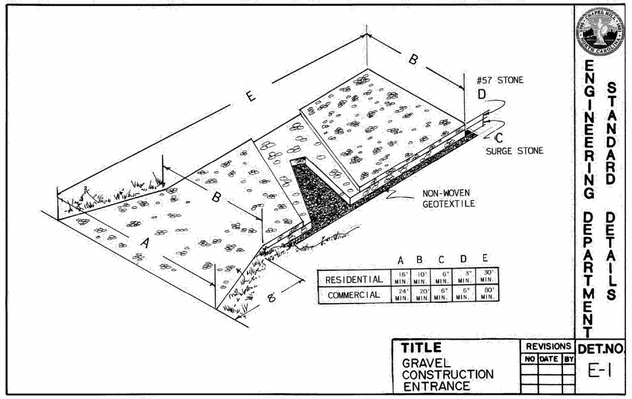

1 CONSTRUCTION ENTRANCE NTS
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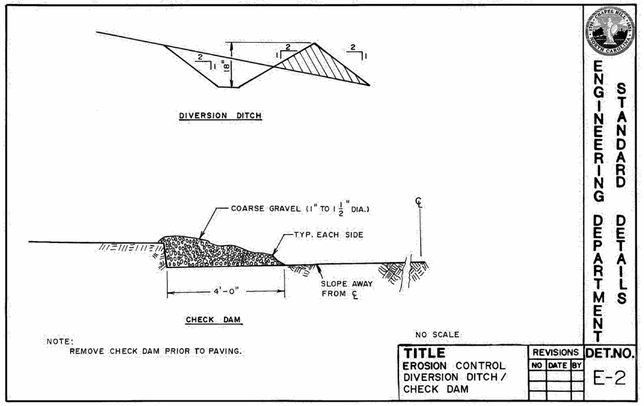

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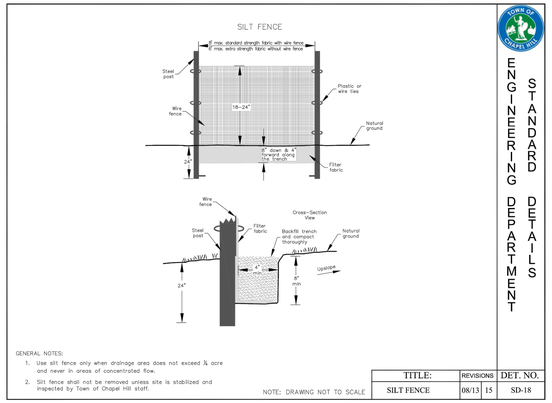

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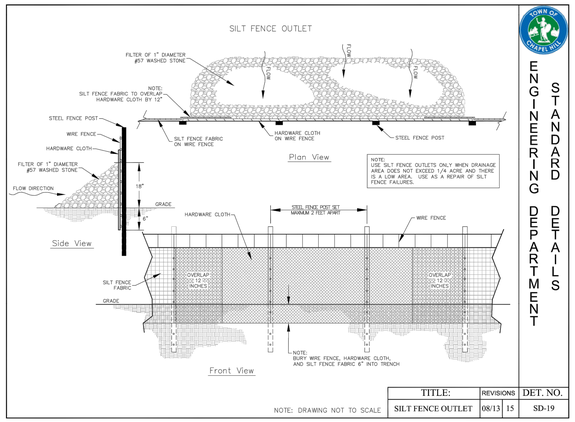

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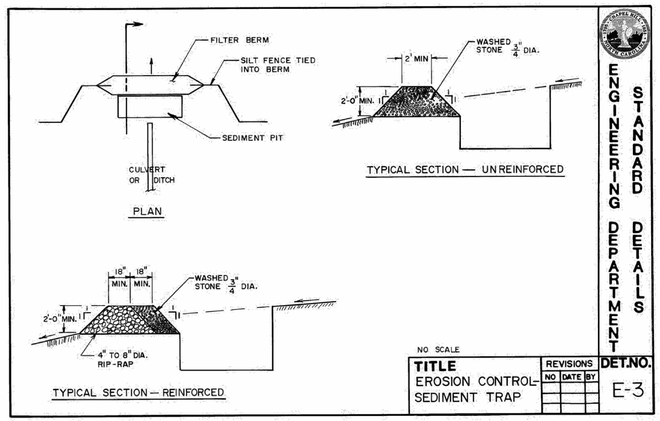


5 SEDIMENT TRAP 3/8" = 1'-0"
SECTION

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

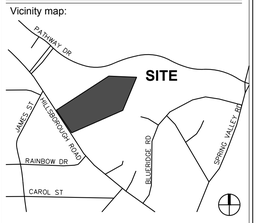
Client:

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

Project:

MARTIN LUTHER KING, JR. PARK

Vicinity map:



Seal:

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No.	Date	Description

SCALE: N.T.S.

Title:

EROSION CONTROL DETAILS

Project number: C16146
Date: 03.03.2017
Drawn by: CJJ
Approved by: JLW
Sheet: C9.10

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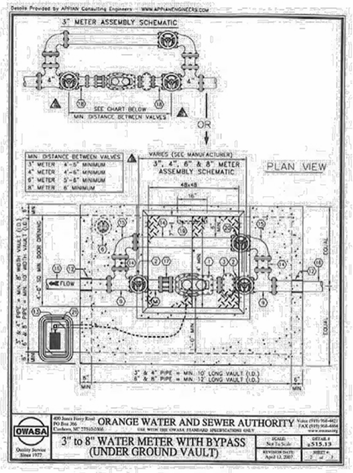

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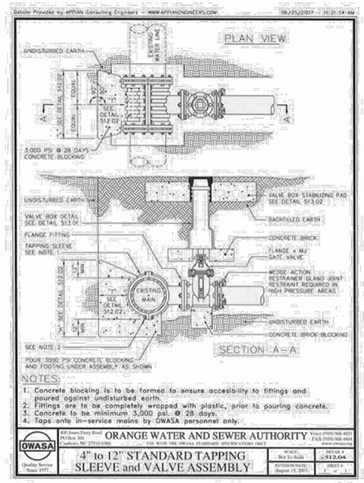

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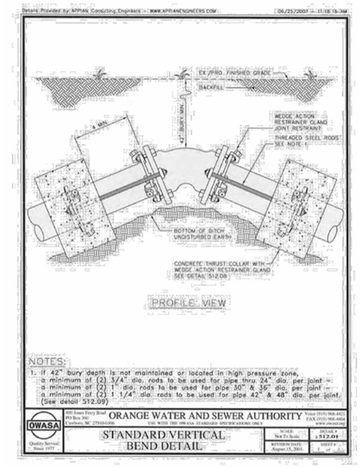

3 WATERLINE BEND NTS
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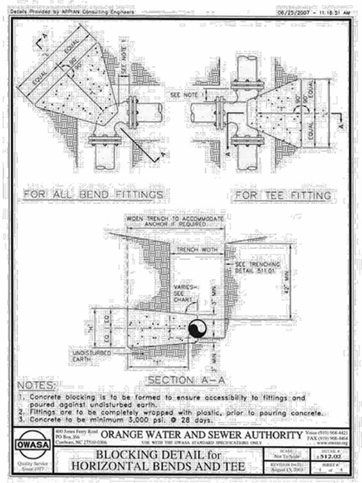

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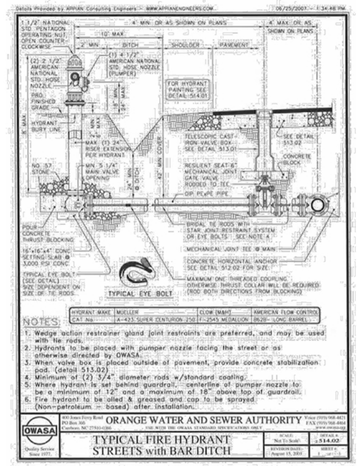

5 FIRE HYDRANT NTS
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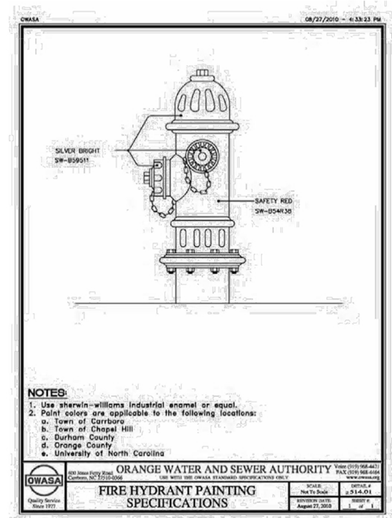

6 FIREHYDRANT PAINT NTS
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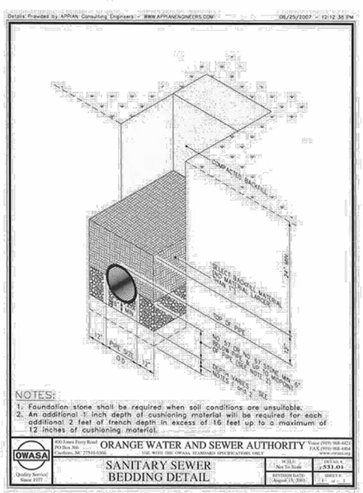

7 SANITARY SEWER BEDDING NTS
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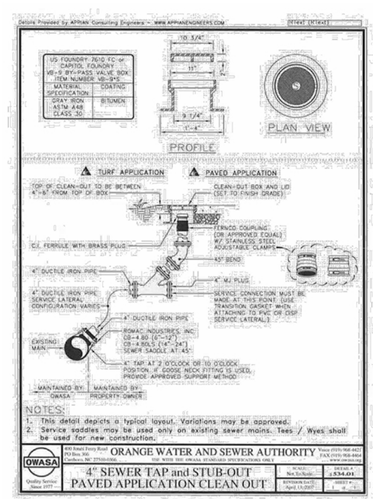

8 CLEANOUT NTS
SECTION

STEWART

421 FAYETTEVILLE ST., SUITE 400
RALEIGH, NC 27601
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FIRM LICENSE #: C-1051
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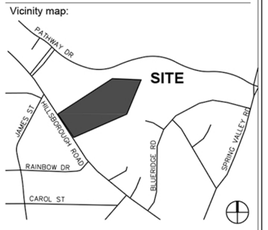

Seal:

NORTH CAROLINA PROFESSIONAL SEAL 17911 ENGINEER JOHN-PETER W. L. PUCKNERWER

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Issued for:

60% DESIGN DEVELOPMENT

No.	Date	Description

SCALE: N.T.S.

Title:

UTILITY DETAILS

Project number: C16146 Sheet:
Date: 03.03.2017
Drawn by: CJJ
Approved by: JLW

C9.30

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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	2,326 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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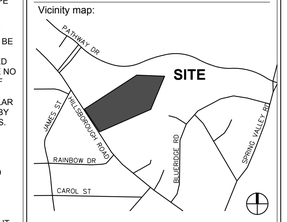

Seal:

NORTH CAROLINA LICENSED LANDSCAPE ARCHITECT 1791 JENNIFER L. WAGNER

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Issued for:

60% DESIGN DEVELOPMENT

No.	Date	Description

0 25 50 100

SCALE: 1"=50'

NORTH

Title:

PLANTING PLAN

Project number: C16146 Sheet:
Date: 01.23.2017
Drawn by: TPG
Approved by: JWP

L1.00

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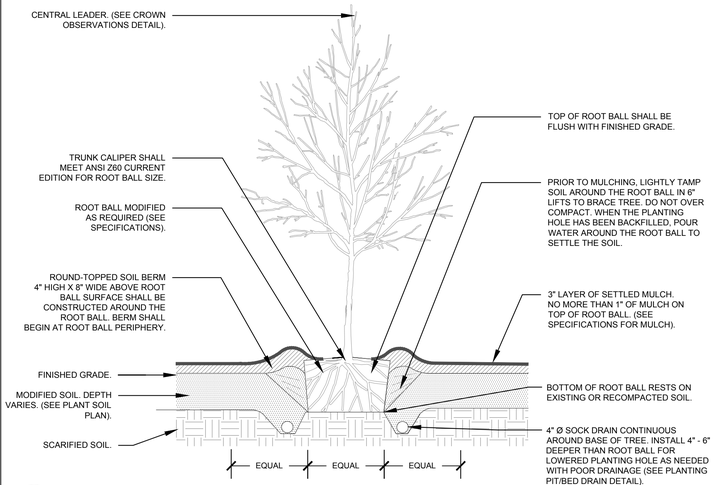

1 TREE (TYPICAL)
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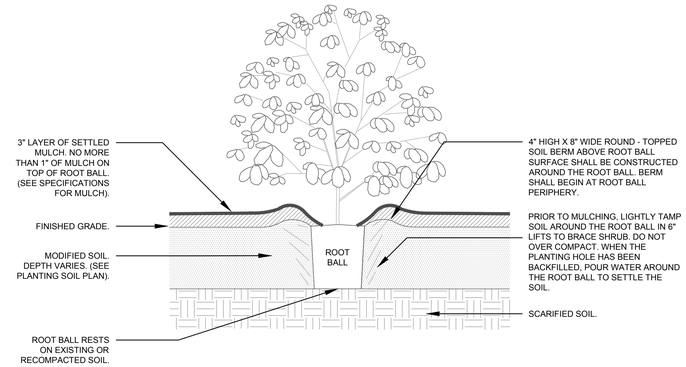

2 SHRUB (TYPICAL)
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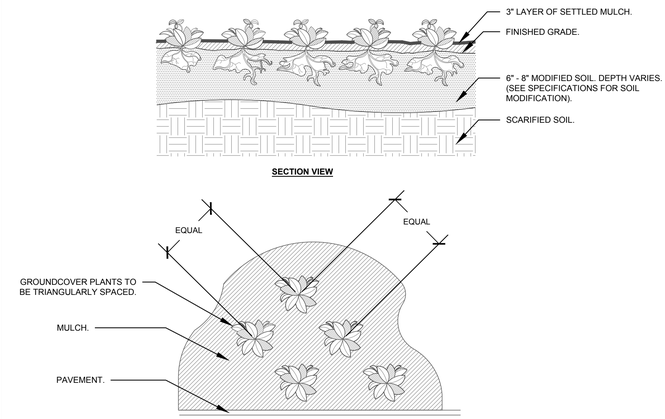
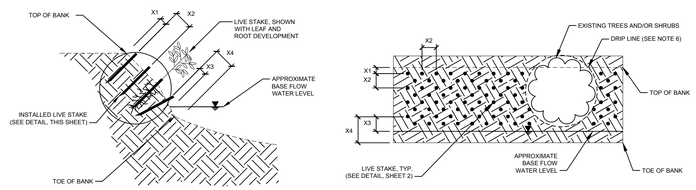


3 GROUNDCOVER PLANTING (TYPICAL)
PLAN — NTS



4 WETLAND PLANTING (LIVE STAKING)
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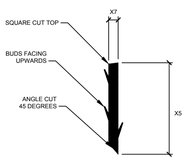
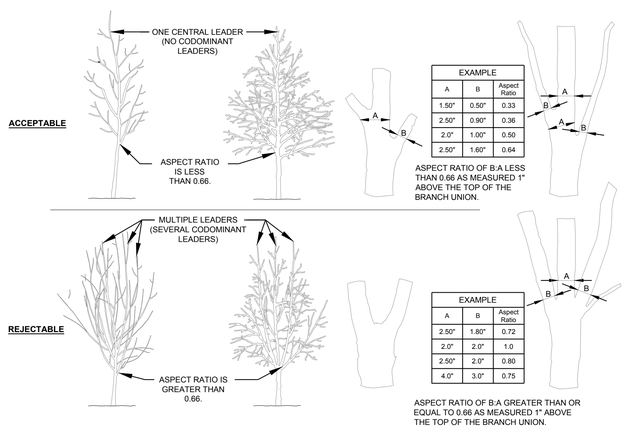


5 PLACEHOLDER(POLLINATOR PLANTING)
SECTION — NTS

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.

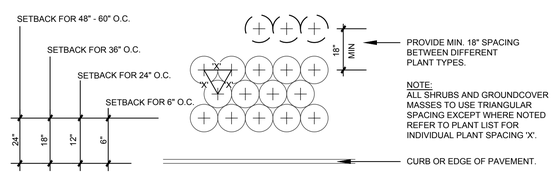
EXAMPLE		
A	B	Aspect Ratio
2.50"	1.80"	0.72
2.0"	2.0"	1.0
2.50"	2.0"	0.80
4.0"	3.0"	0.75

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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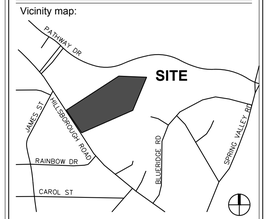
Vicinity map:



Seal:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1791 JENNIFER L. WALKER

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Issued for:

60% DESIGN DEVELOPMENT

No.	Date	Description

SCALE: N.T.S.

Title:

PLANTING DETAILS

Project number: C16146 Sheet:
Date: 03.10.2017
Drawn by: TPG
Approved by: JLW

L2.00

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