use in non-insulated ceiling where insulation must be kept a minimum of 3" from the fixture.
Junction box listed for (8) #12 AWG (four in, four out) 90°C conductors and thru branch wiring.
Junction box contains (5) 1/2" knockouts with trade pry-out slots and (4) Romex cable clamp knockouts.
Frame accommodates up to 1/2" ceiling thickness. Standard 24" nailer bars ship with each unit and field installed.

Installation

- 24" nailer bars provide stability and support for installation on joists, T-Grid and suspended ceilings.
Housings can be positioned at any point within the 24" joist span.
Score lines allow adjustments for 1/2" joists without tools.

Warranty

- LSI LED Fixtures carry a 5-year warranty.
1 Year warranty on optional Emergency Battery. Test regularly in accordance with local codes.

Listing

- cETLus Listed to UL 1598 and UL 8750 standards for 25°C Ambient applications
RoHS Compliant.
EMC/RFI compliant with FCC 47CFR Part 15 Class B Consumer limits and Class A Commercial & Industrial.
Damp location rated
Title 24 Compliant.

Performance

Table with columns: Lumen Package, 120V, 208V, 240V, 277V. Rows: 14L, 25L, 32L, 41L.

*Electrical Data at 25C (77F) Actual Wattage may differ +/-10%

Table with columns: Lumen Pkg, Distribution, Delivered Lumens, Efficiency, Delivered Lumens, Efficiency, Delivered Lumens, Efficiency, Delivered Lumens, Efficiency, Wattage. Rows: 14L, 25L, 32L, 41L.

*LED Chips are frequently updated therefore values may change. Data is based on New Reflector.



LCD6 6" LED Commercial Downlight

Luminaire Ordering Guide

Table with columns: Family Size, LED Gen, Lumen Package, Voltage, Driver, Color Temperature, CRI, Beam Optic. Includes typical order example: LCD6 LED 25L UNV DIM1 35 NF TR6R HAZ.

Table with columns: Self-Fange, Reflector, Finish. Lists various configurations like TR6R, TR6RW, TR6RFL, TR6RWW, TR6RBL, TR6RBLR.

Accessory Ordering Information (Accessories are field installed)

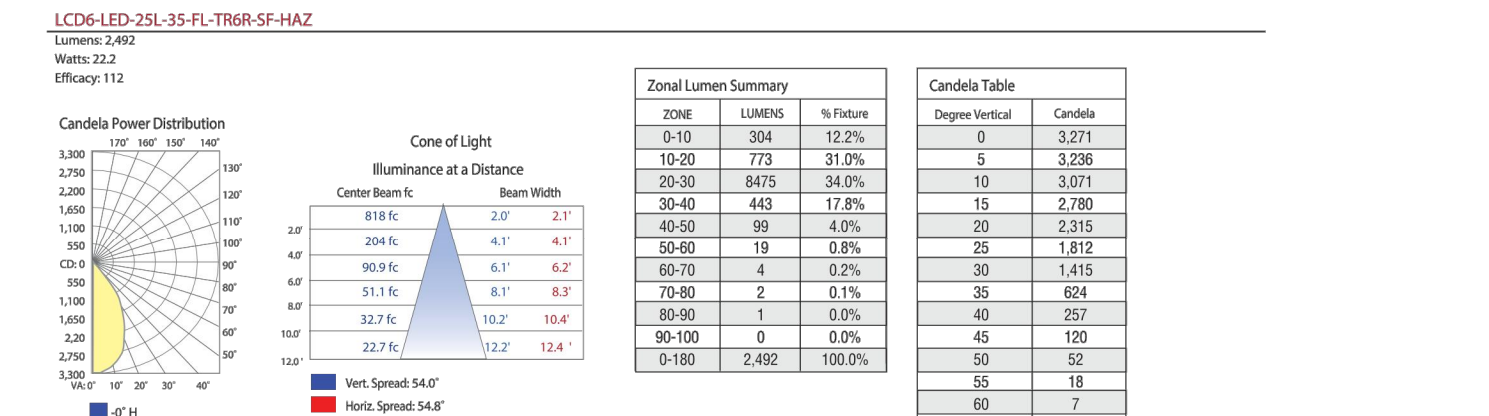
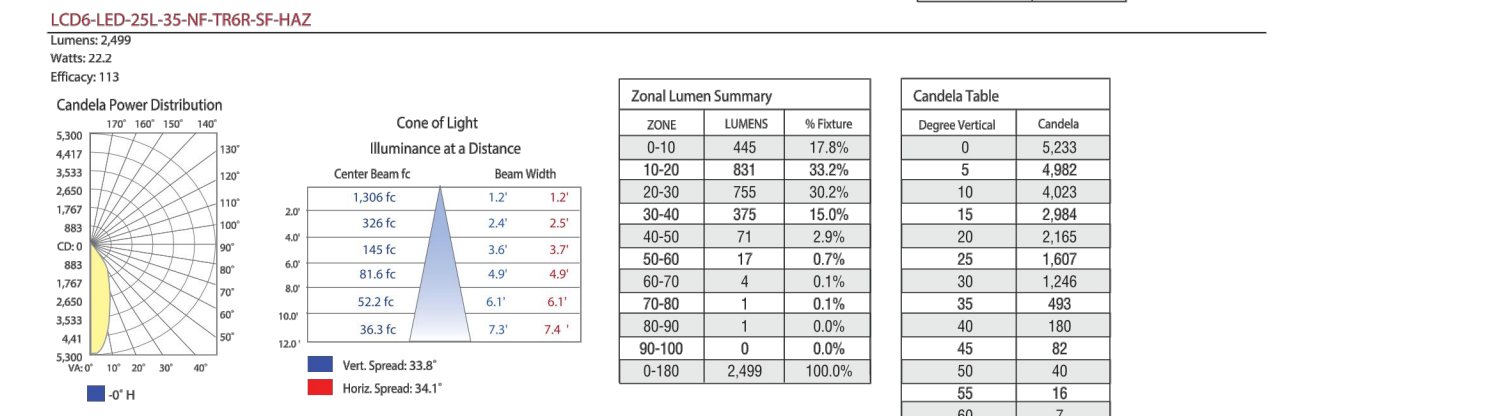
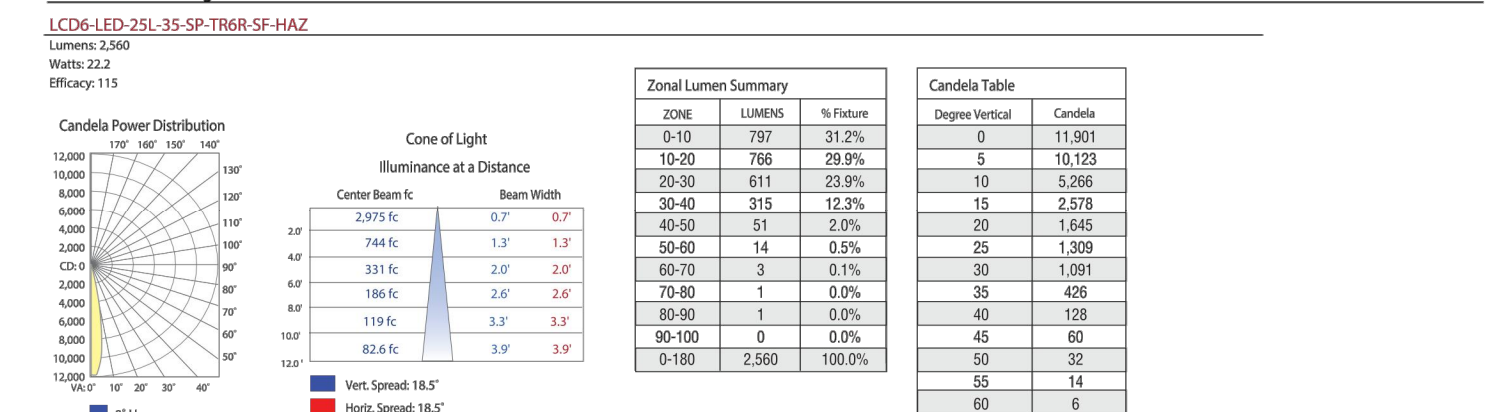
Table with columns: Description, Order Number. Lists White metal trim ring and Emergency Battery.

- NOTES: 1. Regressed lens trims are wet location listed. All other trims are rated for damp location. 2. TR6RWW wall wash reflector comes with 40° integrated optic additional beam optics not compatible. 3. TR6RFL frosted floating lens comes with integrated white metal trim; accessory white metal trim ring not required. 4. Housing can ship ahead of the light engine and reflector. 5. 90 CRI requires 55 day leadtime & 100 MOQ. Consult Factory. 6. Refer to IES Files for Beam Spread.



LCD6 6" LED Commercial Downlight

Photometry



LCD6 6" LED Commercial Downlight

Photometry (cont.)

LCD6-LED-25L-35-WF-TR6R-SF-HAZ Lumens:2333 Watts:23.2 Efficacy:105

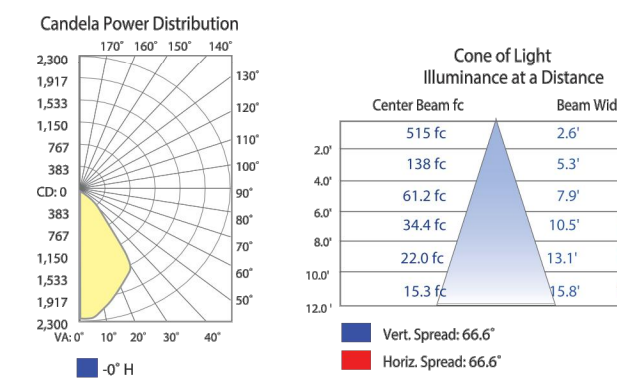


Table with columns: Zonal Lumen Summary, Candela Table. Rows: 0-10, 10-20, 20-30, 30-40, 40-50, 50-60, 60-70, 70-80, 80-90, 90-100, 0-180.

6" Recessed Downlight Reflectors



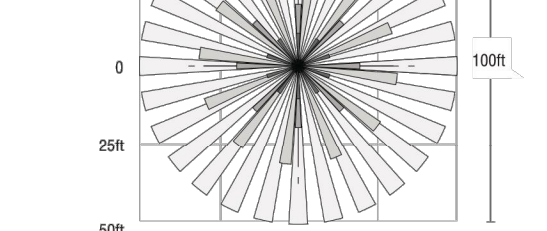
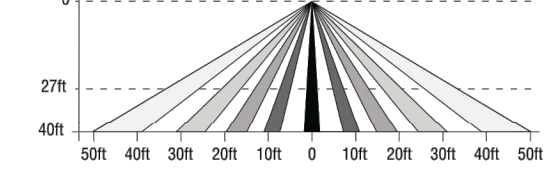
MIRADA WALL SCONCE (XWM)



DOE LIGHTING FACTS Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit www.lightingfacts.com for specific catalog strings.

Table with columns: Lumens, Wattage, LPW. Rows: 03, 04, 06, 08.

COVERAGE DIAGRAM



Project Name _____ Fixture Type _____ 10/20/17
Catalog # _____ LSI INDUSTRIES INC. © 2017

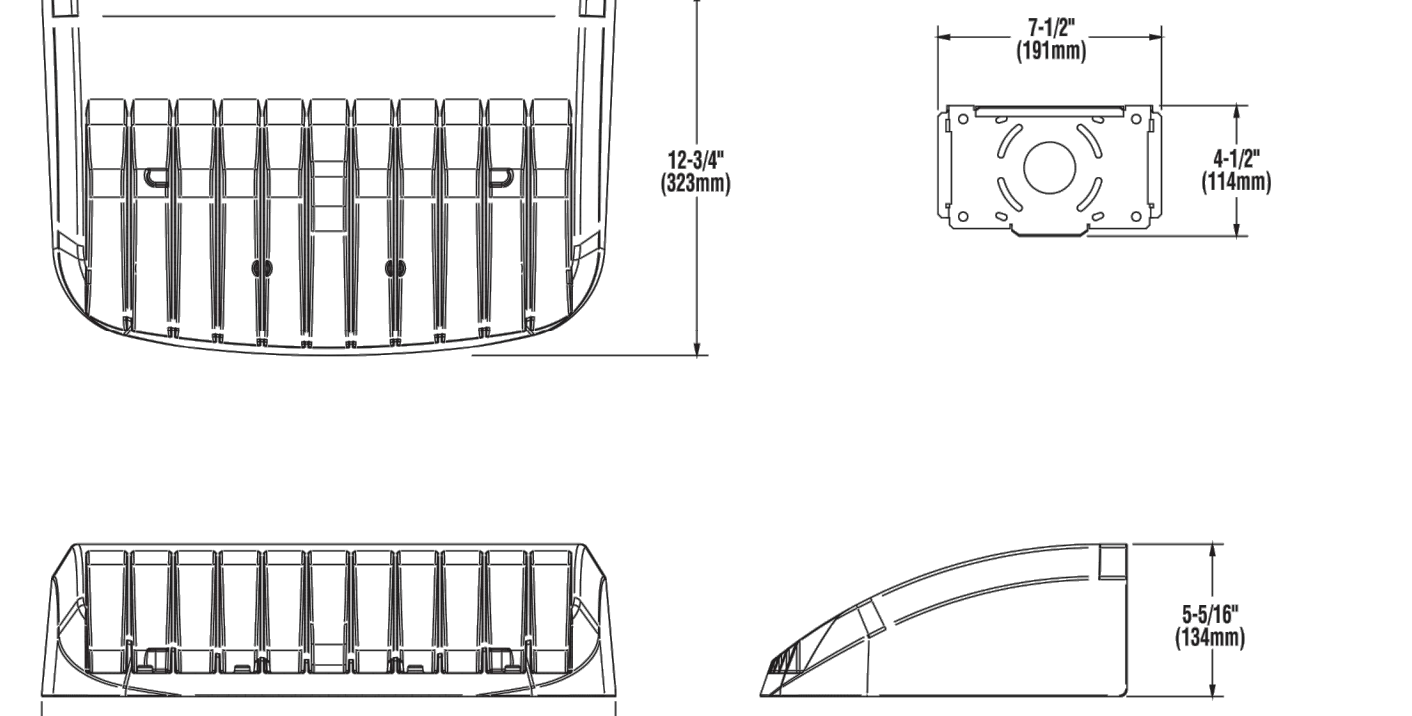
MIRADA WALL SCONCE (XWM)

LUMINAIRE ORDERING INFORMATION. Table with columns: Prefix, Distribution, Light Source, Output, Color Temperature, Input Voltage, Finish, Optional Controls, Optional Sensor/Options.

ACCESSORY ORDERING INFORMATION. Table with columns: Description, Order Number, Description, Order Number.

FOOTNOTES: 1 - For wireless controls information and accessories, see Controls Section. 2 - Requires a 3-Phase and 4-wire supply. Not compatible with battery back-up. 3 - Not compatible with IMS Option. 4 - Output based on type 3 optics in cool white color temperature, see IES files for exact delivered lumens.

DIMENSIONS



Project Name _____ Fixture Type _____ 10/20/17
Catalog # _____ LSI INDUSTRIES INC. © 2017

HORROCKS ENGINEERS 555 South Bluff St., Suite 101 St. George, UT 84770 (435) 966-7888 www.horrocks.com

WARNING REVISIONS DATE SEP 3, 2021 REV # DATE DESIGNED TMD DRAWN TMD CHECKED RP PROJECT CO-2658-2008 PRELIMINARY NOT FOR CONSTRUCTION SEE GENERAL NOTES SHEET

MAVERIK, INC. - SITE CODE CO-0258 I-25 & COUNTY LINE ROAD MONUMENT, CO ELECTRICAL CUT SHEETS E-1.4 PAGE 27



AirLink enabled by Synapse®

Wireless Lighting Controller

The AirLink integrated controller is a California Title 24 compliant lighting controller that provides real-time light monitoring and control with utility-grade power monitoring.

Features

- 2% Utility Grade Power Monitoring
Up to 80% Savings through smart dimming
True On/Off functionality via switched relay
Seamlessly integrates into the outdoor AirLink wireless lighting control solution & Self-healing Mesh Networking

Specifications

Regulatory Approvals

- FCC, IC, CE certified
cULus Listed

- California Title 24 compliant

Power and Performance

- Operating environmental: -40°F to 131°F (-40°C to 55°C)
Input power: 100-277 VAC +/- 10% (Max 305V/47/64 Hz)
Switched output: Default ON; Zero Cross Switching
Load rating: 5A @ 100V to 277V (+/- 10%)

Other

- Dimensions: 8.2" L x 2.3" W x 1.3" H (209mm L x 59mm W x 33mm H) without antennas
Radio: SNAP 2.4 GHz; 802.15.4; +20 dBm Transmit Power; -105 dBm Receive Sensitivity
Warranty: 5 years

Contact LSI Controls

Sales controls.sales@lsi-industries.com
Support controls.support@lsi-industries.com
More information For more information on AirLink, visit our website at www.lsi-airlink.com/airlink

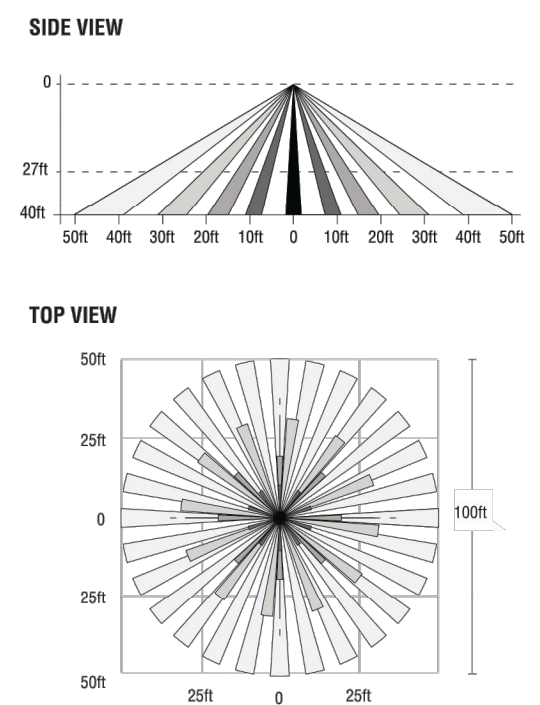
MIRADA WALL SCENCE (XWM)



Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program.

Table with columns: Light Output - XWM - 3 5000K CCT, Lumen, Wattage, LPW

COVERAGE DIAGRAM



SMARTREC™-LSI drivers feature integral sensor which reduces drive current, when ambient temperatures exceed rated temperature
ENERGY SAVING CONTROL OPTIONS - DIM 0-10 volt dimming enabled with LSI wireless controls.
OPTICAL INTEGRAL MOTION SENSOR - Passive infrared motion sensor activates switching of luminaire light levels.

MIRADA WALL SCENCE (XWM)

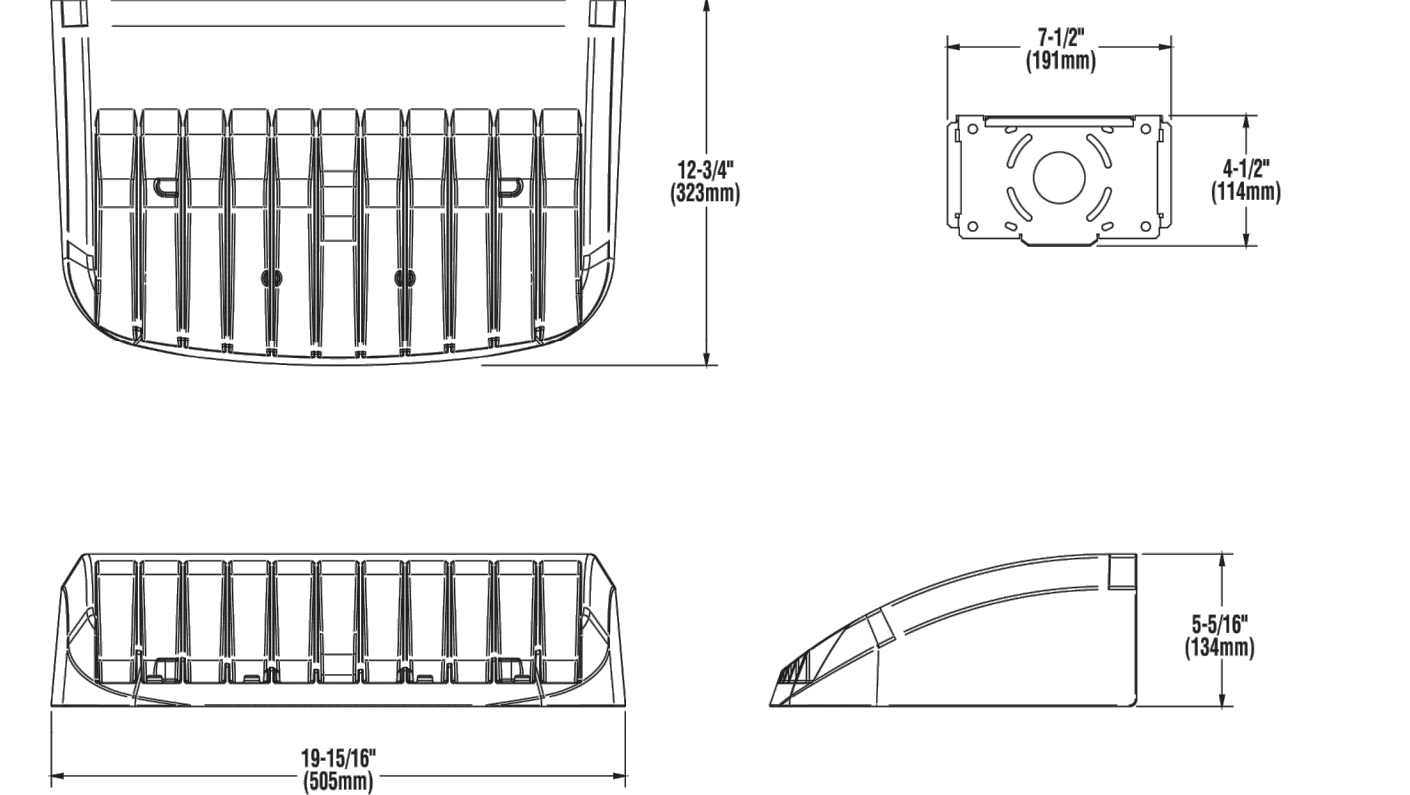
LUMINAIRE ORDERING INFORMATION

Table with columns: Prefix, Distribution, Light Source, Output, Color Temperature, Input Voltage, Finish, Optional Controls, Optional Sensor/Options

Table with columns: Description, Order Number, Description, Order Number

FOOTNOTES:
1 - For wireless controls information and accessories, see Controls Section
2 - Requires a 5A/20A gasket and override switch. Not compatible with battery back-up.

DIMENSIONS



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Regulatory Approvals

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cULus Listed

- California Title 24 compliant

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- Operating environmental: -40°F to 131°F (-40°C to 55°C)
Input power: 100-277 VAC +/- 10% (Max 305V/47/64 Hz)
Switched output: Default ON; Zero Cross Switching
Load rating: 5A @ 100V to 277V (+/- 10%)

Other

- Dimensions: 8.2" L x 2.3" W x 1.3" H (209mm L x 59mm W x 33mm H) without antennas
Radio: SNAP 2.4 GHz; 802.15.4; +20 dBm Transmit Power; -105 dBm Receive Sensitivity
Warranty: 5 years

Contact LSI Controls

Sales controls.sales@lsi-industries.com
Support controls.support@lsi-industries.com
More information For more information on AirLink, visit our website at www.lsi-airlink.com/airlink

Catalog #: Prepared By: Project: Date:

Scottsdale Vertex™ (scv) Petroleum Canopy LED Luminaire



Table with columns: Overview, Lumen Package, Wattage Range, Efficacy Range (LPW), Weight (lbs/kg)

QUICK LINKS

- Ordering Guide
Performance
Photometrics
Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged low-profile die-cast aluminum housing, optical unit, and driver cover.
Below canopy access to optical chamber and driver housing for serviceability.
IP66 rated optical unit protects integral components from dust and water.

QUICK LINKS

- Total harmonic distortion: <20%
Operating temperature: -40°C to +50°C (-40°F to +122°F) when mounted to Steel/Aluminum surfaces for 10L, 13L, & 15L Lumen Packages.

Optical System

- Proprietary silicone refractor optics provide exceptional coverage and uniformity in Symmetrical or Combination Forward Throw distributions.
State-of-the-art silicone optics deliver industry leading optical control with an integrated gasket to provide an IP66 rated sealed optical chamber in one component.

Installation

- Installs in a 12" or 16" deck pan.
Four fasteners are provided with the fixture for using deck, metallic canopy substrates only when classified as suitable for use by installing professional otherwise suitable fasteners should be provided by others.



ORDERING GUIDE

SCV LED 13L SC UNV DIM 50 WHT IMSBT

Table with columns: Family/Size, LED Gen, Lumen Package, Distribution, Voltage, Driver, Color Temperature, Finish, Controls

Table with columns: Description, Order Number, Description, Order Number

FOOTNOTES:
1 - Consult factory for HV with AirLink Synapse Wireless Control System.
2 - IMST is field configurable via the LSI app that can be downloaded from your smartphone's native app store.

PERFORMANCE

Table with columns: Delivered Lumens, Drive Current, Ambient Temperature, Lumen Multiplier

Table with columns: SCFT Distribution Recommended Lumen Maintenance, Ambient Temperature, Lumen Multiplier

Table with columns: Electrical Data, Lumen Level, Voltage, Efficiency

WARNING: IF THIS BAR DOES NOT MEASURE 2" THEN DRAWING IS NOT TO SCALE

PRELIMINARY NOT FOR CONSTRUCTION

Scottsdale Vertex SCV Petroleum PHOTOMETRICS Back to Quick Links Luminaire photometry has been conducted by an accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested at the source resulting in a luminaire efficacy of 100%. See <http://www.lsi-industries.com/products/led-lighting-solutions.aspx> for detailed photometric data.

SCV-LED-15L-SC-50

LUMINAIRE DATA		
Description	5000 Kelvin, 70 CRI	24.361
Delivered Lumens	15,470	
Watts	103	
Efficacy	150	
IES Type	Type IIS - Very Short	
BUS Rating	B3-UD-G1	

Zonal Lumen Summary		
Zone	Lumens	%Luminaire
Low (0-30°)	4101.6	26.5%
Medium (30-60°)	6386.4	41.3%
High (60-90°)	2748.6	17.8%
Very High (90-120°)	173.4	1.1%
Uplight (90-180°)	0.0	0.0%
Total flux	15412.2	100%

ISOFOOT CANDLE PLOT POLAR CURVE

SCV-LED-23L-SCFT-50

LUMINAIRE DATA		
Description	5000 Kelvin, 70 CRI	24.361
Delivered Lumens	191.5	
Watts	127	
Efficacy	150	
IES Type	Type IV - Short	
BUS Rating	B3-UD-G3	

Zonal Lumen Summary		
Zone	Lumens	%Luminaire
Low (0-30°)	4388.4	17.7%
Medium (30-60°)	6963.0	28.5%
High (60-90°)	439.5	1.8%
Uplight (90-180°)	0.0	0.0%
Total flux	24881.0	100%

SCV-LED-23L-SCFT-50

LUMINAIRE DATA		
Description	5000 Kelvin, 70 CRI	24.361
Delivered Lumens	24,361	
Watts	157	
Efficacy	155	
IES Type	Type II - Short	
BUS Rating	B3-UD-G3	

Zonal Lumen Summary		
Zone	Lumens	%Luminaire
Low (0-30°)	4388.4	17.7%
Medium (30-60°)	6963.0	28.5%
High (60-90°)	439.5	1.8%
Uplight (90-180°)	0.0	0.0%
Total flux	24881.0	100%

CANOPY COMPARISON

Canopy Layout	Fixture	QTY	Fixture Lumens	Fixture Watts	Lumens/Watts	Canopy/Watts	Canopy/Watts/Sq. Ft.	*Canopy/Avg.	Transition Area Avg.
1	SCV-LED-15L-SC-50	18	12,933	84.3	153	1,717	0.39	35.41	3.43
2	SCV-LED-10L-SC-50	12	10,306	66.1	156	1,842	0.50	34.34	9.58
	SCV-LED-23L-SCFT-50	6	24,361	191.5	127				
3	SCV-LED-15L-SC-50	12	12,933	84.3	153	2,161	0.56	39.43	9.70
	SCV-LED-23L-SCFT-50	6	24,361	191.5	127				
4	SCV-LED-15L-SC-50	12	12,933	84.3	153	2,385	0.62	44.23	9.80
	SCV-LED-23L-SCFT-50	6	24,361	191.5	127				
5	SCV-LED-20L-SC-50	12	20,141	130.3	155	2,713	0.70	53.38	10.03
	SCV-LED-23L-SCFT-50	6	24,361	191.5	127				
6	SCV-LED-23L-SC-50	12	23,150	152.5	152	2,979	0.77	59.22	10.16
	SCV-LED-23L-SCFT-50	6	24,361	191.5	127				

*Initial foot-candle values at grade.

Page 3/9 Rev. 06/18/20 SPEC.1023.A.0420

Scottsdale Vertex SCV Petroleum PRODUCT DIMENSIONS Back to Quick Links

CONTROLS

AirLink Wireless Lighting Controller

The AirLink integrated controller is a California Title 24 compliant lighting controller that provides real-time light monitoring and control with utility-grade power monitoring. It includes a 24V sensor input and power supply to connect a sensor into the outdoor AirLink wireless lighting system. The wireless integrated controller is compatible with this fixture. Click the link below to learn more details about AirLink. <https://www.lsi-industries.com/documents/datasheets/airlink-outdoor-specsheet.pdf>

Integral Bluetooth™ Motion and Photocell Sensor (IMSBT)

Slim low profile sensor provides multi-level control based on motion and/or daylight. Sensor controls 0-10 VDC LED drivers and is rated for cold and wet locations (-30° C to 70° C). Two unique PIR lenses are available and used based on fixture mounting height. All control parameters are adjustable via an iOS or Android App capable of storing and transmitting sensor profiles. Click the link below to learn more details about IMSBT. <https://www.lsi-industries.com/documents/datasheets/imsbt-specsheet.pdf>

AirLink™ Blue

Wireless Bluetooth Mesh Outdoor Lighting Control System that provides energy savings, code compliance and enhanced safety/security for parking lots and parking garages. Three key components: Bluetooth wireless radio/sensor controller, Time Keeper and an iOS App. Capable of grouping multiple fixtures and sensors as well as scheduling time-based events by zone. Radio/Sensor Controller is factory integrated into Area/Site, Wall Mounted, Parking Garage and Canopy luminaires. Click the link below to learn more details about AirLink Blue. <https://www.lsi-airlink.com/airlink-blue/>

RETROFIT KITS

LSI Industries offers a full line of Retrofit Kits for existing Encore, Richmond, 2x2 Universal and many more older canopy luminaires. Click the link below to see more details on all our Retrofit Kits. <https://www.lsi-industries.com/documents/datasheets/scv-petro-retrofit-specsheet.pdf>

Page 4/9 Rev. 06/18/20 SPEC.1023.A.0420

SLM LED 18L SIL 3 UNV 40 70CRI BRZ IL T14 Catalog #: Project: Date: Prepared By: SLM LED 18L SIL 3 UNV 40 70CRI BRZ IL T14

Slice Medium (SLM) Outdoor LED Area Light

OVERVIEW	
Lumen Package	9,000 - 42,000
Wattage Range	69 - 390
Efficacy Range (LPW)	93 - 145
Weight lbs(kg)	30 (13.6)

QUICK LINKS

Ordering Guide	Performance	Photometrics	Dimensions
----------------	-------------	--------------	------------

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Designed to mount to square poles.
- Fixtures are finished with LSI's DuraGrip™ polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 30 lbs in carton.

Optical System

- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated sealed optical chamber in 1 component.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in IES Types 2, 3, SW, FT, FTA and AM.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93%.
- Zero uplight.
- Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak Intensity at 610nm.
- Minimum CRI of 70.
- Integral louver (L) and house-side shield (H) options available for improved backlight control without sacrificing street side performance. See page 5 for more details.

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over temperature protection. Custom lumen and wattage packages available.
- 0-10V dimming (0% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >100k Hours (See Lumen Maintenance on Page 3)
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F). 42L lumen package rated to +40°C.
- Power factor: >90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation.
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Optional integral passive infrared Bluetooth™ motion and photocell sensor (see page 5 for more details). Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7. (see page 5 for more details).

Installation

- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment.
- Included terminal block accepts up to 12 ga. wire.
- Utilizes LSI's traditional 3" drill pattern B3 for easy fastening of LSI products.

Warranty

- LSI LED Fixtures carry a 5-year warranty.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant: with 3000K color temperature selection.
- Title 24 Compliant: see local ordinance for qualification information.
- Suitable for wet Locations.
- IP66 rated Luminaire per IEC 60598.
- 3G rated for ANSI C136.31 high vibration applications.
- IP66 rated Luminaire per IEC 60598.
- 3G rated for ANSI C136.31 high vibration applications are qualified.

Specifications and dimensions subject to change without notice.

Page 1/9 Rev. 10/21/20 SPEC.1023.A.0420

Slice Medium Outdoor LED Area Light

ORDERING GUIDE Back to Quick Links

TYPICAL ORDER EXAMPLE: SLM LED 36L SIL FTA UNV DIM 50 70CRI ALSCS04 BRZ IL					
Luminaire Prefix	Light Source	Lumen Package	Light Output	Distribution	Orientation ¹
SLM Slice Medium	LED	SL - 9,000 lms 12L - 12,000 lms 18L - 18,000 lms 24L - 24,000 lms 30L - 30,000 lms 36L - 36,000 lms 42L - 42,000 lms	SIL - Silicone	2 - Type 2 3 - Type 3 SW - Type 5 Wide FT - Forward Throw FTA - Forward Throw Automotive AM - Automotive Merchandise	(blank) - standard L - Optics rotated left 90° R - Optics rotated right 90°
Color Temp	Color Rendering	Controls (Choose One)	Finish	Options	
50 - 5,000 CCT 40 - 4,000 CCT 30 - 3,000 CCT AMB - Phosphor Converted Amber ^{2,3}	70CRI - 70 CRI	(Blank) - None Wireless Controls System: ALSC - AirLink Synapse Control System ⁴ ALSCH - AirLink Synapse Control System Host / Satellite ^{4,5} ALSCHS01 - AirLink Synapse Control System Host / Satellite with 8-12" Motion Sensor ⁴ ALSCHS01 - AirLink Synapse Control System Host / Satellite with 8-12" Motion Sensor ⁴ ALSCHS02 - AirLink Synapse Control System with 12-20" Motion Sensor ALSCHS02 - AirLink Synapse Control System Host / Satellite with 12-20" Motion Sensor ⁴ ALSCHS04 - AirLink Synapse Control System with 20-40" Motion Sensor ⁴ ALSCHS04 - AirLink Synapse Control System Host / Satellite with 20-40" Motion Sensor ⁴ ALSCHS1 - AirLink Blue Wireless Motion & Photo Sensor Controller (8-24" mounting height) ⁶ ALSCHS2 - AirLink Blue Wireless Motion & Photo Sensor Controller (25-40" mounting height) ⁶	BRZ - Bronze BLK - Black GPT - Graphite MSV - Metallic Silver WRT - White PLP - Platinum Plus SVG - Satin Verde Green	(Blank) - None IH - Integral HouseSide Shield ⁷ IL - Integral Louver (Sharp Spill Light Control) ⁸	
FOOTNOTES: 1 - Not available on "Type SW" distribution. 2 - Consult factory for availability. 3 - Only available in SL and 2L Lumen Packages. 4 - Not available in H3. 5 - Consult factory for Site Layout. 6 - IMSBT is field configurable via the LSI app that can be downloaded from your smartphone's native app store. 7 - Control device or shorting cap must be ordered separately. See Accessory Ordering Information. 8 - Accessories are shipped separately and field installed. 9 - Factory installed CRTP option required. See Options. 10 - "CLR" denotes finish. See Finish options. 11 - Custom lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DLC listed.					

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Slice Medium Outdoor LED Area Light

ACCESSORY ORDERING INFORMATION⁹

Controls Accessories	
Description	Order Number
Test/Lock Photocell (120V) for use with CRTP	122514
Test/Lock Photocell (208-277V) for use with CRTP	122515
Test/Lock Photocell (480V) for use with CRTP	122516
AirLink 5 Pin Test Lock Controller	661409
AirLink 5 Pin Test Lock Controller	661410
Pole-Mounted Occupancy Sensor (24V)	68294CLR
Shorting Cap for use with CRTP	148328

Fusing Accessories	
Description	Order Number
Single Fusing (120V)	FK120
Single Fusing (120V)	FK277
Double Fusing (208V, 240V)	DFK240
Double Fusing (480V)	DFK480
Double Fusing (347V)	DFK347

Mounting Accessories	
Description	Order Number
Round Pole Adapter (2" Round/Teased Pole)	40873CLR
Round Pole Adapter (4" Round Pole)	37986CLR
Round Pole Adapter (2" Round Pole)	37986CLR
Universal Mounting Bracket	68416CLR
Adjustable Slip Fitter (2" - 2.38" Tenon)	68813CLR
Quick Mount Pole Bracket (Square Pole)	68702CLR
Quick Mount Pole Bracket (4-4" Round Pole)	68900CLR
15 Tier Quick Mount Pole Bracket (Square Pole)	68800CLR
15 Tier Quick Mount Pole Bracket (4-4" Round Pole)	68900CLR
Wall Mount Bracket	38112CLR
Wood Pole Bracket (8" Minimum Pole Diameter)	75121CLR

Miscellaneous Accessories	
Description	Order Number
Integral Louver/Shield	664812
Integral HouseSide Shield	743414
10" Linear Bird Spike Kit (6" Recommended per Luminaire)	736795

OPTICS ROTATION

ACCESSORIES/OPTIONS

Integral Louver (IL) and House-Side Shield (IH)

Accessory louver and shield available for improved backlight control without sacrificing street side performance. LSI's Integral Louver (L) and Integral House-Side Shield (IH) options deliver backlight control that significantly reduces spill light behind the poles for applications with pole locations close to adjacent properties. The design maximizes forward reflected light while reducing glare, maintaining the optical distribution selected, and most importantly eliminating light trespass. Both options rotate with the optical distribution.

Luminaire Shown with Integral Louver (L)

Luminaire Shown with IMSBT Option

7 Pin Photoelectric Control

7-pin ANSI C136.41-2013 control receptacle option available for twist lock photocontrols or wireless control modules. Control accessories sold separately. Dimming leads from the receptacle will be connected to the driver dimming leads (Consult factory for alternate wiring).

Fixture Shown with CRTP

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Slice Medium Outdoor LED Area Light

PERFORMANCE Back to Quick Links

Delivered Lumens*											
Lumen Package	Distribution	CRI	Delivered Lumens	Efficacy	3000K CCT	4000K CCT	5000K CCT	Wattage			
9L	2	70	8956	131	82-UD-G2	9427	138	82-UD-G2	9838	144	82-UD-G2
			9088	133	82-UD-G2	9666	140	82-UD-G2	9963	146	82-UD-G2
			8431	123	83-UD-G2	8875	130	83-UD-G2	8262	135	83-UD-G2
			9046	133	82-UD-G2	9522	140	82-UD-G2	9937	146	82-UD-G2
			8993	131	82-UD-G2	9466	138	82-UD-G2	9879	144	82-UD-G2
			AM	8953	132	82-UD-G1	9817	144	82-UD-G2	10210	150
	3	70	11842	127	83-UD-G2	12485	134	83-UD-G2	13009	140	83-UD-G2
			12017	129	82-UD-G2	12649	138	82-UD-G2	13200	142	82-UD-G2
			11149	120	84-UD-G2	11735	128	84-UD-G2	12247	132	84-UD-G2
			11982	128	82-UD-G2	12591	135	82-UD-G2	13140	141	82-UD-G2
			11891	128	83-UD-G3	12517	134	83-UD-G3	13062	140	83-UD-G3
			AM	11997	129	82-UD-G2	13155	141	82-UD-G2	13681	147
12L	70	17722	119	83-UD-G3	18555	126	83-UD-G3	19468	131	83-UD-G3	
		17844	121	82-UD-G3	18530	127	83-UD-G3	19355	133	83-UD-G3	
		16685	112	84-UD-G2	17563	118	84-UD-G2	18328	123	84-UD-G2	
		17901	121	83-UD-G3	18843	127	83-UD-G3	19664	132	83-UD-G4	
		17796	120	83-UD-G3	18732	126	83-UD-G3	19549	132	83-UD-G3	
		AM	17906	121	83-UD-G2	19634	133	83-UD-G2	20419	148	83-UD-G2
18L	70	24122	128	84-UD-G3	24851	132	84-UD-G3	25119	133	84-UD-G3	
		24945	132	83-UD-G3	25699	136	83-UD-G4	25976	138	83-UD-G4	
		22673	122	85-UD-G3	23667	125	85-UD-G3	23823	127	85-UD-G3	
		24276	129	83-UD-G4	25010	132	83-UD-G4	25380	134	83-UD-G4	
		24715	131	83-UD-G3	25462	135	83-UD-G3	25737	136	83-UD-G3	
		AM	24056	127	83-UD-G2	25729	136	83-UD-G3	26243	139	83-UD-G3
24L	70	30286	122	84-UD-G3	31201	126	84-UD-G3	31538	127	84-UD-G3	
		31319	126	83-UD-G4	32266	130	83-UD-G4	32614	131	83-UD-G4	
		28843	116	85-UD-G3	29715	120	85-UD-G3	30074	121	85-UD-G4	
		30479	123	83-UD-G4	31401	126	83-UD-G4	31740	128	83-UD-G5	
		31030	125	83-UD-G3	31969	129	84-UD-G3	32314	130	84-UD-G3	
		AM	30471	122	83-UD-G3	32590	131	83-UD-G3	33242	134	83-UD-G3
30L	70	36082	114	84-UD-G4	37173	117	84-UD-G4	37574	118	84-UD-G4	
		37313	117	83-UD-G4	38442	121	83-UD-G4	38857	122	84-UD-G4	
		34383	108	85-UD-G4	35402	111	85-UD-G4	35784	113	85-UD-G4	
		36313	114	83-UD-G5	37411	118	84-UD-G5	37815	119	84-UD-G5	
		36899	116	84-UD-G4	38087	120	84-UD-G4	38498	121	84-UD-G4	
		AM	36718	115	83-UD-G3	39270	123	84-UD-G3	40056	126	84-UD-G3
36L	70	41080	104	85-UD-G4	42301	108	85-UD-G4	42758	109	85-UD-G4	
		42461	108	84-UD-G5	43745	111	84-UD-G5	44217	112	84-UD-G5	
		39104	99	85-UD-G4	40286	102	85-UD-G4	40721	104	85-UD-G4	
		41323	105	84-UD-G5	42572	108	84-UD-G5	43002	109	84-UD-G5	
		42069	107	84-UD-G4	43341	110	84-UD-G4	43809	111	84-UD-G4	
		AM	42205	107	84-UD-G3	45138	114	84-UD-G3	46041	116	84-UD-G3

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MAVERIK, INC. - SITE CODE CO-0258
I-25 & COUNTY LINE ROAD
MONUMENT, CO

ELECTRICAL CUT SHEETS

E-1.6

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Slice Medium Outdoor LED Area Light

PERFORMANCE (CONT.)

ELECTRICAL DATA (AMPS)*		RECOMMENDED LUMEN MAINTENANCE* (9-18L)					
Lumens	Watts	120V	208V	240V	277V	347V	480V
9L	88.2	0.6	0.3	0.3	0.2	0.2	0.1
12L	93.1	0.8	0.4	0.4	0.3	0.3	0.2
16L	148.5	1.2	0.7	0.6	0.5	0.4	0.3
24L	188.8	1.6	0.9	0.8	0.7	0.5	0.4
30L	248.6	2.1	1.2	1.0	0.9	0.7	0.5
36L	317.8	2.6	1.5	1.3	1.1	0.9	0.7
42L	393.4	3.3	1.9	1.6	1.4	1.1	0.8

*Electrical data at 25°C (77°F). Actual wattage may differ by +/-10%.

PHOTOMETRICS

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%. See <http://www.lsi-industries.com/products/led-lighting-solutions.aspx> for detailed photometric data.

SLM-LED-30L-SIL-2-40-70CRI

LUMINAIRE DATA

Type 2 Distribution	4000 Kelvin, 70 CRI
Description	4000 Kelvin, 70 CRI
Delivered Lumens	31,201
Watts	248.6
Efficacy	126
IES Type	Type II - Short
BUG Rating	B4-U0-G3

Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30)*	4375	14%
Medium (30-60)*	18726	60%
High (60-90)*	7949	25%
Very High (90-180)*	152	0%
Uplight (90-180)*	0	0%
Total Flux	31201	100%

25' Mounting Height/ 25' Grid Spacing
 ■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

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Slice Medium Outdoor LED Area Light

PHOTOMETRICS (CONT.)

SLM-LED-30L-SIL-3-40-70CRI

LUMINAIRE DATA

Type 3 Distribution	4000 Kelvin, 70 CRI
Description	4000 Kelvin, 70 CRI
Delivered Lumens	32,266
Watts	248.6
Efficacy	130
IES Type	Type III - Short
BUG Rating	B3-U0-G4

Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30)*	3497	11%
Medium (30-60)*	16867	52%
High (60-90)*	11653	36%
Very High (90-180)*	248	1%
Uplight (90-180)*	0	0%
Total Flux	32266	100%

25' Mounting Height/ 25' Grid Spacing
 ■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

SLM-LED-30L-SIL-FT-40-70CRI

LUMINAIRE DATA

Type FT Distribution	4000 Kelvin, 70 CRI
Description	4000 Kelvin, 70 CRI
Delivered Lumens	31,401
Watts	248.6
Efficacy	126
IES Type	Type IV - Short
BUG Rating	B3-U0-G4

Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30)*	3659	12%
Medium (30-60)*	14488	46%
High (60-90)*	12808	41%
Very High (90-180)*	447	1%
Uplight (90-180)*	0	0%
Total Flux	31402	100%

25' Mounting Height/ 25' Grid Spacing
 ■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

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Slice Medium Outdoor LED Area Light

PHOTOMETRICS (CONT.)

SLM-LED-30L-SIL-SW-40-70CRI

LUMINAIRE DATA

Type SW Distribution	4000 Kelvin, 70 CRI
Description	4000 Kelvin, 70 CRI
Delivered Lumens	29,715
Watts	248.6
Efficacy	120
IES Type	Type IV - Short
BUG Rating	B5-U0-G3

Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30)*	2930	10%
Medium (30-60)*	11709	39%
High (60-90)*	14881	50%
Very High (90-180)*	194	1%
Uplight (90-180)*	0	0%
Total Flux	29715	100%

25' Mounting Height/ 25' Grid Spacing
 ■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

SLM-LED-30L-SIL-FTA-40-70CRI

LUMINAIRE DATA

Type FTA Distribution	4000 Kelvin, 70 CRI
Description	4000 Kelvin, 70 CRI
Delivered Lumens	31,970
Watts	248.6
Efficacy	129
IES Type	Type II - Short
BUG Rating	B4-U0-G3

Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30)*	5840	18%
Medium (30-60)*	19571	61%
High (60-90)*	6265	20%
Very High (90-180)*	294	1%
Uplight (90-180)*	0	0%
Total Flux	31970	100%

25' Mounting Height/ 25' Grid Spacing
 ■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

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Slice Medium Outdoor LED Area Light

PHOTOMETRICS (CONT.)

SLM-LED-30L-SIL-AM-40-70CRI

LUMINAIRE DATA

Type AM Distribution	4000 Kelvin, 70 CRI
Description	4000 Kelvin, 70 CRI
Delivered Lumens	32,590
Watts	249
Efficacy	131
IES Type	Type III - Very Short
BUG Rating	B3-U0-G3

Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30)*	5652	17%
Medium (30-60)*	20618	63%
High (60-90)*	5956	18%
Very High (90-180)*	364	1%
Uplight (90-180)*	0	0%
Total Flux	32590	100%

25' Mounting Height/ 25' Grid Spacing
 ■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

PRODUCT DIMENSIONS

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Slice Medium Outdoor LED Area Light

CONTROLS

AirLink Wireless Lighting Controller

The AirLink integrated controller is a California Title 24 compliant lighting controller that provides real-time light monitoring and control with utility-grade power monitoring. It includes a 24V sensor input and power supply to connect a sensor into the outdoor AirLink wireless lighting system. The wireless integrated controller is compatible with this fixture. Click the link below to learn more details about AirLink. <https://www.lsi-industries.com/documents/datasheets/airlink-outdoor-specsheet.pdf>

Integral Bluetooth™ Motion and Photocell Sensor (IMSBT)

Slim low profile sensor provides multi-level control based on motion and/or daylight. Sensor controls 0-10 VDC LED drivers and is rated for cold and wet locations (-30° C to 70° C). Two unique PIR lenses are available and used based on fixture mounting height. All control parameters are adjustable via an iOS or Android App capable of storing and transmitting sensor profiles. Click the link below to learn more details about IMSBT. <https://www.lsi-industries.com/documents/datasheets/imsbt-specsheet.pdf>

AirLink Blue

Wireless Bluetooth Mesh Outdoor Lighting Control System that provides energy savings, code compliance and enhanced safety/security for parking lots and parking garages. Three key components: Bluetooth wireless radio/sensor controller, Time Keeper and an iOS App. Capable of grouping multiple fixtures and sensors as well as scheduling time-based events by zone. Radio/Sensor Controller is factory integrated into Area/Site, Wall Mounted, Parking Garage and Canopy luminaires. Click the link below to learn more details about AirLink Blue. <https://www.lsi-airlink.com/airlink-blue/>

POLES & BRACKETS

LSI offers a full line of poles and mounting accessories to complete your lighting assembly. Aluminum and steel in both square and round shafts. In addition, LSI offers round tapered, fluted and hinge based poles. Designed and engineered for durability and protected with our oven baked DuraGrip Protection System. Also available with our DuraGrip+ Protection system for unmatched corrosion resistance and an extended warranty. American made in our Ohio facility with industry leading lead times. Click the link below to learn more details about poles & brackets. <https://www.lsi-industries.com/products/poles-and-brackets-area-street.aspx>

BKA UMB CLR
 The 3G rated UMB allows for seamless integration of LSI luminaires onto existing/retrofit or new construction poles. The UMB was designed for square or round tapered or straight poles with two mounting hole spacings between 3.5" - 5".

BKA ASF CLR
 The adjustable Slip Fitter is a 3G rated rugged die cast aluminum adapter to mount LSI luminaires onto a 2" iron pipe, 2 3/8" OD tenon. The Adjustable Slip Fitter can be rotated 180° allowing for tilting LSI luminaires up to 45° and 90° when using a vertical tenon.

BKS PQMIS CLR
 The Pole Quick Mount Bracket allows for pre-set 15' uplit of LSI luminaires for greater throw of light and increased vertical illumination as well as fast installation onto poles with LSI's 3" or 5" bolt pattern.

BKS PQMH CLR
 The Pole Quick Mount Bracket allows for lightning fast installation of LSI luminaires onto existing and new construction poles with LSI's B3 or B5 standard pole bolt patterns.

Square Pole 14'-39"
 Round Pole 10'-30"
 Tapered Pole 20'-39"

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Catalog #: SLM LED 16L SIL FT UNV 40 70CRI BRZ Project: MAVERIK - T14A

Prepared By: Date:

Slice Medium - SLM Outdoor LED Area Light

The Slice's sleek design makes it perfectly-suited for Commercial & Industrial applications, while its cost-effective die-cast aluminum housing makes its acquisition cost very competitive. The Slice offers high performance silicone optics, die cast aluminum housing, 42,000+ lumens and is available with integral Airlink Synapse control.

Features & Specifications

Optical System

- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated sealed optical chamber in 1 component.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in IES Types 2, 3, 5W, FT and FTA.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93%.
- Zero uplight.
- Available in 5000K, 4000K, 3000K, and 2700K color temperatures per ANSI C78.377. Also available in Phosphor Converted Amber, consult factory for availability.
- Minimum CRI of 70. Optional 80 CRI available, consult factory for lead time.
- Integral Louver (IL) option available for improved back-light control without sacrificing street side performance. See page 5 for more details.

Electrical

- High-performance driver features over-voltage, under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life >100k Hours (See Lumen Maintenance on Page 3)
- Total harmonic distortion: <20%.
- Operating temperature: -40°C to +50°C (-40°F to +122°F), 42L lumen package rated to +40°C.
- Power factor: > 90
- Input power stays constant over life.
- Field replaceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C82.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Terminal block provided accepts up to 10ga wire.
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.

Product Dimensions

16" (407mm)
 4 1/8" (120mm)
 28-11/16" (729mm)
 0.88" (22mm)
 1.2" (30mm)
 2.4" (61mm)
 13-3/8" (340mm)

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REVISIONS
 DATE SEP 3, 2021
 DESIGNED: TMD
 DRAWN: TMD
 CHECKED: RP
 PROJECT: CO-2658-2008

PRELIMINARY NOT FOR CONSTRUCTION

MAVERIK, INC. - SITE CODE CO-0258
 I-25 & COUNTY LINE ROAD
 MONUMENT, CO

ELECTRICAL CUT SHEETS

E-1.7

PAGE 30



Slice Medium - SLM Outdoor LED Area Light

Features & Specifications (Cont.)

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Designed to mount to square poles.
- Luminaire is proudly manufactured in the U.S. and S. and imported parts.
- IP66 rated luminaire protects integral components from harsh environments.
- 3G rated for ANSI C136.31 high vibration applications
- Fixtures are finished with LSI's DuraGrip™ polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 30 lbs in carton.

Controls

Wireless Control System

To make this fixture AirLink ready, simply order one of the following options:

- The integrated Wireless Lighting Controller; ALSCH or ALSCH (see ordering guide) as the controls option, or
- Integrated Wireless Controller option (above) with integrated motion sensor; ALSCS (ordering guide for mounting heights) or
- The 7-Pin Photoelectric Control Receptacle; CR7P as the controls option; and either the 5-Pin or 7-Pin Twist Lock Controller; ALSCH UNV TL5 or ALSCH UNV TL7 as an accessory.

To see how the components of AirLink system work together, reference the diagram in the controls section of this datasheet. For more information on our AirLink products, visit our website: www.lsi-airlink.com/airlink-synapse/

Stand-Alone Control

- The integral passive infrared motion sensor (IMS) activates switching of luminaire light levels (see the controls section for more details).
- The 7-pin ANSI C136.41-2013 photocontrol receptacle option (CR7P) is available for twist lock photocontrols or wireless control modules.
- The Button Type Photoctrls (PBT) are capable of switching luminaires ON/OFF in response to the amount of available daylight.

Installation

- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment for installing/servicing.
- Included terminal block provides quick and easy on-site wiring.
- Utilizes LSI's traditional 3" drill pattern for easy fastening of LSI products. (See drawing on page 1)

Warranty

- LSI LED Fixtures carry a 5-year warranty.

Listings

- Listed to UL 1598 and UL 8750.
- RHO5 Compliant.
- American Recovery and Reinvestment Act Funding Compliant.
- IAH compliant, with 3000K color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable For wet Locations.
- IP66 rated Luminaire. IP66 rated optical chamber.
- 3G rated for ANSI C136.31 high vibration applications

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Performance

ELECTRICAL DATA (AMPS)*									
Lumens	Watts	120V	208V	240V	277V	347V	480V	Wattage	
SL	68.2	0.6A	0.3A	0.3A	0.2A	0.2A	0.1A		
12L	93.1	0.8A	0.4A	0.4A	0.3A	0.3A	0.2A		
18L	148.5	1.2A	0.7A	0.6A	0.5A	0.4A	0.3A		
24L	188.8	1.6A	0.9A	0.8A	0.7A	0.6A	0.4A		
30L	248.6	2.1A	1.2A	1.0A	0.8A	0.7A	0.5A		
36L	317.8	2.8A	1.5A	1.3A	1.1A	0.9A	0.7A		
42L	393.6	3.3A	1.9A	1.6A	1.4A	1.1A	0.8A		

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%

ELECTRICAL DATA - PHOSPHOR CONVERTED AMBER (AMPS)**									
Lumens	Watts	120V	208V	240V	277V	347V	480V	Wattage	
SL	74.3	0.6A	0.4A	0.3A	0.3A	0.2A	0.1A		
12L	102.9	0.8A	0.5A	0.4A	0.4A	0.3A	0.2A		

**Electrical data at 25C (77F). Actual wattage may differ by +/-10%

RECOMMENDED LUMEN MAINTENANCE(24-42L)

Ambient	Initial ¹	25 hr ²	50 hr ²	75 hr ²	100 hr ²
0-40 C	100%	100%	97%	94%	92%

RECOMMENDED LUMEN MAINTENANCE(9-18L)

Ambient	Initial ¹	25 hr ²	50 hr ²	75 hr ²	100 hr ²
0-50 C	100%	96%	91%	87%	83%

- Lumen maintenance values of ESC are calculated per TM-21 based on LM-80 data and on-site testing.
- In accordance with IESNA TM-21-11, Predicted Values represent interpolated values based on time.
- Factory installed PCRP are only valid for the IESNA LM-80 test duration for the device under testing.
- In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times the IESNA LM-80 test duration for the device under testing.

DELIVERED LUMENS*

Lumen Package	Distribution	Phosphor	Converted	Amber	Rating	Wattage
9L	Z	3595	80		80-100-01	
	2	3735	50		80-100-01	
	3	6196	80		81-100-01	74
	3 IL	4295	60		80-100-01	
	SW	5658	74		83-100-01	74
	FT	6922	79		81-100-02	
	FTA	9697	80		82-100-02	
	FTA IL	4254	57		80-100-01	
	2	7899	73		82-100-02	
	3	4738	46		80-100-01	103
	3	7860	78		82-100-02	
	FT	2133	23		80-100-01	
FTA	4709	46		80-100-02		
FTA	7688	74		82-100-02		
FTA IL	597	52		80-100-01		

*LED Chips are frequently updated therefore values are nominal

LUMINAIRE EPA CHART - SLM

Thru Pole		40' Pole		50' Pole		70' Pole	
Single	2	2	4	2	4	2	4
D180°	1.1	2.1	2.6	1.2	2.9	1.2	3.6
D120°	1.1	2.1	2.6	1.3	4.4	1.3	5.4
D90°	0.9	2.5	3.1	1.2	2.9	1.2	3.6

Specifications and dimensions subject to change without notice.
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Slice Medium - SLM Outdoor LED Area Light

DELIVERED LUMENS*														
Lumen Package	Distribution	CRI	2700K CCT		3000K CCT		4000K CCT		5000K CCT		Wattage			
			Delivered Lumens	BUG Rating	Delivered Lumens	BUG Rating	Delivered Lumens	BUG Rating	Delivered Lumens	BUG Rating				
9L	Z	70	8349	122	82-100-02	8576	125	82-100-02	9396	137	82-100-02	6784	143	82-100-02
	2 IL	70	3195	78	82-100-01	3326	78	82-100-01	3830	85	82-100-01	4076	89	82-100-01
	3	70	8071	129	81-100-02	8664	129	81-100-02	9646	141	82-100-02	10464	141	82-100-02
	3 IL	70	6283	82	80-100-02	6454	84	80-100-02	7071	103	80-100-02	7363	107	80-100-02
	SW	70	8138	119	82-100-02	8380	119	82-100-02	9187	130	82-100-02	9865	140	82-100-02
	FT	70	8337	122	82-100-02	8643	125	82-100-02	9382	137	82-100-02	9709	143	82-100-02
	FT IL	70	3393	79	80-100-02	3540	81	80-100-02	4069	89	80-100-02	4320	92	80-100-02
	FTA	70	8459	133	82-100-02	8669	137	82-100-02	9521	139	82-100-02	10135	145	82-100-02
	FTA IL	70	6200	81	81-100-01	6389	83	81-100-01	6979	102	81-100-01	7266	106	81-100-01
	2	70	11157	119	82-100-02	11481	122	82-100-02	12366	134	82-100-02	13073	139	82-100-02
12L	Z	70	8639	74	81-100-01	7317	76	81-100-02	7796	83	81-100-02	8119	86	81-100-02
	3	70	11454	122	82-100-02	11766	125	82-100-02	12380	137	82-100-02	13423	149	82-100-02
	3 IL	70	8386	89	80-100-02	8625	89	80-100-02	9449	101	80-100-02	9828	108	80-100-02
	SW	70	10592	116	84-100-02	11189	119	84-100-02	12289	131	84-100-02	12773	136	84-100-02
	FT	70	11141	119	82-100-02	11444	122	82-100-02	12538	133	82-100-02	13056	139	82-100-02
	FT IL	70	7297	77	80-100-02	7465	79	80-100-02	8110	89	80-100-02	8445	91	80-100-02
	FTA	70	11394	120	82-100-02	11612	124	82-100-02	12722	135	82-100-02	13447	141	82-100-02
	FTA IL	70	6286	68	81-100-01	6511	71	81-100-01	6925	76	81-100-01	7170	103	81-100-01
	2	70	18214	112	83-100-03	17368	115	83-100-03	18959	126	83-100-03	19696	135	83-100-03
	2 IL	70	10379	69	81-100-02	10662	71	81-100-02	11881	78	81-100-02	12163	81	81-100-02
18L	Z	70	17188	115	82-100-03	17455	118	82-100-03	18518	129	82-100-03	19101	134	82-100-03
	3 IL	70	12578	84	81-100-03	12900	86	81-100-03	14155	95	81-100-03	14729	99	81-100-03
	SW	70	16341	109	84-100-02	16778	112	84-100-02	18379	121	84-100-02	19138	128	84-100-02
	FT	70	16669	112	83-100-03	17143	115	83-100-03	18781	126	83-100-03	19627	133	83-100-03
	FT IL	70	10785	72	81-100-02	11089	74	81-100-02	12149	81	81-100-02	12651	85	81-100-03
	FTA	70	18954	113	82-100-03	17385	116	82-100-03	18958	127	82-100-03	19844	133	82-100-03
	FTA IL	70	12412	83	81-100-01	12759	85	81-100-02	13989	93	81-100-02	14546	97	81-100-02
	2	70	20880	112	83-100-03	22791	121	84-100-03	24278	130	84-100-03	24784	135	84-100-03
	2 IL	70	13180	89	81-100-02	14243	78	81-100-02	15521	81	81-100-02	16560	83	81-100-02
	3	70	21739	116	84-100-03	22836	128	84-100-04	25273	134	84-100-04	26800	138	84-100-04
24L	Z	70	15868	85	81-100-03	17209	92	81-100-03	18403	96	81-100-03	19798	100	81-100-03
	SW	70	20952	110	82-100-03	22432	120	82-100-03	23989	128	82-100-03	24899	131	82-100-03
	FT	70	21611	116	83-100-04	23496	126	83-100-04	25128	134	83-100-04	26865	137	83-100-04
	FT IL	70	13892	73	81-100-03	14886	80	81-100-03	16019	86	81-100-03	16820	87	81-100-03
	FTA	70	21496	115	82-100-03	23371	125	82-100-03	24992	133	82-100-03	26515	136	82-100-03
	FTA IL	70	15226	81	81-100-02	16555	89	81-100-02	17709	95	81-100-02	18673	97	81-100-02
	2	70	26581	108	84-100-03	28960	117	84-100-03	30995	126	84-100-03	32561	132	84-100-03
	2 IL	70	16677	68	81-100-02	18132	73	81-100-02	19700	79	81-100-02	20796	80	81-100-02
	3	70	27675	112	83-100-04	30089	122	83-100-04	32178	130	83-100-04	33850	135	83-100-04
	3 IL	70	12412	83	81-100-01	12759	85	81-100-02	13989	93	81-100-02	14546	97	81-100-02
30L	Z	70	26286	106	85-100-03	28517	116	85-100-03	30938	124	85-100-03	31777	126	85-100-04
	FT	70	27312	111	83-100-04	29912	121	83-100-04	31987	130	83-100-04	33656	132	83-100-05
	FT IL	70	17428	71	82-100-02									



Slice Medium - SLM Outdoor LED Area Light

Stand-alone Controls: Occupancy Sensor (IMS)

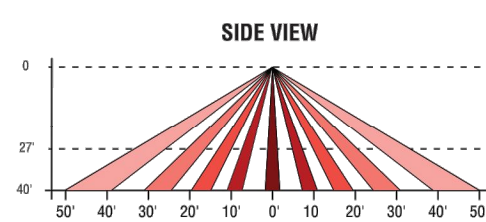
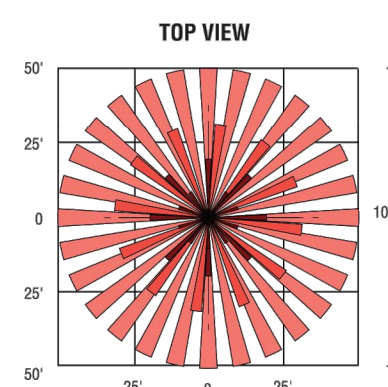
The integral passive infrared motion sensor activates switching of luminaire light levels. Standard Factory settings: High level light is activated and increased to full bright upon detection of motion. Lowlight level (10% maximum drive current) is activated when target zone is absent of motion activity for ~5 minutes. See coverage diagram for detection cone.

The Remote Configurator Tool allows for easy and safe programming of each luminaire from ground level. See the [Remote Configurator User Guide](#) for programming instructions.

When ordering the Stand-alone Occupancy Sensor on the fixture, you must include IMS (see ordering guide for mounting height options) as the controls option in the fixture nomenclature.

To order a motion sensor with the AirLink Wireless Control System, see ordering guide under "Wireless Controls System" and select the ALS/CS controls option with the desired mounting height.

IMS Coverage Diagrams



Remote Configurator Tool



Luminaire Shown with IMS



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The AirLink enabled by Synapse Wireless Lighting Control System is the perfect solution for commercial, industrial and municipal applications, such as: auto dealerships, parking lots, garages, shopping complexes and warehouses.

AirLink utilizes robust wireless communication via 2.4 GHz Self-Healing Mesh Network which not only increases reliability and accuracy of system, but also eliminates single point of failure.

The flexibility of the system make it perfect for new construction and retrofit projects. The user-friendly AirLink web application is accessible through any device with an internet connection and allows for complete customization of the system's features.

Some capabilities of the system include: occupancy/vacancy sensing, daylight harvesting, scheduling, high-end trim, dimming, zone control, BMS integration and energy monitoring.

The AirLink System

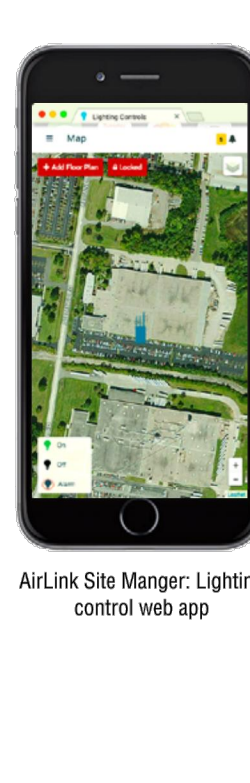
Wireless controls & sensors



Centralized control & integration



Simple-to-use software



Contact LSI Controls

- Sales** controls.sales@lsi-industries.com
- Support** controls.support@lsi-industries.com 1 (800) 436-7800 (support, option 8)
- More information** For more information on AirLink, visit our website at www.lsi-airlink.com

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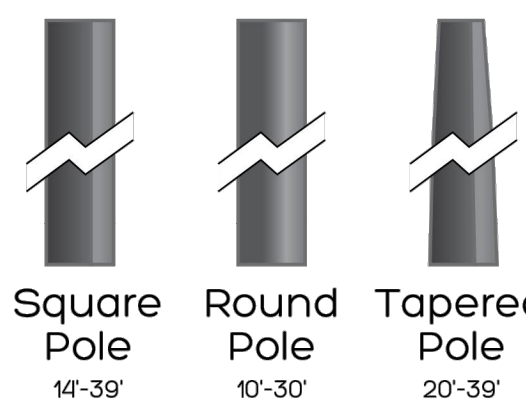


Slice Medium - SLM Outdoor LED Area Light

poles & Brackets



LSI offers a full line of poles and brackets to complete your lighting assembly. Our USA manufacturing facility has the same high quality standards for our poles and brackets as we do our lighting fixtures.



BKS PQMH CLR
The Pole Quick Mount Bracket allows for lightning fast installation of LSI luminaires onto existing and new construction poles with LSI's 3" or 5" standard bolt patterns.

BAKA UMB CLR
The 3G rated Universal Mounting Bracket (UMB) allows for seamless integration of LSI luminaires onto existing or new construction poles. The UMB bracket was designed specifically for square or round (tapered/straight) poles with (2) mounting hole spaces between 3.5"-5".

BAKA ASF CLR
The adjustable Slip Fitter is a 3G rated rugged die cast aluminum adapter to mount LSI luminaires onto a 2" (51mm) IP, 2.375" (60mm) O.D. tenon. The Adjustable Slip Fitter can be rotated 180° allowing for tilting LSI luminaires up to 45° and 90° when using a vertical tenon.

BKS PQM15 CLR
The Pole Quick Mount Bracket allows for preset 15° up tilt of LSI luminaires for greater throw of light and increased vertical illumination as well as fast installation onto poles with LSI's 3" or 5" bolt pattern.

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Catalog #: SLM LED 18L SIL FT UNV 40 70CRI BRZ 4SO B3 S11G SI Project: MAVERIK T14C
Prepared By: D90 Date:



Slice Medium - SLM Outdoor LED Area Light

The Slice's sleek design makes it perfectly-suited for Commercial & Industrial applications, while its cost-effective die-cast aluminum housing makes its acquisition cost very competitive. The Slice offers high performance silicone optics, die cast aluminum housing, 42,000+ lumens and is available with integral AirLink Synapse controls.

Features & Specifications

Optical System

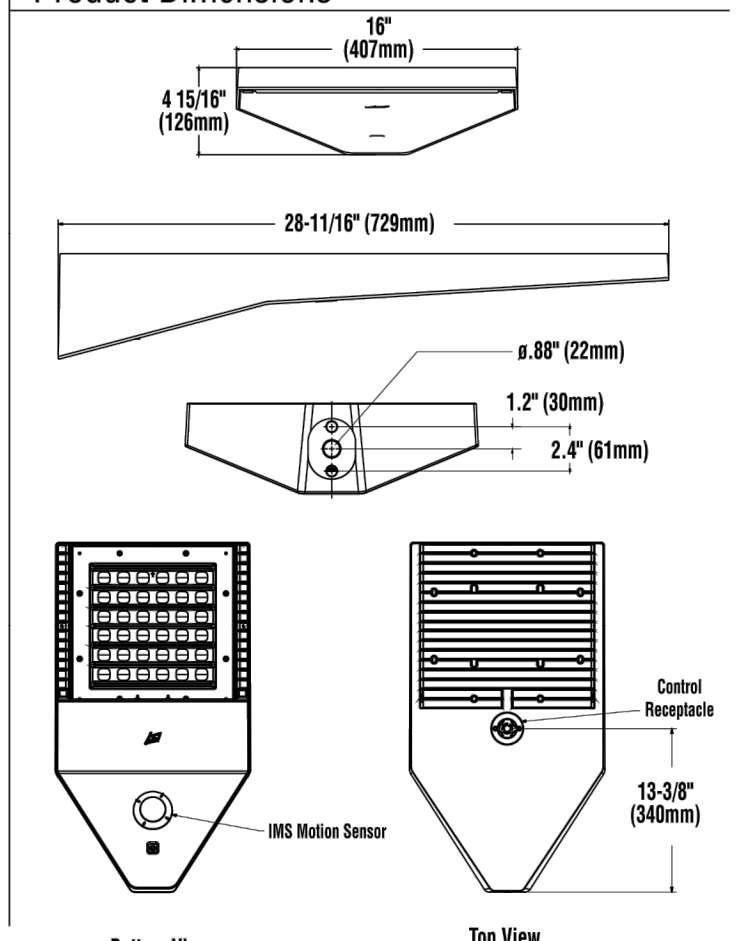
- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated sealed optical chamber in 1 component.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in IES Types 2, 3, 5W, FT and FTA.
- Silicone optical material does not yellow or crack with age and provides a typical light transmission of 93%.
- Zero weight.
- Available in 5000K, 4000K, 3000K, and 2700K color temperatures per ANSI C78.377. Also available in Phosphor Converted Amber, consult factory for availability.
- Minimum CRI of 70. Optional 80 CRI available, consult factory for lead time.
- Integral Louver (L) option available for improved back-light control without sacrificing street side performance. See page 5 for more details.

Electrical

- High-performance driver features over-voltage, under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >100k Hours (See Luminaire Maintenance on Page 3)
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F), 42L lumen package rated to +40°C.
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable surge protection device meets a minimum Category C Low operation per ANSI/IEEE C82.41.2.
- High-efficiency LEDs mounted to metal-core circuit board to maximize heat dissipation
- Terminal block provided accepts up to 10ga wire.
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.



Product Dimensions



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Slice Medium - SLM Outdoor LED Area Light

Features & Specifications (Cont.)

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Designed to mount to square poles.
- Luminaire is proudly manufactured in the U.S. of U.S. and imported parts.
- Luminaire rated luminaire protects integral components from harsh environments.
- 3G rated for ANSI C136.31 high vibration applications
- Fixtures are finished with LSI's Durabrite® polyester powder coat finishing process. The Durabrite finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 30 lbs in carton.

Controls

Wireless Controls System

- To make this fixture AirLink ready, simply order one of the following options:
 - The Integrated Wireless Lighting Controller: ALS/CS or ALS/CSH (see ordering guide) as the controls option, or
 - Integrated Wireless Controller option (above) with integrated motion sensor: ALS/CS (ordering guide for mounting heights) or
 - The 7-Pin Photoelectric Control Receptacle: CR7P as the controls option, and either the 5-Pin or 7-Pin Twist Lock Controller: ALS/CS UNV TL or ALS/CS UNV TL7 as an accessory.

To see how the components of AirLink system work together, reference the diagram in the controls section of this specsheet. For more information on our AirLink products, visit our website: www.lsi-airlink.com/airlink-synapse/

Stand-Alone Controls

- The integral passive infrared motion sensor (IMS) activates switching of luminaire light levels (see the controls section for more details).
- The 7-pin ANSI C136.41-2013 photocontrol receptacle option (CR7P) is available for two lock photocontrols or wireless control modules.
- The Button Type PhotoCells (PC) are capable of switching luminaires ON/OFF in response to the amount of available daylight.

Installation

- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment for installing/servicing.
- Included terminal block provides quick and easy on-site wiring.
- Includes LSI's traditional 3" drill pattern for easy fastening of LSI products. (See drawing on page 1)

Warranty

- LSI LED Fixtures carry a 5-year warranty.

Listings

- UL listed to UL 1598 and UL 8750.
- ROHS Compliant.
- American Recovery and Reinvestment Act Funding Compliant.
- IDA compliant, with 3000K color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable For wet Locations.
- IP66 rated Luminaire. IP66 rated optical chamber.
- 3G rated for ANSI C136.31 high vibration applications

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Performance

ELECTRICAL DATA (AMPS)*		2700K CCT		3000K CCT		4000K CCT		5000K CCT	
Lumens	Watts	120V	208V	240V	277V	347V	480V	Delivered Lumens	Efficiency
9L	68.2	0.6A	0.3A	0.3A	0.2A	0.2A	0.1A	6820	100
12L	93.1	0.8A	0.4A	0.4A	0.3A	0.3A	0.1A	9310	100
18L	148.5	1.2A	0.7A	0.6A	0.5A	0.4A	0.2A	14850	100
24L	188.9	1.6A	0.9A	0.8A	0.7A	0.5A	0.3A	18890	100
30L	246.6	2.1A	1.3A	1.1A	0.9A	0.7A	0.4A	24660	100
36L	317.8	2.6A	1.5A	1.3A	1.1A	0.9A	0.7A	31780	100
42L	393.4	3.3A	1.9A	1.6A	1.4A	1.1A	0.8A	39340	100

ELECTRICAL DATA - PHOSPHOR CONVERTED AMBER (AMPS)*		2700K CCT		3000K CCT		4000K CCT		5000K CCT	
Lumens	Watts	120V	208V	240V	277V	347V	480V	Delivered Lumens	Efficiency
9L	74.3	0.6A	0.4A	0.3A	0.3A	0.2A	0.2A	6820	92
12L	102.9	0.8A	0.5A	0.4A	0.4A	0.3A	0.2A	9310	92

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%

RECOMMENDED LUMEN MAINTENANCE*(24-42L)		2700K CCT		3000K CCT		4000K CCT		5000K CCT	
Ambient	Initial*	25 hr*	50 hr*	75 hr*	100 hr*	Delivered Lumens	Efficiency	Delivered Lumens	Efficiency
0-40 C	100%	100%	97%	94%	92%	24200	92	24200	92

RECOMMENDED LUMEN MAINTENANCE*(9-18L)		2700K CCT		3000K CCT		4000K CCT		5000K CCT	
Ambient	Initial*	25 hr*	50 hr*	75 hr*	100 hr*	Delivered Lumens	Efficiency	Delivered Lumens	Efficiency
0-50 C	100%	99%	91%	87%	83%	9310	92	9310	92

1- Lumen maintenance values at 25C are calculated per TM-21 based on LM-80 data and in-situ testing.
2- In accordance with IESNA TM-21-11, Projected Values represent interpolated values based on time durations that are within six times the IESNA LM-80 test duration for the device under testing.
3- In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times the IESNA LM-80 test duration for the device under testing.

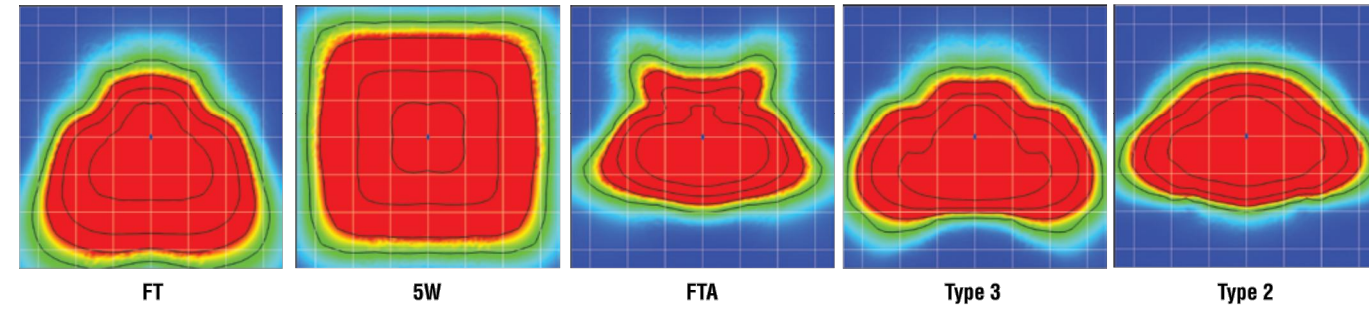
DELIVERED LUMENS*		Phosphor Converted Amber		2700K CCT		3000K CCT		4000K CCT		5000K CCT		Wattage	
Lumen Package	Distribution	Delivered Lumens	Efficiency	BUG Rating	Delivered Lumens	Efficiency	BUG Rating	Delivered Lumens	Efficiency	BUG Rating			
9L	2	7375	50	80-U0-G1	7375	50	80-U0-G1	7375	50	80-U0-G1	7375	50	80-U0-G1
	3	9766	66	80-U0-G1	9766	66	80-U0-G1	9766	66	80-U0-G1	9766	66	80-U0-G1
	5W	12622	88	80-U0-G1	12622	88	80-U0-G1	12622	88	80-U0-G1	12622	88	80-U0-G1
	FT	16822	118	80-U0-G1	16822	118	80-U0-G1	16822	118	80-U0-G1	16822	118	80-U0-G1
	FTL	21022	150	80-U0-G1	21022	150	80-U0-G1	21022	150	80-U0-G1	21022	150	80-U0-G1
	FTAL	25222	182	80-U0-G1	25222	182	80-U0-G1	25222	182	80-U0-G1	25222	182	80-U0-G1
	2	9766	66	80-U0-G1	9766	66	80-U0-G1	9766	66	80-U0-G1	9766	66	80-U0-G1
	3	12622	88	80-U0-G1	12622	88	80-U0-G1	12622	88	80-U0-G1	12622	88	80-U0-G1
	5W	16822	118	80-U0-G1	16822	118	80-U0-G1	16822	118	80-U0-G1	16822	118	80-U0-G1
	FT	21022	150	80-U0-G1	21022	150	80-U0-G1	21022	150	80-U0-G1	21022	150	80-U0-G1
	FTL	25222	182	80-U0-G1	25222	182	80-U0-G1	25222	182	80-U0-G1	25222	182	80-U0-G1
	FTAL	29422	214	80-U0-G1	29422	214	80-U0-G1	29422	214	80-U0-G1	29422	214	80-U0-G1
12L	2	10290	74	80-U0-G1	10290	74	80-U0-G1	10290	74	80-U0-G1	10290	74	80-U0-G1
	3	13716	99	80-U0-G1	13716	99	80-U0-G1	13716	99	80-U0-G1	13716	99	80-U0-G1
	5W	18288	132	80-U0-G1	18288	132	80-U0-G1	18288	132	80-U0-G1	18288	132	80-U0-G1
	FT	24384	176	80-U0-G1	24384	176	80-U0-G1	24384	176	80-U0-G1	24384	176	80-U0-G1
	FTL	30480	220	80-U0-G1	30480	220	80-U0-G1	30480	220	80-U0-G1	30480	220	80-U0-G1
	FTAL	36576	264	80-U0-G1	36576	264	80-U0-G1	36576	264	80-U0-G1	36576	264	80-U0-G1
	2	13716	99	80-U0-G1	13716	99	80-U0-G1	13716	99	80-U0-G1	13716	99	80-U0-G1
	3	18288	132	80-U0-G1	18288	132	80-U0-G1	18288	132	80-U0-G1	18288	132	80-U0-G1
	5W	24384	176	80-U0-G1	24384	176	80-U0-G1	24384	176	80-U0-G1	24384	176	80-U0-G1
	FT	30480	220	80-U0-G1	30480	220	80-U0-G1	30480	220	80-U0-G1	30480	220	80-U0-G1
	FTL	36576	264	80-U0-G1	36576	264	80-U0-G1	36576	264	80-U0-G1	36576	264	80-U0-G1
	FTAL	42672	308	80-U0-G1	42672	308	80-U0-G1	42672	308	80-U0-G1	42672	308	80-U0-G1
18L	2	14850	84	80-U0-G1	14850	84	80-U0-G1	14850	84	80-U0-G1	14850	84	80-U0-G1
	3	19800	112	80-U0-G1	19800	112	80-U0-G1	19800	112	80-U0-G1	19800	112	80-U0-G1
	5W	26400	150	80-U0-G1	26400	150	80-U0-G1	26400	150	80-U0-G1	26400	150	80-U0-G1
	FT	35200	198	80-U0-G1	35200	198	80-U0-G1	35200	198	80-U0-G1	35200	198	80-U0-G1
	FTL	44000	252	80-U0-G1	44000	252	80-U0-G1	44000	252	80-U0-G1	44000	252	80-U0-G1
	FTAL	52800	306	80-U0-G1	52800	306	80-U0-G1	52800	306	80-U0-G1	52800	306	80-U0-G



Slice Medium - SLM Outdoor LED Area Light

Performance (Cont.)

All published luminaire photometric testing performed to IESNA LM-79 standards. ISO footcandle plots below demonstrate the Slice (SLM) light patterns only. Not for total fixture output. For complete specifications and IES files, see website.



Ordering Guide

TYPICAL ORDER EXAMPLE: **SLM LED 36L SIL FTA UNV DIM 50 ALSG BRZ IL**

Luminaire Prefix	Light Source	Lumen Package	Light Output	Distribution	Orientation**	Voltage	Driver
SLM Slice Medium	LED	SL - 9,000 lms L2L - 12,000 lms HL - 18,000 lms 2AL - 24,000 lms 3SL - 30,000 lms 3HL - 36,000 lms 4SL - 42,000 lms	SIL - Silicone 2 - Type 2 3 - Type 3 SW - Type 5 Wide** FT - Type Forward Throw FTA - Forward Throw Automotive		(blank) - standard L - Optics rotated left 90 R - Optics rotated right 90	UNV - Universal Voltage (120-277V) HW - High Voltage (347-480V)	DIM - 0-10v Dimming (0-10%)

Color Temp	Color Rendering	Controls	Finish	Options
30 - 3,000 CCT 40 - 4,000 CCT 50 - 5,000 CCT 27 - 2,700 CCT* AMB - Amber*	70CRI - 70 CRI 80CRI - 80 CRI	(blank) - None WCS - Wireless Control System ALSC - AirLink Synapse Control System 1+ ALSCN - AirLink Synapse Control System 1+ + Host / Satellite IMSS - Integral motion & Daylight Sensor 24V (for use with ALSG/ALSCH 1+) EXT - 0-10v Dimming* IMS - Integral Motion & Daylight Sensor 1+	BRZ - Bronze SLK - Black GPT - Graphite MSV - Metallic Silver WHT - White PLP - Platinum Plus SVD - Satin Verde Green	(blank) - None Bottom Type Photocell* PC120 - 120V PC208 - 208V PC240 - 240V PC277 - 277V PC247 - 247V PCRV7P - 7 Pin Photoelectric Control Receptacle IL - Integral Louver HSS

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Slice Medium - SLM Outdoor LED Area Light

Stand-alone Controls: Occupancy Sensor (IMS)

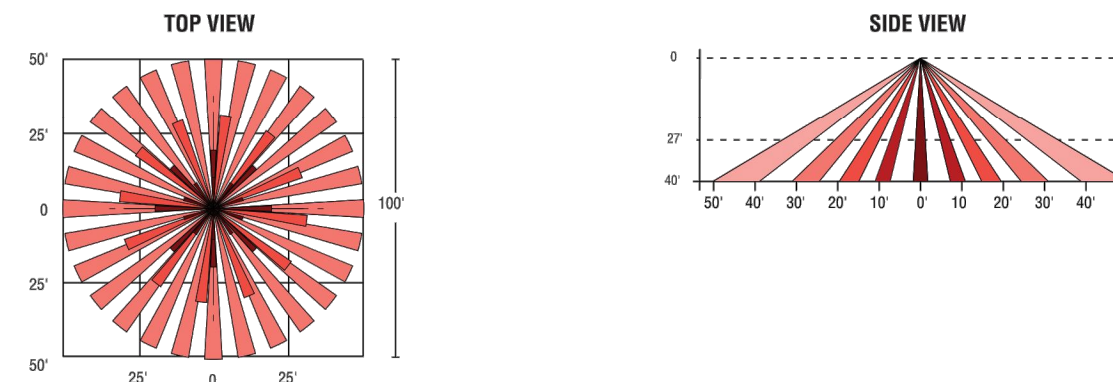
The integral passive infrared motion sensor activates switching of luminaire light levels. Standard Factory settings: High level light is activated and increased to full bright upon detection of motion. Lowlight level (10% maximum drive current) is activated when target zone is absent of motion activity for ~5 minutes. See coverage diagram for detection cone.

The Remote Configurator Tool allows for easy and safe programming of each luminaire from ground level. See the Remote Configurator User Guide for programming instructions.

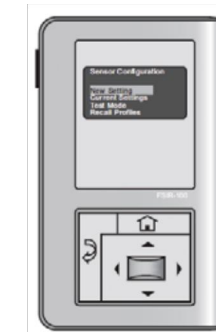
When ordering the Stand-alone Occupancy Sensor on the fixture, you must include IMS (see ordering guide for mounting height options) as the controls option in the fixture nomenclature.

To order as a motion sensor with the AirLink Wireless Control System, see ordering guide under "Wireless Controls System" and select the ALSG controls option with the desired mounting height.

IMS Coverage Diagrams



Remote Configurator Tool



Luminaire Shown with IMS



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Slice Medium - SLM Outdoor LED Area Light



The AirLink enabled by Synapse Wireless Lighting Control System is the perfect solution for commercial, industrial and municipal applications, such as: auto dealerships, parking lots, garages, shopping complexes and warehouses.

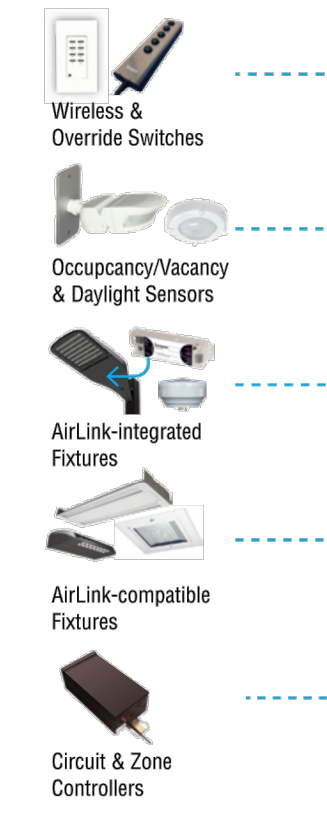
AirLink utilizes robust wireless communication via 2.4 GHz Self-Healing Mesh Network which not only increases reliability and accuracy of system, but also eliminates single point of failure.

The flexibility of the system make it perfect for new construction and retrofit projects. The user-friendly AirLink web application is accessible through any device with an internet connection and allows for complete customization of the system's features.

Some capabilities of the system include: occupancy/vacancy sensing, daylight harvesting, scheduling, high-end trim, dimming, zone control, BMS integration and energy monitoring.

The AirLink System

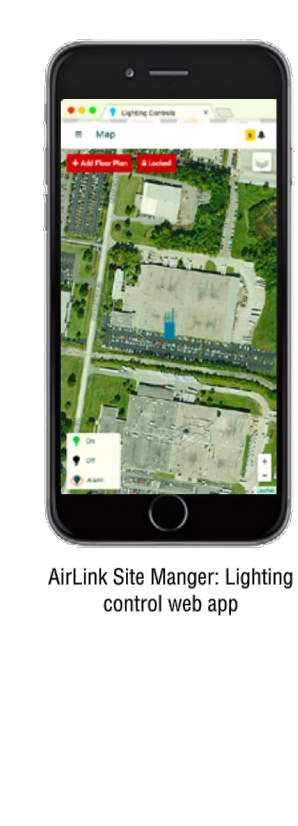
Wireless controls & sensors



Centralized control & integration



Simple-to-use software



Contact LSI Controls

Sales controls.sales@lsi-industries.com
Support controls.support@lsi-industries.com 1 (800) 436-7800 (support, option 8)
More information For more information on AirLink, visit our website at www.lsi-airlink.com

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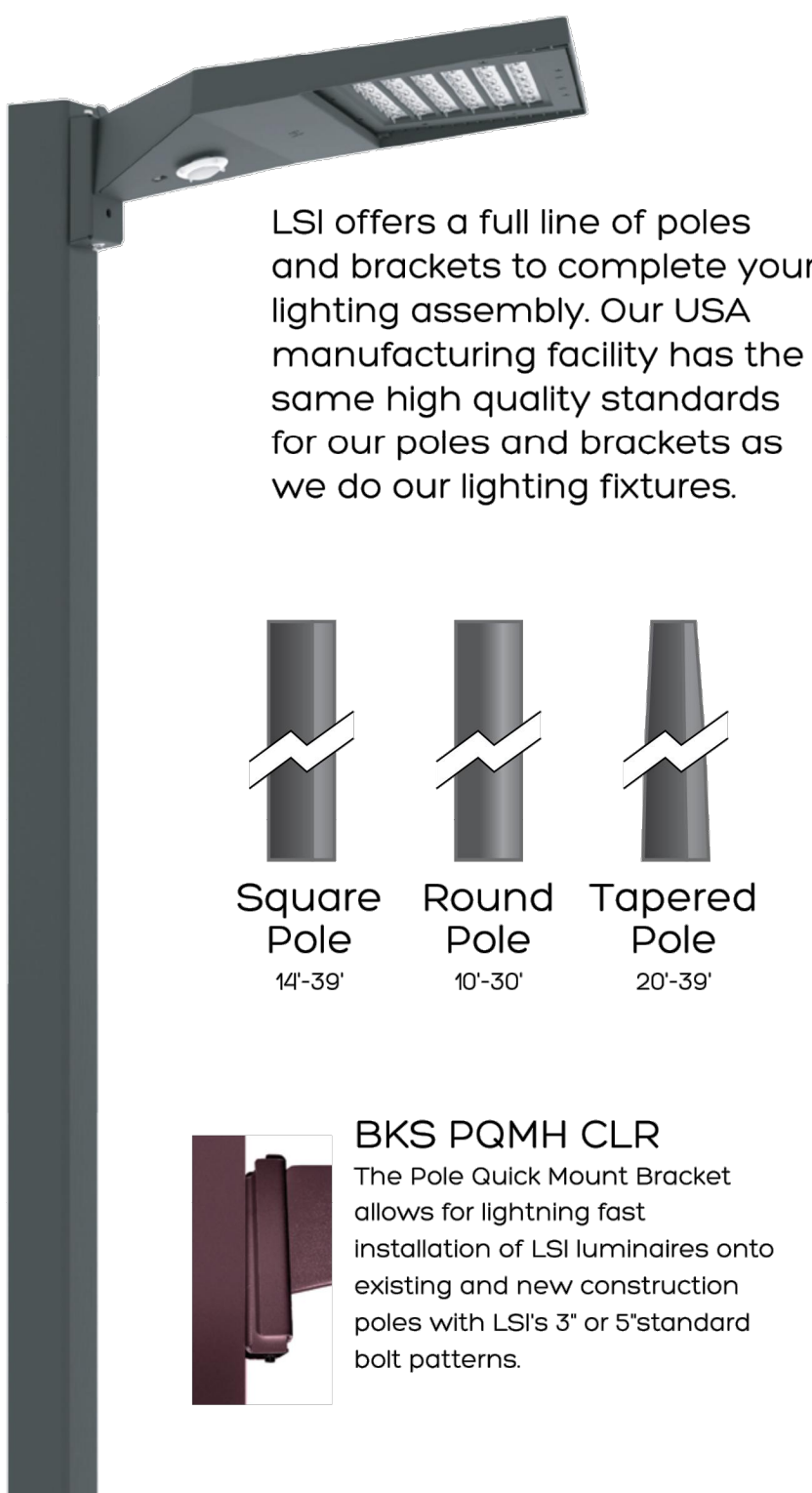
REVISIONS	REV #	DATE	BY	CHKD	APP'D
DESIGNED	TMD				
DRAWN	TMD				
CHECKED	RP				
PROJECT	CO-2658-2008				

PRELIMINARY NOT FOR CONSTRUCTION



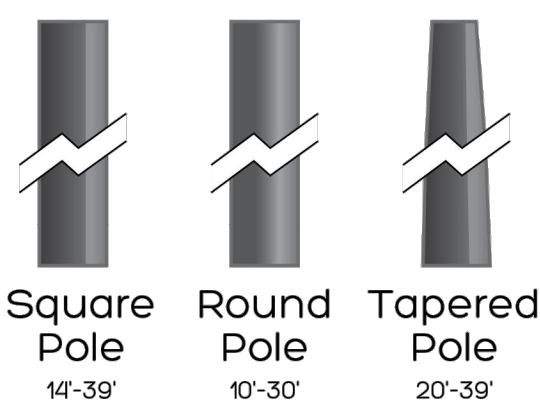
Slice Medium - SLM Outdoor LED Area Light

poles & Brackets



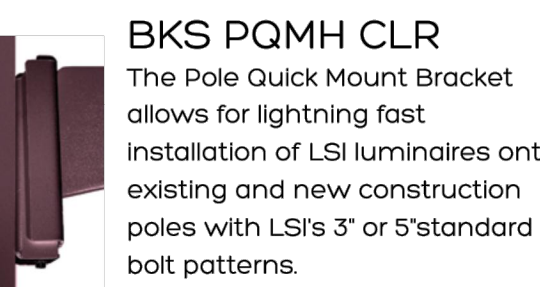
LSI offers a full line of poles and brackets to complete your lighting assembly. Our USA manufacturing facility has the same high quality standards for our poles and brackets as we do our lighting fixtures.

BKA UMB CLR
The 3G rated Universal Mounting Bracket (UMB) allows for seamless integration of LSI luminaires onto existing or new construction poles. The UMB bracket was designed specifically for square or round (tapered/straight) poles with (2) mounting hole spaces between 3.5"-5".



Square Pole 14'-39"
Round Pole 10'-30"
Tapered Pole 20'-39"

BKA ASF CLR
The adjustable Slip Filter is a 3G rated rugged die cast aluminum adapter to mount LSI luminaires onto a 2" (51mm) ID, 2.375" (60mm) O.D. tenon. The Adjustable Slip Filter can be rotated 180° allowing for tilting LSI luminaires up to 45° and 90° when using a vertical tenon.



BKS PQMH CLR
The Pole Quick Mount Bracket allows for lightning fast installation of LSI luminaires onto existing and new construction poles with LSI's 3" or 5" standard bolt patterns.

BKS PQM15 CLR
The Pole Quick Mount Bracket allows for preset 15° uptilt of LSI luminaires for greater throw of light and increased vertical illumination as well as fast installation onto poles with LSI's 3" or 5" bolt pattern.

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Catalog #: MSL4 LED 20L CSM UNV DIM U

Project: T15

Prepared By:

Date:



MLS Mini LED Strip



The mini LED strip replaces traditional T5 and T8 fluorescent strip luminaires. Ideal for task lighting, restrooms, under/over cabinet, storage closets and display cases. Diffuse acrylic lens provides uniform illumination. The MLS series provides long-life and energy efficiency as well as 0-10V dimming capability.

Features & Specifications

Optical System

- High transmission impact resistant diffuse acrylic lens eliminates bright spots from individual LEDs and provides high vertical illumination and visual comfort.
- Use of closely spaced medium-power, high brightness chips provide uniform lens luminance with no dead spots
- Standard in 4000K color temperature.
- Minimum CRI of 80.

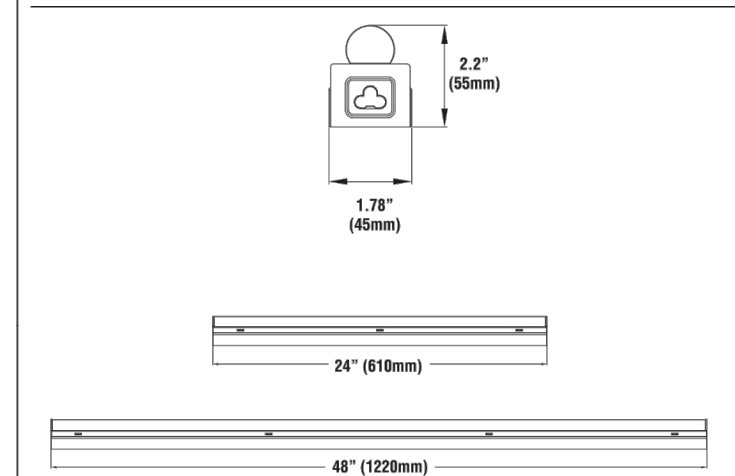
Electrical

- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
- 0-10 volt dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz
- L70 Calculated Life: >50k Hours
- Total harmonic distortion: <20%
- Operating temperature: -20°C to +40°C (-4°F to +104°F)
- Power factor: > .90
- Input power stays constant over life.

Construction

- Rigid housing is die-formed thick gauge steel for consistency and strength.
- Removable Lens frame assembly provides quick access to wiring and driver connections.
- Available in 2' or 4' lengths.
- All metal parts are painted after fabrication following treatment with phosphate rust inhibitor. Finish coating of housing reflecting surfaces is with high-reflectance white (minimum 92%) polyester powder.

Dimensions



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MLS Mini LED Strip

Features & Specifications (Cont.)

Installation

- Installs surface mount to ceiling studs or drywall.
- Comes standard with linking connector feature for continuous row installation.

Warranty

- LSI LED Fixtures carry a 5-year warranty.

Listings

- Listed to UL 1598 and UL 8750.
- RoHS Compliant.
- Suitable For Damp Locations.

Performance

MODEL	4000K CCT			Avg. Wattage
	Delivered Lumens	Efficacy		
10L	1133	115		9.8
20L	2134	109		19.5

*LED Chips are frequently updated therefore values are nominal.

ELECTRICAL DATA*				
MODEL	120V	208V	240V	277V
10L	0.08A	0.05A	0.04A	0.06A
20L	0.16A	0.09A	0.08A	0.07A

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

Luminaire Ordering Guide

TYPICAL ORDER EXAMPLE: **MLS2 LED 10L CSM UNV DIM 40 U**

Luminaire Prefix	LED Size	Lumen Package	Optic	Voltage	Driver	Color Temperature	Packaging
MLS2	LED	10L - 1000 20L - 2000	CSM - Contoured Symmetric	UNV - Universal Voltage (120-277V)	DIM - 0-10V	40 - 4000K	U - Single Pack

Notes:
1- Only available with MLS2 on the 10L lumen package.
2- Only available with MLS4 on the 20L lumen package.

Accessory Ordering Information

Description	Order Number
Remode Emergency Battery Field Installed	658633

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MAVERIK, INC. - SITE CODE CO-0258
I-25 & COUNTY LINE ROAD
MONUMENT, CO
ELECTRICAL CUT SHEETS



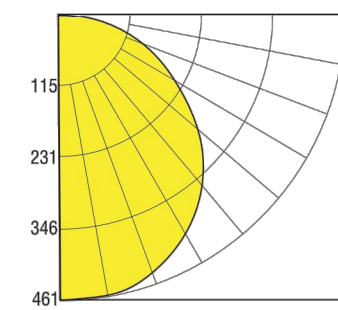


MLS Mini LED Strip

Photometry

MLS4-LED-20L-CSM-UNV-DIM-40

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%. See <http://www.lsi-industries.com/products/led-lighting-solutions.aspx> for detailed photometric data.



ZONAL LUMEN SUMMARY		
ZONE	LUMENS	% OF LUMINAIRE
0-20	167.7	7.9%
0-30	363.5	17.0%
0-40	610.3	28.6%
0-60	1,158.6	54.3%
0-80	1,626.0	76.2%
0-90	1,795.9	84.1%
10-90	1,753.2	82.1%
20-40	442.6	20.7%
20-50	716.0	33.5%
40-70	801.4	37.5%
60-90	467.3	21.9%
70-90	214.3	10.0%
80-90	169.9	8.0%
90-110	226.6	10.7%
90-120	290.3	13.6%
90-130	323.5	15.2%
90-150	338.8	15.9%
90-180	338.8	15.9%
110-180	110.0	5.2%
0-180	2,134.5	100.0%



Steel Poles Round Straight



Catalog #: _____ Project: _____
Prepared By: _____ Date: _____

QUICK LINKS

- Ordering Guide
- Configurations
- Dimensions
- EPA

FEATURES & SPECIFICATIONS

Pole Shaft

- Steel round poles are 4" or 5" in diameter.
- Pole shaft is electro-welded ASTM-A500 Grade C steel tubing with a minimum yield strength of 46,000 psi.
- On Tenon Mount steel poles, tenon is high-strength pipe. Tenon N option is 2-3/8" O.D. x 4-3/4" tall. Tenon 4N option is 4" O.D. x 4-7/8" tall.

Hand-Hole

- Standard hand-hole location is 12" above pole base.
- Poles 18' and above have a 3" x 6" reinforced hand-hole. Shorter poles have 2" x 4" non-reinforced hand-hole.

Base

- Pole base is ASTM-A36 hot-rolled steel plate with a minimum yield strength of 36,000 psi.
- Two-piece square base cover is optional. Decorative base cover is also available.

Anchor Bolts

- Poles are furnished with anchor bolts featuring zinc-plated double nuts and washers. Galvanized anchor bolts are optional.
- Anchor bolts conform to ASTM F 1554-07a Grade 55 with a minimum yield strength of 55,000 psi.

Ground Lug

- Ground lug is standard.

Duplex Receptacle

- Weatherproof duplex receptacle is optional.

Ground Fault Circuit Interrupter

- Self-testing ground fault circuit interrupter is optional.

Finishes

- Every pole is provided with the DuraGrip® Protection System and a 5-year limited warranty.
- When the top-of-the-line DuraGrip® Plus Protection System is selected, in addition to the DuraGrip® Protection System, a non-porous, automotive-grade corrosion coating is applied to the lower portion of the pole interior, sealing and further protecting it from corrosion. This option extends the limited warranty to 7 years.

Determining The Luminaire/Pole Combination For Your Application:

- Select luminaire from luminaire ordering information
- Select bracket configuration if required
- Determine EPA value from luminaire/bracket EPA chart
- Select pole height

Select MPH to match wind speed in the application area (See windspeed maps).

- Confirm pole EPA equal to or exceeding value of luminaire/bracket EPA

- Consult factory for special wind load requirements and banner brackets

Pole Vibration Damper

- A pole vibration damper is recommended in open terrain areas of the country where low steady state winds are common.
- Non-tapered poles and lightly loaded poles are more susceptible to destructive vibration if a damper is not installed.

Listings

- UL Listed
- BAA/TAA Compliant



Steel Poles - Round Straight

ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: **5RP B3 S07G 24 S PLP DGP**

Pole Series	Mounting Method	Material	Height *	Mounting Configuration	Pole Finish	Options
4RP - 4" Diameter Round Straight Pole	Bolt-On Mount - See pole selection guide for patterns and future matches.	S110 - 11 Ga. Steel (SRP only)	8'	S - Single/Parallel D180 - Double D90 - Double	BRZ - Bronze	GA - Galvanized Anchor Bolts
5RP - 5" Diameter Round Straight Pole	B2 - 2" Reduced Drilling Pattern	S10G - 10 Ga. Steel (4RP only)	10'	T90 - Triple TN120 - Triple Q90 - Quad Q40 - Quad	BLK - Black	SF - Single Roof P.L.P. - Pathum Plus
	T - Tenon Mount - See pole selection guide for tenon and future matches.	S07G - 07 Ga. Steel (SRP only)	12'	4N - Tenon Mount (SRPT only for 4" poles, use 4RP)	WHT - White	DF - Double Roof + DGP - DuraGrip Plus LAB - Less Anchor Bolts
			14'	4N-6 - Tenon Mount (SRPT only for 4" poles use 4RP)	SVG - Satin Verde Green	GPT - Graphite
			15'		MSV - Metallic Silver	BZA - Alternate Bronze
			16'			
			17'			
			18'			
			20'			
			22'			
			22' 6"			
			24'			
			25'			
			26'			
			27'			
			28'			
			30'			

Accessory Ordering Information

Description	Order Number	Description	Order Number
4" GBC Square Base Cover	15460CLR	M6 - Mounting Hole Plugs for use with 3" reduced drill pattern (3 sets of 3 plugs)	46126
5" SRBC Square Base Cover	15461CLR	M5D - Mounting Hole Plugs for use with 2" reduced drill pattern (3 sets of 3 plugs)	72541
4" B' GBC Decorative Base Cover	46359CLR	BB - Banner Brackets	Consult Factory for EPA calculations
ER2 - Weatherproof Duplex Receptacle (Poles below 18')	12257CLR		
ER3 - Weatherproof Duplex Receptacle for Reinforced Hand-Hole (Poles 18' and above)	12256CLR		
GF1 - Ground Fault Circuit Interrupter (Poles below 18')	12255CLR		
GF1 - Ground Fault Circuit Interrupter for Reinforced Hand-Hole (Poles 18' and above)	22567CLR		
M6G - Mounting Hole Plugs for use with 5" traditional drill pattern (3 set of 3 plugs)	13236		

FOOTNOTES:
 1 - See Area Light Brackets - 3" Reduced Drill Pattern and Area Light Brackets - 5" Traditional Drill Pattern spec sheets.
 2 - For Enterprise and Lexington PT mounting configuration styles, see Tenon Mount (4N) and Greenlee Slight Pole Series (4RP).
 3 - Standard flat black pole cap provided. Dorned Greenlee pole cap will ship with S44 and S45 Enterprise and Lexington features. SA Lifestyle features, BK SPT 60, BK MPT 90 and LCL brackets.
 4 - Pole heights will have +/- 1/2" tolerance.
 5 - For Enterprise and Lexington D180 or other mounting configuration styles using BK SPT 90 and BK MPT 90 accessories, see chart on Bolt-on Mount 4RP/3/SRBC DRILLING PATTERN section on pole selection chart.
 6 - See Flood Lighting Brackets section for choice of FBO brackets.

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REVISIONS
 DATE SEP 3, 2021
 DESIGNED TMD
 DRAWN TMD
 CHECKED RP
 PROJECT CO-2658-2008

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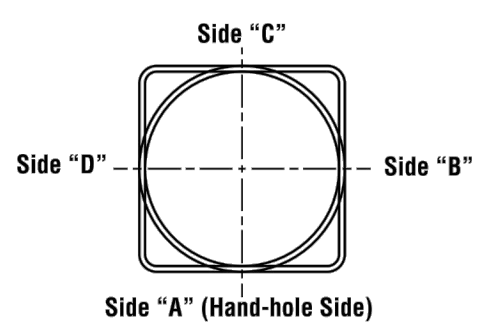


Steel Poles - Round Straight

Back to Quick Links

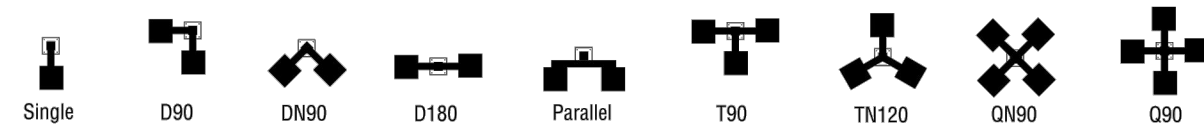
DRILLING LOCATIONS

Sides	A	B	C	D
Hand-hole	X			
Single	X			
D180		X		X
D90	X			X
D180 ⁹⁰		X		X
T90	X	X		X
TN120 ²		X		X
Q90	X	X	X	X
Q180 ⁹⁰		X		X
Single FBO	X			
Double FBO		X		X



NOTES:
 1 - Two locations will be 45° to the left and right of Side A.
 2 - Other two locations will be 120° to the left and right of Side A.
 3 - Two locations will be 45° to the left and right of Side A and two locations will be 135° to the left and right of Side A.
 Consult factory for custom variations. Standard SF and DF pole preparations are located 3/4 of the height of the pole from the base, except on 20' poles. Maximum height for SF and DF pole preparations on 20' poles is 13' from the base.

FIXTURE CONFIGURATIONS



BOLT CIRCLE

Bolt Circle Designator	4" (102mm) Round 10-1/8" (257mm) sq.	5" (127mm) Round 10-1/8" (257mm) sq.	5" (127mm) Round 10-1/8" (257mm) sq.
Bolt Circle	11" (279mm) Dia. Bolt Circle	11" (279mm) Dia. Bolt Circle	11" (279mm) Dia. Bolt Circle
Anchor Bolt Size	3/4" x 30" (19mm x 762mm)	3/4" x 30" (19mm x 762mm)	1" x 30" (25mm x 914mm)
Anchor Bolt Projection	3-1/4" (83mm)	3-1/4" (83mm)	4" (102mm)
Base Plate Opening for Wireway Entry	3-5/8" (90mm)	4-3/4" (117mm)	4-5/8" (117mm)
Base Plate Dimensions	10-1/8" sq. x 3/4" thk. (257mm x 19mm)	10-1/8" sq. x 3/4" thk. (257mm x 19mm)	10-1/8" sq. x 1" thk. (257mm x 25mm)
Pole Gauge	10	11	7

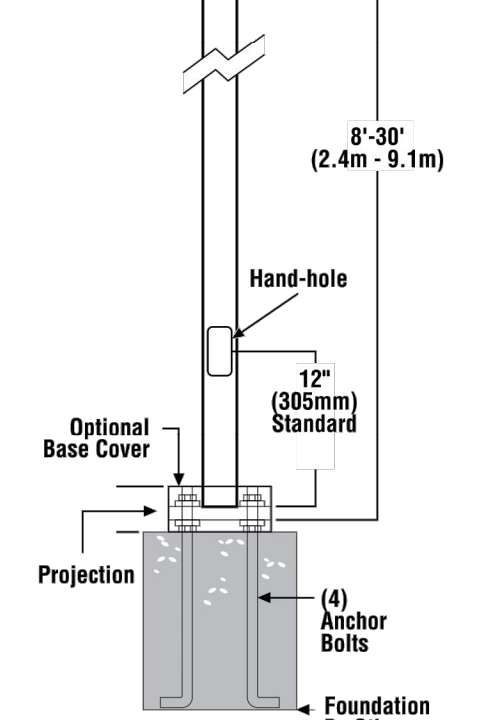
Note: Base plate illustrations may change without notice. Do not use for setting anchor bolts. Consult factory for the appropriate anchor bolt template.



Steel Poles - Round Straight

PRODUCT DIMENSIONS

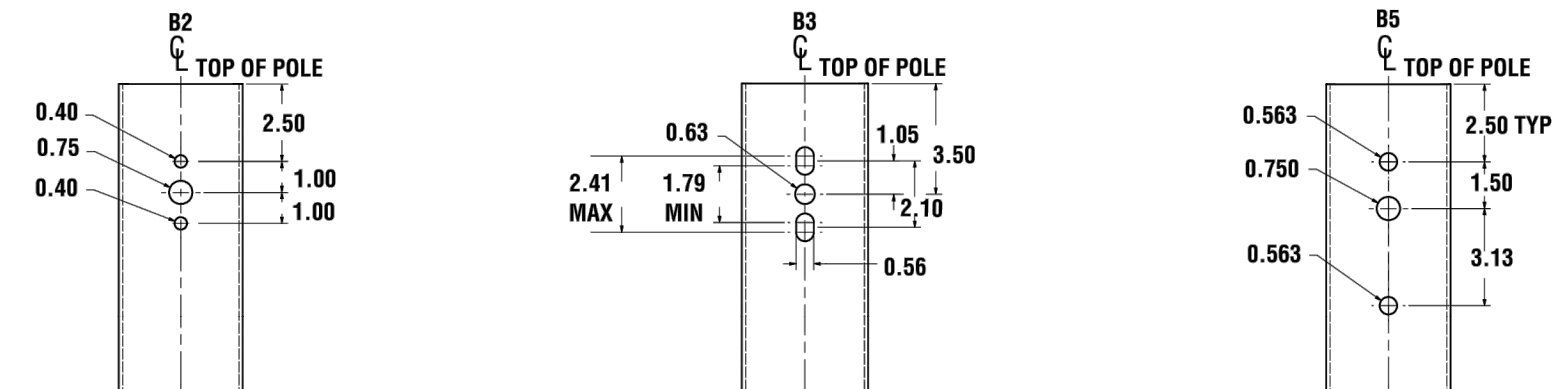
RPT -
N = 2-3/8" (60mm) O.D. x 4-3/4" (121mm) Tenon
4N = 4" (102mm) O.D. x 4-7/8" (124mm) Tenon
4N6 = 4" (102mm) O.D. x 6-3/8" (162mm) Tenon



SHIPPING WEIGHTS

4" (102mm) Dia. 10 Ga. is approximately	6.0 lbs./ft.
5" (127mm) Dia. 11 Ga. is approximately	7.0 lbs./ft.
5" (127mm) Dia. 07 Ga. is approximately	10.0 lbs./ft.
Anchor Bolts (3/4" x 30") (19mm x 762mm)	15 lbs. (7kg)/set
Anchor Bolts (1" x 30") (25mm x 914mm)	30 lbs. (14kg)/set

Bolt-On Mount 2-Bolt Pattern



Steel Poles - Round Straight

WIND SPEED

EPA Information
 All LSI Industries' poles are guaranteed to meet the EPA requirements listed. LSI Industries is not responsible if a pole order has a lower EPA rating than the indicated wind-loading zone where the pole will be located.
CAUTION: This guarantee does not apply if the pole/bracket/fixture combination is used to support any other items such as flags, pennants, or signs, which would add stress to the pole. LSI Industries cannot accept responsibility for harm or damage caused in these situations.
NOTE: Pole calculations include a 1.3 gust factor over steady wind velocity. Example poles designed to withstand 80 MPH steady wind will withstand gusts to 104 MPH. EPA's are for locations 100 miles away from hurricane ocean lines. Consult LSI for other areas. Note: Hurricane ocean lines are the Atlantic and Gulf of Mexico coastal areas. For applications in Florida or Canada, consult factory.

Use ONLY with "Wind Speed Map for ASCE 7-10"

POLE	Wgt. Height Length (ft)	Wall Thick (ga)	BOLT CIRCLE		EPA									
			Designator	Dia. (in)	110 MPH	115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH	
4" x 10-ga x 14'	14	10	L	11	0.75	6.0	5.2	4.7	3.9	3.2	2.7	2.3	2.0	1.7
4" x 10-ga x 16'	16	10	L	11	0.75	4.3	3.7	3.2	2.6	2.1	1.8	1.4	1.2	1.0
4" x 10-ga x 18'	18	10	L	11	0.75	7.7	6.8	6.0	5.0	4.2	3.5	3.0	2.5	2.2
4" x 10-ga x 20'	20	10	L	11	0.75	6.0	5.2	4.6	3.7	3.1	2.5	2.1	1.8	1.5
4" x 10-ga x 22'	22	10	L	11	0.75	4.6	3.9	3.3	2.6	2.1	1.7	1.4	1.1	0.9
4" x 10-ga x 24'	24	10	L	11	0.75	3.4	2.7	2.2	1.7	1.3	1.0	0.7	0.5	na
5" x 11-ga x 16'	16	11	L	11	0.75	8.7	7.9	7.2	6.0	5.0	4.3	3.7	3.2	2.8
5" x 11-ga x 18'	18	11	L	11	0.75	12.2	11.1	10.1	8.5	7.2	6.1	5.3	4.6	4.0
5" x 11-ga x 20'	20	11	L	11	0.75	10.0	9.1	8.2	6.8	5.7	4.9	4.2	3.6	3.1
5" x 11-ga x 22'	22	11	L	11	0.75	8.1	7.3	6.6	5.5	4.5	3.8	3.2	2.8	2.4
5" x 11-ga x 24'	24	11	L	11	0.75	6.5	5.9	5.3	4.3	3.5	2.9	2.4	2.0	1.7
5" x 11-ga x 26'	26	11	L	11	0.75	5.2	4.6	4.1	3.2	2.6	2.1	1.7	1.4	1.1
5" x 7-ga x 18'	18	7	M	11	1.00	19.7	17.9	16.4	13.8	11.7	10.1	8.6	7.7	6.8
5" x 7-ga x 20'	20	7	M	11	1.00	16.5	15.0	13.7	11.5	9.8	8.4	7.3	6.3	5.6
5" x 7-ga x 22'	22	7	M	11	1.00	14.0	12.7	11.5	9.6	8.1	7.0	6.0	5.2	4.6
5" x 7-ga x 24'	24	7	M	11	1.00	11.8	10.6	9.6	8.0	6.8	5.7	4.9	4.2	3.7
5" x 7-ga x 26'	26	7	M	11	1.00	9.9	8.9	8.0	6.7	5.6	4.7	4.0	3.4	2.9
5" x 7-ga x 28'	28	7	M	11	1.00	8.3	7.4	6.7	5.4	4.5	3.7	3.1	2.7	2.3
5" x 7-ga x 30'	30	7	M	11	1.00	6.8	6.1	5.4	4.4	3.6	2.9	2.4	2.0	1.7

All LSI Industries' poles are guaranteed to meet the EPA requirements listed. LSI Industries is not responsible if a pole order has a lower EPA rating than the indicated wind-loading zone where the pole will be located.
CAUTION: This guarantee does not apply if the pole/bracket/fixture combination is used to support any other items such as flags, pennants, or signs, which would add stress to the pole. LSI Industries cannot accept responsibility for harm or damage caused in these situations.
Note: Poles shorter than those listed here in for each gauge have EPA rating equal to or greater than that is provided in this table. To confirm EPA ratings on shorter poles, contact LSI Industries.

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