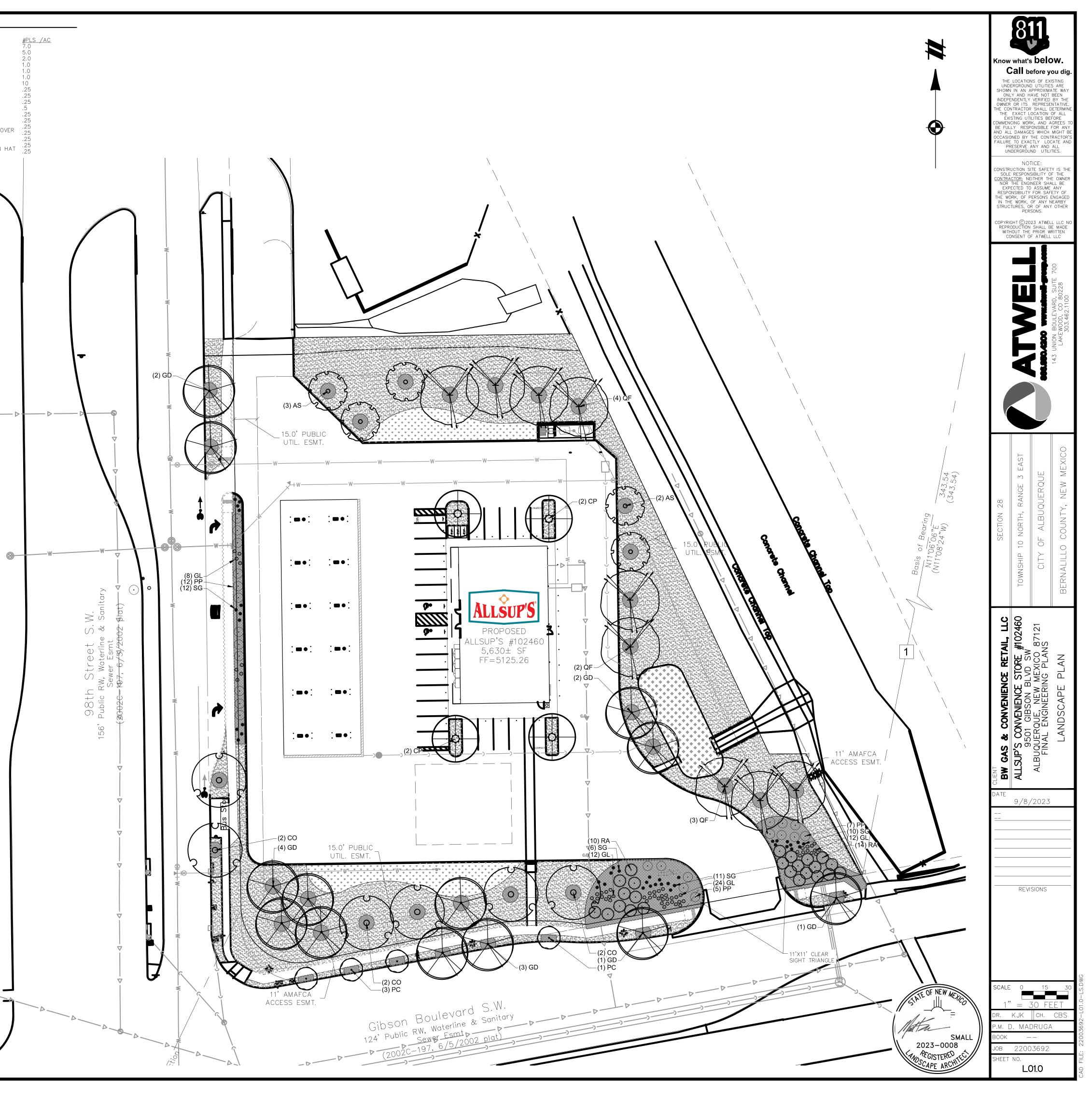


|   | <ul> <li>PROPOSED SANITARY SEWER</li> <li>EXISTING STORM SEWER</li> <li>PROPOSED STORM SEWER</li> <li>EXISTING WATER LINE</li> <li>PROPOSED WATER LINE</li> <li>EXISTING UNDERGROUND GAS</li> <li>PROPOSED UNDERGROUND TELEPHONE</li> </ul>  | <u>TYPE</u><br>HILARIA JAMESII 'VIVA' – GALLETA<br>ORYZOPIS HYMENOIDES 'PALOMA' – INDIAN RICE GRASS<br>BOUTELOUA GRACILIS 'HACHITA' BLUE GRAMA<br>BOUTELOUS CURTIPENDULA 'VAUGHN'– SIDEOATS GRAMA<br>AGROPYRON SMITHII 'ARRIBA' – WESTERN WHEAT<br>SPOROBOLUS AIROIDES 'SALADO' ALKALI SCATON<br>ARTEMISIA FRIGIDA – FRINGED SAGEBUSH<br>SPAERALCEA AMBIGUA – DESERT GLOEMALLOW<br>SPAERALCEA PARVIFOLIA – NELSON GLOBEMELLOW<br>HELIANTHUS ANNUUS<br>OENOTHERA PALLIDA – WHITE EVENING PRIMROSE<br>BAILEYA MULTIRADATA – DESERT MARIGOLD<br>ABRONIA FRAGRANS OR ABRONIA VILLOSA<br>DALEA PURPUREA VAR PURPUREA – PURPLE PRARIE CLO<br>MACHAERANTHERA CANESCENS – HOARY TANSEYASTER<br>BERLANDIERA LYRATA – CHOCLOATE FLOWER<br>RATIBIDA COLUMNIFERA FORMA PULCHERRIMA – MEXICAN |
|---|--|--|
| →       → | <ul> <li>EXISTING ROW</li> <li>EXISTING EASEMENT LINE</li> <li>PROPOSED EASEMENT LINE</li> <li>EXISTING SANITARY SEWER</li> <li>PROPOSED SANITARY SEWER</li> <li>EXISTING STORM SEWER</li> <li>PROPOSED STORM SEWER</li> <li>EXISTING WATER LINE</li> <li>PROPOSED WATER LINE</li> <li>EXISTING UNDERGROUND GAS</li> <li>PROPOSED UNDERGROUND TELEPHONE</li> </ul> | AGROPYRON SMITHII 'ARRIBA' – WESTERN WHEAT<br>SPOROBOLUS AIROIDES 'SALADO' ALKALI SCATON<br>ARTEMISIA FRIGIDA – FRINGED SAGEBUSH<br>SPAERALCEA AMBIGUA – DESERT GLOEMALLOW<br>SPAERALCEA PARVIFOLIA – NELSON GLOBEMELLOW<br>HELIANTHUS ANNUUS<br>OENOTHERA PALLIDA – WHITE EVENING PRIMROSE<br>BAILEYA MULTIRADATA – DESERT MARIGOLD<br>ABRONIA FRAGRANS OR ABRONIA VILLOSA<br>DALEA PURPUREA VAR PURPUREA – PURPLE PRARIE CLO<br>MACHAERANTHERA CANESCENS – HOARY TANSEYASTER<br>BERLANDIERA LYRATA – CHOCLOATE FLOWER  |
|   | <ul> <li>PROPOSED SANITARY SEWER</li> <li>EXISTING STORM SEWER</li> <li>PROPOSED STORM SEWER</li> <li>EXISTING WATER LINE</li> <li>PROPOSED WATER LINE</li> <li>EXISTING UNDERGROUND GAS</li> <li>PROPOSED UNDERGROUND TELEPHONE</li> </ul>  | HELIANTHUS ANNUUS<br>OENOTHERA PALLIDA – WHITE EVENING PRIMROSE<br>BAILEYA MULTIRADATA – DESERT MARIGOLD<br>ABRONIA FRAGRANS OR ABRONIA VILLOSA<br>DALEA PURPUREA VAR PURPUREA – PURPLE PRARIE CLO<br>MACHAERANTHERA CANESCENS – HOARY TANSEYASTER<br>BERLANDIERA LYRATA – CHOCLOATE FLOWER  |
| GGG   | <ul> <li>PROPOSED WATER LINE</li> <li>EXISTING UNDERGROUND GAS</li> <li>PROPOSED UNDERGROUND GAS</li> <li>EXISTING UNDERGROUND TELEPHONE</li> </ul>  |  |
| 0 0   |  |  |
|   | <ul> <li>EXISTING OVERHEAD TELEPHONE</li> <li>PROPOSED UNDERGROUND TELEPHONE</li> <li>EXISTING UNDERGROUND ELECTRIC</li> </ul>   |  |
|   |  |  |
| $ \begin{array}{c} \hline TV & TV & TV \\ \hline X & X & X \\ \hline X & X & X \\ \hline \end{array} $  |  |  |
|   | PROPOSED LIGHT POLE/WALL PACK LIGHT<br>BLUE GRAMA GRASS SEEDED LAWN<br>ROCK MULCH  |  |
|   | VALLEY GOLD (1") – 3" DEPTH WITH<br>PERVIOUS FILTER FABRIC.<br>SOILUTIONS FOREST FLOOR MULCH, 4" DEPTH.  |  |
|   | DETENTION POND SEED MIX  |  |
| LANDSCAPE       CALCULATIONS         ROW TREES       21         ROW TREES       ROW TREES REQURIED (         21       ROW TREES PROVIDED  | (522 LF/25)  |  |
| 16,408 SF GRAVEL LANDSCAPE AR   | (SITE LANDSCAPE) PROVIDED<br>A PROVIDED  |  |
| 758 SF PARKING LOT LANDSCAI<br>PARKING LOT AREA)  | PE AREA (11% OF 6,757 SF   |  |

- ALL PLANT MATERIAL SHALL BE FREE OF DISEASE AND INSECTS AND SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSA) OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
   ALL WEED BARRIER SHALL BE PERMEABLE AND ONLY INSTALLED IN AREAS
- NOT TO RECEIVE ORGANIC MULCH. 3. PROVIDE A MINIMUM OF 5' RADIUS OF ORGANIC MULCH, BUT NOT DIRECTLY
- AGAINST THE TRUNK, FOR ALL TREES, WITH A DEPTH OF 4". 4. ALL SHRUBS WITHIN ANY SITE TRIANGLES SHALL BE LESS THAN 30"
- MATURE HEIGHT. 5. ALL TREES THAT OVERHANG PUBLIC WALKS SHALL MAINTAIN 8' CLEARANCE
- WITH 9' CLEARANCE MAINTAINED OVER PUBLIC ROADS.
  TREES IN PUBLIC ROW SHALL BE IRRIGATED AND COMPLIY WITH MINIMUM TECHNICAL REQUIREMENTS IN ARTICLE 6-6 OF ROA 1994. A SEPERATE
- VALVE SHALL BE PROVIDED FOR REQUIRED IRRIGATION IN PUBLIC ROW.
  7. ALL ON SITE LANDSCAPE SHALL BE IRRIGATED WITH AN AUTOMATE DRIP IRRIGATION SYSTEM FOR SHRUBS AND TREES. ANY TURF AREAS SHALL BE IRRIGATED WITH SPRAY IRRIGATION AS REQUIRED. SPRAY IRRIGATION SHALL NOT OVERSPRAY ON HARD SURFACES INCLUDED WALKWAYS AND PARKING
- AREAS.
- TREES SHALL NOT BE PLANTED IN EASEMENTS.
   TREES SHALL MAINTAIN A MINIMUM OF 10' CLEAR FROM CENTERLINE OF SEWER OR WATER LINES, ALONG WITH OTHER REQUIREMENTS FOR UTILITIES.
   ALL LANDSCAPING WORK SHALL ADHERE TO CITY OF ALBUQUERQUE STANDARD DETAILS AND SPECIFICATIONS STANDARD DETAILS AND SPECIFICATIONS.

| DECIDUOUS TREES         |      | QTY        | BOTANICAL / COMMON NAME                             | CONT   | CAL        | MATURE SIZE (H x W) |
|-------------------------|------|------------|---|--------|------------|---------------------|
| for a                   | AS   | 5          | Acer negundo `Sensation` / Sensation Box Elder      | B&B    | 2" Cal.    | 30' x 25'           |
|                         | со   | 6          | Celtis occidentalis / Common Hackberry              | B&B    | 2" Cal.    | 40' x 40'           |
| $\overline{\mathbb{R}}$ | GD   | 13         | Gymnocladus dioica 'Espresso' / Kentucky Coffeetree | B&B    | 2" Cal.    | 60' x 40'           |
|                         | СР   | 4          | Pistacia chinensis / Chinese Pistache               | B&B    | 2" Cal.    | 30' x 30'           |
| $(\cdot)$               | PC   | 4          | Prunus cerasifera / Purple-leaf Plum                | B&B    | 2" Cal.    | 20' x 15'           |
| D                       | QF   | 9          | Quercus fusiformis / Texas Live Oak                 | B&B    | 2" Cal.    | 50' x 50'           |
| SHRUBS                  | CODE | <u>QTY</u> | BOTANICAL / COMMON NAME                             | CONT   | <u>0.C</u> | MATURE SIZE (H x W) |
| $\odot$                 | GL   | 56         | Gaura lindheimeri / Gaura                           | 1 gal. |            | 3' x 2'             |
| $\bigcirc$              | РР   | 24         | Prunus besseyi 'P011S' / Pawnee Buttes® Sand Cherry | 1 gal. |            | 1.5' x 6'           |
| $\odot$                 | RA   | 24         | Rhus trilobata 'Autumn Amber' / Autumn Amber Sumac  | 1 gal. |            | 14" x 8'            |
|                         | SG   | 39         | Salvia greggii / Autumn Sage                        | 1 gal. |            | 2' x 2'             |
|                         |      |            |   |        |            | •                   |

# PLANT SCHEDULE



### GENERAL LANDSCAPE NOTES

- . LANDSCAPE CONTRACTOR (CONTRACTOR) SHALL VISIT SITE, INSPECT EXISTING 1. NO PLANTING TO BE INSTALLED UNTIL GRADING AND CONSTRUCTION HAS CONDITIONS AND REVIEW PROPOSED PLANTINGS AND RELATED WORK. LANDSCAPE CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS ON PROPERTY WITH THE GENERAL CONTRACTOR AND BY CALLING 811 PRIOR TO STAKING PLANT LOCATIONS. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES CONTACT LANDSCAPE ARCHITECT THE PLANT LIST ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE INSTALLED.
- 2. PRIOR TO ANY LAND CLEARING OR CONSTRUCTION, TREE PROTECTION FENCING IS TO BE INSTALLED BY THE CONTRACTOR. THIS FENCING SHALL BE INSTALLED AT THE DRIP LINE OF ALL TREES AND SHRUBS AND MUST BE MAINTAINED AS APPROVED FOR THE DURATION OF THE PROJECT. NO CUTTING, FILLING OR TRESPASSING SHALL OCCUR INSIDE THE FENCED AREAS.
- 3. LANDSCAPE CONTRACTOR SHALL COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATIONS WITH OTHER CONTRACTORS WORKING ON SITE.
- 4. WHERE EXISTING TREES AND/OR SIGNIFICANT SHRUBS MASSINGS ARE FOUND ON SITE. WHETHER SHOWN ON THE DRAWING OR NOT. THEY SHALL BE PROTECTED AND SAVED UNLESS NOTED TO BE REMOVED AND/OR ARE IN AN AREA TO BE GRADED, ANY QUESTION REGARDING WHETHER PLANT MATERIAL SHOULD REMAIN OR NOT SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE PRIOR TO REMOVAL
- 5. ALL EXISTING TREES TO REMAIN TO BE FERTILIZED AND PRUNED TO REMOVE DEAD WOOD AND DAMAGED OR RUBBING BRANCHES.
- 6. NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL IS REQUESTED OF THE LANDSCAPE ARCHITECT AND OWNER BY THE LANDSCAPE CONTRACTOR PRIOR TO INSTALLATION.
- 7. ALL PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. ALL LANDSCAPING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE STANDARDS OF THE AUTHORITY HAVING JURISDICTION AND IN ACCORDANCE WITH CURRENT INDUSTRY STANDARDS IN A NEAT, HEALTHY AND WEED FREE CONDITION.
- 8. CONTRACTOR WILL SUPPLY FINISHED GRADE AND EXCAVATE AS NECESSARY TO SUPPLY 4" TOPSOIL DEPTH IN ALL PLANTING BEDS AND 4" TOPSOIL DEPTH IN ALL LAWN AREAS, BACKELL AND CROWN PARKING LOT ISLANDS 6" ABOVE ADJACENT CURBS WITH TOPSOIL. BACKFILL DIRECTLY BEHIND ALL CURBS AND ALONG SIDEWALKS AND COMPACT TO TOP OF CURB OR WALK TO SUPPORT VEHICLE AND PEDESTRIAN WEIGHT WITHOUT SETTLING.
- 9. ACCEPTANCE OF GRADING AND SOD/SEED SHALL BE BY LANDSCAPE ARCHITECT AND/OR PROJECT REPRESENTATIVE. THE LANDSCAPE CONTRACTOR SHALL ASSUME MAINTENANCE RESPONSIBILITY UNTIL FINAL ACCEPTANCE HAS BEEN RECEIVED. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REPLACEMENT OF WASH-OUTS AND OTHER OPERATIONS NECESSARY TO KEEP SOD/SEED IN A THRIVING CONDITION. UPON FINAL ACCEPTANCE BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE, THE OWNER WILL ASSUME ALL MAINTENANCE RESPONSIBILITIES.
- 10. PLANT MATERIAL LOCATIONS SHOWN ARE DIAGRAMMATIC AND MAY BE SUBJECT TO CHANGE IN THE FIELD AS REQUIRED.
- 11. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO THE OWNER.
- 12. OWNER OR OWNER'S REPRESENTATIVE SHALL INSPECT LANDSCAPE INSTALLATION AND HAVE THE RIGHT TO REJECT AND WITHHOLD PAYMENT ON ANY PLANT MATERIAL(S) OF DAMAGED OR POOR QUALITY OR NOT MEETING SPECIFICATIONS.
- 13. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN-UP OF SITE AT THE COMPLETION OF LANDSCAPING EACH DAY. AT ALL TIMES THE SIDEWALKS SHALL BE MAINTAINED CLEAN AND FREE OF DEBRIS. REMOVE SURPLUS SOIL AND WASTE MATERIAL, TRASH AND DEBRIS FROM THE SITE AND LEGALLY DISPOSE OF SAME IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL CODES AND REGULATIONS.
- 14. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR SOIL, EROSION AND DUST CONTROL MEASURES PRIOR TO AND DURING CONSTRUCTION. THE LANDSCAPE CONTRACTOR SHALL PREVENT FROSION OF SOIL AND ENTRY OF SOIL-BEARING WATER AND AIRBORNE DUST ONTO ADJACENT PROPERTIES AND INTO THE PUBLIC STORMWATER FACILITIES. REFER TO EROSION CONTROL PLANS FOR DETAILS
- 15. LANDSCAPE CONTRACTOR SHALL PROVIDE IRRIGATION SHOP DRAWINGS TO OWNER AND LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. IRRIGATION SYSTEM SHALL BE FULLY AUTOMATIC, ZONED AND COVER ALL PLANT AND TURF AREAS. TURF AREAS SHALL BE IRRIGATED WITH POP-UP ROTARY HEADS. ALL TREE, SHRUB, AND PERENNIAL BEDS SHALL BE 🛛 12. ALL LANDSCAPE AREAS SHALL HAVE PROPER DRAINAGE THAT PREVENTS IRRIGATED WITH DRIP SYSTEM. SYSTEM SHALL INCLUDE A WIRELESS RAIN/FREEZE SENSOR MOUNTED ON BUILDING WALL PARAPET OR APPROVED LOCATION. APPROVED IRRIGATION MANUFACTURERS INCLUDE, TORO, RAINBIRD AND HUNTER BRANDS. LANDSCAPE CONTRACTOR SHALL INCLUDE A TRAINING SESSION WITH THE OWNER (OR REPRESENTATIVE) DEMONSTRATING THE OPERATION OF THE SYSTEM AND THE CONTROLLER. AS PART OF THIS TRAINING, PROVIDE ONE SPRING START-UP AND ONE FALL SHUT-DOWN OF THE SYSTEM.

### GENERAL PLANTING NOTES

- BEEN COMPLETED IN THE IMMEDIATE AREA.
- 2. SEE CIVIL/SITE PLAN FOR ALL SITE DIMENSIONS, SQUARE FOOTAGES, PARKING CALCULATIONS, AND DETAILS OF ALL SITE IMPROVEMENTS.
- AND/OR OWNER'S REPRESENTATIVE WITH ANY CONCERNS. SIZES SPECIFIED IN 3. IF THE LANDSCAPE CONTRACTOR PERCEIVES ANY DEFICIENCIES IN THE PLANT SELECTIONS, SOIL CONDITIONS, OR ANY OTHER SITE CONDITION WHICH MIGHT NEGATIVELY AFFECT PLANT MATERIAL ESTABLISHMENT, SURVIVAL, OR GUARANTEE, THEY SHALL BRING THESE DEFICIENCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
  - PRIOR TO ANY LAND CLEARING OR CONSTRUCTION, TREE PROTECTION FENCING IS TO BE INSTALLED BY THE CONTRACTOR. THIS FENCING SHALL BE INSTALLED AT THE DRIP LINE OF ALL TREES AND SHRUBS (TO BE PROTECTED) ACCORDING TO THE TREE PROTECTION DETAIL AND MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT. NO CUTTING, FILLING OR TRESSPASSING SHALL OCCUR INSIDE THE FENCED AREAS WITHOUT APPROVAL.
  - ALL PLANTS TO BE INSTALLED AS PER PLANTING DETAILS. PLANT MATERIALS ARE TO BE PLANTED IN THE SAME RELATIONSHIP TO GRADE AS WAS GROWN IN NURSERY CONDITIONS. IF WET, CLAY SOILS OR POOR DRAINING SOILS ARE EVIDENT, PLANT HIGHER. REMOVE ALL TWINE, WIRE AND BURLAP FROM TOP 1/3 OF ROOT BALL AND FROM TREE TRUNKS.
  - 6. ONE SHRUB PER TYPE AND SIZE IN EACH PLANTING BED AND EVERY TREE SHALL BE CLEARLY IDENTIFIED (COMMON OR LATIN NOMENCLATURE) WITH A PLASTIC TAG WHICH SHALL NOT BE REMOVED PRIOR TO OWNER ACCEPTANCE.
  - 7. SEED AND/OR SOD ALL AREAS DISTURBED DUE TO GRADING AND CONSTRUCTION ACTIVITIES. WHERE SOD/SEED ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, THE SOD SHALL BE STAKED TO THE GROUND. REFER TO PLAN FOR SOD/SEED LOCATIONS
  - 8. PRUNE, THIN AND SHAPE TREES AND SHRUBS ACCORDING TO STANDARD HORTICULTURAL PRACTICES. APPLY MINIMUM 4" MULCH CUP AT ALL TREES NOT PLANTED IN PLANTING BEDS.
  - 9. EXISTING LAWN AREAS TO BE SAVED AND AREAS THAT ARE DAMAGED DURING CONSTRUCTION MUST BE INSPECTED TO DETERMINE VIABILITY. IF THE EXISTING LAWN IS FOUND TO BE LEVEL, HEALTHY, DENSE & FREE FROM WEEDS. LAWN MAY NOT REQUIRE REPLACEMENT OR RENOVATION. IF RENOVATION IS REQUIRED OR IS PART OF THE APPROVED PLAN, THEN THE FOLLOWING REQUIREMENTS WILL APPLY:
  - EXISTING LAWN FOUND TO BE IN POOR CONDITION MUST FIRST BE SPRAYED 7. EDGING: EDGING SHALL BE SPADE EDGED. WITH ROUND-UP (OR EQUAL) TO KILL THE EXISTING LAWN AND WEED AREAS. WAIT A MIN. OF (10) DAYS FOR THE HERBICIDE TO TAKE EFFECT, THEN REMOVE ALL DEAD SOD & WEEDS TO A MIN. DEPTH OF (2) INCHES. ADD A MIN. OF 6 INCHES OF NEW TOPSOIL TO ALL LAWN AREAS. BACKFILL AND COMPACT TOPSOIL TO THE TOP OF ALL CURBS & WALKS PRIOR TO SODDING. REGRADE TO ELIMINATE ALL BUMPS & DEPRESSIONS AND RESOD ALL AREAS.
  - EXISTING LAWN FOUND TO BE IN GOOD CONDITION. BUT WITH BARE, SPARSE OR WEEDY AREAS MUST BE RENOVATED BY FILLING IN LOW AREAS. RAKING. OVERSEEDING AND TOP DRESSING ALL SPARSE AND BARE SPOTS AND BY INITIATING A WEED AND FEED PROGRAM.
  - 10. PLANTING PLAN: ALL PROPOSED PLANTS SHALL BE LOCATED CAREFULLY AS SHOWN ON THE PLANS. PLAN TAKES PRECEDENCE OVER PLANT SCHEDULE IF 10. CONVERSION OF ALL ASPHALT AND GRAVEL AREAS TO LANDSCAPE SHALL BE DISCREPANCIES IN QUANTITIES EXIST. SPECIFICATIONS TAKE PRECEDENCE DONE IN THE FOLLOWING MANNER: OVER NOTES. RESPECT STATED DIMENSIONS. DO NOT SCALE DRAWINGS.
  - A. REMOVE ALL ASPHALT, GRAVEL AND COMPACTED EARTH TO A DEPTH OF 24"-30" DEPENDING ON THE DEPTH OF SUB BASE AND DISPOSE OF OFF SITE.
  - B. REPLACE EXCAVATED MATERIAL W/ GOOD, MEDIUM TEXTURED PLANTING SOIL (LOAM OR LIGHT YELLOW CLAY) TO A MIN. OF 2" ABOVE TOP OF CURB AND SIDEWALK. ADD 4"-6" OF TOPSOIL AND CROWN TO A MIN. OF 6" ABOVE ADJACENT CURB AND WALK AFTER EARTH SETTLING, UNLESS NOTED OTHERWISE ON THE PLANS.
  - IF CONVERSION TO LANDSCAPE OCCURS IN AN EXISTING (OR BETWEEN) LANDSCAPE AREAS REPLACE EXCAVATED MATERIAL TO 4"-6" BELOW ADJACENT EXISTING GRADE W/ GOOD MEDIUM TEXTURED PLANTING SOIL (LOAM OR LIGHT YELLOW CLAY) AND ADD 4"-6" OF TOPSOIL TO MEET EXISTING GRADES AFTER EARTH SETTLING.
  - 11. ALL TREE PITS MUST BE TESTED FOR PROPER DRAINAGE PRIOR TO PLANTING TREES. A DRAINAGE SYSTEM MUST BE INSTALLED IF PLANTING PIT DOES NOT DRAIN SUFFICIENTLY. (REQUIRED IN HEAVY CLAY SOILS)
  - EXCESS WATER FROM STANDING ON LAWN AREAS OR AROUND TREES & SHRUBS
  - 13. ALL MULCH RINGS AND SHRUB BEDS IN LAWN AREAS SHALL BE EDGED WITH A MANICURED EDGE OR WITH MANUFACTURED EDGING AS INDICATED.
  - 14. MULCHING AND WATERING OF ALL PLANTS & TREES SHALL BE IMMEDIATELY OR WITHIN 16 HOURS AFTER INSTALLATION.

### LANDSCAPE PLANTING SPECIFICATIONS

- A MINIMUM DEPTH OF 10". AMENDMENTS (LEAF MOLD OR SPHAGNUM PEAT MOSS) SHALL BE APPLIED DURING CULTIVATION. ALL BEDS ARE TO BE GRADED SMOOTH BEFORE PLANTING. PLANT GROUNDCOVER TO WITHIN 12" OF TRFFS OR SHRUBS. REMOVE ALL STONES LARGER THAN 2", ALL STICKS, ROOTS, RUBBISH AND ANY OTHER EXTRANEOUS MATERIALS. ALL LANDSCAPE AREAS, PARKING LOT ISLANDS AND LANDSCAPE BEDS NEXT TO BUILDINGS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND POOR SOILS TO A DEPTH OF 18" AND BACKFILLED WITH GOOD, MEDIUM TEXTURED PLANTING SOIL (LOAM OR LIGHT YELLOW CLAY). ADD 4" OF TOPSOIL OVER FILL MATERIAL AND CROWN A MINIMUM OF 6" ABOVE TOP OF CURBS AND/OR WALKS AFTER EARTH SETTLING UNLESS OTHERWISE NOTED ON THE GRADING PLAN
- 2. BACKFILL SOIL: USE SOIL EXCAVATED FROM PLANTING HOLES AND PROVIDE AMENDMENTS (1 PART LEAF MOLD OR SPHAGNUM PEAT MOSS AND 3 PARTS EXCAVATED SOIL). ALL NEW TOPSOIL USED SHALL BE FREE OF WEEDS AND OTHER FOREIGN VEGETATION. AS WELL AS, STONES LARGER THAN 2", ALL STICKS, ROOTS, RUBBISH AND ANY OTHER EXTRANEOUS MATERIALS.
- FERTILIZATION: ALL PLANT MATERIALS SHALL BE FERTILIZED UPON INSTALLATION WITH DRIED BONE MEAL OR OTHER SPECIFIED FERTILIZER MIXED IN WITH THE PLANTING SOIL PER THE MANUFACTURER'S INSTRUCTIONS UNLESS NOTED OTHERWISE.
- MULCH MATERIAL: AS SPECIFIED ON THE LANDSCAPE PLANS. MASS MULCH - 4 ALL PLANTING BEDS TO 3" DEPTH. ALL SHRUB PLANTING BEDS TO RECEIVE 3" DEEP MULCH. ALL EVERGREEN AND DECIDUOUS TREES (IF USED) TO RECEIVE 6" DEEP SHREDDED HARDWOOD MULCH WITH NO MULCH IN DIRECT CONTACT WITH TREE TRUNK. EXTENT OF MULCH TO BE 5'-0" DIA. AT TREES AND 18" BEYOND SHRUB DRIP LINES.
- 5. TREE STAKING: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO STAKE AND/OR GUY THE TREES ACCORDING TO THE DETAILS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE EVERY STEP NECESSARY TO MAINTAIN THE TREES AND SHRUBS IN AN UPRIGHT AND PLUMB CONDITION AT 4. TREE GUYING SHALL BE REMOVED AFTER ONE FULL GROWING SEASON. ALL TIMES UNTIL THE END OF THE PLANT GUARANTEE PERIOD ESPECIALLY WHERE VANDALISM, SOIL OR WIND CONDITIONS ARE A PROBLEM. AT END OF GUARANTEE PERIOD ALL STAKES SHALL BE REMOVED BY LANDSCAPE CONTRACTOR. ALL STAKES USED FOR TREE SUPPORTS SHALL POINT AWAY FROM ANY AND ALL CIRCULATION ROUTES.
- 6. TREE WRAPPING: WRAPPING MATERIAL SHALL BE QUALITY, HEAVY WATERPROOF CREPE PAPER MANUFACTURED FOR THIS PURPOSE. WRAP ALL DECIDUOUS TREES PLANTED IN THE FALL PRIOR TO 12-1 AND REMOVE ALL WRAPPING AFTER 5-1.
- 8. FERTILIZER: JUMP-SHOT ROOT STIMULATOR AS MANUFACTURED BY ACME, OR APPROVED EQUAL, SHALL BE APPLIED TO THE SOIL BACKFILL OF EACH PLANT DURING INSTALLATION.
- 9. PLANT SIZING: MEASURE TREES AND SHRUBS ACCORDING TO ANSI Z60.1 STANDARDS. TAKE CALIPER MEASUREMENTS 6 INCHES ABOVE GROUND FOR TREES UP TO 4" CALIPER AND 12 INCHES ABOVE GROUND FOR LARGER TREES. ALWAYS HANDLE BALLED AND BURLAPPED MATERIAL BY THE ROOT BALL. PLANT MATERIAL SHALL BE DELIVERED TO THE SITE AND PLANTED THE SAME DAY.

### PLANT MATERIAL NOTES

- 1. PLANTING BED PREPARATION: ALL MASS PLANTING BEDS SHALL BE TILLED TO 1. PROVIDE PLANTS OF QUANTITY, SIZE, GENUS, SPECIES, AND VARIETY SHOWN 1. LAWN AREAS SHALL BE PREPARED ACCORDING TO THE SECTION BELOW AND SCHEDULED AND IN CONFORMANCE WITH THE REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". PLANTS SHALL HAVE BEEN GROWN IN A RECOGNIZED NURSERY IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE.
  - ALL PLANTS SHALL BE FULL, WELL-BRANCHED PLANTS CHARACTERISTIC OF THE SPECIES. PLANTS SHALL BE FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS, OR DISFIGUREMENT
  - 3. PLANT STOCK SHALL HAVE BEEN GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO CONDITIONS IN THE LOCALITY OF THE PROJECT. LABEL AT LEAST ONE PLANT OF EACH KIND WITH A SECURELY ATTACHED
  - WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAME.
  - PROVIDE FRESHLY DUG BALLED & BURLAPPED PLANT MATERIALS. DO NOT DROP BALLED & BURLAPPED STOCK DURING DELIVERY.
  - 6. DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS UNTIL PLANTING TIME.

### INSTALLATION OF PLANT MATERIAL NOTES

- 1. INSTALL TREES AND SHRUBS ACCORDING TO STANDARD DETAILS SHOWN ON THE PLAN.
- ALL TREE SAUCERS SHALL BE SOAKED WITH WATER AND MULCHED IMMEDIATELY FOLLOWING PLANTING.
- 3. ALL TREE SAUCERS AND SHRUB BEDS SHALL BE MULCHED WITH A 3-INCH LAYER OF ORGANIC TRIPLE SHREDDED HARDWOOD BARK MULCH. NON-ORGANIC MULCHES SUCH AS GRAVEL, CRUSHED BRICK, LAVA ROCK, ETC. ARE UNACCEPTABLE.
- APPLY 12 CUBIC FEET OF PEAT MOSS PER 100 SQUARE FEET AND 20 POUNDS OF 8-8-8 FERTILIZER PER 100 SQUARE FEET OF GROUND COVER PLANTING BEDS. ROTOTILL THE BEDS TO A DEPTH OF 6 INCHES AND SMOOTH 1. TO AN EVEN AND UNIFORM SURFACE. PLANT GROUND COVER MATERIALS, APPLY 2 INCHES OF ORGANIC MULCH, AND WATER.

### PLANT MATERIAL MAINTENANCE AND WARRANTY NOTES

- 1. MAINTENANCE OF PLANT MATERIALS AND LAWN AREAS SHALL BEGIN IMMEDIATELY AFTER INSTALLATION AND SHALL CONTINUE UNTIL FINAL ACCEPTANCE, BUT IN NO CASE, LESS THAN THE FOLLOWING STATED PERIODS: PLANT MATERIALS: 90 DAYS AFTER SUBSTANTIAL COMPLETION LAWN AREAS: 60 DAYS AFTER SUBSTANTIAL COMPLETION
- AFTER REQUIRED MAINTENANCE PERIOD, THE OWNER, UPON REQUEST, WILL MAKE AN INSPECTION TO DETERMINE ACCEPTABILITY. UNACCEPTABLE WORK SHALL BE REPAIRED OR REPLACED AND REINSPECTED BEFORE FINAL ACCEPTANCE IS GRANTED.
- A WRITTEN WARRANTY SHALL BE PROVIDED TO THE OWNER GUARANTEEING THAT ALL PLANT MATERIALS, SOD, AND/OR SEEDED AREAS WILL BE THRIVING FOR THE FOLLOWING STATED PERIODS:
- TREES, SHRUBS, AND GROUND COVERS: ONE YEAR AFTER FINAL ACCEPTANCE SOD AND SEEDED AREAS: 90 DAYS AFTER FINAL ACCEPTANCE PERENNIALS: 90 DAYS AFTER FINAL ACCEPTANCE
- 4. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH WRITTEN INSTRUCTIONS REGARDING MAINTENANCE OF EACH TYPE OF VEGETATION. THE OWNER IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE MATERIALS DURING THE WARRANTY PERIOD AS OUTLINED IN THE MAINTENANCE INSTRUCTIONS. THE CONTRACTOR SHALL MAKE PERIODIC INSPECTIONS OF THE SITE AND WILL INFORM THE OWNER OF ANY LACK OF PROPER MAINTENANCE IN WRITING. OWNER'S FAILURE TO COMPLY WITH THE MAINTENANCE PROGRAM SHALL RENDER THE WARRANTY NULL AND VOID.
- 5. THE CONTRACTOR IS NOT RESPONSIBLE FOR ACTS OF NATURE INCLUDING ABNORMAL WEATHER CONDITIONS, EROSION, VANDALISM, NOR DAMAGES BY OTHERS. IF ANY CONDITIONS BEYOND THE CONTROL OF THE CONTRACTOR SHOULD OCCUR, THE MATERIALS AFFECTED WILL NO LONGER BE COVERED BY THE WARRANTY

### LAWN AND SEEDBED NOTES

- ENTITLED "SEEDBED PREPARATION".

- FINE SPRAY.
- THE MULCHING OPERATION.

### SEEDBED PREPARATION

- AS FOLLOWS:
- FFFT •LIMESTONE - 75 LBS. PER 1000 SQUARE FEET

MUDDY SOIL CONDITION.

LOCALLY-GROWN SOD SHALL BE PROVIDED IN AREAS WHERE SEEDING IS NORMALLY UNSUCCESSFUL OR WILL BE UNSUCCESSFUL DUE TO CLIMATE, SEASON OR OTHER TEMPORARY CONSTRAINT SOD SHALL BE STRONGLY ROOTED, FREE OF WEEDS, AND OF UNIFORM THICKNESS WITH NO MORE THAN 1.5 INCHES OR LESS THAN 1 INCH OF SOIL.

3. SOD SHALL BE TIGHTLY-FITTED TOGETHER. ENDS AND EDGES SHALL MEET WITHOUT OVERLAP AND JOINTS SHALL BE STAGGERED WITH ADJACENT ROWS. AFTER INSTALLATION, SOD SHALL BE THOROUGHLY WATERED. ON SLOPES STEEPER THAN 2:1, SOD SHALL BE HELD IN PLACE WITH WOODEN STAKES MEASURING 1 INCH SQUARE BY 6 INCHES LONG. STAKES SHALL BE DRIVEN FLUSH WITH THE TOP OF THE SOD'S SOIL LAYER.

4. PROVIDE GRASS SEED THAT IS FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH TOLERANCE FOR PURITY AND GERMINATION ESTABLISHED BY OFFICIAL SEED ANALYSTS OF NORTH AMERICA. PROVIDE SEED TYPE OR SEED MIX WITH BEST RECORD OF SUCCESS IN LOCALITY OF PROJECT OR PER PROJECT SPECIFICATIONS. REFER TO PLAN

APPLY SEED AT THE APPROPRIATE RATE, PER D.O.T. SPECIFICATIONS, FOR ESTABLISHING A NEW LAWN. SOW SEED USING A SPREADER OR SEEDING MACHINE. DISTRIBUTE SEED EVENLY OVER ENTIRE AREA BY SOWING EQUAL QUANTITY IN 2 DIRECTIONS AT RIGHT ANGLES TO EACH OTHER. RAKE SEED LIGHTLY INTO TOP 1/8-INCH OF SOIL, ROLL LIGHTLY, AND WATER WITH A

PROTECT ALL SEEDED AREAS AGAINST EROSION BY SPREADING A CLEAN, SEED FREE SALT HAY OR THRESHED STRAW OF WHEAT, RYE, OATS, OR BARLEY. SPREAD UNIFORMLY TO FORM A CONTINUOUS BLANKET NOT LESS THAN 1.5 INCHES LOOSE MEASUREMENT OVER SEEDED AREA.

TREATMENTS SUCH AS JUTE MESH, EXCELSIOR MATTING, OR FIBERGLASS ROVING SHALL BE USED TO STABILIZE DITCHES OR STEEP SLOPES SUSCEPTIBLE TO EROSION. THE TREATMENT SHALL BE INSTALLED PRIOR TO

ALL DISTURBED AREAS SHALL BE DRESSED TO THE TYPICAL SECTIONS AND/OR GRADES SHOWN AND PLOWED TO A DEPTH OF 5 INCHES. THE TOP 2 INCHES SHALL BE PULVERIZED TO PROVIDE A UNIFORM SEEDBED.

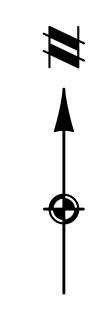
REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER DEBRIS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM. SOIL LEVEL SHALL BE APPROXIMATELY 1 INCH BELOW ALL TOPS OF CURBS AND WALKWAYS.

APPLY LIME AND FERTILIZER WITH NECESSARY EQUIPMENT TO ENSURE UNIFORM DISTRIBUTION OF THE MATERIALS. THE HAND/BUCKET METHOD IS NOT ACCEPTABLE. THE RATES AND TYPES OF MATERIÁLS TO BE APPLIED ARE

• TURFGRADE FERTILIZER WITH SLOW RELEASE NITROGEN (E.G. 18-24-10) -RATE THAT WILL PROVIDE 5 LBS. OF PHOSPHORUS PER 1000 SQUARE

(LIMESTONE MAY BE WAIVED IF EXISTING PH IS GREATER THAN 5.5.)

MOISTEN PREPARED LAWN AREAS BEFORE PLANTING IF SOIL IS DRY. ALLOW SURFACE MOISTURE TO DRY BEFORE PLANTING LAWNS. DO NOT CREATE A



SMALL 2023-0008

SHEET NO.

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|   | - BOUNDARY LINE  |
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|   | - EXISTING EASEMENT LINE   |
|   | PROPOSED EASEMENT LINE   |
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| TVTVTV  | PROPOSED UNDERGROUND CABLE   |
| — X — — X — — X — — X —   | EXISTING FENCE   |
| X X X X   |  |
| ÷÷-   | EXISTING LIGHT POLE  |
|   | PROPOSED LIGHT POLE/WALL PACK LIGHT  |
|   | BLUE GRAMA GRASS SEEDED LAWN —<br>IRRIGATED W/ MULTI—STREAM ROTATING<br>HYDRANTS   |
|   | DECORATIVE ROCK MULCH,VALLEY GOLD<br>(1") – 3" DEPTH WITH PERVIOUS FILTER<br>FABRIC. NON–IRRIGATED   |
|   | SOILUTIONS FOREST FLOOR MULCH, 4" DEPTH.<br>PROVIDE (1) .5 GPM NON-ADJUSTABLE<br>BUBBLER PER TREE  |
| IPOC  | IRRIGATION POINT OF CONNECTION, 3/4"WATER<br>METER W/ 1" R.P. BACKFLOW PREVENTER; 24±<br>GPM FLOW REQUIRED. REUSE WATER SERVICE IF<br>AVAILABLE  |
| C-RS  | IRRIGATION CONTROLLER & RAIN SENSOR. SIX<br>STATIONS, HUNTER NODE, 6STATION BATTERY<br>OPERATED CONTROL MODULE & RAIN SENSOR.  |
|   | IRRIGATION MAIN: 1–1/4" CLASS 200 SOLVEN<br>WELD IRRIGATION MAIN W/ SCH 80 PVC<br>FITTINGS; 30"± DEPTH; PROVIDE A 5'±<br>HORIZONTAL SEPARATION FROM OTHER POTABL<br>LINE(S).   |
| 4"SL<br>2"SL  | IRRIGATION SLEEVES: 4" SCH 80 PVC FOR<br>DRIVEWAY CROSSINGS AND MULTIPLE LATERAL<br>LINES CROSSINGS; 2" SCH 40 PVC FOR SINGLE<br>LATERAL LINE AND CONTROL WIRES CROSSINGS<br>SOLVENT WELD ALL JOINTS AT CROSSINGS.   |
| CH841   | IRRIGATION MAIN BLOW-OFF ASSEMBLY: 1-1/4<br>SCH 80 PVC BALL VALVE WITHIN A JUMBO<br>VALVE BOX PROVIDE FILTER FABRIC AND<br>GRAVEL.   |
| æ   | IRRIGATION ZONE CONTROL VALVE, 1" PLASTIC<br>BODY; GLOVE CONFIGURATION; 24± GPM ZONE<br>FLOW LIMIT; THREE VALVES WITHIN A JUMBO<br>VALVE BOX; DBR WIRE CONNECTORS, PROVIDE<br>PLASTIC ID & WARNING TAGS, NON-WOOVEN<br>FILTER FABRIC AND .5" DIAM. GRAVEL. |
| *   | IRRIGATION TREE BUBBLERS: .5 GPM PRESSURE<br>COMPENSATING W/ CHECK VALVE; NON–<br>ADJUSTABLE UMBRELLA PATTERN BUBBLER<br>NOZZLE. ONE NOZZLE PER TREE. PLACE<br>BUBBLER UPHILL FROM EDGE OF ROOTBALL.<br>DRIP IRRIGATION ASSEMBLIES COMPONENTS:             |
|   | DRIP IRRIGATION ASSEMBLIES COMPONENTS:<br>INLINE TUBING, 0.92 GPH EMITTERS 12" 0.C.,   |

INLINE TUBING, 0.92 GPH EMITTERS 12" O.C., 24"± BETWEEN TUBING SECTIONS.

TUBING TO TUBING INTER-CONNECTING FITTING

— AUTOMATIC LINE FLUSHING VALVE

— 1" PVC SUPPLY HEADER ASSEMBLY

---- EXHAUST HEADER ASSEMBLY

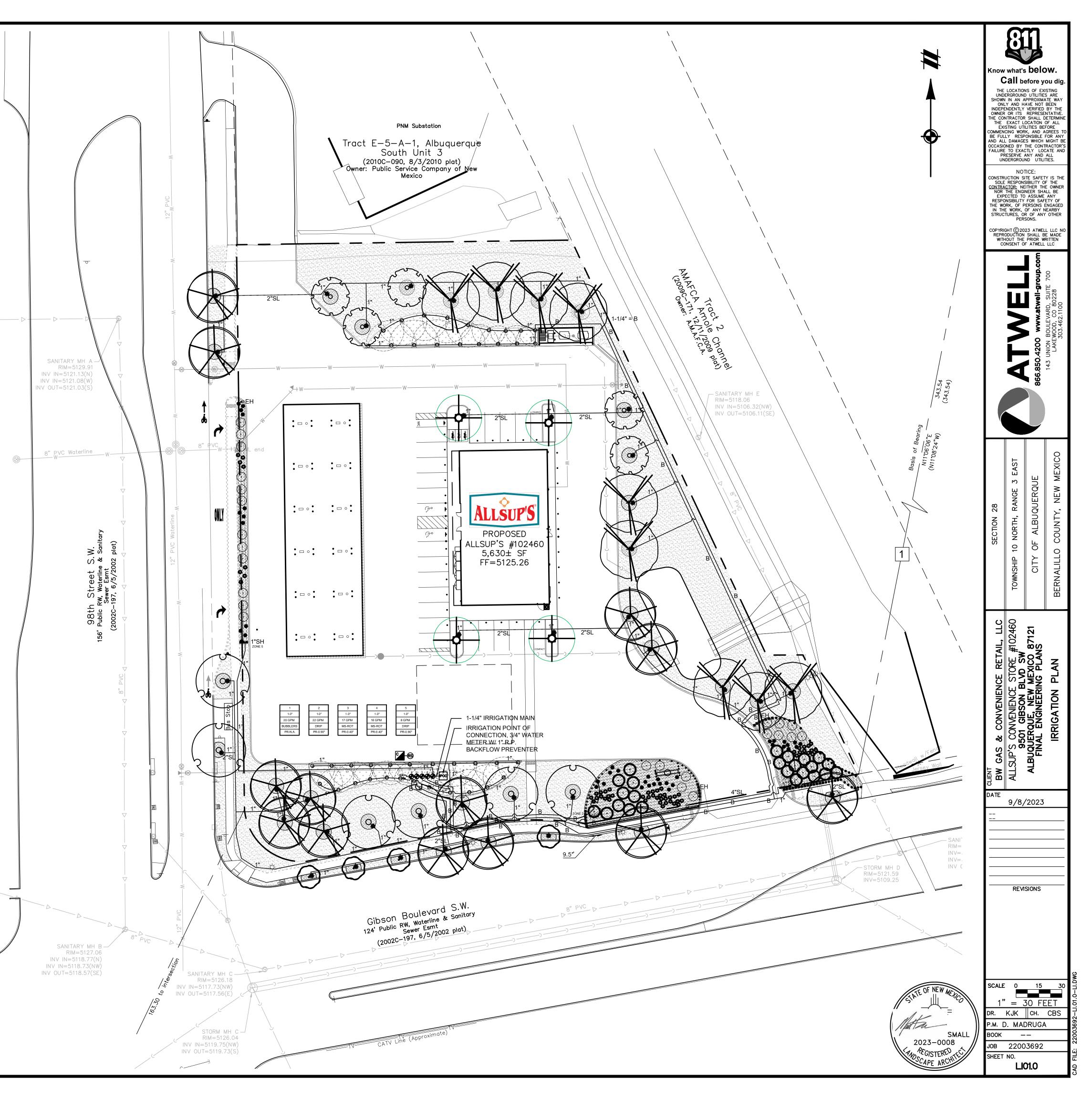
PVC TO TUBING INTER-CONNECTING FITTING

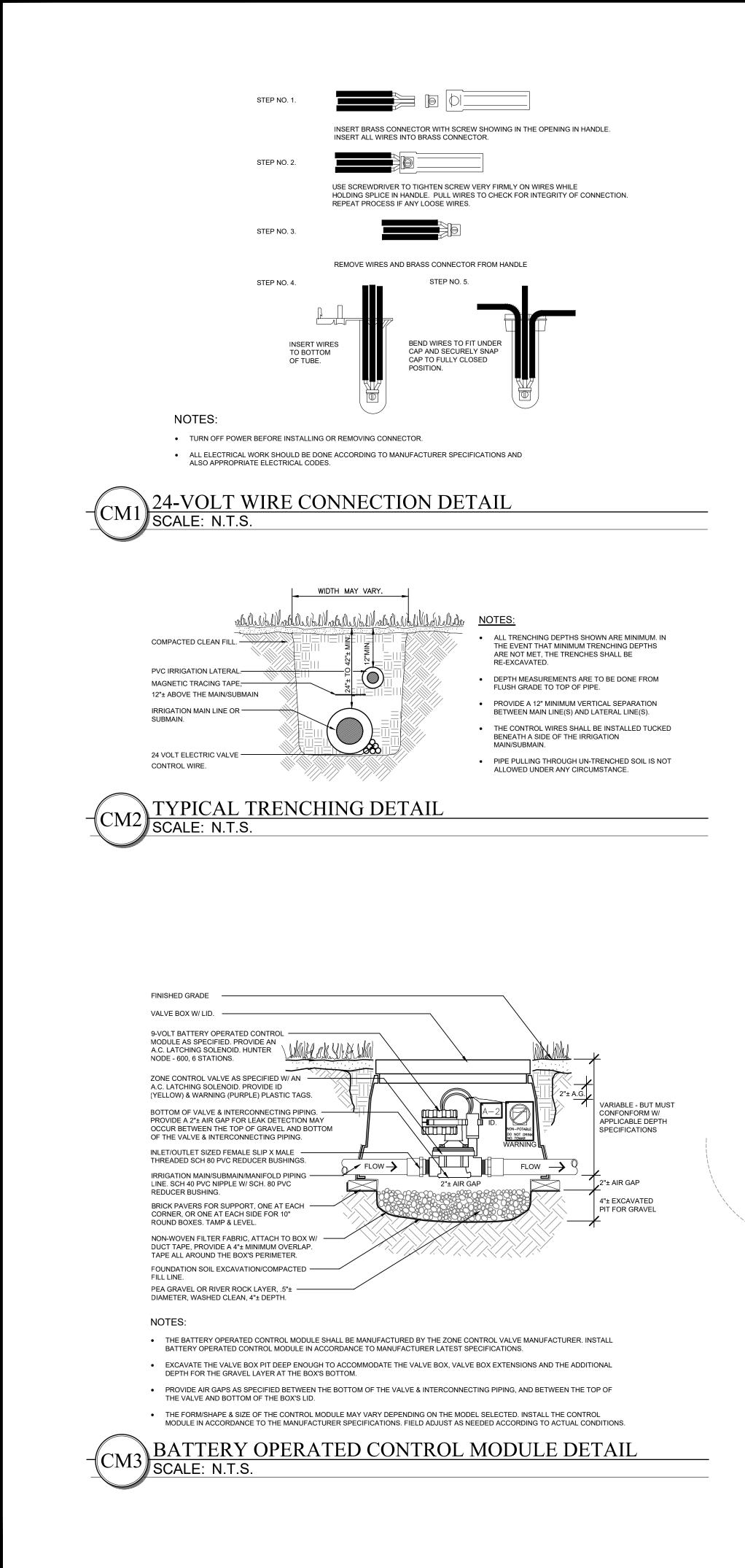
1"SH EH ------IRRIGATION NOTES 1. PIPING AND ELEMENTS MAY BE SHOWN ON PAVED SURFACES, OUTSIDE PROPERTY LINE OR THROUGH VEGETATION FOR GRAPHIC CLARITY ONLY. ACTUAL LOCATION SHALL BE WITHIN THE PROJECT'S LANDSCAPE DESIGNATED AREA(S).

ALL ELEMENT(S) INCLUDING BACKFLOW PREVENTER, INSTALLATION SHALL
 COMPLY W/ THE CITY OF ALBUQUERQUE, NM APPLICABLE IRRIGATION RULES
 & REGULATIONS.

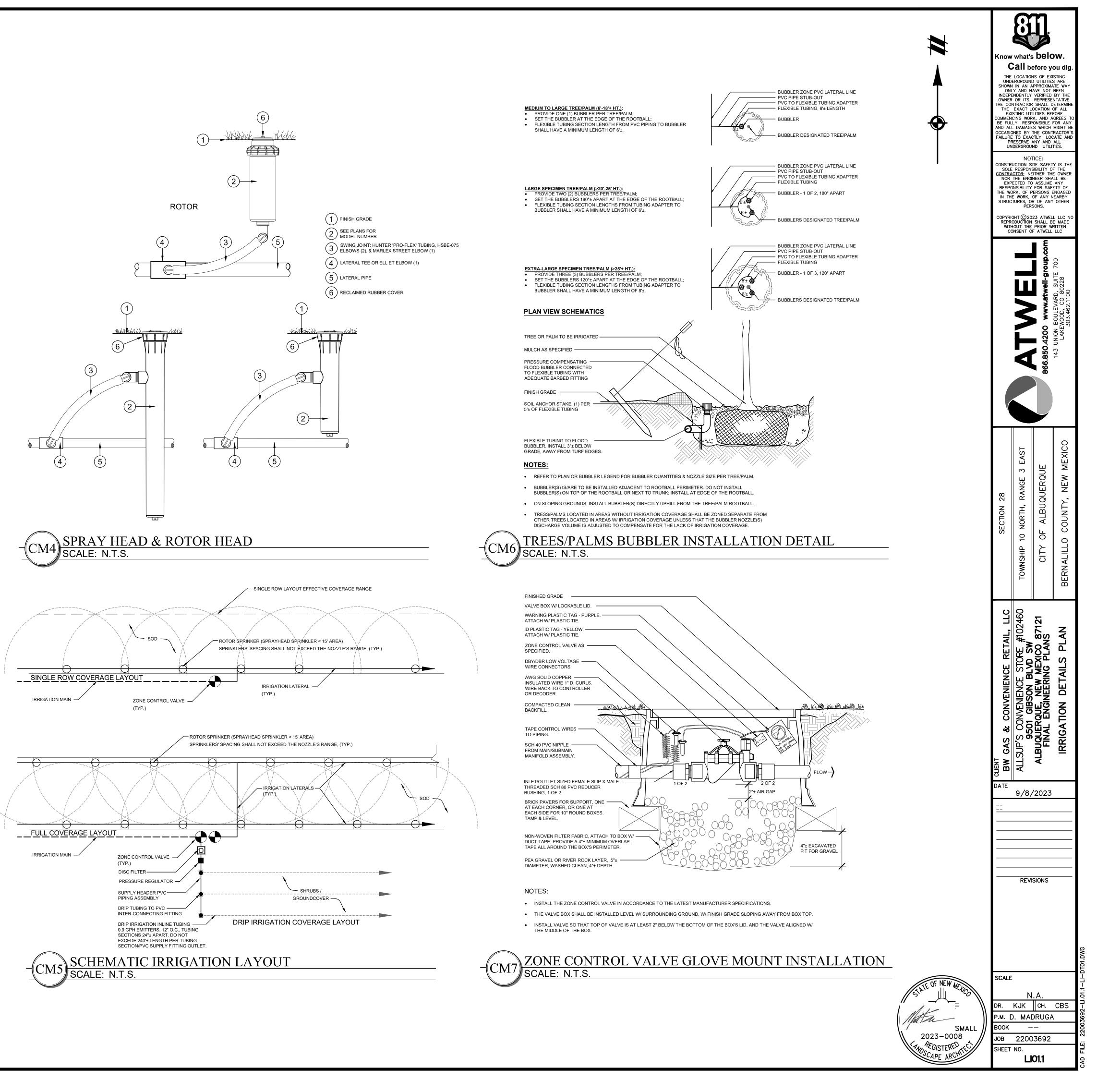
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## IRRIGATION SPECIFICATIONS:

GENERAL CONTENT: GENERAL NOTES

- 1. THE PLANS AND DRAWINGS ARE DIAGRAMMATIC OF THE WORK TO BE PERFORMED. THE WORK SHALL BE EXECUTED IN A MANNER TO AVOID CONFLICTS WITH UTILITIES AND OTHER ELEMENTS OF CONSTRUCTION. INCLUDING LANDSCAPE MATERIALS, ANY AND ALL DEVIATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER OR OWNERS. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY ASPECT OF THE IRRIGATION SYSTEM AS SHOWN ON THE PLANS AND DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DISCREPANCIES EXIST THAT MIGHT NOT HAVE BEEN KNOWN DURING THE DESIGN OF THE IRRIGATION SYSTEM. IN THE EVENT THAT NOTIFICATION OF THE CONFLICT IS NOT GIVEN TO THE REPRESENTATIVE, THE CONTRACTOR WILL ASSUME FULL RESPONSIBILITY FOR ALL REVISIONS
- 2. THE IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS, IRRIGATION SYSTEM SPECIFICATIONS AND ALL CONTRACT DOCUMENTS. CONTRACTOR SHALL COMPLY WITH ALL PREVAILING LOCAL CODES, ORDINANCES AND REGULATIONS.
- 3. CHECK AND VERIFY ALL SITE CONDITIONS, INCLUDING SERVICE UTILITY LOCATIONS, PRIOR TO TRENCHING OR DIGGING. COORDINATE ALL IRRIGATION SYSTEM CONSTRUCTION WITH EXISTING AND/OR NEW PLANTINGS TO AVOID CONFLICT OR INTERFERENCE WITH LOCATION OF PIPING SLEEVING, CABLES AND SERVICE UTILITIES THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION WITH ALL OTHER CONSTRUCTION ON SITE, ESPECIALLY LANDSCAPE INSTALLATION. IRRIGATION SYSTEM IS TO BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER FOR ANY CONFLICT WITH LANDSCAPE INSTALLATION OR ANY OTHER SITE CONSTRUCTION OR EXISTING CONDITIONS. ALL COMPONENTS THAT ARE NOT CONTAINED WITHIN THE SPECIFIC AREAS SHOWN ON THE DRAWINGS WILL NOT BE ACCEPTED. ALL PIPING AND OTHER COMPONENTS ARE TO REMAIN WITHIN THE PROPERTY OF THE OWNER.
- 4. PIPING AND/OR OTHER ELEMENTS MAY BE SHOWN ON PAVED SURFACES OR OTHER NON-LANDSCAPE DESIGNATED AREAS OR OUTSIDE OF THE PROJECT'S BOUNDARIES FOR GRAPHIC COMMUNICATION CLARITY ONLY. ACTUAL LOCATION SHALL BE WITHIN THE PROJECT'S LANDSCAPE DESIGNATED AREAS
- 5. PIPING MAY BE SHOWN GOING THROUGH EXISTING AND/OR PROPOSED VEGETATION FOR GRAPHIC COMMUNICATION FOR CLARITY ONLY. FIELD ADJUST THE ROUTING AS NEEDED IN ORDER TO CLEAR THE VEGETATION WITHOUT CONFLICT SO THAT THE PIPING CAN REACH THE INTENDED TARGETED AREA OR ELEMENT
- 6. WHERE EXISTING OR NEW TREES, LIGHT STANDARDS, SIGNS, ELECTRONIC CONTROLLERS AND/OR OTHER OBJECTS ARE AN OBSTRUCTION TO AN IRRIGATION SPRINKLER'S PATTERN, THE COMPONENT AND PIPING SHALL BE RELOCATED WITHIN REASON AS NECESSARY TO OBTAIN PROPER COVERAGE WITHOUT DAMAGING THE OBSTRUCTION. LANDSCAPE ARCHITECT OR ITS REPRESENTATIVE SHALL DETERMINE WHETHER OBSTRUCTION OCCURS OR NOT.
- 7. COMPONENT SPACINGS ARE MAXIMUM. DO NOT EXCEED SPACINGS SHOWN OR NOTED ON THE PLANS. COMPONENT SPACINGS MAY BE ADJUSTED TO ACCOMMODATE CHANGES IN TERRAIN AND PLANTING LAYOUT AS LONG AS THE MODIFIED SPACINGS DO NOT EXCEED THE SPACINGS SHOWN IN THE PLANS. UNLESS SHOWN OTHERWISE, IRRIGATION CONTRACTOR SHALL PROVIDE 100% COVERAGE THAT MEETS THE TARGETED DISTRIBUTION UNIFORMITY LEVEL(S).
- 8. ALL MATERIALS AND EQUIPMENT SHOWN SHALL BE INSTALLED AS DETAILED ON THE PLANS. IF THE DRAWINGS DO NOT THOROUGHLY DESCRIBE THE TECHNIQUES TO BE USED, THE INSTALLER SHALL FOLLOW THE INSTALLATION METHODS/INSTRUCTIONS RECOMMENDED BY THEIR MANUFACTURER.
- 9. IRRIGATION CONTRACTOR SHALL ADJUST ALL SPRINKLERS, CONTROLLER AND OTHER DEVICES TO OBTAIN SPECIFIED OPERATING CHARACTERISTICS, INCLUDING COVERAGE, OPERATING PRESSURE, FLOW RATES AND OPERATION TIME, AS INDICATED ON THE DRAWINGS AND ON THE IRRIGATION SYSTEM SPECIFICATIONS. ADJUST ALL SPRINKLERS TO AVOID OVERTHROW OF WATER ONTO BUILDINGS, ROADWAYS, SIDEWALKS OR EXISTING NATIVE VEGETATION
- 10. CONTRACTOR TO PROVIDE INSTALLATION SHOP DRAWINGS AND MANUFACTURER PRODUCT INFORMATION FOR ALL IRRIGATION COMPONENTS. ALL INSTALLATIONS SHALL BE AS RECOMENDED BY MANUFACTURERS. THE QUANTITIES SHOWN IN THE LEGENDS AND SYMBOL SHEETS SHALL NOT BE USED FOR BIDDING PURPOSES. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONDUCTING A COMPREHENSIVE TAKE-OFF OF MATERIALS TO DETERMINE THE ACTUAL QUANTITIES OF MATERIAL NECESSARY TO EXECUTE THE WORK DESCRIBED ON THE PLANS AND DRAWINGS.
- 11. ALL TRENCHES SHALL BE BACKFILLED WITH CLEAN, DEBRIS-FREE SUITABLE SOIL MATERIALS. CLEAN SAND SHALL BE USED FOR BEDDING MATERIAL IF PARENT SOIL CANNOT BE ADEQUATELY RID OF ROCK AND OTHER EXTRANEOUS DEBRIS. PULLING PIPE SHALL BE PROHIBITED. 12. ALL SOLVENT WELDING SHALL BE PRECEDED BY PRIMING OF THE FITTINGS AND PIPE AS RECOMMENDED BY THE MANUFACTURER. THE USE OF
- FAST-SETTING SOLVENT WELD COMPOUND ON MAIN OR SUBMAIN PIPING GREATER THAN 2.5" IS PROHIBITED. SLOWER SETTING SOLVENT WELD COMPOUND SHALL BE USED. B. IRRIGATION WATER SOURCE
- 1 THE IRRIGATION WATER SOURCE SHALL BE AS SPECIFIED UNLESS THAT THE IRRIGATION WATER SOURCE IS NOT AVAILABLE OR IT IS NOT SUITABLE FOR REASON(S) UNKNOWN TO THE IRRIGATION DESIGNER OR LANDSCAPE ARCHITECT OR PROJECT MANAGER
- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING AND TESTING THE IRRIGATION WATER SOURCE TO MAKE SURE THAT IT IS CAPABLE OF PROVIDING THE PROPOSED SYSTEM'S REQUIRED OPERATING PRESSURE & PEAK WATER FLOW
- C. IRRIGATION MAIN/SUBMAIN PIPING 1. ALL IRRIGATION MAIN(S) & SUBMAIN(S) 3" AND/OR LARGER SHALL BE 1120-1220 CLASS 200 PVC GASKET BELL-END PIPE. ALL IRRIGATION MAIN(S) & SUBMAIN(S) 2.5" AND/OR SMALLER SHALL BE 1120-1220 CLASS 200 PVC SOLVENT WELD BELL-END JOINT PIPE. ALL IRRIGATION MAINS AND LATERAL
- LINES PIPING SHALL BE PANTONE PURPLE 522C. 2. FOR ALL IRRIGATION MAIN(S) & SUBMAIN(S) 3" AND LARGER FITTINGS SHALL BE D.I.P. W/ GASKET, MECHANICAL JOINT RESTRAINING HARDWARE SHALL BE PROVIDED AND USED BY THE IRRIGATION CONTRACTOR FOR APPLICATIONS IN WHICH HIGH OPERATING PRESSURE, WATER FLOWS AND
- SIGNIFICANT PRESSURE SURGE POTENTIAL OCCUR 3. FOR ALL IRRIGATION MAIN(S) & SUBMAIN(S) 3" AND LARGER FITTINGS SHALL HAVE THRUST BLOCKS AT POINTS SUBJECT TO PRESSURE SURGE IMPACT, OR HAVE SUITABLE/ADEQUATE RESTRAINING HARDWARE WHETHER SPECIFIED OR NOT.
- 4. FOR ALL IRRIGATION MAIN(S) & SUBMAIN(S) 2.5" AND SMALLER FITTINGS SHALL BE: SCH 80 PVC FOR SERVICE TEES AND OTHER THREADED FITTINGS; SCH 40 PVC FOR NON-THREADED FITTINGS. 5. HYDROSTATIC PRESSURE TESTING FOR IRRIGATION MAINS/SUBMAINS SHALL BE DONE ONLY AFTER ALL MAIN/SUBMAIN VALVES (INCLUDING ZONE
- CONTROL VALVES) AND OTHER MAIN/SUBMAIN ELEMENTS ARE FULLY ATTACHED. HYDROSTATIC PRESSURE TESTING MUST BE WITNESSED AND DOCUMENTED 6. THE DEPTH OF ALL LINES SHALL BE AS SPECIFIED PER PLANS AND DETAILS. MEASUREMENTS SHALL BE FROM TOP OF PIPE(S) TO FINISH GRADE.
- 7. ALL MAINLINES WILL BE INSTALLED WITH A TRACING TAPE LABELED " NON-POTABLE IRRIGATION MAIN
- 8. ELECTRONIC TRACKING/LOCATING BALLS SHALL BE INSTALLED/PROVIDED 12"± ABOVE THE PIPING AT ALL POINTS WHERE PIPING DIRECTION CHANGES AND/OR STUB-OUTS OCCUR
- 9. ALL PIPING STUB-OUTS FOR FUTURE ZONE EXPANSIONS SHALL HAVE THE END CAPPED, AND BE LOCATED USING A 6" VALVE BOX OR AN ELECTRONIC TRACKING/LOCATING BALL
- D. IRRIGATION LATERALS & GENERAL PVC PIPING GUIDE LINES
- 1. ALL IRRIGATION LATERAL LINES PIPING SHALL BE 1120-1220 CLASS 200 PVC SOLVENT WELD BELL-END JOINT PIPE.
- 2. ALL IRRIGATION MAIN(S)/SUBMAIN(S) & LATERAL LINES PIPING CUTS SHALL BE SQUARE, CLEAN AND WITHOUT ANY BURRS. ALL PVC PIPE TO BE SOLVENT WELD JOINED AND SHALL BE PRIMED WITH A PRIMER SUITABLE FOR THE SOLVENT WELD COMPOUND TO BE USED. THE PRIMER AND SOLVENT WELD COMPOUND SHALL BE APPLIED IN A NEAT, CLEAN FASHION, AVOIDING EXCESSIVE AMOUNTS OF PRIMER AND SOLVENT WELD COMPOUND.
- 3. ALL IRRIGATION LATERAL LINES PIPING 2.5" AND LARGER SHALL BE INSTALLED AT A MINIMUM TRENCH DEPTH OF 18"±. ALL IRRIGATION LATERAL LINES PIPING 2" AND SMALLER SHALL BE INSTALLED AT A MINIMUM TRENCH DEPTH OF 12"±.
- 4. THE DEPTH OF ALL LATERAL LINES SHALL BE MEASURED FROM TOP OF PIPE(S) TO FINISH GRADE. CONTRACTOR WILL BE RESPONSIBLE FOR RETRENCHING AND RELAYING ANY PIPE NOT MEETING SPECIFIED DEPTH(S).
- 5. ALL PVC PIPING MAIN(S)/SUBMAIN(S)/LATERAL(S) AND/OR OTHER PIPING SHALL BE PANTONE PURPLE 522C FOR IRRIGATION WATER USE ID EASE WHETHER THE WATER FROM THE SOURCE IS OR IS NOT EFFLUENT WATER. E. IRRIGATION SLEEVES - HDPE DIRECTIONAL BORES
- 1. ALL IRRIGATION SLEEVES UNDER PAVED SURFACES NOT SCHEDULED FOR IMPROVEMENTS OPENING OR REFURBISHMENT SHALL BE: CLASS 200 EXTRAMOLECULAR STRENGTH SDR 11 HDPE CASINGS FOR WATER PIPES; CLASS 200 EXTRAMOLECULAR STRENGTH SDR 13.5 HDPE CASINGS FOR CONTROL WIRES. THE CASINGS SHALL BE INSTALLED DIRECTIONAL BORE DRILLING TECHNOLOGY.
- 2 FOR WATER LINES THE DR CASING SHALL BE TWO TIMES LARGER THAN THE PIPE WITHIN. FOR LARGER OR MULTIPLE LINES (SMALLER DIAMETER). THE BORE'S INTERIOR DIAMETER SHALL BE LARGE ENOUGH TO FIT THE JOINT BELL END(S) OF THE PIPE(S) WITHIN. 3. DIRECTIONAL BORE DRILLING INSTALLED CLASS 200 SDR 11 HDPE CASINGS MAY BE USED AS AN IRRIGATION MAIN OR SUBMAIN TO CROSS A PAVED SURFACE AS LONG AS THE DB CASING MATCHES THE IRRIGATION MAIN/SUBMAIN SIZE, AND PVC TO HDPE MECHANICAL JOINT COUPLINGS WITH
- TRANSITIONAL GASKETS ARE USED TO CONNECT TO THE PVC INTERCONNECTING POINTS. 4. DIRECTIONAL BORES FOR CONTROL WIRES SHALL BE CLASS 200 EXTRAMOLECULAR STRENGTH HDPE 13.5 2" CASINGS (FOR 30 OR LESS 14 GAUGE WIRES); 3" (31 TO 60± 14 GAUGE WIRES).
- F. IRRIGATION SLEEVES PVC CASINGS & GENERAL SLEEVES GUIDE LINES
- 1. ALL IRRIGATION SLEEVES UNDER UNPAVED OR PAVED SURFACES SCHEDULED FOR IMPROVEMENTS SHALL BE: SCH 80 PVC FOR SLEEVES 6" AND LARGER; SCH 40 PVC FOR SLEEVES 4" AND SMALLER.
- 2. FOR CROSSINGS WITH LENGTHS LESS THAN 20' LONG USE AN ENTIRE PVC SECTION. FOR CROSSINGS WITH LENGTHS GREATER THAN 20' USE JOINED SECTIONS, WATER-PROOF SOLVENT WELD THE JOINT UNION.
- 3. IRRIGATION SLEEVE/CASING/BORE END SECTIONS SHALL EXTEND: 4'± BEYOND THE EDGE OF THE PAVED DRIVEWAYS W/ CURBING; 7'± PAVED DRIVEWAYS WITH NO CURBING; 1.5'± SIDEWALKS.
- 4. ELECTRONIC TRACKING/LOCATING BALLS SHALL BE INSTALLED/PROVIDED 12"± ABOVE: EACH END OF THE SLEEVE(S) AT DRIVEWAY & WIDE (>8'±) SIDEWALK CROSSINGS; EACH END OF CONTROL (OR OTHER USE) WIRES SLEEVE - ALL CROSSING
- 5 ALL IRRIGATION SUFFVE CROSSINGS SHALL BE DOCUMENTED STATING: SIZE(S) OF SLEEVE(S); TYPE(S) OF SLEEVE(S); USE(S) OF SLEEVE(S); LENGTH OF SLEEVE(S); DEPTH(S) OF SLEEVE(S). THE PARTY INSTALLING THE SLEEVES SHALL VERIFY THE INSTALLATION AND SIGN THE SLEEVES LOG 6. THE IRRIGATION CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR THE LOCATION OF SLEEVE CROSSINGS WHETHER SHOWN
- 7. ALL IRRIGATION CONTROL AND ELECTRICAL WIRES SHALL HAVE EXCLUSIVE/DEDICATED SLEEVES. AT NO TIME WILL WIRING SHARE THE SAME SLEEVE WITH MAIN(S), SUBMAIN(S) OR OTHER PIPING.
- 8. THESE DRAWINGS HAVE BEEN PREPARED UTILIZING OTHER'S DATA. WHERE PROPOSED SLEEVING IS EITHER INADEQUATE OR NOT POSSIBLE, THE CONTRACTOR SHALL PROVIDE A UNIT COST FOR PROVIDING THE SLEEVING AND/OR BORING NECESSARY TO EXECUTE THE WORK. UNIT PRICES SHALL ALSO INCLUDE NECESSARY DIRECTIONAL BORES, WHERE AND AS APPLICABLE.

- IRRIGATION NOTES
- GENERAL CONTENT
- G. IRRIGATION ISOLATION VALVES

- SOLVENT WELD CONNECTIONS
- CORRESPONDING DETAIL(S).
- H. IRRIGATION QUICK COUPLING VALVES
- PER FOUR QUICK COUPLING VALVES
- I. IRRIGATION CONTROL SYSTEM CONTROLLER(S)
- 3. THE CONTROLLER SHALL HAVE 120V DEDICATED ELECTRIC SERVICE PROVIDED TO THE CONTROLLER IN CONDUIT. THE IRRIGATION CONTRACTOR
- MANUFACTURER'S LATEST SPECIFICATIONS

- AND/OR STRUCTURAL INTERFERENCE.
- J. IRRIGATION CONTROL SYSTEM DECODERS
- BY THE IRRIGATION CONTROLLER MANUFACTURER.

- 6. PROVIDE ID (YELLOW) AND WARNING PLASTIC TAGS MANUFACTURED BY CHRISTY INDUSTRIES. PROVIDE MANUFACTURER PROVIDED NUMBERS, OR

- M. IRRIGATION VALVE BOXES GENERAL GUIDE LINES
- VALVE BOXES USING THE FOLLOWING CRITERIA.
- RECTANGULAR, SQUARE AND JUMBO BOXES.
- THE PIPING WITH DUCT TAPE

- SETTINGS/ADJUSTMENTS
- 3. PROVIDE AN INLET SIZED SCH 80 PVC PRE-MANUFACTURED SWING JOINT ASSEMBLY PER ROTOR HEAD TO CONNECT TO THE CORRESPONDING LATERAL LINE.
- 4. PROVIDE INSTALLATION, ADJUSTMENTS AND MAINTENANCE (AS NEEDED) IN ACCORDANCE TO THE MANUFACTURER SPECIFICATIONS
- N. IRRIGATION INTERMEDIATE/SMALL AREAS ROTOR HEADS
- SETTINGS/ADJUSTMENTS.
- AND HARD PLASTIC FITTINGS 4. PROVIDE INSTALLATION, ADJUSTMENTS AND MAINTENANCE (AS NEEDED) IN ACCORDANCE TO THE MANUFACTURER SPECIFICATIONS.

1 IRRIGATION ISOLATION VALVES 2" AND LARGER SHALL: HAVE A PRESSURE RATING OF 200 PSI OR GREATER; HAVE A BODY CONSTRUCTED WITH CAST IRON: BE EPOXY COATED: HAVE FLANGED CONNECTIONS: HAVE A NON-RISING STEM WITH A SQUARE NUT MECHANISM

2. IRRIGATION ISOLATION VALVES 1-1/2" AND SMALLER SHALL: HAVE A PRESSURE RATING OF 200 PSI OR GREATER; HAVE A BODY CONSTRUCTED WITH BRASS; HAVE THREADED CONNECTIONS; HAVE A NON-RISING STEM AND WHEEL TURN HANDLE.

3. IRRIGATION ISOLATION VALVES LOCATED AT LOCATIONS WHERE SALT INTRUSION WITHIN THE SOILS MAY BE PRESENT SHALL BE SCH 80 PVC,

### 4. ALL ISOLATION VALVES INSTALLED ALONG THE IRRIGATION MAIN OR SUBMAIN SHALL BE INSTALLED WITHIN A VALVE BOX (12" RECTANGULAR FOR 2" AND LARGER VALVES; 10" ROUND FOR 1-1/2" AND SMALLER VALVES). IRRIGATION CONTRACTOR SHALL PROVIDE VALVE BOX EXTENSIONS WHEN NECESSARY. EXTENSIONS MAY BE COMPOSED OF VALVE BOX EXTENSIONS, OR MADE WITH BLACK PLASTIC CORRUGATED PIPE. REFER TO

1. IRRIGATION QUICK COUPLING VALVES SHALL: BE CONSTRUCTED OF BRASS; HAVE AN ACME THREADED MECHANISM; HAVE A LOCKABLE COVER LID. 2. IRRIGATION QUICK COUPLING VALVES SHALL HAVE A MATCHING KEY WITH A SWIVEL EL. THE IRRIGATION CONTRACTOR SHALL PROVIDE ONE KEY

3. IRRIGATION QUICK COUPLING VALVES SHALL BE INSTALLED WITHIN A 10" ROUND BOX. THE VALVE SHALL BE CENTERED WITHIN THE CENTER OF THE

1. ALL CONTROLLER(S) (EACH IF APPLICABLE) WILL BE INSTALLED AT LOCATIONS DESIGNATED BY THE IRRIGATION DESIGNER. IN THE EVENT THAT NO DESIGNATED LOCATIONS OCCUR, OR THE LOCATIONS DESIGNATED ARE IN CONFLICT, THE IRRIGATION CONTRACTOR SHALL DETERMINE AND FIELD LOCATE ALL CONTROLLER(S) AND RAIN SENSOR(S) LOCATION(S). THE LOCATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL OF THE IRRIGATION DESIGNER OR LANDSCAPE ARCHITECT PRIOR TO PROCEEDING WITH THE INSTALLATION.

2. THE CONTROLLER(S) SHALL BE LOCATED AT LOCATION(S) ACCESSIBLE TO MAINTENANCE PERSONNEL

SHALL BE RESPONSIBLE FOR HAVING MATERAILS AND LABOR NECESSARY TO BE PROVIDED FOR THE SERVICE. 4. ALL CONTROLLER(S) (EACH IF APPLICABLE) WILL BE GROUNDED USING THREE EIGHT FOOT (8') COPPER CLAD RODS WITH #6 SOLID COPPER WIRE. COPPER CLAMPS WILL BE USED TO ATTACH THE WIRE TO THE RODS. IF ANOTHER CONTROLLER IS UTILIZED, AN EARTH GROUND OF FIVE (5) OHMS OR LESS SHALL BE OBTAINED ON THE GROUNDING EQUIPMENT. CONTROL EQUIPMENT GROUNDING SHALL BE IN ACCORDANCE TO THE

5. CONTROL WIRE SHALL BE AWG SOLID COPPER INSULATED WIRE SUITABLE FOR DIRECT BURIAL APPLICATIONS. THE SIZE OF THE WIRE SHALL BE AS SPECIFIED OR AWG 14 GAUGE GROUND AND COMMON IF THE DISTANCE BETWEEN THE CONTROLLER AND THE FARTHEST VALVE IS LESS THAN 2,000'±, OR AWG 12 GAUGE GROUND AND AWG 14 GAUGE ACTIVE IS THE DISTANCE BETWEEN THE CONTROLLER AND FARTHEST VALVE IS LESS THAN

6. CONTROL WIRE COLORS SHALL BE: WHITE FOR GROUND; WHITE W/ COLOR STRIPE FOR GROUND SPARE; RED FOR ACTIVE; GREEN AND/OR BLUE FOR SPARE; YELLOW AND/OR ORANGE FOR SPECIAL USES SUCH AS MASTER VALVE OR SENSOR(S).

7. ALL CONTROL WIRE CONNECTIONS SHALL BE DONE USING DBY/DBR WIRE CONNECTORS. CONTROL WIRES WITHIN VALVE BOXES SHALL BE NEATLY CURLED IN 1" CURLS, OR FOLDED AND SECURED WITH PLASTIC TIES.

8. ALL CONTROLLER(S) (EACH IF APPLICABLE) WILL HAVE A RAIN SENSOR AND BY-PASS SWITCH INSTALLED TO MEET STATE AND LOCAL CODES. RAIN SENSORS AND BY-PASS SWITCHES ALSO WILL BE INSTALLED IN ACCORDANCE TO MANUFACTURER'S GUIDELINES.

9. RAIN SENSORS & MINI-WEATHER STATIONS (WIND SENSOR) SHALL BE INSTALLED IN OPEN AREAS CLEAR OF IRRIGATION COVERAGE, VEGETATION

1. THE IRRIGATION CONTROLLER SHALL BE SUITABLE FOR TWO-WIRE DECODER CONTROL TECHNOLOGY. THE DECODERS SHALL BE MANUFACTURED

2. THE DECODERS TWO-WIRE CONTROL WIRE SHALL BE MANUFACTURED BY THE CONTROLLER & DECODERS MANUFACTURER, OR A MANUFACTURER APPROVED EQUAL. THE WIRE'S LENGTH TO THE FARTHEST VALVE/DECODER SHALL NOT EXCEED THE MANUFACTURER'S RECOMMENDED LENGTH. 3. WHERE POSSIBLE, PRACTICAL AND FEASIBLE ZONE CONTROL VALVES SHALL BE MANIFOLDED TOGETHER NEAR THE MANAGING DECODER. VALVES LOCATED WITHIN 140'± FROM A MANAGING DECODER LOCATION SHALL HAVE THE SOLENOID WIRED TO THE DECODER (FOR ACTIVATION) USING AWG 14 GAUGE SOLID COPPER INSULATED WIRE. THE WIRES' COLOR SHALL MATCH THE SUBJECT DECODER'S CORRESPONDING WIRES COLOR.

4. THE DECODERS SHALL BE GROUNDED IN ACCORDANCE TO THE MANUFACTURER'S LATEST GROUNDING SPECIFICATIONS. 5. THE IRRIGATION CONTRACTOR SHALL HAVE ON SITE AT ALL TIMES SUITABLE DECODER PROGRAMING EQUIPMENT.

6. BIDDING CONTRACTORS MUST BE CERTIFIED IN DECODER CONTROL SYSTEMS INSTALLATION, SERVICE AND MANAGEMENT.

7. THE DECODERS' INSTALLATION SHALL BE IN ACCORDANCE TO THE DECODERS' MANUFACTURER LATEST SPECIFICATIONS. 8. THE SYSTEM'S ZONE CONTROL VALVES SHALL BE MANUFACTURED BY THE DECODER CONTROL SYSTEM MANUFACTURER.

L. IRRIGATION ZONE CONTROL VALVES

1. THE ZONE CONTROL VALVES SHALL BE MANUFACTURED BY THE IRRIGATION CONTROLLER MANUFACTURER. 2 THE ZONE CONTROL VALVES SHALL HAVE INTERNAL AUTOMATED CLEANING MECHANISMS WITHIN AND DIAL TYPE PRESSURE REGULATORS

3. THE ZONE CONTROL VALVE'S PRESSURE REGULATOR SETTINGS SHALL BE: LARGE TURF AREA ROTOR HEADS, (50'-70' SPACINGS) 70± PSI; FERMEDIATE RANGE ROTOR HEADS, 50± PSI; SHORT RANGE ROTORS HEAD, 40± PSI; SPRAY HEADS, BUBBLERS & DRIP HYDRANTS, 30± PS

4. THE ZONE CONTROL VALVES SHALL BE NEATLY INSTALLED (CENTERED) WITHIN A VALVE BOX. THE ZONE CONTROL VALVES VALVE BOX SIZES SHALL BE: 10" ROUND VALVE BOX FOR SINGLE 1" VALVES WITH NO ISOLATION VALVE AT INLET: 12" RECTANGULAR VALVE BOX FOR SINGLE 1.5" AND 2" VALVES; 12" RECTANGULAR VALVE BOX FOR SINGLE 1" VALVES WITH ISOLATION VALVE AT INLET; JUMBO VALVE BOX FOR SINGLE 1.5" & 2" VALVES W/ ISOLATION VALVES AT INLET. DO NOT INSTALL MULTIPLE (TWO OR MORE) 1.5" OR 2" VALVES WITHIN A VALVE BOX. MULTIPLE (THREE - MAXIMUM) 1" VALVES MAY BE INSTALLED WITHIN A JUMBO VALVE BOX

5. PROVIDE NON-WOOVEN FILTER FABRIC AND A 4"+ LAYER OF GRAVEL (PEA GRAVEL OR <3/4") AT EACH VALVE BOX. ATTACH THE FILTER FABRIC TO THE EXTERIOR OF THE VALVE BOX'S BOTTOM WITH DUCT TAPE. EXCAVATE THE SOIL AT THE BOTTOM OF THE BOX'S AREA SO THAT A 2" AIR GAP CAN

OCCUR BETWEEN THE TOP OF GRAVEL AND THE BOTTOM OF THE BOX. PROVIDE PAVER BRICKS (FOUR PER RECTANGULAR/JUMBO BOXES - ONE AT EACH CORNER, TWO FOR 10" ROUND BOXES - ONE PER SIDE OPPOSITE OF EACH OTHER) FOR VALVE BOX STABILITY.

NEATLY WRITE THE CORRESPONDING VALVE NUMBER ON THE ID TAG

7. WHERE POSSIBLE AND PRACTICAL LOCATE AND INSTALL THE ZONE CONTROL VALVES AND BOXES WITHIN LOW GROWING PLANTING BEDLINE AREAS A FASHION THAT THE OUTLINE OF THE PLANTING BEDLINE IS NOT INTERRUPTED BY THE VALVE BOX.

8. DO NOT INSTALL ZONE CONTROL VALVES/VALVE BOXES WITHIN: SWALES, AND/OR THE BOTTOM OF LOW AREAS; 20' FROM THE MAIN TRUNK OF LARGE CANOPY TREES/PALMS: MINIMUM 12' FROM THE MAIN TRUNK OF MEDIUM/SMALL TREES/PALMS: MINIMUM 7'± FROM EDGE OF DRIVEWAYS: MINIMUM 5'± FROM THE EDGE OF SIDEWALKS, MASONRY WALLS OR BUILDING FOUNDATIONS.

1. THE VALVE BOXES SHALL BE AS SPECIFIED. IF A MANUFACTURER AND MODEL ARE NOT SPECIFIED THE IRRIGATION CONTRACTOR SHALL PROVIDE

2. THE VALVE BOXES SHALL BE OF SUITABLE SIZE AND MATERIAL APPROPRIATE FOR THE INTENDED USE. THE VALVE BOX LIDS SHALL HAVE A RIBBED REINFORCED BACKING, AND BE LOCKABLE. THE LID SHALL BE PANTONE PURPLE 522C.

3. BRICK PAVERS SHALL BE PROVIDED IN THE FOLLOWING FASHION: ONE PAVER PER SIDE (OPPOSITE OF EACH OTHER); ONE BRICK PER CORNER FOR

4. THE BOTTOM OF THE BOXES SHALL BE LINED WITH NON-WOVEN FILTER FABRIC (NWFF) TO KEEP SOILS, SILTS AND DEBRIS FROM ENCROACHING INTO THE BOX. THE NWFF SHALL BE ATTACHED TO THE BOX WITH CONTINUOUS BANDS OF DUCT TAPE WRAPPED AROUND THE ENTIRE PERIMETER OF THE BOX. THE NWFF SHALL HAVE OPENINGS ONLY FOR THE PIPING TO GO THROUGH (SNUG). THE EDGE OF THE NWFF SHALL BE SECURED TO

5. PROVIDE A 4"± LAYER OF GRAVEL (PEA GRAVEL OR <3/4") AT THE BOTTOM OF THE INTERIOR OF EACH VALVE BOX. EXCAVATE THE SOIL AT THE BOTTOM OF THE BOX'S PIT DEEP ENOUGH FOR THE LAYER OF GRAVEL CAN FIT WITHIN THE DEEPER EXCAVATED AREA SO THAT A 2" AIR GAP CAN

OCCUR BETWEEN THE TOP OF GRAVEL AND THE BOTTOM OF THE BOX.

6. FOR DEEP EXCAVATION/INSTALLATION APPLICATIONS PROVIDE VALVE BOX EXTENSIONS AS NEEDED. THE EXTENSIONS SHALL BE AS RECOMMENDED/SPECIFIED BY THE VALVE BOX MANUFACTURER. PLASTIC CORRUGATED PIPE (NO HOLES) CAN BE CONSIDERED AN ACCEPTABLE EXTENSION FOR ROUND BOXES AS LONG AS THE MATERIAL HAS A REASONABLE LEVEL OF RIGIDNESS.

## M. IRRIGATION - LARGE TURF AREAS/ATHLETIC FIELD ROTOR HEADS

1. THE ROTOR HEAD MANUFACTURER AND MODEL SHALL BE AS SPECIFIED.

2. THE ROTOR HEAD NOZZLE SELECTION SHALL BE AS SHOWN PER PLAN. REFER TO THE PLAN FOR NOZZLE SELECTION AND COVERAGE PATTERN

1. THE ROTOR HEAD MANUFACTURER AND MODEL SHALL BE AS SPECIFIED. 2. THE ROTOR HEAD NOZZLE SELECTION SHALL BE AS SHOWN PER PLAN. REFER TO THE PLAN FOR NOZZLE SELECTION AND COVERAGE PATTERN

3. PROVIDE AN INLET SIZED PREMANUFACTURED RIGID PLASTIC SWING JOINT ASSEMBLY (HUNTER 712SJ - .75"X12" SWING JOINT) PER ROTOR HEAD TO CONNECT TO THE CORRESPONDING LATERAL LINE FOR HIGH FLOW NOZZLE & OPERATING PRESSURE ROTOR HEADS NOTED IN PLAN. FOR OTHER

SMALLER AREA LOWER FLOW DEMAND/OPERATING PRESSURE ROTOR HEADS SHALL BE CONNECTED TO LATERAL LINE PIPING USING FUNNY PIPE

## **IRRIGATION NOTES**

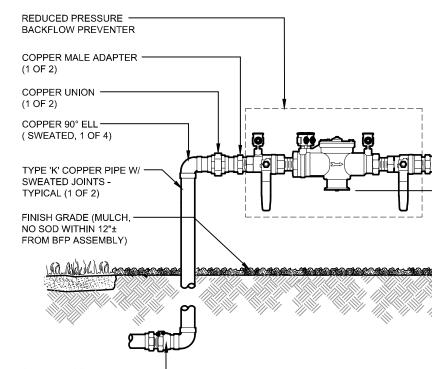
GENERAL CONTENT

## O. IRRIGATION - SPRAY HEADS

1. THE SPRAY HEAD MANUFACTURER AND MODEL SHALL BE AS SPECIFIED

- 2. THE SPRAY HEAD NOZZLE SELECTION SHALL BE AS SHOWN PER PLAN. REFER TO THE PLAN FOR NOZZLE SELECTION AND COVERAGE PATTERN
- SETTINGS/ADJUSTMENTS 3. PROVIDE INSTALLATION, ADJUSTMENTS AND MAINTENANCE (AS NEEDED) IN ACCORDANCE TO THE MANUFACTURER SPECIFICATIONS
- P. IRRIGATION TREE/PALM SUPPLEMENTAL WATERING BUBBLERS
- 1. THE BUBBLER MANUFACTURER AND MODEL SHALL BE AS SPECIFIED. THE BUBBLERS SHALL BE SET VOLUME WATER DISCHARGE PRESSURE COMPENSATING FLOOD TYPE BUBBLERS. THE INSTALLATION/USE OF ADJUSTABLE BUBBLERS IS NOT ALLOWED.
- 2. THE BUBBLER NOZZLE SELECTION SHALL BE AS SHOWN PER PLAN/NOTE(S)/BUBBLER SELECTION TABLE.
- 3. PROVIDE INSTALLATION, ADJUSTMENTS AND MAINTENANCE (AS NEEDED) IN ACCORDANCE TO THE MANUFACTURER SPECIFICATIONS.
- R. IRRIGATION DRIP IRRIGATION
- 1. THE DRIP IRRIGATION FILTER ASSEMBLY SHALL BE AS SPECIFIED AND INSTALLED AT THE LOCATION(S) SHOWN. THE IRRIGATION CONTRACTOR SHALL CONSTRUCT A DRIP IRRIGATION FILTER DISCHARGE SUMP AS SPECIFIED
- 2. DRIP IRRIGATION INLINE TUBING (DIIT) SHALL BE USED AS THE PRIMARY MEANS TO PROVIDE WATER TO THE TARGETED PLANT MATERIAL FOR GENERAL GROUND/LARGER PLANTER APPLICATIONS THE DIIT SHALL BE .5" FLEXIBLE POLYETHYLENE TUBING WITH FACTORY INSTALLED .92 GPH EMITTERS INSTALLED ON 12" SPACINGS. PLANTING POTS/URN APPLICATIONS THE DIIT SHALL BE .25" FLEXIBLE POLYETHYLENE MICRO-TUBING WITH FACTORY INSTALLED .25 GPH EMITTERS INSTALLED ON 6" SPACINGS.
- 3. PROVIDE SOIL TUBING ANCHOR STAKES AT A RATE OF ONE STAKE PER FIVE FEET OF INLINE TUBING. NO SOIL ANCHOR STAKES FOR MICRO-TUBING.
- 4. ALL INLINE TUBING AND MICRO-TUBING INTERCONNECTING FITTINGS SHALL BE MANUFACTURED BY THE TUBING MANUFACTURER. 5. THE INLINE TUBING (LARGER) SHALL BE LAID-OUT IN STRAIGHT ROWS BETWEEN ROWS OF PLANTINGS, PARALLEL TO THE PLANTING AREA(S) BOUNDARY/IES . WAVING THE TUBING IN AND OUT, IN BETWEEN PLANTS IS PROHIBITED. THE INLINE TUBING SECTIONS SHALL BE INSTALLED ON 24±
- SPACINGS. THE SPACINGS MAY VARY AT SMALL ODD SHAPED AREAS. THE MICRO-TUBING SHALL BE INSTALLED FOLLOWING THE PLANTING BOWL/URN'S PERIMETER OUTLINE, WITHIN 3"± FROM THE EDGE. IF A SECOND ROW/SECTION OF TUBING IS REQUIRED IT SHALL BE INSTALLED 8"± APART, PARALLEL TO THE FIRST SECTION.
- 6. DO NOT EXCEED THE TUBING & MICRO-TUBING MANUFACTURER'S LENGTH LIMITS. INLINE TUBING, 200'; MICRO-TUBING, 10'.
- 7. CONNECTIONS TO PVC POINTS OF CONNECTION SHALL BE MADE AS ILLUSTRATED IN THE PVC HEADER POINT OF CONNECTION.
- 8. PROVIDE (1) AUTOMATIC LINE FLUSH VALVE PER 15 GPM OF ZONE'S FLOW, OR AT DEAD END SECTIONS, OR OTHER LOCATIONS SHOWN. 9. PROVIDE (1) AIR VACUUM RELIEF VALVE (AVRFV) PER 6 GPM OF ZONE'S FLOW, THE AVRV LOCATIONS MAY NOT BE SHOWN IN THE PLAN BUT SHOULD BE INSTALLED THROUGHOUT THE ZONE, ESPECIALLY AT THE HIGHER ELEVATION AREAS. INSTALLATION SHALL BE IN ACCORDANCE TO THE MANUFACTURER SPECIFICATIONS.
- 10. PROVIDE HIGH FLOW EMISSION MODULES TO PROVIDE SUPPLEMENTAL WATER FOR PLANTINGS THAT REQUIRE MORE WATER. PROVIDE: (1) .25"X24"± LONG MICRO-TUBING (BLANK) SECTION; (1) .25" MICRO-TUBING SOIL STAKE; (1) .25" MICRO-TUBING DIFFUSER BUG CAP PER SUPPLEMENTAL WATER HIGH FLOW EMISSION MODULE
- 11. POTS AND/OR PLANTERS SHALL BE IRRIGATED VIA SUBSURFACE DRIP IRRIGATION, OR DIRECT EMISSION DRIP IRRIGATION AS DIRECTED PER PLAN, OR IN A FASHION THAT PROVIDES A WATER APPLICATION EQUAL OR NO GREATER THAN 1.0"± PER HOUR. DRIP IRRIGATION INLINE TUBING TO BE USED SHALL BE SUITABLE FOR THE SIZE OF THE POT(S)/PLANTER(S).
- 12. THE DRIP IRRIGATION APPLICATIONS FOR POTS AND PLANTERS SHALL BE IN DEDICATED ZONES, NOT MIXED W/ OTHER PLANTS AND/OR IRRIGATION APPLICATION METHODS AND MEDIA.
- S. IRRIGATION SPECIFICATIONS & DOCUMENTS
- 1. THE IRRIGATION CONTRACTOR'S STAFF SHALL HAVE A COPY OF THE PLAN SET FOR REFERENCE ON SITE AT ALL TIMES.
- 2. ALL SYSTEM ELEMENTS SHALL BE INSTALLED, USED AND MAINTAINED IN ACCORDANCE TO THE MANUFACTURER SPECIFICATIONS. 3. THE CONTRACTOR SHALL ACKNOWLEDGE THAT CONSTRUCTION DOCUMENTS (PLANS) AND WRITTEN SPECIFICATIONS ARE PART OF THESE
- CONTRACT DOCUMENTS AND SHALL BE RESPONSIBLE FOR THE THOROUGH REVIEW AND ADHERENCE THERETO. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT IN A TIMELY MANNER PRIOR TO THE COMMENCEMENT OF WORK.
- 4. THE CONTRACT DOCUMENTS (DRAWINGS & SPECIFICATIONS) TAKE PRECEDENCE OVER ASSUMED INDUSTRY STANDARDS.
- T. <u>WARRANTY</u>
- 1. THE IRRIGATION CONTRACTOR SHALL FURNISH A WRITTEN WARRANTY, STATING THAT ALL WORK INCLUDED UNDER THIS CONTRACTSHALL BE VARRANTED AGAINST ALL DEFECTS AND MALFUNCTION OF WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF
- COMPLETION AND FINAL ACCEPTANCE OF THIS PROJECT. 2. THE IRRIGATION CONTRACTOR FURTHER AGREES THAT HE/SHE WILL AT HIS/HER OWN EXPENSE REPAIR AND/OR REPLACE ALL SUCH DEFECTIVE
- WORK AND MATERIALS AND ALL OTHER WORK DAMAGED THEREBY IN WHICH BECOMES DEFECTIVE DURING THE TERM OF THE GUARANTY-WARRANTY IN AN EXPEDIENT MANNER.
- 3. THE OWNER RESERVES THE RIGHT TO MAKE EMERGENCY REPAIRS WITHOUT RELIEVING THE IRRIGATION CONTRACTOR'S GUARANTY OBLIGATION. IN THE EVENT THAT THE IRRIGATION CONTRACTOR DOES NOT RESPOND TO THE OWNER'S REQUEST FOR REPAIRS WITHIN FORTY-EIGHT (48) HOURS.
- THE OWNER MAY MAKE SUCH REPAIRS AS HE/SHE DEEMS NECESSARY, AT THE FULL EXPENSE OF THE IRRIGATION CONTRACTOR.
- 4. ANY SETTLING OF BACKFILLED TRENCHES WHICH MAY OCCUR DURING THE GUARANTY-WARRANTY PERIOD SHALL BE REPAIRED BY THE

- CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER, INCLUDING THE COMPLETE RESTORATION OF ALL DAMAGED PLANTINGS, SOD, PAVING
- AND/OR OTHER IMPROVEMENT(S) OF ANY KIND.



SWEATED COPPER -POINT OF CONNECTION

PVC MALE ADAPTER

SPECIFIED) PIPE

NOTES:

COPPER FEMALE ADAPTER -

**IRRIGATION MAIN/SUBMAIN (AS** 

• **RECOMMENDED SIZES**:

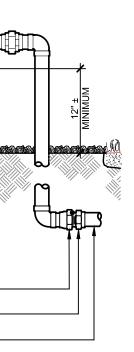
• 1± GPM TO 20± GPM, 1" R.P.

21± GPM TO 50± GPM, 1-1/2" R.P

• 51± GPM TO 120± GPM, 2" R.P.

SCALE: N.T.S.

• ALL JOINTS ON COPPER PIPING SHALL BE SWEATED JOINTS.



 INSTALL BACKFLOW PREVENTER IN ACCORDANCE TO NATIONAL, STATE AND LOCAL CODES AND HEALTH DEPARTMENT REGULATIONS. VERIFY LOCAL REQUIREMENTS PRIOR TO INSTALLATION.

# REDUCED PRESSURE BACKFLOW PREVENTER DETAIL



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| SOLE<br>CONTRA<br>NOR<br>EXP<br>RESPC<br>THE WC<br>IN THI<br>STRUC<br>COPYRIC<br>REPRI                               | NOTICE:<br>CONSTRUCTION SITE SAFETY IS THE<br>SOLE RESPONSIBILITY OF THE<br><u>CONTRACTOR</u> ; NEITHER THE OWNER<br>NOR THE ENGINEER SHALL BE<br>EXPECTED TO ASSUME ANY<br>RESPONSIBILITY FOR SAFETY OF<br>THE WORK, OF PERSONS ENGAGED<br>IN THE WORK, OF ANY NEARBY<br>STRUCTURES, OR OF ANY OTHER<br>PERSONS.<br>COPYRIGHT @2023 ATWELL LLC NO<br>REPRODUCTION SHALL BE MADE<br>WITHOUT THE PRIOR WRITTEN<br>CONSENT OF ATWELL LLC  |  |  |  |
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| SECTION 28   | TOWNSHIP 10 NORTH, RANGE 3 EAST   | CITY OF ALBUQUERQUE                                      | BERNALILLO COUNTY, NEW MEXICO  |  |
| DE CLIENT  | ALLSUP'S CONVENIENCE STORE #102460<br>9501 GIBSON BLVD SW   | ALBUQUERQUE, NEW MEXICO 87121<br>FINAL ENGINEERING PLANS | IRRIGATION NOTES PLAN  |  |
|  | 9/8/  | 2023   |  |  |
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P.M. D. MADRUGA

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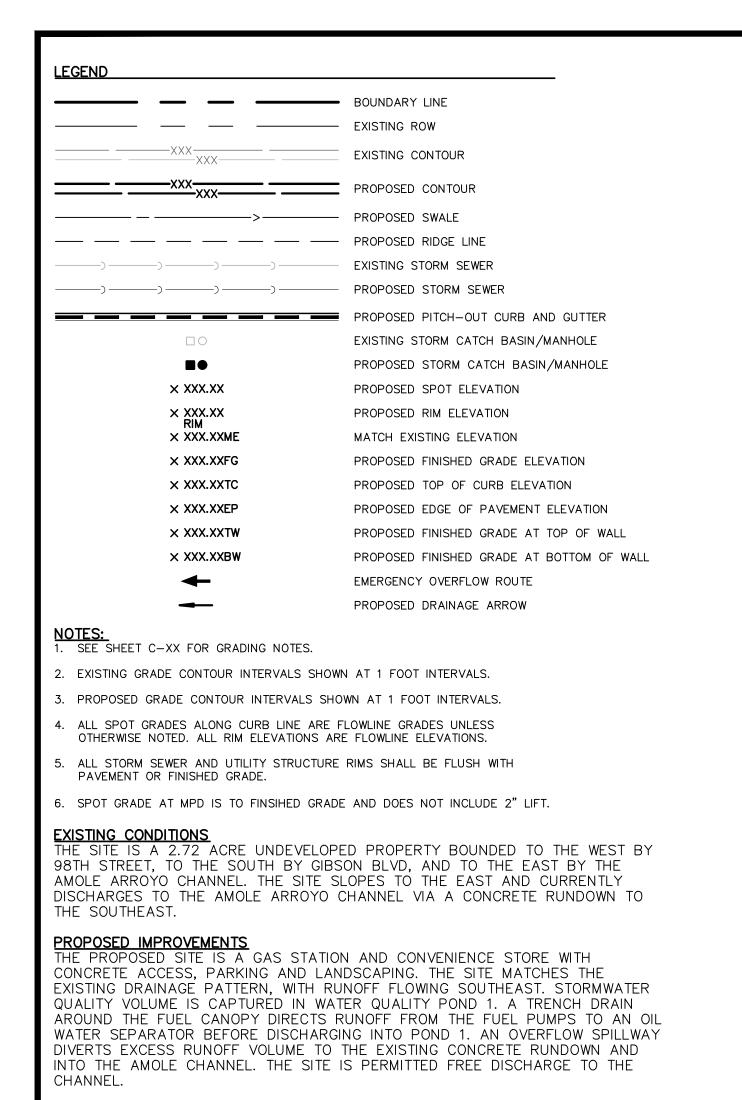
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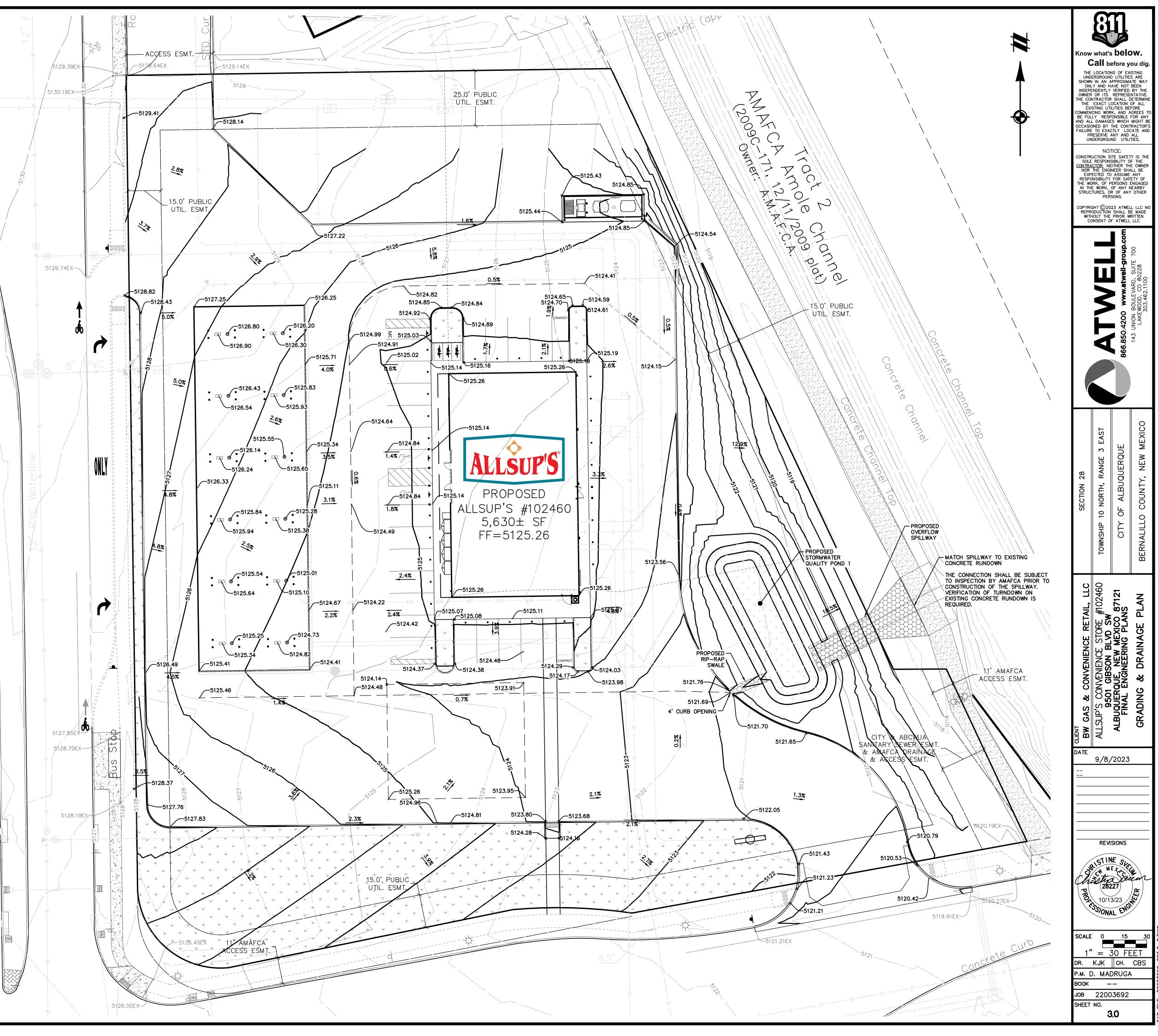
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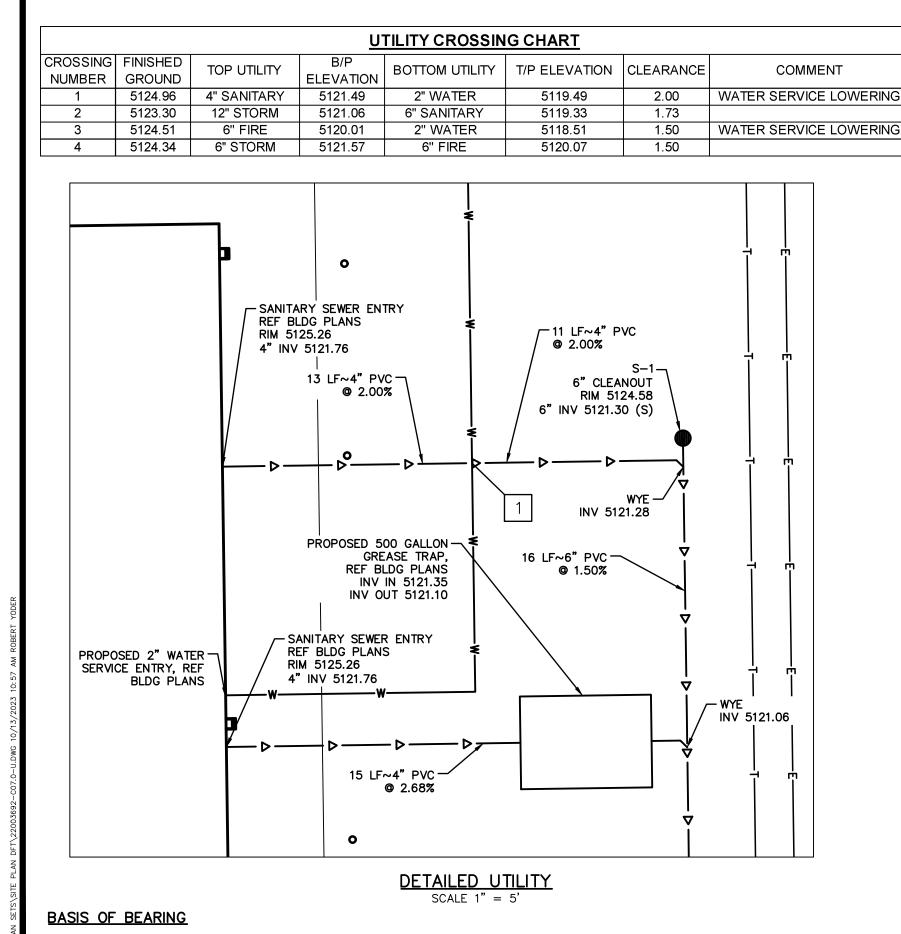




BASIS OF BEARING

THE BASIS OF BEARINGS IS BETWEEN THE SE CORNER OF TRACT E-5-A-2 AND USC&GS BRASS CAP "TRANS 1969" AS MEASURED WITH THE "TRIMBLE VRS NOW" GNSS VIRTUAL REFERENCE SYSTEM. BEARINGS ARE NEW MEXICO STATE PLANE BEARINGS, CENTRAL ZONE, NAD 83. DISTANCE ARE GROUND DISTANCES. ELEVATION DATUM IS NAVD88

DISTANCE ARE GROUND DISTANCES. ELEVATION DATUM IS NAVD88



| CONTRACTOR SHALL BE RESPONSIBLE FOR<br>COORDINATION WITH APPROPRIATE UTILITY<br>COMPANIES TO ENSURE THAT THE REQUIRED<br>VERTICAL AND HORIZONTAL CLEARANCES AT<br>ALL LOCATIONS WHERE ANY UTILITY LINE<br>CROSSES AN EXISTING OR PROPOSED GAS,<br>TELEPHONE OR ELECTRIC LINE ARE MET. |   |
|---|---|
|   | COORDINATION WITH APPROPRIATE UTILITY<br>COMPANIES TO ENSURE THAT THE REQUIRED<br>VERTICAL AND HORIZONTAL CLEARANCES AT<br>ALL LOCATIONS WHERE ANY UTILITY LINE<br>CROSSES AN EXISTING OR PROPOSED GAS. |

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