



PROJECT GENERAL NOTES

GENERAL NOTES

- 1. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE CITY AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS. ALL REFERENCES TO PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.
2. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE PLANS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, AND RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.
3. UTILITY TRENCHES ARE TO BE SLOPED OR BRACED AND SHEETED AS NECESSARY TO FURNISH SAFE WORKING CONDITIONS FOR THE WORKMEN AND THE PROTECTION OF OTHER UTILITIES IN COMPLIANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL HEALTH AND SAFETY RULES AND REGULATIONS.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT CONNECTION POINTS AND POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS AND TO COORDINATE SUCH RELOCATIONS WITH THE APPROPRIATE UTILITY PROVIDER AND ALL AFFECTED PARTIES.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITY COMPANY/DISTRICT TO OBTAIN TEMPORARY POWER, TELEPHONE, AND WATER SERVICE DURING CONSTRUCTION. ALL COST FOR TEMPORARY SERVICES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
6. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE CITY AND ALL UTILITY COMPANIES/DISTRICTS INVOLVED WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL UTILITY RELOCATIONS, WHETHER SHOWN OR NOT SHOWN ON THE PLANS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
9. THE CONTRACTOR SHALL INSTALL AND MAINTAIN CONSTRUCTION FENCE PRIOR TO, AND THROUGHOUT CONSTRUCTION.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK AND INSPECTIONS AS REQUIRED BY THE CITY, STATE, OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH INSPECTION.
11. THE CONTRACTOR SHALL NOTIFY THE CITY AND LOCAL UTILITY COMPANIES/DISTRICTS AT LEAST 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.
12. THE CONTRACTOR SHALL NOTIFY THE CITY AND LOCAL UTILITY COMPANIES/DITRICTS AT LEAST 48 HOURS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.
14. INCLUDED IN THIS PACKAGE IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN IN THIS SET OF CONSTRUCTION DRAWINGS. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.
15. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION, AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS. COORDINATES PROVIDED ON THE DRAWING SHALL BE VERIFIED. ANY WORK DONE INCORRECTLY BASED UPON THE PROVIDED COORDINATES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND FIXED AT HIS OWN EXPENSE.
16. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO THE REQUIRED FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.
17. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE PROJECT MANAGER FOR THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.
18. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL USE BENCHMARKS AND DATUMS SHOWN HEREON TO SET PROJECT BENCHMARK(S), BY RUNNING A LEVEL LOOP BETWEEN AT LEAST TWO BENCHMARKS, AND SHALL PROVIDE SURVEY NOTES OF SUCH TO PROJECT ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
19. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

SITE/GRADING GENERAL NOTES

- 1. CONTOURS SHOWN REPRESENT FINISHED ELEVATIONS. ADJUSTMENT TO SUBGRADE FOR ALL STRUCTURES (IE PAVING, SIDEWALKS, SLABS, ETC) IS THE RESPONSIBILITY OF THE CONTRACTOR. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR HIS OWN ESTIMATE OF EARTHWORK QUANTITIES.
2. EXISTING SPOT ELEVATIONS AT MATCH POINTS WERE DERIVED FROM CONTOURS PROVIDED WITH THE SITE MAPPING AND ARE ANTICIPATED TO BE +/- AND SHALL BE VERIFIED PRIOR TO ANY CONSTRUCTION. ANY DEVIATION SHALL BE REPORTED TO THE ENGINEER.
3. PRIOR TO PLACING ANY CONCRETE CURB, GUTTER, PANS, AND ACCESSIBLE RAMPS, THE FORMWORK ELEVATIONS SHALL BE VERIFIED AND PROVIDED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL. ANY WORK THAT DOES NOT COMPLY WITH THIS REQUIREMENT AND IS PLACED IN ERROR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. NO PROPOSED LANDSCAPED SLOPE SHALL EXCEED 3:1, OR AS SPECIFIED OTHERWISE BY LOCAL CODE.
5. CONTRACTOR SHALL REFER TO BUILDING ARCHITECTURAL PLANS FOR EXACT DIMENSIONS AND LOCATIONS OF BUILDINGS AND APPURTENANCES. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH THE ARCHITECTURAL BUILDING PLANS AND SPECIFICATIONS AND THE GEOTECHNICAL REPORT PREPARED SPECIFICALLY FOR THIS SITE.
6. ALL LANDSCAPED AREAS ARE TO BE CONDITIONED PER THE REQUIREMENTS OF THE LANDSCAPE PLANS. ALL DISTURBED AREAS THAT ARE NOT DESIGNATED TO BE PAVED SHALL BE LANDSCAPED OR SEEDED ACCORDING TO THE LANDSCAPE PLAN(S) AND GRADING, EROSION AND SEDIMENT CONTROL PLAN(S).
7. ALL PROPOSED SPOT ELEVATIONS ARE FLOWLINE ELEVATIONS UNLESS OTHERWISE NOTED. SPOT ELEVATIONS TAKE PRECEDENCE OVER CONTOURS AND SLOPES SHOWN. CONTRACTOR SHALL NOTIFY ENGINEER OF SPOT ELEVATIONS WHICH DO NOT APPEAR TO BE CONSISTENT WITH THE CONTOURS AND SLOPES. SPOT ELEVATIONS AND SPECIFIC PROFILE DATA SHALL BE USED FOR SETTING ELEVATIONS OF CURB AND GUTTER AND UTILITIES. THE CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
8. ASPHALT GRADES SHALL NOT BE LESS THAN 1.00% IN THE DIRECTION OF FLOW. CURB AND GUTTER AND CONCRETE PAN GRADES SHALL NOT BE LESS THAN 0.50% IN THE DIRECTION OF FLOW. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL PAVEMENT AREAS AND ALONG ALL CURBS. PAVEMENT OR CURBS WHICH DO NOT PROVIDE PROPER DRAINAGE MUST BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
9. HANDICAP PARKING STALLS SHALL BE PAINTED AND SIGNED IN ACCORDANCE WITH CURRENT ADA STANDARDS AND REGULATIONS.
10. HANDICAP RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT ADA STANDARDS AND REGULATIONS.
11. THE FOLLOWING IS APPLICABLE TO ALL CONSTRUCTION WITHIN THE LIMITS OF THIS PROJECT:
a. THE MAXIMUM CROSS SLOPE OF ANY SIDEWALK OR PEDESTRIAN ACCESS ROUTE SHALL BE 2.0%. THE SLOPE SHALL BE MEASURED PERPENDICULAR TO THE DIRECTION OF TRAVEL.
b. THE GRADE OF HANDICAP PARKING STALLS SHALL NOT EXCEED 2.0% IN ANY DIRECTION. HANDICAP PARKING SHALL HAVE AN ACCESSIBLE ROUTE TO THE BUILDING ENTRY AS SHOWN ON THE DRAWINGS.
c. HANDICAP ACCESSIBLE ROUTES SHALL HAVE A MAXIMUM LONGITUDINAL GRADE OF 5.0%. ACCESSIBLE ROUTES EXCEEDING 5.0% SHALL BE CONSTRUCTED WITH RAMPS AND HAND RAILS HAVING A MAXIMUM SLOPE OF 8.33% FOR A MAXIMUM RISE OF 30 INCHES. A 5-FOOT BY 5-FOOT LANDING PAD (WITH A 2 PERCENT MAXIMUM SLOPE IN ANY DIRECTION) SHALL BE CONSTRUCTED AT THE BOTTOM AND TOP OF ALL RAMPS.
12. PRIOR TO PLACEMENT OF CURB AND PAVEMENT CONTRACTOR SHALL VERIFY COMPLIANCE WITH ADA STANDARDS.
13. IF DURING THE GRADING AND CONSTRUCTION PROCESS CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE PROJECT MANAGER FOR THE DEVELOPER/OWNER, THE ENGINEER, AND THE GEOTECHNICAL ENGINEER IMMEDIATELY.
14. ALL GRATES, MANHOLE RIMS, VALVE BOXES, VALVE COVERS, CLEANOUTS, AND VAULT OR BOX COVERS SHALL BE ADJUSTED TO "AS CONSTRUCTED" FINISHED GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.
15. ALL CONCRETE PAVEMENT, CONCRETE FLATWORK, CONCRETE STRUCTURES, AND CONCRETE UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE MATERIAL RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED SPECIFICALLY FOR THIS SITE.
16. CONCRETE PAVEMENT JOINTS SHALL MEET THE REQUIREMENTS OF CDOT STANDARDS AND SPECIFICATIONS, AND CDOT STANDARD PLAN NO. M-412-1, UNLESS NOTED OTHERWISE.
17. ALL SIGNING AND STRIPING WILL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCAL CODES.
18. REFER TO ARCHITECTURAL PLANS FOR BUILDING SIGNAGE LOCATIONS.
19. CONTRACTOR SHALL COORDINATE SIGNAGE PERMIT, INSTALLATION, AND SPECIFICATIONS WITH OWNER AND SIGNAGE MANUFACTURER.
20. CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF ANY AND ALL ALLOWABLE MONUMENT OR POLE SIGNAGE WITH OWNER AND SIGNAGE MANUFACTURER, AND PROVIDE SHOP DRAWINGS PRIOR TO FABRICATION TO THE OWNER FOR APPROVAL.
21. REFER TO THE SITE PLAN FOR EXTENT OF PAVEMENT AND PAVEMENT SECTIONS.
22. GRADES WITHIN ASPHALT PAVING AREAS SHALL BE CONSTRUCTED TO WITHIN 0.10 FEET OF THE DESIGN GRADE. HOWEVER, THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL PAVEMENT AREAS AND ALONG CURBS. CURBS OR PAVEMENT AREAS WHICH DO NOT PROVIDE PROPER DRAINAGE MUST BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
23. THE CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL LANDSCAPED AND PAVED AREAS.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.
25. IF ANY EXISTING STRUCTURES, SIDEWALK, AND/OR CURB AND GUTTER MODIFIED OR TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER PRIOR TO PROJECT CLOSE OUT.
26. THE CONTRACTOR SHALL PROTECT THE PROJECT BENCHMARK(S) THROUGHOUT CONSTRUCTION AND SET ADDITIONAL PROJECT BENCHMARKS AS NECESSARY TO MAINTAIN VERTICAL CONTROL THROUGHOUT THE DURATION OF THE PROJECT.
27. THE CONTRACTOR SHALL INSPECT AND REPAIR EXISTING DRAINAGE STRUCTURES AS NEEDED, AND CLEAN OUT EXISTING PIPES TO REMOVE ALL SILT AND DEBRIS.

MSE RETAINING WALL GENERAL NOTES

- 1. CONTRACTOR SHALL PROVIDE FULL DESIGN AND CONSTRUCTION OF THE MSE RETAINING WALLS IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND INDUSTRY STANDARDS AND SPECIFICATIONS.
2. THE ALIGNMENT OF THE MSE WALLS IS SHOWN ON THE PLANS AND ASSOCIATED PROFILES DEPICTING THE FINISHED GRADE AT THE TOP OF THE WALL (TOW) AND BOTTOM OF THE WALL (BOW) AND IS NOT INTENDED TO SHOW ANY PORTION OF THE WALL BELOW FINISHED GRADE. CHANGES IN THE TOP OF WALL ELEVATIONS SHALL BE ACHIEVED BY UNIFORMLY STEPPING THE WALL.
3. CONTRACTOR IS REQUIRED TO:
a. REVIEW THE GEOTECHNICAL REPORT FOR THE SITE AND VERIFY THE REPORT PROVIDES ALL INFORMATION REQUIRED FOR THE DESIGN OF THE WALL.
b. PROVIDE FULL DESIGN OF THE WALL INCLUDING DESIGN CALCULATIONS AND CONSTRUCTION DRAWINGS PREPARED BY A LICENSED ENGINEER TO BE SUBMITTED TO THE CITY FOR APPROVAL. THE DESIGN SHALL CONSIDER THE LONG TERM STRUCTURAL STABILITY OF THE WALL AND ADDRESS DRAINAGE BEHIND THE WALL.
c. OBTAIN ALL PERMITS REQUIRED FOR THE WORK.
d. VERIFY EXISTING AND PROPOSED ELEVATIONS AT TOP OF WALL.
e. PROVIDE ALL MATERIALS AND LABOR REQUIRED FOR CONSTRUCTION AND INSTALLATION OF THE WALL.
f. PROVIDE MATERIAL TESTING OF ALL MATERIALS USED FOR CONSTRUCTION OF WALLS.
g. DETAIL, PROVIDE, AND INSTALL A PEDESTRIAN GUARDRAIL ALONG THE TOP OF ALL WALLS INSTALLED. SUBMIT DETAILS TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
h. SUBMIT TO THE ARCHITECT A COLOR AND TEXTURE SAMPLE OF THE BLOCK TO BE USED PRIOR TO INSTALLATION.



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 HIS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCURRED BY THE CONTRACTOR'S FAILURE TO 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 RESPONSIBLE TO ASSURE AN INDIVIDUAL'S SAFETY OF THE WORK OR PERSONS ENGAGED IN THE WORK OF ANY OTHER PERSONS.

COPYRIGHT © 2025 ATWELL LLC. NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL LLC.

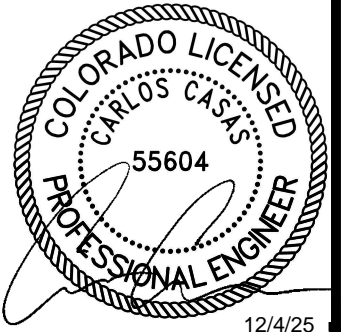


LOT 4A, PARKER POINT SUBD. FILING NO. 1, AMEND. NO. 1 S. PARKER RD & STROH RD PARKER DOUGLAS COUNTY, COLORADO

BLACK ROCK COFFEE BAR 13135 DECLAN DRIVE BLACK ROCK COFFEE BAR GENERAL NOTES

DATE 2025-12-04

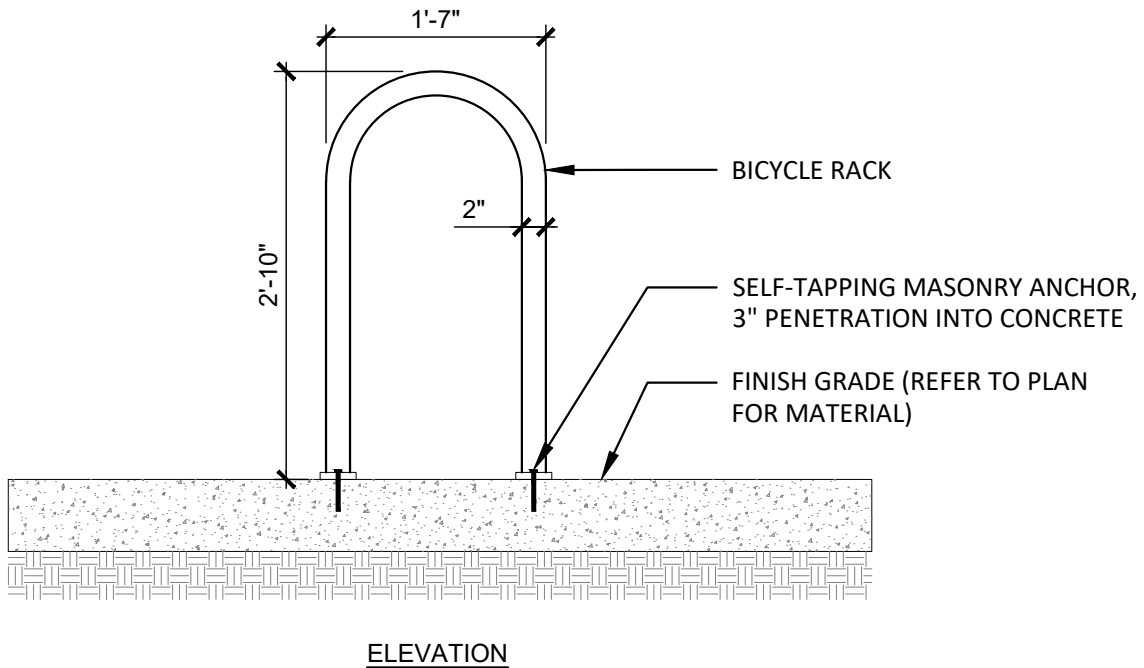
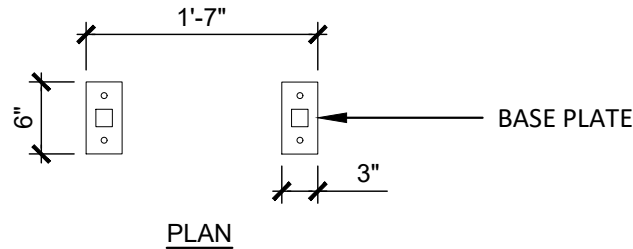
REVISIONS



DRAWN BY: K. SARWAR CHECKED BY: N. SALAZAR PROJECT MANAGER: N. SALAZAR JOB #: 24003198 FILE CODE: ## SHEET NO. C1.20



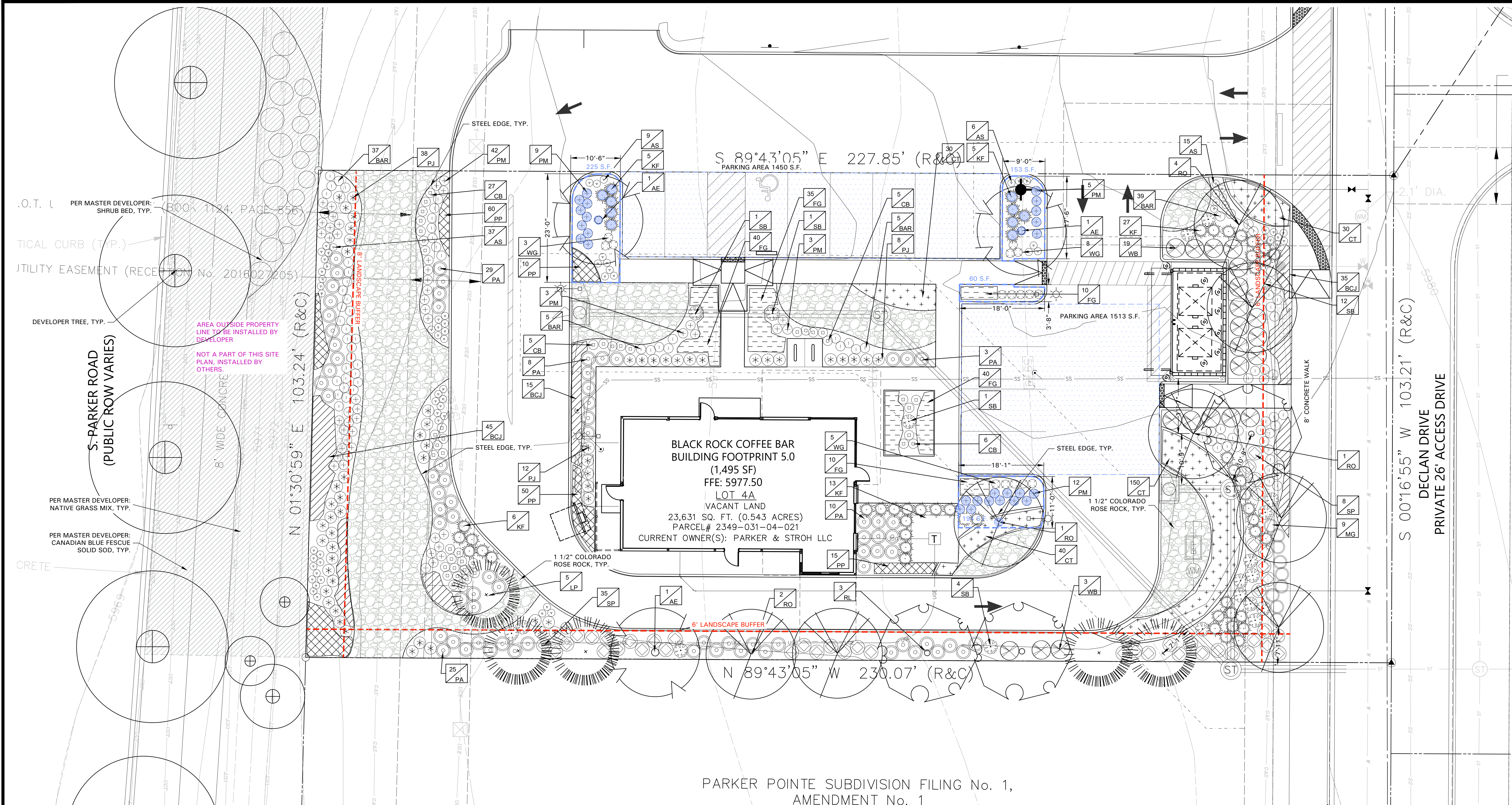
# TOWN OF PARKER STANDARD DETAILS



**NOTES:**

1. BASIS-OF-DESIGN: BIKE RACK (MADRAX U-200), SURFACE MOUNTED, COLOR: BLACK
2. FINAL LOCATION TO BE VERIFIED IN FIELD WITH OWNER AND DESIGN TEAM COORDINATE WITH OWNER ON EXACT LOCATION.
3. WHERE BICYCLE RACK SITS ON UNIT PAVING, MASONRY ANCHOR TO EXTEND THROUGH UNIT PAVING AND EMBED INTO C.I.P. CONCRETE FOOTING TO MIN. 3" DEPTH.





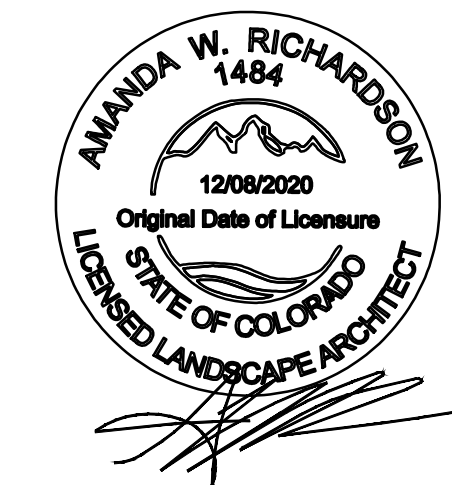
- GENERAL LAWN NOTES**
- CONTRACTOR SHALL COORDINATE OPERATIONS AND AVAILABILITY OF EXISTING TOPSOIL WITH ON-SITE CONSTRUCTION MANAGER.
  - LAWN AREAS SHALL BE LEFT 1" BELOW FINAL FINISHED GRADE PRIOR TO TOPSOIL INSTALLATION.
  - CONTRACTOR TO FIND GRADE AREAS TO ACHIEVE FINAL CONTOURS AS SHOWN ON CIVIL 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.
  - 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.
  - CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" IN DIAMETER AND LARGER. REMOVE ALL DIRT CLOUDS, STICKS, CONCRETE SPOILS, TRASH ETC PRIOR TO PLACING TOPSOIL AND GRASS INSTALLATION.
  - CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE.
  - CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT IF NECESSARY.
- SOLID SOD:**
- 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.
  - 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" (1-1/4"), EXCLUDING TOP GROWTH AND THATCH.
  - 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.
  - TOP DRESS JOINTS IN SOD BY HAND WITH TOPSOIL TO FILL VOIDS IF NECESSARY.
  - SOD SHALL BE ROLLED TO CREATE A SMOOTH EVEN SURFACE. SOD SHOULD BE WATERED THOROUGHLY DURING INSTALLATION PROCESS.
  - SHOULD INSTALLATION OCCUR BETWEEN OCTOBER 1ST AND MARCH 1ST, OVERSEED BERMUDA GRASS SOD WITH WINTER RYEGRASS AT A RATE OF 4 POUNDS PER 1000 S.F.
- HYDROMULCH:**
- SCARIFY AND LOOSEN ALL AREAS TO BE HYDROMULCHED TO A MINIMUM DEPTH OF 4" PRIOR TO TOPSOIL AND HYDROMULCH INSTALLATION.
  - COLORADO BLUE 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:**
- FIBER SHALL BE 100% WOOD CELLULOSE FIBER, DELIVERED TO THE SITE IN ITS ORIGINAL UNOPENED CONTAINER AS MANUFACTURED BY "CONWEB" OR EQUAL.
  - FIBER TACK SHALL BE DELIVERED TO THE SITE IN ITS UNOPENED CONTAINER AND SHALL BE "TERRA-TACK ONE", AS MANUFACTURED BY GROWERS, INC OR APPROVED EQUAL.
  - HYDROMULCH WITH COLORADO BLUE GRASS SEED AT A RATE OF 2 POUNDS PER 1000 S.F.
  - USE A BATTER BOARD AGAINST ALL BED AREAS TO PREVENT OVER SPRAY.
  - IF INADEQUATE MOISTURE IS PRESENT IN SOIL, APPLY WATER AS NECESSARY FOR OPTIMUM MOISTURE FOR SEED APPLICATION.
  - IF INSTALLATION OCCURS BETWEEN SEPTEMBER 1ST AND MAY 1ST, ALL HYDROMULCH AREAS SHALL BE OVER-SEED WITH WINTER RYE GRASS AT A RATE OF FOUR POUNDS PER ONE THOUSAND SQUARE FEET.
  - CONTRACTOR SHALL BE REQUIRED TO RE-HYDROMULCH WITH COLORADO BLUE GRASS SEED THE FOLLOWING GROWING SEASON AS PART OF THIS CONTRACT.
  - AFTER APPLICATION, NO EQUIPMENT SHALL OPERATE OVER APPLIED AREAS. WATER SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO SATURATION.
  - ALL LAWN AREAS TO BE HYDROMULCHED SHALL ACHIEVE 100% COVERAGE PRIOR TO FINAL ACCEPTANCE.
- LANDSCAPE NOTES**
- 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.
  - 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.
  - A MINIMUM OF 2% SLOPE SHALL BE PROVIDED AWAY FROM ALL STRUCTURES.
  - CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 9" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS.
  - LANDSCAPE ISLANDS SHALL BE CROWNED, AND UNIFORM THROUGHOUT THE SITE.
  - 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. EDGING SHALL BE CUT AT 45 DEGREE ANGLE WHERE IT INTERSECTS WALKS

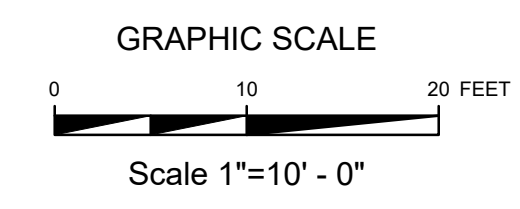
- AND/OR CURBS:**
- MULCH SHALL BE INSTALLED AT 1/2" BELOW THE TOPS OF SIDEWALKS AND CURBING.
  - MULCH TYPES ON THESE PLANS ARE FOR REFERENCE ONLY. THE SPACING OF PLANTS SHOULD BE AS INDICATED ON PLANS OR OTHERWISE NOTED. ALL TREES AND SHRUBS SHALL BE PLANTED PER DETAILS.
  - CONTAINER GROWN PLANT MATERIAL IS PREFERRED HOWEVER BALL AND BURLAP PLANT MATERIAL CAN BE SUBSTITUTED IF NEEDED BE AND IS APPROPRIATE TO THE SIZE AND QUALITY INDICATED ON THE PLANT MATERIAL LIST.
  - 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.
  - 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 STRAIN MULCH IS PROHIBITED.
  - WEED BARRIER FABRIC SHALL BE USED IN PLANT BEDS AND AROUND ALL TREES AND SHALL BE MIRAFIX 1405 WEED BARRIER OR APPROVED EQUAL.
  - CONTRACTOR TO PROVIDE UNIT PRICING OF LANDSCAPE MATERIALS AND BE RESPONSIBLE FOR OBTAINING ALL LANDSCAPE AND IRRIGATION PERMITS.
- IRRIGATION:**
- 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:**
- 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.
  - 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.
  - ALL LANDSCAPE AREAS SHOULD BE CLEANED AND KEPT FREE OF TRASH, DEBRIS, WEEDS AND OTHER MATERIAL.
- MISCELLANEOUS MATERIALS:**
- STEEL EDGING SHALL BE 3/16" X 4 X 10' DARK GREEN DURAEDGE STEEL LANDSCAPE EDGING UNLESS NOTED OTHERWISE ON PLANS/DETAILS.
  - ROCK SHALL BE COLORADO ROSE ROCK, 1.5" IN DIAMETER. RIVER ROCK SHALL BE COMPACTED TO A MINIMUM OF 3" DEPTH OVER FILTER FABRIC.

- PLANS NOTED:**
- LANDSCAPE DESIGN FEATURES OF COMMERCIAL, MIXED-USE, INDUSTRIAL, AND MULTIPLE-FAMILY DEVELOPMENTS
- LANDSCAPE PLANTING MATERIALS SHALL GENERALLY BE LAYERED AGAINST A BUILDING OR EDGE TREATMENT FROM HIGH TO LOW IN HEIGHT SO THAT THE FULL CHARACTER OF THE PLANTS CAN BE APPRECIATED AND UTILIZED TO SHAPE EXTERIOR SPACES.
  - TREE GRATES SHALL BE A MINIMUM OF FIVE (5) FEET BY EIGHT (8) FEET.
  - UTILIZE LAWN AREAS ONLY WHERE ACTIVE RECREATION AND USAGE WILL OCCUR.
  - PROVIDE A MINIMUM EIGHT (8) FOOT LANDSCAPE BUFFER BETWEEN PUBLIC WALKWAYS AND BUILDING EDGES EXCEPT AT BUILDING ENTRY AND EXIT POINTS.
  - THE PLANTING STRIP BETWEEN THE BACK OF THE ROADWAY CURB AND THE SIDEWALK SHALL BE PLANTED WITH SHRUBS AND GROUNDCOVER OR LOW WATER USE TURF AND DESIGNED TO CREATE VISUAL INTEREST.
  - THE SPACE BETWEEN THE PUBLIC REALM AND A BUILDING FACADE THAT DOES NOT HAVE AN ACTIVE USE SHALL BE DESIGNED WITH HIGHER STANDARDS OF LANDSCAPING AND STREETSCAPE TO CREATE AN ATTRACTIVE BUILDING FRONT AND STREET EDGE.
  - SELECT NATURAL PLANT MATERIALS THAT TRANSITION BETWEEN NATURAL OPEN SPACES AND THE INTERNAL PROJECT LANDSCAPE MATERIAL.
  - UTILIZE LANDSCAPING TO LOGICALLY SHAPE SPACES THAT CREATE AND FACILITATE CIRCULATION PATHS IN LOGICAL AND INTUITIVE PATTERNS USE LANDSCAPING TO HELP GUIDE PEOPLE TO BUILDING ENTRY POINTS THROUGH HIGHER CONCENTRATION OF LANDSCAPE MATERIAL.

NO CHANGE TO THE APPROVED LANDSCAPE AND STREETSCAPE PLAN MAY OCCUR WITHOUT PRIOR APPROVAL FROM THE TOWN AND THE WATER SANITATION DISTRICT



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



CALL UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

**811 Know what's Below. Call before you dig.**  
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND HAVE NOT BEEN REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCURRED 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 RESPONSIBLE TO ASSURE ANY RESPONSIBILITY FOR SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

COPYRIGHT © 2025 ATWELL LLC. NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL LLC.

**24 HOUR EMERGENCY CONTACT**

**ATWELL GROUP**  
866.850.4200 www.atwell-group.com  
9001 AIRPORT FREEWAY, SUITE 660  
NORTH RICHLAND HILLS, TX 76180  
972.936.9860

**LOT 4A, PARKER POINTE SUBD. FILING NO. 1, AMEND. NO. 1**

**BLACK ROCK COFFEE BAR**  
13135 DECLAN DRIVE  
LANDSCAPE PLAN

**PARKER**  
S. PARKER RD & STROH RD  
DOUGLAS COUNTY, COLORADO

DATE: 2025-10-8

REVISIONS:

DRAWN BY: K. SARWAR  
CHECKED BY: N. SALAZAR  
PROJECT MANAGER: N. SALAZAR  
JOB #: 24003198  
FILE CODE: ##  
SHEET NO: **L1.01**

SECTION 32 9300 - LANDSCAPE

PART 1 - GENERAL

1.1 QUALIFICATIONS OF THE LANDSCAPE CONTRACTOR

A. ALL LANDSCAPE WORK 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 SUPERVISORS, 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 NURSERMEN, 27 OCTOBER 1988, 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 NURSERMEN, 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 SOIL 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, GROUND COVER 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, MOVING 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 DIVING 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 AS REQUIRED.
- J. COORDINATE THE OPERATION OF IRRIGATION SYSTEM TO ENSURE THAT PLANTS ARE ADEQUATELY WATERED. HAD WATER AREAS NOT RECEIVING ADEQUATE WATER FROM AN IRRIGATION SYSTEM.
- K. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN ACCORDANCE TO THE MAINTENANCE SCHEDULE TO ENSURE THE SYSTEM IS PROPERLY 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 3/12 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, GROUND COVER 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 USED IN 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 UTILIZED 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 CONTACT 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.

1.10 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. PREPARATION
  1. BALLED AND BURLAPPED 888 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 DETRIORATION DURING DELIVERY AND WHILE STORED ON SITE.
  2. DELIVER ONLY PLANT MATERIALS THAT ARE PROTECTED FROM DETRIORATION 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 DETRIORATION 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 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 THE 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 COMPLEMENTARY. ANYTHING CALLED FOR ON ONE AND NOT THE OTHER IS AS SHOWN AND CALLED FOR ON BOTH. THE PLANT SCHEDULE IS AN AID TO BIDDERS ONLY. DO NOT FURNISH ALL QUANTITIES LISTED.
- 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, DISFIGUREMENTS, INSECT EGGS AND ARE TO BE OF SPECIMEN 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 CLIMATIC 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 ENCODING AND/OR GRINDING ROOTS, AND FREE FROM ANY OTHER ROOT DISEASES (SUCH AS L-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 PRUNING.
- K. TREE TRUNKS TO BE STURDY, EXHIBIT HARDENED SYSTEMS AND VIGOROUS AND FIBROUS ROOT SYSTEMS. LEADERS SHALL BE PROTECTED BY BURLAP.
- L. TREES WITH DAMAGED OR CROOKED LEADERS, BRK ABRASIONS, SUNCALF, 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. MULTITRUNK 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. SOIL: PROVIDE WELL-ROOTED SOIL OF THE VARIETY NOTED ON THE PLANS. SOIL SHALL BE CUT FROM HEALTHY MATURE TURF WITH SOIL THICKNESS OF 3/4" TO 1". EACH PALLET OF SOIL SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOIL.

2.2 SOIL PREPARATION MATERIALS

- A. SANDY LOAM:
  1. FRIABLE, FERTILE, DARK, LOAMY SOIL, FREE OF CLAY LUMPS, SUBSOIL, STONES AND OTHER EXTRANEIOUS MATERIAL AND REASONABLY FREE OF WEEDS AND FOREIGN GRASSES. LOAM CONTAINING DALLAS SOIL OR NATURAL GRASS 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 ARCHITECT 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 COARSE 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, DALLAS, TEXAS; OR ACID GRO 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, DARK BROWN.
- F. ORGANIC FERTILIZER: FERTILIZED, SUSTANE, OR GREEN SEEN OR EQUAL AS RECOMMENDED FOR REQUIRED APPLICATIONS. FERTILIZER SHALL BE DELIVERED TO THE SITE 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 MICROINUTRIENTS.
- H. FEAT: COMMERCIAL SPAGNUM 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, DURABLE STEEL OR APPROVED EQUAL.
- B. TREE STAKING - TREE STAKING SOLUTIONS OR APPROVED SUBSTITUTE; REFER TO DETAILS.
- C. FILTER FABRIC - MIRAFI 1405 BY MIRAFI INC. OR APPROVED SUBSTITUTE. AVAILABLE AT LONE STAR PRODUCTS, INC. (469-923-0444)
- D. SAND - UNIFORMLY GRADED, WASHED, CLEAN, BAKED, WASH 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 DECOMPOSITION.
- G. ROCK - LOCALLY AVAILABLE NATIVE ROCK 1.5" 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 MANUFACTURERS 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, ROCKS, 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 GAPPED OPEN, THEN WATERED THOROUGHLY.

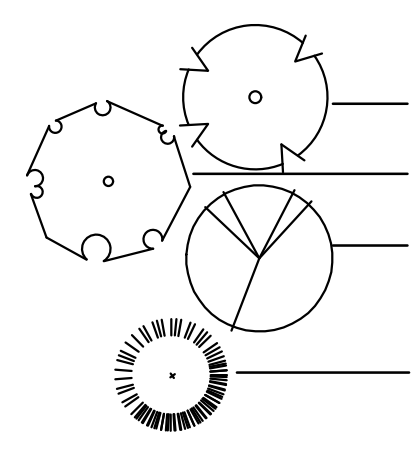
3.2 INSTALLATION

- A. MAINTENANCE OF PLANT MATERIALS SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS DELIVERED TO THE SITE AND SHALL CONTINUE UNTIL ALL CONSTRUCTION IS COMPLETELY 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 OR OTHER PLANTS WHICH WILL SETTLE 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 BEAR 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") AND SIX (6") INCHES DEEPER THAN IT'S VERTICAL DIMENSION. REMOVE AND HAUL FROM SITE ALL ROCKS AND STONES OVER THREE-QUARTER (3/4") INCH IN DIAMETER. PLANTS SHOULD BE THOROUGHLY MOIST BEFORE REMOVING CONTAINERS.
- G. PERCOLATION TEST: PERC 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 5 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 1/2 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 OF NOT LESS THAN THREE (3") FEET BELOW GRADE AND NO LESS THAN SIX (6") INCHES BELOW THE BOTTOM OF BALL WHEN PLANTS ARE 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 PERFORMED 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 TRIPPING 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.

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 HOSEING THEM AT END OF EACH WORK DAY.
- B. REPAIR RUTS, HOLES AND SCARS 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 SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.
- E. IF AT ANY TIME 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 REINSPECTED 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



| PLANT SCHEDULE  |   |                                  |   |         |                            |                |                   |
|---|---|----------------------------------|---|---------|----------------------------|----------------|-------------------|
| QTY   | LABEL   | COMMON NAME                      | SCIENTIFIC NAME                                 | SIZE    | NOTES                      | MATURE SIZE    | YEARS TO MATURITY |
| <b>DECIDUOUS TREES</b>  |   |                                  |   |         |                            |                |                   |
| 3   | AE  | Accolade Elm                     | <i>Ulmus 'Accolade'</i>                         | 3" cal. | 12' ht., 4' spread         | 60' ht x 40' w | 10-15 years       |
| 3   | RL  | Redmond Linden                   | <i>Tilia americana 'Redmond'</i>                | 3" cal. | 12' ht., 4' spread         | 60' ht x 40' w | 20-30 years       |
| 8   | RO  | Northern Red Oak                 | <i>Quercus rubra</i>                            | 3" cal. | 12' ht., 5' spread         | 60' ht x 40' w | 30-35 years       |
| 14  | <b>TOTAL DECIDUOUS TREES</b>  |                                  |   |         |                            |                |                   |
| <b>EVERGREEN TREES</b>  |   |                                  |   |         |                            |                |                   |
| 5   | LP  | Lacebark Pine                    | <i>Pinus bungeana</i>                           | 3" cal. | 12' ht., 5' spread         | 40' ht x 25' w | 20-30 years       |
| 5   | <b>TOTAL EVERGREEN TREES</b>  |                                  |   |         |                            |                |                   |
| 19  | <b>TOTAL TREES</b>  |                                  |   |         |                            |                |                   |
| <b>DECIDUOUS SHRUBS</b>   |   |                                  |   |         |                            |                |                   |
| 86  | BAR   | Concord Barberry                 | <i>Berberis thunbergii 'Concorde'</i>           | 5 gal.  | full, 20" sprd, 24" o.c.   | 2' ht x 3' w   | 2-3 years         |
| 43  | CB  | Chokeberry                       | <i>Aronia melanocarpa 'UCONNAM165'</i>          | 5 gal.  | full, 20" sprd, 24" o.c.   | 2' ht x 4' w   | 2-3 years         |
| 20  | SB  | Spanish Gold Broom               | <i>Cytisus purgan 'Spanish Gold'</i>            | 5 gal.  | full, 24" sprd, 36" o.c.   | 4' ht x 5' w   | 2-3 years         |
| 44  | SP  | Snowmound Spirea                 | <i>Spiraea nipponica 'Snowmound'</i>            | 5 gal.  | full, 24" sprd, 36" o.c.   | 5' ht x 8' w   | 2-3 years         |
| 193   | <b>TOTAL DECIDUOUS SHRUBS</b>                                       |                                  |   |         |                            |                |                   |
| <b>EVERGREEN SHRUBS</b>   |   |                                  |   |         |                            |                |                   |
| 75  | PA  | Panchito manzana                 | <i>Arctostaphylos x coloradensis 'Panchito'</i> | 5 gal.  | full, 24" sprd, 36" o.c.   | 2.5' ht x 5' w | 2-3 years         |
| 58  | PJ  | Pencil Point Juniper             | <i>Juniperus communis 'Compressa'</i>           | 5 gal.  | full, 20" spread, 30" o.c. | 3' ht x 2' w   | 10 years          |
| 74  | PM  | Pine, Mugo, Teeny                | <i>Pinus mugo 'Teeny'</i>                       | 5 gal.  | full, 20" sprd, 24" o.c.   | 2' ht x 3' w   | 5-10 years        |
| 22  | WB  | Wichita Blue Juniper             | <i>Juniperus scopulorum 'Wichita Blue'</i>      | 5 gal.  | full, 24" sprd, 42" o.c.   | 15' ht x 6' w  | 8-10 years        |
| 229   | <b>TOTAL EVERGREEN SHRUBS</b>                                       |                                  |   |         |                            |                |                   |
| 422   | <b>TOTAL SHRUBS</b>   |                                  |   |         |                            |                |                   |
| <b>ORNAMENTAL GRASSES</b>   |   |                                  |   |         |                            |                |                   |
| 135   | FG  | Fountain Grass                   | <i>Pennisetum orientale</i>                     | 1 gal.  | full, 18" o.c.             | 2' ht x 2' w   | 2 years           |
| 56  | KF  | Karl Foerster Feather Reed Grass | <i>Calamagrostis acutiflora 'Karl Foerster'</i> | 5 gal.  | full, 24" spread, 36" o.c. | 4' ht x 3' w   | 2 years           |
| 9   | MG  | Maiden Grass, Gold Bar           | <i>Miscanthus sinensis 'Gold Bar'</i>           | 5 gal.  | full, 20" spread, 30" o.c. | 4' ht x 3' w   | 2 years           |
| 200   | <b>TOTAL ORNAMENTAL GRASSES</b>                                     |                                  |   |         |                            |                |                   |
| <b>PERENNIAL</b>  |   |                                  |   |         |                            |                |                   |
| 135   | PP  | Pikes Peak Purple Penstemon      | <i>Penstemon x mexical 'Pikes Peak Purple'</i>  | 1 gal.  | full, 12" o.c.             | 1' ht x 1' w   | 2 years           |
| <b>EVERGREEN GROUND COVER</b>   |   |                                  |   |         |                            |                |                   |
| 70  | AS  | Angelina Sedum                   | <i>Sedum rupestre 'Angelina'</i>                | 1 gal.  | full, 18" o.c.             | 6" ht x 24" w  | 3 years           |
| 95  | BCJ   | Blue Chip Juniper                | <i>Juniperus horizontalis 'Blue Chip'</i>       | 1 gal.  | full, 24" o.c.             | 1' ht x 8' w   | 5-10 years        |
| 250   | CT  | Creeping Thyme                   | <i>Thymus serpyllum</i>                         | 1 gal.  | full, 18" o.c.             | 6" ht x 18" w  | 3 years           |
| 16  | WG  | Wall Germander                   | <i>Teucrium chamaedrys</i>                      | 1 gal.  | full, 18" o.c.             | 18" ht x 24" w | 3 years           |
| 566   | <b>TOTAL PERENNIAL AND EVERGREEN GROUND COVER</b>                   |                                  |   |         |                            |                |                   |
| 766   | <b>TOTAL ORNAMENTAL GRASSES, PERENNIALS, EVERGREEN GROUND COVER</b> |                                  |   |         |                            |                |                   |
| <b>GROUND COVER</b>   |   |                                  |   |         |                            |                |                   |
| 1 1/2" Colorado Rose Rock   |   |                                  |   |         |                            |                |                   |
| 3/4" Morrison Grey Rock mulch (in all shrub beds - areas with no hatch) |   |                                  |   |         |                            |                |                   |

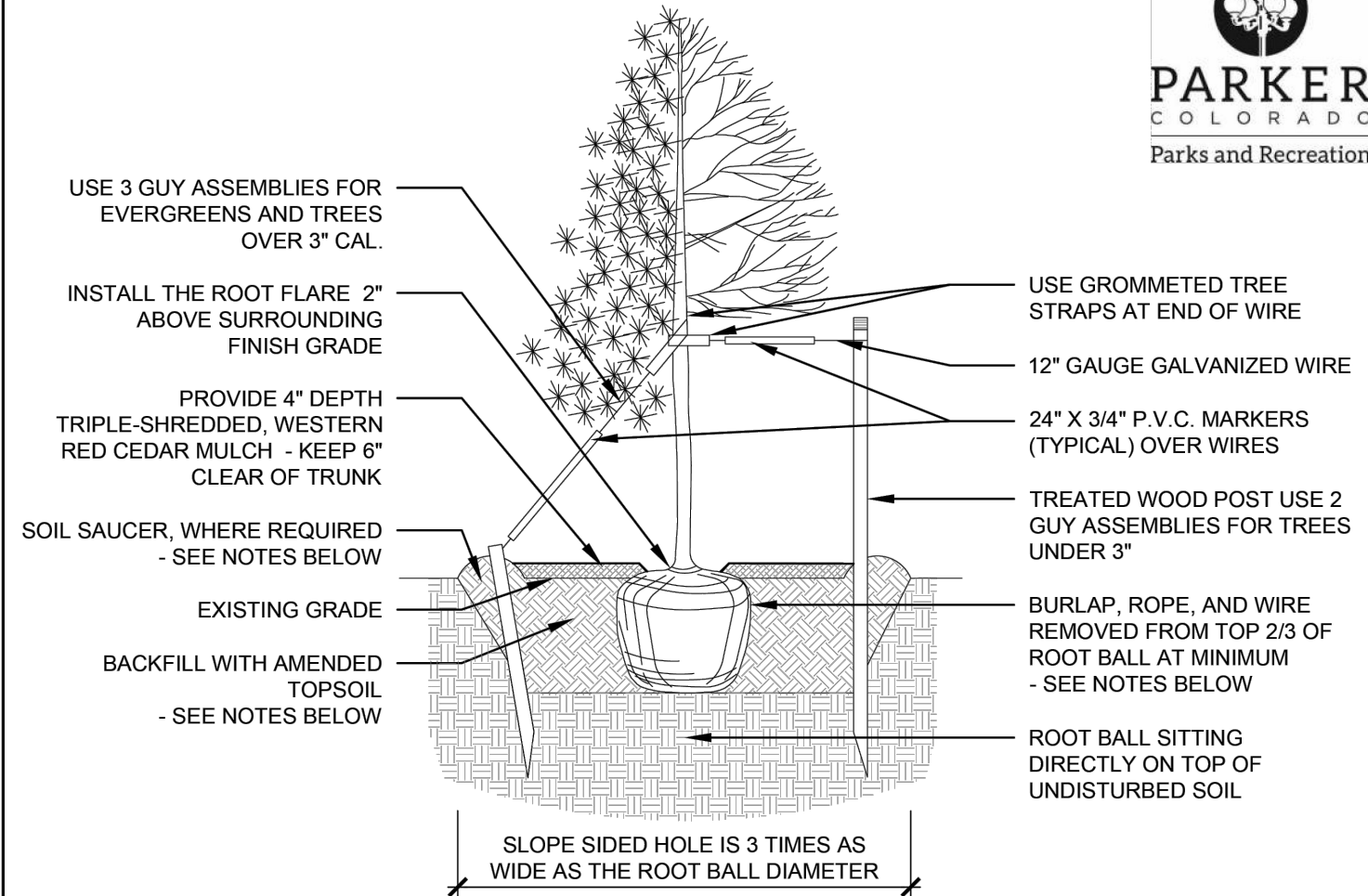
Plant list is an aid to bidders only. Contractor shall verify all quantities on plan. All heights and spreads are minimums. Trees shall have a strong central leader and be of matching specimens. All plant material shall meet or exceed remarks as indicated.

A. INTERNAL LANDSCAPING

| NET SITE AREA        | LANDSCAPE AREA  |                  |                 |                 | % LIVE COVER |                 |  |  |
|----------------------|-----------------|------------------|-----------------|-----------------|--------------|-----------------|--|--|
|                      | REQUIRED (15%)  | PROVIDED         | SURPLUS/DEFICIT | REQUIRED (75%)  | PROVIDED     | SURPLUS/DEFICIT |  |  |
| 25,933 S.F.          | 3890 S.F. (15%) | 8,294 S.F. (44%) | 4404 S.F.       | 2918 S.F. (75%) | 8294 S.F.    | 5376 S.F.       |  |  |
| TURF GRASS (maximum) | 584 S.F. (15%)  | 0 S.F.           |                 |                 |              |                 |  |  |

| INTERNAL SITE AREA (S.F.) | TREE REQUIREMENT 1/1500 S.F. |  |  | SHRUB REQUIREMENT 5/1 |  |  |
|---------------------------|------------------------------|--|--|-----------------------|--|--|
|---------------------------|------------------------------|--|--|-----------------------|--|--|

TOWN OF PARKER STANDARD DETAILS

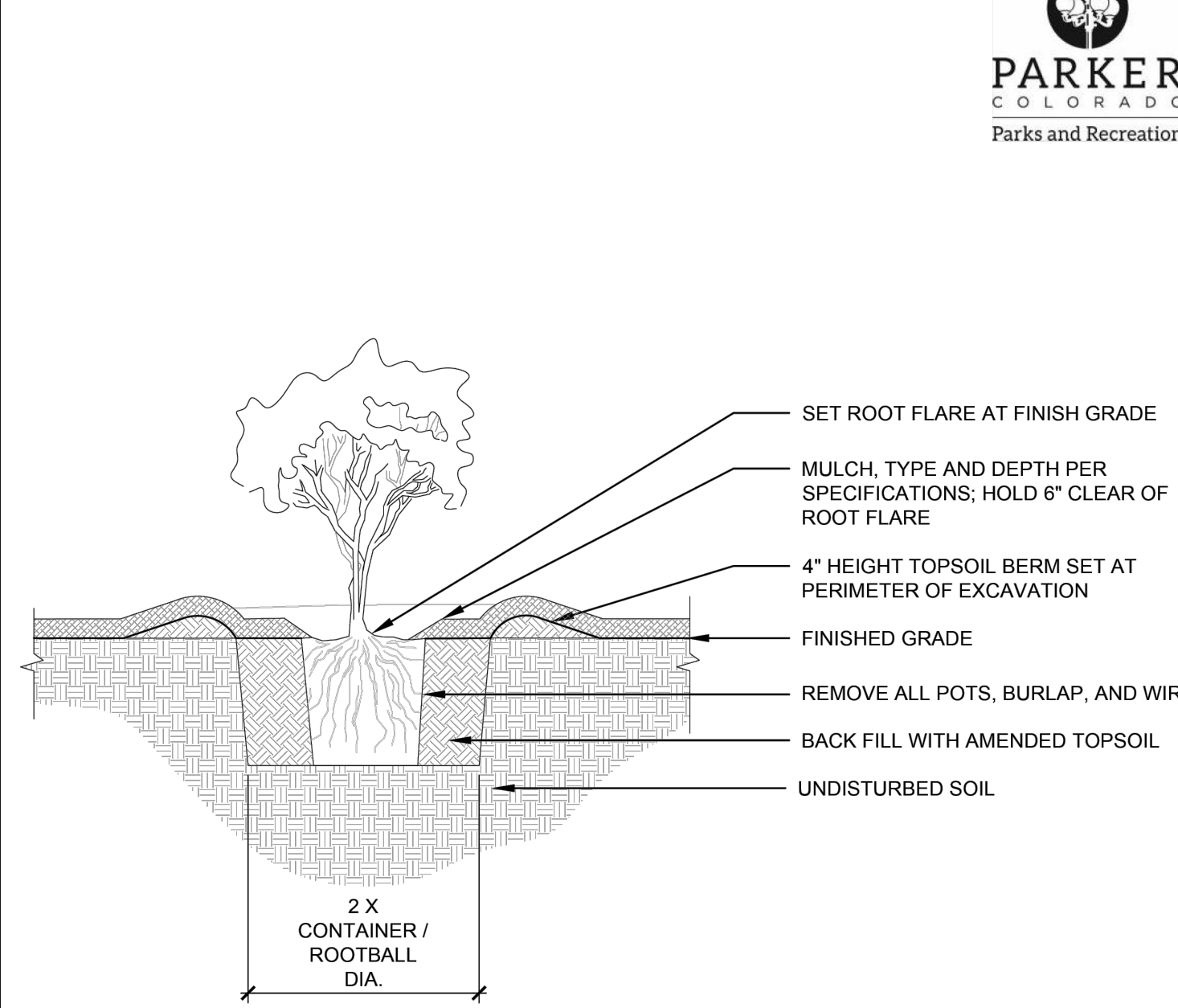


- NOTES:
- EXCAVATE PLANTING HOLES WITH SLOPING SIDES, MAKE EXCAVATIONS AT LEAST THREE TIMES AS WIDE AS THE ROOT BALL DIAMETER AND NO DEEPER THAN THE DISTANCE FROM THE TOP OF THE ROOT BALL TO ALLOW FOR SETTLING. DO NOT DISTURB SOIL AT BOTTOM OF PLANTING HOLES, BUT DO SCORE THE SIDES OF THE PLANTING HOLE. THE PLANTING AREA SHALL BE LOOSENED AND AERATED AT LEAST THREE TIMES THE DIAMETER OF THE ROOT BALL.
  - BACKFILL SHALL CONSIST OF APPROVED ON-SITE TOPSOIL BLENDED W/ COMPOST AMENDMENT. IF ON-SITE TOPSOILS ARE NOT APPROVED FOR USE, BACKFILL W/ IMPORTED TOPSOIL BLENDED WITH COMPOST AMENDMENT. REFER TO SPECIFICATION SECTION 329113 FOR ADDITIONAL INFORMATION.
  - TREES SHALL BE PLANTED WITH THE ROOT COLLAR/FLARE VISIBLE ABOVE GRADE AND TWO OR MORE STRUCTURAL ROOTS LOCATED WITHIN THE TOP 1" TO 2" OF THE ROOT BALL/FINISHED GRADE MEASURED 3" TO 4" FROM TRUNK. THIS INCLUDES TREES THAT ARE SET ON SLOPES (SEE SLOPE PLANTING DETAIL). TREES THAT DO NOT HAVE A VISIBLE ROOT COLLAR SHALL BE REJECTED. DO NOT COVER THE ROOT BALL WITH SOIL.
  - WHEN ROOT BALL WILL REMAIN INTACT, CUT OFF BOTTOM 1/4 OF WIRE BASKET BEFORE PLACING TREE IN HOLE. CUT OFF REMAINDER OF BASKET AFTER TREE IS SET IN HOLE. REMOVE BASKET COMPLETELY. AT A MINIMUM, THE TOP 2/3 OF THE BURLAP AND BASKET SHALL BE REMOVED FROM THE ROOT BALL ON ALL TREES. REMOVE ALL NYLON TIES, TWINE, ROPE AND BURLAP. REMOVE UNNECESSARY PACKING MATERIAL.
  - FORM SOIL INTO A 6" TALL WATERING RING (SAUCER) AROUND PLANTING AREA. THIS IS NOT NECESSARY IN IRRIGATED TURF AREAS. APPLY 4" DEPTH OF SPECIFIED MULCH OVER PLANTING AREA AND INSIDE SAUCERS. AWAY FROM TRUNK.
  - STAKING AND GUYING OF TREES IS OPTIONAL IN MOST PLANTING SITUATIONS. IN AREAS OF EXTREME WINDS, OR ON STEEP SLOPES, STAKING MAY BE REQUIRED TO STABILIZE TREES. STAKING AND GUYING MUST BE REMOVED WITHIN 1 YEAR OF PLANTING DATE.
  - TREE WRAP IS NOT TO BE USED ON ANY NEW PLANTINGS, EXCEPT IN LATE FALL PLANTING SITUATIONS, AND ONLY AFTER CONSULTATION WITH THE TOWN ARBORIST.
  - RESETTING OF IMPROPERLY PLANTED TREES WILL ONLY BE ALLOWED IF IT IS DETERMINED THAT DOING SO WILL IN NO WAY COMPROMISE THE ROOT BALL, AND SHALL ONLY BE DONE WITH APPROVAL OF THE TOWN ARBORIST.

TREE PLANTING  
1/4" = 1'-0"

DATE: MAY 2023 | DETAIL SD-3

TOWN OF PARKER STANDARD DETAILS

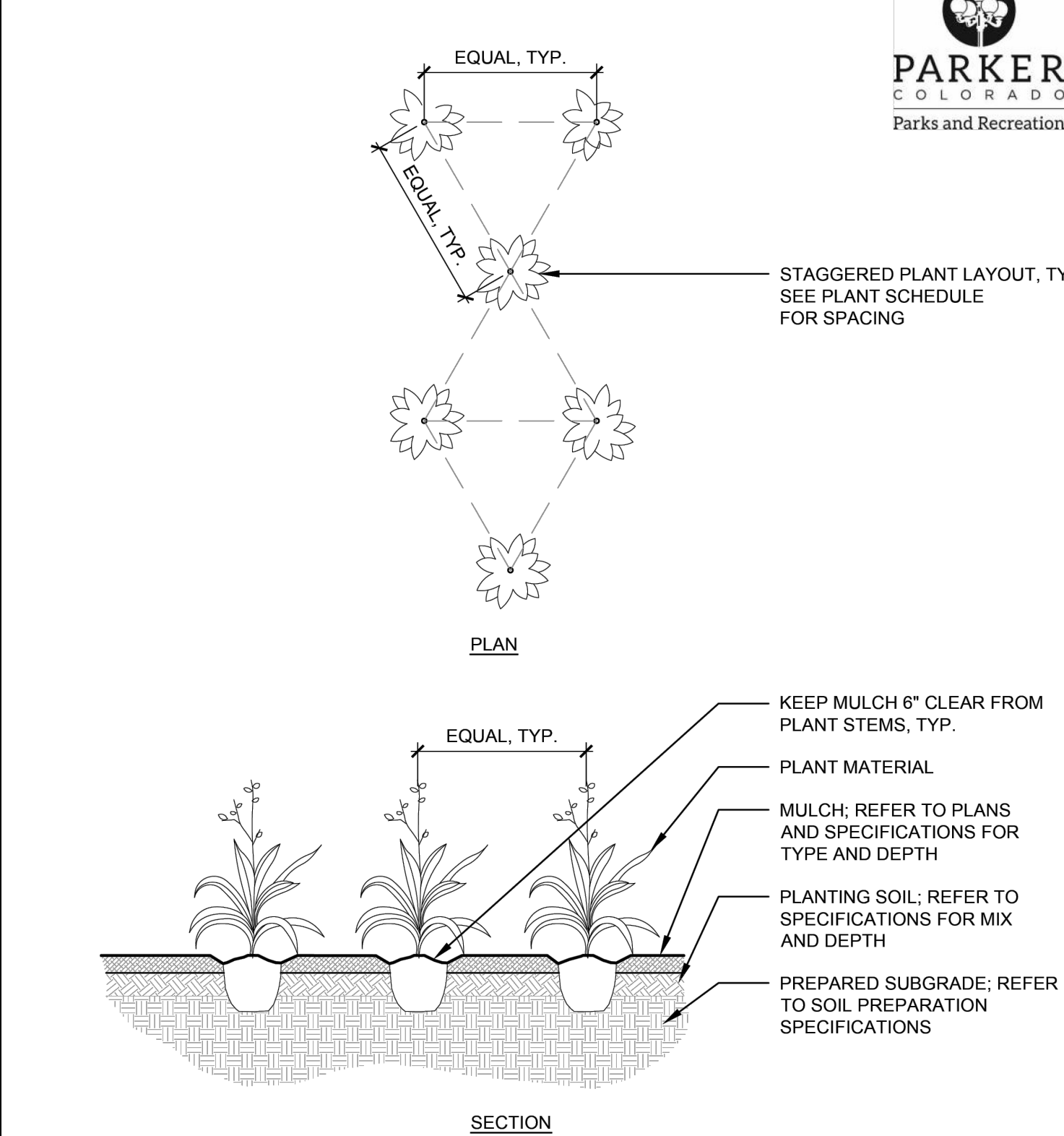


- NOTES:
- PRUNE ALL DAMAGED, DISEASED OR WEAK LIMBS.
  - CLEANLY PRUNE ALL DAMAGED ROOT ENDS.
  - DO NOT ALLOW ROOTS TO DRY OUT DURING INSTALLATION PROCESS.
  - DEEP WATER AFTER PLANTING.

SHRUB PLANTING  
1/2" = 1'-0"

DATE: MAY 2023 | DETAIL SD-5

TOWN OF PARKER STANDARD DETAILS

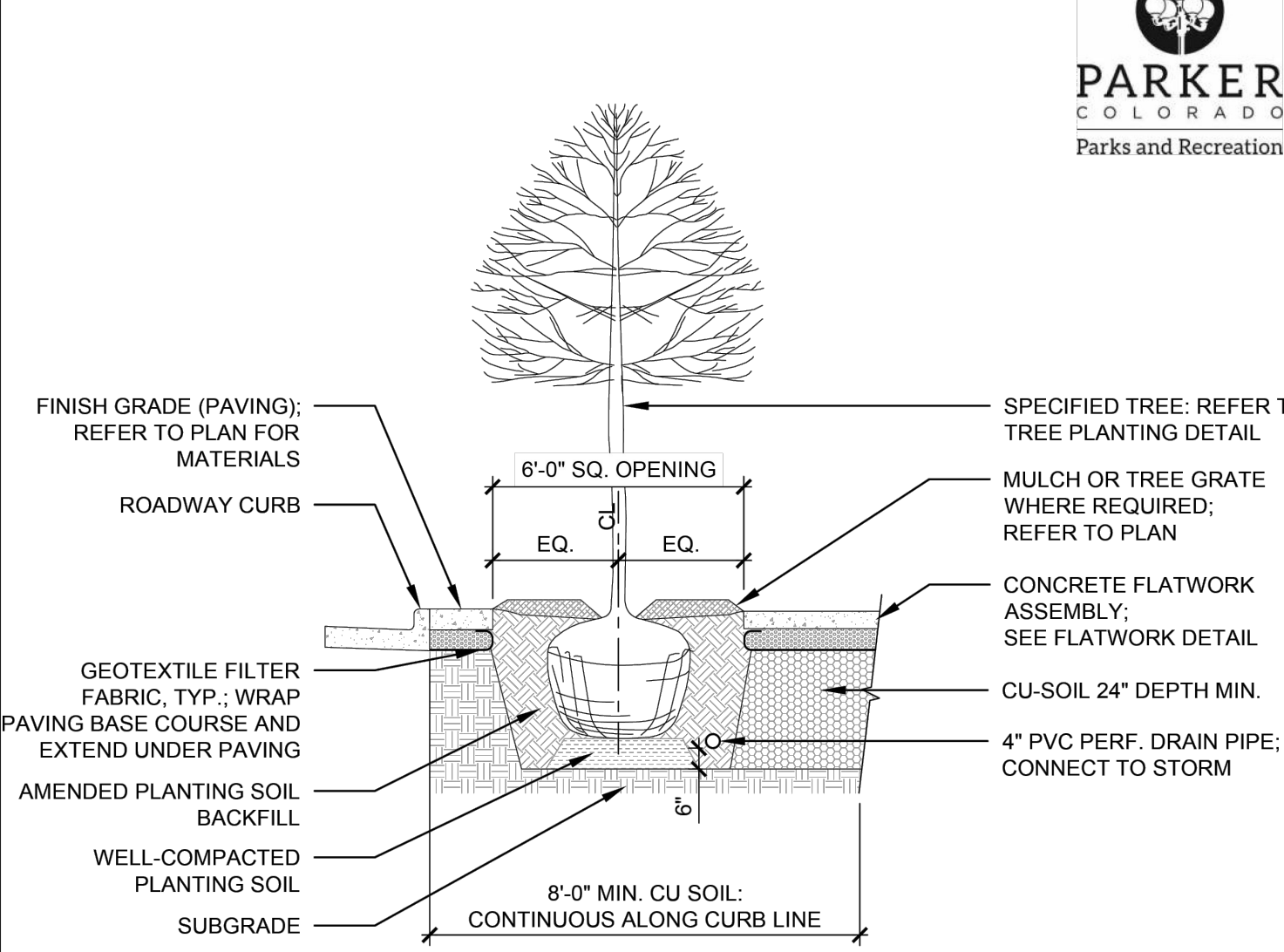


- NOTES:
- WHEN BACKFILLING AROUND PLANTS, DO NOT ALLOW AIR POCKETS TO FORM.
  - AFTER PLANTING, WATER THOROUGHLY.

PERENNIAL PLANTING  
1/4" = 1'-0"

DATE: MAY 2023 | DETAIL SD-6

TOWN OF PARKER STANDARD DETAILS

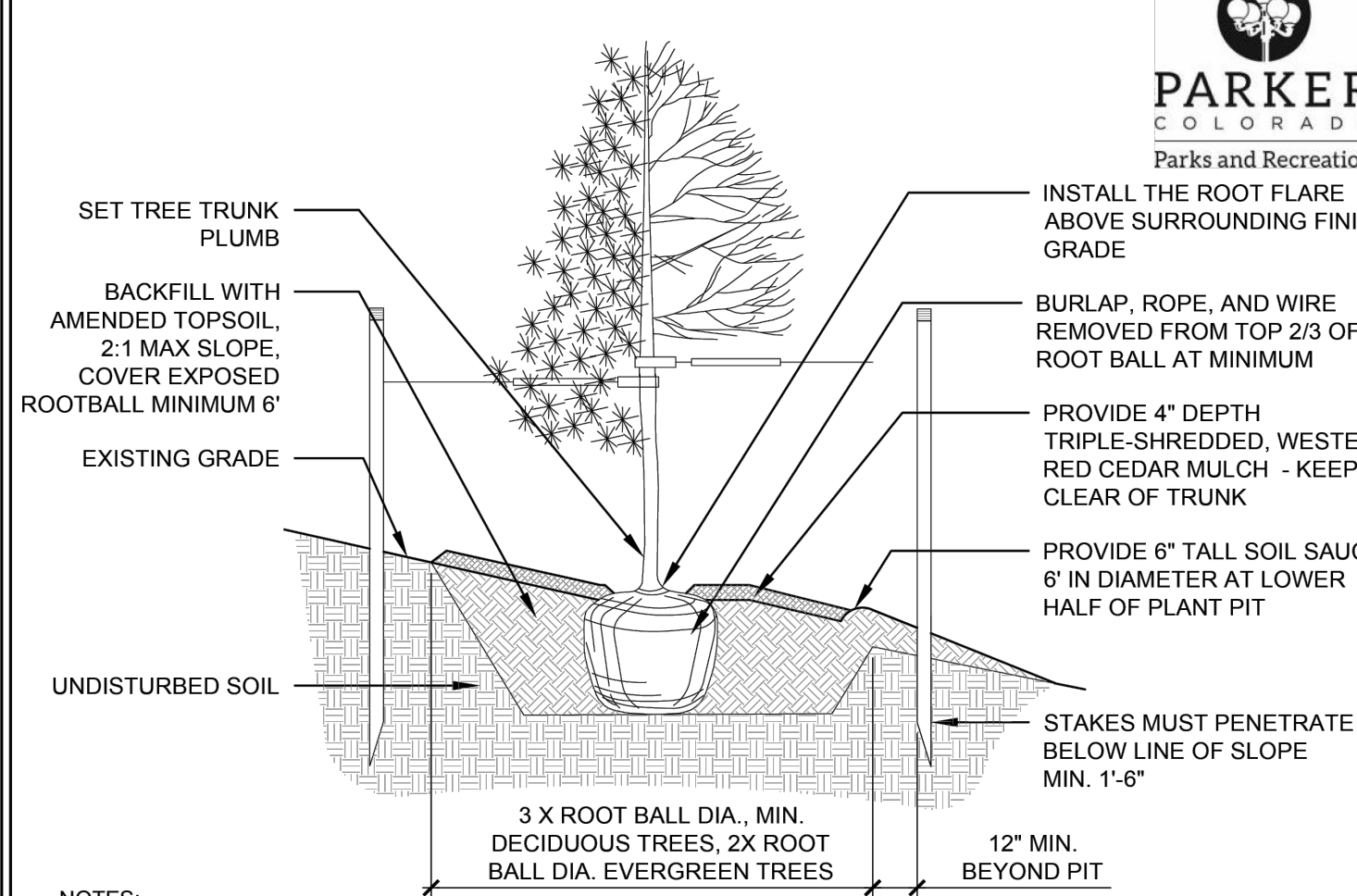


- NOTES:
- TREES SHALL BE PLANTED WITH THE ROOT COLLAR/FLARE VISIBLE ABOVE GRADE AND TWO OR MORE STRUCTURAL ROOTS LOCATED WITHIN THE TOP 1" TO 2" OF THE ROOT BALL/FINISHED GRADE MEASURED 3" TO 4" FROM TRUNK.
  - WHEN ROOT BALL WILL REMAIN INTACT, CUT OFF BOTTOM 1/4 OF WIRE BASKET BEFORE PLACING TREE IN HOLE. CUT OFF REMAINDER OF BASKET AFTER TREE IS SET IN HOLE. REMOVE BASKET COMPLETELY. AT A MINIMUM, THE TOP 2/3 OF THE BURLAP AND BASKET SHALL BE REMOVED FROM THE ROOT BALL ON ALL TREES. REMOVE ALL NYLON TIES, TWINE, ROPE AND BURLAP. REMOVE UNNECESSARY PACKING MATERIAL.
  - TREE WRAP IS NOT TO BE USED ON ANY NEW PLANTINGS, EXCEPT IN LATE FALL PLANTING SITUATIONS, AND ONLY AFTER CONSULTATION WITH THE TOWN ARBORIST.
  - RESETTING OF IMPROPERLY PLANTED TREES WILL ONLY BE ALLOWED IF IT IS DETERMINED THAT DOING SO WILL IN NO WAY COMPROMISE THE ROOT BALL, AND SHALL ONLY BE DONE WITH APPROVAL OF THE TOWN ARBORIST.

CU SOIL TREE PIT  
1/4" = 1'-0"

DATE: MAY 2023 | DETAIL SD-2

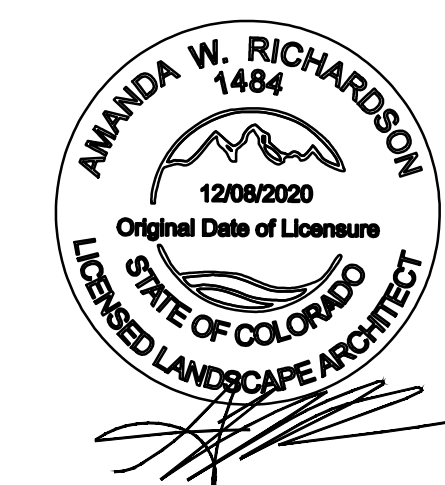
TOWN OF PARKER STANDARD DETAILS



- NOTES:
- THIS INSTALLATION SHALL APPLY TO ALL TREE TYPES AND SIZES PLANTED ON SLOPES 4:1 OF GREATER.
  - EXCAVATE PLANTING HOLES WITH SLOPING SIDES, MAKE EXCAVATIONS AT LEAST THREE TIMES AS WIDE AS THE ROOT BALL DIAMETER AND NO DEEPER THAN THE DISTANCE FROM THE TOP OF THE ROOT BALL TO ALLOW FOR SETTLING. DO NOT DISTURB SOIL AT BOTTOM OF PLANTING HOLES, BUT DO SCORE THE SIDES OF THE PLANTING HOLE. THE PLANTING AREA SHALL BE LOOSENED AND AERATED AT LEAST THREE TIMES THE DIAMETER OF THE ROOT BALL.
  - BACKFILL SHALL CONSIST OF APPROVED ON-SITE TOPSOIL BLENDED W/ COMPOST AMENDMENT. OF ON-SITE TOPSOILS ARE NOT APPROVED FOR USE, BACKFILL W/ IMPORTED TOPSOIL BLENDED WITH COMPOST AMENDMENT. REFER TO SPECIFICATION SECTION 329113 FOR ADDITIONAL INFORMATION.
  - TREES SHALL BE PLANTED WITH THE ROOT COLLAR/FLARE VISIBLE ABOVE GRADE AND TWO OR MORE STRUCTURAL ROOTS LOCATED WITHIN THE TOP 1" TO 2" OF THE ROOT BALL/FINISHED GRADE MEASURED 3" TO 4" FROM TRUNK. THIS INCLUDES TREES THAT ARE SET ON SLOPES (SEE SLOPE PLANTING DETAIL). TREES THAT DO NOT HAVE A VISIBLE ROOT COLLAR SHALL BE REJECTED. DO NOT COVER THE ROOT BALL WITH SOIL.
  - WHEN ROOT BALL WILL REMAIN INTACT, CUT OFF BOTTOM 1/4 OF WIRE BASKET BEFORE PLACING TREE IN HOLE. CUT OFF REMAINDER OF BASKET AFTER TREE IS SET IN HOLE. REMOVE BASKET COMPLETELY. AT A MINIMUM, THE TOP 2/3 OF THE BURLAP AND BASKET SHALL BE REMOVED FROM THE ROOT BALL ON ALL TREES. REMOVE ALL NYLON TIES, TWINE, ROPE AND BURLAP. REMOVE UNNECESSARY PACKING MATERIAL.
  - FORM SOIL INTO A 6" TALL WATERING RING (SAUCER) AROUND PLANTING AREA. THIS IS NOT NECESSARY IN IRRIGATED TURF AREAS. APPLY 4" DEPTH OF SPECIFIED MULCH OVER PLANTING AREA AND INSIDE SAUCERS. AWAY FROM TRUNK.
  - STAKING AND GUYING OF TREES IS OPTIONAL IN MOST PLANTING SITUATIONS. IN AREAS OF EXTREME WINDS, OR ON STEEP SLOPES, STAKING MAY BE REQUIRED TO STABILIZE TREES. STAKING AND GUYING MUST BE REMOVED WITHIN 1 YEAR OF PLANTING DATE.
  - TREE WRAP IS NOT TO BE USED ON ANY NEW PLANTINGS, EXCEPT IN LATE FALL PLANTING SITUATIONS, AND ONLY AFTER CONSULTATION WITH THE TOWN ARBORIST.
  - RESETTING OF IMPROPERLY PLANTED TREES WILL ONLY BE ALLOWED IF IT IS DETERMINED THAT DOING SO WILL IN NO WAY COMPROMISE THE ROOT BALL, AND SHALL ONLY BE DONE WITH APPROVAL OF THE TOWN ARBORIST.

TREE PLANTING ON SLOPE  
1/4" = 1'-0"

DATE: MAY 2023 | DETAIL SD-4



AWR Designs, LLC  
P.O. Box 1746  
Aledo, Texas 76608  
amanda@awr-designs.com  
c. 512.517.5589

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987  
CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



Know what's Below. Call before you dig. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN BY AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND ASSUME FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCURRED 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 HELD RESPONSIBLE FOR ANY INADEQUACIES OR SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

COPYRIGHT © 2025 ATWELL LLC. NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL LLC.

24 HOUR EMERGENCY CONTACT

ATWELL GROUP

866.850.4200 www.atwell-group.com  
9001 AIRPORT FREEWAY, SUITE 660  
NORTH RICHLAND HILLS, TX 76180  
972.356.9860

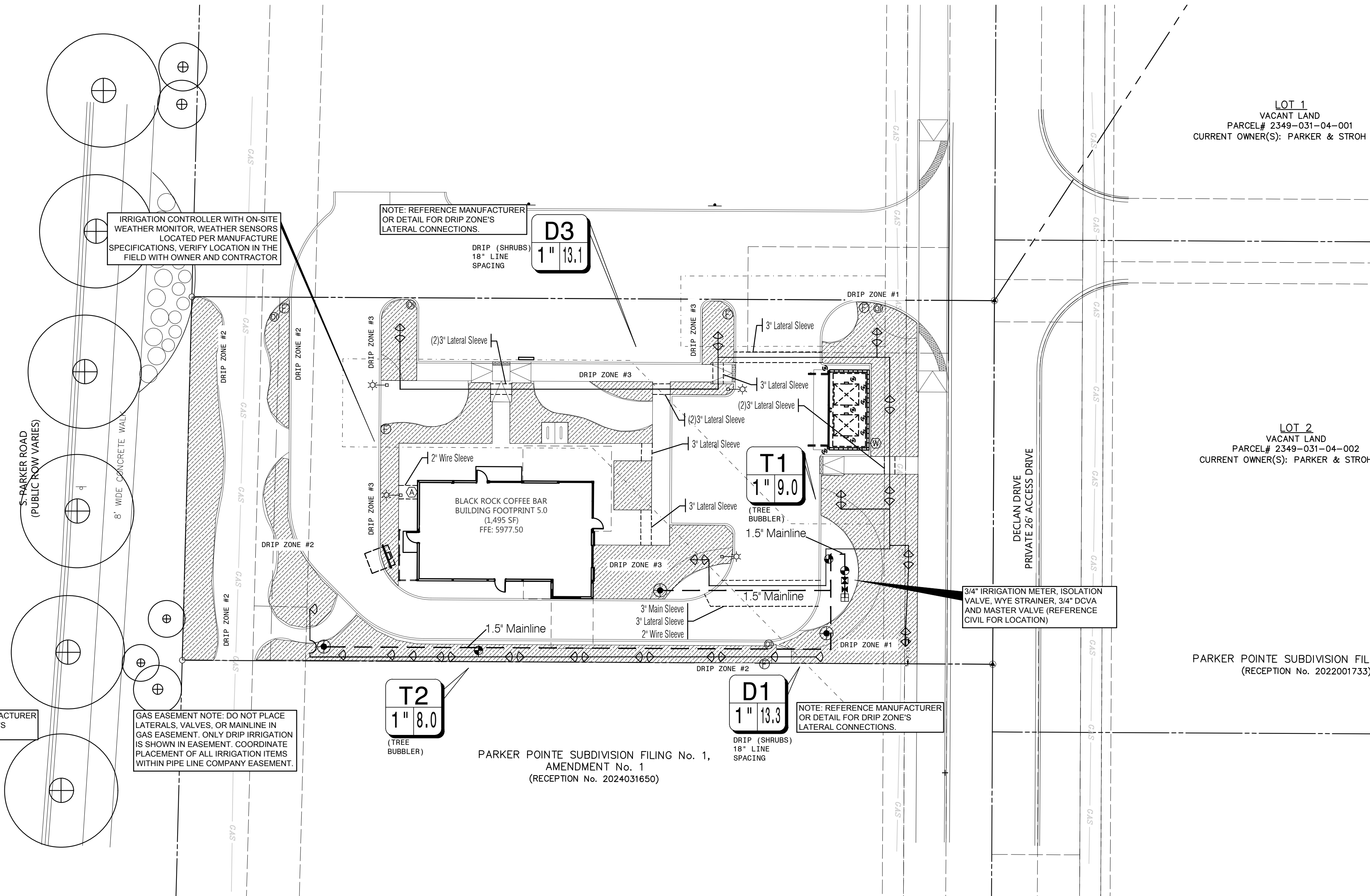
LOT 4A, PARKER POINTE SUBD. FILING NO. 1 - AMEND. NO. 1  
S. PARKER RD & STROH RD  
PARKER  
DOUGLAS COUNTY, COLORADO

BLACK ROCK COFFEE BAR  
13135 DECLAN DRIVE  
LANDSCAPE DETAILS

DATE: 2025-10-8

REVISIONS

DRAWN BY: K. SARWAR  
CHECKED BY: N. SALAZAR  
PROJECT MANAGER: N. SALAZAR  
JOB #: 24003198  
FILE CODE: ##  
SHEET NO.



**SLEEVING NOTES**

1. PIPING AND CONTROL WIRES SHALL BE INSTALLED IN SEPARATE SLEEVES UNDER PAVED AREAS FOR DESIGN CLARITY ONLY. IRRIGATION ELEMENTS HAVE BEEN SHOWN ON THIS PLAN AS ACCURATELY AS POSSIBLE WITHOUT THE PORTFOLIO 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. SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
3. INSTALLATION OF SLEEVES SHALL BE TWENTY (20) FEET 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 ON THE CURB WITH A SAWCUT OF TWO PARALLEL LINES THAT ARE TWO (2) INCHES LONG AND ONE (1) INCH 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 A REGISTERED LICENSED IRRIGATOR 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\"/>

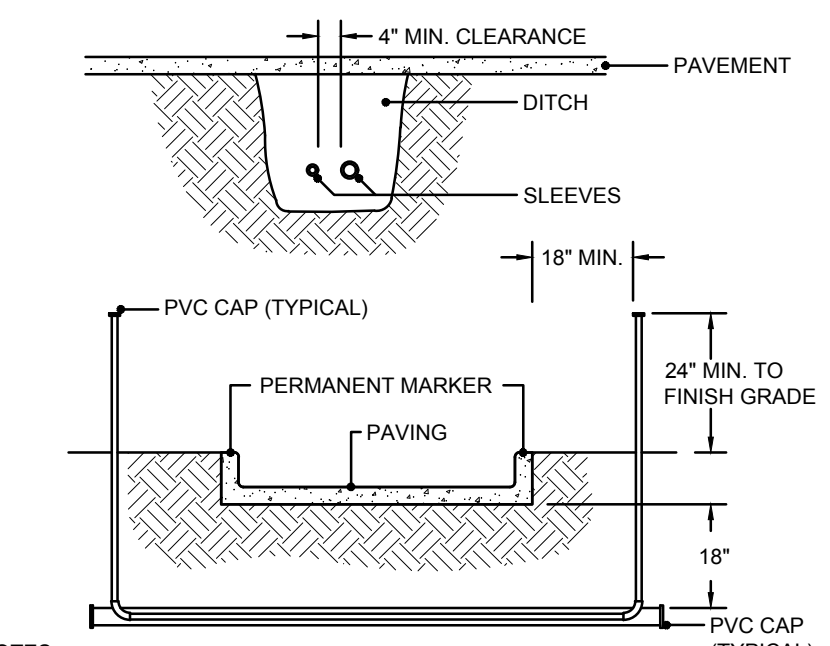
**IRRIGATION PROJECT NOTES**

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 PORTFOLIO 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 SIXTY (60 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 MANUFACTURER'S 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. IRRIGATION REMOTE CONTROL VALVES SHALL BE 1\"/>

**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.

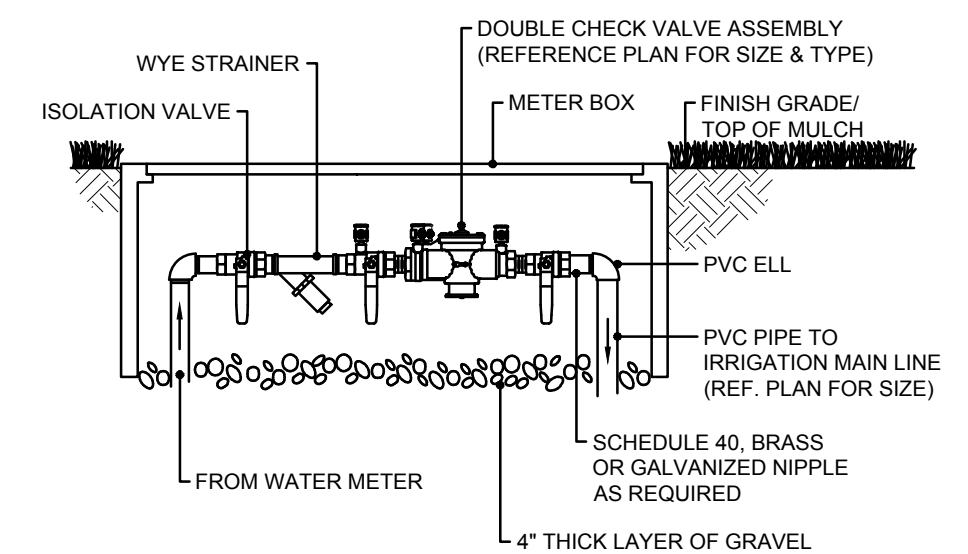
| FLOW RANGE GPM | PIPE SIZE |
|----------------|-----------|
| 0 - 6 GPM      | 3/4"      |
| 8 - 12 GPM     | 1"        |
| 12 - 22 GPM    | 1-1/4"    |
| 22 - 28 GPM    | 1-1/2"    |
| 28 + GPM       | 2"        |

**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 MANUFACTURER'S RECOMMENDATIONS.  
 9. ALL MAINLINE PIPING 3 INCHES AND LARGER SHALL BE BELL AND GASKETED CLASS 200 PVC PIPE. SDR 21. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. CONTACT MANUFACTURER OR DISTRIBUTOR FOR PRODUCT DEMONSTRATION.  
 10. GROUP VALVES IN FIELD AS NECESSARY FOR MAINLINE SIZING. CENTER FEED LATERALS WHEN POSSIBLE.



- NOTES:**
1. ALL PVC IRRIGATION SLEEVES TO BE SCHEDULE 40 PIPE.
  2. ALL JOINTS TO BE SOLVENT WELDED AND WATER TIGHT.
  3. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24-INCHES MINIMUM ABOVE FINISH GRADE.
  4. MECHANICALLY TAMP TO 85% PROCTOR.
  5. SLEEVE LOCATIONS SHALL BE MARKED ON THE TOP OF CURB WITH A SAWCUT OF TWO PARALLEL LINES THAT ARE 2\"/>

**1 IRRIGATION PVC SLEEVES**  
N.T.S.



- NOTE:**
1. INSTALL BACKFLOW PREVENTER AS REQUIRED BY LOCAL CODES AND HEALTH DEPARTMENT. VERIFY LOCAL REQUIREMENTS PRIOR TO INSTALLATION. PRIOR TO BACKFLOW PREVENTER, INSTALL A NOMINALLY SIZED ISOLATION VALVE.

**2 DOUBLE CHECK ASSEMBLY**  
N.T.S.

| SYMBOL | DESCRIPTION           | MANUFACTURER | MODEL NO.                        |
|--------|-----------------------|--------------|----------------------------------|
| ⬇      | MULTI-STREAM BUBBLERS | HUNTER       | PROS-06-PRS30 W/ MSBN50H NOZZLES |
| ⬇      | REMOTE CONTROL VALVE  | HUNTER       | ICV                              |
| ⬇      | 1\"/>                 |              |                                  |

| SYMBOL | DESCRIPTION                 | MANUFACTURER | MODEL NO.     |
|--------|-----------------------------|--------------|---------------|
| ⬇      | 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-25 |

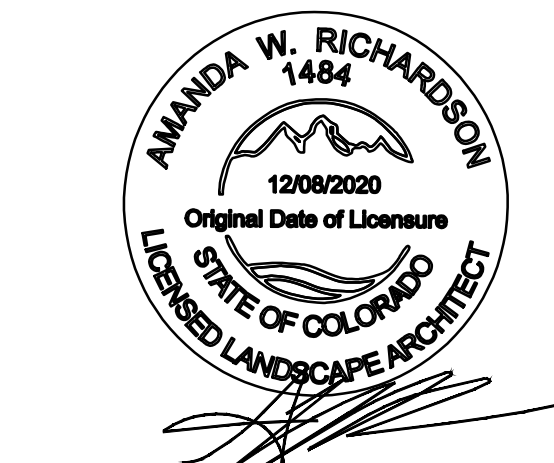
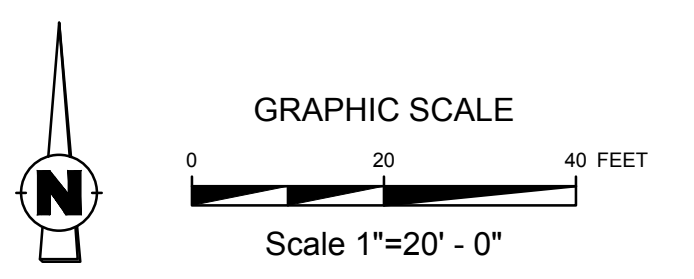
| SYMBOL | DESCRIPTION | MANUFACTURER | MODEL NO. |
|--------|-------------|--------------|-----------|
| ⬇      | 1\"/>       |              |           |

| SYMBOL | DESCRIPTION | MANUFACTURER | MODEL NO. |
|--------|-------------|--------------|-----------|
| ⬇      | 1\"/>       |              |           |

| SYMBOL | DESCRIPTION | MANUFACTURER | MODEL NO. |
|--------|-------------|--------------|-----------|
| ⬇      | 1\"/>       |              |           |



**AWR**  
 AWR Designs, LLC  
 P.O. Box 1746  
 Alledo, Texas 76008  
 amanda@awr-designs.com  
 c. 512.517.5589

CALL UTILITY NOTIFICATION  
 CENTER OF COLORADO  
 1-800-922-1987  
 CALL 2-BUSINESS DAYS IN ADVANCE  
 BEFORE YOU DIG, GRADE, OR EXCAVATE  
 FOR THE MARKING OF UNDERGROUND  
 MEMBER UTILITIES.

**811**  
 Know what's below.  
 Call before you dig.  
 THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON AN APPROXIMATE BASIS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY AND ALL DAMAGES WHICH MIGHT BE OCCURRED 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 HELD RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCURRED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

**ATWELL**  
 866.850.4200 www.atwell-group.com  
 9001 AIRPORT FREEWAY, SUITE 660  
 NORTH RICHLAND HILLS, TX 76180  
 972.656.9860

**24 HOUR EMERGENCY CONTACT**

**LOT 1A: PARKER POINTE SUBD. FILING NO. 1. AMEND. NO. 1**  
**BLACK ROCK COFFEE BAR**  
**13135 DECLAN DRIVE**  
**PARKER**  
**DOUGLAS COUNTY, COLORADO**

**DATE** 2025-10-8

**REVISIONS**

**DRAWN BY:** K. SARWAR  
**CHECKED BY:** N. SALAZAR  
**PROJECT MANAGER:** N. SALAZAR  
**JOB #:** 24003198  
**FILE CODE: ##**  
**SHEET NO.** L2.01

SECTION 32 8423 - UNDERGROUND IRRIGATION SLEEVES AND UTILITY CONDUITS

- PART 1 - GENERAL**
- DESCRIPTION
  - RELATED WORK
  - REFERENCE STANDARDS
- PART 2 - MATERIALS**
- GENERAL
- POLYVINYL CHLORIDE PIPE (PVC) - SCHEDULE 40 SHALL BE USED FOR ALL SLEEVING PURPOSES.
  - PVC PIPES SHALL BE MARKED WITH SDR NUMBER, ASTA STANDARD NUMBER, AND THE NSF SEAL.
  - 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**
- INSTALLATION
- A MINIMUM OF TWENTY FOUR (24) INCHES COVER SHALL BE PROVIDED OVER THE TOP OF SLEEVE FROM FINISH GRADE.
  - 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.
- BACKFILL
- BACKFILL SHALL BE PLACED OVER SLEEVES IN SIX (6) INCH LIFTS. SOIL SHALL BE TAMPED INTO PLACE, TAKING CARE TO NOT DAMAGE SLEEVE.
  - REPAIR ANY DAMAGE FROM IMPROPER COMPACTION.
- END OF SECTION

- REFERENCE STANDARDS
- AMERICAN STANDARD FOR TESTING AND MATERIALS (ASTM) - LATEST EDITION.
- QUALITY ASSURANCE AND REQUIREMENTS
- PERMITS AND FEES: THE CONTRACTOR SHALL OBTAIN AND PAY FOR ANY PERMITS NECESSARY AND ALL OBSERVATIONS AS REQUIRED.
  - 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.
  - 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.
  - 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.
- SCHEDULE OF MATERIALS
- MATERIALS LIST:
    - ALL EQUIPMENT MANUFACTURERS AND MODEL NUMBERS SHALL BE AS NOTED ON THE PLANS.
    - 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.
    - A COMPLETE MATERIAL LIST OF EQUIPMENT SHALL BE SUBMITTED BEFORE PERFORMING ANY WORK. SUBMITTALS SHOULD INCLUDE ALL MANUFACTURERS' SPECIFICATIONS AND LITERATURE FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
    - EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT MAY BE REJECTED.
    - 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.
    - MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE. SUCH WARRANTIES SHALL ONLY SUPPLEMENT THE GUARANTEE.

- SUPPLY AS PART OF THIS CONTRACT THE FOLLOWING TOOLS:
    - QUICK COUPLING KEYS, THREE (3) WITH BOILER DRAINS ATTACHED USING BRASS REDUCER.
    - THREE (3) KEYS FOR EACH AUTOMATIC CONTROLLER
    - THE ABOVE MENTIONED EQUIPMENT SHALL BE TURNED OVER TO THE OWNER AT THE CONCLUSION OF THE PROJECT.
  - 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 IRRIGATED.
- MAINTENANCE AND GUARANTEE
- MAINTENANCE AND WORKMANSHIP SHALL BE GUARANTEED FULLY FOR ONE (1) YEAR AFTER FINAL ACCEPTANCE.
  - PROVIDE MAINTENANCE OF SYSTEM, CLEANING AND ADJUSTMENT OF THE HEADS, FOR ONE (1) YEAR AFTER COMPLETION OF INSTALLATION.
  - GUARANTEE IS LIMITED TO REPAIR AND REPLACEMENT OF DEFECTIVE MATERIALS AND WORKMANSHIP, INCLUDING THE REPAIR OF BACKFILL SETTLEMENT.
- TESTING
- PERFORM TESTING REQUIRED WITH OTHER TRADES INCLUDING EARTHWORK, PAVING, PLUMBING, ETC. TO AVOID CUTTING, PATCHING OR BORING.
  - 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 PROPERLY. IF STATIC PRESSURE IS LESS THAN THE DESIGN PRESSURE NEEDED, DO NOT START WORK UNTIL THE LANDSCAPE ARCHITECT IS NOTIFIED.
- COORDINATION
- COORDINATE INSTALLATION OF ALL PRODUCTS, INCLUDING EARTHWORK, PAVING AND PLUMBING.
  - COORDINATE TO ENSURE THAT ELECTRICAL POWER SOURCE IS IN PLACE.
  - COORDINATE INSTALLATION WITH WORK SPECIFIED IN OTHER SECTIONS.
  - COORDINATE WITH THE LANDSCAPE CONTRACTOR TO ENSURE PLANT MATERIAL IS UNIFORMLY WATERED IN ACCORDANCE WITH INTENT SHOWN ON DRAWINGS.

- INTERFERENCE WITH UTILITIES OR OTHER CONSTRUCTION DIFFICULTY IN PLANTING TREES, SHRUBS, AND GROUNDCOVERS. COORDINATE WORK WITH OTHER SITE CONTRACTORS.
- PREPARATION
- PHYSICAL LAYOUT:
    - PIPING AND HEAD LAYOUT AS SHOWN ON PLANS IS SCHEMATIC ONLY. ALL PIPES TO BE INSTALLED DIRECTLY BEHIND CURBS, WALLS AND WALLS WHEREVER POSSIBLE.
    - PRIOR TO INSTALLATION CONTRACTOR SHALL STAKE OUT ALL PRESSURE SUPPLY LINES, ROUTING AND LOCATION OF SPRINKLER HEADS.
    - ALL LAYOUTS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
  - WATER SUPPLY:
    - IRRIGATION SYSTEM SHALL BE CONNECTED TO WATER SUPPLY POINTS OF CONNECTION AS INDICATED ON THE DRAWINGS.
    - CONNECTIONS SHALL 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.
- INSTALLATION
- TRENCHING
    - 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.
    - 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.
    - PROVIDE A MINIMUM OF EIGHTEEN (18) INCHES OF COVER FOR ALL PRESSURE SUPPLY LINES.
    - PROVIDE A MINIMUM OF TWELVE (12) INCHES OF COVER FOR ALL NON-PRESSURE LINES.
    - PROVIDE A MINIMUM COVER OF EIGHTEEN (18) INCHES FOR ALL CONTROL WIRING.
    - 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.
  - BACKFILL
    - 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.
    - 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.
  - TRENCHING AND BACKFILL UNDER PAVING:
    - 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.
  - ASSEMBLIES
    - 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.
    - 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

- ON PVC TO METAL CONNECTIONS, THE CONTRACTOR SHALL WORK METAL CONNECTIONS FIRST. USE NON HARDENING PIPE DOOR 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.
- 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.
- 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.
- 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.
- REMOTE CONTROL VALVES:
  - INSTALL WHERE SHOWN ON DRAWINGS AND DETAILS. VALVES SHALL BE SIZED ACCORDING TO THE DRAWINGS.
  - INSTALL IN A LEVEL POSITION IN ACCORDANCE TO MANUFACTURER'S SPECIFICATIONS.
  - 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.
- FLUSHING OF SYSTEM:
  - 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.
  - SPRINKLER HEADS SHALL BE INSTALLED ONLY AFTER FLUSHING OF THE SYSTEM HAS BEEN ACCOMPLISHED.
  - SPRINKLER HEADS:
    - INSTALL HEADS AS DESIGNED ON THE DRAWINGS. MAKE APPROPRIATE ADJUSTMENTS TO HEAD LAYOUT TO ACCOMMODATE FOR ACTUAL FIELD CONDITIONS.
    - 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.
    - ALL SPRINKLERS TO ATTACH TO LATERAL LINES WITH FLEXIBLE CONNECTORS. REFERENCE DETAILS ON DRAWINGS.

SECTION 32 8424 - IRRIGATION SYSTEM

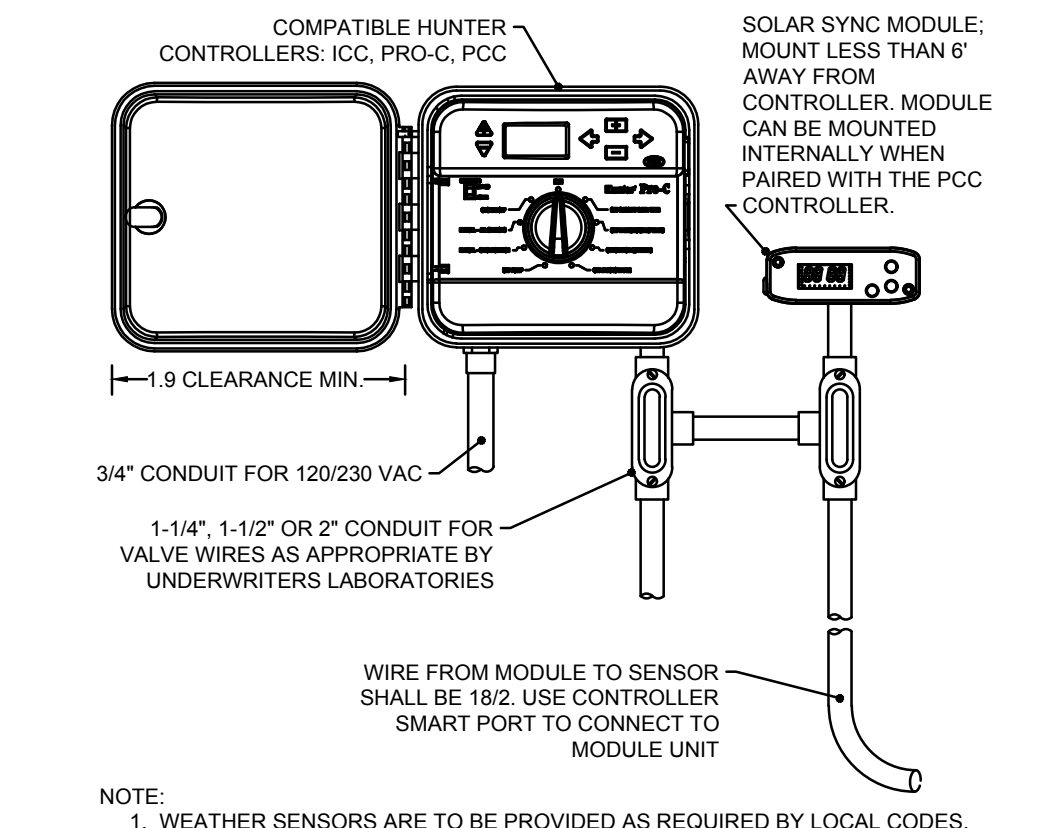
- PART 1 - GENERAL**
- DESCRIPTION
- PROVIDE A COMPLETE IRRIGATION SYSTEM INSTALLATION AS DETAILED AND SPECIFIED. THIS SHALL INCLUDE FURNISHING ALL LABOR, MATERIAL, EQUIPMENT AND SERVICES NECESSARY TO PROVIDE COMPLETE INSTALLATION. WORK INCLUDES:
    - TRENCHING
    - BACKFILL
    - AUTOMATIC CONTROLLED SYSTEM
    - AS BUILT DRAWINGS
    - SLEEVING AS SHOWN SHALL BE FURNISHED BY THE GENERAL CONTRACTOR.
    - METER AND POWER SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.
- RELATED WORK
- REFERENCE IRRIGATION PLANS FOR CONTROLLER, HEAD AND ALL VALVE LOCATIONS.
  - REFERENCE LANDSCAPE PLANS, NOTES, DETAILS FOR ADDITIONAL REQUIREMENTS.
  - SECTION 32 9300 - LANDSCAPE
  - SECTION 32-8423 - UNDERGROUND IRRIGATION SLEEVE AND UTILITY CONDUITS

- RECORD AND AS BUILT DRAWINGS/SUBMITTALS
- CONTRACTOR SHALL PROVIDE AND KEEP UP TO DATE AND COMPLETE "AS-BUILT" RECORD SET OF PRINTS.
  - CONTRACTOR SHOULD USE ALL SYMBOLS AND NOTATIONS CONSISTENT WITH THE ORIGINAL DRAWINGS.
  - IN "AS-BUILT" DRAWINGS, CONTRACTOR SHALL LOCATE:
    - CONNECTION TO EXISTING WATER LINES
    - CONNECTION TO ELECTRICAL POWER
    - GATE VALVES
    - ROUTING OF SPRINKLER PRESSURE LINES
    - SPRINKLER CONTROL VALVES
    - QUICK COUPLING VALVES
    - OTHER RELATED EQUIPMENT
  - SUBMIT COMPLETED TRACINGS PRIOR TO FINAL ACCEPTANCE. DATE AND SIGN ALL DRAWINGS.
  - EQUIPMENT TO BE FURNISHED:

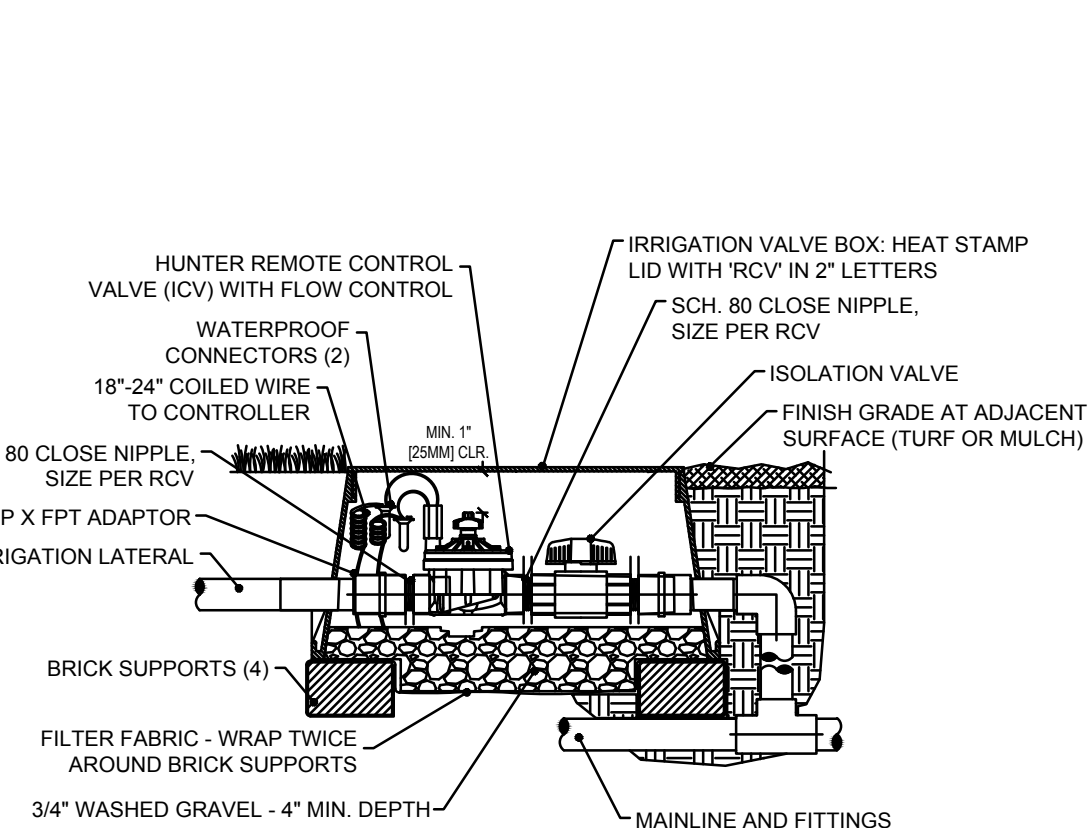
- PART 2 - PRODUCTS**
- MATERIALS
- REFER TO CONSTRUCTION DRAWINGS AND NOTES.
  - SPRINKLER HEADS IN LAWN AREAS AS SPECIFIED ON PLAN
  - PVC PIPE: CLASS 200 SPR 21
  - COPPER TUBING (FOR CITY CONNECTIONS): TYPE "M"
  - 24V WIRE - SIZE 14, TYPE UF
  - ELECTRIC VALVES TO BE ALL PLASTIC CONSTRUCTION AS INDICATED ON PLANS.
  - REFER TO DRAWING FOR BACKFLOW PREVENTION LOCATION - COORDINATE EXACT LOCATION WITH THE GENERAL CONTRACTOR.
- PART 3 - EXECUTION**
- INSPECTION
- SITE CONDITIONS:
    - ALL SCALED DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL CHECK AND VERIFY ALL SIZE DIMENSIONS.
    - 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 NEGLIGENCE.
    - 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.
- PREPARATION
- PHYSICAL LAYOUT:
    - PIPING AND HEAD LAYOUT AS SHOWN ON PLANS IS SCHEMATIC ONLY. ALL PIPES TO BE INSTALLED DIRECTLY BEHIND CURBS, WALLS AND WALLS WHEREVER POSSIBLE.
    - PRIOR TO INSTALLATION CONTRACTOR SHALL STAKE OUT ALL PRESSURE SUPPLY LINES, ROUTING AND LOCATION OF SPRINKLER HEADS.
    - ALL LAYOUTS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
  - WATER SUPPLY:
    - IRRIGATION SYSTEM SHALL BE CONNECTED TO WATER SUPPLY POINTS OF CONNECTION AS INDICATED ON THE DRAWINGS.
    - CONNECTIONS SHALL 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.
- INSTALLATION
- TRENCHING
    - 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.
    - 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.
    - PROVIDE A MINIMUM OF EIGHTEEN (18) INCHES OF COVER FOR ALL PRESSURE SUPPLY LINES.
    - PROVIDE A MINIMUM OF TWELVE (12) INCHES OF COVER FOR ALL NON-PRESSURE LINES.
    - PROVIDE A MINIMUM COVER OF EIGHTEEN (18) INCHES FOR ALL CONTROL WIRING.
    - 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.
  - BACKFILL
    - 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.
    - 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.
  - TRENCHING AND BACKFILL UNDER PAVING:
    - 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.
  - ASSEMBLIES
    - 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.
    - 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

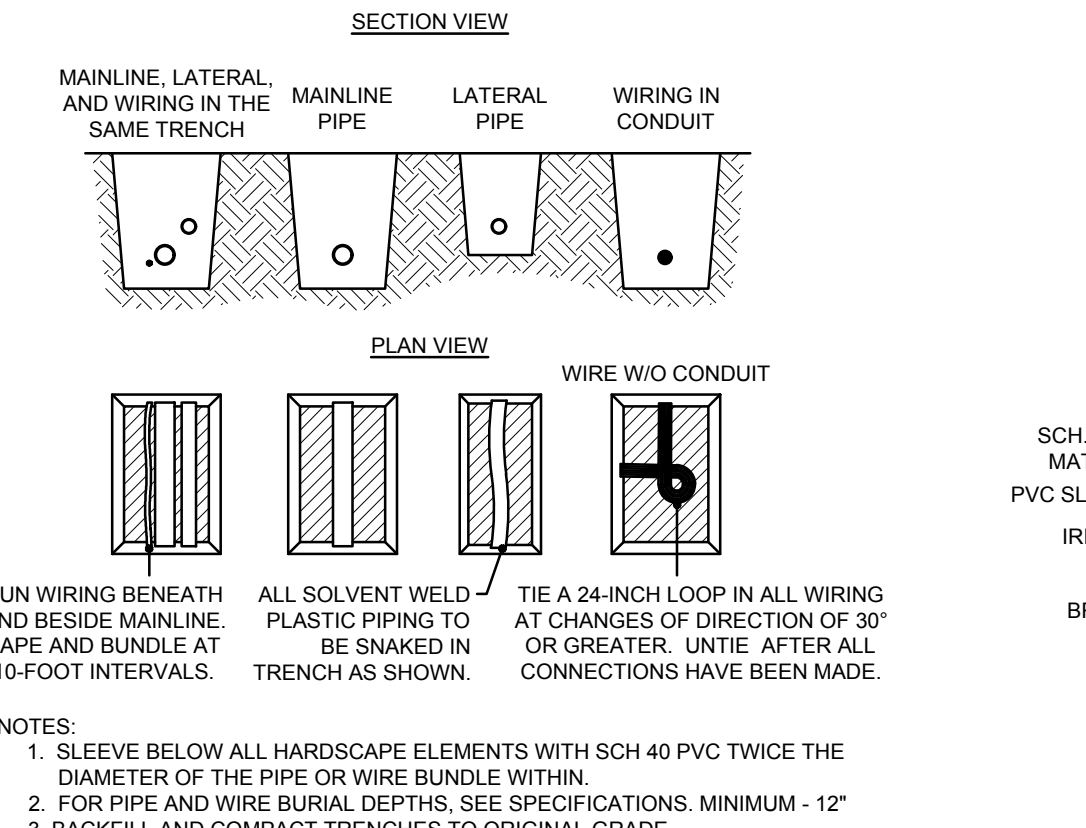
- ON PVC TO METAL CONNECTIONS, THE CONTRACTOR SHALL WORK METAL CONNECTIONS FIRST. USE NON HARDENING PIPE DOOR OR TEFLON TAPE ON THREADED PVC ADAPTERS INTO WHICH PIPE MAY BE WELDED. LIGHT WRENCH PRESSURE IS ALL THAT IS REQUIRED, USE THREADED PVC ADAPTERS INTO WHICH THE PIPE MAY BE WELDED.
- LINE CLEARANCE: 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.
- 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.
- 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.
- REMOTE CONTROL VALVES:
  - INSTALL WHERE SHOWN ON DRAWINGS AND DETAILS. VALVES SHALL BE SIZED ACCORDING TO THE DRAWINGS.
  - INSTALL IN A LEVEL POSITION IN ACCORDANCE TO MANUFACTURER'S SPECIFICATIONS.
  - 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.
- FLUSHING OF SYSTEM:
  - 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.
  - SPRINKLER HEADS SHALL BE INSTALLED ONLY AFTER FLUSHING OF THE SYSTEM HAS BEEN ACCOMPLISHED.
  - SPRINKLER HEADS:
    - INSTALL HEADS AS DESIGNED ON THE DRAWINGS. MAKE APPROPRIATE ADJUSTMENTS TO HEAD LAYOUT TO ACCOMMODATE FOR ACTUAL FIELD CONDITIONS.
    - 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.
    - ALL SPRINKLERS TO ATTACH TO LATERAL LINES WITH FLEXIBLE CONNECTORS. REFERENCE DETAILS ON DRAWINGS.



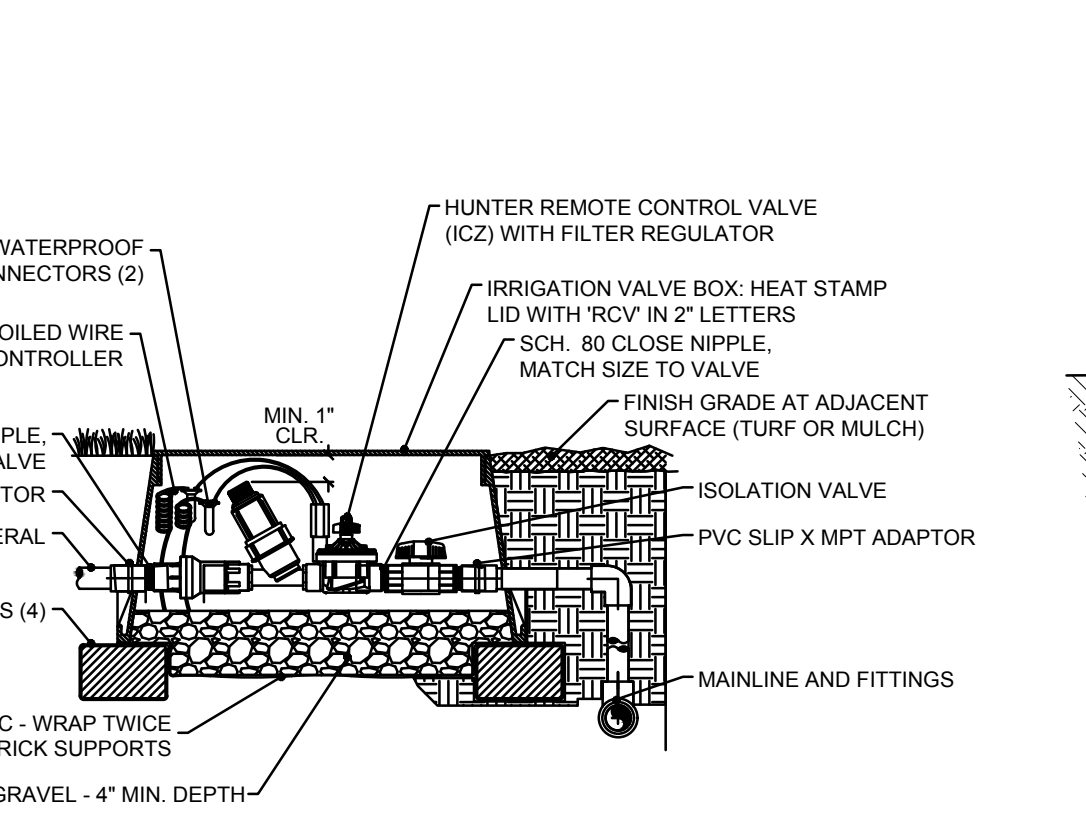
**1 PRO-C CONTROLLER W/SOLAR SYNC SYSTEM**  
N.T.S.



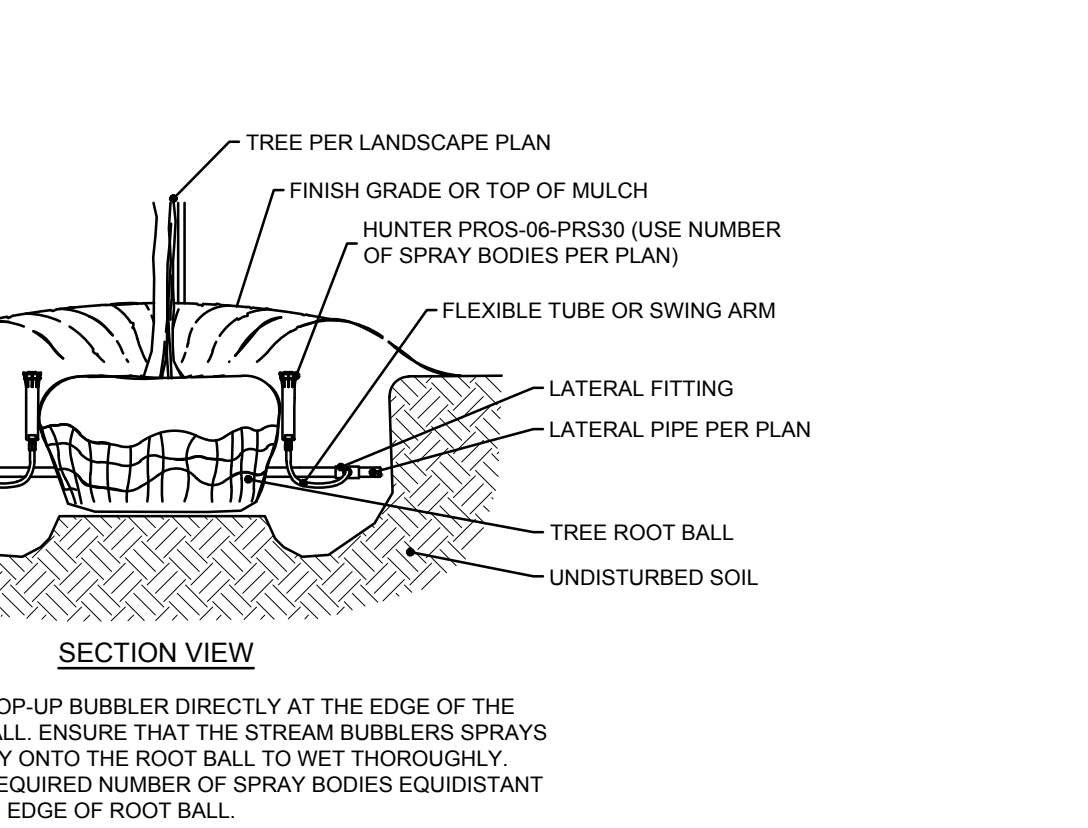
**2 IN-LINE VALVE (ICV) WITH ISOLATION VALVE**  
N.T.S.



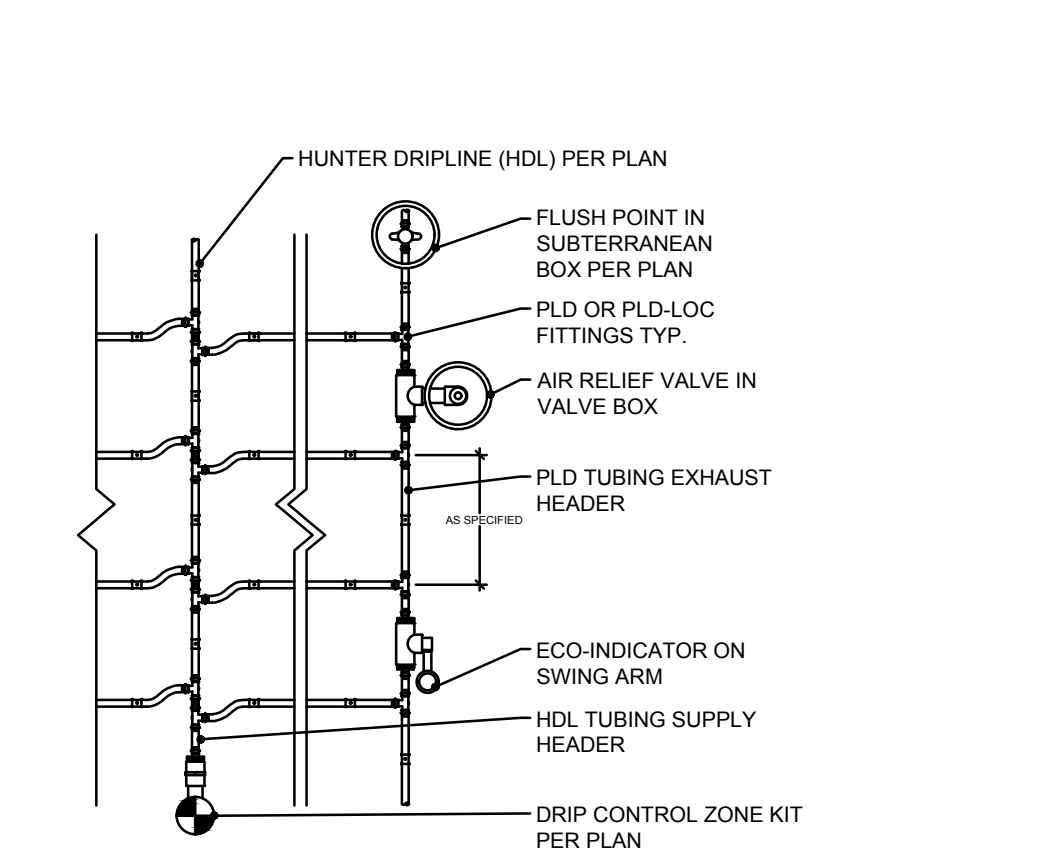
**3 PIPE AND WIRING TRENCHING**  
N.T.S.



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

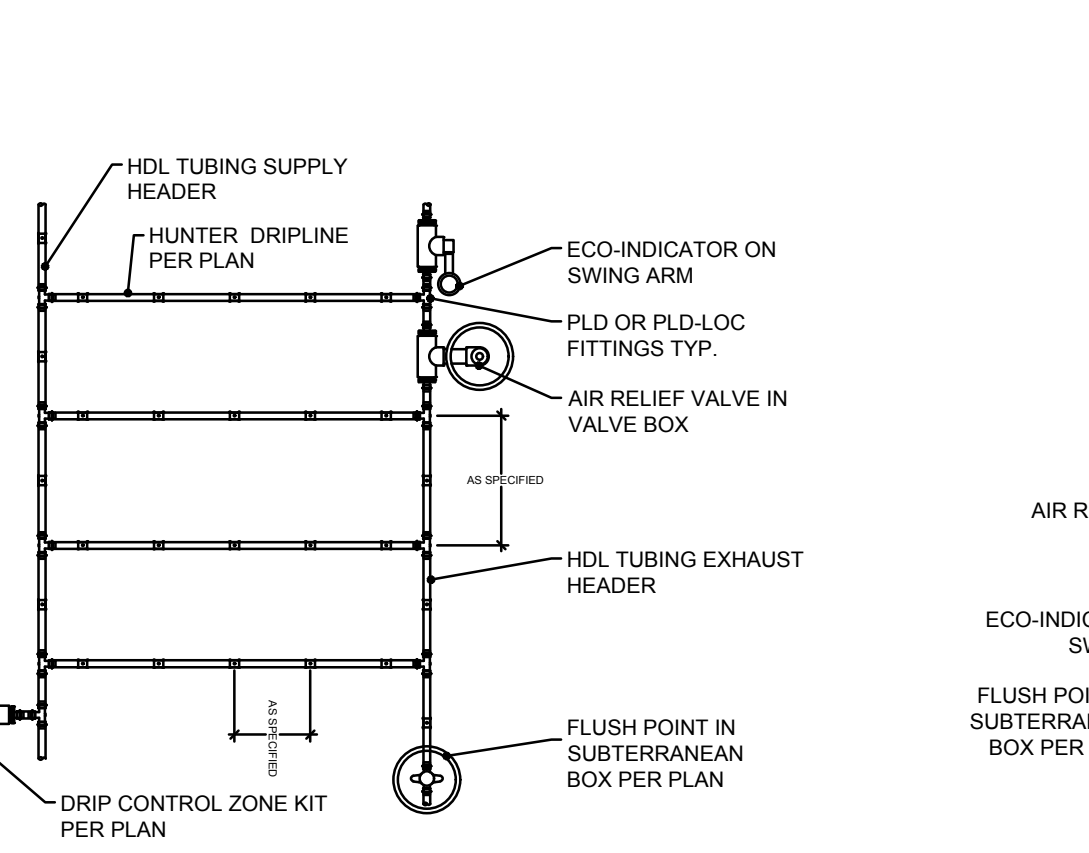


**5 TREE BUBBLER ASSEMBLY WITH HUNTER PROS-06-PRS30**  
N.T.S.



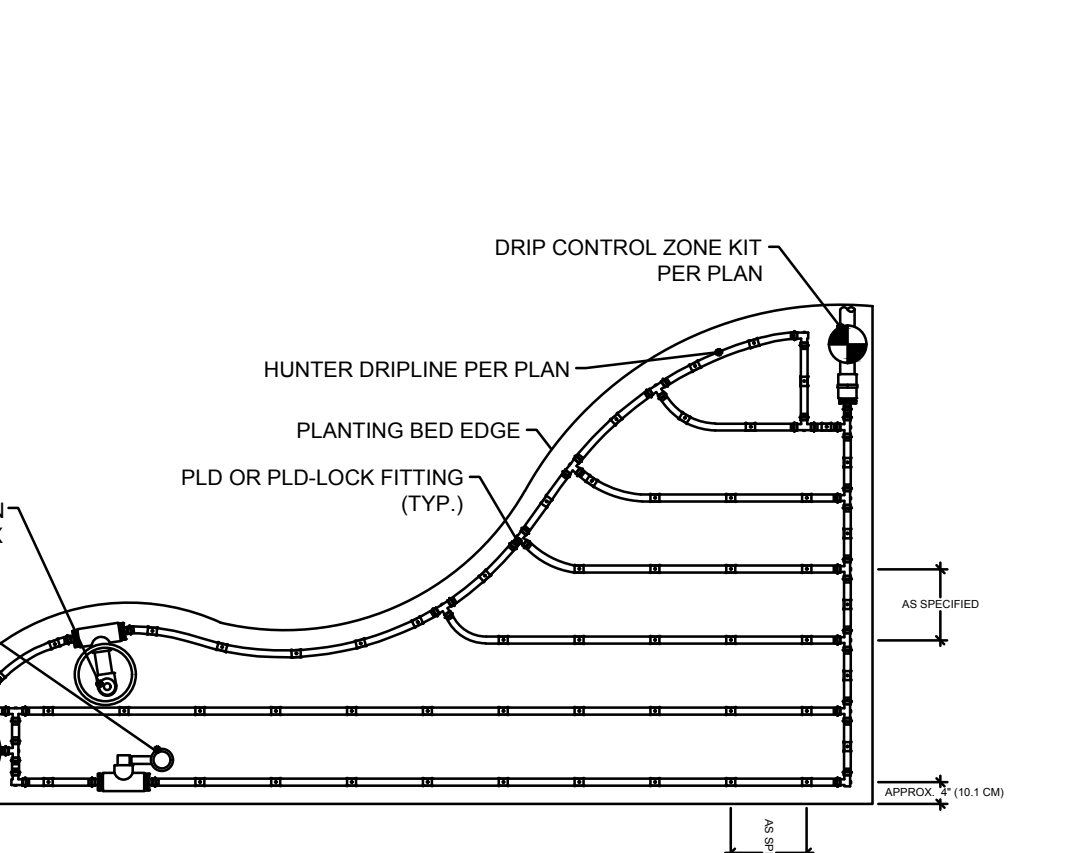
- NOTE:
- AIR RELIEF VALVE INSTALLED IN VALVE BOX AT OPTIMAL HIGHEST POINT FROM CONTROL ZONE KIT. MULTIPLE AIR RELIEF VALVES MAY BE NEEDED TO ACCOMMODATE DIFFERENCES IN GRADE.
  - ECO-INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN POPPED UP.
  - FLUSH POINT TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT TO ALLOW FOR MAXIMUM DEBRIS FLUSH IN SYSTEM.

**6 HUNTER DRIPLINE- PLANTING BED CENTER FEED**  
N.T.S.



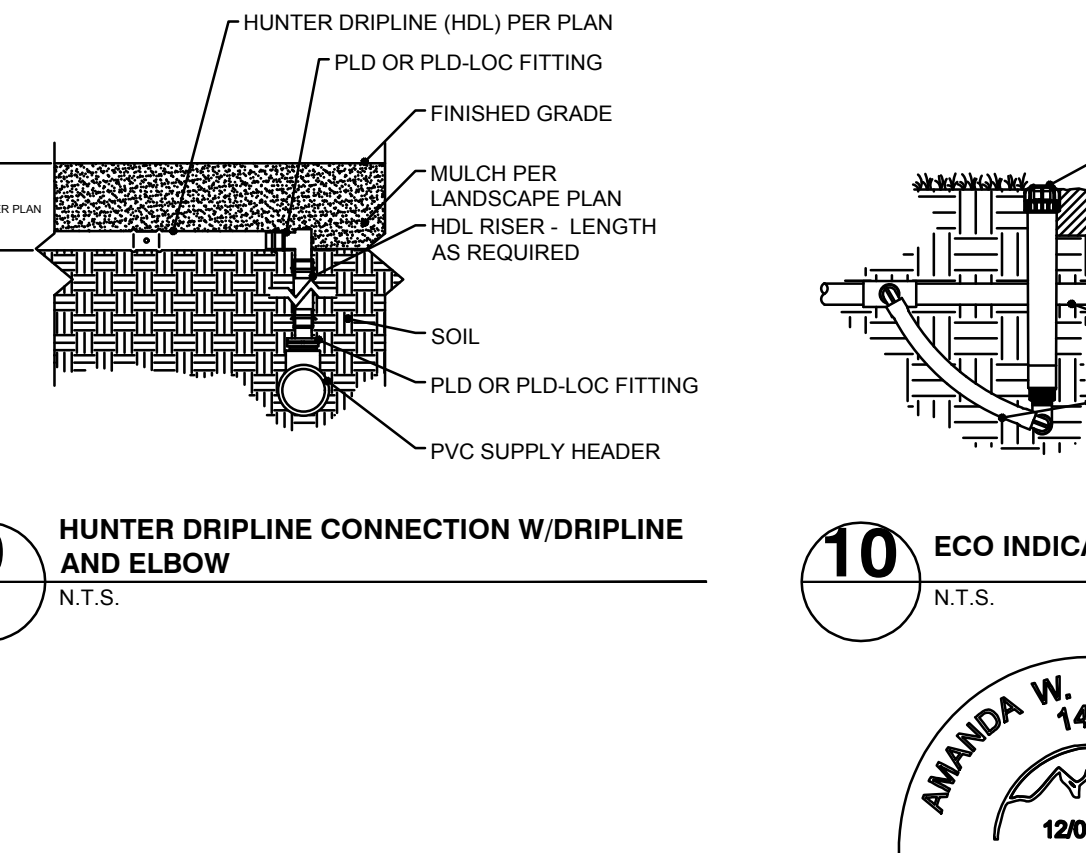
- NOTE:
- AIR RELIEF VALVE INSTALLED IN VALVE BOX AT OPTIMAL HIGHEST POINT FROM CONTROL ZONE KIT. MULTIPLE AIR RELIEF VALVES MAY BE NEEDED TO ACCOMMODATE DIFFERENCES IN GRADE.
  - ECO-INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN POPPED UP.
  - FLUSH POINT TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT TO ALLOW FOR MAXIMUM DEBRIS FLUSH IN SYSTEM.

**7 HUNTER DRIPLINE- PLANTING BED**  
N.T.S.

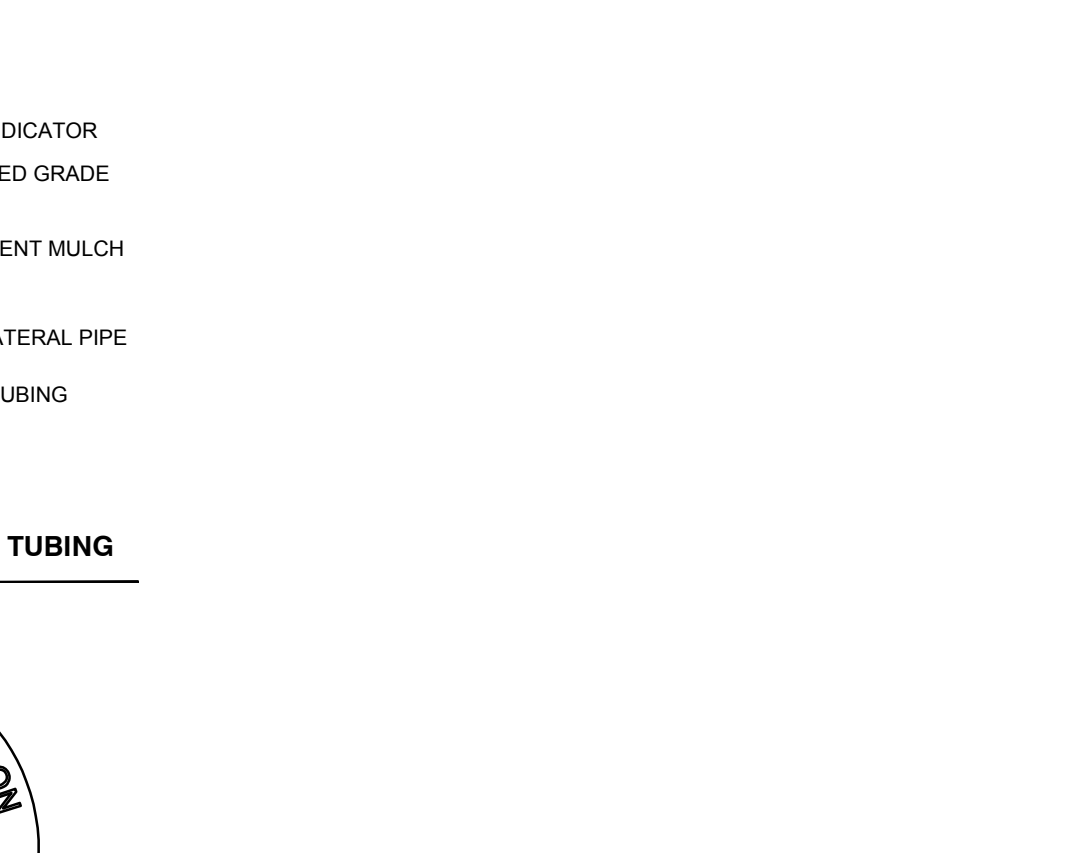


- NOTE:
- AIR RELIEF VALVE INSTALLED IN VALVE BOX AT OPTIMAL HIGHEST POINT FROM CONTROL ZONE KIT. MULTIPLE AIR RELIEF VALVES MAY BE NEEDED TO ACCOMMODATE DIFFERENCES IN GRADE.
  - ECO-INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN POPPED UP.
  - FLUSH POINT TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT TO ALLOW FOR MAXIMUM DEBRIS FLUSH IN SYSTEM.

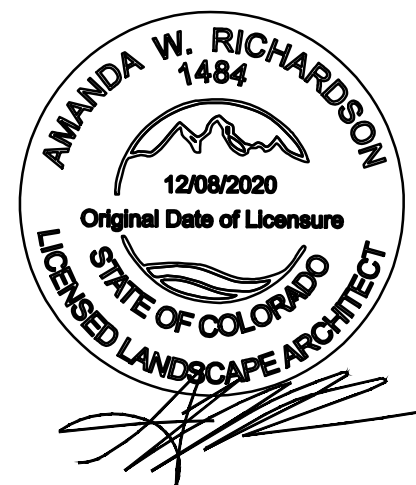
**8 HUNTER DRIPLINE- IRREGULAR PLANTING AREA**  
N.T.S.



**9 HUNTER DRIPLINE CONNECTION W/ DRIPLINE AND ELBOW**  
N.T.S.



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



CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987  
CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

**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 AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCURRED 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 HELD RESPONSIBLE FOR ANY DAMAGE TO THE SAFETY OF THE WORK OR PERSONS ENGAGED IN THE WORK, OR ANY HARMER STRUCTURE, OR OF ANY OTHER PERSONS.

COPYRIGHT © 2025 ATWELL LLC. NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL LLC.

**24 HOUR EMERGENCY CONTACT**

**ATWELL**  
866.850.4200 www.atwell-group.com  
9001 AIRPORT FREEWAY, SUITE 660  
NORTH RICHLAND HILLS, TX 76180  
972.656.9860

---

LOT 4A PARKER POINT SUBD. FILING NO. 1. AMEND. NO. 1  
S. PARKER RD & STROH RD  
PARKER  
DOUGLAS COUNTY, COLORADO

---

BLACK ROCK COFFEE BAR  
13135 DECLAN DRIVE  
PARKER  
IRRIGATION SPECIFICATIONS AND DETAILS

---

DATE: 2025-10-8

REVISIONS

---

DRAWN BY: K. SARWAR  
CHECKED BY: N. SALAZAR  
PROJECT MANAGER: N. SALAZAR  
JOB #: 24003198  
FILE CODE: ##  
SHEET NO: **L2.02**

| ELECTRICAL SYMBOLS LEGEND |  |
|---------------------------|--|
| SYMBOLS                   | DESCRIPTION  |
|                           | FLUORESCENT FIXTURE, WITH FIXTURE DESIGNATED BY LETTER.  |
| NL                        | NIGHT LIGHT – NOT SWITCHED   |
|                           | CEILING OR WALL MOUNTED FIXTURE  |
|                           | JUNCTION BOX   |
|                           | SINGLE/DOUBLE FACED EXIT SIGN – NOT SWITCHED   |
|                           | DOUBLE HEAD EMERGENCY LIGHT WITH BATTERY BACK UP.  |
| S                         | SINGLE POLE SWITCH, +48" A.F.F.  |
| S <sub>3</sub>            | THREE WAY SWITCH, +48" A.F.F.  |
| S <sub>o</sub>            | OUTLET CONTROL INDICATOR   |
| S <sub>D</sub>            | DIMMER SWITCH  |
| S <sub>OS</sub>           | OCCUPANCY SENSOR SWITCH  |
| S <sub>T</sub>            | THERMAL OVERLOAD SWITCH  |
|                           | DUPLEX RECEPTACLE, +18" A.F.F.   |
|                           | DUPLEX RECEPTACLE ABOVE COUNTER, VERIFY HEIGHT   |
|                           | FOURPLEX RECEPTACLE, +18" A.F.F.   |
|                           | HALF SWITCHED DUPLEX RECEPTACLE  |
|                           | POWER/PHONE/DATA FLUSH FLOOR OUTLET  |
|                           | 250 VOLT RECEPTACLE PER UNIT REQUIREMENTS  |
|                           | 600 VOLT RECEPTACLE PER UNIT REQUIREMENTS  |
|                           | TELEPHONE/DATA SYSTEM OUTLET, 4" SQUARE BOX AND COVERPLATE, 3/4"C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUN, +18" A.F.F.     |
|                           | TELEVISION OUTLET PLASTER RING AT +18" A.F.F. (U.N.O.) HUBBELL COVERPLATE, 3/4"C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUNS. |
|                           | CONDUIT BELOW FLOOR OR UNDERGROUND   |
|                           | CONDUIT IN WALL OR ABOVE CEILING   |
| LA 1,3                    | HOMERUN TO PANEL (SEE GROUNDING NOTE)  |
|                           | MOTOR CONNECTION   |
|                           | DISCONNECT SWITCH  |
|                           | DUCT SMOKE DETECTOR  |
|                           | LIGHTNING ARRESTER   |

\*\*\* ALL SYMBOLS ON LEGEND MAY NOT APPLY TO DRAWING(S). \*\*\*

| ABBREVIATIONS |   |
|---------------|---|
| E             | EXISTING LIGHT OR DEVICE TO REMAIN                  |
| ER            | EXISTING LIGHT OR DEVICE TO BE REMOVED OR RELOCATED |
| R             | RELOCATED LIGHT OR DEVICE                           |
| N             | NEW LIGHT OR DEVICE                                 |
| A.F.F.        | ABOVE FINISHED FLOOR                                |
| C             | CONDUIT   |
| E.C.          | EMPTY CONDUIT WITH PULLWIRE                         |
| E.D.F.        | ELECTRICAL DRINKING FOUNTAIN.                       |
| GND           | GROUND  |
| MLO           | MAIN LUGS ONLY                                      |
| MCB           | MAIN CIRCUIT BREAKER                                |
| S.E.S.        | SERVICE ENTRANCE SECTION                            |
| WP            | WEATHER PROOF                                       |
| WR            | WATER RESISTANT                                     |
| GFI/GFCI      | GROUND–FAULT CIRCUIT INTERRUPTER                    |
| U.N.O.        | UNLESS NOTED OTHERWISE                              |
|               | SECURITY CAMERA                                     |
|               | SPEAKER   |
| S.U.S.E       | SUITABLE FOR USE AS SERVICE EQUIPMENT               |

| SCOPE OF WORK   |  |
|---|--|
| ELECTRICAL ENGINEERING CONSTRUCTION DOCUMENTATION FOR A 860 SF GROUND UP OF A NEW RETAIL SPACE FOR A NEW COFFEE SHOP.   |  |
| DESIGN INCLUDES:  |  |
| <ul style="list-style-type: none"> <li>– ELECTRICAL SITE PLAN.</li> <li>– ELECTRICAL PHOTOMETRIC SITE PLAN.</li> <li>– IECC REPORT.</li> <li>– ONE–LINE DIAGRAM, PANEL SCHEDULES &amp; FAULT CURRENT CALCULATIONS.</li> </ul> |  |

- \* REFER TO ARCHITECTURAL E2.0 FOR INTERIOR LIGHTING PLAN.
- \* REFER TO ARCHITECTURAL E3.0 FOR INTERIOR POWER FLOOR & ROOF PLAN.

| DEFERRED SUBMITTAL – FIRE ALARM NOTES  |  |
|--|--|
| <p>FIRE ALARM SYSTEM MODIFICATIONS MAY BE INCLUDED IN THIS PROJECT &amp; SHALL BE A DEFERRED SUBMITTAL. ANY DEVICES SHOWN ON THE ELECTRICAL PLANS ARE FOR BID PURPOSES ONLY, AND NOT FOR CONSTRUCTION. ELECTRICAL CONTRACTOR SHALL VERIFY EXACT FIRE ALARM REQUIREMENTS, INCLUDING ANY MODIFICATIONS OR UPGRADES NECESSARY TO THE EXISTING SYSTEM, WITH LANDLORD AND AUTHORITY HAVING JURISDICTION. CONTRACTOR IS TO PROVIDE COMPLETE DWGS &amp; ALL COSTS SHALL BE INCLUDED IN THE BID. FIRE ALARM DEVICES ARE TO BE COMPATIBLE WITH LANDLORDS FIRE ALARM SYSTEM. IF ENGINEERED FIRE ALARM DRAWINGS ARE REQUIRED, THEY ARE TO BE PREPARED BY A LOCAL, LICENSED FIRE ALARM CONTRACTOR AND SUBMITTED TO THE LANDLORD AND AUTHORITY HAVING JURISDICTION FOR APPROVAL PRIOR TO ANY WORK COMMENCEMENT.</p> |  |

| GENERAL NOTES   |  |
|---|--|
| <p>A. EXAMINE THE CONTRACT DRAWINGS AND ALL AVAILABLE INFORMATION CONCERNING EXISTING INSTALLATION, STRUCTURE, AND LOCAL CONDITIONS. VISIT THE SITE TO UNDERSTAND THE NATURE AND SCOPE OF ALL WORK TO BE PERFORMED AND VERIFY EXISTING CONDITIONS. THE SUBMISSION OF A BID WILL BE TAKEN AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND THAT ALL EXISTING CONDITIONS HAVE BEEN CONSIDERED. NO ALLOWANCES WILL BE MADE AFTER THE PROJECT HAS BEEN AWARDED FOR FAILURE TO VERIFY EXISTING CONDITIONS. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THAT OF THESE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.</p> |  |
| <p>B. THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRING PATCHING, PLASTERING, PAINTING AND /OR OTHER REPAIR DUE TO THE INSTALLATION OF ELECTRICAL WORK UNDER THE TERMS OF THE CONTRACT. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED.</p>  |  |
| <p>C. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS AND BUILDING DETAILS. VERIFY LOCATION OF ALL OUTLETS, SWITCHES, AND WALL MOUNTED LIGHTING FIXTURES WITH ARCHITECTURAL DRAWINGS AND ACTUAL CONDITIONS. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES. VERIFY ALL CEILING TYPES WITH ARCHITECTURAL DRAWINGS BEFORE ORDERING FIXTURES.</p>  |  |
| <p>D. PRIOR TO ROUGH-IN AND FINAL CONNECTION, VERIFY ELECTRICAL CHARACTERISTICS AND EXACT LOCATION OF EQUIPMENT.</p>  |  |
| <p>E. GROUT AND SEAL ALL CONDUIT PENETRATIONS OF WALLS AND FLOOR SLABS TO PRESERVE FIRE RATING AND WATERTIGHT INTEGRITY.</p>  |  |
| <p>F. ALL WIRING TO BE INSTALLED IN RACEWAYS. TYPE OF RACEWAY SHALL BE AS REQUIRED BY CODE. MINIMUM CONDUIT SIZE SHALL BE 3/4"C. FOR POWER AND 1"C. FOR DATA. RACEWAYS RUN ACROSS ROOF SHALL BE MINIMUM 4" ABOVE ROOF.</p>  |  |
| <p>G. BRANCH CIRCUIT WIRING SHALL BE THHN/THWN INSULATION. EXTERIOR WIRING SHALL BE THWN–2. PANEL FEEDERS. SHALL BE TYPE XHHW. ALL WIRE SHALL BE COPPER. MINIMUM WIRE SIZE SHALL BE #12. PER THE LATEST NEC CODE ADOPTED BY THE CITY OF PARKER, A SEPARATE NEUTRALS ARE TO BE PROVIDED FOR EACH CIRCUIT OR PROVIDE MULTI–POLE HANDLE TIE FOR EACH MULTI–WIRE CIRCUIT</p>  |  |
| <p>H. PROVIDE CODE SIZED GROUNDING CONDUCTOR WIRE IN ALL CONDUITS.</p>  |  |
| <p>I. ALL ELECTRICAL EQUIPMENT SHALL BE NEW, U.L. APPROVED AND COMMERCIAL GRADE.</p>  |  |
| <p>J. ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF PARKER, LATEST ADOPTED NATIONAL ELECTRICAL CODE (NEC), AND ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.</p>   |  |
| <p>K. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO PROVIDE ONE (1) SET OF COMPLETE CONSTRUCTION DRAWINGS.</p>  |  |
| <p>L. PROVIDE NEW PANEL DIRECTORIES INDICATING SPECIFIC CIRCUIT INFORMATION TO DISTINGUISH EACH CIRCUIT FROM ANY OTHER PER NEC.</p>   |  |
| <p>M. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION OF DEVICES, WIRE &amp; CONDUIT. WHERE THESE ITEMS ARE NO LONGER USED ALL UNUSED WIRE SHALL BE REMOVED BACK TO THE PANEL. ANY DOWNSTREAM EQUIPMENT TO REMAIN IN USE SHALL BE RECONNECTED.</p>  |  |

**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 MAY OCCUR OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

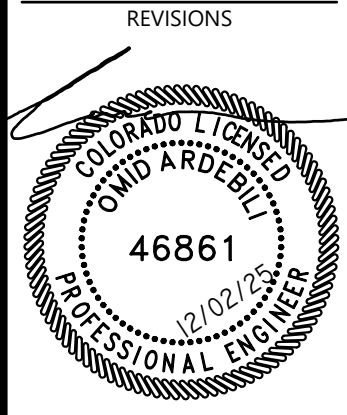
**NOTICE**  
 CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OR PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.  
 COPYRIGHT © 2022 ATWELL LLC. NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL LLC.

**ATWELL**  
 866.850.4200 www.atwell-group.com  
 9001 AIRPORT FREEWAY, SUITE 660  
 NORTH RICHLAND HILLS, TX 76180  
 972.266.8860

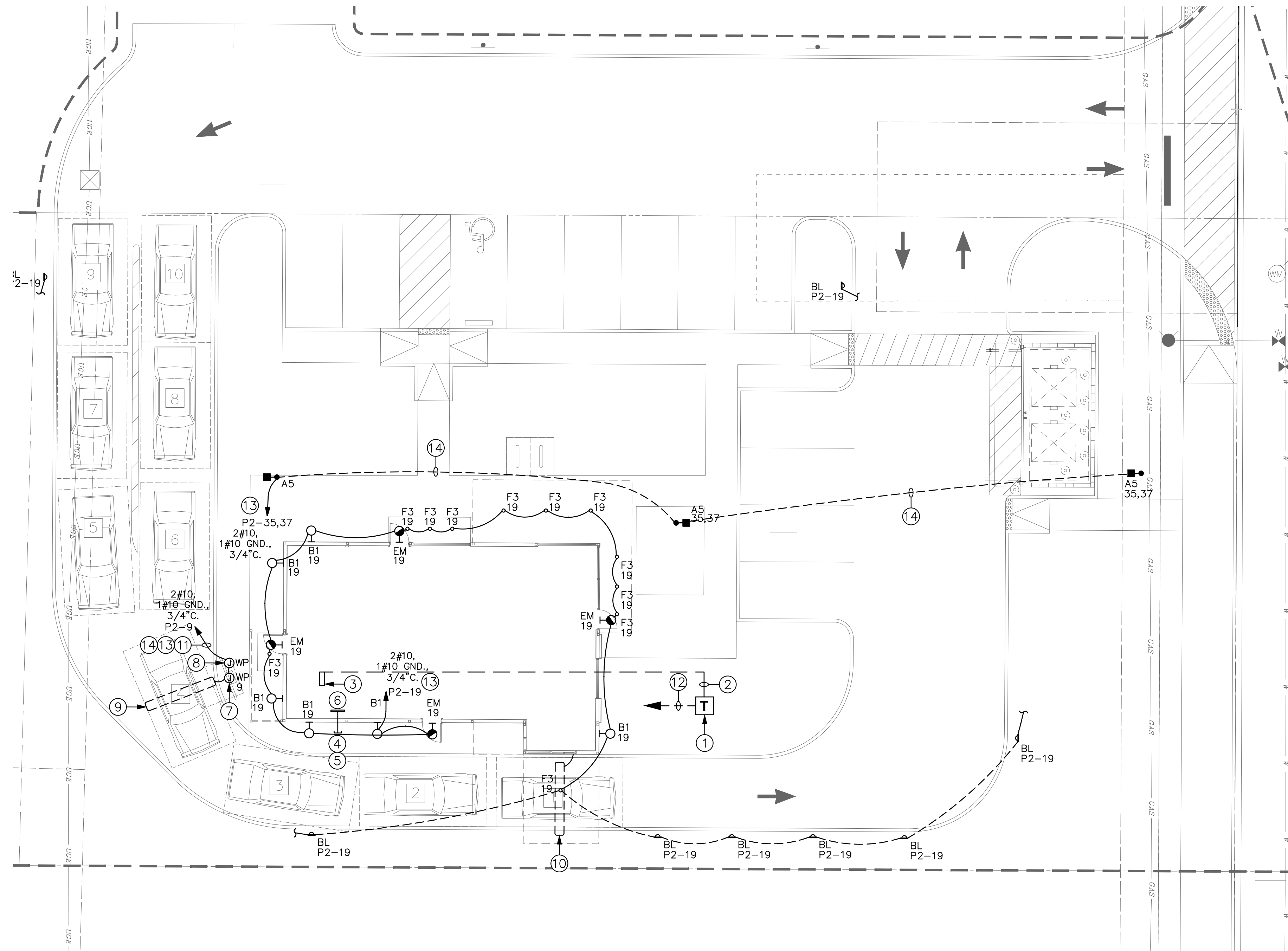
LOT 4A, PARKER POINT SUBD. FILING NO. 1, AMEND. NO. 1  
 S. PARKER RD & STROH RD  
 PARKER  
 DOUGLAS COUNTY, COLORADO

BLACK ROCK COFFEE BAR  
 13135 DECLAN DRIVE  
 ELECTRICAL NOTES & SYMBOLS

DATE 2025-06-04



**ARDEBILI Engineering**  
 Project Number: 25280 | Design Engineer: AV  
 7328 E Stetson Dr., Scottsdale, AZ 85251  
 JOB #: 24003198  
 FILE CODE: ##  
 SHEET NO. E0.1



1 ELECTRICAL SITE PLAN  
SCALE: 3/32"=1'-0"

**GENERAL NOTES**

- A. ALL EXTERIOR LIGHT FIXTURES TO COMPLY WITH LOCAL NIGHT SKY ORDINANCE.
- B. ALL EXTERIOR LIGHTING AND SIGNAGE TO BE FED WITH #10 CU. U.N.O.
- C. ALL EXTERIOR ELECTRICAL EQUIPMENT TO BE NEMA-3R RATED.
- D. CONTRACTOR TO COORDINATE EXACT SITE LIGHTING FIXTURE LOCATIONS WITH LANDSCAPE DRAWINGS.
- E. ALL FIXTURES INSTALLED OUTDOORS SHALL BE RATED FOR DAMP/WET LOCATIONS AS REQUIRED. THE CONTRACTOR SHALL COORDINATE DAMP/WET LOCATION RATING PER NEC ARTICLE 410-4. ALL INSTALLATIONS SHALL CONFORM TO NEC ARTICLE 410, ALL SUB ARTICLES.
- F. FIRE ALARM EQUIPMENT SHALL BE COORDINATED FOR EXACT LOCATION AND REQUIREMENTS WITH FIRE MARSHALL.
- G. ALL PVC CONDUIT MUST HAVE A MINIMUM OF #12 CU. GROUND CONDUCTOR.
- H. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND SCHEDULING WITH POWER AND TELEPHONE UTILITY COMPANIES INCLUDING PROVIDING (2) COMPLETE SETS OF DRAWINGS TO EACH COMPANY. ALL WORK SHALL BE INSTALLED PER EACH UTILITY COMPANIES FINAL DESIGN DRAWINGS.
- I. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL EXTERIOR LIGHT FIXTURES WITH ARCHITECTURAL DRAWINGS.

**KEYED NOTES**

- 1. PROPOSED LOCATION OF NEW UTILITY TRANSFORMER. VERIFY EXACT LOCATION WITH UTILITY COMPANY.
- 2. NEW SECONDARY FEEDERS FROM TRANSFORMER PER POWER COMPANY REQUIREMENTS. ROUTING SHOWN FOR REFERENCE ONLY.
- 3. PROPOSED LOCATION OF NEW SERVICE ENTRANCE SECTION IN NEMA-1 ENCLOSURE.
- 4. 4" UNDERGROUND PVC CONDUIT WITH PULLWIRE AND BENDS PER TELEPHONE COMPANY REQUIREMENTS. TRENCH AND BACKFILL AS REQUIRED. REFER TO NEC TABLE 300.5 FOR ADDITIONAL REQUIREMENTS.
- 5. TERMINATE AND STUB CONDUIT TO PROPERTY LINE OR EXISTING CABINET PER TELEPHONE COMPANY REQUIREMENTS.
- 6. PROPOSED LOCATION OF MPOP (MAIN POINT OF PRESENCE) FOR TELEPHONE COMPANY DEMARCATION AND TERMINATION.
- 7. PROVIDE W.P. J-BOX FOR DRIVE-THRU MENU BOARD. COORDINATE EXACT POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION.
- 8. PROVIDE W.P. J-BOX FOR DRIVE-THRU SPEAKER. COORDINATE EXACT POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION.
- 9. CONNECT SPEAKER PEDESTAL TO DETECTION LOOP. COORDINATE EXACT REQUIREMENT WITH MANUFACTURER PRIOR TO ROUGH-IN.
- 10. PROVIDE STUB UP FOR DETECTION LOOP. COORDINATE EXACT REQUIREMENT WITH MANUFACTURER PRIOR TO ROUGH-IN.
- 11. PROVIDE (3) ELECTRICAL CONDUITS FOR DRIVE-THRU EQUIPMENT.
- 12. PROPOSED PRIMARY PER UTILITY COMPANY.
- 13. CIRCUIT ROUTED THRU TIME CLOCK.
- 14. PROVIDE #10 WIRE IN 3/4" NONMETALLIC CONDUIT, 24" BELOW FINISHED GRADE OR PER NEC 300.5. VERIFY EXACT ROUTING PRIOR TO INSTALLATION. TRENCH, BACKFILL, AND REPAIR LANDSCAPE/HARDSCAPE AS REQUIRED.

**CONDUIT ROUTING NOTE**

CONDUIT ROUTING IS SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL FIELD COORDINATE EXACT CONDUIT ROUTING WITH ARCHITECT PRIOR TO INSTALLATION. ROUTE FEEDERS CONCEALED BELOW GRADE ONSITE AND CONCEALED FROM PUBLIC VIEW WITHIN SPACE WHEN POSSIBLE.

**NOTE**

ALL UNDERGROUND CONDUIT FOR BRANCH CIRCUITS SHALL BE A MINIMUM OF 24" BELOW GRADE, OR PER NEC TABLE 300.5.



**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 DAMAGE WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO 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 DEEMED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.  
COPYRIGHT © 2022 ATWELL LLC. NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL LLC.

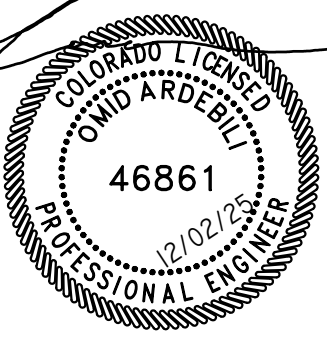


LOT 4A, PARKER POINT SUBD. FILING NO. 1, AMEND. NO. 1  
S. PARKER RD & STROH RD  
PARKER  
DOUGLAS COUNTY, COLORADO

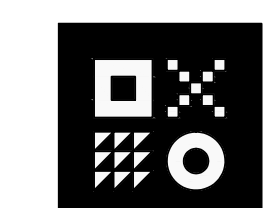
BLACK ROCK COFFEE BAR  
13135 DECLAN DRIVE  
ELECTRICAL SITE PLAN

DATE 2025-06-04

REVISIONS



DRAWN BY: AD  
CHECKED BY: PC  
PROJECT MANAGER: AV  
JOB #: 24003198  
FILE CODE: ##  
SHEET NO. E1.0



**ARDEBILI Engineering**  
Project Number: 25280 | Design Engineer: AV  
7328 E Stetson Dr., Scottsdale, AZ 85251  
P: 480.626.7072 | ardebilieng.com

**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 MAY 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 DEEMED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OR OF NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

COPYRIGHT © 2022 ATWELL LLC. NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL LLC.

**ATWELL**  
 866.850.4200 www.atwell-group.com  
 9001 AIRPORT FREEWAY, SUITE 660  
 NORTH RICHLAND HILLS, TX 76180  
 972.636.8860

LOT 4A PARKER POINT SUBD. FILING NO. 1 - AMEND. NO. 1  
 S. PARKER RD & STROH RD  
 PARKER  
 DOUGLAS COUNTY, COLORADO

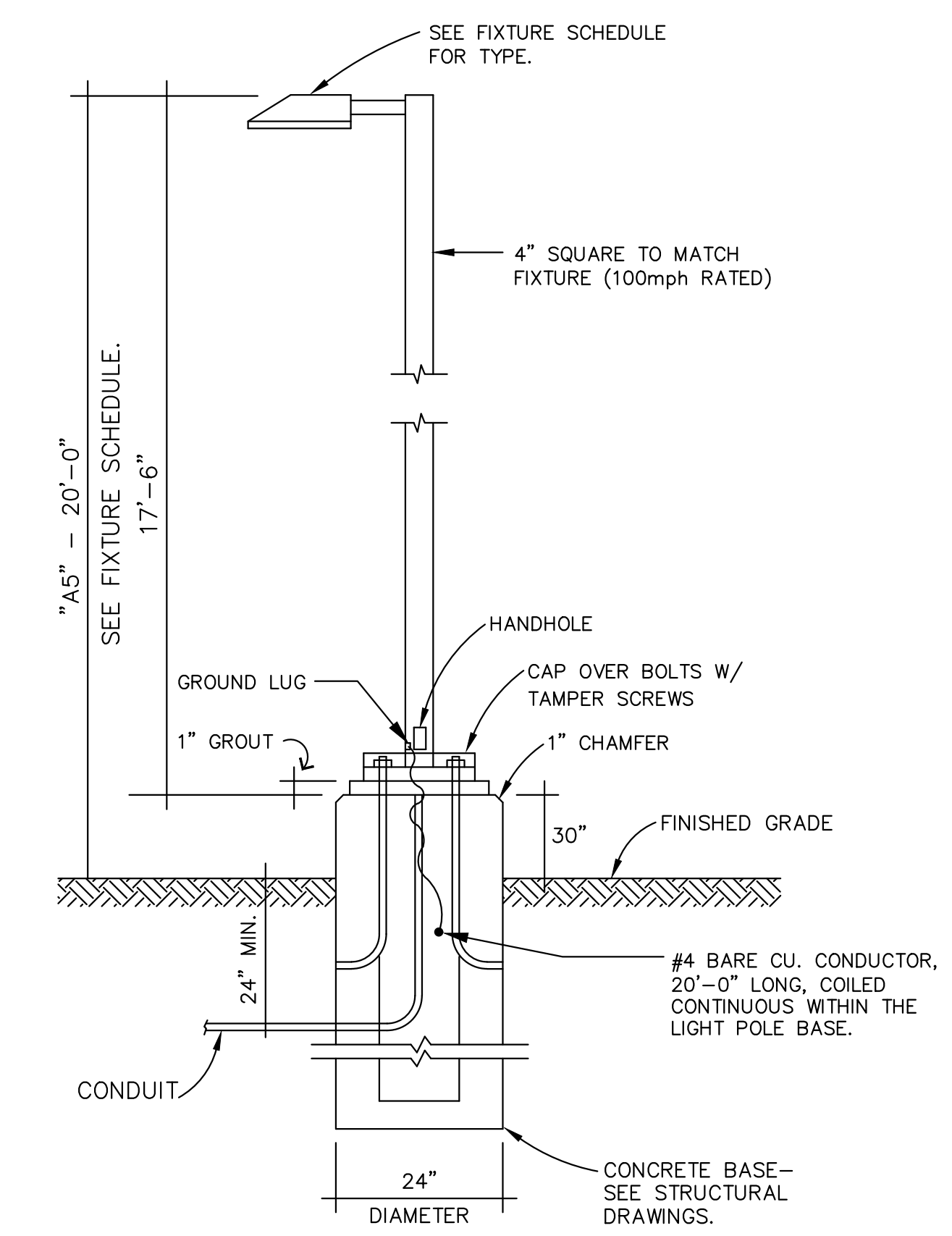
BLACK ROCK COFFEE BAR  
 13135 DECLAN DRIVE  
 PHOTOMETRIC SITEPLAN

DATE 2025-06-04

REVISIONS

COLORADO LICENSED  
 46861  
 12/02/23  
 PROFESSIONAL ENGINEER

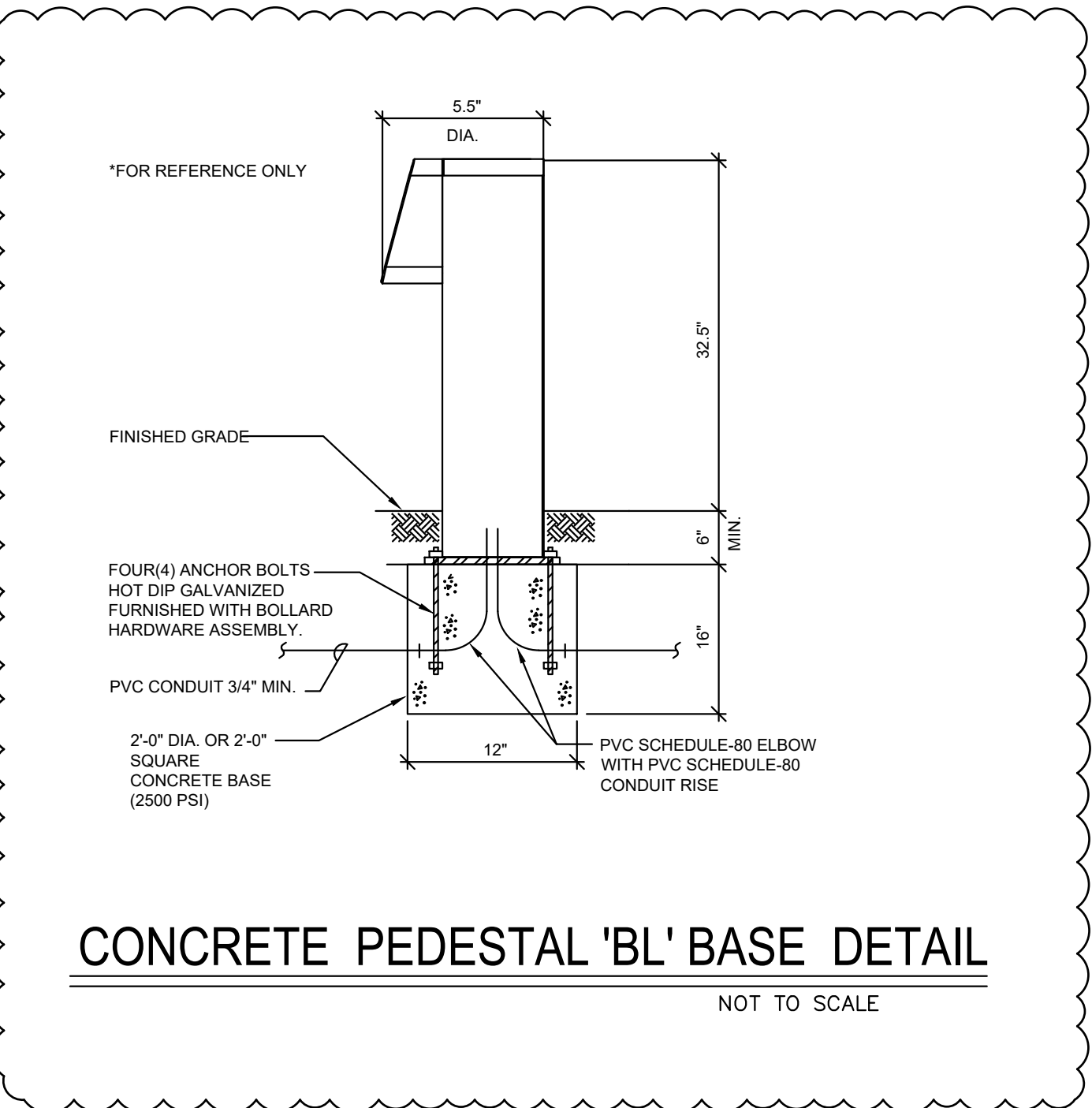
DRAWN BY: AD  
 CHECKED BY: PC  
 PROJECT MANAGER: AV  
 JOB #: 24003198  
 FILE CODE: #  
 SHEET NO: E.1



**LIGHT POLE 'A5'**

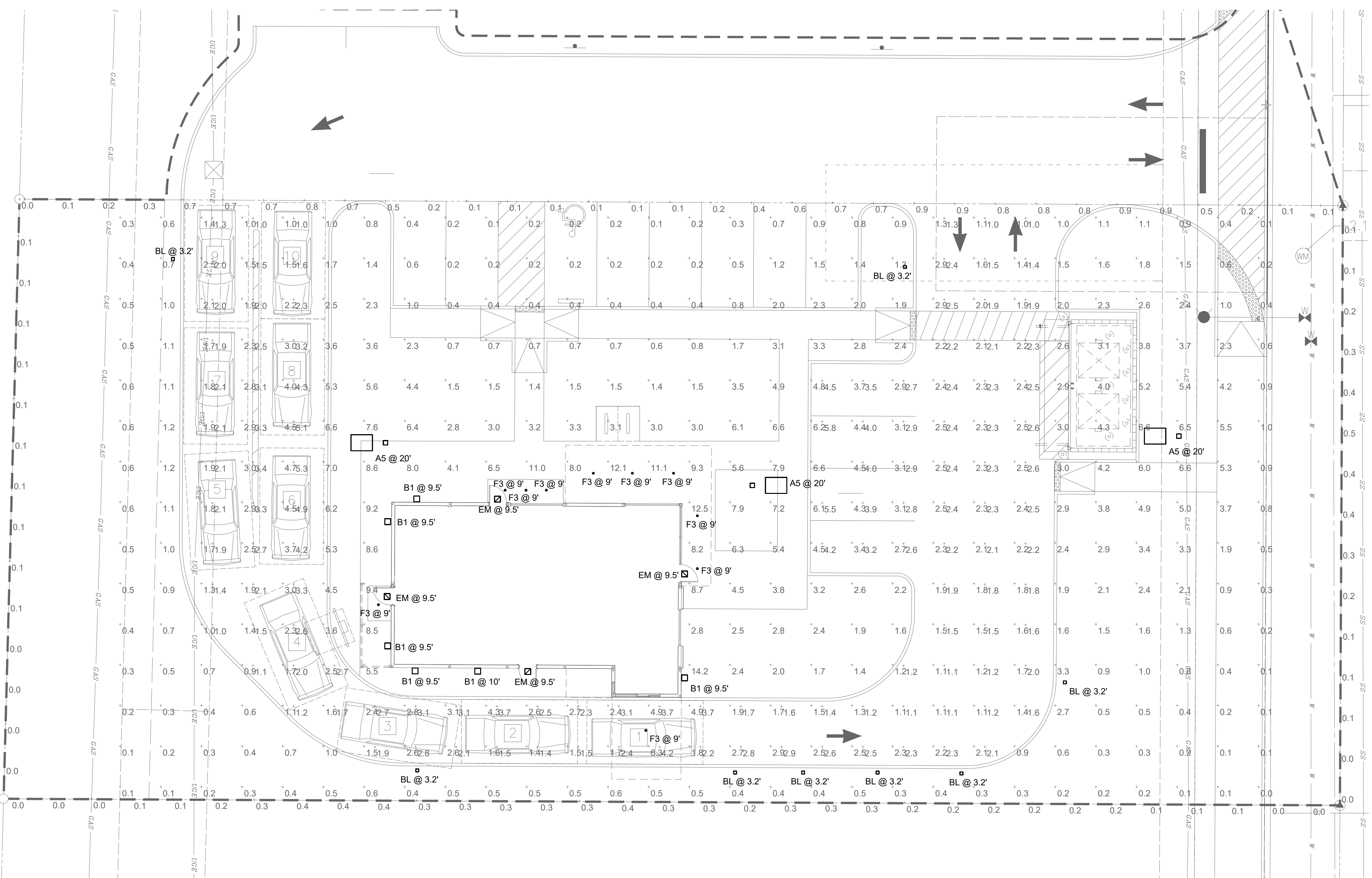
NOTE:  
 CONTRACTOR SHALL PROVIDE NEW POLE BASES WHERE INDICATED ON PLANS. LIGHTING FIXTURE POLE DETAILS AND DESCRIPTIONS ARE FOR ELECTRICAL REFERENCES ONLY. THE POLE AND BASE SHALL BE DESIGNED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF COLORADO AND BE STAMPED AND SEALED ACCORDINGLY.

N.T.S.



**CONCRETE PEDESTAL 'BL' BASE DETAIL**

NOT TO SCALE



**1 ELECTRICAL PHOTOMETRIC SITE PLAN**  
 SCALE: 3/32"=1'-0"

| Statistics           |        |        |         |        |         |         |
|----------------------|--------|--------|---------|--------|---------|---------|
| Description          | Symbol | Avg    | Max     | Min    | Max/Min | Avg/Min |
| FC@ PROPERTY LINE    | +      | 0.3 fc | 0.9 fc  | 0.0 fc | N/A     | N/A     |
| SITE FC              | +      | 2.3 fc | 14.2 fc | 0.0 fc | N/A     | N/A     |
| DRIVE AISLES/PARKING | +      | 2.4 fc | 5.8 fc  | 1.0 fc | 5.8:1   | 2.4:1   |

| Schedule |       |     |                   |  |  |              |             |             |
|----------|-------|-----|-------------------|--|--|--------------|-------------|-------------|
| Symbol   | Label | QTY | Manufacturer      | Catalog  | Description  | Number Lamps | Lamp Output | Input Power |
| ○        | F3    | 10  | ALPHABET LIGHTING | NUE4-QW-SW-10LM-30K-90-WW                                      | NUE 4" WALL WASH EXTERIOR DOWNLIGHT, WET RATED FIXTURE, BLACK TRIM   | 1            | 890         | 15.3        |
| □        | B1    | 6   | RB LIGHTING       | 4427-XX-13W-3K   | 4" LED SQUARE CYLINDER DOWNLIGHT, OUTDOOR WALL MOUNTED LED, WET RATED FIXTURE, BLACK FINISH  | 1            | 911         | 13.3        |
| ◻        | EM    | 4   | LITHONIA LIGHTING | WDGE2 LED P2 30K 80CRI T3M MVOLT SRM E20WC (FINISH) (OR EQUAL) | WALL PACK LED WITH P2 - PERFORMANCE PACKAGE, 3000K, 80CRI, TYPE 3 MEDIUM OPTIC. FIXTURE IS EQUIPPED WITH 90 MINUTS EMERGENCY BATTERY PACK, DARK BRONZE FINISH          | 1            | 1964        | 18.9815     |
| ◻        | A5    | 3   | OPTEC LED         | OLA1-080-40-5  | SINGLE HEAD LED POLE LIGHT, LED ARAEA SERIES LARGE 80W, 4000K, TYPE 5 MOUNTED AT 15 AFG, DARK BRONZE FINISH  | 1            | 12719       | 80          |
| ◻        | BL    | 8   | Hydrel            | WANDER1 PM1 P1 90CRI 30K MVOLT LM                              | Single Optic, Parkway Light Pedestal Mount, 1 Fixture Performance 1 90CRI 3000K Multi-Volt, 120V-277V Long Forward Throw, Medium Lateral Throw, Black textured finish. | 1            | 303         | 4.38        |

**ARDEBILI Engineering**  
 Project Number: 25280 | Design Engineer: AV  
 7328 E Stetson Dr., Scottsdale, AZ 85251  
 P: 480.626.7072 | ardebilieng.com

# Optec LED LIGHTING

## 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 LEDs 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 oil-gassing. All luminaires come standard with a universal pole mount bracket or an optional wall surface box. Luminaires are available with a number of options including alternate CCT choices, finishes, photocells and 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 ICA 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 (IC 69529)
- 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, IES, 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 | 2000K  | Lumens | 5000K  | F   | U | G |
|--------------|-----------------|--------|--------|--------|-----|---|---|
| Type 2       | OLA1-080        | 10,800 | 10,960 | 10,960 | 3 * | 0 | 1 |
|              | OLA1-120        | 15,840 | 16,200 | 16,200 | 3 * | 0 | 2 |
|              | OLA1-150        | 19,800 | 20,250 | 20,250 | 3 * | 0 | 2 |
| Type 3L      | OLA1-080        | 11,600 | 11,760 | 11,760 | 2 * | 0 | 2 |
|              | OLA1-120        | 16,960 | 16,920 | 16,920 | 3 * | 0 | 2 |
|              | OLA1-150        | 20,560 | 21,000 | 21,000 | 3 * | 0 | 2 |
| Type 3R      | OLA1-080        | 10,799 | 10,960 | 10,960 | 3 * | 0 | 3 |
|              | OLA1-120        | 15,960 | 16,199 | 16,199 | 3 * | 0 | 3 |
|              | OLA1-150        | 19,800 | 20,249 | 20,249 | 3 * | 0 | 3 |
| Type 4       | OLA1-080        | 10,799 | 10,960 | 10,960 | 3 * | 0 | 3 |
|              | OLA1-120        | 15,960 | 16,198 | 16,198 | 3 * | 0 | 3 |
|              | OLA1-150        | 19,800 | 20,250 | 20,250 | 3 * | 0 | 3 |
| Type 4L      | OLA1-080        | 10,799 | 10,960 | 10,960 | 3 * | 0 | 3 |
|              | OLA1-120        | 15,472 | 15,712 | 15,712 | 3 * | 0 | 2 |
|              | OLA1-150        | 19,046 | 19,349 | 19,349 | 3 * | 0 | 2 |
| Type 4R      | OLA1-080        | 10,800 | 10,960 | 10,960 | 3 * | 0 | 3 |
|              | OLA1-120        | 16,080 | 16,320 | 16,320 | 3 * | 0 | 3 |
|              | OLA1-150        | 19,800 | 20,250 | 20,250 | 4 * | 0 | 4 |
| Type 5       | OLA1-080        | 10,032 | 10,185 | 10,185 | 4 * | 0 | 3 |
|              | OLA1-120        | 15,049 | 15,278 | 15,278 | 4 * | 0 | 3 |
|              | OLA1-150        | 18,811 | 19,097 | 19,097 | 5 * | 0 | 4 |

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

| Voltage (V) | 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 1700 De Soto Place, Ontario, CA 91761 P: 888-743-5220 optecledlighting.com

# Optec LED LIGHTING

## Area Series (Small)

### ORDERING INFORMATION

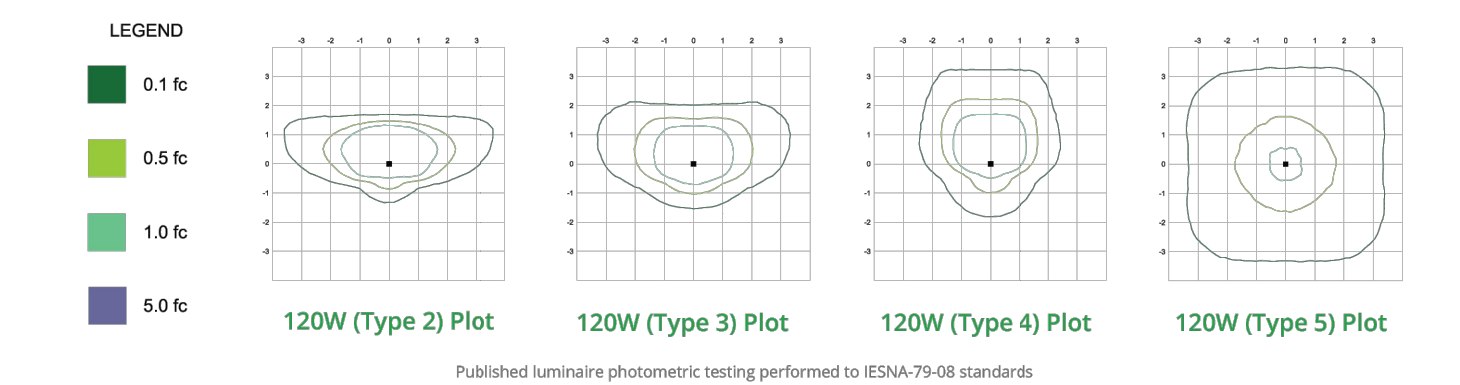
EXAMPLE: OLA1-120-UNVL-50-4-SQ-BZ-PR-TL12

| SERIES                      | WATTAGE                               | VOLTAGE                            | COLO TEMP                              | DISTRIBUTION   | MOUNTING   | FINISH  | CONTROLS / OPTIONS   |
|-----------------------------|---------------------------------------|------------------------------------|--|--|--|---|--|
| OLA1 = Optec LED Area Light | 080 = 80W<br>120 = 120W<br>150 = 150W | UNV = 120-277V<br>UNVH = 1347-480V | 30 = 3000K<br>40 = 4000K<br>50 = 5000K | 2 = Type 2<br>3 = Type 3<br>3L = Type 3 Left<br>3R = Type 3 Right<br>4 = Type 4<br>4L = Type 4 Left<br>4R = Type 4 Right<br>5 = Type 5 | SQ = Square Pole (Wall/Recessed)<br>RD = Round Pole<br>WM = Wall Mount<br>3R = 3 Rod Adapter<br>LK = Levelling Kit<br>5 = Type 5 | WH = White<br>BL = Black<br>BA = Brushed Aluminum<br>OB = Oil-Rubbed Bronze<br>GM = Graphite Metallic<br>CF = Custom Finish | DSWS = Occupancy Sensor (Watt/Recessed)<br>PHS = Photocell Receptor 5-pin<br>PRS = Photocell Receptor 5-pin<br>RFS = Photocell Receptor 5-pin<br>WCS = Wireless Control Dimmer<br>BES = Backlight<br>SF = Single Rate (120V, 277V, 347V)<br>DF = Double Rate (200V, 240V, 480V)<br>TSC = Twist Lock Shoring Cap<br>S04 = US04 Filter |

- For details, reference accessory data sheet.
- Watt option requires 5 pin mount bracket (ordering example: SQ WM).
- Levelling kit adjusts up to 5 degrees or down to 5 degrees.
- DSWS: For Wattage/Power sensor information and options contact factory.
- WCS: For Synapse wireless control information and options contact factory for details.
- Photocell (default) = Full in "ON" mode (unless otherwise specified).

### PHOTOMETRIC PERFORMANCE

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



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    |

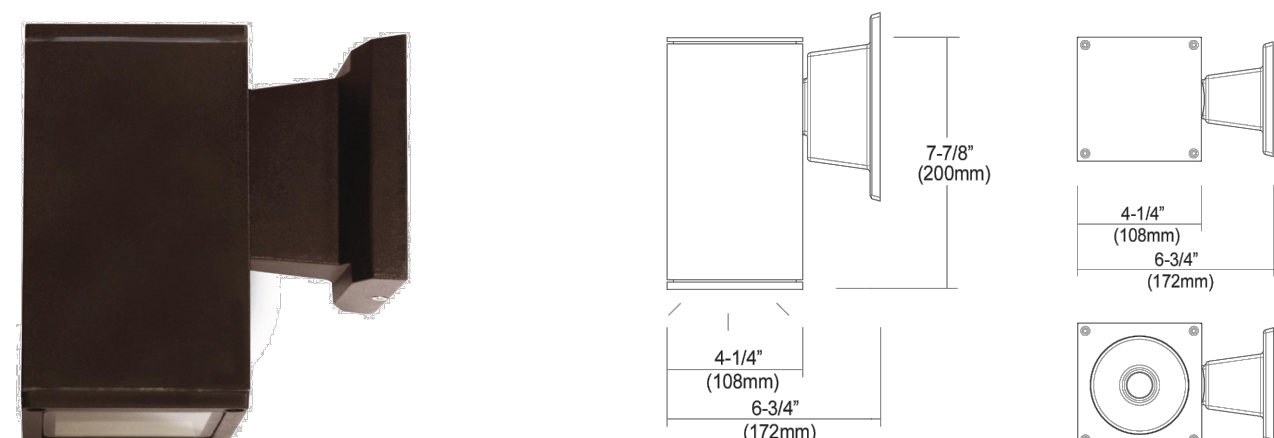
  

| Wattage | Effective Projected Area (EPA) in ft² |      |      |      |
|---------|---------------------------------------|------|------|------|
| 80      | 0.96                                  | 1.92 | 1.81 | 2.77 |
| 120     | 0.96                                  | 1.92 | 1.81 | 2.77 |
| 150   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

Optec LED LIGHTING 13040 West Lisbon Road, Unit 400, Brookfield, WI 53005 P: 888-743-5220 optecledlighting.com Revised 5/5/21

4427  
120V

### 4" LED Architectural Square Cylinder Downlight



### DESCRIPTION

The Outdoor LED Cylinder Family features wet location rated wall mount style cylinders with down light and up & down light options. Choose from energy efficient 13W, 17W, or 27W AC modules, with finishes available in black, brushed nickel, or oil-rubbed bronze. Features Triac dimming down to 5%, using most standard dimmers. Utilizes AC circuit on board technology for cooler operating temperature and extended lifetime.

### DESIGN FEATURES

- Construction**
  - Aluminum die-cast with powder coat finish
- Electrical**
  - 120V Direct AC operation with DOB
  - Triac dimming down to 5%
  - Various wattages of modules available
  - Cooler operating temperature without driver
  - Operating temperature: -31°F (-35°C) to 122°F (50°C)
  - Stable driving current prevents inrush damage to circuit switches and modules
  - Available in 80CRI, 3000K & 4000K
- Installation**
  - Easy surface mounting for simple installation using anchors and screws
  - J-box mountable
- Lens**
  - Clear acrylic lens protects LEDs while allowing for optimum lumen output
  - 37° beam angle
- Finish**
  - Black, brushed aluminum or oil-rubbed bronze
- Certifications**
  - cCSAus for wet location
  - 5 year limited warranty
  - Wet location rated

TEL: 800.937.6925 | Fax: 800.207.9509 | www.rplighting.com

4427  
120V

### Specification & Ordering

| Model # | Dimensions (H x W x D)   | Watt | Lumens (delivered) | Lumens (source) | Color Temp |
|---------|--------------------------|------|--------------------|-----------------|------------|
| 4427    | 7-7/8" x 4-1/4" x 6-3/4" | 13W  | 845lm              | 1280lm          | 3K 3000K   |
|         |                          | 17W  | 1105lm             | 1710lm          | 4K 4000K   |
|         |                          | 27W  | 1755lm             | 2570lm          |            |

| Model # | Finish                 | Watts     | CCT          |
|---------|------------------------|-----------|--------------|
| 4427    | BA = Black             | -13 : 13W | -3K : 3000 K |
|         | BA = Brushed Aluminum  | -17 : 17W | -4K : 4000 K |
|         | OB = Oil-rubbed Bronze | -27 : 27W |              |

TEL: 800.937.6925 | Fax: 800.207.9509 | www.rplighting.com

# WDGE2 LED

## Architectural Wall Sconce Precision Refractive Optic



### Specifications

- Depth (D1): 7"
- Depth (D2): 1.5"
- Height: 9"
- Width: 11.5"
- Weight: 13.5 lbs (without options)

Catalog Number: \_\_\_\_\_  
Project: \_\_\_\_\_  
Prepared by: \_\_\_\_\_  
Type: EM  
Note: \_\_\_\_\_

**Introduction**  
The WDGE2 family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean, rectangular design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with right-AIR wireless controls, the WDGE2 family provides additional energy savings and code compliance.

WDGE2 with industry leading precision refractive optics provides great uniform distribution and optical control. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian-scale applications in any environment.

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit [www.acuitybrands.com/designselect](http://www.acuitybrands.com/designselect). See ordering tree for details.

| Luminaire | Optic                | Standard EM, 0° C | Gold EM, 20° C | Sensor              | P0     | P1     | P2     | P3     | P4     | P5     | P6 |
|-----------|----------------------|-------------------|----------------|---------------------|--------|--------|--------|--------|--------|--------|----|
| WDGE2 LED | Visual Comfort       | 4W                |                |                     | 750    | 1,200  | 2,000  |        |        |        |    |
| WDGE2 LED | Visual Comfort       | 10W               | 18W            | Standalone / rLight | 1,200  | 2,000  | 3,000  | 4,500  | 6,000  |        |    |
| WDGE2 LED | Precision Refractive | 10W               | 18W            | Standalone / rLight | 700    | 1,200  | 2,000  | 3,200  | 4,200  |        |    |
| WDGE2 LED | Precision Refractive | 15W               | 18W            | Standalone / rLight | 7,500  | 8,500  | 10,000 | 12,000 |        |        |    |
| WDGE2 LED | Precision Refractive |                   |                | Standalone / rLight | 12,000 | 16,000 | 18,000 | 20,000 | 22,000 | 25,000 |    |

### Ordering Information

| Series    | Package | Color Temperature | CRI       | Distribution          | Mounting                 | Shipped included | Shipped separately  |
|-----------|---------|-------------------|-----------|-----------------------|--------------------------|------------------|---|
| WDGE2 LED | P0*     | 27K 2700K         | 40K 4000K | 70CR*                 | T1S Type I Short         | MVOLT            | AWS 3/8" Architectural wall spacer  |
|           | P1†     | 30K 3000K         | 50K 5000K | 80CR*                 | T2M Type II Medium       | 347*             | Surface-mounted back box (top, left, right, and bottom) (see below for no junction box available) |
|           | P2†     | 35K 3500K         | 50K 5000K | AM*                   | T3M Type III Medium      | 480*             | Indirect Canopy (top, left, right, and bottom) (see below for no junction box available)          |
|           | P3†     |                   |           | AM*                   | T4M Type IV Medium       |                  |   |
|           | P4      |                   |           | LW Limited Wavelength | T5M Forward throw Medium |                  |   |

| Options  | Finish                           |
|--|----------------------------------|
| E1WH Emergency battery backup, Certified in CA Title 20 (MERS) (10W, 15W)                                | DBRO Dark bronze                 |
| E2WC Emergency battery backup, Certified in CA Title 20 (MERS) (10W, 15W, 20W)                           | DBLD Industrial black            |
| PK Photocell, Backup Type†   | DNAX Natural aluminum            |
| DMG 0-10V dimming wires pulled outside fixture (for use with an external controller, ordered separately) | DBWD White                       |
| BCE Bottom conduit entry for back box (PBBX), Total of 4 entry points                                    | DSDB Sandstone                   |
| CCE Coastal Construction†  | DBRD Dark bronze                 |
|  | DBRD Industrial black            |
|  | DNAT Industrial natural aluminum |
|  | DWHD Industrial white            |
|  | DSST Industrial sandstone        |

LITHONIA LIGHTING COMMERCIAL OUTDOOR 1 Acuity Way • Decatur, GA 30035 • Phone: 1-800-705-SERV (7378) • www.lithonia.com  
© 2019-2025 Acuity Brands Lighting, Inc. All rights reserved. WDGE2 LED Rev. 07/07/25

| Accessories  | NOTES  |
|--|--|
| WDGE2S080U WDGE2S Architectural Wall Space (specify finish)  | 1 P0 option not available with sensors/controls.   |
| WDGE2PBB080U WDGE2 surface-mounted back box (specify finish) | 2 P1-P4 not available with AMB and LW.   |
|  | 3 AMB and LW always go together.   |
|  | 4 70CR only available with T3M and T4M.  |
|  | 5 347V and 480V not available with E1WH or E2WC.   |
|  | 6 Not qualified for CA. Not available with emergency battery backup or sensors/controls. |
|  | 7 For PBBX and AWS with CCE option, require an RFA.                                      |
|  | 8 PE not available in 480V or with sensors/controls.                                     |
|  | 9 DMG option not available with sensors/controls.  |

### Performance Data

**Lumen Output**  
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerance allowed by lighting facts. Contact factory for performance data on any configurations not shown here.

| Performance Package | System Watt | Dist. Type | 27K (2700K, 30 CRI) | 30K (3000K, 30 CRI) | 35K (3500K, 30 CRI) | 40K (4000K, 30 CRI) | 50K (5000K, 30 CRI) | And/or (Limited Wavelength) |     |   |   |       |       |     |   |   |       |       |     |   |   |       |       |    |   |   |   |
|---------------------|-------------|------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------------|-----|---|---|-------|-------|-----|---|---|-------|-------|-----|---|---|-------|-------|----|---|---|---|
| P0                  | 7W          | T1S        | 636                 | 92                  | 0                   | 0                   | 666                 | 97                          | 0   | 0 | 0 | 699   | 100   | 0   | 0 | 1 | 691   | 100   | 0   | 0 | 1 | 712   | 47    | 0  | 0 | 1 |   |
|                     |             | T2M        | 462                 | 96                  | 0                   | 0                   | 491                 | 101                         | 0   | 0 | 0 | 728   | 106   | 0   | 0 | 0 | 719   | 104   | 0   | 0 | 0 | 741   | 48    | 0  | 0 | 0 |   |
|                     |             | T3M        | 648                 | 96                  | 0                   | 0                   | 679                 | 98                          | 0   | 0 | 0 | 712   | 100   | 0   | 0 | 0 | 704   | 102   | 0   | 0 | 0 | 726   | 47    | 0  | 0 | 0 |   |
|                     |             | T4M        | 648                 | 96                  | 0                   | 0                   | 679                 | 98                          | 0   | 0 | 0 | 712   | 100   | 0   | 0 | 0 | 704   | 102   | 0   | 0 | 0 | 726   | 47    | 0  | 0 | 0 |   |
|                     |             | T5M        | 1,105               | 99                  | 0                   | 0                   | 1,137               | 104                         | 0   | 0 | 1 | 1,215 | 109   | 0   | 0 | 1 | 1,208 | 107   | 0   | 0 | 0 | 1,290 | 48    | 0  | 0 | 1 |   |
|                     |             | T6M        | 1,120               | 103                 | 0                   | 0                   | 1,204               | 108                         | 0   | 0 | 1 | 1,244 | 113   | 0   | 0 | 1 | 1,240 | 112   | 0   | 0 | 0 | 1,320 | 49    | 0  | 0 | 1 |   |
|                     | P1          | 11W        | T2M                 | 1,120               | 103                 | 0                   | 0                   | 1,204                       | 108 | 0 | 0 | 1     | 1,244 | 113 | 0 | 0 | 1     | 1,240 | 112 | 0 | 0 | 0     | 1,320 | 49 | 0 | 0 | 1 |
|                     |             |            | T3M                 | 1,120               | 103                 | 0                   | 0                   | 1,204                       | 108 | 0 | 0 | 1     | 1,244 | 113 | 0 | 0 | 1     | 1,240 | 112 | 0 | 0 | 0     | 1,320 | 49 | 0 | 0 | 1 |
|                     |             |            | T4M                 | 1,120               | 103                 | 0                   | 0                   | 1,204                       | 108 | 0 | 0 | 1     | 1,244 | 113 | 0 | 0 | 1     | 1,240 | 112 | 0 | 0 | 0     | 1,320 | 49 | 0 | 0 | 1 |
|                     |             |            | T5M                 | 1,120               | 103                 | 0                   | 0                   | 1,204                       | 108 | 0 | 0 | 1     | 1,244 | 113 | 0 | 0 | 1     | 1,240 | 112 | 0 | 0 | 0     | 1,320 | 49 | 0 | 0 | 1 |
|                     |             |            | T6M                 | 1,120               | 103                 | 0                   | 0                   | 1,204                       | 108 | 0 | 0 | 1     | 1,244 | 113 |   |   |       |       |     |   |   |       |       |    |   |   |   |

# COMcheck Software Version COMcheckWeb Exterior Lighting Compliance Certificate

**Project Information**  
 Energy Code: 2021 IECC  
 Project Title: 25280 - BRC  
 Project Type: New Construction  
 Exterior Lighting Zone: 3 (Other (LZ3))

Construction Site: LOT 4A, PARKER POINTE SUBD  
 FLUNG NO. 1, AMEND. NO. 1 S  
 PARKER RD & STROH RD  
 PARKER, Colorado 80134  
 Owner/Agent: Designer/Contractor:

**Allowed Exterior Lighting Power**

| Area/Surface Category                  | B<br>Quantity | C<br>Allowed<br>Watts / | D<br>Tradable<br>Wattage | E<br>Allowed Watts<br>(B X C) |
|--|---------------|-------------------------|--------------------------|-------------------------------|
| Parking area                           | 22043 f21     | 0.06                    | Yes                      | 1323                          |
| Total Tradable Watts (a) =             |               |                         |                          | 1323                          |
| Total Allowed Watts =                  |               |                         |                          | 1323                          |
| Total Allowed Supplemental Watts (b) = |               |                         |                          | 500                           |

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.  
 (b) A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

**Proposed Exterior Lighting Power**

| Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast | A<br>Lamps/<br>Fixture | B<br>C<br># of<br>Fixture<br>Wattage | D<br>E<br>Wattage<br>(C X D) |
|--|------------------------|--------------------------------------|------------------------------|
| Parking area (22043 f21): Tradable Wattage                   |                        |                                      |                              |
| LED: B1 4" LED SQUARE CYLINDER: Other:                       | 1                      | 6                                    | 13                           |
| LED: EM WALL PACK LED: Other:                                | 1                      | 4                                    | 19                           |
| LED: AS SINGLE HEAD POLE LIGHT: Other:                       | 1                      | 3                                    | 80                           |
| LED: F3 NIE 4" WALL WASH EXTERIOR DOWNL: Other:              | 1                      | 10                                   | 15                           |
| LED: BL PEDESTAL MOUNT: Other:                               | 1                      | 8                                    | 4                            |
| Total Tradable Proposed Watts = 584                          |                        |                                      |                              |

Exterior Lighting PASSES: Design 68% better than code  
**Exterior Lighting Compliance Statement**  
 Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

ALEJANDRO VILLACORTA  
 Name - Title: Alejandro Villacorta  
 Signature: *Alejandro Villacorta*  
 Date: 10/14/25

Project Title: 25280 - BRC  
 Data Filename: Report date: 10/14/25  
 Page 1 of 4

| Section # & Req.ID            | Rough-In Electrical Inspection   | Complies?   | Comments/Assumptions   |
|-------------------------------|--|---|--|
| C405.2.7 [EL28] <sup>2</sup>  | Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.  | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable | Requirement will be met.<br><b>Location on plans/spec:</b> E1.0 & E4.1 |
| C405.7 [EL26] <sup>2</sup>    | Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.  | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable |  |
| C405.8 [EL27] <sup>1</sup>    | Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist). | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable |  |
| C405.9.1 [EL28] <sup>2</sup>  | Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.   | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable |  |
| C405.10 [EL29] <sup>2</sup>   | Total voltage drop across the combination of feeders and branch circuits <= 5%.  | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable |  |
| C405.1.1 [EL30] <sup>2</sup>  | At least 90% of dwelling unit permanently installed lighting shall have lamp efficacy >= 45 lm/W or luminaires with efficacy >= 45 lm/W or comply with C405.2.4 or C405.3.   | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable |  |
| C405.11.1 [EL31] <sup>1</sup> | 50% of 15/20 amp receptacles installed in enclosed offices, conference rooms, copy rooms, break rooms, classrooms and workstations and > 25% of branch circuit feeders for modular furniture will have automatic receptacle control in accordance with C405.11.1.  | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable |  |

**Additional Comments/Assumptions:**

Project Title: 25280 - BRC  
 Data Filename: Report date: 10/14/25  
 Page 3 of 4

# COMcheck Software Version COMcheckWeb Inspection Checklist

Energy Code: 2021 IECC  
 Requirements: 100.0% were addressed directly in the COMcheck user interface  
 Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

| Section # & Req.ID        | Plan Review   | Complies?   | Comments/Assumptions   |
|---------------------------|---|---|--|
| C103.2 [PR8] <sup>1</sup> | Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices. | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable | Requirement will be met.<br><b>Location on plans/spec:</b> E1.1 & E1.2 |
| C406 [PR9] <sup>1</sup>   | Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.  | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable |  |

**Additional Comments/Assumptions:**

Project Title: 25280 - BRC  
 Data Filename: Report date: 10/14/25  
 Page 2 of 4

| Section # & Req.ID          | Final Inspection  | Complies?   | Comments/Assumptions                                   |
|-----------------------------|---|---|--|
| C405.5.1 [F19] <sup>1</sup> | Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.  | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable | See the Exterior Lighting Fixture Schedule for values. |
| C408.1.1 [F17] <sup>1</sup> | Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated. | <input type="checkbox"/> Complies<br><input checked="" type="checkbox"/> Does Not<br><input type="checkbox"/> Not Observable<br><input type="checkbox"/> Not Applicable |  |

**Additional Comments/Assumptions:**

Project Title: 25280 - BRC  
 Data Filename: Report date: 10/14/25  
 Page 4 of 4

# alphabet

## NU4

### 4" Square Wall Wash Standard White

**PROJECT INFORMATION**  
 JOB NAME: TYPE: F3  
 ORDERING CODE:

**WW BEAM**  
 (Note: Spec/Options are subject to change without notice)  
 14mm COB PERFORMANCE DATA

| LED LIGHT ENGINE | NOMINAL DELIVERED LUMENS | SYSTEM WATTAGE |
|------------------|--------------------------|----------------|
| 10LM             | 840LM @30K/80CRI         | 9W             |
| 15LM             | 1270LM @30K/80CRI        | 12W            |
| 20LM             | 1780LM @30K/80CRI        | 17W            |
| 25LM             | 2160LM @30K/80CRI        | 21W            |
| 30LM             | 2630LM @30K/80CRI        | 26W            |
| 35LM             | 3050LM @30K/80CRI        | 31W            |
| 40LM             | 3550LM @30K/80CRI        | 37W            |
| 10LM             | 720LM @30K/90CRI         | 9W             |
| 15LM             | 1080LM @30K/90CRI        | 12W            |
| 20LM             | 1510LM @30K/90CRI        | 17W            |
| 25LM             | 1840LM @30K/90CRI        | 21W            |
| 30LM             | 2230LM @30K/90CRI        | 26W            |
| 35LM             | 2590LM @30K/90CRI        | 31W            |
| 40LM             | 3020LM @30K/90CRI        | 37W            |

Notes: Delivered lumens based on WW optic with no lens, (see page 2)

**FEATURES**  
 • An asymmetric reflector with highly efficient BrightView angle bending lens produces excellent wall washing with no scalloping  
 • 4" set back with 6" on center spacing - 15 FC average  
 • 3/4" bezel regress with 1/16" micro flange  
 • USB-C  
 • Custom finishes available  
 • Microbar™ antimicrobial finish available on all exposed painted surfaces

**DIMMING AND CONTROLS**  
 • eLED LED flicker free 0-10V dimming to 0% and 1%  
 • eLED LED flicker free DALI dimming to 0% and 1%  
 • DMX dim to zero  
 • Lutron Hi-Lume 1% 3-wire/Ecosystem  
 • Lutron athena wireless node  
 • Leading & trailing edge (Triac/ELV) dimming to 1%  
 • Night light control interface dimming to 0%  
 • Casambi dimming to 10%

**CONSTRUCTION**  
 • Lense™ (PC) highly resistant to impact and heat (240°F)  
 • Optimal material for wireless signal connectivity  
 • Shatter proof acrylic bezel lens  
 • Electrocoat 16-gauge cold-rolled steel construction  
 • Accommodates ceiling thickness from 1/8" to 1 3/4"

**ELECTRICAL**  
 • 120V/277V, 120 only Triac / ELV  
 • Power factor > 0.9  
 • >200 driver input surge protection  
 • Remote and Integral (EIS) emergency test switch  
 • 7W, 10W (T20 CEC) and 12W EM 90min battery  
 • Max. ambient installation temperature 95°F (35°C)  
 • 5 Year Limited warranty

**LISTING**  
 • ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0  
 • IP65 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens  
 • Non-conductive, dead-front construction (shower approved)  
 • NSF/ANSI-2 with lens (Non-Food and Splash Zones)  
 • Declare, LBC Red List Approved  
 • 5 Year Limited warranty

**FIXTURE HEIGHT**  
 10LM - 30LM LOW LUMENS  
 40LM HIGH LUMENS

**TRIMMED**  
 4" set back with 6" on center spacing

**TRIMLESS**  
 4" set back with 6" on center spacing

**MILLWORK**  
 4" set back with 6" on center spacing

Alphabet by Lutron Brands, Inc. | 88 Maxwell Drive, CA 92086 | PH: 714.293.9519 FAX: 714.293.9519 | AlphabetLighting.com

# alphabet

**PROJECT INFORMATION**  
 JOB NAME: TYPE: F3  
 ORDERING CODE:

**WW BEAM ORDERING CODE**

| SERIES                | NU4   | NU4                           |
|-----------------------|---|-------------------------------|
| TYPE                  | QW square wall wash   | NU4 square wall wash trimless |
| LED                   | SW standard white   |                               |
| DELIVERED LUMENS      | 10LM 830 lm<br>15LM 1250 lm<br>20LM 1705 lm<br>25LM 2075 lm<br>30LM 2580 lm<br>35LM 2815 lm<br>40LM 3195 lm |                               |
| CCT                   | 27K 2700K<br>30K 3000K<br>35K 3500K<br>40K 4000K  |                               |
| CRI                   | 80 80 CRI<br>90 90 CRI  |                               |
| OPTIC & LM MULTIPLIER | WW wall wash with diffused angle bending lens   |                               |
| TRIM COLOR            | BK black<br>WH white<br>MC matte chrome<br>BZ bronze<br>WT wheat  |                               |
| BEZEL COLOR           | BK black<br>WH white<br>MC matte chrome<br>BZ bronze<br>WT wheat  |                               |

**WW BEAM ORDERING CODE**  
 new construction with ceiling fitting plate  
 insulation contact housing  
 insulation contact/airtight housing  
 chicago plenum housing  
 retrofit, no ceiling fitting plate

**MOUNTING OPTIONS**  
 NC ICAT CP  
 SEE PAGE 5, 6

**VOLTAGE**  
 120 120V  
 UNV 120V-277V

**DIMMING**  
 DIM10 eLED LED flicker free 0-10V dimming to 10%  
 DIM10Z eLED LED flicker free 0-10V dimming to 0%  
 DALI eLED LED flicker free DALI-2 dimming to 1%  
 DALIZ eLED LED flicker free DALI-2 dimming to 0%  
 DMX DMX dim to zero  
 LUT Lutron Hi-Lume Ecosystem dimming to 1%, Soft-on & Fade-to-Black  
 LUTP Lutron Hi-Lume Premier Ecosystem dimming to 0.1%, Soft-on & Fade-to-Black  
 ELV1 leading & trailing edge (Triac/ELV) dimming to 1%  
 NLT night light control interface: standard Cat-5/845 connection (optional), dim to off  
 CAS Casambi control with flicker free 1% dimming  
 AWRN Lutron athena wireless node  
 LSDA Lutron Hi-Lume 1% 3-wire/Ecosystem  
 EM7 emergency battery backup, 90 minutes at 12W to LED  
 EM2 emergency battery backup, 90 minutes at 10W to LED, CA title 20  
 EM10CAZ remote emergency battery backup, 90 minutes at 10W to LED, CA title 20

**ELECTRICAL OPTIONS**

**ADDITIONAL MOUNTING INFO**  
 New Construction Bar Hangers (included) Mounting Length: 14-3/4" to 26"  
 Extension Kit (p/n: R20206 (ordered separately, 1 per fixture) Extends a pair of Bar Hangers Total Mounting Length: 25" to 48"

**YOUR COMPLETED ORDERING CODE**

Follow the steps to specify your fixture, example:  
 NU4 - QW - SW - 20LM - 35K - 90 - WW - WH - NC - UNV - DIM10 - EM7

**NOTES**  
 1. 35LM/40LM available with ELV/DMX dimming.  
 2. Custom set up fee plus minimum quantity required per color.  
 3. ICAT/CP not available in 35LM/40LM.  
 4. LUT/LUTP not available in 25LM/30LM/35LM/40LM.  
 5. DMX (DMX) not available in 10LM.  
 6. AWRN reference page 8 for product specifications on Athena wireless node.  
 \* eLED and DMX uses logarithmic dimming curve as standard. For linear dimming curve, add "L" after dimming code, i.e. DIM10L.

# HYDREL

## WANDER

### Pathway and Step Light Family Pedestal Mount

**PROJECT INFORMATION**  
 JOB NAME: TYPE: F3  
 ORDERING CODE:

**HYDREL**

**HIGHLIGHTS**  
 • Available in 2 sizes and 2 heights and with single or double sided head fixture options for a wide range of pathway applications  
 • Integral sealed driver module  
 • Sturdy die-cast body with IK10 impact rating  
 • IP67 Rated  
 • Precision acrylic optic available in 3 tailored distributions  
 • Industry leading performance with up to 1750 delivered lumens  
 • Achieve excellent uniformity and meet egress lighting requirements with fixture spacings of up to 25' on-center (8' H38 height option)  
 • Emergency battery option  
 • 120V GFCI receptacle option  
 • Fully shielded, BUG U-0 rating  
 • ADA-compliant design  
 • 3G vibration rated per ANSI C136.31  
 • DarkSky Approved Pedestrian Comfort Luminaire

**PERFORMANCE SUMMARY**

| Model   | Performance Package | Distribution | Delivered Lumens | Watts | LPW |
|---------|---------------------|--------------|------------------|-------|-----|
| WANDER1 | P1                  | SW           | 334              | 4.4   | 76  |
|         |                     | MW           | 334              | 4.4   | 76  |
|         |                     | LW           | 334              | 4.4   | 76  |
| WANDER3 | P2                  | SW           | 677              | 10.2  | 66  |
|         |                     | MW           | 677              | 10.2  | 66  |
|         |                     | LW           | 677              | 10.2  | 66  |

**STANDARD DISTRIBUTION**  
 Short Forward, Wide Lateral Distribution (SW)  
 Medium Forward, Wide Lateral (MW)  
 Long Forward, Medium Lateral Distribution (LW)

© 2025 Acuity Brands Lighting, Inc. • 1 Acuity Way, Decatur, GA 30035  
 Phone: 800-705-SERV (7378) • www.hydrrel.com

# HYDREL

## WANDER Pedestal Mount Pathway Light | 2

**ORDERING INFORMATION**

EXAMPLE: WANDER1 PM1 H22 P1 90CRI 27K 2700K 120V thru 277V MultiVOLT SW Short Forward, Wide Lateral Distribution

| Model*  | Style*                    | Height*                         | Performance Package* | CRI       | Color Temperature* | Voltage*                       | Distribution*                                |
|---------|---------------------------|---------------------------------|----------------------|-----------|--------------------|--------------------------------|--|
| WANDER1 | One Optic Pathway Light   | PM1 Pedestal Mount, Single Head | P1                   | 90CRI     | 27K 2700K          | MVOLT MultiVOLT 120V thru 277V | SW Short Forward, Wide Lateral Distribution  |
| WANDER1 | Three Optic Pathway Light | PM2 Pedestal Mount, Double Head | P2                   | 35K 3500K | 120 120 Volt       | 12 12 Volt                     | MW Medium Forward, Wide Lateral Distribution |
| WANDER3 | One Optic Pathway Light   | PM1 Pedestal Mount, Single Head | P1                   | 90CRI     | 27K 2700K          | MVOLT MultiVOLT 120V thru 277V | SW Short Forward, Wide Lateral Distribution  |
| WANDER3 | Three Optic Pathway Light | PM2 Pedestal Mount, Double Head | P2                   | 35K 3500K | 120 120 Volt       | 12 12 Volt                     | MW Medium Forward, Wide Lateral Distribution |

**Control Input**  
 ZT 0-10V Dimming (0% to 100%)  
 ELV Reverse Phase  
 \*ZT and ELV options are not available with 12V

**Options**  
 GFCI Receptacle, 120 volt only  
 ELM Battery Back Up, 120 volt only  
 Note: ELV is only available with WANDER PM1

**Finishes\***  
 BL Black Textured  
 WH White Textured  
 BRN Bronze Textured  
 DBL Designer Black Smooth  
 DDB Designer Bronze Smooth  
 DNA Natural Aluminum Smooth  
 Note: Additional standard finish options available. See page 11

**Notes:**  
 1. Zinc Undercoat provides corrosion protection for Marine Environment and Natatorium Construction  
 2. RALTBDF for printing only, replace with applicable RAL call out when ready to order. See the RALTBDF for available options. It is recommended that typical products only use textured paint.

Project Number: 25280 | Design Engineer: AV  
 7328 E Stetson Dr., Scottsdale, AZ 85251  
 P: 480.626.7072 | ardebilieng.com

**ARDEBILI Engineering**

Professional Engineer  
 License No. 46861  
 Exp. 12/02/25

DRAWN BY: AD  
 CHECKED BY: PC  
 PROJECT MANAGER: AV  
 JOB #: 24003198  
 FILE CODE: ##  
 SHEET NO: E.1.3

**811**  
 Know what's below. Call before you dig.  
 THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER 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 MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

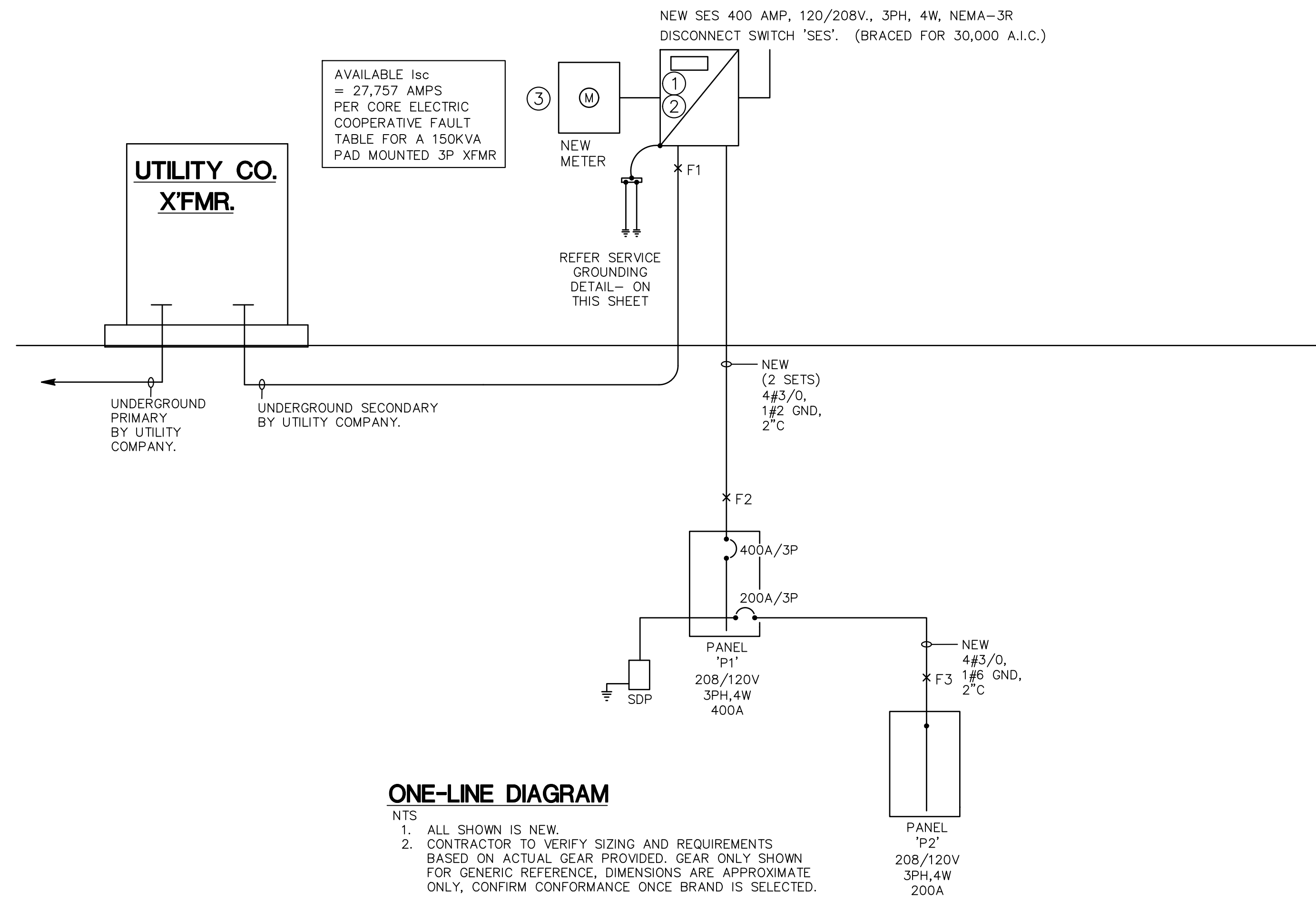
**ATWELL**  
 866.850.4200 www.atwell-group.com  
 9001 AIRPORT FREEWAY, SUITE 660  
 NORTH RICHLAND HILLS, TX 76180  
 972.626.9860

LOT 4A, PARKER POINTE SUBD, FILING NO. 1, AMEND. NO. 1  
 S. PARKER RD & STROH RD  
 PARKER  
 DOUGLAS COUNTY, COLORADO

BLACK ROCK COFFEE BAR  
 13135 DECLAN DRIVE  
 IECC REPORT

DATE: 2025-06-04

REVISIONS

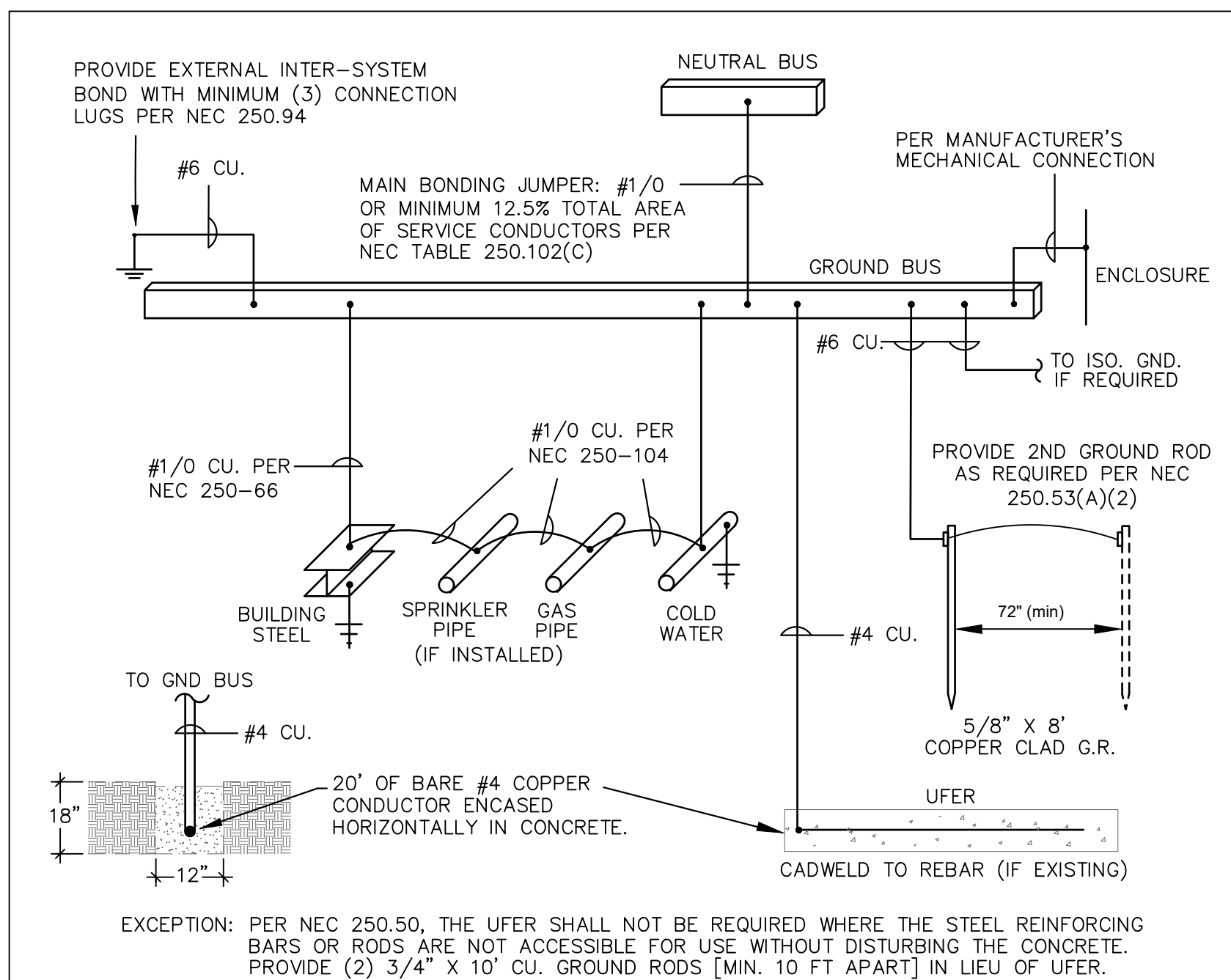


**ONE-LINE DIAGRAM**

- NTS
1. ALL SHOWN IS NEW.
  2. CONTRACTOR TO VERIFY SIZING AND REQUIREMENTS BASED ON ACTUAL GEAR PROVIDED. GEAR ONLY SHOWN FOR GENERIC REFERENCE, DIMENSIONS ARE APPROXIMATE ONLY, CONFIRM CONFORMANCE ONCE BRAND IS SELECTED.

**ELECTRICAL SERVICE NOTE**

PRIOR TO PURCHASE OF MAIN SERVICE ENTRANCE EQUIPMENT, VERIFY PROPOSED SERVICE IS ACCEPTABLE TO BOTH UTILITY COMPANY AND A.H.J. NOTIFY THE ENGINEER OF REJECTIONS AND COMMENTS PERTINENT TO THE MAIN SERVICE ENTRANCE EQUIPMENT.



**SERVICE GROUNDING DETAIL**

NOT TO SCALE

**GENERAL NOTES**

- THESE REQUIREMENTS ARE PROVIDED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE, ARTICLE 250 PERTAINING TO 'GROUNDING ELECTRODE SYSTEMS'.
- 1) THE METALLIC PIPING BOND, BUILDING STEEL BOND, AND THE 2ND SERVICE BONDING MUST BE BONDED TOGETHER AND TO THE GROUNDING ELECTRODE SYSTEM IF PRESENT.
  - 2) ALL SPLICING SHALL BE EXOTHERMIC WELDS (CAD WELDS).
  - 3) ALL INSTALLATIONS SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF NEC ARTICLE 250 AND ANY STATE AND/OR LOCAL REQUIREMENTS.
  - 4) THE GROUNDING SYSTEM SHALL PROVIDE LESS THAN 25 OHMS RESISTANCE TO GROUND AT THE SERVICE CONNECTION. INSTALL ADDITIONAL GROUND RODS IF GROUND RESISTANCE EXCEEDS 25 OHMS PER NEC 250.56

| DEVICE | FAULT  | AIC RATING | L-N VOLTS | UTILITY | FED FROM |         | FEEDER  |           |           |        |        | TOTAL MOTOR FAULT | DIRECTLY CONNECTED MOTOR LOAD |          |
|--------|--------|------------|-----------|---------|----------|---------|---------|-----------|-----------|--------|--------|-------------------|-------------------------------|----------|
|        |        |            |           |         | DEVICE   | FAULT   | SIZE    | X / 1000' | R / 1000' | LENGTH | X      |                   | R                             | KVA      |
|        |        |            |           |         |          |         |         |           |           |        |        |                   |                               |          |
| SES    | 27,757 | 30,000     | 120V      | 27,228  |          | (2)#3/0 | 0.021   | 0.0385    |           | 0      | 0      | 529               |                               |          |
| F1     | DS-1   | 10,000     | 120V      | 9,471   | SES      | 27,228  | (2)#3/0 | 0.021     | 0.0385    | 1'     | 0      | 0                 | 529                           |          |
| F2     | P1     | 9,751      | 120V      | 9,221   | DS-1     | 9,471   | (2)#3/0 | 0.021     | 0.0385    | 12'    | 0.0003 | 0.0005            | 530                           | 23.2 257 |
| F3     | P2     | 9,238      | 120V      | 8,736   | P1       | 9,221   | #3/0    | 0.042     | 0.077     | 12'    | 0.0005 | 0.0009            | 502                           | 24.6 273 |

**ONE-LINE GENERAL NOTES**

- SWITCHBOARD COMPONENTS, INCLUDING OVERCURRENT PROTECTIVE DEVICES SHALL BE FULLY RATED FOR THE AVAILABLE FAULT CURRENT SHOWN.
- PROVIDE ARC FLASH AND SHOCK HAZARD WARNING IDENTIFICATION PER NEC ARTICLE 110.16
- "NO DESIGN CHANGES MAY BE MADE TO THE SYSTEM WITHOUT THE PRIOR APPROVAL OF THE DESIGN ENGINEER AND THE ELECTRICAL INSPECTOR."
- THE FEEDER LENGTHS SHOWN IN THE INPUT DATA IS FOR CALCULATIONS ONLY. IT IS NOT THE INTENT TO USE THESE ENTERED LENGTHS FOR USAGE OF ACTUAL FIELD FEEDER LENGTH MEASUREMENTS.
- PER NEC 240.2 CURRENT LIMITING OVERCURRENT A DEVICE THAT, WHEN INTERRUPTING CURRENTS IN ITS CURRENT-LIMITING RANGE, REDUCES THE CURRENT FLOWING IN THE FAULTED CIRCUIT TO A MAGNITUDE SUBSTANTIALLY LESS THAN THAT OBTAINABLE IN THE SAME CIRCUIT IF THE DEVICE WERE REPLACED WITH A SOLID CONDUCTOR HAVING COMPARABLE IMPEDANCE.
- ALL SWITCHBOARDS, SWITCHGEAR, AND PANELBOARDS SUPPLIED BY FEEDERS SHALL BE PERMANENTLY MARKED TO INDICATE EACH DEVICE OR EQUIPMENT WHERE THE POWER ORIGINATES. THE LABEL SHALL BE PERMANENTLY AFFIXED, OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED, AND NOT HANDWRITTEN PER NEC 408.4(B)

**PANEL SCHEDULES GENERAL NOTES**

- A.I.C. RATING SHOWN ON PANEL SCHEDULES ARE THE MINIMUM RATING FOR NEW AND REPLACEMENT OVERCURRENT PROTECTIVE DEVICES. EACH DEVICE SHALL BE FULLY RATED AT AFC AS SHOWN ON ONE-LINE DIAGRAM.
- ALL PANEL BOARDS SHALL HAVE A TYPE WRITTEN DIRECTORY IDENTIFYING EACH NUMBERED CIRCUIT PLACED IN A DIRECTORY HOLDER INSIDE THE DOOR.
- THE CONTRACTOR SHALL PERMANENTLY MARK WITH PERMANENT MARKER THE CIRCUIT IDENTIFICATIONS ON THE COVERPLATES OF RECEPTACLES, EQUIPMENT, AND LIGHTING JUNCTION BOXES. (STICK ON LABELS NOT ACCEPTABLE)
- PER NEC 210.4(B) ALL MULTIWIRE BRANCH CIRCUITS ARE TO BE PROVIDED WITH A DEVICE THAT WILL DISCONNECT POWER TO ALL UNGROUNDED CONDUCTORS SIMULTANEOUSLY AT THE POINT OF ORIGIN.
- ALL LIFE SAFETY CIRCUITS SHALL REQUIRE A LOCK ON DEVICE. FIRE ALARM CIRCUITS SHALL HAVE RED IDENTIFICATION AND BE IDENTIFIED AS FIRE ALARM CIRCUIT.
- PER NEC 408.4(A) EVERY CIRCUIT AND CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT AND SPECIFIC PURPOSE OR USE.
- PER NEC 700.12(F)2 INSTALLATION OF UNIT EQUIPMENT, EMERGENCY LIGHTS, EXIT SIGNS & OTHER UNIT EQUIPMENT SHALL BE CLEARLY IDENTIFIED WITHIN & AT THE DISTRIBUTION PANEL.

**KEYED NOTES**

- PROVIDE WEATHERPROOF PLACARD STATING AVAILABLE FAULT CURRENT AND DATE CALCULATED PER NEC 110.24.
- PROVIDE ARC-FLASH HAZARD WARNING LABEL: LABEL SHALL INDICATE NOMINAL VOLTAGE, AVAILABLE FAULT CURRENT, CLEARING TIME (UNDER SPECIAL INSPECTION) AND THE DATE THE LABEL IS APPLIED PER NEC 110.16(B). MAIN BREAKER SHALL BE LSIG.
- E.C. SHALL INSTALL UTILITY COMPLIANT CT/METER. COORDINATE FINAL APPROVAL WITH LOCAL ELECTRICAL UTILITY COMPANY.



**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 AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

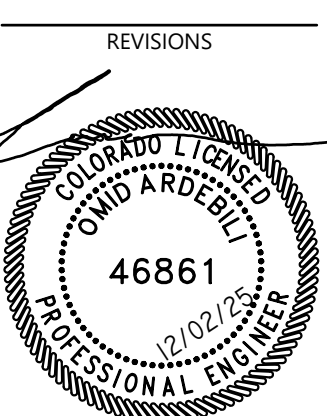
**NOTICE**  
 CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE DEEMED TO ASSUME ANY RESPONSIBILITY FOR THE SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK OF ANY NEARBY STRUCTURE, OR OF ANY OTHER PERSONS.  
 COPYRIGHT © 2025 ATWELL LLC. NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL LLC.

**ATWELL**  
 866.850.4200 www.atwell-group.com  
 9001 AIRPORT FREEWAY, SUITE 660  
 NORTH RICHLAND HILLS, TX 76180  
 972.626.8860

LOT 4A PARKER POINT SUBD. FILING NO. 1. AMEND. NO. 1  
 S. PARKER RD & STROH RD  
 PARKER  
 DOUGLAS COUNTY, COLORADO

BLACK ROCK COFFEE BAR  
 13135 DECLAN DRIVE  
 ELECTRICAL ONE-LINE DIAGRAM

DATE 2025-06-04



DRAWN BY: AD  
 CHECKED BY: PC  
 PROJECT MANAGER: AV  
 JOB #: 24003198  
 FILE CODE: ##  
 SHEET NO. E4.0

**ARDEBILI Engineering**  
 Project Number: 25280 | Design Engineer: AV  
 7328 E Stetson Dr., Scottsdale, AZ 85251  
 P: 480.626.7072 | ardebilieng.com

| NEW SERVICE                  |                       |          |                       |        |                       |                    |                               |          |  |
|------------------------------|-----------------------|----------|-----------------------|--------|-----------------------|--------------------|-------------------------------|----------|--|
| ROOM ELEC ROOM               |                       |          | VOLTS 208Y/120V 3P 4W |        |                       | AIC 30,000         |                               |          |  |
| MOUNTING SURFACE             |                       |          | BUS AMPS 400          |        |                       | MAIN BKR 400       |                               |          |  |
| FED FROM UTILITY             |                       |          | NEUTRAL 100%          |        |                       | LUGS STANDARD      |                               |          |  |
| NOTE NEMA 1                  |                       |          |                       |        |                       |                    |                               |          |  |
| CKT #                        | CIRCUIT DESCRIPTION   | KVA LOAD |                       |        | FRAME TRIP/POLES      | COND.              | FEEDER RACEWAY AND CONDUCTORS |          |  |
|                              |                       | A        | B                     | C      |                       |                    |                               |          |  |
| 1                            | FUSED DISCONNECT DS-1 | 41.3     | 36.7                  | 43.8   | 400/3                 | (2)2'C,4#3/0,#1/0G |                               |          |  |
| TOTAL CONNECTED KVA BY PHASE |                       | 41.3     | 36.7                  | 43.8   |                       |                    |                               |          |  |
|                              |                       | CONN KVA | CALC KVA              |        |                       | CONN KVA           | CALC KVA                      |          |  |
| LIGHTING                     |                       | 1.17     | 1.46                  | (125%) | RECEPTACLES           | 9.01               | 9.01                          | (50%>10) |  |
| LARGEST MOTOR                |                       | 19.6     | 4.9                   | (25%)  | KITCHEN EQUIPMENT     | 47.8               | 31.1                          | (65%)    |  |
| MOTORS                       |                       | 47.8     | 47.8                  | (100%) | CONTINUOUS HEATING    | 4.69               | 5.86                          | (125%)   |  |
|                              |                       |          |                       |        | HEATING               | 11.4               | 11.4                          | (100%)   |  |
|                              |                       |          |                       |        | TOTAL LOAD            |                    | 111                           |          |  |
|                              |                       |          |                       |        | BALANCED 3-PHASE LOAD |                    | 309 A                         |          |  |

| NEW PANEL                     |       |                                    |                       |        |                       |               |          |                                 |          |      |      |
|-------------------------------|-------|------------------------------------|-----------------------|--------|-----------------------|---------------|----------|---------------------------------|----------|------|------|
| ROOM STORAGE AREA             |       |                                    | VOLTS 208Y/120V 3P 4W |        |                       | AIC 22,000    |          |                                 |          |      |      |
| MOUNTING SURFACE              |       |                                    | BUS AMPS 400          |        |                       | MAIN BKR 400  |          |                                 |          |      |      |
| FED FROM DS-1                 |       |                                    | NEUTRAL 100%          |        |                       | LUGS STANDARD |          |                                 |          |      |      |
| NOTE NEMA 1                   |       |                                    |                       |        |                       |               |          |                                 |          |      |      |
| CKT #                         | BKR   | CIRCUIT DESCRIPTION                | KVA LOAD              |        |                       | CKT #         | BKR      | CIRCUIT DESCRIPTION             | KVA LOAD |      |      |
|                               |       |                                    | A                     | B      | C                     |               |          |                                 | A        | B    | C    |
| 1                             | 20/1  | STORAGE AREA RECEPTACLE(S)         | 0.72                  |        |                       | 2             | 20/1     | IT CABINET RECEPTACLES(S)       | 0.72     |      |      |
| 3                             | 20/1  | DINING AREA RECEPTACLE(S)          |                       | 1.26   |                       | 4             | 20/1     | KITCHEN RECEPTACLE(S)           |          | 0.9  |      |
| 5                             | 20/2  | E7(ICE MACHINE)                    |                       |        | 1.42                  | 6             | 20/1     | E14(BUNN GRINDER)               |          |      | 1.32 |
| 7                             |       |                                    | 1.42                  |        |                       | 8             | 20/1     | E9(SWFT GRINDER)                | 0.78     |      |      |
| 9                             | 20/1  | #1 E19(UNDER COUNTER REFRIGERATOR) |                       | 0.24   |                       | 10            | 30/2     | #2 E17(MICROWAVE)               |          | 3.1  |      |
| 11                            | 30/2  | #1 E17(MICROWAVE)                  |                       |        | 3.1                   | 12            |          |                                 |          |      | 3.1  |
| 13                            |       |                                    | 3.1                   |        |                       | 14            | 20/1     | E10(VITAMIX BLENDER)            | 1.8      |      |      |
| 15                            | 20/1  | #1 E10(VITAMIX BLENDER)            |                       | 1.8    |                       | 16            | 20/2     | E26(BEVERAGE FREEZER)           |          | 1.3  |      |
| 17                            | 20/1  | #2 E19(UNDER COUNTER REFRIGERATOR) |                       |        | 0.24                  | 18            |          |                                 |          |      | 1.3  |
| 19                            | 20/1  | E20(NITRO BREW COFFEE DISPENSOR)   | 0.6                   |        |                       | 20            | 20/1     | POS EQUIPMENT                   | 0.5      |      |      |
| 21                            | 20/1  | E9(SWIFT GRINDER)                  |                       | 0.78   |                       | 22            | 20/1     | E18(UNDER COUNTER REFRIGERATOR) |          | 0.36 |      |
| 23                            | 30/2  | E8(RANCILIO ESPRESSO MACHINE)      |                       |        | 3                     | 24            | 20/1     | E27(HOT WATER DISPENSER)        | 0.36     |      | 1.85 |
| 25                            |       |                                    | 3                     |        |                       | 26            | 20/1     | KITCHEN RECEPTACLE(S)           |          |      |      |
| 27                            | 20/1  | #2 E10(VITAMIX BLENDER)            |                       | 1.8    |                       | 28            | 20/1     | RO SYSTEM RECEPTACLE(S)         |          | 0.37 |      |
| 29                            | 20/1  | #3 E10(VITAMIX BLENDER)            |                       |        | 1.8                   | 30            | 20/1     | E10(VITAMIX BLENDER)            |          | 1.8  |      |
| 31                            | 20/1  | POS EQUIPMENT                      | 0.5                   |        |                       | 32            | 70/3     | RTU-1                           | 6.53     |      |      |
| 33                            | -/1   | SPACE                              |                       | 0      |                       | 34            |          |                                 |          |      | 6.53 |
| 35                            | -/1   | SPACE                              |                       |        | 0                     | 36            |          |                                 |          |      |      |
| 37                            | 200/3 | PANEL P2                           |                       |        | 21.3                  | 38            | -/3      | SPD                             | 0        |      |      |
| 39                            |       |                                    |                       |        | 18.3                  | 40            |          |                                 |          |      | 0    |
| 41                            |       |                                    |                       |        | 18.3                  | 42            |          |                                 |          |      | 0    |
| TOTAL CONNECTED KVA BY PHASE  |       |                                    | 41.3                  | 36.7   | 43.8                  |               |          |                                 |          |      |      |
| TOTAL CONNECTED AMPS BY PHASE |       |                                    | 347                   | 306    | 368                   |               |          |                                 |          |      |      |
|                               |       | CONN KVA                           | CALC KVA              |        |                       | CONN KVA      | CALC KVA |                                 |          |      |      |
| LIGHTING                      |       | 1.17                               | 1.46                  | (125%) | RECEPTACLES           | 9.01          | 9.01     | (50%>10)                        |          |      |      |
| LARGEST MOTOR                 |       | 19.6                               | 4.9                   | (25%)  | KITCHEN EQUIPMENT     | 47.8          | 31.1     | (65%)                           |          |      |      |
| MOTORS                        |       | 47.8                               | 47.8                  | (100%) | CONTINUOUS HEATING    | 4.69          | 5.86     | (125%)                          |          |      |      |
|                               |       |                                    |                       |        | HEATING               | 11.4          | 11.4     | (100%)                          |          |      |      |
|                               |       |                                    |                       |        | TOTAL LOAD            |               | 111      |                                 |          |      |      |
|                               |       |                                    |                       |        | BALANCED 3-PHASE LOAD |               | 309 A    |                                 |          |      |      |

| NEW PANEL                     |      |                               |                       |        |                       |               |          |                                 |          |       |      |
|-------------------------------|------|-------------------------------|-----------------------|--------|-----------------------|---------------|----------|---------------------------------|----------|-------|------|
| ROOM STORAGE AREA             |      |                               | VOLTS 208Y/120V 3P 4W |        |                       | AIC 22,000    |          |                                 |          |       |      |
| MOUNTING SURFACE              |      |                               | BUS AMPS 200          |        |                       | MLO           |          |                                 |          |       |      |
| FED FROM P1                   |      |                               | NEUTRAL 100%          |        |                       | LUGS STANDARD |          |                                 |          |       |      |
| NOTE NEMA 1                   |      |                               |                       |        |                       |               |          |                                 |          |       |      |
| CKT #                         | BKR  | CIRCUIT DESCRIPTION           | KVA LOAD              |        |                       | CKT #         | BKR      | CIRCUIT DESCRIPTION             | KVA LOAD |       |      |
|                               |      |                               | A                     | B      | C                     |               |          |                                 | A        | B     | C    |
| 1                             | 40/2 | E8(RANCILIO ESPRESSO MACHINE) | 3                     |        |                       | 2             | 20/1     | #1 E10(VITAMIX BLENDER)         | 1.8      |       |      |
| 3                             |      |                               |                       | 3      |                       | 4             | 20/1     | #2 E10(VITAMIX BLENDER)         |          | 1.8   | 6.53 |
| 5                             | 35/2 | E13(COFFEE BREWER)            |                       |        | 2.65                  | 6             | 70/3     | RTU-2                           |          |       | 6.53 |
| 7                             |      |                               | 2.65                  |        |                       | 8             |          |                                 | 6.53     |       |      |
| 9                             | 20/1 | DRIVE-THRU SPEAKER, MENUBOARD |                       | 1      |                       | 10            |          |                                 |          | 6.53  |      |
| 11                            | 20/1 | KITCHEN AREA LIGHTING         |                       |        | 0.378                 | 12            | 20/1     | ROOF RECEPTACLE(S)              |          |       | 0.36 |
| 13                            | 20/2 | E6(MOBILE ICE BIN)            | 1.47                  |        |                       | 14            | 20/1     | DINING AREA LIGHTING            | 0.312    |       |      |
| 15                            |      |                               | 1.47                  |        | 1.47                  | 16            | 20/1     | RESTROOM LIGHTING & CEF-1       |          | 0.218 |      |
| 17                            | 20/1 | CP-1                          |                       |        | 0.097                 | 18            | 50/2     | EW-1                            |          |       | 4    |
| 19                            | 20/1 | EXTERIOR BUILDING LIGHTING    | 0.219                 |        |                       | 20            |          |                                 | 4        |       |      |
| 21                            | 20/1 | EXTERIOR SIGNAGE 1            |                       | 1.2    |                       | 22            | 20/1     | EXTERIOR SIGNAGE 3              |          | 1.2   |      |
| 23                            | 20/1 | EXTERIOR SIGNAGE 2            |                       |        | 1.2                   | 24            | 20/1     | EXTERIOR RECEPTACLE(S)          |          |       | 0.72 |
| 25                            | 20/1 | WALK-IN COOLER LIGHTING       | 0.08                  |        |                       | 26            | 20/1     | WALK-IN COOLER FAN              | 0.192    |       |      |
| 27                            | 20/1 | TIME SWITCH                   |                       | 0.05   |                       | 28            | 20/1     | E18(UNDER COUNTER REFRIGERATOR) |          | 0.36  |      |
| 29                            | 20/3 | E15(WALK-IN CLR CONDENSER)    |                       |        | 0.696                 | 30            | 20/1     | EUH-1                           |          | 1.5   |      |
| 31                            |      |                               | 0.696                 |        | 0.696                 | 32            | 20/1     | DINE-IN AREA LIGHTING           | 0.174    |       |      |
| 33                            |      |                               |                       |        |                       | 34            | 20/1     | BIG FAN                         |          | 0.75  |      |
| 35                            | 20/2 | EXTERIOR POLE LIGHTING        |                       | 0.16   |                       | 36            | -/1      | SPACE                           |          |       | 0    |
| 37                            |      |                               |                       |        | 0                     | 38            | -/1      | SPACE                           |          |       | 0    |
| 39                            | -/1  | SPACE                         |                       |        | 0                     | 40            | -/1      | SPACE                           |          |       | 0    |
| 41                            | -/1  | SPACE                         |                       |        | 0                     | 42            | -/1      | SPACE                           |          |       | 0    |
| TOTAL CONNECTED KVA BY PHASE  |      |                               | 21.3                  | 18.3   | 18.3                  |               |          |                                 |          |       |      |
| TOTAL CONNECTED AMPS BY PHASE |      |                               | 178                   | 154    | 156                   |               |          |                                 |          |       |      |
|                               |      | CONN KVA                      | CALC KVA              |        |                       | CONN KVA      | CALC KVA |                                 |          |       |      |
| LIGHTING                      |      | 1.17                          | 1.46                  | (125%) | RECEPTACLES           | 2.61          | 2.61     | (50%>10)                        |          |       |      |
| LARGEST MOTOR                 |      | 19.6                          | 4.9                   | (25%)  | KITCHEN EQUIPMENT     | 15.3          | 11.3     | (LARGEST 2)                     |          |       |      |
| MOTORS                        |      | 24.6                          | 24.6                  | (100%) | CONTINUOUS HEATING    | 4.69          | 5.86     | (125%)                          |          |       |      |
|                               |      |                               |                       |        | HEATING               | 9.5           | 9.5      | (100%)                          |          |       |      |
|                               |      |                               |                       |        | TOTAL LOAD            |               | 60.3     |                                 |          |       |      |
|                               |      |                               |                       |        | BALANCED 3-PHASE LOAD |               | 167 A    |                                 |          |       |      |

### PANEL SCHEDULES GENERAL NOTES

- A.I.C. RATING SHOWN ON PANEL SCHEDULES ARE THE MINIMUM RATING FOR NEW AND REPLACEMENT OVERCURRENT PROTECTIVE DEVICES. EACH DEVICE SHALL BE FULLY RATED AT AFC AS SHOWN ON ONE-LINE DIAGRAM.
- ALL PANEL BOARDS SHALL HAVE A TYPE WRITTEN DIRECTORY IDENTIFYING EACH NUMBERED CIRCUIT PLACED IN A DIRECTORY HOLDER INSIDE THE DOOR.
- THE CONTRACTOR SHALL PERMANENTLY MARK WITH PERMANENT MARKER THE CIRCUIT IDENTIFICATIONS ON THE COVERPLATES, EQUIPMENT, AND LIGHTING JUNCTION BOXES. (STICK ON LABELS NOT ACCEPTABLE)
- PER NEC 210.4(B) ALL MULTI-WIRE BRANCH CIRCUITS ARE TO BE PROVIDED WITH A DEVICE THAT WILL DISCONNECT POWER TO ALL UNGROUNDED CONDUCTORS SIMULTANEOUSLY AT THE POINT OF ORIGIN.
- ALL LIFE SAFETY CIRCUITS SHALL REQUIRE A LOCK ON DEVICE. FIRE ALARM CIRCUITS SHALL HAVE RED IDENTIFICATION AND BE IDENTIFIED AS FIRE ALARM CIRCUIT.
- PER NEC 408.4(A) EVERY CIRCUIT AND CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT AND SPECIFIC PURPOSE OR USE.
- PER NEC 700.12(F)2) INSTALLATION OF UNIT EQUIPMENT, EMERGENCY LIGHTS, EXIT SIGNS & OTHER UNIT EQUIPMENT SHALL BE CLEARLY IDENTIFIED WITHIN & AT THE DISTRIBUTION PANEL.

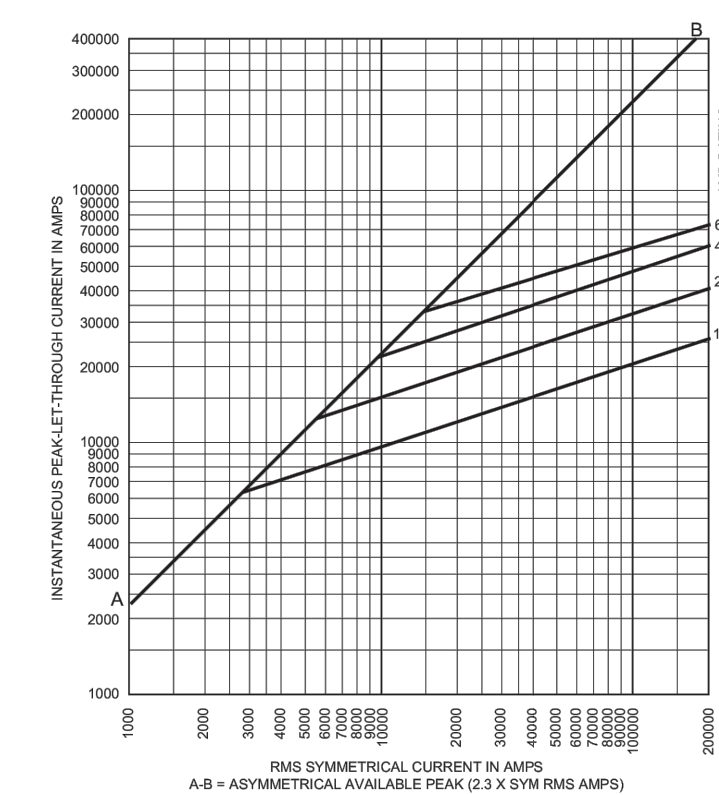
### PANELBOARD SYMBOLS

|   |  |
|---|--|
| ▲ | CONTROLLED BY TIME CLOCK/PHOTOCELL (VIA CONTACTOR) |
| ◆ | GFCI - GROUND FAULT CIRCUIT INTERRUPTER BREAKER    |

Technical Data 1020  
Effective July 2023

FRN-R Class RK5 250Vac, 125/250Vdc  
70-600A, dual element, time-delay fuses

#### Current-limitation curves:



#### Current-limiting effects:

| Prospect S.C.C. | Let-through current (apparent RMS Sym. vs. fuse rating) |        |        |        |
|-----------------|---|--------|--------|--------|
|                 | 100A  | 200A   | 400A   | 600A   |
| 5000            | 3000  | 5000   | 5000   | 5000   |
| 10,000          | 4000  | 7000   | 10,000 | 10,000 |
| 15,000          | 5000  | 8000   | 11,000 | 15,000 |
| 20,000          | 5000  | 8000   | 12,000 | 16,000 |
| 25,000          | 6000  | 9000   | 13,000 | 17,000 |
| 30,000          | 6000  | 10,000 | 14,000 | 18,000 |
| 35,000          | 6000  | 10,000 | 15,000 | 19,000 |
| 40,000          | 7000  | 11,000 | 15,000 | 20,000 |
| 50,000          | 7000  | 11,000 | 17,000 | 21,000 |
| 60,000          | 8000  | 12,000 | 18,000 | 22,000 |
| 70,000          | 8000  | 13,000 | 19,000 | 23,000 |
| 80,000          | 8000  | 13,000 | 19,000 | 24,000 |
| 90,000          | 9000  | 14,000 | 20,000 | 25,000 |
| 100,000         | 9000  | 14,000 | 21,000 | 26,000 |
| 150,000         | 10,000  | 16,000 | 24,000 | 29,000 |
| 200,000         | 11,000  | 18,000 | 26,000 | 32,000 |

### FUSE PULL OUT DISCONNECT CLASS RK5 DS-1 TIME-DELAY FUSES.

The only controlled copy of this data sheet is the electronic read-only version located on the Eaton network drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

**Eaton**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
Eaton.com  
Bussmann Division  
114 Old Stone Road  
Elkville, MD 23021  
United States  
Eaton.com/bussmannseries

For Eaton's Bussmann series product information, call 1-855-287-7626 or visit: [Eaton.com/bussmannseries](http://Eaton.com/bussmannseries)

**EATON**  
Powering Business Worldwide

© 2023 Eaton  
All Rights Reserved  
Printed in USA  
Publication No. 1020  
July 2023

Eaton, Bussmann and Fusitec are valuable trademarks of Eaton in the U.S. and other countries. You are not permitted to use the Eaton trademarks without prior written consent of Eaton.  
Follow us on social media to get the latest product and support information.  
[f](https://www.facebook.com/eaton) [in](https://www.linkedin.com/company/eaton) [yt](https://www.youtube.com/eaton) [ig](https://www.instagram.com/eaton)



**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 AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCURRED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.  
NOTICE  
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE PROVIDER SHALL BE DEEMED TO ASSUME ANY RESPONSIBILITY FOR THE SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK OF ANY NEARBY STRUCTURE, OR OF ANY OTHER PERSONS.  
COPYRIGHT © 2023 ATWELL LLC. NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL LLC.

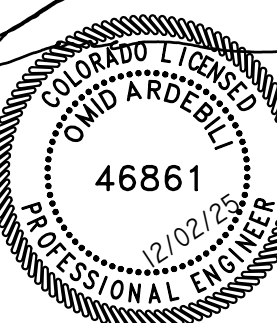
**ATWELL**  
866.850.4200 [www.atwell-group.com](http://www.atwell-group.com)  
9001 AIRPORT FREEWAY, SUITE 660  
NORTH RICHLAND HILLS, TX 76180  
972.956.9860

LOT 4A PARKER POINT SUBD. FILING NO. 1 - AMEND. NO. 1  
S. PARKER RD & STROH RD  
PARKER  
DOUGLAS COUNTY, COLORADO

BLACK ROCK COFFEE BAR  
13135 DECLAN DRIVE  
ELECTRICAL PANEL SCHEDULES

DATE 2025-06-04

REVISIONS



DRAWN BY: AD  
CHECKED BY: PC  
PROJECT MANAGER: AV  
JOB #: 24003198  
FILE CODE: ##  
SHEET NO. E4.1

**ARDEBILI Engineering**  
Project Number: 25280 | Design Engineer: AV  
7328 E Stetson Dr., Scottsdale, AZ 85251  
P: 480.626.7072 | [ardebilieng.com](mailto:ardebilieng.com)



ELECTRICAL SPECIFICATIONS

16001 SCOPE OF WORK

THE WORK DESCRIBED UNDER THIS SECTION OF THE SPECIFICATIONS INCLUDES FURNISHING ALL MATERIAL LABOR AND EQUIPMENT, EXCEPT AS FURNISHED UNDER OTHER SECTIONS OF THE SPECIFICATIONS, TO INSTALL ALL ELECTRICAL WORK AS SHOWN IN THE DRAWINGS AND AS SPECIFIED AND REFERRED TO HEREIN.

01 EXAMINATION OF THE PREMISES

THE CONTRACTOR WILL BE HELD TO HAVE EXAMINED THE PREMISES AND SATISFIED HIMSELF AS TO EXISTING CONDITIONS UNDER WHICH HE WILL BE OBLIGATED TO OPERATE IN PERFORMING HIS PART OF THE WORK OR THAT WHICH WILL IN ANY MANNER AFFECT THE WORK UNDER HIS CONTRACT.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, VERIFY THE DIMENSIONS AT THE SITE. CORRECTNESS OF DIMENSIONS WILL BE THIS CONTRACTOR'S RESPONSIBILITY. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS. IMMEDIATELY REPORT DIFFERENCES TO THE ARCHITECT AND DO NOT PROCEED WITH WORK UNTIL ARCHITECT RENDERS HIS DECISION.

02 REGULATIONS, PERMITS, AND INSPECTIONS

REGULATIONS: COMPLY WITH ALL APPLICABLE CODES, RULES, AND REGULATIONS. ALL MATERIALS, EQUIPMENT, AND WORK MUST COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE AND THE APPLICABLE MUNICIPAL AND LIFE SAFER CODES.

PERMITS: OBTAIN AND PAY FOR ALL PERMITS, FEES, AND LICENSES REQUIRED TO PERFORM WORK DESCRIBED HEREIN.

INSPECTIONS: ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES. PRIOR TO FINAL APPROVAL, FURNISH THE ARCHITECT WITH CERTIFICATES OF INSPECTION AND APPROVALS BY THE LOCAL AUTHORITIES.

03 WORK LISTED ELSEWHERE

FURNISHING AND INSTALLING MOTOR CONTROLS UNLESS IN MOTOR CONTROL CENTER. FURNISHING HOLE CUTTING IN PRE CAST STRUCTURAL CONCRETE.

04 EXISTING SERVICES AND REMODEL AREAS

MAINTAIN ALL SERVICES, POWER, SOUND, TELEPHONE, ETC. TO EXISTING BUILDINGS OR AREAS. INTERRUPTIONS OF SERVICES REQUIRED FOR "CUT-OVER" OR CONNECTIONS OF NEW CABLES, ETC. SHALL BE DONE AT THE CONVENIENCE OF THE TENANT AND BE APPROVED IN WRITING BY THE TENANT PRIOR TO THE INTERRUPTION.

05 TEMPORARY POWER

PROVIDE TEMPORARY POWER AS REQUIRED BY THE GENERAL CONTRACTOR. THIS SERVICE SHALL BE MAINTAINED THROUGHOUT THE ENTIRE JOB AS THE WORK PROGRESSES.

PROVIDE OUTLETS AT CONVENIENT POINTS AND IN SUFFICIENT NUMBERS SO THAT NO EXTENSION CORD IS OVER 50 FEET IN LENGTH IS REQUIRED TO REACH ANY WORK POINT. MAINTAIN GENERAL LIGHTING IN CORRIDORS, STAIRS, BASEMENT AND OTHER AREAS NOT RECEIVING DAYLIGHT REQUIRED FOR SAFETY. REMOVE TEMPORARY WORK AS RAPIDLY AS REQUIRED FOR OR ALLOWED BY INSTALLATION OF PERMANENT WORK.

16420 SERVICE ENTRANCE EQUIPMENT

SERVICE ENTRANCE EQUIPMENT TO HAVE SHORT CIRCUIT CURRENT RATING EQUAL TO OR GREATER THAN AVAILABLE FAULT CURRENT, AND MEET ALL THE REQUIREMENTS OF U.L. STANDARD NO. 891. OUTDOOR GEAR TO BE NEMA 3R. ALL SWITCHGEAR TO BE FREE STANDING, UNLESS OTHERWISE INDICATED, MOUNTED ON 4" CONCRETE PAD EXTENDING A MINIMUM OF 6 INCHES IN FRONT OF EQUIPMENT.

END SECTION SHALL BE PROVIDED WITH FULL CAPACITY THROUGH BUS FOR FUTURE EXTENSION TO FUTURE SECTIONS.

16425 SWITCHBOARDS

SWITCHBOARDS TO BE SQUARED D TYPE QMB OR EQUAL, FREE STANDING, 90" HIGH, MIN. 14" DEEP WITH TYPE QMB SWITCHES. END SECTION WITH FULL CAPACITY THRU - BUS FOR FUTURE SECTION. MOUNT ON 4" CONCRETE PAD EXTENDING A MINIMUM OF 6 INCHES IN FRONT OF SWITCHBOARDS.

16440 SAFETY SWITCHES

SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE, WHERE OUTSIDE THE BUILDING, THE SWITCHES SHALL BE RAINIGHT TYPE NEMA 3R. ALL SWITCHES SHALL BE LOCKABLE.

16471 PANELS

PANEL TYPE AS INDICATED ON THE DRAWINGS. NEW FLUSH PANELS TO HAVE (3) 3/4" EMPTY CONDUITS STUBBED INTO ACCESSIBLE CEILING SPACE.

PROVIDED A GROUND BUS IN ALL PANELS INCLUDING EXISTING PANELS WHEREIN WORK IS DONE OR LOADS ADDED. CHECK ALL BREAKERS. REPLACE DEFECTIVE BREAKERS IN AFOREMENTIONED PANELS.

VERIFY THE INTERRUPTING CAPACITY OF ALL BREAKERS WITH REQUIREMENT INDICATED ON THE DRAWINGS. REPLACE EXISTING BREAKERS NOT MEETING REQUIRED A.I.C. RATING.

16461 DRY TYPE TRANSFORMERS (IF ANY)

SHALL BE CLEAR TO SQUARE D, 150 DEGREE TEMPERATURE RISE; SERIES 7410/7411. CLEARANCE ALL AROUND PER MANUFACTURERS RECOMMENDATION. PROVIDE ISOLATION PADS.

16510 LIGHTING FIXTURES

FLOUORESCENT FIXTURES SHALL BE FURNISHED WITH UL LISTED HIGH POWER-FACTOR BALLASTS. CONTRACTOR SHALL VERIFY CEILING CONSTRUCTION BEFORE ORDERING RECESSED UNITS AND SHALL PROVIDE PLASTER OR DRY WALL FRAMES AS REQUIRED.

RECESSED INCANDESCENT FIXTURES AND FLOUORESCENT DOWN LIGHTS SHALL BE LISTED FOR USE IN INSULATED CEILING SPACES, AND SHALL HAVE ANY REQUIRED FEED-THRU BOXES. LAMPS FOR INCANDESCENT FIXTURES SHALL BE 1000 HOUR INSIDE FROSTED 130 VOLT, NOT EXCEEDING THE WATTAGE FOR WHICH THE FIXTURE IS LABELED AND SHALL BE OF THE TYPE RECOMMENDED BY THE FIXTURE MANUFACTURE. LAMPS SHALL BE OF THE SAME MANUFACTURE AS FLOUORESCENT.

ALL FIXTURES SHALL BE PROPERLY SUPPORTED FROM CEILING STRUCTURE, NOT FROM GYPBOARD OR PLASTER. SURFACE OR PENDANT MOUNT FLOUORESCENT FIXTURES SHALL BE BOLTED TOGETHER FOR PROPER ALIGNMENT AND BONDING.

ALL FLOUORESCENT FIXTURES RECESSED IN THE CEILING OR IN A GRID CEILING SHALL BE PROVIDED WITH EARTHQUAKE CLIPS AS REQUIRED BY CODE.

16195 NAME PLATES

PROVIDE CONTRAST PLASTIC EMBOSING TAPE, ADHESIVE BAKED NAMEPLATES FOR ALL STARTERS AND DISCONNECT SWITCHES.

PROVIDE LAMICOD NAMEPLATES FOR ALL DISTRIBUTION SWITCHES, BREAKERS, LIGHTING AND POWER PANELS INDICATING ITEMS SERVED. SIZE OF LETTERS SHALL BE MINIMUM OF 3/16" HIGH.

16120 WRE

ALL WIRE AND CABLE SHALL BE NEW, 600 VOLT INSULATED, OF TYPES SPECIFIED BELOW. ALL WIRE AND CABLE SHALL BEAR THE UNDERWRITERS' LABEL AND SHALL BE BROUGHT TO THE JOB IN UNBROKEN PACKAGES. WIRE SHALL BE COLOR CODED PER NEC.

BRANCH CIRCUIT WIRING SHALL BE A MINIMUM #12 AWG COPPER

WIRE AND CABLE NO. 4 AWG AND SMALLER SHALL BE TYPE THW OR THHN/THWN

WIRE AND CABLE LARGER THAN NO. 4 AWG SHALL BE TYPE XHHW. ALL AIR CONDITIONING FEEDERS SHALL BE TYPE XHHW.

ALL WIRING IN PANELBOARDS, SWITCHBOARDS, AND GUTTERS SHALL BE NEATLY ARRANGED. WIRE SHALL BE HELD BUNDLED BY TY-RAPS. WIRES SHALL BE CONNECTED TO CIRCUIT BREAKERS, SWITCHES AND OTHER DEVICES PERPENDICULAR TO TERMINAL LUGS.

ALL WIRING IN MANHOLES, PULL BOXES OR JUNCTION BOXES OVER 12 INCHES IN LENGTH SHALL BE BUNDLED IN A NEAT AND ORDERLY MANNER.

AFTER COMPLETION OF UNDERGROUND SPLICES AND SPLICES IN MANHOLES, SEAL SPLICES WITH SCOTCHCOAT #82 COATING OR EQUAL TO MOISTURE PROOF CABLES.

LEAVE NO LESS THAN 6 INCHES OF WIRE AT EACH OUTLET FOR CONNECTION TO LIGHTING FIXTURES, SWITCHES, RECEPTACLES AND OTHER PIECES OF EQUIPMENT. WHERE WIRES FEED THROUGH AN OUTLET OR JUNCTION BOX, NEATLY TUCK 6 INCH LOOP IN BOTTOM OF BOX.

LIGHTING AND POWER CIRCUITS SHALL BE IDENTIFIED BY PANEL LETTER AND CIRCUIT NUMBER WITH BRADY WRAPAROUND CLOTH WIRE MARKERS AT ALL TERMINATIONS AND JUNCTIONS.

ALL BRANCH CIRCUIT AND FEEDER CONDUCTORS SHALL BE COLOR-CODED AS FOLLOWS:

FOR ALL 120 V TO GROUND CIRCUITS; PHASE CONDUCTORS - BLACK, RED, BLUE NEUTRAL CONDUCTOR - WHITE

FOR ALL 277 V TO GROUND CIRCUITS; PHASE CONDUCTORS - BROWN, ORANGE, YELLOW NEUTRAL CONDUCTORS - GRAY

LARGE FEEDER CONDUCTORS SHALL BE CODED BY COLORED TAPE WRAPPED AROUND THE CONDUCTOR AT EACH PULLBOX, TERMINATION POINT AND SPLICE.

ALL CONNECTIONS TO CIRCUIT BREAKERS AND SWITCHES AND ALL JOINTS IN WIRES SHALL BE MADE AS NOTED BELOW:

CONNECTIONS TO CIRCUIT BREAKERS AND SWITCHES: NO. 12 WIRE SHALL BE FORMED AROUND BINDING POST OR SCREW, NO. 10 AND 8 WIRE - BUCHANAN, "TERMED" OR APPROVED EQUAL, LOCKING TONGUE LUG. NO. 6 WIRE AND LARGER - BURNDY "QUICK-LUG" TYPE ODA, OR APPROVED EQUAL, ROUND FLANGE SOLDERLESS LUG.

FIXTURE CONNECTIONS: CIRCUIT WIRING CONNECTIONS TO FIXTURE WIRE SHALL BE MADE WITH PRESSURE-TYPE, SOLDER-LESS CONNECTORS - BUCHANAN, SCOTCHLOC OR WING NUT OR APPROVED EQUAL, COMPLETE WITH INSULATOR AND SECURITY RING.

JOINTS IN WIRES: NO. 6 WIRE AND LARGER - BURNDY OR APPROVED EQUAL. NO. 8 WIRE AND SMALLER - BUCHANAN, SCOTCHLOC, WING NUT, OR EQUAL. PRESSURE-TYPE SOLDERLESS CONNECTORS COMPLETE WITH INSULATOR AND SECURITY RING.

CONTROL WIRING AND ALL OTHER STANDARD WIRING TO SCREW CONNECTIONS SHALL BE PROVIDED WITH T AND B STA-KON TERMINALS.

SOLID CONDUCTORS SHALL LOOP TIGHTLY AND COMPLETELY AROUND TERMINAL SCREWS ON ALL WIRING DEVICES.

UNINSULATED SOLDERLESS CONNECTORS TO BE INSULATED AS FOLLOWS: TAPE WITH A COVERING OF RUBBER TAPE, EQUAL IN THICKNESS TO THE INSULATION. THIS SHALL BE FOLLOWED WITH AN OUTER COVERING OF FRICTION TAPE IN TWO LAYERS. ONE COAT OF WATERPROOF PAINT SHALL BE APPLIED WHEN SUBJECT TO MOISTURE.

WIRE AND CABLE TO BE PULLED INTO CONDUITS WITHOUT STRAIN, USE POWDERED SOAPSTONE, MINERALAC, OR OTHER APPROVED LUBRICANT.

WIRE SHALL NOT BE RE-PULLED IF SAME HAS BEEN PULLED OUT OF A CONDUIT RUN. NO CONDUCTOR SHALL BE PULLED INTO CONDUIT UNTIL CONDUIT SYSTEM IS COMPLETE, INCLUDING JUNCTION BOXES, PULL BOXES, ETC., WITHOUT PERMISSION OF ARCHITECT.

16110 CONDUIT

IN GENERAL, ELECTRICAL METALLIC TUBING SHALL BE USED FOR ALL WIRING EXCEPT IN OR UNDER CONCRETE, EARTH, OR FILL. ELECTRICAL METALLIC TUBING MAY BE USED IN FURRED SPACES, WOOD FRAME WALLS WHERE CONDUITS DO NOT EXCEED 2 1/2" IN SIZE. BRICK, BLOCK, TILE, AND CONCRETE WALLS ARE NOT CONSIDERED HOLLOW AND RIGID CONDUIT SHALL BE PROVIDED FOR THESE AREAS.

01 RIGID STEEL CONDUITS OR INTERMEDIATE METAL CONDUITS SHALL BE USED IN CONCRETE SLABS, IN SOLID GROUTED CELLS OR CONCRETE MASONRY WALLS, BRICK, OR TILE WALLS. FOR ALL EXPOSED CONDUIT OUTSIDE OF THE BUILDING, AND FOR CONDUITS EXCEEDING 2 1/2" IN SIZE, IN ADDITION ALL WIRING IN OR UNDER CONCRETE, EARTH, OR FILL SHALL BE RIGID GALVANIZED OR SHERARIZED STEEL. RIGID CONDUIT UNDER CONCRETE, IN EARTH, OR FILL SHALL BE COATED WITH POLYETHYLENE TAPE. SCOTCH NO. 50 OR APPROVED EQUAL, SPIRAL WRAPPED 1/2" LAPPED TO AN OVERALL THICKNESS OF NOT LESS THAN 15 MILS.

02 USE FLEXIBLE METAL CONDUITS FOR RECESSED FIXTURES, MOTOR, TRANSFORMER AND OTHER EQUIPMENT SUBJECT TO MOVEMENT. USE LIQUID TIGHT TYPE WHERE EXTERIOR OR SUBJECT TO LIQUID SPRAY OR DRIPPING.

03 UL LISTED SCHEDULE 40 PVC CONDUIT MAY BE USED FOR UNDERGROUND RUNS. EXPANSION JOINTS AT 75 FEET ON CENTER OR AS REQUIRED BY MFR. ALL BENDS SHALL BE MANUFACTURED.

04 NON-METALLIC CONDUIT INSTALLED BELOW CONCRETE FLOORS MAY BE INSTALLED IN THE FILL, HOWEVER, A PORTION OF THE CONCRETE FILL MATERIAL MUST BE PLACED AROUND THE CONDUIT FOR RIGID SUPPORT. NON-METALLIC CONDUIT OUTSIDE THE FILL SHALL BE BURIED A MINIMUM OF 18" BELOW GRADE. NON-METALLIC CONDUIT SHALL BE PROVIDED WITH CODE SIZE COPPER BOND WIRE INSIDE THE CONDUIT FOR ELECTRICAL CONTINUITY, AND SHALL BE INSTALLED IN ACCORDANCE TO NEC ARTICLE NO. 250. WRAPPED RIGID STEEL ELBOWS SHALL BE USED FOR RISERS ON PVC CONDUIT RUNS AND SHALL BE GROUNDED.

ALL FLOUORESCENT FIXTURES RECESSED IN THE CEILING OR IN A GRID CEILING SHALL BE PROVIDED WITH EARTHQUAKE CLIPS AS REQUIRED BY CODE.

CONDUIT PLACED IN A CONCRETE SLAB SHALL BE LARGER THAN 3/4" TRADE SIZE DIAMETER AND CONDUIT SMALLER THAN 3/4" SHALL BE USED FOR UNDERGROUND CIRCUITS. CONDUIT SHALL HAVE MINIMUM 1" CONCRETE COVER. NO CONDUIT SHALL BE IMBEDDED IN A SLAB THAT IS LESS THAN 3-1/2" THICK, EXCEPT FOR LOCAL OFFSETS. NO CONDUIT SHALL BE PLACED BETWEEN THE REINFORCING STEEL AND THE BOTTOM OF THE SLAB.

ALL CONDUIT UNDER CONCRETE DRIVES OR ANY LOCATION WHERE SUBJECT TO DAMAGE BY HEAVY EQUIPMENT SHALL BE INSTALLED A MINIMUM OF 24" BELOW GRADE OR 18" BELOW GRADE ENCASED IN A 3" THICK CONCRETE ENVELOPE.

TRENCHING, BACKFILLING, AND CONCRETE WORK FOR ELECTRICAL WORK SHALL BE DONE UNDER THIS SECTION AND AS REQUIRED BY LOCAL AND/OR RULING AUTHORITIES AND REGULATING AGENCIES.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SLEEVES AND CHASES REQUIRED WHERE CONDUITS PASS THROUGH FLOORS OR WALLS, AND SHALL SEAL ALL OPENING AND FINISH TO MATCH ADJACENT SURFACES. WHERE EXPOSED CONDUITS PASS THROUGH WALLS, FLOORS, OR CEILINGS, ESOUTHCHEON PLATES SHALL BE PROVIDED.

ALL NECESSARY SERVICES AND BLOCKOUTS SHALL BE PROVIDED.

ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL WIRE.

05 RIGID CONDUIT FITTINGS

PROVIDE DOUBLE LOCKNUTS AND BUSHINGS EXCEPT AT THREADED HUBS.

06 EMT OR FLEX FITTINGS

FOR EMT, OR MALLEABLE IRON, COMPRESSION TYPE ONLY. FOR FLEXIBLE CONDUIT, COMPRESSION OR CLAMP TYPE CONNECTORS SHALL HAVE INSULATED THREADS.

07 MC CABLE

METAL CLAD CABLE MAY BE USED IN LIEU OF EMT CONDUIT AND WIRE FOR BRANCH CIRCUIT WIRING IF ACCEPTABLE TO AUTHORITIES.

16140 WIRING DEVICES

RECEPTACLES SHALL BE FURNISHED AS INDICATED BELOW:

20 AMP 120 VOLT DUPLEX HUBBELL #5362 W/#8 COVERPLATE

20 AMP 120 VOLT DUPLEX, WEATHERPROOF HUBBELL #5362 W/TAYMAC #10110 COVERPLATE

20 AMP 120 VOLT DUPLEX, GROUND FAULT HUBBELL # OF-5362 W/#26 COVERPLATE

20 AMP 120 VOLT FOURPLEX HUBBELL (2) #5352 W/#82 COVERPLATE

20 AMP 120 VOLT DUPLEX, ISOLATED GROUND HUBBELL # 1G-5362 W/#8 COVERPLATE

WHEN SURFACE WEATHERPROOF MOUNTING IS REQUIRED, RECEPTACLES SHALL BE MOUNTED IN AN FS CONDUIT BOX.

ELEVATION OF EACH RECEPTACLE SHALL BE AT THE FLOOR PLUS 18" TO CENTER UNLESS OTHERWISE NOTED.

ALL SWITCHES SHALL BE FURNISHED IN ACCORDANCE WITH THE FOLLOWING TABLE. SWITCHES SHALL BE OF THE SAME MANUFACTURER AS THE RECEPTACLES FURNISHED.

20 AMP 1 POLE HUBBELL #1221-1 WITH #P1 COVERPLATE

20 AMP 3 POLE HUBBELL #1223-1 WITH #P1 COVERPLATE

COVERPLATES FOR RECEPTACLES, SWITCHES AND OUTLETS SHALL GENERALLY BE PLASTIC, WITH COLOR AS SELECTED BY THE ARCHITECT.

16130 BOXES

BOXES IN EXPOSED OR WET LOCATIONS SHALL BE CAST STEEL CONDUIT BODIES. IN CONCEALED LOCATIONS, THEY SHALL BE SHEET STEEL BOXES WITH GALVANIZED OR SHERARIZED FINISH, NEOPRENE GASKETED, SCREWED COVERS.

SHEET STEEL BOXES SHALL BE STANDARD ONE-PIECE KNOCKOUT BOXES. WHERE OUTLETS ARE INSTALLED IN CONCRETE SLABS, BOXES SHALL BE CONCRETE CAST TYPE BOXES. BOXES SHALL NOT BE LESS THAN 4" IN DIAMETER AND 1-1/2" DEEP. OUTLET BOXES SET IN CONCRETE SHALL BE SET TO HAVE FINAL OPENING FLUSH WITH FINISH SURFACE.

CAST-METAL CONDUIT BODIES SHALL BE CROUSE-HINDS CONDUITS, APPLETON UNLETS, OR APPROVED EQUIVALENT. BOXES SHALL BE ARRANGED WITH THREADED CONNECTORS FOR RIGID CONDUIT. ALL CONDUIT BODIES SHALL HAVE SUITABLE COVERS, WHICH SHALL BE PROVIDED WITH GASKET FOR EXTERIOR AND MOST LOCATIONS.

POWER / PHONE FLOOR OUTLETS SHALL BE STEEL CITY #664 WITH # 664CST COVER (VERIFY COLOR), #664-BP PHONE PLATE, #664RP RECEPTACLE PLATE AND 20A DUPLEX RECEPTACLE. PHONE COMPARTMENT TO HAVE 3/4" E.C. TO CEILING SPACE WA FLOOR / WALL.

OUTLETS SET IN FURRED CEILING AND STUD WALLS SHALL BE ANCHORED TO THE CEILING OR WALL STRUCTURE WITH SUITABLE STEEL STRAPS.

OUTLET BOXES SHALL BE USED AS PULL AND JUNCTION BOXES WHEREVER POSSIBLE AND WHERE REQUIRED. BOXES IN PLASTERED WALLS OR CONCRETE BLOCK WALLS IN FINISHED AREAS AND CEILINGS SHALL HAVE TWO GANG RASSED PLASTER RINGS AND BLANK WALL PLATE. OTHER BOXES SHALL HAVE BLANK COVERS.

WHERE OTHER THAN OUTLET BOXES ARE REQUIRED, PULL AND JUNCTION BOXES SHALL BE CONSTRUCTED OF GALVANIZED STEEL CONFIRMING TO CODE REQUIREMENTS. EXTERIOR BOXES SHALL BE OF WEATHERPROOF CONSTRUCTION AND SHALL BE PROVIDED WITH NEOPRENE COVER GASKETS. BOXES SHALL BE RIGIDLY ATTACHED TO THE STRUCTURE, INDEPENDENT OF ANY CONDUIT SUPPORT.

HANGERS / INSERTS

FURNISH AND INSTALL ALL UNISTRUT, HANGERS, SUPPORTS, ETC. REQUIRED FOR WORK UNDER THIS DIVISION. SUPPORT CONDUIT FROM BUILDING STRUCTURE, NOT FROM CEILING SUPPORTS. BRANCH CIRCUIT CONDUIT 3/4" AND SMALLER MAY BE RUN FROM CEILING SUPPORTS USING SPRING STEEL CLIPS.

CONCRETE, EXCAVATION, FILL, BACKFILL

FURNISH ALL CONCRETE, EXCAVATION, FILL, BACKFILL AND STEEL REQUIRED FOR THIS WORK UNLESS SPECIFICALLY NOTED OTHERWISE.

ALL CONCRETE, FILL, BACKFILL, STEEL, ETC., WHERE REQUIRED SHALL BE IN STRICT ACCORDANCE WITH SPECIFICATIONS SET UP IN OTHER DIVISIONS

OF THE SPECIFICATIONS.

FINAL LOCATION OF SURFACE FEATURES

SHALL BE ACCOMPLISHED IN THE FIELD, SUBJECT TO THE APPROVAL OF THE ARCHITECT. THE LOCATION OF ALL SWITCHES, FIXTURES, PANELS, ETC. AND THEIR PROXIMITY AND RELATIONSHIP TO ALL VISIBLE FEATURES OF EQUIPMENT FURNISHED BY OTHER TRADES, SHALL BE MADE KNOWN TO THE ARCHITECT. IN CASE OF CONFLICT BETWEEN TRADES, OR BETWEEN A TRADE AND THE ARCHITECT, THE DECISION OF THE ARCHITECT SHALL BE FINAL, AND HIS INSTRUCTIONS IN THESE MATTERS SHALL BE FOLLOWED BY ALL CONCERNED.

PAINTING

ALL EXPOSED ELECTRICAL EQUIPMENT, CONDUIT, FLUSH PANEL FRONT, TRANSFORMER, SWITCHES, SWITCHBOARDS, PANELS AND SIMILAR ITEMS SHALL BE PAINTED AS SPECIFIED UNDER THE PAINTING SECTION OF THESE SPECIFICATIONS.

CLEANING UP PREMISES

AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH CAUSED BY EMPLOYEES. METAL FLOOR PANS SHALL BE PROVIDED PIPE THREADING MACHINES AND BENCHES AND SHALL BE USED AT ALL TIME TO PREVENT CONCRETE FLOORS BECOMING OIL SOAKED. UPON COMPLETION OF THE JOB, REMOVE ALL DEBRIS, CLEAN ALL SWITCHPLATES, FIXTURES, PANEL TRIMS AND IN GENERAL, LEAVE THE PREMISES IN A CLEAN AND TIDY CONDITION.

ACCEPTABLE MANUFACTURERS

THE FOLLOWING IS A LIST OF MANUFACTURERS WHOSE SPECIFICATION GRADE EQUIPMENT IS ACCEPTABLE AS TO MANUFACTURER. SUBSTITUTIONS SHALL NOT CAUSE OR CONTRIBUTE TO CHANGES UNLESS THESE CHANGES ARE APPROVED BY THE ARCHITECT PRIOR TO SUBSTITUTION.

ITEMS: CAREFUL CHECKING MUST BE MADE TO VERIFY THAT THE EQUIPMENT WILL MEET ALL CAPACITIES, REQUIREMENTS, SPACE ALLOCATIONS, AND THAT THE WEIGHTS ARE NOT EXCESSIVE.

POWER DISTRIBUTION EQUIPMENT: SQUARE D, SIEMENS, CHALLENGER, SUN VALLEY ELECTRIC

WIRE AND CABLES: GENERAL CABLE, ANACONDA, CAPITOL, CIRCLE AW, GENERAL ELECTRIC, OKONITE, ROME, SIMPLEX, KAISER.

LOCAL WALL SWITCHES, RECEPTACLES, PILOT LIGHTS: PASS AND SEYMOUR, SIERRA, BRYANT, CIRTE F, GENERAL ELECTRIC, HUBBELL, RUSSELL & STOLL, ARROW-HART.

DEVICE PLATES: HUBBELL, SLATER, PASS AND SEYMOUR, SIERRA, BRYANT, ARROW-HART, LEVITON.

LAMPS: GENERAL ELECTRIC, PHILLIPS, PENNSYLVANIA.

CONDUIT: TRIANGLE, NATIONAL ELECTRIC CO., JONES-MCLAUGHLIN REPUBLIC.

FITTINGS: THOMAS AND BETTS, APPLETON, CROUSE-HINDS.

CAST OUTLET BOXES: CROUSE-HINDS, APPLETON.

BALLASTS: ADVANCE, GENERAL ELECTRIC, JEFFERSON, WESTINGHOUSE, PENNSYLVANIA, UNIVERSAL.

FLOOR BOXES: HUBBELL, LEW STEEL CITY.

OUTLET BOXES: RACO, STEEL CITY, SLATER.

SHOP DRAWINGS

ALL DATA SHALL BE SUBMITTED AT ONE TIME, BOUND AND INDEXED IN AN ORDERLY MANNER. PRIOR TO STARTING THE WORK, SUBMIT TO THE ARCHITECT FOR APPROVAL, SIX (6) SETS OF SHOP DRAWINGS OF SERVICE ENTRANCE SECTION, SWITCHBOARDS, PANELBOARDS, LIGHTING FIXTURES, TRANSFORMERS AND ALL EQUIPMENT TO BE FABRICATED.

FINAL INSPECTION AND TEST

FURNISH ALL METERS, CABLES, CONNECTIONS AND APPARATUS NECESSARY FOR MAKING TESTS.

TEST SYSTEM FOR SHORTS AND GROUNDS. FAULTY WIRING SHALL BE REMOVED AND REPLACED. ANY DEVICE, APPARATUS OR FIXTURE INSTALLED SHOWING SUBSTANDARD PERFORMANCE SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ARCHITECT.

MEGGER ALL SYSTEM NEUTRALS IN THE PRESENCE OF THE ENGINEER TO INSURE THE NEUTRAL IS NOT GROUNDED WITHIN THE SYSTEM. TEST SHALL BE MADE AFTER ALL BRANCH CIRCUIT WIRING IS INSTALLED AND CONNECTED.

TEST ALL GROUND FAULT RELAYS IN THE PRESENCE OF THE ENGINEER. SET RELAY FOR TIME AND CURRENT RATING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.

ALL EQUIPMENT RATED AT 1,000 AMPS OR MORE, OR 480 VOLTS SHALL BE TESTED FOR INSULATION BREAKDOWN PRIOR TO ITS BEING ENERGIZED. SUCH EQUIPMENT SHALL WITHSTAND FOR A PERIOD OF ONE MINUTE WITHOUT BREAKDOWN, THE APPLICATIONS OF A 60HZ ALTERNATING POTENTIAL OF 1,000V PLUS TWICE THE RATED VOLTAGE OF THE DEVICE. TEST SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER.

HIGH POTENTIAL TESTING

THE HIGH-POTENTIAL TESTS SHALL BE MADE BY AN INDEPENDENT COMPANY HIRED BY THE ELECTRICAL CONTRACTOR. COPIES OF THE REPORT CERTIFIED BY A REGISTERED ENGINEER, SHALL BE FORWARDED TO THE ARCHITECT WITHIN TWO (2) WEEKS AFTER THE TESTS ARE PERFORMED.

TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. "HI-POT" TEST VOLTAGES AND TIMES SHALL BE COORDINATED WITH AND DETERMINED BY THE OWNER'S REPRESENTATIVE WHEN ANY OTHER CABLE OR DEVICES, OTHER THAN THAT INSTALLED NEW BY ELECTRICAL CONTRACTOR UNDER HIS CONTRACT, IS TO BE INCLUDED IN THE TEST PROCEDURES. CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE, IN WRITING, HIS INTENTIONS TO PERFORM THE HI-POTTING TEST, INCLUDING TIME AND DATE AND THE TESTING AGENCY.

IN GENERAL TESTS SHALL BE CONDUCTED AS FOLLOWS:

MAXIMUM D.C. VOLTAGES 52.8 KV.

BUILD-UP TIME TO TEST VOLTAGE - ONE (1) MINUTE IN 10 KV DC STEPS WITH RECORDED MILLI-AMP READINGS AT 156, 30 AND 45 SECONDS.

HOLDING TIME AT TEST VOLTAGE - FIVE (5) MINUTES, WITH RECORDED MILLI-AMP READING AT THE END OF EACH MINUTE.

"DECAY TIME" SHALL BE RECORDED WITH SHUT-OFF AT APPROXIMATELY 1-3 KV.

THE "HI-POT" TEST SHALL NOT BE MADE UNTO ANY PORTION OF AN

ENERGIZED DEVICE. SUFFICIENT TIME LAG SHALL BE ALLOWED IN THE INSTANT REQUEST FOR THE OWNER TO SET UP A DEFINITE PERIOD OF TESTING IF ANY PORTION OF THE OWNER'S DISTRIBUTION SYSTEM IS INVOLVED.

GROUNDING

THE NEUTRAL CONDUCTORS AND ALL OTHER EXPOSED NON-CURRENT CARRYING METAL PARTS AS REQUIRED BY CODE SHALL BE GROUNDED. GROUNDING BUSHING SHALL BE USED AS REQUIRED AND SHALL BE 0.2" INSULATED TYPE BL OR APPROVED EQUAL. NO GROUNDING SHALL BE MADE TO GAS PIPING. WHERE EQUIPMENT OR DEVICES ARE SERVED BY NON-METALLIC DUCTS, ENCLOSURES SHALL BE GROUNDED BY MEANS OF A CODE SIZE BARE OR GREEN INSULATED EQUIPMENT GROUND WIRE INSTALLED IN THE DUCT WITH THE CURRENT CARRYING CONDUCTORS AND BE BONDED SECURELY IN EACH CABINET TERMINATING THE GROUND WIRE. COPPER JUMPERS SHALL BRIDGE FLEXIBLE CONDUIT AND BE INSTALLED IN THE CONDUIT. ALL SERVICE GROUNDS SHALL BE IN ACCORDANCE WITH THE USER GROUND.

ALL EMT, FLEXIBLE CONDUIT, MC CABLE, OR PVC CONDUIT SHALL BE PROVIDED WITH AN INSULATED GREEN GROUND WIRE.

16700 COMMUNICATIONS

16740 TELEPHONE

PROVIDE EMPTY CONDUIT OR DUCT WITH "JET-LINE" OR EQUAL POLYPROPYLENE PULL LINE AND TERMINAL MOUNTING BOARD AS SHOWN ON DRAWINGS.

USE LARGE RADIUS RIGID GALVANIZED STEEL CONDUIT FOR BENDS AND OFFSETS IN DUCT RUNS.

ALL CONDUIT RUNS TO TELEPHONE OUTLET BOXES SHALL BE A MINIMUM OF 3/4" AND HAVE A MAXIMUM OF TWO 90 DEGREE BENDS.

TELEPHONE TERMINAL BOARDS SHALL BE 3/4" FIR PLYWOOD, GRADE CC PLUS SIZE, AS INDICATED ON DRAWINGS. TELEPHONE TERMINAL CABINETS SHALL HAVE THE DOOR FASTENED TO THE TRIM WITH CONCEALED HINGES AND BE PROVIDED WITH FLUSH TYPE COMBINATION LATCH AND LOCK, KEYS TO MATCH LIGHTING PANELS, CABINETS AND TRIM SHALL BE FACTORY PAINTED WITH TWO FINISH COATS.

PROVIDE ALL NECESSARY MATERIAL AND LABOR REQUIRED BY THE TELEPHONE COMPANY FOR DELIVERING SERVICE TO THE TELEPHONE TERMINAL BOARD. ALL CONDUIT, TRENCHING AND BACKFILL SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH THE TELEPHONE COMPANY STANDARDS.

16800 DATA

ALL CONDUIT RUNS TO DATA OUTLET BOXED SHALL BE A MINIMUM OF 3/4" AND HAVE A MAXIMUM OF TWO 90 DEGREE BENDS.

ALL DATA OUTLETS ARE TO HAVE WALL PLATES TO MATCH THE DEVICE PLATE.

GUARANTEE

GUARANTEE ALL MATERIAL, EQUIPMENT, AND WORKMANSHIP FOR ALL SECTIONS UNDER THIS DIVISION IN WRITING TO BE FREE FROM DEFECT OF MATERIAL AND WORKMANSHIP FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. REPLACE WITHOUT CHARGE, ANY MATERIAL OR EQUIPMENT FOUND DEFECTIVE DURING THIS PERIOD. THE GUARANTEE SHALL INCLUDE PERFORMANCE OF THE EQUIPMENT UNDER ALL CONDITIONS OF LOAD, INSTALLING ANY ADDITIONAL ITEMS OF CONTROL AND/OR PROTECTIVE DEVICES AS REQUIRED.

GENERAL ELECTRICAL NOTES

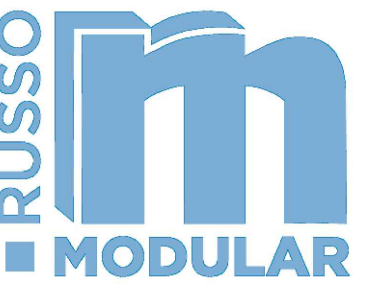


# FINISH SCHEDULE

| ID TAG                              | MATERIAL         | MANUFACTURER     | MODEL                                    | REMARKS  |
|-------------------------------------|------------------|------------------|--|--|
| <b>ZONE 1 (BODY AND TOWER)</b>      |                  |                  |  |  |
| 1                                   | CORRUGATED METAL | WESTERN STATES   | WESTERN RIB 7.2 PANELS 24 GA             | PREFINISHED COLOR SILVER ZINC MATTE FINISH       |
| 2                                   | CORRUGATED METAL | WESTERN STATES   | WESTERN WAVE 16.0 PANELS 24 GA           | PREFINISHED MATTE CHARCOAL GRAY                  |
| 3                                   | LAP SIDING       | JAMES HARDIE     | WOODTONE RUSTIC SERIES 9 1/4" WIDE       | PRE-FINISHED SAND CASTLE                         |
| <b>FLASHING, COLUMNS AND CANOPY</b> |                  |                  |  |  |
| 4                                   | PAINTED STEEL    | SHERWIN WILLIAMS | COLOR TO MATCH DEVELOPMENT METAL AWNINGS | SW4026 SLATE GRAY                                |
| 5                                   | PAINTED STEEL    | WESTERN STATES   | PREFINISHED PARAPET CAP                  | COLOR SILVER ZINC MATTE                          |
| 6                                   | PAINTED STEEL    | SHERWIN WILLIAMS | PREFINISHED PARAPET CAP                  | COLOR MATTE CHARCOAL GRAY                        |
| 7                                   | MASONRY          | ANGELUS BLOCK    | SMOOTH FACE                              | COLOR ONXY TO MATCH APPROVED DEVELOPMENT PALETTE |

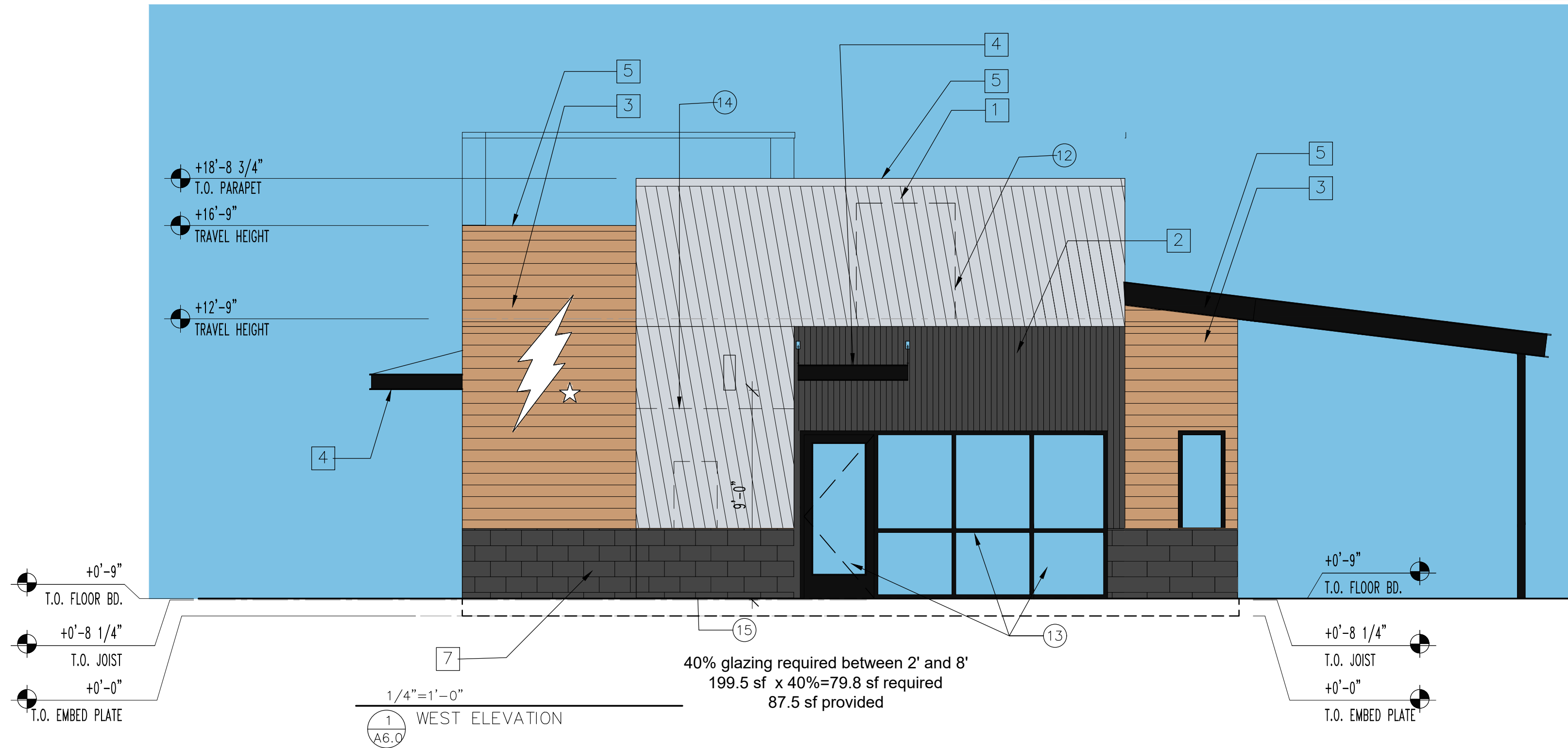
## KEY NOTES

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. DOWNSPOUT DAYLIGHT.
7. EXTERIOR LIGHTING AT 9"-2" AFF. TYP OF (7), CAP FLASHING.
8. AWNING CORRUGATED METAL PANEL.
9. RTU - SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
10. SCREENED ROOFTOP MECHANICAL.
11. GLAZING AT DOOR AND THIS ENTIRE STOREFRONT TO BE DARK TINTED GLASS.
12. SCREEN WALL.
13. WALL MOUNTED ELECTRIC METER AND DISCONNECT TO BE PAINTED TO MATCH SURROUNDING WALL COLOR.



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

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH SHALL REMAIN THE PROPERTY OF RUSSO LLC. UNAUTHORIZED USE OF REPRODUCTION WITHOUT PERMISSION IS PROHIBITED.



SIGNS WILL BE REVIEWED FOR COMPLIANCE AND APPROVED THROUGH THE SIGNAGE PERMIT PROCESS



BLACK ROCK COFFEE  
MODULAR BUILDING



NOT FOR CONSTRUCTION

CONTROL # 001  
JOB NUMBER:  
DATE: 2-4-25  
CONTENTS:  
EXTERIOR ELEVATIONS

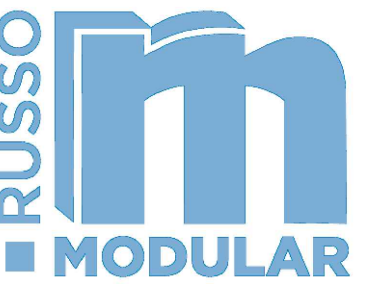
A6.0

# FINISH SCHEDULE

| ID TAG                              | MATERIAL         | MANUFACTURER     | MODEL                                    | REMARKS  |
|-------------------------------------|------------------|------------------|--|--|
| <b>ZONE 1 (BODY AND TOWER)</b>      |                  |                  |  |  |
| 1                                   | CORRUGATED METAL | WESTERN STATES   | WESTERN RIB 7.2 PANELS 24 GA             | PREFINISHED COLOR SILVER ZINC MATTE FINISH       |
| 2                                   | CORRUGATED METAL | WESTERN STATES   | WESTERN WAVE 16.0 PANELS 24 GA           | PREFINISHED MATTE CHARCOAL GRAY                  |
| 3                                   | LAP SIDING       | JAMES HARDIE     | WOODTONE RUSTIC SERIES 9 1/4" WIDE       | PRE-FINISHED SAND CASTLE                         |
| <b>FLASHING, COLUMNS AND CANOPY</b> |                  |                  |  |  |
| 4                                   | PAINTED STEEL    | SHERWIN WILLIAMS | COLOR TO MATCH DEVELOPMENT METAL AWNINGS | SW4026 SLATE GRAY                                |
| 5                                   | PAINTED STEEL    | WESTERN STATES   | PREFINISHED PARAPET CAP                  | COLOR SILVER ZINC MATTE                          |
| 6                                   | PAINTED STEEL    | SHERWIN WILLIAMS | PREFINISHED PARAPET CAP                  | COLOR MATTE CHARCOAL GRAY                        |
| 7                                   | MASONRY          | ANGELUS BLOCK    | SMOOTH FACE                              | COLOR ONXY TO MATCH APPROVED DEVELOPMENT PALETTE |

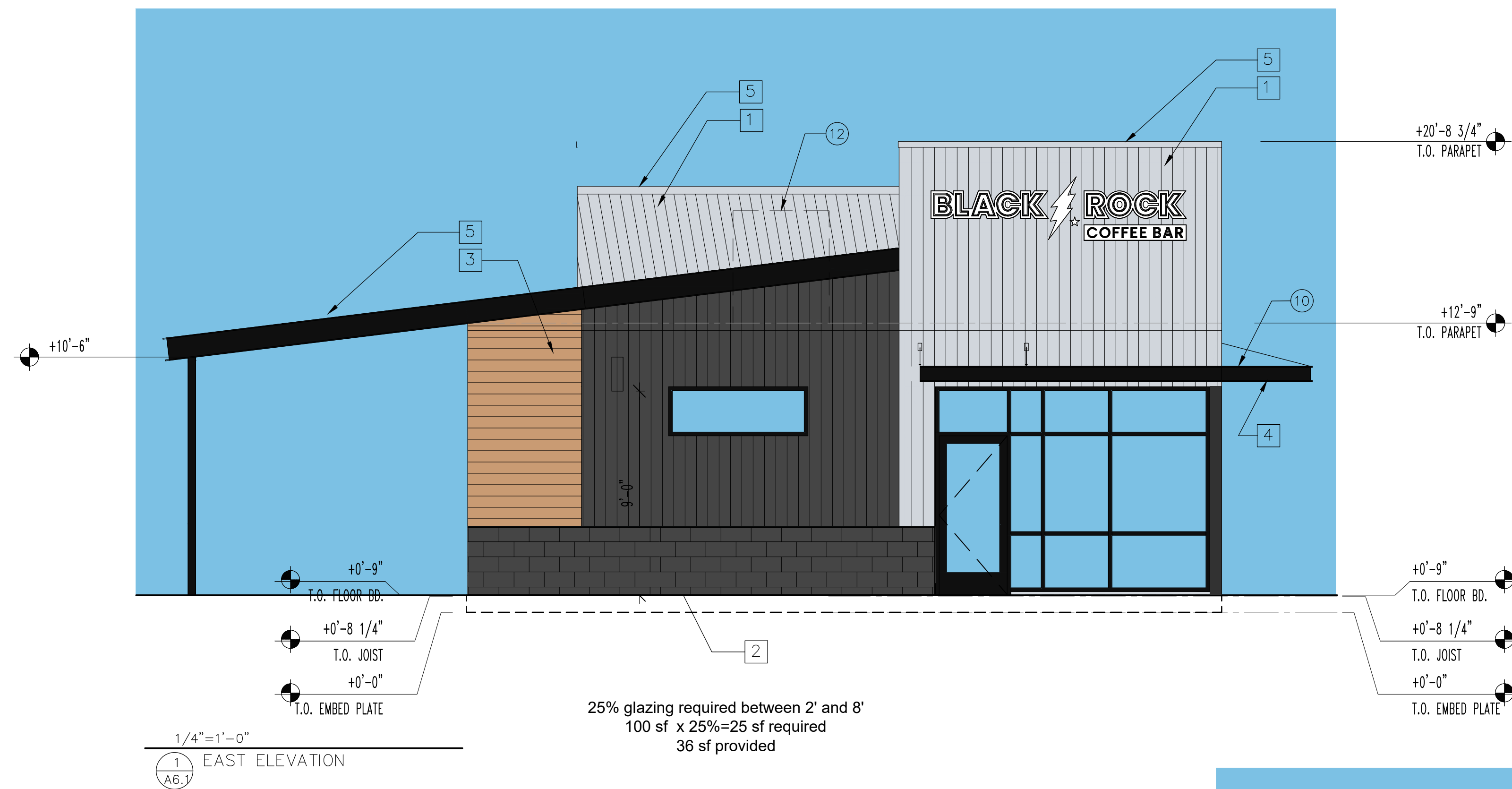
## KEY NOTES

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), CAP FLASHING.
9. AWNING CORRUGATED METAL PANEL.
10. RTU - SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
11. SCREENED ROOFTOP MECHANICAL.
12. NOT USED
13. NOT USED
14. SCREEN WALL



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

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH SHALL REMAIN THE PROPERTY OF RUSSO LLC. UNAUTHORIZED USE OF REPRODUCTION WITHOUT PERMISSION IS PROHIBITED.



SIGNS WILL BE REVIEWED FOR COMPLIANCE AND APPROVED THROUGH THE SIGNAGE PERMIT PROCESS



BLACK ROCK COFFEE  
MODULAR BUILDING



NOT FOR  
CONSTRUCTION

CONTROL # 001  
JOB NUMBER:  
DATE: 2-4-25  
CONTENTS:  
EXTERIOR ELEVATIONS

A6.1