# MARTIN LUTHER KING JR. PARK

## 90% CONSTRUCTION DOCUMENTS

# MLK JR PARK | CARRBORO, NC

90% CD : ILLUSTRATIVE RENDERING

05 . 23 . 2017

STEWART

# MLK JR PARK | CARRBORO, NC

60% DD : ILLUSTRATIVE RENDERING

05 . 15 . 2017

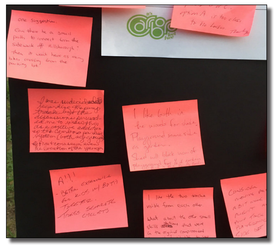
STEWART

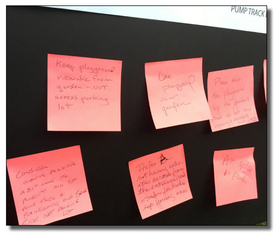
# PUMP TRACK COMMUNITY INPUT MEETING - MAY 15

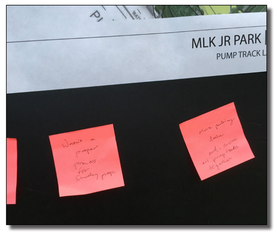
MLK JR PARK | CARRBORO, NC
PUMP TRACK LAYOUT : OPTION A

MLK JR PARK | CARRBORO, NC
PUMP TRACK LAYOUT : OPTION B

MLK JR PARK | CARRBORO, NC
PUMP TRACK LAYOUT : OPTION C






# MLK JR PARK | CARRBORO, NC

## 90% CD : PUMP TRACK INPUT

05 . 23 . 2017

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# PUMP TRACK LAYOUTS PRESENTED AT MAY 15 COMMUNITY MEETING

## OPTION A FEEDBACK:

- LIKE THE PLAYGROUND NEAR THE GARDEN
- DO NOT KEEP PUMP TRACKS NEAR EACH OTHER
- LIKE BOTH IN THE WOODS FOR SHADE
- CONCERNED ABOUT PROXIMITY TO NEIGHBORS
- LIKE BEGINNER TRACK CLOSER TO ROAD (WITH FENCE) AND GARDEN SO PARENTS CAN HEAR IF KID IS HURT.
- WAS UNDECIDED, BUT NOW BELIEVE THIS WILL BE A POSITIVE ADDITION TO CARRBORO PARKS. LIKE PUMP TRACKS NEAR EACH OTHER AND NEAR GARDEN.
- LIKE OPTION A - BETTER EXPERIENCE FOR KIDS WITH BOTH TRACKS TOGETHER.
- OPTION A IS TOO CLOSE TO THE NEARBY HOUSES.
- LIKE THE TWO TRACKS VISIBLE FROM EACH OTHER. CAN WE ADD SMALL SKILLS STATIONS?
- LIKE OPTION A - CLUSTERS KIDS' ACTIVITIES ON ONE SIDE OF PARKING LOT.
- LIKE PLAYGROUND NEAR GARDEN AND PUMP TRACKS CLOSE TO EACH OTHER.
- MAKE ONE PUMP TRACK VIEWABLE FROM THE OTHER.
- SHADE THE PUMP TRACKS.
- CONSIDER SHIFTING PARKING TO PUT ALL NEAR EACH OTHER ON THE SAME SIDE OF PARKING.
- LOVE ALL OPTIONS - NICE BALANCE OF OPEN AND STRUCTURED SPACES. IT'S NICE TO HAVE THE TRACKS ADJACENT.
- ADD A PATH TO CONNECT FROM HILLSBOROUGH
- SHETLEY PROPERTY WAS NOT VETTED THROUGH THE PUBLIC PROCESS LIKE THE PARK LAND.
- I LIKE BOTH IN THE WOODS FOR SHADE.

# PUMP TRACK LAYOUTS PRESENTED AT MAY 15 COMMUNITY MEETING

## OPTION B FEEDBACK:

- DON'T LIKE SEPARATION OF PLAYGROUND
- A FENCE AROUND THE ENTIRE PARK WOULD LIMIT THE PUMP TRACKS FROM TAKING OVER ALL THE WOODS AND BIKING INTO THE NEIGHBORHOOD

HILLSBOROUGH ROAD
OLD NC 86 (60' PI
68' DUKE POWE
ASPHALT DRIVE
TOWER
0 25 50

# MLK JR PARK | CARRBORO, NC

PUMP TRACK LAYOUT : OPTION B

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# PUMP TRACK LAYOUTS PRESENTED AT MAY 15 COMMUNITY MEETING

## OPTION C FEEDBACK:

- I PREFER THIS PLAN. CAN WE TRY OUT THE BEGINNER TRACK BEFORE INVESTING IN A LARGER ONE?
- LOVE THE DESIGN AND CANNOT WAIT FOR GROUND BREAKING.
- OPTION C IS MY PREFERRED. A IS ALSO FINE BUT ONLY IF IT IS ON THE SAME TIME LINE AS THE CURRENT MLK PLANS.
- MOVE PARKING DOWN AND PUT ALL PUMP TRACKS TOGETHER.
- THERE WASN'T A PROPER PROCESS FOR THE SHETLEY PROPERTY.
- DON'T THINK SENIORS WILL USE THE EXERCISE STATIONS.
- I'M WORRIED ABOUT THE YOUNGER FOLKS SCOOTING ACROSS THE PARKING LOT TO REACH THE ADDITIONAL BIKE FACILITIES.
- DON'T LIKE SEPARATION OF TWO TRACKS.

# 90% CD'S - WITH PREFERRED PUMP TRACK LOCATIONS

# MLK JR PARK | CARRBORO, NC

90% CD : ILLUSTRATIVE RENDERING

05 . 23 . 2017

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# 90% CD'S - NATURAL PLAYGROUND DETAILS

1

EMBANKMENT SLIDE

2

HOPPING LOGS

3

WATER PLAY

4

CLIMBING LOGS

5

BALANCING LOGS

6

SEESAW

7

WILLOW TUNNEL

8

BIRD'S NEST SWING

MLK JR PARK | CARRBORO, NC

90% CD : PLAYGROUND RENDERING

05 . 23 . 2017

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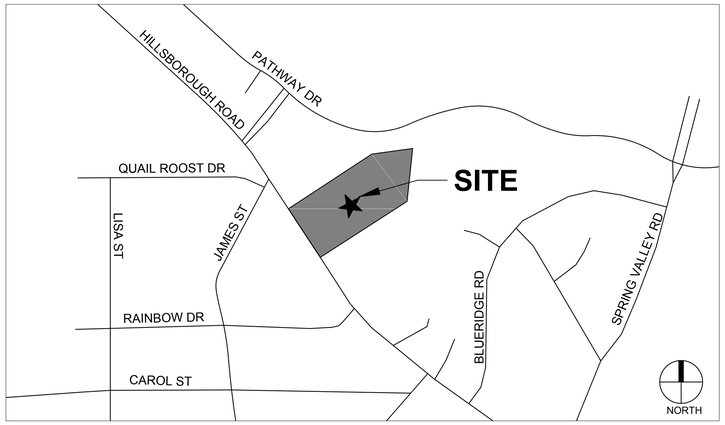


VICINITY MAP
SCALE: 1" = 500'

# MARTIN LUTHER KING, JR PARK

1120 HILLSBOROUGH RD
CARRBORO, NC 27516

TOWN OF CARRBORO
LAND USE PERMIT

SUBMITTED ON MAY 1, 2017

| SUMMARY INFORMATION | |
|---|---|
| PROJECT NAME: | MARTIN LUTHER KING, JR PARK |
| SITE ADDRESS: | 1120 HILLSBOROUGH ROAD |
| COUNTY: | ORANGE |
| PARCEL PIN #: | 9779-31-1977 |
| PARCEL OWNER: | TOWN OF CARRBORO |
| PARCEL AREA: | 10.12 Ac |
| TOTAL DISTURBED/ PROJECT AREA: | 6.03 Ac |
| CURRENT ZONING: | R-15 |
| EXISTING LAND USE: | PARK |
| PROPOSED USE: | PARK |
| RIVER BASIN: | CAPE FEAR ; JORDAN LAKE (UNPROTECTED) |
| CONSTRUCTION TYPE: | PARK |
| MAX BUILDING HEIGHT: | 35'-0" |
| PROPOSED BUILDING HEIGHT: | 13'-0" |
| EXISTING IMPERVIOUS AREA: | 10,197 S.F. |
| PROPOSED IMPERVIOUS AREA: | 22,053 S.F. |

| OVERALL PARKING SUMMARY | |
|---|---|
| REQUIRED PARKING | 30 BASED UPON PARK USAGE |
| PROVIDED PARKING | 30 TOTAL |
| REGULAR 9'X18' SPACES | 28 |
| HANDICAP ACCESSIBLE SPACES | 2 |
| BIKE PARKING | 6 |

| UTILITIES IMPROVEMENTS QTY | |
|---|---|
| PRIVATE SEWER | |
| 6" SEWER SERVICE | 452 LF |
| PRIVATE WATER | |
| 4" WATER MAIN | 403 LF |
| 8" FIRE LINE | 179 LF |

| SHEET INDEX | |
|---|---|
| SHEET # | SHEET NAME |
| C0.00 | COVER SHEET |
| C1.00 | EXISTING CONDITIONS |
| C2.00 | DEMOLITION PLAN |
| C3.00 | SITE PLAN |
| C3.01 | PLAYGROUND ENLARGEMENT |
| C4.00 | EROSION CONTROL NOTES |
| C4.01 | EROSION CONTROL PHASE 1 |
| C4.02 | EROSION CONTROL PHASE 2 |
| C5.00 | GRADING PLAN |
| C5.10 | SCM PLAN |
| C5.11 | SCM DETAILS |
| C6.00 | UTILITY PLAN |
| C6.10 | UTILITY PLAN AND PROFILE |
| C6.11 | UTILITY PLAN AND PROFILE |
| C9.00 | SITE DETAILS |
| C9.01 | SITE DETAILS |
| C9.02 | SITE DETAILS |
| C9.10 | EROSION CONTROL DETAILS |
| C9.30 | UTILITY DETAILS |
| L1.00 | LANDSCAPE PLAN |
| L2.00 | PLANTING DETAILS |
| A-101 | FLOOR PLANS |
| A-102 | PICNIC SHELTER FLOOR PLANS |
| A-201 | ELEVATIONS |
| A-202 | ELEVATIONS |
| A-203 | ELEVATIONS |
| A-204 | EXTERIOR PERSPECTIVES |

## APPLICANT/OWNER

TOWN OF CARRBORO
PARKS AND RECREATION
301 WEST MAIN STREET
CARRBORO, NC 27510
CONTACT: WENDELL RODGERS
919.918.7371 (T)
WRODGERS@TOWNOFCARRBORO.ORG

## CIVIL ENGINEERING - LANDSCAPE ARCHITECTURE

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421 FAYETTEVILLE ST., SUITE 400
RALEIGH, NC 27601
T 919.380.8750
FIRM LICENSE # C-1051
www.stewartinc.com
PROJECT # C16146

STEWART INC. - CIVIL ENGINEERING
CONTACT: JOSEPH PUCKETT, PE
CIVIL ENGINEER
919.866.4829 (T)
919.380.8752 (F)
JPUCKETT@STEWARTINC.COM

STEWART INC. - LANDSCAPE ARCHITECTURE
CONTACT: JENNIFER WAGNER, RLS
PROJECT MANAGER
919.866.4739 (T)
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JWAGNER@STEWARTINC.COM

Project number: C16146
Date: 02.27.2017
Drawn by: T. GULL
Designed by: T.GULL

Revisions:

| No. | Date | Description |
|---|---|---|
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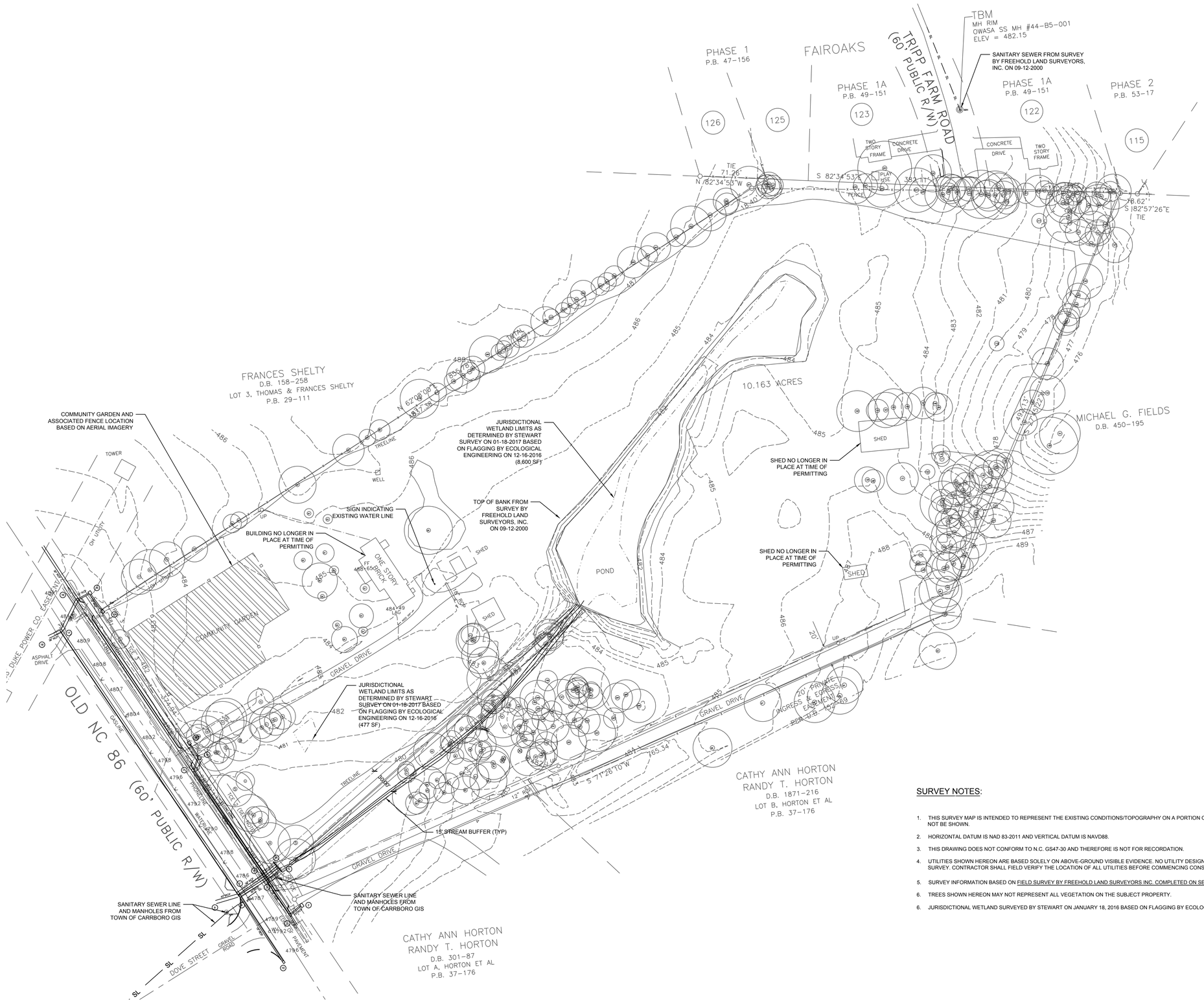
| | | |




## SURVEY LEGEND:

| | |
|---|---|
| | SURVEY CONTROL POINT |
| EIP | EXISTING IRON PIPE |
| ECM | EXISTING CONCRETE MONUMENT |
| | COMPUTED POINT |
| | STORM DRAIN MANHOLE |
| | STORM DRAIN CURB INLET |
| | SANITARY SEWER MANHOLE |
| | SANITARY SEWER CLEANOUT |
| | SANITARY FORCEMAIN VALVE |
| | HYDRANT |
| WV | WATER VALVE |
| WM | WATER METER |
| | WATER MANHOLE |
| W | WATER VAULT |
| | WELL |
| GV | GAS VALVE |
| GM | GAS METER |
| | TELEPHONE MANHOLE |
| TPED | TELEPHONE PEDESTAL |
| | TV MANHOLE |
| CATV | TV PEDESTAL |
| FOWP | FIBER OPTIC WITNESS POST |
| FO | FIBER OPTIC BOX |
| | ELECTRIC MANHOLE |
| EM | ELECTRIC METER |
| EB | ELECTRIC BOX |
| | UTILITY POLE |
| | GUY POLE |
| | GUY WIRE |
| | LIGHT POLE |
| | MANHOLE |
| TS | TRAFFIC SIGNAL BOX |
| | TRAFFIC SIGNAL POST |
| MW | MONITORING WELL |
| BOR | BORING LOCATION |
| | BOLLARD |
| | SIGN |
| FF=267.18' | FINISHED FLOOR ELEVATION |
| | DECIDUOUS TREE |
| | EVERGREEN TREE |
| | BUSH |
| —X— | WIRE FENCE |
| —O— | CHAIN LINK FENCE |
| —T— | UNDERGROUND TELEPHONE LINE |
| —FO— | UNDERGROUND FIBER OPTIC LINE |
| —G— | UNDERGROUND GAS LINE |
| —E— | UNDERGROUND ELECTRIC LINE |
| —W— | UNDERGROUND WATER LINE |
| —SS— | SANITARY SEWER LINE |
| = = = | STORM DRAIN LINE |
| —OHW— | OVERHEAD WIRES |
| —U— | UNIDENTIFIED LINE |
| | UNKNOWN DESTINATION |
| | CONCRETE SURFACE |
| DIP | DUCTILE IRON PIPE |
| PVC | POLYVINYL CHLORIDE PIPE |
| HDPE | HIGH-DENSITY POLYETHYLENE PIPE |
| RCP | REINFORCED CONCRETE PIPE |
| CMP | CORRUGATED METAL PIPE |
| CB | CATCH BASIN |

## SURVEY NOTES:

1. THIS SURVEY MAP IS INTENDED TO REPRESENT THE EXISTING CONDITIONS/TOPOGRAPHY ON A PORTION OF THE PROPERTY AND ALL ENCUMBRANCES UPON THE PROPERTY MAY NOT BE SHOWN.
2. HORIZONTAL DATUM IS NAD 83-2011 AND VERTICAL DATUM IS NAVD88.
3. THIS DRAWING DOES NOT CONFORM TO N.C. GS47-30 AND THEREFORE IS NOT FOR RECORDATION.
4. UTILITIES SHOWN HEREON ARE BASED SOLELY ON ABOVE-GROUND VISIBLE EVIDENCE. NO UTILITY DESIGNATION/MARKING SERVICES WERE PERFORMED AS A PART OF THIS SURVEY. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES BEFORE COMMENCING CONSTRUCTION.
5. SURVEY INFORMATION BASED ON FIELD SURVEY BY FREEHOLD LAND SURVEYORS INC. COMPLETED ON SEPT. 12, 2000.
6. TREES SHOWN HEREON MAY NOT REPRESENT ALL VEGETATION ON THE SUBJECT PROPERTY.
6. JURISDICTIONAL WETLAND SURVEYED BY STEWART ON JANUARY 18, 2016 BASED ON FLAGGING BY ECOLOGICAL ENGINEERING ON DECEMBER 16, 2016 .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Client:

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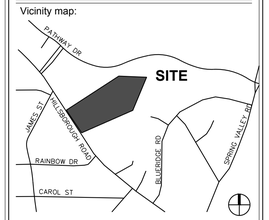
Project:

# MARTIN LUTHER KING, JR. PARK

Vicinity map:




Seal:

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Issued for:

## LAND USE PERMIT

| No. | Date | Description |
|---|---|---|

0 25 50 100

NORTH

SCALE: 1"=50'

Title:

## EXISTING CONDITIONS

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: NBC
Approved by: JLW

C1.00

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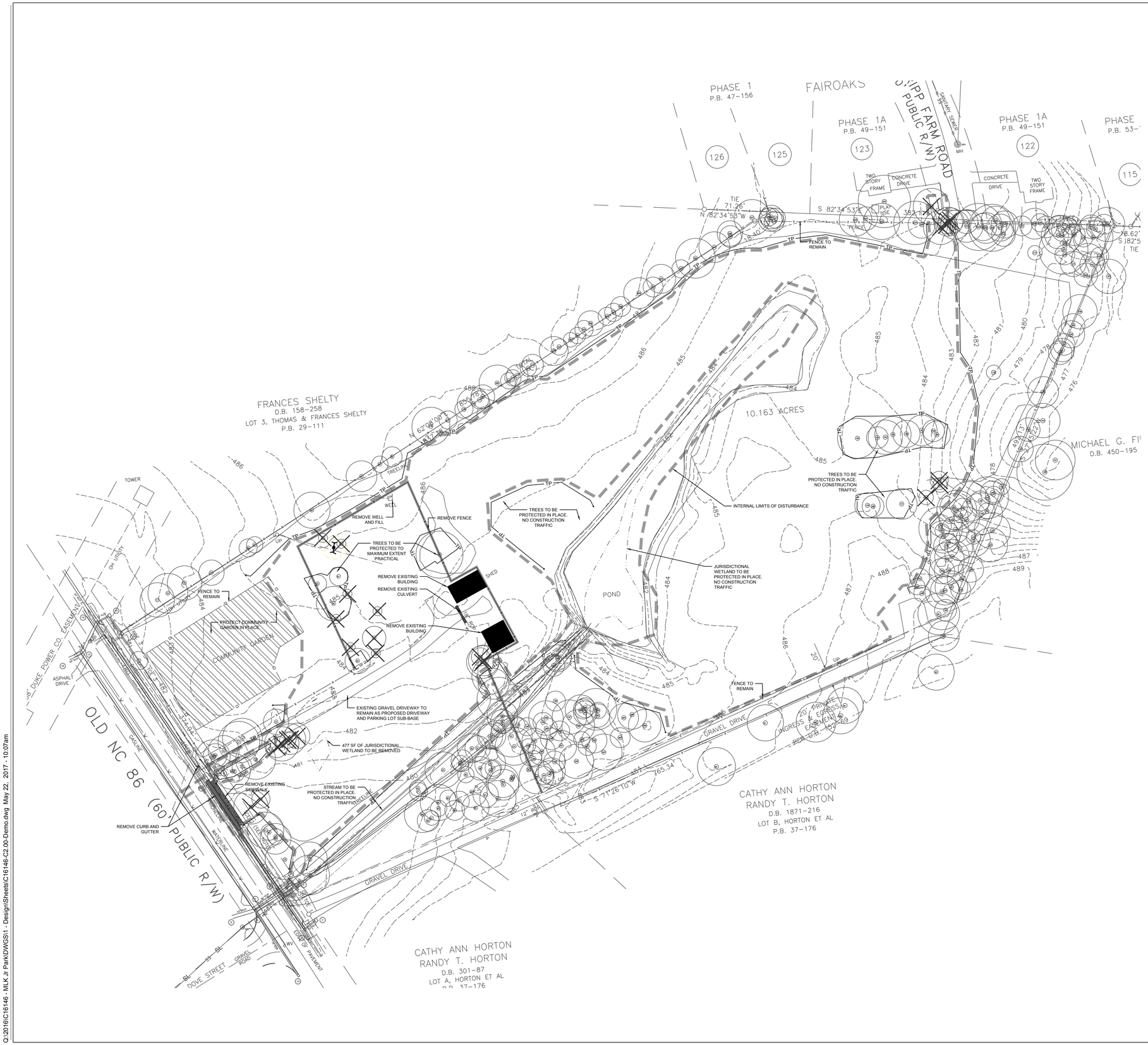


## DEMOLITION LEGEND

- REMOVE BUILDING
- REMOVE WATER LINE
- REMOVE SANITARY SEWER LINE
- REMOVE STORM DRAINAGE
- REMOVE FENCE
- TREE PROTECTION FENCE
- LIMITS OF DISTURBANCE
- COORDINATE LIGHT POLE REMOVAL
- REMOVE TREE
- REMOVE TREELINE
- REMOVE CURB & GUTTER
- REMOVE SIGN
- REMOVE CONCRETE

## DEMOLITION NOTES:

1. REFER TO SHEET C3.00 FOR GENERAL NOTES.
2. CLEANOUTS AND WATER VALVES LOCATED IN AREAS OF DEMOLITION OR SUBSEQUENT CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE AND RAISED TO BE FLUSH WITH NEW GRADE.
3. ANY UTILITY SERVICES SHOWN TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY PROVIDER. CONTRACTOR IS RESPONSIBLE FOR APPROPRIATE SEQUENCING OF UTILITY DEMOLITION WITH THE RESPECTIVE UTILITY AGENCIES.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES PRIOR TO BEGINNING DEMOLITION OPERATIONS. NOTIFY "NORTH CAROLINA ONE CALL" (TELEPHONE 1-800-632-4949) AT LEAST 48 HOURS PRIOR TO START OF DEMOLITION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL."
5. CLEAN SOILS SHALL BE UTILIZED FOR BACKFILL. COMPACTION OF THESE SOILS SHALL BE PERFORMED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
6. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE REMOVED COMPLETELY, INCLUDING ALL SUBGRADE MATERIALS DIRECTLY ASSOCIATED WITH ITEMS TO BE REMOVED.
7. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF LEGALLY OFF-SITE UNLESS OTHERWISE NOTED ON THIS PLAN.
8. REFER TO LANDSCAPE AND EROSION CONTROL DRAWINGS FOR TREE PROTECTION PLAN AND REQUIREMENTS.
9. ALL DEMOLITION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL JURISDICTIONAL CODES OR REQUIREMENTS.
10. TREE PROTECTION FENCING SHALL BE IN PLACE PRIOR TO BEGINNING DEMOLITION
11. EROSION CONTROL PERMIT SHALL BE OBTAINED AND ONSITE PRIOR TO BEGINNING DEMOLITION.
12. ITEMS DESIGNATED TO BE SALVAGED AND/OR RE-USED SHALL BE REMOVED BY THE CONTRACTOR AND PROVIDED TO THE OWNER. COORDINATE STORAGE LOCATION WITH OWNER'S REPRESENTATIVE.
13. WHERE UTILITIES ("TO BE REMOVED") IMPACT THE FOOTPRINT OF THE NEW BUILDING, THE CONTRACTOR SHALL EXECUTE AND REMOVE AN ADDITIONAL 2 FEET OF SOILS TO EITHER SIDE OF THE PIPE, AND 1 FOOT BELOW. CLEAN SUITABLE SOIL SHALL BE UTILIZED FOR BACKFILL AND COMPACTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
14. DEMOLITION AND SUBSEQUENT CONSTRUCTION OF STORM DRAINAGE PIPING SHALL BE PERFORMED IN SUCH A MANNER THAT THE OLD PIPE AND STRUCTURES REMOVED DO NOT IMPACT DRAINAGE UPSTREAM OF THE SYSTEM. PROVISIONS SHALL BE MADE TO MAINTAIN STORM WATER DRAINAGE PATTERNS DURING CONSTRUCTION.
15. DEMOLITION AND SUBSEQUENT CONSTRUCTION OF UTILITIES (WATER, SEWER, ETC) SHALL BE PERFORMED IN SUCH A MANNER THAT THE OLD PIPE AND STRUCTURES REMOVED DO NOT IMPACT OR MINIMIZE SERVICE INTERRUPTION TO EXISTING FACILITIES TO REMAIN. PROVISIONS SHALL BE MADE TO MAINTAIN SERVICE DURING CONSTRUCTION.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL DAMAGES TO THE EXISTING SIDEWALK AND CURB AND GUTTER AS A RESULT OF CONSTRUCTION ACTIVITY AND TRAFFIC. CONTRACTOR SHALL MAINTAIN A PRE-CONSTRUCTION VIDEO OR PHOTO DOCUMENTATION TO SHOW NO DAMAGES OCCURRED.
17. ALL MATERIALS, FURNISHINGS, UTILITIES, AND PAVEMENT THAT ARE NOT SCHEDULED TO BE DEMOLISHED AND ARE DAMAGED BY THE CONTRACTOR AS A RESULT OF THE DEMOLITION OR CONSTRUCTION OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
18. WHERE UTILITIES ARE SHOWN TO BE "REMOVED", CONTRACTOR SHALL INCLUDE NECESSARY PLUG OR VALVES TO ENSURE UTILITY LINES TO REMAIN WILL CONTINUE TO BE IN SERVICE. COORDINATE NECESSARY SHUT DOWN AND REMOVAL WITH THE LOCAL JURISDICTION OR UTILITY OWNER.
19. CONTRACTOR SHALL PROVIDE PEDESTRIAN INGRESS / EGRESS TO ALL EXISTING PARKING LOTS AND PATHS OF PEDESTRIAN TRAVEL THROUGHOUT THE CONSTRUCTION PERIOD.


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PROJECT #: C16146


Client:

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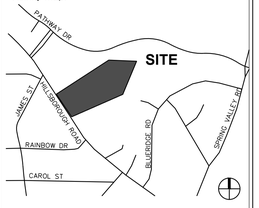
Project:

# MARTIN LUTHER KING, JR. PARK

Vicinity map:




Seal:

NORTH CAROLINA LICENSED LANDSCAPE ARCHITECT 1791 JENNIFER L. WALCHER

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Issued for:

LAND USE PERMIT

| No. | Date | Description |
|---|---|---|

0 25 50 100 NORTH

SCALE: 1"=50'

Title:

DEMOLITION PLAN

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: TPG
Approved by: JLW

C2.00

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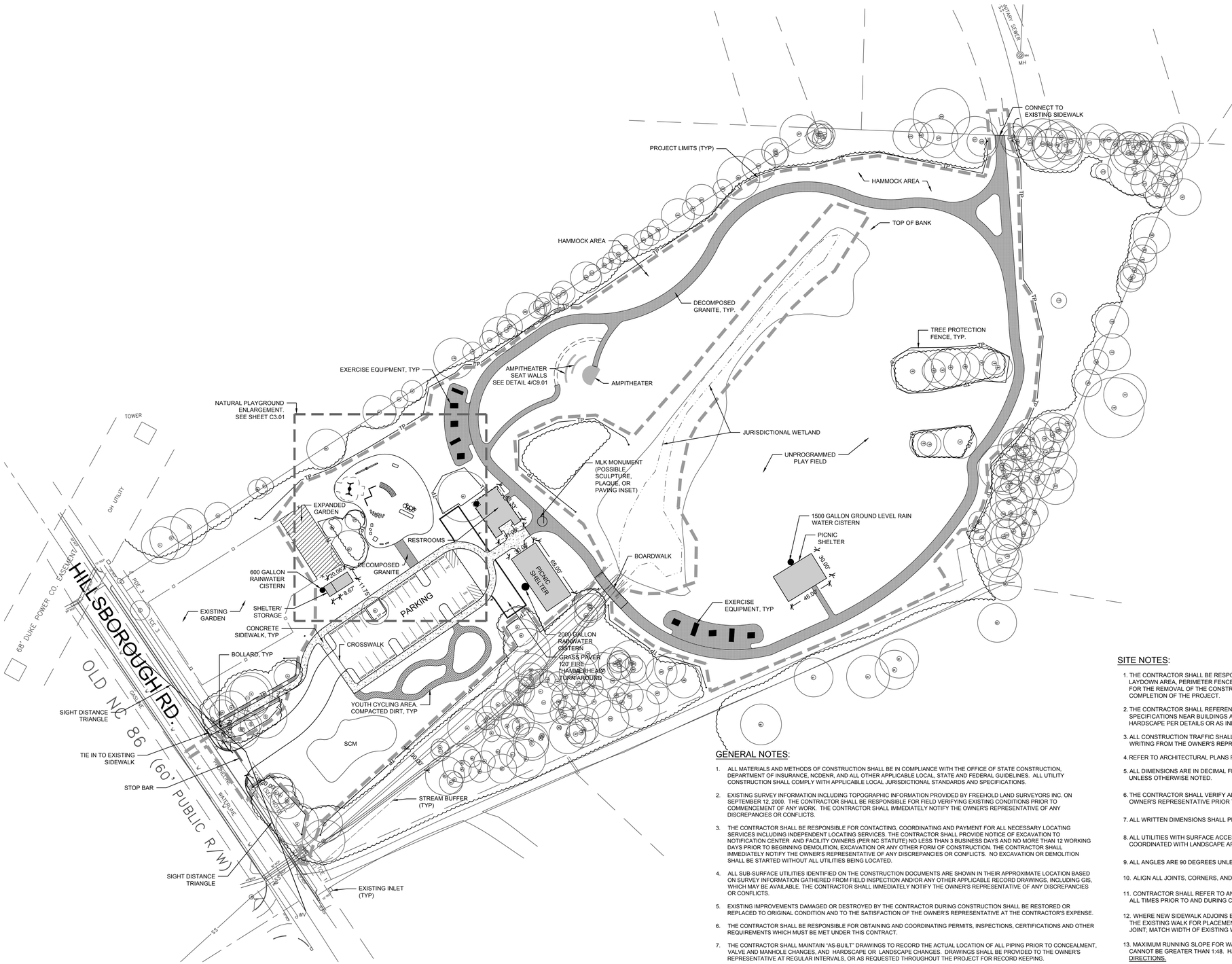


## SITE LEGEND

- PROPOSED BUILDING
- PROPOSED CONCRETE SIDEWALK
- PROPOSED HEAVY DUTY PAVEMENT
- PROPOSED STOP BAR
- PROPOSED 6' WIDE STANDARD CROSSWALK
- PROPOSED SIGN
- H/C PROPOSED ADA PARKING SPACE
- PROPOSED KEYSTONE WALL
- PROPOSED WHEEL STOP
- PROPOSED DECOMPOSED GRANITE TRAIL
- PROPOSED COMPACTED DIRT TRACK
- PROPOSED TREELINE
- X PROPOSED FENCE
- PROPOSED VEHICLE GATE (X' WIDE)
- PROPOSED LIGHT
- PROPOSED BIKE RACK
- PROPOSED BENCH
- PROPOSED BOLLARD
- LIMITS OF DISTURBANCE

## GENERAL NOTES:

1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE OFFICE OF STATE CONSTRUCTION, DEPARTMENT OF INSURANCE, NCDENR, AND ALL OTHER APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES. ALL UTILITY CONSTRUCTION SHALL COMPLY WITH APPLICABLE LOCAL JURISDICTIONAL STANDARDS AND SPECIFICATIONS.
2. EXISTING SURVEY INFORMATION INCLUDING TOPOGRAPHIC INFORMATION PROVIDED BY FREEHOLD LAND SURVEYORS INC. ON SEPTEMBER 12, 2000. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING AND PAYMENT FOR ALL NECESSARY LOCATING SERVICES INCLUDING INDEPENDENT LOCATING SERVICES. THE CONTRACTOR SHALL PROVIDE NOTICE OF EXCAVATION TO NOTIFICATION CENTER AND FACILITY OWNERS (PER NC STATUTE) NO LESS THAN 3 BUSINESS DAYS AND NO MORE THAN 12 WORKING DAYS PRIOR TO BEGINNING DEMOLITION, EXCAVATION OR ANY OTHER FORM OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS. NO EXCAVATION OR DEMOLITION SHALL BE STARTED WITHOUT ALL UTILITIES BEING LOCATED.
4. ALL SUB-SURFACE UTILITIES IDENTIFIED ON THE CONSTRUCTION DOCUMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATION BASED ON SURVEY INFORMATION GATHERED FROM FIELD INSPECTION AND/OR ANY OTHER APPLICABLE RECORD DRAWINGS, INCLUDING GIS, WHICH MAY BE AVAILABLE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS.
5. EXISTING IMPROVEMENTS DAMAGED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED OR REPLACED TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND COORDINATING PERMITS, INSPECTIONS, CERTIFICATIONS AND OTHER REQUIREMENTS WHICH MUST BE MET UNDER THIS CONTRACT.
7. THE CONTRACTOR SHALL MAINTAIN "AS-BUILT" DRAWINGS TO RECORD THE ACTUAL LOCATION OF ALL PIPING PRIOR TO CONCEALMENT, VALVE AND MANHOLE CHANGES, AND HARDSCAPE OR LANDSCAPE CHANGES. DRAWINGS SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE AT REGULAR INTERVALS, OR AS REQUESTED THROUGHOUT THE PROJECT FOR RECORD KEEPING.
8. IF DEPARTURES FROM THE PROJECT DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THERE OF SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION OF ANY EXISTING UTILITY LINES REQUIRED TO COMPLETE ANY PORTION OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE COORDINATION AND COSTS OF THE RELOCATION AND ASSOCIATED WORK.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIALS AND RUBBISH CAUSED BY THE CONTRACTOR. ALL DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE ON A DAILY BASIS.
11. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
12. ROADWAYS (TEMPORARY OR PERMANENT) MUST BE CAPABLE OF SUPPORTING FIRE FIGHTING APPARATUS (85,000 LBS) DURING ALL PHASES OF CONSTRUCTION ONCE VERTICAL CONSTRUCTION HAS BEGUN.

## SITE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE CONSTRUCTION LAYDOWN AREA, PERIMETER FENCE, AND ASSOCIATED GATES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE REMOVAL OF THE CONSTRUCTION LAYDOWN AREA PERIMETER FENCE AND ASSOCIATED GATES AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REFERENCE THE DESIGN PLANS FOR DIMENSIONS, JOINT LOCATIONS, AND INLAY SPECIFICATIONS NEAR BUILDINGS AND IN COURTYARDS. CONTRACTOR SHALL PROVIDE JOINTS IN WALKWAYS AND HARDSCAPE PER DETAILS OR AS INDICATED ON LANDSCAPE/HARDSCAPE PLAN SHEETS.
3. ALL CONSTRUCTION TRAFFIC SHALL ENTER SITE FROM HILLSBOROUGH ROAD UNLESS OTHERWISE APPROVED IN WRITING FROM THE OWNER'S REPRESENTATIVE FOR AN ALTERNATE POINT OF ACCESS.
4. REFER TO ARCHITECTURAL PLANS FOR BUILDING INFORMATION.
5. ALL DIMENSIONS ARE IN DECIMAL FEET TO OUTSIDE FACE OF BUILDINGS, TO CENTERLINES, AND/OR FACE OF CURB UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND COORDINATES AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO ANY CONSTRUCTION.
7. ALL WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE FROM DRAWINGS.
8. ALL UTILITIES WITH SURFACE ACCESS SHALL BE LOCATED WITHIN THE PAVING PATTERN AND SHALL BE COORDINATED WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. REFER TO LAYOUT DRAWINGS.
9. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.
10. ALIGN ALL JOINTS, CORNERS, AND EDGES AS SHOWN
11. CONTRACTOR SHALL REFER TO AND COORDINATE WITH ARCHITECTURAL, STRUCTURAL, AND MEP DRAWINGS AT ALL TIMES PRIOR TO AND DURING CONSTRUCTION.
12. WHERE NEW SIDEWALK ADJOINS EXISTING WALK, PROVIDE EXPANSION JOINT BY DRILLING INTO THE FACE OF THE EXISTING WALK FOR PLACEMENT OF DOWELS. TIE NEW SIDEWALKS INTO NEAREST EXISTING PAVEMENT JOINT; MATCH WIDTH OF EXISTING WALKWAY.
13. MAXIMUM RUNNING SLOPE FOR WALKING SURFACES CANNOT BE GREATER THAN 1:20 AND CROSS SLOPES CANNOT BE GREATER THAN 1:48. HANDICAP SPACES SURFACE SLOPES SHALL NOT EXCEED 1:48 IN ALL DIRECTIONS.
14. SIGHT TRIANGLES - NOTHING OVER 30" HIGH SHALL BE ALLOWED WITHIN THE SIGHT DISTANCE TRIANGLES.
15. THE SITE SHALL BE FULLY STABILIZED (90% COVERAGE) PRIOR TO ISSUANCE OF A BUILDING CERTIFICATE OF OCCUPANCY OR PROJECT APPROVAL
16. HANDICAP RAMPS SHALL BE INSTALLED PER THE PLANS AND SPECIFICATIONS AND THE NC BUILDING CODE. A MAXIMUM SLOPE OF 1/12 FOR 6-FEETE AND A MAXIMUM CROSS SLOPE OF 1:48 SHALL BE PROVIDED. IF EXISTING CONDITIONS PRECLUDE THIS REQUIREMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION
17. THE TESTING AGENCY SHALL BE RESPONSIBLE FOR PROVIDING THE ASPHALT AND CONTRACTOR CERTIFICATION MEMO TO NCDOT FOR ALL ROADWAY IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY.


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Client:

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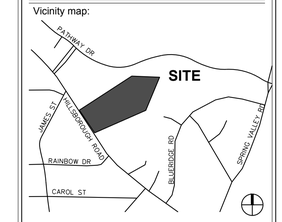
Project:

# MARTIN LUTHER KING, JR. PARK

Vicinity map:




Seal:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1791 JENNIFER L. WAGNER

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Issued for:

LAND USE PERMIT

| No. | Date | Description |
|---|---|---|

0 25 50 100

NORTH

SCALE: 1"=50'

Title:

SITE PLAN

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: TPG
Approved by: JLW

C3.00

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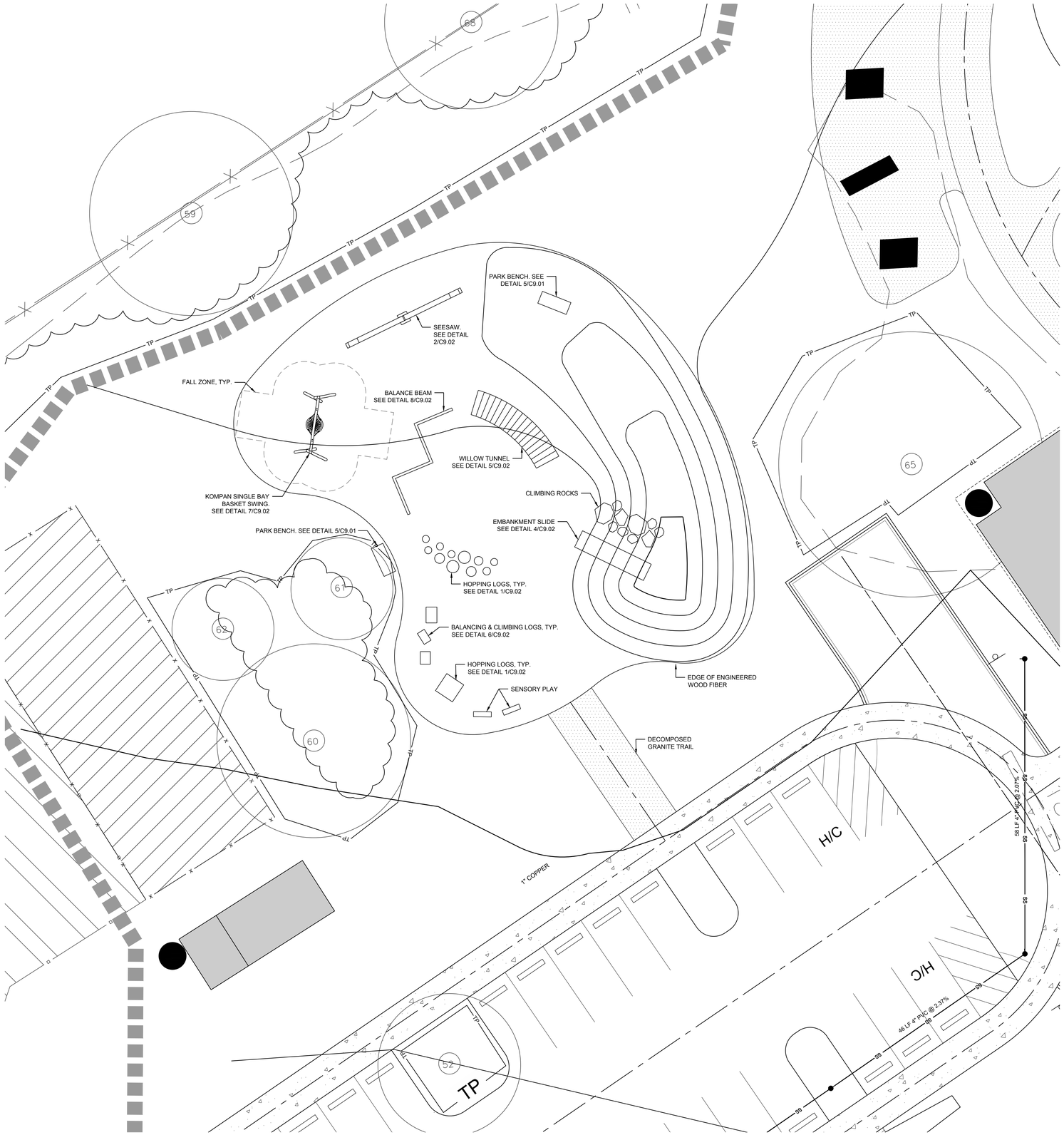


## SITE LEGEND

- PROPOSED BUILDING
- PROPOSED CONCRETE SIDEWALK
- PROPOSED HEAVY DUTY PAVEMENT
- PROPOSED STOP BAR
- PROPOSED 6' WIDE STANDARD CROSSWALK
- PROPOSED SIGN
- H/C — PROPOSED ADA PARKING SPACE
- PROPOSED KEYSTONE WALL
- PROPOSED WHEEL STOP
- PROPOSED DECOMPOSED GRANITE TRAIL
- PROPOSED COMPACTED DIRT TRACK
- PROPOSED TREELINE
- PROPOSED FENCE
- PROPOSED VEHICLE GATE (X' WIDE)
- PROPOSED LIGHT
- PROPOSED BIKE RACK
- PROPOSED BENCH
- PROPOSED BOLLARD
- LIMITS OF DISTURBANCE


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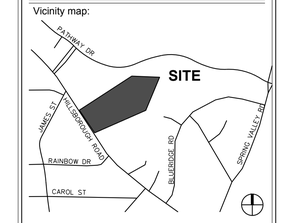


Seal:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1791 JENNIFER L. WAGNER

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Issued for:

## LAND USE PERMIT

| No. | Date | Description |
|---|---|---|

0 5 10 20

SCALE: 1"=10'

NORTH

Title:

## PLAYGROUND ENLARGEMENT

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: TPG
Approved by: JLW

C3.01

Q:\2016\C16146 - MLK Jr Park\DWGS1 - Design\Sheets\C16146-C3.00-Site Plan.dwg May 22, 2017 - 10:08am

## EROSION CONTROL NOTES:

1. REFER TO C3.00 FOR GENERAL NOTES.
2. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED IN BEST LOCATION BASED ON FIELD CONDITIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF CONSTRUCTION ENTRANCES AS NECESSARY TO PREVENT THE TRACKING OF SEDIMENT OFF-SITE. THE OWNER IS RESPONSIBLE FOR MAINTENANCE OF ALL PERMANENT EROSION CONTROL METHODS AFTER CONSTRUCTION IS COMPLETE, IF ANY PERMANENT METHODS ARE REQUIRED.
5. APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
6. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR AND ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
7. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE LIMITS OF DISTURBANCE (L.O.D.) SHALL BE PERMITTED. THE L.O.D. SHALL BE MAINTAINED BY THE ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
8. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
9. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).
10. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT. COPIES OF THE WRITTEN INSPECTION REPORTS SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE TWICE PER WEEK AND AFTER RAINS OF GREATER THAN 0.5". RAIN GAUGE REQUIRED ON SITE.
11. ANY AREAS OF EXPOSED SOILS THAT WILL NOT BE DISTURBED FOR FOURTEEN DAYS SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
12. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY EIGHT (48) HOURS FOLLOWING A STORM EVENT.
13. AT NO TIME SHALL SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
14. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
15. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE A MINIMUM THICKNESS OF 2 TO 3 INCHES.
16. INTERIM SLOPES MAY BE GRADED TO A MAXIMUM SLOPE OF 2:1 (HORIZONTAL: VERTICAL); CUT SLOPES SHALL BE LIMITED TO A MAXIMUM SLOPE OF 1.5:1.
17. THE SURFACE OF AREAS SLOPES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL THAT ARE TO RECEIVE INTERIM FILL SHALL BE PLOWED, FURROWED, TILLED OR BROKEN UP PRIOR TO PLACING FILL SO THAT FILL MATERIAL WILL BOND WITH EXISTING . " SURFACE. INTERIM FILL SHALL BE PLACED AS SPECIFIED FOR PERMANENT FILLS AND IN LIFTS NOT GREATER THAN 6".
18. PROVIDE DUST CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, WETTING DOWN TO CONTROL DUST ON SITE, IN ORDER TO PREVENT ANNOYANCE/AND OR DAMAGE TO ADJACENT SITES. CALCIUM CHLORIDE OR ANY OTHER CHEMICAL MATERIAL MAY NOT BE USED ON SUBGRADES OF AREAS TO BE SEEDED OR PLANTED.
19. SEDIMENT LADEN RUNOFF FROM EXCAVATIONS SHALL NOT BE PUMPED DIRECTLY TO STORM DRAINAGE.
20. INSPECTOR REFERS TO LOCAL JURISDICTIONAL (NCDENR OR LOCAL) LAND QUALITY INSPECTOR OR HIS REPRESENTATIVE, FIELD INSPECTIONS MAY REQUIRE ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS DEEMED NECESSARY BY THE INSPECTOR.
21. CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES LAND QUALITY SECTION EROSION AND SEDIMENT CONTROL PLANNING LAND DESIGN MANUAL.
22. NOTIFICATION OF LAND RESOURCES SEDIMENT AND EROSION CONTROL SELF-INSPECTION PROGRAM: THE PERSON RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES IS REQUIRED TO INSPECT THE PROJECT AFTER EACH PHASE OF THE PROJECT AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED IN ACCORDANCE WITH NCGS 113A-54.1 AND 15A NCAC 4B.0131 TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. THE SELF-INSPECTION REPORT FORM IS AVAILABLE AS AN EXCEL SPREADSHEET FORM HTTP://WWW.DLR.ENR.STATE.NC.US/PAGES/SEDIMENTATION_NEW.HTML

## TREE PROTECTION NOTES:

1. TREE PROTECTION FENCING MUST BE IN PLACE PRIOR TO ANY DEMOLITION, LAND DISTURBANCE OR ISSUANCE OF A GRADING PERMIT. OR OBTAIN A GRADING PERMIT THEN TREE PROTECTION FENCING MUST BE IN PLACE PRIOR TO ANY DEMOLITION, LAND DISTURBANCE
2. TREE PROTECTION FENCING SHALL INCLUDE WARNING SIGNS POSTED IN BOTH ENGLISH AND SPANISH, AS FOLLOWS: "NO TRESPASSING/TREE PROTECTION AREA/PROHIBIDO ENTRAR / ZONA PROTECTORA PARA LOS ÁRBOLES."
3. PROTECTION OF EXISTING VEGETATION: AT THE START OF GRADING INVOLVING THE LOWERING OF EXISTING GRADE AROUND A TREE OR STRIPPING OF TOPSOIL, A CLEAN, SHARP, VERTICAL CUT SHALL BE MADE AT THE EDGE ON THE TREE ROOTS OUTSIDE OF THE TREE SAVE AREA. THIS SHALL OCCUR AT THE SAME TIME THAT OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCING SHALL BE INSTALLED ON THE SIDE OF THE CUT FARTHEST AWAY FROM THE TREE TRUNK AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREES IS COMPLETE.
4. NO STORAGE OF MATERIALS, FILL, OR EQUIPMENT AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED TREE AREA.
5. TREE PROTECTION AREA: EQUALS ONE FOOT OF RADIUS FOR EVERY INCH OF DIAMETER OF EXISTING TREES, OR SIX FOOT RADIUS, WHICHEVER IS GREATER. NO DISTURBANCE ALLOWED WITHIN THIS AREA.

## SEQUENCE OF CONSTRUCTION ACTIVITIES:

1. OBTAIN GRADING PERMIT.
2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. A PRECONSTRUCTION CONFERENCE MUST BE HELD 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. THE EROSION CONTROL INSPECTOR, ARCHITECT, ENGINEER, AND CONTRACTOR SHALL BE PRESENT TO SATISFY REQUIREMENTS.
4. INSTALL CONSTRUCTION ENTRANCE, TREE PROTECTION FENCING, SILT FENCE, PERIMETER EROSION CONTROL DEVICES AND ALL REQUIRED BASINS AND TRAPS.
5. SCHEDULE SITE INSPECTION.
6. UPON APPROVAL TO PROCEED BY THE EROSION CONTROL INSPECTOR, HARVEST ANY TIMBER.
7. CONSTRUCT REMAINING EROSION CONTROL MEASURES AS REQUIRED.
8. REMOVE AND/OR STORE TOPSOIL.
9. BEGIN GRADING OPERATIONS.
10. CLEAN SEDIMENT BASINS/TRAPS WHEN ONE-HALF FULL.
11. ALL STREETS SURROUNDING THE PROJECT SHALL BE KEPT CLEAN AT ALL TIMES.
12. PLACE TEMPORARY SEEDING ON ALL DISTURBED AREAS THAT WILL BE IDLE 14 DAYS OR LONGER.
13. PERMANENT SURFACE STABILIZATION SHALL BE INSTALLED FOR ALL AREAS WITHIN 14 DAYS AFTER FINAL GRADE HAS BEEN REACHED. AS NECESSARY, FERTILIZE, WATER AND RESEED AS REQUIRED TO ESTABLISH AND MAINTAIN A VIGOROUS STAND OF GRASS.
14. AFTER COMPLETION OF CONSTRUCTION AND THE SITE IS STABILIZED, REMOVE ALL ACCUMULATED SEDIMENT FROM SEDIMENT TRAPPING MEASURES AND DISPOSE BY MEANS DEEMED ACCEPTABLE BY THE ENGINEER. SCHEDULE SITE INSPECTION. UPON APPROVAL BY THE EROSION CONTROL INSPECTOR, REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY APPROPRIATE STABILIZATION.
15. STORMWATER PERMIT INSPECTION REPORTS SHALL BE PERFORMED BY THE CONTRACTOR UNTIL NOTIFIED OTHERWISE BY THE EROSION CONTROL INSPECTOR.

NOTES:

1. INSPECTOR REFERS TO LOCAL JURISDICTIONAL (NCDENR OR LOCAL) LAND QUALITY INSPECTOR OR HIS REPRESENTATIVE, FIELD INSPECTIONS MAY REQUIRE ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS DEEMED NECESSARY BY THE INSPECTOR.
2. CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES LAND QUALITY SECTION EROSION AND SEDIMENT CONTROL PLANNING LAND DESIGN MANUAL.
3. NOTIFICATION OF LAND RESOURCES SEDIMENT AND EROSION CONTROL SELF-INSPECTION PROGRAM: THE PERSON RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES IS REQUIRED TO INSPECT THE PROJECT AFTER EACH PHASE OF THE PROJECT AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED IN ACCORDANCE WITH NCGS 113A-54.1 AND 15A NCAC 4B.0131 TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. THE SELF-INSPECTION REPORT FORM IS AVAILABLE AS AN EXCEL SPREADSHEET FORM HTTP://WWW.DLR.ENR.STATE.NC.US/PAGES/SEDIMENTATION_NEW.HTML

## TEMPORARY SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO SIX INCHES DEEP.
3. REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE ADMIXTURE BELOW).
5. CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE MORE THAN 60% DAMAGED, RE-ESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT S&EC ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

## SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONED, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO 6 INCHES DEPTH.
3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY ALL AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW).
5. CONTINUE TILLAGE UNTIL A WELL PULVERIZED, FIRM, REASONABLY UNIFORM 4 TO 6 INCHES DEEP SEEDBED IS PREPARED.
6. SEED ON A FRESHLY PREPARED SEED BED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESENDING WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 60% DAMAGED , REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESENDING WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 50% DAMAGED , REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES AND LANDSCAPING PLANS.
10. SEE LANDSCAPING PLANS FOR PERMANENT SEEDING, MULCHING, AND FERTILIZING RATES. ALL AREAS NOT DESIGNATED TO RECEIVE PLANTS SHALL BE SEEDED PER THE LANDSCAPING PLANS.

## ADMIXTURES

AGRICULTURAL LIMESTONE: 2 TONS/ACRE

FERTILIZER: 1,000 LBS/ACRE - 10-10-10

SUPERPHOSPHATE: 500 LBS/ACRE - 20% ANALYSIS

MULCH: 2 TONS/ACRE - SMALL GRAIN STRAW

ANCHOR: ASPHALT EMULSION AT 300 GALS/ACRE

## SEEDING SCHEDULE

SHOULDERS, SIDE DITCHES, SLOPES (Max 3:1)

| DATE | TYPE | PLANTING RATE |
|---|---|---|
| AUG 15 - NOV 1 | TALL FESCUE | 300 LBS/ACRE |
| NOV 1 - MAR 1 | TALL FESCUE<br>& ABRUZZI RYE | 300 LBS/ACRE<br>25 LBS/ACRE |
| MAR 1 - APR 15 | TALL FESCUE | 300 LBS/ACRE |
| APR 15 - JUN 30 | HULLED COMMON BERMUDAGRASS | 25 LBS/ACRE |
| JUL 1 - AUG 15 | TALL FESCUE AND<br>***BROWNTOP MILLET<br>***OR SORGHUM-SUDAN HYBIRIDS | 120 LBS/ACRE<br>35 LBS/ACRE<br>30 LBS/ACRE |

SLOPES (3:1 to 2:1)

| DATE | TYPE | PLANTING RATE |
|---|---|---|
| MAR 1 - JUN 1<br>(MAR 1 - APR 15) | ***BROWNTOP MILLET<br>ADD TALL FESCUE<br>OR ADD HULLED COMMON BERMUDAGRASS | 50 LBS/ACRE<br>120 LBS/ACRE (MAR 1 - JUN 30)<br>25 LBS/ACRE |
| JUN 1 - SEP 1 | ***TALL FESCUE AND<br>***BROWNTOP MILLET<br>***OR SORGHUM-SUDAN HYBRIDS | 120 LBS/ACRE<br>35 LBS/ACRE<br>30 LBS/ACRE |
| SEP 1 - MAR 1 | ANNUAL RYE<br>AND TALL FESCUE<br>ADD ABRUZZI RYE | 70 LBS/ACRE<br>120 LBS/ACRE (NOV 1 - MAR 1)<br>25 LBS/ACRE |

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

***TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.

## SEDIMENTATION BASIN SIZING

| BASIN ID | BASIN GEOMOETRY | | | | | | | | | OUTLET | | SKIMMER CHARACTERISITCS | | | SURFACE AREA (SF) | | VOLUME (CF) | | DEWATERING TIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BOTTOM | | TOP | | SURFACE | | DAM | SIDE | STORAGE | STONE | SIDE | | | | | | | | |
| | WIDTH | LENGTH | WIDTH | LENGTH | WIDTH | LENGTH | HEIGHT | SLOPES | DEPTH | WIDTH | SLOPES | SIZE | HEAD | ORIFICE | REQUIRED | PROVIDED | REQUIRED | PROVIDED | |
| Sed Basin 1 | 13.0 ft | 38.0 ft | 31.0 ft | 56.0 ft | 25.0 ft | 50.0 ft | 4.5 ft | 2:1 | 3.0 ft | 4.0 ft | 2:1 | 3.0 in | 0.3 ft | 1.00 in | 958 | 2,207.00 | 2,196.00 | 2,202.00 | 2 days |
| Sed Basin 2 | 13.0 ft | 38.0 ft | 31.0 ft | 56.0 ft | 25.0 ft | 50.0 ft | 4.5 ft | 2:1 | 3.0 ft | 4.0 ft | 2:1 | 3.0 in | 0.3 ft | 0.75 in | 864 | 1,250.00 | 1,980.00 | 2,616.00 | 4 days |

## DIVERSION DITCH SIZING

| Channel | Bottom Width (Y) | Sideslope (M) | Top Width (W) | Lining | Channel Depth (FT) | Velocity |
|---|---|---|---|---|---|---|
| DD-01 | 0.00 FT | 2 :1 | 4 FT | STRAW SINGLE NET BLANKET | 0.65 FT | 4.31 FT/S |
| DD-02 | 0.00 FT | 2 :1 | 4 FT | STRAW SINGLE NET BLANKET | 0.7 FT | 4.42 FT/S |
| DD-03 | 0.00 FT | 2 :1 | 4 FT | STRAW SINGLE NET BLANKET | 0.65 FT | 2.97 FT/S |
| DD-04 | 0.00 FT | 2 :1 | 4 FT | STRAW SINGLE NET BLANKET | 0.45 FT | 3.29 FT/S |

TOTAL AREA OF DISTURBANCE
6.03 AC


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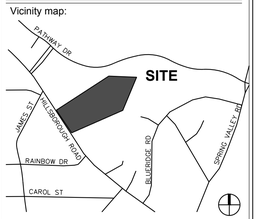
F: (919) 918-4475

Project:

MARTIN LUTHER KING, JR. PARK

Vicinity map:




Seal:

NORTH CAROLINA PROFESSIONAL SEAL 033779 ENGINEER JOSEPH W. PUCKETT

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Issued for:

LAND USE PERMIT

| No. | Date | Description |
|---|---|---|

SCALE: N.T.S.

Title:

EROSION CONTROL NOTES

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: CJJ
Approved by: JWP

C4.00

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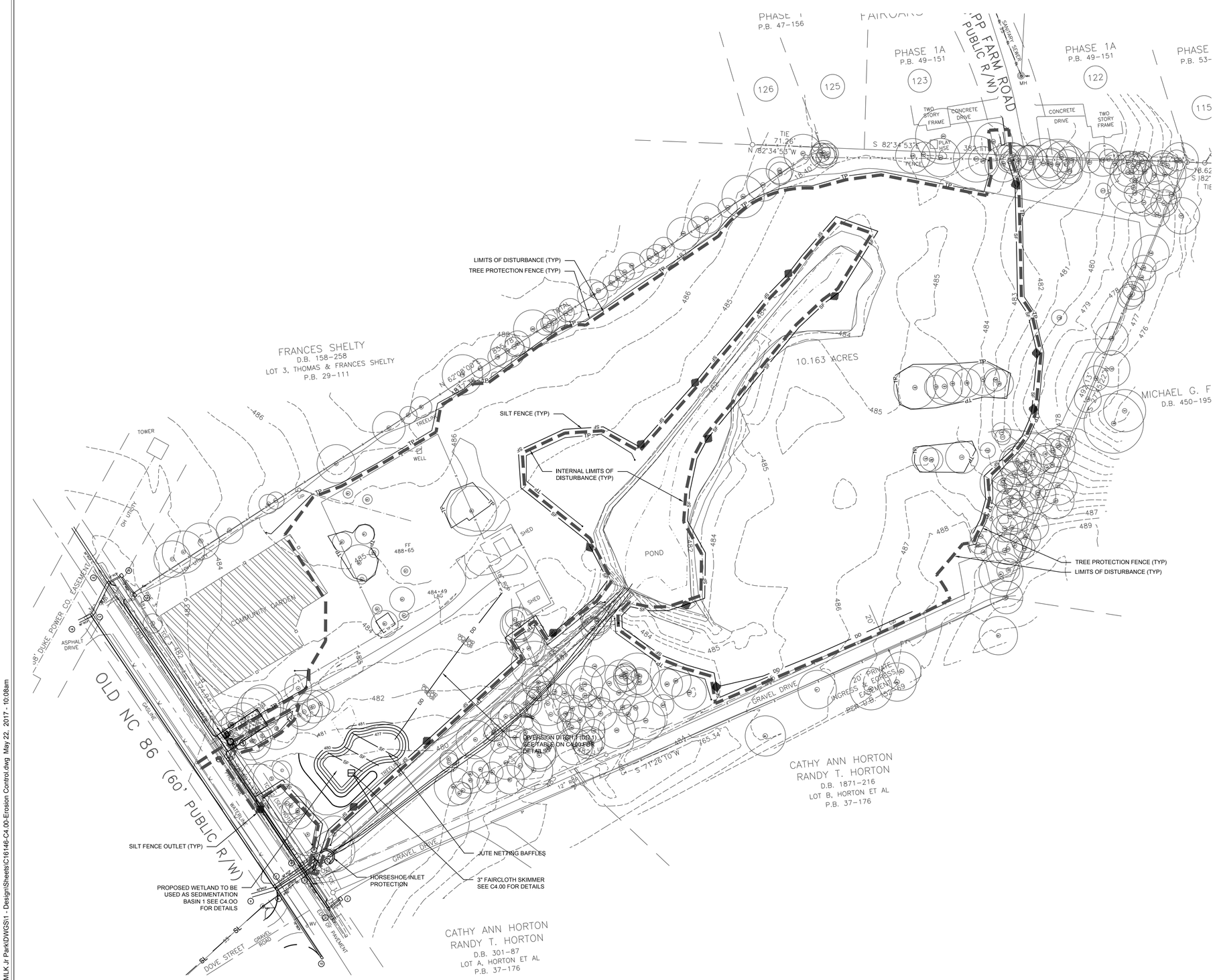


## EROSION CONTROL LEGEND

- SF — SILT FENCE
- TP — TREE PROTECTION
- DD — DIVERSION DITCH
- LIMITS OF DISTURBANCE
- HORSE SHOE INLET PROTECTION
- SILT FENCE OUTLET
- CHECK DAM
- FLARED END SECTION (FES)
- SEDIMENT TRAP
- RIPRAP DISSIPATER
- CE — TEMPORARY CONSTRUCTION ENTRANCE
- 100 YR FLOOD ELEV.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NORTH CAROLINA EROSION CONTROL SPECIFICATIONS

TOTAL AREA OF DISTURBANCE
6.03 AC


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FIRM LICENSE #: C-1051
www.stewartinc.com
PROJECT #: C16146

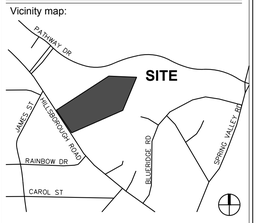

Client:

TOWN OF CARRBORO
301 W. MAIN STREET
CARRBORO, NC 27510
T: (919) 918-7364
F: (919) 918-4475

Project:

# MARTIN LUTHER KING, JR. PARK

Vicinity map:

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|---|---|---|
| | | |

0 25 50 100 NORTH

SCALE: 1"=50'

Title:

## EROSION CONTROL PHASE 1

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: NBC
Approved by: JWP

C4.01

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## EROSION CONTROL LEGEND

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- DD — DIVERSION DITCH
- LIMITS OF DISTURBANCE
- HORSE SHOE INLET PROTECTION
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ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NORTH CAROLINA EROSION CONTROL SPECIFICATIONS

TOTAL AREA OF DISTURBANCE
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Project:

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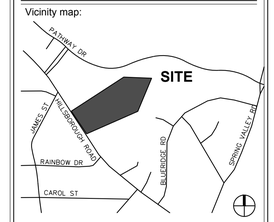
Vicinity map:




Seal:

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Issued for:

LAND USE PERMIT

| No. | Date | Description |
|---|---|---|
| | | |

0 25 50 100 NORTH

SCALE: 1"=50'

Title:

EROSION CONTROL PHASE 2

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: CJJ
Approved by: JWP

C4.02

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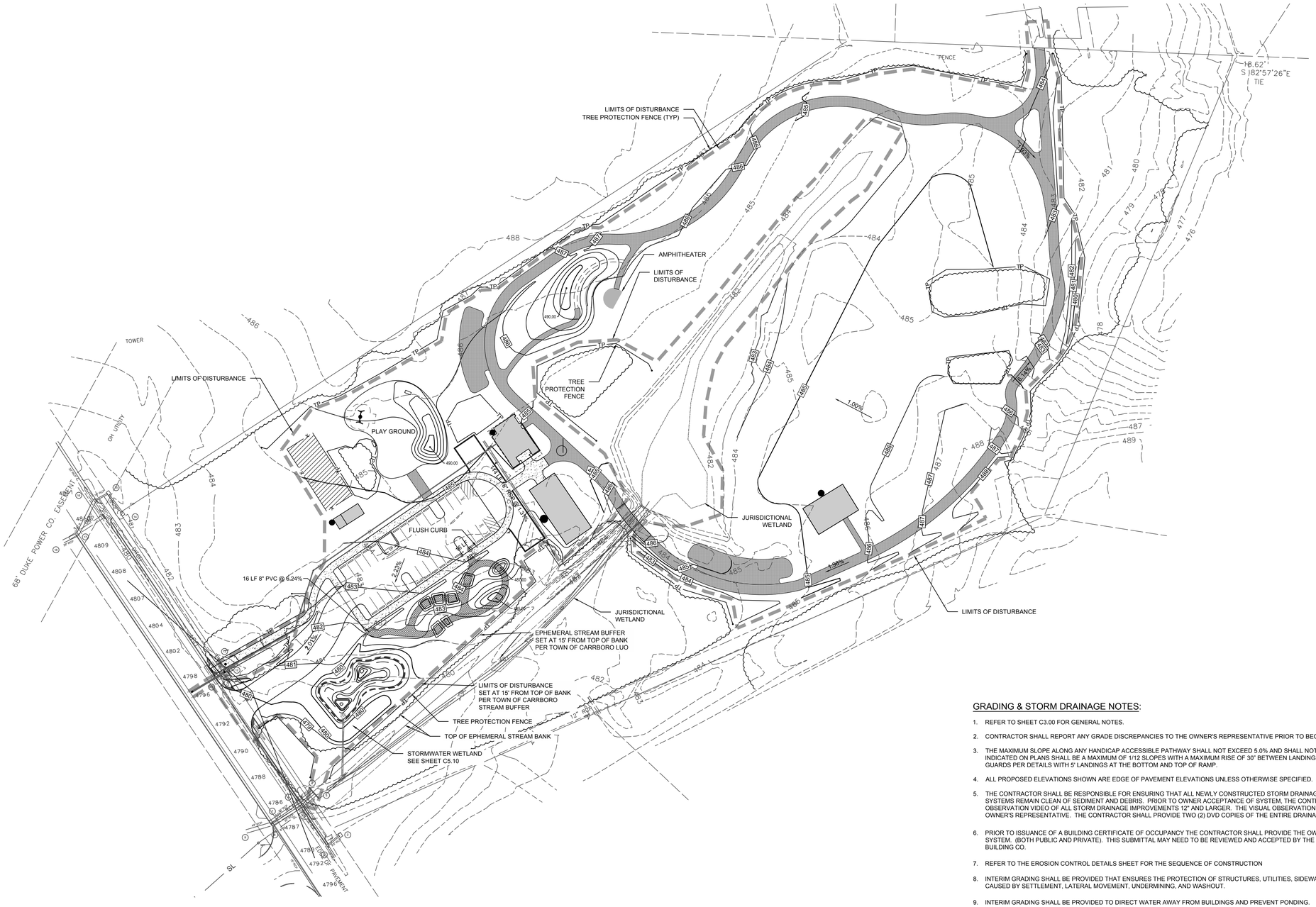



## GRADING LEGEND

- 200 — PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 200 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED STORM DRAINAGE
- PROPOSED AREA DRAIN
- 44.50 — PROPOSED ELEVATION
- RIPRAP DISSIPATOR
- FLOW DIRECTION
- LIMITS OF DISTURBANCE

## GRADING & STORM DRAINAGE NOTES:

1. REFER TO SHEET C3.00 FOR GENERAL NOTES.
2. CONTRACTOR SHALL REPORT ANY GRADE DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION OPERATIONS.
3. THE MAXIMUM SLOPE ALONG ANY HANDICAP ACCESSIBLE PATHWAY SHALL NOT EXCEED 5.0% AND SHALL NOT EXCEED A 2.0% CROSS SLOPE. HANDICAP RAMPS INDICATED ON PLANS SHALL BE A MAXIMUM OF 1/12 SLOPES WITH A MAXIMUM RISE OF 30" BETWEEN LANDINGS. NON-CURB CUT RAMPS SHALL HAVE HANDRAILS AND GUARDS PER DETAILS WITH 5' LANDINGS AT THE BOTTOM AND TOP OF RAMP.
4. ALL PROPOSED ELEVATIONS SHOWN ARE EDGE OF PAVEMENT ELEVATIONS UNLESS OTHERWISE SPECIFIED.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL NEWLY CONSTRUCTED STORM DRAINAGE IMPROVEMENTS AND RECEIVING STORM DRAINAGE SYSTEMS REMAIN CLEAN OF SEDIMENT AND DEBRIS. PRIOR TO OWNER ACCEPTANCE OF SYSTEM, THE CONTRACTOR SHALL COORDINATE AND PROVIDE A VISUAL OBSERVATION VIDEO OF ALL STORM DRAINAGE IMPROVEMENTS 12" AND LARGER. THE VISUAL OBSERVATION SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE TWO (2) DVD COPIES OF THE ENTIRE DRAINAGE VISUAL OBSERVATION.
6. PRIOR TO ISSUANCE OF A BUILDING CERTIFICATE OF OCCUPANCY THE CONTRACTOR SHALL PROVIDE THE OWNER WITH THE VIDEO INSPECTION OF THE STORM SEWER SYSTEM. (BOTH PUBLIC AND PRIVATE). THIS SUBMITTAL MAY NEED TO BE REVIEWED AND ACCEPTED BY THE LOCAL JURISDICTION PRIOR TO THE ISSUANCE OF THE BUILDING CO.
7. REFER TO THE EROSION CONTROL DETAILS SHEET FOR THE SEQUENCE OF CONSTRUCTION
8. INTERIM GRADING SHALL BE PROVIDED THAT ENSURES THE PROTECTION OF STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, AND WASHOUT.
9. INTERIM GRADING SHALL BE PROVIDED TO DIRECT WATER AWAY FROM BUILDINGS AND PREVENT PONDING.
10. TIE ROOF LEADERS WHERE POSSIBLE TO UNDERGROUND STORM SYSTEM. CONTRACTOR TO FIELD VERIFY LOCATE AND INSTALL WHERE POSSIBLE OR AS SHOWN ON PLANS. WHERE ROOF LEADERS DAYLIGHT AT GRADE A SPLASH BLOCK APPROVED BY THE OWNER'S REPRESENTATIVE SHALL BE INSTALLED.
11. MAXIMUM SLOPE ACROSS ANY HANDICAPPED PARKING SPACE AND AISLE SHALL NOT EXCEED 2% IN ANY DIRECTION.
12. PROPOSED CONTOURS ARE APPROXIMATE. SPOT ELEVATIONS AND ROADWAY PROFILES SHALL BE USED IN CASE OF DISCREPANCY.
13. PLACE BACKFILL AND FILL MATERIALS IN LAYER NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. PLACE BACKFILL AND FILL MATERIALS EVENLY ON ALL SIDES TO REQUIRED ELEVATIONS, AND UNIFORMLY ALONG THE FULL LENGTH OF EACH STRUCTURE. COMPACT SOIL TO NOT LESS THAN 95 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 FOR EACH LAYER OF BACKFILL OR FILL MATERIAL UP TO TWO FEET OF FINISHED GRADE. COMPACT SOIL TO NOT LESS THAN 98 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 FOR EACH LAYER OF BACKFILL OR FILL MATERIAL FOR THE FINAL TWO FEET.
14. SITE GRADING IMMEDIATELY ADJACENT TO FOUNDATION OF BUILDING SHALL SLOPE NOT LESS THAN 1/20 AWAY FOR MINIMUM DISTANCE OF 10 FEET. ALTERNATIVE METHOD SHALL BE PROVIDED TO DIVERT WATER AWAY FROM FOUNDATION VIA SWALES SLOPED AT A MINIMUM OF 2% OR IMPERVIOUS SURFACES SLOPED AWAY A MINIMUM OF 2% AWAY FROM BUILDING.
15. CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF EXISTING MANHOLES, METERS, VALVES, ETC. AS REQUIRED TO MEET NEW FINISHED GRADES.
16. CONTRACTOR SHALL SLOPE GRADES TO ASSURE POSITIVE STROMWATER FLOW TO KEEP WATER FROM POOLING ALONG CURBS AND WALLS.
17. TOP OF WALL ELEVATIONS INDICATE THE ELEVATION AT THE TOP OF THE CAP, UNLESS OTHERWISE NOTED.
18. BOTTOM OF WALL ELEVATIONS INDICATE THE ELEVATION OF THE FINISHED GRADE.

### STRUCTURE TABLE

| STRUCTURE NAME: | DETAILS: | PIPES IN: | PIPES OUT |
|---|---|---|---|
| BMP RISER | RIM = 481.55<br>INV OUT = 477.49 | | Pipe 2, 12" RCP INV OUT =477.49 |
| HW#1 | RIM = 478.90<br>INV IN = 477.17 | Pipe 2, 12" RCP INV IN =477.17 | |

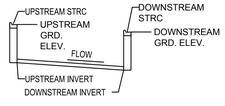
### PIPE TABLE

| START STRUCTURE | END STRUCTURE | START INVERT | END INVERT | SIZE | LENGTH | SLOPE | MATERIAL |
|---|---|---|---|---|---|---|---|
| | | 483.80 | 483.50 | 8" | 15.98' | 1.88% | PVC |
| | | 481.50 | 480.50 | 8" | 16.03' | 6.24% | PVC |
| | | 482.50 | 481.00 | 18" | 114.49' | 1.31% | RCP |
| BMP RISER | HW#1 | 477.49 | 477.17 | 12" | 59.44' | 0.53% | RCP |

### STORM DRAINAGE NETWORK

TYPE CODE:
AD = AREA DRAIN
FES = FLARED END SECTION
JB = JUNCTION BOX
RI = RISER

TYPE CODE:
L-AD = AREA DRAIN
L-JB = JUNCTION BOX




NOTES:
1. STRUCTURES WITHIN NCDOT RIGHT-OF-WAY SHALL BE TO NCDOT STANDARDS.
2. STRUCTURES NOT WITHIN RIGHT OF WAY SHALL EITHER ALL BE TO NCDOT STANDARDS OR SHALL ALL BE TO LOCAL JURISDICTIONAL STANDARDS.
3. ALL STORM PIPES TO BE CLASS III RCP UNLESS OTHERWISE NOTED.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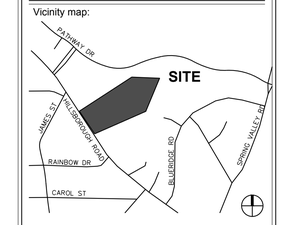
Project:

# MARTIN LUTHER KING, JR. PARK

Vicinity map:

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| No. | Date | Description |
|---|---|---|

0 25 50 100 NORTH

SCALE: 1"=50'

Title:

GRADING PLAN

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: NBC
Approved by: JWP

C5.00

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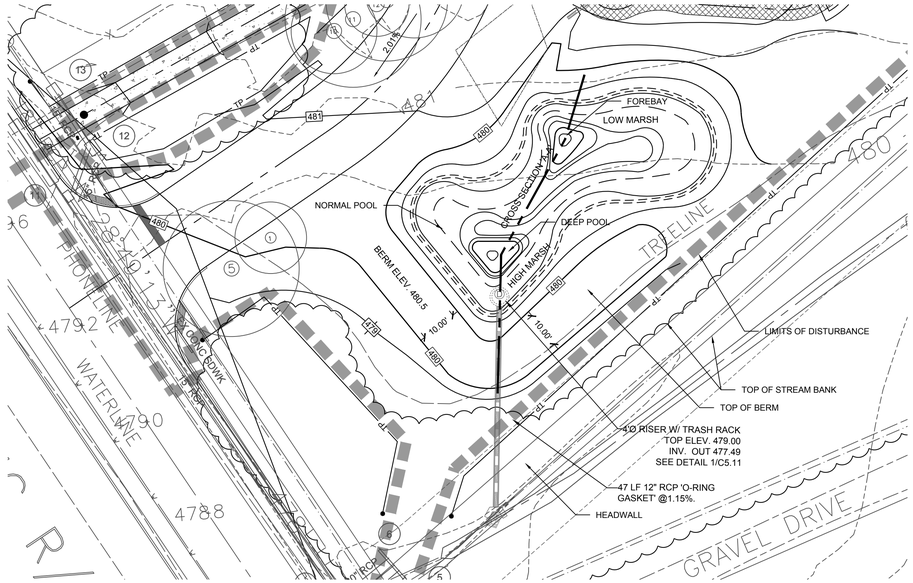



## CONSTRUCTED WETLAND PLAN

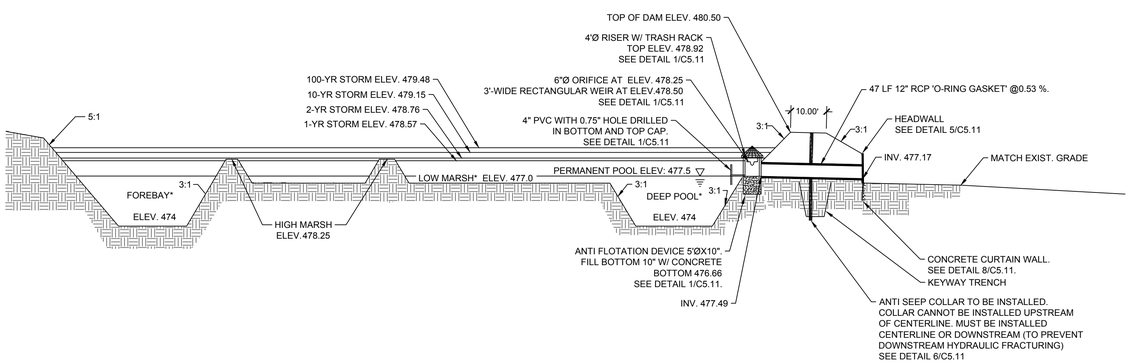
SCALE:1"=20'

0 10 20 40 NORTH

## GRADING LEGEND

- 200 — PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 200 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED STORM DRAINAGE
- PROPOSED AREA DRAIN
- 44.50 — PROPOSED ELEVATION
- RIPRAP DISSIPATOR
- FLOW DIRECTION
- LIMITS OF DISTURBANCE

*SHWT DETERMINED TO BE APPROXIMATELY 13" BELOW EXISTING GRADE.
SEE STORMWATER IMPACT ANALYSIS FOR DETAILS.




## CONSTRUCTED WETLAND CROSS SECTION A -A'

SCALE:1"=20' (H) / 1"=4' (V)

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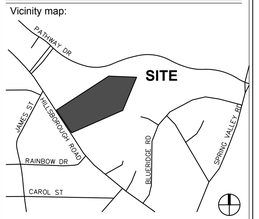


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| No. | Date | Description |
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0 25 50 100 NORTH

SCALE: 1"=50'

Title:

SCM PLAN

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: NBC
Approved by: JWP

C5.10

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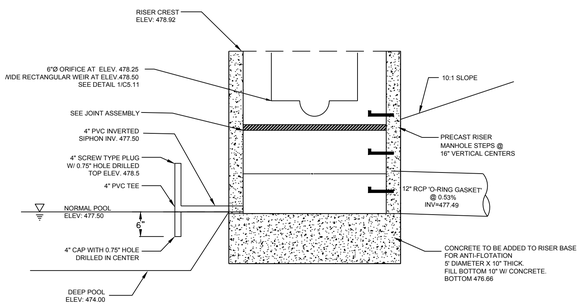
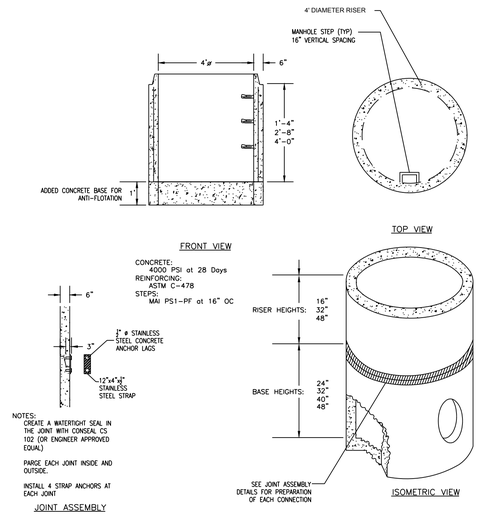
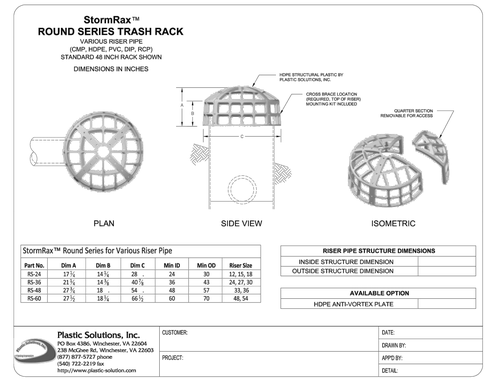



1 C5.11 RISER DETAIL I
SCALE: N.T.S.




2 C5.11 RISER DETAIL II
SCALE: N.T.S.



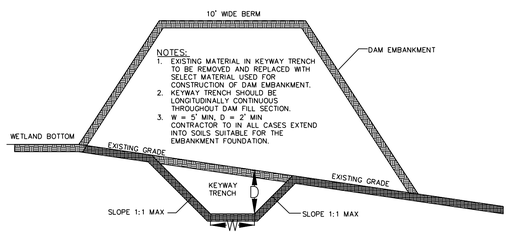

StormRax™ Round Series for Various Riser Pipe

| Part No. | Dim A | Dim B | Dim C | Min ID | Min OD | Riser Size |
|---|---|---|---|---|---|---|
| RS-24 | 17 1/4 | 14 1/4 | 28 | 24 | 30 | 12, 15, 18 |
| RS-36 | 23 1/4 | 14 1/4 | 40 3/4 | 36 | 43 | 24, 27, 30 |
| RS-48 | 27 3/4 | 18 | 54 | 48 | 57 | 33, 36 |
| RS-60 | 27 3/4 | 18 1/4 | 66 1/2 | 60 | 70 | 48, 54 |

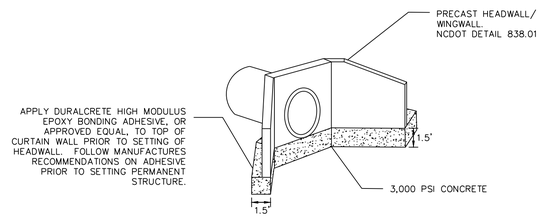
| RISER PIPE STRUCTURE DIMENSIONS | |
|---|---|
| INSIDE STRUCTURE DIMENSION | |
| OUTSIDE STRUCTURE DIMENSION | |

| AVAILABLE OPTION | |
|---|---|
| HDPE ANTI-VORTEX PLATE | |

3 C5.11 TRASH RACK DETAIL
SCALE: N.T.S.




4 C5.11 KEYWAY TRENCH
SCALE: N.T.S.




5 C5.11 CONCRETE HEADWALL AND CURTAIN WALL DETAIL
SCALE: N.T.S.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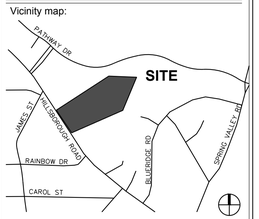


Seal:

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0 25 50 100
NORTH

SCALE: 1"=50'

Title:

SCM DETAILS

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: NBC
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C5.11

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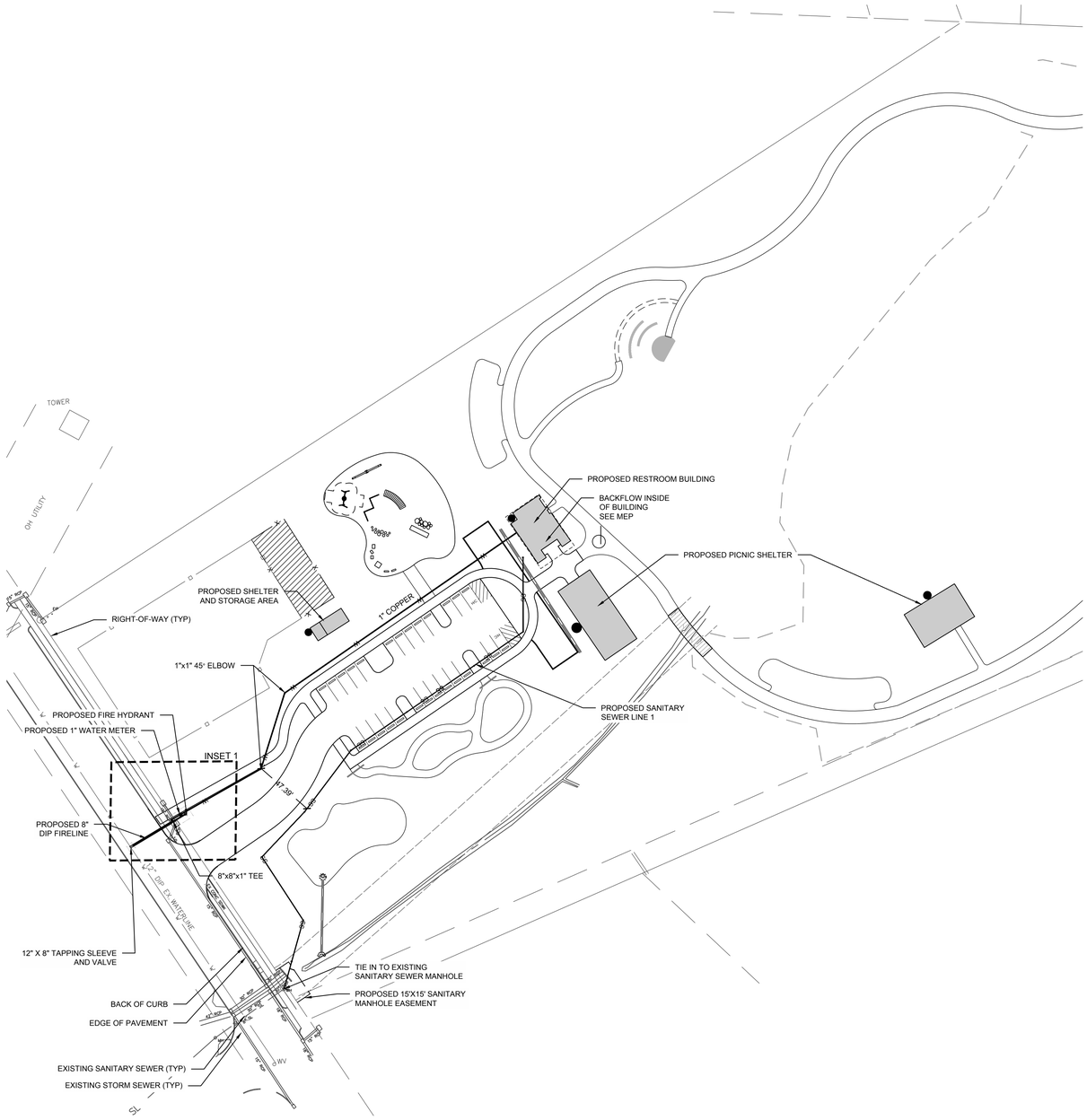
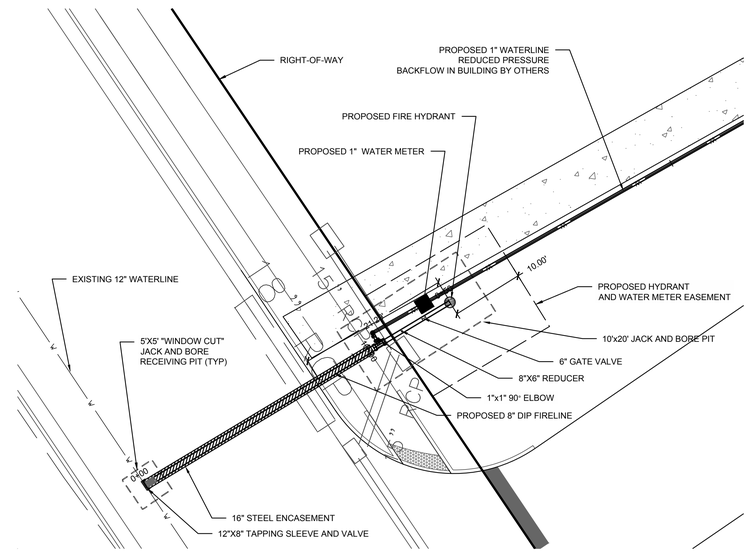



## UTILITY LEGEND

- EXISTING WATER LINE
- PROPOSED WATER LINE
- EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED FDC
- PROPOSED BACKFLOW METER
- PROPOSED POST INDICATOR VALVE (PIV)
- GREASE INTERCEPTOR
- 300' HYDRANT COVERAGE CIRCLE
- LIMITS OF DISTURBANCE




INSET 1- WATER METER ASSEMBLY

scale: 1" = 10'

0 5 10 20

SCALE: 1"=10'

NORTH

| UTILITIES IMPROVEMENTS QTY | |
|---|---|
| PRIVATE SEWER | |
| 4" SEWER SERVICE | 443 LF |
| PRIVATE WATER | |
| 1" WATER MAIN | 368 LF |
| | |
| | |

## UTILITY NOTES:

1. REFER TO SHEET C3.00 FOR GENERAL NOTES.
2. UNLESS OTHERWISE NOTED, ALL MANHOLES SHALL BE PRE-CAST CONCRETE STRUCTURES.
3. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF UNDERGROUND UTILITIES (WATER, SEWER, STORM, ELECTRICAL, GAS, OR OTHER) FOR THIS PROJECT WITH THE BUILDING PLANS. THE UTILITY CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE INSTALLATION OF ALL UTILITY SERVICES TO WITHIN FIVE (5) FEET OF THE BUILDING CONNECTION POINT.
4. THE CONTRACTOR SHALL COORDINATE WITH OTHER CONTRACTORS ON SITE AND UTILITY PROVIDERS DURING CONSTRUCTION TO ENSURE SMOOTH TRANSITION BETWEEN DISCIPLINES.
5. THE CONTRACTOR SHALL COORDINATE ALL PEDESTRIAN AND VEHICULAR INTERRUPTIONS WITH OWNER'S REPRESENTATIVE AT LEAST 72 HOURS PRIOR TO BEGINNING WORK.
6. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INSIDE THE PUBLIC RIGHT OF WAY PRIOR TO RECEIPT AND COMPLIANCE WITH ALL APPLICABLE NCDOT PERMITS. ADDITIONALLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY FLAGGERS AND TRAFFIC CONTROL DURING ALL WORK INSIDE THE PUBLIC RIGHTS OF WAY.
7. THE CONTRACTOR SHALL NOT RE-USE ANY FIRE HYDRANT REMOVED AS PART OF THIS PROJECT. ANY FIRE HYDRANT SHOWN TO BE REMOVED OR RELOCATED SHALL BE REPLACED WITH A NEW FIRE HYDRANT MEETING THE LOCAL JURISDICTIONAL REQUIREMENTS AND STANDARDS.
8. ALL EXISTING SUB-SURFACE UTILITIES IDENTIFIED ON THE CONSTRUCTION DOCUMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATION BASED ON SURVEY INFORMATION GATHERED FROM FIELD INSPECTION AND/OR ANY OTHER APPLICABLE RECORD DRAWINGS WHICH MAY BE AVAILABLE. DEPTHS OF EXISTING UTILITIES SHOWN IN PROFILE VIEWS ARE BASED ON STANDARD ASSUMPTIONS. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION, DEPTH, SIZE AND MATERIAL OF ANY AND ALL SUB-SURFACE CONDITIONS REFERENCED IN THESE PLANS PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS.
9. ELEVATIONS OF UTILITIES ARE GIVEN TO THE EXTENT OF INFORMATION AVAILABLE, WHERE ELEVATIONS ARE NOT GIVEN AT POINTS OF EXISTING UTILITY CROSSINGS, SUCH ELEVATIONS SHALL BE DETERMINED BY THE CONTRACTOR AND REPORTED TO THE ENGINEER, WHEN UNKNOWN LINES ARE EXPOSED. THEIR LOCATIONS AND ELEVATIONS SHALL ALSO BE REPORTED TO THE ENGINEER.
10. UNDERGROUND UTILITIES SHOWN ON THIS PLAN SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION OF PARKING AREA, DRIVES, CURB AND GUTTER OR CONCRETE WALKS / PADS. IF UTILITIES SHOWN ON THIS PLAN CANNOT BE INSTALLED PRIOR TO INSTALLATION OF IMPERVIOUS (ASPHALT / CONCRETE) CONDUIT SHALL BE INSTALLED FOR THE "FUTURE" UTILITY INSTALLATION.
11. AS-BUILT DOCUMENTATION REQUIREMENTS: PRIOR TO APPROVAL FROM LOCAL JURISDICTION OR ENGINEER THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS (IN BOTH PAPER AND ELECTRONIC FORMAT (CAD / PDF) PREPARED AND SEALED BY A PROFESSIONAL LAND SURVEYOR SHOWING ALL UTILITY INSTALLATION. HORIZONTAL AND VERTICAL INFORMATION SHALL BE PROVIDED FOR WATER, SEWER, STORM INCLUDING ALL STRUCTURES, VALVES, HYDRANTS, AND OTHER APPURTENANCES.

## PROPOSED UTILITY SEPARATION:

1. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM EXISTING OR PROPOSED SEWERS, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10-FOOT HORIZONTAL SEPARATION IN WHICH CASE;
   a. THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER; OR
   b. THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER WITH THE WATER MAIN LOCATED AT ONE SIDE OF A BENCH OF UNDISTURBED EARTH, AND WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP TO THE SEWER.
2. CROSSING A WATER MAIN OVER A SEWER. WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN 18 INCH VERTICAL SEPARATION, IN WHICH CASE BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
3. CROSSING A WATER MAIN UNDER A SEWER. WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.

## SEPARATION OF SANITARY SEWERS AND STORM SEWERS:

1. A 24" VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND SANITARY SEWER LINES OR BOTH THE SANITARY AND THE STORM LINES SHALL BE CONSTRUCTED OF FERROUS MATERIALS.

## SEWER NOTES:

1. SANITARY SEWER CLEANOUTS LOCATED IN PAVEMENT AREAS SHALL BE HEAVY DUTY TRAFFIC BEARING CASTINGS.
2. UNLESS OTHERWISE NOTED, ALL SANITARY SEWER MANHOLES ARE 4' DIA.
3. MANHOLES LOCATED IN PAVEMENT, CONCRETE OR OTHER TRAFFIC AREAS SHALL BE SET AT GRADE. MANHOLES LOCATED IN OTHER AREAS (I.E. GRASS OR WOODED AREAS) SHALL HAVE THEIR RIMS RAISED SIX INCHES ABOVE THE SURROUNDING GRADE. MANHOLES SUBJECT TO POSSIBLE WATER INFILTRATION SHALL HAVE WATERTIGHT, BOLTED LIDS.
4. MINIMUM REQUIRED SLOPES FOR SEWER SERVICES:
   4" SEWER SERVICE - 2.00% SLOPE
   6" SEWER SERVICE - 1.00% SLOPE
   8" SEWER SERVICE - 0.50% SLOPE
5. UNLESS OTHERWISE NOTED, LOCATE SANITARY SERVICE CLEANOUTS AT ALL HORIZONTAL OR VERTICAL CHANGES IN DIRECTION. MAXIMUM SPACING BETWEEN CLEANOUTS SHALL BE 75 FEET.
6. SEWER LINES LESS THAN 3 FEET OF COVER SHALL BE CLASS 50 DUCTILE IRON PIPE. SEWER LINES WITH GREATER THAN 3 FEET OF COVER SHALL BE AS NOTED BELOW:
   4" SEWER SERVICE - SCH 80
   6" SEWER SERVICE - SCH 80
   8" SEWER SERVICE - SDR-35
7. SEWER LINES UNDER CONSTRUCTION SHALL BE PROTECTED FROM DIRT, DEBRIS OR OTHER CONTAMINANTS ENTERING THE NEW SYSTEM. A MECHANICAL PLUG SHALL BE UTILIZED BOTH IMMEDIATELY UPSTREAM OF THE NEW CONSTRUCTION AND AT THE FIRST MANHOLE DOWNSTREAM IN THE EXISTING SYSTEM. EXISTING STRUCTURES, PIPING AND APPURTENANCES SHALL BE PROTECTED FROM ANY INFLOW OF WATER, DIRT OR DEBRIS DUE TO NEW CONSTRUCTION CONNECTING TO OR IN THE VICINITY OF THE EXISTING SYSTEM. CONTRACTOR TO REMOVE DEBRIS AND PLUG PRIOR TO OCCUPANCY.
8. ALL MANHOLES COVERS SHALL BE PAINTED TO LOCAL JURISDICTIONAL REQUIREMENTS.

## WATER NOTES:

1. AS INDICATED, ALL WATERLINES SHALL BE DUCTILE IRON PIPE MEETING THE REQUIREMENTS OF ANSI-AWWA C151 PRESSURE CLASS 350 OR SOFT COPPER TYPE K PIPE PER ASTM B88. IF PVC WATERLINE IS INDICATED ON THE PLANS IT SHALL MEET THE REQUIREMENTS OF AWWA C-900; CLASS 200.
2. ALL WATERLINES SHALL HAVE A MINIMUM OF 3.5 FEET OF COVER.
3. TESTING NOTES:
   PRESSURE:
   LEAKAGE SHALL NOT EXCEED THE MAXIMUM ALLOWABLE LEAKAGE SPECIFIED IN AWWA C 600. MINIMUM TEST PRESSURE SHALL BE 150 PSI FOR DOMESTIC AND 200 PSI FOR FIRE PROTECTION.
   BACTERIOLOGICAL:
   TWO SAMPLES FOR BACTERIOLOGICAL SAMPLING SHALL BE COLLECTED AT LEAST 24 HOURS APART. IF CONTAMINATION IS INDICATED, THEN THE DISINFECTION PROCEDURE AND TESTING SHALL BE REPEATED UNTIL SATISFACTORY RESULTS ARE OBTAINED.
4. THE CHLORINE IN HEAVILY CHLORINATED WATER FLUSHED FROM MAINS NEEDS TO BE NEUTRALIZED BEFORE DISCHARGE. CONTRACTORS SHALL NEUTRALIZE HEAVILY CHLORINATED WATER FLUSHED FROM MAINS PRIOR TO DISCHARGE OR TRANSPORT ALL HEAVILY CHLORINATED WATER OFFSITE FOR PROPER DISPOSAL.
5. PAINT VALVE COVERS, FIRE HYDRANTS AND OTHER WATER APPARATUS TO MEET THE LOCAL JURISDICTIONAL REQUIREMENTS.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FIRM LICENSE #: C-1051
www.stewartinc.com
PROJECT #: C16146

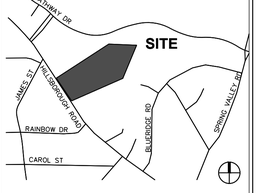

Client:

TOWN OF CARRBORO
301 W. MAIN STREET
CARRBORO, NC 27510
T: (919) 918-7364
F: (919) 918-4475

Project:

# MARTIN LUTHER KING, JR. PARK

Vicinity map:




Seal:

NORTH CAROLINA PROFESSIONAL SEAL 033779 ENGINEER JOSEPH W. PUCKETT

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Issued for:

LAND USE PERMIT

| No. | Date | Description |
|---|---|---|
| 1 | 02.21.2017 | 60% DD |

0 25 50 100

SCALE: 1"=50'

NORTH

Title:

UTILITY PLAN

Project number: C16146 Sheet:
Date: 03.15.2017
Drawn by: CJJ
Approved by: JWP

C6.00

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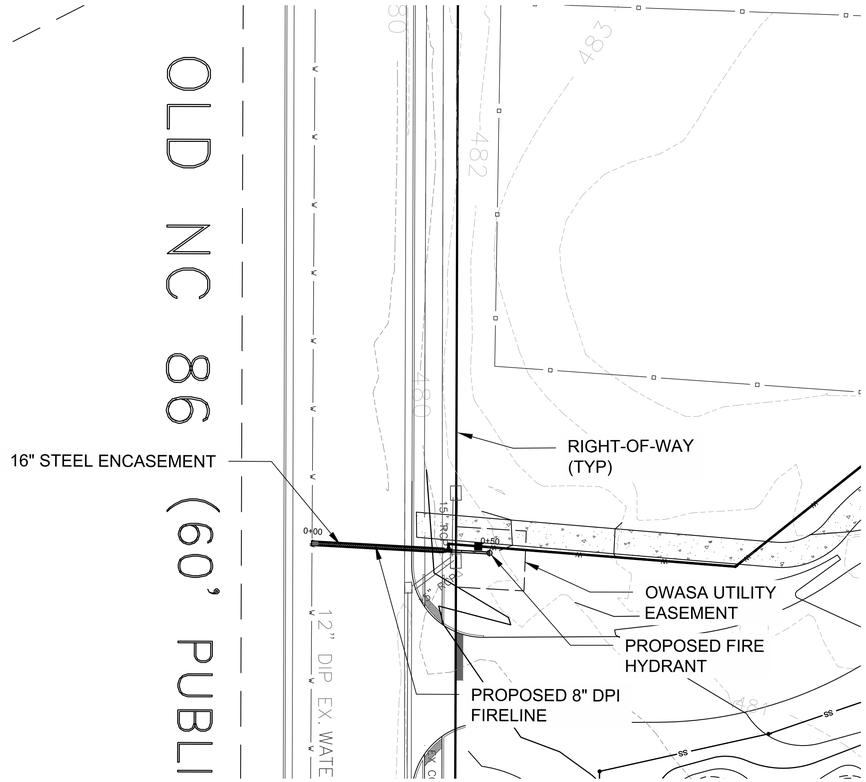
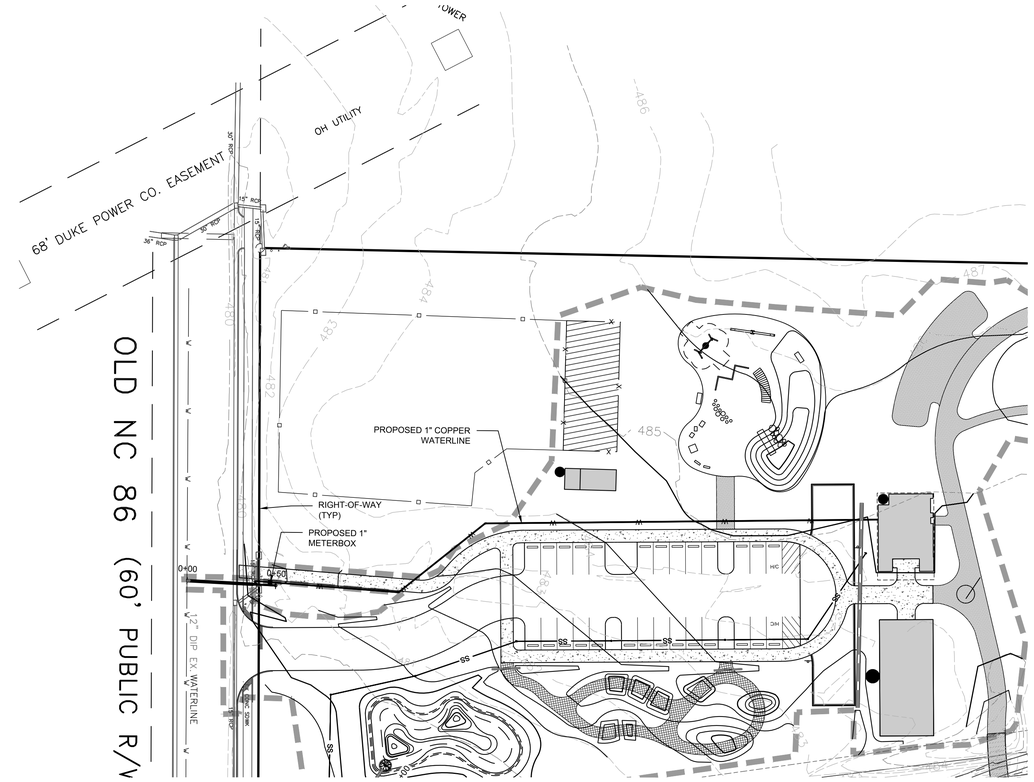


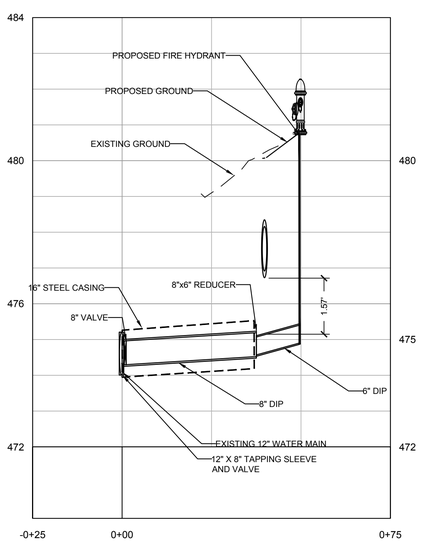

PLAN VIEW - PROPOSED 8" DIP FIRELINE STA 00+00 - 0+49.61
SCALE: 1"=20'

NORTH

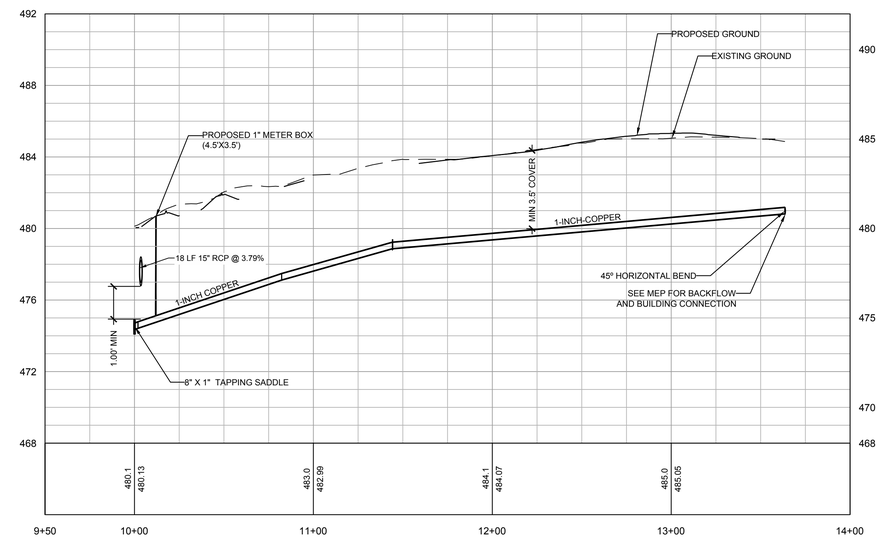



PLAN VIEW - PROPOSED 1" COPPER WATERLINE STA 0+00-3+60.04
SCALE: 1"=40'

NORTH




PROFILE VIEW - PROPOSED 8" DIP FIRELINE STA 0+00 - 0+49.61
SCALE: H: 1"=20', V: 1"=2'




PROFILE VIEW - PROPOSED 1" COPPER WATERLINE STA 10+00 - 13+36.36
SCALE: H: 1"=40', V: 1"=4'

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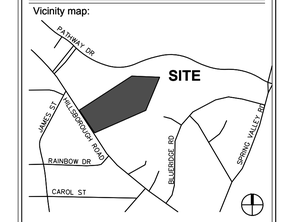
Project:

MARTIN LUTHER KING, JR. PARK

Vicinity map:

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|---|---|---|
| 1 | 02.21.2017 | 60% DD |

0 20 40 80

NORTH

SCALE: 1"=40'

Title:

UTILITY PROFILES

Project number: C16146 Sheet:
Date: 03.15.2017
Drawn by: CJJ
Approved by: JWP

C6.10

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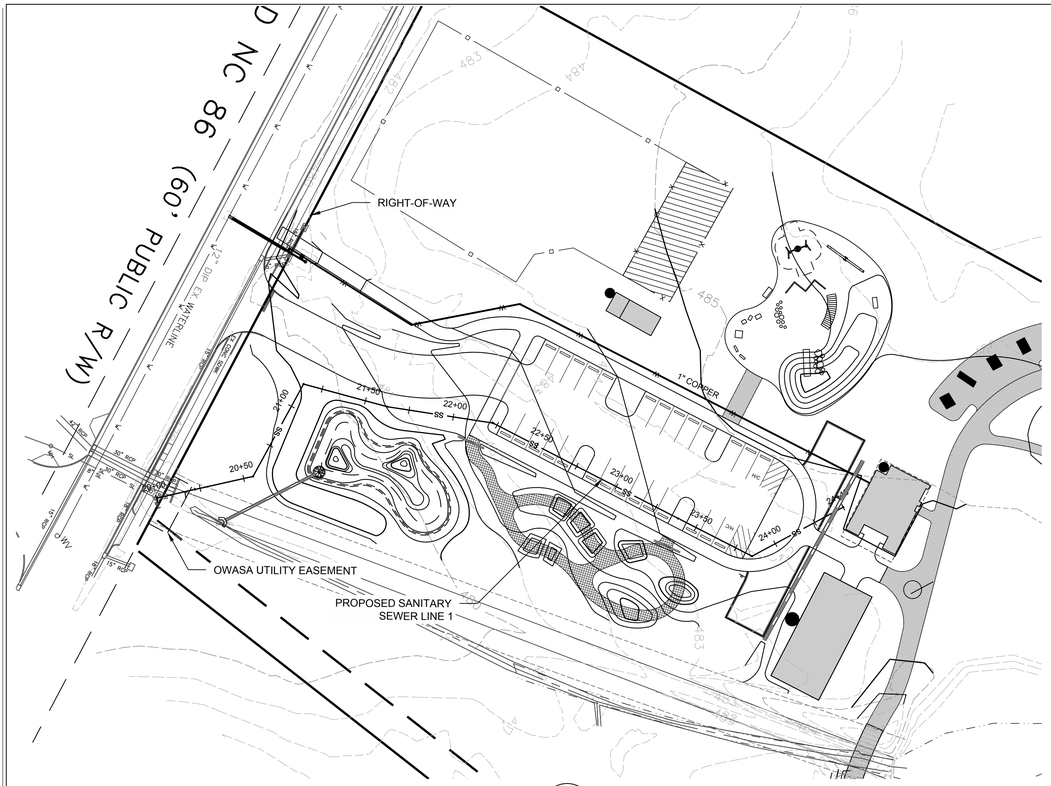
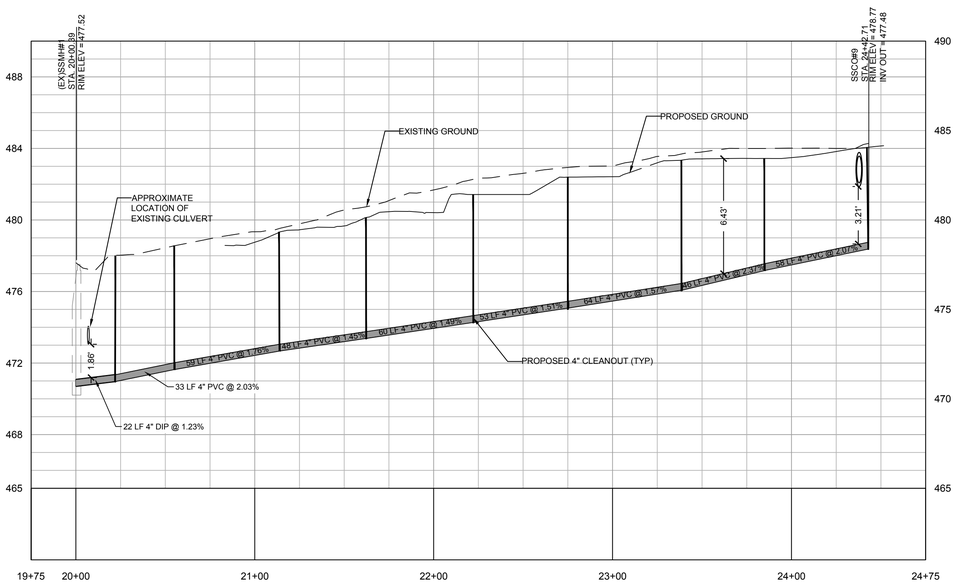



PLAN VIEW - PROPOSED SANITARY SEWER SERVICE 1 STA 20+00 - 24+51.97
SCALE: 1"=40'

NORTH




PROFILE VIEW - PROPOED SANITARY SEWER SERVICE STA 20+00 - 24+51.97
SCALE: H: 1"=40', V: 1"=4'

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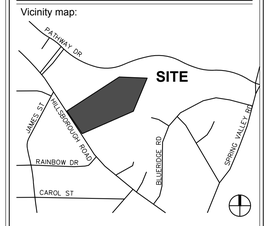
Project:

# MARTIN LUTHER KING, JR. PARK

Vicinity map:

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## LAND USE PERMIT

| No. | Date | Description |
|---|---|---|
| 1 | 02.21.2017 | 60% DD |

0 20 40 80

NORTH

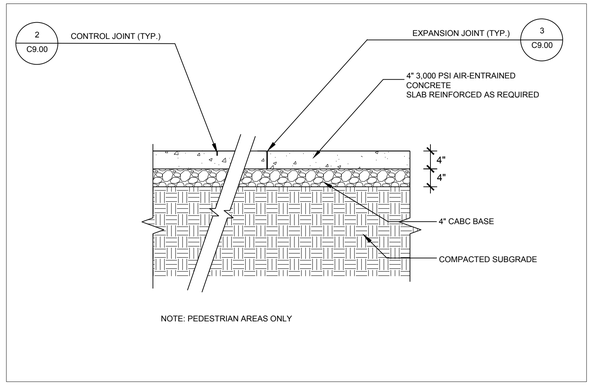
SCALE: 1"=40'

Title:

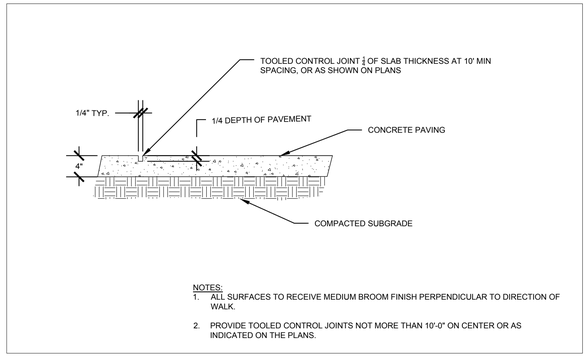
## UTILITY PROFILES

Project number: C16146 Sheet:
Date: 03.15.2017
Drawn by: CJJ
Approved by: JWP

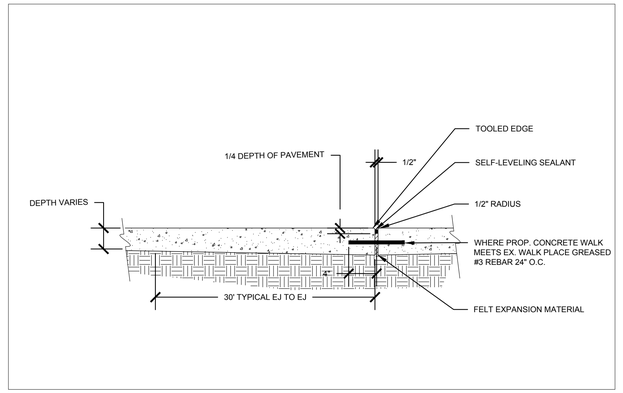
C6.11



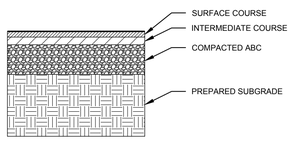

1 4" CONCRETE SIDEWALK ¾" = 1'-0"
SECTION




2 CONTROL JOINT - SIDEWALK NTS
SECTION

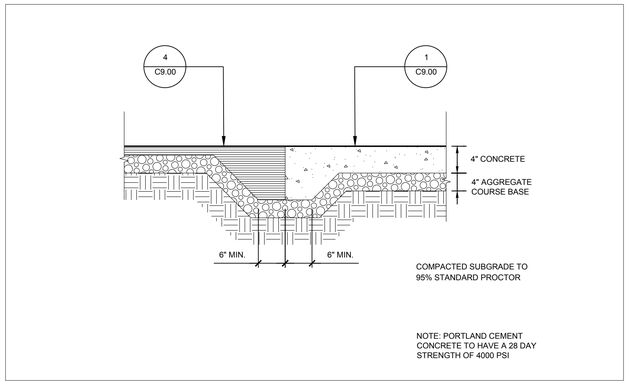



3 EXPANSION JOINT - SIDEWALK ¾" = 1'-0"
SECTION

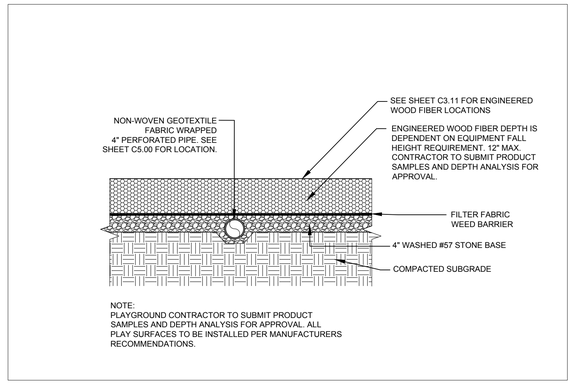



| | SURFACE | INTERMDEIATE | STONE |
|---|---|---|---|
| PAVEMENT TYPE | S9.5B | I19.0B | ABC |
| STND. DUTY | 3" | -- | 8" |
| HVY. DUTY | 2" | 2.5" | 8" |

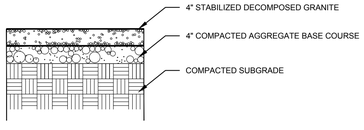
4 ASPHALT PAVING ¾" = 1'-0"
SECTION




5 EDGING - SIDEWALK TO ASPHALT ¾" = 1'-0"
SECTION

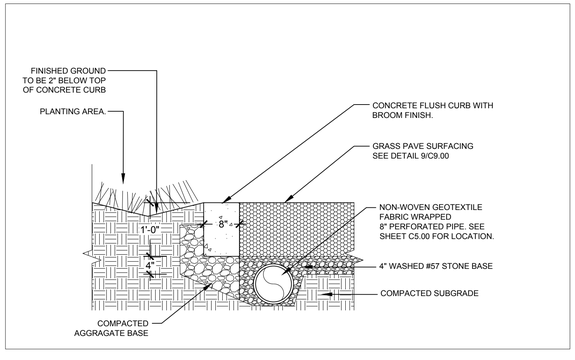



6 ENGINEERED WOOD FIBER SURFACING ¾" = 1'-0"
SECTION

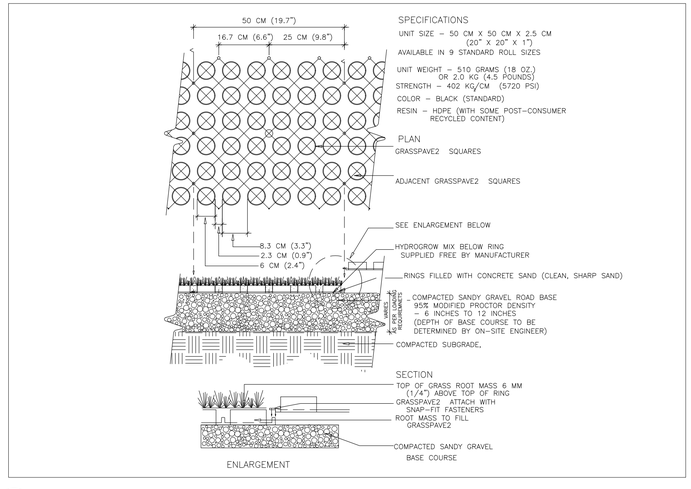



NOTE:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH STABILIZER MANUFACTURER'S SPECIFICATIONS.

7 DECOMPOSED GRANITE PATH WITH STABILIZER ¾" = 1'-0"
SECTION




8 CIP FLUSH CURB ¾" = 1'-0"
SECTION




9 GRASS PAVE NTS
SECTION

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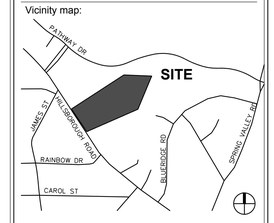
F: (919) 918-4475

Project:

# MARTIN LUTHER KING, JR. PARK

Vicinity map:




Seal:

NORTH CAROLINA LICENSED LANDSCAPE ARCHITECT 1791 JENNIFER L. WAGNER

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Title:

SITE DETAILS

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: TPG
Approved by: JLW

C9.00

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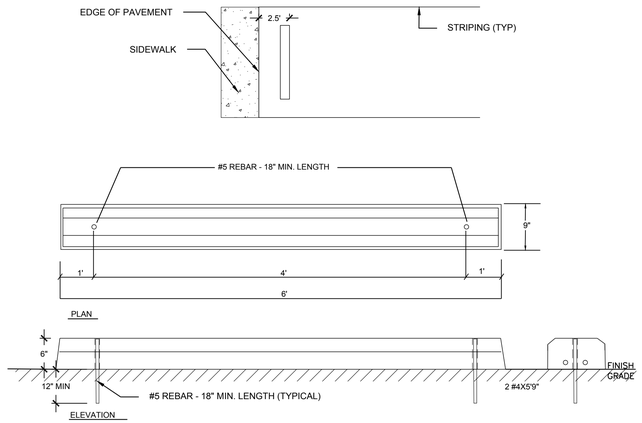
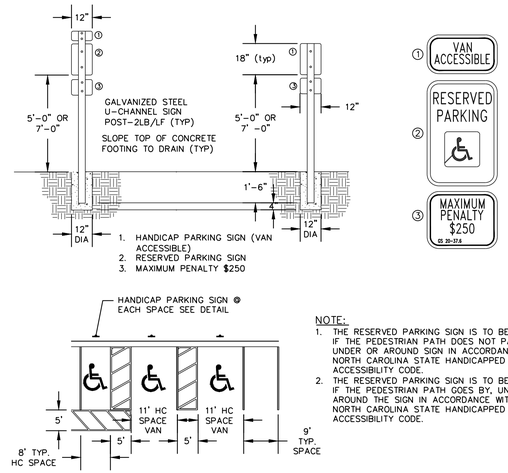



## 1 CONCRETE WHEEL STOP
PLAN

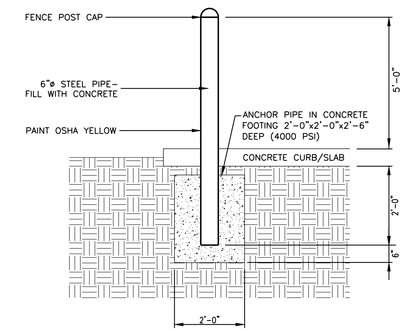
NTS




NOTE:
1. THE RESERVED PARKING SIGN IS TO BE 5'-0" IF THE PEDESTRIAN PATH DOES NOT PASS UNDER OR AROUND SIGN IN ACCORDANCE WITH NORTH CAROLINA STATE HANDICAPPED ACCESSIBILITY CODE.
2. THE RESERVED PARKING SIGN IS TO BE 7'-0" IF THE PEDESTRIAN PATH GOES BY, UNDER, OR AROUND THE SIGN IN ACCORDANCE WITH NORTH CAROLINA STATE HANDICAPPED ACCESSIBILITY CODE.

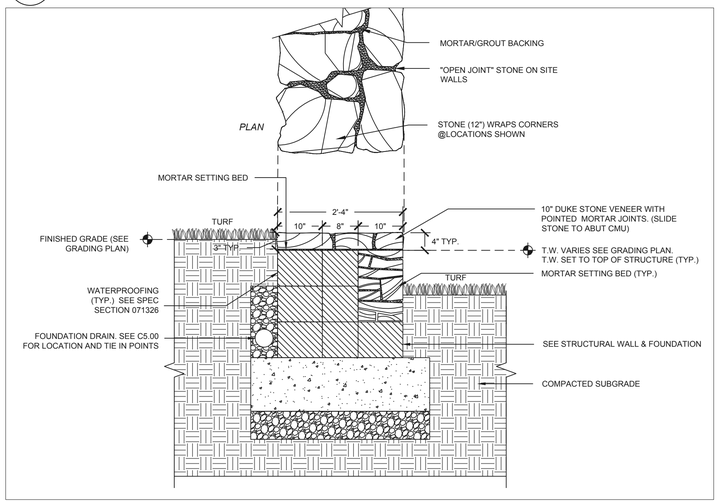
## 2 ADA SIGNAGE
PLAN

NTS



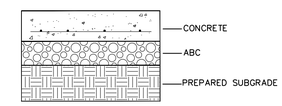

## 3 BOLLARD
PLAN

NTS




## 4 SEAT WALL - AMPHITHEATRE
PLAN

3/8" = 1'-0"

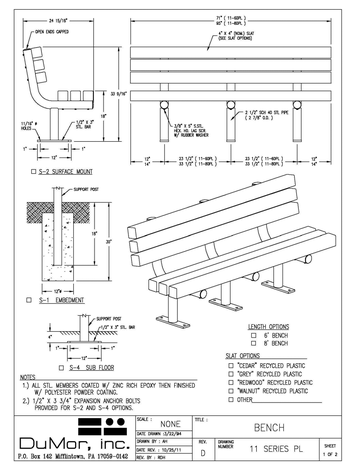



PAVEMENT SHALL BE CONSTRUCTED OF 4000 PSI CONCRETE. REINFORCEMENT BARS SHALL BE ONE (1) ROW AT 12" O.C. BOTH DIRECTIONS AS INDICATED BELOW. SURFACE FINISHES AND JOINT TO SCALE SHALL BE AS INDICATED ON PLANS AND DETAILS.

| PAVEMENT TYPE | ABC | REINF. | CONCRETE |
|---|---|---|---|
| HEAVY DUTY (DUMPSTER PAD) | 4" | 1 ROW - #4 REBAR SPACED 12" O.C. BOTH WAYS | 6" |
| SIDEWALK | - | ---------- | 4" |

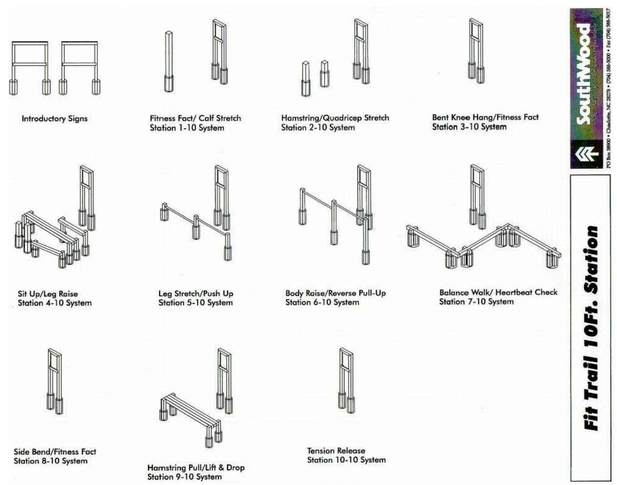
## 6 HEAVY DUTY CONCRETE
PLAN

NTS



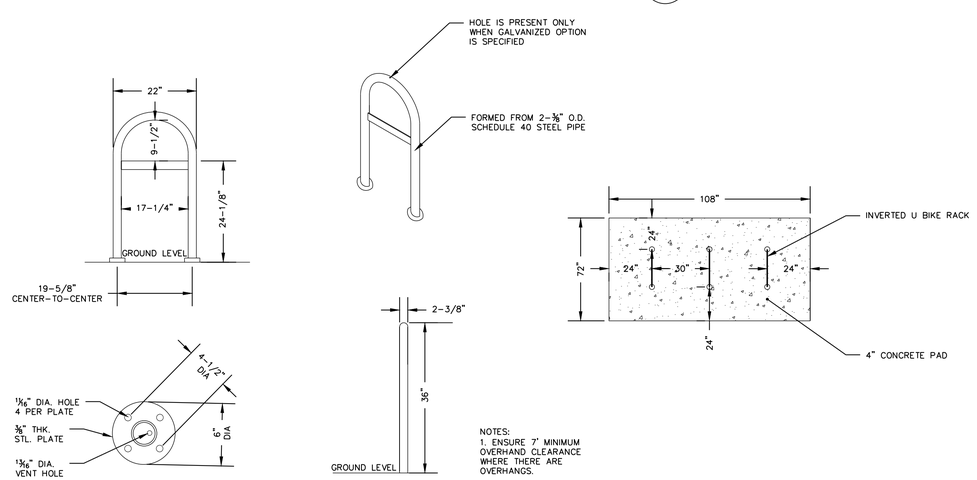

## 5 PARK BENCH
PLAN

NTS




## 7 EXERCISE EQUIPMENT
PLAN

NTS




## 8 BIKE RACK
PLAN

NTS

STEWART

421 FAYETTEVILLE ST., SUITE 400
RALEIGH, NC 27601
T 919.380.8750

FIRM LICENSE #: C-1051
www.stewartinc.com
PROJECT #: C16146

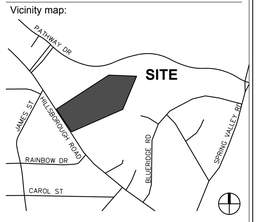
Client:

TOWN OF CARRBORO
301 W. MAIN STREET
CARRBORO, NC 27510
T: (919) 918-7364
F: (919) 918-4475

Project:

MARTIN LUTHER KING, JR. PARK

Vicinity map:




Seal:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1791 JENNIFER L. WAGNER

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Issued for:

LAND USE PERMIT

| No. | Date | Description |
|---|---|---|
| | | |

Title:

SITE DETAILS

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: TPG
Approved by: JLW

C9.01

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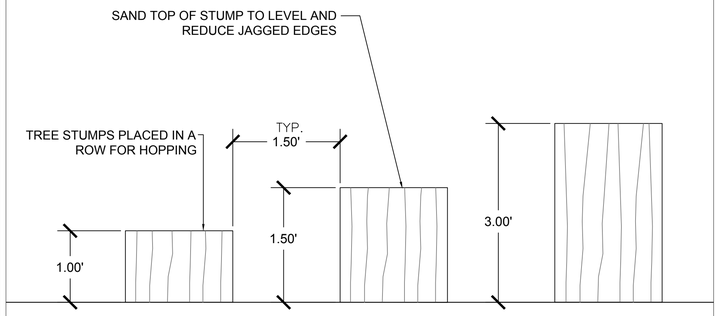
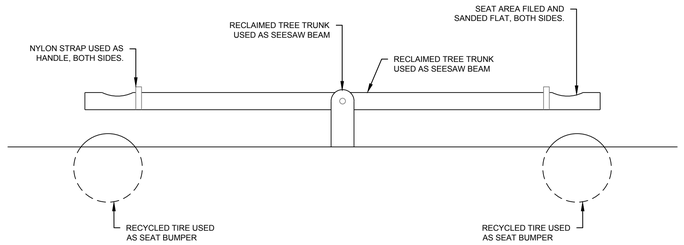



## 1 HOPPING LOGS
ELEVATION

NTS




## 2 SEESAW
ELEVATION

NTS

**Natural Playgrounds Store**

Natural Playgrounds Company
85 Warren Street, Concord, NH 03301
Toll Free 888-290-8405
Intl 603-228-0476
Fax 603-228-6018
ethan@naturalplaygrounds.com

### Embankment Slide w/ sit down bar

**EMB-SL**

**Shipping Weight: 0 lbs**
**Shipping Dimensions: 72"L X 24"W X 18"H**
**Brand: Natural Playgrounds Company**
**Toxicity: non-toxic**
**Age Appropriateness: all ages**

<h2>A manual quote is required for shipping slides from the manufacturer. Typically such a quote takes no more than 1 business day, but it may take slightly longer depending on how busy they are. Please bear with us while we calculate accurate shipping costs. As soon as we receive the shipping cost, we'll add it to your estimate and e-mail it to you. When you've authorized payment, we'll process the order.</h2>

Embankment Slides offer constant thrills of movement and speed, and are a must-have on all playgrounds for several reasons!

First, Embankment Slides are built into the ground so it's impossible to fall off a ladder (there is none!) or off the sides (the slide is level with the ground), which means Embankment Slides are 100% safe!

Further, slides encourage scientific curiosity: climbing the hill builds up a reservoir of potential energy resulting from gravity's pull, sliding down the hill turns that supply of energy into its kinetic form -- and demonstrates acceleration and velocity. Slides trigger both proprioceptive and kinesthetic responses; they help illustrate several branches of mathematics (geometry, calculus, and trigonometry); they help children stay active, get physically fit, and develop motor skills and coordination; and they are the most popular play element on a Natural Playground.

Our slides are made of heavyweight, commercial-grade, 3/8" +/- thick polyethylene that resists fading (so they last forever), they will not buckle in the heat or with use, seams will never separate to cause safety hazards, they're treated to resist static build-up so cochlear implants will not be affected, AND the built-in foot under the exit region not only provides the necessary anchoring, but also keeps the exit region at the ASTM/CPSC required height off the fall zone material!

Also, exclusive to our long slides (more than 12' deck height) is a spring system that allows for expansion and contraction in the heat and cold. We recommend this as a precaution against buckling the slide.

Slides may be made of any length. Shown in the picture is a 35 foot embankment slide, but the low price shown is for our smallest slide that fits on a 3 foot high hill. (NOTE: If you are installing a slide exceeding an 8 foot deck height, we may recommend expansion springs be installed to take care of any expansion due to heat.)

Slides are usually straight, but left or right curves or waves can be included in longer slides to add thrills or slow speed if desired. We suggest the neutral gray color to better fit with a natural playground theme. Dye lots may cause slight color variations on longer slides.

Installation instructions that meet all CPSC and ASTM safety guidelines, all slide hardware, CPSCB approved sit-down bar,

## 4 Embankment Slide
PLAN

NTS

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Intl 603-228-0476
Fax 603-228-6018
ethan@naturalplaygrounds.com

### Water Table, Multiple Use SALE

**HPWP-WT SALE**

**Shipping Weight: 300 lbs**
**Shipping Dimensions: 48"L X 48"W X 30"H**
**Brand: Natural Playgrounds Company**
**Toxicity: child friendly wood preservative**
**Age Appropriateness: 3-10 years**

If you don't have a pond or a stream on your playground, a water play table is a perfect option, especially this large one, which is a fabulous, one-of-a-kind water play element, perfect for a Natural Playground!

This table is big enough at 4'x4' that an entire class can gather around for group play, which encourages communication and socialization, or getting a lesson from you about water.

Water also offers many learning opportunities and benefits. It's one of nature's simplest, manipulatives which can be scooped, measured, poured, splashed, dripped, dipped, carried, weighed, and studied.

Obviously, kids can float almost anything in the water, including boats, leaves, sticks, pieces of wood and origami figures, so they'll learn about buoyancy. Anything that doesn't float will sink to the bottom, thus teaching children about density and weight.

Or, as you can see from the center photo below, one schools placed a duck in the water so kids could look under clear table to watch the way in which webbed feet are used for propelling birds and animals through water.

Also, because water always seeks the lowest level, it will flow off of things such as spoons, containers, and pitchers when they're tipped, cupped hands, pine cones, rocks, sticks, and so on, so children will also learn about gravity, and the properties of fluids: how they move and settle.

Playing with water also promotes hand/eye coordination and fine motor skills.

Further, as children splay and splash the water, droplets will appear on surfaces everywhere, and will act as tiny magnifying glasses, which can lead to other, completely different kinds of learning.

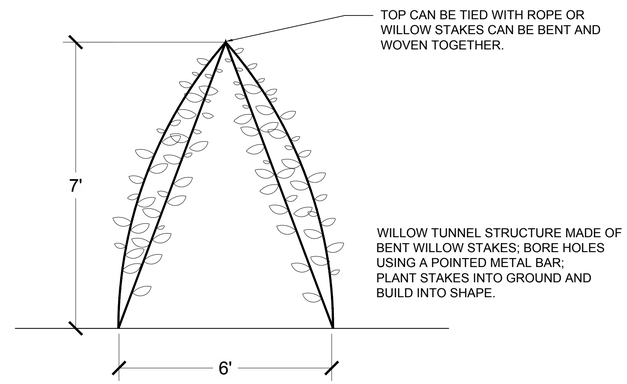
The clear bottom is a fabulous benefit, because it may magnify or otherwise distort anything on the ground, such as shoes and legs, or toys, or grass, or any number of other things, which can be fun, entertaining, and a great lesson about lenses.

This huge table designed for the outdoors, is made with indestructible, clear Lexan and kid-friendly treated lumber. Table holds approximately 80 gallons of water, and there is a large drain hole with an easy to remove plug for drainage. A hose can be attached to direct the drainage water where you want it (a garden, a stream).

Can be set on the ground or installed permanently (instructions included), and can be mounted at any height. Holds a maximum of 800 gallons, although obviously, you don't have to fill it up to use it!

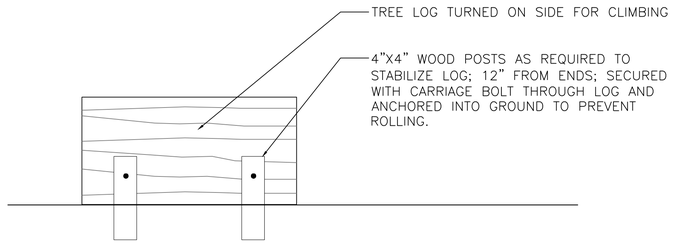
## 3 WATER TABLE
PLAN

NTS



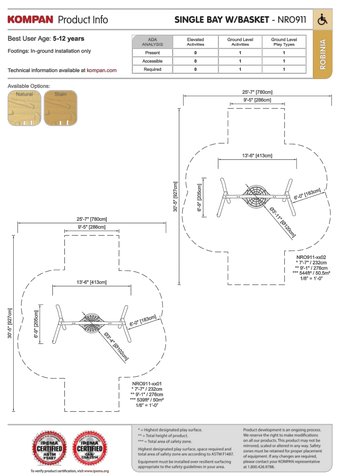

## 5 WILLOW TUNNEL
ELEVATION

NTS



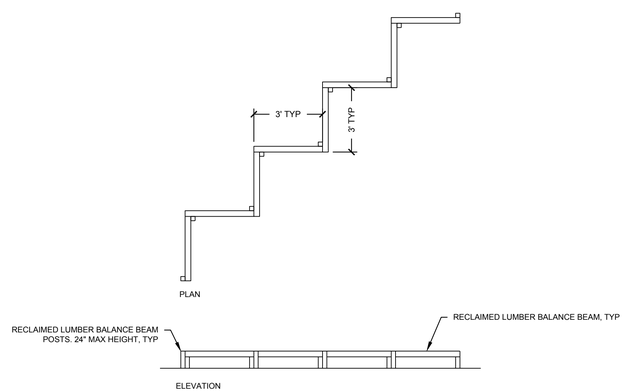

## 6 BALANCING & CLIMBING LOG
ELEVATION

NTS




## 7 KOMPAN SINGLE BAY BASKET SWING
PLAN

NTS




## 8 BALANCE BEAM
PLAN

NTS

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T 919.380.8750

FIRM LICENSE #: C-1051
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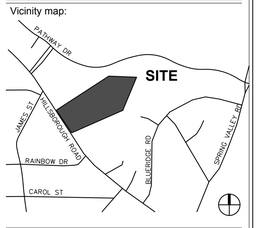
Project:

MARTIN LUTHER KING, JR. PARK

Vicinity map:

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Title:

SITE DETAILS

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: TPG
Approved by: JLW

C9.02

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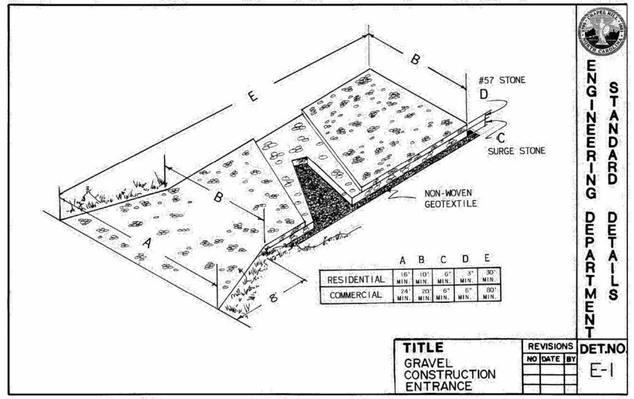
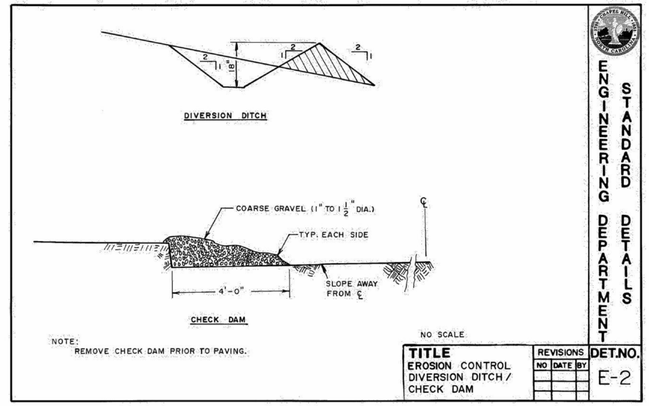
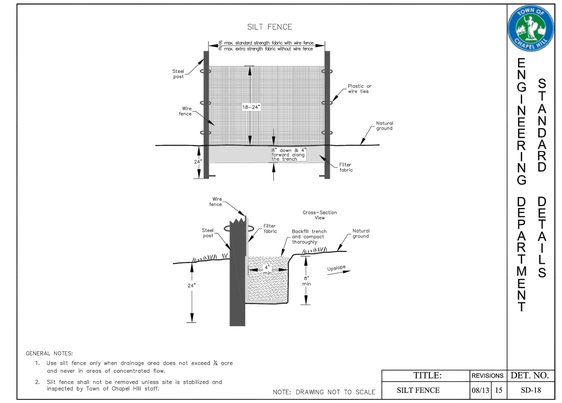


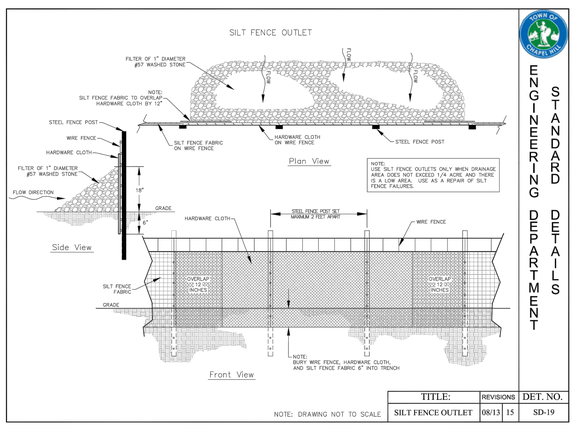

1 CONSTRUCTION ENTRANCE NTS
PLAN



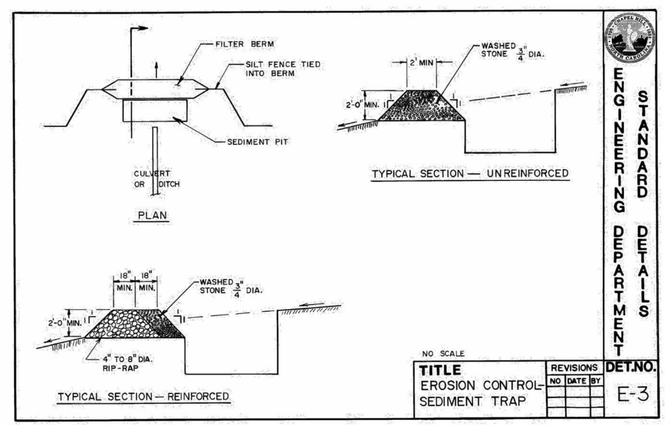

2 DIVERSION DITCH NTS
SECTION



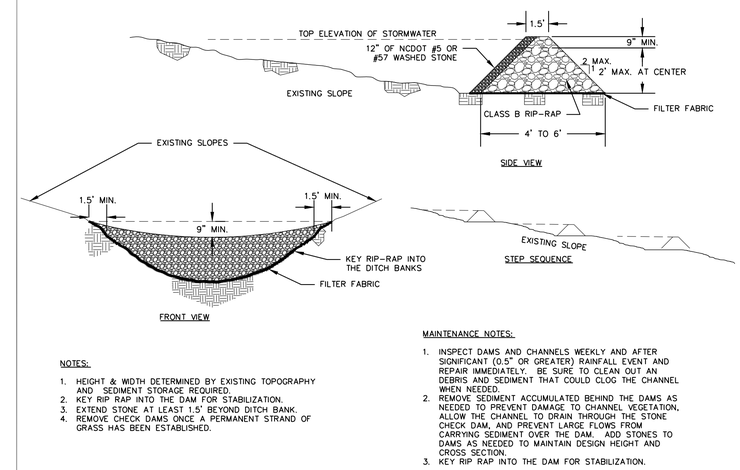

3 SILT FENCE NTS
SECTION




4 SILT FENCE OUTLET NTS
SECTION



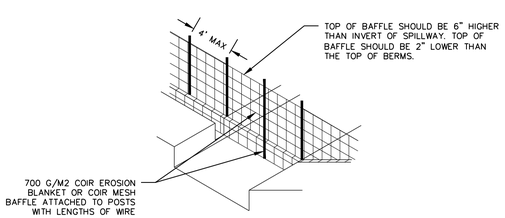

5 SEDIMENT TRAP 3/8" = 1'-0"
SECTION




NOTES:
1. HEIGHT & WIDTH DETERMINED BY EXISTING TOPOGRAPHY AND SEDIMENT STORAGE REQUIRED.
2. KEY RIP RAP INTO THE DAM FOR STABILIZATION.
3. EXTEND STONE AT LEAST 1.5' BEYOND DITCH BANK.
4. REMOVE CHECK DAMS ONCE A PERMANENT STRAND OF GRASS HAS BEEN ESTABLISHED.

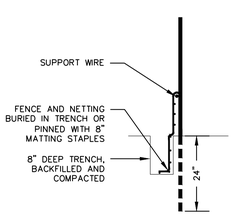
MAINTENANCE NOTES:
1. INSPECT DAMS AND CHANNELS WEEKLY AND AFTER SIGNIFICANT (0.5" OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. BE SURE TO CLEAN OUT AN DEBRIS AND SEDIMENT THAT COULD CLOG THE CHANNEL WHEN NEEDED.
2. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION, ALLOW THE CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM, AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. ADD STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.
3. KEY RIP RAP INTO THE DAM FOR STABILIZATION.

6 CHECK DAM NTS
SECTION

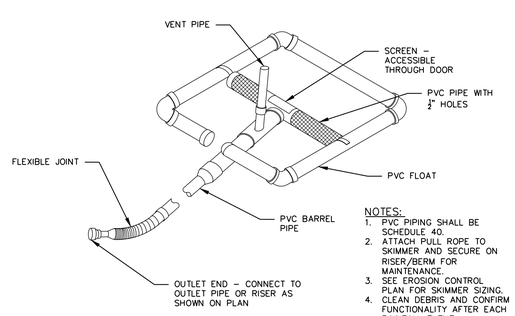



NOTES
1. DRIVE STEEL FENCE POST AT LEAST 24" INTO SOLID GROUND
2. WOOD POSTS ARE NOT ACCEPTABLE
3. USE STAPLES 1' APART TO ATTACH FABRIC

MAINTENANCE
1. INSPECT BAFFLES AT LEAST ONCE A WEEK OR AFTER ANY RAINFALL
2. REMOVE SEDIMENT WHEN IT REACHES HALF FULL. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGN STORAGE DEPTH.
3. TAKE ALL PRECAUTION TO MAINTAIN QUALITY OF BAFFLES. IF BAFFLES ARE DAMAGE, REMOVE AND REPLACE.




7 BAFFLE NTS
SECTION




NOTES:
1. PVC PIPING SHALL BE SCHEDULE 40.
2. ATTACH PULL ROPE TO SKIMMER AND SECURE ON RISER/BERM FOR MAINTENANCE.
3. SEE EROSION CONTROL PLAN FOR SKIMMER SIZING.
4. CLEAN DEBRIS AND CONFIRM FUNCTIONALITY AFTER EACH RAINFALL EVENT.

8 SKIMMER NTS
SECTION

STEWART
421 FAYETTEVILLE ST., SUITE 400
RALEIGH, NC 27601
T 919.380.8750
FIRM LICENSE #: C-1051
www.stewartinc.com
PROJECT #: C16146

Client:

TOWN OF CARRBORO
301 W. MAIN STREET
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T: (919) 918-7364
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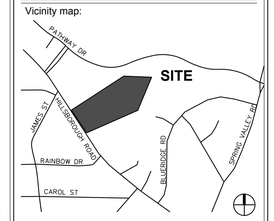


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EROSION CONTROL DETAILS

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: CJJ
Approved by: JWP
C9.10

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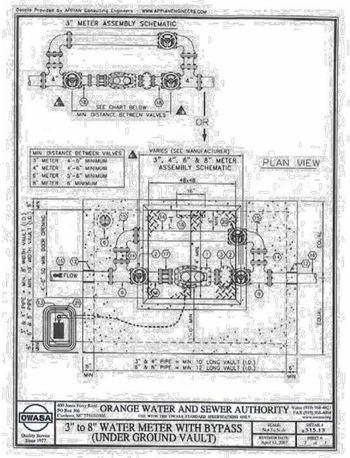
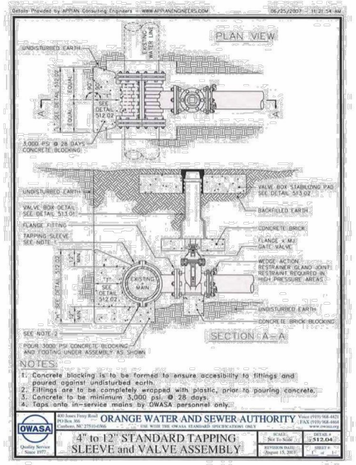
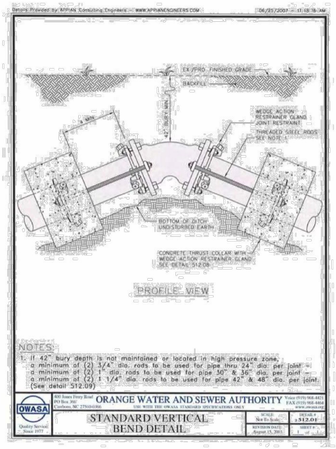


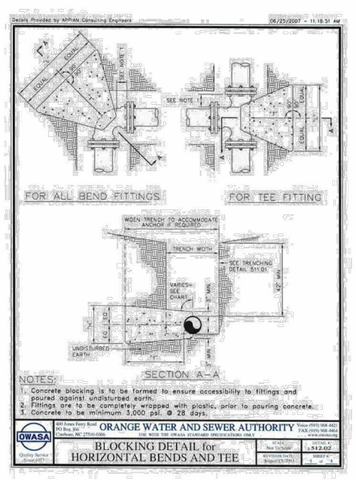

1 WATER METER NTS
PLAN




2 TAPPING SLEEVE AND VALVE NTS
PLAN




3 WATERLINE BEND NTS
PLAN




4 BLOCKING NTS
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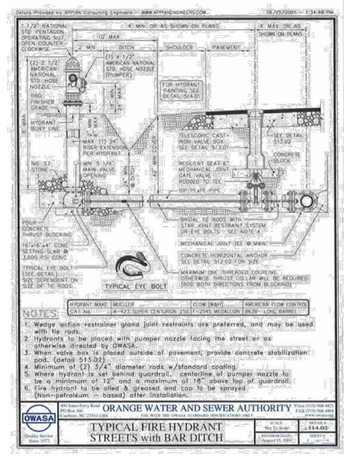


5 FIRE HYDRANT NTS
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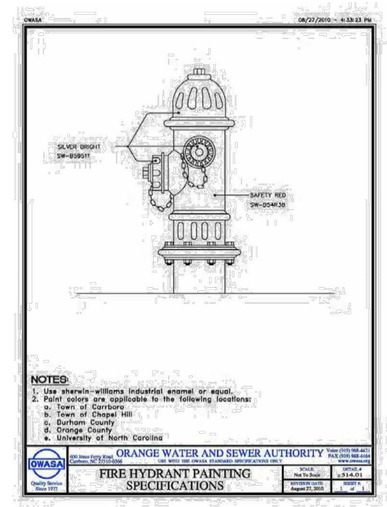


6 FIREHYDRANT PAINT NTS
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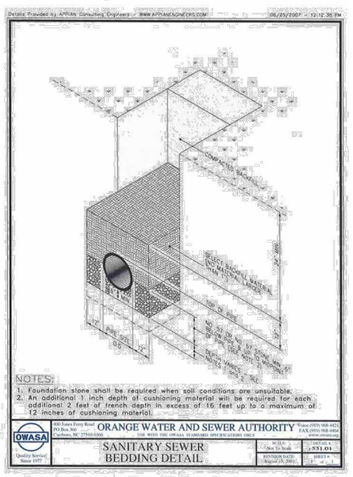


7 SANITARY SEWER BEDDING NTS
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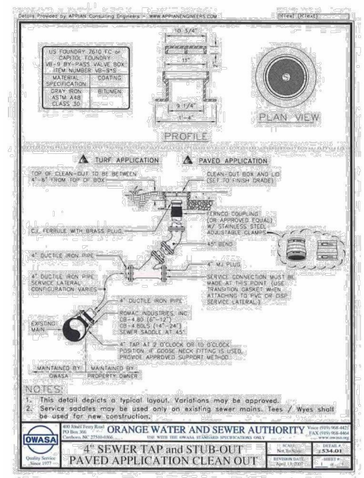


8 CLEANOUT NTS
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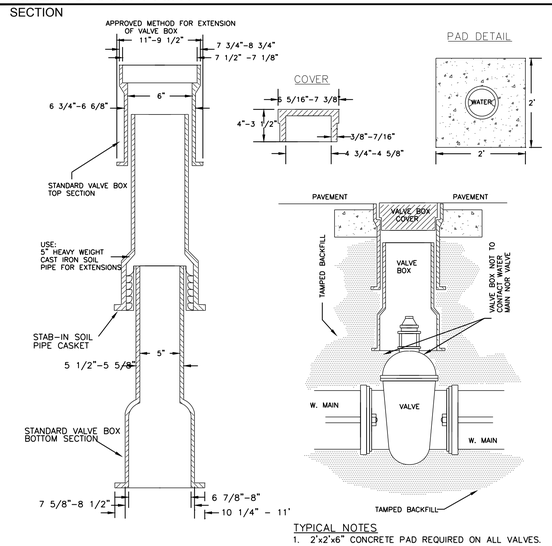


9 VALVE BOX INSTALLATION AND EXTENSION NTS
SECTION

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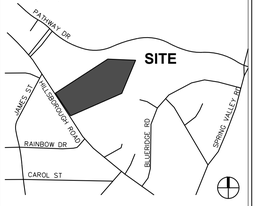


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UTILITY DETAILS

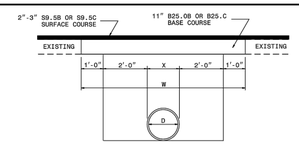
Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: CJJ
Approved by: JWP

C9.30

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

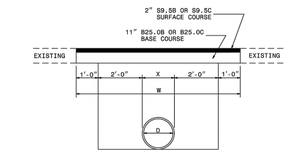
1-12

ENGLISH STANDARD DRAWING FOR **PAVEMENT REPAIRS** FOR SUPERPAVE MIX TYPES




| D | X | W |
|---|---|---|
| 12" | 1'-4" | 3'-4" |
| 15" | 1'-7" | 3'-7" |
| 18" | 1'-10" | 3'-10" |
| 24" | 2'-6" | 8'-6" |
| 30" | 3'-1" | 9'-1" |
| 36" | 3'-8" | 9'-8" |
| 42" | 4'-5" | 10'-5" |
| 48" | 5'-0" | 11'-0" |

**PAVEMENT REPAIRS ON ROADS TO BE RESURFACED (PIPE IS PLACED UNDER EXISTING PAVEMENT)**




**PAVEMENT REPAIRS ON ROADS NOT TO BE RESURFACED (PIPE IS TO BE PLACED UNDER EXISTING PAVEMENT)**

SHEET 1 OF 1

654.01

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR **PAVEMENT REPAIRS** FOR SUPERPAVE MIX TYPES

SHEET 1 OF 1

654.01

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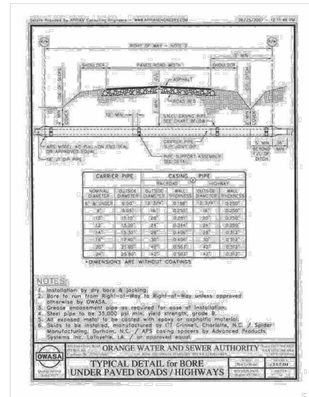




1 PAVEMENT REPAIR NTS

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Project:

MARTIN LUTHER KING, JR. PARK

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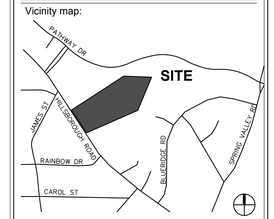


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Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: CJJ
Approved by: JWP

C9.31

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# PLANT SCHEDULE

| TREES | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT | CAL | SIZE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| | CACA | 3 | CARPINUS CAROLINIANA | AMERICAN HORNBEAM | B & B | 3"CAL | | |
| | CISG | 1 | CARYA ILLINOINENSIS `STARKING SOUTHERN GIANT` | SOUTHERN GIANT PECAN | B & B | 4"CAL | | |
| | COFL | 21 | CORNUS FLORIDA | FLOWERING DOGWOOD | B & B | 2"CAL | 8' | |
| | LITU | 7 | LIRIODENDRON TULIPIFERA | TULIP TREE | B & B | 3"CAL | | |
| | OXAR | 5 | OXYDENDRUM ARBOREUM | SOURWOOD TREE | B & B | 3"CAL | | |
| | PIPA | 25 | PINUS PALUSTRIS | LONGLEAF PINE | B & B | 3"CAL | | |
| | QUCO | 11 | QUERCUS COCCINEA | SCARLET OAK | B & B | 3"CAL | 10'-12' | |
| | QULA | 5 | QUERCUS LAURIFOLIA | LAUREL-LEAVED OAK | B & B | 3.5"CAL | | |
| | QUPH | 5 | QUERCUS PHELLOS | WILLOW OAK | B & B | 3.5"CAL | | |
| | TIAM | 4 | TILIA AMERICANA | AMERICAN LINDEN | B & B | 3"CAL | | |
| SHRUBS | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT. | HGT. | | REMARKS |
| | AMAR | 11 | AMELANCHIER ARBOREUM | SERVICEBERRY | 5 GAL | | | |
| | ASTR | 6 | ASIMINA TRILOBA | PAWPAW | 5 GAL | | | |
| | COCG | 6 | COTINUS COGGYGRIA `GRACE` | GRACE SMOKE TREE | 5 GAL | | | |
| GROUND COVERS | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT | SF | | REMARKS |
| | FESC | 2,336 SF | FESCUE SEED | FESCUE GRASS | SEED | 3LBS/1000SF | | |
| | PESM | 4,751 SF | PERENNIAL SEED MIX | PRAIRIE MOON NURSERY INSECTOPIA SEED MIX | SEED | 25LBS/AC | | SEE GENERAL LANDSCAPING NOTE 19 |
| | POSM | 22,101 SF | POLLINATOR SEED MIX | MELLOW MARSH FARM "POLLINATOR MIX" | SEED | 14 LB / AC | | SEE GENERAL LANDSCAPING NOTE 20 |
| | WLSM | 16,088 SF | WETLAND SEED MIX | MELLOW MARSH FARM WETLAND SEED MIX | SEED | 25LBS/AC | | SEE GENERAL LANDSCAPING NOTE 21 |

## LANDSCAPING NOTES:

1. VERIFY ALL QUANTITIES AND REPORT ANY DISCREPANCIES OR INACCURACIES IN THE PLANS TO THE OWNER'S REPRESENTATIVE PRIOR TO PLANTING.
2. LANDSCAPE WORK SHALL INCLUDE THE FURNISHING, INSTALLATION, AND WARRANTY OF ALL PLANTING MATERIALS WITHIN THE PROJECT AREA.
3. THE LANDSCAPE CONTRACTOR SHALL ASCERTAIN THE LOCATION OF ALL EXISTING AND NEW UNDERGROUND UTILITIES PRIOR TO EXCAVATION FOR PLANTING. DAMAGES TO UTILITIES CAUSED BY THE LANDSCAPE OPERATION SHALL BE CORRECTED BY THE LANDSCAPE CONTRACTOR AT NO COST TO THE OWNER.
4. LANDSCAPING SHALL REMAIN CLEAR FROM ANY FIRE HYDRANTS ON THE SITE.
5. ALL TREES TO BE A MINIMUM OF 2" IN CALIPER AND MUST MEET THE AMERICAN STANDARD FOR NURSERY STOCK.
6. TREE PROTECTION NOTE: TREE PROTECTION FENCING MUST BE IN PLACE PRIOR TO ANY DEMOLITION, LAND DISTURBANCE OR ISSUANCE OF A GRADING PERMIT AND SHALL INCLUDE WARNING SIGNS POSTED IN BOTH ENGLISH AND SPANISH, AS FOLLOWS: "NO TRESPASSING/TREE PROTECTION AREA/PROHIBIDO ENTRAR / ZONA PROTECTORA PARA LOS ÁRBOLES."
7. PROTECTION OF EXISTING VEGETATION: AT THE START OF GRADING INVOLVING THE LOWERING OF EXISTING GRADE AROUND A TREE OR STRIPPING OF TOPSOIL, A CLEAN, SHARP, VERTICAL CUT SHALL BE MADE AT THE EDGE OF THE TREE SAVE AREA AT THE SAME TIME AS OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCING SHALL BE INSTALLED ON THE SIDE OF THE CUT FARTHEST AWAY FROM THE TREE TRUNK AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREES IS COMPLETE. NO STORAGE OF MATERIALS, FILL, OR EQUIPMENT AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED AREA.
8. ROOT ZONE PROTECTION AREA: VARIES BASED ON LOCAL JURISDICTION HAVING AUTHORITY. CONTRACTOR SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS. NO DISTURBANCE ALLOWED WITHIN THIS AREA. AREA MUST BE PROTECTED WITH BOTH TREE PROTECTION FENCING AND WARNING SIGNS.
9. SEED BED PREPARATION: ALL AREAS TO BE SEEDED ARE TO BE RECEIVE A MINIMUM OF 2" OF APPROVED TOPSOIL. ALL DEBRIS, ROCKS, ETC. LARGER THAN .5" ARE TO BE REMOVED. ALL LARGE CONCENTRATIONS OF GRAVEL & DEBRIS REGARDLESS OF SIZE ARE TO BE REMOVED PRIOR TO SEEDING OR PLANTING.
10. ALL PLANT BED AREAS ARE TO RECEIVE A MINIMUM OF 6" OF APPROVED TOPSOIL.
11. SOIL SHOULD BE TESTED AND AMENDED WITH LIME AND FERTILIZER FOR HARDWOOD TREES ACCORDING TO NCDA PROCEDURES. SCARIFY PLANT PIT WALLS. CONSULT LANDSCAPE ARCHITECT FOR ALTERNATE COMPLIANCE.
12. SHREDDED HARDWOOD MULCH 3" DEEP EXCEPT AT CROWN OF PLANT UNLESS OTHERWISE NOTED. FLARE AT CROWN SHOULD BE REVEALED. BACKFILL CONSISTS OF THOROUGHLY BROKEN UP NATIVE SOIL. TOTAL VOLUME OF BACKFILL SHOULD BE AMENDED WITH UP TO ONE THIRD PINE BARK MULCH. PIECES SHOULD BE NO LARGER THAN WHAT PASSES THROUGH A ONE INCH SCREEN. IF ADDITIONAL SOIL IS REQUIRED FOR BACKFILL DUE TO DETRIMENTAL SUBSOIL DRAINAGE CONDITIONS, USE SOIL SIMILAR TO EXISTING NATIVE SOIL. ADDITIONAL SOIL TO BE APPROVED BY LANDSCAPE ARCHITECT. MAXIMUM SAUCER HEIGHT IS 6 INCHES.
13. TOP OF ROOTBALL TO BE RAISED 2-3 INCHES ABOVE EXISTING GRADE.
14. FOR B&B PLANTS, NATURAL FIBER BURLAP SHOULD BE TURNED DOWN BY 1/3 TOTAL HEIGHT OF ROOT BALL. PLASTIC FIBER BURLAP AND WIRE BASKETS SHOULD BE REMOVED TO 2/3'S OF TOTAL HEIGHT OF ROOT BALL.
15. CONTRACTOR IS RESPONSIBLE FOR KEEPING THE TREE UPRIGHT AND PLUMB THROUGHOUT THE WARRANTY PERIOD. IF STABILIZATION IS NECESSARY SEE STAKING IN TREE DETAIL, ORANGE FLAGGING TAPE SHOULD BE ATTACHED TO SUPPORT WIRE. STAKING SHOULD BE REMOVED BY CONTRACTOR AT END OF ONE YEAR WARRANTY PERIOD OR AS DIRECTED BY GROUNDS MANAGEMENT.
16. USE STANDARD "GATOR" BAGS FOR WATERING TREES IN AREAS NOT UNDER IRRIGATION. INCORPORATE TERRA-SORB (OR EQUAL) AS PER MANUFACTURER'S RECOMMENDATIONS, FOR AREAS NOT UNDER IRRIGATION.
17. USE "BIO-BARRIER" OR EQUIVALENT ACCORDING TO MANUFACTURER'S RECOMMENDATION FOR TREES THAT WILL BE PLANTED WITHIN 10' OF PAVEMENT
18. LANDSCAPING/C.O. STANDARDS NOTE: ALL LANDSCAPING MUST BE IN PLACE PRIOR TO REQUEST FOR A CERTIFICATE OF COMPLIANCE.
19. PERENNIAL SEED MIX CONTAINS THE FOLLOWING SPECIES: ACHILLEA MILLEFOLIUM, AGASTACHE FOENICULUM, ALLIUM STELLATUM, APOCYNUM CANNABINUM, ASCLEPIAS INCARNATA, ASCLEPIAS SYRIACA, ASCLEPIAS TUBEROSA, ASCLEPIAS VERTICILLATA, ASTER ERICOIDES, ASTER LAEVIS, CHAMAECRISTA FASCICULATA, COREOPSIS LANCELEOLATA, COREOPSIS PALMATA, DALEA CANDIDA, DALEA PURPUREA, ERYNGIUM YUCCIFOLIUM, HELIANTHUS PAUCIFLORUS, HELIOPSIS HELIANTHOIDES, LIASTRIS LIGULISTYLIS, MONARDA FISTULOSA, MONARDA PUNCTATA, PARTHENIUM INTEGRIFOLIUM, POTENTILLA ARGUTA, PYCNANTHEMUM VIRGINIANUM, RATIBIDA PINNATA, RUDEBECKIA HIRTA, SCROPHULARIA MARILANDICA, SOLIDAGO GRAMINIFOLIA, SOLIDAGO SPECIOSA, TRADESCANTIA OHIENSIS, VERBENA STRICTA, VERONICASTRUM VIRGINICUM, ZIZIA APTERA, ZIZIA AUREA, CEANOTHUS AMERICANUS, BOUTELOUA CURTIPENDULA, ELYMUS CANADENSIS, KOELERIA MACRANTHA, SCHYZACHYRIUM SCOPARIUM, SPOROBOLUS HETEROLEPIS.
20. POLLINATOR SEED MIX CONTAINS THE FOLLOWING SPECIES: CHAMAECRISTA FASCICULATA, COREOPSIS LANCEOLATA, ACHILLEA MILLEFOLIUM, BIDENS ARISTOSA, GAILLARDIA PULCHELLA, ELYMUS CANADENSIS, ELYMUS VIRGINICUS, TRIPSACUM DACTYLOIDES, SORGHASTRUM NUTANS, RUDBECKIA HIRTA, SCHIZACHYRIUM SCOPARIUM, TRIDENS FLAVUS, ECHINACEA PURPUREA, SENNA HEBECARPA, HELIANTHUS ANGUSTIFOLIUS, HELIANTHUS MAXIMILIANII, MONARDA PUNCTATA, VERBENA HASTATA, ASCLEPIAS TUBEROSA, SYMPHYOTRICHUM PILOSUM.
21. WETLAND SEED MIX CONTAINS THE FOLLOWING SPECIES: ELYMUS RIPARIUS, PANICUM RIGIDULUM, PANICUM DICHOTOMIFLORUM, CAREX VULPINOIDEA, PANICUM VIRGATUM, DICHANTHELIUM CLANDESTINUM, BIDENS ARISTOSA, JUNCUS EFFUSUS, POLYGONUM PENSYLVANICUM, AND SPARGANIUM AMRICANUM.


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Project:

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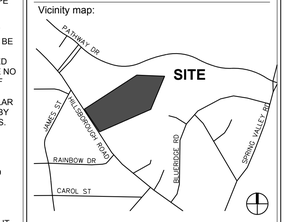


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SCALE: 1"=50'

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Title:

LANDSCAPE PLAN

Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: TPG
Approved by: JLW

L1.00

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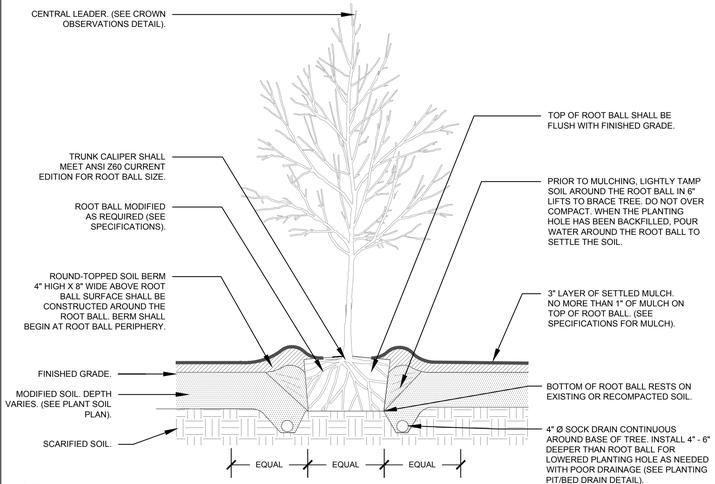


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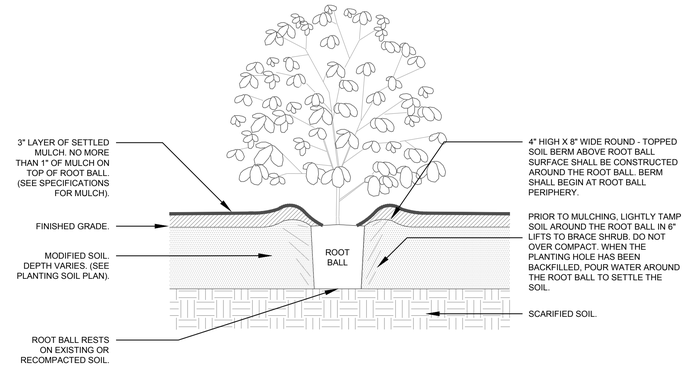


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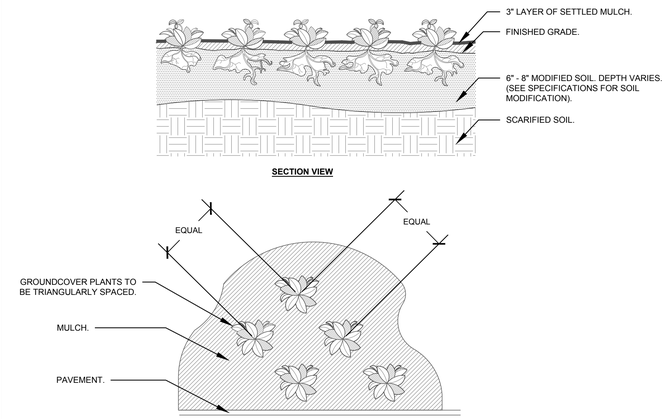
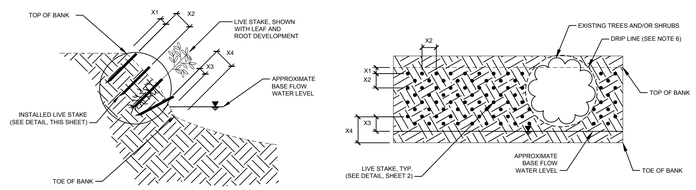



## 3 GROUNDCOVER PLANTING (TYPICAL)
PLAN — NTS

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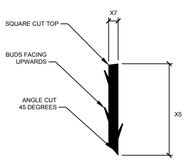


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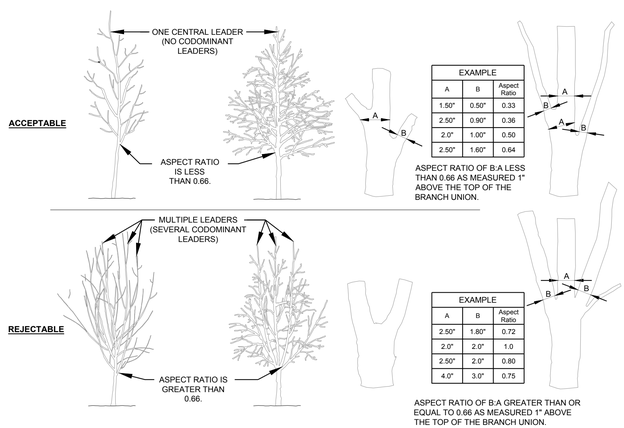
SECTION — NTS

## 6 PLACEHOLDER
SECTION — NTS




| EXAMPLE | | |
|---|---|---|
| A | B | Aspect Ratio |
| 1.50" | 0.50" | 0.33 |
| 2.50" | 0.90" | 0.36 |
| 2.0" | 1.00" | 0.50 |
| 2.50" | 1.60" | 0.64 |

ASPECT RATIO OF B:A LESS THAN 0.66 AS MEASURED 1" ABOVE THE TOP OF THE BRANCH UNION.

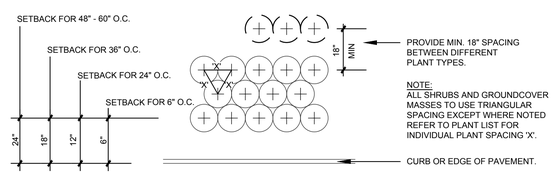
| EXAMPLE | | |
|---|---|---|
| A | B | Aspect Ratio |
| 2.50" | 1.80" | 0.72 |
| 2.0" | 2.0" | 1.0 |
| 2.50" | 2.0" | 0.80 |
| 4.0" | 3.0" | 0.75 |

ASPECT RATIO OF B:A GREATER THAN OR EQUAL TO 0.66 AS MEASURED 1" ABOVE THE TOP OF THE BRANCH UNION.

## 7 CROWN OBSERVATIONS - HIGH BRANCHED
SECTION — NTS

**NOTES:**

1. SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE AND SPACING DIMENSION.
2. SMALL ROOTS (¼" OR LESS) THAT GROW AROUND, UP OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE, HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPHERY CAN BE REMOVED AT THE TIME OF PLANTING (SEE ROOT BALL SHAVING DETAIL).
3. SETTLE SOIL AROUND ROOT BALL OF EACH GROUNCOVER PRIOR TO MULCHING.
4. WHEN GROUNDCOVER PLANTINGS ARE USED IN MASSES, ENTIRE BED SHALL BE EXCAVATED AND TILLED WITH SOIL AMENDMENTS PER SPECIFICATIONS.
5. CONTRACTORS SHALL ASSURE PERCOLATION OF A ALL PLANTING PITS PRIOR TO INSTALLATION.




## 8 SHRUB AND GROUNDCOVER SPACING
PLAN — NTS

**PLANTING NOTES:**

1. DO NOT STAKE TREES EXCEPT WHERE SPECIFIED BY LANDSCAPE ARCHITECT. STAKING IS REQUIRED FOR TREES PLANTED ON SLOPES.
2. WHERE SEVERAL TREES WILL BE PLANTED CLOSE TOGETHER SUCH THAT THEY WILL LIKELY SHARE ROOT SPACE, TILL IN SOIL AMENDMENTS TO A DEPTH OF 4-6" OVER THE ENTIRE AREA.
3. FOR CONTAINER GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
4. FOR FIELD GROWN TREES, CUT BURLAP, ROPE AND WIRE BASKET AWAY FROM TOP AND SIDES OF ROOT BALL.
5. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
6. THE PLANTING PROCESS IS SIMILAR FOR DECIDUOUS AND EVERGREEN TREES.
7. DO NOT WRAP TRUNK; MARK NORTH SIDE OF TREE IN THE NURSERY AND LOCATE TO THE NORTH IN THE FIELD.
8. WIDTH OF PLANTING HOLE IS 3X ROOT BALL AT THE SURFACE, SLOPING TO 2X THE ROOT BALL DIAMETER AT THE DEPTH OF THE ROOT BALL.
9. BEFORE PLANTING, ADD 3-4" OF WELL COMPOSTED LEAVES, RECYCLED YARD WASTE OR OTHER COMPOST AND TILL INTO TOP 6" OF PREPARED SOIL. ADD COMPOST AT 20-35% BY VOLUME TO BACKFILL.
10. PERFORM PERCOLATION TEST FOR EACH TREE PIT TO CONFIRM THAT WATER DRAINS OUT OF THE SOIL. PROVIDE GRAVEL SUMP FILTER FABRIC & VENT PIPE IF DRAINAGE DOES NOT OCCUR WITHIN 24 HOURS. INCLUDE ALL SUMPS IN BASE BID. SHOULD SUMPS NOT BE NECESSARY AFTER PERCOLATION TEST, PROVIDE CHANGE ORDER DEDUCT TO OWNER.
11. IF PLANTING HOLES ARE DUG WITH A LARGE AUGER BREAKING DOWN THE SIDES WITH A SHOVEL CAN ELIMINATE GLAZING AND CREATE THE PREFERRED SLOPING SIDE.
12. TREES SHALL HAVE SINGLE LEADERS. TREES WITH 2 LEADERS WILL BE REJECTED.
13. DO NOT PLACE MULCH IN CONTACT WITH TRUNK.
14. PROVIDE GATOR BAGS FOR ALL TREES WHERE IRRIGATION IS NOT PROVIDED.

## 9 PLANTING NOTES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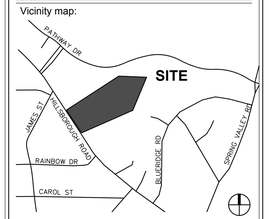


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Project number: C16146 Sheet:
Date: 05.01.2017
Drawn by: TPG
Approved by: JLW

L2.00

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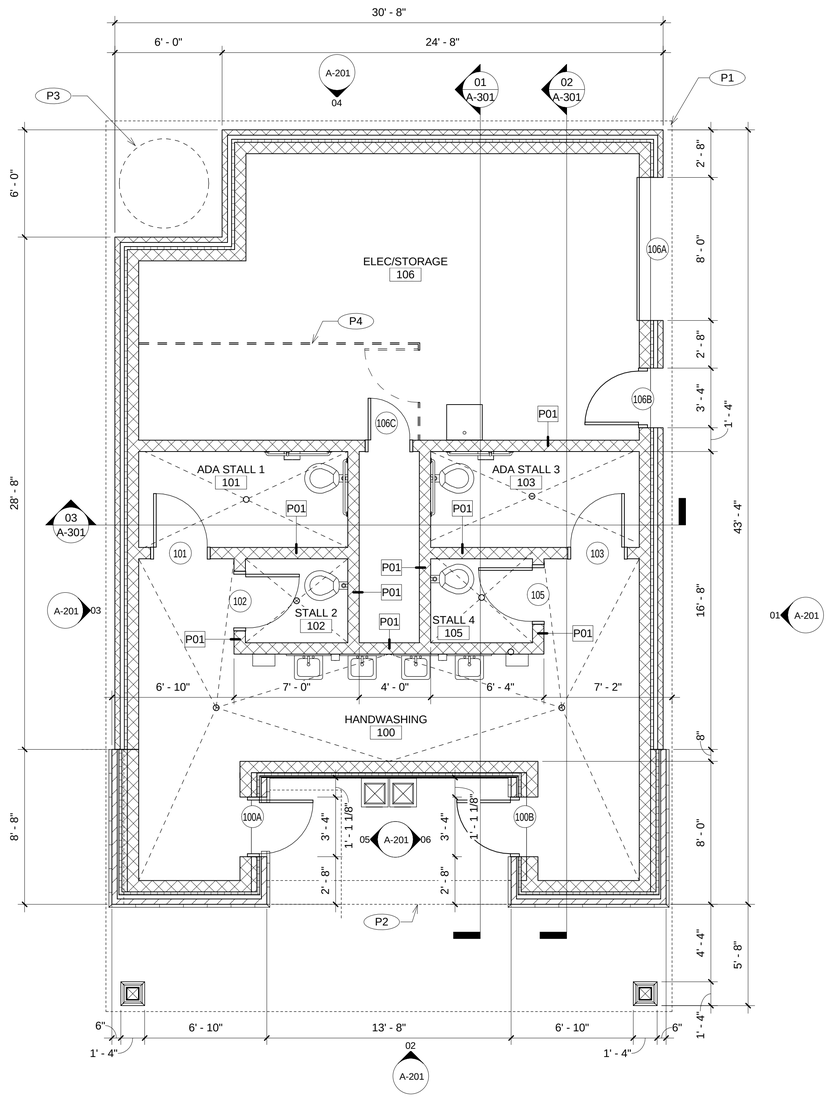
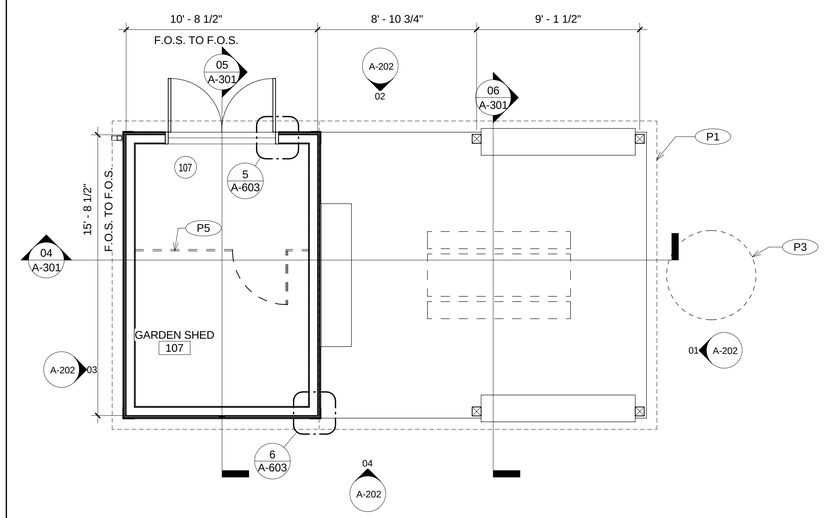
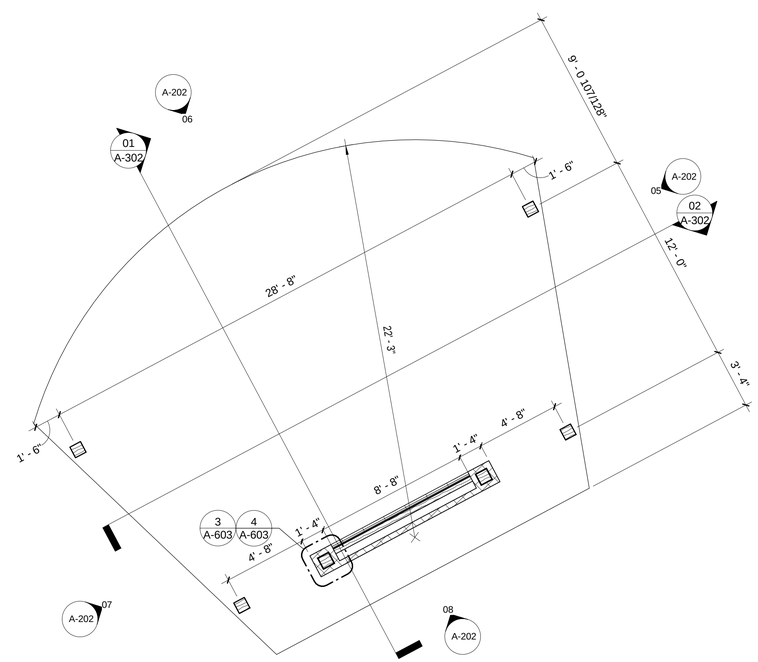



01 RESTROOM FLOOR PLAN
1/4" = 1'-0"




02 GARDEN SHELTER FLOOR PLAN
1/4" = 1'-0"




03 AMPHITHEATER FLOOR PLAN
1/4" = 1'-0"

| KEYNOTES - FLOOR PLAN | |
|---|---|
| P1 | LINE OF ROOF ABOVE |
| P2 | LINE OF SOFFIT ABOVE |
| P3 | RAINWATER CISTERN - REFERENCE CIVIL |
| P4 | EQUIPMENT ENCLOSURE |
| P5 | STORAGE ENCLOSURE - BY OWNER |

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REGISTERED ARCHITECT
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| NO. | REVISION | DATE |
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JOB NUMBER
16-051

DATE ISSUED
04-27-2017

PROJECT STATUS
DESIGN DEVELOPMENT

SHEET
FLOOR PLANS

A-101

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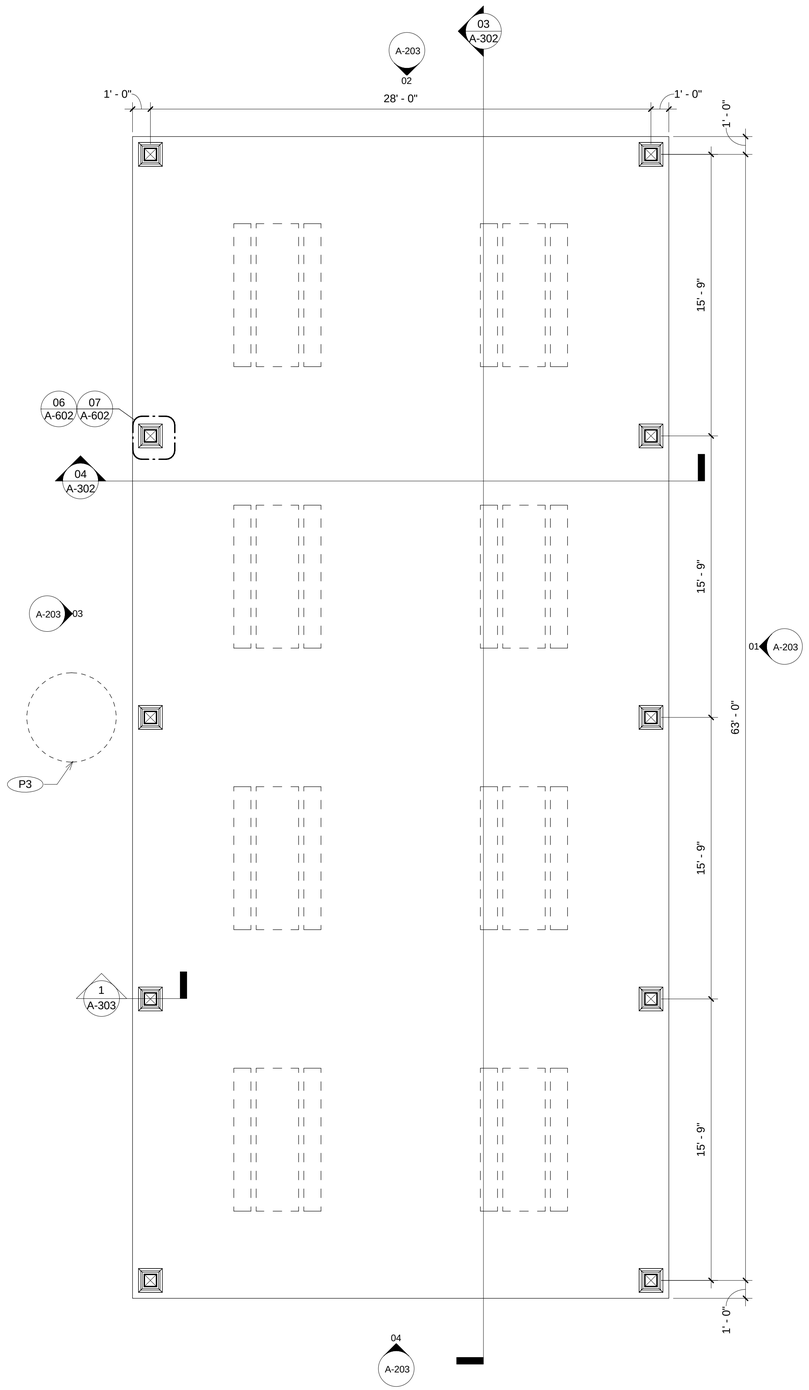
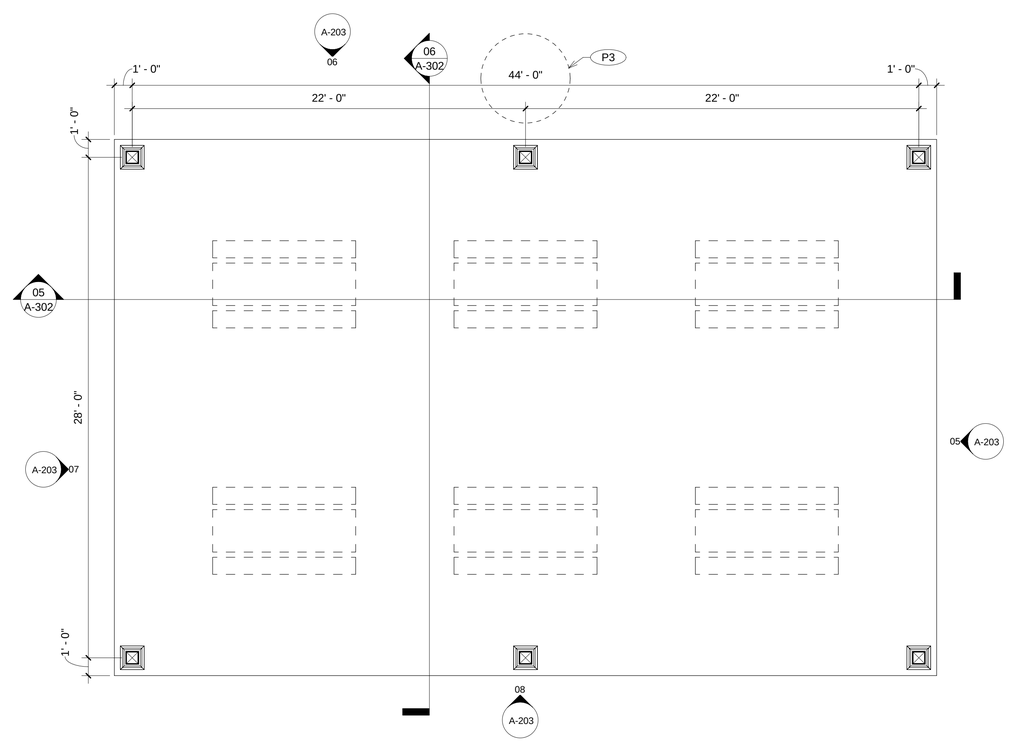
Plot Time: 5/16/2017 9:32:48 AM

| KEYNOTES - FLOOR PLAN | |
|---|---|
| P3 | RAINWATER CISTERN - REFERENCE CIVIL |




01 PICNIC SHELTER 1 FLOOR PLAN
1/4" = 1'-0"




02 PICNIC SHELTER 2 FLOOR PLAN
1/4" = 1'-0"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|---|---|---|

JOB NUMBER
16-051

DATE ISSUED
04-27-2017

PROJECT STATUS
DESIGN DEVELOPMENT

SHEET
PICNIC SHELTER FLOOR PLANS

A-102


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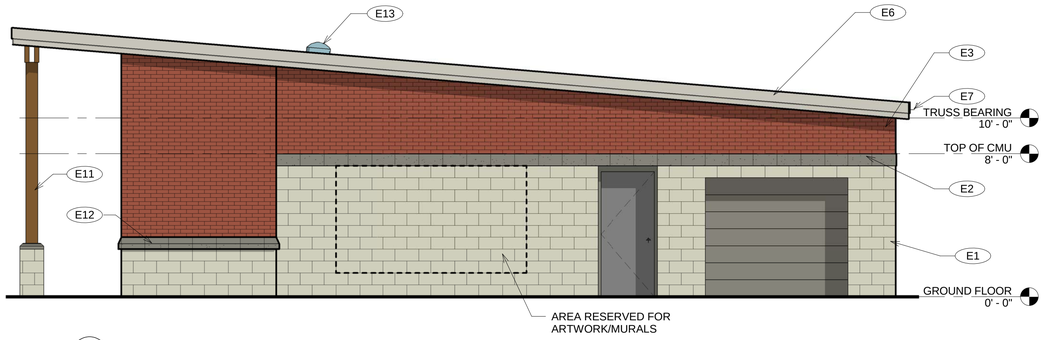
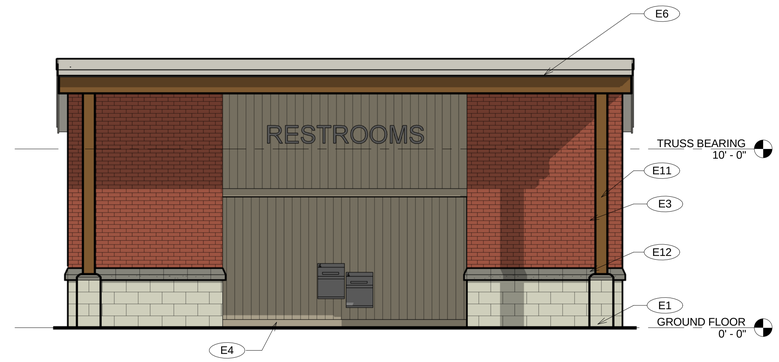
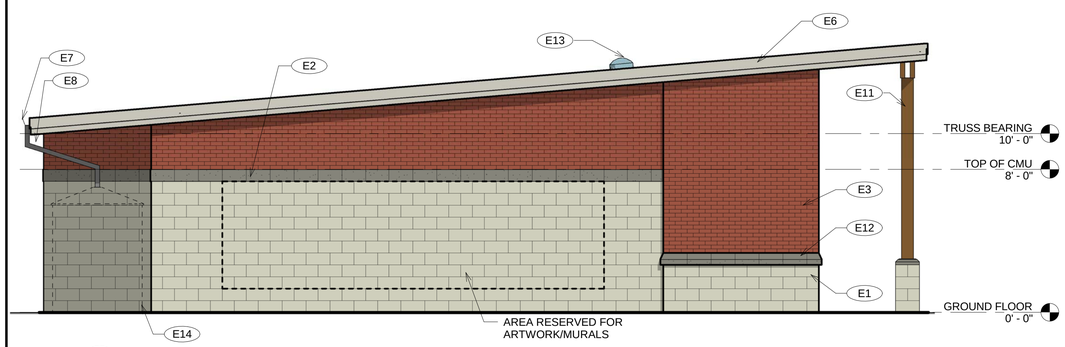


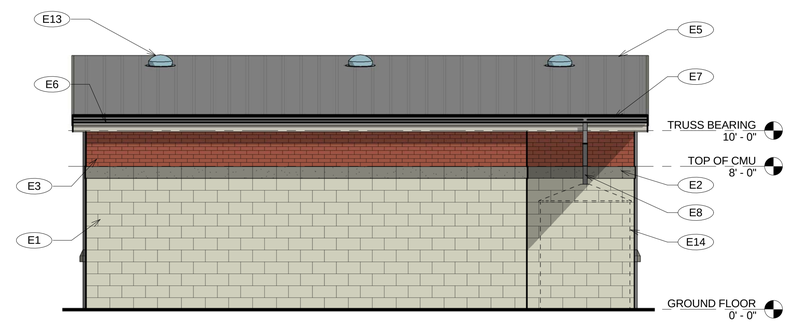

1 PRESENTATION - RESTROOM - EAST ELEVATION
1/4" = 1'-0"



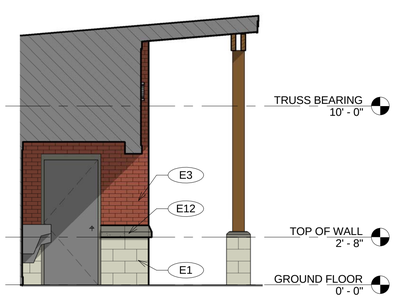

2 PRESENTATION - RESTROOM - SOUTH ELEVATION
1/4" = 1'-0"



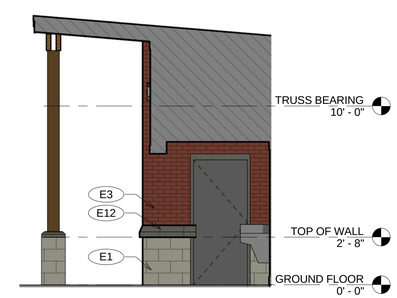

3 PRESENTATION - RESTROOM - WEST ELEVATION
1/4" = 1'-0"




4 PRESENTATION - RESTROOM - NORTH ELEVATION
1/4" = 1'-0"




5 PRESENTATION - RESTROOM ENTRY - WEST ELEVATION
1/4" = 1'-0"




6 PRESENTATION - RESTROOM ENTRY - EAST ELEVATION
1/4" = 1'-0"

| KEYNOTES - ELEVATION | |
|---|---|
| E1 | CMU BLOCK |
| E2 | SPLIT FACE CMU BLOCK |
| E3 | BRICK VENEER |
| E4 | RECLAIMED WOOD SIDING |
| E5 | STANDING SEAM METAL ROOF |
| E6 | CEMENT BOARD ROOF FASCIA |
| E7 | PRE-FINISHED ALUMINUM GUTTER |
| E8 | ALUMINUM DOWNSPOUT |
| E11 | TREATED COLUMN; SEE STRUCTURAL DRAWINGS |
| E12 | CMU SILL |
| E13 | SKYLIGHT - SEE ROOF PLAN FOR LOCATION |
| E14 | RAINWATER CISTERN, NOT SHOWN FOR CLARITY - REFERENCE CIVIL |

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JOB NUMBER
16-051

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PROJECT STATUS
DESIGN DEVELOPMENT

SHEET
ELEVATIONS

A-201A

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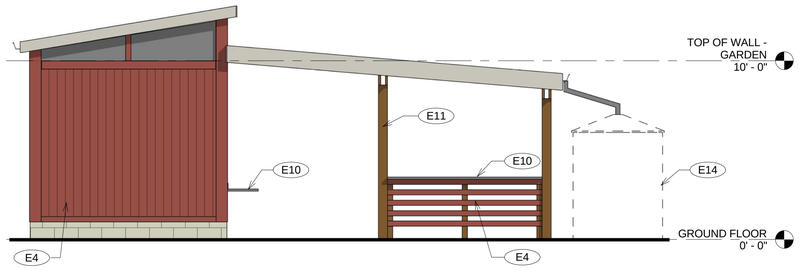
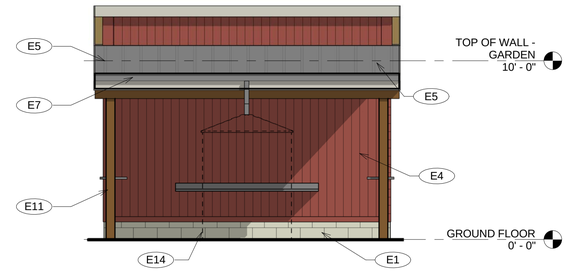
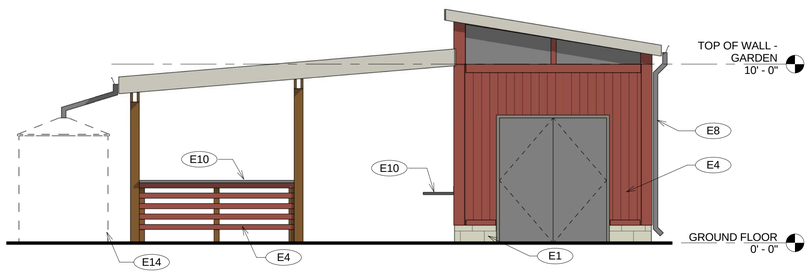



1 PRESENTATION - GARDEN SHELTER - SOUTH ELEVATION
1/4" = 1'-0"

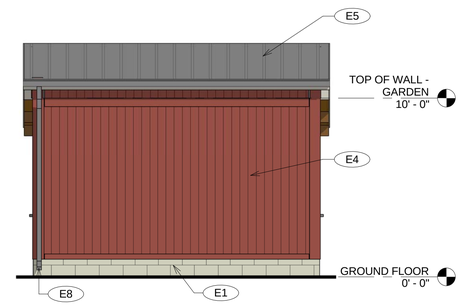



2 PRESENTATION - GARDEN SHELTER - EAST ELEVATION
1/4" = 1'-0"

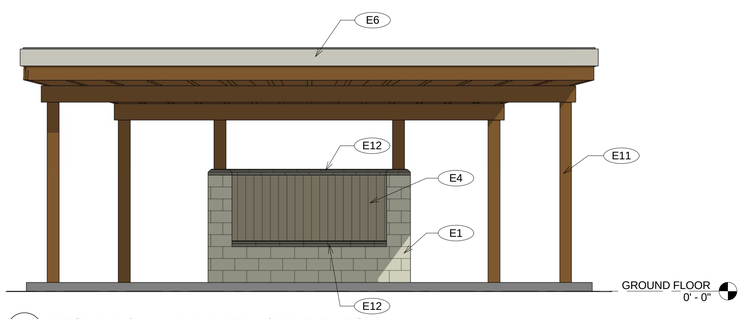
| KEYNOTES - ELEVATION | |
|---|---|
| E1 | CMU BLOCK |
| E4 | RECLAIMED WOOD SIDING |
| E5 | STANDING SEAM METAL ROOF |
| E6 | CEMENT BOARD ROOF FASCIA |
| E7 | PRE-FINISHED ALUMINUM GUTTER |
| E8 | ALUMINUM DOWNSPOUT |
| E9 | GREEN ROOF (ALTERNATE #1) |
| E10 | EXTERIOR GRADE COUNTERTOP |
| E11 | TREATED COLUMN; SEE STRUCTURAL DRAWINGS |
| E12 | CMU SILL |
| E14 | RAINWATER CISTERN, NOT SHOWN FOR CLARITY - REFERENCE CIVIL |



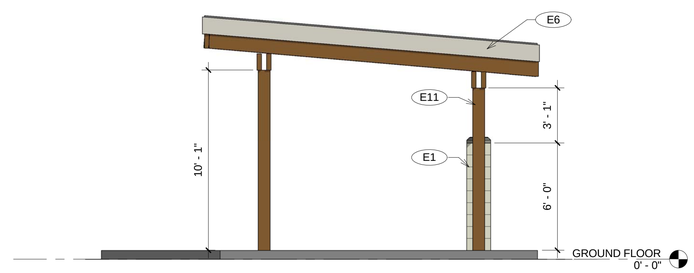

3 PRESENTATION - GARDEN SHELTER - NORTH ELEVATION
1/4" = 1'-0"



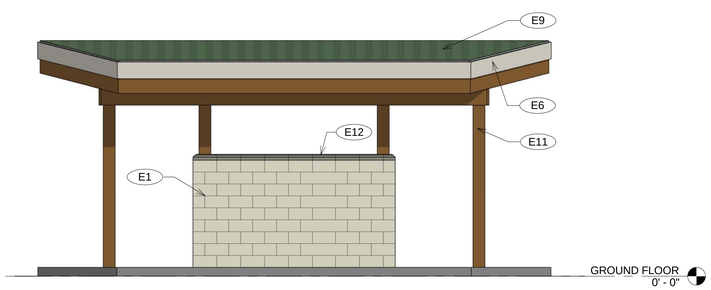

4 PRESENTATION - GARDEN SHELTER - WEST ELEVATION
1/4" = 1'-0"



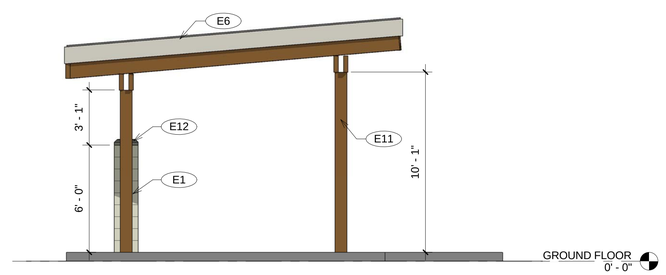

5 PRESENTATION - AMPHITHEATER NORTH ELEVATION
1/4" = 1'-0"




6 PRESENTATION - AMPHITHEATER WEST ELEVATION
1/4" = 1'-0"




7 PRESENTATION - AMPHITHEATER SOUTH ELEVATION
1/4" = 1'-0"




8 PRESENTATION - AMPHITHEATER EAST ELEVATION
1/4" = 1'-0"

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RALEIGH, N

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JOB NUMBER
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DATE ISSUED
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PROJECT STATUS
DESIGN DEVELOPMENT

SHEET
ELEVATIONS

A-202A

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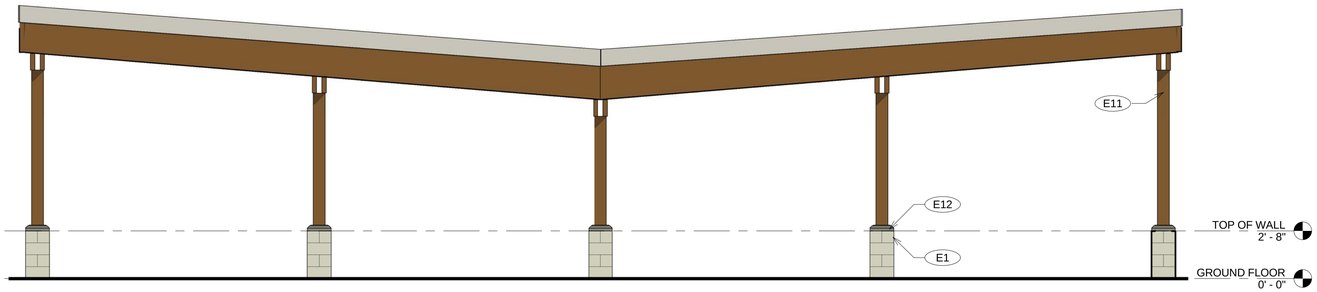
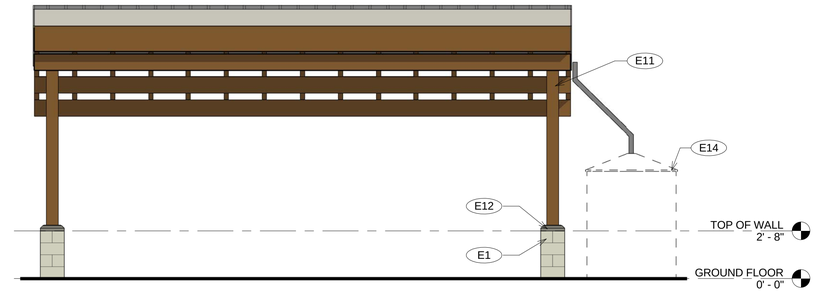
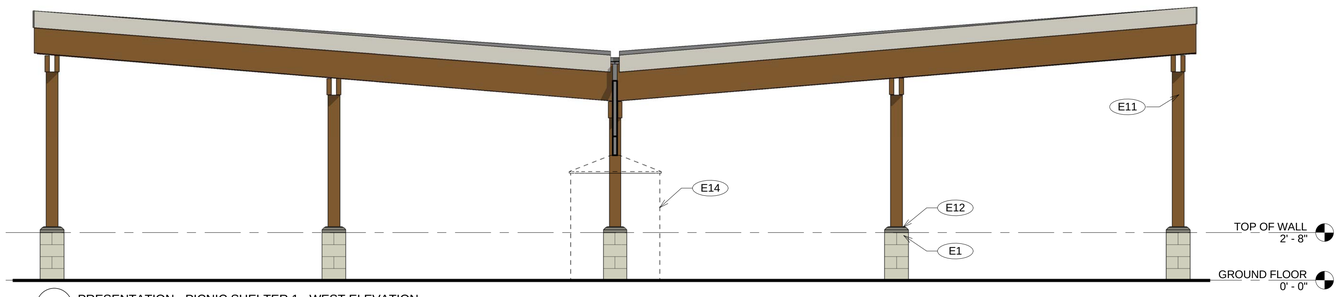


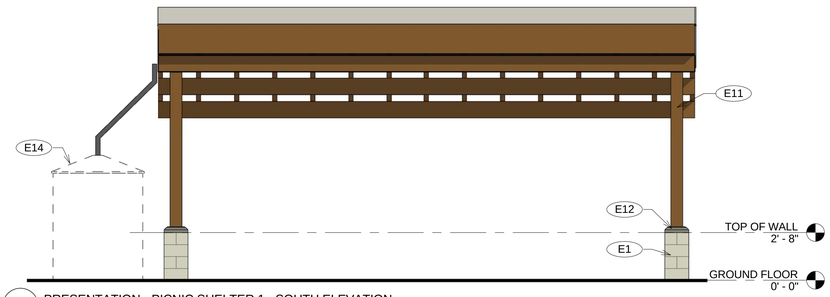

1 PRESENTATION - PICNIC SHELTER 1 - EAST ELEVATION
1/4" = 1'-0"



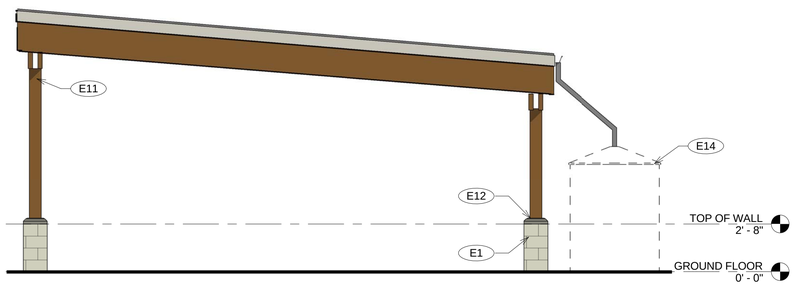

2 PRESENTATION - PICNIC SHELTER 1 - NORTH ELEVATION
1/4" = 1'-0"



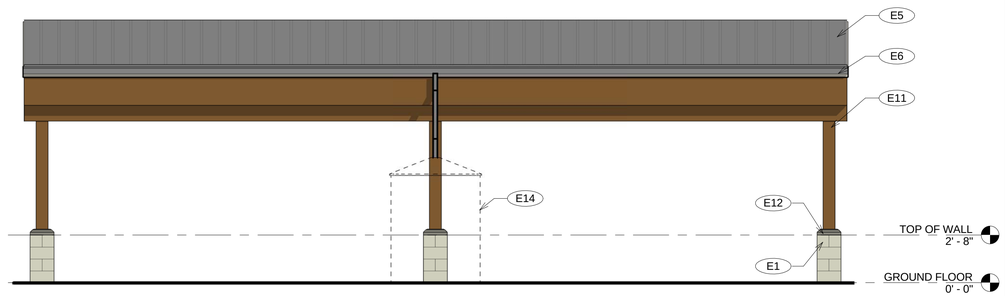

3 PRESENTATION - PICNIC SHELTER 1 - WEST ELEVATION
1/4" = 1'-0"



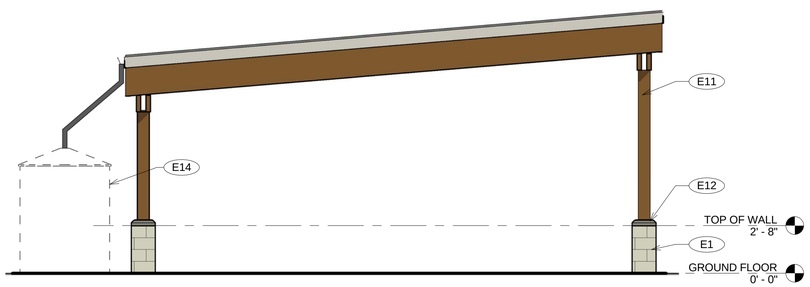

4 PRESENTATION - PICNIC SHELTER 1 - SOUTH ELEVATION
1/4" = 1'-0"



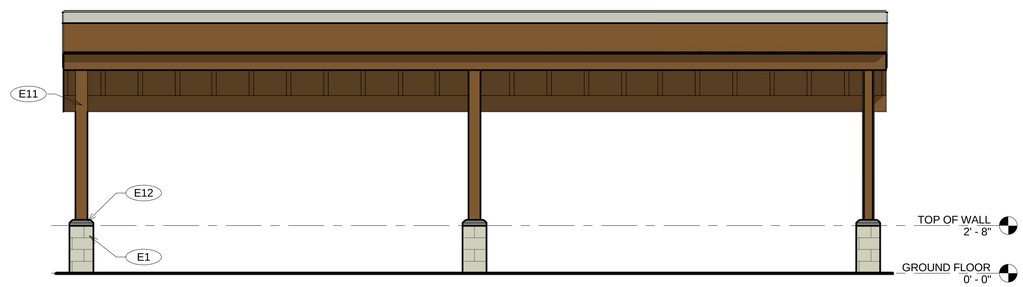

5 PRESENTATION - PICNIC SHELTER 2 - EAST ELEVATION
1/4" = 1'-0"




6 PRESENTATION - PICNIC SHELTER 2 - NORTH ELEVATION
1/4" = 1'-0"




7 PRESENTATION - PICNIC SHELTER 2 - WEST ELEVATION
1/4" = 1'-0"




8 PRESENTATION - PICNIC SHELTER 2 - SOUTH ELEVATION
1/4" = 1'-0"

| KEYNOTES - ELEVATION | |
|---|---|
| E1 | CMU BLOCK |
| E5 | STANDING SEAM METAL ROOF |
| E6 | CEMENT BOARD ROOF FASCIA |
| E11 | TREATED COLUMN; SEE STRUCTURAL DRAWINGS |
| E12 | CMU SILL |
| E14 | RAINWATER CISTERN, NOT SHOWN FOR CLARITY - REFERENCE CIVIL |

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JOB NUMBER
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PROJECT STATUS
DESIGN DEVELOPMENT

SHEET
ELEVATIONS

A-203A

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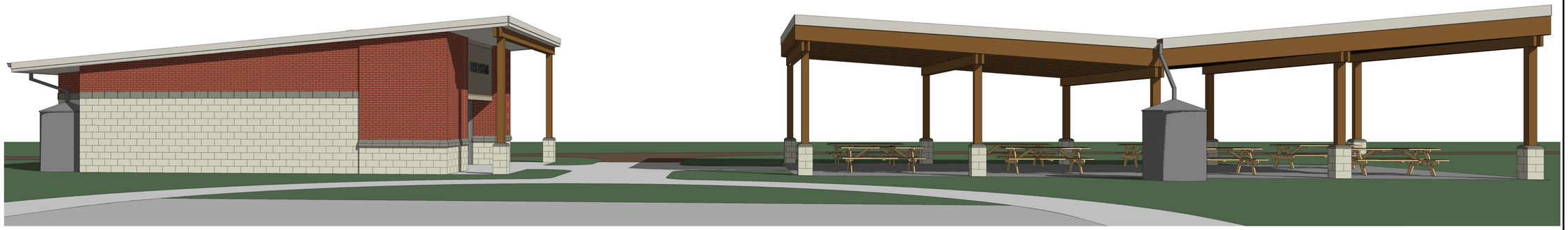
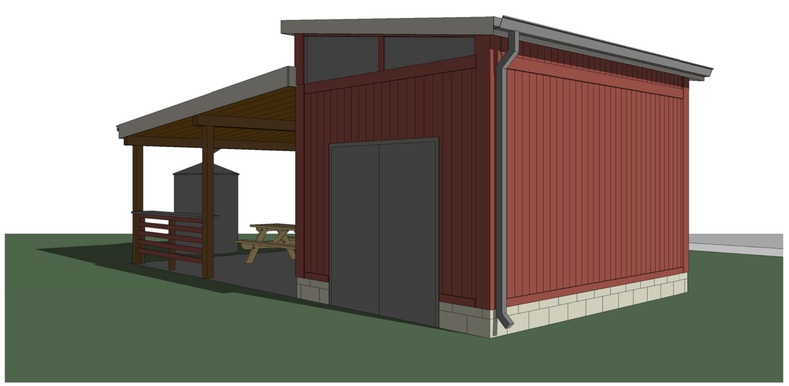


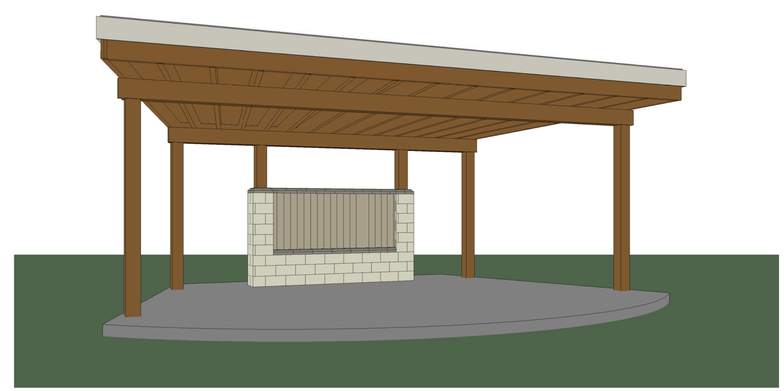
1 ARRIVAL PERSPECTIVE VIEW

2 PICNIC SHELTER 2 PERSPECTIVE VIEW

3 RESTROOM PERSPECTIVE VIEW



4 GARDEN SHELTER PERSPECTIVE VIEW



5 AMPITHEATER PERSPECTIVE VIEW

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PROJECT STATUS
DESIGN DEVELOPMENT

SHEET
EXTERIOR PERSPECTIVES

A-204A

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