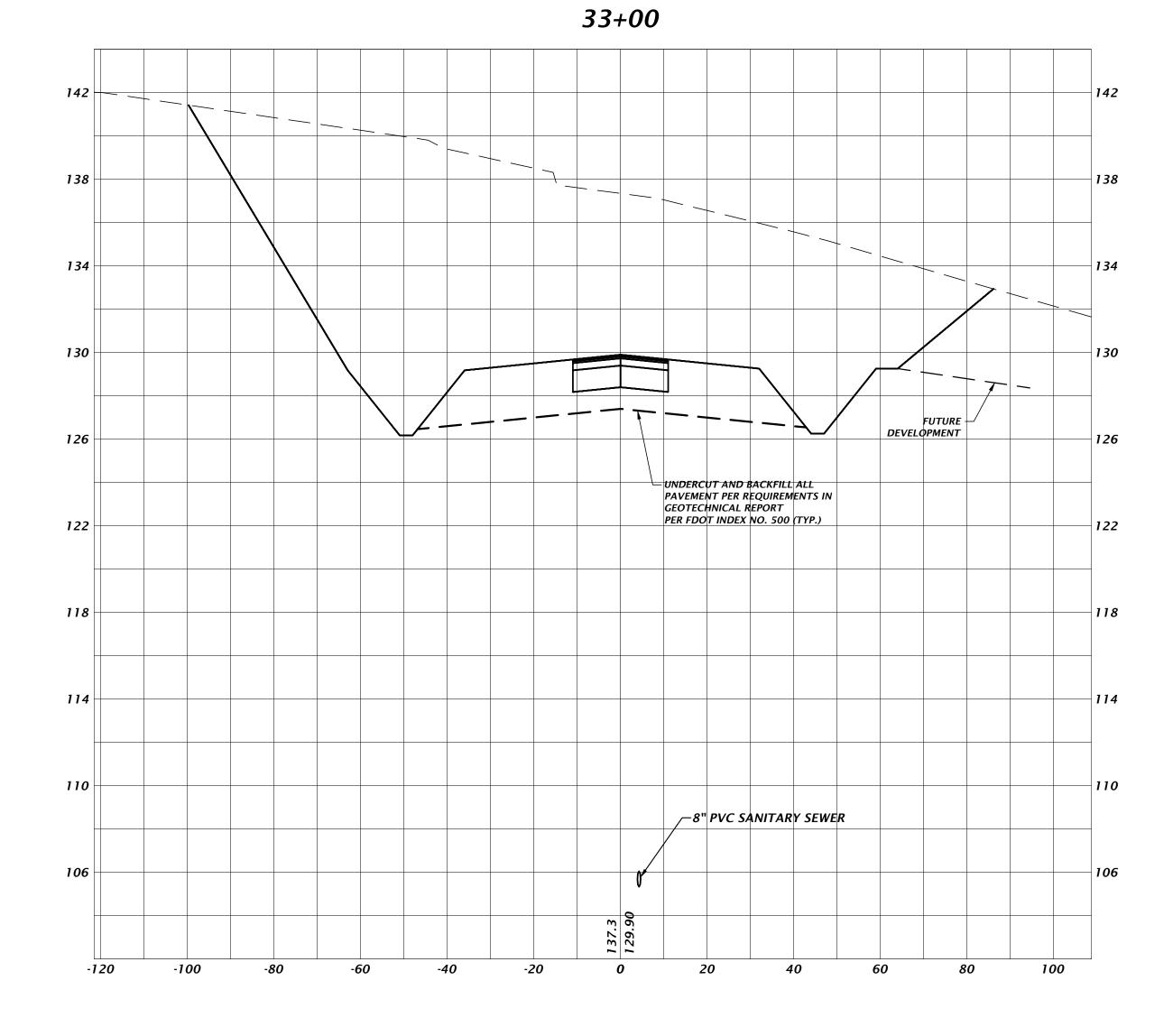
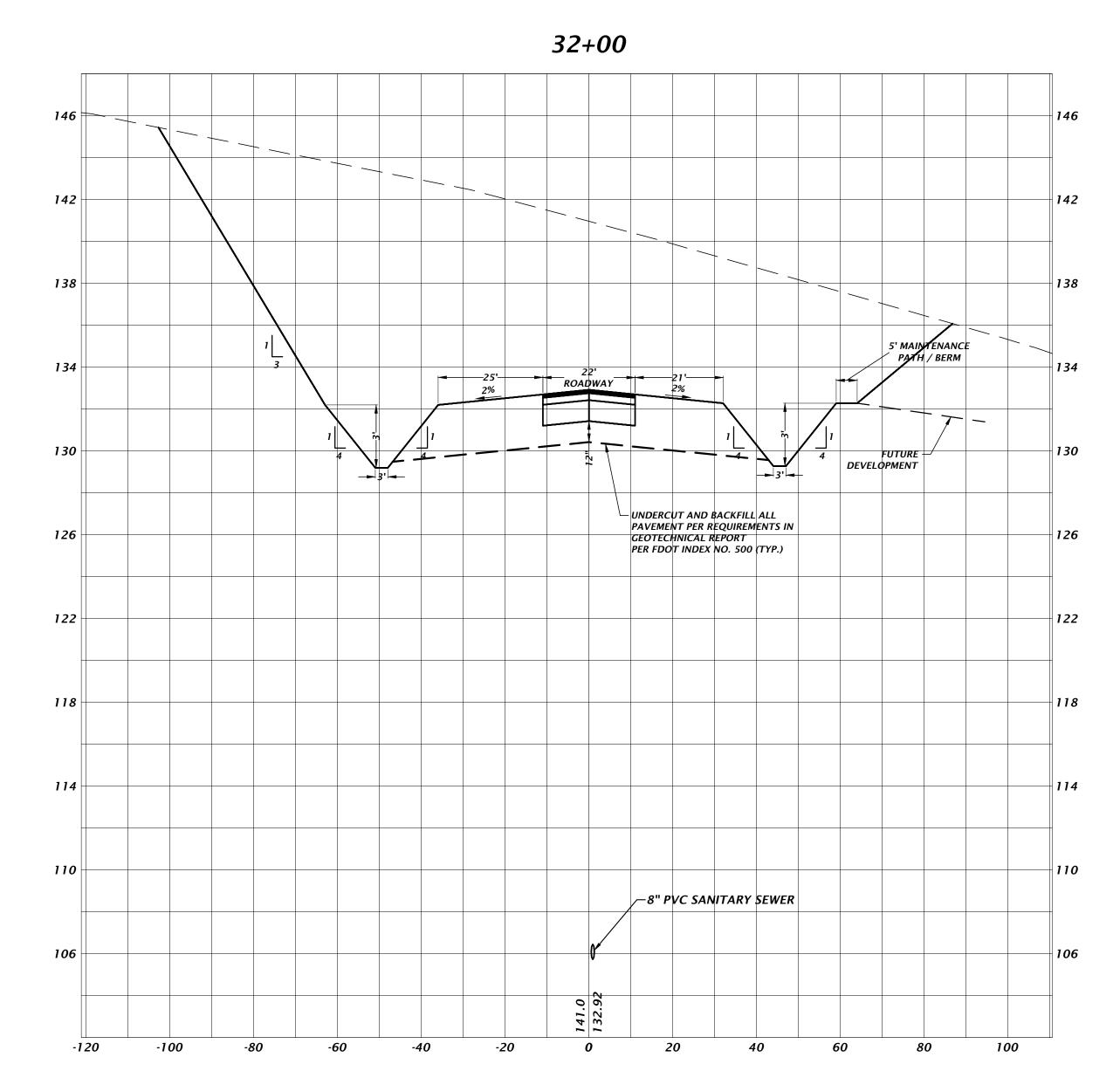


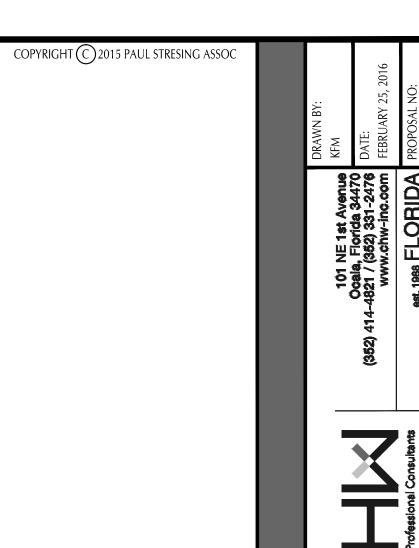




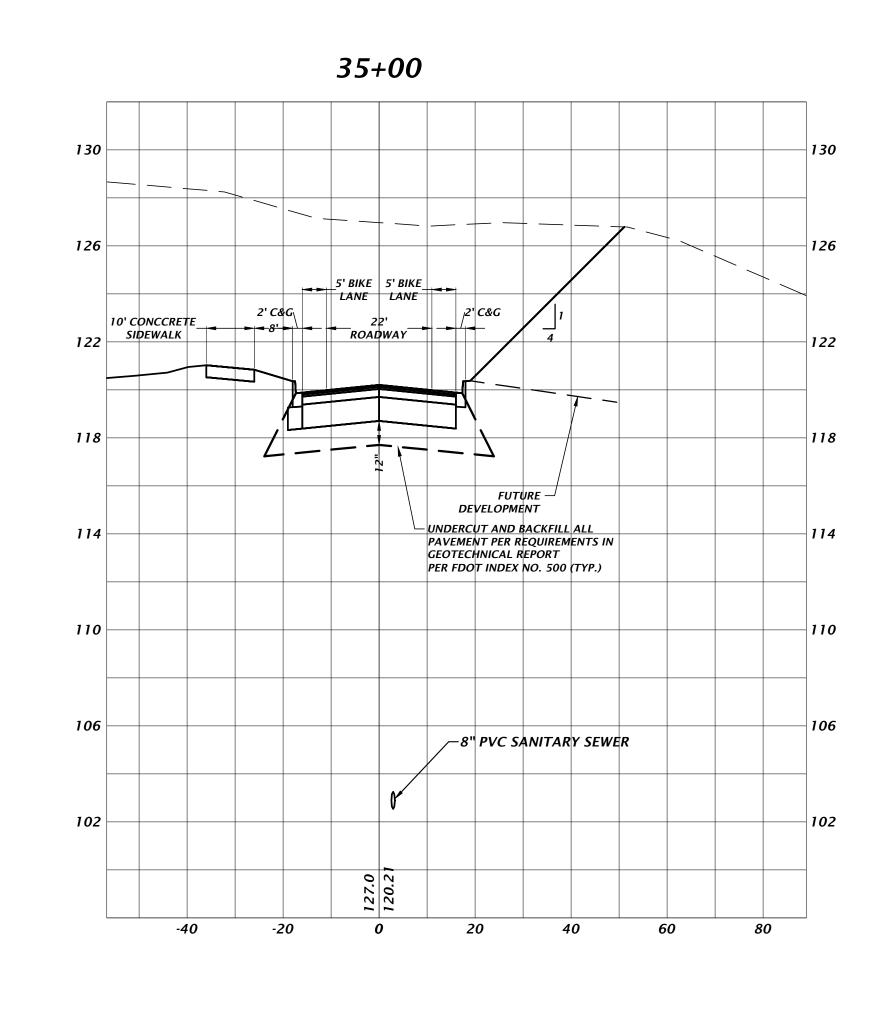
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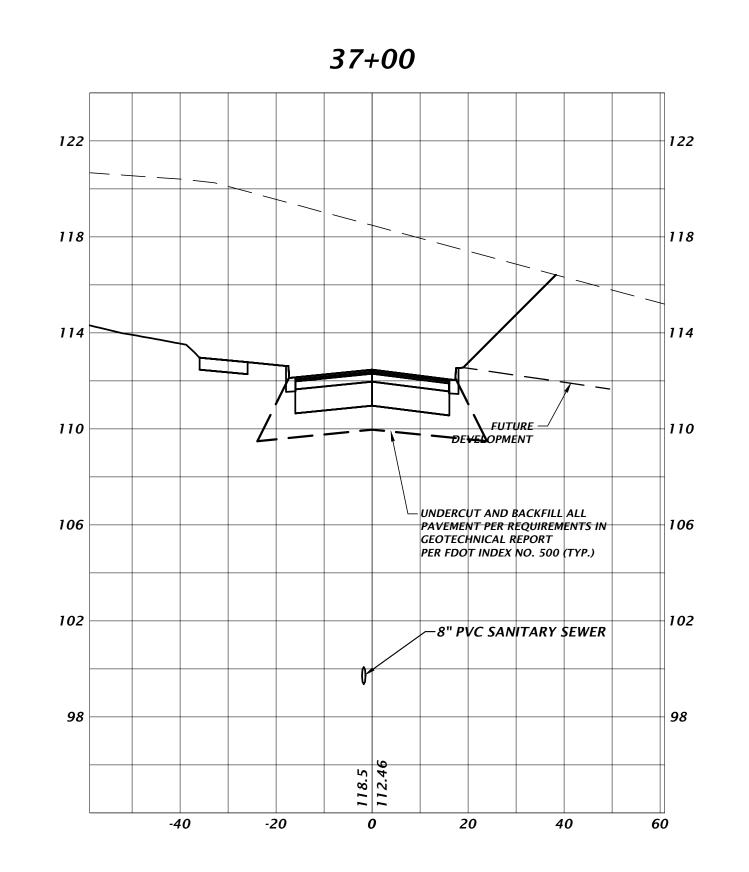


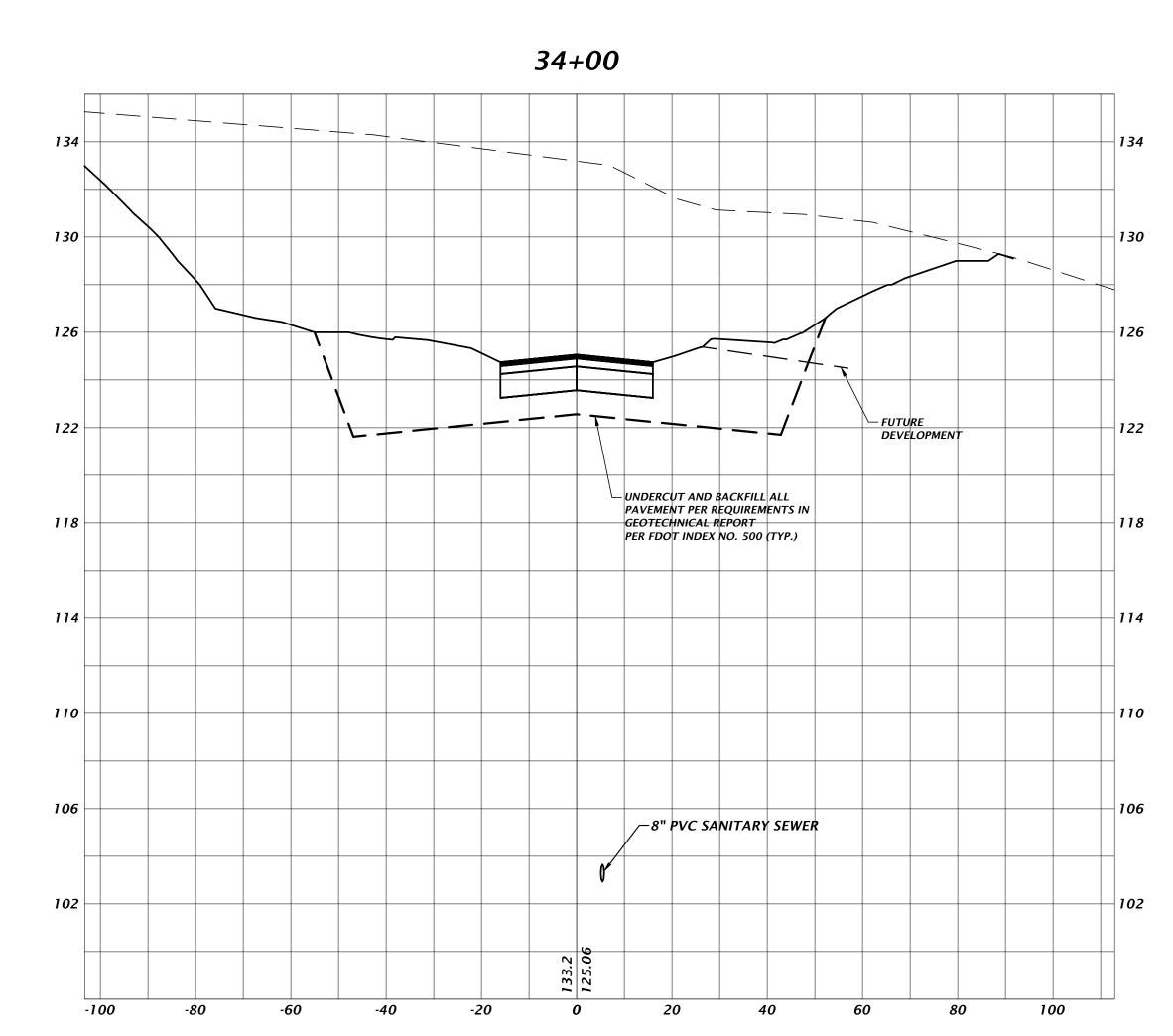


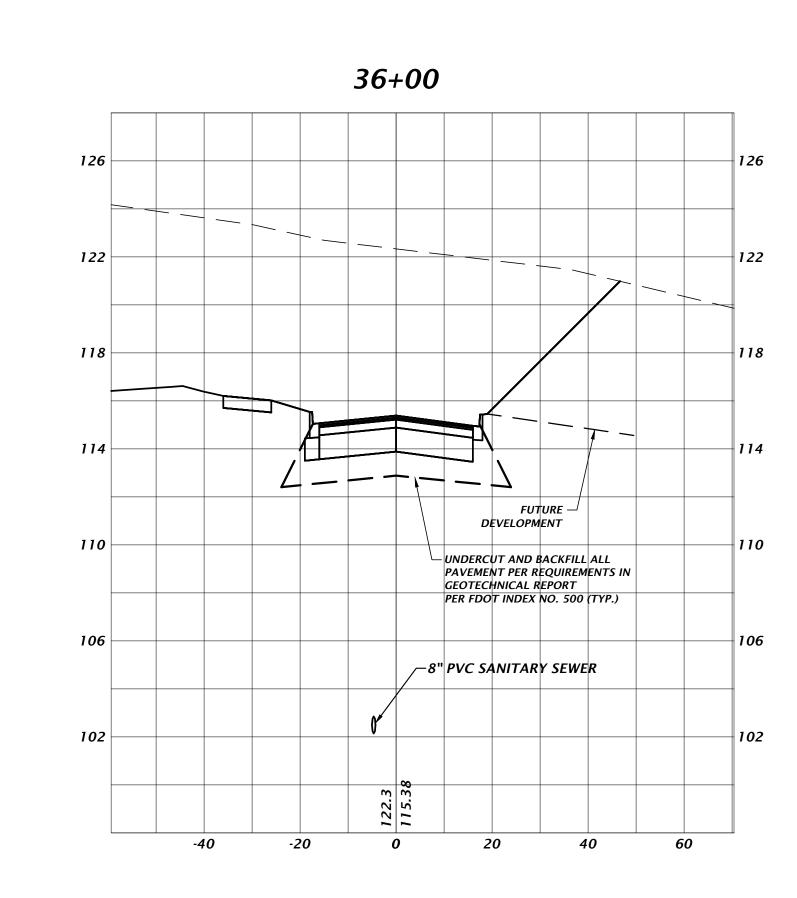


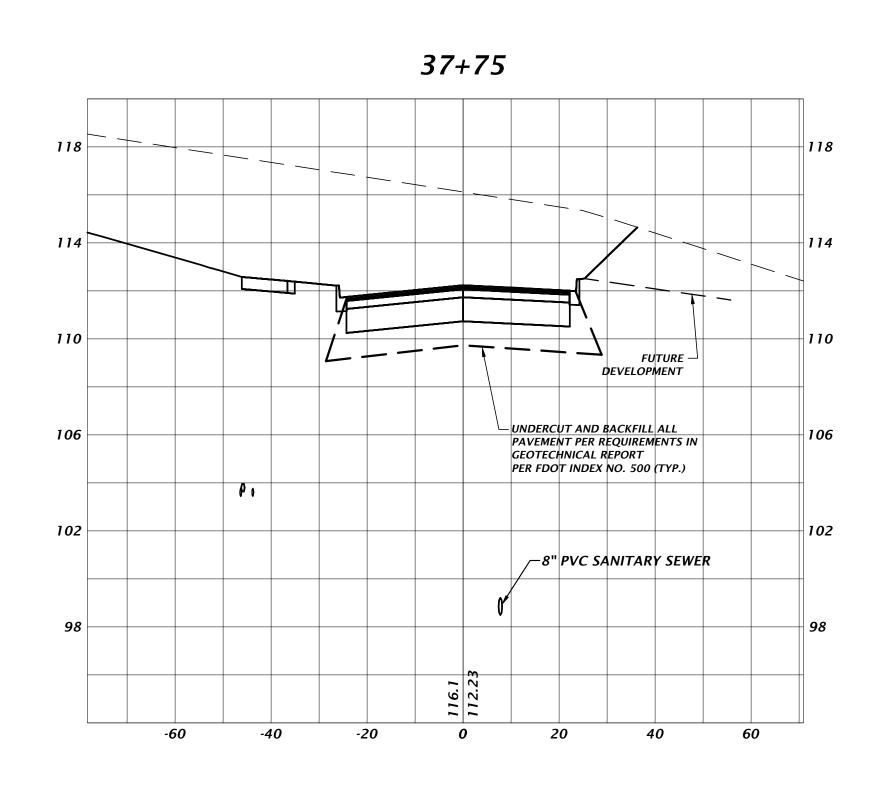
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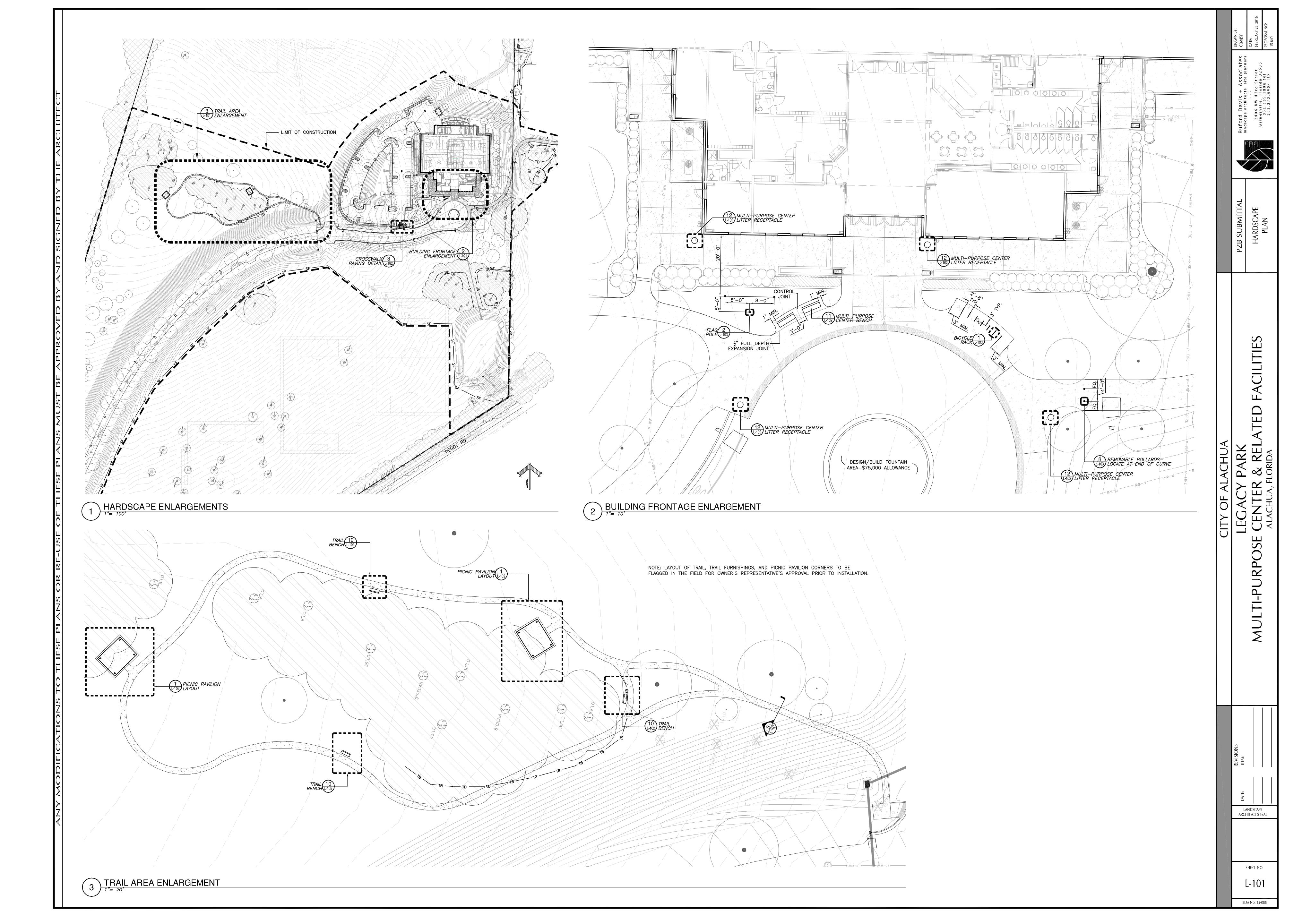






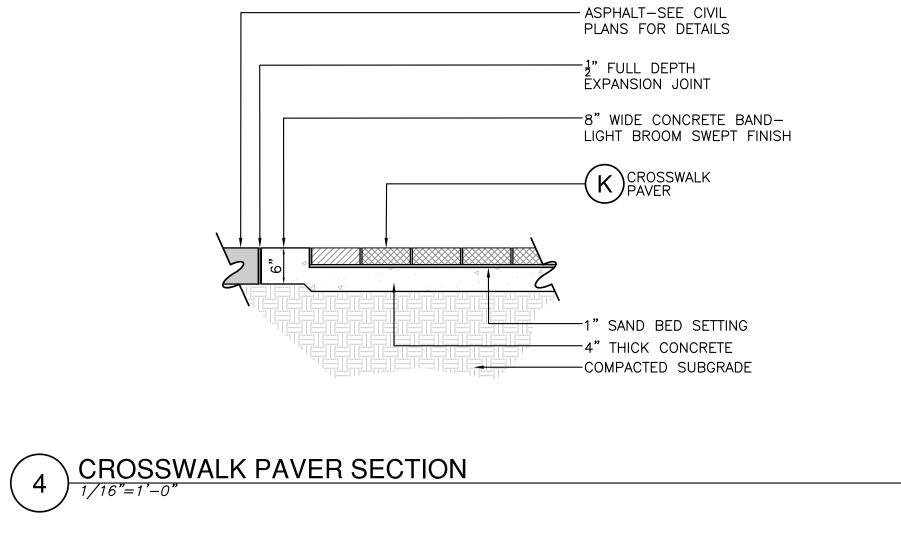




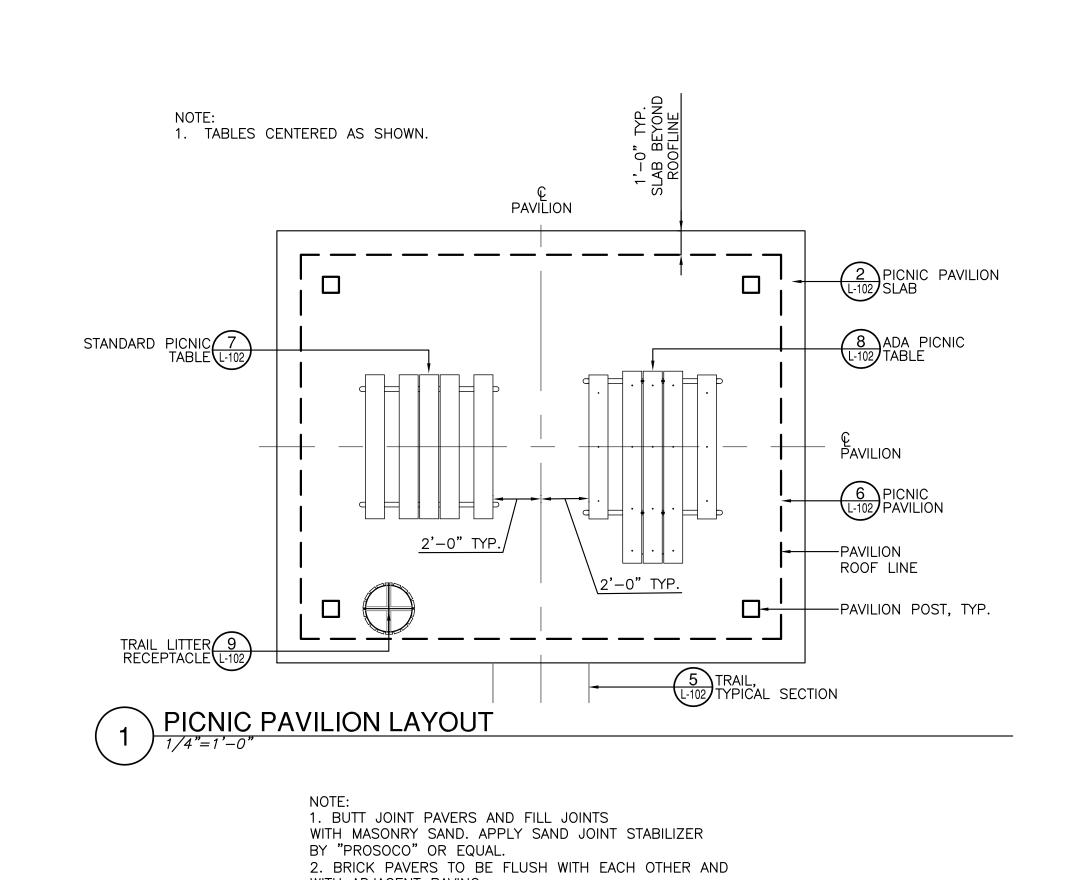








WITH ADJACENT PAVING.











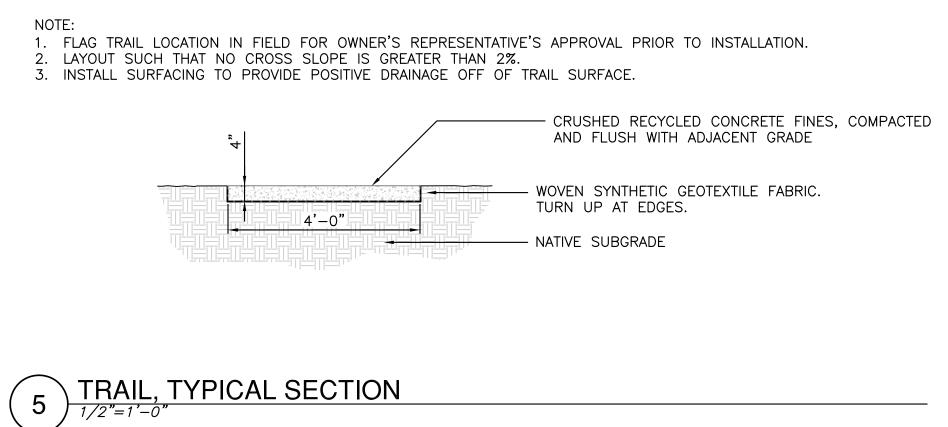


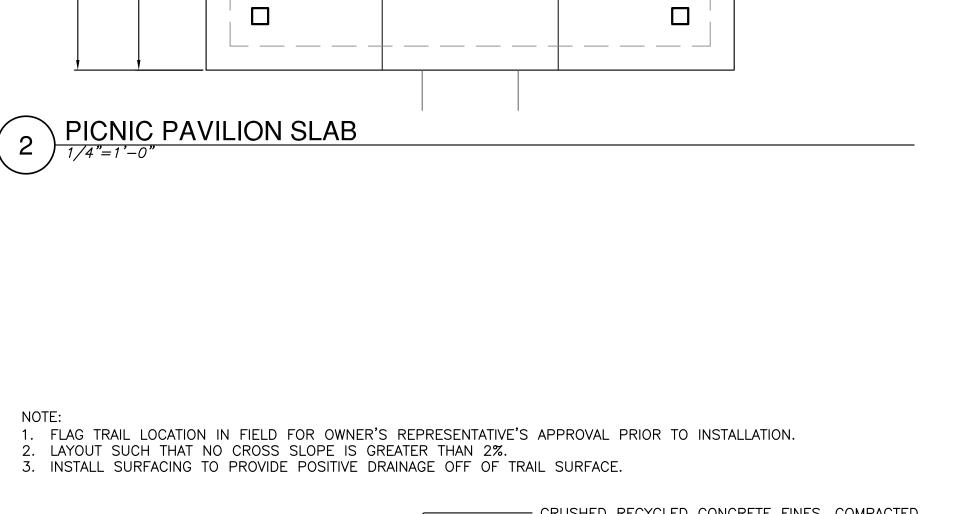


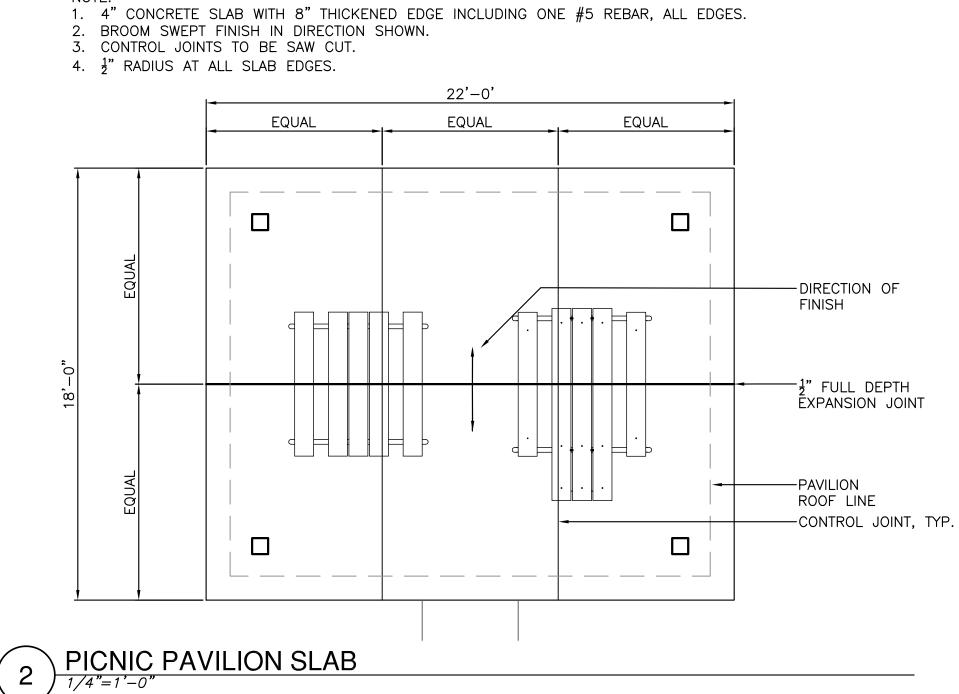


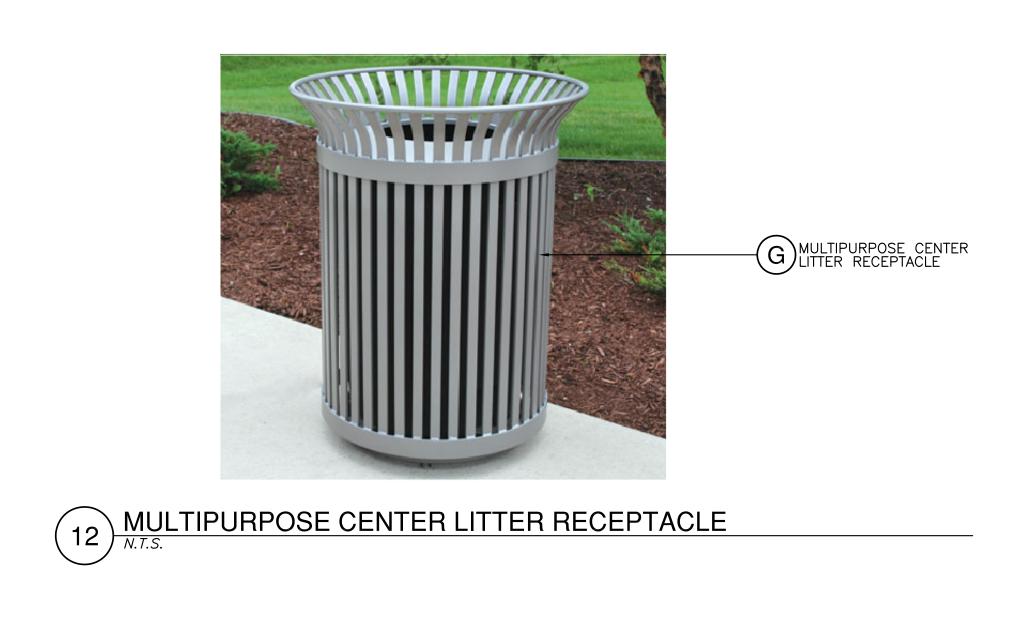






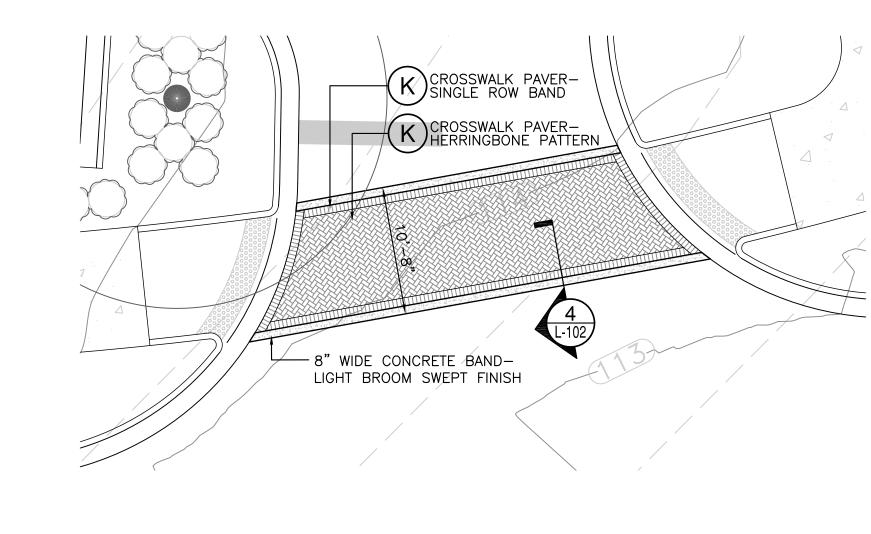




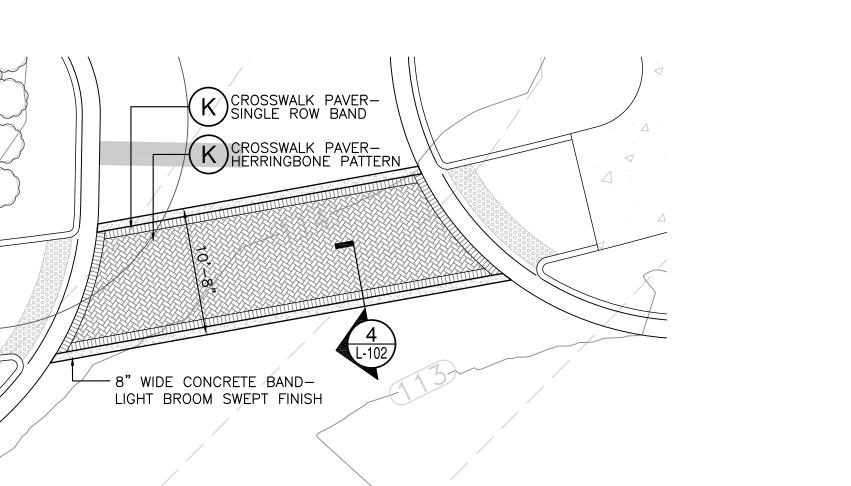








CROSSWALK PAVING DETAL



| DRAV CEM/                 | DATE<br>FEBRI<br>PROP<br>15-64  |
|---------------------------|---|
| Buford Davis + Associates | 2406 NW 43rd Street<br>Gainesville, Florida 32606<br>352.335.1896 tel<br>352.373.6407 fax |

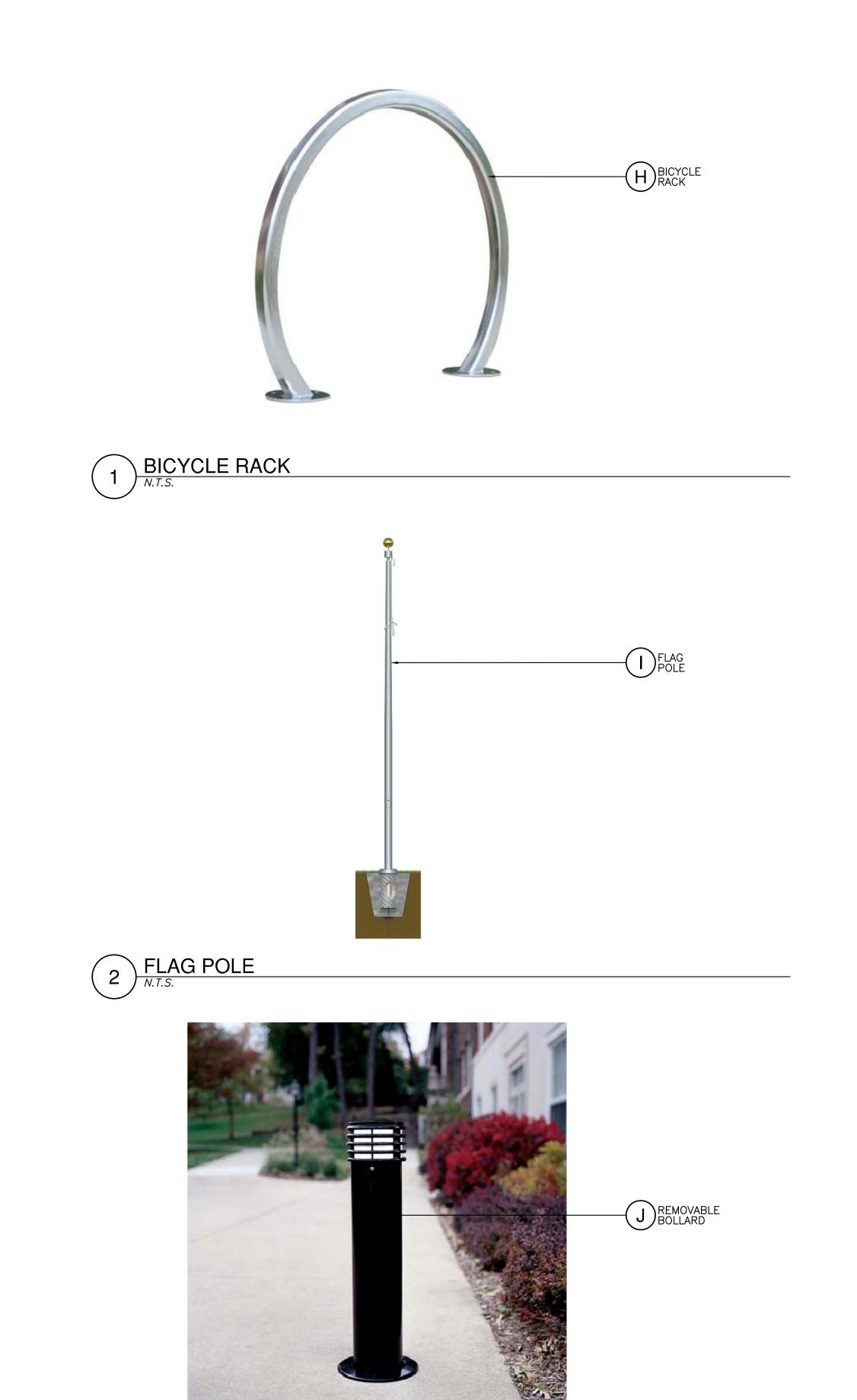
PZB SUBMITTAL

TI-PURPO

LANDSCAPE ARCHITECT'S SEAL

SHEET NO.

L-102



REMOVABLE BOLLARD

N.T.S.

| SYM | ITEM   | SPECIFICATIONS   |
|-----|--|--|
| A   | PICNIC PAVILION<br>(COUNT: 2)                    | TYPE: 16' X 24' HIPPED SHELTER BY RCP SHELTERS FINISH: POWDER COATED TUBE STEEL COLOR: STANDARD, BY ARCHITECT SOURCE: RCP SHELTERS, KYLE RITTER (772)288-0207 OR KYLE@RCPSHELTERS.COM  |
| B   | STANDARD PICNIC<br>TABLE<br>(COUNT: 2)           | TYPE: GV106G 6' TABLE BY WABASH VALLEY FINISH: POLY-TUF RECYCLED TOPS, POWDER COATED FRAME, SURFACE MOUNT COLOR: STANDARD, BY ARCHITECT SOURCE: SITE HORIZONS, EBBA BOWEN (407)637-9384 OR EBBABOWEN@GMAIL.COM   |
| C   | ADA PICNIC TABLE<br>(COUNT: 2)                   | TYPE: GV1115G 8' ADA TABLE BY WABASH VALLEY FINISH: POLY-TUF RECYCLED TOPS, POWDER COATED FRAME, SURFACE MOUNT COLOR: STANDARD, BY ARCHITECT SOURCE: SITE HORIZONS, EBBA BOWEN (407)637-9384 OR EBBABOWEN@GMAIL.COM  |
| D   | TRAIL LITTER RECEPTACLE AND DOME LID (COUNT: 2)  | TYPE: GV100G LITTER RECEPTACLE WITH DT100N DOME LID BY WABASH VALLEY FINISH: STEEL SUPPORTED, 100% RECYCLED MATERIAL PLANKS, SURFACE MOUNT COLOR: STANDARD, BY ARCHITECT SOURCE: SITE HORIZONS, EBBA BOWEN (407)637-9384 OR EBBABOWEN@GMAIL.COM  |
| E   | TRAIL BENCH<br>(COUNT: 3)                        | TYPE: GV306G 6' BENCH BY WABASH VALLEY, DIRECT BURY FINISH: POLY-TURF RECYCLED MATERIAL TOP AND BACK, POWDER COATED FRAME COLOR: STANDARD, BY ARCHITECT SOURCE: SITE HORIZONS, EBBA BOWEN (407)637-9384 OR EBBABOWEN@GMAIL.COM   |
| F   | MULTIPURPOSE<br>CENTER BENCH<br>(COUNT: 2)       | TYPE: GRB-6-HS-P 6' BENCH BY THOMAS STEELE TO MATCH THOSE ALONG MAIN STREET FINISH: POWDER COATED ALUMINUM FRAME AND STEEL BARS COLOR: STANDARD, BY ARCHITECT SOURCE: THOMAS STEELE. ANDREA CLAUSEN (608)849-1080 OR ACLAUSEN@THOMAS-STEELE.COM  |
| G   | MULTIPURPOSE CENTER LITTER RECEPTACLE (COUNT: 4) | TYPE: WNTR LITTER RECEPTACLE BY THOMAS STEELE TO MATCH THOSE ALONG MAIN STREET FINISH: POWDER COATED STEEL COLOR: STANDARD, BY ARCHITECT SOURCE: THOMAS STEELE. ANDREA CLAUSEN (608)849-1080 OR ACLAUSEN@THOMAS-STEELE.COM   |
| H   | BICYCLE RACK<br>(COUNT: 7)                       | TYPE: ORN-2-SF-P ORION BICYCLE RACK BY MADRAX, SURFACE MOUNT FINISH: POWDER COATED, ROUND TUBING COLOR: STANDARD, BY ARCHITECT SOURCE: MADRAX, STACEY HALDEMAN (608)849-1080 OR SHALDEMAN@MADRAX.COM   |
| 1   | FLAGPOLE<br>(COUNT: 3)                           | TYPE: IWW — INTERNAL WITH WINCH FLAGPOLES BY AMERICAN FLAGPOLE OR APPROVED EQUAL. ALL TO MEET 120 MPH WIND SPEED REQUIREMENTS WITHOUT FLAG.  FOR U.S. FLAG, TOTAL OF (1): MODEL NO. IWW35D81, 35' HT., 8" BUTT DIA. AND INCLUDE SPUN ALUMINUM COLLAR OPTION. INCLUDE (1) U.S. FLAG, 5'X8', NYLON, NO. FLAG—US—04  FOR OTHER FLAGS, TOTAL OF (2): MODEL NO. IWW30D71, 30' HT., 7" BUTT DIA. AND |
|     |  | INCLUDE SPUN ALUMINUM COLLAR OPTION. INCLUDE (1) STATE OF FLORIDA FLAG, 4'X6', NYLON, NO. FLAG-FLORIDA-03 INCLUDE (1) FLAG TO BE DETERMINED BY OWNER, 4'X6', NYLON  FINISH: STANDARD SATIN ALUMINUM COLOR: N/A SOURCE: FLORIDA SPECIALTY PRODUCTS, REGINA LAMBERT (321) 765-4975 OR APPROVED EQ.   |
| J   | REMOVABLE<br>BOLLARD<br>(COUNT: 2)               | TYPE: STEEL REMOVABLE BOLLARD, LANDSCAPE FORMS, ANNAPOLIS 6" X 33" REMOVABLE BOLLARD FINISH: POWDERCOAT WITH SOLAR LIGHTED BOLLARD TOP, INCLUDE BLACK SLEEVE COLOR: STANDARD, BY ARCHITECT SOURCE: LANDSCAPE FORMS, DAN CRANE (800)430-6202 EXT. 1306, WWW.LANDSCAPEFORMS.COM  |
| K   | CROSSWALK<br>PAVER                               | TYPE: 4"x8"x2-3/4" VEHICULAR GRADE CLAY BRICK PAVER BY PINE HALL BRICK FINISH: RUMBLED SERIES COLOR: TO BE SELECTED FROM STANDARD COLORS SOURCE: HARWOOD BRICK, STEVE BISCHKE (352) 377-1699   |

PZB SUBMITTAL

HARDSCAPE DETAILS

AND FINISH SCHEDULE

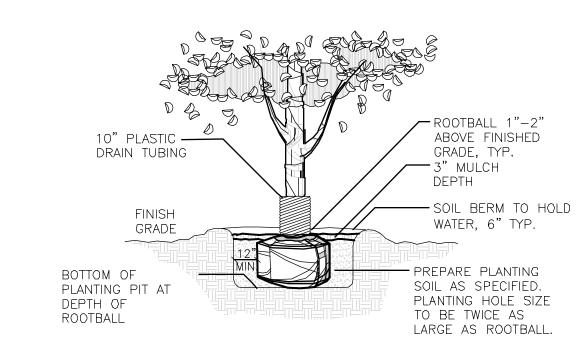
Buford Davis + Associates

CEM/JSY

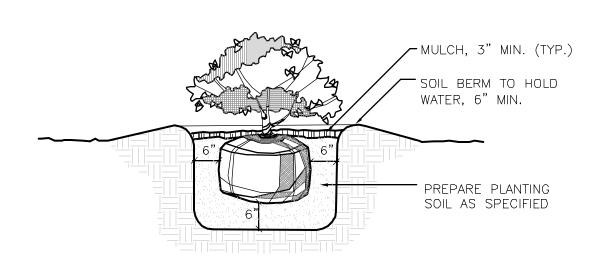
2406 NW 43rd Street
Gainesville, Florida 32606
352.335.1896 tel
PROPOSAL NO:
15-640

LANDSCAPE ARCHITECT'S SEAL

TREE PROTECTION DETAIL

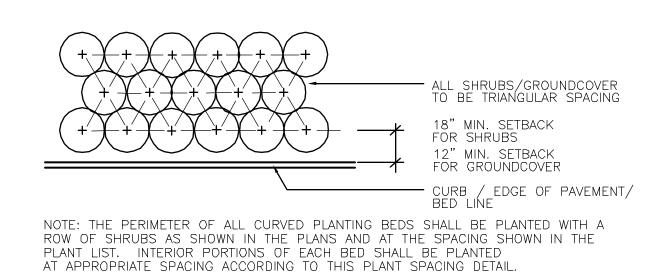


TREE PLANTING DETAIL



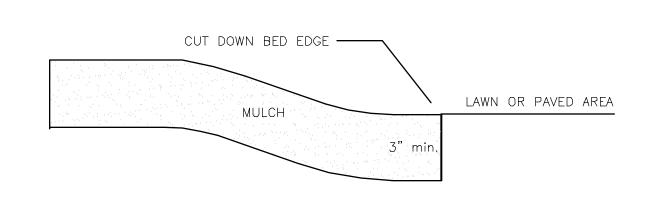
SHRUB PLANTING DETAIL

N.T.S.



4 PLANT SPACING DETAIL

N.T.S.



5 MULCHING DETAIL

N.T.S.

#### TREE PROTECTION NOTES

- 1. PROTECTIVE BARRICADES SHALL BE PLACED AROUND ALL REGULATED TREES AT A MINIMUM OF TWO-THIRDS OF THE AREA OF THE DRIPLINE OF THE TREE OR STAND OF TREES AT SIX FEET FROM THE TRUNK OF THE TREE, WHICHEVER IS
- 2. PROTECTIVE BARRICADES SHALL BE PLACED AT THE DRIPLINE OF ALL HERITAGE TREES, CHAMPION TREES, AND REGULATED PALM TREES.
- 3. PROTECTIVE BARRICADES SHALL BE PLACED AROUND ALL TREES TO BE RETAINED ON THE SITE AND SHALL REMAIN IN
- PLACE UNTIL SITE CLEARING AND CONSTRUCTION ACTIVITIES ARE COMPLETE, EXCEPT WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE PROTECTED AREA. 4. IF LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE PROTECTED AREA, THEN THE PROTECTIVE

BARRICADES SHALL ONLY BE REMOVED WHEN ACTIVITIES ARE OCCURRING. PROTECTIVE BARRICADES SHALL BE REPLACED

- 5. PROTECTIVE BARRICADES SHALL BE AT LEAST FOUR FEET HIGH AND CONSTRUCTED OF EITHER WOODEN CORNER POSTS AT LEAST TWO INCHES BY FOUR FEET BURIED ONE FOOT DEEP WITH AT LEAST TWO COURSES OF WOODEN SIDE SLATS AT LEAST ONE INCH BY FOUR FEET WITH COLORED FLAGGING OR COLORED MESH CONSTRUCTION FENCING ATTACHED OR CONSTRUCTED OF ONE INCH ANGLE IRON CORNER POSTS WITH BRIGHTLY COLORED MESH CONSTRUCTION FENCING
- 6. NO ATTACHMENTS SHALL BE SECURED TO TREES DESIGNATED TO REMAIN ON SITE.

UPON COMPLETION OF THE ACTIVITIES WITHIN THE PROTECTED AREA.

- 7. A THREE-INCH LAYER OF MULCH SHALL BE APPLIED OVER THE SURFACE OF ANY EXPOSED ROOTS OF RETAINED REGULATED, HERITAGE, AND CHAMPION TREES AND KEPT WET DURING THE SITE CLEARING AND CONSTRUCTION PHASES.
- 8. DURING THE SITE CLEARING OR CONSTRUCTION PHASES, THE FOLLOWING ACTIVITIES SHALL BE PROHIBITED WITHIN THE PROTECTIVE AREA UNLESS APPROVED - THE CLEARING OF VEGETATION EXCEPT BY HAND;
  - THE COMPACTION, FILLING, OR REMOVAL OF SOIL DEPOSITS;
  - THE PLACEMENT OF DEBRIS;
  - THE PLACEMENT OR DUMPING OF SOLVENTS OR OTHER CHEMICALS;
  - THE PLACEMENT OR STORAGE OF CONSTRUCTION MATERIALS, MACHINERY OR OTHER EQUIPMENT OF ANY KIND; AND
  - THE USE OF CONCRETE, ASPHALT, OR OTHER PAVING MATERIALS.
- ANY RETAINED OR RELOCATED TREE SHALL BE REPLACED IF THE TREE DIES WITHIN ONE YEAR AFTER SITE CLEARING AND CONSTRUCTION.
- 10. ANY ROOT PRUNING AND/OR PRUNING OF RETAINED REGULATED, HERITAGE, AND CHAMPION TREES DURING THE SITE CLEARING OR CONSTRUCTION PHASES SHALL BE DONE IN ACCORDANCE WITH ARBORICULTURAL

#### GENERAL PLANTING NOTES

- 1. ALL ASPHALT, LIMEROCK, AND CONSTRUCTION DEBRIS TO BE REMOVED FROM PLANTING BEDS AND AREAS TO BE SODDED PRIOR TO LANDSCAPE INSTALLATION. PLANTING DEPTH OF SOIL IN SUCH AREAS SHOULD BE AT LEAST 3'. IF FILL MUST BE ADDED, IT MUST BE FLORIDA CLEAN DEEP FILL (FREE OF WEED SEEDS) WITH pH 5.5-6.5.
- 2. CANOPY TREES SHALL BE A MINIMUM OF EIGHT (8) FEET IN HEIGHT AND ORNAMENTAL OR UNDERSTORY TREES SHALL HAVE A MINIMUM CALIPER OF ONE AND A HALF (1.5) INCHES, UNLESS OTHERWISE SPECIFIED B BY THE LANDSCAPE ARCHITECT.
- 3. ALL TREES TO BE PLANTED 1"-2" ABOVE FINISHED GRADE.
- 4. ALL LANDSCAPED AREAS TO BE MULCHED WITH 3" THICKNESS OF MULCH. PINE BARK 'MINI NUGGET' MULCH SHALL BE USED IN ALL AREAS, EXCEPT RETENTION AREAS. PINE STRAW MULCH SHALL BE USED IN
- 5. LEADER SHOOTS AND MAIN STRUCTURAL LIMBS OF TREES WILL NOT BE TOPPED OR PRUNED. TREES TO BE STAKED AS NEEDED, GUYLINES TO BE NON-SYNTHETIC BIODEGRADABLE MATERIAL.
- 6. ALL PLANT MATERIAL TO BE FLORIDA NO.1 OR BETTER, GRADED IN ACCORDANCE WITH GRADES AND
- STANDARDS FOR NURSERY PLANTS PUBLISHED BY THE STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE. 7. ALL DISTURBED AND UNPAVED AREAS TO BE GRASSED WITH NOXIOUS WEED AND TROPICAL SODA APPLE FREE SOD OR SEEDED AND MULCHED. SEE CIVIL SITE PLANS FOR ADDITIONAL RELATED INFORMATION. 8. SHRUBS AROUND ABOVE GROUND GAS TANK TO BE PLANTED IN FUTURE PHASE.
- 9. SELECTIVELY CLEAR AREAS AROUND EXISTING TREES TO REMAIN IN AREAS GENERALLY INDICATED ON PLANS. REFER TO SPECIFICATION SECTION 311300 SELECTIVE TREE AND VEGETATION REMOVAL AND TRIMMING.

#### 30% LANDSCAPED AREA REQUIREMENT

Per City of Alachua Comprehensive Plan Policy 2.4.1, which states that the minimum landscaped area must be 30% of the development site.

| OTAL PROPOSED LANDSCAPED AREA |  |  |  |
|-------------------------------|--|--|--|

### 10% OPEN SPACE AREA REQUIREMENT

CITY OF ALACHUA LDR SECTION 6.7.3 (A) STATES THAT THE MINIMUM OPEN SPACE SET—ASIDE SHALL BE 10% OF THE DEVELOPMENT SITE. THIS REQUIREMENT IS MET BY THE CALCULATIONS FOR 30% LANDSCAPE, SHOWN WITHIN CHART ON THIS SHEET, WHICH INCLUDE LANDSCAPED BUFFERS, BASINS, AND OTHER LANDSCAPED

#### REQUIRED TREE MITIGATION

| MITIGATION RE           | QUIRED:   |
|-------------------------|---|
|                         | INCH TREE MITIGATION: 46" REPLACEMENT TREE MITIGATION: 12 TREES TO BE REPLACED = 1.5" EACH (CODE MINIMUM SIZE) 64" TOTAL REPLACEMENT INCHES   |
| PER 6.2.1(<br>NOTE: ALI | 50% OF THE TOTAL REPLACEMENT TREES SHALL BE CANOPY TREES AND AT LEAST 75% SHALL BE CHOSEN FROM RECOMMENDED TREE LIST<br>(D)(4)(b)<br>_ TREES TO BE COUNTED TOWARDS MITIGATION REPLACEMENT TREES ARE MARKED 'M' ON PLAN. TREES USED FOR MITIGATION ARE SEPARAT<br>IN ADDITION TO MINIMUM LANDSCAPE REQUIREMENTS. |
|                         | ROVIDED: " CALIPER 30 GALLON TREES PROVIDED = 26 TREES PROVIDED, ALL LIVE OAKS 50% REQUIREMENT FOR CANOPY TREES   |

### SITE LANDSCAPE CALCULATIONS Section 6.2.2(D)(1)(b)

Note: See sheet L—202 for Tree Preservation Credit Chart

| DESCRIPTION   | TREE REQUIREMENTS   | TREES PROVIDED   |  |  |
|---|---|--|--|--|
| PRIMARY SIDE CANOPY TREES   | 4 Trees per Acre<br>4 Trees x 30 Acres = 120 Trees required   | 84 Trees Provided<br>36 Tree Credits Used                                  |  |  |
| SIDE AND REAR CANOPY TREES  | 3 Trees per Acre per side and rear  |  |  |  |
| WEST SIDE CANOPY TREES  | 3 Trees x 30 Acres = 90 Trees   | 87 Trees Provided, 3 Credits Used  |  |  |
| EAST SIDE CANOPY TREES  | 3 Trees x 30 Acres = 90 Trees   | 34 Trees Provided, 56 Credits Used 26 Trees Provided, 64 Credits Used      |  |  |
| REAR SIDE CANOPY TREES  | 3 Trees x 30 Acres = 90 Trees   |  |  |  |
|   | 8 Trees per Acre<br>8 Trees x 30 Acres = 240 Trees  |  |  |  |
| SITE UNDERSTORY TREES   | 50% in Front = 120 Trees  | 47 Trees Provided, 73 Credits Used   |  |  |
| SITE UNDERSTORY TREES   | 25% on West Side = 60 Trees   | 43 Trees Provided, 17 Credits Used   |  |  |
|   | 25% on East Side = 60 Trees   | 14 Trees Provided, 46 Credits Used   |  |  |
| BUILDING FACADE  *All trees to be counted towards building facade trees are marked 'B' on plan. | 4 Trees per 100 L.F./<br>Shrub line along all facades<br>875 L.F. of facade<br>8.75 X 4 = 35 Trees required | 35 Trees Provided, 0 Credits Used<br>Shrub line along all facades provided |  |  |

# PERIMETER BUFFER LANDSCAPE REQUIREMENTS Section 6.2.2(D)(3) Note: Public and Institutional Use (Parks and Open Areas) — Buffers are not required.

### PARKING BUFFER LANDSCAPE REQUIREMENTS

Sec. 6.2.2(D)(2)(b): 4 Canopy & 2 Understory trees per 100 lin. ft.

| N | ote: See sheet L-202 for Iree | Preservation Credit Chart  |  |
|---|-------------------------------|----------------------------|--|
|   | PARKING PERIMETER LENGTH      | TREE & SHRUB REQUIREMENTS  | TREES & SHRUBS PROVIDED                      |
|   | Parking Perimeter = 544 L.F.  | 22 Canopy Trees            | 22 Canopy Trees Provided, O Tree Credits     |
|   |                               | 11 Understory Trees        | 11 Understory Tree Provided, 0 Tree Credits  |
|   |                               | 33 Trees Required          | 33 Total Trees Provided, 0 Tree Credits Used |
|   |                               | Continuous Evergreen Hedge | Continuous Evergreen Hedge Provided          |

#### INTERIOR PARKING AREA LANDSCAPE REQUIREMENTS Sec. 6.2.2(D)(2)(a): 1 Canopy/Understory tree for every 2,000 S.F.; 10 shrubs for every tree.

| PROPOSED PARKING AREA  34,667 S.F./2000 S.F. = 18 Trees required  18 Trees Provided, 0 Tree Credits |              | 10 (1 ) 10 (1 1 ) 100 1               | 190                                     |
|---|--------------|---------------------------------------|---|
| PROPOSED PARKING 34,667 S.F.  | AREA         | 34,667 S.F./2000 S.F. = 18 Trees      | uired 18 Trees Provided, 0 Tree Credits |
|   |              | · · · · · · · · · · · · · · · · · · · |   |
| PARKING AREA TREE & SHRUB REQUIREMENTS TREES & SHRUBS PROVIDED                                      | PARKING AREA | PARKING AREA TREE & SHRUB REQUIRE     | NTS TREES & SHRUBS PROVIDED             |

#### IRRIGATION

SEE SHEET L-302 THROUGH L-307 FOR AUTOMATIC IRRIGATION SYSTEM IN ACCORDANCE WITH CITY OF ALACHUA LDR SECTION 6.2.2(D)(6)(b)(vi).

#### LEGEND



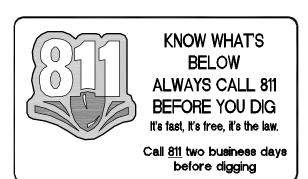


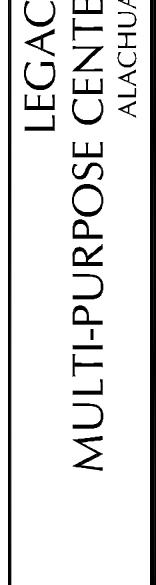




#### PLANT SCHEDULE

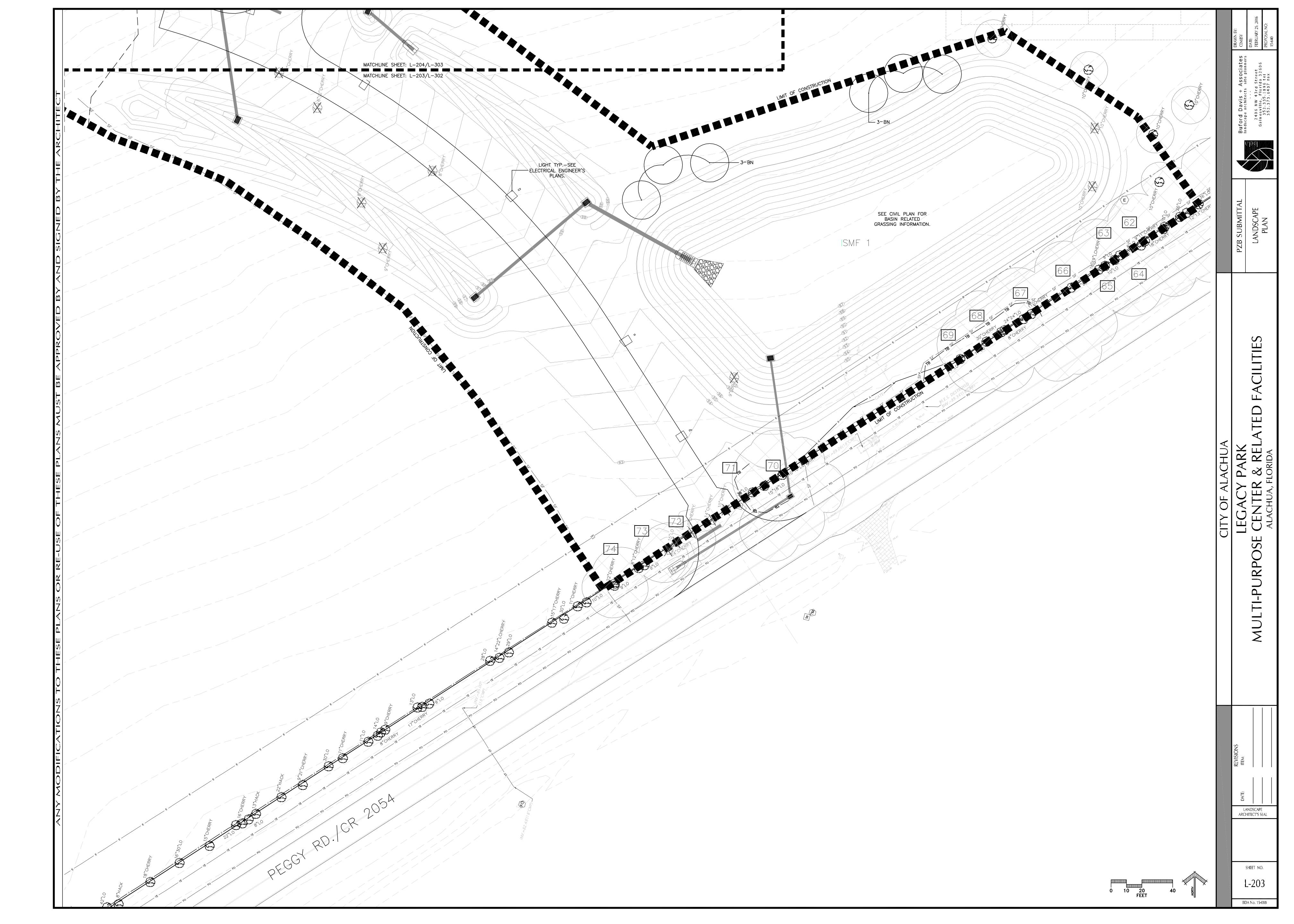
| <u>TREES</u><br>AR   | <u>QTY</u><br>9  | BOTANICAL NAME<br>ACER RUBRUM 'FLORIDA FLAME'           | COMMON NAME<br>FLORIDA FLAME RED MAPLE    | <u>SIZE</u><br>15 GAL., 9' HT., 34" SPR., 1.5" CAL.   |
|----------------------|------------------|---|---|---|
| BN                   | 6                | BETULA NIGRA 'DURA HEAT'                                | DURA HEAT RIVER BIRCH                     | 15 GAL., 9' HT., 34" SPR., 1.5" CAL.                  |
| FG                   | 20               | FRAXINUS PENNSYLVANICA                                  | GREEN ASH                                 | 15 GAL., 9' HT., 34" SPR., 1.5" CAL.                  |
| LIN                  | 51               | LAGERSTROEMIA INDICA 'NATCHEZ'                          | NATCHEZ CRAPE MYRTLE                      | 15 GAL., 8' HT., 30" SPR., 1.5" CAL., STANDARD        |
| LT                   | 12               | LIRIODENDRON TULIPIFERA                                 | TULIP TREE                                | 15 GAL., 9' HT., 34" SPR., 1.5" CAL.                  |
| LTL                  | 8                | LIRIODENDRON TULIPIFERA                                 | TULIP TREE                                | 30 GAL., 11' HT., 3' SPR., 2.5" CAL.                  |
| MG                   | 22               | MAGNOLIA GRANDIFLORA 'BRACKEN'S BROWN BEAUTY'           | BRACKEN'S BROWN BEAUTY MAGNOLIA           | 15 GAL., 9' HT., 2' SPR., 1.5" CAL., FULL TO GROUND   |
| MGL                  | 5                | MAGNOLIA GRANDIFLORA 'BRACKEN'S BROWN BEAUTY'           | BRACKEN'S BROWN BEAUTY MAGNOLIA           | 30 GAL., 12' HT., 42" SPR., 2.5" CAL., FULL TO GROUND |
| QV                   | 21               | QUERCUS VIRGINIANA                                      | SOUTHERN LIVE OAK                         | 15 GAL., 9' HT., 42" SPR., 1.5" CAL.                  |
| QVB                  | 26               | QUERCUS VIRGINIANA 'BOARDWALK'                          | BOARDWALK LIVE OAK                        | 30 GAL., 12' HT., 54" SPR., 2.5" CAL.                 |
| QVL                  | 4                | QUERCUS VIRGINIANA                                      | SOUTHERN LIVE OAK                         | 30 GAL., 12' HT., 54" SPR., 2.5" CAL.                 |
| TD                   | 12               | TAXODIUM DISTICHUM                                      | BALD CYPRESS                              | 15 GAL, 9' HT, 2' SPR, 1.5" CAL                       |
| UPE                  | 19               | ULMUS PARVIFOLIA 'ALLEE'                                | ALLEE ELM                                 | 15 GAL, 8' HT, 30" SPR, 1.5" CAL                      |
| <u>SHRUBS</u><br>CN  | <u>QTY</u><br>19 | BOTANICAL NAME<br>CAMELLIA SASANQUA 'NORTHERN EXPOSURE' | COMMON NAME<br>NORTHERN EXPOSURE CAMELLIA | <u>SIZE</u><br>3 GAL., 18" HT X 12" SPR.              |
| IDB                  | 225              | ILEX CORNUTA 'DWARF BURFORDII'                          | DWARF BURFORD HOLLY                       | 3 GAL., 24" HT., X 16" SPR.                           |
| LL                   | 124              | LOROPETALUM CHINENSE 'PLUM'                             | PLUM LOROPETALUM                          | 3 GAL., 24" HT. X 12" SPR.                            |
| РМ                   | 21               | PODOCARPUS MACROPHYLLUS                                 | PODOCARPUS                                | 15 GAL., 42" HT. X 24" SPR.                           |
| RI                   | 216              | RHAPHIOLEPIS INDICA                                     | INDIAN HAWTHORN                           | 3 GAL., 15" HT. X 15" SPR.                            |
| VOS                  | 61               | VIBURNUM OBOVATUM 'MRS. SHILLER'S DELIGHT'              | MRS. SHILLERS DELIGHT VIBURNUM            | 3 GAL., 18" HT X 12" SPR.                             |
| GROUND COVERS<br>LEM | <u>QTY</u><br>68 | BOTANICAL NAME<br>LIRIOPE MUSCARI 'EMERALD GODDESS'     | COMMON NAME<br>EMERALD GODDESS LIRIOPE    | SIZE<br>1 GAL., FULL                                  |
| SOD/SEED<br>SOD      |                  | BOTANICAL NAME PASPALUM NOTATUM 'ARGENTINE'             | COMMON NAME<br>BAHIA GRASS                | <u>SIZE</u><br>WEED FREE AND SAND GROWN SOD           |

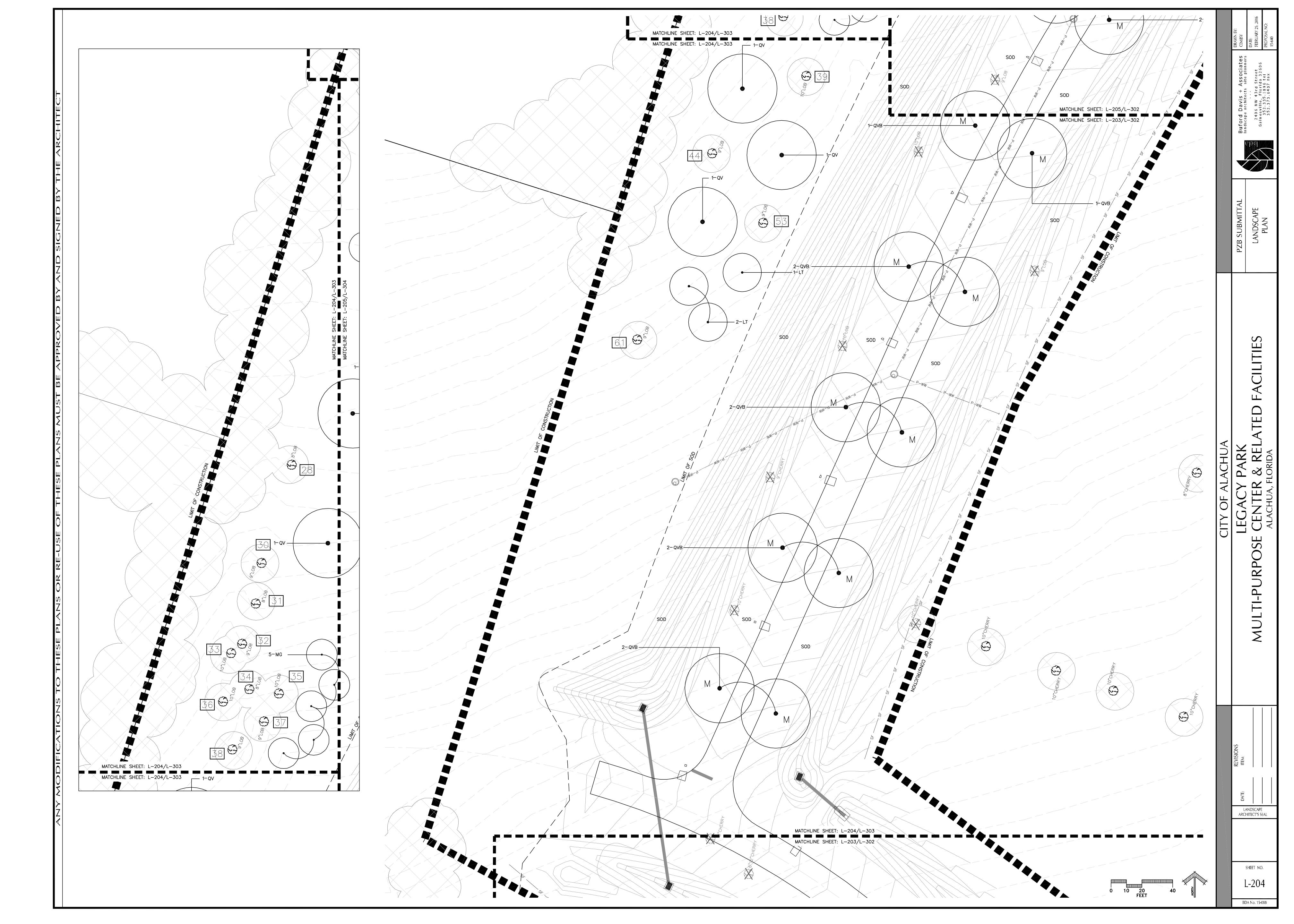


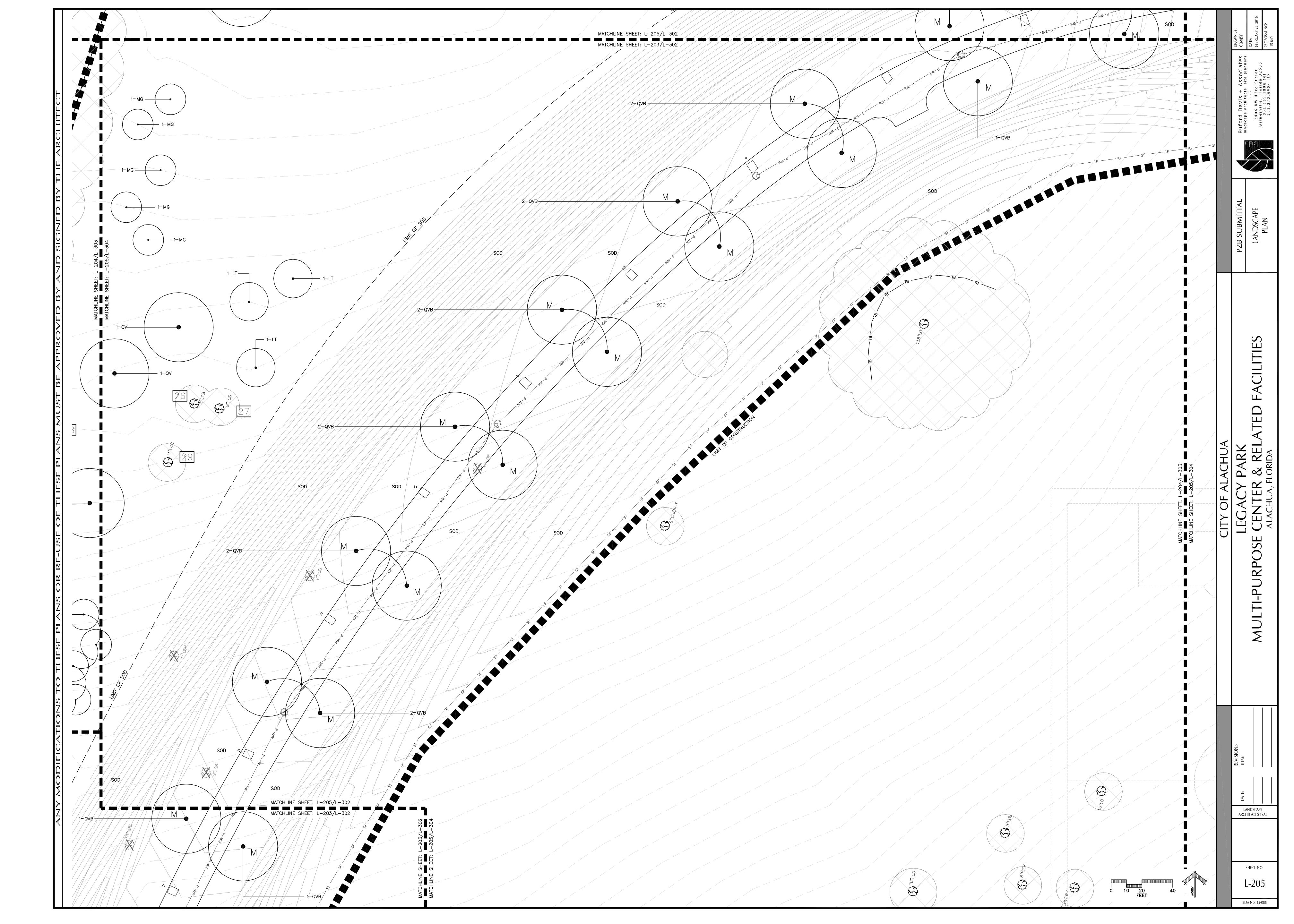


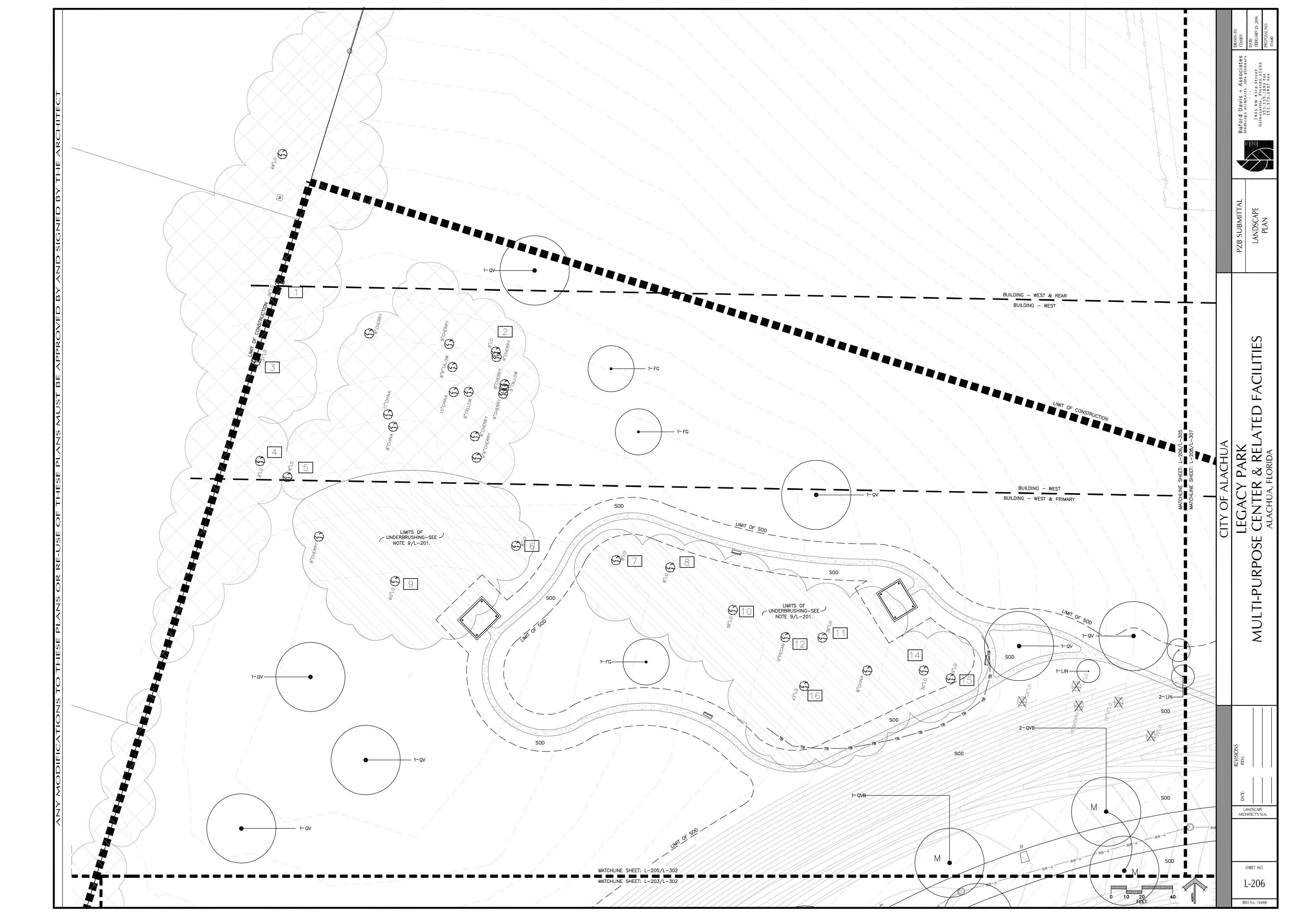
LANDSCAPE ARCHITECT'S SEAL

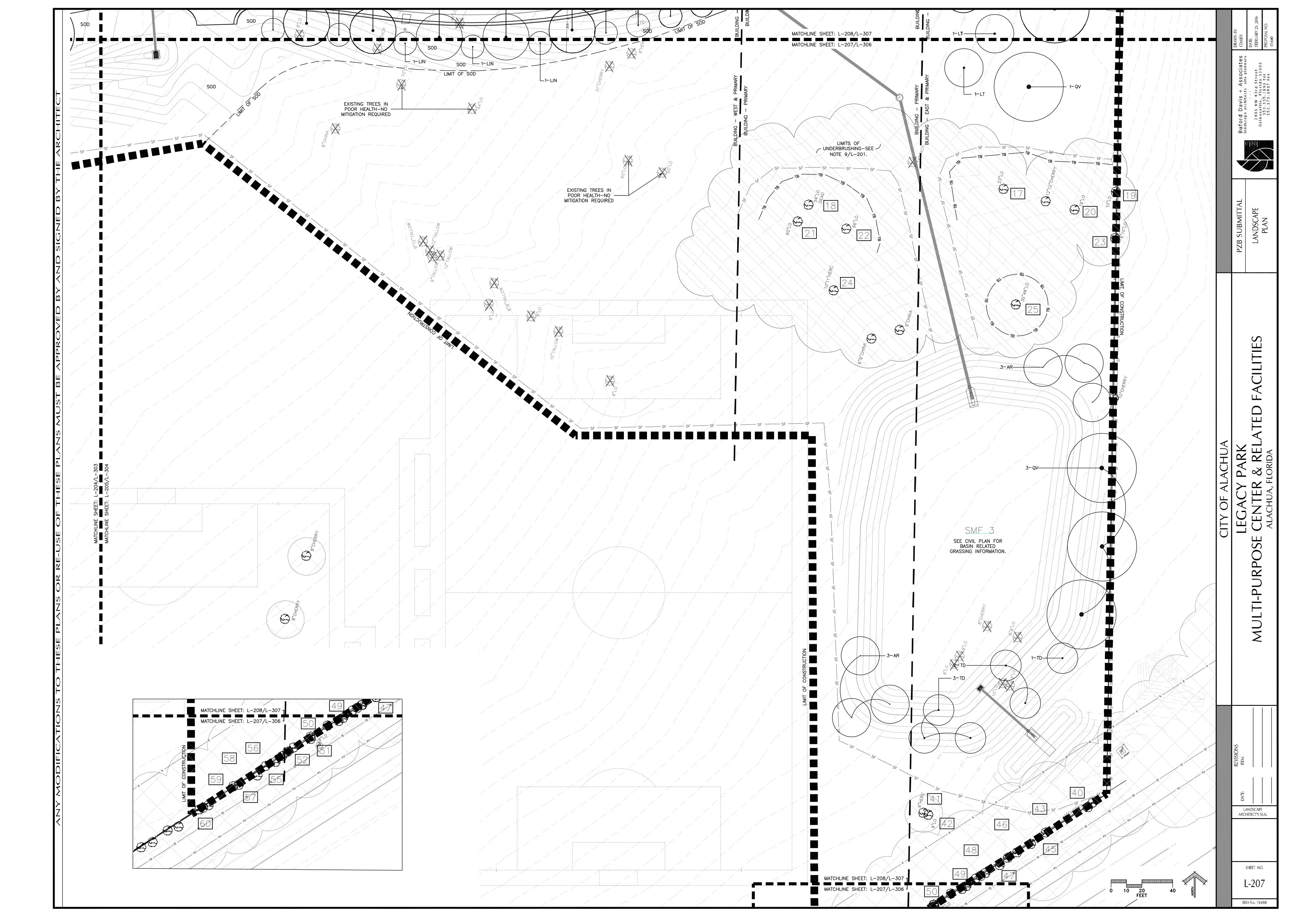
| 56       LIVE OAK       11"       2         57       LIVE OAK       20"       4         58       LIVE OAK       10"       2         59       LIVE OAK       22"       4         60       LIVE OAK       18",18"       8         61       LOBLOLLY PINE       9"       2         62       LIVE OAK       8"       2         63       LIVE OAK       13"       3         64       LIVE OAK       9"       2         65       LIVE OAK       10"       2         66       LIVE OAK       11"       2         67       LIVE OAK       24",24"       10         68       LIVE OAK       11"       2         69       LIVE OAK       24"       8         70       LIVE OAK       15",18"       7 | 30 LOBLOLLY PINE 9" 2  31 LOBLOLLY PINE 8" 2  32 LOBLOLLY PINE 9" 2  33 LOBLOLLY PINE 10" 2  34 LOBLOLLY PINE 8" 2  35 LOBLOLLY PINE 10" 2  36 LOBLOLLY PINE 10" 2  37 LOBLOLLY PINE 9" 2  38 LOBLOLLY PINE 9" 2  39 LOBLOLLY PINE 9" 2  40 LIVE OAK 22" 4  41 HERCULES CLUB 9" 2  42 LIVE OAK 21",24" 9  44 LOBLOLLY PINE 9" 2  45 LIVE OAK 12" 3  47 LIVE OAK 22" 4  48 LIVE OAK 22" 4  48 LIVE OAK 12" 3  47 LIVE OAK 12" 3  47 LIVE OAK 15",42" 11  50 LIVE OAK 15",42" 11  50 LIVE OAK 15" 3  51 LOBLOLLY PINE 18" 4  52 LIVE OAK 9" 2  54 LIVE OAK 9" 2  55 LIVE OAK 9" 2   | 9 LIVE OAK 60" 9  10 LIVE OAK 36" 7  11 LIVE OAK 36" 7  12 PECAN 9" 2  13 LIVE OAK 39" 7  14 LIVE OAK 30" 6  15 LIVE OAK 9" 2  16 LIVE OAK 43" 8  17 LIVE OAK 23" 4  18 LIVE OAK 54" 9  19 LIVE OAK 10" 2  20 LIVE OAK 19" 4  21 LIVE OAK 60" 9  22 LIVE OAK 66" 9  23 LIVE OAK 66" 9  24 HERCULES CLUB 10",11" 4  25 LIVE OAK 30",48" 15  26 LOBLOLLY PINE 8" 2  29 LOBLOLLY PINE 8" 2  29 LOBLOLLY PINE 8" 2  29 LOBLOLLY PINE 11" 2 | TREE PRESERVATION CREDITS  NOTE: TREE NUMBERS RELATE TO NUMBERS SHOWN ON PLEWITHIN SQUARES NEXT TO EXISTING TREE.  TREE NUMBER  1 LIVE OAK 36" 7  2 LIVE OAK 9" 2  3 LIVE OAK 31" 6  4 LIVE OAK 9" 2  5 LIVE OAK 8" 2  6 LIVE OAK 8" 2  7 LIVE OAK 8" 2  8 LIVE OAK 8" 2 |
|--|---|--|--|
| L-203<br>L-302   | L-204<br>L-303<br>L-304<br>L-304<br>L-305<br>L-306<br>L-307<br>L-306<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307<br>L-307 | L-206<br>L-305   | IREE PRESERVATION CREDIT   |
| NOT TO SCALE   | x   |  |  |
| LANDSCAPE ARCHITECT'S SEAL  SHEET NO.  L-202   | CITY OF ALACHUA  LEGACY PARK  MULTI-PURPOSE CENTER & RELATEI  ALACHUA, FLORIDA  | PZB SUBMITTAL LANDSCAPE AND IRRIGATION KEY SHEET   | Buford Davis + Associates landscape architects site planners   |

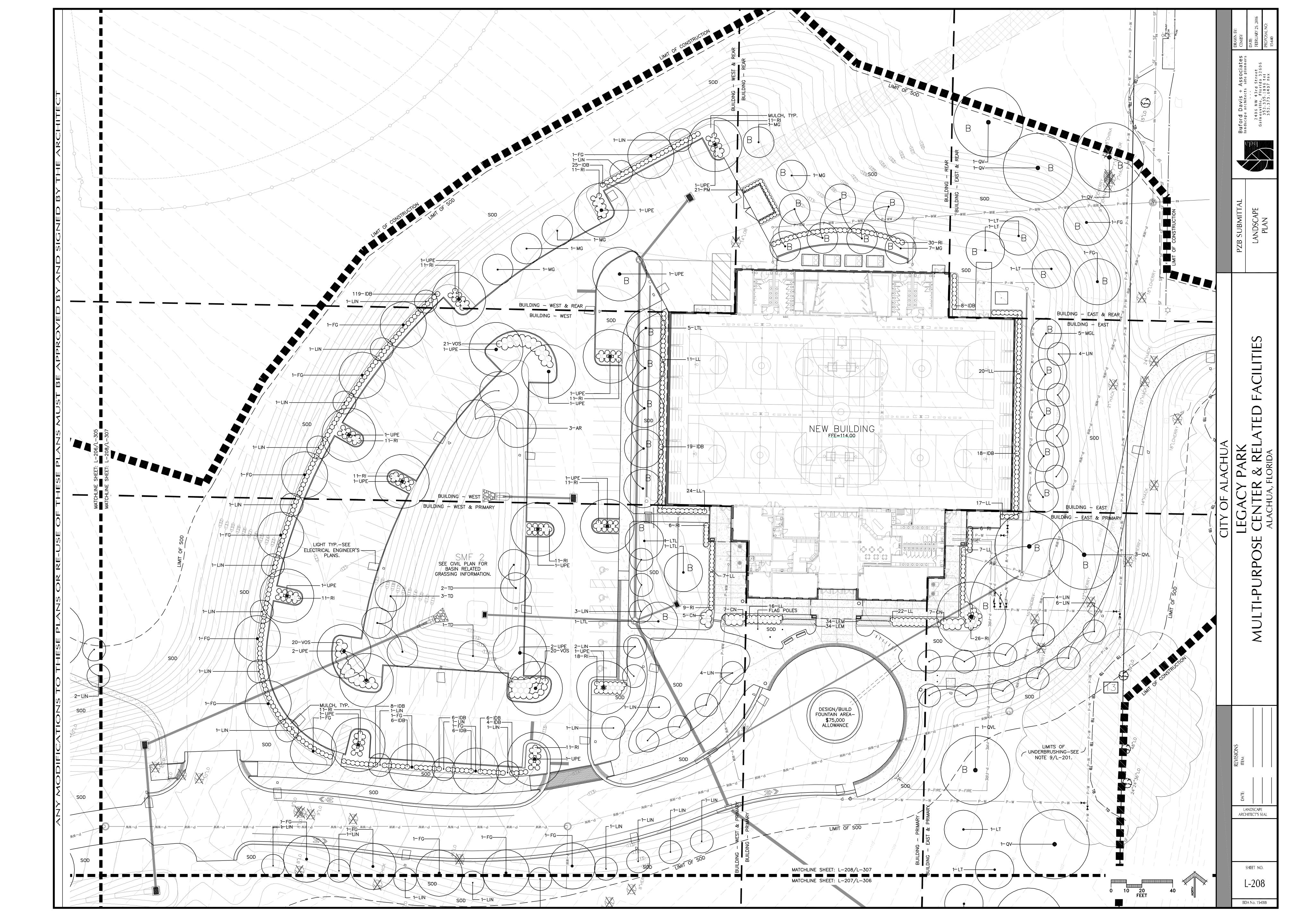


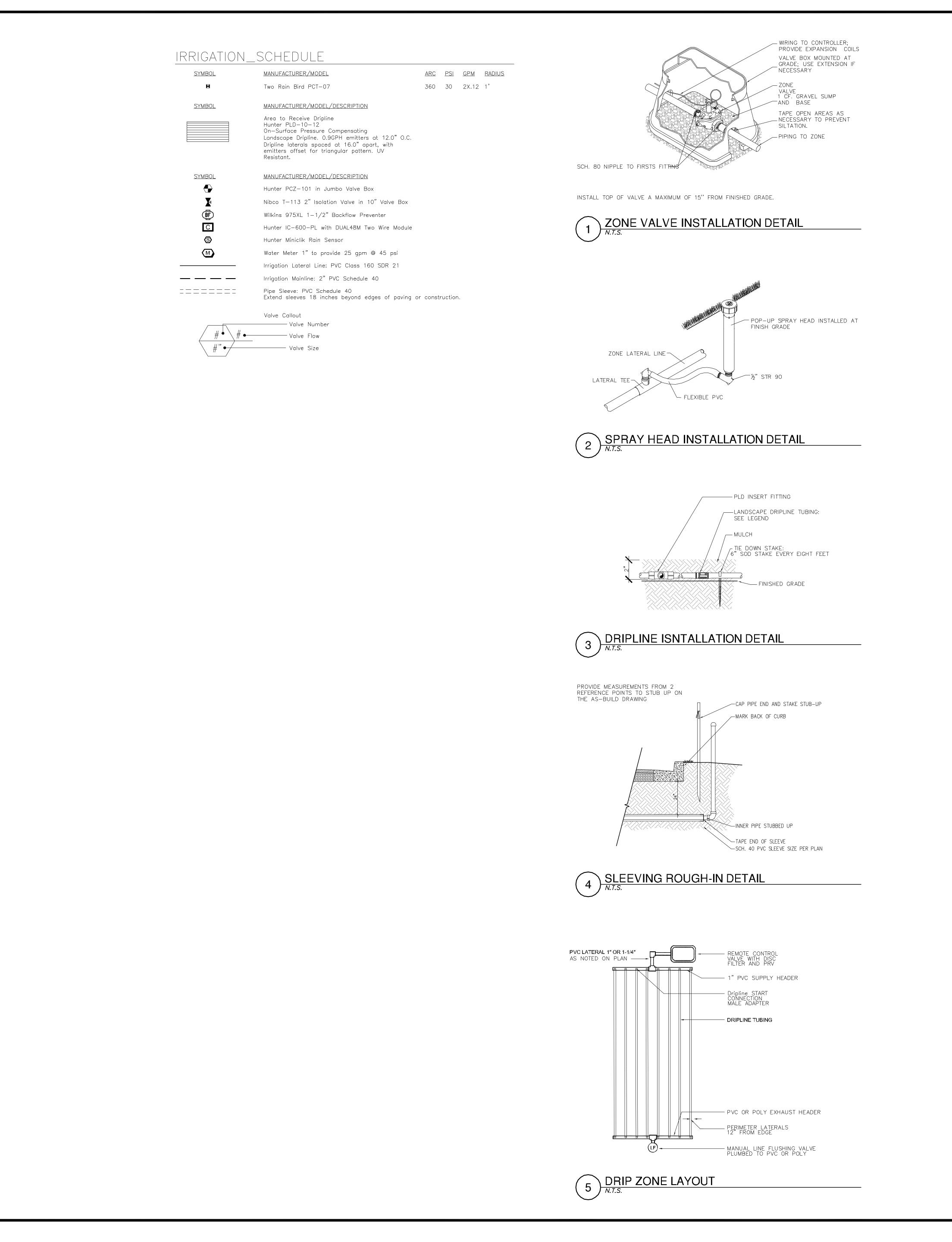




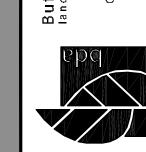


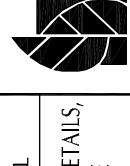








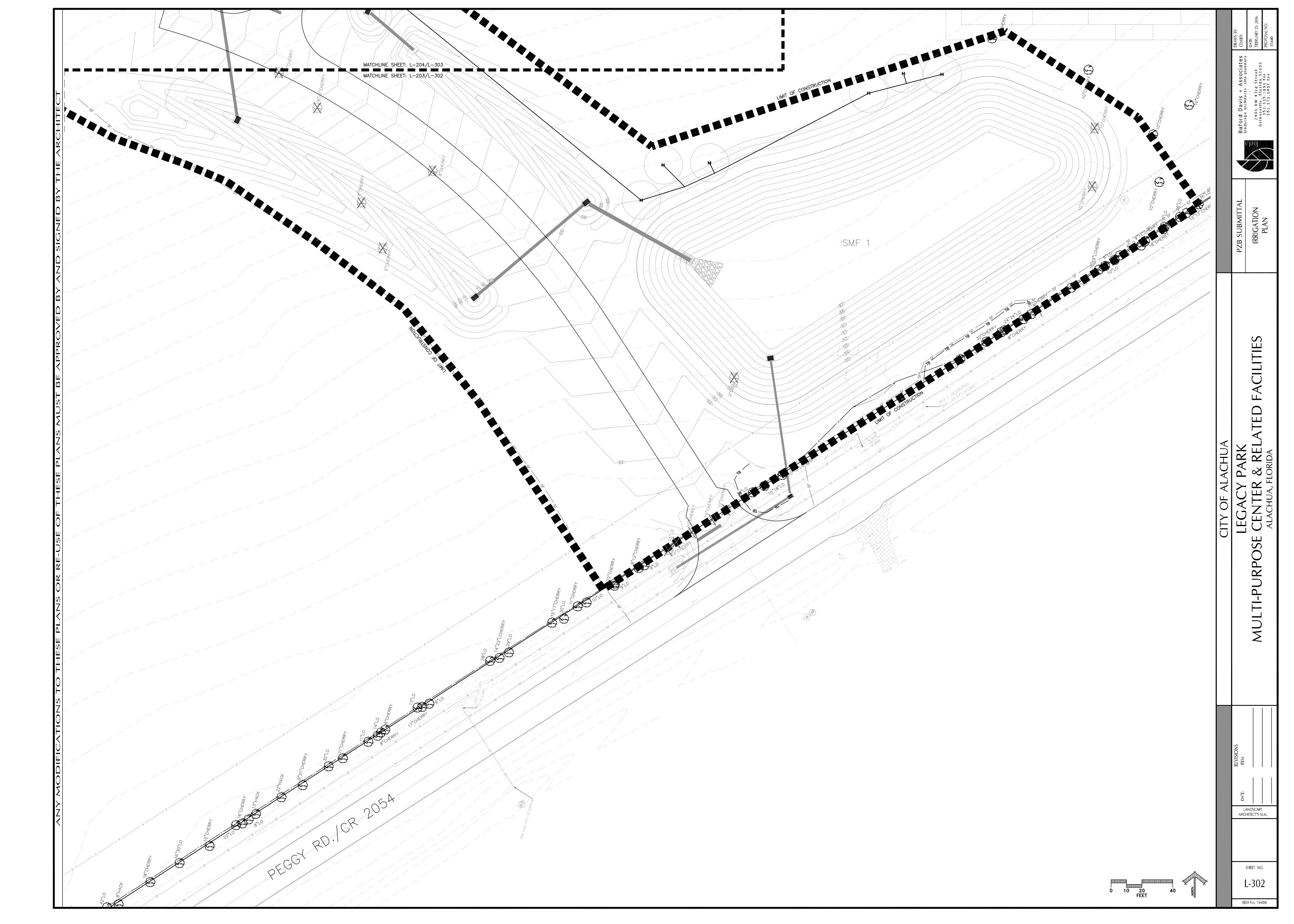


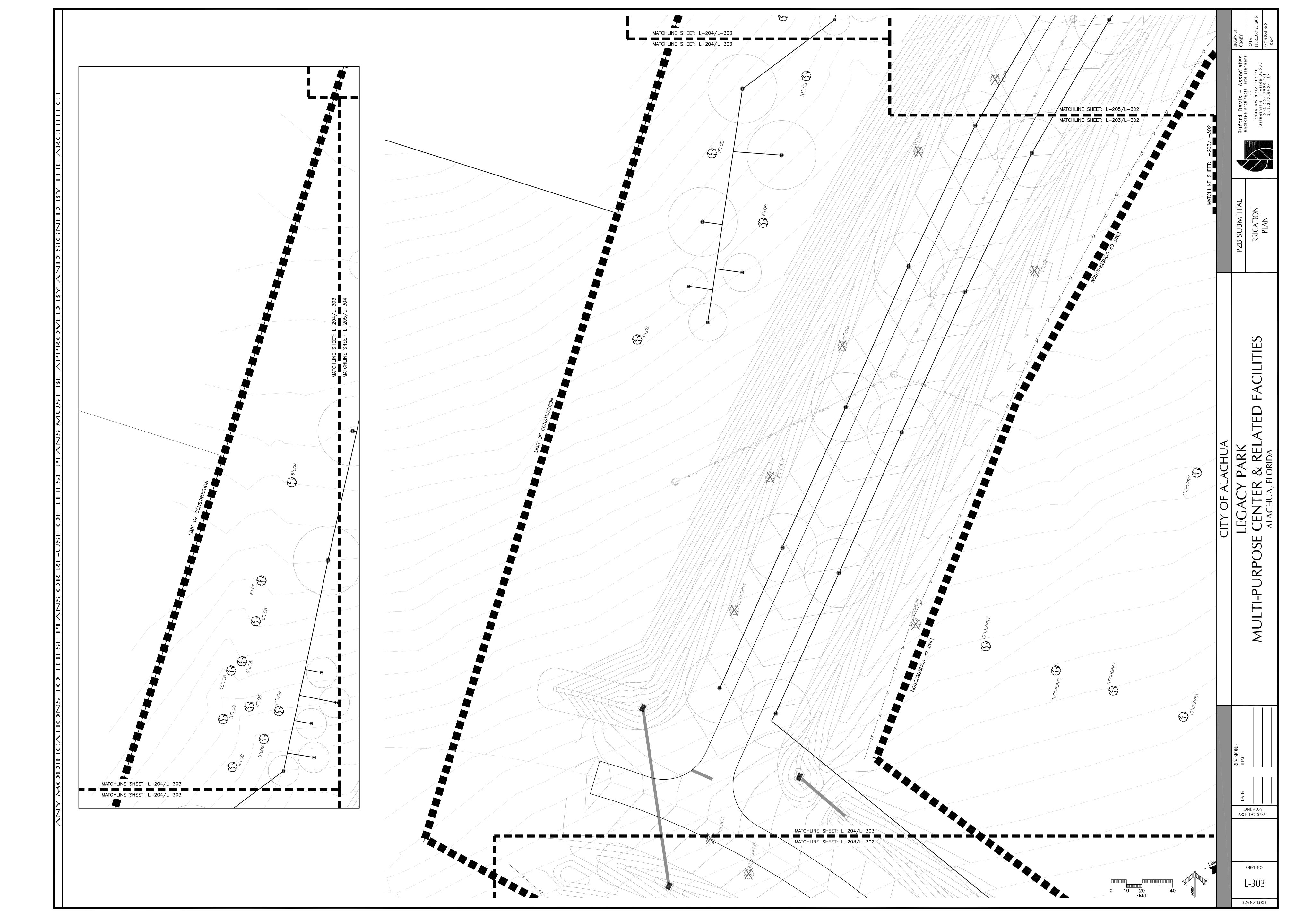


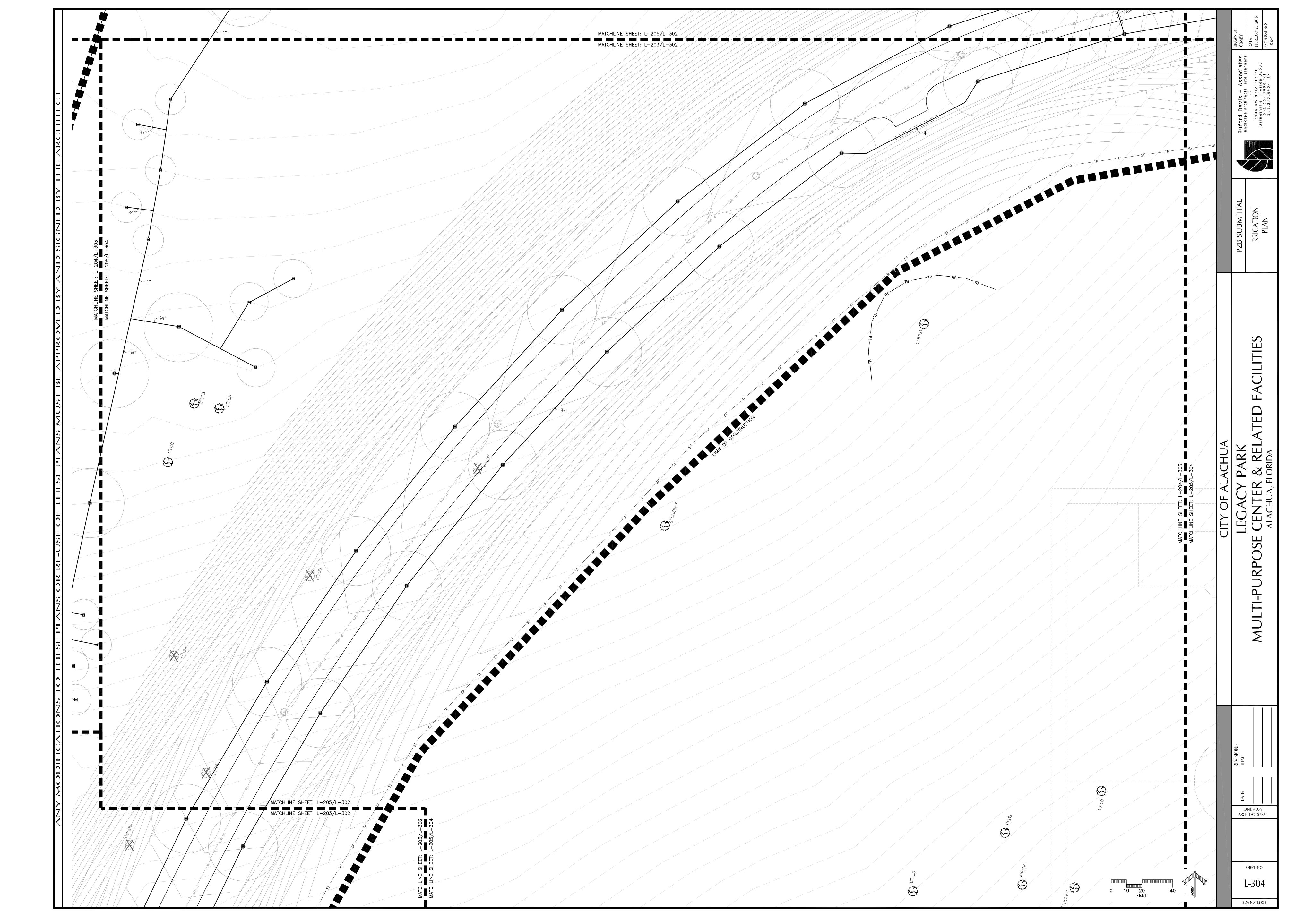
URP 4

LANDSCAPE ARCHITECT'S SEAL

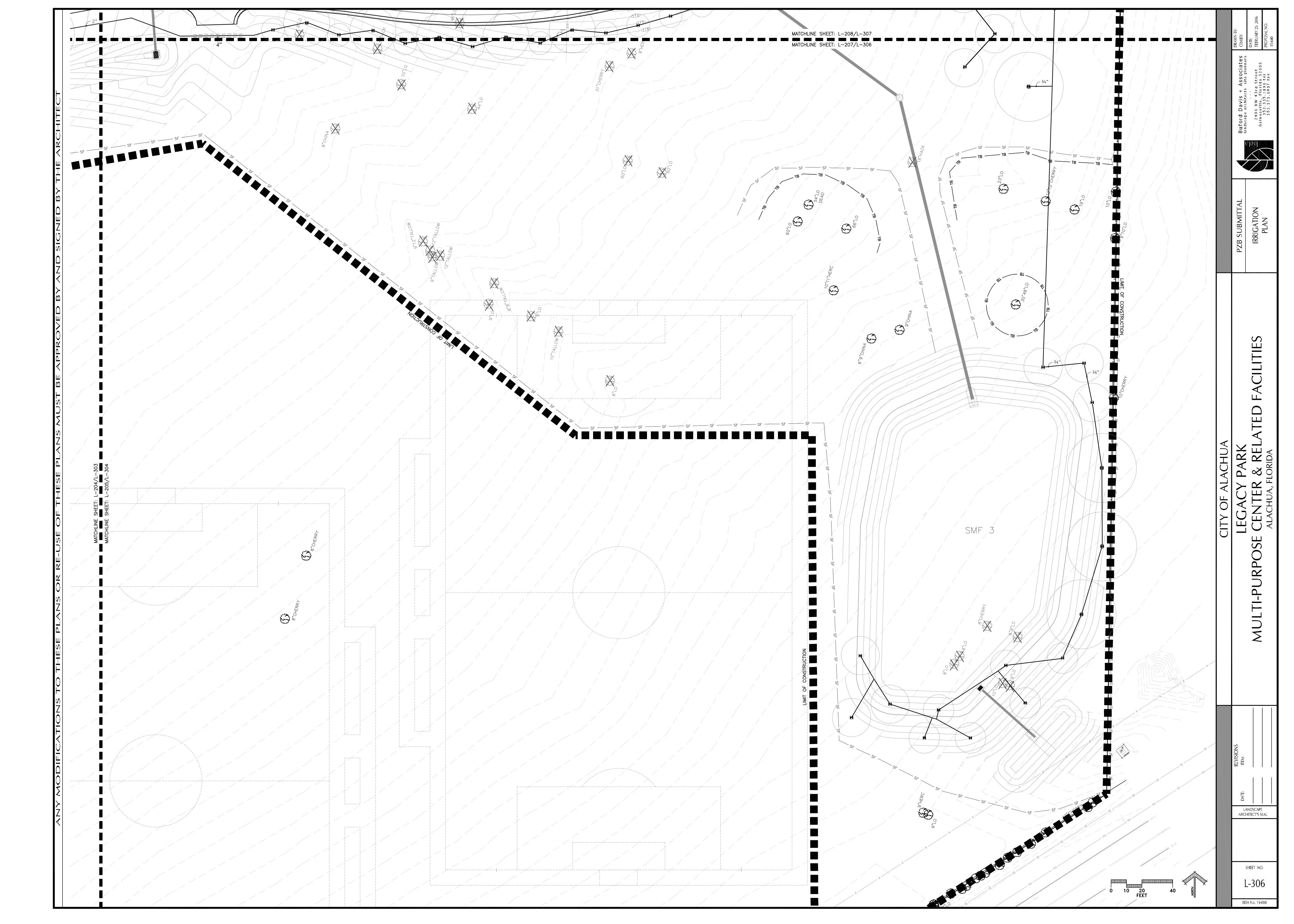
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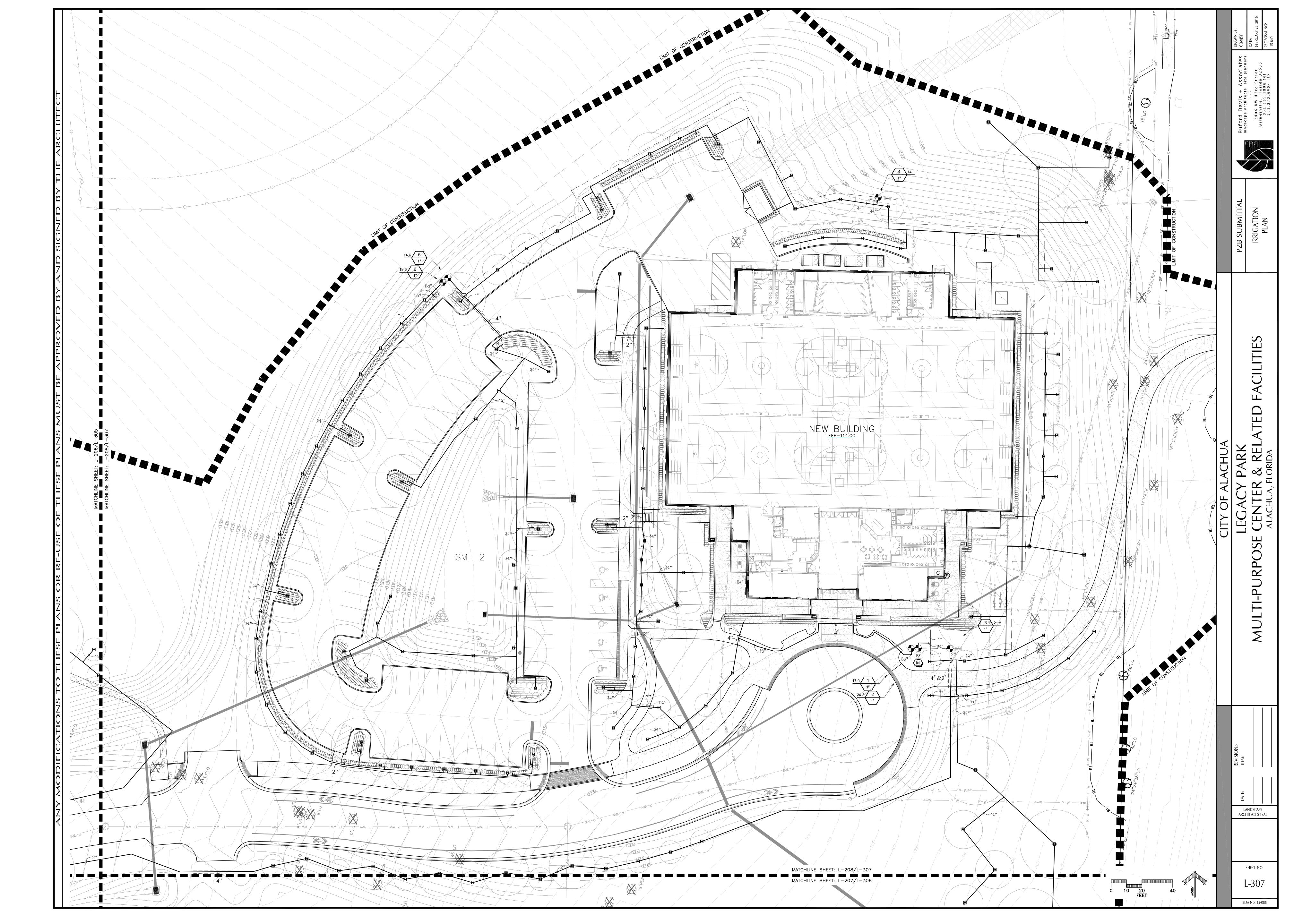




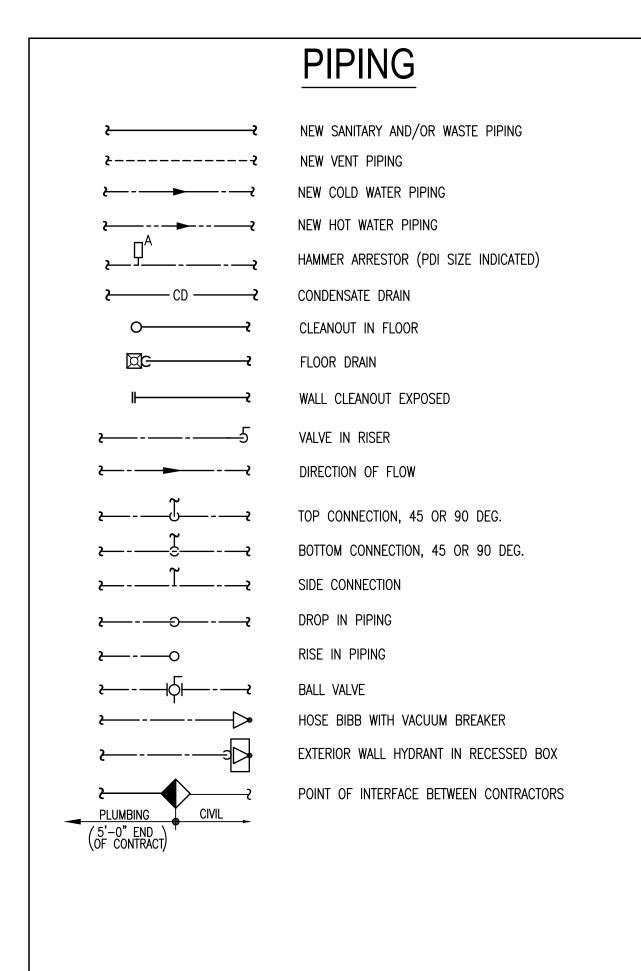


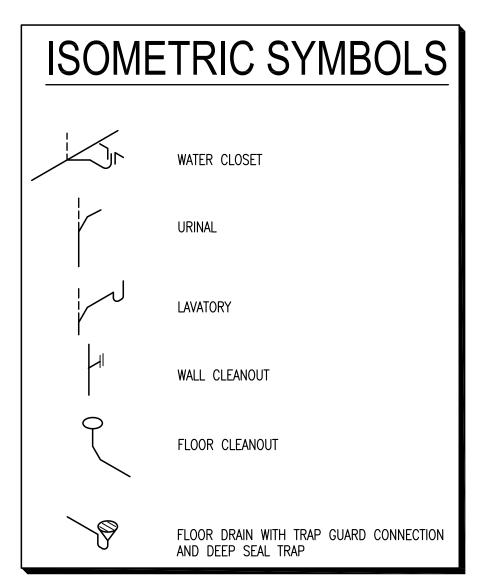






WALL HYDRANT





# NOTE:

THESE ARE STANDARD SYMBOLS AND GENERAL NOTES AND MAY NOT ALL APPEAR ON THE PROJECT DRAWINGS; HOWEVER WHEREVER THE SYMBOL APPEARS ON THE PROJECT DRAWINGS, THE ITEM SHALL BE PROVIDED AND INSTALLED.

|             | PLUMBING FIXTURE SCHEDULE  |               | Γ            | SANITARY        |        |
|-------------|--|---------------|--------------|-----------------|--------|
| MARK        | ITEM   | COLD<br>WATER | HOT<br>WATER | AND/OR<br>WASTE | VENT   |
| <u>WC</u>   | WATER CLOSET: AMERICAN STANDARD MADERA FLOWISE #3451.001 FLOOR MOUNTED ELONGATED BOWL, VITREOUS CHINA, 12" ROUGH FLUSH VALVE: SLOAN OPTIMA SMOOTH MODEL 111-1.6 GPF SIDE MOUNTED BATTERY OPERATED NON-DIAPHRAGM PISTON FLUSH SENSOR SHALL BE INSTALLED ON WIDE SIDE OF TOILET ROOM SEAT: BEMIS MODEL #3155C. COMMERCIAL SOLID ELONGATED PLASTIC OPEN FRONT WITH COVER COLOR BY ARCHITECT   | 1"            | -            | 3"              | 2"     |
| <u>WCH</u>  | WATER CLOSET: AMERICAN STANDARD MADERA FLOWISE #3461.001 FLOOR MOUNTED ELONGATED BOWL, VITREOUS CHINA, 12" ROUGH FLUSH VALVE: SLOAN OPTIMA SMOOTH MODEL 111-1.6 GPF SIDE MOUNTED BATTERY OPERATED NON-DIAPHRAGM PISTON FLUSH SENSOR SHALL BE INSTALLED ON WIDE SIDE OF TOILET ROOM SEAT: BEMIS MODEL #3155C. COMMERCIAL SOLID ELONGATED PLASTIC OPEN FRONT WITH COVER COLOR BY ARCHITECT   | 1"            | -            | 3"              | 2"     |
| <u>UR</u>   | URINAL: AMERICAN STANDARD TRIMBROOK 6561.017, SIPHON JET FLUSH ACTION, WALL MOUNTED, TOP SPUD, VITREOUS CHINA, LOW CONSUMPTION (1.0 GPF) FLUSH VALVE: SLOAN OPTIMA SMOOTH MODEL 186-1.0 GPF SIDE MOUNTED BATTERY OPERATED NON-DIAPHRAGM PISTON FLUSH INSTALL LIP AT 24" HIGH ABOVE FINISHED FLOOR CARRIER: ZURN Z1222 WITH LOWER BEARING PLATE REFER TO ARCHITECTURAL DRAWING FOR MOUNTING HEIGHTS   | 3/4"          | -            | 2"              | 2"     |
| <u>URH</u>  | URINAL: AMERICAN STANDARD TRIMBROOK 6561.017, SIPHON JET FLUSH ACTION, WALL MOUNTED, TOP SPUD, VITREOUS CHINA, LOW CONSUMPTION (1.0 GPF) FLUSH VALVE: ZURN #Z6003AV INSTALL LIP AT 17" HIGH ABOVE FINISHED FLOOR CARRIER: ZURN Z1222 WITH LOWER BEARING PLATE REFER TO ARCHITECTURAL DRAWING FOR MOUNTING HEIGHTS  | 3/4"          | -            | 2"              | 2"     |
| LAV         | LAVATORY: ELKAY LLVR1916 COUNTER MOUNTED STAINLESS STEEL 19" X 16" 18 GAUGE, FROUNT OVERFLOW FAUCET: SLOAN OPTIMA PLUS EBF-650, BATTERY POWERED, WITH GRID DRAIN AND TAILPIECE TRAP: ZURN 1-1/4" X 1 1/2" CHROME PLATED 17 GAUGE P TRAP WITH CLEANOUT OFFSET TAILPIECE SUPPLIES: BRASSCRAFT 1/2" X 3/8" X 12" CHROME PLATED LEAD FREE FLEXIBLE SUPPLIES AND LOOSE KEY STOPS  | 1/2"          | 1/2"         | 2"              | 2"     |
| <u>LAVH</u> | LAVATORY: AMERICAN STANDARD LUCERN # 0355.012 WALL MOUNTED VITREOUS CHINA 20" X 18"  VITREOUS CHINA, 4" CENTERS, FRONT OVERFLOW,  FAUCET: SLOAN OPTIMA PLUS EBF-650, BATTERY POWERED, WITH GRID DRAIN AND TAILPIECE  TRAP: ZURN 1-1/4" X 1 1/2" CHROME PLATED 17 GAUGE P TRAP WITH CLEANOUT  SUPPLIES: BRASSCRAFT 1/2" X 3/8" X 12" CHROME PLATED LEAD FREE FLEXIBLE SUPPLIES AND LOOSE KEY STOPS  CARRIER: ZURN Z1231 CCONCEALED ARM CARRIER  INSULATE WASTE AND WATER SUPPLIES BELOW LAVATORY WITH TRUEBRO PIPE INSULATION   | 1/2"          | 1/2"         | 2"              | 2"     |
| LAV-1       | LAVATORY: AMERICAN STANDARD LUCERN # 0355.012 WALL MOUNTED VITREOUS CHINA 20" X 18" VITREOUS CHINA, 4" CENTERS, FRONT OVERFLOW, FAUCET: SYMMONS SYMMETRIX S-20-2-1.5 SINGLE LEVER FAUCET WITH POP UP DRAIN AND TAILPIECE TRAP: ZURN 1-1/4" X 1 1/2" CHROME PLATED 17 GAUGE P TRAP WITH CLEANOUT SUPPLIES: BRASSCRAFT 1/2" X 3/8" X 12" CHROME PLATED LEAD FREE FLEXIBLE SUPPLIES AND LOOSE KEY STOPS CARRIER: ZURN Z1231 CCONCEALED ARM CARRIER INSULATE WASTE AND WATER SUPPLIES BELOW LAVATORY WITH TRUEBRO PIPE INSULATION  | 1/2"          | 1/2"         | 2"              | 2"     |
| <u>EWC</u>  | ELECTRIC WATER COOLER: ELKAY #EZSTL8C BI-LEVEL WALL MOUNTED, STAINLESS STEEL TOP WITH FRONT AND SIDE PUSH PADS, BUBBLER WITH FLEXI-GUARD ANTI-MICROBIAL SAFTY BUBBLER TRAP: ZURN 1-1/4" X 1 1/2" PVC SCHEDULE 40 WASTE: ZURN 1-1/4" x 1-1/4" PVC SCHEDULE 40 END OUTLET WASTE SUPPLY: ZURN 1/2" X 3/8" X 12" CHROME PLATED LEAD FREE FLEXIBLE SUPPLY AND WHEEL HANDLE STOP CARRIER: ZURN Z1225 FLOOR MOUNTED WALL CARRIER REFER TO ARCHITECTURAL DRAWING FOR MOUNTING HEIGHTS  | 1/2"          | -            | 2"              | 1-1/2* |
| <u>SH</u>   | SHOWER: AQUARIUS ONE PIECE ACRYLIC INSTITUTIONAL, ADA COMPLIANT, MODEL MODEL H 4136 BF BARRIER FREE SHOWER, WITH FOLD DOWN SEAT AND STANDARD ACCESSORIES, COLOR SELECTION BY ARCHITECT. SHOWER VALVE: SYMMONS S-96-300-B30-L-V HAND HELD SHOWER HEAD, SOLID LEVER HANDLE,  |               |              | 2"              | 2"     |
| <u>MS</u>   | SHOWER HEAD, SOLID LEVER HANDLE,  MOP SINK: FLOOR MOUNTED, 24" X 24" ONE PIECE STRUCTURAL FIBREGLASS, FIAT WITH STRAINER, MOLD IN DRAIN FAUCET: T & S B-0665-BSTP SERVICE SINK FAUCET WITH VACUUM BREAKER ACCESSORIES: FIAT MOP HOLDER FIAT HOSE HOLDER MOP SINK SPLASHES: STAINLESS STEEL SPLASH GUARDS AT EACH WALL CONTACTING MOP SINK  SINK: ELKAY LR1722 DROP-IN SINGLE COMPARTMENT 17" X 22" X 6-1/2" 18 GAUGE STAINLESS STEEL FAUCET: ZURN Z7870C-XL DECK MOUNTED SINGLE LEVER FAUCET STRAINER: ZURN Z8741 STAINLESS STEEL HEAVY DUTY BASKET STRAINER TRAP: ZURN Z8702-PC 1-1/2" X 1 1/2" CHROME PLATED 17 GAUGE P TRAP WITH CLEANOUT SUPPLIES: ZURN 1/2" X 3/8" X 12" CHROME PLATED LEAD FREE FLEXIBLE SUPPLIES AND WHEEL HANDLE STOPS |               | 1/2"         | 3"              | 2"     |
| <u>SK</u>   |  |               | 1/2"         | 2"              | 1-1/2" |
| <u>SK-1</u> | SINK: ELKAY LR3321 COUNTERTOP DOUBLE COMPARTMENT 33" X 21-1/4" X 8" DEEP, 3 HOLE 18 GAUGE STAINLESS STEEL FAUCET: ELKAY LK1000CR DECK MOUNTED SINGLE LEVER FAUCET WITHOUT SIDE SPRAY STRAINER: ZURN Z8741 STAINLESS STEEL HEAVY DUTY BASKET STRAINER TRAP: ZURN Z8702-PC 1-1/2" X 1 1/2" CHROME PLATED 17 GAUGE P TRAP WITH CLEANOUT CONTINUOUS WASTE: ZURN Z8753 1-1/2" 20 GAUGE SUPPLIES: ZURN 1/2" X 3/8" X 12" CHROME PLATED LEAD FREE FLEXIBLE SUPPLIES AND WHEEL HANDLE STOPS  | 1/2"          | 1/2"         | 2"              | 1–1/2' |
| <u>IMB</u>  | ICE MAKER BOX: 20 GAUGE WHITE POWDER COATED RECESSED MOUNTED WALL BOX, 1/4 TURN VALVE WITH HAMMER ARRESTOR, GUY GRAY MODEL MIB1HA  | 1/2"          | -            | -               | -      |
| <u>WH</u>   | EXTERIOR WALL HYDRANT: BRASS FACE, BOX AND DOOR WITH INTERGRAL VACUUM BREAKER — BACKFLOW PREVENTER, 3/4" CONNECTION — FREEZE PROOF WOODFORD MODEL #B65 PB, MOUNT @ 18" ABOVE GRADE   | 3/4"          | -            | -               | _      |
| <u>HB</u>   | INTERIOR HOSE BIBB: ZURN Z 1330-SS -BFP STAINLESS STEEL CASING WITH STAINLESS STEEL HINGED COVER INTEGRAL VACUUM BREAKER - BACKFLOW PREVENTER, 3/4" MOUNT @ 18" ABOVE FLOOR IN A RECESSED WALL BOX.  | 1/2"          | _            | -               | -      |
| <u>HB-1</u> | INTERIOR HOSE BIBB: T & S B-0736-POL WITH INTEGRAL VACUUM BREAKER - BACKFLOW PREVENTER, MOUNT @ 18" ABOVE FLOOR IN MECHANICAL ROOMS  | 1/2"          | _            | -               | ı      |
| <u>FD</u>   | <u>FLOOR DRAIN:</u> ZURN Z415S 5" INCH SQUARE NICKALOY TOP STRAINER<br>OPTIONS, PROVIDE WITH NO-HUB SVCI DEEP SEAL 'P' TRAP, PRO-SEAL TRAPGUARD  | _             | _            | SEE<br>DRAWINGS | -      |
| <u>WCO</u>  | <u>WALL CLEANOUT</u> : ZURN Z1441 ROUND WITH SMOOTH STAINLESS STEEL COVER, CENTER SCREW, AND RECESSED BRONZE THREADED TAPPED PLUG,   | _             | _            | 4"              | _      |
| FCO         | FLOOR CLEANOUT: ZURN Z1400 ROUND ADJUSTABLE SCORIATED NICKEL BRONZE TOP WITH TAPER THREAD.   | _             | -            | SEE<br>DRAWINGS | _      |
| <u>WHA</u>  | <u>WATER HAMMER ARRESTORS</u> : SIOUX CHIEF 660 HYDRA-RESTER COMMERCIAL SERIES PISTON TYPE TYPE L COPPER TUBE  | -             | _            | -               | _      |
| <u>EWH</u>  | ELECTRIC WATER HEATER: A.O. SMITH PCS-30 (2) 4500 WATT ELEMENTS, 208/3/60 ENERGY FACTOR .93 IN DRAIN PAN ON GALVANIZED STAND 10 YEAR WARRANTY OPEN END 3/4" RELIEF LINE ABOVE DRAIN PAN AND 1" PAN DRAIN OPEN END 2" ABOVE FLOOR DRAIN (SEE DETAIL FOR FURTHER INFORMATION)  | 1"            | 1"           | _               | _      |

# **SPECIFICATIONS**

1.0 BASIC MATERIAL AND METHODS

AND 1" PAN DRAIN OPEN END 2" ABOVE FLOOR DRAIN (SEE DETAIL FOR FURTHER INFORMATION)

- 1.1 <u>SCOPE OF WORK</u>
  PROVIDE LABOR AND MATERIALS AS REQUIRED TO PROVIDE A FULLY FUNCTIONING AND COMPLETE SYSTEM AS INDICATED ON DRAWINGS. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT. FINAL LOCATIONS OF EQUIPMENT SHALL BE FIELD DETERMINED. ALL DISCREPANCIES ON DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING PRIOR TO SUBMISSION OF BIDS.
- 1.2 GENERAL AND SPECIAL CONDITIONS
  ALL DIVISION 1 SPECIFICATIONS AND ARCHITECTURAL GENERAL AND SPECIAL CONDITIONS OUTLINED IN THE CONTRACT DOCUMENTS APPLY TO MECHANICAL SYSTEMS. ADDITIONAL, WORK SHALL COMPLY WITH FLORIDA BUILDING CODE (2010) ORDINANCES AND REGULATIONS OF THE LOCAL AUTHORITY HAVING JURISDICTION, NATIONAL FIRE PROTECTION AND NATIONAL ELECTRICAL CODE. ALL EQUIPMENT SHALL CARRY THE UNDERWRITER'S LABORATORIES (UL) SEAL WHERE APPLICABLE.
- 1.3 QUALITY CONTROL
  UNLESS OTHERWISE NOTED, PROVIDE NEW MATERIALS FREE OF DEFECTS, WHERE NO SPECIFIC WEIGHTS OR GRADES ARE SPECIFIED PROVIDE MATERIALS OF AN ACCEPTED STANDARD WEIGHT AND GRADE ACCORDING TO CODE AND GOVERNING STANDARDS BY ASHRAE, SMACNA, NFPA AND UL. INSTALL ALL EQUIPMENT, PIPING, DUCTWORK AND CONTROLS IN ACCORDANCE WITH CODES, GOVERNING STANDARDS, AND MANUFACTURER'S RECOMMENDATIONS.
  FIRE PERFORMANCE CHARACTERISTICS OF INSTALLED MATERIALS SHALL BE RATED IN ACCORDANCE WITH ASTM E84.
  MAXIMUM SMOKE DEVELOPED RATING SHALL BE 50.
  SUPPLIED EQUIPMENT SHALL BE AS SCHEDULED OR OWNER APPROVED EQUAL IN QUALITY AND PERFORMANCE.
- 1.4 <u>COORDINATION</u>
  COORDINATE ALL WORK FOR PROPER LOCATION, POWER, AND UTILITY REQUIREMENTS. SCHEDULE INSTALLATIONS TO AVOID CONFLICT AMONG TRADES. ADDITIONS TO THE CONTRACT FOR COORDINATION AMONG TRADES WILL NOT BE ALLOWED.
- PENETRATIONS, CUTTING AND PATCHING
  SEAL ALL PIPING PENETRATIONS OF WALLS IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
  PIPING PENETRATIONS OF RATED FLOORS AND WALLS SHALL BE SEALED WITH FIRE STOPPING MATERIAL. FLASH ALL ROOF AND WALL PENETRATIONS IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS. PROVIDE FIRE DAMPERS AT ALL RATED PENETRATIONS.
- 2.0 PIPING

  WASTE AND/OR VENT PIPING ABOVE FLOOR SLAB: SCHEDULE 40 DWV PVC SOLID CORE
  WATER PIPING BELOW FLOOR: TYPE K COPPER
  WATER PIPING ABOVE FLOOR: TYPE L COPPER
  VALVES: NIBCO OR EQUAL FULL PORT
  HOT WATER PIPE INSULATION: 1" FIBERGLASS OWENS CORNING SSL II, ASJ
  PIPE HANGERS: 3/8" THREADED ROD, WITH ADJUSTABLE BAND HANGER
- 3.0 <u>Submittals</u> Shop drawings must be submitted and approved prior to ordering equipment. Engineer will require

# DRAWING INDEX

#### PLUMBING

- P1.0 ABBREVIATIONS, LEGENDS, GENERAL NOTES AND SCHEDULE P2.0 PLUMBING SITE UTILITY PLAN
- P3.0 PLUMBING STIE UTILITY PLAN
  P3.0 PLUMBING SANITARY AND VENT FLOOR PLAN
  P4.0 PLUMBING DOMESTIC WATER FLOOR PLAN
- P5.0 PLUMBING DOMESTIC WATER FLOOR PLAN
  P5.0 PLUMBING DETAILS
  P6.0 PLUMBING SANITARY, VENT RISER DIAGRAM
  P7.0 PLUMBING DOMESTIC WATER RISER DIAGRAM

### PLUMBING GENERAL NOTES

- CONTRACTOR SHALL PROVIDE COMPLETE CODE COMPLIANT, PLUMBING SYSTEMS AS DETAILED ON THESE DRAWINGS WORK CONSISTS OF FURNISHING ALL MATERIALS, EQUIPMENT, AND SERVICES REQUIRED FOR COMPLETE SYSTEMS. INCLUDE ANY INCIDENTAL APPARATUS, APPLIANCES, MATERIAL LABOR AND SERVICES NECESSARY TO MAKE NEW WORK COMPLETE IN ALL RESPECTS AND FULLY READY FOR
- PRIOR TO ANY EXCAVATION OR DEMOLITION THE CONTRACTOR MUST COORDINATE HIS WORK WITH THE OTHER TRADES. THE OWNERS MAINTENANCE DEPARTMENT, AND ANY OTHER AVAILABLE SOURCE OF INFORMATION AS TO ABOVE OR BELOW GROUND SERVICES THAT SHALL BE AVOIDED.
- THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR CUTTING AND PATCHING THAT MAY BE REQUIRED DUE TO SCOPE OF WORK. COORDINATE WITH THE GENERAL CONTRACTOR.
- 4 ALL PLUMBING WORK SHALL BE DESIGNED, INSTALLED, TESTED, AND CLEANED IN ACCORDANCE WITH FLORIDA PLUMBING CODE 2010, FLORIDA BUILDING CODE 2010 ENERGY CONSERVATION CODE WITH ALL LATEST REVISIONS
- 5. VERIFY THE EXACT LOCATION OF EXISTING SANITARY SEWER AND WATER SERVICE PIPING FROM THE ACTUAL JOB SITE PRIOR TO SUBMITTING BID. SUBMISSION OF YOUR PROPOSAL SHALL BE CONSTRUED AS INDICATING SUCH KNOWLEDGE. NO ADDITIONAL PAYMENT WILL BE MADE ON CLAIMS THAT ARISE FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS
- 6. MAKE SUCH OFFSETS AND DEVIATIONS FROM WORK SHOWN ON THE DRAWINGS, AS MAY BE NECESSARY TO FIT THE ACTUAL SPACE CONDITIONS.
- 7. WHERE VALVES OCCUR ABOVE DRYWALL OR PLASTER OR ARE CONCEALED BEHIND WALLS, THIS CONTRACTOR SHALL FURNISH AND INSTALL ACCESS PANELS. COORDINATE COLOR AND STYLE WITH ENGINEER/ARCHITECT.
- 8. PROVIDE AND MAINTAIN TEMPORARY CONNECTIONS TO KEEP EXISTING UTILITIES IN SERVICE. ANY SHUT DOWNS ARE TO BE APPROVED BY OWNER'S REPRESENTATIVE.
- 9. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND ROUGHING DIMENSIONS OF ALL PLUMBING FIXTURES, DRAINS, ETC.
- 10. INSTALLER SHALL NOT CUT ANY STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
- 11. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS BETWEEN DISSIMILAR PIPING METALS.
- 12. FIELD VERIFY ALL EXISTING PIPE SIZES PRIOR TO INSTALLATION.
- 13. NO VENT THROUGH ROOF SHALL TERMINATE CLOSER THAN 10 FT. TO ANY OUTSIDE AIR INTAKE OR VENTILATION LOUVERS, DOORS, WINDOWS AND OTHER BUILDING OPENINGS.
- 14. ALL SANITARY AND WATER PIPING UNDERGROUND SHALL BE A MINIMUM OF 14" BELOW FINISHED FLOOR UNLESS NOTED OTHERWISE.
- 15. PIPING IN CONCRETE BLOCK WALLS SHALL BE INSTALLED AS BLOCK IS BEING LAID. DO NOT CUT BLOCK WALL.
- 16. PROVIDE ALL SINKS AND LAVATORIES WITH SLIP JOINT TRAP FITTINGS FOR CLEANOUT.
- 17. CONTRACTOR IS RESPONSIBLE TO ALSO CHECKING FIELD CONDITIONS PRIOR TO BIDDING AND REPORT ANY PROBLEMS/CONFLICTS TO THE ENGINEER WITHIN 24 HOURS OF DISCOVERY. ANY CHANGES RESULTING FROM CONDITIONS ARISING IN THE FIELD WHICH WERE NOT BROUGHT TO THE ENGINEER'S ATTENTION ARE TO BE MADE BY THIS CONTRACTOR WITH NO ADDITIONAL COST TO THE
- ALL WORK IS TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE(1) YEAR FROM DATE OF FINAL ACCEPTANCE. ALL DEFECTS WHICH DEVELOP OR ARE DISCOVERED WITHIN THIS PERIOD SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- 19. UPON COMPLETION OF THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL REMOVE ALL TOOLS, APPLIANCES, SURPLUS MATERIALS, AND SCRAP. ALL IDENTIFIED EXISTING EQUIPMENT TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER.
- 20. WHEN CONFLICTS OCCUR IN SPECIFICATIONS OR IN THE DRAWINGS, OR BETWEEN EITHER, THE ITEMS OF GREATER QUANTITY OR HIGHER COST SHALL BE PROVIDED.
- 21. THE CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES IN ORDER TO AVOID CONFLICTS.
- 22. ALL NEW SANITARY, VENT, COLD AND HOT WATER PIPING SHALL BE PER SPECIFICATIONS.

23. PROVIDE AIR CHAMBERS AT COLD AND HOT WATER CONNECTION TO ALL FIXTURES FOR SHOCK

ABSORPTION PER SPECIFICATIONS.

CITY OF ALACHU LEGACY PAR -PURPOSE CENTER & RE

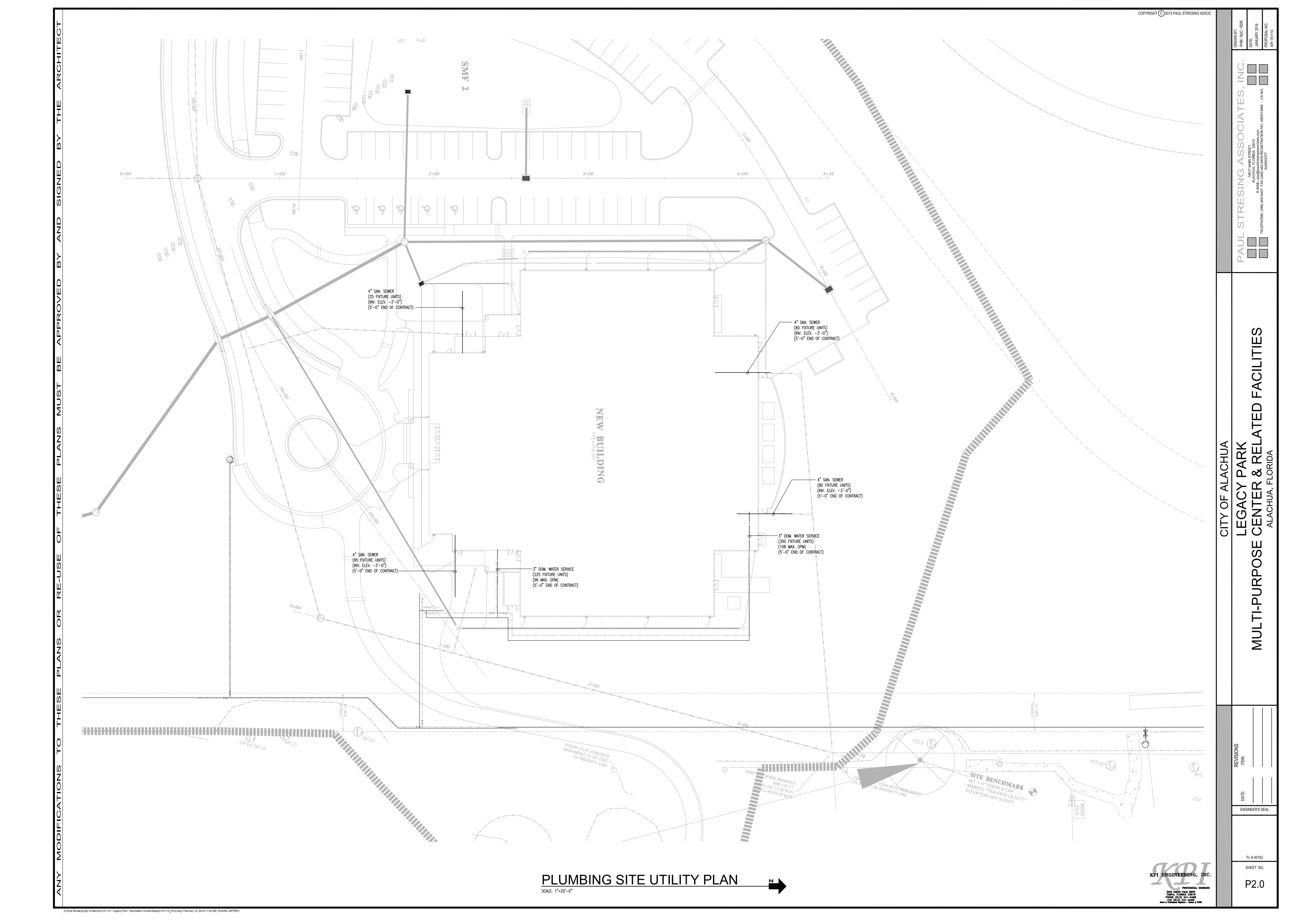
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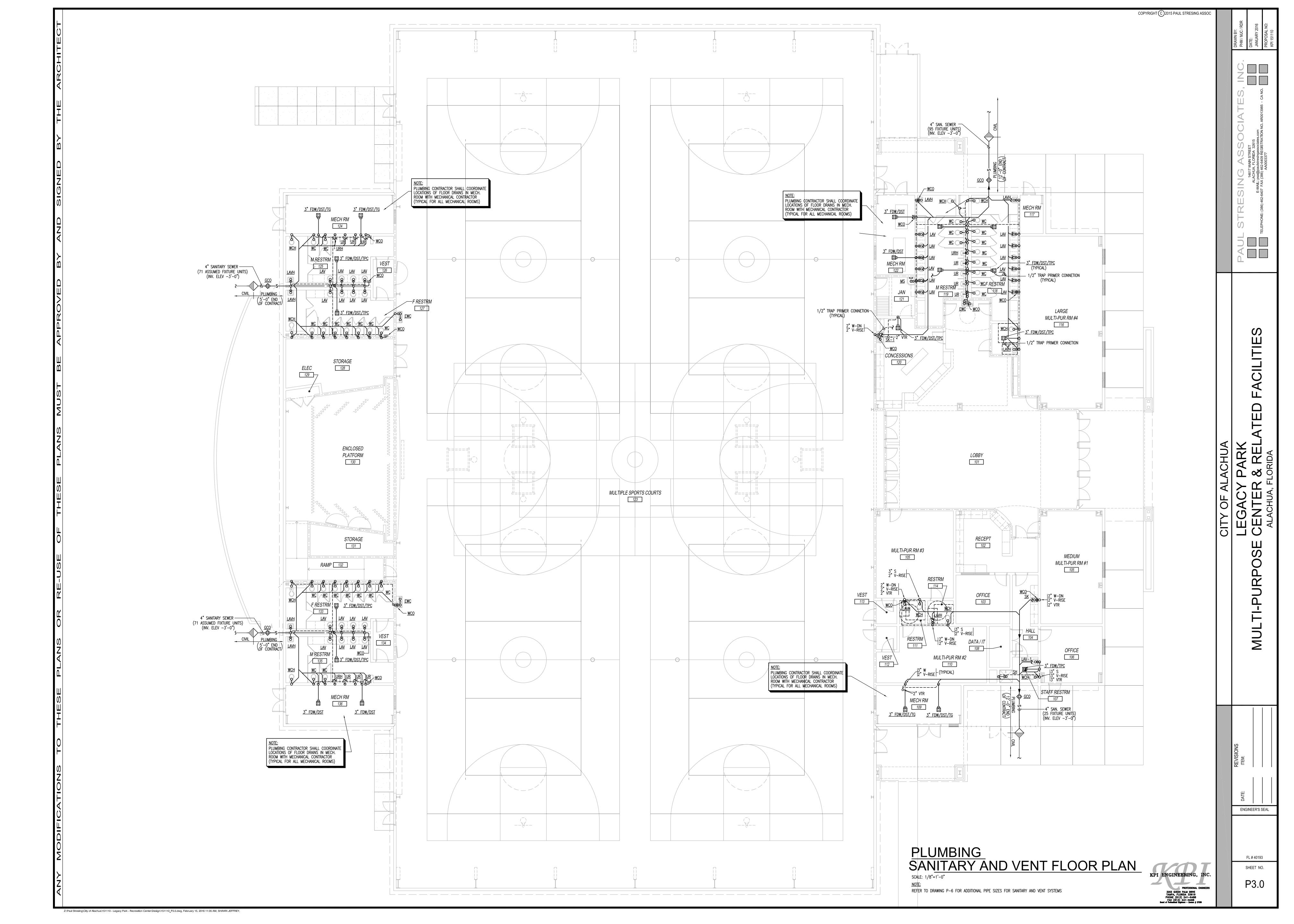
ENGINEER'S SEAL

FL#40193 SHEET NO.

PROFESSIONAL ENGINEERS
3 QUEEN PALM DRIVE
IPA, FLORIDA 33619

KPI ENGINEERING,





BE SCALED. INSTALLER SHALL COORDINATE AT SITE WITH ALL PLUMBING, HVAC AND ELECTRICAL WORK SO AS NOT TO CONFLICT IN LOCATION WITH OTHER WORK UNDER THIS

TO AVOID CONFLICTS WITH DUCTWORK, EQUIPMENT, LIGHTING, ETC.

ALL EXPOSED FIRE PROTECTION PIPING IN ACCORDANCE WITH NFPA 13.

PREVENTERS ONLY IF APPROVED BY THE AUTHORITY HAVING JURISDICTION.

8. FIRE DEPARTMENT CONNECTION SHALL HAVE AN AUTOMATIC BALL DRIP.

RELATED RE-DESIGN FEES BORN BY THE CONTRACTOR.

BE INSTALLED WITH COMPLETE DRAINABLE SYSTEM.

OWNER AT NO ADDITIONAL COST TO THE OWNER.

ADDITIONAL COST TO THE OWNER.

COST TO THE OWNER.

HYDRAULIC CALCULATED AREA.

COMPATIBILITY OF SWITCHES AND LOCATIONS.

25. PROVIDE ALL DRAINS AS REQUIRED BY NFPA 13.

REQUIRED BY AUTHORITY HAVING JURISDICTION.

28. ALL SPRINKLER HEADS SHALL BE QUICK RESPONSE TYPE.

29. CONTRACTOR SHALL PERFORM FLOW TEST AT ALL PROJECT SITE HYDRANTS.

INSTALLATION TOLERANCES AND WILL BE CENTERED IN CEILING TILES.

LARGER, PER NFPA 13 OR AS REQUIRED TO PROVIDE COVERAGE.

BE REMOVED SHALL BE TURNED OVER TO THE OWNER.

OF GREATER QUANTITY OR HIGHER COST SHALL BE PROVIDED.

23. PROVIDE ALL HANGERS AS REQUIRED TO COMPLY WITH NFPA 13.

12. ALL MATERIALS SHALL BE U.L. LISTED AND BEAR THE U.L. LABEL

APPROVAL FROM THE ARCHITECT.

CONTRACT OR THAT MAY BE EXISTING. CONTRACTOR SHALL ADJUST PIPE ROUTING AS NECESSARY

INSTALLER SHALL NOT CUT ANY EXISTING STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN

IN GEOGRAPHICAL LOCATIONS SUBJECT TO TEMPERATURES BELOW 40°F, PROVIDE PROTECTION FOR

PROVIDE TAMPER SWITCHES ON ALL VALVES THAT CAN SHUT OFF FLOW IN MAINS OR BRANCHES.

CHAINS AND LOCKS IN LIEU OF TAMPER SWITCHES MAY BE USED AT OUTDOOR BACKFLOW

10. PIPE SIZED, GENERAL ROUTING, AND CONFIGURATION IN SYSTEMS REQUIRED TO BE HYDRAULICALLY CALCULATED SHALL BE INSTALLED PER THIS ENGINEER'S CONSTRUCTION DOCUMENTS. ANY

DEVIATION SUBMITTED BY THE CONTRACTOR SHALL BE RE-DESIGNED BY THIS ENGINEER WITH

II. CONTRACTOR SHALL ARRANGE FOR, OBTAIN AND BEAR THE COST OF NECESSARY PERMITS, BONDS,

13. PENETRATIONS THROUGH FIRE RATED ASSEMBLIES, PENETRATIONS FOR PIPES, CONDUITS, OR OTHER PURPOSES THROUGH ASSEMBLIES (FLOORS, WALLS, PARTITIONS, ETC.) WITH A REQUIRED FIRE RESISTANCE RATING FIRE STOP MATERIAL SHALL BE UL LISTED AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS TO MEET OR EXCEED THE FIRE RATING OF

14. BEFORE SHUTTING OFF ANY SECTION OF THE FIRE PROTECTION SYSTEM TO MAKE ADJUSTMENTS OR ADDITIONAL CONNECTIONS, COORDINATE WITH THE OWNER AND NOTIFY THE AUTHORITY HAVING JURISDICTION. PLAN THE WORK CAREFULLY AND ASSEMBLE ALL MATERIALS TO ENABLE

15. WHERE ELECTRICAL PANELS EXIST, PROVIDE DEFLECTORS ON ELECTRICAL EQUIPMENT TO PREVENT WETTING PANELS. SPRINKLER PIPING SHALL NOT BE INSTALLED DIRECTLY ABOVE ELECTRIC PANELS.

16. PROVIDE FLUSHING CONNECTION AT END OF SPRINKLER SYSTEM WHERE LAY-IN CEILING OCCURS.

17. ALL SPRINKLER HEADS SHALL BE U.L. LISTED AND INSTALLED IN ACCORDANCE WITH THEIR

LISTING REQUIREMENTS. ALL ESCUTCHEONS AND ACCESSORIES SHALL BE METAL.

INTERRUPTION, AND PROTECTION SHALL BE RESTORED AS PROMPTLY AS POSSIBLE.

COMPLETION IN THE SHORTEST POSSIBLE TIME. WORK SHALL BE USED TO COMPLETION WITHOUT

ALL SPRINKLER PIPING THAT REQUIRES CHANGE IN ELEVATION DUE TO COORDINATION ROUTING OF

18. ALL WORK IS TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1)

YEAR FROM DATE OF FINAL ACCEPTANCE. ALL DEFECTS WHICH DEVELOP OR ARE DISCOVERED

TOOLS, APPLIANCES, SURPLUS MATERIALS, AND SCRAP. ALL IDENTIFIED EXISTING EQUIPMENT TO

20. WHEN CONFLICTS OCCUR IN SPECIFICATIONS OR IN THE DRAWINGS, OR BETWEEN EITHER, THE ITEMS

21. THE CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES IN ORDER TO AVOID CONFLICTS.

MECHANICAL, AND STRUCTURAL ELEMENTS OF BUILDING. MAKE MODIFICATIONS WITHOUT

CONTRACTOR AND CONNECTED BY FIRE ALARM CONTRACTOR. COORDINATE TO VERIFY

26. EQUIP ALL GATE AND BUTTERFLY VALVES WITH LOCKING DEVICES AND TAMPER SWITCHES IF

AND HYDRAULIC REFERENCE POINTS. FIRE PROTECTION CONTRACTOR TO COORDINATE

27. SEE CIVIL DRAWINGS FOR LOCATION OF FIRE MAINS, SHOWN HERE TO GIVE POINT OF SERVICE

LOCATION OF MAINS AND STUB-UPS FOR SPRINKLER RISERS WITH ALL OTHER CONTRACTORS

AND MAKE ADJUSTMENTS AS NECESSARY TO PROVIDE COMPLETE SYSTEM AT NO ADDITIONAL

30. PROVIDE UPRIGHT SPRINKLER HEADS UNDER ALL EXPOSED DUCTWORK/OBSTRUCTION 48" WIDE OR

31. PENDENT MOUNTED SPRINKLER HEADS SHALL BE ALIGNED WITHIN NORMAL FABRICATION AND

32. CONTRACTOR SHALL PROVIDE A MINIMUM SAFETY MARGIN OF 10 PSI AT THE MOST REMOTE

24. TAMPER SWITCHES AND FLOW SWITCHES TO BE PROVIDED AND INSTALLED BY FIRE PROTECTION

22. COORDINATE EXACT LOCATION OF SPRINKLERS AND PIPING WITH CEILING, ELECTRICAL,

WITHIN THIS PERIOD SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE

19. UPON COMPLETION OF THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL REMOVE ALL

PIPING SHALL HAVE FLUSH CONNECTION AT ALL LOWER ELEVATION. THE SPRINKLER SYSTEM SHALL

### FIRE MAIN GPM GALLONS PER MINUTE GRV **GROOVED** MAX MAXIMUM MINIMUM NORMALLY CLOSED NOT IN CONTRACT NORMALLY OPEN

SPRINKLER

TYPICAL

TAMPER SWITCH

VERIFY IN FIELD

UNLESS OTHERWISE NOTED

SPK.

TYP

UON

# VALVE IN RISER FLUSHING CONNECTION DIRECTION OF FLOW TOP CONNECTION, 45 OR 90 DEG. BOTTOM CONNECTION, 45 OR 90 DEG. SIDE CONNECTION RISE OR DROP IN PIPE $\vdash$ GATE VALVE CHECK VALVE $\leftarrow$ BALL VALVE BUTTERFLY VALVE

## NOTE:

THESE ARE STANDARD SYMBOLS AND GENERAL NOTES AND MAY NOT ALL APPEAR SYMBOL APPEARS ON THE PROJECT DRAWINGS, THE ITEM SHALL BE PROVIDED AND INSTALLED.

#### FIRE PROTECTION LIGHT HAZARD DESIGN CRITERIA

- \* Fire Protection system to be designed to NFPA 13 (2010) and Authority having jurisdiction
- \* Hazard Type: Light hazard \* Sprinkler Head Design Area: 196 sq.ft.
- \* Sprinkler Head Density: .10 gpm/sq.ft.
- \* Sprinkler Head Response Type: Quick Response
- System Coverage Area: Most remote 1500 sq.ft
- \* Sprinkler Head Temperature Rating: 155 degree F \* All materials to be UL Listed and/or Factory Mutual approved.
- \* All piping shall be pressure tested at 200 psi for 2 hour as per NFPA-13.
- \* Fire sprinkler system to be centrally monitored. \* Main piping 2-1/2" and larger shall be black steel schedule 10 with roll grooved
- ends utilizing grooved couplings and fittings, outlets to be welded groove-o-lets. \* Branch piping 2" and under shall be black steel schedule 40 Threaded ends
- \* Provide signed and sealed hydraulic calculations.

#### FIRE PROTECTION ORDINARY HAZARD DESIGN CRITERIA

- \* Fire Protection system to be designed to NFPA 13 (2010) and Authority having jurisdiction \* Hazard Type: Ordinary hazard (Group #1)
- \* Sprinkler Head Design Area: 120 sq.ft. \* Sprinkler Head Density: .15 gpm/sq.ft.
- \* Sprinkler Head Response Type: Quick Response \* System Coverage Area: Most remote 1500 sq.ft.
- \* Sprinkler Head Temperature Rating: 155 degree F \* All materials to be UL Listed and/or Factory Mutual approved.
- \* All piping shall be pressure tested at 200 psi for 2 hour as per NFPA—13.
- \* Fire sprinkler system to be centrally monitored. \* Main piping 2-1/2" and larger shall be black steel schedule 10 with roll grooved
- ends utilizing grooved couplings and fittings, outlets to be welded groove—o—lets. \* Branch piping 2" and under shall be black steel schedule 40 Threaded ends
- \* Provide signed and sealed hydraulic calculations.

|             | FIRE SPRINKLER HEAD SCHEDULE |              |             |          |       |        |             |              |       |  |  |
|-------------|------------------------------|--------------|-------------|----------|-------|--------|-------------|--------------|-------|--|--|
| SYMBOL      | NAME                         | METAL FINISH | TEMPERATURE | K-FACTOR | SIN   | N.P.T. | ESCHUTCHEON | MANUFACTURER | MODEL |  |  |
| 0           | UPRIGHT                      | BRASS        | 155° F      | 5.6      | VK300 | 1/2"   | N/A         | VIKING       | M QR  |  |  |
| •           | RECESSED<br>PENDENT          | WHITE        | 155° F      | 5.6      | VK302 | 1/2"   | RECESSED    | VIKING       | M QR  |  |  |
| $\triangle$ | HORIZONTAL<br>SIDEWALL       | WHITE        | 200° F      | 5.6      | VK305 | 1/2"   | RECESSED    | VIKING       | QR    |  |  |

### FIRE PROTECTION SYSTEM SUMMARY

CITY OF ALACHUA OWNER: LOCATION: LEGACY PARK, ALACHUA FL. ASSEMBLY OCCUPANCY: NUMBER OF FLOORS: MAIN FLOOR AND PLATFORM CEILING HEIGHT:

APPLICABLE CODES: NFPA 13, SYSTEM COVERAGE: 37.685 SQ. FT. OCCUPANCY: LIGHT / ORDINARY HAZARDS DESIGN AREA:

DESIGN DENSITY: 0.10 / 0.15 SPRINKLER RESPONSE: QUICK RESPONSE FIRE MAIN: 6" SERVICE

#### WATER FLOW TEST INFORMATION

HYDRANT LOCATION: MOST EAST HYDRANT OF COLONIAL HEIGHTS

STATIC PRESSURE = 62 PSI RESIDUAL PRESSURE = 43 PSI FLOW HYDRANTS: A1 AND A2

ACTUAL FLOW = 934 GPM

AVAILABLE @ 20 PSI RESIDUAL 1434 GPM TEST CONDUCTED BY: M.O. AND D.W. TEST TAKEN: FEBRUARY 4 2016

# FIRE PROTECTION SPECIFICATIONS

#### 1.0 PIPE FITTINGS AND VALVES

PSI RATED.

A. STEEL PIPE ASTM A 135, PIPE SIZE 2" AND SMALLER SHALL BE SCHEDULE 40 BLACK STEEL WITH THREADED CAST IRON BLACK FITTINGS.

B. STEEL PIPE SIZE 2-1/2" AND LARGER SHALL BE SCHEDULE 10 BLACK STEEL ROLL GROOVED WITH GROOVED COUPLINGS AND FITTINGS, MECHANICAL TEES AND WELDED OUTLETS. C. DRAIN PIPING SHALL BE SCHEDULE 40 WITH THREADED CAST IRON BLACK FITTINGS, NFPA 13 SPECIFIED WALL THICKNESS FOR 2-1/2" THRU 4" SIZE.

#### 1.1 <u>CAST IRON THREADED FLANGES</u> ASME B16.4, CLASS 125, RAISED GROUND FACE, BOLT HOLES SPOT FACED.

1.2 <u>CAST IRON THREADED FITTINGS</u> ASME B16.4, CLASS 125, STANDARD PATTERN, WITH THREADS ACCORDING TO ASME B1.20.1, 175

1.3 MALLEABLE IRON THREADED FITTINGS

#### ASME B16.3, CLASS 150, STANDARD PATTERN, WITH THREADS ACCORDING TO ASME B1.20.1.

1.4 <u>STEEL FITTINGS</u> ASTM A 234/ A 234M, SEAMLESS OR WELDED; ASME B16.9, BUTTWELDING; OR ASME B16.11, SOCKET WELDING TYPE FOR WELDED JOINTS

1.5 GROOVED END FITTINGS FOR STEEL PIPE UL LISTED AND FM APPROVED ASTM A 536, GRADE 65-45-152 DUCTILE IRON OR ASTM A 47 GRADE 32510 MALLEABLE IRON. WITH GROOVES OR SHOULDERS DESIGNED TO ACCEPT GROOVED

1.6 <u>FLANGED JOINTS FOR DUCTILE IRON PIPE AND DUCTILE IRON OR CAST IRON FITTINGS</u> AWWA C115 DUCTILE IRON OR GRAY IRON PIPE FLANGES, RUBBER GASKETS, AND HIGH STRENGTH STEEL BOLTS AND NUTS.

1.7 <u>COUPLINGS FOR GROOVED END STEEL PIPE AND GROOVED END FERROUS FITTINGS</u> UL 213, AWWA C606, ASTM A 536 DUCTILE IRON OR ASTM A 47 MALLEABLE IRON HOUSING, WITH ENAMEL FINISH. INCLUDE SYNTHETIC RUBBER GASKET WITH CENTRAL CAVITY, PRESSURE RESPONSIVE DESIGN, ASTM A 183 CARBON STEEL BOLTS AND NUTS TO SECURE GROOVED PIPE AND FITTINGS.

1.8 <u>GENERAL</u> UL LISTED AND/OR FM APPROVED SERVICE VALVES WITH 175 PSIG NON-SHOCK MINIMUM WORKING PRESSURE RATING. GATE VALVES: UL 262, CAST BRONZE, THREADED ENDS, SOLID WEDGE, OUTSIDE SCREW AND YOKE, RISING STEM. PROVIDE INDICATING (BUTTERFLY OR BALL) VALVES TYPE, BRONZE BODY WITH THREADED ENDS, AND INTEGRAL INDICATING DEVICE, INDICATOR SHALL BE VISUAL AND ELECTRICAL 115 VOLTS A.C., PRE-WIRED 2 CIRCUIT, SUPERVISORY SWITCH.

#### 2.0 <u>SPRINKLERS</u> PROVIDE AUTOMATIC HEAT-RESPONSIVE GLASS BULB SPRINKLER HEADS, WITH 1/2" NOMINAL ORIFICE, 5.50 "K" FACTOR 155°F TEMPERATURE RATING, INSTALL SPRINKLERS IN A UNIFORM, CONSISTENT MANNER IN ORDER TO LINE UP EACH AREA, IN THE "CENTER" OF THE CEILING TILE

3.0 <u>SPRINKLER CABINETS</u> FINISHED STEEL CABINET AND HINGED COVER, WITH 6 SPARE SPRINKLERS PLUS SPRINKLER WRENCH, SUITABLE FOR WALL MOUNTING.

# 4.0 <u>ALARM DEVICES</u>

VERIFY IF REQUIRED. PROVIDE NEW DEVICES IF REQUIRED AS BASED ON PRE-BID FIELD INVESTIGATION. COORDINATE WITH ELECTRICAL (OR FIRE ALARM) CONTRACTOR TO PROVIDE CONNECTIONS TO FIRE ALARM SYSTEM IF REQUIRED.

#### DEVIATIONS FROM APPROVED "WORKING PLANS" FOR SPRINKLER PIPING REQUIRE WRITTEN

5.0 <u>PIPING INSTALLATIONS</u>

AS DETAILED.

APPROVAL FROM AUTHORITY WITH JURISDICTION. FILE WRITTEN APPROVAL WITH THE ENGINEER PRIOR TO DEVIATING FROM APPROVED "WORKING PLANS". INSTALL UNION OR FLANGE ADJACENT TO EACH VALVE. INSTALL HANGER AND SUPPORT SPACING AND LOCATIONS FOR STEEL PIPING JOINED WITH GROOVED MECHANICAL COUPLINGS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR RIGID SYSTEMS PER NFPA 13.

#### 6.0 <u>FIELD QUALITY CONTROL</u>

FLUSH, TEST AND INSPECT SPRINKLER PIPING SYSTEMS ACCORDING TO NFPA 13 CHAPTER "SYSTEM ACCEPTANCE". REPORT TEST RESULTS PROMPTLY AND IN WRITING TO ARCHITECT AND TO THE AUTHORITY HAVING JURISDICTION. CLEANING: CLEAN DIRT AND DEBRIS FROM SPRINKLERS. REPLACE SPRINKLERS HAVING PAINT OTHER THAN FACTORY FINISH WITH NEW SPRINKLERS. CLEAN AND REUSE OF PAINTED SPRINKLERS IS PROHIBITED.

7.0 SPRINKLER SYSTEM BASIS OF DESIGN ITEM

COORDINATE WITH ARCHITECTURAL DRAWING AND CLASSIFY CLASSIFICATION AREAS PER NFPA

WET PIPE SPRINKLER SYSTEM

SPRINKLER HEAD MANUFACTURER/MODEL (SEE SCHEDULE)

TEMPERATURE RATING

(SEE SCHEDULE)

STATIC PRESSURE RESIDUAL PRESSURE/FLOW

CONTRACTOR TO OBTAIN INFORMATION

CONTRACTOR TO OBTAIN INFORMATION

FIRE DEPARTMENT CONNECTION WALL TYPE POTTER-ROEMER, INC. MODEL 5020-D 4"x2-1/2" (2 WAY) CHROME PLATED LABELED "AUTO. SPKR."

APPLICABLE.

1. SYSTEM DESIGN SHALL BE HYDRAULICALLY CALCULATED PER NFPA-13.

2. PROVIDE 200°F TEMPERATURE SPRINKLER HEADS IN THE MECHANICAL/ ELECTRICAL ROOMS.

3. COORDINATE CEILING MOUNTED SPRINKLER HEADS WITH OTHER DEVICES (LIGHTS, DIFFUSERS, ACCESS PANELS, ETC.) SEE ARCHITECTURAL CEILING PLANS FOR LOCATIONS OF ALL DEVICES. 4. ALL MATERIALS AND EQUIPMENT SHALL UL AND/OR FACTORY MUTUAL APPROVED WHERE

KPI ENGINEERING,

PROFESSIONAL ENGINEERS

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 $\Box$ 

ENGINEER'S SEAL

FL # 40193

SHEET NO.

