

SECTION 32 8400 - LANDSCAPE IRRIGATION SYSTEM

PART 1 - GENERAL

- 1.01 DESCRIPTION OF WORK
A. THE WORK CONSISTS OF INSTALLING A COMPLETE UNDERGROUND IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREAFTER. THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT, MATERIALS, AND PERMITS NECESSARY FOR THE COMPLETION OF THE SYSTEM OR, UNLESS SPECIFIED, TO BE FURNISHED BY OTHERS.
B. THE IRRIGATION SYSTEM SHALL INCLUDE THE FURNISHING, INSTALLATION, AND TESTING OF ALL PIPES, FITTINGS, VALVES, HEADS, CONTROLLERS, WIRES, AIR RELEASE, AND VACUUM VALVES, BACKFLOW PREVENTERS, INLET, AND DISCHARGE PIPING; AUTOMATIC DRAIN VALVES, MANUAL DRAIN VALVES, VALVE BOXES, WATER METERS, AND OTHER COMPONENTS PERTINENT TO THE SYSTEM, OR OTHERWISE NOTED ON THE DRAWINGS.
C. THE CONTRACTOR SHALL PERFORM ALL TRENCHING, EXCAVATING, BORING, BACKFILLING, COMPACTING, CONCRETE WORK, ELECTRICAL WORK, WELDING, AND ANY OTHER WORK NECESSARY TO COMPLETE THE IRRIGATION SYSTEM.

- 1.02 SITE INVESTIGATION
A. THE CONTRACTOR SHALL EXAMINE RELATED WORK AND SURFACES BEFORE STARTING THE WORK OF THIS SECTION. IN WRITING, THE CONTRACTOR SHALL REPORT TO THE OWNER'S REPRESENTATIVE CONDITIONS THAT COULD PREVENT THE PROPER EXECUTION OF IRRIGATION INSTALLATION. DEVIATIONS FROM DRAWINGS AND SPECIFICATIONS SHALL BE EXECUTED ONLY WITH THE EXPRESS PERMISSION OF THE OWNER'S REPRESENTATIVE AND AT NO COST TO THE OWNER. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING BEFORE PROCEEDING WITH THE SYSTEM'S INSTALLATION OF OBVIOUS INADEQUACIES OR INAPPROPRIATE DESIGN ON THE DRAWINGS.

- 1.03 CODES, RULES, AND SAFETY ORDERS
A. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE LATEST LOCAL RULES AND REGULATIONS OF SAFETY.
1.04 PROTECTION
A. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL WARNING SIGNS, SHORING, BARRICADES, RED LANTERNS, AND OTHER PROTECTION DEVICES, AS REQUIRED BY THE DIVISION OF INDUSTRIAL SAFETY ORDERS AND LOCAL ORDINANCES.

- 1.05 DEVIATIONS OF LAYOUT
A. REASONABLE CHANGES IN THE LOCATION OF PIPING, VALVES, OR OTHER IRRIGATION COMPONENTS ON THE DRAWINGS MAY BE CONSIDERED BEFORE INSTALLATION.
B. THE OWNER'S REPRESENTATIVE MUST APPROVE DEVIATIONS FROM SPECIFIED LOCATIONS BEFORE INSTALLATION.
C. ANY CHANGES IN THE LOCATION OF IRRIGATION COMPONENTS SHALL BE AT NO COST TO THE OWNER.

- 1.06 COORDINATION
A. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH OTHER ON-SITE CONTRACTORS TO ENSURE RAPID AND EFFICIENT COMPLETION OF ALL CONTRACTED WORK.

- 1.07 SUBMITTALS
A. THE CONTRACTOR SHALL PREPARE AND MAKE FIVE SETS OF SUBMITTALS PROVIDING THE MANUFACTURER'S SPECIFICATIONS AND "CUT SHEETS" ON THE FOLLOWING COMPONENTS:
1.1. MANUAL AND AUTOMATIC VALVES.
2. BACKFLOW PREVENTER.
3.24 VOLT WIRE.
4. PIPING AND TUBING.
5. JOINT MATERIALS.
6. PVC PRIMER AND CEMENT.
7. HEADS.
8. VALVE BOXES.
9. WIRE SPLICING MATERIALS.
10. PVC FITTINGS.
11. DETECTABLE LINE MARKING TAPE.
12. ENCLOSURES.
13. DRAINS.
14. CONTROLLER.
15. FILTERS.
16. THREADED JOINT SEALANT OR TAPE.
B. EACH SET OF SUBMITTALS SHALL BE BOUND OR PROVIDED ELECTRONICALLY IN PDF FORMAT AND CLEARLY LABELED WITH THE PROJECT NAME AND DATE.
C. THE CONTRACTOR SHALL NOT PROCEED WITH THE IRRIGATION SYSTEM WORK UNTIL THE OWNER'S REPRESENTATIVE APPROVES THE IRRIGATION SUBMITTALS.

- 1.08 RECORD DRAWINGS
A. THE CONTRACTOR SHALL PROVIDE AN UPDATED SET OF "RECORD DRAWINGS," SHOWING DAILY CHANGES TO THE IRRIGATION INSTALLATION AND OTHER CHANGES FROM THE ORIGINAL DRAWINGS AND SPECIFICATIONS. ALL GATE VALVES, MANUAL DRAINS, WIRE SPLICE, AND AUTOMATIC AND MANUAL VALVE LOCATIONS SHALL BE SHOWN WITH ACTUAL MEASUREMENTS TO REFERENCE POINTS TO BE EASILY LOCATED IN THE FIELD.
B. AT THE TIME OF FINAL ACCEPTANCE, THE CONTRACTOR SHALL FURNISH ONE ELECTRONIC COPY AND ONE PAPER COPY OF "RECORD DRAWINGS" PREPARED BY A QUALIFIED DRAFTSPERSON IN AUTOCAD FORMAT, SHOWING THE ENTIRE COMPLETED SYSTEM AS INSTALLED. THIS DRAWING SHALL BE ACCURATE AND TO SCALE. THE SYMBOLS FOR VALVES, HEADS, PIPING AND OTHER COMPONENTS SHALL BE THE SAME AS ORIGINALLY SHOWN ON THE DRAWINGS. DRAFT THE CHANGES ON A HARD COPY OF THE IRRIGATION SHEETS. ADD ANY ADDITIONAL CHANGES TO THE IRRIGATION LEGEND, PLANS, AND DETAILS. THE FINAL DRAWINGS SHALL BE DATED AND CLEARLY LABELED "RECORD DRAWING."

PART 2 - PRODUCTS

- 2.01 MATERIALS
A. ALL MATERIALS SHALL BE NEW AND WITHOUT FLAWS OR DEFECTS OF ANY TYPE AND BE THE BEST OF THEIR CLASS AND KIND. ALL MATERIALS SHALL HAVE A MINIMUM WARRANTY OF ONE YEAR AGAINST MATERIAL DEFECTS OR DEFECTIVE QUALITY.
B. ALL MATERIALS SHALL BE THE BRANDS, AND TYPES NOTED ON THE DRAWINGS, AS SPECIFIED HEREIN, OR APPROVED EQUAL.
C. THE IRRIGATION SYSTEM WAS DESIGNED AROUND EQUIPMENT MANUFACTURED BY SPECIFIC COMPANIES AS A STANDARD. APPROVED EQUAL EQUIPMENT BY OTHER MANUFACTURERS MAY BE USED ONLY WITH THE APPROVAL OF THE OWNER'S REPRESENTATIVE. SUBMIT A REQUEST FOR APPROVAL OF NON-SPECIFIED MATERIALS TO THE OWNER'S REPRESENTATIVE SEVEN (7) DAYS BEFORE THE OPENING OF BIDS. SUBMISSION OF IRRIGATION SPRINKLER HEADS FOR APPROVAL AS EQUAL SHALL ONLY BE CONSIDERED IF SUBMITTED HEADS MATCH THE PRECIPITATION RATE, GALLONS PER MINUTE, AND SPACING OF SPECIFIED SPRINKLER HEADS.
D. MARK IRRIGATION COMPONENTS FOR USE WITH RECYCLED WATER PER THE UNIFORM PLUMBING CODE.

- 2.02 PVC PIPE AND FITTINGS
A. ALL MAINLINE PVC PIPE, FROM THE POINT OF CONNECTION TO THE ZONE VALVE, WITH A DIAMETER OF TWO INCHES (2") OR LESS SHALL BE SCHEDULE 40 PVC AND SHALL CONFORM TO ASTM D 1785; MAINLINE PIPE WITH A

- DIAMETER OF TWO AND ONE-HALF INCHES (2-1/2") OR GREATER SHALL BE CLASS 200 "O" RING GASKET PIPE, SDR 21; LATERAL LINE PIPING DOWNSTREAM OF THE ZONE VALVES WHICH IS 2-1/2" IN DIAMETER AND GREATER SHALL BE CLASS 200 SDR 21 AND SHALL CONFORM TO ASTM D 2241. LATERAL LINE PIPING DOWNSTREAM OF THE ZONE VALVES, WHICH IS TWO INCHES (2") IN DIAMETER OR LESS, SHALL BE SCHEDULE 40 PVC AND CONFORM TO ASTM D 1785. ALL PVC PIPES SHALL BE CONTINUOUSLY MARKED WITH IDENTIFICATION OF THE MANUFACTURER, TYPE, CLASS, AND SIZE AND SHALL BE FREE OF HOLES, FOREIGN MATERIAL, BLISTERS, WRINKLES, DENTS, OR SUNBURN.
B. POLYETHYLENE PIPE SHALL BE LINEAR, LOW DENSITY POLYETHYLENE DRIP TUBING WITH 50 PSI MAXIMUM OPERATING PRESSURE AT 100 DEGREE F, COMPATIBLE WITH ALL STANDARD 3/4" (OD) TUBING.
C. FITTINGS ON PVC LINES SHALL BE SCHEDULE 40 PVC, TYPE 1, CELL CLASSIFICATION 12454, AND COMPLY WITH ASTM D 2466.
D. FITTINGS FOR POLYETHYLENE PIPE SHALL BE PVC BARBED INSERT FITTINGS, CONFORMING TO ASTM D 2609.
E. CLAMPS FOR FITTINGS ON POLYETHYLENE PIPE SHALL BE KEYSTONE SAE "TYPE" J' STAINLESS STEEL PINCH CLAMPS OR EQUAL.
F. ALL THREADED PVC NIPPLES SHALL BE SCHEDULE 80 MOLDED PVC PIPE.
G. ALL GALVANIZED NIPPLES SHALL BE SCHEDULE 40 GALVANIZED STEEL PIPE.

- 2.03 VALVES AND VALVE BOXES
A. VALVES: VALVES FOR USE IN ELECTRICALLY CONTROLLED AUTOMATIC CONTROL SYSTEMS SHALL BE DIAPHRAGM ACTUATED AND HYDRAULICALLY OPERATED SOLENOID VALVES AS SPECIFIED ON THE DRAWINGS.
B. GATE VALVES SHALL BE AS SPECIFIED ON THE DRAWINGS.
C. VALVE BOXES: VALVE BOXES SHALL BE AS NOTED ON THE DRAWINGS. VALVE BOX COLORS SHALL BE AS FOLLOWS:
1. GREEN: TURF AREAS (POTABLE WATER.)
2. TAN: GRAVEL MULCH AREAS (POTABLE WATER.)
3. PURPLE: RECLAIMED WATER.

- 2.04 HEADS
A. HEADS SHALL BE AS SPECIFIED ON THE DRAWINGS.

- 2.05 CONTROLLER
A. THE CONTROLLER SHALL BE AS SPECIFIED ON THE DRAWINGS.

- 2.06 BACKFLOW PREVENTER
A. THE BACKFLOW PREVENTION DEVICE SHALL BE AS SPECIFIED ON THE DRAWINGS.

- 2.07 PRIMER, CEMENT, AND THREADED JOINT SEALANT
A. THE PRIMER SHALL CONFORM TO ASTM F 656 AND MEET NSF. CEMENT SHALL BE LOW VOC, NSF APPROVED, AND MEET ASTM D 2564. CEMENT AND PRIMER SHALL BE IPS WELD-ON DEPENDING ON THE SIZE AND SCHEDULE OF PIPE AND FITTINGS AS FOLLOWS:
1. SCHEDULE 40 PVC PIPE AND FITTINGS UP TO 6" DIA.: P-68 PRIMER AND 705 CEMENT
2. SCHEDULE 80 PVC PIPE AND FITTINGS UP TO 4" DIA.: P-70 PRIMER AND 705 CEMENT
3. SCHEDULE 80 PVC PIPE AND FITTINGS LARGER THAN 4" DIA.: P-70 PRIMER AND 711 CEMENT

- B. ALL THREADED CONNECTIONS BETWEEN METAL TO METAL, PVC TO METAL, AND PVC TO PVC SHALL BE MADE USING SPEARS BLUE 75 THREAD SEALANT OR POLYETRAFLUOROETHYLENE (PTFE) THREAD SEAL TAPE. PTFE THREAD SEAL TAPE SHALL COMPLY WITH MIL-T-27730A SPECIFICATIONS, HAVE A MINIMUM THICKNESS OF 3.5 MILS, AND BE 99% PURE PTFE. DO NOT USE THREAD SEALING COMPOUND ON THREADED CONNECTIONS BETWEEN SPRINKLER AND NIPPLE OR BUBBLER AND NIPPLE. USE THREAD SEALANT OR PTFE TAPE PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

- C. ALL "O" RING GASKET AND PIPE SPIGOT END SHALL BE LUBRICATED USING THE LUBRICANT RECOMMENDED OR SUPPLIED BY THE PIPE MANUFACTURER. IF THE PIPE MANUFACTURER DOES NOT PROVIDE A LUBRICANT FOR THE PIPE, USE IPS WELD-ON EZ FLUSH PIPE LUBRICANT, NSF APPROVED

- 2.08 DETECTABLE LINE MARKING TAPE
A. DETECTABLE LINE MARKING TAPE FOR IRRIGATION MAIN AND LATERAL LINES SHALL BE MANUFACTURED BY T.A. CHRISTY ENTERPRISES OR APPROVED EQUAL AND SHALL CONSIST OF A MINIMUM 5.0 MIL (0.0050") OVERALL THICKNESS; FIVE-PLY COMPOSITION; ULTRA-HIGH MOLECULAR WEIGHT; 100% VIRGIN POLYETHYLENE; ACID, ALKALINE, AND CORROSION RESISTANT.
B. THE TAPE WIDTH SHALL BE A MINIMUM OF 6".
C. ELONGATION PROPERTIES SHALL BE PER ASTM D882-80A AND LESS THAN 150% AT BREAK.
D. TENSILE STRENGTH SHALL BE PER ASTM D882-80A AND NOT LESS THAN 7800 PSI.

- E. THE TAPE SHALL HAVE A MINIMUM 20-GAUGE (0.0020") SOLID ALUMINUM FOIL CORE, ADHERED TO A 2.55 MIL (0.00255") POLYETHYLENE BACKING.
F. TAPE COLOR AND LEGEND COMBINATION SHALL BE FOLLOWING APWA REQUIREMENTS. THE COLOR SHALL BE BLUE FOR IRRIGATION LINES WITH POTABLE WATER SUPPLY, AND THE LEGEND SHALL READ "CAUTION: IRRIGATION LINE BURIED BELOW." THE COLOR FOR IRRIGATION LINES WITH NON-POTABLE WATER SUPPLY SHALL BE PURPLE, AND THE LEGEND SHALL READ "CAUTION: RECYCLED/RECLAIMED WATER LINE BURIED BELOW."

- 2.09 OTHER MISCELLANEOUS FITTINGS AND MATERIALS
A. ALL OTHER MISCELLANEOUS FITTINGS AND MATERIALS SHALL BE AS SPECIFIED ON THE DRAWINGS.

PART 3 - EXECUTION

- 3.01 GENERAL
A. THIS SECTION INCLUDES SPECIFICATIONS FOR ALL ITEMS INSTALLED AS A PART OF THE IRRIGATION SYSTEM BUT IS NOT LIMITED TO OTHER CONSTRUCTIONS OR MINOR EQUIPMENT INSTALLATION NECESSARY FOR THE SYSTEM NOT INDICATED HEREIN. IN ANY CASE, THE CONTRACTOR SHALL INSTALL ALL MATERIALS AND EQUIPMENT NEATLY AND PROFESSIONALLY PER THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS, LOCAL AND STATE CODES, AS SHOWN ON THE DRAWINGS, AND AS SPECIFIED HEREIN.

- 3.02 PRODUCT HANDLING
A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT PROCEDURES IN LOADING, UNLOADING, STACKING, TRANSPORTING, AND HANDLING ALL MATERIALS FOR THE SYSTEM. THE CONTRACTOR SHALL AVOID ROUGH HANDLING, WHICH MAY AFFECT THE EQUIPMENT'S USEFUL LIFE. HANDLE PIPES FOLLOWING THE MANUFACTURER'S RECOMMENDATIONS ON LOADING, UNLOADING, AND STORAGE.

- 3.03 POINT OF CONNECTION
A. EXISTING WATER MAIN LINE LOCATIONS SHOWN ON THE DRAWINGS ARE SCHEMATIC. THE CONTRACTOR SHALL FILL POTHOLES AND FIELD-CHECK TO DETERMINE ACTUAL LOCATIONS AS AN INCIDENTAL REQUIRE TO THE CONSTRUCTION CONTRACT.

- B. THE PROPOSED CONTROLLER LOCATION INDICATED ON THE DRAWINGS IS APPROXIMATE. THE OWNER'S REPRESENTATIVE SHALL DETERMINE THE CONTROLLER'S LOCATION IN THE FIELD.

- C. WHERE CONNECTIONS TO EXISTING PIPE OR STUB OUT ARE REQUIRED, THE CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS IF THE PIPE OR STUB-OUT IS NOT EXACTLY AS SHOWN, AT NO ADDITIONAL COST TO THE OWNER.

- 3.04 STATIC PRESSURE TEST
A. THE DESIGN PRESSURE OF THE IRRIGATION SYSTEM IS SHOWN ON THE DRAWINGS. BEFORE THE CONSTRUCTION OF THE IRRIGATION SYSTEM, THE CONTRACTOR SHALL, IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE, PROVIDE A GAUGED TEST OF AVAILABLE STATIC PRESSURE AT THE POINT OF CONNECTION. IF THE ACTUAL STATIC PRESSURE IS LESS THAN THE DESIGN STATIC PRESSURE, THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK UNTIL THE OWNER'S REPRESENTATIVE PROVIDES WRITTEN DIRECTION.

- 3.05 EXCAVATION AND TRENCHING
A. THE CONTRACTOR SHALL STAKE THE LOCATION OF EACH PIPE RUN AND ALL SPRINKLER HEADS AND VALVES BEFORE TRENCHING. THE OWNER'S REPRESENTATIVE SHALL APPROVE EACH RUN OF THE SYSTEM BEFORE INSTALLATION.

- B. EXCAVATION AND TRENCHING FOR PIPELINES SHALL BE A TRUE AND STRAIGHT LINE, WITH THE TRENCH BANKS AS NEARLY VERTICAL AS PRACTICAL. THE WIDTH OF THE TRENCHES SHALL NOT BE GREATER THAN NECESSARY TO PERMIT PROPER JOINING, TAMPING, BACKFILLING, BEDDING, OR ANY OTHER INSTALLATION PROCEDURES THAT MAY BE NECESSARY. TRENCH WIDTHS SHALL BE WIDE ENOUGH TO PROVIDE A MINIMUM HORIZONTAL AND VERTICAL SEPARATION OF 4" BETWEEN PIPES IN THE SAME TRENCH.

- C. IN AREAS WHERE TREES ARE PRESENT, TRENCH LINES SHALL BE ADJUSTED ON THE SITE TO ELIMINATE ANY DAMAGE TO TREE ROOTS.
D. TRENCH DEPTHS SHALL BE SUFFICIENT TO PROVIDE THE SPECIFIED PIPE COVER AS DESCRIBED ELSEWHERE IN THESE SPECIFICATIONS OR AS NOTED ON THE DRAWINGS. IN ROCKY AREAS, INCREASE THE TRENCH DEPTH AND WIDTH AS NEEDED TO PROVIDE A MINIMUM OF 6" PIPE BEDDING AT THE BOTTOM AND SIDES OF THE PIPE.
E. DEPTH OF BURY: COVER OVER MAINLINE AND LATERAL PIPING SHALL BE AS NOTED ON THE DRAWINGS.

- 3.06 PIPE AND FITTINGS INSTALLATION
A. INSTALLATION OF PVC PIPE AND FITTINGS SHALL BE PER ASTM D 2774, THE MANUFACTURER'S RECOMMENDATIONS, AND THE PROCEDURES DESCRIBED IN THESE SPECIFICATIONS.
B. EXERCISE CAUTION HANDLING, LOADING, UNLOADING, AND STORING PVC PIPE AND FITTINGS. ALL PVC PIPES SHALL BE STORED AND TRANSPORTED IN A VEHICLE WITH A BED LONG ENOUGH TO ALLOW THE PIPE TO LIE FLAT WITHOUT SUBJECTING IT TO UNDUE BENDING OR CONCENTRATED EXTERNAL LOAD AT ANY POINT. THE PIPE SHALL BE PROTECTED FROM DAMAGE BY EXPOSURE TO SUNLIGHT. REPLACE ANY DENTED, DAMAGED, OR DEFECTIVE PIPE BEFORE OR AFTER LAYING WITH A SOUND PIPE AT NO COST TO THE OWNER.

- C. BEFORE INSTALLATION, CLEAN ALL DIRT AND FOREIGN MATTER INSIDE THE PIPE AND KEEP IT CLEAN DURING AND AFTER LAYING THE PIPE. WHEN WORK IS NOT IN PROGRESS, CLOSE THE PIPE'S OPEN ENDS AND FITTINGS SO THAT NO TRENCH WATER, EARTH, OR OTHER FOREIGN SUBSTANCES ENTERS THE PIPE OR FITTINGS. WHERE PIPE ENDS FOR FUTURE EXPANSION OR CONNECTIONS, THEY SHALL BE VALVED AND CAPPED AS DIRECTED ON THE DRAWINGS.

- D. ASSEMBLE ALL PVC PIPES AND FITTINGS TO PERMIT THE PIPE OR FITTINGS TO BE JOINED AT THE TRUE PARALLEL POSITION OF THE FITTINGS. PLACEMENT OF PIPE WHICH CAUSES EXCESSIVE BENDING AND STRESS ON PIPE AND FITTINGS SHALL NOT BE PERMITTED. NO EXCESS PIPING OR FITTINGS SHALL BE PERMITTED IN THE SYSTEM'S INSTALLATION, AS THIS MAY INCREASE PRESSURE LOSS OR POTENTIAL FOR BLOCKAGE.

- E. BEFORE INSTALLING THE PIPE, REMOVE ALL ROCKS OVER 1-INCH DIAMETER, RUBBISH, AND FROM THE TRENCHES. IF THE ADJACENT SOIL IS ROCKY, THE TRENCHES SHALL BE BEDDED AND FILLED WITH CLEAN DIRT OR SAND TO PROVIDE A MINIMUM OF 6" CLEARANCE BETWEEN THE PIPE AND THE NATIVE SOIL. THE OWNER'S REPRESENTATIVE SHALL APPROVE THE MATERIAL USED FOR PIPE BEDDING AND TRENCH FILLING. THE FULL LENGTH OF EACH SECTION OF THE PIPE SHALL REST SOLIDLY UPON THE PIPE BED, WITH RECESSES EXCAVATED TO ACCOMMODATE BELLS, JOINTS, AND COUPLINGS.

- F. DO NOT LAY PIPE IN WATER OR WHEN TRENCH OR WEATHER CONDITIONS ARE UNSUITABLE FOR THE WORK. REMOVE ANY ENCOUNTERED OR ACCUMULATED WATER IN THE TRENCHES AND EXCAVATIONS TO KEEP THEM FREE AND CLEAR OF WATER DURING THE WORK. DO NOT LAY THE PIPE WHEN THE TEMPERATURE IS 32 DEGREES F OR BELOW.

- G. PVC PIPES EXPAND OR CONTRACT AT THE RATE OF +/- 3/8" PER 100' PER 10 DEGREES F CHANGE OF TEMPERATURE. THEREFORE, INSTALL THE PIPE TO PROVIDE FOR EXPANSION AND CONTRACTION AS PER THE MANUFACTURER'S RECOMMENDATIONS.

- H. THE MINIMUM HORIZONTAL AND VERTICAL CLEARANCE BETWEEN LINES IN THE SAME TRENCH SHALL BE 4".

- I. AFTER INSTALLING ALL PIPING, RISERS, VALVES, THRUST BLOCKS, AND OTHERS, OPEN THE CONTROL VALVE AND RUN A FULL HEAD OF WATER TO FLUSH OUT THE SYSTEM. PROVIDE CAUTION FOR RELEASING ANY ENTRAPPED AIR IN THE SYSTEM. CAP THE RISERS AND TEST THE PRESSURE PER THE SPECIFICATIONS AFTER THOROUGHLY FLUSHING IT. INSTALL THE HEADS AND COMPLETE BACKFILL OPERATIONS AFTER THE PRESSURE TEST.

- 3.07 SOLVENT WELDING PROCEDURE
A. MAKE ALL SOLVENT WELD JOINTS PER THE SOLVENT MANUFACTURER'S RECOMMENDATIONS AND ASTM D 2855.
B. SQUARELY CUT THE PVC PLASTIC PIPE UTILIZING A MITER BOX MOUNTED HACKSAW OR PVC SPECIALTY SAW WITH A BLADE OF 18 OR 24 TEETH PER INCH.
C. REMOVE INTERIOR AND EXTERIOR BURRS AND BEVEL THE EXTERIOR TO PRODUCE A 10-15 DEGREE BEVEL.
D. THOROUGHLY CLEAN THE MATING PIPE END AND THE FITTING SOCKET WITH A CLEAN, DRY CLOTH.

- E. USING A PROPERLY SIZED APPLICATOR (APPROXIMATELY HALF THE DIAMETER OF THE PIPE), APPLY A LIGHT COATING OF PRIMER TO THE INSIDE OF THE FITTING SOCKET, THEN APPLY A THIN COAT TO THE OUTSIDE OF THE PIPE END. APPLY A SECOND, LIGHT COAT OF PRIMER TO THE INSIDE OF THE FITTING SOCKET TO AVOID PUDDLING OF PRIMER IN THE FITTING.

- F. APPLY A UNIFORM COAT OF CEMENT TO THE OUTER PIPE END WITH A PROPERLY-SIZED APPLICATOR (APPROXIMATELY HALF THE DIAMETER OF THE PIPE).

- G. IN LIKE MANNER, APPLY A THIN COATING OF CEMENT TO THE INSIDE OF THE FITTING SOCKET.

- H. RE-APPLY A LIGHT COAT OF CEMENT OUTSIDE THE PIPE END AND QUICKLY INSERT IT INTO THE FITTING TO THE FULL DEPTH OF THE FITTING SOCKET WHILE ROTATING THE PIPE OR FITTING APPROXIMATELY ONE-QUARTER TURN TO ENSURE EVEN DISTRIBUTION OF CEMENT.

- I. HOLD IN POSITION FOR APPROXIMATELY 30 SECONDS.
J. WIPE OFF ANY EXCESS SOLVENT CEMENT THAT FORMS AS A BEAD AROUND THE OUTER SHOULDER.

- K. THE CONTRACTOR SHALL NOT USE EXCESSIVE SOLVENT CEMENT THAT COULD CAUSE BURRS OR OBSTRUCTIONS INSIDE THE PIPE JOINT.
L. ALLOW SOLVENT WELD JOINTS TO CURE FOR 24 HOURS BEFORE APPLYING PRESSURE TO THE SYSTEM.

- 3.08 BACKFILLING
A. UPON COMPLETION OF A PARTICULAR SECTION OF THE IRRIGATION SYSTEM, AND AFTER SUFFICIENT TIME HAS ELAPSED FOR CURING SOLVENT WELD JOINTS, PARTIAL BACKFILLING SHALL BEGIN, LEAVING ALL JOINTS, RISERS, AND CONNECTIONS EXPOSED FOR VISUAL INSPECTION DURING THE HYDROSTATIC TESTING. FINISH BACKFILL OPERATIONS FOR ALL SECTIONS AFTER COMPLETING

- THE HYDROSTATIC TEST.
B. THE OWNER'S REPRESENTATIVE SHALL APPROVE ALL BACKFILL MATERIAL. BACKFILL MATERIAL SHALL BE FREE FROM ROCK, LARGE STONES, BRUSH, SOD, FROZEN MATERIAL, OR OTHER UNSUITABLE SUBSTANCES THAT MAY DAMAGE THE PIPE OR COMPROMISE COMPACTION DURING THE BACKFILLING OPERATIONS.
C. IF THE OWNER'S REPRESENTATIVE FINDS THE MATERIAL FROM THE EXCAVATION OR TRENCHING UNSUITABLE FOR USE IN THE BACKFILL, IT SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR AT HIS OWN EXPENSE. THE CONTRACTOR SHALL THEN, AT NO COST TO THE OWNER, ARRANGE FOR, PURCHASE, AND FURNISH SUITABLE BACKFILL MATERIAL CONSISTING OF EARTH, LOAM, SANDY CLAY, SAND, OR OTHER APPROVED MATERIALS FREE OF LARGE CLODS OF EARTH OR SHARP STONES AND CAPABLE OF ATTAINING THE SAME RELATIVE DENSITY OF THE SURROUNDING GROUND.

- D. IN ROCKY AREAS, THE TRENCH DEPTH SHALL BE 6" BELOW THE NORMAL TRENCH DEPTH TO ALLOW FOR 6" OF SUITABLE BACKFILL AS PADDING FOR THE PIPE AND A MINIMUM OF 6" OF SUITABLE BACKFILL ON ALL SIDES OF THE PIPE AS PADDING AGAINST A ROCK IN THE TRENCH WALL.

- E. ALL MAINLINE AND LATERAL PIPING SHALL HAVE DETECTABLE LINE MARKING TAPE INSTALLED IN THE TRENCH SIX (6") INCHES ABOVE THE PIPE. AFTER PLACING THE PIPE IN A TRENCH AND THE FIRST 6" LAYER OF BACKFILL IS PLACED AND COMPACTED, PLACE THE DETECTABLE MARKING TAPE CONTINUOUSLY IN ALL TRENCHES BEFORE FINISHING BACKFILL OPERATIONS.

- F. PLACE BACKFILL IN HORIZONTAL LAYERS NOT EXCEEDING 6" IN DEPTH. BACKFILL SHALL BE THOROUGHLY TAMPED OR WATER-COMPACTED TO NEARLY ORIGINAL DENSITY OR TO AVOID SETTLING. PLACE BACKFILL TO THE ORIGINAL GROUND LEVEL. IF SETTLEMENT OF TRENCHES OCCURS WITHIN ONE (1) YEAR FROM THE COMPLETION DATE, THE CONTRACTOR SHALL REFILL TRENCHES, RE-SEED, RE-SOD, OR RE-INSTALL LANDSCAPE MULCH IN THE REPAIRED AREAS.

- 3.09 SLEEVED CROSSING
A. UNLESS NOTED ON THE DRAWINGS, SLEEVE ALL PIPING INSTALLED UNDER SIDEWALKS, ROADWAYS, AND PARKING LOTS IN A CLASS 200 PVC PIPE TWO (2) SIZES LARGER THAN THE PIPE TO BE SLEEVED. PLACE THE WIRE IN A SEPARATE SLEEVE FROM THE PIPE CROSSING. THE SLEEVE SHALL BE CLASS 200 PVC MINIMUM 2" SIZE OR LARGER AS REQUIRED TO ACCOMMODATE THE QUANTITY OF WIRE TO BE SLEEVED. SEAL THE ENDS OF SLEEVES WITH DUCT TAPE AFTER INSTALLING WIRE OR PIPING.

- 3.10 HEAD INSTALLATION
A. HEADS SHALL BE OF THE TYPE AND MODEL SPECIFIED AND INSTALLED PER THE DRAWINGS. INSTALL HEADS WITH A 4" SPACE BETWEEN THE EDGE OF THE HEAD AND CURBS, WALKS, WALLS, DRIVEWAYS, AND BUILDING WALLS. INSTALL HEADS IN THE VERTICAL POSITION, BACKFILLED, AND COMPACTED TO 90% MODIFIED PROCTOR.

- B. HEAD SPACING SHALL NOT EXCEED THE SPACING SHOWN ON THE DRAWINGS AND SHALL BE IN THE LOCATION AND CONFIGURATION SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY TURF AREA DIMENSION WHILE STAKING HEAD LOCATION AND SPACE HEADS TO ACHIEVE UNIFORM COVERAGE.

- C. AFTER ALL PIPING AND RISERS ARE IN PLACE AND CONNECTED, OPEN ALL CONTROL VALVES AND USE A FULL HEAD OF WATER TO FLUSH OUT THE SYSTEM BEFORE INSTALLING THE HEADS. IF WATER PRESSURE WITHOUT THE HEADS INSTALLED IS INSUFFICIENT TO PROVIDE ADEQUATE WATER FLOW FROM END RISERS, THE CONTRACTOR SHALL CAP OFF ENOUGH HEADS CLOSEST TO THE WATER SOURCE TO PROVIDE ADEQUATE FLUSHING OF THE END RISER ASSEMBLIES.

- 3.11 AUTOMATIC CONTROL VALVE INSTALLATION
A. AUTOMATIC CONTROL VALVES SHALL BE OF THE TYPE AND SIZE INDICATED ON THE DRAWINGS. INSTALLATION SHALL BE ACCORDING TO THESE SPECIFICATIONS, THE DRAWINGS, AND THE MANUFACTURER'S RECOMMENDATIONS.

- B. THE VALVE BOXES SHALL BE OF THE SIZE AND TYPE PER THE DRAWINGS.
C. WATERPROOF VALVE WIRE SPLICES USING 3M DBR/Y DIRECT BURY SPLICE KIT CONNECTORS OR APPROVED EQUAL. THE CONTRACTOR SHALL PROVIDE A 36" WIRE EXPANSION COIL TO FACILITATE RAISING SPLICES TO GROUND LEVEL WITHOUT CUTTING WIRES.

- 3.12 TESTING
A. UPON COMPLETION OF THE IRRIGATION SYSTEM'S MAINLINE, THE ENTIRE MAINLINE SHALL BE TESTED WITH THE OWNER'S REPRESENTATIVE FOR ONE HOUR AT 100 PSI UNLESS OTHERWISE NOTED. BEFORE TESTING, PARTIALLY BACKFILL THE MAINLINE, LEAVING ALL JOINTS AND CONNECTIONS EXPOSED FOR VISUAL INSPECTION. FLUSH ALL DIRT FROM THE SYSTEM AND FILL THE LINE WITH WATER TO REMOVE AIR. THE MAINLINE SHALL BE BROUGHT TO STATIC PRESSURE. INSTALL A PRESSURE GAUGE AND TEMPORARY VALVE AT THE END OF THE MAINLINE TO PERMIT AIR PRESSURE. RETAIN A PRESSURE OF 100 PSI FOR ONE HOUR AND REPAIR ANY LEAKS THAT MAY OCCUR. RETEST THE SYSTEM UNTIL THE SYSTEM PASSES THE TEST.

- B. UPON COMPLETION OF THE LATERAL PIPING SECTIONS, EACH LATERAL SYSTEM SHALL BE PRESSURE TESTED, WITH THE OWNER'S REPRESENTATIVE PRESENT FOR ONE HOUR AT 100 PSI. TEST THE LATERAL SYSTEM BEFORE INSTALLING THE FLEX NIPPLES OR SWING JOINTS ON SYSTEMS USING FLEX NIPPLES OR SWING JOINTS. PARTIALLY BACKFILL THE LATERAL LINES BEFORE TESTING, LEAVING ALL JOINTS AND CONNECTIONS EXPOSED FOR VISUAL INSPECTION. FLUSH ALL AIR AND DIRT FROM THE SYSTEM AND CAP ALL OPEN FITTINGS. THE TESTING PROCEDURE SHALL BE THE SAME AS USED FOR THE MAIN LINE. REPAIR ANY LEAKS OCCURRING DURING THE HYDROSTATIC TEST. RETEST THE SYSTEM UNTIL THE SYSTEM PASSES THE TEST. IF, AFTER ONE HOUR, 100 PSI PRESSURE HAS BEEN RETAINED, INSTALL THE HEADS, AND COMPLETE THE BACKFILL OPERATIONS.

- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING CONSTRUCTION OBSERVATIONS FOR RETESTING ANY LINES OR SYSTEM COMPONENTS THAT FAIL THE INITIAL PRESSURE OR PERFORMANCE TEST. COSTS SHALL INCLUDE THE OBSERVER'S TIME AT THE OBSERVER'S STANDARD RATE, TRAVEL TIME, AND TRAVEL EXPENSES.

- 3.13 ADJUSTING OF SYSTEM
A. AFTER TESTING AND INSTALLATION, THE CONTRACTOR SHALL ADJUST ALL VALVES FOR THE PROPER OPERATING PRESSURE AND ALL HEADS FOR UNIFORM COVERAGE AND FLOW. THE CONTRACTOR SHALL WIRE THE CONTROLLER TO HAVE STATION NUMBERS CORRESPOND WITH VALVE NUMBERS INDICATED ON THE DRAWINGS OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. INDICATE THE VALVE NUMBER ON THE CONTROLLER PANEL FOR EACH STATION. THE CONTRACTOR SHALL PROGRAM THE CONTROLLER TO PROVIDE OPTIMUM SYSTEM PERFORMANCE.

- 3.14 CLEAN UP
A. THE CONTRACTOR SHALL KEEP A NEAT AND ORDERLY AREA WHERE IS INSTALLING THE SYSTEM. DISPOSAL OF RUBBISH AND WASTE MATERIAL RESULTING FROM THE INSTALLATION SHALL BE CONTINUAL. UPON COMPLETION OF THE SYSTEM, THE CONTRACTOR SHALL REMOVE FROM THE OWNER'S PROPERTY, AT HIS OWN EXPENSE, ALL TEMPORARY STRUCTURES, RUBBISH, WASTE MATERIAL, TOOLS, AND EQUIPMENT RESULTING FROM OR USED IN THE INSTALLATION OF THE SYSTEM.

- 3.15 PROTECTION OF EXISTING UTILITIES
A. THE CONTRACTOR SHALL LOCATE ALL EXISTING CABLES, CONDUITS, PIPING, AND OTHER UTILITIES OR STRUCTURES ENCOUNTERED ABOVE OR BELOW GROUND. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE EXISTING UTILITIES AND IMPROVEMENTS. THE CONTRACTOR SHALL REPAIR OR REPLACE DAMAGED UTILITIES TO THEIR

- ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.
3.16 ROCK
A. NO ADDITIONAL COMPENSATION SHOULD BE PAID IF THE CONTRACTOR ENCOUNTERS ROCK OR OTHER UNFAVORABLE TRENCHING CONDITIONS. WHEN MATERIAL FROM THE EXCAVATION OR TRENCHING IS UNSUITABLE FOR USE AS BACKFILL, ADDITIONAL BACKFILL MATERIAL SUITABLE FOR THIS PURPOSE SHALL BE BROUGHT IN AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL UNSUITABLE MATERIALS FROM THE TRENCH UNNECESSARY IN THE BACKFILL OPERATION.

- 3.17 FINAL ACCEPTANCE
A. THE CONTRACTOR SHALL ISSUE A NOTICE OF COMPLETION TO THE OWNER'S REPRESENTATIVE REQUESTING A FINAL OBSERVATION WHEN THE SYSTEM IS BALANCED, ADJUSTED, AND OPERATING PROPERLY, AND AFTER COMPLETING ALL WORK AND CLEAN-UP. THE OWNER'S REPRESENTATIVE SHALL RESPOND TO THE NOTICE OF COMPLETION AND SHALL APPEAR WITH THE OWNER FOR AN OBSERVATION OF THE PROJECT. DURING THE FINAL OBSERVATION, THE CONTRACTOR SHALL DEMONSTRATE THE SYSTEM'S OPERATION IN ITS ENTIRETY. IN REVIEWING THE WORK, NO ALLOWANCE FOR DEVIATION FROM THE ORIGINAL DRAWINGS AND SPECIFICATIONS SHALL BE MADE UNLESS PRIOR APPROVAL.
B. THE OWNER'S REPRESENTATIVE SHALL NOTE ANY INCONSISTENCY TO THE SPECIFICATIONS OR DRAWINGS AND GIVE THE CONTRACTOR A WRITTEN COPY OF NECESSARY CORRECTIONS. THE CONTRACTOR SHALL COMPLETE ALL CORRECTIONS PROMPTLY AND THEN ISSUE A REQUEST TO THE OWNER'S REPRESENTATIVE TO INSPECT THE CORRECTED WORK. FINAL ACCEPTANCE SHOULD OCCUR WHEN ALL CORRECTIONS ARE COMPLETE.

- 3.18 OPERATIONAL INSTRUCTION
A. AFTER THE SYSTEM HAS BEEN TESTED AND ACCEPTED, THE CONTRACTOR SHALL INSTRUCT THE OWNER'S REPRESENTATIVE ON THE OPERATION AND MAINTENANCE OF THE SYSTEM.
B. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH TWO (2) KEYS FOR EACH OF THE FOLLOWING:
1. MANUAL GATE VALVES
2. VALVE BOXES
3. ANY LOCKING ASSEMBLY IN NEED OF KEY ACCESS
C. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH TWO COPIES OF A MAINTENANCE MANUAL BOUND IN A THREE-RING BINDER. THE MAINTENANCE MANUAL SHALL INCLUDE COPIES OF THE APPROVED SUBMITTALS, OPERATION MANUALS AND MANUFACTURER'S WARRANTIES ON ALL IRRIGATION PRODUCTS.

- 3.19 SYSTEM MAINTENANCE AND GUARANTEE
A. MAINTENANCE OF THE IRRIGATION SYSTEM SHALL BEGIN IMMEDIATELY FOLLOWING THE SYSTEM'S INSTALLATION AND SHALL CONTINUE UNTIL THE ENTIRE PROJECT IS ACCEPTED. MAINTENANCE SHALL INCLUDE REPAIR OF DEFECTS OR DAMAGES, ADJUSTMENTS AND FINE-TUNING OF THE SYSTEM, AND REPAIRS OF DAMAGES RESULTING FROM VANDALISM, EROSION, WEATHER, AND THE LIKE.

- B. FOR ONE (1) YEAR FROM FINAL ACCEPTANCE OF THE ENTIRE PROJECT, THE CONTRACTOR SHALL PROMPTLY FURNISH AND INSTALL ANY PARTS OR MATERIALS THAT PROVE DEFECTIVE IN MATERIAL OR QUALITY WITHOUT COST TO THE OWNER. DAMAGE TO THE LANDSCAPE OR OTHER PROPERTY DUE TO IRRIGATION SYSTEM LINE BREAKS SHALL BE REPAIRED AND BROUGHT TO ORIGINAL CONDITION BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

- C. IN THE FALL, AT THE OWNER'S REQUEST, THE CONTRACTOR SHALL DRAIN THE SYSTEM AND PREPARE THE SYSTEM FOR WINTER. IN THE SPRING, AT THE OWNER'S REQUEST, THE CONTRACTOR SHALL REACTIVATE THE SYSTEM, REPAIR ANY DEFECTS OR DAMAGE AND ADJUST THE SYSTEM. THE CONTRACTOR SHALL INSTRUCT THE OWNER AS THESE SERVICES ARE PERFORMED.

- D. FOR ONE (1) YEAR FROM FINAL ACCEPTANCE OF THE SYSTEM, THE CONTRACTOR SHALL REPAIR ANY SETTLEMENT OF TRENCHES BY ONE OF THE FOLLOWING METHODS AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

- 1. TURF AREAS: BRING TO GRADE BY TOP-DRESSING (RAKING TOPSOIL INTO THE GRASS).
2. TURF AREAS: BRING TO GRADE WITH PLANTING SOIL MIXTURE AND INSTALL SEED MIX TO MATCH EXISTING TURF.
3. SOD AREAS OR TREE/SHRUB PLANTING AREAS: REMOVE EXISTING SOD OR MULCH. FILL THE DEPRESSION WITH PLANTING SOIL MIXTURE AND REPLACE IT WITH NEW SOD OR MULCH TO MATCH EXISTING.

- E. REPAIR BY ANY OF THE ABOVE METHODS SHALL RESULT IN A SMOOTH, LEVEL AREA.

- 3.20 OBSERVATIONS
A. THE FOLLOWING SHALL BE THE MINIMUM REQUIRED OBSERVATIONS DURING CONSTRUCTION. THE OWNER'S REPRESENTATIVE MAY PERFORM ADDITIONAL OBSERVATIONS AT ANY TIME. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE, IN WRITING, 48 HOURS IN ADVANCE OF EACH OBSERVATION. DO NOT ALTER THE SEQUENCE OF REQUIRED OBSERVATIONS FROM THE LIST BELOW. THE CONTRACTOR SHALL NOT PROCEED WITH WORK WITHOUT THE WRITTEN APPROVAL OF PREVIOUS SEQUENCES. THE CONTRACTOR SHALL ATTACH A COPY OF THE WRITTEN OBSERVATION APPROVALS TO ALL APPLICATIONS FOR PAYMENT.

- B. REQUIRED OBSERVATION LIST AND SEQUENCE:
1. STAKED LOCATIONS OF MAINLINE, VALVES, LATERALS, AND HEADS.
2. INSTALLATION AND PRESSURE TEST OF MAINLINE.
3. 24-VOLT CONTROL WIRE INSTALLATION AND OPERATIONS OF ALL VALVE ZONES.
4. INSTALLATION AND PRESSURE TEST OF AUTOMATIC VALVES AND LATERAL LINES BEFORE INSTALLATION OF FLEX NIPPLES AND HEADS.
5. HEAD PLACEMENT, COVERAGE, AND OPERATING PRESSURE BEFORE PLANTING.
6. FINAL PROJECT REVIEW.
7. 11 MONTHS AFTER FINAL PROJECT ACCEPTANCE.

END OF SECTION



ALBUQUERQUE COLLEGIATE CHARTER SCHOOL
SUNSET GARDENS AND 90TH ALBUQUERQUE, NM

CONSTRUCTION DOCUMENTS

Table with 2 columns: REVISION, DATE

Table with 2 columns: DATE, 11-24-25

LANDSCAPE SPECIFICATIONS

SHEET NO.

L001

SECTION 32 9300 - PLANTS

- PART 1 - GENERAL
.01. SUMMARY
A. WORK UNDER THIS SECTION CONSISTS OF PLANTING TREES, SHRUBS, GRASSES, VINES, AND GROUND COVERS, FURNISHING ALL LABOR, EQUIPMENT, AND MATERIALS, AND PERFORMING ALL WORK IN CONNECTION WITH THE DRAWINGS AND SPECIFICATIONS.
B. PLANT NAMES
1. THE BOTANIC AND COMMON NAMES USED FOR THE PLANTS ON THE DRAWINGS GENERALLY CONFORM WITH THE APPROVED NAMES GIVEN IN STANDARDIZED PLANT NAMES, LATEST EDITION, PUBLISHED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE.
C. PLANT MATERIAL SUBSTITUTIONS
1. DO NOT SUBSTITUTE PLANT MATERIALS WITHOUT THE WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.
.02. SUBMITTALS
A. FURNISH SAMPLES OF THE FOLLOWING BEFORE CONSTRUCTION:
1. BACKFILL AMENDMENT.
2. SOIL CONDITIONER.
D. FURNISH THE FOLLOWING MATERIALS THE SAME DAY DELIVERED TO THE SITE.
PART 2 - MATERIALS
.01. PLANT MATERIALS
A. A COMPLETE PLANT LIST, INCLUDING QUANTITIES, SIZES, AND OTHER REQUIREMENTS, IS SHOWN ON THE DRAWINGS.
.02. PLANT MATERIAL QUALITY
A. PLANT MATERIAL QUALITY, SIZE, AND CONDITION SHALL BE PER AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, AS PUBLISHED BY THE COMMITTEE ON HORTICULTURAL STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., THE DRAWINGS, AND THE FOLLOWING REQUIREMENTS:
1. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY.
2. UNLESS OTHERWISE STATED ON THE DRAWINGS OR APPROVED BY THE OWNER'S REPRESENTATIVE, ALL PLANTS SHALL BE NURSERY-GROWN AND TAGGED WITH NURSERY LABELS INDICATING SPECIES AND VARIETY.
3. CONTAINER-GROWN PLANT MATERIAL SHALL HAVE BEEN GROWN IN ITS DELIVERY CONTAINER FOR NOT LESS THAN SIX (6) MONTHS BUT NOT MORE THAN TWO (2) YEARS.
4. MULTI-STEM-ALL COUNTABLE STEMS, IN AGGREGATE, SHALL AVERAGE THE SIZE SPECIFIED.
5. BALLED AND BURLAPPED PLANT MATERIAL SHALL HAVE A SOLID BALL OF THE EARTH OF A MINIMUM SPECIFIED SIZE HELD SECURELY BY BURLAP AND STOUT TWINE OR ROPE.
6. UNLESS SPECIFICALLY NOTED ON THE DRAWINGS, ALL TREES SHALL HAVE A SINGLE TRUNK THAT IS STRAIGHT AND FREE OF "DOG LEGS," "CROOKS," "Y-CROTCHES," OR OTHER DISFIGURING SHAPES.
7. ALL PLANT MATERIAL SHALL HAVE A UNIFORM SHAPE AROUND ITS COMPLETE CIRCUMFERENCE.
8. THE OWNER'S REPRESENTATIVE SHALL REVIEW ALL PLANT MATERIAL AT THE CONTRACTOR'S YARD OR WHOLESALE NURSERY BEFORE DELIVERY TO THE JOB SITE.
9. PLANT PHOTOGRAPHS: AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE, THE CONTRACTOR MAY SUBMIT COLOR PHOTOGRAPHS IN DIGITAL FORMAT OF EACH REQUIRED SPECIES AND SIZE OF PLANT MATERIAL AS IT WILL BE FURNISHED TO THE PROJECT.
10. THE OWNER'S REPRESENTATIVE SHALL JUDGE THE QUALITY AND ACCEPTABILITY OF ALL PLANT MATERIALS.
.03. PLANTING SOIL MIXTURE
A. PLANTING SOIL MIXTURE SHALL BE A MIXTURE OF ONE PART BACKFILL AMENDMENT TO TWO PARTS EXISTING SOIL.
1. "LAWN AND GARDEN 1/4" MINUS COMPOST", A HOMOGENOUS BLEND OF COMPOSTED MANURES, GREENWASTE AND ORGANIC PRODUCTS, AS PRODUCED BY GRO-WELL, INC., 9000 BATES RD, SE, ALBUQUERQUE, NM 87105 (505-877-8670), OR EQUAL.
2. "PREMIUM COMPOST", A HOMOGENOUS BLEND OF LOCAL MANURES, WELL-AGED GREENWASTE AND ORGANIC PRODUCTS, AS AVAILABLE FROM SOLUTIONS, 9008 BATES RD, SE, ALBUQUERQUE, NM 87105 (505-877-0220), OR EQUAL.
3. "MEDITERRANEAN MIX", A HOMOGENOUS BLEND OF COMPOST, PUMICE, AND COMPOSTED WOODY MATERIALS, AS AVAILABLE FROM SOLUTIONS, 9008 BATES RD, SE, ALBUQUERQUE, NM 87105 (505-877-0220), OR EQUAL.

- B. EACH DELIVERY SHALL HAVE A LOAD TICKET TO BE COLLECTED AND PROVIDED TO THE OWNER'S REPRESENTATIVE.
1. TYPE OF MIXTURE
2. SOURCE OF MIXTURE
3. APPROXIMATE VOLUME OF LOAD
4. DATE OF DELIVERY OR LOADING
5. NAME OF THE INDIVIDUAL REPRESENTING THE SOURCE.
2.04 SOIL CONDITIONER
A. THE SOIL CONDITIONER SHALL BE GRANULAR 85% SULPHUR BENTONITE FERTILIZER, TIGER-SUL TIGER 85CR SULPHUR ORGANIC, OR EQUAL.
2.05 MULCH
A. MULCH SHALL BE AS SPECIFIED ON THE DRAWINGS.
PART 3 - EXECUTION
3.01 PLANTING OPERATIONS
A. BEFORE PLANTING OPERATIONS, LANDSCAPE AREAS SHALL BE CLEARED OF ROCKS AND LUMPS GREATER THAN 1" DIAMETER, VEGETATION, AND DEBRIS TO A MINIMUM DEPTH OF 12", AND FINISH GRADING SHALL BE COMPLETE.
1. THE CONTRACTOR SHALL TAKE CARE WHEN BACKFILLING PLANTERS TO PROVIDE ADEQUATE COMPACTION OF THE FILL MATERIAL TO PREVENT SETTLING.
2. PREPARE ALL PLANTING PITS AND INSTALL PLANTS AS SHOWN ON THE DRAWINGS.
3. REMOVE WIRE BASKET, WOOD BOX, PLASTIC, TWINE, OR ROPE BEFORE BACKFILLING.
4. BACKFILL FOR PLANTING PITS SHALL CONSIST OF THE SPECIFIED PLANTING SOIL MIXTURE AND 0.16 POUNDS OF SOIL CONDITIONER PER CUBIC FOOT OF BACKFILL.
5. AFTER COMPLETION OF PLANTING, PRUNE ALL TREES PER THE OWNER'S DIRECTIONS.
3.02 MULCHING
A. COMPLETE MULCHING SHALL BE AS INDICATED ON THE DRAWINGS.
3.03 MAINTENANCE AND PROTECTION
A. MAINTENANCE AND PROTECTION OF TREES, SHRUBS, AND GROUND COVERS SHALL BEGIN IMMEDIATELY FOLLOWING EACH PLANT'S INSTALLATION AND CONTINUE UNTIL THE ENTIRE PROJECT IS ACCEPTED.
B. THE CONTRACTOR SHALL MONITOR THE CONDITION OF THE LANDSCAPE AT REGULAR INTERVALS DURING THE WARRANTY PERIOD.
3.04 WARRANTY
A. ALL PLANT MATERIALS SHALL BE GUARANTEED TO BE IN A LIVE, HEALTHY, AND NORMAL GROWING CONDITION FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE THROUGH ONE TWELVE-MONTH GROWING SEASON.
B. THE CONTRACTOR SHALL MONITOR THE CONDITION OF THE LANDSCAPE AT REGULAR INTERVALS DURING THE WARRANTY PERIOD.
3.05 REVIEWS
A. THE FOLLOWING REVIEWS SHALL BE THE MINIMUM REQUIRED DURING CONSTRUCTION.
B. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE, IN WRITING, 48 HOURS IN ADVANCE OF EACH REVIEW.
C. THE REQUIRED REVIEW SEQUENCE SHALL NOT CHANGE FROM THE SEQUENCE LISTED BELOW.
D. REQUIRED REVIEW LIST AND SEQUENCE:
1. PLANT MATERIAL AT THE CONTRACTOR'S YARD BEFORE DELIVERY TO THE JOB SITE.
2. STAKED LOCATIONS OF MATERIAL BEFORE PLANTING
3. PLANTING HOLES AND PLANTING SOIL MIXTURE PREPARATION.
4. PLANT MATERIAL AT THE JOB SITE BEFORE AND DURING PLANTING.
5. FINAL PROJECT COMPLETION.
6. 11 MONTHS AFTER THE FINAL PROJECT ACCEPTANCE.
END OF SECTION

SECTION 32 9220 - REVEGETATION SEEDING

- PART 1 - GENERAL
1.01 DESCRIPTION OF WORK
A. WORK UNDER THIS SECTION CONSISTS OF PREPARING ALL AREAS INDICATED ON THE DRAWINGS FOR REVEGETATION SEEDING AND FURNISHING AND INSTALLING SEED AS SPECIFIED HEREIN.
1.02 SUBMITTALS
A. FURNISH SUPPLIER LITERATURE OF THE FOLLOWING BEFORE CONSTRUCTION:
1. SEED.
2. WOOD CELLULOSE FIBER.
B. FURNISH THE FOLLOWING THE SAME DAY MATERIALS ARE DELIVERED TO THE PROJECT SITE:
1. DELIVERY TICKETS INDICATING SPECIES AND QUANTITY OF SEED DELIVERED.
PART 2 - PRODUCTS
2.01 SEED
A. SEED SHALL BE AS SPECIFIED ON THE DRAWINGS.
B. THE SEED PROVIDER SHALL LABEL AND SEAL EACH SEED BAG PER FEDERAL SEED LAWS AND NEW MEXICO DEPARTMENT OF AGRICULTURE LABELING LAWS.
2.02 HAY MULCH
A. HAY MULCH SHALL BE PERENNIAL NATIVE OR INTRODUCED GRASSES OF FINE-STEMMED VARIETIES.
3.01 PREPARATION
A. BEFORE STARTING SOIL PREPARATION, THE FINISH GRADE SHALL BE ESTABLISHED AND APPROVED PER THE DRAWINGS.
B. RIP SEED BED IN TWO DIRECTIONS AND PLOW WITH A "PLOW DISC" TO A MINIMUM OF SIX (6) INCHES.
C. TILLAGE SHALL BE PERFORMED ACROSS THE SLOPE WHEN PRACTICAL.
D. THE EXTENT OF SEEDBED PREPARATION SHALL NOT EXCEED THE AREA ON WHICH THE ENTIRE SEEDING OPERATION CAN BE APPLIED TO SUCH PREPARED SEED BED BEFORE ANY SURFACES CRUSTING OR LOSS OF SEED DUE TO EROSION.
E. BEFORE SEEDING, THE FINISH GRADE SHALL BE BROUGHT TO A FIRM, EVEN SURFACE, FREE FROM STONES, LUMPS, DEBRIS, VEGETATION, AND DIRT CLODS.
PART 4 - SEEDING
A. THE SEED MIX AND RATE SHALL BE AS SPECIFIED ON THE DRAWINGS.
B. THE CONTRACTOR'S VEHICLES AND OTHER EQUIPMENT SHALL NOT TRAVEL OVER THE SEEDED AREAS.
4.01 TIME OF SEEDING
A. ACCOMPLISH NATIVE GRASS REVEGETATION SEEDING FROM APRIL 15 THROUGH AUGUST 30.
4.02 DRILL SEEDING
A. NATIVE SEED ON AREAS LESS THAN A 3:1 GRADIENT SHALL BE SOWN BY DRILLING AND CRIMPING.
1. DRILL SEED AT ONE-HALF INCH DEPTH AT THE RATE INDICATED ON DRAWINGS.
2. BLOW ON MULCH AT A RATE OF 1.5 TONS PER ACRE.
3. CRIMP OR ANCHOR MULCH IN TWO DIRECTIONS USING A CRIMPER DISK OR COLTER TYPE MACHINE.
B. SOW NATIVE SEED ON AREAS OF 3:1 GRADIENT OR GREATER BY HYDROSEEDING.
1. HYDRAULIC MULCHING EQUIPMENT SHALL INCLUDE A PUMP CAPABLE OF BEING OPERATED AT 1000 GPM AND 100 PSI PRESSURE.
2. WOOD CELLULOSE FIBER FOR HYDRAULIC SEEDING SHALL NOT CONTAIN ANY SUBSTANCE OR FACTOR THAT MIGHT INHIBIT SEED GERMINATION OR GROWTH.
3. ADD WOOD CELLULOSE FIBER WITH PROPORTIONATE QUANTITIES OF WATER AND OTHER APPROVED MATERIALS IN THE SLURRY TANK.
4. DO NOT PERFORM HYDRAULIC SEEDING IN THE PRESENCE OF FREE SURFACE WATER.
4.03 OBSERVATION
A. THE FOLLOWING OBSERVATIONS SHALL BE THE MINIMUM REQUIRED OBSERVATIONS OF REVEGETATION SEEDING DURING CONSTRUCTION.
B. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING 48 HOURS BEFORE EACH REQUIRED OBSERVATION.

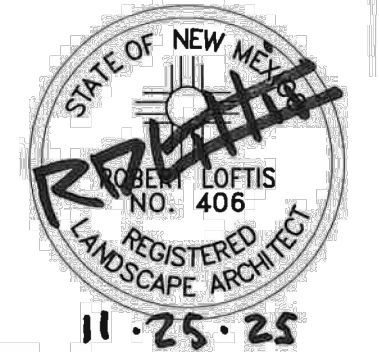
- C. THE SEQUENCE LISTED BELOW. THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK OF THE NEXT SEQUENCE WITHOUT THE WRITTEN APPROVAL OF THE WORK OF THE PREVIOUS SEQUENCE.
D. REQUIRED OBSERVATION LIST AND SEQUENCE:
1. EACH PHASE OF SOIL PREPARATION.
2. FINISH GRADE.
3. SEEDS BEFORE SEEDING.
4. SEEDING OPERATIONS.
5. MULCH BEFORE MULCHING.
6. MULCH OPERATIONS.
7. SEEDED AREAS.

END OF SECTION



ALBUQUERQUE COLLEGIATE CHARTER SCHOOL
SUNSET GARDENS AND 90TH ALBUQUERQUE, NM

CONSTRUCTION DOCUMENTS
REVISION DATE
DATE 11-24-25
PROJECT NO
LANDSCAPE SPECIFICATIONS
SHEET NO. L002



IRRIGATION SCHEDULE

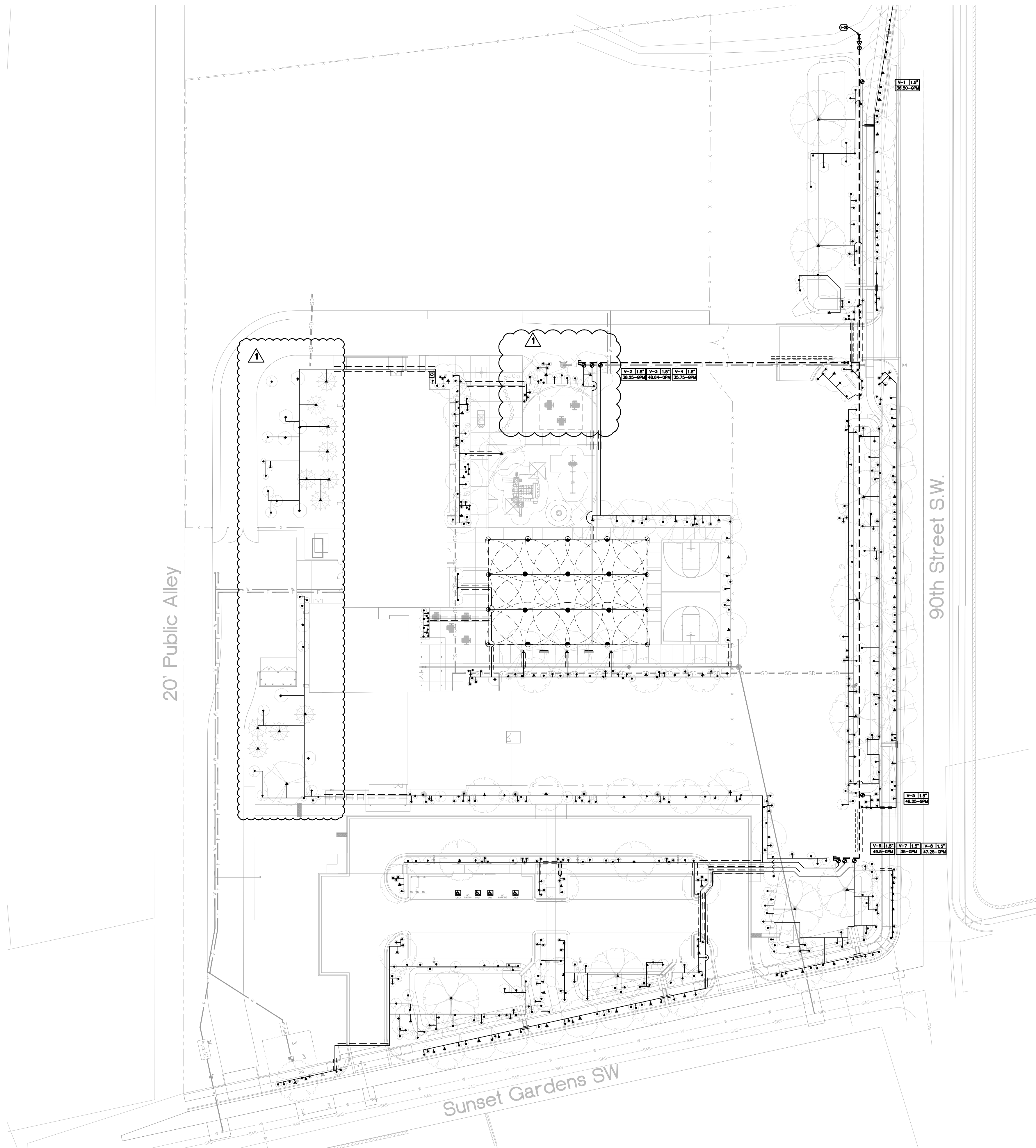
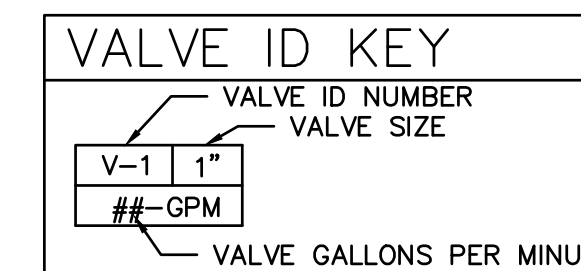
CODE	DESCRIPTION
I-01	IRRIGATION SYSTEM POINT OF CONNECTION. TIE INTO WATER SERVICE LINE - SEE UTILITIES PLAN.

GENERAL IRRIGATION NOTES SCHEDULE

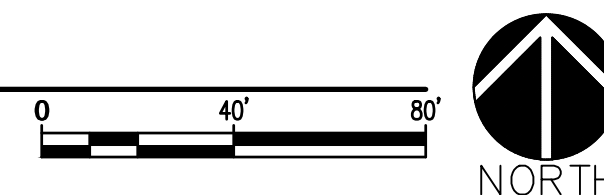
CODE	DESCRIPTION
GI-01	THE CONTRACTOR SHALL COORDINATE SLEEVE INSTALLATION WITH PARTIES INVOLVED TO ENSURE THAT PIPE AND SLEEVES ARE INSTALLED AT PROPER DEPTHS AND BEFORE INSTALLATION OF CURB AND GUTTER, ASPHALT PAVEMENT, SIDEWALKS, CONCRETE PADS, ETC.
GI-02	THE CONTRACTOR SHALL FURNISH LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT THE PROPOSED IRRIGATION SYSTEM PER THE DRAWINGS AND SPECIFICATIONS.
GI-03	FOR PVC IRRIGATION PIPING AND EQUIPMENT REFERENCE SPECIFICATION SECTION 328400 - LANDSCAPE IRRIGATION SYSTEM.
GI-04	THE LOCATION AND SIZE OF IRRIGATION EQUIPMENT ON THE PLAN ARE SHOWN DIAGRAMMATICALLY FOR GRAPHIC CLARITY. THE LOCATION OF CONTROLLERS, PUMPS, BACKFLOW PREVENTERS, VALVES, ETC. SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
GI-05	THE LOCATION OF THE IRRIGATION MAIN AND LATERAL LINES ON THE PLAN IS SHOWN DIAGRAMMATICALLY FOR GRAPHIC CLARITY. UNLESS OTHERWISE NOTED ON THE PLAN, ANY IRRIGATION LINES SHOWN IN HARDSCAPE AREAS ARE FOR GRAPHIC CLARITY ONLY. IRRIGATION LINES SHALL BE LOCATED IN IMMEDIATELY ADJACENT LANDSCAPE AREAS.
GI-06	VALVE BOXES IN MULCH AREAS SHALL BE TAN WITH TAN BOLT-DOWN LIDS.
GI-07	THE IRRIGATION SYSTEM WAS DESIGNED AT A MINIMUM STATIC PRESSURE OF 60 PSI AT THE POINT OF CONNECTION. CONTRACTOR SHALL VERIFY ACTUAL PSI AND DELIVER RESULTS TO THE LANDSCAPE ARCHITECT BEFORE CONSTRUCTION. IN THE EVENT THE ACTUAL PSI IS LESS THAN 60 PSI, THE CONTRACTOR SHALL RECEIVE DIRECTION FROM THE LANDSCAPE ARCHITECT REGARDING DESIGN MODIFICATIONS IF NECESSARY.
GI-08	CONTRACTOR SHALL PROVIDE ONE (1) 120-VOLT, 20 AMP CIRCUIT FROM THE ELECTRICAL PANEL TO THE IRRIGATION CONTROLLER AND THE BACKFLOW PREVENTER ENCLOSURE (ONE TO EACH). ALL WORK AND MATERIALS SHALL MEET LOCAL CODES AND THE NATIONAL ELECTRIC CODE (NEC). REFERENCE ELECTRICAL PLANS.
GI-09	AIR RELEASE VALVE LOCATIONS ARE SHOWN SCHEMATICALLY ON THE PLAN AT HIGH ELEVATION POINTS. THE CONTRACTOR SHALL SURVEY THE FINAL LOCATIONS OF ALL AIR RELEASE VALVES BEFORE INSTALLATION TO ENSURE THAT THEY ARE LOCATED AT ACTUAL HIGH POINTS.
GI-10	CONTRACTOR SHALL REPAIR LINE BREAKS IN EXISTING IRRIGATION TO REMAIN THAT OCCUR DUE TO ANY CONSTRUCTION OR TRENCHING ACTIVITIES.

IRRIGATION LEGEND

- IRRIGATION MAIN LINE, SCHEDULE 40, BELL END, SOLVENT WELD PVC, SIZE 2". DEPTH OF BURY 28" FOR CONTINUOUS PRESSURE MAIN, 18" FOR NON-CONTINUOUS PRESSURE MAIN.
 - LATERAL PIPING, SCH. 40, BELL END, SOLVENT WELD PVC, SIZE AS SHOWN ON PLAN. DEPTH OF BURY, 18". LATERAL PIPE CONVEYING LESS THAN 6 GPM SHALL BE 3/4".
 - MAIN LINE AND LATERAL SLEEVE PIPING, CLASS 200, SDR-21, BELL-END, SOLVENT WELD PVC. EXTEND SLEEVE 18" BEYOND PAVING.
 - 24-VOLT IRRIGATION WIRE SLEEVE PIPING, CLASS 200, SDR-21, BELL-END, SOLVENT WELD PVC. EXTEND SLEEVE 18" BEYOND PAVING.
 - ⊕ REMOTE CONTROL VALVE ASSEMBLY, RAIN BIRD PEB SERIES, OR EQUAL, PLASTIC BODY 24-VOLT AUTOMATIC VALVE, SIZE AS SHOWN ON PLAN. INSTALL PER DETAIL C3/LI501.
 - ⊗ MANUAL ISOLATION VALVE ASSEMBLY, SPEARS SCH. 80 PVC BALL VALVE WITH UNIONS, SAME SIZE AS LINE. INSTALL PER DETAIL C4/LI501.
 - ⊕ BACKFLOW PREVENTER AND MASTER VALVE ASSEMBLY, FEBCO 825Y, OR EQUAL, 2" REDUCED PRESSURE BACKFLOW PREVENTER IN HEATED AND INSULATED BACKFLOW ENCLOSURE, HOT BOX MODEL HB2, OR EQUAL, WITH RAIN BIRD PEB SERIES, OR EQUAL 2" PLASTIC BODY 24-VOLT AUTOMATIC MASTER VALVE, RAIN BIRD PEB SERIES, OR EQUAL, IN VALVE BOX. INSTALL PER DETAIL A4/LI501 AND C2/LI501.
 - PRESSURE COMPENSATING BUBBLER ASSEMBLIES, RAIN BIRD 1400 SERIES WITH CHECK VALVE. INSTALL AS FOLLOWS:
- | MODEL NO. | GPM | PSI | DETAIL |
|-----------|----------------------------|-----|---------------------|
| 1401 | .25 | 30 | A2/LI501 |
| 1401 | .50 (2 PER VERTICAL SHRUB) | 30 | A2/LI501 |
| 1402 | 1.50 (3 PER TREE) | 30 | A1/LI501 & A2/LI501 |
- ROTOR SPRINKLER ASSEMBLIES, RAIN BIRD 5000 SERIES WITH MATCHED PRECIPITATION NOZZLES, 6" POP-UP, AS FOLLOWS:
- | MODEL NO. | RADIUS | PSI | FLOW (GPM) | | | PRECIP. RATE (IN./HR.) | | |
|----------------|--------|-----|------------|------|------|------------------------|------|------|
| | | | Q | H | F | Q | H | F |
| RB-5000-MPR-25 | 25' | 45 | 1.00 | 1.98 | 3.82 | 0.62 | 0.61 | 0.59 |
| RB-5000-MPR-30 | 30' | 45 | 1.40 | 2.96 | 5.78 | 0.60 | 0.63 | 0.62 |
- INSTALL ROTOR SPRINKLERS PER MANUFACTURER'S INSTRUCTIONS AND DETAIL C1/LI501
 - ⊔ SOLVENT WELD PVC CAP, SIZE PER LINE SIZE.
 - ⊔ IRRIGATION CONTROLLER, RAIN BIRD ESP-LXME, OR EQUAL, 9-STATION, WALL-MOUNT CONTROLLER INSTALLED IN METAL WALL-MOUNTED CABINET. INSTALL PER DETAIL A3/LI501. PROVIDE GROUNDING TO CONTROLLER PER CONTROLLER SPECIFICATIONS AND DETAIL B1/LI501.
 - ⊔ WATER METER, BY OTHERS. SEE UTILITY PLAN.



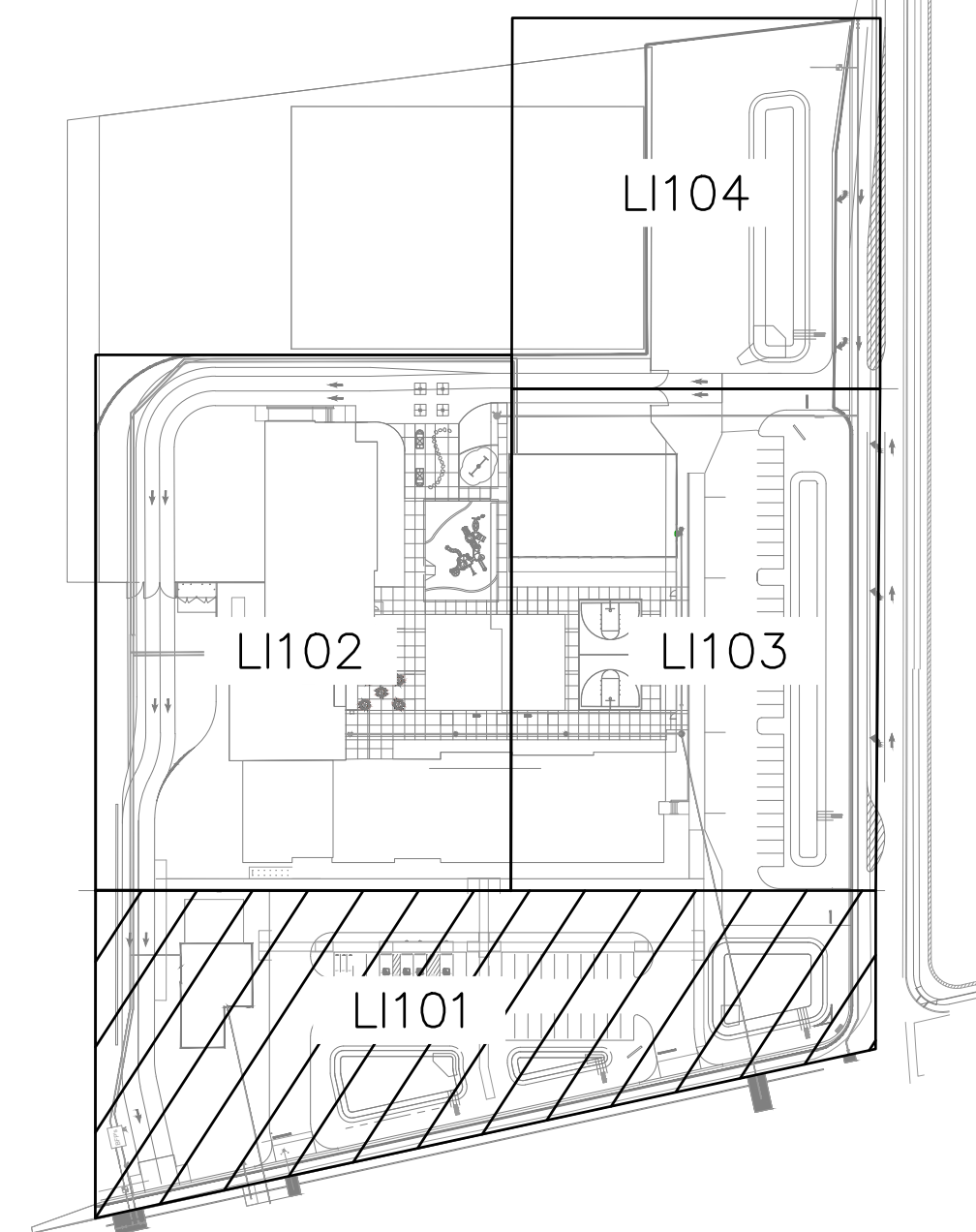
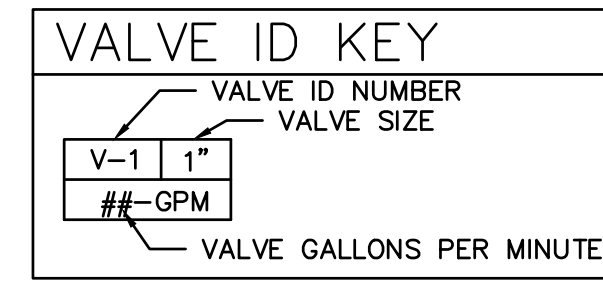
A1 OVERALL IRRIGATION PLAN
SCALE: 1"=40'-0"



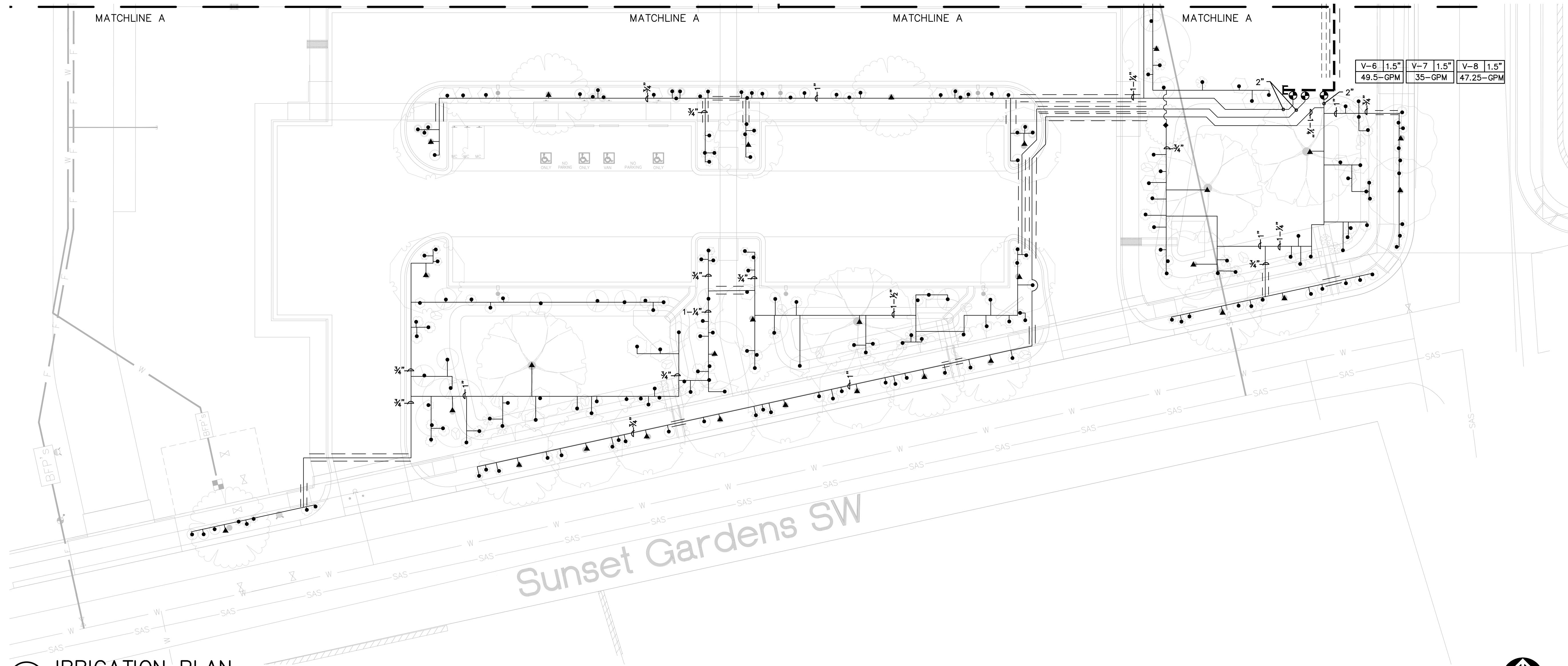
IRRIGATION LEGEND

- IRRIGATION MAIN LINE, SCHEDULE 40, BELL END, SOLVENT WELD PVC, SIZE 2". DEPTH OF BURY 28" FOR CONTINUOUS PRESSURE MAIN, 18" FOR NON-CONTINUOUS PRESSURE MAIN.
 - LATERAL PIPING, SCH. 40, BELL END, SOLVENT WELD PVC, SIZE AS SHOWN ON PLAN. DEPTH OF BURY, 18". LATERAL PIPE CONVEYING LESS THAN 6 GPM SHALL BE 3/4".
 - ===== MAIN LINE AND LATERAL SLEEVE PIPING, CLASS 200, SDR-21, BELL-END, SOLVENT WELD PVC. EXTEND SLEEVE 18" BEYOND PAVING.
 - 24-VOLT IRRIGATION WIRE SLEEVE PIPING, CLASS 200, SDR-21, BELL-END, SOLVENT WELD PVC. EXTEND SLEEVE 18" BEYOND PAVING.
 - ⊕ REMOTE CONTROL VALVE ASSEMBLY, RAIN BIRD PEB SERIES, OR EQUAL, PLASTIC BODY 24-VOLT AUTOMATIC VALVE, SIZE AS SHOWN ON PLAN. INSTALL PER DETAIL C3/LI501.
 - ⊗ MANUAL ISOLATION VALVE ASSEMBLY, SPEARS SCH. 80 PVC BALL VALVE WITH UNIONS, SAME SIZE AS LINE. INSTALL PER DETAIL C4/LI501.
 - ⊗ BACKFLOW PREVENTER AND MASTER VALVE ASSEMBLY, FEBCO 825Y, OR EQUAL, 2" REDUCED PRESSURE BACKFLOW PREVENTER IN HEATED AND INSULATED BACKFLOW ENCLOSURE, HOT BOX MODEL HB2, OR EQUAL, WITH RAIN BIRD PEB SERIES, OR EQUAL 2" PLASTIC BODY 24-VOLT AUTOMATIC MASTER VALVE, RAIN BIRD PEB SERIES, OR EQUAL, IN VALVE BOX. INSTALL PER DETAIL A4/LI501 AND C2/LI501.
 - ⊕ PRESSURE COMPENSATING BUBBLER ASSEMBLIES, RAIN BIRD 1400 SERIES WITH CHECK VALVE. INSTALL AS FOLLOWS:
- | MODEL NO. | GPM | PSI | DETAIL |
|-----------|----------------------------|-----|---------------------|
| 1401 | .25 | 30 | A2/LI501 |
| 1401 | .50 (2 PER VERTICAL SHRUB) | 30 | A2/LI501 |
| 1402 | 1.50 (3 PER TREE) | 30 | A1/LI501 & A2/LI501 |
- ⊕ ROTOR SPRINKLER ASSEMBLIES, RAIN BIRD 5000 SERIES WITH MATCHED PRECIPITATION NOZZLES, 6" POP-UP, AS FOLLOWS:
- | MODEL NO. | RADIUS | PSI | FLOW (GPM) | | | PRECIP. RATE (IN./HR.) | | |
|----------------|--------|-----|------------|------|------|------------------------|------|------|
| | | | Q | H | F | Q | H | F |
| RB-5000-MPR-25 | 25' | 45 | 1.00 | 1.98 | 3.82 | 0.62 | 0.61 | 0.59 |
| RB-5000-MPR-30 | 30' | 45 | 1.40 | 2.96 | 5.78 | 0.60 | 0.63 | 0.62 |
- ⊕ INSTALL ROTOR SPRINKLERS PER MANUFACTURER'S INSTRUCTIONS AND DETAIL C1/LI501
 - ⊕ SOLVENT WELD PVC CAP, SIZE PER LINE SIZE.

- ⊕ IRRIGATION CONTROLLER, RAIN BIRD ESP-LXME, OR EQUAL, 9-STATION. WALL-MOUNT CONTROLLER INSTALLED IN METAL WALL-MOUNTED CABINET. INSTALL PER DETAIL A3/LI501. PROVIDE GROUNDING TO CONTROLLER PER CONTROLLER SPECIFICATIONS AND DETAIL B1/LI501.
- ⊕ WATER METER, BY OTHERS. SEE UTILITY PLAN.

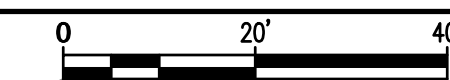


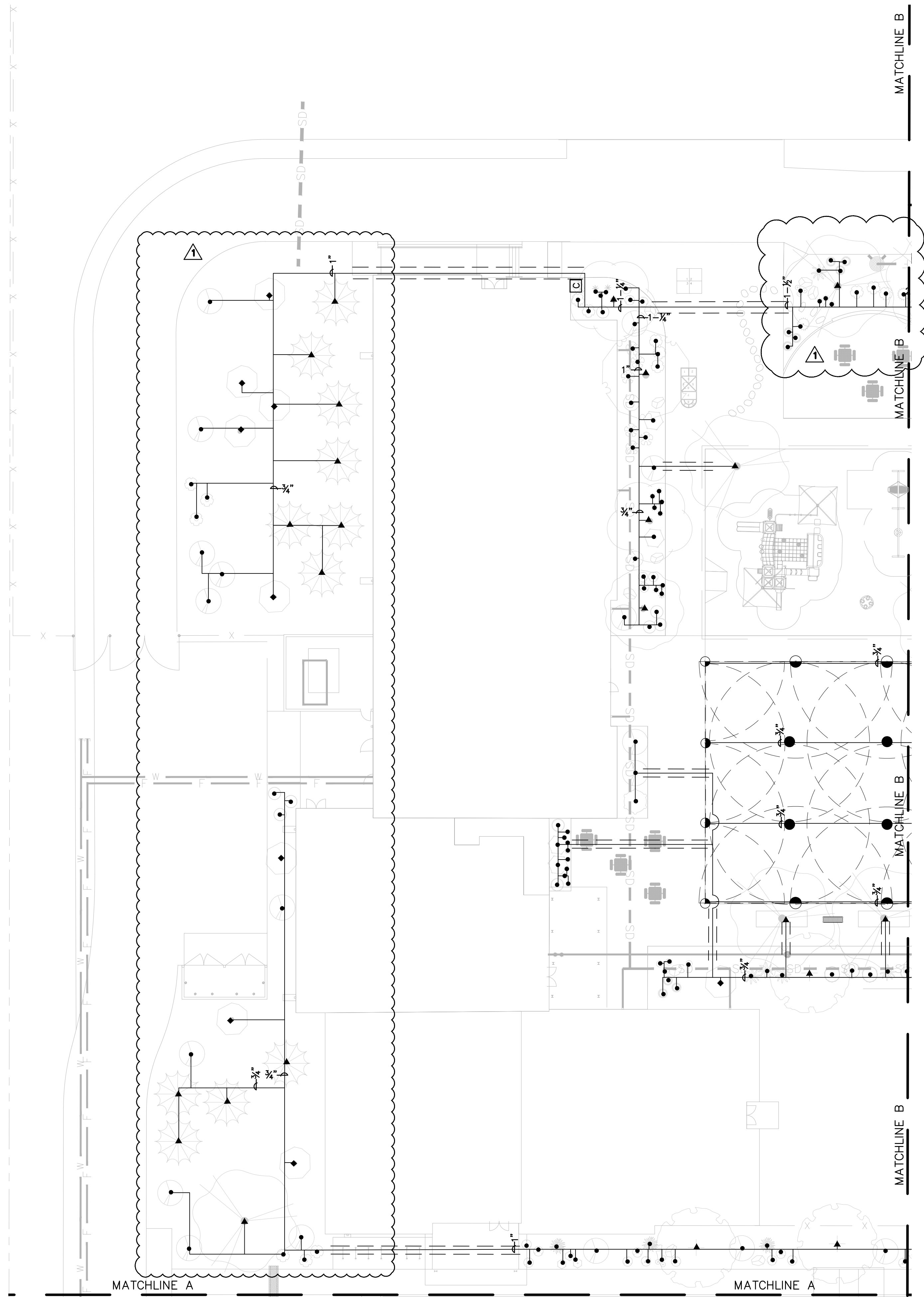
(D) KEYMAP



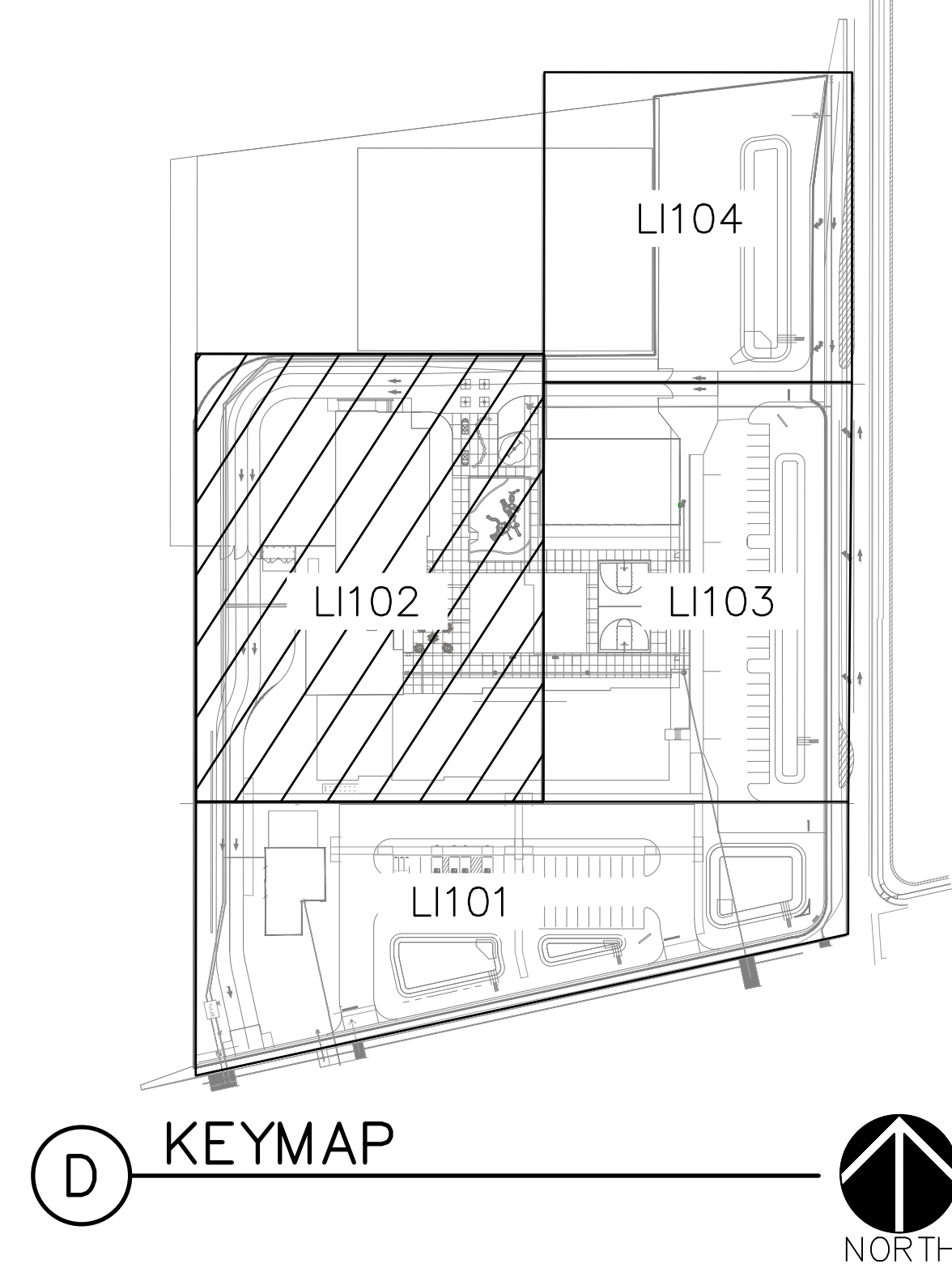
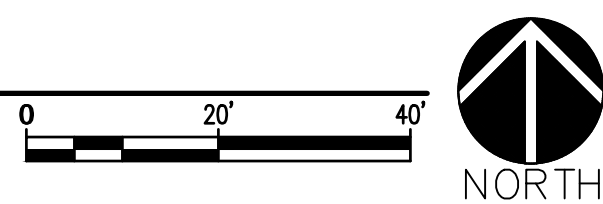
(A1) IRRIGATION PLAN

SCALE: 1"=20'-0"



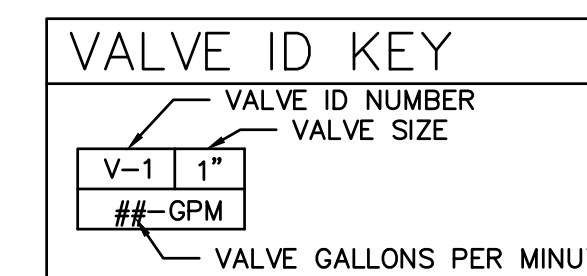


A1 IRRIGATION PLAN
SCALE: 1"=20'-0"



IRRIGATION LEGEND

- IRRIGATION MAIN LINE, SCHEDULE 40, BELL END, SOLVENT WELD PVC, SIZE 2". DEPTH OF BURY 28" FOR CONTINUOUS PRESSURE MAIN, 18" FOR NON-CONTINUOUS PRESSURE MAIN.
 - LATERAL PIPING, SCH. 40, BELL END, SOLVENT WELD PVC, SIZE AS SHOWN ON PLAN. DEPTH OF BURY, 18". LATERAL PIPE CONVEYING LESS THAN 6 GPM SHALL BE 3/4".
 - MAIN LINE AND LATERAL SLEEVE PIPING, CLASS 200, SDR-21, BELL-END, SOLVENT WELD PVC. EXTEND SLEEVE 18" BEYOND PAVING.
 - 24-VOLT IRRIGATION WIRE SLEEVE PIPING, CLASS 200, SDR-21, BELL-END, SOLVENT WELD PVC. EXTEND SLEEVE 18" BEYOND PAVING.
 - ⊕ REMOTE CONTROL VALVE ASSEMBLY, RAIN BIRD PEB SERIES, OR EQUAL, PLASTIC BODY 24-VOLT AUTOMATIC VALVE, SIZE AS SHOWN ON PLAN. INSTALL PER DETAIL C3/LI501.
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 - ⊕ BACKFLOW PREVENTER AND MASTER VALVE ASSEMBLY, FEBCO 825Y, OR EQUAL, 2" REDUCED PRESSURE BACKFLOW PREVENTER IN HEATED AND INSULATED BACKFLOW ENCLOSURE, HOT BOX MODEL HB2, OR EQUAL, WITH RAIN BIRD PEB SERIES, OR EQUAL 2" PLASTIC BODY 24-VOLT AUTOMATIC MASTER VALVE, RAIN BIRD PEB SERIES, OR EQUAL, IN VALVE BOX. INSTALL PER DETAIL A4/LI501 AND C2/LI501.
 - ⊕ PRESSURE COMPENSATING BUBBLER ASSEMBLIES, RAIN BIRD 1400 SERIES WITH CHECK VALVE. INSTALL AS FOLLOWS:
- | MODEL NO. | GPM | PSI | DETAIL |
|-----------|----------------------------|-----|---------------------|
| 1401 | .25 | 30 | A2/LI501 |
| 1401 | .50 (2 PER VERTICAL SHRUB) | 30 | A2/LI501 |
| 1402 | 1.50 (3 PER TREE) | 30 | A1/LI501 & A2/LI501 |
-
- ⊕ ROTOR SPRINKLER ASSEMBLIES, RAIN BIRD 5000 SERIES WITH MATCHED PRECIPITATION NOZZLES, 6" POP-UP, AS FOLLOWS:
- | MODEL NO. | RADIUS | PSI | FLOW (GPM) | | | PRECIP. RATE (IN./HR.) | | |
|----------------|--------|-----|------------|------|------|------------------------|------|------|
| | | | Q | H | F | Q | H | F |
| RB-5000-MPR-25 | 25' | 45 | 1.00 | 1.98 | 3.82 | 0.62 | 0.61 | 0.59 |
| RB-5000-MPR-30 | 30' | 45 | 1.40 | 2.96 | 5.78 | 0.60 | 0.63 | 0.62 |
- ⊕ INSTALL ROTOR SPRINKLERS PER MANUFACTURER'S INSTRUCTIONS AND DETAIL C1/LI501
 - ⊕ SOLVENT WELD PVC CAP, SIZE PER LINE SIZE.
 - ⊕ IRRIGATION CONTROLLER, RAIN BIRD ESP-LXME, OR EQUAL, 9-STATION. WALL-MOUNT CONTROLLER INSTALLED IN METAL WALL-MOUNTED CABINET. INSTALL PER DETAIL A3/LI501. PROVIDE GROUNDING TO CONTROLLER PER CONTROLLER SPECIFICATIONS AND DETAIL B1/LI501.
 - ⊕ WATER METER, BY OTHERS. SEE UTILITY PLAN.



**ALBUQUERQUE COLLEGIATE
CHARTER SCHOOL**
SUNSET GARDENS AND 90TH
ALBUQUERQUE, NM

**CONSTRUCTION
DOCUMENTS**

REVISION	DATE
⊕ PERMIT REVIEW	01.08.26
DATE	11-24-25
PROJECT NO	

**IRRIGATION
PLAN**



**ALBUQUERQUE COLLEGIATE
CHARTER SCHOOL**

SUNSET GARDENS AND 90TH
ALBUQUERQUE, NM

**CONSTRUCTION
DOCUMENTS**

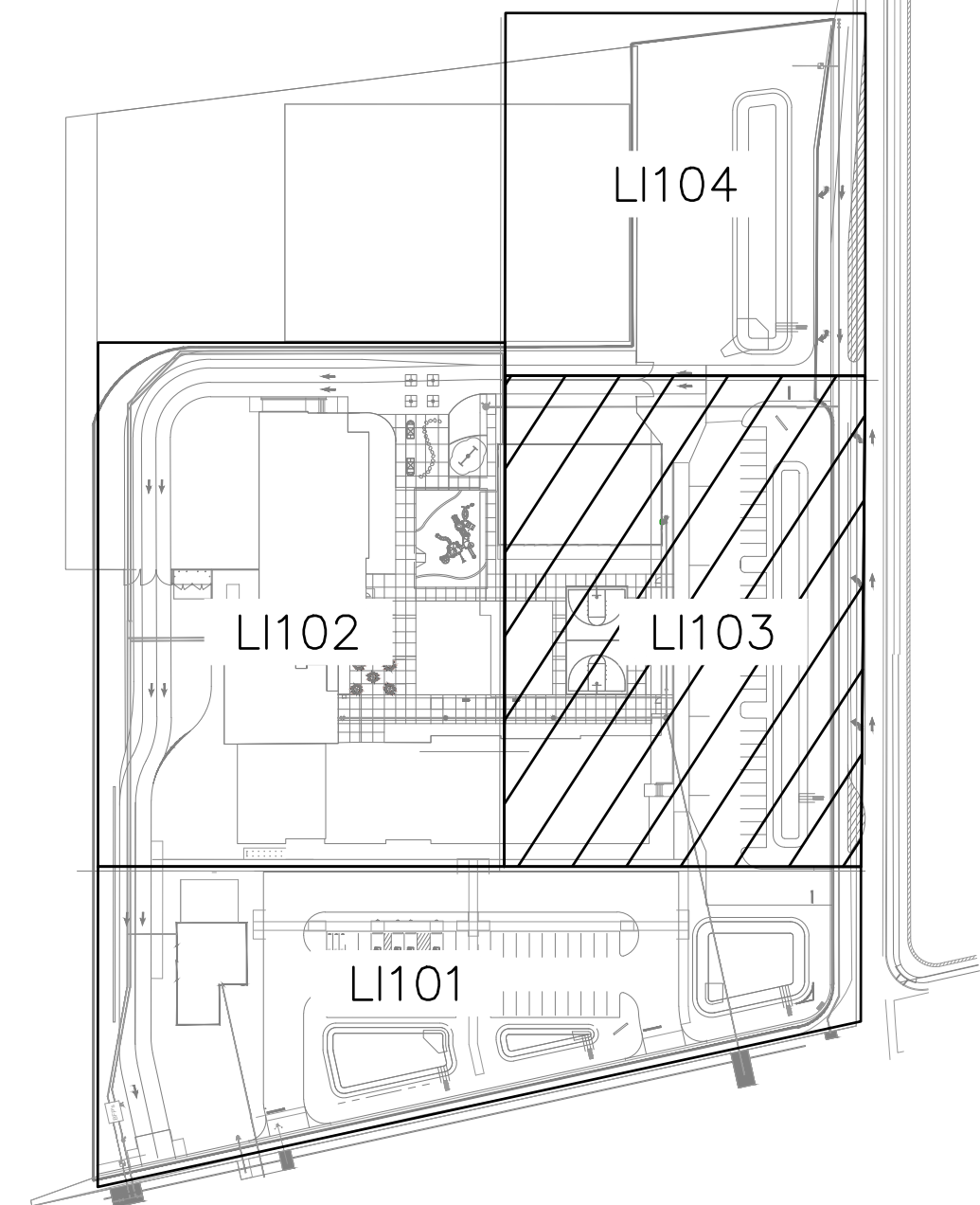
REVISION	DATE
△ PERMIT REVIEW	01.08.26

DATE	11-24-25
PROJECT NO	

**IRRIGATION
PLAN**

SHEET NO.

LI103



D KEYMAP



IRRIGATION LEGEND

- IRRIGATION MAIN LINE, SCHEDULE 40, BELL END, SOLVENT WELD PVC, SIZE 2". DEPTH OF BURY 28" FOR CONTINUOUS PRESSURE MAIN, 18" FOR NON-CONTINUOUS PRESSURE MAIN.
- LATERAL PIPING, SCH. 40, BELL END, SOLVENT WELD PVC, SIZE AS SHOWN ON PLAN. DEPTH OF BURY, 18". LATERAL PIPE CONVEYING LESS THAN 6 GPM SHALL BE 3/4".

- ==== MAIN LINE AND LATERAL SLEEVE PIPING, CLASS 200, SDR-21, BELL-END, SOLVENT WELD PVC. EXTEND SLEEVE 18" BEYOND PAVING.
- 24-VOLT IRRIGATION WIRE SLEEVE PIPING, CLASS 200, SDR-21, BELL-END, SOLVENT WELD PVC. EXTEND SLEEVE 18" BEYOND PAVING.

- ⊙ REMOTE CONTROL VALVE ASSEMBLY, RAIN BIRD PEB SERIES, OR EQUAL, PLASTIC BODY 24-VOLT AUTOMATIC VALVE, SIZE AS SHOWN ON PLAN. INSTALL PER DETAIL C3/LI501.
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PRESSURE COMPENSATING BUBBLER ASSEMBLIES, RAIN BIRD 1400 SERIES WITH CHECK VALVE. INSTALL AS FOLLOWS:

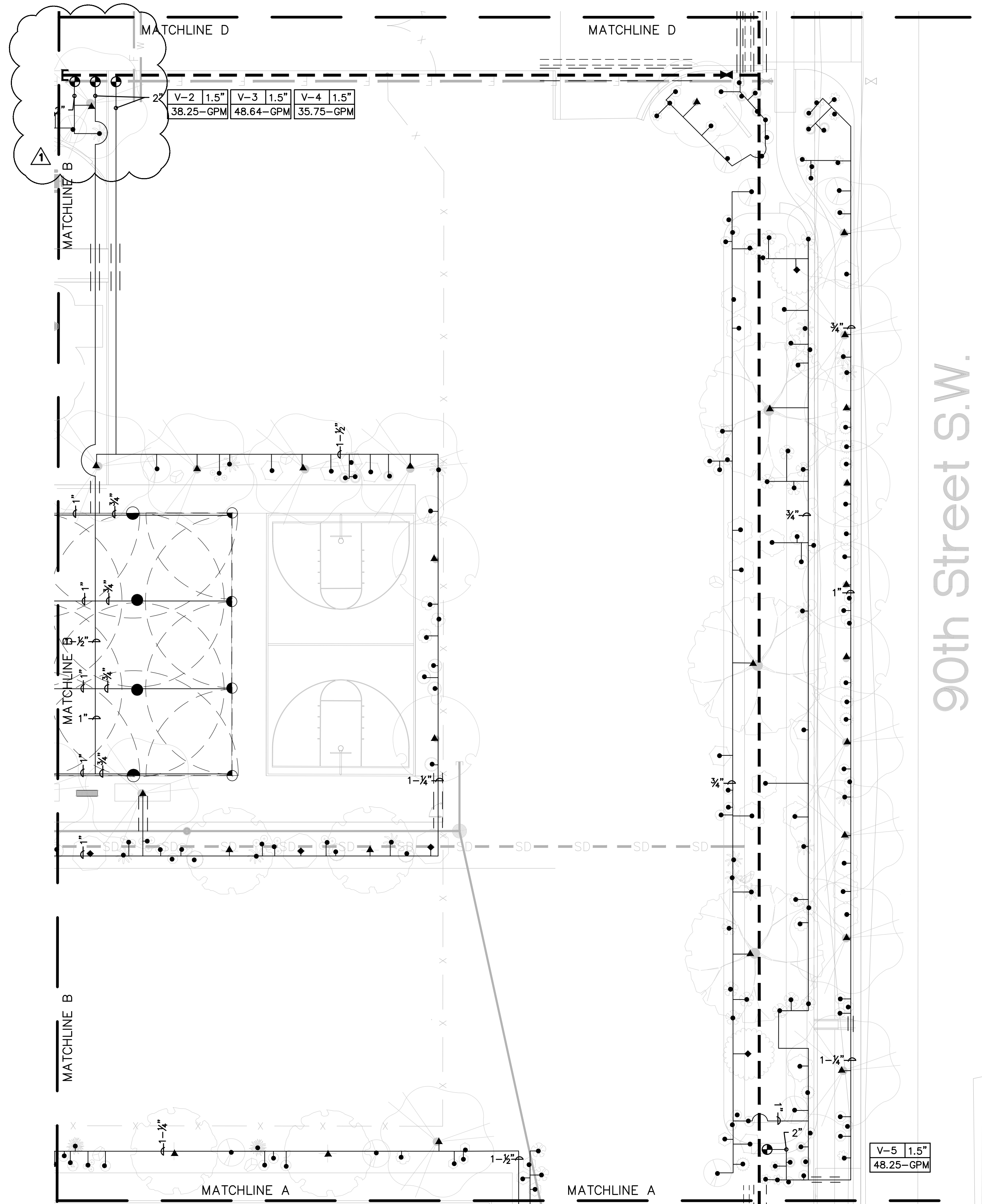
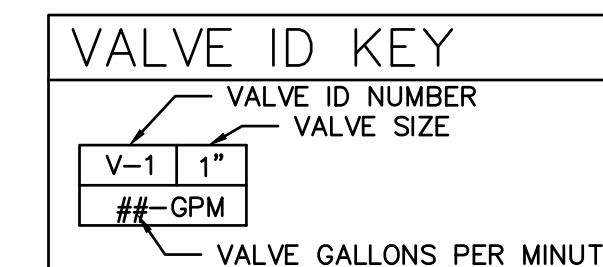
MODEL NO.	GPM	PSI	DETAIL
1401	.25	30	A2/LI501
1401	.50 (2 PER VERTICAL SHRUB)	30	A2/LI501
1402	1.50 (3 PER TREE)	30	A1/LI501 & A2/LI501

ROTOR SPRINKLER ASSEMBLIES, RAIN BIRD 5000 SERIES WITH MATCHED PRECIPITATION NOZZLES, 6" POP-UP, AS FOLLOWS:

MODEL NO.	RADIUS	PSI	FLOW (GPM)			PRECIP. RATE (IN./HR.)		
			Q	H	F	Q	H	F
RB-5000-MPR-25	25'	45	1.00	1.98	3.82	0.62	0.61	0.59
RB-5000-MPR-30	30'	45	1.40	2.96	5.78	0.60	0.63	0.62

INSTALL ROTOR SPRINKLERS PER MANUFACTURER'S INSTRUCTIONS AND DETAIL C1/LI501

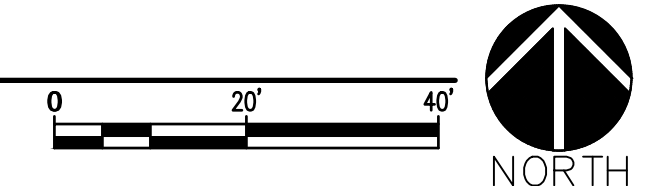
- L SOLVENT WELD PVC CAP, SIZE PER LINE SIZE.
- C IRRIGATION CONTROLLER, RAIN BIRD ESP-LXME, OR EQUAL, 9-STATION, WALL-MOUNT CONTROLLER INSTALLED IN METAL WALL-MOUNTED CABINET. INSTALL PER DETAIL A3/LI501. PROVIDE GROUNDING TO CONTROLLER PER CONTROLLER SPECIFICATIONS AND DETAIL B1/LI501.
- M WATER METER, BY OTHERS. SEE UTILITY PLAN.

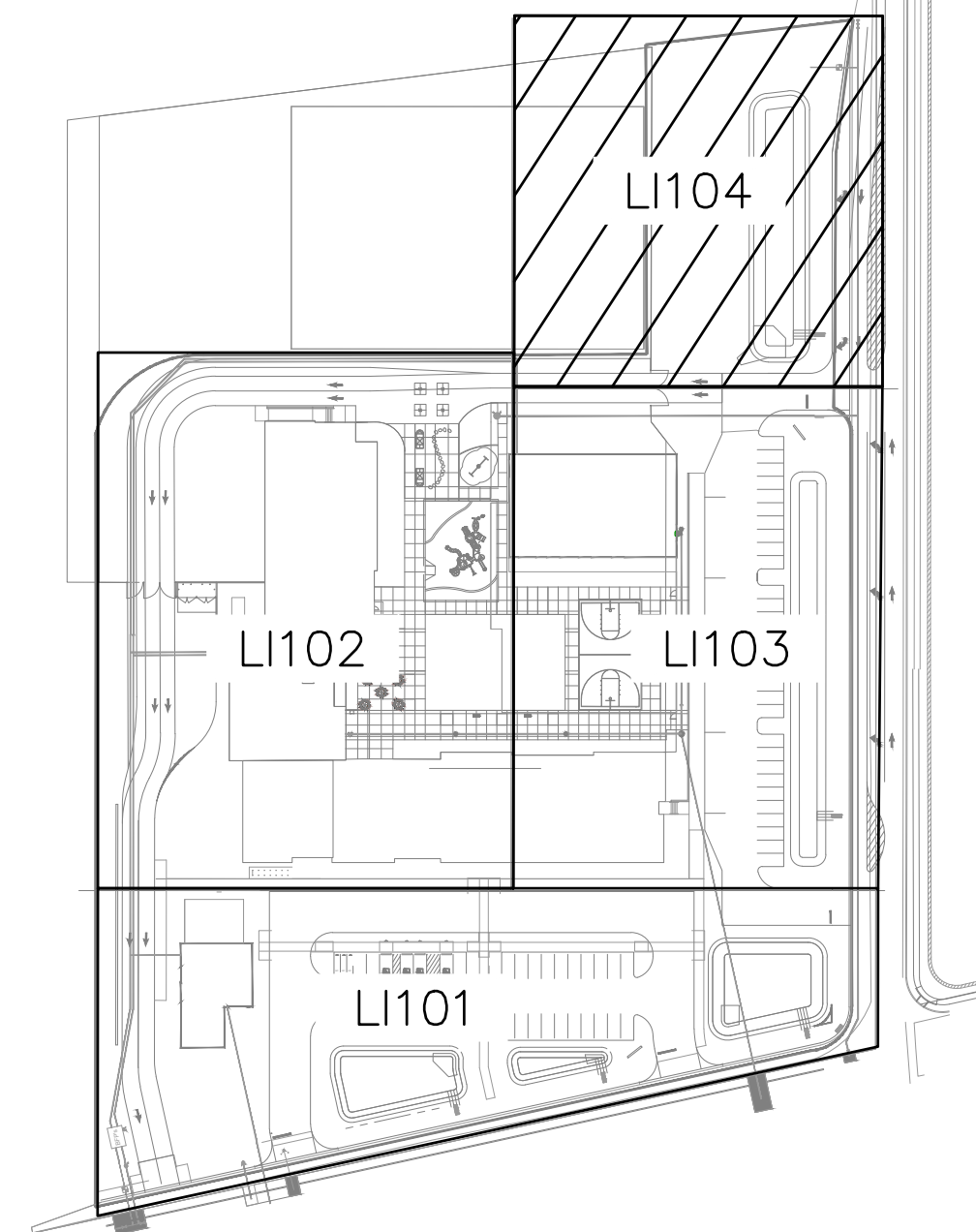


90th Street S.W.

A1 IRRIGATION PLAN

SCALE: 1"=20'-0"





D KEYMAP



IRRIGATION SCHEDULE

CODE	DESCRIPTION
I-01	IRRIGATION SYSTEM POINT OF CONNECTION. TIE INTO WATER SERVICE LINE - SEE UTILITIES PLAN.

IRRIGATION LEGEND

- IRRIGATION MAIN LINE, SCHEDULE 40, BELL END, SOLVENT WELD PVC, SIZE 2". DEPTH OF BURY 28" FOR CONTINUOUS PRESSURE MAIN, 18" FOR NON-CONTINUOUS PRESSURE MAIN.
- LATERAL PIPING, SCH. 40, BELL END, SOLVENT WELD PVC, SIZE AS SHOWN ON PLAN. DEPTH OF BURY, 18". LATERAL PIPE CONVEYING LESS THAN 6 GPM SHALL BE 3/4".
- ==== MAIN LINE AND LATERAL SLEEVE PIPING, CLASS 200, SDR-21, BELL-END, SOLVENT WELD PVC. EXTEND SLEEVE 18" BEYOND PAVING.
- 24-VOLT IRRIGATION WIRE SLEEVE PIPING, CLASS 200, SDR-21, BELL-END, SOLVENT WELD PVC. EXTEND SLEEVE 18" BEYOND PAVING.
- ⊕ REMOTE CONTROL VALVE ASSEMBLY, RAIN BIRD PEB SERIES, OR EQUAL, PLASTIC BODY 24-VOLT AUTOMATIC VALVE, SIZE AS SHOWN ON PLAN. INSTALL PER DETAIL C3/LI501.
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MODEL NO.	GPM	PSI	DETAIL
1401	.25	30	A2/LI501
1401	.50 (2 PER VERTICAL SHRUB)	30	A2/LI501
1402	1.50 (3 PER TREE)	30	A1/LI501 & A2/LI501

ROTOR SPRINKLER ASSEMBLIES, RAIN BIRD 5000 SERIES WITH MATCHED PRECIPITATION NOZZLES, 6" POP-UP, AS FOLLOWS:

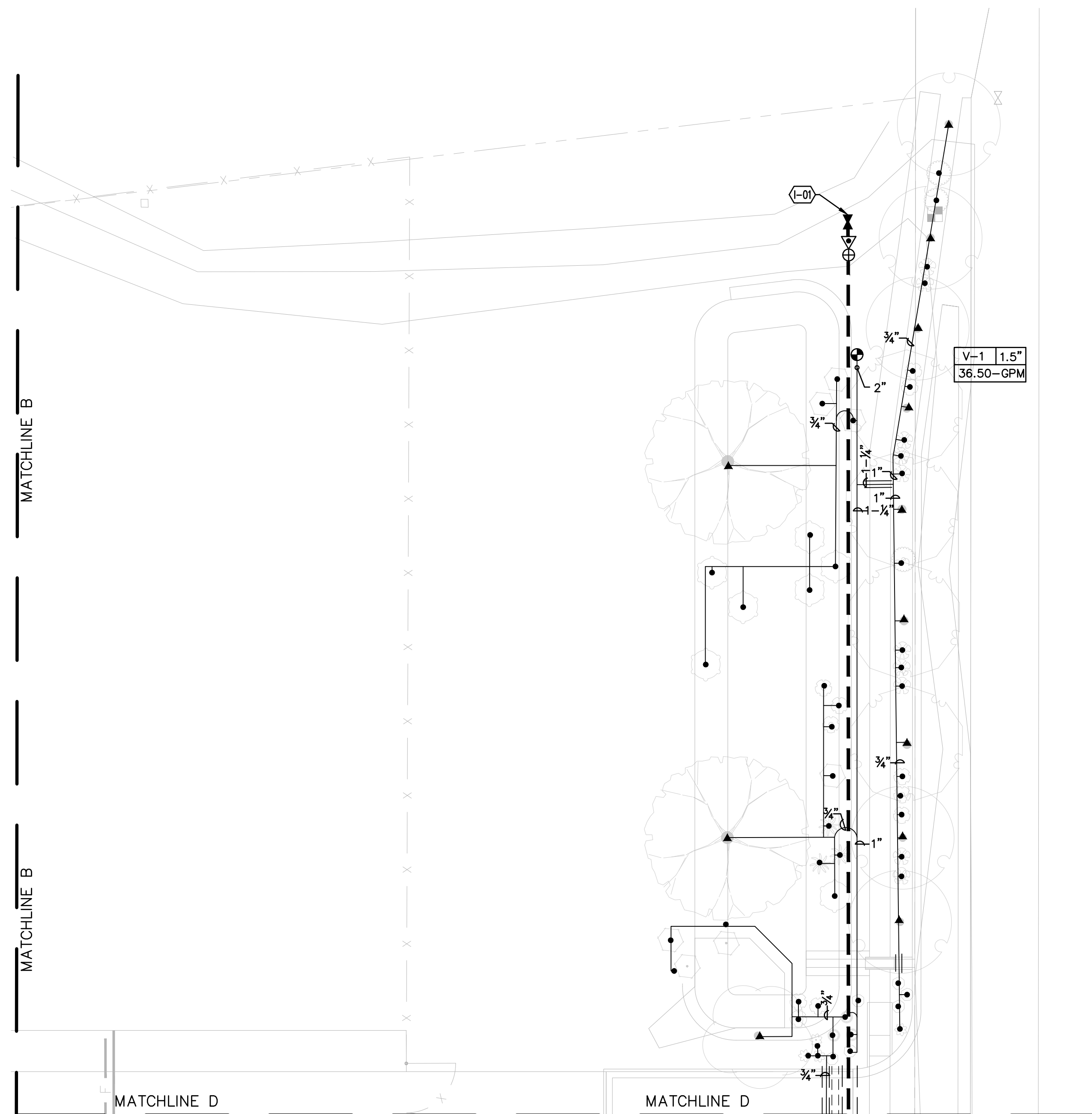
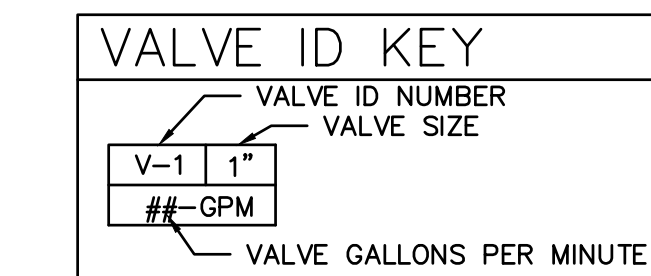
MODEL NO.	RADIUS	PSI	FLOW (GPM)			PRECIP. RATE (IN./HR.)		
			Q	H	F	Q	H	F
RB-5000-MPR-25	25'	45	1.00	1.98	3.82	0.62	0.61	0.59
RB-5000-MPR-30	30'	45	1.40	2.96	5.78	0.60	0.63	0.62

INSTALL ROTOR SPRINKLERS PER MANUFACTURER'S INSTRUCTIONS AND DETAIL C1/LI501

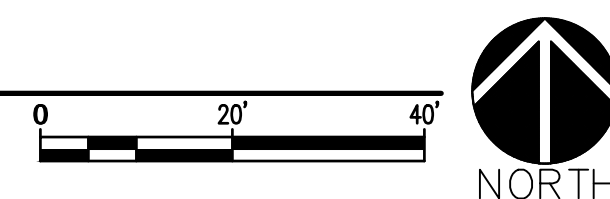
L SOLVENT WELD PVC CAP, SIZE PER LINE SIZE.

C IRRIGATION CONTROLLER, RAIN BIRD ESP-LXME, OR EQUAL, 9-STATION. WALL-MOUNT CONTROLLER INSTALLED IN METAL WALL-MOUNTED CABINET. INSTALL PER DETAIL A3/LI501. PROVIDE GROUNDING TO CONTROLLER PER CONTROLLER SPECIFICATIONS AND DETAIL B1/LI501.

M WATER METER, BY OTHERS. SEE UTILITY PLAN.



A1 IRRIGATION PLAN
SCALE: 1"=20'-0"



CONSTRUCTION DOCUMENTS

REVISION DATE

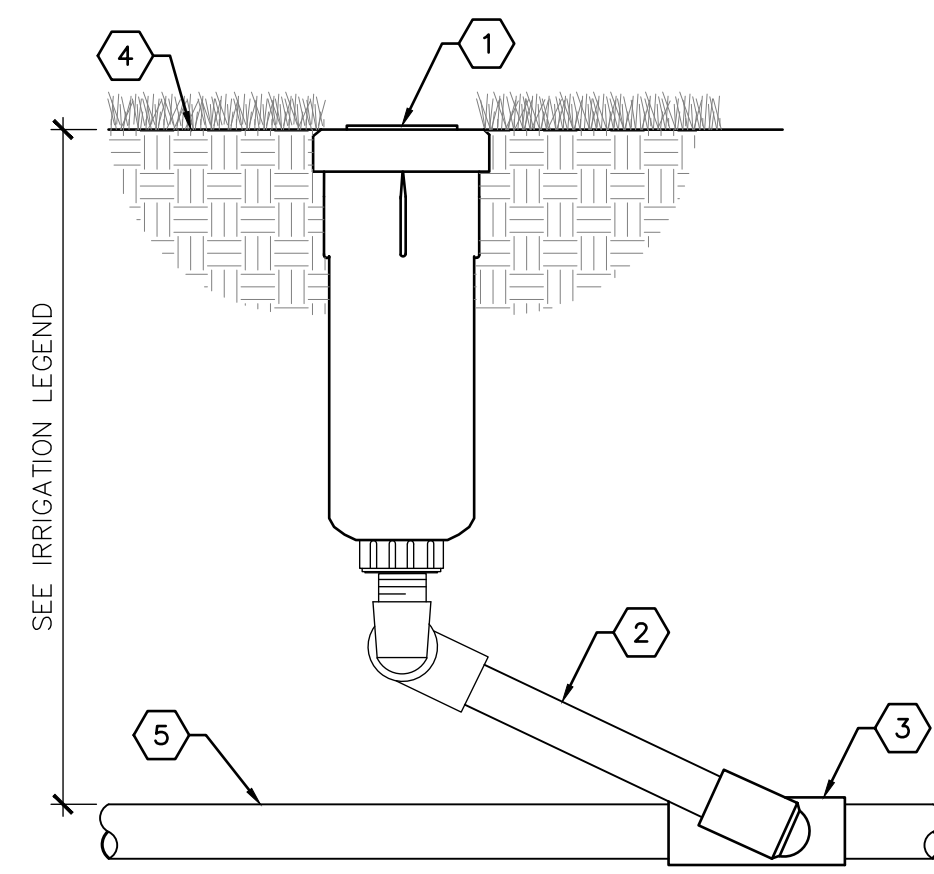
DATE 11-24-25

PROJECT NO

IRRIGATION PLAN

SHEET NO.

LI104

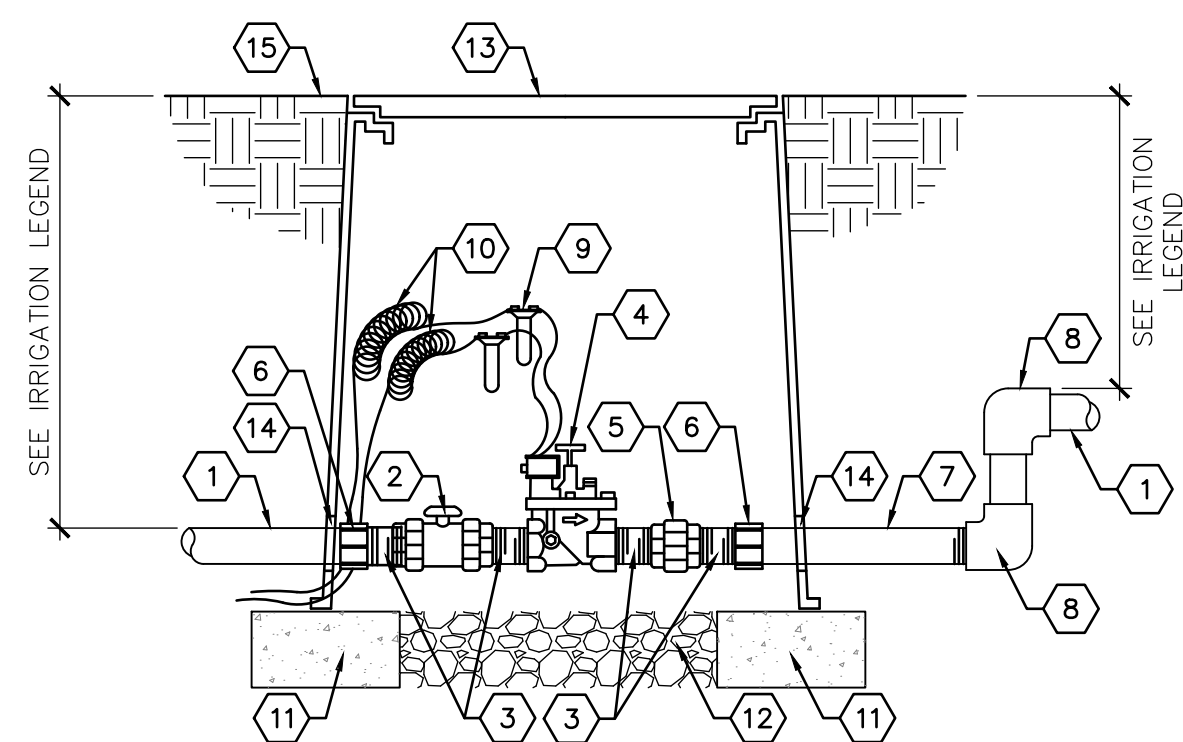


KEYED NOTES

1. SPRINKLER BODY - SEE IRRIGATION LEGEND
2. UNITIZED SWING JOINT, SAME SIZE AS HEAD'S INLET SIZE
3. PVC LATERAL PIPE FITTING
4. FINISH GRADE
5. LATERAL PIPING

C1 SPRINKLER ASSEMBLY

NOT TO SCALE

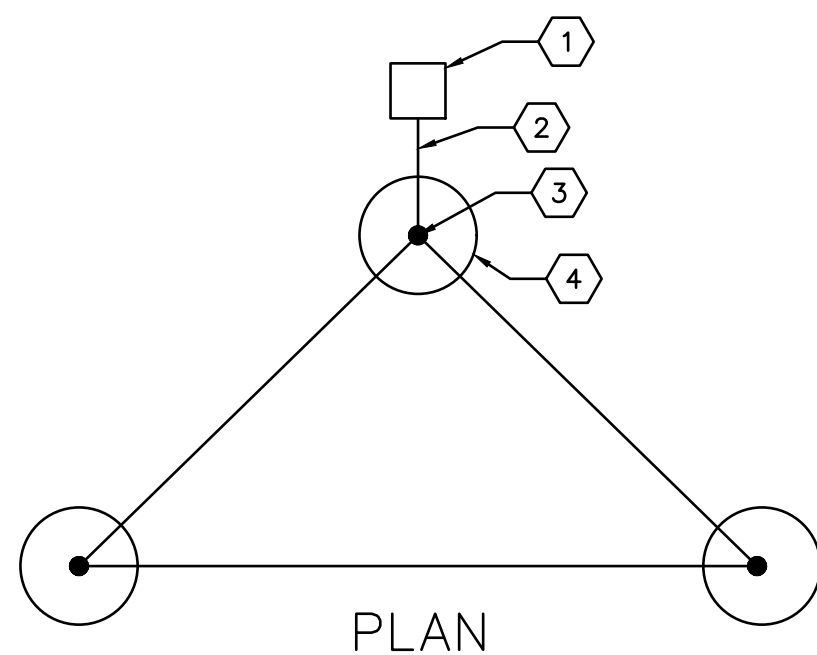


KEYED NOTES

1. MAINLINE
2. SCH. 80 PVC BALL VALVE WITH UNIONS
3. SCH. 80 PVC NIPPLE, 3" LENGTH
4. MASTER VALVE - SEE IRRIGATION LEGEND
5. SCH. 80 PVC UNION
6. SCH. 80 PVC FEMALE ADAPTER
7. SCH. 80 PVC NIPPLE, LENGTH AS REQUIRED
8. SCH. 40 PVC ELL
9. WATERPROOF WIRE CONNECTOR
10. 3/8" WIRE EXPANSION LOOPS
11. SOLID CMU BLOCK, FOUR PER BOX
12. 6" DEPTH OF 1" DIAMETER WASHED GRAVEL WITH MIN. 2" CLEARANCE FROM BOTTOM OF EQUIPMENT AND PIPING
13. 17" X 30" HEAVY-DUTY VALVE BOX WITH T-STYLE BOLT-DOWN COVER AND EXTENSIONS AS REQUIRED
14. NOTCH OR CORE DRILL VALVE BOX WALL, 1/2" LARGER THAN PIPE DIAMETER
15. FINISH GRADE

C2 MASTER VALVE ASSEMBLY

NOT TO SCALE



PLAN

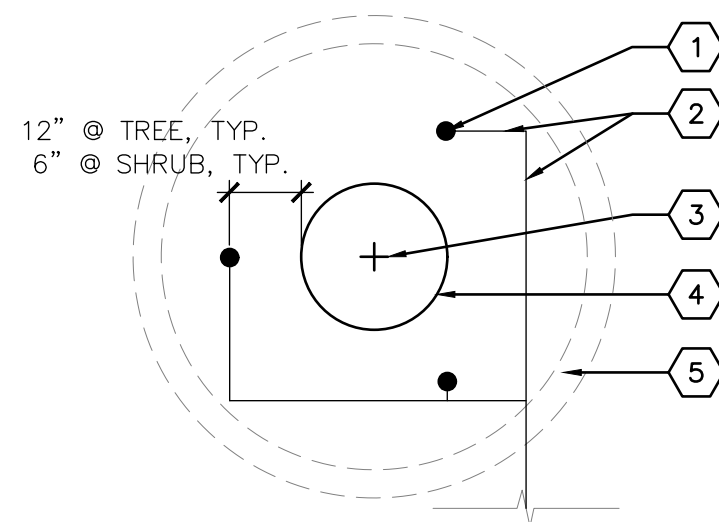
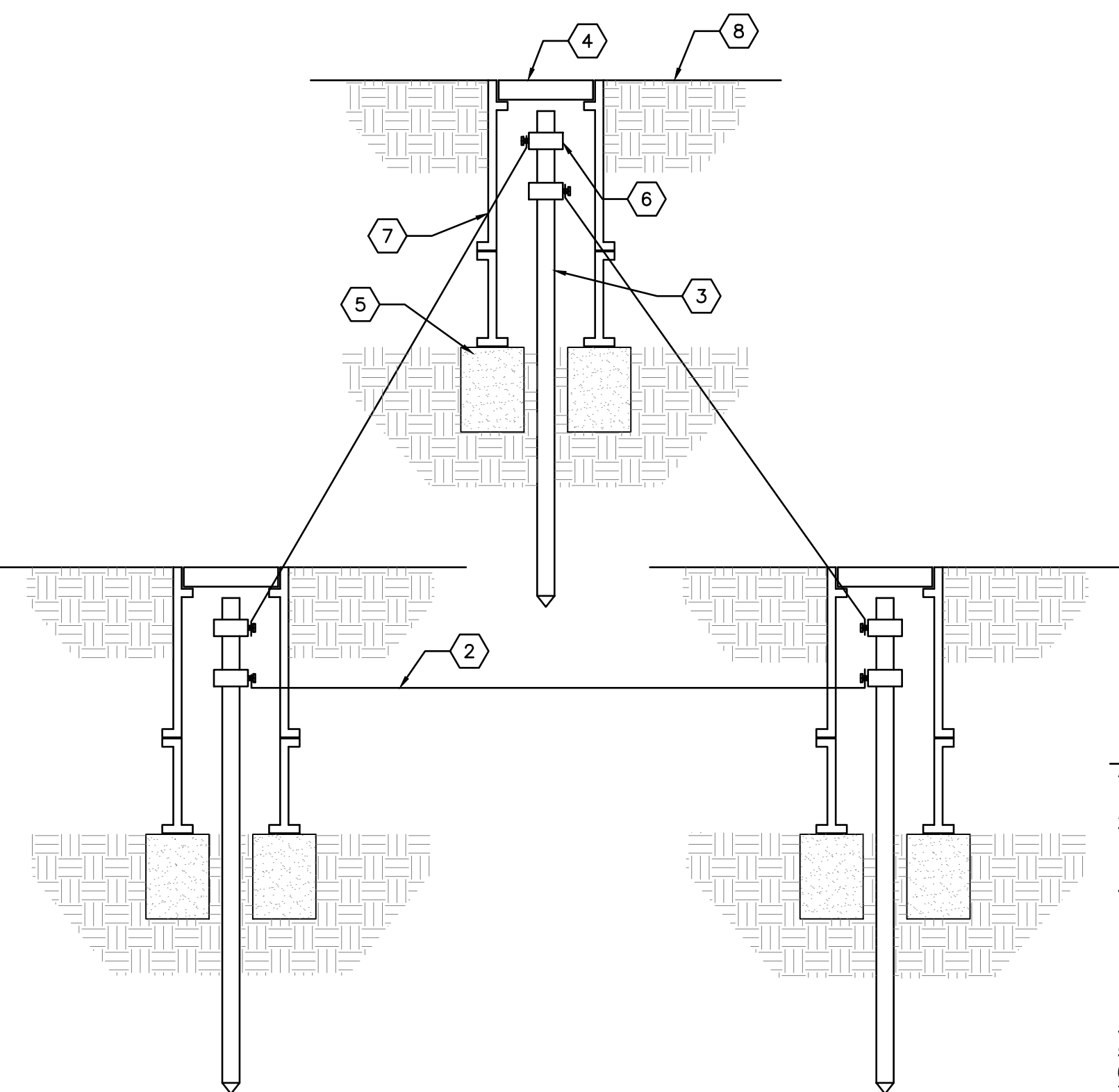
KEYED NOTES

1. IRRIGATION CONTROLLER OR DECODER SURGE DEVICE - SEE IRRIGATION LEGEND
2. #10 AWG WIRE FROM IRRIGATION CONTROLLER OR SURGE DEVICE TO GROUND ROD CLAMP. WIRE SHALL BE INSTALLED STRAIGHT AND TAUT
3. 8' LENGTH GROUND ROD, PLACE IN IRRIGATED AREA A MINIMUM OF 16' FROM ONE ANOTHER WITH ONE ROD A MIN. OF 12' FROM CONTROLLER OR SURGE DEVICE. (OPTION: REPLACE GROUNDING RODS WITH 1/8" X 12" X 18" COPPER PLATE, BURIED AT 12" DEPTH. SOLDER #6 BARE COPPER WIRE TO PLATE)
4. 6" ROUND VALVE BOX WITH COVER
5. SOLID CMU BLOCK, TWO PER BOX
6. GROUND ROD CLAMP
7. DRILL A SMALL OPENING IN VALVE BOX TO MAINTAIN WIRE TAUTNESS
8. FINISH GRADE

SECTION

B1 CONTROLLER GROUNDING

NOT TO SCALE

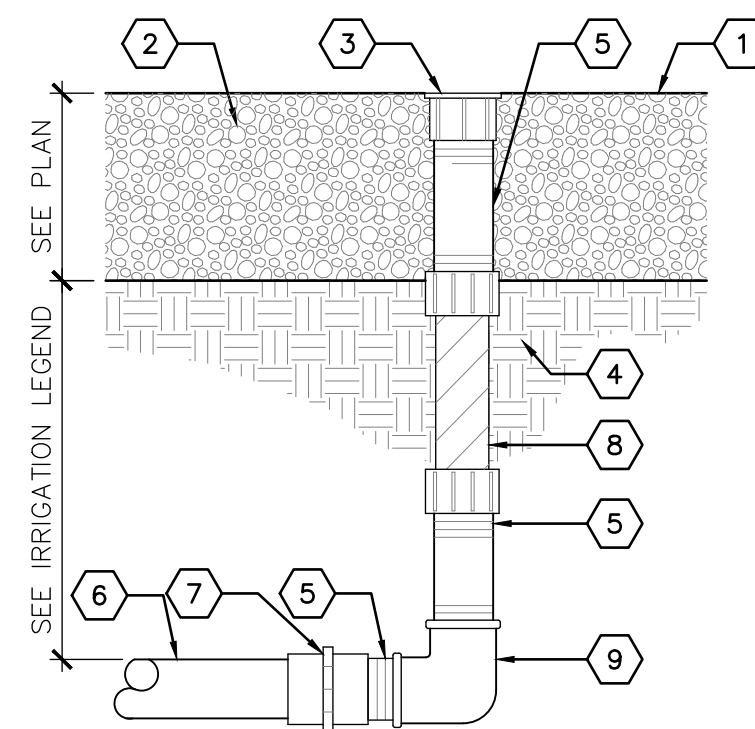


KEYED NOTES

1. BUBBLER ASSEMBLY - SEE IRRIGATION LEGEND
2. 3/4" LATERAL PIPING
3. CENTER OF TREE
4. EDGE OF ROOT BALL
5. EARTHEN BERM - SEE PLANTING DETAILS

A1 THREE-BUBBLER LAYOUT

NOT TO SCALE

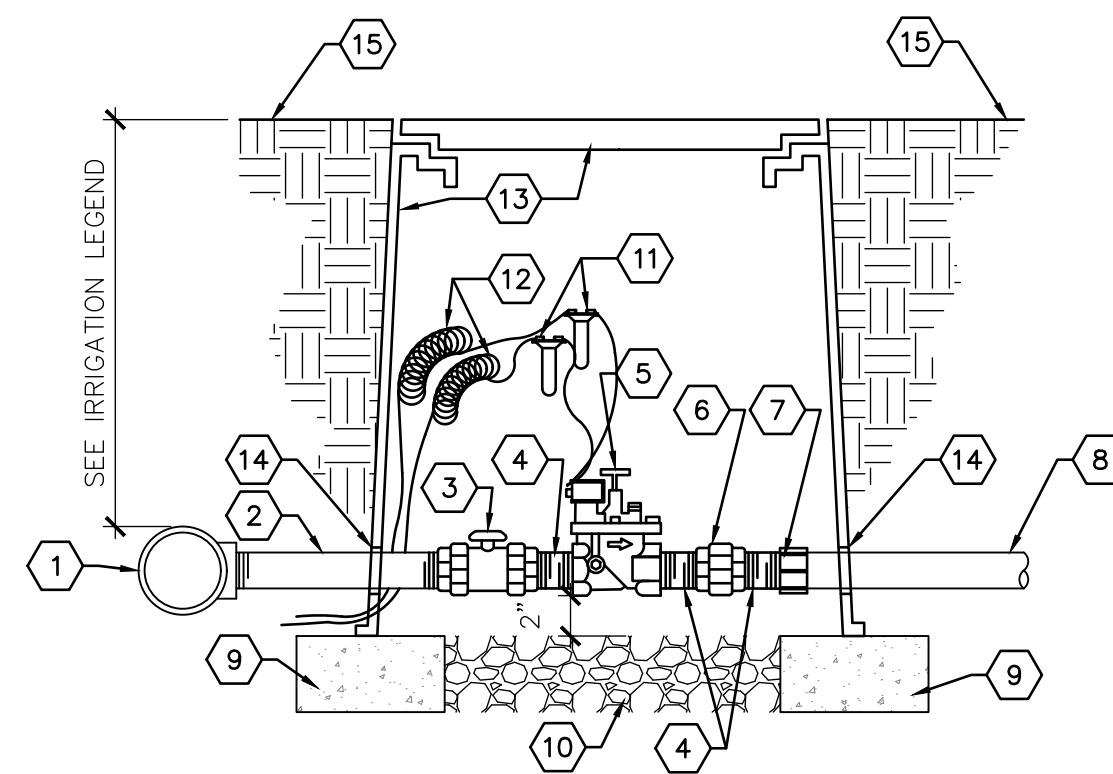


KEYED NOTES

1. FINISH GRADE
2. MULCH
3. PRESSURE COMPENSATING BUBBLER - SEE IRRIGATION LEGEND, TOP OF BUBBLER SHALL BE FLUSH WITH TOP OF MULCH
4. COMPACTED SUBGRADE
5. 1/2" SCH. 80 PVC THREADED NIPPLE, LENGTH AS REQUIRED
6. 3/4" LATERAL PIPING
7. 3/4" X 1/2" SCH. 40 PVC FEMALE ADAPTER
8. 1/2" X 6" FLEX NIPPLE
9. 1/2" SCH. 40 PVC THREADED ELBOW

A2 BUBBLER ASSEMBLY

NOT TO SCALE



KEYED NOTES

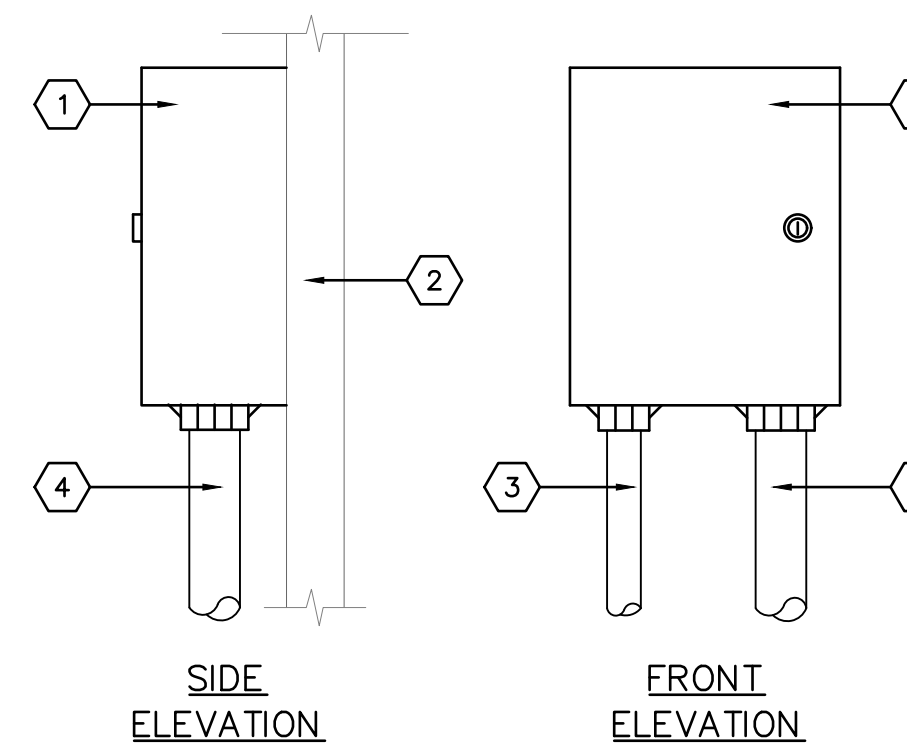
1. SERVICE TEE AT MAINLINE
2. SCH. 80 PVC NIPPLE, LENGTH AS REQUIRED
3. SCH. 80 PVC BALL VALVE WITH UNIONS
4. SCH. 80 PVC NIPPLE, 3" LENGTH
5. REMOTE CONTROL VALVE - SEE IRRIGATION LEGEND
6. SCH. 80 PVC UNION
7. SCH. 80 PVC FEMALE ADAPTER
8. LATERAL PIPING
9. SOLID CMU BLOCK, FOUR PER BOX
10. 6" DEPTH OF 1" DIAMETER WASHED GRAVEL WITH MIN. 2" CLEARANCE FROM BOTTOM OF EQUIPMENT AND PIPING
11. WATERPROOF WIRE CONNECTOR
12. 3/8" WIRE EXPANSION LOOPS
13. 17" X 30" HEAVY-DUTY VALVE BOX WITH T-STYLE BOLT-DOWN COVER AND EXTENSIONS AS REQUIRED
14. NOTCH OR CORE DRILL VALVE BOX WALL, 1/2" LARGER THAN PIPE DIAMETER
15. FINISH GRADE

GENERAL NOTES

- A. CONTRACTOR SHALL INSTALL ONE AUTOMATIC VALVE ASSEMBLY PER VALVE BOX.

C3 REMOTE CONTROL VALVE ASSEMBLY

NOT TO SCALE



KEYED NOTES

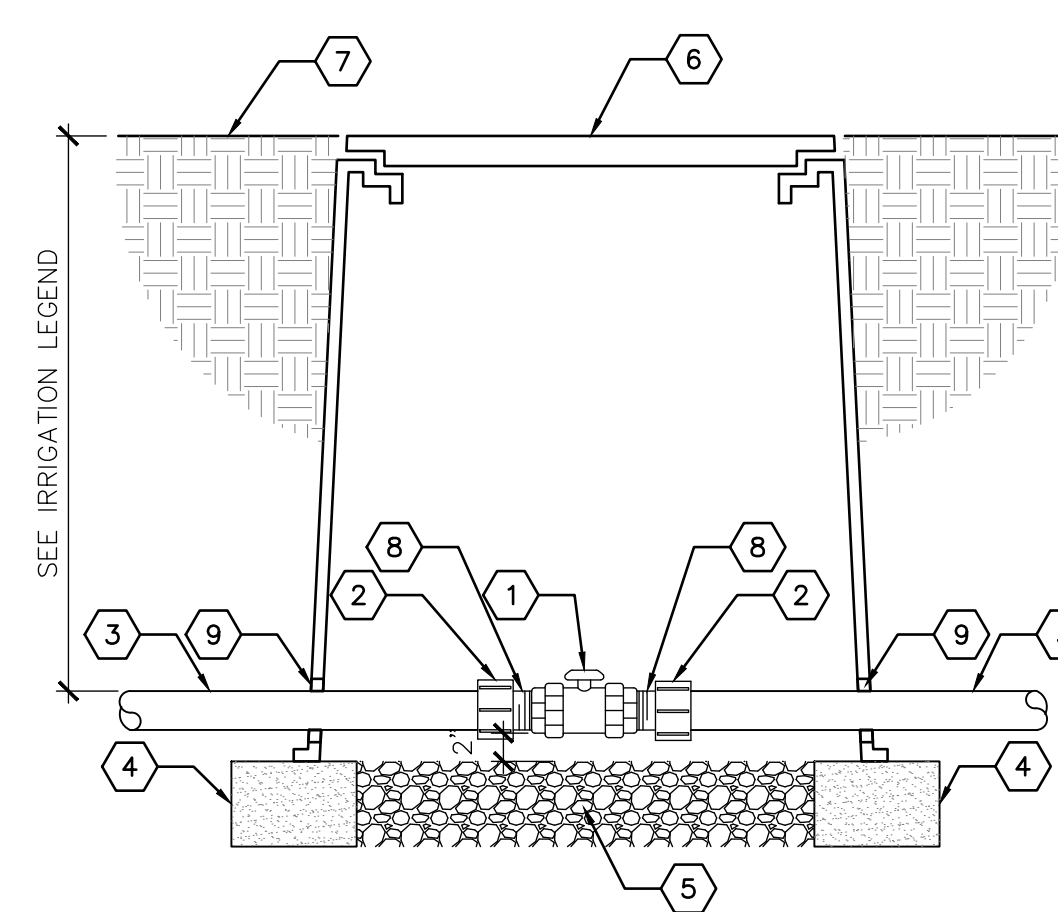
1. AUTOMATIC CONTROLLER - SEE IRRIGATION LEGEND
2. WALL - SEE PLAN
3. 120-VOLT WIRE CONDUIT
4. 24-VOLT WIRE CONDUIT

GENERAL NOTES

- A. CONTROLLER SHALL BE MOUNTED SECURELY TO WALL USING APPROPRIATE FASTENERS FOR WALL TYPE.
- B. ALL EXPOSED CONDUIT SHALL BE E.M.T. OR EQUAL AND APPROVED BY LOCAL CODES.
- C. ALL CONDUIT CONNECTIONS SHALL BE MADE USING WATERTIGHT CONNECTORS.
- D. MOUNT TOP OF CONTROLLER 52" TO 58" ABOVE FINISH GRADE.

A3 WALL-MOUNT CONTROLLER

NOT TO SCALE

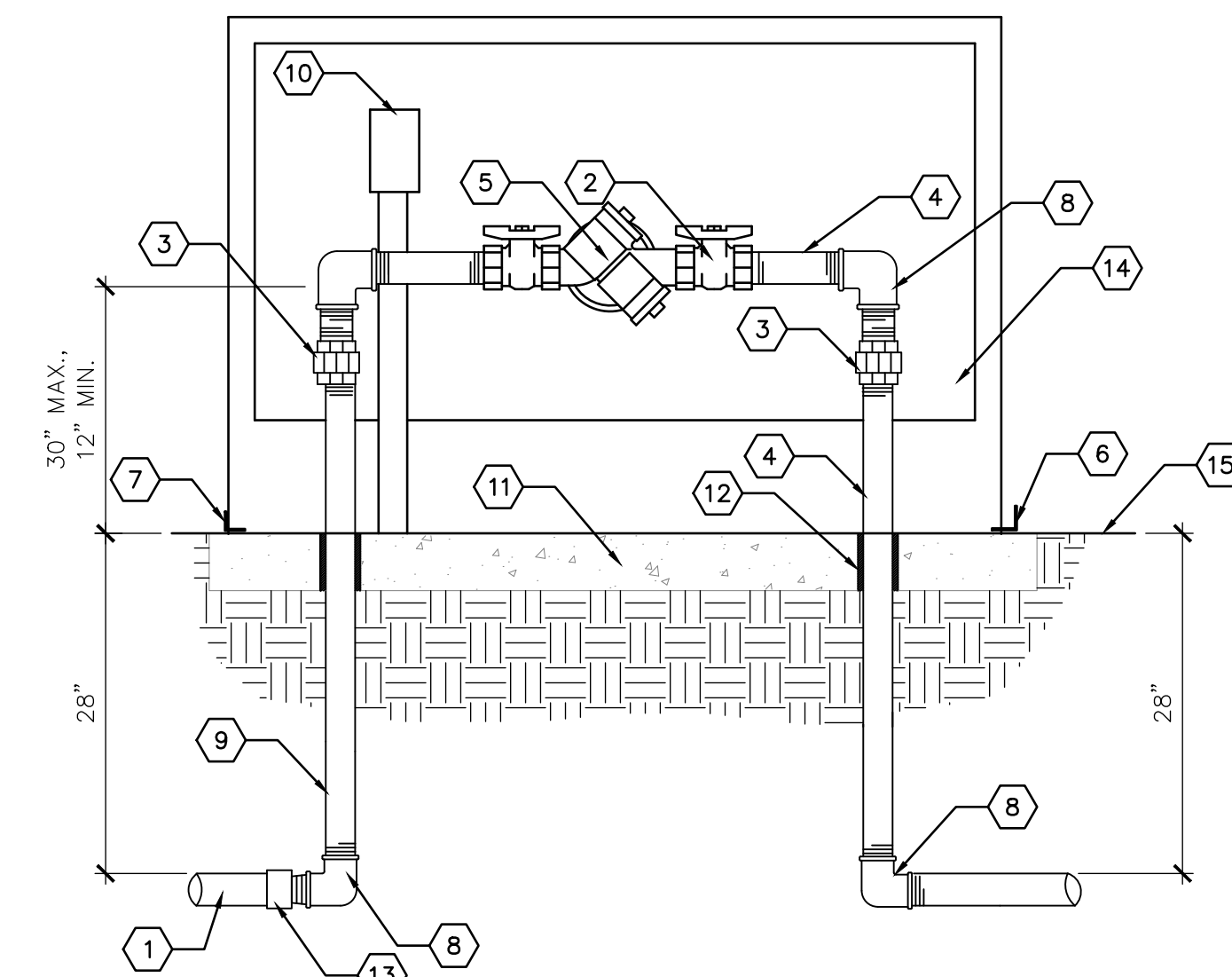


KEYED NOTES

1. SCH. 80 BALL VALVE WITH UNIONS
2. SCH. 40 PVC MALE ADAPTER
3. IRRIGATION MAINLINE
4. SOLID CMU BLOCK, FOUR PER BOX
- 6" DEPTH OF 1" DIAMETER WASHED GRAVEL WITH MIN. 2" CLEARANCE FROM BOTTOM OF EQUIPMENT AND PIPING
- 10" X 15" HEAVY-DUTY VALVE BOX WITH T-STYLE BOLT-DOWN COVER AND EXTENSIONS AS REQUIRED
7. FINISH GRADE
8. SCHEDULE 80 PVC NIPPLE, 3" LENGTH
9. NOTCH OR CORE DRILL VALVE BOX WALL, 1/2" LARGER THAN PIPE DIAMETER

C4 MANUAL ISOLATION VALVE

NOT TO SCALE

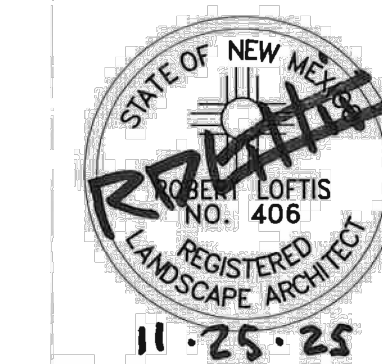


KEYED NOTES

1. SERVICE LINE TO WATER METER
2. TRUE UNION SCHEDULE 80 PVC BALL VALVE
3. GALVANIZED UNION (MIN. 4" ABOVE GRADE)
4. GALVANIZED NIPPLE
5. REDUCED PRESSURE BACKFLOW PREVENTER, SEE IRRIGATION LEGEND.
6. SWIVEL HASP. (LOCK BY OWNER)
7. PIANO HINGE, SECURED TO CONCRETE SLAB WITH 1/4" DIA. X 2 3/4" TAPPER HEX HEAD SCREWS.
8. GALVANIZED ELL
9. GALVANIZED RISER
10. 110V ELECTRICAL OUTLET FOR HEATED PROTECTIVE ENCLOSURE. PLACE AWAY FROM RELIEF VALVE. ELECTRICAL OUTLET SHALL BE A GFI OUTLET WITH WEATHERPROOF COVER.
11. MIN. 4" 3000 PSI CONCRETE SLAB.
12. PVC SLEEVING & INSULATION (MIN. 1" THICK)
13. PVC X MIP ADAPTER.
14. PROTECTIVE ENCLOSURE, SEE IRRIGATION LEGEND.
15. FINISH GRADE.

A4 BACKFLOW PREVENTER (RPBP)

SCALE: N.T.S.



GENERAL PLAY EQUIPMENT NOTES SCHEDULE

DESCRIPTION

CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO FURNISH, INSTALL, AND CONSTRUCT ALL PLAY EQUIPMENT SPECIFIED AND DESCRIBED ON THIS PLAN.

CONTRACTOR'S ON-SITE SUPERINTENDENT OVERSEEING ALL PLAY EQUIPMENT INSTALLATION SHALL BE A NATIONAL RECREATION AND PARKS ASSOCIATION CERTIFIED PLAYGROUND SAFETY INSPECTOR (CPSI).

BEFORE FINAL ACCEPTANCE BY THE OWNER, THE CONTRACTOR SHALL PROVIDE AN "AS-BUILT" DRAWING THAT DOCUMENTS THAT EACH PIECE OF PLAY EQUIPMENT IS CONSTRUCTED WITH THE REQUIRED USE ZONE AND THAT NO USE ZONES OVERLAP.

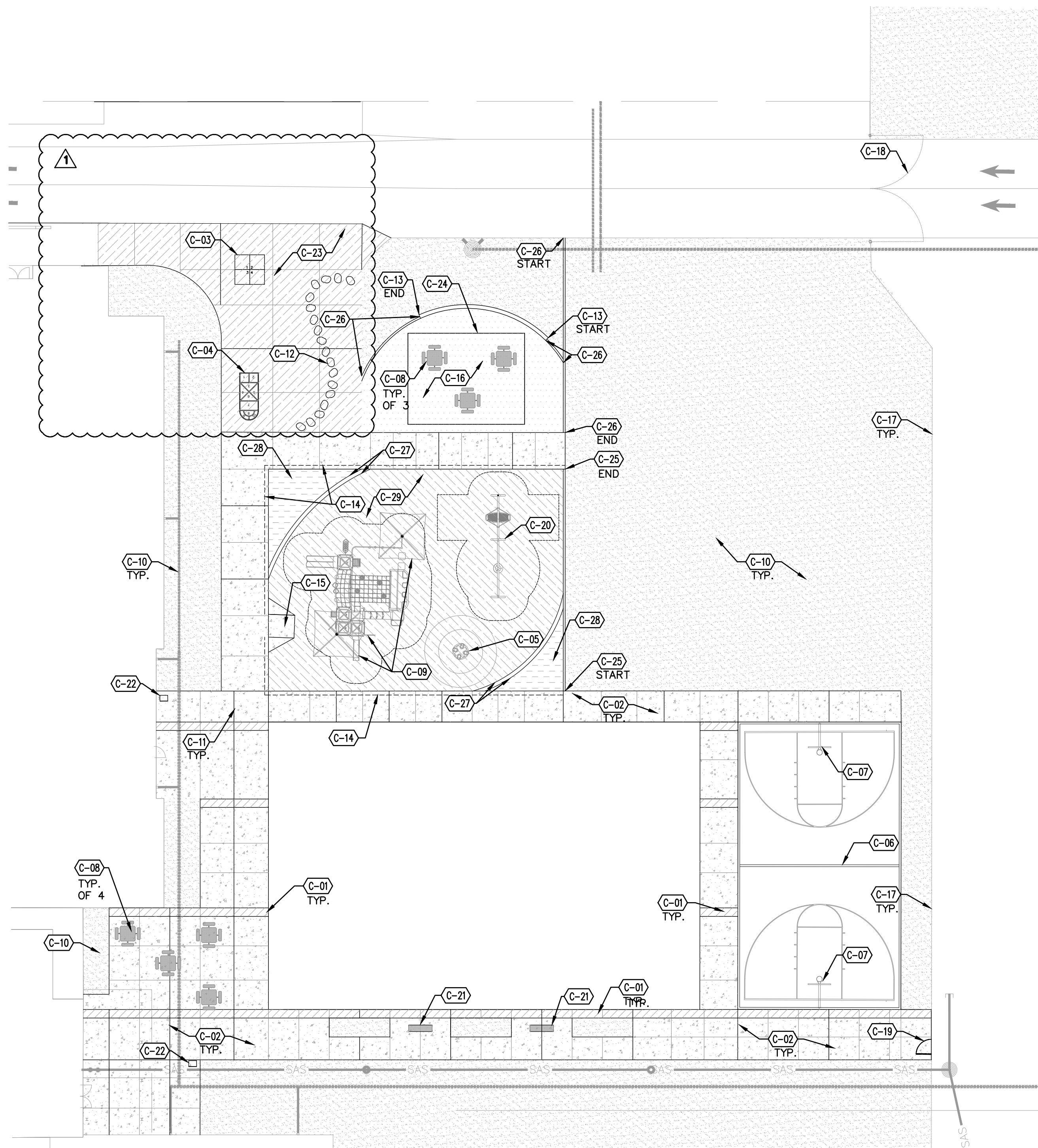
BEFORE FINAL ACCEPTANCE BY THE OWNER, THE CONTRACTOR MUST PROVIDE WRITTEN CERTIFICATION THAT EACH PIECE OF PLAY EQUIPMENT HAS BEEN INSPECTED BY AN INDEPENDENT NATIONAL RECREATION AND PARKS ASSOCIATION CERTIFIED PLAYGROUND SAFETY INSPECTOR (CPSI); AND THAT THE CONSTRUCTION AND INSTALLATION OF EACH PIECE OF EQUIPMENT FULLY COMPLY WITH ASTM F-1487-11 AND THE U.S. CONSUMER PRODUCT SAFETY COMMISSION (CPSC) PUBLIC PLAYGROUND SAFETY HANDBOOK.

CONSTRUCTION

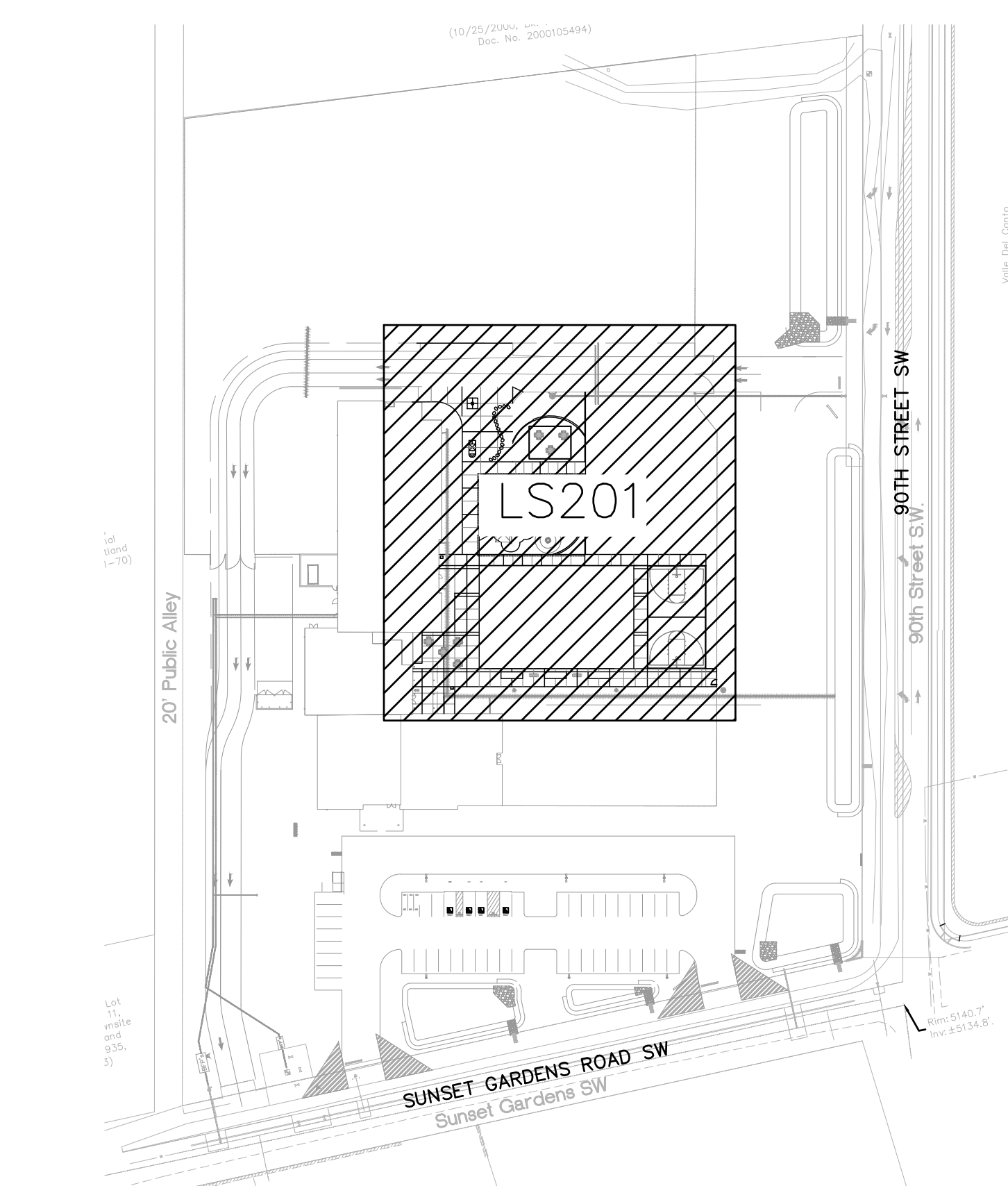
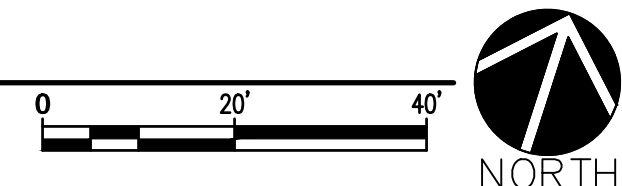
SYMBOL	CODE	DESCRIPTION	DETAIL
	C-01	LIGHT-DUTY CONCRETE PAVING WITH INTEGRAL COLOR, FINISH: HEAVY SANDBLAST. COLOR: 'MESQUITE' FROM DAVIS COLOR. SEE CIVIL.	
	C-02	LIGHT-DUTY CONCRETE PAVING WITH INTEGRAL COLOR. COLOR: 'MESQUITE' FROM DAVIS COLOR. SEE CIVIL.	
	C-03	PAINT FOUR SQUARE MARKINGS ON CONCRETE.	B1/LS502
	C-04	PAINT HOPSCOTCH MARKINGS ON CONCRETE.	C1/LS502
	C-05	FUTURE 'OMNI SPINNER' PLAY EQUIPMENT, AS AVAILABLE FROM LANDSCAPE STRUCTURES PLAY EQUIPMENT (505-907-4521). SHOWN FOR REFERENCE, NIC.	
	C-06	PAINT BASKETBALL COURT MARKINGS.	C3/LS502
	C-07	FURNISH AND INSTALL BASKETBALL GOAL. GOAL POST SHALL BE DOUGLAS MODEL 39180M WITH 6' EXTENSION, BACKBOARD SHALL BE DOUGLAS FAL AND RIM SHALL BE DOUGLAS DURAGOAL 1 AS AVAILABLE FROM PLAY1 (505)-321-0453 OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S SPECIFICATIONS. CONCRETE FOOTINGS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.	C3/LS502
	C-08	INSTALL 46" SQUARE PICNIC TABLE, MODEL # TSQ46-A-04-000. AS AVAILABLE FROM MYTCOAT (505-907-4521). INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDED BY OWNER.	
	C-09	INSTALL PLAY EQUIPMENT AND SHADE STRUCTURE, MODEL #172675A, AS AVAILABLE FROM LANDSCAPE STRUCTURES PLAY EQUIPMENT(505-907-4521). INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDED BY OWNER.	
	C-10	LANDSCAPE AREA, SEE PLANTING PLAN.	
	C-11	CONCRETE JOINT, TYP. SEE CIVIL.	
	C-12	PAINT 'JUMP STOMP' MARKINGS ON CONCRETE.	A5/LS502
	C-13	CONSTRUCT CONCRETE SEATWALL WITH INTEGRAL COLOR. FINISH: HEAVY SANDBLAST, COLOR: 'MESQUITE' FROM DAVIS COLOR.	A3/LS501
	C-14	CONSTRUCT CONCRETE PAVING WITH TURNDOWN EDGE.	B1/LS501
	C-15	CONSTRUCT ADA ACCESSIBLE CONCRETE RAMP AT PLAYGROUND.	A2/LS501
	C-16	CONSTRUCT STABILIZED CRUSHER FINES PAVING.	A1/LS501
	C-17	FURNISH AND INSTALL 6'-0" HEIGHT ORNAMENTAL FENCING. SEE CIVIL FOR FENCING EXTENTS.	A1/LS502
	C-18	VEHICULAR GATE, SEE CIVIL SHEETS.	
	C-19	INSTALL 6' HEIGHT X 4' WIDTH SINGLE GATE.	A3/LS502
	C-20	FUTURE TIRE SWING WITH 5" ARCH & FLEX SWING, AS AVAILABLE FROM LANDSCAPE STRUCTURES PLAY EQUIPMENT (505-907-4521). SHOWN FOR REFERENCE, NIC.	
	C-21	FUTURE 'EXPOSITION 6' FLAT' BENCH, COLOR: BRONZE, AS AVAILABLE FROM ANOVA (800-325-3047). SHOWN FOR REFERENCE, NIC.	
	C-22	INSTALL 32 GALLON TRASH RECEPTACLE AS AVAILABLE FROM MYTCOAT (505-907-4521). INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDED BY OWNER.	
	C-23	HEAVY-DUTY CONCRETE PAVING WITH INTEGRAL COLOR, COLOR: 'MESQUITE' FROM DAVIS COLOR. SEE CIVIL.	
	C-24	INSTALL 24' X 24' HIP SHADE STRUCTURE, AS AVAILABLE SKYWAYS (505-907-4521). INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDED BY OWNER.	
	C-25	CONSTRUCT CONCRETE HEADER CURB AT PLAY AREA.	B3/LS501
	C-26	CONSTRUCT CONCRETE MOW CURB.	A4/LS501
	C-27	TRANSITION ENGINEERED WOOD FIBER FROM 12" DEPTH IN FALL ZONE TO 6" DEPTH.	B2/LS501
	C-28	FURNISH AND INSTALL ENGINEERED WOOD FIBER ACCESSIBLE PLAYGROUND MULCH AT 6" DEPTH. TOP OF MULCH SHALL BE 2" BELOW TOP OF ADJACENT CURB OR PAVED SURFACES. MULCH MUST BE IPEMA CERTIFIED AND SHALL COMPLY WITH THE FOLLOWING ASTM STANDARDS (CURRENT EDITIONS)	B2/LS501
	C-29	FURNISH AND INSTALL ENGINEERED WOOD FIBER ACCESSIBLE PLAYGROUND MULCH AT 12" DEPTH. TOP OF MULCH SHALL BE 2" BELOW TOP OF ADJACENT CURB OR PAVED SURFACES. MULCH MUST BE IPEMA CERTIFIED AND SHALL COMPLY WITH THE FOLLOWING ASTM STANDARDS (CURRENT EDITIONS)	B2/LS501

GENERAL NOTES

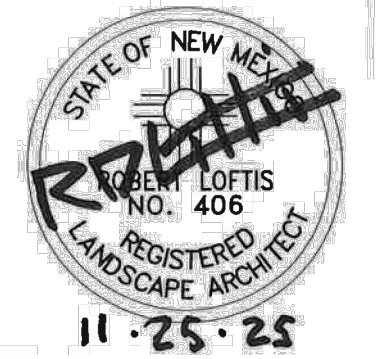
A. CONCRETE JOINT PATTERN SHALL BE AS SHOWN ON THIS SHEET. SEE CIVIL.



A1 COURTYARD ENLARGEMENT
SCALE: 1"=20'-0"



KEY MAP



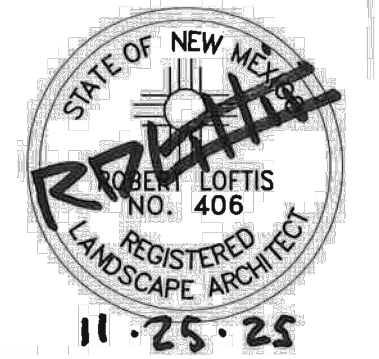
CONSTRUCTION DOCUMENTS

REVISION	DATE
△ PERMIT REVIEW	01.08.26

DATE	11-24-25
PROJECT NO.	

COURTYARD ENLARGEMENT





ALBUQUERQUE COLLEGIATE
CHARTER SCHOOL
SUNSET GARDENS AND 90TH
ALBUQUERQUE, NM

CONSTRUCTION
DOCUMENTS

REVISION DATE

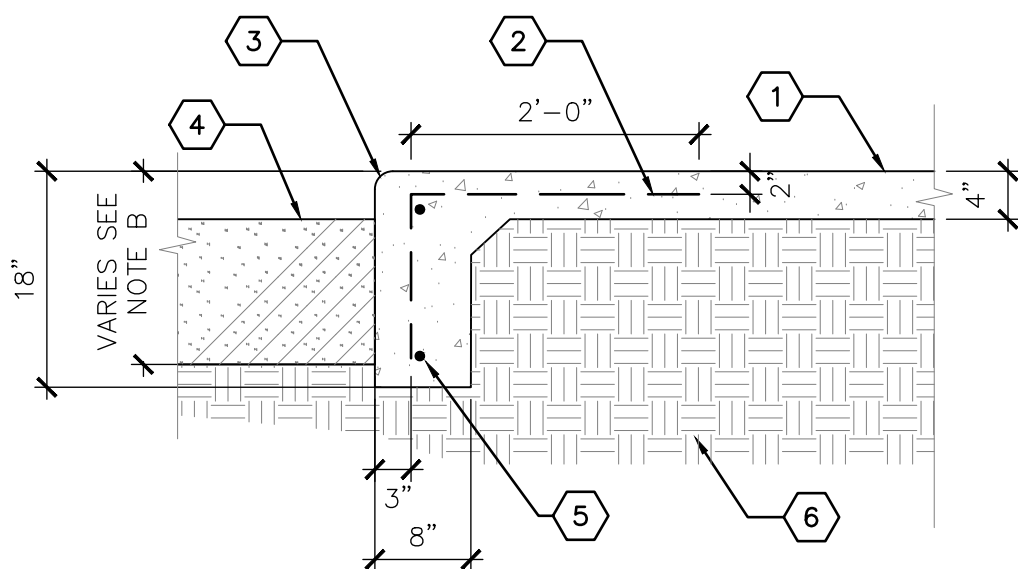
DATE 11-24-25

PROJECT NO

SITE DETAILS

SHEET NO.

LS501

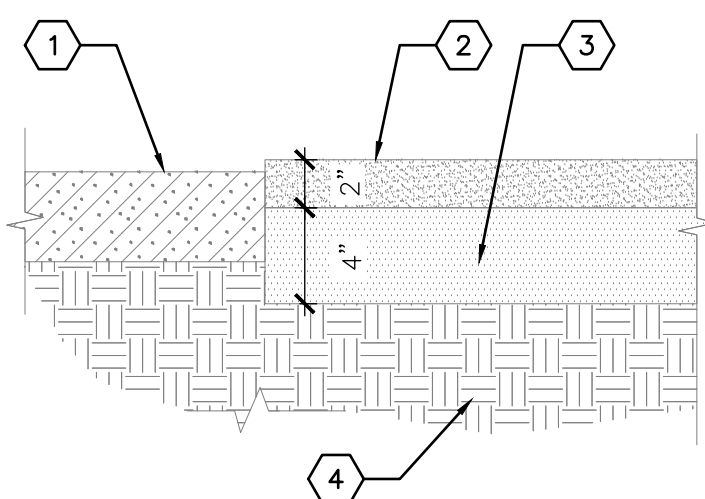
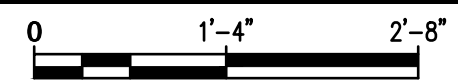


B1 CONCRETE TURNDOWN EDGE

- 3/4" = 1'-0"
- KEYED NOTES**
1. CONCRETE PAVING, SEE PLAN
 2. #4 REBAR AT 12" O.C.
 3. TOOLED EDGE
 4. ADJACENT MATERIAL VARIES
 5. #4 REBAR, HORIZONTAL AND CONTINUOUS
 6. COMPACTED SUBGRADE

GENERAL NOTES

1. PLACE EXPANSION JOINTS AT 20'-0" O.C. WITH CONTROL JOINTS AT 5'-0" O.C. FOR CONCRETE WALK.
2. PROVIDE 4" FREEBOARD TO TOP OF ENGINEERED WOOD FIBER. ALL OTHER MATERIALS SHALL BE FLUSH WITH TOP OF TURNDOWN.

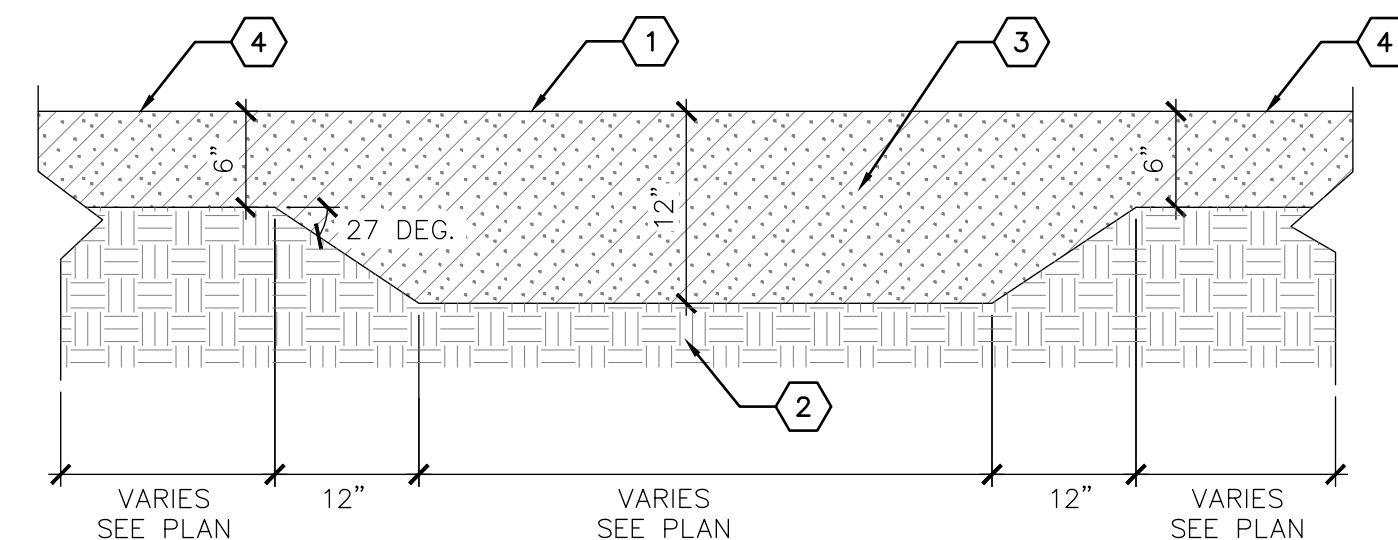


A1 STABILIZED CRUSHER FINES PAVING

- 1 1/2" = 1'-0"
- KEYED NOTES**
1. MULCH - SEE PLAN.
 2. STABILIZED CRUSHER FINES.
 3. BASE COURSE NMDOT TYPE 1, COMPACTED TO 95%.
 4. COMPACTED SUBGRADE

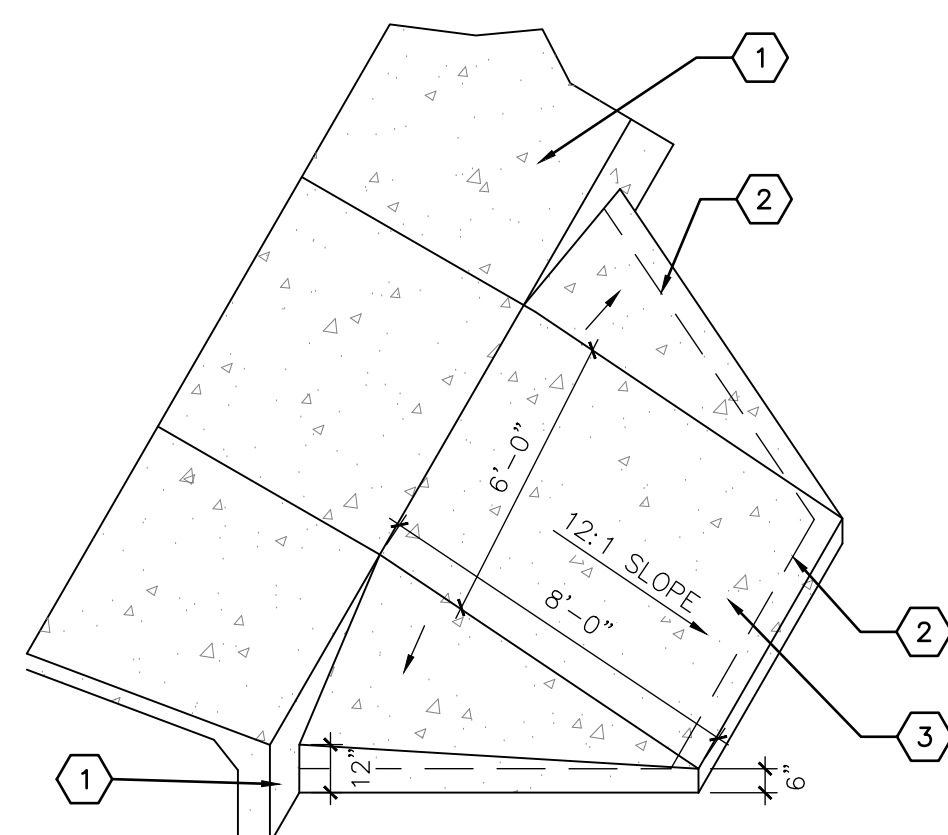
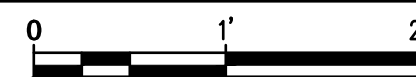
GENERAL NOTES

1. CRUSHER FINES SHALL BE "JUST GOLD" AS AVAILABLE FROM JPR DECORATIVE GRAVEL (505-877-4913) OR APPROVED EQUAL.
2. CRUSHER FINES SHALL BE STABILIZED WITH STABILIZER, OR EQUAL, AS AVAILABLE FROM STABILIZER SOLUTIONS (800-336-2468). INSTALL PER MANUFACTURER'S SPECIFICATIONS.



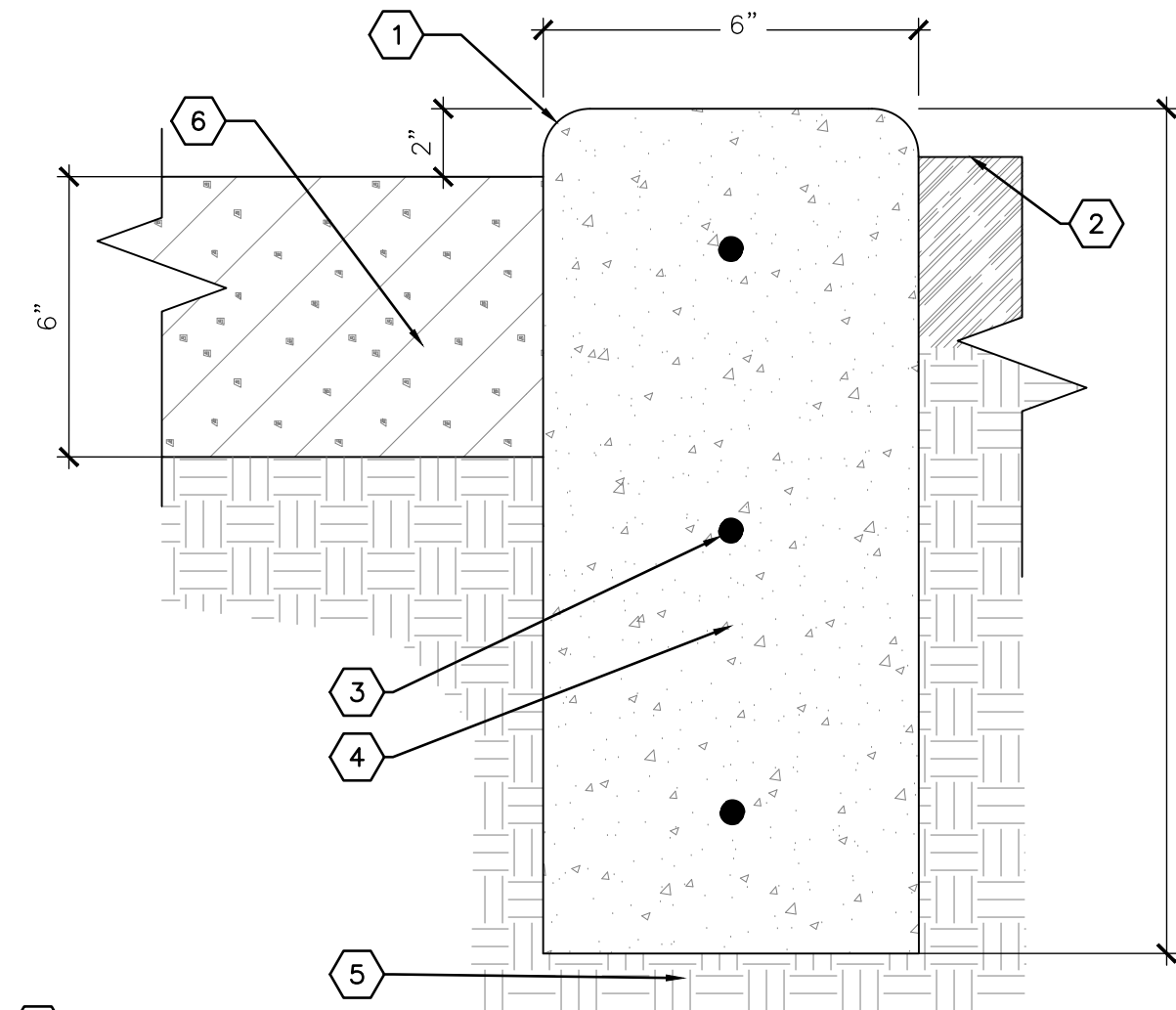
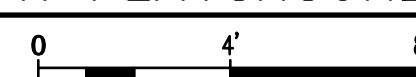
B2 ENGINEERED WOOD FIBER SECTION

- 1" = 1'-0"
- KEYED NOTES**
1. ENGINEERED WOOD FIBER (EWF) PLAY SURFACING
 2. COMPACTED SUBGRADE
 3. COMPACTED
 4. NOT COMPACTED



A2 ACCESS RAMP AT PLAYGROUND

- 1/4" = 1'-0"
- KEYED NOTES**
1. CONCRETE PAVING WITH TURNDOWN EDGE - SEE PLAN.
 2. TURNDOWN EDGE ON PLAYGROUND ACCESS RAMP.
 3. 3000 PSI CONCRETE.

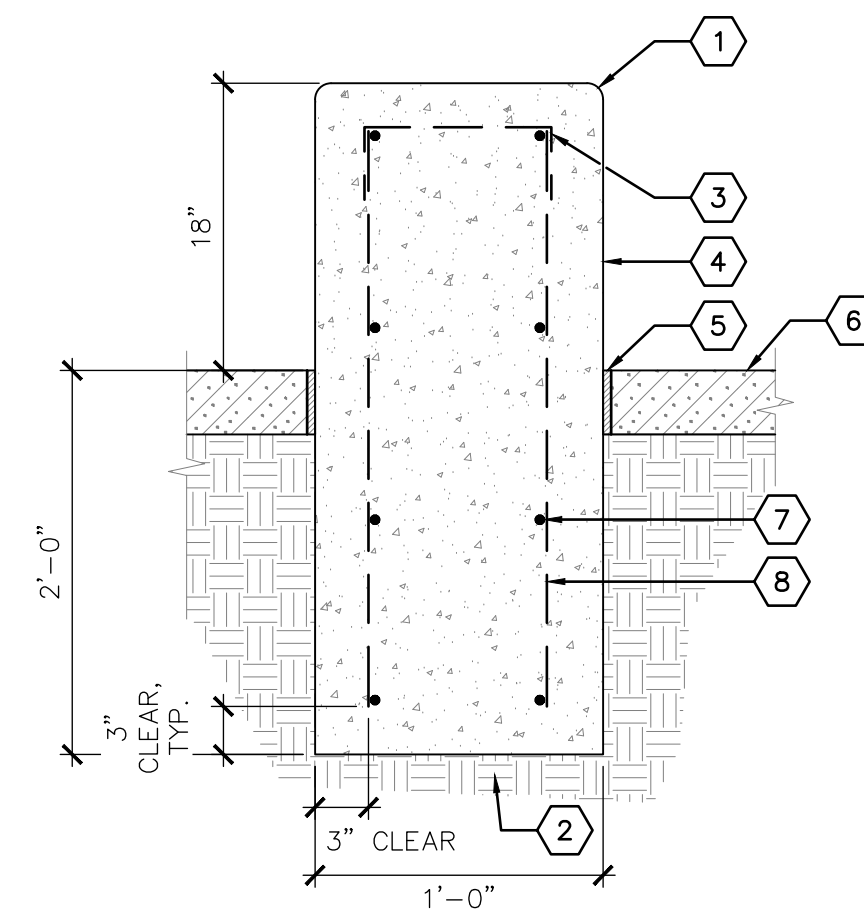
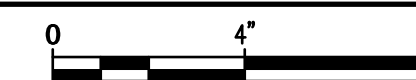


B3 CONCRETE HEADER CURB AT PLAY AREA

- 3" = 1'-0"
- KEYED NOTES**
1. 1/2" RADIUS TOOLED EDGE.
 2. LANDSCAPE AREA - SEE PLAN.
 3. #3 REBAR, HORIZONTAL AND CONTINUOUS @ 12" O.C.
 4. 3000 PSI CONCRETE HEADER
 5. COMPACTED SUBGRADE TO 95%.
 6. ENGINEERED WOOD FIBER PLAY SURFACING @ 12" O.C.

GENERAL NOTES

1. PLACE EXPANSION JOINTS @ 20'-0" O.C. WITH CONTROL JOINTS @ 5'-0" O.C.

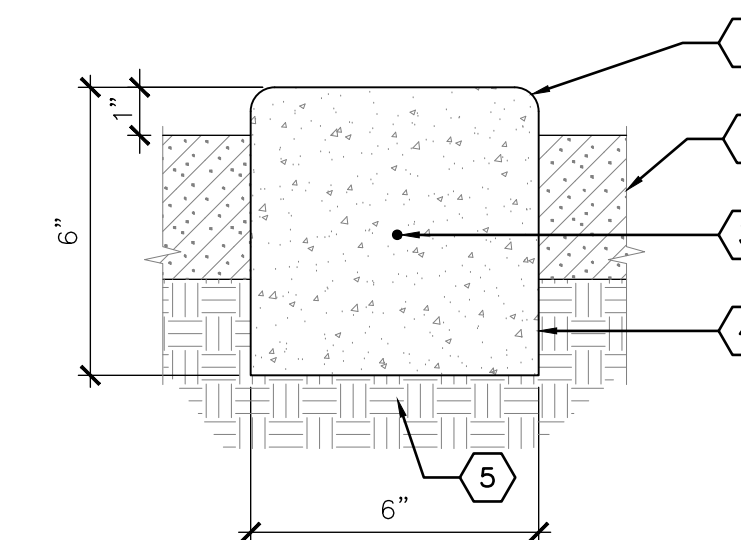


A3 CONCRETE SEATWALL

- 1" = 1'-0"
- KEYED NOTES**
1. TOOLED EDGE, 1" RADIUS BOTH SIDES
 2. SUBGRADE COMPACTED TO 95%
 3. #4 U-BAR AT 48" O.C.
 4. 4500 PSI CONCRETE SEATWALL
 5. 1/2" EXPANSION JOINT WHERE ADJACENT TO CONCRETE PAVING
 6. ADJACENT CONDITION VARIES - SEE PLAN.
 7. #4 HORIZONTAL AND CONTINUOUS REBAR AT 12" O.C., TYP.
 8. #4 VERTICAL REBAR AT 18" O.C., TYP.

GENERAL NOTES

1. THE FINISH SURFACES OF THE WALLS SHALL BE FREE OF HONEYCOMB PATTERNS AND SHARP OR ROUGH EDGES. EXPOSED, UNIFORMLY-SPACED, SNAP TIE INDENTIONS ARE ACCEPTABLE.
2. RUBBING OR PATCHING OF EXPOSED WALL SURFACES IS NOT ACCEPTABLE.



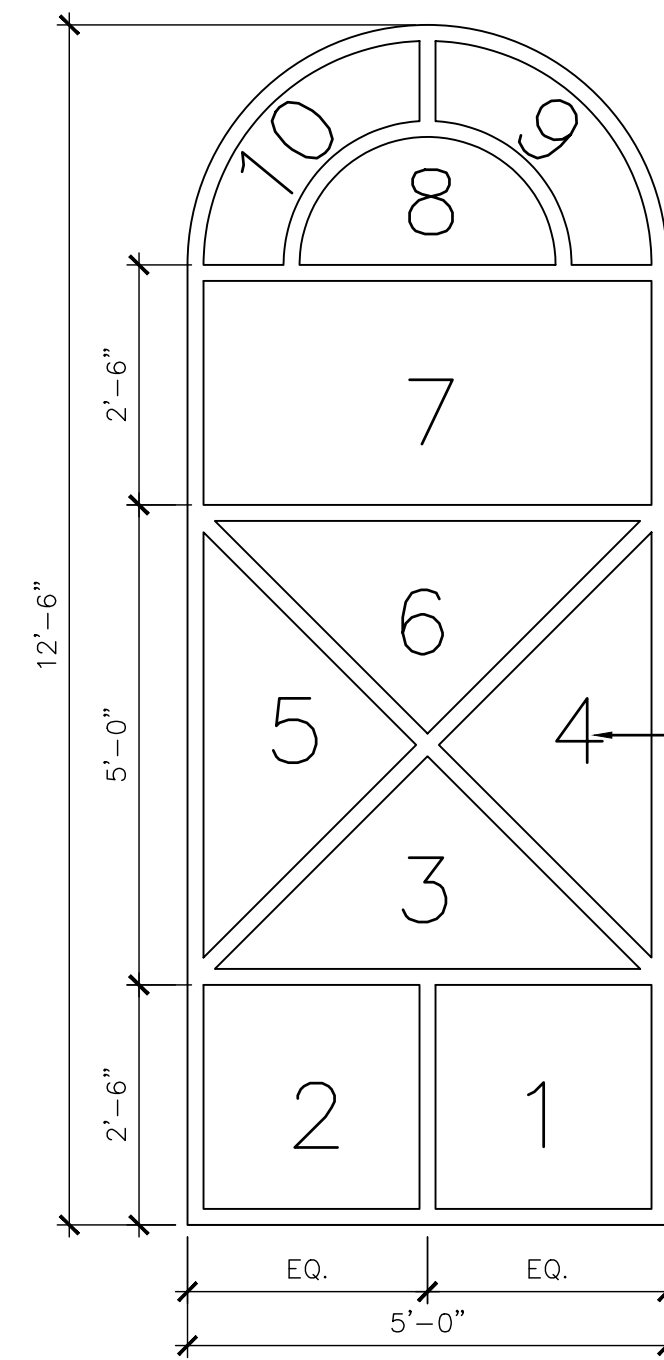
A4 6" CONCRETE MOW CURB

- 3" = 1'-0"
- KEYED NOTES**
1. 1/2" RADIUS TOOLED EDGE
 2. ADJACENT CONDITION VARIES - SEE PLAN
 3. #4 REBAR, HORIZ. AND CONT.
 4. 3000 PSI CONCRETE
 5. COMPACTED SUBGRADE

GENERAL NOTES

1. PLACE EXPANSION JOINTS A 20'-0" O.C. WITH CONTROL JOINTS AT 5'-0" O.C.
2. TOP SURFACE OF EDGER SHALL HAVE A MEDIUM BROOM FINISH.





KEYED NOTES

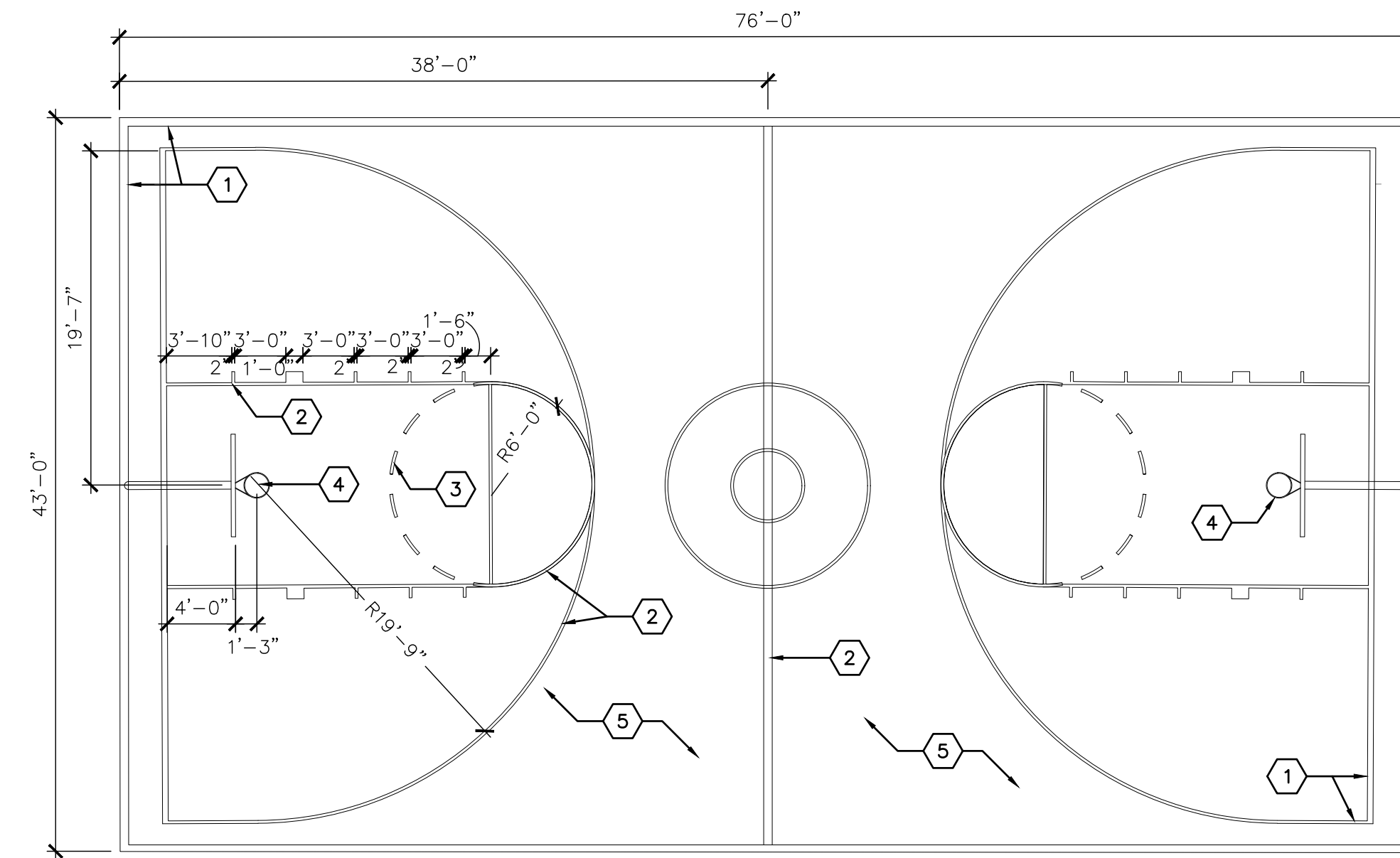
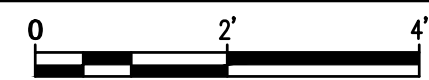
- 8" HT. PAINTED NUMBERS, COLOR: TURQUOISE TO MATCH ACCS BRANDING COLOR.
- 2" WIDE PAINTED STRIPES, COLOR: RED TO MATCH ACCS BRANDING COLOR.

GENERAL NOTES

- A. CONTRACTOR SHALL PROVIDE RAL COLOR TO LANDSCAPE ARCHITECT FOR APPROVAL.

C1 HOPSCOTCH MARKING

1/2" = 1'-0"

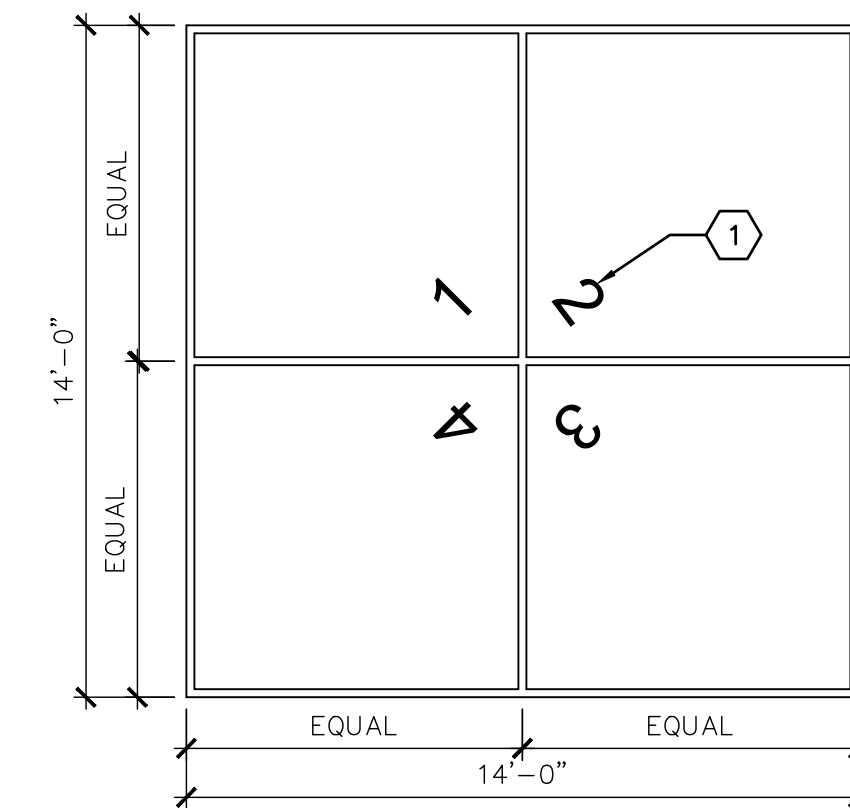


KEYED NOTES

- 4" COURT BASE LINES—PAINT WHITE
- 2" COURT BASE LINES—PAINT WHITE
- 8 MARKS, 16" LONG, & 7 SPACES 14" LONG—PAINT BLACK
- BASKETBALL GOAL
- CONCRETE PAVING - COURTYARD ENLARGEMENT PLAN

C3 BASKETBALL COURT STRIPING LAYOUT

1/8" = 1'-0"



KEYED NOTES

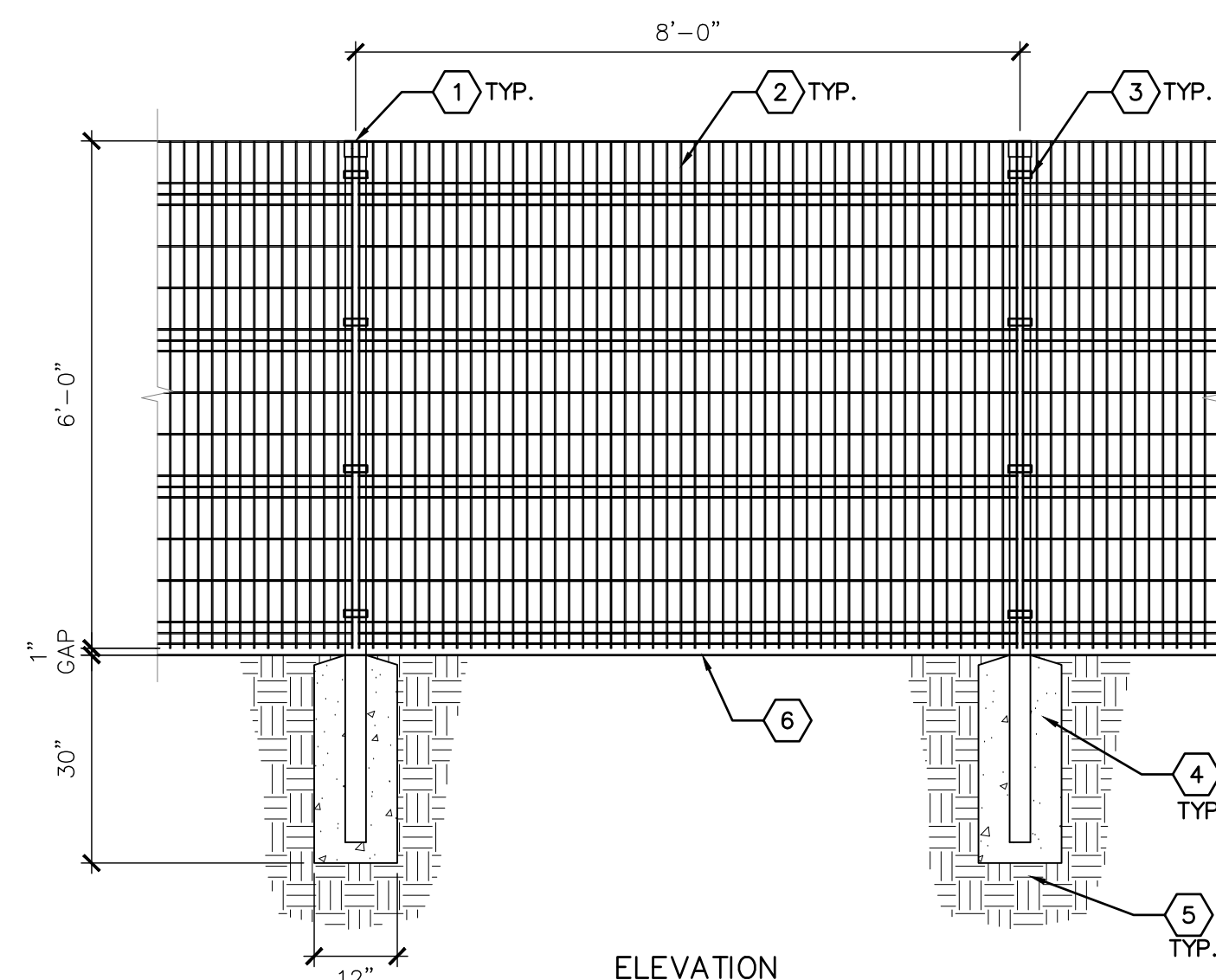
- 14" HT. PAINTED NUMBERS, COLOR: TURQUOISE TO MATCH ACCS BRANDING COLOR.
- 2" WIDE PAINTED STRIPES, COLOR: RED TO MATCH ACCS BRANDING COLOR.

GENERAL NOTES

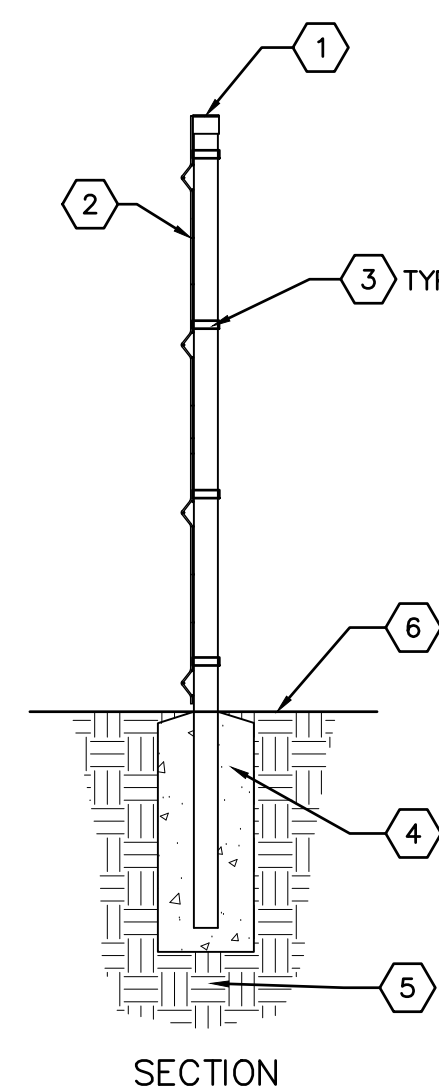
- A. CONTRACTOR SHALL PROVIDE RAL COLOR TO LANDSCAPE ARCHITECT FOR APPROVAL.

B1 FOUR SQUARE MARKING

1/4" = 1'-0"



ELEVATION



SECTION

KEYED NOTES

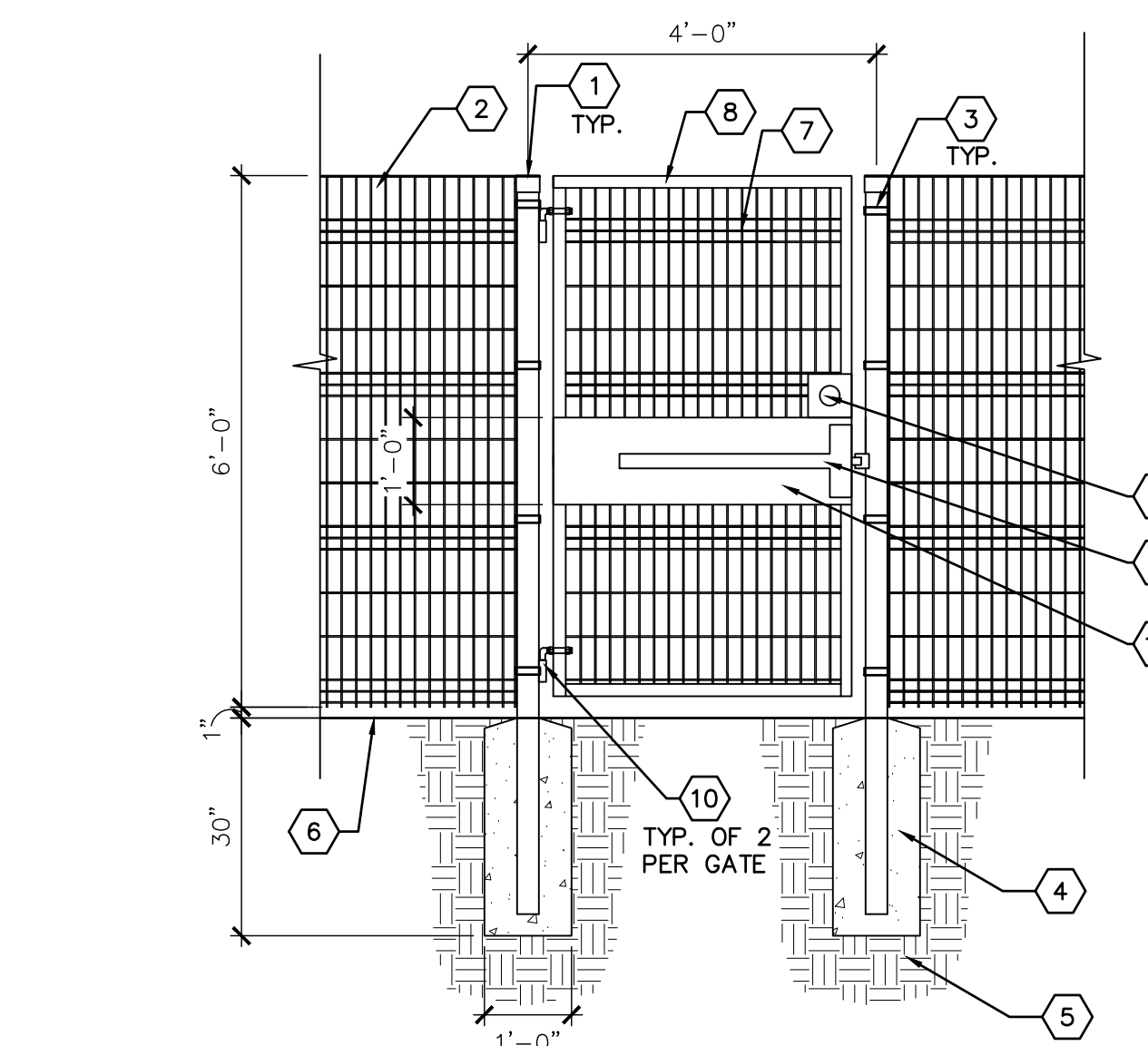
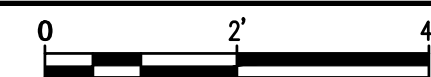
- 3" X 3" X 11 GAUGE STEEL POST, SPACED AT 8'-0" O.C. TOPS OF POSTS SHALL HAVE POST CAPS.
- 6" HEIGHT DESIGNMASTER CLASSIC PANEL OR APPROVED EQUAL, AS AVAILABLE FROM VALLEY FENCE CO. (505-877-1155).
- STANDARD 3" X 3" BRACKET FOR 3" POST. FENCE PANELS SHALL BE ATTACHED TO POSTS WITH STANDARD 3" BRACKETS, (4) BRACKETS PER POST, SPACED EVENLY AS SHOWN. SEE GENERAL NOTE B.
- 3000 PSI CONCRETE FOOTING.
- SUBGRADE COMPACTED TO 95%.
- FINISH GRADE

GENERAL NOTES

- A. FENCE SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
- B. THE STANDARD BRACKET SHALL BE INSTALLED SO THE BOLT SIDE IS ON THE OUTSIDE OF THE ENCLOSED AREA.
- C. POSTS AND FENCE PANEL POWDER COATING COLOR SHALL BE BROWN.
- D. ORIENT PANELS SO PICKETS ARE DOWN.

A1 6' HEIGHT ORNAMENTAL FENCE

1/2" = 1'-0"



KEYED NOTES

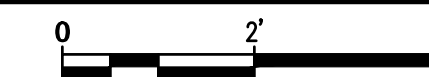
- 3" X 3" X 11 GAUGE STEEL GATE POST. TOPS OF POSTS SHALL HAVE POST CAPS.
- 6' HIGH DESIGNMASTER CLASSIC FENCE, AS AVAILABLE FROM VALLEY FENCE CO. (505-877-1155). - SEE DETAIL A1/LS502.
- STANDARD 3" X 3" BRACKET FOR 3" GATE POST. FENCE PANELS SHALL BE ATTACHED TO GATE POSTS WITH STANDARD 3" BRACKETS.
- 3000 PSI CONCRETE FOOTING.
- SUBGRADE COMPACTED TO 95%.
- FINISH GRADE - SEE PLAN.
- 6" HT. X 4" WIDE DESIGNMASTER CLASSIC PANEL. THE PANEL SHALL BE WELDED TO GATE FRAME.
- 2" X 2" X 3 GAUGE (1/4" WALL) SQUARE STEEL TUBE, FOR GATE FRAME. WELD CAPS SEE PLATE CAP ON OPEN ENDS.
- SEE GENERAL NOTES.
- PANIC HARDWARE KIT SHALL BE MODEL #D-6045-B36 AND ACCESSIBLE LEVER HANDLE ON OPPOSITE SIDE OF GATE, MODEL #D-6100-B. CONTRACTOR SHALL COORDINATE WITH OWNER REGARDING THE KEYING OF THE LOCK. THE ACCESSIBLE LEVER HANDLE SHALL ONLY BE INSTALLED ON GATES AS SHOWN ON FENCING PLAN. AVAILABLE FROM HOOVER FENCE CO, 1-800-355-2335 OR APPROVED EQUAL. PANIC HARDWARE AND LEVER HANDLE SHALL BE COLOR TBD.
- 3/4" STEEL J-BOLT ADJUSTABLE BARREL HINGE. THE J-BOLT ADJUSTABLE BARREL HINGE WILL ALLOW THE GATE TO OPEN IN BOTH DIRECTIONS.
- DOUBLE CYLINDER DEADBOLT LOCK
- 1/4" STEEL PLATE.

GENERAL NOTES

- A. TOUCH UP PAINT ON PANEL PER THE MANUFACTURER'S SPECIFICATIONS.
- B. POSTS AT GATES SHALL BE 3" X 3" X 11 GAUGE STEEL POSTS.
- C. POSTS, GATE, & FENCE PANELS POWDER COATING COLOR SHALL BE BROWN.
- D. ALL WELDS SHALL BE GROUND SMOOTH.
- E. GATE SHALL BE CONSTRUCTED WITH ALL JOINTS WELDED. THE GATE SHALL ALSO BE CONSTRUCTED TO OPEN 180 DEGREES IN BOTH DIRECTIONS AND LATCH TO ADJACENT FENCE.
- F. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
- G. CONTRACTOR SHALL MINIMIZE THE GAP BETWEEN GATE AND FENCE POST TO INSURE THAT DEADBOLT AND PANIC HARDWARE WILL WORK PROPERLY.

A3 6' HEIGHT X 4' WIDE SWING GATE

1/2" = 1'-0"



COLOR CHART

TURQUOISE COLOR FOR PAINT (FOR REFERENCE ONLY, SAMPLED FROM WEBSITE)



'HONEY GLAZE' COLOR FOR PAINT (OR APPROVED OTHER, FOR REFERENCE ONLY)



'ORANGE SLICE' COLOR FOR PAINT (OR APPROVED OTHER, FOR REFERENCE ONLY)



RED COLOR FOR PAINT (FOR REFERENCE ONLY, SAMPLED FROM WEBSITE)



'FIELD TIME GREEN' COLOR FOR PAINT (OR APPROVED OTHER, FOR REFERENCE ONLY)

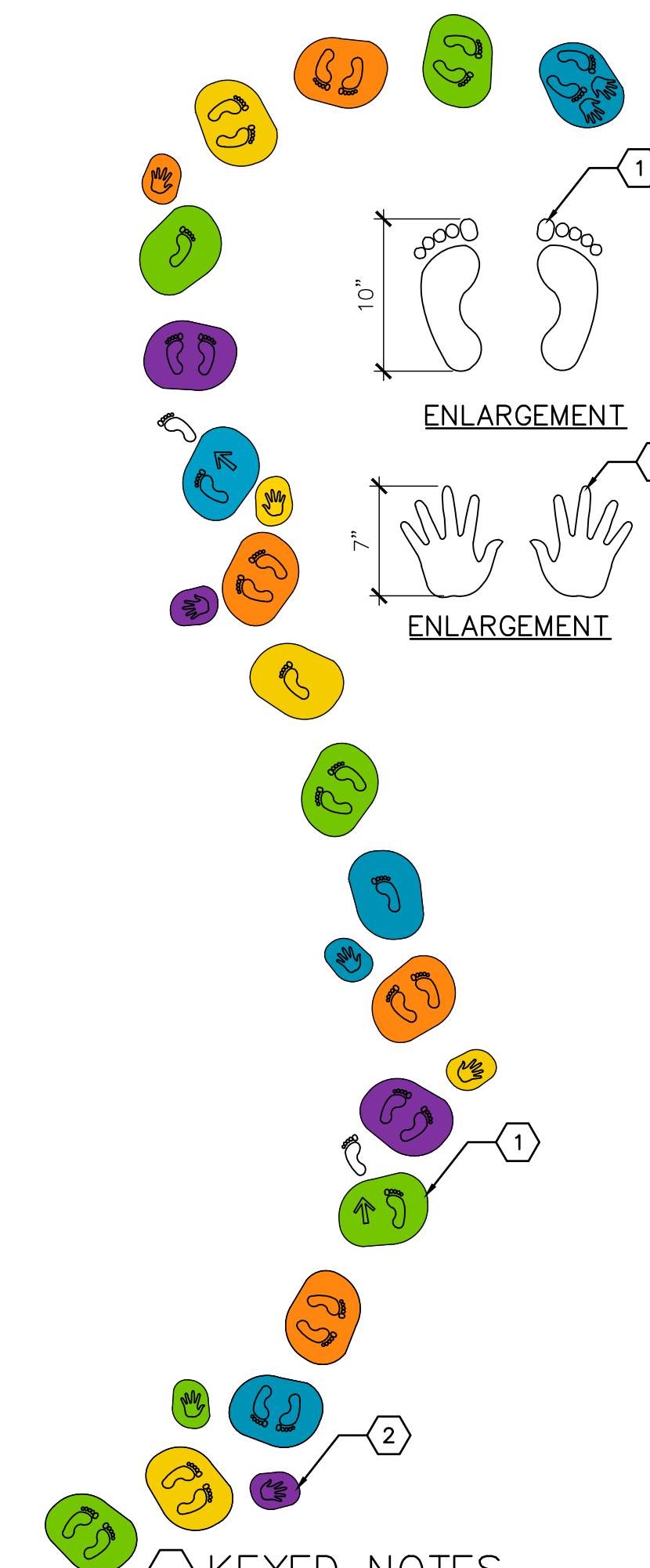


'PLUMBERRY' COLOR FOR PAINT (OR APPROVED OTHER, FOR REFERENCE ONLY)



GENERAL NOTES

- A. CONTRACTOR SHALL USE MASONRY OUTDOOR EXTERIOR GRADE PAINT OR APPROVED EQUAL. SEE DETAILS C1/LS502, B1/LS502, AND A5/LS502 FOR MORE INFORMATION ON PAINT USAGE.



KEYED NOTES

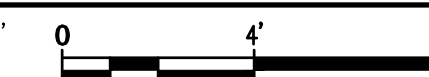
- MASONRY PAINTED JUMP SHAPES, SEE COLOR IN COLOR CHART.
- MASONRY PAINTED HAND SHAPES, SEE COLOR IN COLOR CHART

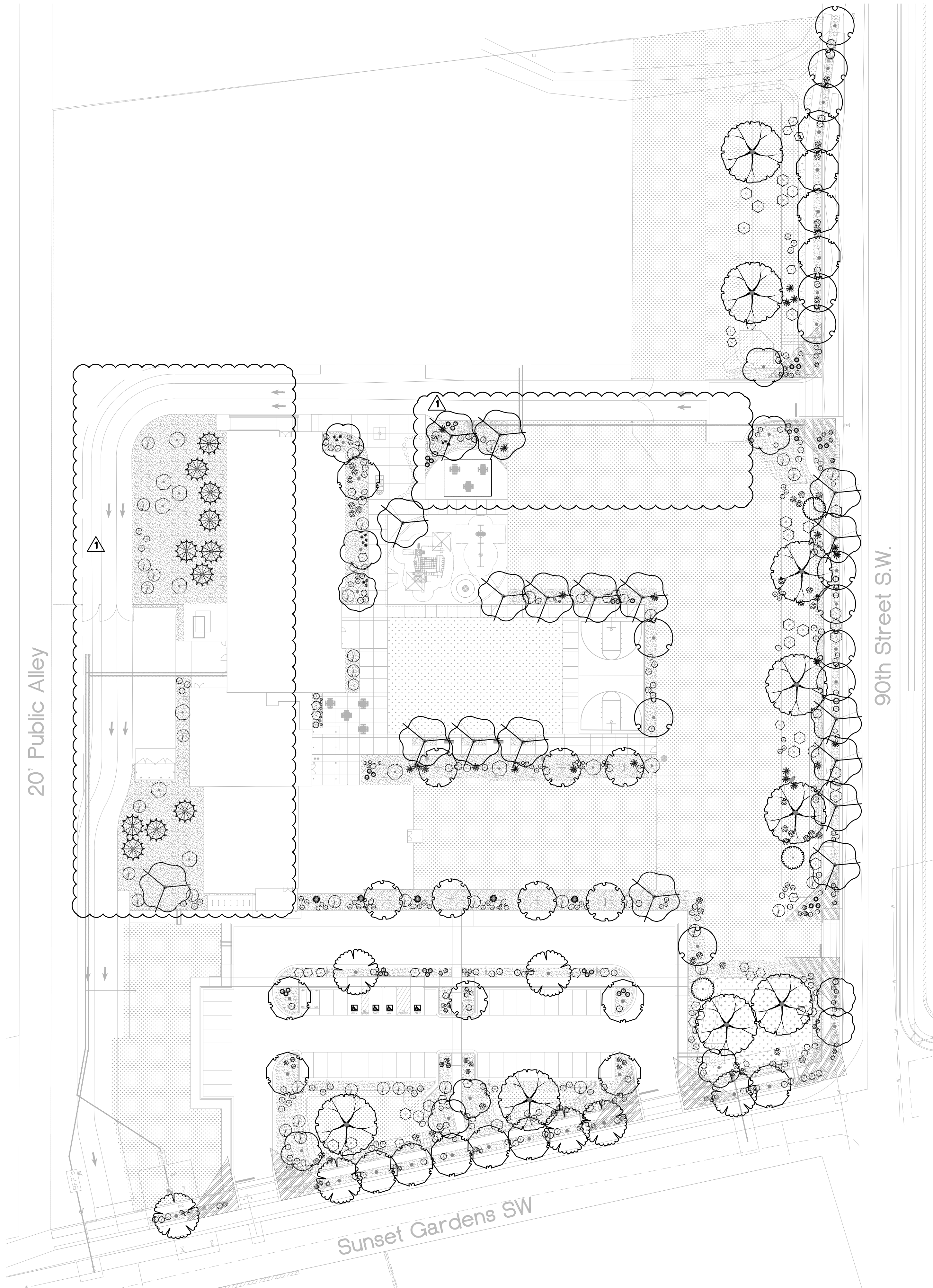
GENERAL NOTES

- A. CONTRACTOR SHALL PROVIDE RAL COLOR TO LANDSCAPE ARCHITECT FOR APPROVAL.
- B. FOOT SYMBOLS, HAND SYMBOLS, AND ARROWS SHALL ALL BE PAINTED RED COLOR TO MATCH ACCS BRANDING COLOR.

A5 JUMP STOMP MARKINGS

1/4" = 1'-0"





GENERAL PLANTING NOTES SCHEDULE

CODE	DESCRIPTION
GP-01	IN CASE OF DISCREPANCY IN PLANT QUANTITIES SHOWN ON THE PLANT LEGEND AND THOSE SHOWN ON THE PLANTING PLAN, THE QUANTITIES SHOWN ON THE PLAN SHALL GOVERN. CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO BID AND INSTALLATION. NO ADDITIONAL PAYMENT WILL BE MADE FOR ANY DISCREPANCIES IN QUANTITIES BETWEEN THE PLANTING PLAN AND THE PLANT LIST.
GP-02	IF THERE IS A DISCREPANCY IN THE FIELD OR NURSERY BETWEEN THE CONTAINER SIZE CALLED OUT UNDER "REMARKS" AND HEIGHT & SPREAD CALLED OUT UNDER "INSTALLED SIZE", THE SPECIFIED PLANT MUST MEET HEIGHT & SPREAD REQUIREMENTS SPECIFIED UNDER "INSTALLED SIZE", EVEN IF A LARGER CONTAINER SIZE IS REQUIRED TO MEET THESE SPECIFICATIONS, AT NO ADDITIONAL COST TO THE OWNER.
GP-03	FILTER FABRIC SHALL BE MIN. 4 OZ. NON-WOVEN NEEDLE-PUNCHED POLYPROPYLENE (MIRAFI OR EQUIVALENT). OVERLAP ENDS 3" AND TURN DOWN EDGES 6".
GP-04	THE TOP OF MULCH SHALL BE 1" BELOW TOP OF ADJACENT CONCRETE SURFACES.
GP-05	THE CONTRACTOR SHALL PRUNE LOWER BRANCHES OF DECIDUOUS TREES AS DIRECTED BY LANDSCAPE ARCHITECT IN THE FIELD.
GP-06	THE CONTRACTOR SHALL INSTALL TREES PER DETAIL A5/LP501 AND B4/LP501.
GP-07	THE CONTRACTOR SHALL INSTALL SHRUBS PER DETAIL B5/LP501.
GP-08	THE CONTRACTOR SHALL INSTALL ORNAMENTAL GRASSES PER DETAIL A4/LP501.
GP-09	VISIBILITY, LANDSCAPING, FENCING, AND SIGNS SHALL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES AND SHRUBS BETWEEN 3 AND 8 FEET IN HEIGHT (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE LOCATED IN THE CLEAR SIGHT TRIANGLE.
GP-10	STREET TREES SHALL BE MAINTAINED ALIVE AND HEALTHY. MAINTAINING AND REPLACING STREET TREES OR OTHER TREES PLANTED IN THE PUBLIC RIGHT-OF-WAY ARE THE RESPONSIBILITY OF ADJUTING PROPERTY OWNERS.
GP-11	WHERE LANDSCAPING WAS INSTALLED PURSUANT TO A SITE PLAN OR DEVELOPMENT APPROVAL, THE LANDSCAPING SHALL BE REPLACED ACCORDING TO ANY LANDSCAPING AND MAINTENANCE PLAN UNDER THAT APPROVAL.
GP-12	LANDSCAPING, SCREENING AND BUFFERING AREAS SHALL BE MAINTAINED IN COMPLIANCE WITH ARTICLES 6-6 AND 9-8 OF ROA 1994 (TREES, VEGETATION, LANDSCAPING WEEDS, LITTER AND SNOW) AND SECTION 4 OF THE ALBUQUERQUE BERNALILLO COUNTY WATER AUTHORITY (ABCWUA) LEGISLATION AND ORDINANCES (WATER WASTE REDUCTION ORDINANCE).
GP-13	THE OWNER WILL ASSUME RESPONSIBILITY FOR THE MAINTENANCE OF THE LANDSCAPE.
GP-14	THE CONTRACTOR SHALL INSTALL ACCENT BOULDER PER DETAIL C5/LP501.

LANDSCAPE CALCULATIONS

GENERAL LANDSCAPE REQUIREMENTS:	
GROSS LOT AREA (MINUS EASEMENT):	346,976 SF
AREA OF DISTURBANCE:	263,512 SF
BUILDING COVERAGE:	26,671 SF
NET LOT AREA:	236,841 SF
REQUIRED LANDSCAPE IS 15% OF PHASE ONE NET LOT AREA	
TOTAL LANDSCAPE AREA REQUIRED:	35,526 SF
LANDSCAPE AREA PROVIDED:	152,224 SF
REQUIRED VEGETATIVE COVERAGE (75% OF THE REQUIRED LANDSCAPE AREA):	
VEGETATIVE COVER REQUIRED:	26,644 SF
VEGETATIVE COVER PROVIDED:	66,193 SF
REQUIRED GROUND LEVEL VEGETATIVE COVERAGE (25% OF THE REQUIRED LANDSCAPE AREA):	
VEGETATIVE GROUND COVER REQUIRED:	8,882 SF
VEGETATIVE GROUND COVER PROVIDED:	9,167 SF
MULCH PROVIDED:	
ORGANIC MULCH REQUIRED (MIN. 15% OF THE TOTAL LANDSCAPE AREA):	22,833 SF
ORGANIC MULCH PROVIDED:	17,760 SF
ROCK MULCH ALLOWED (NOT TO EXCEED 75% OF TOTAL LANDSCAPE AREA):	114,168 SF
ROCK MULCH PROVIDED:	28,533 SF
TOTAL PARKING LOT REQUIREMENTS :	
TOTAL PARKING STALLS:	44
TREES REQUIRED (1 TREE PER 10 STALLS):	4
TREES PROVIDED:	7
10% OF TOTAL PARKING LOT SHALL BE LANDSCAPED:	3,275 SF
LANDSCAPE AREA PROVIDED:	3,516 SF
STREET TREE REQUIREMENTS : SHADE TREES PLANTED AT 25' O.C. ON PEDESTRIAN PATHWAYS.	
TOTAL LINEAR FOOT PEDESTRIAN PATHWAYS:	805 LF
TREES REQUIRED (1 TREE PER 25' KEEPING SITE TRIANGLE CLEAR):	32
TREES PROVIDED:	32



ALBUQUERQUE COLLEGIATE
CHARTER SCHOOL

SUNSET GARDENS AND 90TH
ALBUQUERQUE, NM

CONSTRUCTION
DOCUMENTS

REVISION DATE

PERMIT REVIEW 01.08.26

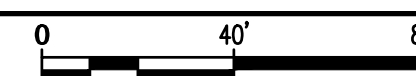
DATE 11-24-25

PROJECT NO

OVERALL
PLANTING
PLAN

SHEET NO.

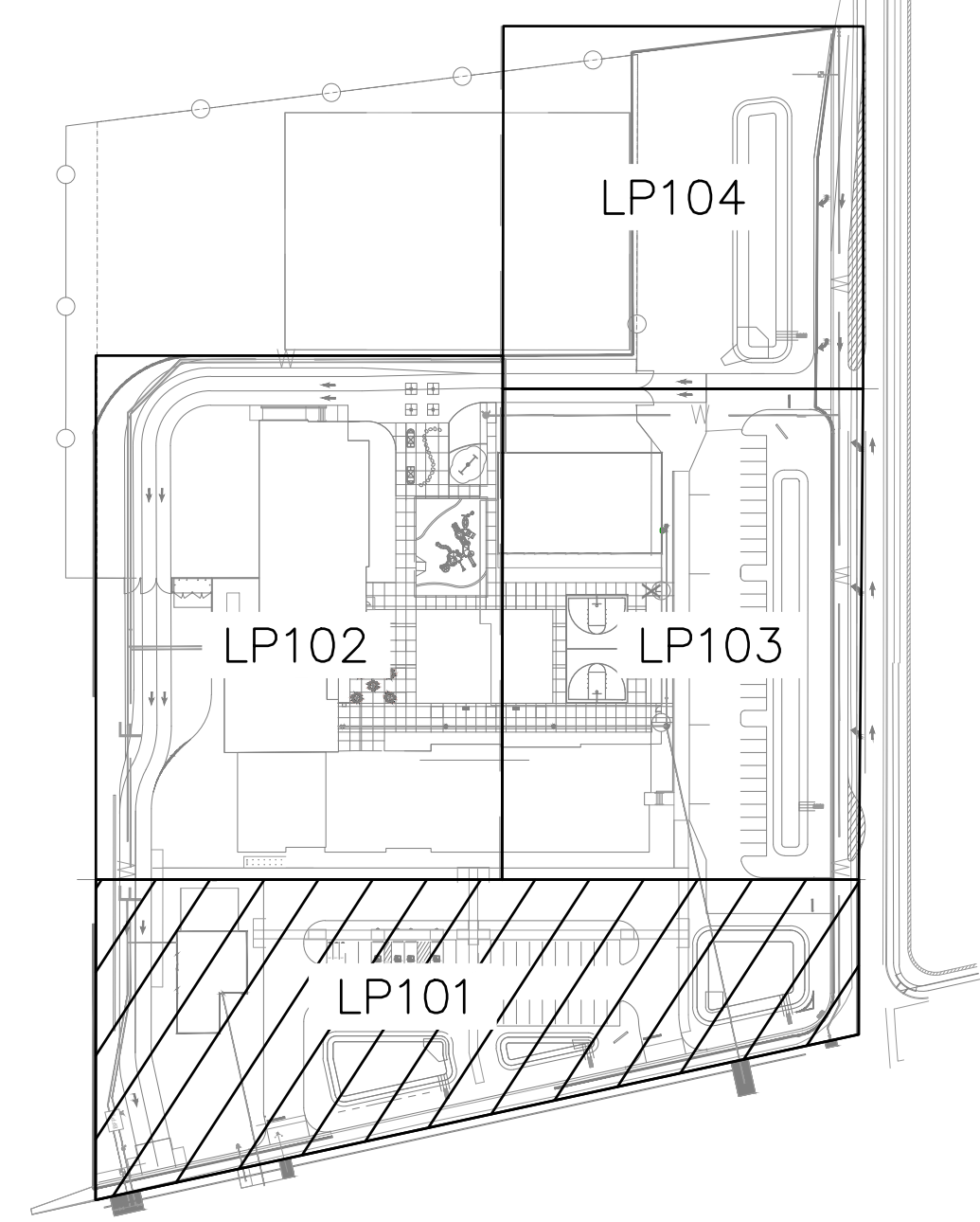
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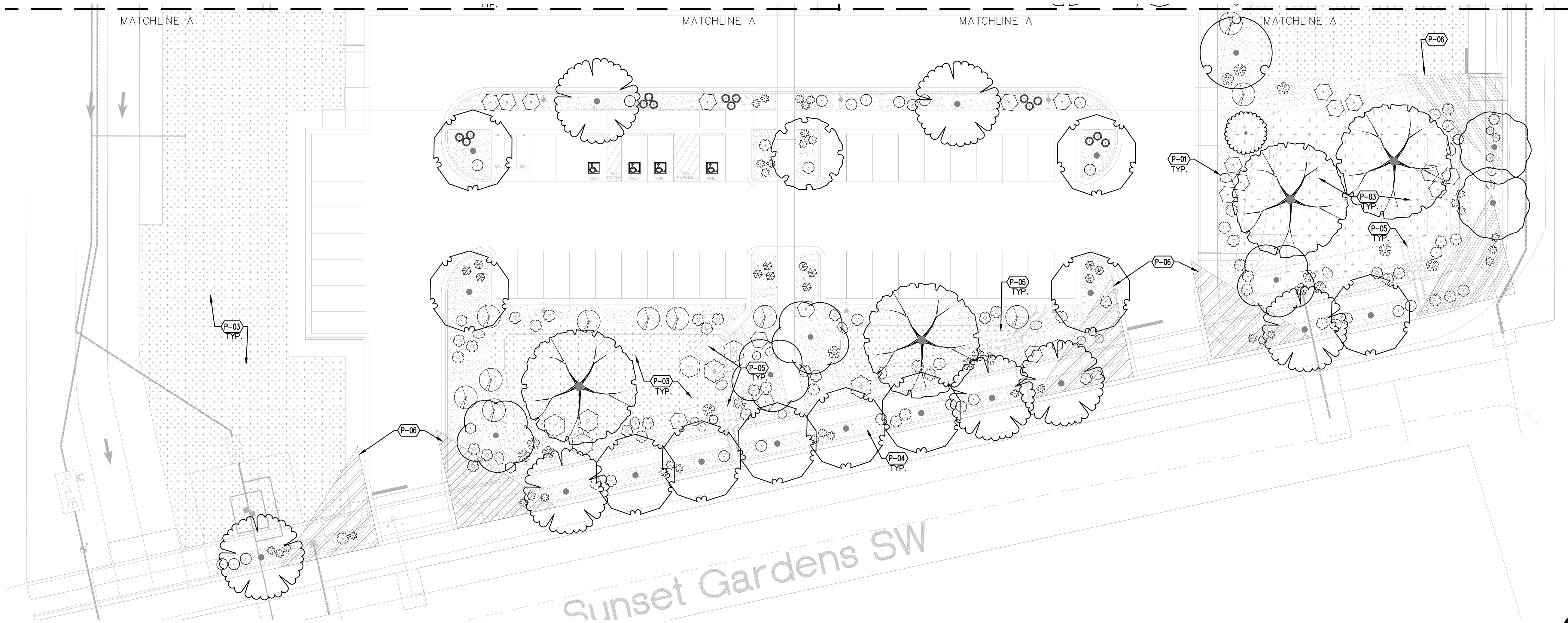
SYMBOL	COMMON NAME	BOTANICAL NAME
TREES		
	CHINESE PISTACHE	PISTACIA CHINENSIS
	COMMON HACKBERRY	CELTIS OCCIDENTALIS
	DESERT DIVA DESERT WILLOW	CHILOPSIS LINEARIS 'LOPUR' DESERT DIVA
	FRONTIER ELM	ULMUS X 'FRONTIER'
	GREEN VASE SAWLEAF ZELKOVA	ZELKOVA SERRATA 'GREEN VASE'
	NEW MEXICO OLIVE	FORESTIERA NEOMEXICANA
	PURPLE ROBE LOCUST	ROBINIA PSEUDOACACIA 'PURPLE ROBE'
	RIO GRANDE COTTONWOOD	POPULUS DELTOIDES WISLIZENII
GRASSES		
	DEER GRASS	MUHLENBERGIA RIGENS
DECIDUOUS SHRUBS		
	APACHE PLUME	FALLUGIA PARADOXA
	GRO-LOW SUMAC	RHUS AROMATICA 'GRO-LOW'
	WESTERN SAND CHERRY	PRUNUS BESSEYI 'PAWNEE BUTTES'

SYMBOL	COMMON NAME	BOTANICAL NAME
DESERT ACCENTS		
	DESERT DUSK@RED YUCCA	HESPERALOE PARVIFLORA 'MSWNERMA' DESERT DUSK
	SPINELESS PRICKLY PEAR	OPUNTIA ELLISIANA
EVERGREEN SHRUBS		
	DESERT SAGE	SALVIA DORRII
	DWARF RABBITBRUSH	CHRYSOTHAMNUS NAUSEOSUS NAUSEOSUS
	GREEN CLOUD TEXAS SAGE	LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD'
	PRARIE SAGE	ARTEMISIA LUDOVICIANA
	SILVER SAGEBRUSH	ARTEMISIA CANA
	TURPENTINE BUSH	ERICAMERIA LARICIFOLIA
PERENNIALS		
	AUTUMN SAGE	SALVIA GREGGII
	CATMINT	NEPETA FAASSENII

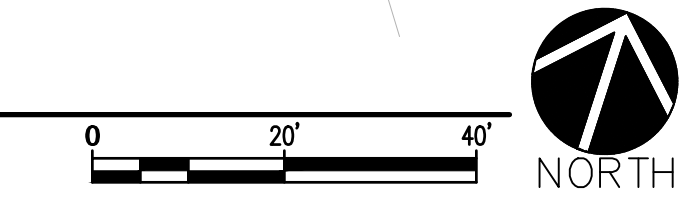
SYMBOL	CODE	DESCRIPTION	DETAIL
	P-01	FURNISH AND INSTALL ACCENT BOULDER 'MARBLE BOULDERS ROSE GOLD/JUST GOLD BLEND' AS AVAILABLE FROM JPR GRAVEL (505-503-7766).	C5/LP501
	P-03	DRILL SEED ON FINISH GRADE. SEED MIX SHALL BE A BLEND OF 'SANTA FE TRAIL' INSTALLED AT A RATE OF 2 LBS PER 1,000 SF AND 'SHOWY PLAINS AND JUNIPER HILLS WILDFLOWER MIXTURE' INSTALLED AT A RATE OF 1 LB PER 1,000 SF. AS AVAILABLE FROM CURTIS AND CURTIS (877-907-1806). NATIVE SEED MIX FOR SLOPE STABILIZATION DURING PHASE ONE. FUTURE PHASES WILL HAVE LANDSCAPING AND MULCH. DO NOT USE FILTER FABRIC.	
	P-04	BLEND OF 30% FINES, 20% 1/2", AND 50% 1"-2" 'JUST GOLD' ROCK MULCH, AS AVAILABLE FROM JPR GRAVEL (505-892-8869), OR APPROVED EQUAL, INSTALLED AT A 4" DEPTH OVER FILTER FABRIC.	
	P-05	'JUST GOLD' ROCK MULCH, SIZE VARIES, AS AVAILABLE FROM JPR GRAVEL (505-892-8869), OR APPROVED EQUAL - SEE CIVIL.	
	P-06	CLEAR SIGHT TRIANGLE	



D KEYMAP NORTH



A1 PLANTING PLAN SCALE: 1"=20'-0"



REVISION	DATE
DATE	11-24-25
PROJECT NO	

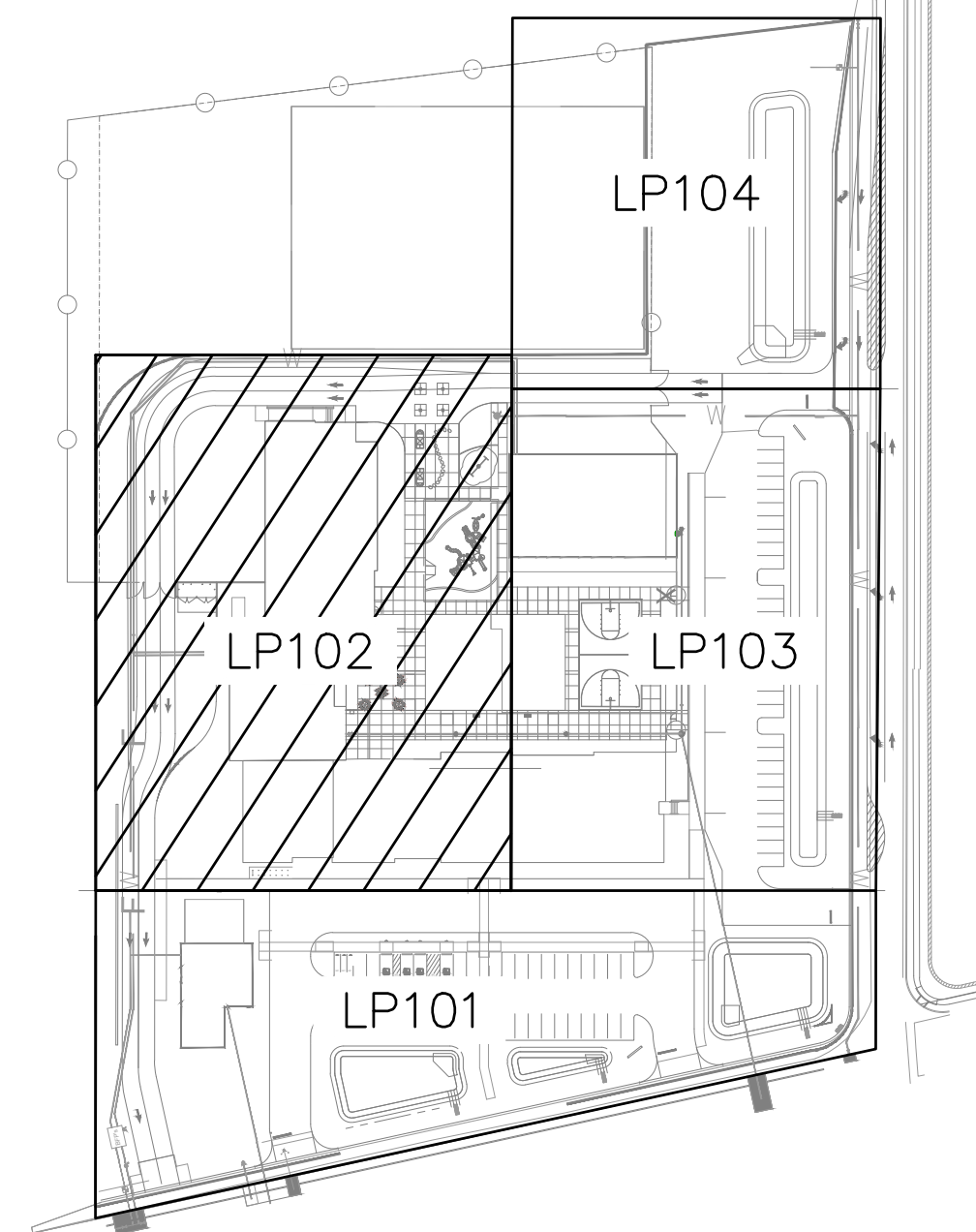
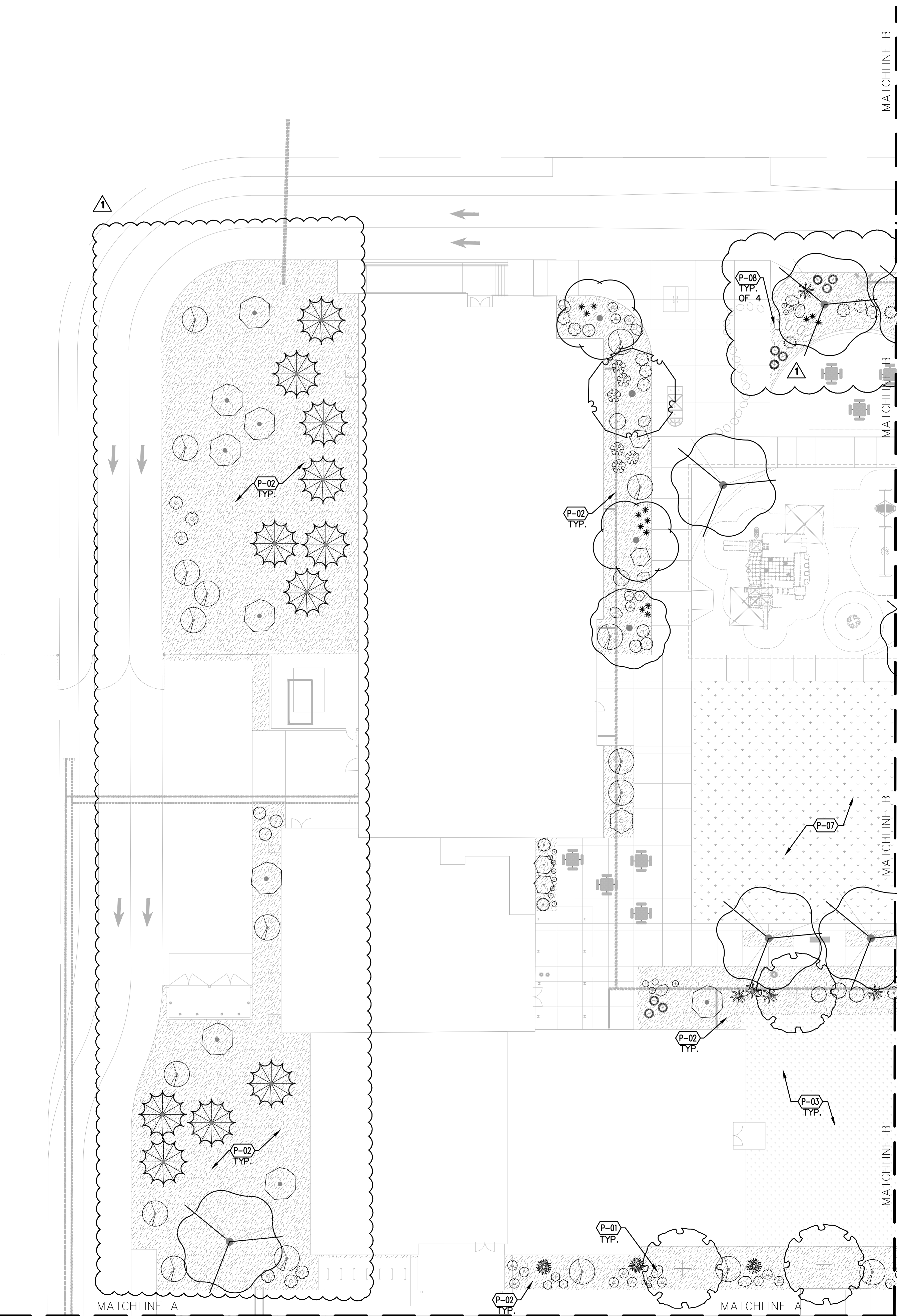
PLANT SCHEDULE LP102

SEE SHEET LP501 FOR FULL PLANTING SCHEDULE.

SYMBOL	COMMON NAME	BOTANICAL NAME
TREES		
	ALLEE LACEBARK ELM	ULMUS PARVIFOLIA 'EMER II'™
	CHINESE PISTACHE	PISTACIA CHINENSIS
	COMMON HACKBERRY	CELTIS OCCIDENTALIS
	DESERT DIVA DESERT WILLOW	CHILOPSIS LINEARIS 'LOPUR' DESERT DIVA
	PURPLE ROBE LOCUST	ROBINIA PSEUDOACACIA 'PURPLE ROBE'
EVERGREEN TREES		
	PINON PINE	PINUS EDULIS
GRASSES		
	BLONDE AMBITION BLUE GRAMA	BOUTELOUA GRACILIS 'BLONDE AMBITION'
	DEER GRASS	MUHLENBERGIA RIGENS
DECIDUOUS SHRUBS		
	APACHE PLUME	FALLUGIA PARADOXA
	BLUE MIST SPIREA	CARYOPTERIS X CLANDONENSIS
	GOLDEN CURRANT	RIBES AUREUM
	GRO-LOW SUMAC	RHUS AROMATICA 'GRO-LOW'
	LEADPLANT	AMORPHA CANESCENS
	WESTERN SAND CHERRY	PRUNUS BESSEYI 'PAWNEE BUTTES'
DESERT ACCENTS		
	BEARGRASS	NOLINA MICROCARPA
	COMMON SOTOL	DASYLIRION WHEELERI
EVERGREEN SHRUBS		
	ARIZONA ROSEWOOD	VAUQUELINIA CALIFORNICA
	DWARF RABBITBRUSH	CHRYSOTHAMNUS NAUSEOSUS NAUSEOSUS
	GREEN CLOUD TEXAS SAGE	LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD'
	ROSEMARY	ROSMARINUS OFFICINALIS
	SILVER SAGEBRUSH	ARTEMISIA CANA
	TURPENTINE BUSH	ERICAMERIA LARICIFOLIA
PERENNIALS		
	AUTUMN SAGE	SALVIA GREGGII
	CATMINT	NEPETA FAASSENII
	COMPACT CREEPING GERMANDER	TEUCRIUM CHAMAEDRY'S 'PROSTRATUM'
	DWARF PLUMBAGO	CERATOSTIGMA PLUMBAGINOIDES
	MOONSHINE YARROW	ACHILLEA X 'MOONSHINE'

PLANTING SCHEDULE LP102

SYMBOL	CODE	DESCRIPTION	DETAIL
	P-01	FURNISH AND INSTALL ACCENT BOULDER 'MARBLE BOULDERS ROSE GOLD/JUST GOLD BLEND' AS AVAILABLE FROM JPR GRAVEL (505-503-7766).	C5/LP501
	P-02	FURNISH AND INSTALL 'FOREST FLOOR' WOOD MULCH AS AVAILABLE FROM SOLUTIONS (505-877-0220) OR APPROVED EQUAL.	
	P-03	DRILL SEED ON FINISH GRADE. SEED MIX SHALL BE A BLEND OF 'SANTA FE TRAIL' INSTALLED AT A RATE OF 2 LBS PER 1,000 SF AND 'SHOWY PLAINS AND JUNIPER HILLS WILDFLOWER MIXTURE' INSTALLED AT A RATE OF 1 LB PER 1,000 SF, AS AVAILABLE FROM CURTIS AND CURTIS (877-907-1806). NATIVE SEED MIX FOR SLOPE STABILIZATION DURING PHASE ONE. FUTURE PHASES WILL HAVE LANDSCAPING AND MULCH. DO NOT USE FILTER FABRIC.	
	P-04	BLEND OF 30% FINES, 20% 1/2", AND 50% 1"-2" 'JUST GOLD' ROCK MULCH, AS AVAILABLE FROM JPR GRAVEL (505-892-8869), OR APPROVED EQUAL, INSTALLED AT A 4" DEPTH OVER FILTER FABRIC.	
	P-07	TURFGRASS SOD SHALL BE 'EVERGREEN TEXAS BLUEGRASS' AS AVAILABLE FROM EVERGREEN TURF, 505-384-5247, OR APPROVED EQUAL. TOP OF SOD SHALL BE INSTALLED 1" BELOW TOP OF ADJACENT HARD SURFACES.	
	P-08	FURNISH AND INSTALL FLAGSTONE PATH, COLOR: 'PEACH', AS AVAILABLE FROM C4/LP501 JPR GRAVEL (505-503-7766), OR APPROVED EQUAL.	



D KEYMAP



A1 PLANTING PLAN

SCALE: 1"=20'-0"

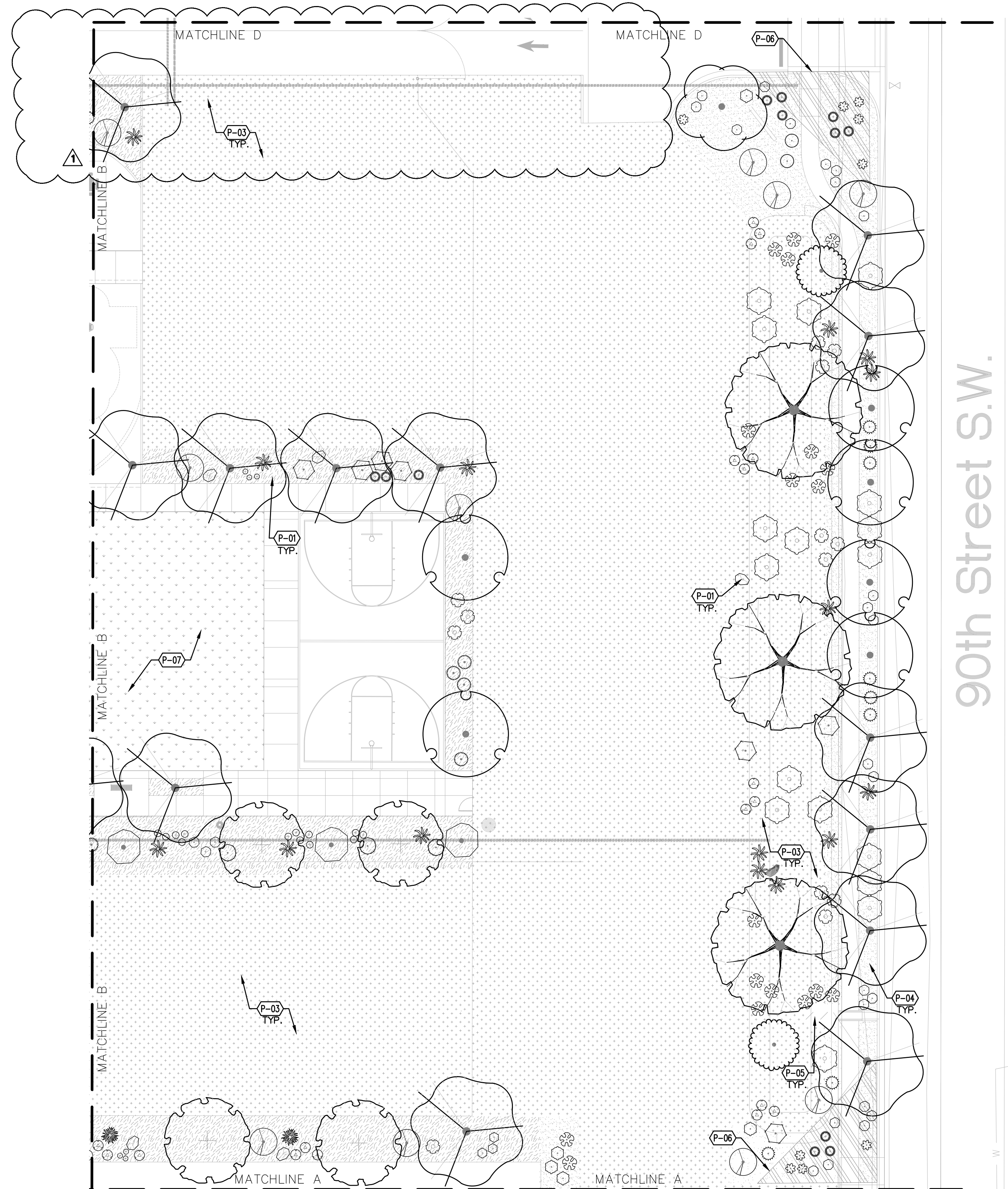
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REVISION	DATE
PERMIT REVIEW	01.08.25

DATE 11-24-25

PROJECT NO



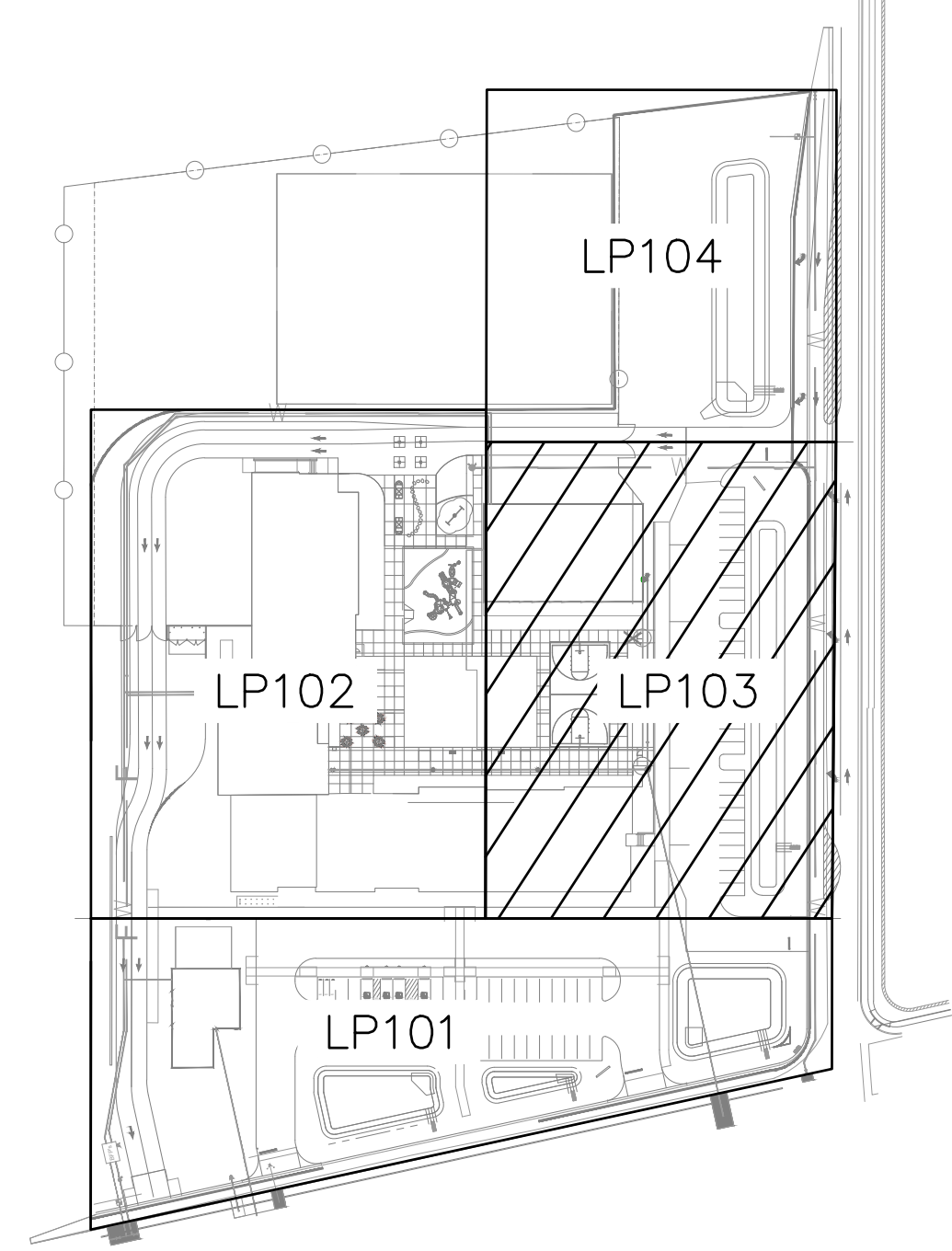
90th Street S.W.

SYMBOL	COMMON NAME	BOTANICAL NAME
TREES		
	ALLEE LACEBARK ELM	ULMUS PARVIFOLIA 'EMER II'™
	CHINESE PISTACHE	PISTACIA CHINENSIS
	DESERT DIVA DESERT WILLOW	CHILOPSIS LINEARIS 'LOPUR' DESERT DIVA
	GREEN VASE SAWLEAF ZELKOVA	ZELKOVA SERRATA 'GREEN VASE'
	NEW MEXICO OLIVE	FORESTIERA NEOMEXICANA
	RIO GRANDE COTTONWOOD	POPULUS DELTOIDES WISLIZENII
GRASSES		
	DEER GRASS	MUHLENBERGIA RIGENS
DECIDUOUS SHRUBS		
	APACHE PLUME	FALLUGIA PARADOXA
	BLUE MIST SPIREA	CARYOPTERIS X CLANDONENSIS
	GRO-LOW SUMAC	RHUS AROMATICA 'GRO-LOW'
	LEADPLANT	AMORPHA CANESCENS
DESERT ACCENTS		
	BEARGRASS	NOLINA MICROCARPA
	COMMON SOTOL	DASYLIRION WHEELERI
	DESERT DUSK® RED YUCCA	HESPERALOE PARVIFLORA 'MSWNPERRMA' DESERT
	SPINELESS PRICKLY PEAR	OPUNTIA ELLISIANA
EVERGREEN SHRUBS		
	ARIZONA ROSEWOOD	VAUQUELINIA CALIFORNICA
	DESERT SAGE	SALVIA DORRII
	DWARF RABBITBRUSH	CHRYSOTHAMNUS NAUSEOSUS NAUSEOSUS
	GREEN CLOUD TEXAS SAGE	LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD'
	ROSEMARY	ROSMARINUS OFFICINALIS
	SILVER SAGEBRUSH	ARTEMISIA CANA
	TURPENTINE BUSH	ERICAMERIA LARICIFOLIA
PERENNIALS		
	AUTUMN SAGE	SALVIA GREGGII
	CATMINT	NEPETA FAASSENII
	DWARF PLUMBAGO	CERATOSTIGMA PLUMBAGINOIDES
	MOONSHINE YARROW	ACHILLEA X 'MOONSHINE'

PLANTING SCHEDULE LP103

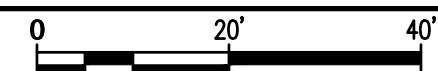
SYMBOL	CODE	DESCRIPTION	DETAIL
	P-01	FURNISH AND INSTALL ACCENT BOULDER 'MARBLE BOULDERS ROSE GOLD/JUST GOLD BLEND' AS AVAILABLE FROM JPR GRAVEL (505-503-7766).	C5/LP501
	P-02	FURNISH AND INSTALL 'FOREST FLOOR' WOOD MULCH AS AVAILABLE FROM SOILUTIONS (505-877-0220) OR APPROVED EQUAL.	
	P-03	DRILL SEED ON FINISH GRADE. SEED MIX SHALL BE A BLEND OF 'SANTA FE TRAIL' INSTALLED AT A RATE OF 2 LBS PER 1,000 SF AND 'SHOWY PLAINS AND JUNIPER HILLS WILDFLOWER MIXTURE' INSTALLED AT A RATE OF 1 LB PER 1,000 SF, AS AVAILABLE FROM CURTIS AND CURTIS (877-907-1806). NATIVE SEED MIX FOR SLOPE STABILIZATION DURING PHASE ONE. FUTURE PHASES WILL HAVE LANDSCAPING AND MULCH. DO NOT USE FILTER FABRIC.	
	P-04	BLEND OF 30% FINES, 20% 1/2", AND 50% 1"-2" 'JUST GOLD' ROCK MULCH, AS AVAILABLE FROM JPR GRAVEL (505-892-8869), OR APPROVED EQUAL, INSTALLED AT A 4" DEPTH OVER FILTER FABRIC.	
	P-05	'JUST GOLD' ROCK MULCH, SIZE VARIES, AS AVAILABLE FROM JPR GRAVEL (505-892-8869), OR APPROVED EQUAL - SEE CIVIL.	
	P-06	CLEAR SIGHT TRIANGLE	
	P-07	TURFGRASS SOD SHALL BE 'EVERGREEN TEXAS BLUEGRASS' AS AVAILABLE FROM EVERGREEN TURF, 505-384-5247, OR APPROVED EQUAL. TOP OF SOD SHALL BE INSTALLED 1" BELOW TOP OF ADJACENT HARD SURFACES.	

D KEYMAP



A1 PLANTING PLAN

SCALE: 1"=20'-0"



ALBUQUERQUE COLLEGIATE CHARTER SCHOOL

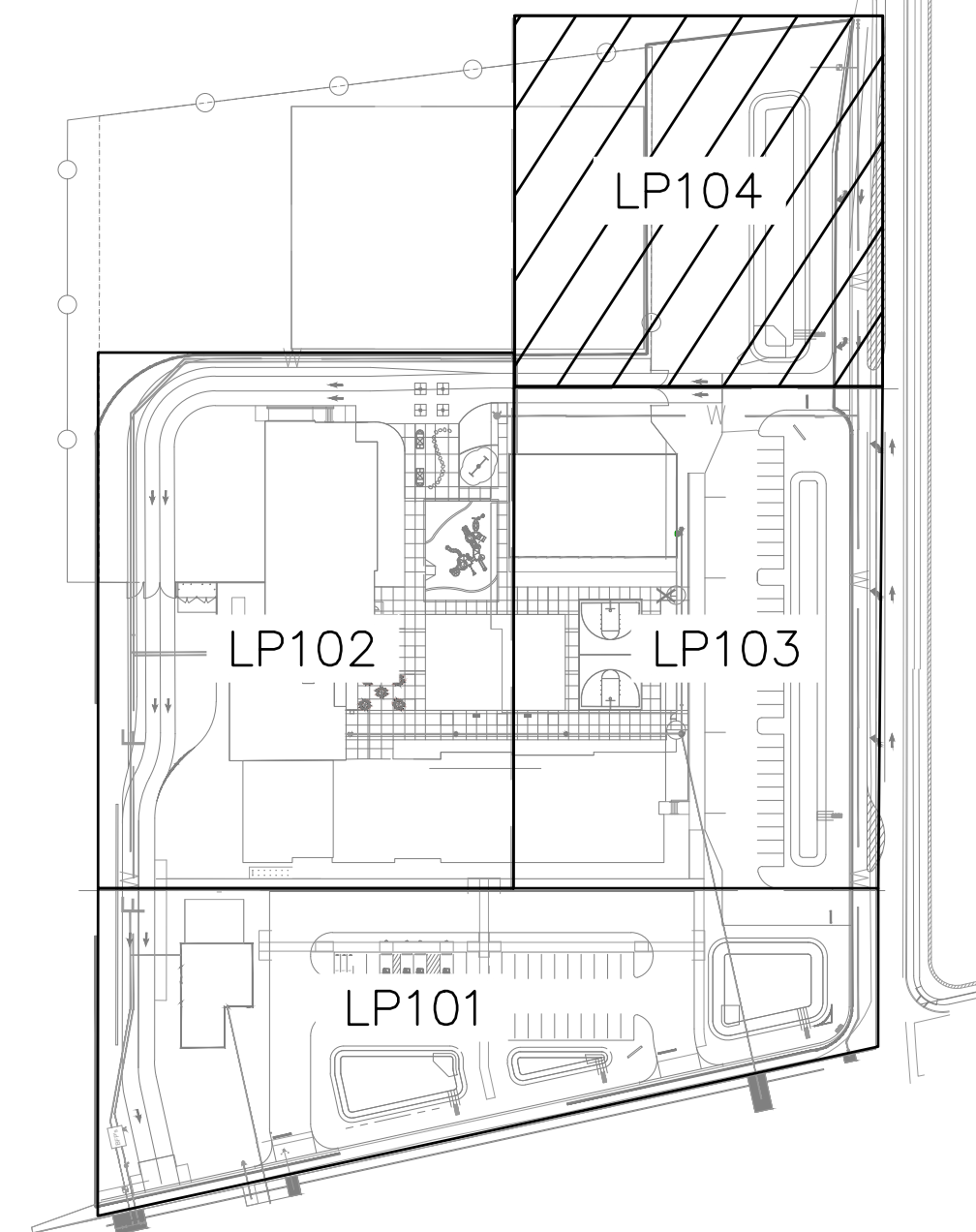
SUNSET GARDENS AND 90TH ALBUQUERQUE, NM

CONSTRUCTION DOCUMENTS

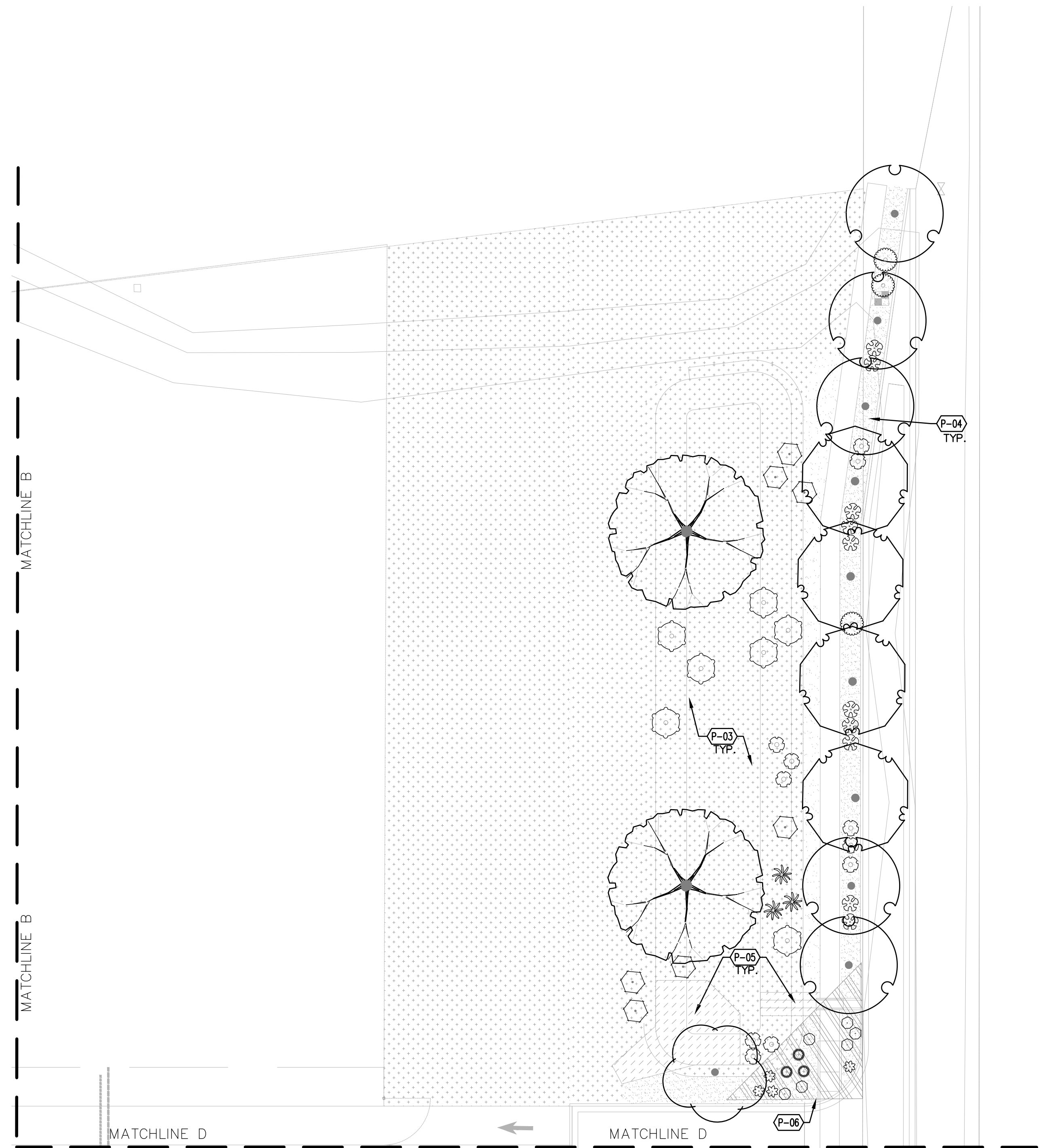
REVISION	DATE
	PERMIT REVIEW 01.08.26

DATE	11-24-25
PROJECT NO	

PLANTING PLAN



(D) KEYMAP



PLANT SCHEDULE LP104

SEE SHEET LP501 FOR FULL
PLANTING SCHEDULE.

SYMBOL	COMMON NAME	BOTANICAL NAME
TREES		
	COMMON HACKBERRY	CELTIS OCCIDENTALIS
	DESERT DIVA DESERT WILLOW	CHILOPSIS LINEARIS 'LOPUR' DESERT DIVA
	GREEN VASE SAWLEAF ZELKOVA	ZELKOVA SERRATA 'GREEN VASE'
	RIO GRANDE COTTONWOOD	POPULUS DELTOIDES WISLIZENII
GRASSES		
	DEER GRASS	MUHLENBERGIA RIGENS
DECIDUOUS SHRUBS		
	APACHE PLUME	FALLUGIA PARADOXA
	CREEPING THREE-LEAF SUMAC	RHUS TRILOBATA 'AUTUMN AMBER'
	GRO-LOW SUMAC	RHUS AROMATICA 'GRO-LOW'
DESERT ACCENTS		
	BEARGRASS	NOLINA MICROCARPA
	DESERT DUSK@RED YUCCA	HESPERALOE PARVIFLORA 'MSWNERMA' DESERT DUSK
EVERGREEN SHRUBS		
	DESERT SAGE	SALVIA DORRII
	DWARF RABBITBRUSH	CHRYSOTHAMNUS NAUSEOSUS NAUSEOSUS
PERENNIALS		
	AUTUMN SAGE	SALVIA GREGGII

PLANTING SCHEDULE LP104

SYMBOL	CODE	DESCRIPTION
	P-03	DRILL SEED ON FINISH GRADE. SEED MIX SHALL BE A BLEND OF 'SANTA FE TRAIL' INSTALLED AT A RATE OF 2 LBS PER 1,000 SF AND 'SHOWY PLAINS AND JUNIPER HILLS WILDFLOWER MIXTURE' INSTALLED AT A RATE OF 1 LB PER 1,000 SF, AS AVAILABLE FROM CURTIS AND CURTIS (877-907-1806). NATIVE SEED MIX FOR SLOPE STABILIZATION DURING PHASE ONE. FUTURE PHASES WILL HAVE LANDSCAPING AND MULCH. DO NOT USE FILTER FABRIC.
	P-04	BLEND OF 30% FINES, 20% 1/2", AND 50% 1"-2" 'JUST GOLD' ROCK MULCH, AS AVAILABLE FROM JPR GRAVEL (505-892-8869), OR APPROVED EQUAL, INSTALLED AT A 4" DEPTH OVER FILTER FABRIC.
	P-05	'JUST GOLD' ROCK MULCH, SIZE VARIES, AS AVAILABLE FROM JPR GRAVEL (505-892-8869), OR APPROVED EQUAL - SEE CIVIL.
	P-06	CLEAR SIGHT TRIANGLE

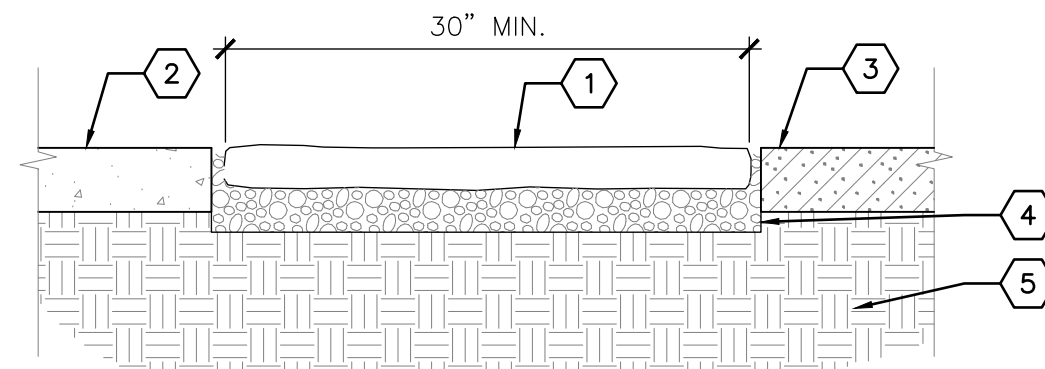
(A1) PLANTING PLAN

SCALE: 1"=20'-0"



PLANT SCHEDULE

SYMBOL	QTY	COMMON NAME	BOTANICAL NAME	REMARKS	HT.	SPD.	INSTALLED SIZE
TREES							
	19	ALLEE LACEBARK ELM	ULMUS PARVIFOLIA 'EMER II' TM	2" CAL.	50'	35'	2" CAL. 8'-10" HT.
	8	CHINESE PISTACHE	PISTACIA CHINENSIS	2" CAL.	30'	30'	2" CAL. 6'-8" HT.
	14	COMMON HACKBERRY	CELTIS OCCIDENTALIS	2" CAL.	30'	30'	2" CAL. 12'-14" HT.
	8	DESERT DIVA DESERT WILLOW	CHILOPSIS LINEARIS 'LOPUR' DESERT DIVA	36" BOX	30'	30'	8'-10" HT.
	7	FRONTIER ELM	ULMUS X 'FRONTIER'	2" CAL.	40'	30'	2" CAL. 8'-10" HT.
	13	GREEN VASE SAWLEAF ZELKOVA	ZELKOVA SERRATA 'GREEN VASE'	24" BOX	35'	25'	2" CAL. 10'-12" HT.
	4	NEW MEXICO OLIVE	FORESTIERA NEOMEXICANA	24" BOX	15'	15'	2" CAL. 6'-8" HT.
	3	PURPLE ROBE LOCUST	ROBINIA PSEUDOACACIA 'PURPLE ROBE'	2" CAL.	35'	25'	2" CAL. 10'-12" HT.
	9	RIO GRANDE COTTONWOOD	POPULUS DELTOIDES WISLIZENII	B&B	40'	40'	2" CAL. 12'-14" HT.
EVERGREEN TREES							
	11	PINON PINE	PINUS EDULIS	2" CAL.	15'	15'	6'-8" HT.
GRASSES							
	14	BLONDE AMBITION BLUE GRAMA	BOUTELOUA GRACILIS 'BLONDE AMBITION'	3 GAL.	2'	2'	MIN. 8" HT.
	52	DEER GRASS	MUHLENBERGIA RIGENS	5 GAL.	3'	4'	MIN. 18" SPD.
DECIDUOUS SHRUBS							
	38	APACHE PLUME	FALLUGIA PARADOXA	5 GAL.	6'	6'	MIN. 18" SPD.
	6	BLUE MIST SPIREA	CARYOPTERIS X CLANDONENSIS	5 GAL.	5'	5'	MIN. 12" HT.
	3	CREeping THREE-LEAF SUMAC	RHUS TRILOBATA 'AUTUMN AMBER'	5 GAL.	1'	6'	MIN. 18" SPD.
	2	GOLDEN CURRANT	RIBES AUREUM	5 GAL.	5'	5'	18" H X 16" W
	32	GRO-LOW SUMAC	RHUS AROMATICA 'GRO-LOW'	5 GAL.	3'	8'	MIN. 18" SPD.
	35	LEADPLANT	AMORPHA CANESCENS	5 GAL.	3'	3'	MIN. 12" HT.
	36	WESTERN SAND CHERRY	PRUNUS BESSEYI 'PAWNEE BUTTES'	5 GAL.	2'	4-6'	MIN. 18" SPD.
DESERT ACCENTS							
	23	BEARGRASS	NOLINA MICROCARPA	5 GAL.	5'	5'	MIN. 12" HT.
	5	COMMON SOTOL	DASYLIRION WHEELERI	5 GAL.	4'	4'	MIN. 12" HT.
	48	DESERT DUSK@RED YUCCA	HESPERALOE PARVIFLORA 'MSWNERMA' DESERT DUSK	1 GAL.	2'-6"	3'	MIN. 12" SPD.
	9	SPINELESS PRICKLY PEAR	OPUNTIA ELLISIANA	5 GAL.	4'	4'	MIN 18" HT
EVERGREEN SHRUBS							
	12	ARIZONA ROSEWOOD	VAUQUELINIA CALIFORNICA	15 GAL.	12'	10'	1" CAL. 4'-6" HT.
	43	DESERT SAGE	SALVIA DORRII	1 GAL.	2'	3'	12" H X 12" W
	62	DWARF RABBITBRUSH	CHRYSOETHAMNUS NAUSEOSUS NAUSEOSUS	5 GAL.	3'	3'	MIN. 12" HT.
	39	GREEN CLOUD TEXAS SAGE	LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD'	10 GAL.	6'	6'	4' HEIGHT
	12	PRARIE SAGE	ARTEMISIA LUDOVICIANA	5 GAL.	3'	3'	MIN. 12" HT.
	7	ROSEMARY	ROSMARINUS OFFICINALIS	3 GAL.	4'	4'	24" H X 18" W
	12	SILVER SAGEBRUSH	ARTEMISIA CANA	3 GAL.	4'	4'	18" H X 20" W MIN.
	29	TURPENTINE BUSH	ERICAMERIA LARICIFOLIA	3 GAL.	3'	4'	MIN 18" HT
PERENNIALS							
	39	AUTUMN SAGE	SALVIA GREGGII	1 GAL.	2'	3'	MIN. 8" HT.
	9	CATMINT	NEPETA FAASSENII	1 GAL.	1'	3'	MIN. 6" SPD.
	3	COMPACT CREEPING GERMANDER	TEUCRIUM CHAMAEDRYIS 'PROSTRATUM'	1 GAL.	6"	1'-6"	MIN. 6" SPD.
	17	DWARF PLUMBAGO	CERATOSTIGMA PLUMBAGINOIDES	1 GAL.	1'	1'-6"	MIN. 6" SPD.
	17	MOONSHINE YARROW	ACHILLEA X 'MOONSHINE'	1 GAL.	2'	2'	MIN. 6" SPD.



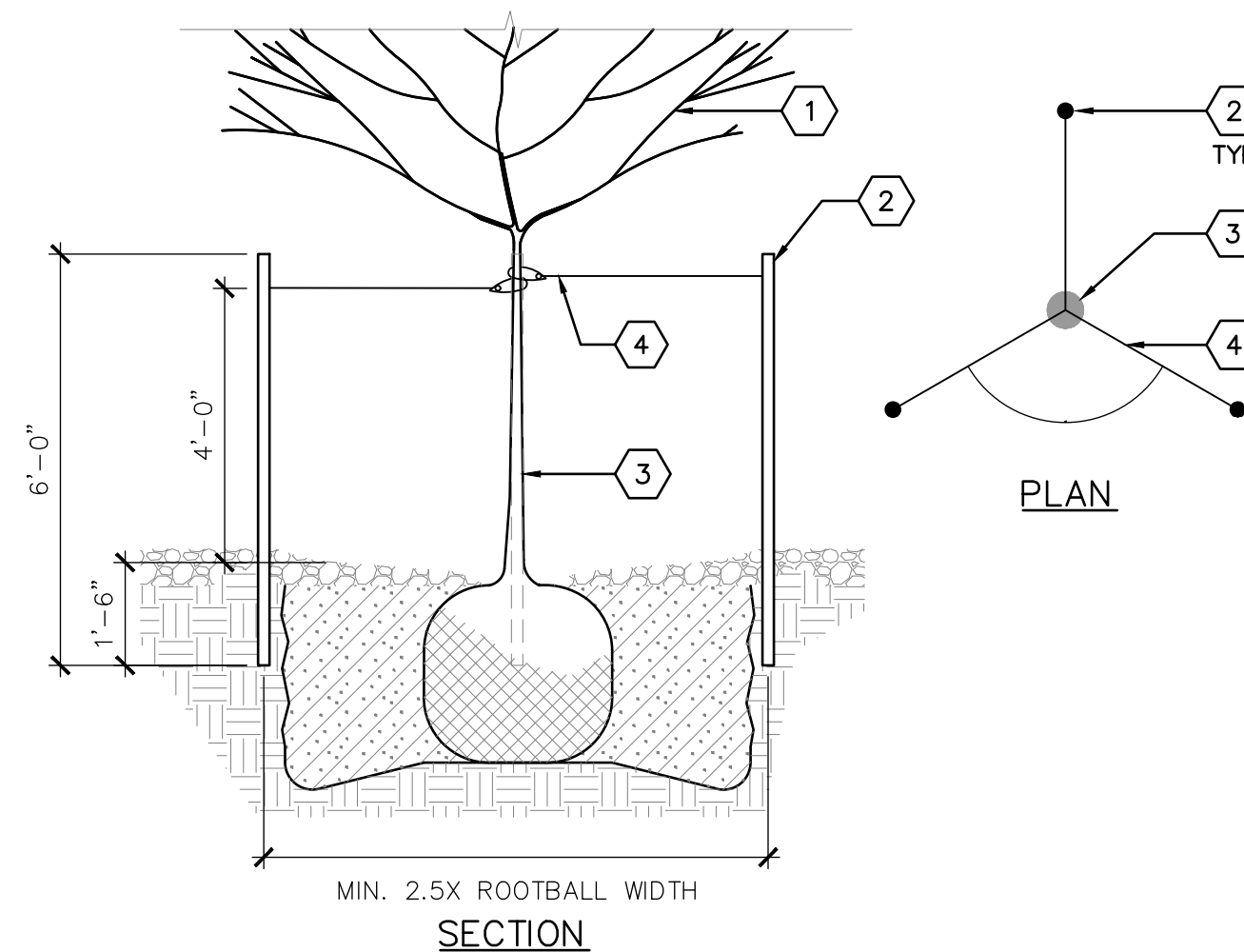
KEYED NOTES

- 2" THICK FLAGSTONE PAVER, SIZE VARIES - SEE PLAN.
- CONCRETE PAVING - SEE PLAN.
- CONDITION VARIES - SEE PLAN.
- 2" DEPTH SAND LEVELING COURSE.
- COMPACTED SUBGRADE.

GENERAL NOTES

- FLAGSTONE COLOR SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- BASE COURSE SHALL BE INSTALLED TO LIMITS OF AREA COVERED BY FLAGSTONE.

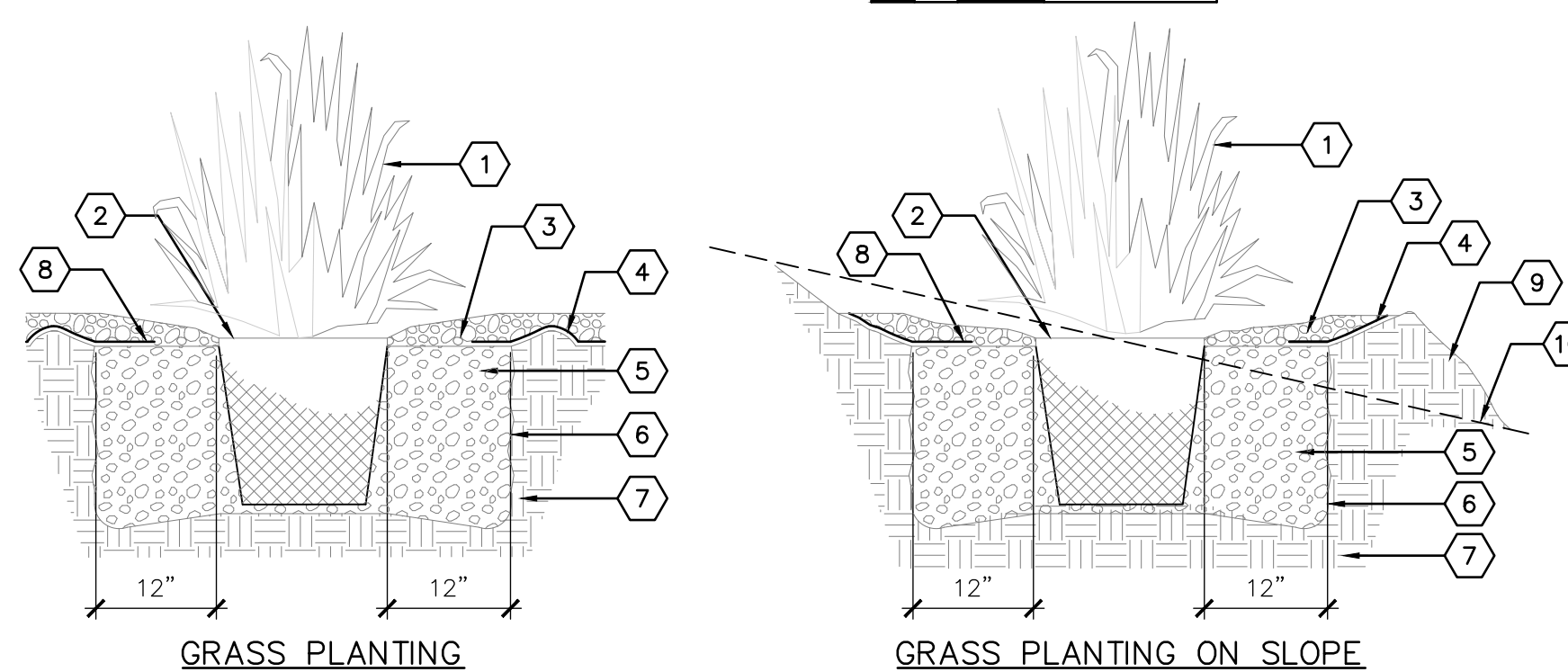
C4 FLAGSTONE STEPPER WITH BASE



KEYED NOTES

- TREE - SEE PLAN FOR SPECIES AND LOCATIONS.
- 2" DIA. X 6' HT. LODGEPOLE PINE TREE STAKE, DRIVEN 18" INTO UNDISTURBED SOIL. THREE (3) PER TREE TRIANGULATED AROUND TRUNK. SET STAKES PLUMB.
- TREE TRUNK.
- TREE ROPE OR WEBBING (ARBORTIE OR PRE-APPROVED EQUAL) - ATTACH TO 2" WIDE NYLON TREE STRAPS WITH METAL GROMMETS - PROVIDE SLACK TO ALLOW TREE TO SWAY WITHIN THE STAKING SYSTEM.

B4 TREE STAKING



KEYED NOTES

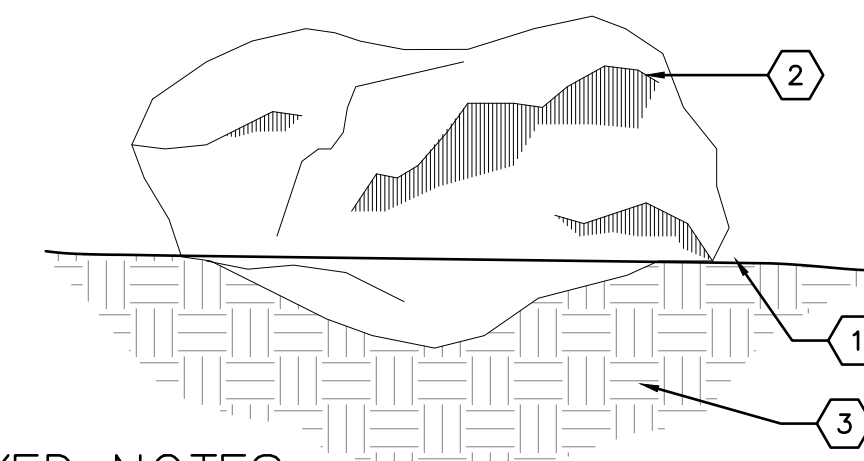
- ORNAMENTAL GRASS - SEE PLAN FOR TYPE AND LOCATION.
- PLANT DEPTH, SLIGHTLY HIGHER THAN ADJACENT SUBGRADE.
- MULCH - SEE PLAN. HOLD BACK 2" FROM GRASS STEMS.
- EARTHEN BERM, 6" HEIGHT.
- BACKFILL AND SOIL AMENDMENTS - SEE SPECIFICATIONS. MIX THOROUGHLY PRIOR TO INSTALLATION.
- SCARIFY EDGE OF PLANTING HOLE, CONTINUOUS ALL SIDES.
- UNDISTURBED SUBGRADE.
- WEED BARRIER FABRIC. DIAMETER OF FILTER FABRIC CUTOUT SHALL BE EQUIVALENT TO MATURE SPREAD OF GRASS - SEE PLANT SCHEDULE FOR SPREAD DIMENSION.
- PROPOSED GRADE - SMOOTHLY TAPER SLOPE TO FORM PLANTING WELL.
- EXISTING GRADE.

GENERAL NOTES

- LOOSEN ALL ROOTS AT EDGE OF ROOT BALL. UNWIND OR CUT ANY ENCIRCLING ROOTS.

A4 ORNAMENTAL GRASS PLANTING WITH FABRIC

NOT TO SCALE

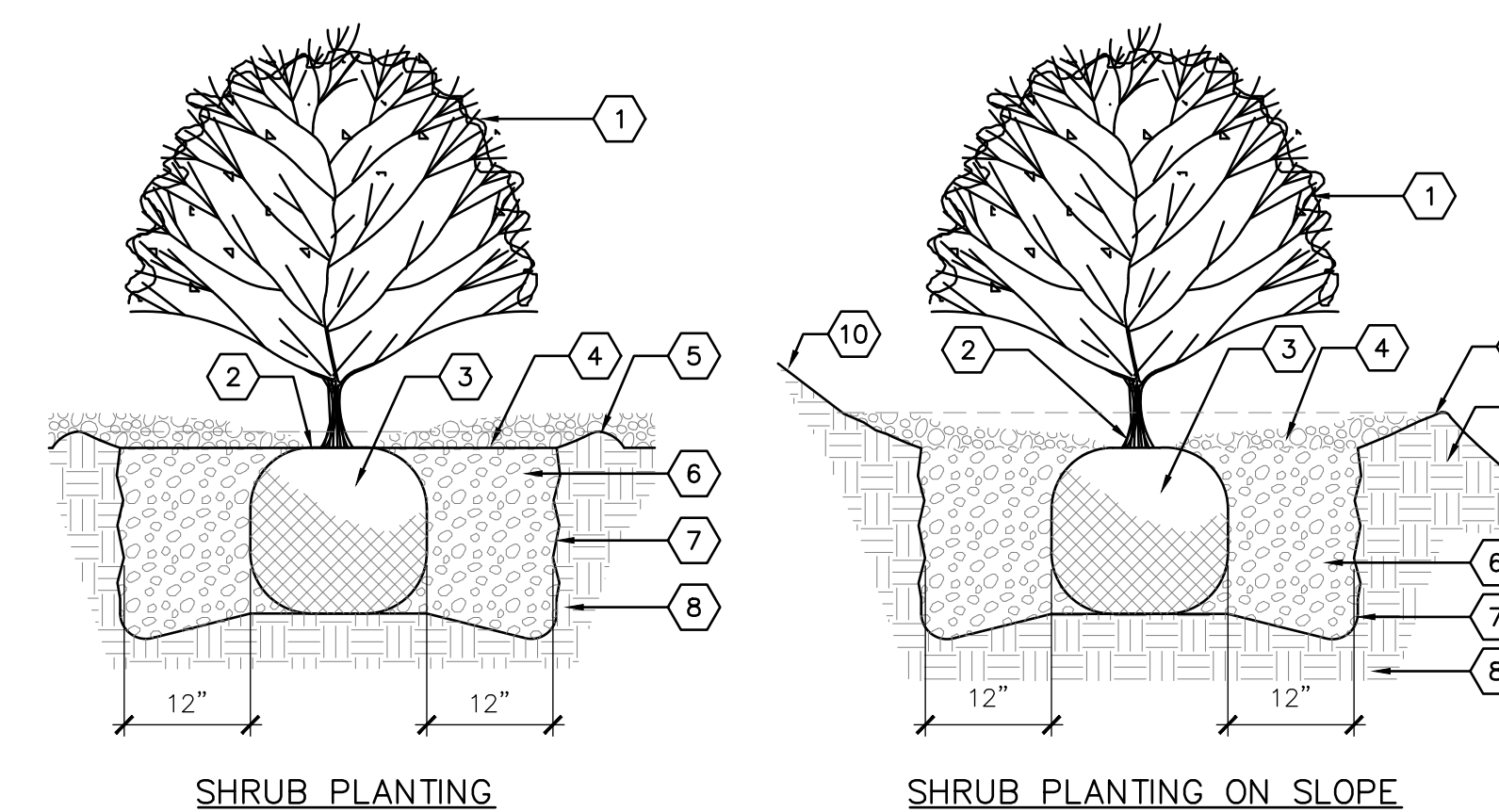


KEYED NOTES

- FINISH GRADE (MATERIAL VARIES) - BOULDER SHALL BE BURIED TO MIN 8" DEPTH BELOW FINISH GRADE.
- BOULDER, 'MARBLE BOULDER ROSE GOLD/JUST GOLD' OR APPROVED ALTERNATE MATERIAL AS LOCALLY AVAILABLE.
- COMPACTED SUBGRADE.

C5 ACCENT BOULDER

NOT TO SCALE



SHRUB PLANTING

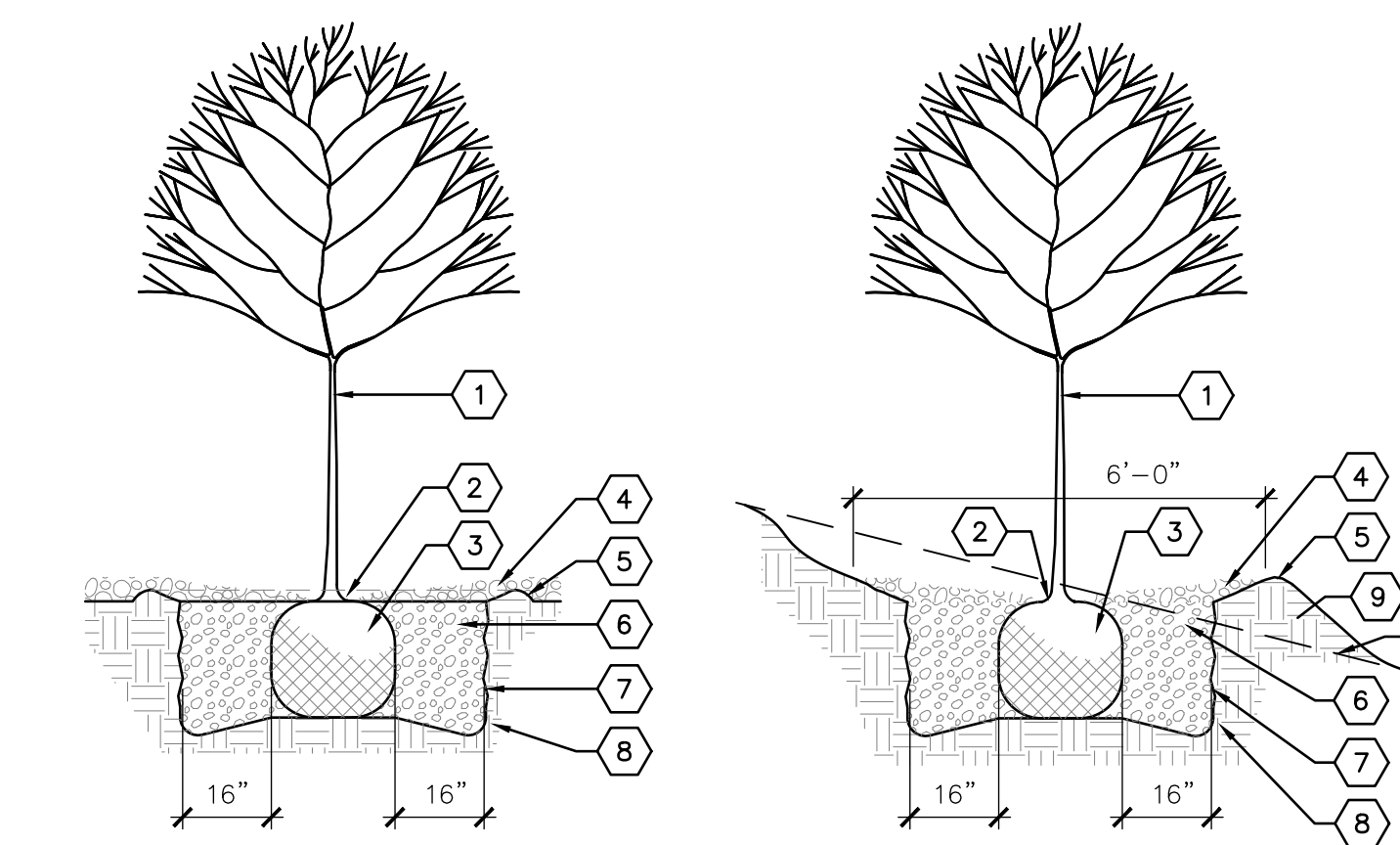
SHRUB PLANTING ON SLOPE

KEYED NOTES

- SHRUB - SEE PLAN FOR SPECIES AND LOCATION.
- PLANT AT SAME DEPTH AS MAINTAINED AT NURSERY.
- PLACE SHRUB IN HOLE AND STRAIGHTEN.
- MULCH - SEE PLAN. HOLD BACK 2" FROM SHRUB STEMS.
- 6-INCH HEIGHT EARTHEN BERM.
- BACKFILL AND SOIL AMENDMENTS - SEE SPECIFICATIONS. MIX THOROUGHLY PRIOR TO INSTALLATION.
- SCARIFY EDGE OF PLANTING HOLE, CONTINUOUS ALL SIDES.
- UNDISTURBED SUBGRADE.
- PROPOSED GRADE. SMOOTHLY TAPER SLOPE TO FORM SHRUB WELL.
- EXISTING GRADE.

B5 SHRUB PLANTING

NOT TO SCALE



TREE PLANTING

TREE PLANTING ON SLOPE

KEYED NOTES

- TREE - SEE PLAN FOR SPECIES AND LOCATION.
- REMOVE EXISTING SOIL FROM NURSERY AS NEEDED TO EXPOSE ROOT FLARE. INSTALL WITH ROOT FLARE 2"-3" ABOVE GRADE.
- PLACE TREE IN HOLE AND STRAIGHTEN. REMOVE WIRE BASKET, WOOD BOX, PLASTIC, TWINE AND/OR ROPE, AND BURLAP PRIOR TO BACKFILL.
- MULCH - SEE PLAN. AVOID MULCH INSTALLATION 4"-6" OF DISTANCE FROM TREE TRUNK.
- EARTHEN BERM, 6" HEIGHT.
- THOROUGHLY MIX BACKFILL AND SOIL AMENDMENTS PRIOR TO INSTALLATION - SEE SPECIFICATIONS.
- SCARIFY EDGE OF PLANTING HOLE, CONTINUOUS ALL SIDES.
- UNDISTURBED SUBGRADE.
- PROPOSED GRADE. SMOOTHLY TAPER SLOPE TO FORM TREE WELL.
- EXISTING GRADE.

A5 TREE PLANTING

NOT TO SCALE

