DEVELOPMENT PLANS FOR

BRC COLORADO SPRINGS

CHAPPARAL RIDGE FILING NO. 2

5570 BARNES ROAD
COLORADO SPRINGS, EL PASO COUNTY, CO
TAX PARCELS: 6325106040

LEGAL DESCRIPTION

A REMAINDER OF TRACT 5 SADDLEBACK ESTATES, IN THE CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO EXCEPTING THEREFROM ALL THAT PORTION OF SAID TRACT 5 WHICH IS INCLUDED WITHIN THE PLAT OF CHAPARRAL RIDGE FILING NO. 1, RECORDED IN PLAT BOOK C-4 AT PAGE 32; AND FURTHER EXCEPTING THEREFROM THAT PORTION AS CONVEYED IN GENERAL WARRANTY DEED RECORDED APRIL 9, 2021 UNDER RECEPTION NO. 221071424.

MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ALONG NORTHERLY RIGHT-OF-WAY OF BARNES ROAD AND THE WESTERLY RIGHT-OF-WAY OF CHAPARRAL ROAD; THENCE N80°34'12"E, 32.02 FEET TO A POINT,

THENCE S74°00'33"E, 6.80 FEET TO A POINT,

THENCE N15°47'20"E, 86.55 FEET TO A POINT OF CURVATURE,

THENCE ALONG THE ARC OF A CURVE TO THE LEFT WITH A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 48°27'30", THE CHORD OF WHICH BEARS N8°26'26"W FOR A DISTANCE OF 139.54; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 143.79 FEET TO A POINT,

THENCE N32°07'40"W, 344.73 FEET TO A POINT ALONG THE EASTERLY RIGHT-OF-WAY OF JEFFREY ROAD THE FOLLOWING 6 COURSES;

THENCE ALONG THE ARC OF A CURVE TO THE LEFT WITH A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 17°43'32", THE CHORD OF WHICH BEARS S55°25'17"W FOR A DISTANCE OF 7.70 FEET; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 7.73 FEET TO A POINT,

THENCE S46°26'33"W, 72.83 FEET TO A POINT OF CURVATURE,

THENCE ALONG THE ARC OF A CURVE TO THE LEFT WITH A RADIUS OF 570.00 FEET, A CENTRAL ANGLE OF 30°39'47", THE CHORD OF WHICH BEARS S31°07'29"W FOR A DISTANCE OF 301.42 FEET; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 305.05 FEET TO A POINT,

THENCE S15°42'23"W, 63.88 FEET TO A POINT OF CURVATURE,

THENCE ALONG THE ARC OF A CURVE TO THE LEFT WITH A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 90°11'54", THE CHORD OF WHICH BEARS S29°26'21"E FOR A DISTANCE OF 35.42 FEET; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 39.36 FEET TO A POINT,

THENCE S18°35'42"W, 10.42 FEET TO A POINT ALONG THE NORTHERLY RIGHT-OF-WAY OF BARNES ROAD,

THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY OF BARNES ROAD S74°12'57"E, 374.40 FEET TO THE POINT OF BEGINNING.

BENCHMARK

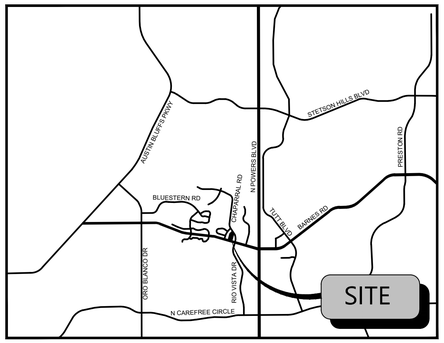
ELEVATIONS ARE BASED UPON COLORADO SPRINGS UTILITIES FACILITIES INFORMATION MANAGEMENT SYSTEM MONUMENT AB3.

ELEVATION: 6429.20 (US FEET)

BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

BASIS OF BEARINGS

BEARINGS ARE BASED UPON THE WESTERLY LINE OF CHAPARRAL ROAD, MONUTMENTED AT BOTH ENDS WITH A #5 REBAR AND 1.5" ALUMINUM CAP STAMPED "WJC PLS 38954", AND IS ASSUMED TO BEAR N 32°07'40" W, A DISTANCE OF 344.73 FEET.

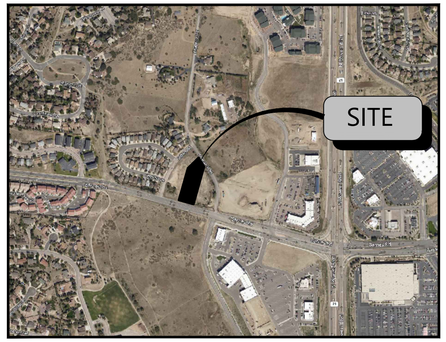


VICINITY MAP
N.T.S.



FEMA MAP
N.T.S.

NOTE: BASED ON GRAPHIC DETERMINATION, THIS PROPERTY DOES NOT LIE IN A F.E.M.A./F.I.R.M.SPECIAL FLOOD HAZARD AREA PER COMMUNITY PANEL NO. 08041C0538G DATED 12-07-2018. THIS PROPERTY LIES IN ZONE X (AREA OF MINIMAL FLOOD HAZARD).



AERIAL MAP
N.T.S.

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SUBMITTAL DATE

SUBMITTAL - 2025-02-26

SITE DATA

TOTAL PROPERTY AREA:	0.91 AC± (39,857± S.F.)
LOT COVERAGE:	1.84%
LAND USE:	MIXED USE LARGE SCALE (MX-L)
BUILDING SIZE:	735 S.F.
MAXIMUM BUILDING HEIGHT:	65'
ZONING:	MX-L/CR AO
FRONT SETBACK:	NONE
SIDE SETBACK:	NONE
REAR SETBACK:	NONE

PARKING SUMMARY

PARKING REQUIREMENTS	1 SPACE/300 GFA OF BUILDING 1 SPACE/350 SF OF OUTDOOR SEATING
TOTAL PARKING REQUIRED	4 SPACES
PARKING PROVIDED	12 SPACES, 1 ADA SPACE

TIMING OF CONSTRUCTION NOTES

ALL CONSTRUCTION WILL OCCUR POST REGIONAL PCM INSTALLATION.

THE STORM WATER DETENTION FACILITY WILL BE COMPLETED AS PART OF THE MASTER SELF-STORAGE DEVELOPMENT. THE ANTICIPATED COMPLETION DATE IS APPROXIMATELY APRIL 30, 2025. THE MASTER SELF-STORAGE DEVELOPMENT'S PCM, VERTICAL PLAN, AND FINAL DRAINAGE REPORTS HAVE BEEN APPROVED BY THE CITY OF COLORADO SPRINGS. ALL FUNDS/BONDS HAVE BEEN POSTED WITH THE CITY ENGINEER.

FOUR STEP PROCESS NOTES (SEE FDR)

1. FACILITIES HAVE BEEN PROPOSED TO ACCOMMODATE RUNOFF, TREAT AND SLOWLY RELEASE WQCV, STABILIZE STREAMS, AND IMPLEMENT SOURCE CONTROLS, AS PER THE CITY OF COLORADO SPRINGS FOUR STEP PROCESS. THESE ACCOMMODATIONS HAVE BEEN MADE USING PROPOSED DETENTION AND SYSTEMS FOUND IN THE FINAL DRAINAGE REPORT CHAPARRAL RIDGE FILING NO. 2 PREPARED BY CIVAS ENGINEERING, LLC AND APPROVED NOVEMBER 25, 2024.
2. THE PROPOSED DEVELOPMENT FOUND IN THESE CONSTRUCTION PLANS MAKES ADDITIONAL WATER QUALITY AND RUNOFF ACCOMMODATIONS AND A DETAILED ANALYSIS MAY BE FOUND IN THE FINAL DRAINAGE REPORT TITLED "FINAL DRAINAGE REPORT BLACK ROCK COFFEE OF COLORADO SPRINGS CHAPARRAL RIDGE FILING NO. 2" AS PREPARED BY ATWELL, LLC.

GENERAL NOTES

1. ACCESSIBLE ROUTES, INCLUDING RAMPS AND SIDEWALKS, WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE PER THE CITY OF COLORADO SPRINGS STANDARD DRAWINGS AND SPECIFICATIONS. CITY'S ENGINEERING DEVELOPMENT REVIEW INSPECTOR WILL HAVE THE FINAL AUTHORITY ON ACCEPTING THE PUBLIC IMPROVEMENTS.
2. PROPERTY OWNERS ARE RESPONSIBLE FOR THE MAINTENANCE OF SHARED COMMON TRACTS, ACCESS DRIVES, PRESERVATION AREAS, AND LANDSCAPE AREAS ADJACENT TO THEIR PROPERTY.
3. ALL STREET TREES AND STREETSCAPE IMPROVEMENTS LOCATED IN THE R.O.W. WILL BE MAINTAINED BY THE ABUTTING PROPERTY OWNER.
4. ALL STOP SIGNS WILL BE INSTALLED BY THE DEVELOPER AT THE LOCATIONS SHOWN ON THE DEVELOPMENT PLAN TO MEET MUTCD STANDARDS. CONTACT TRAFFIC ENGINEERING, SIGNS & MARKINGS AT 719-385-6720 FOR ASSISTANCE.
5. SIGNAGE IS NOT APPROVED PER THIS PLAN. A SEPARATE SIGN PERMIT IS REQUIRED. CONTACT THE DEVELOPMENT REVIEW ENTERPRISE AT 719-385-5982 TO BEGIN A SIGN PERMIT APPLICATION.
6. PER CITY CODE SECTION 7.4.2, ALL LIGHTING FIXTURES SHALL BE FULL CUT-OFF OR HAVE SHIELDING TO REDUCE OFF-SITE LIGHTING IMPACTS ONTO ADJACENT PROPERTIES AND ROADWAYS. ALL EXTERIOR LIGHTING SHALL BE ARRANGED TO MITIGATE LIGHT DIRECTED AWAY FROM ADJACENT PROPERTIES AND ANY PUBLIC RIGHT-OF-WAY. AN AMENDMENT TO THIS PLAN MAY BE REQUIRED IF THE LIGHTING TYPE IS CHANGED.
7. DEVELOPMENT SITS WITHIN THE ALREADY-IMPLEMENTED HIGH CHAPPARAL MASTER PLAN #CPC MP 10-00089.
8. THE CROSS ACCESS EASEMENT (DECR) HAS BEEN AGREED UPON BY ALL PARTIES TO THE SALE OF LOTS 1-3 WITHIN THE MASTER DEVELOPMENT. THE CLOSING DATE IS ANTICIPATED TO BE BETWEEN MARCH 15, 2025 TO APRIL 1, 2025 AND AT WHICH TIME, THE CROSS ACCESS EASEMENT AGREEMENT WILL BE RECORDED.
9. THE FINAL DRAINAGE REPORT (FDR) PREPARED BY ATWELL, LLC WAS SUBMITTED TO SWENT ON 02/26/2025 (STM-REV25-0068).

Staff Note: This exhibit is for reference only. The Development Plan review is in progress and is administrative. Further revision of this plan may be required by Staff.

FOR CITY USE:

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EMAIL: TONY@BR.COFFEE

SURVEYOR
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COLORADO SPRINGS, CO 80917
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811 Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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S25-T13S-R66W
5570 BARNES ROAD
COLORADO SPRINGS
EL PASO COUNTY, CO

BRC COLORADO SPRINGS
BLACK ROCK DEVELOPMENT COMPANY, LLC
DEVELOPMENT PLANS
COVER

DATE 2025-02-26

REVISIONS

DRAWN BY: A.M., R.S., N.N.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. 1 OF 11

CAD FILE: C00 COVER

NOT-ISSUED-FOR-CONSTRUCTION

FILE NAME: K:\24005174 - BRC - Barnes & Jeffrey - Colorado Springs CO_LD\04 PRODUCTION\C000 COVER.dwg LAST SAVED BY: nnap 2/26/2025 4:04 PM PLOTTED BY: Nick Nap 2/26/2025 PAPER: ARCH FULL BLEED D (24.00 X 36.00 INCHES) DEVICE: DWG To PDF.PC3 PLOT STYLE: ATWELL.CTB

ATWELL NOTES

1. THESE PLANS ARE SUBJECT TO THE INTERPRETATION OF INTENT BY THE ENGINEER. ALL QUESTIONS REGARDING THESE PLANS SHALL BE PRESENTED TO THE ENGINEER. ANYONE WHO TAKES UPON HIMSELF THE INTERPRETATION OF THE DRAWINGS OR MAKES REVISIONS TO SAME WITHOUT CONFERRING WITH THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR THE CONSEQUENCES THEREOF.
2. THE ENGINEER MAKES NO GUARANTEE REGARDING THE LOCATION OR ELEVATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CALL BARRON LAND, LLC. FOR LOCATION OF ALL UTILITIES.
3. THE CONTRACTOR SHALL MAKE HIS OWN ESTIMATE OF EARTHWORK QUANTITIES REQUIRED TO COMPLETE ALL WORK AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL IMPORT FILL OR EXPORT SOIL AS REQUIRED TO PROVIDE AN EARTHWORK BALANCE AT NO EXTRA COST TO THE PROJECT.
4. THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS SPECIFIED IN THE GEOTECHNICAL INVESTIGATION.
5. THE DEVELOPER/CONTRACTOR ASSUMES ALL RESPONSIBILITY AND COSTS INCURRED IF HE ELECTS TO LANDSCAPE RETENTION BASINS BEFORE THE REQUIRED RETENTION VOLUME HAS BEEN CERTIFIED BY THE ENGINEER.
6. CONTRACTOR IS RESPONSIBLE FOR PROTECTING STORM DRAIN PIPES DURING THE CONSTRUCTION STAGE. THE COVER ON THE DRAINAGE PIPE IS DESIGNED FOR FINAL GRADE; THEREFORE, EXTRA CARE MUST BE EXERCISED DURING THE CONSTRUCTION PHASE TO MAINTAIN COVER OVER PIPES TO PREVENT DAMAGE.
7. CONTRACTOR IS TO LOCATE ALL EXISTING PROPERTY MONUMENTS PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR SHALL MAKE NO CLAIM AGAINST THE OWNER OR THE SURVEYOR REGARDING ALLEGED INACCURACY OF CONSTRUCTION STAKES SET BY THE ENGINEER UNLESS ALL SURVEY STAKES SET BY THE SURVEYOR ARE MAINTAINED INTACT AND CAN BE VERIFIED AS TO THEIR ORIGIN. IF IN THE OPINION OF THE SURVEYOR, THE STAKES ARE NOT MAINTAINED INTACT AND CANNOT BE VERIFIED AS TO THEIR ORIGIN, ANY REMEDIAL WORK REQUIRED TO CORRECT ANY ITEM OR IMPROPER CONSTRUCTION WORK IN THIS DEVELOPMENT SHALL BE PERFORMED AT THE SOLE EXPENSE OF THE RESPONSIBLE CONTRACTOR OR SUBCONTRACTOR.
9. STORM WATER POLLUTION PREVENTION PLAN DEPICTS TYPICAL EROSION CONTROL MEASURES TO BE EMPLOYED ON THIS SITE. IT IS UNDERSTOOD THAT THE STORM WATER POLLUTION PREVENTION PLAN IS A DYNAMIC DOCUMENT AND IT IS TO BE UPDATED AS NEEDED TO REFLECT CURRENT CONDITIONS AND ADDRESS UNFORESEEN CONDITIONS.
10. PER THE CITY OF COLORADO SPRINGS NO VARIANCES SHALL BE PERMITTED FOR NEW DEVELOPMENT.

DEMOLITION NOTES

1. IN ORDER TO PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SOIL EROSION AND SEDIMENTATION, THE DEMOLITION CONTRACTOR SHALL CONSTRUCT EROSION CONTROL MEASURES PER THE INITIAL EROSION CONTROL PLAN (PHASE I) AS NECESSARY PRIOR TO AND DURING DEMOLITION OPERATIONS. ADDITIONAL MEASURES MAY BY REQUIRED AS DIRECTED BY THE ENGINEER, LOCAL INSPECTOR OR THE OWNER.
2. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE OR THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION. ANY DEVIATION WITHOUT THE OWNERS' CONSENT WILL BE AT THE CONTRACTOR'S RISK.
3. THE DEMOLITION CONTRACTOR SHALL LOCATE, IDENTIFY PROPERLY, TERMINATE, AND MARK ALL EXISTING UTILITIES THAT SHALL REMAIN WITHIN THE DEMOLITION AREA TO PROTECT THEM FROM DAMAGE.
4. THE DEMOLITION CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES, ASSOCIATED GOVERNMENT DEPARTMENTS, AND THE OWNER'S REPRESENTATIVE PRIOR TO INTERRUPTION OF ANY UTILITY SERVICE. NOTIFICATION MUST BE MADE PER THE PROJECT SPECIFICATIONS. THE DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH AND ADHERENCE TO THE REQUIREMENTS OF EACH UTILITY COMPANY AND ANY GOVERNMENT UTILITY DEPARTMENT REGARDING SERVICE INTERRUPTION.
5. THE DEMOLITION CONTRACTOR SHALL PROTECT ALL LANDSCAPING AND OTHER FEATURES DESIGNATED TO REMAIN AND REPLACE/REPAIR ALL ITEMS THAT ARE DISTURBED DURING DEMOLITION.
6. THE CONTRACTOR SHALL CONDUCT ALL DEMOLITION OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC AND/OR PRIVATE ACCESSES AND FACILITIES.
7. THE DEMOLITION CONTRACTOR SHALL PROTECT BENCH MARKS, PROPERTY CORNERS, AND ALL OTHER SURVEY MONUMENTS FROM DAMAGE OR DISPLACEMENT. IF A MARKER IS REMOVED OR DISTURBED, IT SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AT THE CONTRACTORS EXPENSE.
8. THE DEMOLITION CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES AS REQUIRED IN ACCORDANCE WITH THE US DEPT. OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND GOVERNING AGENCY REQUIREMENTS.
9. DEPRESSIONS AND VOID AREAS CAUSED BY DEMOLITION WORK SHALL BE FILLED TO SUB-GRADE AND PROPERLY COMPACTED. THE CONTRACTOR SHALL SLOPE ALL DISTURBED AREAS TO DRAIN IN ORDER TO AVOID PONDING.
10. THE DEMOLITION CONTRACTOR SHALL ACQUIRE ALL PERMITS AND PAY ALL ASSOCIATED FEES PERTAINING TO THE DEMOLITION AND DISPOSAL REQUIREMENTS. HE SHALL BE RESPONSIBLE FOR ADHERENCE TO ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING THIS WORK. IF THERE ARE NO LOCAL, STATE OR FEDERAL REQUIREMENTS THE DEMOLITION CONTRACTOR SHALL ACQUIRE AN ENGINEER'S CERTIFICATION THAT THE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS.
11. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY AND SAFETY MANAGEMENT. THE CONTRACTOR SHALL PROCEED WITH THE DEMOLITION IN AN ORGANIZED MANNER FOLLOWING ALL APPLICABLE OSHA REQUIREMENTS IN ORDER TO ENSURE WORKER AND CIVIC SAFETY.
12. THE DEMOLITION CONTRACTOR SHALL DO THE FOLLOWING:
    - 12.1. CONFIRM THAT COPIES OF ALL PERMITS AND APPROVALS ARE KEPT ONSITE AND THAT THEY ARE AVAILABLE FOR REVIEW UPON REQUEST.
    - 12.2. INSTALL INITIAL PHASE SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
    - 12.3. REMOVE AND DISPOSE OFFSITE ALL DEBRIS NOT ACCEPTABLE TO THE OWNER.
    - 12.4. LOCATE AND CAP/PLUG ALL WET AND DRY UTILITIES TO BE REMOVED/ABANDONED WITHIN THE LIMITS OF DISTURBANCE.
    - 12.5. PROTECT AND KEEP IN OPERATION ALL ACTIVE SYSTEMS THAT ARE NOT TO BE REMOVED/ABANDONED.
    - 12.6. COORDINATE WITH APPROPRIATE UTILITY SERVICE COMPANY/PROVIDER AND PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND/OR UTILITY COMPANY REQUIREMENTS. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING DURING "OFF-PEAK" HOURS OR ON WEEKENDS TO MINIMIZE THE IMPACT ON THE PUBLIC.
    - 12.7. DIRECT A LICENSED ENVIRONMENTAL TESTING COMPANY COMPLETE A CONTAMINANT AND INSPECTION AND REPORT WITH REGARD TO BUILDINGS/STRUCTURES TO BE REMOVED, AND ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS. CONTAMINATED/HAZARDOUS BUILDING MATERIAL AND/OR SOILS SHALL BE REMOVED AND DISPOSED OF OFFSITE BY A QUALIFIED/LICENSED CONTRACTOR FAMILIAR WITH THE APPLICABLE REGULATIONS.
13. EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND APPLICABLE GOVERNMENTAL AUTHORITIES. IF PERMISSION IS GIVEN, ALL RELATED PERMITS AND MEASURES SHALL BE AT THE DIRECTION OF THE LOCAL ISSUING AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INSPECTIONS AND SEISMIC VIBRATION TESTING REQUIRED FOR PROPER MONITORING OF LOCAL STRUCTURES IN THE AREA.
14. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN ACCORDANCE WITH "THE MANUAL ON UNIFORM TRAFFIC CONTROL", AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS SHOULD DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR RIGHTS-OF-WAY. STREET CLOSURES MUST BE APPROVED BY THE APPROPRIATE GOVERNMENTAL AUTHORITY.
15. EQUIPMENT AND OPERATION OF EQUIPMENT SHALL BE CONTROLLED TO WITHIN THE LIMITS OF DISTURBED ONSITE AREA OF THE PROPERTY.

SITE NOTES

1. THE PROJECT BOUNDARY SURVEY HAS BEEN PROVIDED BY BARRON LAND, LLC. (THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY, OR FOR DESIGN ERRORS OR OMISSIONS AS A RESULT OF SURVEY INACCURACIES.)
2. THE BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL BUILDINGS AND BUILDING APPURTENANCES WITHIN FIVE (5) FEET OF THE BUILDING WALL TO INCLUDE TRUCK DOCKS, SIDEWALKS, STEPS, ETC.
3. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL SITE WORK AND SITE APPURTENANCES UP TO FIVE (5) FEET OF THE BUILDING. THIS INCLUDES TRANSFORMER AND DUMPSTER PADS AS WELL AS ALL UTILITY CONDUITS.
4. CONTRACTOR SHALL OBTAIN ALL PERMITS FROM THE OWNER PRIOR TO CONSTRUCTION.
5. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB AND TO THE END OF PARKING STRIPE UNLESS OTHERWISE NOTED. ALL DIMENSIONS SHOWN TO BUILDINGS ARE TO THE OUTSIDE FACE OF THE BUILDING.
6. ALL STRIPED OR CURBED RADII SHALL BE 3' UNLESS OTHERWISE NOTED.
7. PARKING LOT STRIPING SHALL HAVE TWO (2) COATS OF PAINT (MIN).
8. ALL HANDICAP ACCESSIBLE PARKING SIGNS AND STRIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS. LOCAL CODES MAY GIVE ADDITIONAL DIRECTION WITH REGARD TO GEOMETRICS.
9. ALL CONCRETE WORK SHALL BE INSTALLED TO THE COMPRESSIVE STRENGTH ESTABLISHED IN THE PROJECT GEOTECHNICAL REPORT. THE REPORT SHALL BE FOLLOWED IF THERE IS A DISCREPANCY WITHIN THESE DRAWINGS.
10. ALL ONSITE AND OFFSITE CURB AND GUTTER SHALL BE INSTALLED PER CURB AND GUTTER DETAILS WITHIN THIS DRAWING SET. 1/2 INCH EXPANSION JOINTS OF PRE-MOLDED BITUMASTIC EXPANSION JOINT. MATERIAL SHALL BE PROVIDED AT ALL RADIUS POINTS AND AT INTERVALS NOT TO EXCEED 50 FEET IN THE REMAINDER OF THE ON-SITE CURB AND GUTTER.
11. ALL SIGNS DEPICTED ON THESE PLANS ARE SHOWN FOR INFORMATION ONLY. ALL SIGNS SHALL BE PERMITTED SEPARATELY BY OTHERS
12. ALL TRAFFIC SIGNS SHALL CONFORM TO THE UNIFORM TRAFFIC CONTROL MANUAL AND/OR TO THE STATE DEPARTMENT OF TRANSPORTATION RULES AND REGULATIONS.
13. SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS UPON THE COMPLETION OF THE PROJECT.

ACCESSIBILITY NOTES

1. ALL HANDICAP ACCESSIBLE PARKING SIGNS AND STRIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITY ACT (ADA) REQUIREMENTS. LOCAL CODES MAY GIVE ADDITIONAL DIRECTION WITH REGARD TO GEOMETRICS.
2. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL BE CONSTRUCTED TO A MAXIMUM SLOPE OF 2% IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
3. IF AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO THE ENTRANCE IS TO BE PROVIDED IT SHALL BE CONSTRUCTED TO A MINIMUM OF 5' WIDE. THE RUNNING SLOPE OF THE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
4. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURB, LANDINGS). NO RAMP SHALL EXCEED AN 8% RUNNING SLOPE OR 2% CROSS SLOPE.
5. IN THE CASE THAT A NEW SIDEWALK IS TO BE CONSTRUCTED IN THE PUBLIC R/W, THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES ALSO TO CROSS WALKS WITHIN THE DRIVEWAY. SPECIAL ATTENTION SHALL BE PAID DURING STAKING TO ENSURE A 2% CROSS SLOPE IS MET.
6. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS. INSTALLATIONS THAT ARE NON-COMPLIANT SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.
7. ACCESSIBLE PARKING SHALL HAVE 98" VERTICAL CLEARANCE.
8. DETECTABLE WARNING STRIPS SHALL BE PLACED ON ALL RAMPS.
9. ALL ADA PARKING SPACES SHALL HAVE PROPER SIGNAGE POSTED TO DESIGNATE REGULAR SPACES AND VAN SPACES, AS WELL AS APPLICABLE LOCAL FINES FOR VIOLATIONS.

GRADING NOTES

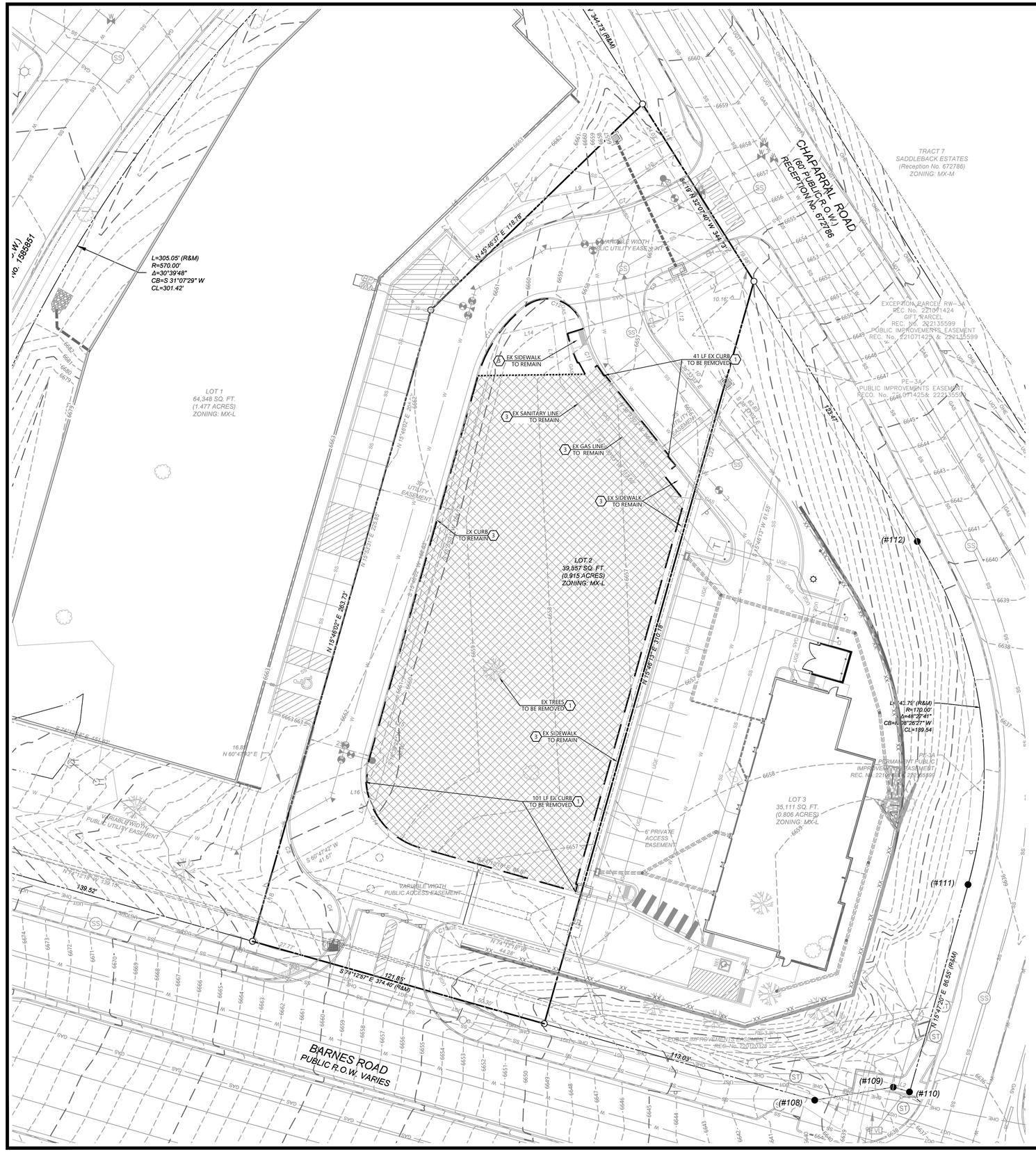
1. THE PROJECT TOPOGRAPHIC SURVEY HAS BEEN PROVIDED BY BARRON LAND, LLC. (THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY, OR FOR DESIGN ERRORS OR OMISSIONS AS A RESULT OF SURVEY INACCURACIES.)
2. SHOULD THE CONTRACTOR NOT ACCEPT THE EXISTING TOPOGRAPHY AS SHOWN ON THE PROJECT SURVEY OR THESE DESIGN DRAWINGS, HE MAY OPT TO HAVE A NEW TOPOGRAPHIC SURVEY PREPARED AT HIS OWN EXPENSE.
3. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL NPDES PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
4. INFORMATION CONCERNING SITE SOIL CONDITIONS SHALL BE PROVIDED BY THE OWNER'S GEOTECHNICAL ENGINEER. THE PROJECT GEOTECHNICAL REPORT AND RECOMMENDATIONS THEREIN ARE CONSIDERED PART OF THE AUTHORIZED CONSTRUCTION DOCUMENTS . IN CASE OF CONFLICT OR DISCREPANCY, THE GEOTECHNICAL REPORT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY.
5. EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND ARCHITECTURAL PLANS AND SPECIFICATIONS.
6. ALL FILL USED TO INCREASE THE ELEVATION OF THE FLOOR SLAB OR ANY FILL TO BE USED AS BACKFILL, SHALL BE CLEAN, SELECT, GRANULAR MATERIAL. PRIOR TO THE USE OF ANY GRANULAR FILL, GRADATION ANALYSIS SHALL BE PERFORMED ON REPRESENTATIVE SAMPLES OF THE FILL MATERIAL TO DETERMINE WHETHER THE MATERIAL IS SUITABLE FOR FILL. COMPACTED FILL SHALL BE PLACED IN ACCORDANCE WITH THE APPROVED GEOTECHNICAL REPORT FOR THE PROJECT.
7. ALL ROCKS, STUMPS, ROOTS, AND ORGANIC MATTER SHALL BE REMOVED TO A DEPTH OF TWO FEET MINIMUM BELOW THE BOTTOM OF THE BASE SECTIONS. THE CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER FOR DIRECTION BEFORE BURYING ROCK ONSITE.
8. ALL SOIL EROSION AND SEDIMENT SHALL BE CONTROLLED AND CONTAINED ON-SITE.
9. ALL SLOPES AND DISTURBED AREAS NOT COVERED BY BUILDING OR PAVEMENT SHALL BE GRADED UNIFORMLY AND SHALL RECEIVE A MINIMUM OF 4 INCHES OF TOPSOIL. THE CONTRACTOR SHALL IMPORT TOPSOIL IF NOT READILY AVAILABLE ONSITE. OPEN AREAS SHALL BE SEEDED, MULCHED, FERTILIZED AND WATERED TO PROVIDE AN UNIFORM STAND OF GRASS.
10. CONTRACTOR SHALL INSTALL SLOPE STABILIZATION FABRIC TO ALL SLOPES 2H:1V OR STEEPER AND SHALL MAINTAIN ALL SLOPE AREAS UNTIL THERE EXISTS A HEALTHY STAND OF GRASS.
11. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDINGS.
12. THE FLOW IN ALL EXISTING STORM SEWERS, STORM DRAINS, AND WATERWAYS SHALL BE MAINTAINED.
13. ALL SPOT ELEVATIONS SHALL BE TAKEN TO BE THE TOP OF PAVEMENT OR FINISHED GROUND UNLESS OTHERWISE NOTED.
    TC=TOP OF CURB ELEVATION
    MATCH=PROPOSED GRADE TO MATCH EXISTING GRADE
    TW=TOP OF RETAINING WALL ELEVATION;
    FG=FINISHED GRADE AT TOE OF WALL ELEVATION
14. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING STORM SEWER STRUCTURES, PIPES, AND ALL UTILITIES PRIOR TO CONSTRUCTION.
15. ALL PIPE LENGTHS SHOWN ON PLAN AND PROFILE VIEWS ARE BASED ON THE HORIZONTAL DISTANCE BETWEEN STRUCTURES.
16. THE CONTRACTOR SHALL COMPARE PLAN AND PROFILE STORM SEWER INFORMATION FOR DISCREPANCIES. IF ANY EXIST THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR CLARIFICATION.
17. PRECAST CONCRETE OR BRICK STRUCTURES MAY BE USED AT THE CONTRACTOR'S OPTION
18. ALL STORM PIPE CONNECTIONS AT MANHOLES SHALL BE WATER TIGHT
19. ALL STORM SEWER MANHOLE STRUCTURES IN PAVED AREAS SHALL BE INSTALLED OR ADJUSTED WITH TRAFFIC READY LIDS FLUSH WITH THE PAVEMENT. MANHOLE STRUCTURES IN UNPAVED AREAS SHALL BE INSTALLED FLUSH WITH FINISH GRADE.
20. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
21. ALL SYSTEM MANHOLES AND PIPES SHALL BE FLUSHED CLEAN PRIOR TO TURNING OVER TO THE OWNER.
22. THE CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK. EXISTING UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS ARE TAKEN FROM THE BEST SOURCES AVAILABLE (FIELD SURVEYS AND UTILITY MAPS) AND MAY NOT BE FULLY ACCURATE. AS SUCH, THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE GRADING. ANY UTILITY RELOCATION DEEMED NECESSARY BUT NOT SHOWN ON THE APPROVED DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION.
23. THE GRADING CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES, ASSOCIATED GOVERNMENT DEPARTMENTS, AND THE OWNER'S REPRESENTATIVE PRIOR TO INTERRUPTION OF ANY UTILITY SERVICE. NOTIFICATION MUST BE MADE PER THE PROJECT SPECIFICATIONS. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH AND ADHERENCE TO THE REQUIREMENTS OF EACH UTILITY COMPANY AND ANY GOVERNMENT UTILITY DEPARTMENT REGARDING SERVICE INTERRUPTION.

UTILITY NOTES

1. THE PROJECT UTILITY SURVEY HAVE BEEN PROVIDED BY BARRON LAND, LLC.
2. THE CONTRACTOR SHALL HAVE A COPY OF THE APPROVED PLANS, A COPY OF THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS, AND A COPY OF ALL PERMITS AND APPROVALS ON THE JOB.
3. ALL UTILITY TRENCHES ARE TO BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND FOR THE PROTECTION OF OTHER UTILITIES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, TRENCH EXCAVATION AND SHORINGS, TRAFFIC CONTROL, AND SECURITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SECURITY DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL COMPLY WITH THE LATEST OSHA STANDARDS AND/OR DIRECTIVES WITH REGARD TO EXCAVATION AND TRENCHING PROCEDURES.
6. ALL FILL MATERIAL SHALL BE PLACED AND COMPACTED PRIOR TO UTILITY INSTALLATION.
7. THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS "AS-BUILT PLANS" AND "FINAL PLATS" (IF APPLICABLE) UPON COMPLETION OF THE PROJECT.
8. THE CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK. EXISTING UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS ARE TAKEN FROM THE BEST SOURCES AVAILABLE (FIELD SURVEYS AND UTILITY MAPS) AND MAY NOT BE FULLY ACCURATE. AS SUCH, THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE GRADING. ANY UTILITY RELOCATION DEEMED NECESSARY BUT NOT SHOWN ON THE APPROVED DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION.
9. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY UTILITY CONFLICTS, ADDITIONAL UTILITIES ENCOUNTERED, AND/OR ANY OTHER UTILITY INFORMATION WHICH MAY REQUIRE EXAMINATION.
10. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO DETERMINE AND IMPLEMENT THEIR SPECIFIC INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
11. THE CONTRACTOR SHALL CALL 811 AT LEAST 72 HOURS PRIOR TO EXCAVATION IN ORDER THAT UTILITIES BE FIELD LOCATED.
12. THE CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITY INSPECTOR 72 HOURS BEFORE CONNECTING TO ANY EXISTING UTILITY.
13. THE SITE CONTRACTOR SHALL COORDINATE SERVICE ROUTING OF ALL GAS, TELEPHONE, AND ELECTRICAL LINES WITH THE APPROPRIATE UTILITY COMPANY. ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE RESPECTIVE UTILITY'S STANDARDS AND SPECIFICATIONS.
14. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES INVOLVED WITH REGARD TO RELOCATION OF OR ADJUSTMENTS TO EXISTING UTILITIES DURING CONSTRUCTION. THIS WORK SHALL BE PERFORMED IN A TIMELY FASHION AND WITH A MINIMAL DISRUPTION OF SERVICE.
15. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR THE PROPOSED LOCATION OF ALL WET AND DRY UTILITY ENTRANCES INTO THE BUILDING. CONTRACTOR SHALL COORDINATE INSTALLATION OF THE VARIOUS UTILITIES TO AVOID CONFLICTS AND ENSURE THAT THE PROPER DEPTHS ARE ACHIEVED.
16. ALL DRY UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE PROPER UTILITY COMPANY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL DRY UTILITIES BY OTHERS.
17. THE CONTRACTOR SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION.
18. THE CONTRACTOR SHALL COORDINATE THE INSTALLATIONS OF WATER AND SANITARY SERVICES WITH THE LOCAL WATER AND SEWER PROVIDER. THE LOCAL WATER AND SEWER AUTHORITY STANDARD SPECIFICATIONS AND DETAILS SHALL GOVERN ALL WATER AND SANITARY SEWER CONSTRUCTION.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXACT LOCATION, SIZE, AND MATERIAL OF ANY EXISTING WATER AND/OR SEWER FACILITY PROPOSED FOR CONNECTION OR USE BY THIS PROJECT. THE RELOCATION OF ALL WATER/SEWER FACILITIES SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY COMPANY.
20. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL TELEVISE EXISTING SANITARY SEWER LINE FROM THE POINT OF CONNECTION THROUGH THE NEXT SUCCESSIVE DOWNSTREAM RUN OF PIPE. THE CONTRACTOR SHALL ALSO TELEVISE ALL NEWLY INSTALLED SANITARY SEWER PIPE TO ENSURE LINES AND GRADES HAVE BEEN MET.
21. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN SANITARY, WATER, STORM, AND PRIVATE UTILITY LINES. MEASUREMENTS SHALL BE TAKEN FROM THE NEAREST EDGE OF THE UTILITIES IN QUESTION.
22. THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE WATER AND SEWER SERVICES SHALL BE 8'. THE MINIMUM VERTICAL SEPARATIONS SHALL BE 18"
23. SANITARY SEWER PIPE SLOPE SHALL BE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE.
24. ALL MANHOLES REQUIRE KOR-N-SEAL OR EQUAL RUBBER BOOTS.
25. TOPS FOR SANITARY SEWER MANHOLES PLACED WITHIN PAVED AREAS SHALL BE INSTALLED WITH TRAFFIC READY FRAMES AND SHALL MATCH THE FINISHED PAVEMENT ELEVATIONS. TOPS FOR MANHOLES PLACED WITHIN GRASSED AREAS SHALL MATCH FINISHED GRADE ELEVATIONS. ALL EXISTING MANHOLES & UTILITY BOXES SHALL BE ADJUSTED AS NECESSARY TO MATCH FINISHED GRADING.
26. ALL SANITARY MANHOLES AND PIPE SHALL BE FLUSHED CLEAN OF DEBRIS PRIOR TO TURNING SYSTEM OVER TO OWNER.
27. ALL FIRE HYDRANTS SHALL CONFORM TO LOCAL REQUIREMENTS.
28. THRUST BLOCKS ARE REQUIRED WHEREVER PIPE CHANGES DIRECTION (TEES, BENDS, ETC.).
29. GRAVITY SEWER LINE MATERIAL SHALL BE PVC (SDR35) OR DIP (CLASS 350).
30. THE PRIMARY ELECTRIC SERVICE SHALL BE PROVIDED BY THE LOCAL POWER PROVIDER. THIS INCLUDES THE TRANSFORMER, PAD, TRENCHING, BACKFILL AND COMPACTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE SECONDARY SERVICE. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF BOTH SERVICES.
31. THE GAS SERVICE UP TO THE GAS METER SHALL BE PROVIDED BY THE LOCAL GAS PROVIDER. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE GAS SERVICE.
32. THE GAS AND UNDERGROUND POWER LINES ARE SHOWN FOR INFORMATION PURPOSES ONLY. EXACT LOCATIONS SHALL BE FIELD DETERMINED DURING CONSTRUCTION.

EROSION NOTES

1. THE PROJECT TOPOGRAPHIC SURVEY HAS BEEN PROVIDED BY BARRON LAND, LLC. (THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY, OR FOR DESIGN ERRORS OR OMISSIONS AS A RESULT OF SURVEY INACCURACIES.)
2. THE OWNER SHALL ALLOW AND MAINTAIN OFF-STREET PARKING FOR WORKERS ON THE SUBJECT PROPERTY THROUGHOUT CONSTRUCTION.
3. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ONSITE WHENEVER LAND DISTURBANCE ACTIVITY IS IN PROGRESS.
4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL CONFORM TO THE LATEST EROSION AND SEDIMENT CONTROL REGULATIONS FOR ASSOCIATED FEDERAL, REGIONAL, AND LOCAL REGULATORY AGENCIES.
5. ALL EROSION CONTROL MEASURES SHALL MEET THE REQUIREMENTS AND THE SPECIFICATIONS CONTAINED WITHIN THE CONSTRUCTION DETAILS UNLESS AN EQUAL PRODUCT HAS BEEN PRESENTED TO AND APPROVED BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
6. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES. THESE MEASURES SHALL BE MAINTAINED THROUGHOUT THE ENTIRE DURATION OF LAND DISTURBING ACTIVITIES.
7. THE CONTRACTOR SHALL PROTECT ANY BORDERING OR ADJACENT DRAINAGE COURSE AND SHALL REMOVE ANY INTRUDING CONSTRUCTION DEBRIS OR SPOIL MATERIAL IN AN EXPEDITIOUS MANNER.
8. THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY MARKED AT THE OUTSET OF CONSTRUCTION AND SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS AS INDICATED ON THE APPROVED EROSION CONTROL DRAWINGS. IF WETLANDS EXIST ON-SITE, ALL CLEARING MUST BE PERFORMED IN ACCORDANCE WITH THE APPROVED CORPS WETLANDS PERMIT.
9. A CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED AT THE OUTSET OF CONSTRUCTION AND SHALL BE MAINTAINED APPROPRIATELY IN ORDER TO PREVENT TRACKING ONTO PUBLIC ROADWAYS. ALL MATERIALS SPILLED ONTO A PUBLIC ROADWAY OR INTO A PUBLIC STORM SEWER SHALL BE REMOVED IMMEDIATELY.
10. ONCE A CONSTRUCTION EXIT HAS BEEN APPROPRIATELY INSTALLED, APPROPRIATE PERIMETER EROSION CONTROL AND STORMWATER MEASURES SHALL BE INSTALLED PRIOR TO FURTHER CONSTRUCTION.
11. ALL SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED WITH EITHER PERMANENT HARD SURFACE GROUND COVER VEGETATION.
12. THE CONTRAC



LEGEND

- PROPERTY LINE
- ADJOINING PROPERTY
- EASEMENT LINE
- CONCRETE SIDEWALK
- CONCRETE CURB & GUTTER
- PARKING STRIPING
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- OVERHEAD ELECTRICAL LINE
- UNDERGROUND ELECTRICAL LINE
- UNDERGROUND TELECOMMUNICATION LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- STORM LINE
- EXISTING FENCE
- UTILITY POLE
- GUY WIRE ANCHOR
- ELECTRICAL VAULT
- TELECOMMUNICATIONS VAULT
- LIGHT POLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEAN OUT
- WATER BEND
- FIRE HYDRANT
- WATER VALVE
- STORM DRAIN INLET
- STORM DRAIN MANHOLE
- SIGN
- BOLLARD POST
- TREES
- WALL

GENERAL DEMOLITION NOTES:

1. IF NOT SHOWN ON THE DEMOLITION DRAWINGS, THE CONTRACTOR SHALL REMOVE ALL EXISTING MATERIALS AS NECESSARY TO COMPLETE ALL NEW WORK AS REQUIRED BY OTHER PORTIONS OF THE CONTRACT DOCUMENTS.
2. SALVAGE RIGHTS FOR ALL DEMOLISHED MATERIALS SHALL BE FIRST GIVEN TO THE OWNER. ANY MATERIALS NOT RETAINED BY THE OWNER SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.
3. THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS IN THE REMOVAL/DEMOLITON OF HAZARDOUS MATERIALS.
4. THE CONTRACTOR IS RESPONSIBLE FOR VERIFY EXISTING UTILITIES PRIOR TO DEMOLITION & EXCAVATION.
5. CONTRACTOR IS RESPONSIBLE FOR ALL REGISTRATIONS, PERMITS AND FEES REQUIRED TO REMOVE & PROPERLY DISPOSE OF ALL DEMOLITION MATERIALS.
6. DEMO CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPROVALS FROM AND NOTIFICATIONS TO ALL LOCAL, STATE AND FEDERAL AUTHORITIES.
7. DEMO CONTRACTOR IS REQUIRED TO VISIT SITE PRIOR TO BID AND NOTIFY ENGINEER OF ANY INCONSISTENCIES.
8. CONTRACTOR RESPONSIBLE TO COORDINATE AND ASSUME ANY FEES ASSOCIATED WITH REMOVAL OF UTILITIES. ALL ABANDONED UTILITIES TO BE REMOVED & CAPPED.
9. REFER TO SURVEY FOR LIMITS AND BOUNDARY OF PROPERTY.
10. CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS FROM YAVAPAI COUNTY PRIOR TO ANY DEMOLITION OR CONSTRUCTION.
11. CONTACT EL PASO COUNTY 48 HOURS PRIOR TO DEMOLITION OR EXCAVATION.

DAMAGES:

PROMPTLY REPAIR DAMAGES TO ADJACENT FACILITIES CAUSED BY DEMOLITON OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR COSTS INCURRED TO REPAIR DAMAGE TO ADJACENT FACILITIES.

GENERAL DEMOLITION SPECIFICATION

1. OWNER ASSUMES NO RESPONSIBILITY FOR CONDITION OF STRUCTURES TO BE DEMOLISHED.
2. CONDITIONS EXISTING AT TIME OF INSPECTION FOR BIDDING PURPOSE WILL BE MAINTAINED BY OWNER AS FAR AS PRACTICAL.
3. STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON-SITE WILL NOT BE PERMITTED.
4. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS.
5. DRAIN, PURGE, OR OTHERWISE REMOVE, COLLECT, AND DISPOSE OF CHEMICALS, GASES, EXPLOSIVES, ACIDS, FLAMMABLES, OR OTHER DANGEROUS MATERIALS BEFORE PROCEEDING WITH DEMOLITION OPERATIONS ACCORDING TO APPLICABLE CODES / REGULATIONS.
7. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
8. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY GOVERNING REGULATIONS.
9. USE OF EXPLOSIVES WILL NOT BE PERMITTED.
10. USE WATER, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS.
11. DO NOT CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS, SUCH AS ICE, FLOODING, AND POLLUTION, WHEN USING WATER. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
13. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE.
14. DO NOT BURN DEMOLISHED MATERIALS.

DEMO NOTES:	
#	*DESCRIPTION*
1	EXISTING TO BE REMOVED
2	EXISTING TO BE RELOCATED
3	EXISTING TO REMAIN

SITE LEGEND:

- LIMITS OF CONSTRUCTION
- LIMITS OF DEMOLITION

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THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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S25-T13S-R66W | 5570 BARNES ROAD | COLORADO SPRINGS | EL PASO COUNTY, CO

BRC COLORADO SPRINGS

BLACK ROCK DEVELOPMENT COMPANY, LLC

DEVELOPMENT PLANS

DEMOLITION PLAN

DATE 2025-02-26

REVISIONS

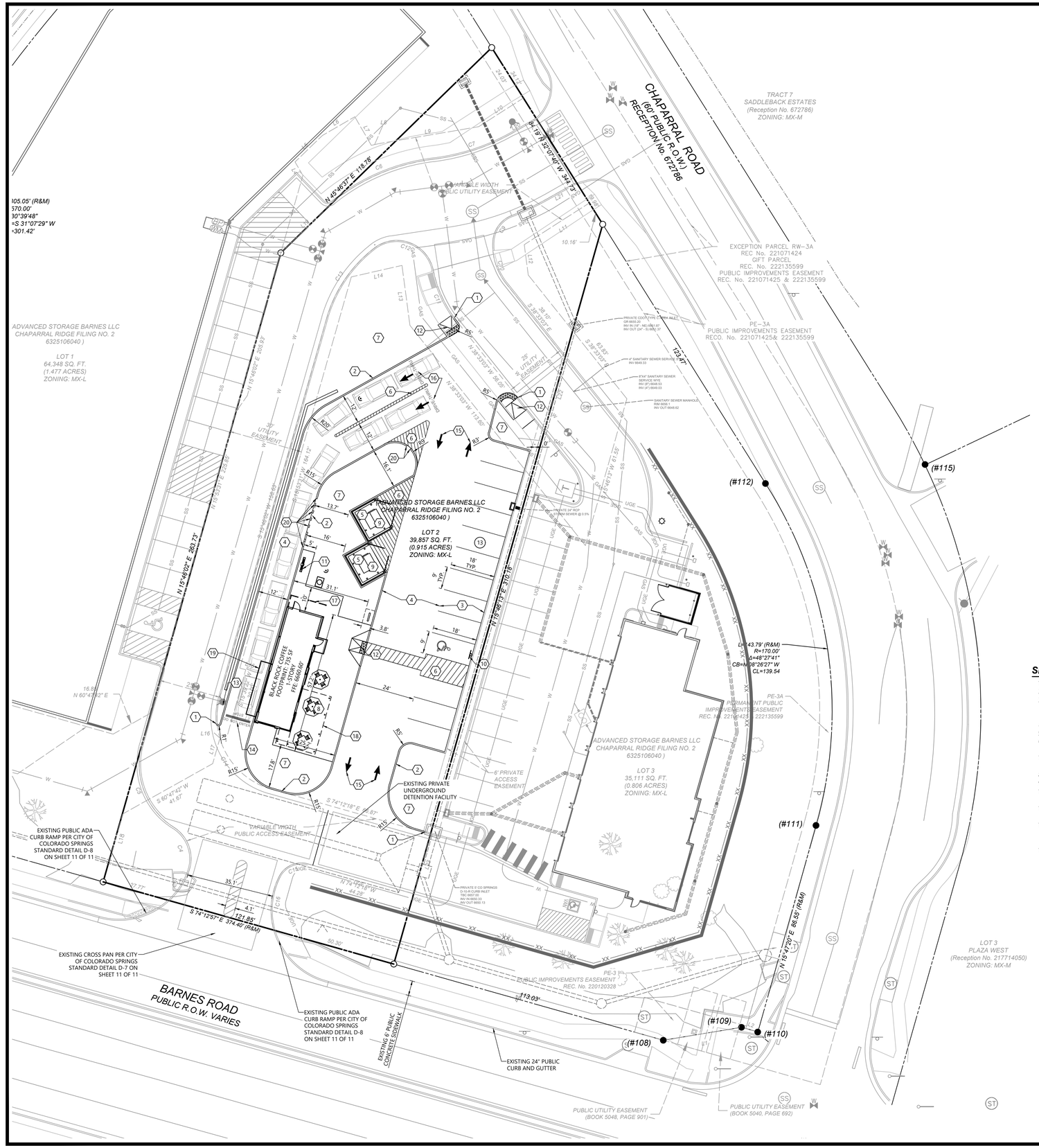
0 10' 20'
SCALE: 1" = 20'

DRAWN BY: A.M., R.S., N.N.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. 3 OF 11

CAD FILE: C110 DEMO

NOT-ISSUED-FOR-CONSTRUCTION

FILE NAME: K:\24005174 - BRC - Barnes & Jeffrey - Colorado Springs CO_LD\04 PRODUCTION\C110 DEMO.dwg LAST SAVED BY: mngo 1/22/2025 8:12 AM PLOTTED BY: Ngoc Ngo 1/22/2025 PAPER: ARCH FULL BLEED D (24.00 X 36.00 INCHES) DEVICE: DWG TO PDF.PC3 PLOT STYLE: ATWELL.CTB



SITE AREA	
TOTAL PROPERTY AREA:	0.91 AC± AC (39,857± S.F.)

ZONING CLASSIFICATION	
JURISDICTION:	CITY OF COLORADO SPRINGS
ZONING:	MX-L, MIXED USE LARGE SCALE
ADJACENT ZONING:	MX-M (NORTH, EAST, SOUTH), PDZ (WEST)

BUILDING SETBACKS	
FRONT	NONE
SIDE	NONE
REAR	NONE

BUILDING SUMMARY	
PROPOSED BUILDING AREA:	735 SF
BUILDING HEIGHT LIMIT:	65'

PARKING SUMMARY	
PARKING REQUIREMENTS	1 SPACE/300 GFA OF BUILDING 1 SPACE/350 SF OF OUTDOOR SEATING
TOTAL PARKING REQUIRED	4 SPACES
PARKING PROVIDED	12 SPACES, 1 ADA SPACE

SITE LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- TRAFFIC FLOW ARROW (PAVEMENT MARKING)
- HANDICAP STALL
- PARKING SPACE COUNT
- STOP BAR (PAVEMENT MARKING)

NOTE NUMBER		CORRESPONDING DETAIL NUMBER (SEE DETAIL SHEETS)
1	TIE IN CURB/DRIVE TO MATCH EXISTING CURB/STREET	-
2	NEW CONCRETE CURB - SEE DETAILS	10 OF 11
3	PROPOSED LIGHT DUTY ASPHALT PAVEMENT	10 OF 11
4	PROPOSED HEAVY DUTY ASPHALT PAVEMENT	10 OF 11
5	PROPOSED HEAVY DUTY CONCRETE PAVEMENT	10 OF 11
6	4" WIDE PAINTED STRIPING @ 2' O.C. AND 45°	-
7	LANDSCAPE AREA	SEE LANDSCAPE PLAN(S)
8	CONCRETE SIDEWALK (SEE WIDTH THIS SHEET)	10 OF 11
9	DUMPSTER ENCLOSURE	SEE ARCHITECTURAL PLANS
10	H/C PARKING SIGNAGE	SEE ARCHITECTURAL PLANS
11	PROPOSED MENU BOARD & ORDER/SPEAKER BOX	SEE ARCHITECTURAL PLANS
12	PROPOSED ADA CURB RAMP	-
13	EXISTING FIRE HYDRANT	-
14	DO NOT ENTER / STOP STRIPING	10 OF 11
15	TRAFFIC FLOW ARROW STRIPING	-
16	DRIVE-THRU STRIPING	10 OF 11
17	PROPOSED SCREEN WALL	-
18	PROPOSED PATIO CANOPY	-
19	PROPOSED DRIVE-THROUGH AWNING	-
20	PROPOSED CURB CUT (TYP.) FOR WATER QUALITY PURPOSES	-

SITE GENERAL NOTES:

1. DIMENSIONS SHOWN ARE TO THE FACE OF CURB, UNLESS OTHERWISE INDICATED.
2. USE 3' RADII, UNLESS SHOWN OTHERWISE.
3. THE INFORMATION PERTAINING TO EXISTING CONDITIONS WAS TAKEN FROM A SURVEY PROVIDED BY: BARRON LAND, LLC. THE LOCATION OF ALL EXISTING UTILITIES WERE OBTAINED FROM AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND DEPTH OF UTILITY PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
4. ALL ACCESSIBLE PARKING SPACES AND TRAVEL ROUTES SHALL BE CONSTRUCTED IN ACCORDANCE WITH A.D.A. AND/OR STATE REQUIREMENTS.
5. ANY DISCREPANCIES IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER AND ENGINEER PRIOR TO THE START OF CONSTRUCTION.
6. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION SHALL BEGIN UNTIL ALL PERMITS HAVE BEEN RECEIVED.
7. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKERS AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE. CONTRACTOR SHALL REPAIR ANY DAMAGE DONE TO PRIVATE OR PUBLIC PROPERTY.
8. ACCESS TO UTILITIES, FIRE HYDRANTS, ETC. SHALL REMAIN UNDISTURBED AT ALL TIMES, UNLESS COORDINATED OTHERWISE.
9. THE GENERAL CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
10. ALL SUBGRADE PREPARATION, PAVING, AND UTILITY TRENCHING MUST BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS INVESTIGATION. IF THERE IS A CONFLICT BETWEEN THE SOILS REPORT AND THE PLANS, THE MORE PROHIBITIVE OF THE TWO SHALL TAKE PRECEDENCE.
11. CONTRACTOR TO ENSURE COMPLIANCE WITH ANY AND ALL LAND DISTURBANCE NOTIFICATIONS REQUIREMENTS, AND THAT ALL REQUIRED EROSION CONTROL MEASURES ARE INSTALLED AND MAINTAINED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
12. FOR WORK IN, OR ADJACENT TO, STREET RIGHT OF WAYS, CONTRACTOR SHALL ENSURE APPROPRIATE PERMITS ARE OBTAINED PRIOR TO CONSTRUCTION. CONTRACTOR TO ERECT AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES IN CONFORMANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
13. ALL PARKING LOT LIGHTING MUST BE INSTALLED AND OPERATE SO AS NOT TO PRODUCE GLARE OR CAST DIRECT ILLUMINATION ACROSS THE BOUNDING PROPERTY LINE. LOW PRESSURE SODIUM LIGHTING IS PROHIBITED. ALL LIGHTING FIXTURES MUST BE RESTRICTED TO DOWN-LIGHT OR CUT-OFF TYPES.

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NOTICE:

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972.638.8860

S25-T13S-R66W
5570 BARNES ROAD
COLORADO SPRINGS
EL PASO COUNTY, CO

BRC COLORADO SPRINGS
BLACK ROCK DEVELOPMENT COMPANY, LLC
DEVELOPMENT PLANS
SITE PLAN

DATE 2025-02-26

REVISIONS

0 10' 20'
SCALE: 1"=20'

DRAWN BY: A.M., R.S., N.N.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. 4 OF 11

CAD FILE: C200 SITE PLAN
NOT-ISSUED-FOR-CONSTRUCTION

FILE NAME: K:\24005174 - BRC - Barnes & Jeffrey - Colorado Springs CO_LD\04 PRODUCTION\C200 SITE PLAN.dwg LAST SAVED BY: nnap 2/26/2025 3:02 PM PLOTTED BY: Nhan Nap 2/26/2025 PAPER: ARCH FULL BLEED D (24.00 X 36.00 INCHES) DEVICE: DWG TO PDF.PC3 PLOT STYLE: ATWELL.CTB



GRADING NOTES:

1. GRADES SHOWN ARE PROPOSED FINISHED GRADES.
2. ALL PROPOSED GRADES AND SPOT ELEVATIONS INDICATE TOP OF PAVEMENT OR FACE/FLOWLINE OF CURB UNLESS OTHERWISE NOTED.
3. THE INFORMATION PERTAINING TO EXISTING CONDITIONS WAS TAKEN FROM A SURVEY PROVIDED BY BARRON LAND, LLC.
4. THE LOCATION OF ALL EXISTING UTILITIES WERE OBTAINED FROM AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND DEPTH OF UTILITY PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
5. ANY DISCREPANCIES IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER AND ENGINEER PRIOR TO THE START OF CONSTRUCTION.
6. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION SHALL BEGIN UNTIL ALL PERMITS HAVE BEEN RECEIVED.
7. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKERS AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE. CONTRACTOR SHALL REPAIR ANY DAMAGE DONE TO PRIVATE OR PUBLIC PROPERTY.
8. ACCESS TO UTILITIES, FIRE HYDRANTS, ETC. SHALL REMAIN UNDISTURBED AT ALL TIMES, UNLESS COORDINATED OTHERWISE.
9. THE GENERAL CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
10. ALL SUBGRADE PREPARATION, PAVING, AND UTILITY TRENCHING MUST BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS INVESTIGATION. IF THERE IS A CONFLICT BETWEEN THE SOILS REPORT AND THE PLANS, THE MORE PROHIBITIVE OF THE TWO SHALL TAKE PRECEDENCE.
11. CONTRACTOR TO ENSURE COMPLIANCE WITH ANY AND ALL LAND DISTURBANCE NOTIFICATIONS REQUIREMENTS, AND THAT ALL REQUIRED EROSION CONTROL MEASURES ARE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE STATE, LOCAL, OR FEDERAL REQUIREMENTS.
12. REMOVE EXISTING TOPSOIL IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, PRIOR TO PLACEMENT OF ANY FILL MATERIAL.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY STANDARDS, COLORADO STATE LAW, AND O.S.H.A. STANDARDS FOR ALL EXCAVATION IN EXCESS OF FIVE FEET IN DEPTH.
14. DRAINAGE SHOULD BE MAINTAINED AWAY FROM THE FOUNDATIONS, BOTH DURING AND AFTER CONSTRUCTION.

GRADING LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING MINOR CONTOURS
- EXISTING MAJOR CONTOURS
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- EXISTING STORM LINE
- PROPOSED SPOT ELEV
- SLOPE ARROW
- PROPOSED (PR.) SPOT ELEV
- PR. SPOT ELEV - MATCH EX. GRADE
- PR. SPOT ELEV - TOP OF CURB GUTTER/BOTTOM OF CURB = TC - 0.5'
- PR. SPOT ELEV - SIDEWALK
- FINISHED FLOOR ELEVATION
- EXISTING SLOPE ARROW
- PROPOSED SLOPE ARROW

ABBREVIATION LIST

EG	EXISTING GRADE
TC	TOP OF CURB
TP	TOP OF PAVEMENT
TW	TOP OF WALL
BW	BOTTOM OF WALL
ME	MATCH EXISTING
SW	SIDEWALK

GRATE INLET

STORM MANHOLE

PROPOSED PLANNED INFILTRATION AREA

FOR CITY USE:

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EL PASO COUNTY, CO

BRC COLORADO SPRINGS
BLACK ROCK DEVELOPMENT COMPANY, LLC
DEVELOPMENT PLANS
PRELIMINARY GRADING PLAN

DATE 2025-02-26

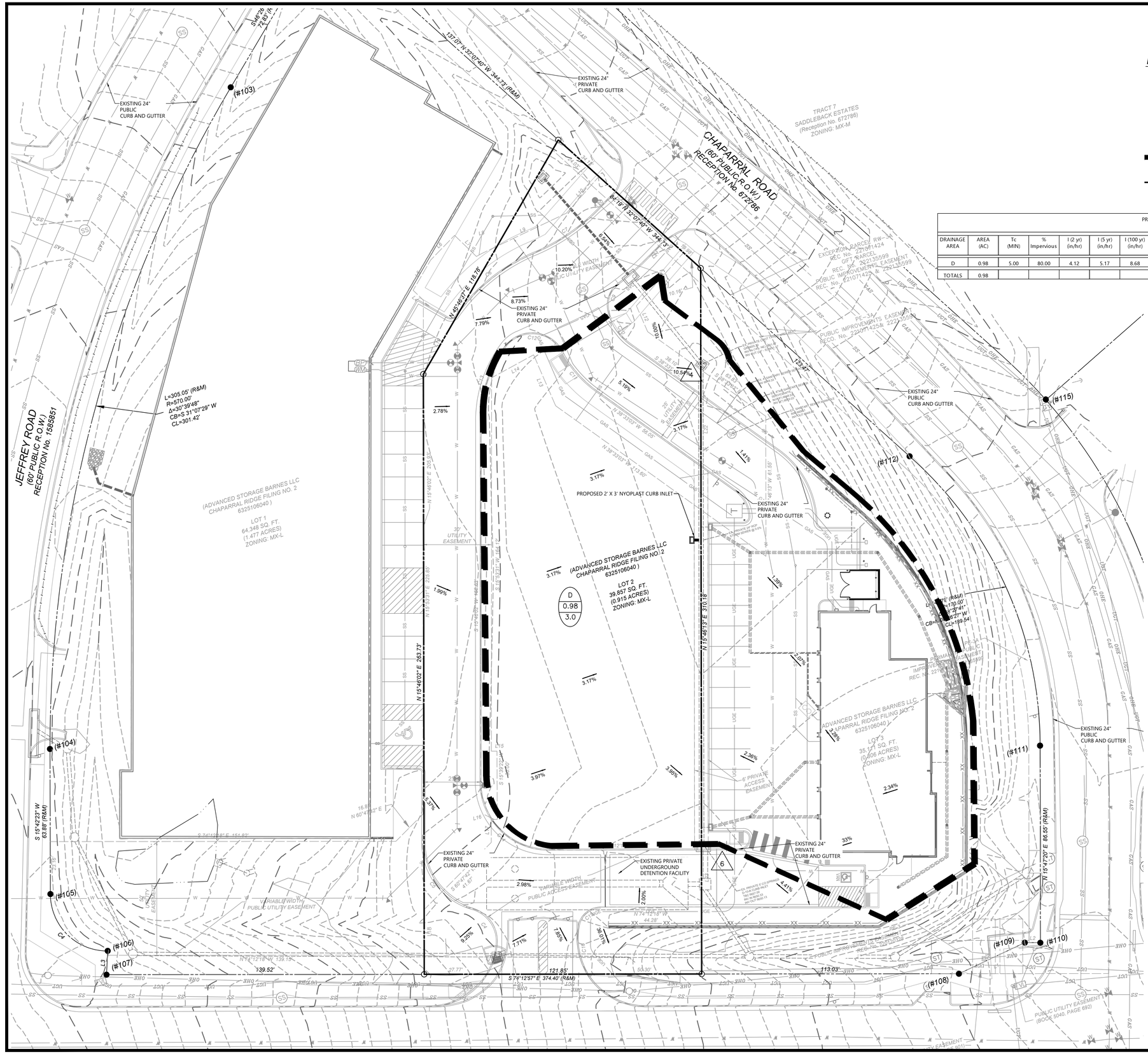
REVISIONS

0 10' 20'
SCALE: 1"=20'

DRAWN BY: A.M., R.S., N.N.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. 5 OF 11

NOT-ISSUED-FOR-CONSTRUCTION CAD FILE: C300 GRADING PLAN

FILE NAME: K:\24005174 - BRC - Barnes & Jeffrey - Colorado Springs CO_LD\04 PRODUCTION\C00 GRADING PLAN.dwg LAST SAVED BY: nnga 2/26/2025 3:27 PM PLOTTED BY: Nguc Nga 2/26/2025 3:27 PM PLOTTED BY: Nguc Nga 2/26/2025 PAPER: ARCH FULL BLEED D (24.00 X 36.00 INCHES) DEVICE: DWG TO PDF.PC3 PLOT STYLE: ATWELL.CTB


JEFFREY ROAD
(60' PUBLIC R.O.W.)
RECEPTION No. 1585851
CHAPARRAL ROAD
(60' PUBLIC R.O.W.)
RECEPTION No. 672186
TRACT 7
SADDLEBACK ESTATES
(Reception No. 672786)
ZONING: MX-M
(ADVANCED STORAGE BARNES LLC
CHAPARRAL RIDGE FILING NO. 2
6325106040)
LOT 1
64,348 SQ. FT.
(1.477 ACRES)
ZONING: MX-L
LOT 2
39,857 SQ. FT.
(0.915 ACRES)
ZONING: MX-L
LOT 3
35,177 SQ. FT.
(0.806 ACRES)
ZONING: MX-L
EXISTING 24" PUBLIC CURB AND GUTTER
EXISTING 24" PRIVATE CURB AND GUTTER
PROPOSED 2' X 3' NYOPLAST CURB INLET
EXISTING PRIVATE UNDERGROUND DETENTION FACILITY
VARIABLE WIDTH PUBLIC UTILITY EASEMENT
VARIABLE WIDTH PUBLIC ACCESS EASEMENT
30' UTILITY EASEMENT
6' PRIVATE ACCESS EASEMENT
PUBLIC UTILITY EASEMENT (BOOK 5040, PAGE 692)
(#103)
(#104)
(#105)
(#106)
(#107)
(#108)
(#109)
(#110)
(#111)
(#112)
(#115)
S 15°42'57" W 63.86' (R&M)
L=305.05' (R&M)
R=570.00'
Δ=30°39'48"
CB=S 31°07'29" W
CL=301.42'
N 15°40'02" E 263.73'
N 15°40'13" E 310.18'
S 74°12'57" E 374.40' (R&M)
N 74°12'18" W 139.15'
121.85'
139.52'
113.03'
N 15°47'20" E 86.55' (R&M)
S 74°12'57" W 44.28'
S 74°12'57" W 27.77'
N 74°12'18" W 44.28'
N 60°47'42" E 41.67'
S 60°47'42" W 41.67'
N 15°40'02" E 205.93'
S 15°53'31" W 466.43'
N 15°53'31" E 466.43'
S 15°36'02" W 263.73'
N 60°47'42" E 16.87'
S 74°12'57" E 151.82'
S 74°12'57" E 151.82'
S 74°12'57" E 151.82

DRAINAGE LEGEND:

H
0.79
6.22

- SUBAREA
- AREA – ACRES
- FLOW – Q 100 (CFS)
- DRAINAGE AREA LINE
- PROPERTY BOUNDARY
- PROPOSED PRIVATE CURB

DRAINAGE NOTES:

1. THE DEVELOPER, THROUGH HIS ENGINEER OR AUTHORIZED REPRESENTATIVE, SHALL ACQUIRE ALL REQUIRED NATIONWIDE PERMITS, SUCH AS CWA 401, 402 AND/OR 404 PERMITS, AS APPROPRIATE, FROM THE USEPA, AND/OR USACE.
2. TOPOGRAPHICAL INFORMATION IS PRESENTED FOR DRAINAGE ANALYSIS PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION.
3. TOPOGRAPHICAL INFORMATION PRESENTED HEREIN IS DERIVED FROM SURVEY AS PROVIDED BY BARRON LAND, LLC.

POST-DEVELOPED DRAINAGE SUMMARY
BRC - Colorado Springs

DRAINAGE AREA	AREA (AC)	Tc (MIN)	C-VALUE (5 yr)	C-VALUE (100 yr)	I (5yr) (in/hr)	I (100 yr) (in/hr)	Q (5 yr) (cfs)	Q (100 yr) (cfs)	REMARKS
D1	0.04	5.00	0.48	0.65	5.17	8.68	0.09	0.21	TO DESIGN POINT 6
D2	0.46	5.00	0.71	0.82	5.17	8.68	1.69	3.28	TO DESIGN POINT 4
D3	0.48	5.00	0.65	0.77	5.17	8.68	1.62	3.22	TO DESIGN POINT 4
TOTALS	0.98						3.31	6.50	

PROVIDED MAXIMUM IMPERVIOUS COVER = 80.0%

PROPOSED IMPERVIOUS COVER = 74.0%

ALLOWED IMPERVIOUS COVER FOR SITE AREA HAS NOT BEEN EXCEEDED.

PRIVATE DETENTION FOR MASTER STORM FACILITY HAS BEEN MADE TO ACCOMMODATE BASIN AREA D

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EL PASO COUNTY, CO

BRC COLORADO SPRINGS
BLACK ROCK DEVELOPMENT COMPANY, LLC
DEVELOPMENT PLANS
POST-DEV DAM

DATE 2025-02-26

REVISIONS

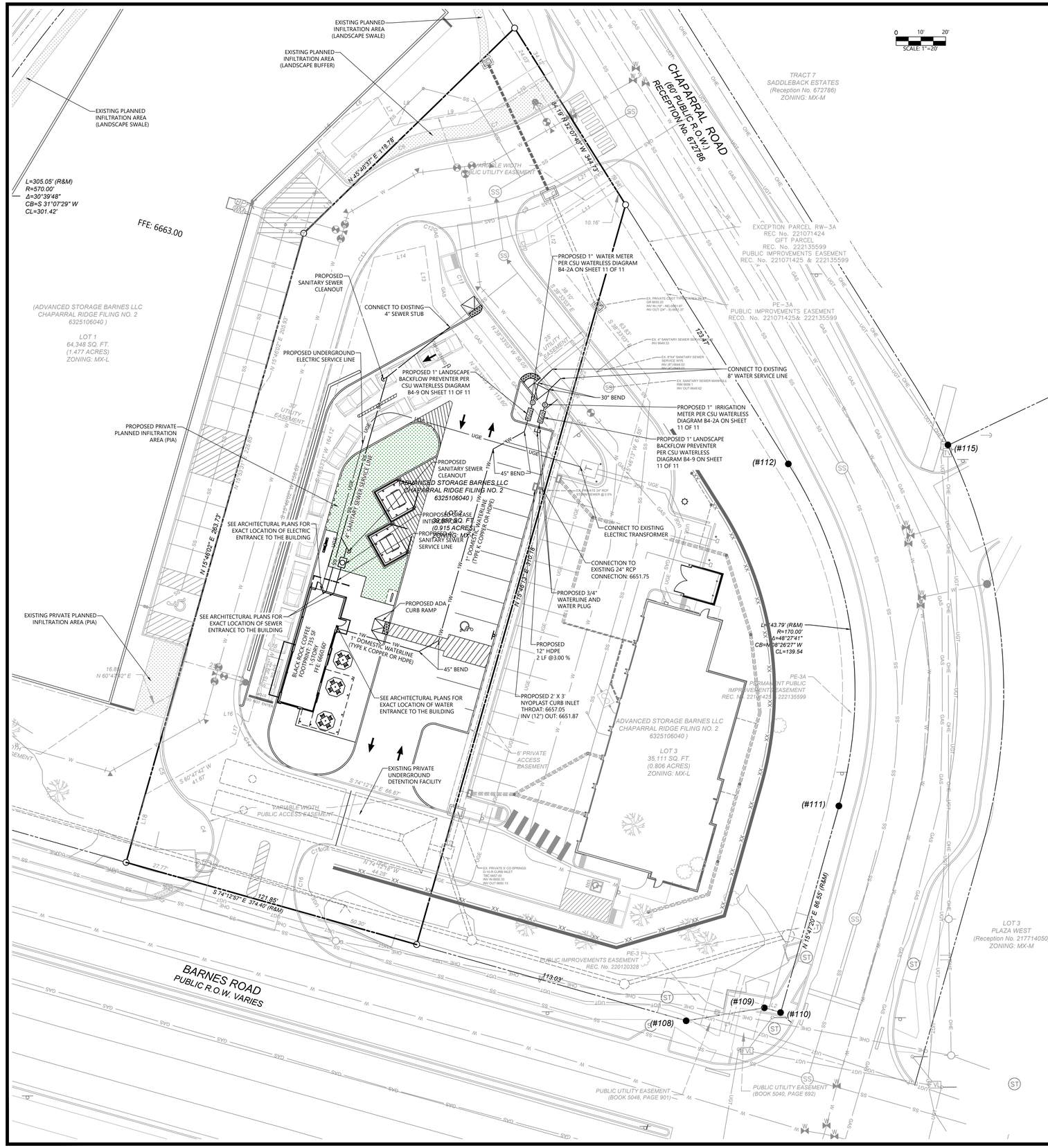
0 10' 20'
SCALE: 1"=20'

DRAWN BY: A.M., R.S., N.N.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. 7 OF 11

CAD FILE: C3D POST-DEV DAM

NOT–ISSUED–FOR–CONSTRUCTION

FILE NAME: K:\24005174 - BRC - Barnes & Jeffrey - Colorado Springs CO_LD\04 PRODUCTION\C3D POST-DEV DAM.dwg LAST SAVED BY: rsaenz 2/26/2025 12:18 PM PLOTTED BY: Ngoc Ngo 2/26/2025 PAPER: ARCH FULL BLEED D (24.00 X 36.00 INCHES) DEVICE: DWG TO PDF.PC3 PLOT STYLE: ATWELL.CTB



NOTE: CSU FIELD ENGINEER TO DETERMINE FINAL GAS/ELECTRIC METER, TRANSFORMER AND SERVICE LINE LOCATIONS. CONTACT FIELD ENGINEERING AT 719-668-4985 (GAS) OR 719-668-5564 (ELECTRIC) WITH ANY QUESTIONS.

UTILITY LEGEND

- EXISTING PROPERTY LINE
- OHE — ELECTRIC OVERHEAD LINE
- UGE — ELECTRIC UNDERGROUND LINE
- GAS — GAS LINE
- SS — SEWER LINE
- UGT — TELEPHONE UNDERGROUND LINE
- #W — DOMESTIC WATER LINE #=SIZE
- SANITARY SEWER MANHOLE
- GREASE TRAP
- SANITARY SEWER CLEAN OUT
- WATER METER
- WATER BEND 45°
- WATER BEND 22.5°
- FIRE HYDRANT
- ELECTRICAL TRANSFORMER
- PROPOSED PLANNED INFILTRATION AREA

PRELIMINARY UTILITY PLAN GENERAL NOTES

PROPERTY OWNER(S) ACKNOWLEDGE AND AGREE TO THE FOLLOWING UPON APPROVAL OF PRELIMINARY UTILITY PLAN:

1. COLORADO SPRINGS UTILITIES (SPRINGS UTILITIES) SHALL MAKE THE FINAL DETERMINATION OF THE LOCATION OF ALL WATER, WASTEWATER, ELECTRIC AND GAS FACILITIES, WHICH MAY NOT BE THE SAME LOCATION AS SHOWN ON THIS PRELIMINARY UTILITY PLAN.
2. PROPERTY OWNER(S) ("OWNER") ACKNOWLEDGES THAT THE CONNECTION AND/OR EXTENSION OF UTILITY SERVICES TO THE PROPERTY IDENTIFIED IN THIS PRELIMINARY UTILITY PLAN ("PROPERTY") SHALL BE IN ACCORD WITH ALL APPLICABLE CODES AND REGULATIONS, SPRINGS UTILITIES LINE EXTENSION & SERVICE STANDARDS ("STANDARDS"), TARIFFS, COLORADO SPRINGS CITY CODE, RESOLUTIONS, AND POLICIES, AND PIKES PEAK REGIONAL BUILDING DEPARTMENT CODES, IN EFFECT AT THE TIME OF UTILITY SERVICE CONNECTION AND/OR EXTENSION.
3. OWNER ACKNOWLEDGES RESPONSIBILITY FOR THE COSTS OF EXTENSIONS OR UTILITY SYSTEM IMPROVEMENTS THAT SPRINGS UTILITIES DETERMINES NECESSARY TO PROVIDE UTILITY SERVICES TO THE PROPERTY OR TO ENSURE TIMELY DEVELOPMENT OF INTEGRATED UTILITY SYSTEMS SERVING THE PROPERTY AND AREAS OUTSIDE THE PROPERTY (INCLUDING THE COSTS TO DESIGN AND INSTALL WATER SYSTEMS, WASTEWATER COLLECTION SYSTEMS, AND ANY GAS OR ELECTRIC LINES TO AND WITHIN THE PROPERTY). OWNER MAY BE ELIGIBLE FOR A COST RECOVERY AGREEMENT AS PROVIDED IN UTILITIES' RULES AND REGULATIONS.
4. SPRINGS UTILITIES UTILITY SERVICES ARE AVAILABLE ON A "FIRST-COME, FIRST-SERVED" BASIS, AND THEREFORE NO SPECIFIC ALLOCATIONS OR AMOUNTS OF UTILITY SERVICES, FACILITIES, CAPACITIES OR SUPPLIES ARE RESERVED FOR THE OWNER, AND SPRINGS UTILITIES MAKES NO COMMITMENT AS TO THE AVAILABILITY OF ANY UTILITY SERVICE UNTIL SUCH TIME AS AN APPLICATION FOR PERMANENT SERVICE IS APPROVED BY SPRINGS UTILITIES.
5. THE RELOCATION OR ALTERATION OF ANY EXISTING UTILITY FACILITIES WITHIN THE PROPERTY WILL BE AT THE OWNER'S SOLE COST AND EXPENSE. IF SPRINGS UTILITIES DETERMINES THAT OWNER'S RELOCATION OR ALTERATION REQUIRES NEW OR UPDATED EASEMENTS, OWNER SHALL CONVEY THOSE EASEMENTS PRIOR TO RELOCATING OR ALTERING THE EXISTING UTILITY FACILITIES.
6. OWNER SHALL DEDICATE BY PLAT AND/OR CONVEY BY RECORDED DOCUMENT, ALL PROPERTY AND EASEMENTS THAT SPRINGS UTILITIES DETERMINES ARE REQUIRED FOR ALL UTILITY SYSTEM FACILITIES NECESSARY TO SERVE THE PROPERTY OR TO ENSURE DEVELOPMENT OF AN INTEGRATED UTILITY SYSTEM. ALL EASEMENTS GRANTED BY SEPARATE INSTRUMENT SHALL UTILIZE SPRINGS UTILITIES' THEN-CURRENT PERMANENT EASEMENT AGREEMENT FORM.
7. THE WATER SYSTEM FACILITIES MUST MEET SPRINGS UTILITIES CRITERIA FOR WATER QUALITY, RELIABILITY AND PRESSURE, INCLUDING LOOPING REQUIREMENTS (SEE SPRINGS UTILITIES LINE EXTENSION AND SERVICE STANDARDS).
8. OWNER RECOGNIZES THAT THE EXTENSION OF WATER SYSTEM FACILITIES MAY AFFECT THE QUALITY OF WATER IN THE SPRINGS UTILITIES WATER SYSTEM. WHEN WATER QUALITY IS AFFECTED, OWNER ACKNOWLEDGES RESPONSIBILITY FOR ANY COSTS THAT SPRINGS UTILITIES DETERMINES NECESSARY IN ORDER TO MAINTAIN WATER QUALITY IN ITS SYSTEM AS A RESULT OF OWNER'S WATER SYSTEM EXTENSIONS. OWNER MAY BE REQUIRED TO SUBMIT A WATER QUALITY PLAN FOR THE PROJECT.
9. OWNER MUST CONTACT SPRINGS UTILITIES FIELD ENGINEERING TO DETERMINE THE LOCATION OF ALL NATURAL GAS AND ELECTRIC METERS AND TRANSFORMERS AND TO SECURE APPROVAL OF GAS-SERVICE-LINE PRESSURES IN EXCESS OF SPRINGS UTILITIES STANDARD GAS SYSTEM PRESSURE. (CONTACT FIELD ENGINEERING NORTH 668-4985 OR SOUTH 668-5564).
10. IT SHALL NOT BE PERMISSIBLE FOR ANY PERSON TO MODIFY THE GRADE OF THE EARTH WITHIN ANY SPRINGS UTILITIES EASEMENT OR RIGHTS OF WAY WITHOUT THE WRITTEN APPROVAL OF SPRINGS UTILITIES. IMPROVEMENTS, STRUCTURES AND TREES SHALL NOT BE LOCATED WITHIN UTILITY EASEMENT, SHALL NOT VIOLATE NATIONAL ELECTRIC SAFETY CODE (NESC) PROVISIONS AND CLEARANCES, AND SHALL NOT IMPAIR ACCESS OR THE ABILITY TO MAINTAIN UTILITY FACILITIES.
11. SPRINGS UTILITIES APPROVAL OF THIS PRELIMINARY UTILITY PLAN SHALL NOT BE CONSTRUED AS A LIMITATION UPON THE AUTHORITY OF SPRINGS UTILITIES TO APPLY ITS STANDARDS; AND IF THERE ARE ANY CONFLICTS BETWEEN ANY APPROVED DRAWINGS AND ANY PROVISION OF STANDARDS OR THE CITY CODE, THEN THE STANDARDS OR CITY CODE SHALL APPLY. SPRINGS UTILITIES' APPROVAL OF THIS PRELIMINARY UTILITY PLAN SHALL NOT BE CONSTRUED AS A LIMITATION UPON THE AUTHORITY OF THE CITY OF COLORADO SPRINGS OR SPRINGS UTILITIES TO ADOPT DIFFERENT ORDINANCES, RULES, REGULATIONS, RESOLUTIONS, POLICIES OR CODES WHICH CHANGE ANY OF THE PROVISIONS OF THE STANDARDS SO LONG AS THESE APPLY TO THE CITY GENERALLY AND ARE IN ACCORD WITH THE THEN-CURRENT TARIFFS, RATES AND POLICIES OF SPRINGS UTILITIES.

FLOODPLAIN STATEMENT

THE FEMA FLOOD INSURANCE RATE MAP (FIRM) FOR COMMUNITY PANEL 08041C0538G, EFFECTIVE DECEMBER 7, 2018 SHOWS THAT NO PORTION OF THIS DEVELOPMENT LIES WITHIN THE 100 YEAR FLOOD PLAIN OF THE TEMPLETON GAP FLOODWAY, NOR ITS TRIBUTARIES. THE SITE IS LOCATED IN ZONE X, AND AREA OF MINIMAL FLOODING, AS PER THE FIRM.

GEOLOGIC HAZARD WAIVER NOTE

THIS PROPERTY IS SUBJECT TO THE FINDINGS, SUMMARY AND CONCLUSIONS OF A GEOLOGIC HAZARD REPORT PREPARED BY ENTECH ENGINEERING, INC., DATED SEPTEMBER 22, 2023 WHICH IDENTIFIED THE FOLLOWING SPECIFIC HAZARDS: ARTIFICIAL FILL, POTENTIALLY UNSTABLE SLOPES, EROSION, PONDED WATER. A COPY OF SAID REPORT HAS BEEN PLACED WITHIN FILE DEPN-23-0171, OR WITHIN THE SUBDIVISION FILE OF THE CITY OF COLORADO SPRINGS PLANNING AND DEVELOPMENT TEAM. CONTACT THE PLANNING AND DEVELOPMENT TEAM AT 30 SOUTH NEVADA AVE., SUITE 701, COLORADO SPRINGS, CO. IF YOU WOULD LIKE TO REVIEW SAID REPORT.

ADA DESIGN PROFESSIONAL STANDARDS STATEMENT

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 THE CITY OF COLORADO SPRINGS DOES NOT ENSURE COMPLIANCE WITH THE ADA OR ANY OTHER FEDERAL OR STATE ACCESSIBILITY LAWS OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS. SOLE RESPONSIBILITY FOR COMPLIANCE WITH FEDERAL OR STATE ACCESSIBILITY LAWS LIES WITH THE PROPERTY OWNER.

FOR CITY USE:

WATER SERVICE PROVIDER

CONTACT: DREW MAKINGS
COLORADO SPRINGS UTILITIES
PHONE: (719) 668-8127

SANITARY SEWER SERVICE PROVIDER

CONTACT: DREW MAKINGS
COLORADO SPRINGS UTILITIES
PHONE: (719) 668-8127

ELECTRIC SERVICE PROVIDER

CONTACT: DREW MAKINGS
COLORADO SPRINGS UTILITIES
PHONE: (719) 668-8127

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PRELIMINARY UTILITY & PUBLIC FACILITY PLAN

DATE 2025-02-26

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SCALE: 1"=20'

DRAWN BY: A.M., R.S., N.N.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. 8 OF 11

NOT-ISSUED-FOR-CONSTRUCTION
CAD FILE: C400 UTILITY PLAN

FILE NAME: K:\24005174 - BRC - Barnes & Jeffrey - Colorado Springs CO_LD\04 PRODUCTION\C400 UTILITY PLAN.dwg LAST SAVED BY: nngo 2/24/2025 1:17 PM PLOTTED BY: Nguo Ngo 2/24/2025 PAPER: ARCH FULL BLEED D (24.00 X 36.00 INCHES) DEVICE: DWG TO PDF.PC3

EROSION CONTROL GENERAL NOTES:

1. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL CONFORM TO THE LATEST EROSION AND SEDIMENT CONTROL REGULATIONS FOR THE STATE, COUNTY, AND/OR CITY.
2. ALL PERIMETER EROSION CONTROL MEASURES AND ROCK STABILIZED ENTRANCE/EXIT MUST BE INSTALLED PRIOR TO ANY EARTHMOVING ACTIVITIES.
3. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION SHALL BEGIN UNTIL ALL PERMITS HAVE BEEN RECEIVED.
4. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE. CONTRACTOR SHALL REPAIR ANY DAMAGE DONE TO PRIVATE OR PUBLIC PROPERTY.
5. CONTRACTOR SHALL TAKE ANY AND ALL AVAILABLE PRECAUTIONS TO CONTROL DUST DURING THE CONSTRUCTION LIFE OF THIS PROJECT. DUST CONTROL TO BE ACCOMPLISHED BY SPRINKLING WATER, OR BY OTHER MEANS APPROVED BY THE COUNTY AND ENGINEER.
6. CONTRACTOR TO ENSURE COMPLIANCE WITH ANY AND ALL LAND DISTURBANCE NOTIFICATIONS REQUIREMENTS, AND THAT ALL REQUIRED EROSION CONTROL MEASURES ARE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE STATE, LOCAL, OR FEDERAL REQUIREMENTS.
7. CONTRACTOR IS RESPONSIBLE FOR PREVENTING THE FLOW OF OR OFF-SITE TRACKING OF SEDIMENT AND OR OTHER POLLUTANTS ONTO ADJACENT STREETS OR PROPERTIES.
8. CONTRACTOR TO MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF THE CONSTRUCTION.
9. CONTRACTOR TO REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AFTER PERMANENT DRAINAGE FACILITIES HAVE BEEN INSTALLED AND FINAL STABILIZATION HAS BEEN ACHIEVED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

EROSION LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING MINOR CONTOURS (123)
- EXISTING MAJOR CONTOURS (123)
- PROPOSED MINOR CONTOUR (123)
- PROPOSED MAJOR CONTOUR (123)
- Co — CONSTRUCTION EXIT
- Sd2–A2 — TEMPORARY INLET SEDIMENT TRAP (ALTERNATE BAG)
- Sd1–C — SEDIMENT BARRIER SILT FENCE (TYPE C) — SF
- CONSTRUCTION FENCE — CF
- CONCRETE WASHOUT

FOR CITY USE:

811 Know what's below. Call before you dig.
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NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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S25-T13S-R66W
5570 BARNES ROAD
COLORADO SPRINGS
EL PASO COUNTY, CO

BRC COLORADO SPRINGS
BLACK ROCK DEVELOPMENT COMPANY, LLC
DEVELOPMENT PLANS
EROSION CONTROL PLAN

DATE 2025-02-26

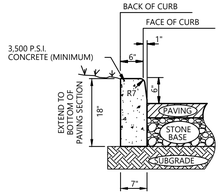
REVISIONS

SCALE: 1"=20'

DRAWN BY: A.M., R.S., N.N.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. 9 OF 11

CAD FILE: C500 EROSION PHASE 1
NOT-ISSUED-FOR-CONSTRUCTION

FILE NAME: K:\24005174 - BRC - Barnes & Jeffrey - Colorado Springs CO_Lit\04 PRODUCTION\C500_EROSION PHASE 1.dwg LAST SAVED BY: mspp 2/26/2025 3:49 PM PLOTTED BY: Nate Nye 2/26/2025 PAPER: ARCH FULL BLEED D (24.00 X 36.00 INCHES) DEVICE: DWG TO PDF.PC3 PLOT STYLE: ATWELL.CTB

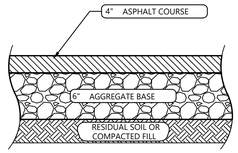


NOTES

1. EXPANSION JOINTS REQUIRED AT ALL STRUCTURES AND CURB RETURNS, 25 FOOT MAXIMUM DISTANCE BETWEEN EXPANSION JOINTS.
2. 3,500 P.S.I. CONCRETE WITH SMOOTH FINISH.
3. COMPACT SUBGRADE TO 95% STANDARD PROCTOR.
4. SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

HEADER CURB

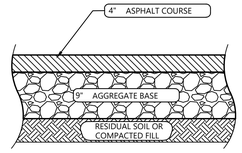
N.T.S.



THIS PAVEMENT DETAIL IS BASED ON THE GEOTECHNICAL REPORT FOR TRC COMPANIES, INC., BY ENTECH ENGINEERING, DATED MAY 2, 2023. THE CONTRACTOR SHOULD CLARIFY ANY DISCREPANCY BETWEEN THE GEOTECHNICAL REPORT AND THIS DETAIL PRIOR TO BIDDING OR CONSTRUCTING.

LIGHT DUTY ASPHALT PAVING SPECIFICATION

N.T.S.



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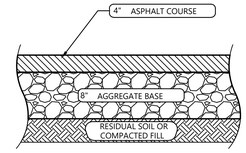
HEAVY DUTY ASPHALT PAVING SPECIFICATION

N.T.S.



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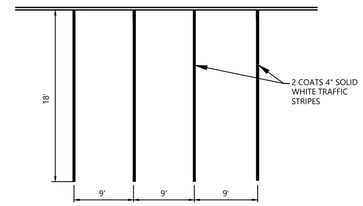
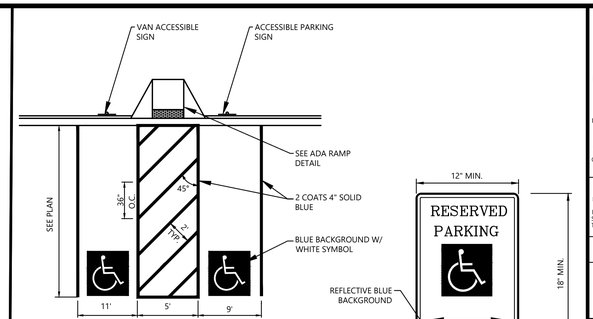
MEDIUM DUTY ASPHALT PAVING SPECIFICATION

N.T.S.



TYPICAL PARKING DETAIL





ACCESSIBLE PARKING SYMBOL
LOCATE AT EDGE OF PARKING SPACE UNLESS ACCOMPANIED BY "VAN" LETTERING

NOTES:

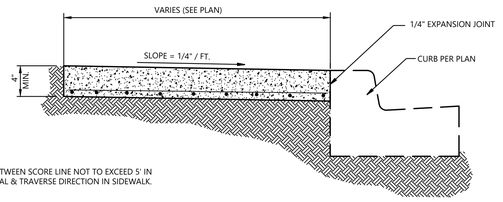
1. SEE SITE PLAN FOR LAYOUT AND LOCATION.
2. ALL DIMENSIONS ARE TO \ OF STRIPE UNLESS OTHERWISE INDICATED.
3. 2% MAXIMUM SLOPE IN ALL DIRECTIONS WITHIN THE ACCESSIBLE SPACE.
4. * CONCRETE BOLLARD AROUND POST IS NECESSARY WHERE THE SIGN IS TO BE WITHIN 2' OF THE TRAVEL LANE OR PARKING SPACE

ADA PARKING DETAIL

N.T.S.

NOTES

1. ACCESSIBLE RAMPS, PER D.O.T. SPECIFICATIONS, TO BE PROVIDED AT ALL LOCATIONS SHOWN ON PLANS.
2. WHERE REQUIRED REINFORCING WILL BE No. 3 BARS AT 24" ON CENTER EACH WAY (MAXIMUM SPACING), OR 6x6 - W1.4xW1.4 WWF.
3. 4" AGGREGATE BASE COURSE COMPACTED TO 98% STANDARD PROCTOR TYPICAL IN AREAS WITH UNSUITABLE SUBGRADE.
4. REFER TO SITEWORK SPECIFICATIONS FOR MORE INFORMATION.

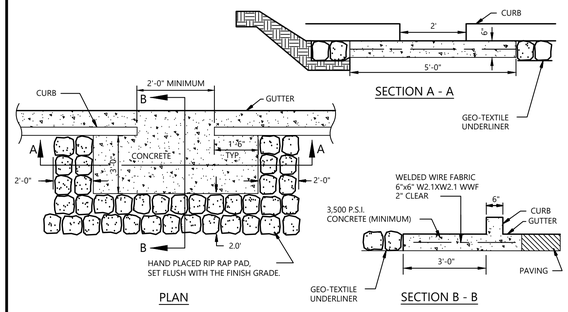


NOTE

DISTANCE BETWEEN SCORE LINE NOT TO EXCEED 5' IN LONGITUDINAL & TRAVERSE DIRECTION IN SIDEWALK.

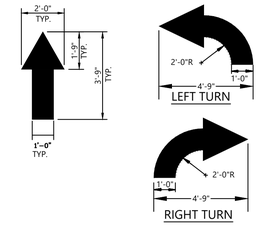
CONCRETE SIDEWALK

N.T.S.



CURB CUT

N.T.S.

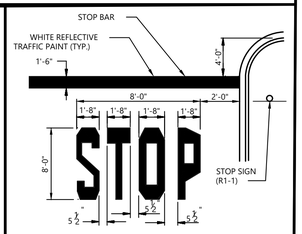


NOTES:

1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B-20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. ALL TRAFFIC FLOW ARROWS TO BE SOLID WHITE REFLECTIVE TRAFFIC PAINT OR MEET LOCAL REQUIREMENTS.

PARKING LOT FLOW ARROW

N.T.S.

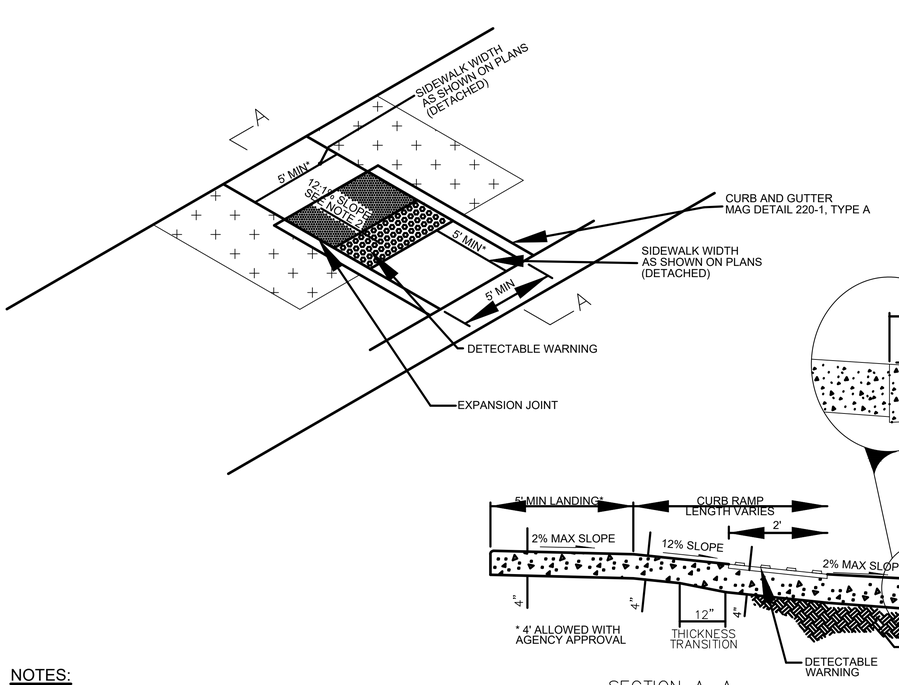


NOTES:

WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B-20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS .

STOP BAR

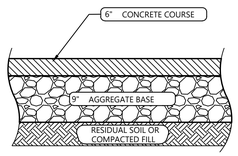
N.T.S.



NOTES:

1. CLASS 'B' CONCRETE PER SECTION 725.
2. SIDEWALK SURFACE TO MATCH 2% SLOPE FROM TOP OF CURB.
3. DETECTABLE WARNING IS TO COMPLY WITH THE JURISDICTIONAL AGENCY'S REQUIREMENTS.

CURB RAMP TYPE 1



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HEAVY DUTY CONCRETE PAVING SPECIFICATION

N.T.S.

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5570 BARNES ROAD
COLORADO SPRINGS
EL PASO COUNTY, CO

BRC COLORADO SPRINGS
BLACK ROCK DEVELOPMENT COMPANY, LLC
DEVELOPMENT PLANS
DETAILS

DATE 2025-02-26

REVISIONS

DRAWN BY: A.M., R.S., N.N.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. 10 OF 11

CAD FILE: C700 DETAILS

NOT-ISSUED-FOR-CONSTRUCTION

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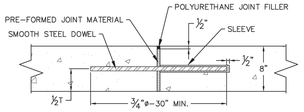
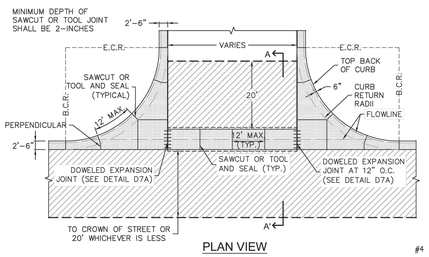
GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT CITY OF COLORADO SPRINGS ENGINEERING DIVISION (THE CITY) STANDARD SPECIFICATIONS.
2. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS. FOR CITY PERMITS CONTRACTORS SHALL USE THE ACCELA ON-LINE PERMIT SYSTEM. ONCE CITY PERMITS ARE APPROVED AND PAID, THEN APPROPRIATE SCHEDULING AND NOTIFICATIONS SHALL BE IN ACCELA.
3. CONTACT CITY PARKS PRIOR TO STARTING WORK IF IT IS NECESSARY TO DISTURB MEDIAN LANDSCAPING OR WORK IS ADJACENT TO AN EXISTING PARK.
4. CONTACT THE CITY FORESTRY DIVISION, PRIOR TO STARTING WORK, IF IT IS NECESSARY TO DISTURB TREES OR ROOTS.
5. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AND BE A CITY APPROVED CONCRETE MIX DESIGN.
6. A BROOM FINISH, WITH SWEEPS IN THE DIRECTION OF FLOW, SHALL BE APPLIED TO ALL GUTTER AND CROSS PANS.
7. PRIOR TO OPENING TO TRAFFIC, CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,200 PSI AS DEMONSTRATED BY FIELD CURE CYLINDERS.
8. NEW ASPHALT SHALL NOT BE PLACED AGAINST FRESHLY POURED CONCRETE. CONCRETE SHALL BE 5-DAYS OLD OR HAVE A COMPRESSIVE STRENGTH OF 3,200 PSI AS DEMONSTRATED BY FIELD CURE CYLINDERS. WHERE PATCHING IN AN EXISTING ROADWAY, PATCHING SHALL BE IN ACCORDANCE WITH ASPHALT REPAIR DRAWINGS.
9. THE CONTRACTOR SHALL STAMP THEIR COMPANY NAME AND CONSTRUCTION DATE ON FRONT FACE OF CURB.
10. WHITE CURE SHALL BE PLACED WITH 100% COVERAGE, AND MEET THE SPECIFICATION OF SECTION 500.

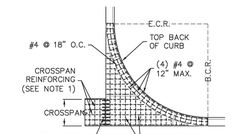


EXPANSION JOINT DETAIL

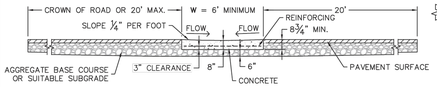
CROSS PAN NOTES		
APPROVED: Gayle Sturdivant, City Engineer		
ISSUED: 8/4/21	REVISED:	DRAWING NO. D7A



PLAN VIEW



REINFORCING LAYOUT



SECTION A-A'



CURB & GUTTER SECTION

NOTES:

1. SQUARED-OFF RETURN TO BE POURED MONOLITHIC 8-INCHES P.C.C. MINIMUM WITH #4 AT 18-INCHES EACH WAY.
2. ASPHALT PATCH SHALL BE PER 'ASPHALT PAVEMENT REPAIR' DETAIL
3. SQUARED-OFF RETURN AREAS REQUIRE REINFORCING FROM B.C.R. TO E.C.R.
4. POLYURETHANE JOINT FILLER REQUIRED OVER EXPANSION JOINTS.
5. MINIMUM DEPTH OF SAWCUT OR TOOL JOINT SHALL BE 2-INCHES.
6. CURB RAMPS SHALL BE LOCATED OUTSIDE OF CROSSPAN FLOWLINE.
7. DOWELED EXPANSION JOINT SHALL BE INSTALLED WHEN POURING HALF PANS.

CROSS PAN		
APPROVED: Gayle Sturdivant, City Engineer		
ISSUED: 6/4/21	REVISED:	DRAWING NO. D7B

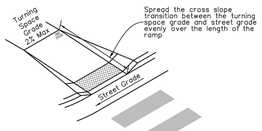
General Notes

1. All work shall be done in accordance with the current City of Colorado Springs Engineering Division (the City) Standard Specifications.
2. The Contractor shall obtain all required permits and notify City Engineering by 1500 hours the business day before inspection is required.
3. Concrete shall have a minimum compressive strength of 4,000 psi and use a City-approved concrete mix.
4. A broom finish, with sweeps perpendicular to the direction of pedestrian traffic, shall be applied to all ramp surfaces.
5. The Contractor shall stamp their company name and construction date at the top right corner of the ramp as viewed from the street.
6. Detectable warnings shall be installed at sidewalk to street transitions and shall consist of prefabricated truncated dome panels approved by the City. The detectable warning panels shall be set into the wet concrete. The domes shall be in a square grid pattern and aligned with pedestrian traffic.
7. All detectable warning surfaces at the base of ramps shall start a minimum of 6 inches from the flowline of the curb and not be more than 8 inches from any point on the flowline of the curb, with the exception for ramps that are constructed within the curved portion of the return as approved by the City.
8. Ramp and detectable warning running slope shall be 8.3% or flatter except on long ramps as specified by Note 14.
9. Drainage structures, traffic signal equipment, or other obstructions shall not be installed in the ramp or turning space areas.
10. If a traffic signal pedestrian push button cannot be mounted within 10 inches horizontally of the pedestrian path or is obstructed from reach then a separate pedestrian push button post assembly shall be installed. Push buttons shall meet the requirements of MUTCD Chapter 4 for pedestrian detectors.
11. Diagonal ramps on the apex are not allowed in new construction. A single diagonal ramp on the apex may be permitted during reconstruction or alteration where physical or site constraints prevent two ramps from being installed and shall require approval from the City on a case-by-case basis.
12. Ramps, excluding flared sides or blended transitions, shall be wholly contained within the width of the crosswalk and/or the pedestrian street crossing that they serve.
13. All ramp joints and grade breaks shall be flush (0"±¼"). The joint between the roadway surface and gutter pan shall be flush.
14. In retrofit applications, to avoid chasing grade indefinitely on steep streets, ramp length is not required to exceed 15 feet.
15. The counter slope of the gutter or road at the foot of a ramp, turning space, or blended transition shall not exceed 5.0%.
16. Flared side slopes may exceed 10% only where they abut a non-walkable surface (landscaping or domed surface) or the adjacent circulation path is blocked such that it is unlikely for a pedestrian to walk across the flared side slope.
17. The minimum turning space for new construction is 5 feet by 5 feet. The minimum turning space allowed for retrofit applications is 4 feet by 4 feet. In all types of construction where the turning space is constrained by an element taller than 2 inches such as curb, the turning space shall be 5 feet by 5 feet.
18. Contact the City Forestry Division if it is necessary to disturb trees or roots.
19. All curb ramps shall have a minimum concrete thickness of 6 inches.
20. All sidewalks and turning spaces shall have a cross slope between 0.5% and 2.0%.
21. Ramps shall align with each other across the street.

Slope Table

The table below is intended to be used to convert between the percent (rise/run) and ratio (run:rise) methods of expressing the magnitude of a slope:

PERCENT SLOPE	0.5%	1.0%	2.0%	5.0%	7.1%	8.3%	10.0%
RATIO SLOPE	200:1	100:1	50:1	20:1	14:1	12:1	10:1



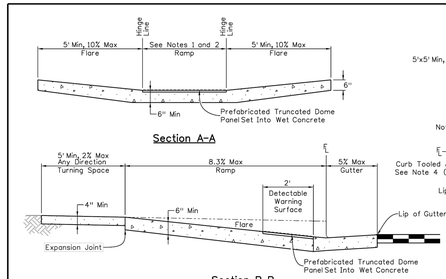
Ramp Cross Slope Transition To Match Roadway Profile

Ramp cross slopes and turning spaces shall be:

A. 2% max when a yield or stop control is present.

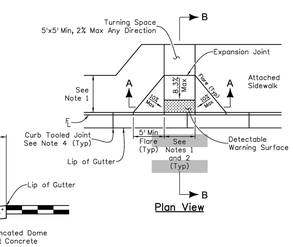
B. Permitted to equal the street grade when there is no yield or stop control, when a traffic signal is present, at a mid block crossing location, or in retrofit applications.

SIDEWALK CURB RAMPS GENERAL NOTES AND DETAILS		
APPROVED: CITY ENGINEER		
ISSUED: 3/28/2019	REVISED:	DRAWING NO. D-8A

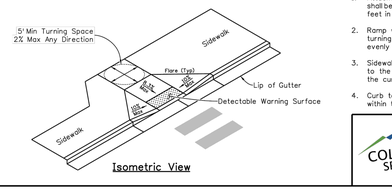


Section A-A

Section B-B



Plan View

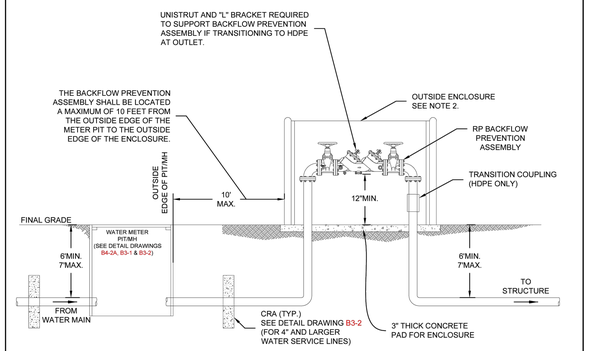


Isometric View

Notes

1. Attached sidewalk shall be 6 feet wide minimum. Detached sidewalk shall be 5 feet wide minimum. Sidewalk width may be reduced to 4 feet in retrofit applications.
2. Ramp width shall be the same as the approaching sidewalk or turning space but not less than 4 feet. Ramp cross slope shall evenly transition between turning space grade and street grade.
3. Sidewalk cross slope shall be 2% maximum measured perpendicular to the direction of walk for detached sidewalk and perpendicular to the curb for attached sidewalk.
4. Curb tooled joints shall be laid out so that at least one joint occurs within the width of each ramp.

SIDEWALK CURB RAMPS TYPE 2 CURB RAMP		
APPROVED: CITY ENGINEER		
ISSUED: 3/28/2019	REVISED:	DRAWING NO. D-8D

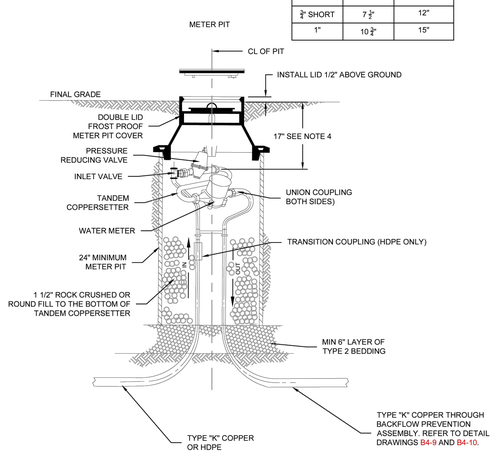


NOTES:

1. REFERENCE SECTION 2.7.N FOR BACKFLOW PREVENTION ASSEMBLY REQUIREMENTS.
2. OUTDOOR ENCLOSURES SHALL BE HEATED AND CONSTRUCTED PER ASSE STANDARD No.1060 TYPE I.
3. NO DRAIN VALVES SHALL BE LOCATED BEFORE THE APPROVED BACKFLOW PREVENTION ASSEMBLY.
4. THE APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL BE SOLDERED OR FLANGED ONLY.
5. THE BACKFLOW PREVENTION ASSEMBLY SHALL BE ON AN APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY.
6. FOR CONSECUTIVE SYSTEMS AN APPROVED DOUBLE CHECK BACKFLOW PREVENTION ASSEMBLY MAY BE USED.
7. FOR SERVICE LINES 4" AND GREATER, PIPE SHALL BE RESTRAINED BETWEEN THE METER PIT AND BACKFLOW PREVENTER.

Colorado Springs Utilities — It's how we're all connected	TYPICAL NON-SINGLE-FAMILY RESIDENTIAL OUTDOOR WATER METER AND BACKFLOW PREVENTION ASSEMBLY	B4-9 DATED 09/2022

METER SIZE	METER LENGTH	LAY LENGTH W/ TAILPIECES
¾" SHORT	7 ½"	12"
1"	10 ½"	15"



NOTES:

1. THE METER SHALL BE PROVIDED AND INSTALLED BY COLORADO SPRINGS UTILITIES.
2. REFERENCE SECTION 2.7 WATER SERVICE LINE DESIGN.
3. METER PIT SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE CURB STOP.
4. METER AND PRESSURE REGULATOR ARE INSTALLED WITH AN APPROVED TANDEM COPPERSETTER, TANDEM COPPERSETTER SHALL BE 17" FROM THE TOP PIT LID/FINISH GRADE TO CENTER OF SETTER. TANDEM COPPERSETTER SHALL HAVE AN INLET VALVE ONLY.
5. METER PIT SHALL BE AN APPROVED PLASTIC PIT WITH A MINIMUM DIAMETER OF 24" BY 36" IN HEIGHT WITH A FROST PROOF COVER.
6. SERVICE LINE SHALL BE TYPE "K" COPPER BETWEEN THE CURB STOP AND THE TANDEM COPPERSETTER TO PROVIDE METER STABILITY. TRANSITION TO HDPE MAY BE MADE AFTER THE OUTLET SIDE OF THE TANDEM COPPERSETTER WITH AN APPROVED TRANSITION COUPLING LOCATED WITHIN THE METER PIT.
7. ALL FITTINGS IN THE METER LOOP SHALL BE SOLDERED, FLANGED OR THREADED. THE BACKFLOW PREVENTER SHALL BE SOLDERED OR FLANGED.
8. IF A BACKFLOW PREVENTION ASSEMBLY IS REQUIRED, IT MUST BE LOCATED BEFORE THE FIRST BRANCH LINE. FOR BACKFLOW PREVENTION ASSEMBLY REQUIREMENTS, INCLUDING LOCATION, SEE SECTION 2.7.N.

Colorado Springs Utilities — It's how we're all connected	3/4" THRU 1" OUTSIDE METER FOR NON SINGLE-FAMILY-RESIDENTIAL CONNECTIONS TYPE "K" COPPER AND HDPE SERVICE	B4-2A DATED 09/2022

Know what's below. Call before you dig.
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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5570 BARNES ROAD
COLORADO SPRINGS
EL PASO COUNTY, CO

BRC COLORADO SPRINGS
BLACK ROCK DEVELOPMENT COMPANY, LLC
DEVELOPMENT PLANS
DETAILS

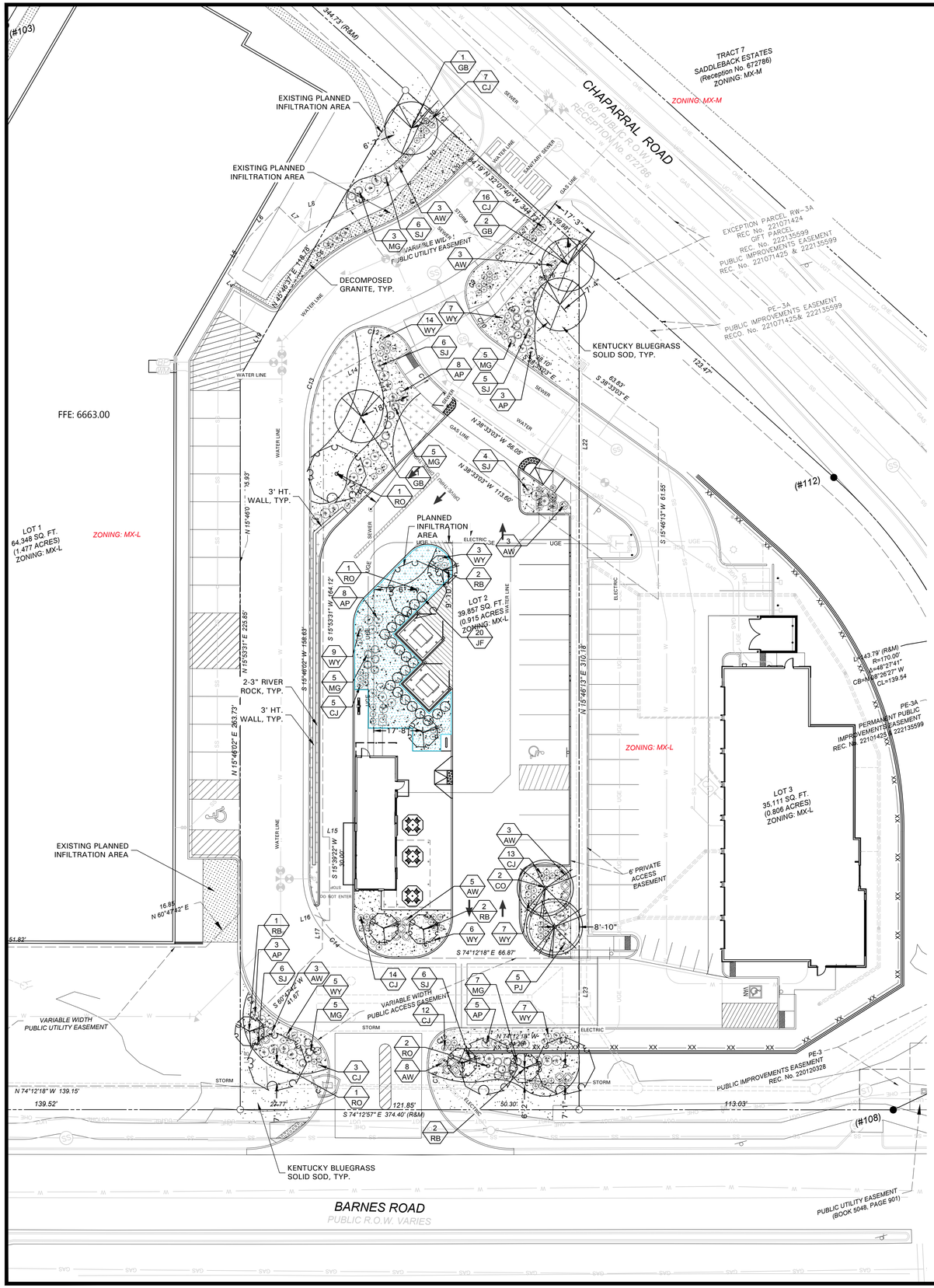
DATE 2025-02-26

REVISIONS

DRAWN BY: A.M., R.S., N.N.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. 11 OF 11

CAD FILE: C700 DETAILS
NOT-ISSUED-FOR-CONSTRUCTION

FILE NAME: K:\24005174 - BRC - Barnes & Jeffrey - Colorado Springs CO_LD\04 PRODUCTION\C700 DETAILS.dwg LAST SAVED BY: nngo 1/21/2025 1:52 PM PLOTTED BY: Ngoc Ngo 1/22/2025 PAPER: ARCH FULL BLEED D (24.00 X 36.00 INCHES) DEVICE: DWG TO PDF.PC3 PLOT STYLE: ATWELL.CTB



Standard City of Colorado Springs Landscape Notes".
A Final Landscape and Irrigation Plan, with applicable supporting material, shall be submitted at time of Building Permit application and shall be approved before any Building Permit approval, any landscape or irrigation construction, and issuance of a Certificate of Occupancy.

All proposed landscaping shall be watered by an automatic irrigation system which will provide drip irrigation to all shrub beds and trees within native seed areas and spray irrigation to all high-water use turf and native seed areas.

The Owner or Developer is required to provide inspection affidavits executed by the Colorado Licensed Landscape Architect or Certified Irrigation Designer of record for the project, which certifies that the project was installed and in compliance with the approved Final Landscape and Irrigation Plan on file in City Planning. This should require limited construction observation visits to accurately complete the affidavits. When ready to call for inspection and submit affidavits, first contact the city planner of record for the project (719-385-5905) and as necessary our DRE office (719-385-5982).

Copies of receipts/delivery tickets for soil amendments installed on the project are required to be provided with the inspection affidavits."

If soil in the parking lot has been compacted by grading operations, the soil within the planter shall be tilled, or removed to a depth of thirty (30) inches and replaced with an acceptable growing medium for the species being installed.

Tilling of the existing soil to incorporate amendments and counter any compaction or soil consolidation shall be required for all landscape planting areas.

Accessible routes, including ramps and sidewalks, within the public right-of-way shall be per city engineering standard drawings and specifications. engineering development review division inspector will have the final authority on accepting the public improvements.

TREES SHALL MAINTAIN A 15 FOOT MINIMUM SEPARATION FROM WATER AND WASTEWATER MAINS AND A 6 FOOT MINIMUM SEPARATION FROM ELECTRIC AND GAS DISTRIBUTION LINES.

PLANT SCHEDULE

QTY	LABEL	COMMON NAME	SCIENTIFIC NAME	SIZE	NOTES
		SHADE TREES			
2	CO	Chinkapin Oak	*Quercus muhlenbergii*	3" cal.	12' ht., 4' spread, matching
4	GB	Ginko	*Ginko biloba*	3" cal.	12' ht., 4' spread, matching
5	RO	Red Oak	*Quercus rubra*	3" cal.	12' ht., 4' spread, matching
		ORNAMENTAL TREES			
7	RB	Eastern Redbud	*Cercis canadensis*	30 gal.	8' ht., 4' spread, multi trunk, 3 cane min.
		SHRUBS			
27	AP	Apache Plume	*Fallugia paradoxa*	5 gal.	full, 24" spread, 36" o.c.
28	AW	Dwarf Blue Arctic Willow	*Salix purpurea 'nana'*	5 gal.	full, 24" spread, 36" o.c.
70	CJ	Compact Pfitzer Juniper	*Juniperous x media 'pfitzeriana compacta'*	3 gal.	full, 24" o.c.
20	JF	Jointfir	*Ephedra americana*	3' ht.	full, 30" sprd, 40" o.c.
30	MG	Undaunted Ruby Muhly Grass	*Muhlenbergia reverchonii 'Undaunted'*	5 gal.	full, 18" sprd, 20" ht., 30" o.c.
38	SJ	Seagreen Juniper	*Juniperus x media 'sea green'*	3' ht.	full, 30" sprd, 40" o.c.
		GROUNDCOVER/VINES/GRASS			
58	WY	Woolly Yarrow Kentucky Bluegrass	*Achillea lanulosa*	1 gal.	full, 24" o.c.

Plant list is an aid to bidders only. Contractor shall verify all quantities on plan. All heights and spreads are minimums. Trees shall have a strong central leader and be of matching specimens. All plant material shall meet or exceed remarks as indicated.

PLANNED INFILTRATION AREA

GENERAL LAWN NOTES

1. CONTRACTOR SHALL COORDINATE OPERATIONS AND AVAILABILITY OF EXISTING TOPSOIL WITH ON-SITE CONSTRUCTION MANAGER.
2. LAWN AREAS SHALL BE LEFT 1" BELOW FINAL FINISHED GRADE PRIOR TO TOPSOIL INSTALLATION.
3. CONTRACTOR TO FIND GRADE AREAS TO ACHIEVE FINAL CONTOURS AS SHOWN ON CIVIL DRAWINGS. POSITIVE DRAINAGE SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. ROUNDING AT TOP AND BOTTOM OF SLOPES SHALL BE PROVIDED AND IN OTHER BREAKS IN GRADE. CORRECT AREAS WHERE STANDING WATER MAY OCCUR.
4. ALL LAWN AREAS SHALL BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED AND FINISH GRADE APPROVED BY THE OWNER'S CONSTRUCTION MANAGER OR LANDSCAPE ARCHITECT PRIOR TO LAWN INSTALLATION.
5. CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" IN DIAMETER AND LARGER. REMOVE ALL DIRT CLODS, STICKS, CONCRETE SPOILS, TRASH ETC PRIOR TO PLACING TOPSOIL AND GRASS INSTALLATION.
6. CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE.
7. CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT IF NECESSARY.

SOLID SOD:

1. SOLID SOD SHALL BE PLACED ALONG ALL IMPERVIOUS EDGES, AT A MINIMUM. THIS SHALL INCLUDE CURBS, WALKS, INLETS, MANHOLES AND PLANTING BED AREAS. SOD SHALL COVER OTHER AREAS COMPLETELY AS INDICATED BY PLAN.
2. SOD SHALL BE STRONGLY ROOTED DROUGHT RESISTANT SOD, NOT LESS THAN 2 YEARS OLD, FREE OF WEEDS AND UNDESIRABLE NATIVE GRASS AND MACHINE CUT TO PAD THICKNESS OF 3/4" (+1/4"), EXCLUDING TOP GROWTH AND THATCH.
3. LAY SOD BY HAND TO COVER INDICATED AREAS COMPLETELY, ENSURING EDGES ARE TOUCHING WITH TIGHTLY FITTING JOINTS, NO OVERLAPS WITH STAGGERED STRIPS TO OFFSET JOINTS.
4. TOP DRESS JOINTS IN SOD BY HAND WITH TOPSOIL TO FILL VOIDS IF NECESSARY
5. SOD SHALL BE ROLLED TO CREATE A SMOOTH EVEN SURFACE. SOD SHOULD BE WATERED THOROUGHLY DURING INSTALLATION PROCESS.
6. SHOULD INSTALLATION OCCUR BETWEEN OCTOBER 1ST AND MARCH 1ST, OVERSEED BERMUDAGRASS SOD WITH WINTER RYEGRASS AT A RATE OF 4 POUNDS PER 1000 S.F.

HYDROMULCH:

1. SCARIFY AND LOOSEN ALL AREAS TO BE HYDROMULCHED TO A MINIMUM DEPTH OF 4" PRIOR TO TOPSOIL AND HYDROMULCH INSTALLATION.
2. BERMUDA GRASS SEED SHALL BE EXTRA HULLED, TREATED LAWN TYPE. SEED SHALL BE DELIVERED TO THE SITE IN ITS ORIGINAL UNOPENED CONTAINER AND SHALL MEET ALL STATE/LOCAL LAW REQUIREMENTS.
3. FIBER SHALL BE 100% WOOD CELLULOSE FIVER, DELIVERED TO THE SITE IN ITS ORIGINAL UNOPENED CONTAINER AS MANUFACTURED BY "CONWEB' OR EQUAL.
4. FIBER TACK SHALL BE DELIVERED TO THE SITE IN ITS UNOPENED CONTAINER AND SHALL BE 'TERRO-TACK ONE', AS MANUFACTURED BY GROWERS, INC OR APPROVED EQUAL.
5. HYDROMULCH WITH BERMUDA GRASS SEET AT A RATE OF 2 POUNDS PER 1000 S.F.
6. USE A BATTER BOARD AGAINST ALL BED AREAS TO PREVENT OVER SPRAY.
7. IF INADEQUATE MOISTURE IS PRESENT IN SOIL, APPLY WATER AS NECESSARY FOR OPTIMUM MOISTURE FOR SEED APPLICATION.
8. IF INSTALLATION OCCURS BETWEEN SEPTEMBER 1ST AND MAY 1ST, ALL HYDROMULCH AREAS SHALL BE OVER-SEEDED WITH WINTER RYE GRASS AT A RATE OF FOUR POUNDS PER ONE THOUSAND SQUARE FEET. CONTRACTOR SHALL BE REQUIRED TO RE-HYDROMULCH WITH BERMUDA GRASS THE FOLLOWING GROWING SEASON AS PART OF THIS CONTRACT.
9. AFTER APPLICATION, NO EQUIPMENT SHALL OPERATE OVER APPLIED AREAS. WATER SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO SATURATION.
10. ALL LAWN AREAS TO BE HYDROMULCHED SHALL ACHIEVE 100% COVERAGE PRIOR TO FINAL ACCEPTANCE.

LANDSCAPE NOTES

1. CONTRACTOR TO VERIFY AND LOCATE ALL PROPOSED AND EXISTING ELEMENTS. NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE FOR ANY LAYOUT DISCREPANCIES OR ANY CONDITION THAT WOULD PROHIBIT THE INSTALLATION AS SHOWN. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS
2. CONTRACTOR SHALL CALL 811 TO VERIFY AND LOCATE ANY AND ALL UTILITIES ON SITE PRIOR TO COMMENCING WORK. LANDSCAPE ARCHITECT SHOULD BE NOTIFIED OF ANY CONFLICTS. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING NEAR UNDERGROUND UTILITIES.
3. A MINIMUM OF 2% SLOPE SHALL BE PROVIDED AWAY FROM ALL STRUCTURES.
4. CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 3" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS.
5. LANDSCAPE ISLANDS SHALL BE CROWNED, AND UNIFORM THROUGHOUT THE SITE.
6. PLANTING AREAS AND SOD TO BE SEPARATED BY STEEL EDGING. NO STEEL EDGING SHALL BE INSTALLED ADJACENT TO BUILDINGS, WALKS OR CURBS. EDGING NOT TO BE MORE THAN 1/2" ABOVE FINISHED GRADE.
7. EDGING SHALL BE CUT AT 45 DEGREE ANGLE WHERE IT INTERSECTS WALKS AND/OR CURBS.
8. MULCH SHALL BE INSTALLED AT 1/2" BELOW THE TOPS OF SIDEWALKS AND CURBING.
9. QUANTITIES ON THESE PLANS ARE FOR REFERENCE ONLY. THE SPACING OF PLANTS SHOULD BE AS INDICATED ON PLANS OR OTHERWISE NOTED. ALL TREES AND SHRUBS SHALL BE PLANTED PER DETAILS.
10. CONTAINER GROWN PLANT MATERIAL IS PREFERRED HOWEVER BALL AND BURLAP PLANT MATERIAL CAN BE SUBSTITUTED IF NEED BE AND IS APPROPRIATE TO THE SIZE AND QUALITY INDICATED ON THE PLANT MATERIAL LIST.
11. TREES SHALL BE PLANTED AT A MINIMUM OF 5' FROM ANY UTILITY LINE, SIDEWALK OR CURB. TREES SHALL ALSO BE 10' CLEAR FROM FIRE HYDRANTS.
12. 4" OF SHREDDED HARDWOOD MULCH (2" SETTLED THICKNESS) SHALL BE PLACED OVER WEED BARRIER FABRIC. MULCH SHALL BE SHREDDED HARDWOOD MULCH OR APPROVED EQUAL. PINE STRAW MULCH IS PROHIBITED.
13. WEED BARRIER FABRIC SHALL BE USED IN PLANT BEDS AND AROUND ALL TREES AND SHALL BE MIRAFI 1405 WEED BARRIER OR APPROVED EQUAL.
14. CONTRACTOR TO PROVIDE UNIT PRICING OF LANDSCAPE MATERIALS AND BE RESPONSIBLE FOR OBTAINING ALL LANDSCAPE AND IRRIGATION PERMITS.

IRRIGATION:

1. ALL REQUIRED LANDSCAPE AREAS SHALL HAVE AN AUTOMATIC IRRIGATION SYSTEM WITH A FREEZE/RAIN SENSOR. SYSTEM SHALL ALSO HAVE AN ET WEATHER BASED CONTROLLER AND BE DESIGNED AND INSTALLED BY A LICENSED IRRIGATOR.

MAINTENANCE REQUIREMENTS:

1. VEGETATION SHOULD BE INSPECTED REGULARLY TO ENSURE THAT PLANT MATERIAL IS ESTABLISHING PROPERLY AND REMAINS IN A HEALTHY GROWING CONDITION APPROPRIATE FOR THE SEASON. IF DAMAGED OR REMOVED, PLANTS MUST BE REPLACED BY A SIMILAR VARIETY AND SIZE.
2. MOWING, TRIMMING, EDGING AND SUPERVISION OF WATER APPLICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE OWNER OR OWNER'S REPRESENTATIVE ACCEPTS AND ASSUMES REGULAR MAINTENANCE.
3. ALL LANDSCAPE AREAS SHOULD BE CLEANED AND KEPT FREE OF TRASH, DEBRIS, WEEDS AND OTHER MATERIAL.

MISCELLANEOUS MATERIALS:

1. STEEL EDGING SHALL BE 3/16" X 4 X 16' DARK GREEN DURAEDGE STEEL LANDSCAPE EDGING UNLESS NOTED OTHERWISE ON PLANS/DETAILS.
2. RIVER ROCK SHALL BE 2" - 3" DIAMETER. RIVER ROCK SHALL BE COMPACTED TO A MINIMUM OF 3" DEPTH OVER FILTER FABRIC.
3. DECOMPOSED GRANITE SHALL CONSIST OF A NATURAL MIX OF GRANITE AGGREGATE NOT TO EXCEED 1/8" IN DIAMETER AND COMPOSED OF VARIOUS STAGES OF DECOMPOSED EARTH BASE. DG SHALL BE PLACED OVER FILTER FABRIC AT A MINIMUM OF 3" DEPTH.

LANDSCAPE TABULATIONS for Colorado Springs, CO

STREET REQUIREMENTS

1. A minimum setback of 25' shall be provided on principal arterial streets. One tree shall be provided for every 20 l.f.
2. Non principal arterial shall have a 10' landscape setback. One tree shall be provided for every 30 l.f.
3. Shrub screen shall be a minimum of 3' in height and evergreen.

Barnes Road: 121 l.f.

REQUIRED	PROVIDED
25' setback	25' setback
6 trees	6 trees
shrub screen	shrub screen

Chaparral Road:84 l.f.

REQUIRED	PROVIDED
10' setback	10' setback
3 trees	3 trees, 3" cal.
shrub screen	shrub screen

PARKING LOT LANDSCAPE

1. One shade tree shall be provided for every 15 parking spaces.
2. At least 2/3 of the frontage of any parking lot with view of the public right of way shall be screened.

REQUIRED	PROVIDED
1 trees	1 trees, 3" cal.
shrub screen	shrub screen

INTERIOR LANDSSCAPE

1. 5% of the gross site area shall be non activated green space.
2. One tree shall be planted for every 500 s.f. of required green space.

Parking spaces: 13

REQUIRED	PROVIDED
1993 s.f.	582 s.f.
4 trees	4 trees

SCREENING

1. Any refuse or recycling areas shall be screened from view from adjacent properties, public or private streets or walkways.
2. Vegetative screen shall be a minimum of 7' in height.

GRAPHIC SCALE
0 20 40 FEET
Scale 1"=20' - 0"

AMANDA W. RICHARDSON
1484
12/08/2020
Original Date of Licensure
STATE OF COLORADO
LICENSED LANDSCAPE ARCHITECT

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P.O. Box 1746
Aledo, Texas 76008
amanda@awr-designs.com
c. 512.517.5589

811
Know what's below. Call before you dig.
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24 HOUR EMERGENCY CONTACT

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S25-T13S-R66W
5570 BARNES ROAD
COLORADO SPRINGS
EL PASO COUNTY, CO

BRC COLORADO SPRINGS
BLACK ROCK DEVELOPMENT COMPANY, LLC
CONSTRUCTION DRAWINGS
FINAL LANDSCAPE PLAN

DATE 02-18-25

REVISIONS

CAD FILE: 24195_LANDSCAPE SERIES

DRAWN BY: A.M. & R.S.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. L101

SECTION 32 9300 - LANDSCAPE

PART 1 - GENERAL

1.1 QUALIFICATIONS OF THE LANDSCAPE CONTRACTOR.

A. ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING.

1.2 REFERENCE DOCUMENTS

A. REFER TO LANDSCAPE PLANS, NOTES, SCHEDULES AND DETAILS FOR ADDITIONAL REQUIREMENTS

1.3 SCOPE OF WORK / DESCRIPTION OF WORK

A. WORK COVERED BY THESE SECTIONS INCLUDES: FURNISH ALL SUPERVISIONS, LABOR, MATERIALS, SERVICES, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE THE WORK COVERED IN CONJUNCTION WITH THE LANDSCAPING COVERED IN LANDSCAPE PLANS AND SPECIFICATIONS INCLUDING:
   1. PLANTING (TREES, SHRUBS, GRASSES)
   1. BED PREP AND FERTILIZATION
   3. NOTIFICATION OF SOURCES
   4. WATER AND MAINTENANCE UNTIL ACCEPTANCE
   5. GUARANTEE

B. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS.

C. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK

1.4 REFERENCES

A. AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICAN ASSOCIATION OF NURSERYMEN; 2/ OCTOBER 1980, EDITION; BY AMERICAN NATIONAL STANDARDS INSTITUTE (260.1) - PLANT MATERIAL

B. AMERICAN JOINT COMMITTEE ON HORTICULTURE NOMENCLATURE; 1942 EDITION OF STANDARDIZED PLANT NAMES.

C. TEXAS ASSOCIATION OF NURSERYMEN, GRADES AND STANDARDS

1.5 SUBMITTALS

A. PROVIDE REPRESENTATIVE QUANTITIES OF EACH SOIL, MULCH, BED MIX, GRAVEL AND STONE BEFORE INSTALLATION. SAMPLES TO BE APPROVED BY OWNERS REPRESENTATIVE BEFORE USE.

B. SOIL AMENDMENTS AND FERTILIZERS SHOULD BE RESEARCHED AND BASED ON THE SOILS IN THE AREA.

C. BEFORE INSTALLATION, SUBMIT DOCUMENTATION THAT PLANT MATERIALS ARE AVAILABLE AND HAVE BEEN RESERVED. FOR ANY PLANT MATERIAL NOT AVAILABLE, SUBMIT REQUEST FOR SUBSTITUTION.

1.6 JOB CONDITIONS, DELIVERY, STORAGE AND HANDLING

A. GENERAL CONTRACTOR TO COMPLETE WORK BEFORE LANDSCAPE CONTRACTOR TO COMMENCE.

B. ALL PLANTING BED AREAS SHALL BE LEFT THREE INCHES BELOW FINAL GRADE OF SIDEWALKS, DRIVES AND CURBS. ALL AREAS TO RECEIVE SOLID SOD SHALL BE LEFT ONE INCH BELOW THE FINAL GRADE OF WALKS, DRIVES AND CURBS. CONSTRUCTION DEBRIS SHALL BE REMOVED PRIOR TO LANDSCAPE CONTRACTOR BEGINNING WORK

C. STORAGE OF MATERIALS AND EQUIPMENT AT THE JOB SITE WILL BE AT THE RISK OF THE LANDSCAPE CONTRACTOR. THE OWNER CANNOT BE HELD RESPONSIBLE FOR THEFT OR DAMAGE.

1.7 SEQUENCING

A. INSTALL TREES, SHRUBS, AND LINER STOCK PLANT MATERIALS PRIOR TO INSTALLATION OF LAWN/SOLID SOD.

B. WHERE EXISTING TURF AREAS ARE BEING CONVERTED TO PLANTING BEDS, THE TURF SHALL BE CHEMICALLY ERADICATED TO MINIMIZE RE-GROWTH IN THE FUTURE. AREAS SHALL BE PROPERLY PREPARED WITH AMENDED ORGANIC MATTER.

1.8 MAINTENANCE AND GUARANTEE

MAINTENANCE:

A. THE LANDSCAPE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK FROM THE TIME OF PLANTING UNTIL FINAL ACCEPTANCE BY OWNER.

B. NO TREES, GRASS, GROUNDCOVER OR GRASS WILL BE ACCEPTED UNLESS THEY SHOW HEALTHY GROWTH AND SATISFACTORY FOLIAGE CONDITIONS.

C. MAINTENANCE SHALL INCLUDE WATERING OF TREES AND PLANTS, CULTIVATION, WEED SPRAYING, EDGING, PRUNING OF TREES, MOWING OF GRASS, CLEANING UP AND ALL OTHER WORK NECESSARY FOR MAINTENANCE.

D. A WRITTEN NOTICE REQUESTING FINAL INSPECTION AND ACCEPTANCE SHOULD BE SUBMITTED TO THE OWNER AT LEAST 7 DAYS PRIOR TO COMPLETION. AN ON SITE INSPECTION BY THE OWNERS AUTHORIZED REPRESENTATIVE WILL BE COMPLETED PRIOR TO WRITTEN ACCEPTANCE.

E. NOTIFY OWNER OR OWNERS REPRESENTATIVE SEVEN DAYS PRIOR TO THE EXPIRATION OF THE WARRANTY PERIOD.

F. REMOVE DEAD, UNHEALTHY AND UNSIGHTLY PLANTS DURING WARRANTY PERIOD

G. REMOVE GUYING AND STAKING MATERIALS AFTER ONE YEAR

H. ALL LANDSCAPE MUST BE MAINTAINED AND GRASS MOWED/EDGED ON A WEEKLY SCHEDULE UNTIL ACCEPTANCE BY OWNER. REMOVE CLIPPINGS AND DEBRIS FROM SITE PROMPTLY.

I. REMOVE TRASH, DEBRIS, AND LITTER. WATER, PRUNE, RESTAKE TREES, FERTILIZE, WEED AND APPLY HERBICIDES AND FUNGICIDES AS REQUIRED.

J. COORDINATE THE OPERATION OF IRRIGATION SYSTEM TO ENSURE THAT PLANTS ARE ADEQUATELY WATERED. HAND WATER AREAS NOT RECEIVING ADEQUATE WATER FROM AN IRRIGATION SYSTEM.

K. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN ACCORDANCE TO THE MAINTENANCE SERVICE TO ENSURE THE SYSTEM IS IN PROPER WORKING ORDER WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.

L. REAPPLY MULCH TO BARE AND THIN AREAS.

M. SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF GRASS AT NO ADDITIONAL COST TO THE OWNER.

N. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:
   a. THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.
   b. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE.
   c. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING. HYDROMULCHED AREAS SHALL SHOW ACTIVE, HEALTHY GROWTH. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESODDED OR RESEEDED (AS APPROPRIATE PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE NEATLY MOWED.

GUARANTEE:

A. TREES, SHRUBS, GROUNDCVOER SHALL BE GUARANTEED (IN WRITING) FOR A 12 MONTH PERIOD (90 DAYS FOR ANNUAL PLANTING OR AT THE END OF THE SEASONAL COLOR GROWING SEASON, WHICHEVER COMES SOONER) AFTER FINAL ACCEPTANCE. THE CONTRACTOR SHALL REPLACE ALL DEAD MATERIALS AS SOON AS WEATHER PERMITS AND UPON NOTIFICATION OF THE OWNER.

B. PLANTS (INCLUDING TREES, WHICH HAVE PARTIALLY DIED SO THAT SHAPE, SIZE OR SYMMETRY HAVE BEEN DAMAGED SHALL BE CONSIDERED SUBJECT TO REPLACEMENT. IN SUCH CASES, THE OPINION OF THE OWNER SHALL BE FINAL.

C. PLANTS USED FOR REPLACEMENT SHALL BE OF THE SAME SIZE AND KIND AS THOSE ORIGINALLY PLANTED OR SPECIFIED. ALL WORK INCLUDING MATERIALS, LABOR AND EQUIPMENT FOR REPLACEMENTS SHALL CARRY A 12 MONTH GUARANTEE. ANY DAMAGE INCLUDING RUTS IN LAWN OR BED AREAS INCURRED AS A RESULT OF MAKING REPLACEMENTS SHALL BE IMMEDIATELY REPAIRED.

D. WHEN PLANT REPLACEMENTS ARE MADE, PLANTS, SOIL MIX, FERTILIZER AND MULCH ARE TO BE EQUIVALENT AS ORIGINALLY SPECIFIED AND RE-INSPECTED FOR FULL COMPLIANCE WITH THE CONTRACT REQUIREMENTS. ALL REPLACEMENTS ARE INCLUDED UNDER "WORK" OF THIS SECTION.

E. THE OWNER AGREES THAT FOR THE ONE YEAR WARRANTY PERIOD TO BE EFFECTIVE, HE WILL WATER PLANTS AT LEAST TWICE A WEEK DURING DRY PERIODS.

F. THE ABOVE GUARANTEE SHALL NOT APPLY WHERE PLANTS DIE AFTER ACCEPTANCE BECAUSE OF DAMAGE DUE TO ACTS OF GOD, VANDALISM, INSECTS, DISEASE, INJURY BY HUMANS, MACHINES, THEFT OR NEGLIGENCE BY OWNER.

G. ACCEPTANCE FOR ALL LANDSCAPE WORK SHALL BE GIVEN AFTER FINAL INSPECTION BY THE OWNER PROVIDED THE JOB IS IN A COMPLETE, UNDAMAGED CONDITION AND THERE IS A STAND OF GRASS IN ALL LAWN AREAS. AT THAT TIME, THE OWNER WILL ASSUME MAINTENANCE ON THE ACCEPTED WORK.

1.9 QUALITY ASSURANCE

A. COMPLY WITH ALL FEDERAL, STATE, COUNTY AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK.

B. EMPLOY PERSONNEL EXPERIENCED AND FAMILIAR WITH THE REQUIRED WORK AND SUPERVISION BY A FOREMAN.

C. MAKE CONTRACT WITH SUPPLIERS IMMEDIATELY UPON OBTAINING NOTICE OF CONTRACT ACCEPTANCE TO SELECT AND BOOK MATERIALS.

D. DEVELOP A PROGRAM OF MAINTENANCE (PRUNING AND FERTILIZATION) WHICH WILL ENSURE THE PURCHASED MATERIALS WILL MEET AND/OR EXCEED PROJECT SPECIFICATIONS.

E. DO NOT MAKE PLANT MATERIAL SUBSTITUTIONS. IF THE LANDSCAPE MATERIAL SPECIFIED IS NOT READILY AVAILABLE, SUBMIT PROOF TO LANDSCAPE ARCHITECT ALONG WITH THE PROPOSED MATERIAL TO BE USED IN LIEU OF THE SPECIFIED PLANT.

F. AT THE TIME BIDS ARE SUBMITTED, THE CONTRACTOR IS ASSUMED TO HAVE LOCATED THE MATERIALS NECESSARY TO COMPLETE THE JOB AS SPECIFIED.

G. OWNERS REPRESENTATIVE SHALL INSPECT ALL PLANT MATERIAL AND RETAINS THE RIGHT TO INSPECT MATERIALS UPON ARRIVAL TO THE SITE AND DURING INSTALLATION. THE OWNERS REPRESENTATIVE MAY ALSO REJECT ANY MATERIALS HE/SHE FEELS TO BE UNSATISFACTORY OR DEFECTIVE DURING THE WORK PROCESS. ALL PLANTS DAMAGED IN TRANSIT OR AT THE JOB SITE SHALL BE REJECTED.

1.10 PRODUCT DELIVERY, STORAGE AND HANDLING

A. PREPARATION

1. BALLED AND BURLAPPED B&B PLANTS): DIG AND PREPARE SHIPMENT IN A MANNER THAT WILL NOT DAMAGE ROOTS, BRANCHES, SHAPE AND FUTURE DEVELOPMENT.

2. CONTAINER GROWN PLANTS: DELIVER PLANTS IN RIGID CONTAINER TO HOLD BALL SHAPE AND PROTECT ROOT MASS.

B. DELIVERY

1. DELIVER PACKAGED MATERIALS IN SEALED CONTAINERS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. PROTECT MATERIALS FROM DETERIORATION DURING DELIVERY AND WHILE STORED ON SITE.

2. DELIVER ONLY PLANT MATERIALS THAT CAN BE PLANTED IN ONE DAY UNLESS ADEQUATE STORAGE AND WATERING FACILITIES ARE AVAILABLE ON SITE

3. PROTECT ROOT BALLS BY HEELING IN WITH SAWDUST OR OTHER APPROVED MOISTURE RETAINING MATERIAL IF NOT PLANTED WITHIN 24 HOURS OF DELIVERY.

4. PROTECT PLANTS DURING DELIVERY TO PREVENT DAMAGE TO ROOT BALL OR DESICCATION OF LEAVES.

5. KEEP PLANTS MOIST AT ALL TIMES. COVER ALL MATERIALS DURING TRANSPORT.

6. NOTIFY OWNERS REPRESENTATIVE OF DELIVERY 72 HOURS PRIOR TO DELIVERY OF PLANT MATERIAL AT JOB SITE.

7. REMOVE REJECTED PLANT MATERIAL IMMEDIATELY FROM JOB SITE.

8. TO AVOID DAMAGE OR STRESS, DO NOT LIFT, MOVE, ADJUST TO PLUMB, OR OTHERWISE MANIPULATE PLANTS BY TRUNK OR STEMS.

PART 2 - PRODUCTS

2.1 PLANT MATERIALS

A. GENERAL: WELL FORMED NO. 1 GRADE OR BETTER NURSERY GROWN STOCK. LISTED PLANT HEIGHTS ARE FROM TOPS OF FOOT BALLS TO NOMINAL TOPS OF PLANTS. PLANT SPREAD REFERS TO NOMINAL OUTER WIDTH OF PLANT NOT THE OUTER LEAF TIPS. PLANTS SHALL BE INDIVIDUALLY APPROVED BY THE OWNERS REPRESENTATIVE AND THEIR DECISION AS TO THEIR ACCEPTABILITY SHALL BE FINAL.

B. QUANTITIES: THE DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY. ANYTHING CALLED FOR ON ONE AND NOT THE OTHER IS AS BINDING AS IF SHOWN AND CALLED FOR ON BOTH. THE PLANT SCHEDULE IS AN AID TO BIDDERS ONLY. CONFIRM ALL QUANTITIES ON PLAN.

C. QUANTITIES AND SIZE: PLANT MATERIALS SHALL CONFORM TO THE SIZE GIVEN ON THE PLAN AND SHALL BE HEALTHY, WELL SHAPED, FULL BRANCHED AND WELL ROOTED. SYMMETRY IS ALSO IMPERATIVE. PLANTS SHALL BE FREE FROM INSECTS, INJURY, DISEASE, BROKEN BRANCHES, DISFIGUREMENT, SUNSCALD, FRESH CUTS OR SCARS OR OTHER UNDESIRABLE QUALITY.

D. APPROVAL: ALL PLANTS WHICH ARE FOUND UNSUITABLE IN GROWTH OR ARE UNHEALTHY, BADLY SHAPED OR UNDERSIZED WILL BE REJECTED BY THE OWNERS REPRESENTATIVE EITHER BEFORE OR AFTER PLANTING AND SHALL BE REMOVED AT THE EXPENSE OF THE LANDSCAPE CONTRACTOR AND REPLACED WITH ACCEPTABLE SPECIMENS.

E. TREES SHALL BE HEALTHY, FULL BRANCHED, WELL SHAPED AND SHALL MEET THE MINIMUM REQUIREMENTS AS SPECIFIED ON THE PLANT SCHEDULE. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE IF POSSIBLE, AND WITH SIMILAR CLIMACTIC CONDITIONS.

F. PRUNING: ALL PRUNING OF TREES AND SHRUBS SHALL BE EXECUTED BY THE LANDSCAPE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, PRIOR TO FINAL ACCEPTANCE.

G. PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED. EXCEPT THE PLANTS LARGER THAN THOSE SPECIFIED MAY BE USED. USE OF LARGER PLANTS SHALL NOT INCREASE THE CONTRACT PRICE.

H. WHERE MATERIALS ARE PLANTED IN MASSES, PROVIDE PLANTS OF UNIFORM SIZE.

I. ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED, FIBROUS ROOT SYSTEMS, NON-POT-BOUND, FREE FROM ENCIRCLING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS J-SHAPED ROOTS).

J. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING

K. TREE TRUNKS TO BE STURDY, EXHIBIT HARDENED SYSTEMS AND VIGOROUS AND FIBROUS ROOT SYSTEMS, NOT ROOT OR POT BOUND.

L. TREES WITH DAMAGED OR CROOKED LEADERS, BARK ABRASIONS, SUNSCALD, DISFIGURING KNOTS, OR/INSECT DAMAGE WILL BE REJECTED.

M. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER, AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER.

N. MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL.

O. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.

P. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS OF 3/4" TO 1". EACH PALLET OF SOD SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.

2.2 SOIL PREPARATION MATERIALS

A. SANDY LOAM:
   1. FRIABLE, FERTILE, DARK, LOAMY SOIL, FREE OF CLAY LUMPS, SUBSOIL, STONES AND OTHER EXTRANEOUS MATERIAL AND REASONABLY FREE OF WEEDS AND FOREIGN GRASSES. LOAM CONTAINING DALLASGRASS OR NUTGRASS SHALL BE REJECTED.
   2. PHYSICAL PROPERTIES AS FOLLOWS:
      a. CLAY – BETWEEN 7-27%
      b. SILT – BETWEEN 15-25%
      c. SAND – LESS THAN 52%
   3. ORGANIC MATTER SHALL BE 3%-10% OF TOTAL DRY WEIGHT.
   4. IF REQUESTED, LANDSCAPE CONTRACTOR SHALL PROVIDE A CERTIFIED SOIL ANALYSIS CONDUCTED BY AN APPROVED SOIL TESTING LABORATORY VERIFYING THAT SANDY LOAM MEETS THE ABOVE REQUIREMENTS.

B. ORGANIC MATERIAL: COMPOST WITH A MIXTURE OF 80% VEGETATIVE MATTER AND 20% ANIMAL WASTE. INGREDIENTS SHOULD BE A MIX OF COURSE AND FINE TEXTURED MATERIAL.

C. PREMIXED BEDDING SOIL AS SUPPLIED BY VITAL EARTH RESOURCES, GLADEWATER, TEXAS; PROFESSIONAL BEDDING SOIL AS SUPPLIED BY LIVING EARTH TECHNOLOGY TO DALLAS IN ORIGINAL UNOPENED MUNICIPAL MIX AS SUPPLIED BY SOIL BUILDING SYSTEMS, DALLAS, TEXAS OR APPROVED EQUAL.

D. SHARP SAND: SHARP SAND MUST BE FREE OF SEEDS, SOIL PARTICLES AND WEEDS.

E. MULCH: DOUBLE SHREDDED HARDWOOD MULCH, PARTIALLY DECOMPOSED PLANT NUT SHELL.

F. ORGANIC FERTILIZER: FERTILAID, SUSTANE, OR GREEN SENSE OR EQUAL AS RECOMMENDED FOR REQUIRED APPLICATIONS. FERTILIZER SHALL BE DELIVERED TO THE DALLAS IN ORIGINAL UNOPENED CONTAINERS, EACH BEARING THE MANUFACTURER'S GUARANTEED STATEMENT OF ANALYSIS.

G. COMMERCIAL FERTILIZER: 10-20-10 OR SIMILAR ANALYSIS. NITROGEN SOURCE TO BE A MINIMUM 50% SLOW RELEASE ORGANIC NITROGEN (SCU OR UF) WITH A MINIMUM 8% SULFUR AND 4% IRON, PLUS MICRONUTRIENTS.

H. PEAT: COMMERCIAL SPHAGNUM PEAT MOSS OR PARTIALLY DECOMPOSED SHREDDED PINE BARK OR OTHER APPROVED ORGANIC MATERIAL.

2.3 MISCELLANEOUS MATERIALS

A. STEEL EDGING - SHALL BE 3/16" X 4" X 16" DARK GREEN LANDSCAPE EDGING. DURAEDGE STEEL OR APPROVED EQUAL.

B. TREE STAKING - TREE STAKING SOLUTIONS OR APPROVED SUBSTITUTE; REFER TO DETAILS.

C. FILTER FABRIC - MIRAFI 140S BY MIRAFI INC. OR APPROVED SUBSTITUTE. AVAILABLE AT LONE STAR PRODUCTS, INC. (469-523-0444)

D. SAND - UNIFORMLY GRADED, WASHED, CLEAN, BANK RUN SAND.

E. GRAVEL: WASHED NATIVE PEA GRAVEL, GRADED 1" TO 1.5"

F. DECOMPOSED GRANITE - BASE MATERIAL OF NATURAL MATERIAL MIX OF GRANITE AGGREGATE NOT TO EXCEED 1/8" IN DIAMETER COMPOSED OF VARIOUS STAGES OF DECOMPOSED EARTH BASE.

G. RIVER ROCK - LOCALLY AVAILABLE NATIVE RIVER ROCK BETWEEN 2"-3" IN DIAMETER.

H. PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PRE-EMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURER'S LABELED RATES.

PART 3 - EXECUTION

3.1 PREPARATION

A. LANDSCAPE CONTRACTOR TO INSPECT ALL EXISTING CONDITIONS AND REPORT ANY DEFICIENCIES TO THE OWNER.

B. ALL PLANTING AREAS SHALL BE CONDITIONED AS FOLLOWS:
   1. PREPARE NEW PLANTING BEDS BY SCRAPING AWAY EXISTING GRASS AND WEEDS AS NECESSARY. TILL EXISTING SOIL TO A DEPTH OF SIX (6") INCHES PRIOR TO PLACING COMPOST AND FERTILIZER. APPLY FERTILIZER AS PER MANUFACTURER'S RECOMMENDATIONS. ADD SIX (6") INCHES OF COMPOST AND TILL INTO A DEPTH OF SIX (6") INCHES OF SPECIFIED MULCH (SETTLED THICKNESS)
   2. BACKFILL FOR TREE PITS SHALL BE AS FOLLOWS: USE EXISTING TOP SOIL ON SITE (USE IMPORTED TOPSOIL AS NEEDED) FREE FROM LARGE CLUMPS, CLODS, DEBRIS, CALICHE, SUBSOILS, ETC., PLACED IN NINE (9") INCH LAYERS AND WATERED IN THOROUGHLY.

C. GRASS AREAS:
   1. BLOCKS OF SOD SHOULD BE LAID JOINT TO JOINT (STAGGERED JOINTS) AFTER FERTILIZING THE GROUND FIRST. ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE. THE JOINTS BETWEEN THE BLOCKS OF SOD SHOULD BE FILLED WITH TOPSOIL WHERE THEY ARE GAPED OPEN, THEN WATERED THOROUGHLY.

3.2 INSTALLATION

A. MAINTENANCE OF PLANT MATERIALS SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS DELIVERED TO THE SITE AND SHALL CONTINUE UNTIL ALL CONSTRUCTION HAS BEEN SATISFACTORILY ACCOMPLISHED.

B. PLANT MATERIALS SHALL BE DELIVERED TO THE SITE ONLY AFTER THE BEDS ARE PREPARED AND AREAS ARE READY FOR PLANTING. ALL SHIPMENTS OF NURSERY MATERIALS SHALL BE THOROUGHLY PROTECTED FROM THE WINDS DURING TRANSIT. ALL PLANTS WHICH CANNOT BE PLANTED AT ONCE, AFTER DELIVERY TO THE SITE, SHALL BE WELL PROTECTED AGAINST THE POSSIBILITY OF DRYING BY WIND AND BALLS OF EARTH OF B & B PLANTS SHALL BE KEPT COVERED WITH SOIL OR OTHER ACCEPTABLE MATERIAL. ALL PLANTS REMAIN THE PROPERTY OF THE CONTRACTOR UNTIL FINAL ACCEPTANCE.

C. POSITION THE TREES AND SHRUBS IN THEIR INTENDED LOCATION AS PER PLAN.

D. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE FOR INSPECTION AND APPROVAL OF ALL POSITIONING OF PLANT MATERIALS.

E. EXCAVATE PITS WITH VERTICAL SIDES AND HORIZONTAL BOTTOM. TREE PITS SHALL BE LARGE ENOUGH TO PERMIT HANDLING AND PLANTING WITHOUT INJURY TO BALLS OF EARTH OR ROOTS AND SHALL BE OF SUCH DEPTH THAT,WHEN PLANTED AND SETTLED, THE CROWN OF THE PLANT SHALL BE THE SAME RELATIONSHIP TO THE FINISH GRADE AS IT DID TO SOIL SURFACE IN ORIGINAL PLACE OF GROWTH. THE SIDES OF THE HOLE SHOULD BE ROUGH AND JAGGED, NEVER SLICK OR GLAZED.

F. SHRUB AND TREE PITS SHALL BE NO LESS THAN TWENTY-FOUR (24") INCHES WIDER THAN THE LATERAL DIMENSION OF THE EARTH BALL AND SIX (6") INCHES DEEPER THAN IT'S VERTICAL DIMENSION. REMOVE AND HAUL FROM SITE ALL ROCKS AND STONES OVER THREE-QUARTER (¾") INCH IN DIAMETER. PLANTS SHOULD BE THOROUGHLY MOIST BEFORE REMOVING CONTAINERS.

G. PERCOLATION TEST: FILL THE HOLE WITH WATER. IF THE WATER LEVEL DOES NOT PERCOLATE WITHIN 24 HOURS, THE TREE NEEDS TO MOVE TO ANOTHER LOCATION OR HAVE DRAINAGE ADDED. INSTALL A PVC STAND PIPE PER TREE IF THE PERCOLATION TEST FAILS.

H. BACKFILL ONLY WITH PARTS EXISTING SOIL OR SANDY LOAM AND 1 PART BED PREPARATION. WHEN THE HOLE IS DUG IN SOLID ROCK, TOPSOIL FROM THE SAME AREA SHOULD NOT BE USED. CAREFULLY SETTLE BY WATERING TO PREVENT AIR POCKETS. REMOVE THE BURLAP FROM THE TOP ⅔ OF THE BALL, AS WELL AS ALL NYLON, PLASTIC STRING AND WIRE. CONTAINER TREES WILL USUALLY BE ROOT BOUND, IF SO FOLLOW STANDARD NURSERY PRACTICE OF 'ROOT SCORING'.

I. DO NOT WRAP TREES.

J. DO NOT OVER PRUNE.

K. REMOVE NURSERY TAGS AND STAKES FROM ALL PLANTS

L. REMOVE BOTTOM OF PLANT BOXES PRIOR TO PLACING PLANTS. REMOVE SIDES AFTER PLACEMENT AND PARTIAL BACKFILLING.

M. REMOVE UPPER THIRD OF BURLAP FROM BALLED AND BURLAPPED TREES AFTER PLACEMENT.

N. PLACE PLANT UPRIGHT AND PLUMB IN CENTER OF HOLE. ORIENT PLANTS FOR BEST APPEARANCE.

O. MULCH THE TOP OF THE BALL. DO NOT PLANT GRASS ALL THE WAY TO THE TRUNK OF THE TREE. LEAVE THE AREA ABOVE THE TOP OF THE BALL AND MULCH WITH AT LEAST TWO (2") INCHES OF SPECIFIED MULCH.

P. ALL PLANT BEDS AND TREES TO BE MULCHED WITH A MINIMUM SETTLED THICKNESS OF TWO (2") INCHES OVER THE ENTIRE BED OR PIT.

Q. OBSTRUCTION BELOW GROUND: IN THE EVENT THAT ROCK, OR UNDERGROUND CONSTRUCTION WORK OR OBSTRUCTIONS ARE ENCOUNTERED IN ANY PLANT PIT EXCAVATION WORK TO BE DONE UNDER THIS SECTION, ALTERNATE LOCATIONS MAY BE SELECTED BY THE OWNER. WHERE LOCATIONS CANNOT BE CHANGED, THE OBSTRUCTIONS SHALL BE REMOVED TO A DEPTH NOT LESS THAN THREE (3') FEET BELOW GRADE AND NO LESS THAN SIX (6") INCHES BELOW THE BOTTOM OF BALL WHEN PLANT IS PROPERLY SET AT THE REQUIRED GRADE. THE WORK OF THIS SECTION SHALL INCLUDE THE REMOVAL FROM THE SITE OF SUCH ROCK OR UNDERGROUND OBSTRUCTIONS ENCOUNTERED AT THE COST OF THE LANDSCAPE CONTRACTOR.

R. TREES AND LARGE SHRUBS SHALL BE STAKED AS SITE CONDITIONS REQUIRE. POSITION STAKES TO SECURE TREES AGAINST SEASONAL PREVAILING WINDS.

S. PRUNING AND MULCHING: PRUNING SHALL BE DIRECTED BY THE LANDSCAPE ARCHITECT AND SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE FOLLOWING FINE PRUNING, CLASS I PRUNING STANDARDS PROVIDED BY THE NATIONAL ARBORIST ASSOCIATION.
   1. DEAD WOOD, SUCKERS, BROKEN AND BADLY BRUISED BRANCHES SHALL BE REMOVED. GENERAL TIPPING OF THE BRANCHES IS NOT PERMITTED. DO NOT CUT TERMINAL BRANCHES.
   2. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
   3. IMMEDIATELY AFTER PLANTING OPERATIONS ARE COMPLETED, ALL TREE PITS SHALL BE COVERED WITH A LAYER OF ORGANIC MATERIAL TWO (2") INCHES IN DEPTH. THIS LIMIT OF THE ORGANIC MATERIAL FOR TREES SHALL BE THE DIAMETER OF THE PLANT PIT.

Q. STEEL EDGE INSTALLATION: EDGE SHALL BE ALIGNED AS INDICATED ON PLANS. STAKE OUT LIMITS OF STEEL CURBING AND OBTAIN OWNERS APPROVAL PRIOR TO INSTALLATION.
   1. ALL STEEL CURBING SHALL BE FREE OF KINKS AND ABRUPT BENDS.
   2. TOP OF EDGING SHALL BE ½" MAXIMUM HEIGHT ABOVE FINAL FINISHED GRADE.
   3. STAKES ARE TO BE INSTALLED ON THE PLANTING BED SIDE OF THE CURBING, AS OPPOSED TO THE GRASS SIDE.
   4. DO NOT INSTALL STEEL EDGING ALONG SIDEWALKS OR CURBS.
   5. CUT STEEL EDGING AT 45 DEGREE ANGLE WHERE EDGING MEETS SIDEWALKS OR CURBS.

3.3 CLEANUP AND ACCEPTANCE

A. CLEANUP: DURING THE WORK, THE PREMISES SHALL BE KEPT NEAT AND ORDERLY AT ALL TIMES. STORAGE AREAS FOR ALL MATERIALS SHALL BE SO ORGANIZED SO THAT THEY, TOO, ARE NEAT AND ORDERLY. ALL TRASH AND DEBRIS SHALL BE REMOVED FROM THE SITE AS WORK PROGRESSES. KEEP PAVED AREAS CLEAN BY SWEEPING OR HOSING THEM AT END OF EACH WORK DAY.

B. REPAIR RUTS, HOLES AND SCARES IN GROUND SURFACES.

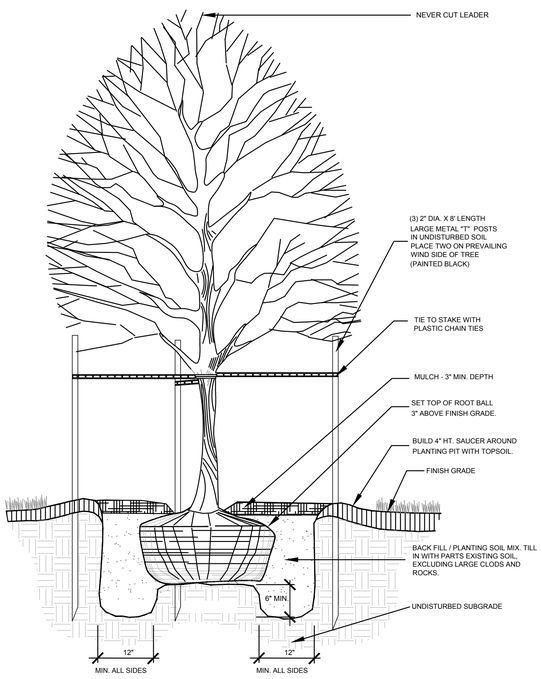
C. ENSURE THAT WORK IS COMPLETE AND PLANT MATERIALS ARE IN VIGOROUS AND HEALTHY GROWING CONDITION.

D. UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.

E. WHEN/IF THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNERS SATISFACTION WITHIN 24 HOURS.

F. THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE.

END OF SECTION


NEVER CUT LEADER
(3) 2" DIA. X 8' LENGTH LARGE METAL "T" POSTS IN UNDISTURBED SOIL PLACE TWO ON PREVAILING WIND SIDE OF TREE (PAINTED BLACK)
TIE TO STAKE WITH PLASTIC CHAIN TIES
MULCH - 3" MIN. DEPTH
SET TOP OF ROOT BALL 3" ABOVE FINISH GRADE.
BUILD 4" HT. SAUCER AROUND PLANTING PIT WITH TOPSOIL.
FINISH GRADE
BACK FILL / PLANTING SOIL MIX. TILL IN WITH PARTS EXISTING SOIL, EXCLUDING LARGE CLODS AND ROCKS.
6" MIN.
UNDISTURBED SUBGRADE

CITY IRRIGATION NOTES

Irrigation Plan Requirements and Formats

A. General Standards

The Following requirements shall apply to all irrigation plans for the City.

1. A Landscape Architect licensed by the State of Colorado, or a Certified Irrigation Designer shall prepare all required irrigation plans and supporting material. The licensed LA or Certified designer shall have a current unexpired certification and no active discipline or board actions against them.

2. As-built irrigation plans are required when the installation of the irrigation system does not comply with the approved irrigation plan. The Manager may require that the as-built irrigation plans be prepared by either a Landscape Architect licensed by the State of Colorado or a Certified Irrigation Designer.

3. Due to the semiarid climate, drying winds, and lack of consistent natural precipitation in Colorado Springs, supplemental irrigation is required for all proposed landscaping within the city.

4. Irrigation shall be provided to ensure germination, establishment, and long care of native seed areas. Permanent in-ground irrigation is required for all native seed areas located next to road frontages and in highly visible areas.

5. Temporary irrigation may be proposed where allowed to support native seed vegetation establishment but design techniques for water re-use must be exemplified such as grading (depressions or swales) to direct water and supplying soil moisture to support vegetation.

6. The Irrigation Plan shall consist of all the information required on the most current Irrigation Check List located on the City of Colorado Springs Web Site. The Irrigation Plan shall be submitted concurrently or after approval of a Final Landscape Plan.

7. The irrigation plan shall graphically and through notes/details depict a water-efficient design consistent with the approved Final Landscape Plan and Hydro Diagram. This would include separate irrigation zones for all hydrozone areas (low, moderate and high) and the irrigation design should work with proposed landscape plantings, slopes, microclimates, environment factors and available water pressure. System shall be designed in conformance with manufacturer's recommendations for water efficiency.

8. The irrigation system design shall be designed to prevent runoff, overspray, low-head drainage, and other similar conditions where irrigation water flows or sprays onto areas not intended for irrigation.

9. The irrigation system shall be designed to apply water at a rate not exceeding the infiltration rate of the soil.

10. Irrigation systems served with non-potable water must comply with current Colorado Springs Utilities Water Line Extension & Service Standards.

11. All above ground temporary irrigation components (main/lateral lines/valves and wires/sprinkler heads/etc.) shall be removed and disposed of by the sites responsible landscape maintenance party and/or owner at time of conclusion of temporary watering for the site. At no time should visible unused/broken temporary irrigation components be left on the property.

12. The required water service (point of connection) shall be installed and be operational as required to coincide with planting installation.

13. The irrigation system shall be properly winterized each season.

14. The irrigation system shall be properly maintained which would include but not limited to inspection, testing and repair, adjusting sprinkler patterns and drip components, calibration of equipment and system controller programing.

15. Water service connections for all irrigated areas shall be consistent with all Colorado Springs Utilities regulations (7.4.904.A.E.2.g)

16. All irrigation water shall be metered and have appropriate backflow prevention as identified by Colorado Springs Utilities Water Line extension and Service Standards. (7.4.904.A.E.2.h)

17. Per current Colorado Springs Utilities standards, no accessible access (drain/filter access/blow out port/ect.) can be located before the backflow unit. The backflow unit shall be located a maximum of ten feet (10') away from the proposed main water source.

18. The proposed irrigation water service connection (Meter/Tap) shall be sized appropriately to accommodate irrigation during the hours and days outlined in the Water Shortage Ordinance, Chapter 12, Article 4, Part 13 of the City Code of Colorado Springs (7.4.904.A.E.2.i).

19. For all design irrigation systems, if more than three days a week are required to provide required coverage with spray/rotor stations/valves, a Water Allocation Plan is required from Colorado Springs Utilities.

20. If a Water Allocation Plan is required/requested from Colorado Springs Utilities, additional information will be needed and shown on the irrigation plan before plan approval.

B. Plan Standards

1. The plans shall include a plan, general irrigation notes, details and any other items that may be necessary by Planning Staff. All proposed components shall have their equipment sized.

2. A irrigation legend shall be included which identifies all symbols and indicates the manufacturer, precipitation rate, g.p.m's, radii of each head type and detail reference call out as well as any pertinent information about the equipment used including P.O.C and meter sizes.

3. All points of connection (P.O.C.) and water meters shall be noted, and sizes called out on the plans and include the proposed type of connection (dedicated irrigation meter, domestic connection, sub-metered). The point of connection(s) shall also indicate the type of water source (potable/non-potable) and the static water pressure.

4. Per current CSU standards, a PRV will be installed before the meter by Colorado Springs Utilities staff and a maximum of 80 PSI will be allowed after this valve for all city meter locations.

5. The sites water pressure shall be noted on the irrigation plans and include existing and required minimum. If needed, booster pump information shall be included on the plans. Actual on-site pressure may vary based on water system demand at the time of the pressure test, subsequent development placing additional demand on the water system.

6. All irrigation equipment installed flush with grade for safety.

7. All existing non-irrigated plant communities to remain onsite shall preserve existing drainage patterns and are not to be irrigated.

8. The plans shall illustrate the location, type, and size of all components of the irrigation system including the following requirements:

a. **Main and lateral lines**

- Proposed pipe sizes shall be indicated numerically (i.e. 1/2", 3/4", 1" etc.).
- Locations shall work with all utilities and underground improvements.

- The proposed main line pressure (pressure per square inch) shown on the plans. The irrigation design shall consider minimum and maximum allowable mainline pressures.
- Total Required operating pressure for each control valve/zone.
- Provide quick coupling valves where needed for the project and connected to an irrigation main line.
- Water pressure regulated with valves (PRV) as needed for the system and prevent water hammer within the system. All mainline and lateral pipe sizes shall be designed large enough to provide adequate water supply to worst case scenario stations without exceeding 5 feet per second.
- Sleeving shall be provided for all main and lateral lines as required.

b. **Drip Lines and systems**

- All drip line shall be staked to the ground and covered by mulch. No exposed drip lines shall be visible after installation and for the life of the project.
- All proposed trees or shrubs located within native seed areas shall be on a dedicated drip control valve connected to the automatic system controller.
- Each proposed planting type and size shall include the number of required drip emitters and be installed per manufacturer's recommendations.
- A flush point is required at the end of all proposed drip lines and shall be located within a valve box.
- Sleeving shall be provided for all drip lines as needed.

c. **Control Valves**

- Each station shall have proposed valve size and station number given.
- Provide gallon per minute for each valve.
- Provide a manual shutoff valve for each valve within the valve box.
- Additional manual shutoff valves shall be installed between the control valve(s) and the main water supply as needed.

d. **Sprinkler heads**

- Sprinkler heads shall have matched precipitation rates within each control valve circuit and head types shall not be mixed within the circuit.
- Low volume and low trajectory spray nozzles shall be used.
- A minimum 6-inch sprinkler/rotor body shall be used for all proposed high-water use turf and native seed locations.
- Pooling and flowing of water is not allowed.

e. **System controllers**

- Automatic controlled utilizing non-volatile memory.
- Capable of dual or multiple programming.
- Must have multiple cycle start capacity and a flexible calendar program.
- Equipped to use a rain shut-off (weather-based system or soil/air moisture detection).
- Long term power source provided for all controllers.

f. **Rain sensors**

- All irrigation designs shall include a rain sensor that prevent the system from running during a rainfall/freeze event and is installed to automatically shut down the irrigation system.

9. Provide a calculated annual irrigation water use table for the site, this would include the proposed amount of high water (sod), medium (shrub beds) and low (native seed) use landscape areas. The amount of square feet and gallons should be provided for each type of landscape area and an overall irrigated amount for square feet and gallons should be included.

10. An irrigation schedule shall be included in the plan set and include the following information for each proposed valve/station: P.O.C number (if more then 1), Controller number (if more than 1), station/valve number, proposed plant material, irrigation type (pop-up/rotor/drip/etc.), design operating pressure (pressure per square inch), application rate (inches per hour), flow rate (gallons per minute), run time per station (min), number of cycles, number of irrigation days a week and estimated water usage (gal/wk). The schedule should also show how the Water Wise Rules irrigation schedule requirements will be met.

11. For all systems having 7 or more spray valves (turf/native seed areas), a critical calculation (worst case) shall be provided on the plans and each piece of equipment shall be listed in the calculation along with the associated loss and minimum required pressure needed. The calculation shall include the total pressure loss of all equipment used in the system to the point of connection. This is recommended for all irrigation systems.

12. The following notes shall be included on the irrigation plans and be listed in a section called "Standard City of Colorado Springs Irrigation Notes":

- "The City has adopted permanent water-wise regulations as of January 1, 2020, which will affect the overall operation of the irrigation system.
  From May 1 to October 15, sprinklers can be operated before 10 a.m. and after 6 p.m.
  Watering is limited to three days a week (Drip irrigation is allowed at any time).
  Establishment permits are required from Colorado Springs Utilities for customers who need to temporarily water more than three days a week to establish new landscapes. Allocation plans are available for customers who need more watering schedule flexibility from Colorado Springs Utilities."
- "For all design irrigation systems, if more than three days a week are required to provide required coverage with spray/rotor stations/valves, a Water Allocation Plan is required from Colorado Springs Utilities."
- "City Affidavit Note – The design professional of record is to complete the irrigation inspection affidavit based on approved Irrigation Plan. This should require limited construction observation visits and a functional test of the irrigation system shall be performed to accurately complete the affidavit. Final CO or financial assurances release shall not be processed until an executed and approved affidavit is submitted to City Staff. When ready to call for inspection and submit affidavits, first contact the city planner of record for the project (719-385-5905) and as necessary our DRE office (719-385-5982)".

SLEEVING NOTES

1. PIPING AND CONTROL WIRES SHALL BE INSTALLED IN SEPARATE SLEEVES UNDER PAVING. REFERENCE DRAWINGS FOR SLEEVE SIZE AND LOCATION.
2. SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
3. INSTALLATION OF SLEEVES SHALL BE TWENTY - FOUR (24") BELOW TOP OF PAVEMENT OR FINISHED GRADE.
4. SLEEVES SHALL EXTEND ONE (1') FOOT BEYOND EDGE OF ALL PAVEMENT AND STAKED FOR LOCATION.
5. ALL SLEEVES SHALL BE SCHEDULE 40 PVC PIPE, CAPPED ON BOTH ENDS AND SIZED AT LEAST TWO TIMES LARGER THAN THE DIAMETER OF THE PIPE INSIDE THE SLEEVE.
6. SLEEVE LOCATIONS SHALL BE MARKED ONTO THE CURB WITH A SAWCUT OF TWO PARALLEL LINES THAT ARE TWO (2") INCHES LONG AND ONE (1") APART.
7. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF SLEEVES AND SHALL ALSO BE RESPONSIBLE FOR LOCATING ANY SLEEVE THAT CANNOT BE FOUND DURING THE INSTALLATION OF THE SYSTEM.
8. CONTRACTOR SHALL FURNISH OWNER AND IRRIGATION CONTRACTOR WITH AN 'AS-BUILT' DRAWING SHOWING ALL SLEEVE LOCATIONS.

IRRIGATION GENERAL NOTES

1. THE IRRIGATION CONTRACTOR SHALL COORDINATE INSTALLATION OF THE IRRIGATION SYSTEM WITH THE LANDSCAPE CONTRACTOR SO THAT ALL PLANT MATERIAL WILL BE WATERED IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE IRRIGATION DESIGNER OF SITE CONDITIONS OR ASSUME FULL RESPONSIBILITY FOR ANY AND ALL ON SITE REVISIONS NECESSARY.
3. CONTRACTOR TO VERIFY DESIGN AND ITS INTENT TO PROVIDE FULL COVERAGE TO ALL NEW PLANTING MATERIAL.
4. NOTIFY IRRIGATION DESIGNER OF ANY LAYOUT DISCREPANCIES PRIOR TO BIDDING.
5. LOCATE ALL UTILITIES AND SITE LIGHTING CONDUITS BEFORE IRRIGATION INSTALLATION BEGINS.
6. IRRIGATION CONTRACTOR TO PROCURE ALL PERMITS, LICENSES AND GIVE ALL NECESSARY NOTICES THROUGHOUT THE DURATION OF THE PROJECT.
7. THE CONTRACTOR SHALL BE IN GOOD STANDING WITH STATE BOARDS AND REGULATORS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PLANT MATERIAL UPON ACCEPTANCE AND THROUGH THE WARRANTY PERIOD FOR DAMAGE DUE TO IRRIGATION SYSTEM FAILURE.
9. ALL ASPECTS OF THE IRRIGATION INSTALLATION SHALL CONFORM WITH THE PROPER GOVERNING AUTHORITIES, CODES AND ORDINANCES.
10. SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR. SLEEVE MATERIAL SHALL BE SCHEDULE 40, SIZE AS INDICATED ON PLAN. REFER TO SLEEVING NOTES.
11. ALL MAIN LINE AND LATERAL LINE PIPING IN PLANTING AND LAWN AREAS SHALL HAVE A MINIMUM OF 12 INCHES OF COVER. ALL PIPING UNDER PAVING SHALL HAVE A MINIMUM OF 18 INCHES OF COVER. CONTRACTOR TO VERIFY LOCAL FREEZE DEPTHS AND ADJUST DEPTH OF COVER ACCORDINGLY.
12. ZONE VALVES SHALL NOT BE LOCATED WITHIN THREE (3') FEET OF ANY DRIVEWAY, TRAFFIC AISLE, ISLAND ETC. WHERE THEY WILL BE DAMAGED BY VEHICLES DRIVING OVER CURBS.
13. ALL NOZZLES IN PARKING LOT ISLANDS AND PLANTING BEDS SHALL BE LOW ANGLE NOZZLES TO MINIMIZE OVER SPRAY ON PAVEMENT SURFACES.
14. AUTOMATIC CONTROLLER SHALL BE INSTALLED AT LOCATION SHOWN. POWER (120V) SHALL BE LOCATED IN A JUNCTION BOX WITHIN FIVE (5') FEET OF CONTROLLER, LOCATION BY OTHER TRADES. RAIN AND FREEZE SENSORS SHALL BE INSTALLED WITH EACH CONTROLLER.
15. ELECTRICAL SPLICES SHOULD BE LOCATED AT EACH VALVE AND CONTROLLER ONLY.
16. PROVIDE A 3/4" BLOW DOWN DRAIN TEE TO ALLOW WATER TO BE BLOWN FROM THE IRRIGATION LINES/SYSTEM.
17. DISTURBED AREAS IN NEED OF TURF ESTABLISHMENT MAY EXIST BEYOND COVERAGE LIMITS OF THE PERMANENT IRRIGATION SYSTEM. IN THESE AREAS, CONTRACTOR TO DETERMINE A TEMPORARY MEANS TO ESTABLISH NECESSARY TURF. CONTRACTOR IS ENCOURAGED TO BEGIN TURF ESTABLISHMENT IMMEDIATELY UPON FINAL GRADE IN ACCORDANCE WITH AND TO SATISFY SWPPP.
18. PROVIDE WITH OWNER A COPY OF ALL INSTALLED EQUIPMENT AND LINES (AS BUILT PLANS.)
19. PLACE COPY OF ZONE MAP WITH ALL ZONE VALVE LOCATIONS SHOWN AND APPROVED IRRIGATION PLAN IN PROTECTIVE JACKET IN MAIN CONTROL PANEL.

IRRIGATION PROJECT NOTES

1. THE LOCATION OF MAINLINE AND VALVES ON THIS PLAN MAY BE SHOWN IN PAVED AREAS FOR DESIGN CLARITY ONLY. IRRIGATION ELEMENTS HAVE BEEN SHOWN ON THIS PLAN AS ACCURATELY AS POSSIBLE WITHOUT THE FORFEIT OF DESIGN CLARITY AND INTENT. ALL PIPES AND VALVES SHALL BE INSTALLED WITHIN **PERVIOUS** AREAS. ALL PIPE AND WIRES THAT CROSS UNDER PAVING SHALL BE INSTALLED IN SEPARATE SLEEVES AS SPECIFIED.
2. ALL SPRINKLER EQUIPMENT NUMBERS REFERENCE THE HUNTER EQUIPMENT CATALOG UNLESS OTHERWISE INDICATED.
3. TEN DAYS PRIOR TO START OF CONSTRUCTION, IRRIGATION CONTRACTOR SHALL VERIFY STATIC WATER PRESSURE. THE IRRIGATION SYSTEM FOR THIS SITE IS DESIGNED TO OPERATE WITH A PRESSURE OF FIFTY FOUR (54 PSI) POUNDS PER SQUARE INCH. SHOULD THE DESIGN PRESSURE FOR THE SYSTEM BE HIGHER THAN THE EXISTING PRESSURE, THE IRRIGATION CONTRACTOR SHALL NOTIFY THE IRRIGATION DESIGNER IMMEDIATELY.
4. IRRIGATION CONTRACTOR SHALL COORDINATE THE LOCATION OF THE CONTROLLER AND SENSORS WITH THE GENERAL CONTRACTOR AND OWNER. A 110 VOLT ELECTRICAL SERVICE TO POWER THE IRRIGATION CONTROLLER SHALL BE PROVIDED BY THE GENERAL CONTRACTOR AT THE LOCATION SHOWN ON THIS PLAN.
5. WATER SERVICE TAP, METER AND LEAD FOR THE IRRIGATION SYSTEM SHALL BE PROVIDED AND INSTALLED BY THE GENERAL CONTRACTOR. SERVICE LINE AND METER SHALL BE SIZED AS NOTED ON THIS PLAN.
6. TYPE AND INSTALLATION OF THE WATER METER AND BACK FLOW PREVENTION DEVICE SHALL BE DETERMINED BY THE GOVERNING AUTHORITY. AN ISOLATION VALVE SHALL BE PROVIDED BETWEEN THE WATER METER AND BACK FLOW DEVICE.
7. ALL CALCULATIONS FOR THIS IRRIGATION SYSTEM ARE BASED ON PRODUCTS AND EQUIPMENT INFORMATION PROVIDED BY HUNTER. INSTALLATION OF THESE PRODUCTS SHALL NOT EXCEED MANUFACTURERS RECOMMENDATIONS.
8. REFERENCE HUNTER GUIDELINES AND SPECIFICATIONS PRIOR TO INSTALLATION. CONFIRM REQUIREMENTS FOR CONTROLLER, WATERPROOF CONNECTIONS, GROUNDING, SURGE PROTECTORS, DECODERS, VALVES, AND WIRING PRIOR TO INSTALLATION. HUNTER TECHNICAL SERVICES (760) 591-7383. WWW.HUNTERINDUSTRIES.COM
9. SPRAY HEADS LOCATED IN TURF AREAS SHALL BE HUNTER PROS-04-PRS30 SPRAY BODIES WITH PRO ADJUSTABLE NOZZLES, FIXED ARC NOZZLES, AND STRIP PATTERN NOZZLES. SEE RADIUS AS INDICATED ON THE PLAN.
10. IRRIGATION REMOTE CONTROL VALVES SHALL BE 1" AND/OR 1.5" HUNTER ICV AS INDICATED. PRIOR TO ALL REMOTE CONTROL VALVES, INSTALL A NOMINALLY SIZED BALL VALVE WITHIN THE SAME BOX.
11. SIZE OF VALVES ARE AS SHOWN ON PLAN. VALVES SHALL BE INSTALLED IN APPROVED BOXES WITH COVERS LARGE ENOUGH TO PERMIT MANUAL OPERATION, REMOVAL OF SOLENOID AND / OR VALVE COVER WITHOUT ANY EARTH EXCAVATION. OWNERS MAY ELECT LOCKING BOXES ON A PROJECT BY PROJECT BASIS.
12. QUICK COUPLING VALVES SHALL BE HUNTER INSTALLED PER DETAIL SHOWN. SWING JOINTS SHALL BE CONSTRUCTED USING ½" SCHEDULE 80 ELBOWS. CONTRACTOR SHALL SUPPLY OWNER WITH TWO (2) HQ-3-RC COUPLERS WITH (2) HK-33 KEYS AND TWO (2) HS-0 HOSE SWIVELS AS PART OF THIS CONTRACT.
13. IRRIGATION SYSTEM AUTOMATIC CONTROLLER SHALL BE HUNTER PRO-C, WITH RAIN AND FREEZE SENSORS. INSTALL PER MANUFACTURERS RECOMMENDATIONS. CONFIRM WIRING, GROUNDING AND SURGE PROTECTION REQUIREMENTS BEFORE INSTALLING.
14. DRIP IRRIGATION REMOTE CONTROL VALVES SHALL BE HUNTER ICZ-101-LF-40 AS INDICATED. DRIP TUBING SHALL BE HUNTER HDL-06-12-CV.
15. INSTALL DRIP TUBING/LINES PER MANUFACTURERES RECOMMENDATIONS. USE PLD-LOC FITTINGS PLD-LOC 075, PLD-LOC 050, PLD-LOC ELB, PLD-LOC CPL, PLD-LOC CAP, PLD-LOC TEE, PLD-LOC OR USE FHS BARB FITTINGS PLD-075, PLD-050, PLD-ELB, PLD-CPL, PLD-CAP, PLD-TEE, PLD-075-TBTEE, PLD-BV. USE ECO-INDICATOR ECO-ID. USE LINE FLUSHING VALVE HUNTER AFV-B.
16. DRIP TUBING SHALL BE SPACED 18" APART IN SHRUB AREAS. REFER TO MANUFACTURERS RECOMMENDATIONS.
17. TREE BUBBLERS SHALL USE HUNTER PROS-06-PRS30 BODIES WITH HUNTER MULTI-STREAM BUBBLERS MODEL MSBN-50H NOZZLES.
18. ALL VALVE CONTROL WIRE SHALL BE SIZED PER MANUFACTURER GUIDELINES BY THE CONTRACTOR ACCORDING TO THE ACTUAL FIELD DISTANCE. ALL CONNECTIONS SHALL BE WATER-PROOF, KEPT TO A MINIMUM, AND LOCATED IN AN APPROVED BOX.

NOTE:
1. ENTIRE SYSTEM SHALL BE INSTALLED PER STATE STANDARDS, MANUFACTURER'S SPECIFICATIONS AND ALL CITY CODES.

2. THIS DESIGN IS DIAGRAMMATIC, ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS INDICATED ON PLAN. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE GROUND IRRIGATION EQUIPMENT WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION, OR IRRIGATION CONTRACTOR MAY BE REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.

3. VARIOUS AREAS ON PLAN ARE SHOWING SINGLE HEAD COVERAGE. IF OWNER SHOULD ELECT FOR FULL COVERAGE, CONTRACTOR TO PROCURE THE PROPER PERMITS AND BID ALTERNATE FOR THESE ADDITIONAL SPRAY HEADS, ZONES, AND CONTROLLER EXPANSION FOR THE SYSTEM.

4. IRRIGATION CONTRACTOR IS TO COORDINATE LOCATION AND PLACEMENT OF ALL IRRIGATION ITEMS WITH THE GENERAL CONTRACTOR. CONTRACTOR IS TO USE EXTREME CAUTION IN TRENCHING TO AVOID EXISTING AND PROPOSED UTILITIES. CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO IRRIGATION INSTALLATION.

5. IRRIGATION SPRAY NOZZLES TO BE ADJUSTED TO AVOID PAVEMENT, BUILDING, WALLS, FENCES, UTILITIES, EQUIPMENT, SIGNAGE, AND CALL BOX.

6. REFERENCE LANDSCAPE PLAN FOR LOCATION OF GRAVEL, STEEL EDGING AND ALL PROPOSED PLANT MATERIAL.

7. IN TURF AREAS (BOTH SOD AND HYDROMULCH AREAS) OUTSIDE OF IRRIGATION PERMANENT COVERAGE, CONTRACTOR TO PROVIDE TEMPORARY IRRIGATION UNTIL ESTABLISHED, TYP

8. CONTRACTOR TO TAKE ALL NECESSARY MEASURES TO PREVENT WATER HAMMER AND SYSTEM COLLAPSE BY DISCHARGING AIR DURING STARTUP AND ALLOWING AIR TO ENTER DURING SHUTDOWN. INSTALL THRUST BLOCKS AND AIR/VACUUM RELIEF VALVES AS NECESSARY TO PROTECT MAINLINE SYSTEM. FOR 3 INCH AND LARGER MAINLINE, INSTALL JOINT RESTRAINTS AT TURNS. INSTALL PER MANUFACTURE'S RECOMMENDATIONS.

9. ALL MAINLINE PIPING 3 INCHES AND LARGER SHALL BE BELL AND GASKETED CLASS 200 PVC PIPE, SDR 21. INSTALL PER MANUFACTURERS RECOMMENDATIONS, CONTACT MANUFACTURE OR DISTRIBUTOR FOR PRODUCT DEMONSTRATION.

10. GROUP VALVES IN FIELD AS NECESSARY FOR MAINLINE SIZING. CENTER FEED LATERALS WHEN POSSIBLE.

Water Schedule- Black Rock Coffee

Zone #	Description	Head Type	GPM	Precip Rate (inch/hour)	Run Time (total min.)	Gal/Cycle	Gal/Cycle (70% Seasonal Adjustment)	Gal/Cycle (50% Seasonal Adjustment)
T1	Trees	Tree Bubblers	7.50	0.50 per nozzle	8.00	60.00	42.00	30.00
T2	Trees	Tree Bubblers	7.00	0.50 per nozzle	8.00	56.00	39.20	28.00
D1	Shrubs	Drip	8.30	0.64	25.00	207.50	145.25	103.75
D2	Shrubs	Drip	12.20	0.64	25.00	305.00	213.50	152.50
S1	Turf	Sprays	18.80	1.60	12.50	235.00	164.50	117.50
S2	Turf	Sprays	12.20	1.60	12.50	152.50	106.75	76.25
S3	Turf	Sprays	17.30	1.60	12.50	216.25	151.38	108.13
					Cycle	1,232.25	862.58	616.13
					Weekly	3,696.75	2,587.73	1,848.38
					Monthly	14,787.00	10,350.90	7,393.50

Note: Run time calculated to apply 1 inch of water per week in three watering events.
Season adjustment and rain/wind sensor available at controller.

Sprays	DESIRED HEAD PRESSURE (psi):				30	
ZONE#	S1					
Loss #	Length	Flow	Diameter	Loss/100'	Individual Loss	Cumulative Loss
Type						
					0.00	0.00
Lateral Loss					2.00	2.00
Valve		18.8	1.5		3.00	5.00
Main 1	225	18.8	1.5	1.14	2.57	7.57
Valve		18.8	1.5		3.00	10.57
Backflow		18.8	1		11.00	21.57
Meter		18.8	1		2.00	23.57
		Grand Total Loss			23.57	23.57
		Assumed Starting psi:			60	
		Total Losses:			23.57	
		Actual Head Pressure:			36.44	
		Designed Pressure:			53.57	
		Difference of Start and Actual:			6.44	

AMANDA W. RICHARDSON 1484
12/08/2020
Original Date of Licensure
STATE OF COLORADO
LICENSED LANDSCAPE ARCHITECT

AWR Designs, LLC
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811 Know what's below. Call before you dig.
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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24 HOUR EMERGENCY CONTACT

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972.638.8860

S25-T13S-R66W | 5570 BARNES ROAD | COLORADO SPRINGS | EL PASO COUNTY, CO

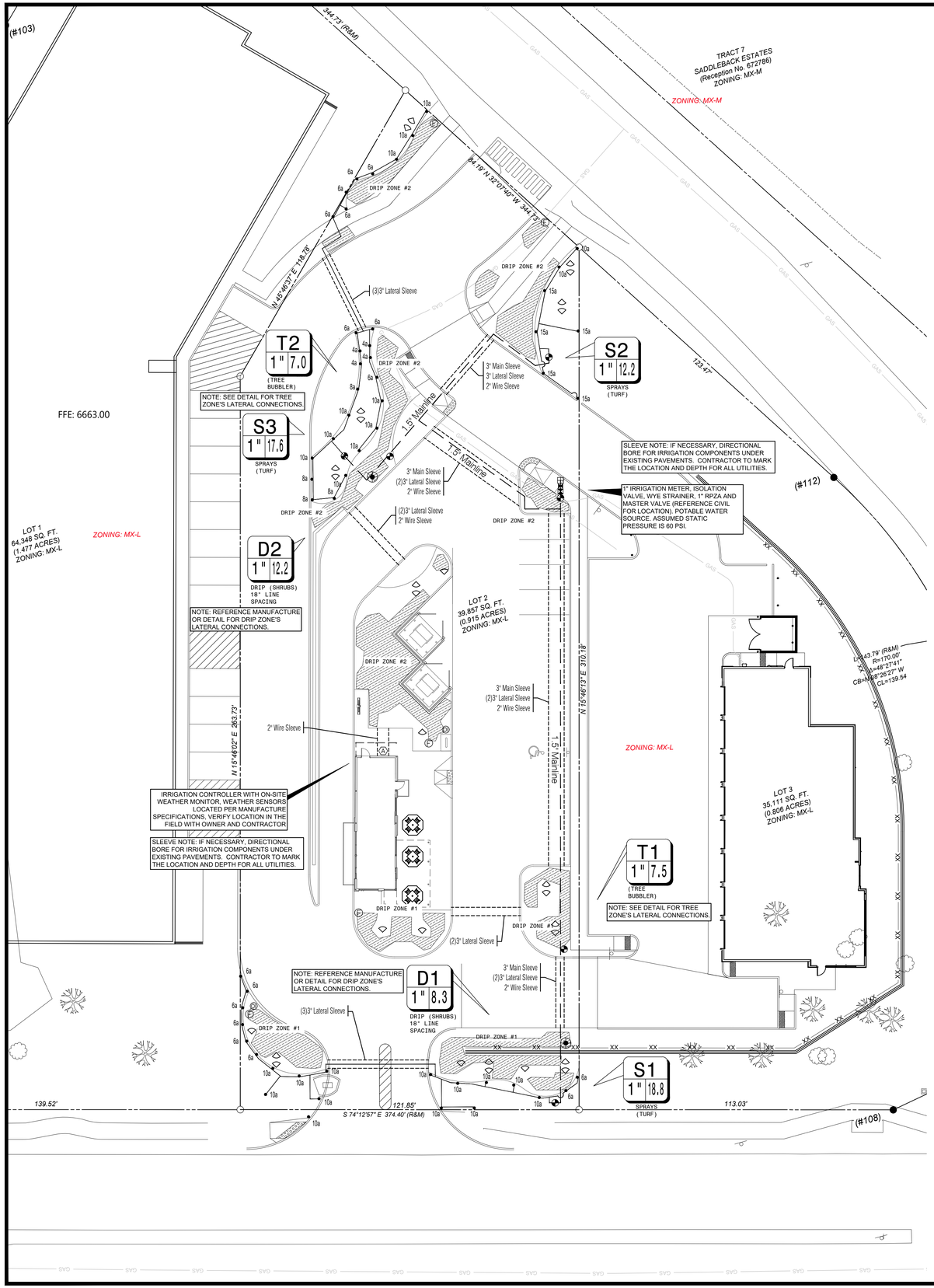
BRC COLORADO SPRINGS
BLACK ROCK DEVELOPMENT COMPANY, LLC
CONSTRUCTION DRAWINGS
IRRIGATION NOTES

DATE 02-18-25

REVISIONS

CAD FILE: 24199_IRRIGATION SERIES

DRAWN BY: A.M. & R.S.
CHECKED BY: N. SALAZAR
PROJECT MANAGER: N. SALAZAR
JOB #: 24005174
FILE CODE: ##
SHEET NO. L200



NOTE TO CONTRACTOR:
1. PLAN SHEETS DO NOT SHOW EXISTING AND PROPOSED UTILITIES FOR CLARITY ONLY. CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO INSTALLATION. CONTRACTOR IS TO USE EXTREME CAUTION IN DIGGING AND TRENCHING TO AVOID EXISTING AND PROPOSED UTILITIES.

IRRIGATION LEGEND			
SYMBOL	DESCRIPTION	MANUFACTURER	MODEL NO.
10a	SPRAYS WITH PRO ADJ. NOZZLES	HUNTER	PROS-04-PRS30 (SEE PLAN FOR RADIUS)
R20	NOT SHOWN		
25R	NOT SHOWN		
	MULTI-STREAM BUBBLERS	HUNTER	PROS-06-PRS30 W/ MSBN50H NOZZLES
	REMOTE CONTROL VALVE	HUNTER	ICV
	1" REDUCED PRESSURE ZONE	FEBCO	860 SERIES
	HDL DRIPLINE	HUNTER	HDL-06-12-CV
	LINE FLUSHING VALVE	HUNTER	AFV-B
	PRESSURE OPERATOR INDICATOR	HUNTER	ECO-ID
	DRIP CONTROL VALVE	HUNTER	ICZ-101-LF-40

IRRIGATION LEGEND	
SYMBOL	DESCRIPTION
	1" IRRIGATION METER
	HUNTER - PRO-C, WITH RAIN AND FREEZE SENSORS
	ISOLATION VALVE
	LATERAL PIPING REFER TO PLAN CLASS 200 PVC
	MAINLINE PIPING REFER TO PLAN SCH. 40 PVC, SIZED AS SHOWN (INSTALL THRUST BLOCKS AND AIR/VACUUM RELIEF VALVES AS NECESSARY TO PROTECT MAINLINE SYSTEM)
=======	IRRIGATION SLEEVE, SCH. 40 PVC, MIN. TWICE SIZE OF PIPE TO BE INSERTED, ONE SLEEVE PER PIPE CONTROL WIRING SLEEVE, 2" SCH. 40 PVC
D1 1" 8.8	VALVE STATION # (WHERE D = DRIP TUBING, S = SPRAY, R = ROTOR, T = TREE DRIP) VALVE SIZE GPM

SUGGESTED LATERAL PIPE SIZE, CLASS 200 PVC	
FLOW RANGE GPM	PIPE SIZE
0 - 8 GPM	3/4"
8 - 12 GPM	1"
12 - 22 GPM	1-1/4 "
22 - 28 GPM	1-1/2"
28 + GPM	2"

Know what's below. Call before you dig.

GRAPHIC SCALE
0 20 40 FEET
Scale 1"=20' - 0"

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LICENSED LANDSCAPE ARCHITECT

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NOTICE:
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IRRIGATION PLAN

DATE 02-18-25

REVISIONS

CAD FILE: 24199_IRRIGATION SERIES

DRAWN BY: A.M. & R.S.
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SHEET NO. L201

SECTION 32 8423 - UNDERGROUND IRRIGATION SLEEVES AND UTILITY CONDUITS

PART 1 - GENERAL

1.1 DESCRIPTION

A. PROVIDE UNDERGROUND IRRIGATION SLEEVES AS INDICATED ON THE DRAWINGS.

1.2 RELATED WORK

A. SECTION 32 8424 - IRRIGATION SYSTEM.

1.3 REFERENCE STANDARDS

A. AMERICAN STANDARD FOR TESTING AND MATERIALS (ASTM) - LATEST EDITION.

PART 2 - MATERIALS

2.1 GENERAL

A. POLYVINYL CHLORIDE PIPE (PVC) - SCHEDULE 40 SHALL BE USED FOR ALL SLEEVING PURPOSES.

B. PVC PIPES SHALL BE MARKED WITH SDR NUMBER, ASTM STANDARD NUMBER, AND THE NSF SEAL.

C. SOLVENT SHALL BE USED AS RECOMMENDED BY MANUFACTURER TO MAKE SOLVENT WELDED JOINTS. PIPE AND FITTINGS SHOULD BE CLEANED BEFORE APPLYING SOLVENT.

PART 3 - EXECUTION

3.1 INSTALLATION

A. A MINIMUM OF TWENTY FOUR (24) INCHES COVER SHALL BE PROVIDED OVER THE TOP OF SLEEVE FROM FINISH GRADE.

B. SLEEVES SHALL BE EXTENDED ONE (1) FOOT PAST THE EDGE OF PAVEMENT OF WALLS. INSTALL A NINETY DEGREE ELBOW ON EACH SLEEVE AND ADD ADDITIONAL LENGTH TO EXTEND ABOVE FINISH GRADE BY TWELVE (12) INCHES. CAP PIPE ENDS.

3.2 BACKFILL

A. BACKFILL SHALL BE PLACED OVER SLEEVES IN SIX (6) INCH LIFTS. SOIL SHALL BE TAMPED INTO PLACE, TAKING CARE TO NOT DAMAGE SLEEVE.

B. REPAIR ANY DAMAGE FROM IMPROPER COMPACTION.

END OF SECTION

SECTION 32 8424 - IRRIGATION SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION

A. PROVIDE A COMPLETE IRRIGATION SYSTEM INSTALLATION AS DETAILED AND SPECIFIED. THIS SHALL INCLUDE FURNISHING ALL LABOR, MATERIAL, EQUIPMENT AND SERVICES NECESSARY TO PROVIDE COMPLETE INSTALLATION. WORK INCLUDES:

a. TRENCHING

b. BACKFILL

c. AUTOMATIC CONTROLLED SYSTEM

d. AS BUILT DRAWINGS

B. SLEEVING AS SHOWN SHALL BE FURNISHED BY THE GENERAL CONTRACTOR.

C. METER AND POWER SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.

1.2 RELATED WORK

C. REFERENCE IRRIGATION PLANS FOR CONTROLLER, HEAD AND ALL VALVE LOCATIONS.

D. REFERENCE LANDSCAPE PLANS, NOTES, DETAILS FOR ADDITIONAL REQUIREMENTS.

E. SECTION 32 9300 - LANDSCAPE

F. SECTION 32-8423 - UNDERGROUND IRRIGATION SLEEVE AND UTILITY CONDUITS

1.3 REFERENCE STANDARDS

A. AMERICAN STANDARD FOR TESTING AND MATERIALS (ASTM) - LATEST EDITION.

1.4 QUALITY ASSURANCE AND REQUIREMENTS

A. PERMITS AND FEES: THE CONTRACTOR SHALL OBTAIN AND PAY FOR ANY PERMITS NECESSARY AND ALL OBSERVATIONS AS REQUIRED.

B. MANUFACTURER'S DIRECTIONS: MANUFACTURER'S DIRECTIONS AND DETAILED DRAWINGS SHALL BE FOLLOWED IN ALL CASES WHERE THE MANUFACTURERS OF ARTICLES USED IN THIS CONTRACT FURNISH DIRECTIONS COVERING POINTS NOT SHOWN IN THE DRAWINGS AND SPECIFICATIONS.

C. ORDINANCES, CODES, AND REGULATIONS: ALL LOCAL, MUNICIPAL AND STATE LAWS, AND RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR. ANYTHING CONTAINED IN THESE SPECIFICATIONS SHALL NOT BE CONSTRUED TO CONFLICT WITH ANY OF THE ABOVE RULES AND REGULATIONS AND REQUIREMENTS OF THE SAME.

D. HOWEVER, WHEN THESE SPECIFICATIONS AND DRAWINGS CALL FOR OR DESCRIBE MATERIALS, WORKMANSHIP, OR CONSTRUCTION OF A BETTER QUALITY, HIGHER STANDARD OR LARGER SIZE THAN IS REQUIRED BY THE ABOVE RULES AND REGULATIONS, THESE SPECIFICATIONS AND DRAWINGS SHALL TAKE PRECEDENCE.

1.5 SCHEDULE OF MATERIALS

A. MATERIALS LIST:

a. ALL EQUIPMENT MANUFACTURERS AND MODEL NUMBERS SHALL BE AS NOTED ON THE PLANS.

b. THE CONTRACTOR SHALL FURNISH THE ARTICLES, EQUIPMENT, MATERIALS, OR PROCESSES SPECIFIED BY NAME IN THE DRAWINGS AND SPECIFICATIONS. NO SUBSTITUTION WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.

c. A COMPLETE MATERIAL LIST OF EQUIPMENT SHALL BE SUBMITTED BEFORE PERFORMING ANY WORK. SUBMITTAL SHOULD INCLUDE ALL MANUFACTURERS' SPECIFICATIONS AND LITERATURE FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

d. EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT MAY BE REJECTED.

e. APPROVAL OF ANY ITEM, ALTERNATE OR SUBSTITUTE INDICATES ONLY THAT THE PRODUCT OR PRODUCTS APPARENTLY MEET THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS ON THE BASIS OF THE INFORMATION OR SAMPLES SUBMITTED.

f. MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE. SUCH WARRANTIES SHALL ONLY SUPPLEMENT THE GUARANTEE.

1.4 RECORD AND AS BUILT DRAWINGS/SUBMITTALS

A. CONTRACTOR SHALL PROVIDE AND KEEP UP TO DATE AND COMPLETE "AS-BUILT" RECORD SET OF PRINTS.

B. CONTRACTOR SHOULD USE ALL SYMBOLS AND NOTATIONS CONSISTENT WITH THE ORIGINAL DRAWINGS.

C. IN "AS-BUILT" DRAWINGS, CONTRACTOR SHALL LOCATE:

a. CONNECTION TO EXISTING WATER LINES

b. CONNECTION TO ELECTRICAL POWER

c. GATE VALVES

d. ROUTING OF SPRINKLER PRESSURE LINES

e. SPRINKLER CONTROL VALVES

f. QUICK COUPLING VALVES

g. OTHER RELATED EQUIPMENT

D. SUBMIT COMPLETED TRACINGS PRIOR TO FINAL ACCEPTANCE. DATE AND SIGN ALL DRAWINGS.

E. EQUIPMENT TO BE FURNISHED:

a. SUPPLY AS PART OF THIS CONTRACT THE FOLLOWING TOOLS:

i. QUICK COUPLING KEYS, THREE (3) WITH BOILER DRAINS ATTACHED USING BRASS REDUCER.

ii. THREE (3) KEYS FOR EACH AUTOMATIC CONTROLLER

b. THE ABOVE MENTIONED EQUIPMENT SHALL BE TURNED OVER TO THE OWNER AT THE CONCLUSION OF THE PROJECT.

F. THE IRRIGATION CONTRACTOR SHOULD DEMONSTRATE THAT THE FINAL INSTALLED SYSTEM WILL OPERATE ACCORDING TO THE INTENT OF THE DESIGNED AND SPECIFIED SYSTEM. IRRIGATION CONTRACTOR SHALL GUARANTEE 100% COVERAGE TO ALL AREAS TO BE IRRIGATION.

1.5 MAINTENANCE AND GUARANTEE

A. MAINTENANCE AND WORKMANSHIP SHALL BE GUARANTEED FULLY FOR ONE (1) YEAR AFTER FINAL ACCEPTANCE.

B. PROVIDE MAINTENANCE OF SYSTEM, CLEANING AND ADJUSTMENT OF THE HEADS, FOR ONE (1) YEAR AFTER COMPLETION OF INSTALLATION.

C. GUARANTEE IS LIMITED TO REPAIR AND REPLACEMENT OF DEFECTIVE MATERIALS AND WORKMANSHIP, INCLUDING THE REPAIR OF BACKFILL SETTLEMENT.

1.6 TESTING

A. PERFORM TESTING REQUIRED WITH OTHER TRADES INCLUDING EARTHWORK, PAVING, PLUMBING, ETC. TO AVOID CUTTING, PATCHING OR BORING.

B. WATER PRESSURE SHOULD BE FOUND PRIOR TO STARTING CONSTRUCTION. DETERMINE/CONFIRM THAT STATIC WATER PRESSURE IS MORE THAN THE WATER PRESSURE NEEDED FOR THE SYSTEM TO FUNCTION PROPERTY. IF STATIC PRESSURE IS LESS THAN THE DESIGN PRESSURE NEEDED, DO NOT START WORK UNTIL THE LANDSCAPE ARCHITECT IS NOTIFIED.

1.7 COORDINATION

A. COORDINATE INSTALLATION OF ALL PRODUCTS, INCLUDING EARTHWORK, PAVING AND PLUMBING.

B. COORDINATE TO ENSURE THAT ELECTRICAL POWER SOURCE IS IN PLACE.

C. COORDINATE INSTALLATION WITH WORK SPECIFIED IN OTHER SECTIONS.

D. COORDINATE WITH THE LANDSCAPE CONTRACTOR TO ENSURE PLANT MATERIAL IS UNIFORMLY WATERED IN ACCORDANCE WITH INTENT SHOWN ON DRAWINGS.

PART 2 - PRODUCTS

2.1 MATERIALS

B. REFER TO CONSTRUCTION DRAWINGS AND NOTES.

C. SPRINKLER HEADS IN LAWN AREAS AS SPECIFIED ON PLAN

D. PVC PIPE: CLASS 200 SPR 21

E. COPPER TUBING (FOR CITY CONNECTIONS): TYPE "M"

F. 24V WIRE - SIZE 14, TYPE UF

G. ELECTRIC VALVES TO BE ALL PLASTIC CONSTRUCTION AS INDICATED ON PLANS.

H. REFER TO DRAWING FOR BACKFLOW PREVENTION LOCATION - COORDINATE EXACT LOCATION WITH THE GENERAL CONTRACTOR.

PART 3 - EXECUTION

3.1 INSPECTION:

A. SITE CONDITIONS:

a. ALL SCALED DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL CHECK AND VERIFY ALL SIZE DIMENSIONS.

b. EXERCISE EXTREME CARE IN EXCAVATING AND WORKING NEAR UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO UTILITIES WHICH ARE CAUSED BY ANY OF HIS OPERATIONS OR NEGLECT.

c. COORDINATE INSTALLATION OF IRRIGATION MATERIALS, INCLUDING PIPE, SO THERE SHALL BE NO INTERFERENCE WITH UTILITIES OR OTHER CONSTRUCTION DIFFICULTY IN PLANTING TREES, SHRUBS, AND GROUNDCOVERS. COORDINATE WORK WITH OTHER SITE CONTRACTORS.

3.2 PREPARATION

A. PHYSICAL LAYOUT:

a. PIPING AND HEAD LAYOUT AS SHOWN ON PLANS IS SCHEMATIC ONLY. ALL PIPES TO BE INSTALLED DIRECTLY BEHIND CURBS, WALKS AND WALLS WHEREVER POSSIBLE.

b. PRIOR TO INSTALLATION CONTRACTOR SHALL STAKE OUT ALL PRESSURE SUPPLY LINES, ROUTING AND LOCATION OF SPRINKLER HEADS.

c. ALL LAYOUTS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

B. WATER SUPPLY:

a. IRRIGATION SYSTEM SHALL BE CONNECTED TO WATER SUPPLY POINTS OF CONNECTION AS INDICATED ON THE DRAWINGS.

b. CONNECTIONS SHOULD BE MADE AT APPROXIMATE LOCATIONS AS SHOWN ON DRAWINGS. CONTRACTOR SHALL VERIFY IN FIELD AND BE RESPONSIBLE FOR MINOR CHANGES CAUSED BY ACTUAL SITE CONDITIONS.

3.3 INSTALLATION

A. TRENCHING

a. DIG TRENCHES STRAIGHT 6" WIDE WITH NEAR VERTICAL SIDE AND SUPPORT PIPE CONTINUOUSLY ON BOTTOM OF TRENCH. REMOVE LUMBER, RUBBISH, LARGE ROCKS ETC. FROM TRENCHES. LAY PIPE TO AN EVEN GRADE - WITH A FIRM, UNIFORM BEARING FOR ENTIRE LENGTH OF PIPE.

b. REMOVE FOREIGN MATTER OR DIRT FROM INSIDE OF PIPE BEFORE WELDING AND KEEP PIPING CLEAN BY ANY MEANS POSSIBLE DURING AND AFTER LAYING OF PIPE.

c. PROVIDE A MINIMUM OF EIGHTEEN (18) INCHES OF COVER FOR ALL PRESSURE SUPPLY LINES.

d. PROVIDE A MINIMUM OF TWELVE (12) INCHES OF COVER FOR ALL NON-PRESSURE LINES.

e. PROVIDE A MINIMUM COVER OF EIGHTEEN (18) INCHES FOR ALL CONTROL WIRING.

f. NO MACHINE TRENCHING, UNLESS APPROVED BY THE LANDSCAPE ARCHITECT, SHALL BE DONE WITHIN DRIP LINE OF EXISTING TREES. TRENCHING SHOULD BE DONE BY HAND, TUNNELING OR BORING OR OTHER METHODS APPROVED BY THE LANDSCAPE ARCHITECT. IT SHOULD BE UNDERSTOOD THAT PIPING LAYOUT IS DIAGRAMMATIC AND PIPING SHALL BE ROUTED AROUND TREES AND SHRUBS IN SUCH A MANNER TO AVOID DAMAGE TO PLANTS.

B. BACKFILL

a. TRENCHES SHALL NOT BE BACKFILLED UNTIL ALL REQUIRED TESTS ARE PERFORMED. TRENCHES SHALL BE CAREFULLY BACKFILLED WITH THE EXCAVATED MATERIALS APPROVED FOR BACKFILLING, CONSISTING OF EARTH, LOAM, SANDY CLAY, SAND OR OTHER APPROVED MATERIALS, FREE FROM LARGE CLODS, STONES OR STICKS.

b. IF SETTLEMENT OCCURS AND SUBSEQUENT ADJUSTMENTS IN PIPE, VALVES, SPRINKLER HEADS, LAWN OR PLANTING OR OTHER CONSTRUCTION ARE NECESSARY, THE CONTRACTOR SHALL MAKE ALL REQUIRED ADJUSTMENTS WITHOUT THE COST TO THE OWNER.

C. TRENCHING AND BACKFILL UNDER PAVING:

a. ALL IRRIGATION MAIN LINE AND LATERAL LINES OR WIRING LOCATED UNDER AREAS WHERE PAVING, ASPHALTIC PAVING, OR CONCRETE SHALL BE INSTALLED IN SCHEDULE 40 PVC SLEEVES OF ADEQUATE SIZE. SEE SECTION 32 8423.

D. ASSEMBLIES

a. INSTALL ALL ASSEMBLIES SPECIFIED HEREIN IN ACCORDANCE WITH RESPECTIVE DETAILS. IN ABSENCE OF DETAIL DRAWINGS OR SPECIFICATIONS, PERFORM SUCH WORK IN ACCORDANCE WITH BEST STANDARD PRACTICES OR MANUFACTURER'S RECOMMENDATIONS AS APPROVED BY THE LANDSCAPE ARCHITECT.

b. MAKE SOLVENT WELDED JOINTS USING ONLY THE SOLVENT RECOMMENDED BY THE MANUFACTURER. PIPES AND FITTINGS SHOULD BE CLEANED OF ALL DIRT AND DUST AND MOISTENED BEFORE APPLYING SOLVENT.

c. ON PVC TO METAL CONNECTIONS, THE CONTRACTOR SHALL WORK METAL CONNECTIONS FIRST. USE NON HARDENING PIPE DOPE OR TEFLON TAPE ON THREADED PVC ADAPTERS INTO WHICH PIPE MAY BE WELDED. LIGHT WRENCH PRESSURE IS ALL THAT IS REQUIRED, USE THREADED PVC ADAPTERS INTO WHICH THE PIPE MAY BE WELDED.

E. LINE CLEARANCE: ALL LINES SHALL HAVE A MINIMUM CLEARANCE OF SIX (6) INCHES FROM EACH OTHER AND FROM OTHER TRADES. PARALLEL LINES SHALL NOT BE DIRECTLY INSTALLED ONE OVER THE OTHER.

F. WIRING: SUPPLY WIRE FROM THE AUTOMATIC CONTROLLER TO ALL THE VALVES. A SEPARATE WIRE IS REQUIRED TO EACH ELECTRIC VALVE. A COMMON NEUTRAL WIRE IS ALSO REQUIRED FROM EACH CONTROL TO EACH OF THE VALVES. BUNDLE MULTIPLE WIRES AND TAPE THEM TOGETHER AT TEN FOOT INTERVALS. EXPANSION COILS OF TEN INCHES SHALL BE INSTALLED APPROXIMATELY EVERY 100 FEET. MAKE ALL SPLICES WATERPROOF.

G. AUTOMATIC CONTROLLER: INSTALL AS PER MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS. REMOVE CONTROL VALVES SHALL BE CONNECTED TO CONTROLLER IN NUMERICAL SEQUENCE AS SHOWN ON THE DRAWINGS. EACH REMOVE CONTROL VALVE SHALL BE WIRED TO ONE STATION OF THE CONTROLLER.

H. REMOTE CONTROL VALVES:

a. INSTALL WHERE SHOWN ON DRAWINGS AND DETAILS. VALVES SHALL BE SIZED ACCORDING TO THE DRAWINGS.

b. INSTALL IN A LEVEL POSITION IN ACCORDANCE TO MANUFACTURER'S SPECIFICATIONS.

c. WHEN GROUPED TOGETHER, ALLOW AT LEAST TWELVE (12) INCHES BETWEEN VALVES. INSTALL EACH REMOTE CONTROL VALVE IN A SEPARATE VALVE BOX. EACH VALVE NUMBER AND ITS CONTROLLER LETTER SHALL BE STENCILED INSIDE VALVE BOX TOP WITH EXTERIOR PAINT.

I. FLUSHING OF SYSTEM:

a. AFTER ALL NEW SPRINKLER PIPE LINES AND RISERS ARE IN PLACE AND CONNECTED, ALL NECESSARY WORK HAS BEEN COMPLETED, AND PRIOR TO INSTALLATION OF SPRINKLER HEADS, THE CONTROL VALVES SHALL BE OPENED AND A FULL HEAD OF WATER USED TO FLUSH OUT THE SYSTEM.

b. SPRINKLER HEADS SHALL BE INSTALLED ONLY AFTER FLUSHING OF THE SYSTEM HAS BEEN ACCOMPLISHED.

J. SPRINKLER HEADS:

a. INSTALL HEADS AS DESIGNED ON THE DRAWINGS. MAKE APPROPRIATE ADJUSTMENTS TO HEAD LAYOUT TO ACCOMMODATE FOR ACTUAL FIELD CONDITIONS.

b. SPACING OF HEADS SHALL NOT EXCEED THE MAXIMUM INDICATED ON THE DRAWINGS. IN NO CASE SHALL THE SPACING EXCEED THE MAXIMUM RECOMMENDED BY THE MANUFACTURER.

c. ALL SPRINKLERS TO ATTACH TO LATERAL LINES WITH FLEXIBLE CONNECTORS. REFERENCE DETAILS ON DRAWINGS.

3.4 TESTING

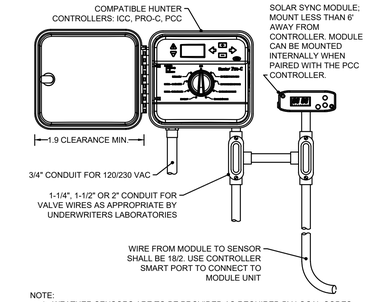
A. THE CONTRACTOR SHALL TEST SPRINKLER MAIN FOR TWELVE TO FOURTEEN HOURS UNDER NORMAL PRESSURE. IF LEAKS ARE PRESENT, REPLACE JOINT OR JOINS AND REPEAT TEST.

B. A COMPLETE TEST SHALL BE MADE PRIOR TO BACKFILLING. BACKFILLING MATERIALS MAY BE PLACED IN TRENCHES IN LIFTS TO ENSURE STABILITY OF THE LINE UNDER THE PRESSURE OF BACKFILL. IN EACH CASE, LEAVE FITTINGS AND COUPLINGS OPEN TO VISUALLY INSPECT FOR FULL PERIOD OF TEST.

C. WHEN SYSTEM IS COMPLETE, A COVERAGE TEST SHALL BE PERFORMED IN THE PRESENCE OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE. IT SHALL BE DETERMINED IF THE WATER COVERAGE FOR ALL PLANTING AREAS IS COMPLETE AND ADEQUATE. FURNISH ALL MATERIALS AND PERFORM ALL WORK REQUIRED TO CORRECT ANY INADEQUACIES OF COVERAGE.

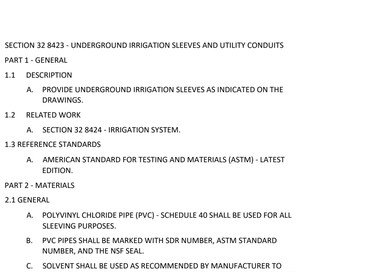
D. UPON COMPLETION OF EACH PHASE OF WORK, THE ENTIRE SYSTEM SHOULD BE TESTED AND ADJUSTED TO MEET SITE REQUIREMENTS.

END OF SECTION



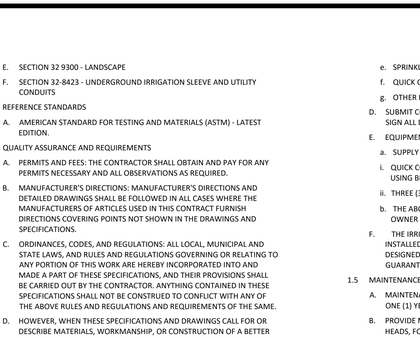
NOTE:
1. WEATHER SENSORS ARE TO BE PROVIDED AS REQUIRED BY LOCAL CODES. VERIFY LOCAL REQUIREMENTS PRIOR TO INSTALLATION.

1 PRO-C CONTROLLER W/SOLAR SYNC SYSTEM
N.T.S.



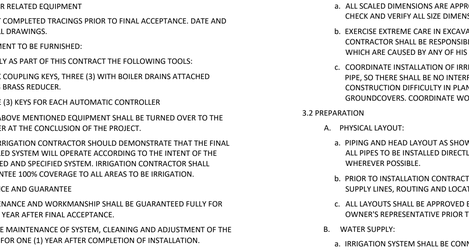
NOTE:
1. FURNISH NOMINALLY SIZED BALL VALVE WITHIN SAME BOX AND PRIOR TO MAINLINE TEE.
2. FURNISH FITTINGS AND PIPING NOMINALLY SIZED IDENTICAL TO NOMINAL QUICK COUPLING VALVE INLET SIZE.

2 QUICK COUPLING VALVE
N.T.S.

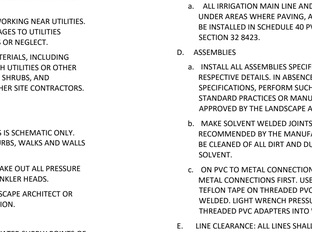


NOTE:
1. INSTALL BACKFLOW PREVENTER AS REQUIRED BY LOCAL CODES AND HEALTH DEPARTMENT. VERIFY LOCAL REQUIREMENTS PRIOR TO INSTALLATION.
2. INSTALL PER MANUFACTURE'S SPECIFICATIONS.
3. INSTALL HUBBELL HOT BOX DROP OVER ENCLOSURE AND POLYMER CONCRETE MOUNTING PAD FOR BACKFLOW DEVICE. PRODUCT LP010026023T.

3 REDUCED PRESSURE ASSEMBLY
N.T.S.

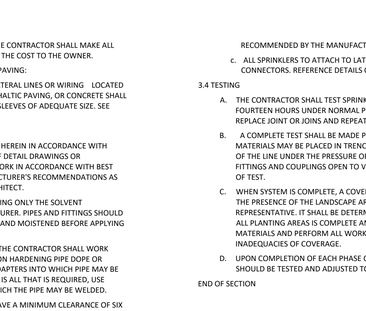


4 IN-LINE VALVE (ICV) WITH ISOLATION VALVE
N.T.S.



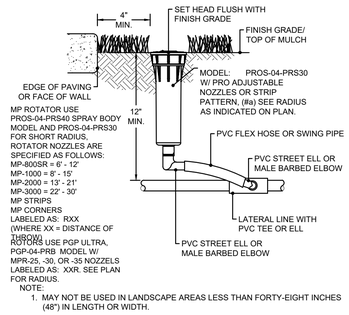
NOTES:
1. ALL PVC IRRIGATION SLEEVES TO BE SCHEDULE 40 PIPE.
2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
3. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24-INCHES MINIMUM ABOVE FINISH GRADE.
4. MECHANICALLY TAMP TO 95% PROCTOR.
5. SLEEVE LOCATIONS SHALL BE MARKED ONTO THE TOP OF CURB WITH A SAWCUT OF TWO PARALLEL LINES THAT ARE 2" LONG AND 1" APART.

5 IRRIGATION PVC SLEEVES
N.T.S.



NOTES:
1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH SCH 40 PVC TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
2. FOR PIPE AND WIRE BURIAL DEPTHS, SEE SPECIFICATIONS. MINIMUM - 12"
3. BACKFILL AND COMPACT TRENCHES TO ORIGINAL GRADE.

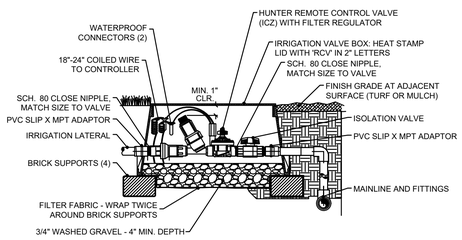
6 PIPE AND WIRING TRENCHING
N.T.S.



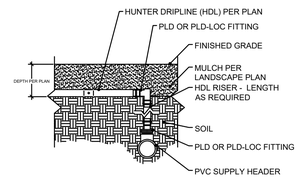
MP ROTATOR USE PROS-04-PRS40 SPRAY BODY MODEL AND PROS-04-PRS30 FOR SHORT RADIUS. ROTATOR NOZZLES ARE SPECIFIED AS FOLLOWS:
MP-8005R = 6' - 12'
MP-1000 = 8' - 15'
MP-2000 = 13' - 21'
MP-3000 = 22' - 30'
MP STRIPS
MP CORNERS
LABELED AS: RXX (WHERE XX = DISTANCE OF THROW)
ROTORS USE PGP ULTRA, PGP-04-PRB MODEL W/ MPR-25, -30, OR -35 NOZZELS LABELED AS: XXR. SEE PLAN FOR RADIUS.

NOTE:
1. MAY NOT BE USED IN LANDSCAPE AREAS LESS THAN FORTY-EIGHT INCHES (48") IN LENGTH OR WIDTH.

7 POP-UP SPRAY BODY OR POP-UP ROTOR
N.T.S.



8 DRIP CONTROL ZONE KIT W/ ISOLATION VALVE
N.T.S.



9 HUNTER DRIPLINE CONNECTION W/DRIPLINE AND ELBOW
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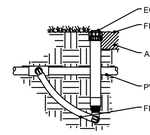
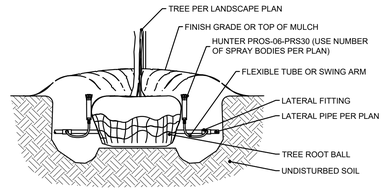


10 ECO INDICATOR- FLEX TUBING
N.T.S.



SECTION VIEW

NOTE:
1. PLACE POP-UP BUBBLER DIRECTLY AT THE EDGE OF THE ROOT BALL. ENSURE THAT THE STREAM BUBBLERS SPRAYS DIRECTLY ONTO THE ROOT BALL TO WET THOROUGHLY.
2. SPACE REQUIRED NUMBER OF SPRAY BODIES EQUIDISTANT AROUND EDGE OF ROOT BALL.
2. USE NUMBER OF SPRAY BODIES PER PLAN.

11 TREE BUBBLER ASSEMBLY WITH HUNTER PROS-06-PRS30
N.T.S.

AMANDA W. RICHARDSON 1484 12/08/2020 Original Date of Licensure STATE OF COLORADO LICENSED LANDSCAPE ARCHITECT

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Know what's below. Call before you dig.
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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S25-T13S-R66W

5570 BARNES ROAD

COLORADO SPRINGS

EL PASO COUNTY, CO

BRC COLORADO SPRINGS

BLACK ROCK DEVELOPMENT COMPANY, LLC

CONSTRUCTION DRAWINGS

IRRIGATION SPECIFICATIONS AND DETAILS

DATE 02-18-25

REVISIONS

CAD FILE: 24199_IRRIGATION SERIES

DRAWN BY: A.M. & R.S.

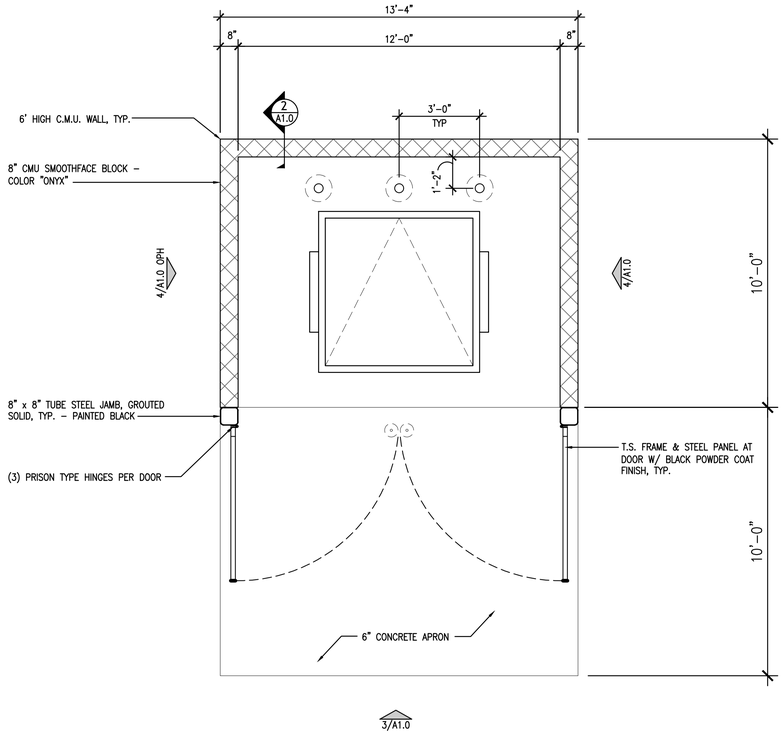
CHECKED BY: N. SALAZAR

PROJECT MANAGER: N. SALAZAR

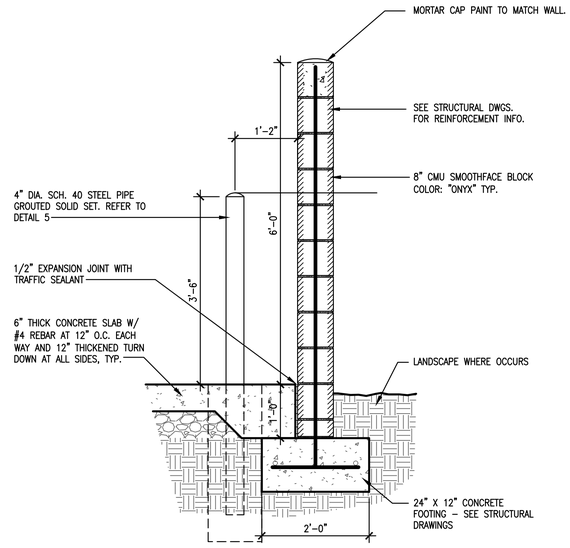
JOB #: 24005174

FILE CODE: ##

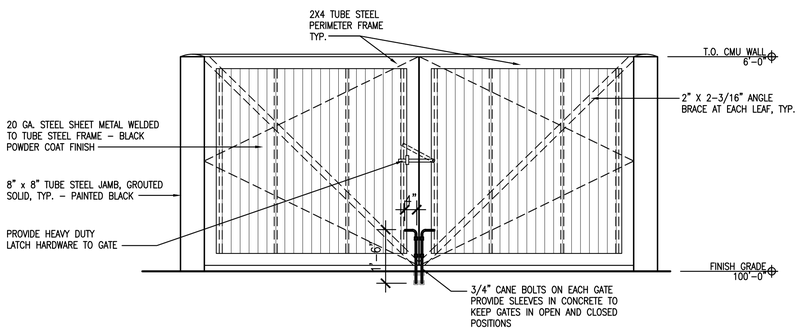
SHEET NO. L202



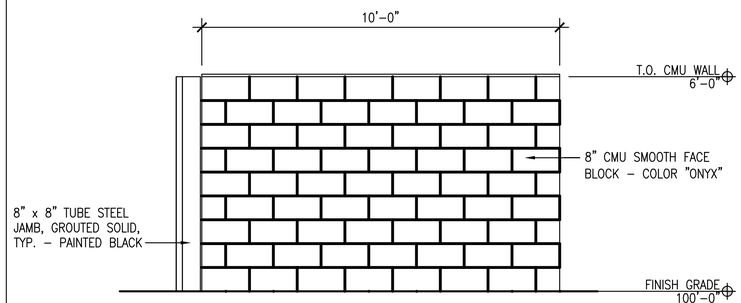
DUMPSTER ENCLOSURE PLAN 1
3/8"=1'-0"



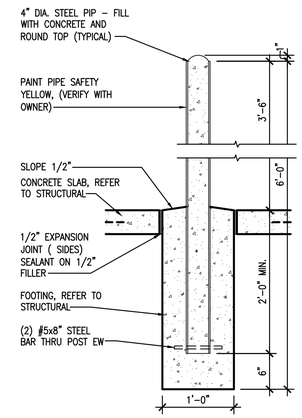
DUMPSTER ENCLOSURE DETAIL 2
3/4"=1'-0"



DUMPSTER ENCLOSURE ELEVATION 3
1/2"=1'-0"



DUMPSTER ENCLOSURE ELEVATION 4
1/2"=1'-0"



BOLLARD DETAIL, TYPICAL 5
1"=1'-0"

idstudio
6201 CAMPUS CIRCLE DR E
IRVING, TEXAS 75063
TEL: 972.870.1288

CORPORATE:

BLACK ROCK COFFEE BAR
9170 E. BAHIA DR., SUITE 101
SCOTTSDALE, AZ 85260
541.531.2149
BR.COFFEE

FOR REFERENCE ONLY.
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BLACK ROCK COFFEE BAR
COLORADO SPRINGS, CO

CLIENT: BLACK ROCK COFFEE BAR
9170 E. BAHIA DRIVE, SUITE 101
SCOTTSDALE, AZ 85260

BLACK ROCK COFFEE BAR

DATE	DESCRIPTION
01/17/2024	OWNER REVIEW ISSUE

DATE	DESCRIPTION

SHEET TITLE:

DUMPSTER ENCLOSURE PLAN AND ELEVATIONS

SHEET NUMBER:

A0.1

PROJECT NUMBER:

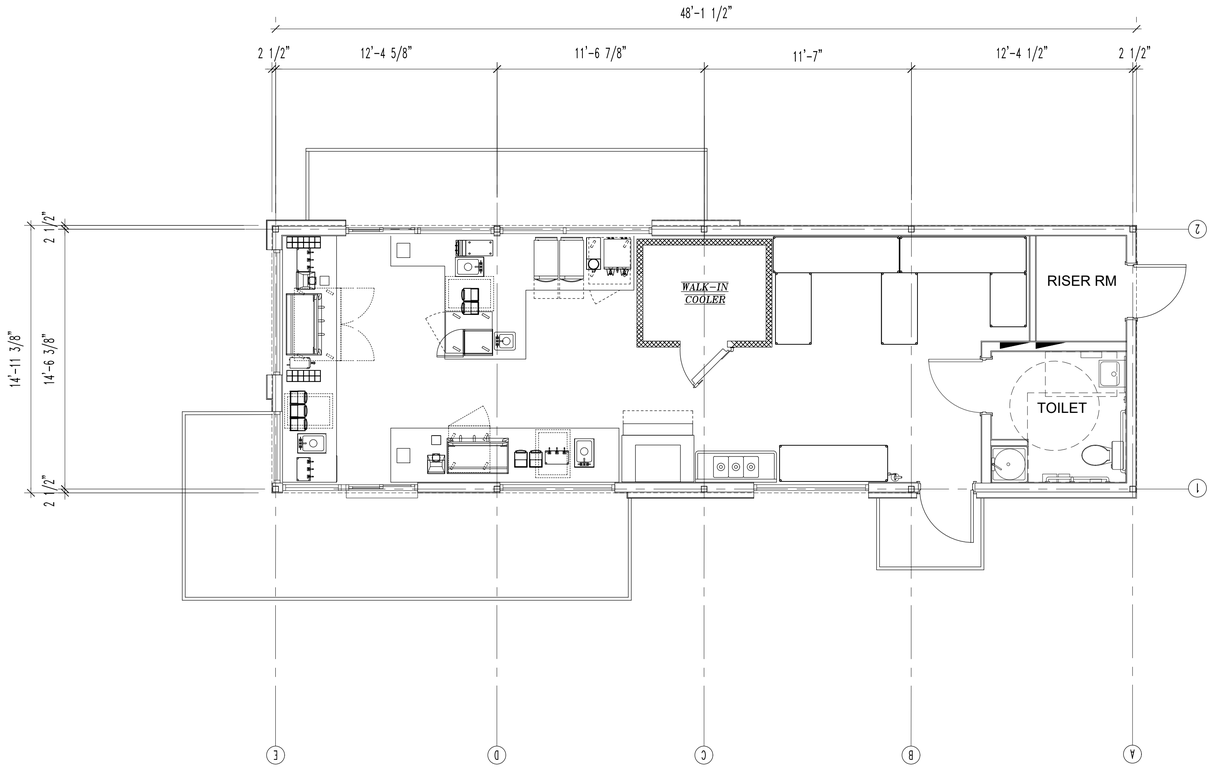
BRC24008

KEY NOTES

1. LINE OF CANOPY ABOVE. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION.
2. LINE OF AWNING ABOVE. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION.
3. 3-COMPARTMENT SINK. REFER TO PLUMBING PLANS FOR ADDITIONAL INFORMATION.
4. MOP SINK 24 X 24. REFER TO PLUMBING PLANS FOR ADDITIONAL INFORMATION,
5. WATER HEATER. REFER TO PLUMBING PLANS FOR ADITIONAL INFORMATION.
6. HAND SINK. REFER TO PLUMBING PLANS FOR ADDITIONAL INFORMATION.
7. EQUIPMENT. SEE SCHEDULE
8. TYPE 2A10BC FIRE EXTINGUISHER.
9. ELECTRICAL PANELS. REFER TO ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.
10. DRIVE-THRU WINDOW.
11. 24 X 24 CRAWL SPACE ACCESS FLOOR PANEL.
12. RANGE HOOD ABOVE.
13. BUILDING POP-OUT.
14. STRUCTURAL COLUMNS - SEE STRUCTURAL PLANS.

SYMBOL LEGEND

- (1) KEYNOTES
- (100) DOOR NO.
- <100> WINDOW NO.
- (1 / A4) EXTERIOR ELEVATION SYMBOL
- (1 / A4) INTERIOR ELEVATION SYMBOL
- (4 / A1) DETAIL SYMBOL



1/4"=1'-0"

(1 / A2.0) FLOOR PLAN

PLAN NORTH

(A)

MODULE KEY PLAN

RUSSO LLC

3836 W BUCKEYE RD
BUILDING C
PHOENIX, AZ 85009
623-328-5196

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BLACK ROCK COFFEE
DTO MODULAR BUILDING

(1)

REGISTERED CERTIFICATE ARCHITECT ARIZONA

NOT FOR CONSTRUCTION

CONTROL # 001

JOB NUMBER: 24-000315
DATE: 11-15-24
CONTENTS: **FLOOR PLAN**

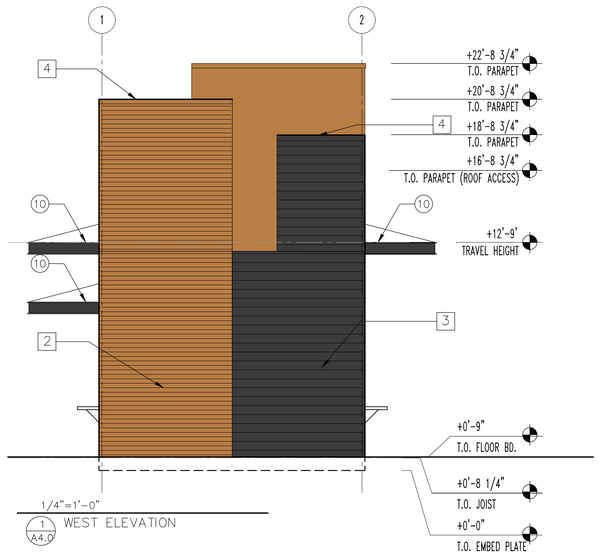
A2.0

FINISH SCHEDULE

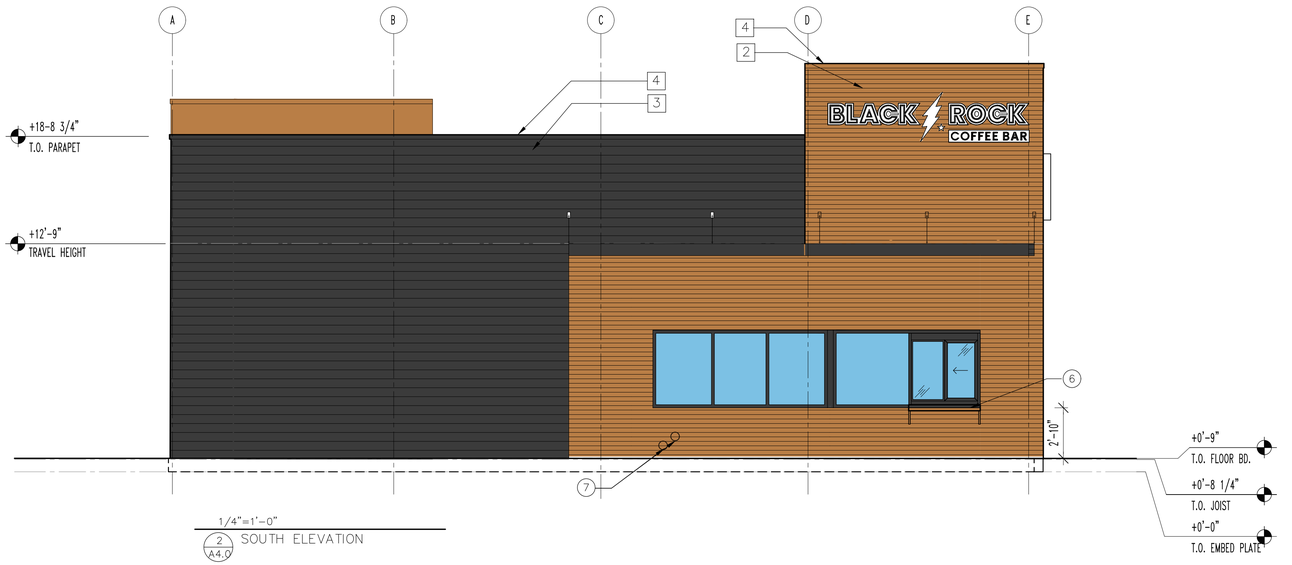
ID TAG	MATERIAL	MANUFACTURER	MODEL	REMARKS
ZONE 1 (BODY AND TOWER)				
1	E.I.F.S.	DRYVIT	TERRANEO	EVEREST
2	CORRUGATED METAL	WESTERN STATES	WESTERN RIB PANEL 24 GA	CORTEN AZP RAW
3	LAP SIDING	JAMES HARDIE	HARDI PLANK SMOOTH 8" 3 1/2" SMOOTH AT CORNERS	PAINT SHERWIN WILLIAMS 6258 TRICORN BLACK
FLASHING, COLUMNS AND CANOPY				
4	PAINTED STEEL	SHERWIN WILLIAMS	COLOR TO MATCH FINISH BELOW	
ALL FINAL FINISHES AS SELECTED DURING SCHEMATIC DESIGN				

KEY NOTES

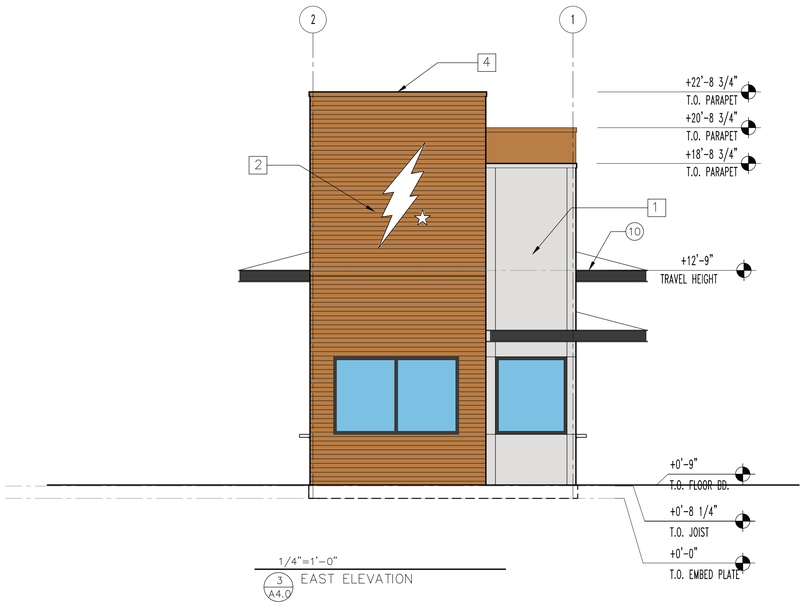
1. FINISH EXTERIOR MATERIAL. INSTALL PER MANUFACTURER'S SPECIFICATION.
2. STEEL CANOPY. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. WINDOW. REFER TO WINDOW SCHEDULE FOR ADDITIONAL INFORMATION.
4. DOOR. REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION.
5. SIGNAGE. UNDER SEPARATED SUBMITTAL.
6. 48" W X 12" D SERVICE COUNTER AR 34" AFF.
7. DOWNSPOUT DAYLIGHT.
8. EXTERIOR LIGHTING AT 9'-2" AFF. TYP OF (7).
9. CAP FLASHING.
10. AWNING CORRUGATED METAL PANEL.
11. RTU - SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
12. E.I.F.S. SCORE LINES.



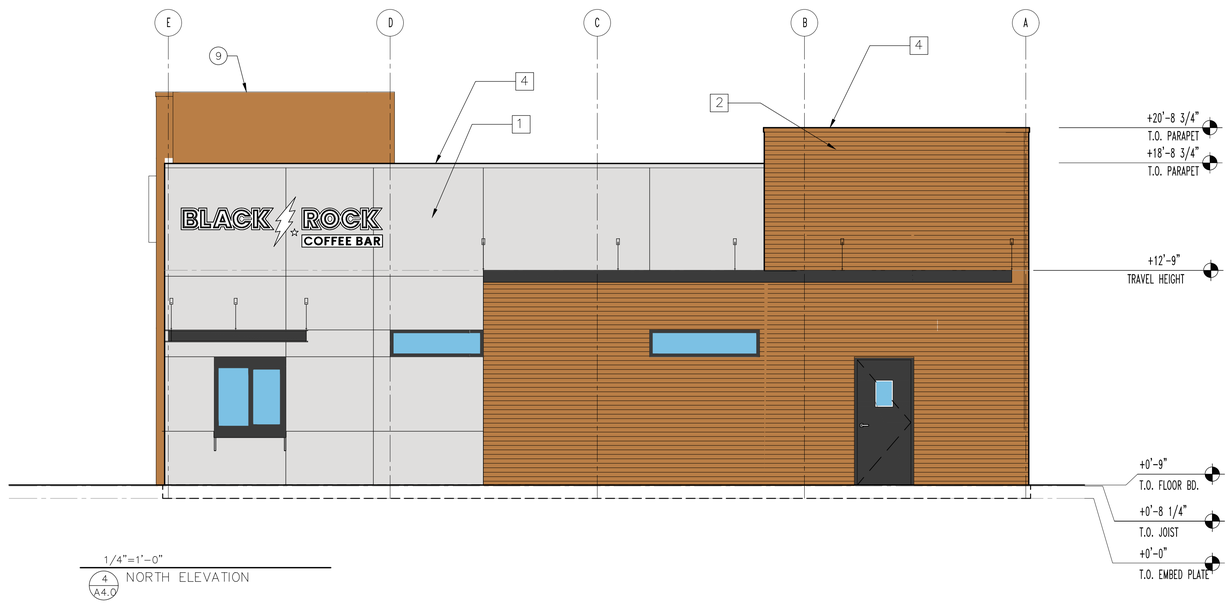
1/4"=1'-0"
1 A4.0 WEST ELEVATION



1/4"=1'-0"
2 A4.0 SOUTH ELEVATION



1/4"=1'-0"
3 A4.0 EAST ELEVATION



1/4"=1'-0"
4 A4.0 NORTH ELEVATION

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3836 W BUCKEYE RD
BUILDING C
PHOENIX, AZ 85009
623-328-5196

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BLACK ROCK COFFEE
DTO MODULAR BUILDING

1

NOT FOR CONSTRUCTION

CONTROL # 001

JOB NUMBER: 24-000315
DATE: 11-15-24
CONTENTS:
EXTERIOR ELEVATIONS

A6.0

FINISH SCHEDULE

ID TAG	MATERIAL	MANUFACTURER	MODEL	REMARKS
ZONE 1 (BODY AND TOWER)				
1	E.I.F.S.	DRYVIT	TERRANEO	EVEREST
2	CORRUGATED METAL	WESTERN STATES	WESTERN RIB PANEL 24 GA	CORTEN AZP RAW
3	LAP SIDING	JAMES HARDIE	HARDI PLANK SMOOTH 8" 3 1/2" SMOOTH AT CORNERS	PAINT SHERWIN WILLIAMS 6258 TRICORN BLACK
FLASHING, COLUMNS AND CANOPY				
4	PAINTED STEEL	SHERWIN WILLIAMS	COLOR TO MATCH FINISH BELOW	
ALL FINAL FINISHES AS SELECTED DURING SCHEMATIC DESIGN				

KEY NOTES

1. FINISH EXTERIOR MATERIAL. INSTALL PER MANUFACTURER'S SPECIFICATION.
2. STEEL CANOPY. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. WINDOW. REFER TO WINDOW SCHEDULE FOR ADDITIONAL INFORMATION.
4. DOOR. REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION.
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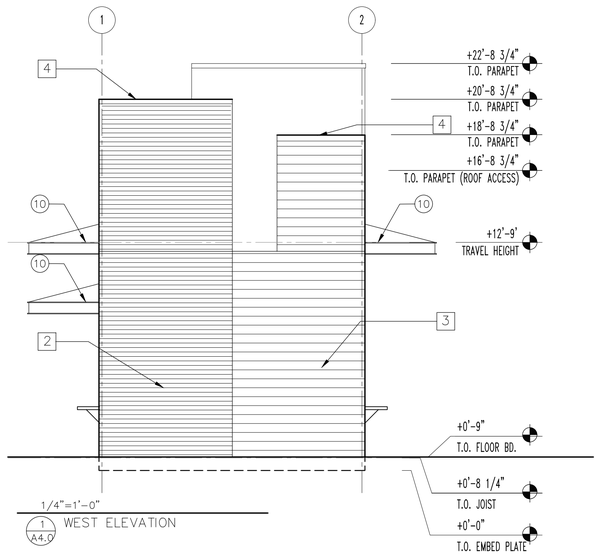
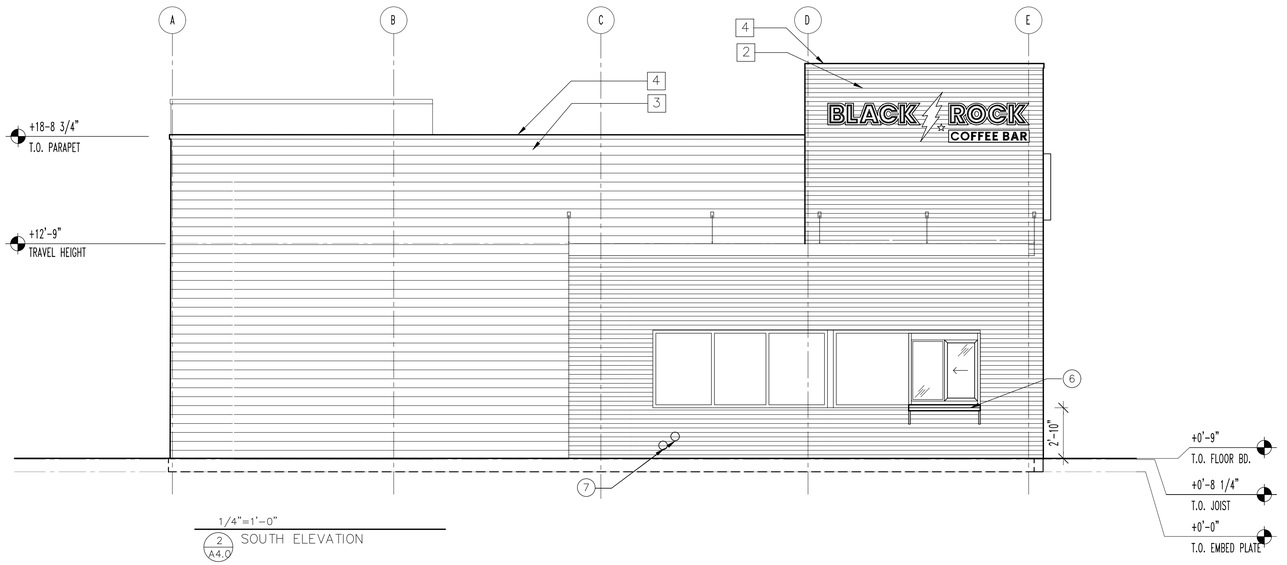
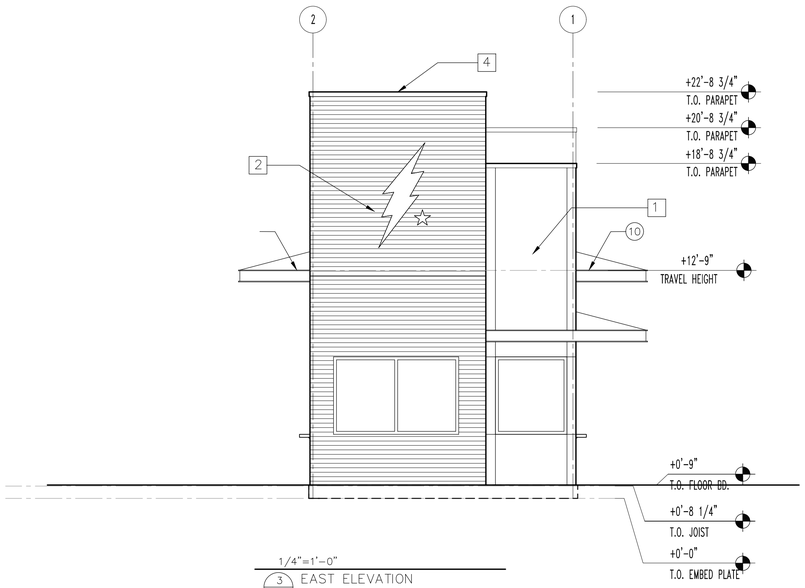
10. AWNING CORRUGATED METAL PANEL.
11. RTU - SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
12. E.I.F.S. SCORE LINES.



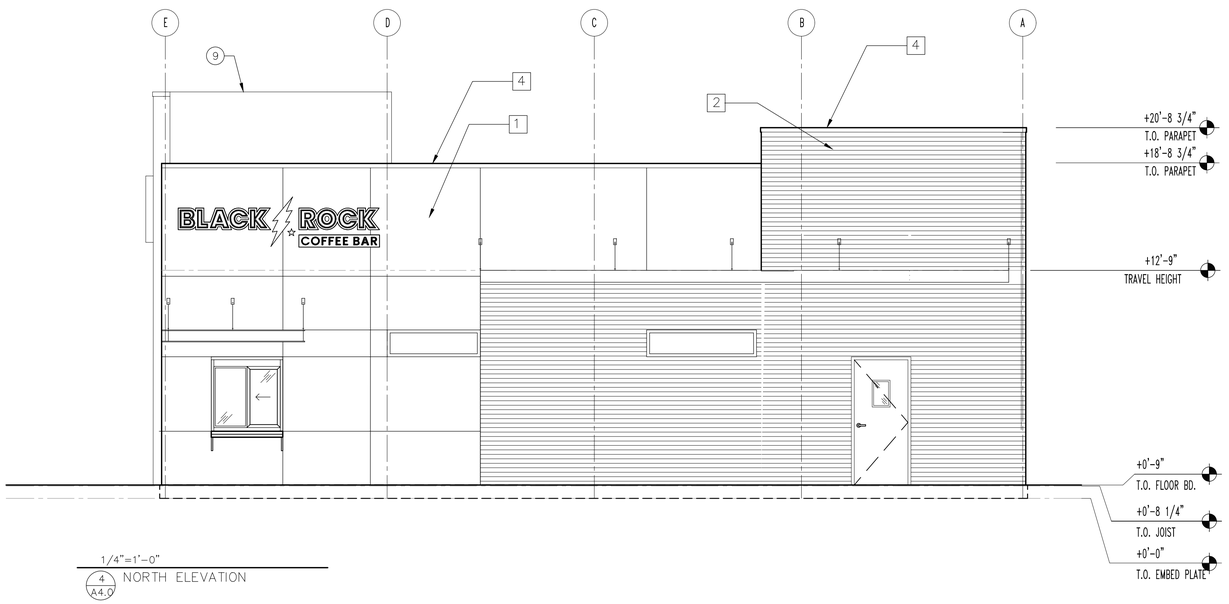
1/4"=1'-0"
1 A4.0 WEST ELEVATION



1/4"=1'-0"
2 A4.0 SOUTH ELEVATION



1/4"=1'-0"
3 A4.0 EAST ELEVATION



1/4"=1'-0"
4 A4.0 NORTH ELEVATION

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BLACK ROCK COFFEE
DTO MODULAR BUILDING

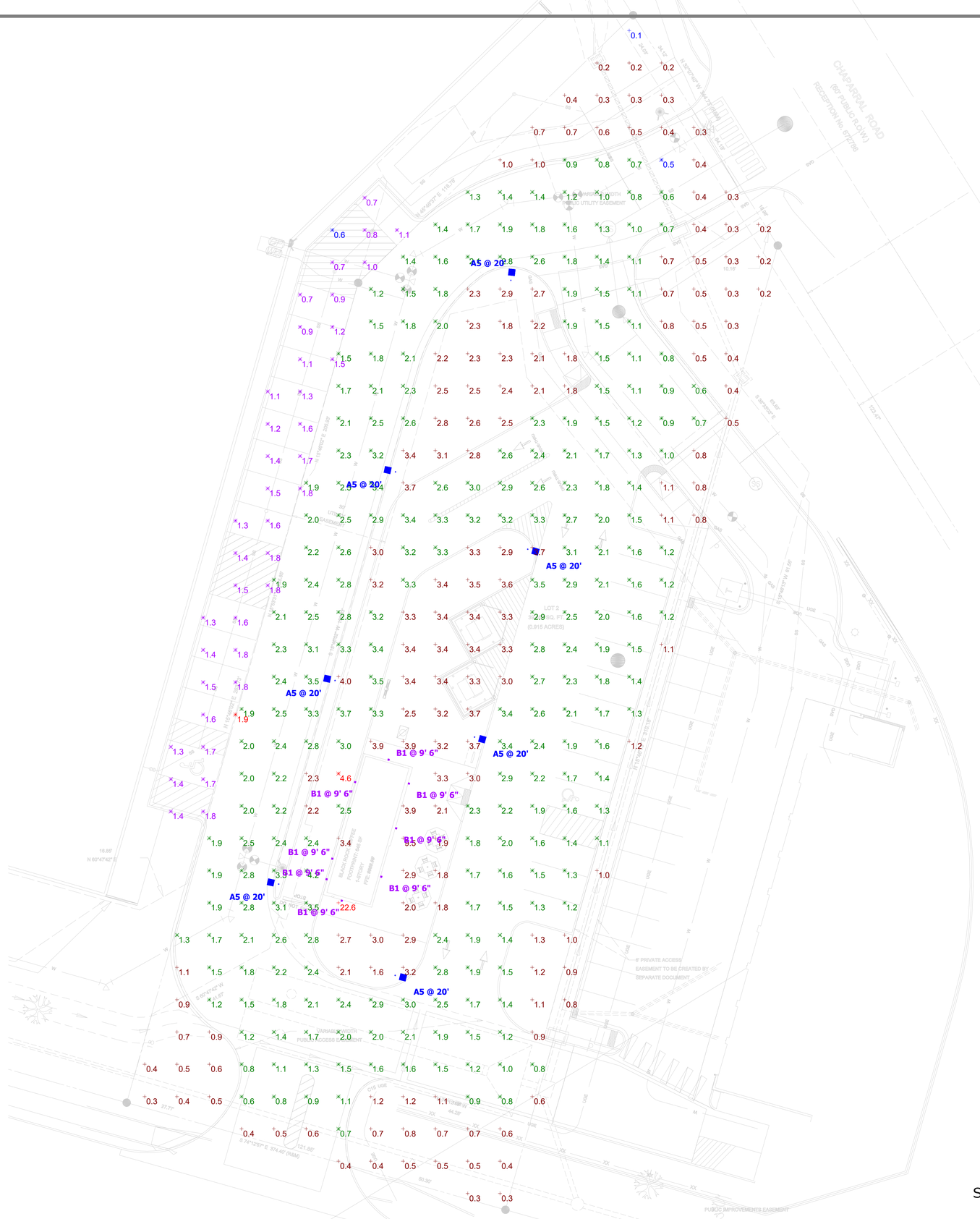
1

NOT FOR CONSTRUCTION

CONTROL # 001

JOB NUMBER: 24-000315
DATE: 11-15-24
CONTENTS:
EXTERIOR ELEVATIONS

A6.0



Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
SITE ALL	+	1.9 fc	22.6 fc	0.1 fc	226.0:1	19.0:1
WEST PARKING	X	1.4 fc	1.9 fc	0.6 fc	3.2:1	2.3:1
PARKING AND DRIVE	X	2.0 fc	4.6 fc	0.5 fc	9.2:1	4.0:1

Schedule

Symbol	Label	QTY	Manufacturer	Catalog	Description	Lamp Output	LLF	Input Power
	A5	7	OPTEC LED LIGHTING	OLA1-120-UNVL-40-5	LED AREA SERIES SMALL 120W 4000K TYPE 5 MOUNTED 10'-0" AFG	15196	0.95	120
	B1	8	RP LIGHTING	4427-XX-17-XX	LED ARCHITECTURAL SQUARE CYLINDER DOWNLIGHT 3000K MOUNTED 9'-6" AFF	1152	0.95	17

Plan View
Scale - 1" = 16ft

optec LED LIGHTING

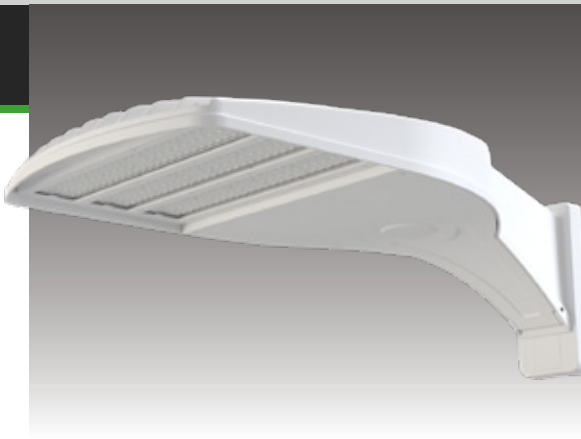
BLACK ROCK COFFEE
COLORADO SPRINGS

Designer
JAW
Date
12/4/2024
Scale
SEE PLAN

Optec LED LIGHTING

Catalog:
Project:
Type:

Area Series (Small)



The OLA1 Small Series is a stylish aerodynamic area luminaire that fits within today's accepted design form factors. Excellent optical performance is achieved with Nichia brand LED's and engineered discrete optics. LED life is assured through efficient thermal coupling and dissipation via a durable, pressure die cast, low-copper alloy, aluminum housing. Engineered to last, all gaskets are anti-UV, anti-aging with no harmful out-gassing. All models come standard with a universal pole mount bracket or an optional wall surface box. Luminaries are available with a number of options including alternate CCT choices, finishes, photocells and occupancy sensors.

FEATURES

- LED Brand: Nichia
- Color Temperatures: 4000K & 5000K (Other CCT's are available upon request)
- CRI: 70
- Lumen Maintenance: L70 = 50,000 hours
- Full Cutoff (meets IDA criteria)
- Operating Temperature: -40˚C (-40˚F) to 40˚C (104˚F)
- Durable All Aluminum Pressure Die Cast Housing
- Powder Coat Finish
- Salt Fog Tested to 2500 hours / per ASTM B117
- IP65 Rated (wet listed / NEMA IEC 60529)
- Mounting: Universal Round or Square Pole, Wall Surface Box

ELECTRICAL SPECIFICATIONS

- Power Input: 120-277V (347-480V Optional)
- Power Factor: > 0.95
- THD: < 15%
- Surge Protection: 20 kV
- Control Options: 0-10V Dimming standard (Photocell and Occupancy Sensors Optional)

TESTS & CERTIFICATIONS

- ETL (UL 1598, UL 8750, NEMA C82.77)
- CSA (C22.2 No.250.0)
- RoHS Compliant
- Design Lights Consortium (Premium)
- 3G Vibration tested (ANSI C136.31)

WARRANTY

- Up to 10-Year Warranty (parts or replacement)

PERFORMANCE SPECIFICATIONS

Distribution	Model / Wattage	Lumens		Bug Rating		
		4000K	5000K	B	U	G
Type 2	OLA1-080	10,801	10,960	3 *	0	1
	OLA1-120	15,840	16,200	3 *	0	2
	OLA1-150	19,800	20,250	3 *	0	2
Type 3	OLA1-080	11,600	11,760	2 *	0	2
	OLA1-120	16,561	16,920	3 *	0	2
	OLA1-150	20,549	21,000	3 *	0	2
Type 3L	OLA1-080	10,799	10,960	3 *	0	3
	OLA1-120	15,960	16,199	3 *	0	3
	OLA1-150	19,800	20,249	4 *	0	3
Type 3R	OLA1-080	10,799	10,960	3 *	0	3
	OLA1-120	15,960	16,198	3 *	0	3
	OLA1-150	19,800	20,250	4 *	0	3
Type 4	OLA1-080	10,596	10,794	2 *	0	2
	OLA1-120	15,472	15,712	2 *	0	2
	OLA1-150	19,046	19,349	3 *	0	2
Type 4L	OLA1-080	10,800	10,960	3 *	0	3
	OLA1-120	16,080	16,320	3 *	0	3
	OLA1-150	19,800	20,250	4 *	0	4
Type 4R	OLA1-080	10,800	10,960	3 *	0	3
	OLA1-120	16,080	16,320	3 *	0	3
	OLA1-150	19,781	20,250	4 *	0	4
Type 5	OLA1-080	10,032	10,185	4	0	3
	OLA1-120	15,049	15,278	4	0	3
	OLA1-150	18,811	19.097	5	0	4

* Backlight = 1 when BC (Backlight Control System) is applied.

Voltage (V)	Current (A)		
	80W	120W	150W
120	0.67	1.00	1.25
208	0.38	0.58	0.72
240	0.33	0.50	0.63
277	0.29	0.43	0.54
347	0.23	0.35	0.43
480	0.17	0.25	0.31

Optec LED LIGHTING



Area Series (Small)

ORDERING INFORMATION

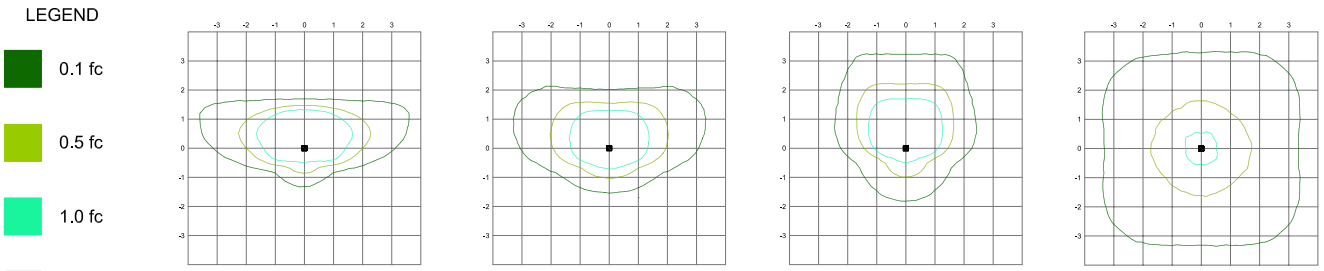
EXAMPLE: OLA1-120-UNVL-50-4-SQ-BZ-PR-TL12

SERIES	WATTAGE	VOLTAGE	COLOR TEMP	DISTRIBUTION	MOUNTING	FINISH	CONTROLS / OPTIONS
OLA1 = Optec LED Area Light	080 = 80W 120 = 120W 150 = 150W	UNVL = 120-277V UNVH =347-480V	30 = 3000K 40 = 4000K 50 = 5000K	2 = Type 2 3 = Type 3 3L = Type 3 Left 3R = Type 3 Right 4 = Type 4 4L = Type 4 Left 4R = Type 4 Right 5 = Type 5	SQ = Square Pole[1] RD = Round Pole[1] WM = Wall Mount[1,2] TA = Tenon Adapter[1] LK = Leveling Kit[3]	WH = White BZ = Dark Bronze BL = Black NA = Natural Aluminum GM = Graphic Metallic CF = Custom Finish	OSWS = Occupancy Sensor (WattStopper)[4] PR3 = Photocell Receptacle 3-pin PR5 = Photocell Receptacle 5-pin PR7 = Photocell Receptacle 7-pin WCS = Wireless Control (Synapse)[5] BCS = Backlight Control System SF = Single Fuse (120V, 277V, 347V) DF = Double Fuse (220V, 240V, 480V) TLSC = Twist Lock Shorting Cap 924 = UL924 Relay TL12 = Twist Lock Photocell 120V[6] TL24 = Twist Lock Photocell 240V[6] TL27 = Twist Lock Photocell 277V[6] TL28 = Twist Lock Photocell 208V[6] TL34 = Twist Lock Photocell 347V[6] TL48 = Twist Lock Photocell 480V[6]

1 - For details, reference accessory data sheet.
2 - WM option requires SQ pole mount bracket (ordering example: SQ-WM)
3 - Leveling kit adjusts up by 5 degrees or down by 5 degrees
4 - OSWS = For Wattstopper PIR sensor information and options contact factory
5 - WCS = for Synapse wireless controls information and options contact factory for details
6 - Photocell default = Fail in "ON" mode (unless otherwise specified)

PHOTOMETRIC PERFORMANCE

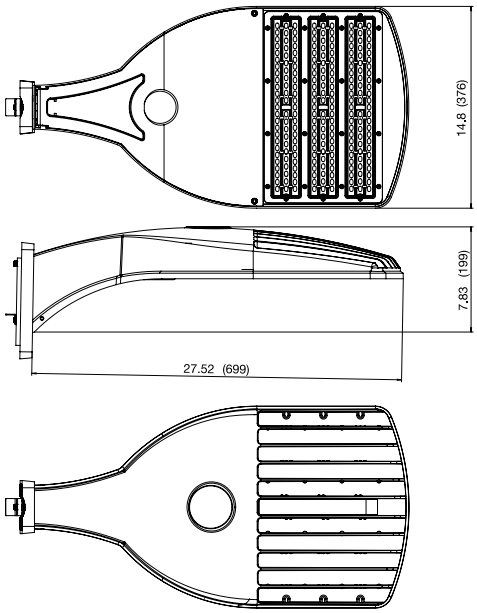
Isofootcandle plots = OLA1 120W model in 5000K CCT @ 30' mounting height. Distances are in units of mounting height.



120W (Type 2) Plot | 120W (Type 3) Plot | 120W (Type 4) Plot | 120W (Type 5) Plot

Published luminaire photometric testing performed to IESNA-79-08 standards

DIMENSIONS, WEIGHTS & EPA

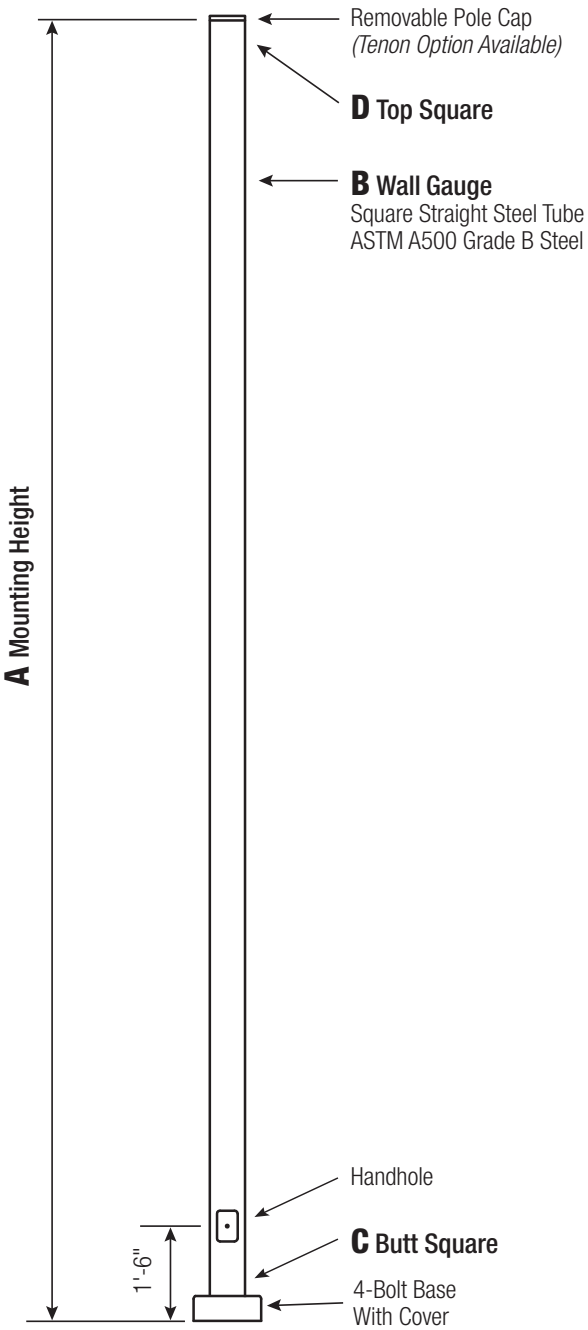


Wattage	80W	120W	150W
Length (inches / mm)	27.52 / 699	27.52 / 699	27.52 / 699
Width (inches / mm)	14.8 / 376	14.8 / 376	14.8 / 376
Height (inches / mm)	7.83 / 199	7.83 / 199	7.83 / 199
Weight (lbs / kg)	19.4 / 8.8	19.4 / 8.9	20 / 9.1

Wattage	Effective Projected Area (EPA) in ft²				
					
80	0.96	1.92	1.81	2.77	3.63
120	0.96	1.92	1.81	2.77	3.63
150	0.96	1.92	1.81	2.77	3.63

SSS

Square Straight Steel Pole
No Arm — 4-Bolt Base



Powder Coated, Galvanized or Powder Coated over Galvanized Finish Per Customer Specification.

C Butt Sq.	D Top Sq.	F Bolt Cir. Dia.	G Base Sq.	H Bolt Proj.	I Bolt Size
4 *(11 Gauge)*	4	8 - 9	8	3.75	.75 x 17 x 3
4 *(7 Gauge)*	4	8 - 9	8	3.75	.75 x 30 x 3
5 *(11 Gauge)**	5	10 - 12	11	3.75	.75 x 30 x 3
5 *(7 Gauge)*	5	10 - 12	11	4.875	1 x 36 x 4
6	6	11 - 13	12.5	4.875	1 x 36 x 4

**Requires the use of oversized washers (provided).*

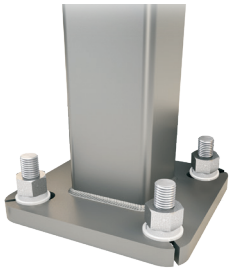
Dimensions in Inches

Pole

Pole shaft shall be weldable-grade, cold-rolled, commercial quality carbon steel tubing conforming to ASTM A500 Grade B. Options include 11 gauge and 7 gauge. All welds shall conform to AWS D1.1 using ER70S-6 electrodes.

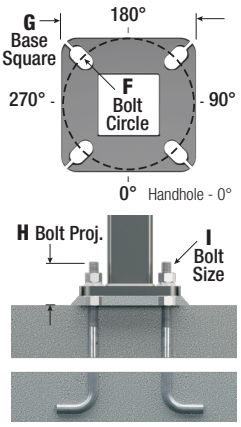
Base Style

4-Bolt Steel Plate Base Flange of fabricated hot rolled carbon steel conforming to ASTM A36 or equivalent (36 ksi minimum yield) with 2-piece Base Cover and attaching hardware.



Anchorage

Anchorage Kit will include four (4) L-shaped Steel Anchor Bolts conforming to AASHTO M314-90 Grade 55. Ten inches (10") of threaded end will be galvanized per ASTM A153. Kits will contain eight (8) Hex Nuts, four (4) Lock Washers, and eight (8) Flat Washers (all components Galvanized Steel). A paper bolt circle template will be provided.



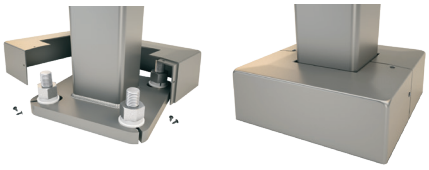
Handhole

Reinforced, 3" x 5" Handhole with cover, stainless steel screw and backbar. A grounding provision incorporating a tapped 1/2"-13NC hole will be provided.



Base Cover

Square ABS plastic Base Covers are standard on all SSS poles specified in BA-Black, BM-Dark Bronze and BH-White. SSS poles specified in all other colors will be manufactured of metal materials. *Custom specification of SSS square metal style Base Covers in BA, BM and BH powder coated finishes is available.*



Vibration Damper

If determined necessary by Hapco, or if specified by the customer, a first and/or second mode vibration damper will be provided.

WARNING: *Do not install light pole without luminaire.*

A Mtg. Hgt.	B Wall Gauge	C Butt Sq.	Total Lum. Weight	Maximum EPA 90	100	110	120	130	140	Catalog Number
10	11	4	320	25.2	20.0	18.6	15.3	12.7	10.6	SSS10B4-4-**
12	11	4	285	20.6	16.2	14.9	12.1	9.9	8.2	SSS12B4-4-**
14	11	4	255	17.0	13.2	12.1	9.7	7.8	6.3	SSS14B4-4-**
15	11	4	245	15.5	11.9	10.9	8.6	6.8	5.4	SSS15B4-4-**
15	7	4	305	23.4	18.4	17.0	13.8	11.4	9.4	SSS15D4-4-**
16	11	4	235	14.0	10.7	9.7	7.6	5.9	4.6	SSS16B4-4-**
16	7	4	290	21.5	16.8	15.5	12.5	10.2	8.4	SSS16D4-4-**
18	11	4	215	11.3	8.4	7.6	5.7	4.3	3.2	SSS18B4-4-**
18	7	4	265	18.0	13.9	12.8	10.2	8.2	6.6	SSS18D4-4-**
20	11	4	200	9.1	6.5	5.8	4.2	2.9	1.9	SSS20B4-4-**
20	11	5	235	14.1	10.3	9.2	6.8	4.9	3.4	SSS20B5-4-**
20	7	4	240	15.1	11.5	10.5	8.2	6.5	5.0	SSS20D4-4-**
20	7	5	330	26.3	20.3	18.6	14.8	11.9	9.6	SSS20D5-4-**
22	11	4	200	7.2	4.9	4.2	2.8	1.7	0.8	SSS22B4-4-**
22	11	5	215	11.4	8.0	7.1	4.9	3.2	1.9	SSS22B5-4-**
22	7	4	225	12.7	9.5	8.6	6.6	5.0	3.7	SSS22D4-4-**
22	7	5	300	22.4	17.1	15.6	12.2	9.6	7.5	SSS22D5-4-**
25	11	4	200	4.7	2.8	2.2	1.0	-	-	SSS25B4-4-**
25	11	5	200	8.0	5.1	4.3	2.4	1.0	-	SSS25B5-4-**
25	7	4	205	9.7	6.9	6.2	4.4	3.1	2.0	SSS25D4-4-**
25	7	5	260	17.7	13.2	11.9	9.0	6.7	4.9	SSS25D5-4-**
28	11	4	200	2.6	1.0	-	-	-	-	SSS28B4-4-**
28	11	5	200	5.1	2.6	1.9	-	-	-	SSS28B5-4-**
28	7	4	200	7.1	4.8	4.1	2.6	1.5	-	SSS28D4-4-**
28	7	5	235	13.9	9.9	8.8	6.3	4.3	2.7	SSS28D5-4-**
30	11	5	200	3.4	1.1	-	-	-	-	SSS30B5-4-**
30	7	4	200	5.6	3.5	2.9	1.6	-	-	SSS30D4-4-**
30	7	5	215	11.7	8.0	7.0	4.7	2.9	1.5	SSS30D5-4-**
30	7	6	275	19.2	13.7	12.2	8.7	5.9	3.8	SSS30D6-4-**
35	7	5	200	6.9	4.0	3.1	1.2	-	-	SSS35D5-4-**
35	7	6	220	12.6	8.0	6.8	3.9	1.6	-	SSS35D6-4-**
39	7	6	200	8.2	4.2	3.1	0.6	-	-	SSS39D6-4-**

Catalog Number System

The catalog number for Hapco poles utilizes the following identification system.

MOUNTING HEIGHT | BUTT SQ. | BASE STYLE | FINISH

S S S [ ] [ ] [ ] - 4 - [ ] - [ ] [ ]

SHAFT ASSEMBLY | WALL GAUGE | TOP SQ. | ACCESORIES OPTIONS

Catalog Number Example -

SSS 20 D 5 - 4 – BA

Square Straight Steel, 20' Mounting Height, 7 Gauge, 5" Butt Square, No Taper, 4-Bolt Base, Black Powder Coat Finish.

EPA Notes:

Effective Projected Area (EPA) in square feet. EPA's calculated using wind velocity (mph) indicated in accordance with 2009 AASHTO LTS-5 using a 25-year design life. Maximum EPA is based on the luminaire weight shown. Increased luminaire weight may reduce the maximum EPA. If weight is exceeded, or if other design life or code is required, please consult the factory.

Mounting Options

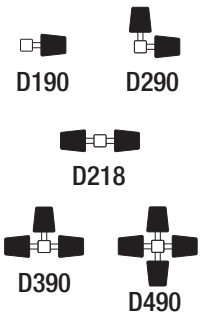
Side Drill Mount
Includes removable pole cap.
NOTE: A luminaire drilling template must be supplied at time of order.



Tenon Mount
For Tenon Mount applications specify both Tenon diameter and length.



Drill Mount Options



Electrical Box

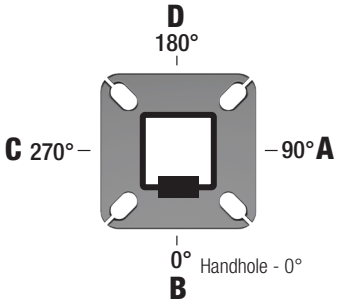

Box Only


GF1 Duplex GFI Receptacle *with Cover*


GF2 Duplex GFI *with In-Use Cover*

Note: *GFI Options must be specified in Accessories.*

Pole Orientation



SSS [ ][ ] [ ][ ] - 4 – [ ][ ][ ][ ] – [ ][ ] – [ ][ ][ ][ ][ ][ ][ ][ ] – [ ][ ]

SSS- Square Straight Steel Pole

Height	Gauge	Butt Sq.	Top Sq.	Base Style	Mounting Options	Electrical Box*	Accessories/Options*	Finish
10 = 10' **12** = 12' **14** = 14' **16** = 16' **18** = 18' **20** = 20' **22** = 22' **25** = 25' **28** = 28' **30** = 30' **35** = 35' **39** = 39'	**B** = 11 Gauge **D** = 7 Gauge	**4** = 4" **5** = 5" **6** = 6"	"-"= No Taper	**4** = 4-Bolt Base	**DRILL MOUNT** **D000** - No Drilling **D190** - Std. "A" **D290** - Std. "A" & "D" **D218** - Std. "A" & "C" **D390** - Std. "A", "D", & "C" **D490** - Std. "A", "B", "C", & "D" **DCUS** - Custom* **TENON** **T204** - 2-3/8" O.D. x 4" **T304** - 2-7/8" O.D. x 4" **T356** - 3-1/2" O.D. x 6" **T406** - 4" O.D. x 6" **TCUS** - Custom Tenon** ** Specify Number and Orientation* *** Specify O.D. and Height*	**FA** - 30" Up, "D" **FB** - 30" Up, "B" **FC** - 30" Up, "A" **FD** - 30" Up, "C" **FE** - 36" Up, "D" **FF** - 36" Up, "B" **FG** - 36" Up, "A" **FH** - 36" Up, "C" **FI** - 24" Up, "D" **FK** - 24" Up, "A" **FL** - 24" Up, "C" **FZ** - Custom** ** GFI Receptacle Options Available (Specify in Accessories)* *** Specify Height and Orientation*	**C12** - Threaded 1/2" Coupling** **C34** - Threaded 3/4" Coupling** **C10** - Threaded 1" Coupling** **EHH** - Extra Handhole** **GF1** - Duplex GFI Receptacle *(WR) with Cover* **GF2** - Duplex GFI *(WR) with In-Use Cover* **LAB** - Less Anchor Bolts **LPC** - Less Pole Cap **PAB** - Pre-shipped Anchor Bolts **VD1** - Vib. Damper - 1st Mode **VD2** - Vib. Damper - 2nd Mode ** Add all that apply (Example: CPL-LAB-VD1)* *** Specify Location*	**POWDER COAT COLORS** **BA** - Black Powder Coat **BH** - White Powder Coat **BM** - Dark Bronze Powder Coat **BV** - Dark Green Powder Coat **GC** - Gray Powder Coat **XX** - Special Colors* **GALVANIZED** **1Q** - Galvanized Only **1C** - Black PC Over Galv. **1D** - White PC Over Galv. **1B** - D. Bronze PC Over Galv. **1Y** - D. Green PC Over Galv. **1J** - Gray PC Over Galv. **XX** - Special PC Over Galv.* ** Provide RAL # or Sample Color Chip*