NOTE:
PLANNED COORDINATION BETWEEN TRADES AND PLANSETS MAY BE REQUIRED BASED ON MANNER IN WHICH PROJECT IS BID ANDAWARDED.

GENERAL NOTES
1. BASE MAP ORIENTATION, EXCLUSIONS, BOUNDARY AND TOPOGRAPHIC INFORMATION, IF APPLICABLE, IS BASEDUPON A FIELD SURVEY PREPARED BY DAVE LAVENDER ON MAY 5, 2014, JUNE 20, 2014 FOR CLEVELAND PARK. TOPOGRAPHIC INFORMATION FOR BERRY FIELD IS BASED UPON FIELD SURVEYS PERFORMED BY DAVE LAVENDER, INC. IN 2014.

2. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY NOT BE COMPLETE, AND WHERE EXACT LOCATIONS MAY BE INCONSPICUOUS. THE LOCATION OF ALL EXISTING UTILITIES SHALL BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR NOTICING THE OWNER TO THE ATTENTION OF THE LOCATION OF SUCH UTILITIES. CONTACT MILONE & MACBROOM INC. IF YOU HAVE QUESTIONS ABOUT THE LOCATION OF ANY EXISTING UTILITIES. THE OWNER WILL BE RESPONSIBLE FOR THE REMOVAL OF SUCH UTILITIES.

3. MILONE & MACBROOM INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.

4. ALL EXCAVATIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

5. DEMOLITION AND CLEARANCE CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE IMPLEMENTED TO PREVENT THE DISCHARGE OF MATERIALS WITHIN THE SITE.

6. THE CONTRACTOR MUST MAINTAIN (REPAIR/REPLACE WHEN NECESSARY) THE SILTATION CONTROLS UNTIL ALL DEVELOPMENT ACTIVITY IS COMPLETED AND THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AND THE CITY'S DESIGNATED person under the direction of the general contractor will be placed in charge of sediment and erosion control for the entire site.

7. PRIOR TO COMMENCEMENT OF WORK A PRECONSTRUCTION MEETING SHALL BE HELD WITH CITY STAFF AND REPRESENTATIVES OF THE CONSTRUCTION SEQUENCE.

8. CALL "CALL BEFORE YOU DIG SOUTH CAROLINA", 1-888-721-7877. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.

9. THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AND THE CITY'S DESIGNATED person under the direction of the general contractor will be placed in charge of sediment and erosion control for the entire site.

10. THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER COMPANY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO COMMENCEMENT OF WORK.

11. CONTRACTOR TO STAKE OUT LIMIT OF DISTURBANCE. NO DISTURBANCE IS TO TAKE PLACE BEYOND THE LIMITS OF WORK SHOWN.

12. CLEAR AND GRUB SITE AND STOCKPILE TOPSOIL. PLACE SEDIMENT FILTER FENCE AND/OR SILT SOCKS AROUND STOCKPILES.


14. THE CONTRACTOR MUST MAINTAIN (REPAIR/REPLACE WHEN NECESSARY) THE SEDIMENT CONTROL UNITS. ALL DEVELOPMENT ACTIVITY IS COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.

OPERATION AND MAINTENANCE PLAN
1. A CONTRACTOR OR IMPROVEMENT COURT SHALL BE MAINTAINED ON ALL SITE SURFACES TO PREVENT ALL EXCESSIVE USE OF FERTILIZER SHALL BE PERMITTED. HAY AND WOOL PRODUCTION WASTE SHOULD BE PERMITTED.

2. THE CONTRACTOR LEGAL RESPONSIBILITY FOR THE EFFICIENT AND EFFECTIVE MAINTENANCE OF ALL IMPROVEMENTScribed withing THE SITE.

3. ADDITIONAL SPECIFICATIONS ARE BASED UPON ENDING OF THE SITE.

4. CALL "CALL BEFORE YOU DIG SOUTH CAROLINA", 1-888-721-7877. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.

5. THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AND THE CITY'S DESIGNATED person under the direction of the general contractor will be placed in charge of sediment and erosion control for the entire site.

6. ALL BUILDINGS WILL BE CONNECTED TO PUBLIC WATER AND SANITARY SEWER.

7. CONTRACTOR TO INSTALL SEDIMENT AND EROSION CONTROLS ALONG THE PERIMETER, AS SHOWN ON THE SEDIMENT AND EROSION CONTROL PLAN AND APPLIED USING PRUDENT APPLICATION PROCEDURES.

8. A COPY OF ALL PLANS AND REVISIONS, AND THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MAINTAINED ON-SITE AT ALL TIMES DURING CONSTRUCTION.

9. PRIOR TO COMMENCEMENT OF WORK A PRECONSTRUCTION MEETING SHALL BE HELD WITH CITY STAFF AND REPRESENTATIVES OF THE CONTRACTOR AND CONTRACTOR WILL BE PLACED IN CHARGE OF SEDIMENT AND EROSION CONTROL FOR THE ENTIRE SITE.
MAPPING NOTES:
1. Topographic information is based upon field survey performed by Dave Lavender, on May 5, 2014 and June 20, 2014 for Cleveland Park.
2. Topographic information is based upon field survey performed by Gramling Bros Surveying, Inc. in 2002 for Berry Field.
3. Channel edge as shown indicates edge of water at time of survey.
4. All elevations refer to NAVD 1988.
5. North arrow, bearings and coordinates are based upon the South Carolina coordinate system (NAD 1983).
6. Milone & MacBroom Inc. accepts no responsibility for the accuracy of maps and data which have been supplied by others.
7. Information regarding the location of existing utilities has been based upon available information and may be incomplete, and where shown should be considered approximate. The location of all existing utilities should be verified by the engineer.
8. Call "Call Before You Dig South Carolina", 1-888-721-7877. All utility locations that do not match the vertical or horizontal control shown on the plans shall immediately be brought to the attention of the engineer for resolution.

MATCHLINE
ALTERNATE NO. 2 - SEE SHEET 26
NOTE:
1. ALL LIGHTS THAT ARE REMOVED SHALL BE PROPERLY DISCONNECTED AT THE BREAKER PANEL AND THE WIRES REMOVED. LIGHTS TO BE STORED FOR REUSE ON THIS PROJECT OR FUTURE USE BY THE COUNTY.
2. TREES TO REMAIN SHALL BE PROTECTED WITH 16 GAUGE TEMPORARY CHAIN LINK FENCE. THE FENCE SHALL BE LOCATED AT THE LIMITS OF THE TREE CANOPY ABOVE, OR AT THE LIMITS OF IDENTIFIED ROOTS, WHICHER EVER PROVIDES THE GREATEST PROTECTION.

MATCHLINE ALTERNATE NO.2 - SEE SHEET 27

MATCHLINE ALTERNATE NO.2 - SEE SHEET 27

REMOVALS LEGEND
- REMOVE BITUMINOUS/CONCRETE PAVEMENT AND ASSOCIATED CURBING AS APPLICABLE TO FULL DEPTH
- REMOVE CONCRETE WALL AND ASSOCIATED CURBING AS APPLICABLE
- REMOVE EXISTING FENCE / RAILING
- REMOVE CONCRETE WALL / CURB
- TREE PROTECTION, SEE NOTE No.2

MATCHLINE ALTERNATE NO.2 - SEE SHEET 27

BASE BID - REMOVALS PLAN
SPARTANBURG, SOUTH CAROLINA
CLEVELAND PARK RENOVATIONS
CLEVELAND PARK AND BERRY FIELD

NOTE:
1. ALL LIGHTS THAT ARE REMOVED SHALL BE PROPERLY DISCONNECTED AT THE BREAKER PANEL AND THE WIRES REMOVED. LIGHTS TO BE STORED FOR REUSE ON THIS PROJECT OR FUTURE USE BY THE COUNTY.
2. TREES TO REMAIN SHALL BE PROTECTED WITH 16 GAUGE TEMPORARY CHAIN LINK FENCE. THE FENCE SHALL BE LOCATED AT THE LIMITS OF THE TREE CANOPY ABOVE, OR AT THE LIMITS OF IDENTIFIED ROOTS, WHICHER EVER PROVIDES THE GREATEST PROTECTION.
307-B Falls Street
Greenville, South Carolina  29601
(864) 271-9598  Fax (864) 271-4135
www.miloneandmacbroom.com

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MATCHLINE
ALTERNATE NO.2 - SEE SHEET 28

CONCRETE SIDEWALK
SEE DETAIL SHEET 14

BITUMINOUS CONCRETE WALK
BENCH
TRASH RECEPTACLE
CONCRETE SEAT WALL
CONCRETE STAIRS

LEGEND

MATCHLINE
ALTERNATE NO.2 - SEE SHEET 28

ENLARGEMENT 2
REFER TO BANK
STABILIZATION PLANS

REFER TO PLANS BY
LEATHERS & ASSOCIATES

ENLARGEMENT 1
REFER TO SHEET 10

FiVe 30 7 2 0 15
JULY 30, 2015
5051-01
BASE BID - MATERIALS PLAN
CLEVELAND PARK RENOVATIONS
CLEVELAND PARK AND BERRY FIELD
SPARTANBURG, SOUTH CAROLINA
NOTE:
1. CONTRACTOR TO CONFIRM PLAYGROUND GRADES WITH MATCHLINE & ASSOCIATIVE PLANS
2. MAXIMUM SLOPE OF ANY SIDEWALK OR PLAZA SPACE SHALL NOT EXCEED 5% OR 1' RISE IN 20' RUN OR 2% OR 1 RISE IN 50' RUN. PLAZA SPACES SHALL NOT EXCEED 2% OR 1 RISE IN 50' RUN IN ANY DIRECTION.
3. ALL UTILITIES SHALL BE PROTECTED DURING CONSTRUCTION. THE CONTRACTOR IS ADVISED THAT A SEWER MAIN RUNS THROUGH THE SITE AS SHOWN ON THE PLANS AND MAY NOT BE IN THE EXACT LOCATION SHOWN.

MATCHLINE
ALTERNATE NO. 2 - SEE SHEET 32

REFER TO BANK STABILIZATION PLANS

SEE ALTERNATE No.3 CLEVELAND PARK TO BERRY FIELD TUNNEL SHEETS 35 TO 38
SPARTANBURG, SOUTH CAROLINA
CLEVELAND PARK AND BERRY FIELD

DESCRIPTION

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MATCHLINE
ALTERNATE NO.1 - SEE SHEET 24

ASHEVILLE HWY.

MATCHLINE
ALTERNATE NO.1 - SEE SHEET 24
**Legend:**
- RANDOM BOULDER
- ROCK APRON
- BEACH ACCESS
- COIR LOG WITH BOULDERS
- LOW FLOW CHANNEL

**Description:**

**Bank Treatment Types:**

**A.** BANK TREATMENT A - REPAIR ERODING SLOPE:
This work shall involve the regrading of eroded slopes (to a maximum steepness of 3:1), without the addition or removal of material. Forming of grade shall involve moving of native material only, prior to the placement of topsoil.

**B.** BANK TREATMENT B - COIR LOG WITH BOULDERS:
This work shall involve the placement of 8-foot sections of 12" dia. COIR log separated and keyed into boulders at the ends of each (see detail).

**C.** BANK TREATMENT C - GRADE SLOPE AT 3:1:
This work shall involve the regrading of the slope at 3:1 in a condition that requires the removal and disposal of excess material off site, prior to the placement of topsoil.

**Water Control Notes:**

1. The project site is subject to flooding. The contractor shall monitor weather forecasts and stabilize the construction site and remove equipment from flood-prone areas in the event of flood warnings.
2. Work shall be performed during periods of low water only.
3. The erosion measures as represented on this plan are presented as informational only, and subject to change based on seasonal, weather, and field conditions.
4. Contractor shall prepare and submit an erosion control and flood contingency plan for approval prior to the start of construction.

**Bank Restoration Notes:**

1. All bank restoration work to be on banks only. No work within the wetted channel area is proposed.
2. No slopes shall be steeper than 3:1 (horizontal to vertical).
3. See cross sections, planting plan, and details for further information.

**Notice to Contractor:**

1. All drainage improvements for alternatives shall be installed as part of the base bid.
2. Neither C. 1, 3, 5, 6, 7, 9, 10, 11, 13 shall be installed with alternative 5.

**Legends:**
- BEACH ACCESS
- RANDOM BOULDER
- ROCK APRON
- COIR LOG WITH BOULDERS
- LOW FLOW CHANNEL
EXHIBIT TO PLANS BY LEATHERS & ASSOCIATES

1. ENLARGEMENT 1 - LAYOUT AND MATERIALS
   ENTRY PLAZA

2. ENLARGEMENT 2 - LAYOUT AND MATERIALS
   REFLECTION GARDEN

3. ENLARGEMENT 3 - LAYOUT AND MATERIALS
   MEMORIAL SCULPTURE

4. ENLARGEMENT 1 - GRADING AND UTILITIES

5. ENLARGEMENT 2 - GRADING AND UTILITIES

6. ENLARGEMENT 3 - GRADING AND UTILITIES

NOTE

*SEE PLANT SCHEDULE ENLARGEMENT ON SHEET 10

REFER TO PLANS BY LEATHERS & ASSOCIATES

REFER TO PLANS BY LEATHERS & ASSOCIATES

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REFER TO PLANS BY LEATHERS & ASSOCIATES

REFER TO PLANS BY LEATHERS & ASSOCIATES

BASE BID & ALTERNATE No. 2 - ENLARGEMENT PLANS

Spartanburg, South Carolina
Berry Field Park Restoration
Cleveland Park and Berry Field

JULY 30, 2015
5051-01
SAL
1. When disturbances will cause 10 acres or more, a conference must be held on-site unless the Department has approved otherwise.

2. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing or grass substitute. Also provide temporary vegetation on exposed slopes.

3. Minimize soil compaction and, unless infeasible, preserve topsoil.

4. For14% or steeper, use erosion control blanket, grass seed, or straw berming. For less than 14%, use a combination of vegetation and sediments controls.

5. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.

6. The following discharges from sites are prohibited:
   - Wastewater from washout of concrete, unless managed by an appropriate control;
   - Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
   - Wastewater from washout of base materials, unless managed by an appropriate control;
   - Stormwater from drainage, unless managed by an appropriate control;
   - Other waterborne contaminants like gasoline, oil, waste with a pH of less than 1 or greater than 12.

7. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.

8. Where stabilization by the above methods is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.

9. Erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized.

10. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of disturbed land.

11. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly installed, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.

12. Inspections and maintenance must be conducted in the order of the BMPs installed, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.

13. Provide a check list of BMPs used. All BMPs shall be maintained until all soil compaction is minimized, vegetation cover restored and stabilized. Include a check list of BMPs used, all disturbed areas shall be cleaned, graded, and stabilized with grassing or grass substitute. Also provide temporary vegetation on exposed slopes.

14. Provide a check list of BMPs used. All BMPs shall be maintained until all soil compaction is minimized, vegetation cover restored and stabilized. Include a check list of BMPs used, all disturbed areas shall be cleaned, graded, and stabilized with grassing or grass substitute. Also provide temporary vegetation on exposed slopes.

15. Erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized.

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19. Provide a check list of BMPs used. All BMPs shall be maintained until all soil compaction is minimized, vegetation cover restored and stabilized. Include a check list of BMPs used, all disturbed areas shall be cleaned, graded, and stabilized with grassing or grass substitute. Also provide temporary vegetation on exposed slopes.
BOULDER FOUNDATION DETAIL

PLAN

SECTION

FOUNTAIN SUPPORT DETAIL

NOTES
1. CONTRACTOR TO VERIFY SIZE OF BOULDER PRIOR TO CONSTRUCTING FOUNTAIN SUPPORT TO MATCH SIZE.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
### TABLE A - PEDESTRIAN BRIDGE DATA

<table>
<thead>
<tr>
<th>BRIDGE</th>
<th>BRIDGE WIDTH</th>
<th>SPAN</th>
<th>BEAMS</th>
<th>TOP OF WALL ELEV.</th>
<th>SOUTH ELEV.</th>
<th>SEAT ELEV.</th>
<th>SHEET NUMBER</th>
<th>BEARING PLATE</th>
<th>CROSS SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXISTING BRIDGE REHABILITATION &quot;B&quot;</td>
<td>6'-0&quot;</td>
<td>41'-0&quot;</td>
<td>W18X48</td>
<td>706.7a</td>
<td>706.7a</td>
<td>(TOP OF WALL ELEV. - 12&quot;)/2</td>
<td>188120</td>
<td>CBX18.75B &amp; ENS &amp; MID-SPAN</td>
<td></td>
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<tr>
<td>EXISTING BRIDGE REHABILITATION &quot;C&quot;</td>
<td>6'-0&quot;</td>
<td>44'-0&quot;</td>
<td>W8X24</td>
<td>706.3a</td>
<td>706.3a</td>
<td>(TOP OF WALL ELEV. - 12&quot;)/2</td>
<td>188120</td>
<td>CBX18.75B &amp; ENS &amp; MID-SPAN</td>
<td></td>
</tr>
</tbody>
</table>

### PEDESTRIAN BRIDGES

**GENERAL NOTES**

1. CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
2. REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.
3. ALL WOOD DECKING SHALL BE PRESSURE TREATED OF THE SIZES AND TYPES INDICATED.
4. STEEL SHALL CONFORM TO ASTM A36, AND SHALL BE GALVANIZED.
5. ANCHOR BOLTS SHALL CONFORM TO ASTM A325.
6. BRIDGES TO MATCH STYLE OF THE BRIDGE TO BE REMOVED.

**PRODUCTS**

**MATERIALS**

- **LUMBER, GENERAL:**
  - FACTORY MARK EACH PIECE OF LUMBER WITH GRADE, MILL AND MILL NUMBER.
  - PROVIDE ACTUAL SIZES AS REQUIRED BY PS 20, FOR NORTHERN PINE LUMBER.
  - PROVIDE DRESSED LUMBER, S4S, UNLESS OTHERWISE INDICATED.
  - PROVIDE SOUTHERN PINE LUMBER, ALL RAILING TO BE NO. 1 GRADE OR BETTER.

- **FABRICATING WORK:**
  - DISCARD UNITS OF MATERIAL WITH DEFECTS WHICH MIGHT IMPAIR QUALITY OF WORK, AND UNITS WHICH ARE TOO SMALL TO USE IN EXECUTION.
  - PROVIDE FASTENERS AND ANCHORAGES WITH A HOT DIP ZINC COATING.

- **WOOD PRESERVATIVE:** .40 CCA PER APWA STANDARDS C2.

- **PRODUCTS**
  - MATERIALS, GENERAL:
    - FACTORY MARK EACH PIECE OF LUMBER WITH GRADE, MILL AND MILL NUMBER.
    - PROVIDE ACTUAL SIZES AS REQUIRED BY PS 20, FOR NORTHERN PINE LUMBER.
    - PROVIDE SOUTHERN PINE LUMBER, ALL RAILING TO BE NO. 1 GRADE OR BETTER.

**EXECUTION**

**MATERIALS, GENERAL:**

- PROVIDE MATERIALS, GENERAL:
  - PROVIDE FASTENERS AND ANCHORAGES WITH A HOT DIP ZINC COATING.
  - PROVIDE SOUTHERN PINE LUMBER, ALL RAILING TO BE NO. 1 GRADE OR BETTER.

- **MISCELLANEOUS MATERIALS:**
  - PROVIDE ALL EXPOSED END OF POSTS AND RAILS TO HAVE 1" CHAMFERED (45°) EDGE.
  - PROVIDE SAND AND GRIT FOR CONSTRUCTION.

### TYPICAL RAILING POST SPACING

| SCALE: | 1'-0" |

**NOTES**

1. Provide fasteners and anchorages with a hot-dip zinc coating.
2. Exposed end of posts and rails shall have 1" chamfered (45°) edge.
RIPRAF AT BRIDGE ABUTMENTS

<table>
<thead>
<tr>
<th>TYPE OF MATERIAL</th>
<th>USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone</td>
<td>For Upland</td>
</tr>
<tr>
<td></td>
<td>Restoration</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RIPRAP AT BRIDGE ABUTMENTS**

- Stone: Use for upland restoration.
- Natural: Use for stream bank protection.

**RIPRAP AT BRIDGE ABUTMENTS**

1. Natural stone: Use for stream bank protection.

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WATER CONTROL NOTES:
1. The project site is subject to flooding. The contractor shall perform necessary flood controls and stabilize the construction zone so as to prevent off-site areas from flooding in the event of flood warnings.
2. Work shall be performed during periods of low water
3. The erosion measures as represented on this plan are presented as informational only, and subject to change based on seasonal, weather, and field conditions.
4. Contractor shall prepare and submit erosion control and flood contingency plan for approval prior to the start of construction.

BANK RESTORATION NOTES:
1. All bank restoration work to be done only. No work within the wetted channel area is proposed.
2. No slopes shall be steeper than 3:1 (Horizontal to Vertical).
3. See Cross Sections, Planting Plan, and Details for further information.

BANK TREATMENT TYPES:
A. BANK TREATMENT A - BANK STABILIZATION PLAN
This work shall involve the regrading of eroded slopes (to a maximum steepness of 3:1), without the addition or removal of material. Formation of grade will involve moving of native material only, prior to the placement of topsoil.
B. BANK TREATMENT B - COIR LOG WITH BOULDERS
This work shall involve the placement of 8-foot sections of 12" dia. Coir log separated and keyed into boulders at the ends of each (see detail).
C. BANK TREATMENT C - GRADE SLOPE AT 3:1
This work shall involve the regrading of the slope at 3:1 in a condition that requires the removal and disposal of excess material off site, prior to the placement of topsoil.

MAPPING NOTES:
1. Topographic information is based upon field survey performed by Dave Lavender, on May 5, 2014 and June 20, 2014 for work area A, Cleveland Park.
2. Topographic information is based upon field survey performed by Gramling Bros Surveying, Inc. in 2002 for work area B, Berry Field.
3. Channel edge as shown indicates edge of water at time of survey.
4. All elevations refer to NAVD 1988.
5. North arrow, bearings and coordinates are based upon the South Carolina Coordinate System (NAD 1983).
6. Milone & MacBroom Inc. accepts no responsibility for the accuracy of maps and data which have been supplied by others.
7. Information regarding the location of existing utilities has been based upon available information and may be incomplete, and where shown should be considered approximate. The location of all existing utilities should be confirmed prior to beginning construction. Call "Call Before You Dig South Carolina", 1-888-721-7877. All utility locations that do not match the vertical or horizontal control shown on the plans shall immediately be brought to the attention of the engineer for resolution.

GENERAL NOTES:
1. Work depicted herein is limited to channel bank restoration. General park improvements and bridge construction plans refer to separate projects, listed below:
2. Refer to plans titled "Cleveland Park Renovation Plans" dated July 30, 2015.

NOTICE TO CONTRACTOR:
1. All drainage improvements for Alternates shall be installed as part of the Base Bid.
2. All square footage of LAKE BOTTOM area shall be installed with Alternates 
3. All deferred improvements for Alternates shall be installed with Alternates in the same year.
**LITTLE CHINQUAPIN CREEK BASELINE**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>STARTING STATION</th>
<th>NORTHING</th>
<th>EASTING</th>
<th>CURVE DATA</th>
<th>LINE DATA</th>
<th>SENDING STATION</th>
<th>NORTHING</th>
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</tr>
</thead>
<tbody>
<tr>
<td>164</td>
<td>1715607.416</td>
<td>1141417.096</td>
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**REFER TO SHEET 07 FOR CLEVELAND PARK BASELINE DATA**

* * *
NOTE:
1. CONTRACTOR TO CONFIRM PLAYGROUND GRADES WITH LEATHERS & ASSOCIATES PLANS.
2. SLOPE OR RISE OF ANY ELEVATION OR PLANE WHICH SHALL BE HAVING A MILD SLOPE, NOT TO EXCEED 1% OR 1' RISE IN 10' RUN, OR A STEEP SLOPE, NOT TO EXCEED 3% OR 1' RISE IN 5' RUN, AND SHALL NOT HAVE ANY DECLINE.
3. ALL UTILITIES SHALL BE PROTECTED DURING CONSTRUCTION. THE CONTRACTOR IS ADVISED THAT A SEWER MAIN RUNS THROUGH THE SITE AS SHOWN ON THE PLANS AND MAY NOT BE IN THE EXACT LOCATION SHOWN.
**SITE PREPARATION:**

Topsoil shall be spread over all exposed areas to restore the soil profile and topsoil condition, if not available from the existing surface. Where rock or other impervious material is exposed, it shall be removed to a depth equal to the thickness of the topsoil required for the project, or as otherwise specified.

**SITE EXCAVATION:**

Topsoil shall be removed to a depth of four (4") inches using a disk or any suitable equipment prior to seeding. Topsoil removed shall be stockpiled in a manner to be reused to one side of the excavation or placed in accordance with the site plan. Where the slope of the site is unusually steep, surcharge or other measures to stabilize the soil shall be used.

**SITE FERTILIZATION:**

Fertilizer shall be applied in accordance with the site plan. Topsoil and subgrade shall be tested for soil acidity every three (3) years and lime added as needed based on annual soil tests.

**COMPACTED SUBGRADE:**

The pH of the subgrade must be greater than 6.0. If less, lime shall be added to the subgrade to bring the pH to a value greater than 6.0. The subgrade shall be free of roots or rhizomes such as grass, trees, or brush.

**CONCRETE BLEACHER PAD:**

Concrete shall be used to prepare the concrete bleacher pad. The concrete pad shall be compacted to a depth of four (4") inches using a disk or any suitable equipment prior to seeding. Topsoil removed shall be stockpiled in a manner to be reused to one side of the excavation or placed in accordance with the site plan. Where the slope of the site is unusually steep, surcharge or other measures to stabilize the soil shall be used.

**TEMPORARY VEGETATIVE COVER:**

Temporary vegetation shall be used to cover the subgrade or any exposed areas of the site. The temporary vegetation shall be removed upon attaining final subgrades, scarifying the surface to a depth of four (4") inches, and planting permanent vegetation.

**PERMANENT VEGETATIVE COVER:**

Permanent vegetation shall be established as specified on the site plan. The permanent vegetation shall be maintained in accordance with the site plan and any applicable specifications. Where necessary, the permanent vegetation shall be maintained to a depth of four (4") inches using a disk or any suitable equipment prior to seeding. Topsoil removed shall be stockpiled in a manner to be reused to one side of the excavation or placed in accordance with the site plan. Where the slope of the site is unusually steep, surcharge or other measures to stabilize the soil shall be used.

**TOPSOILING:**

Topsoil shall be spread over all exposed areas to restore the soil profile and topsoil condition, if not available from the existing surface. Where rock or other impervious material is exposed, it shall be removed to a depth equal to the thickness of the topsoil required for the project, or as otherwise specified.

**SITE BACKFILL:**

Where the slope of the site is unusually steep, surcharge or other measures to stabilize the soil shall be used. The backfill shall be compacted to a depth of four (4") inches using a disk or any suitable equipment prior to seeding. Topsoil removed shall be stockpiled in a manner to be reused to one side of the excavation or placed in accordance with the site plan. Where the slope of the site is unusually steep, surcharge or other measures to stabilize the soil shall be used.

**SITE POLLUTION CONTROL MEASURES:**

Provide permanent and temporary pollution control measures to prevent contamination of adjacent wetlands, watercourses, and water bodies, and to maintain suitable conditions for vegetation.

**SITE TURF:**

Turf shall be installed as specified on the site plan. The turf shall be maintained in accordance with the site plan and any applicable specifications. Where necessary, the turf shall be maintained to a depth of four (4") inches using a disk or any suitable equipment prior to seeding. Topsoil removed shall be stockpiled in a manner to be reused to one side of the excavation or placed in accordance with the site plan. Where the slope of the site is unusually steep, surcharge or other measures to stabilize the soil shall be used.

**SITE MOWING:**

The site shall be mowed to a height of four (4") inches using a disk or any suitable equipment prior to seeding. Topsoil removed shall be stockpiled in a manner to be reused to one side of the excavation or placed in accordance with the site plan. Where the slope of the site is unusually steep, surcharge or other measures to stabilize the soil shall be used.

**SITE MAINTENANCE:**

Maintenance of the site shall be performed in accordance with the site plan and any applicable specifications. Where necessary, the maintenance of the site shall be maintained to a depth of four (4") inches using a disk or any suitable equipment prior to seeding. Topsoil removed shall be stockpiled in a manner to be reused to one side of the excavation or placed in accordance with the site plan. Where the slope of the site is unusually steep, surcharge or other measures to stabilize the soil shall be used.

**SITE COMPLIANCE:**

The site shall be in compliance with all applicable specifications and regulations. Where necessary, the site shall be maintained to a depth of four (4") inches using a disk or any suitable equipment prior to seeding. Topsoil removed shall be stockpiled in a manner to be reused to one side of the excavation or placed in accordance with the site plan. Where the slope of the site is unusually steep, surcharge or other measures to stabilize the soil shall be used.
**TABLE A - PEDESTRIAN BRIDGE DATA**

<table>
<thead>
<tr>
<th>BRIDGE</th>
<th>BRIDGE WIDTH</th>
<th>SMALL</th>
<th>BEAMS</th>
<th>TOP OF WALL ELEVATION</th>
<th>BEARING PLATE</th>
<th>CROSS BEAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Bridge Rehabilitation &quot;A&quot;</td>
<td>8' - 0&quot;</td>
<td>10 ga. 8&quot; @ 18&quot;</td>
<td>Ex. Granite Monument</td>
<td>(4) - #5 BARS</td>
<td>CONCRETE FOOTING (SEE MONUMENT FOOTING DETAIL ON THIS SHEET)</td>
<td>MONUMENT FOOTING</td>
</tr>
<tr>
<td>10 ga. Chain Link Fabric, Aluminized (See Const. Specifications For More Information)</td>
<td>Ex. Wall to Remain</td>
<td>Ex. Grade</td>
<td>18' HIGH CHAIN LINK BACKSTOP</td>
<td>Poured In-Place Concrete</td>
<td>EQUAL SPACING</td>
<td></td>
</tr>
<tr>
<td>1&quot; GAP (MIN.) BETWEEN BACKSTOP AND FINISHED GRADE</td>
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<tr>
<td>1&quot; D.O. POST (TYEP)</td>
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<tr>
<td>TENSION BAR, TYPICAL AT ALL CORNER AND END POSTS</td>
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<tr>
<td>8 GA. CHAIN LINK FABRIC, ALUMINIZED (SEE CONST. SPECIFICATIONS FOR MORE INFORMATION)</td>
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<tr>
<td>FINISHED GRADE</td>
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<td>NOTES</td>
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<tr>
<td>FOR CONSTRUCTION SPECIFICATIONS</td>
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<td>NOT</td>
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<tr>
<td>CONTRACTOR TO VERIFY &amp; MATCH TOP OF WALL ELEVATIONS FOR EXISTING ABUTMENTS. THE CONTRACTOR SHALL ALSO PROVIDE ELEVATIONS TO ENGINEER TO CONFIRM GRADES.</td>
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<tr>
<td><strong>SEAT ELEVATION TO BE TOP OF WALL ELEVATION MINUS 2'-2&quot;.</strong></td>
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</tbody>
</table>

**SCALE: 1"=1'-0"**
NOTE:
ALL WALKS ARE 6' WIDE UNLESS OTHERWISE NOTED.
PROPOSED CONCRETE WALL AND CONCRETE SLAB (SEE ENLARGED DETAIL)

CONCRETE PIER ON ROCK

SOIL

DECK SLAB

SECTION
SCALE: 1/4" = 1'-0"

ALT 3.SD2

MATCH ELEVATION W/BOTTOM OF PIER FOOTING (TYP.)

EX. SLOPE

COMPACTED FILL

18'-6"

23'-6"

10" STEEL BEARING PILE

MATCH ELEVATION W/BOTTOM OF PIER FOOTING

#6 @ 8"

#5 @ 8"

#5 @ 12"

TOP & BOTTOM EACH WAY

(10) - #5 BARS, CONT.

#5 @ 12"

TYPICAL WALL SECTION
SCALE: 1/2" = 1'-0"

ALTERNATE No. 3 - CROSSING UNDER ASHVILLE HWY
SPARTANBURG, SOUTH CAROLINA

ALTERNATE No. 3 - TUNNEL
CLEVELAND PARK RENOVATIONS
CLEVELAND PARK AND BERRY FIELD

37
JULY 30, 2015
5051-01
GENERAL NOTES

1. CONTRACTOR SHALL ADHERE TO CONSTRUCTION SEQUENCE TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK.

2. CONTRACTOR SHALL INSTALL ANCHORS IN MINIMAL DISTANCE TO THE EXISTING SLOPE BELOW BRIDGE.

3. CONTRACTOR SHALL STABILIZE POSITION OF SLOPE WITH ANCHORS & SHOOTS prior to moving the next section.

4. CONTRACTOR SHALL BE AWARE THAT WORK WILL REQUIRE HAND EXCAVATION AND BE LIMITED TO SMALL EQUIPMENT.

5. CONCRETE SHALL HAVE A 28 DAY COMpressive STRENGTH OF 4,000 PSI.

6. REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.

NOTES AND SPECIFICATIONS FOR HELICAL ANCHORS

1. HELICAL ANCHORS SHALL BE INSTALLED TO A MINIMUM CAPACITY OF 40 KIPS.

2. HELICAL ANCHORS AND THEIR COMPONENTS SHALL CONFORM TO THE REQUIREMENTS FOR PRE-STRESSED ROCK AND SOIL ANCHORS, LATEST EDITION, ADOPTED BY THE POST-TENSIONING INSTITUTE.

3. GROUND ANCHORS AND THEIR COMPONENTS SHALL BE PROTECTED FROM CORROSION. CORROSION PROTECTION SHALL INCLUDE DELIVERY AND STORAGE METHOD FOR TENSIONS ON BASES, ABSOLUTE BORISILO DIAMETER, PVC SKEETING IN FREE LENGTH, TEMPORARY AND PERMANENT LUBRICANTS, CEMENT-BOUND MASONRY, CORROSION RESISTANT ATTACHMENTS, CEMENTED IN FREE LENGTH, IF REQUIRED, AND CONSEPTION GROUP FOR MINOR WORK.

4. MEANING PLATES SHALL CONFORM TO ASTM A46, DRY COATED.

5. COMPLETE ANCHORS SHALL BE INSTALLED IN 90% OF DESIGN SERVICE LOAD, STRESSING, PERFORMANCE TESTING, AND PROOF TESTS SHALL COMPLY TO THE REQUIREMENTS OF THE RECOMMENDATIONS FOR PRE-STRESSED ROCK AND SOIL ANCHORS LATEST EDITION, ADOPTED BY THE POST-TENSIONING INSTITUTE.

6. FORMS SHALL BE AWARE THAT WORK WILL REQUIRE exceptional HAND EXCAVATION & SHOTCRETE PRIOR TO MOVING THE NEXT SECTION.