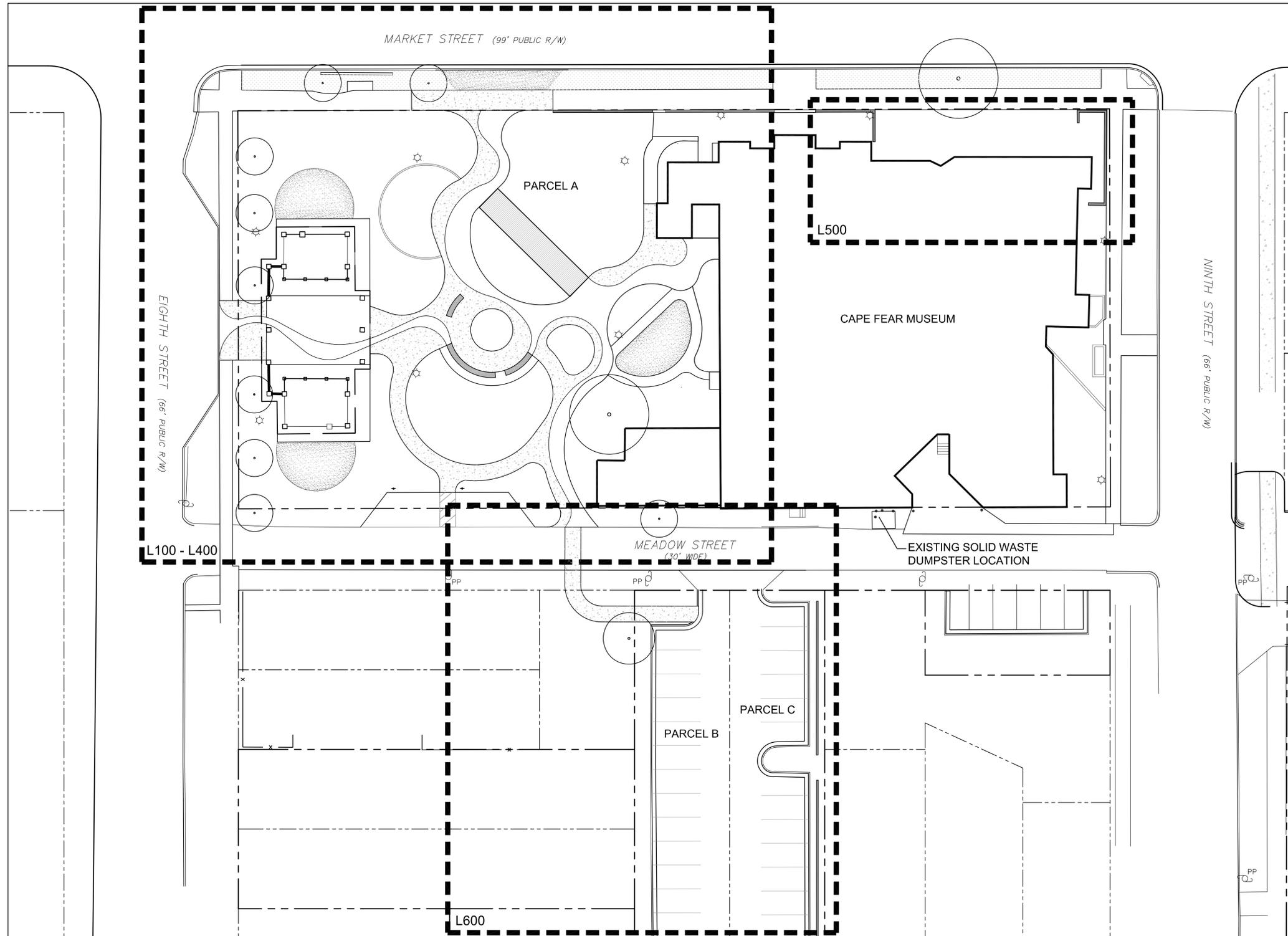


Cape Fear Museum / Outdoor Learning Environment

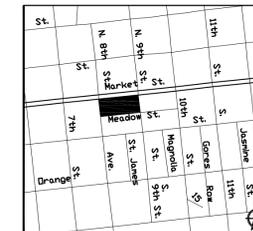
TRC SUBMITTAL / DESIGN DEVELOPMENT

NEW HANOVER COUNTY
814 MARKET STREET, WILMINGTON, NC 28401

NOVEMBER 19, 2014



VICINITY MAP



NOT TO SCALE

DRAWING INDEX:

S100	SURVEY
G100	GENERAL NOTES
L100	DEMOLITION PLAN
L200	LAYOUT PLAN
L201	RIVER PAVING LAYOUT PLAN
L300	GRADING PLAN
L400	PLANTING PLAN
L500	MARKET STREET FACADE
L600	ADJACENT PARKING LOT DEMOLITION
L601	ADJACENT PARKING LOT LAYOUT
D100	DETAILS
D101	DETAILS
D102	DETAILS

SITE DATA:

Property Owner: New Hanover County
Parcel Address: 814 Market Street
Developer: Cape Fear Museum
New Hanover County PIN: RO4817-040-001-000

Zoning: See S100
Acreage of Parcel A: 1.13 acres - Zoned Urban Mixed Use (UMX)
Acreage of Parcel B: .12 acres - Zoned Office and Institutional Special Use District O&I-1 (SD)
Acreage of Parcel C: .12 acres - Zoned Office and Institutional Special Use District O&I-1 (SD)
Total Acreage within project boundary: 1.37 acres

Building Size: 17,828.8 SF
Pre-development Impervious Surface: 35,307.0 SF / 0.81 acres
Post-development Impervious Surface: 25,381.1 SF / 0.58 acres
Impervious Surface Reduction: 9,925.9 SF / 0.23 acres

Building Lot Coverage: N/A
Parking - Project is exempt from parking requirements

LANDSCAPE ARCHITECT:

NOT FOR CONSTRUCTION



CONSULTANTS:

SEALS:

Cape Fear Museum

Outdoor Learning Environment

 NEW HANOVER COUNTY

 814 Market Street, Wilmington, NC 28401

DATE: 11/19/2014

DESIGNER: LED

CHECKED BY: BHS

REVISIONS

NO.	DATE

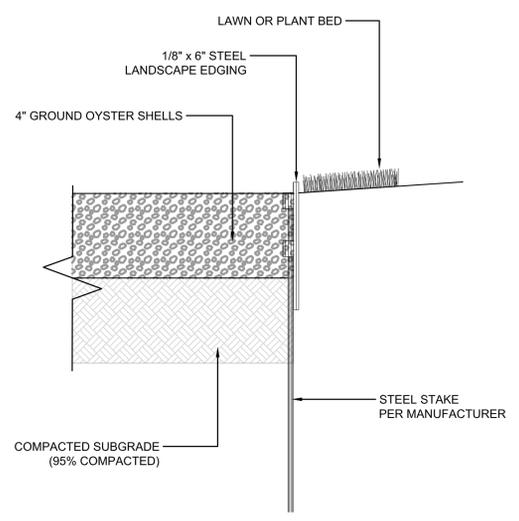
SCALES

 HORIZ: 1"=10'-0"

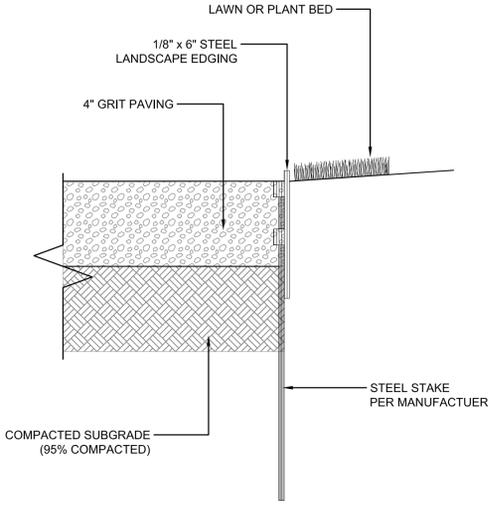
DESIGN DEVELOPMENT

SHEET NO.

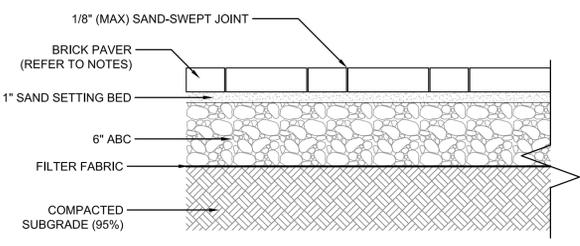
D100



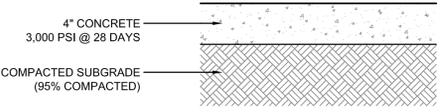
4 GROUND OYSTER SHELL PAVING
3" = 1'-0"



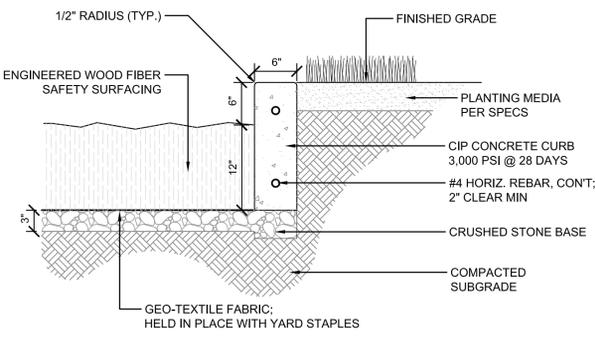
3 GRIT PATH W/ STEEL EDGING
3" = 1'-0"



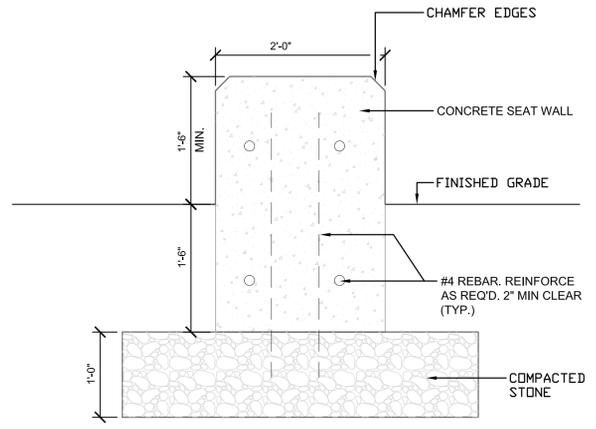
2 BRICK PAVING
1 1/2" = 1'-0"



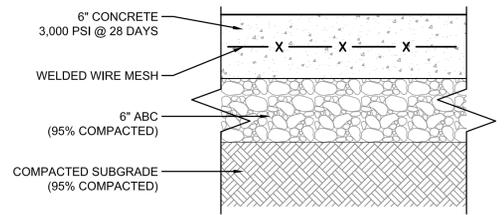
1 STANDARD DUTY CONCRETE PAVING
1 1/2" = 1'-0"



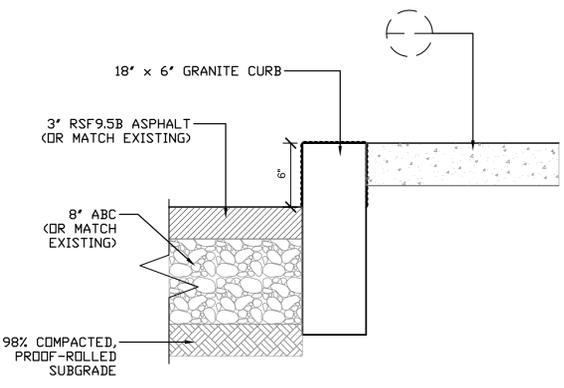
8 CONCRETE EDGE
1" = 1'-0"



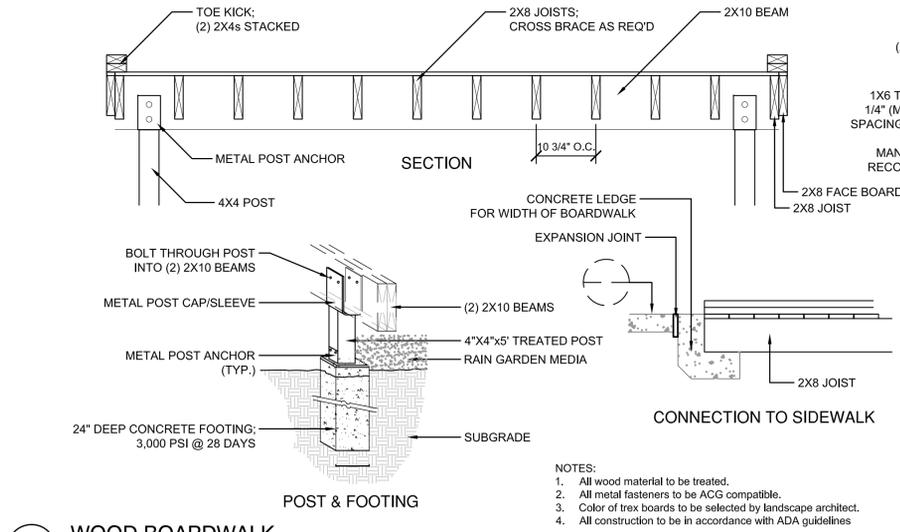
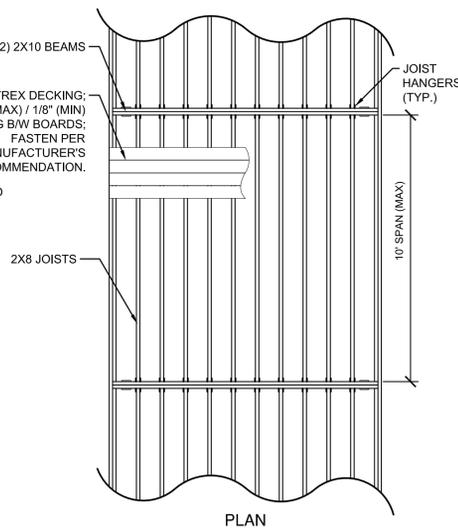
7 CONCRETE SEAT WALL
1" = 1'-0"



6 CONCRETE PAVING (HEAVY DUTY)
1 1/2" = 1'-0"



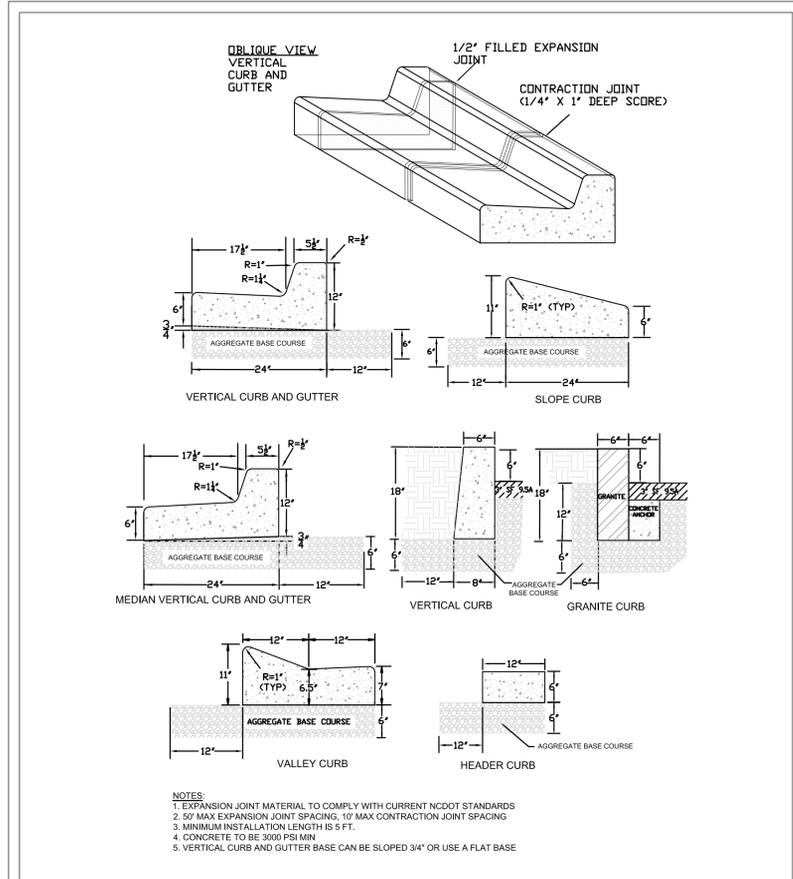
5 ASPHALT PAVING W/ GRANITE CURB
1 1/2" = 1'-0"



9 WOOD BOARDWALK
NTS

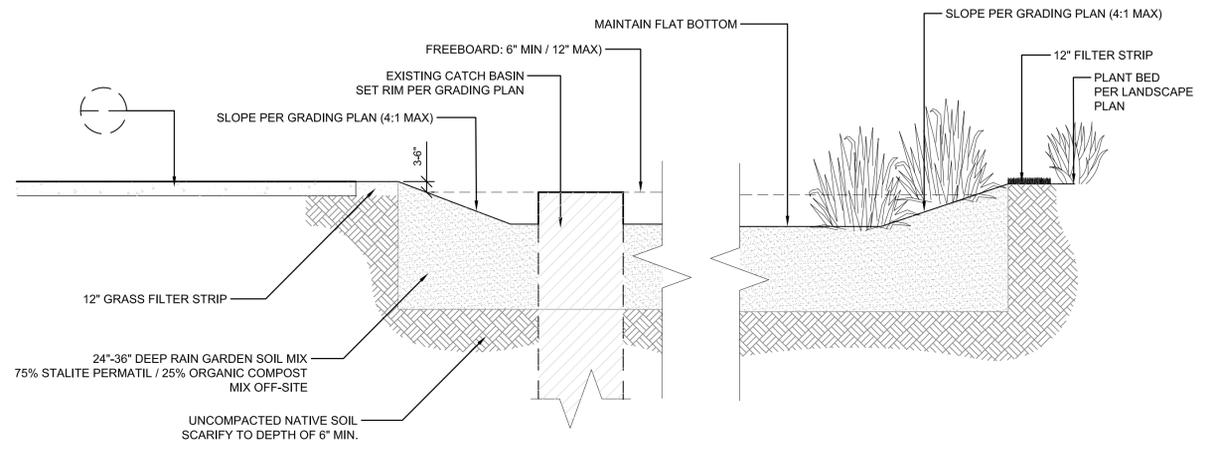
- NOTES:
- All wood material to be treated.
 - All metal fasteners to be ACG compatible.
 - Color of trex boards to be selected by landscape architect.
 - All construction to be in accordance with ADA guidelines.

DETAILS

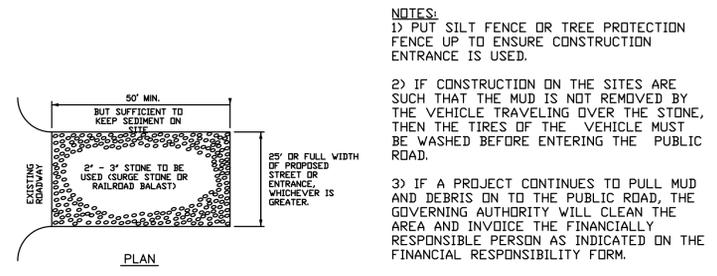


DATE: AUGUST, 2011	STANDARD DETAIL	 CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON N.C. 28402 (910) 341-7807	SD 3-11
DRAWN: PB/JSR	CURBING		
CHECKED: DEC			
SCALE: NOT TO SCALE			

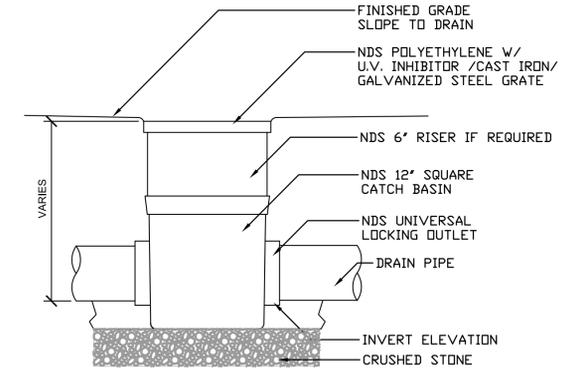
1 CURB & GUTTER (CITY OF WILMINGTON)
 3" = 1'-0"



2 RAIN GARDEN
 1/2" = 1'-0"



3 CONSTRUCTION ENTRANCE
 NTS



4 12" HDP INLET (IN LAWN)
 1 1/2" = 1'-0"

CONSULTANTS:

SEALS:

Cape Fear Museum
Outdoor Learning Environment
 NEW HANOVER COUNTY
 814 Market Street, Wilmington, NC 28401

DATE: 11/19/2014
 DESIGNER: LED
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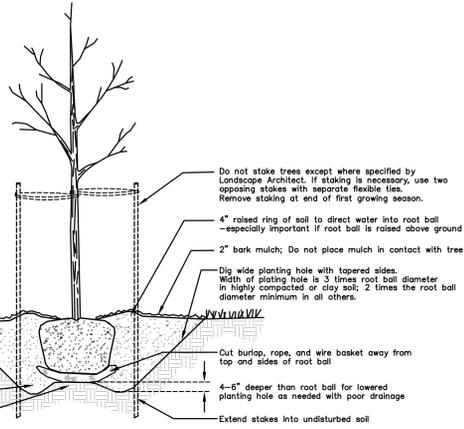
REVISIONS	
NO.	DATE

SCALES
 HORIZ: 1"=10'-0"
 DESIGN DEVELOPMENT

SHEET NO.
D101

NOTES:

- 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" (10-15cm) over the entire area.
- 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.
- During the design phase, confirm that water drains out of the soil; use lowered planting hole depth and design alternate drainage system as required.
- Thoroughly soak root ball and adjacent prepared soil several times during first month after planting and regularly throughout the following two summers.
- The planting process is similar for deciduous and evergreen trees.
- Do not wrap trunk; Mark the north side of the tree in the nursery and locate to the north in the field.
- Avoid purchasing trees with two leaders or remove one at planting. Otherwise, do not prune tree at planting except for specific structural corrections.
- Before planting, add 3-4" of well-composted leaves, recycled yard waste or other compost and fill into top 6" of prepared soil. Add compost at 20-35% by volume to backfill soil. Add compost at 20-35% by volume to backfill.



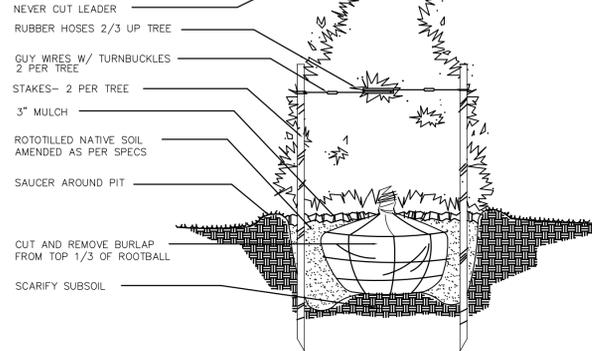
Pack backfill soil around base of root ball to stabilize; allow rest of backfill to settle naturally or tamp lightly.
Set ball on undisturbed soil to prevent settling.



TREE PLANTING

NTS

TREE SHALL HAVE SAME RELATION TO GRADE AS IT HAD IN NURSERY



CUT AND REMOVE BURLAP FROM TOP 1/3 OF ROOTBALL

SCARIFY SUBSOIL

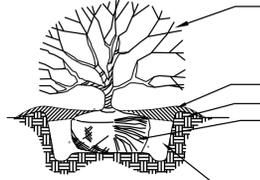


EVERGREEN TREE PLANTING

NTS

NOTES:

- SOIL MIX-1/3 ORGANIC MATTER, 2/3 EXIST SOIL.
- WIDTH OF PLANT PIT -SANDY SOIL, 24" WIDER THAN PLANT BALL -CLAY SOIL, 12" WIDER THAN PLANT BALL
- FOR PLANTING AREAS WHERE SOIL HAS BEEN COMPACTED BY EQUIP. CONTACT LA PRIOR TO PLANTING.
- FOR CAMELLIAS, RHODOS, AZALEAS, AND LAURELS: SOIL MIX, 2/3 ORGANIC AND 1/3 EXISTING SOIL
- SHRUB SHALL BEAR SAME RELATIONSHIP TO GRADE AS IT DID PRIOR TO DIGGING.



- PRUNE AND THIN DECIDUOUS SHRUBS APPROX. 1/3 OF INITIAL BRANCHES TO COMPENSATE FOR LOSS OF ROOTS WHILE DIGGING, FOLLOWING PRUNING PLANT SHALL MEET SPECIFIED SIZE.
- 4" MULCH MIN. PER SPECIFICATION
- 4" EARTH BERM TO FORM SAUCER
- REMOVE ALL METAL/PLASTIC CONT. PRIOR TO PLANTING. SLICE FIBER ROOTS IN THREE PLACES TO ALLOW ROOT GROWTH.
- LOOSEN BURLAP AT STEM/ALLOW IT TO REMAIN ON BALL
- TAMP OR WATER TOPSOIL MIXTURE AT 6" INTERVALS.



SHRUB PLANTING

NTS

CONSULTANTS:

SEALS:

Cape Fear Museum
Outdoor Learning Environment
NEW HANOVER COUNTY
814 Market Street, Wilmington, NC 28401

DATE: 11/19/2014
DESIGNER: LED
CHECKED BY: BHS

REVISIONS	
NO.	DATE

SCALES
HORIZ: 1"=10'-0"

DESIGN DEVELOPMENT

SHEET NO.
D102

DETAILS

GENERAL NOTES:

- | | |
|---|--|
| <p>1. Contractor shall inspect site prior to bidding and start of work; verify existing conditions match plans and accept site, or report any discrepancies immediately to the owner.</p> <p>2. Limits of construction activities will adhere to those clearly indicated on the plans unless designated otherwise.</p> <p>3. Contractor is responsible for scheduling all pre-construction meetings with all applicable governing jurisdictions. Contractor is responsible for obtaining and paying for all permits, inspections, and certifications that may be required.</p> <p>4. All work shall be in accordance with New Hanover County, Town of Wilmington, & NCDOT standard specifications and details.</p> <p>5. Contractor shall keep job site free of trash and garbage, and shall immediately collect any construction-related debris or trash that is on right of way or adjoining properties.</p> <p>6. Tree protection fence is to be installed prior to any construction and be maintained throughout construction and removed accordingly after construction. Location to be approved by landscape architect prior to disturbance.</p> <p>7. All soil erosion control measures required shall be installed prior to grading, clearing, or grubbing. All erosion control devices such as silt fences, etc., shall be maintained in workable conditions for the life of the project and shall be removed at the completion of the project only on the landscape architect's approval. Payment shall be considered incidental to clearing and grubbing. If during the life of the project, a storm causes soil erosion which changes finish grades or creates "gullies" and "washed areas", these shall be repaired at no extra cost, and all silt washed off the project site onto adjacent property shall be removed as directed by the landscape architect at no extra cost. The contractor shall adhere to any approved erosion control plans whether indicated in the construction plans or under separate cover.</p> <p>8. Contractor shall restore any facilities or utilities damaged during construction.</p> <p>9. Any discrepancies in plans, or departure from plans shall be reported to the landscape architect immediately, and no work shall continue on affected issue until directed by landscape architect.</p> <p>10. Prepare and maintain on job site 'as-built' plans. Contractor to prepare and maintain 'as built' plans. Contractor responsible for the preparation and delivery of as built drawings to the owner. Contractor to have original CAD drawing files revised to illustrate changes made during construction.</p> | <p>11. Finish grade tolerances shall be as noted in the specifications. The landscape architect may make minor grade changes as required in the field without effecting the unit bid price for unclassified excavation.</p> <p>12. Entire area to be graded shall be cleared and grubbed. No fill shall be placed on any area not cleared and grubbed.</p> <p>13. The contractor is responsible for the coordination and adjustment of all utility surface accesses whether he performs the work or a utility company performs the work.</p> <p>14. The contractor shall control all "dust" by periodic watering and shall provide access at all times for property owners within the project area and for emergency vehicles. All open ditches and hazardous areas shall be clearly marked in accordance with the specifications.</p> <p>15. The contractor shall enter and exit the site via the temporary construction entrance as detailed in the drawings.</p> <p>16. All work must comply with North Carolina State Building and Handicapped Accessibility Code.</p> <p>17. Prevent spilling of fuels, lubricants, coolants, hydraulic fluids, and any other petroleum products onto the ground or into surface waters. Dispose of spent fuels appropriately. As per law, contractor is responsible for all costs associated with hazardous material spills including remediation.</p> <p>18. DISPOSABLE MATERIAL</p> <p>18.1. Clearing and grubbing wastes shall be removed from the site and properly disposed of by the contractor at his expense, unless specified otherwise. Solid wastes to be removed, such as sidewalks, curbs, pavement, etc., shall be removed from the site as required by the specifications.</p> <p>18.2. Abandoned utilities such as culverts, water pipe, hydrants, castings, pipe appurtenances, utility poles, etc., shall be the property of the specific utility agency, or company having jurisdiction. Before contractor can remove, destroy, salvage, reuse, sell or store for his own use any abandoned utility, he must present to the owner written permission from the utility company involved.</p> <p>18.3. The open burning of trees, limbs, stumps and construction debris associated with this development is prohibited.</p> |
|---|--|



CONSULTANTS:

SEALS:

Cape Fear Museum
Outdoor Learning Environment
 NEW HANOVER COUNTY
 814 Market Street, Wilmington, NC 28401

DATE: 11/19/2014

DESIGNER: LED

CHECKED BY: BHS

REVISIONS

NO.	DATE

SCALES
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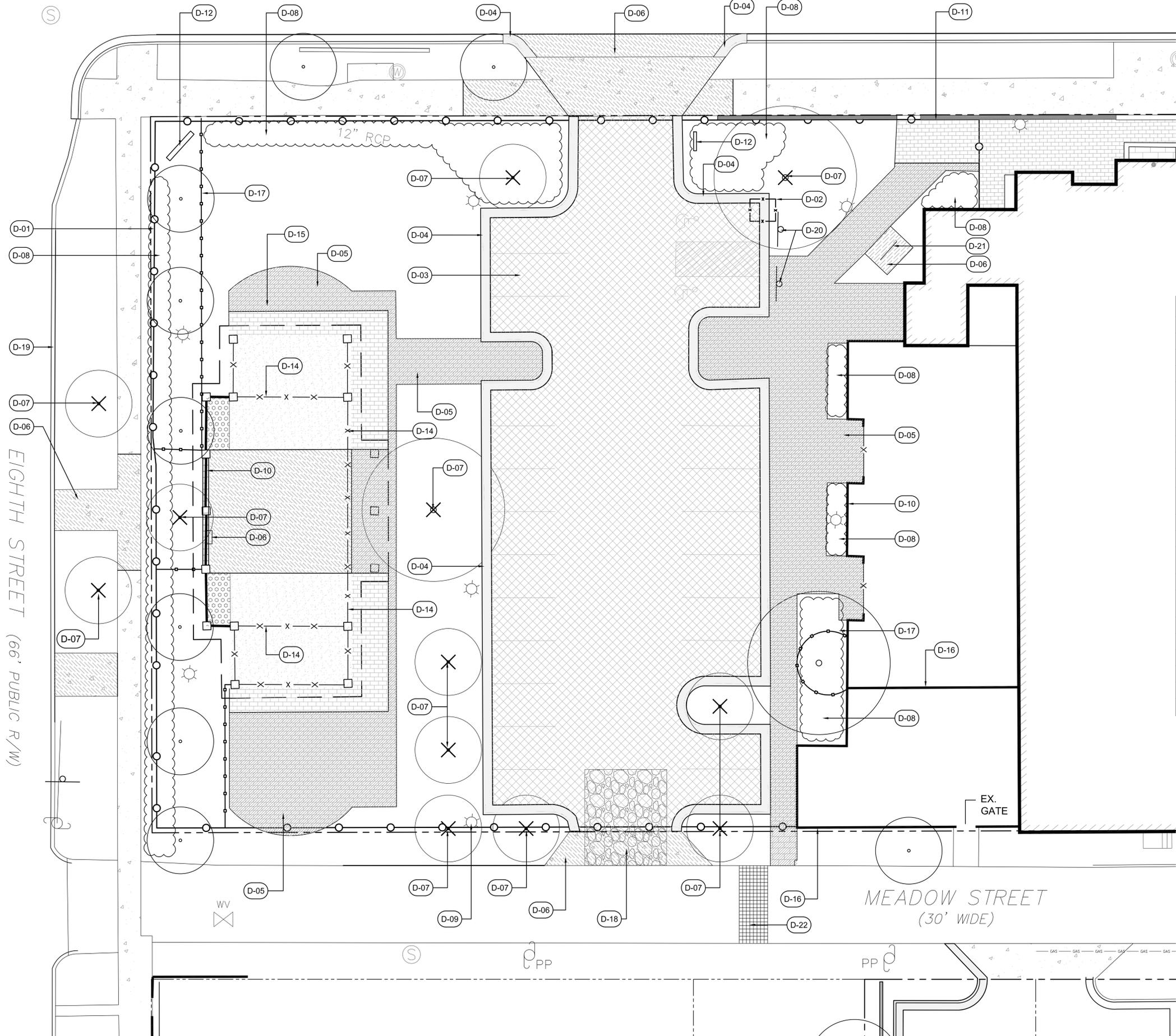
DESIGN DEVELOPMENT

SHEET NO.

G100

GENERAL NOTES

MARKET STREET (99' PUBLIC R/W)



GENERAL DEMOLITION NOTES:

1. Tree protection fencing must be in place prior to any clearing, demolition, and disturbance or issuance of grading permit and maintained throughout construction. Landscape Architect to verify fence location prior to construction.
2. All materials noted for removal to be disposed of off-site and in a legal manner, unless otherwise noted. Contractor to recycle materials as appropriate including asphalt, concrete, brick, and vegetation.
3. Items or elements noted for removal and return to owner or relocation shall be stored on-site at owner's direction.
4. Items not noted for removal, including trees, lights, plant material, paving, and all utilities shall be protected and secured throughout construction. Any damage incurred shall be corrected in kind at no additional cost to the owner.
5. Erosion control measures to be installed prior to site disturbance.
6. If root systems of existing trees noted to remain on site are encountered during construction, roots are to be pruned under the direction a Certified Arborist.
7. Contractor to verify location of existing utilities prior to construction.
8. Contractor to keep construction entrance and adjacent streets clean throughout construction.
9. Contractor shall keep job site free of trash and garbage.
10. Any discrepancies in plans or departure from plans shall be reported to the Landscape Architect immediately.
11. All pavement / curb to be saw cut at limits of removal.

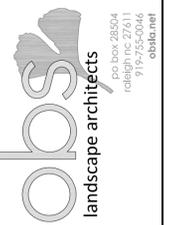
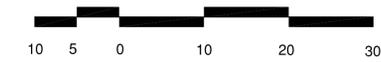
DEMOLITION SCHEDULE

CODE	DESCRIPTION	QTY	DETAIL
D-01	Install construction fencing as shown.	476 lf	
D-02	Install inlet protection		
D-03	Remove asphalt paving to limits shown.	6,980 sf	
D-04	Remove concrete curb and gutter to limits shown or nearest joint.	462 lf	
D-05	Remove brick paving to limits shown. Mortared header course surrounding pavillion to remain.	3,681 sf	
D-06	Remove concrete paving to limits shown.	2,202 sf	
D-07	Remove tree in its entirety. Grind stump to 8" below subgrade.		
D-08	Remove shrubs in their entirety as shown. Remove stumps.		
D-09	Remove light pole. Contractor to protect lights not noted for removal throughout construction.		
D-10	Remove block wall and metal fencing to limits shown. Contractor to re-stucco face of existing columns to remain and paint to match existing.	176 lf	
D-11	Contractor to protect stone wall.		
D-12	Remove Museum sign and return to Owner.		
D-14	Remove metal fencing between columns and reinstall per Layout Plan, Sheet L200. Any unused fencing to be disposed of in a legal and responsible manner.	91 lf	
D-15	Existing stone tables to be removed by owner.		
D-16	Existing wall around mechanical yard to remain and be protected throughout construction. Contractor to repair stucco at corner following wall removal and paint to match existing.		
D-17	Install tree protection fencing as shown.	151 lf	
D-18	Construction entrance.		3/D101
D-19	Remove granite curb and reuse per Layout Sheet L200	104 lf	
D-20	Remove Handicap Signs and relocate per Layout Plan L200.		
D-21	Remove Bike Rack and return to owner.		
D-22	Contractor to remove existing pavers to limits shown and return to owner.	98 sf	

LEGEND:

- Remove Existing Asphalt
- Remove Existing Concrete Paving
- Remove Existing Brick Paving
- Remove Existing Curb and Gutter
- Construction Fencing
- Tree Protection Fencing
- Inlet Protection

DEMOLITION PLAN



CONSULTANTS:

SEALS:

Cape Fear Museum
Outdoor Learning Environment
 NEW HANOVER COUNTY
 814 Market Street, Wilmington, NC 28401

DATE: 11/19/2014

DESIGNER: JAB

CHECKED BY: BHS

REVISIONS

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SCALES
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 DESIGN DEVELOPMENT

SHEET NO.
L100

MARKET STREET (99' PUBLIC R/W)

EIGHTH STREET (66' PUBLIC R/W)

MEADOW STREET (30' WIDE)

GENERAL LAYOUT NOTES:

1. Drawings based on survey provided by Michael Underwood and Associates, PA. Landscape Architect assumes no responsibility for the accuracy of the survey.
2. Any discrepancies in layout should be brought to the attention of the Landscape Architect immediately.
3. Written dimensions supercede scaled dimensions. Do not scale drawings.
4. Layout to be staked by a surveyor licensed in North Carolina.

SITE IMPROVEMENT SCHEDULE

CODE	DESCRIPTION	QTY	DETAIL
S-01	Concrete paving.	4,853 sf	1/D100
S-02	River paving. Refer to sheet L201 for detailed layout information	2,154 sf	
S-03	Wood boardwalk.	48 lf	9/D100
S-04	2" PVC conduit.	146 lf	
S-05	30" Curb and Gutter.	72 lf	1/D101
S-06	8" Metal fencing to be relocated as shown.	121 lf	
S-07	Steel Landscape Edging	355 lf	
S-08	Thermoplastic Parking lot striping.	63 lf	
S-09	Handicap Parking Sign, relocated as shown.		
S-10	1" PVC water line with 2 hose bibs	170 lf	
S-11	Reuse existing granite curb to layout bus drop loop as shown. Contractor to provide new granite curb as needed.	111 lf	5/D100
S-12	Heavy Duty Concrete Paving	729 sf	6/D100
S-13	Concrete Seat wall	44 lf	7/D100
S-14	Compass Rose Medallion		
S-15	Grit paving	421 sf	3/D100
S-16	Brick paving. Contractor to reuse bricks that were removed in this area and to match the existing pattern and installation.	168 sf	2/D100
S-17	Oyster shell pathway	139 sf	4/D100
S-18	Relocated Electrical Panel		
S-19	Asphalt paving	1,112 sf	5/D100
S-20	Concrete edge	76 lf	8/D100
S-21	Tree cross-sections		



CONSULTANTS:

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Cape Fear Museum
Outdoor Learning Environment
 NEW HANOVER COUNTY
 814 Market Street, Wilmington, NC 28401

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REVISIONS

NO.	DATE

SCALES

HORIZ: 1"=10'-0"

DESIGN DEVELOPMENT

SHEET NO.

L200

LAYOUT PLAN



MARKET STREET (99' PUBLIC R/W)

EIGHTH STREET (66' PUBLIC R/W)

MEADOW STREET (30' WIDE)

GENERAL LAYOUT NOTES:

1. Drawings based on survey provided by Michael Underwood and Associates, PA. Landscape Architect assumes no responsibility for the accuracy of the survey.
2. Any discrepancies in layout should be brought to the attention of the Landscape Architect immediately.
3. Written dimensions supercede scaled dimensions. Do not scale drawings.



CONSULTANTS:

SEALS:

Cape Fear Museum
Outdoor Learning Environment
 NEW HANOVER COUNTY
 814 Market Street, Wilmington, NC 28401

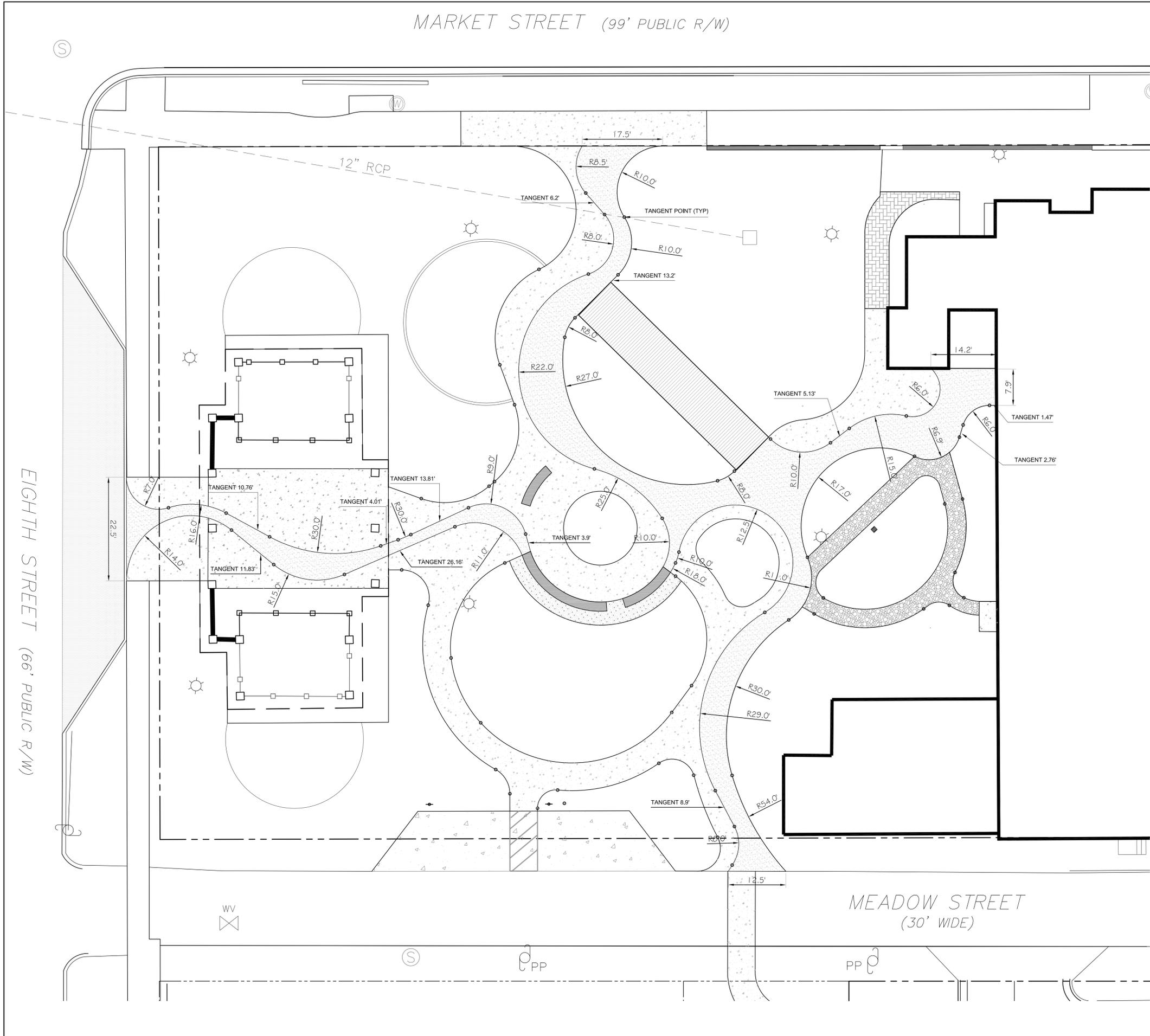
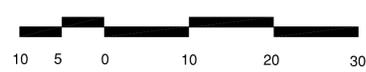
DATE: 11/19/2014
 DESIGNER: LED
 CHECKED BY: BHS

REVISIONS	
NO.	DATE

SCALES
 HORIZ: 1"=10'-0"
 DESIGN DEVELOPMENT

SHEET NO.
L201

RIVER PAVING LAYOUT PLAN



MARKET STREET (99' PUBLIC R/W)

EIGHTH STREET (66' PUBLIC R/W)

MEADOW STREET (30' WIDE)

GENERAL PLANTING NOTES:

1. All plant materials to comply with American Standard for Nursery Stock ANSLZ60
2. Substitutions of plant materials specified can only occur with prior approval by Landscape Architect.
4. Establish plant bed configuration. Landscape Architect to approve bed layout in field.
5. Perform soil test in all new plant beds and amend soils as recommended.
6. Install plants and mulch plant beds with 3" shredded hardwood mulch.
7. All trees to be installed between October 1 and April 30.
8. Contractor to guarantee plant materials for a one year period following substantial completion.
9. Areas damaged by activities of contractor shall be re-established to pre-disturbance condition at no additional cost to the owner.
10. Use herbicides, pesticides, and fertilizer in a manner consistent with the federal insecticide, fungicide, and rodenticide act and in accordance with label restrictions.
11. Contractor shall protect any existing planting not involved in new construction.
12. Contractor shall insure that all plant material is free of fire ants prior to installation.
13. Landscape Architect / Owner shall approve placement of trees prior to planting.

CONCEPT PLANT SCHEDULE

	LARGE TREE Large proposed shade tree.	3
	SMALL TREE Small evergreen or flowering understory tree.	10
	LARGE SHRUB Large proposed evergreen shrub.	5
	SMALL SHRUB Small proposed evergreen or deciduous shrub.	5
	MEDIUM SHRUB Medium proposed evergreen or deciduous shrub.	53
	GROUNDCOVER / GRASSES Proposed groundcover or grasses.	5,141 sf
	LAWN Cynodon dactylon / Bermuda Grass Eremochloa ophiuroides / Centipede Sod Eremochloa ophiuroides 'Tif Blair'™ / Centipede Grass	1,729 sf
	MULCH	654 sf

PLANTING PLAN



CONSULTANTS:

SEALS:

Cape Fear Museum
Outdoor Learning Environment
NEW HANOVER COUNTY
814 Market Street, Wilmington, NC 28401

DATE: 11/19/2014

DESIGNER: LED

CHECKED BY: BHS

REVISIONS

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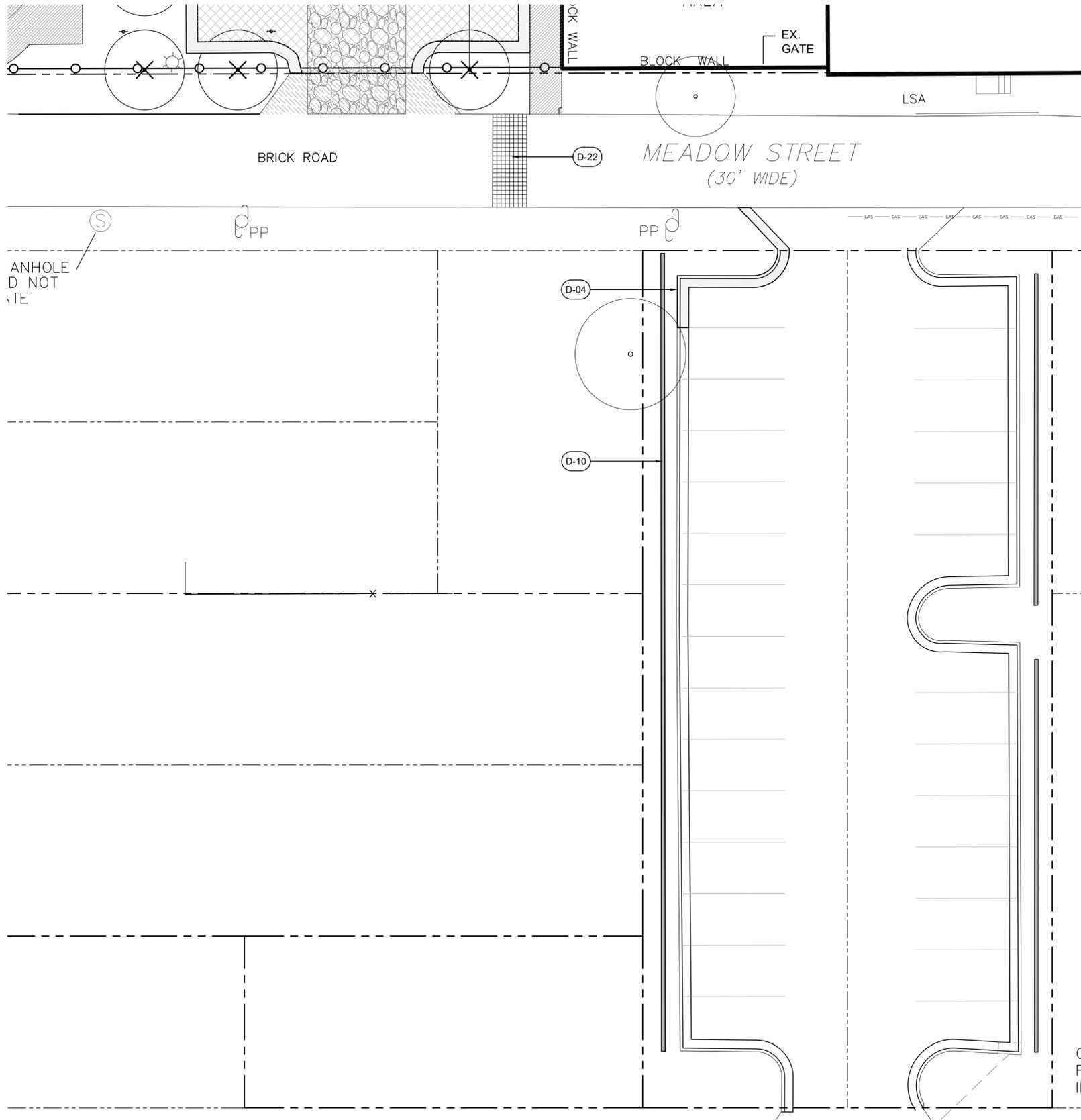
SCALES

HORIZ: 1"=10'-0"

DESIGN DEVELOPMENT

SHEET NO.

L400



EX. CONDITIONS / DEMOLITION



GENERAL DEMOLITION NOTES:

1. Tree protection fencing must be in place prior to any clearing, demolition, and disturbance or issuance of grading permit and maintained throughout construction. Landscape Architect to verify fence location prior to construction.
2. All materials noted for removal to be disposed of off-site and in a legal manner, unless otherwise noted. Contractor to recycle materials as appropriate including asphalt, concrete, brick, and vegetation.
3. Items or elements noted for removal and return to owner or relocation shall be stored on-site at owner's direction.
4. Items not noted for removal, including trees, lights, plant material, paving, and all utilities shall be protected and secured throughout construction. Any damage incurred shall be corrected in kind at no additional cost to the owner.
5. Erosion control measures to be installed prior to site disturbance.
6. If root systems of existing trees noted to remain on site are encountered during construction, roots are to be pruned under the direction a Certified Arborist.
7. Contractor to verify location of existing utilities prior to construction.
8. Contractor to keep construction entrance and adjacent streets clean throughout construction.
9. Contractor shall keep job site free of trash and garbage.
10. Any discrepancies in plans or departure from plans shall be reported to the Landscape Architect immediately.
11. All pavement / curb to be saw cut at limits of removal.

DEMOLITION SCHEDULE

CODE	DESCRIPTION	QTY	DETAIL
D-04	Remove concrete curb and gutter to limits shown or nearest joint.	39 lf	
D-10	Remove block wall and metal fencing to limits shown. Contractor to re-stucco face of existing columns to remain and paint to match existing.	150 lf	
D-22	Contractor to remove existing pavers to limits shown and return to owner.	98 sf	

ADJACENT PARKING LOT



CONSULTANTS:

SEALS:

Cape Fear Museum
Outdoor Learning Environment
 NEW HANOVER COUNTY
 814 Market Street, Wilmington, NC 28401

DATE: 11/19/2014

DESIGNER: LED

CHECKED BY: BHS

REVISIONS

NO.	DATE

SCALES
 HORIZ: 1"=10'-0"

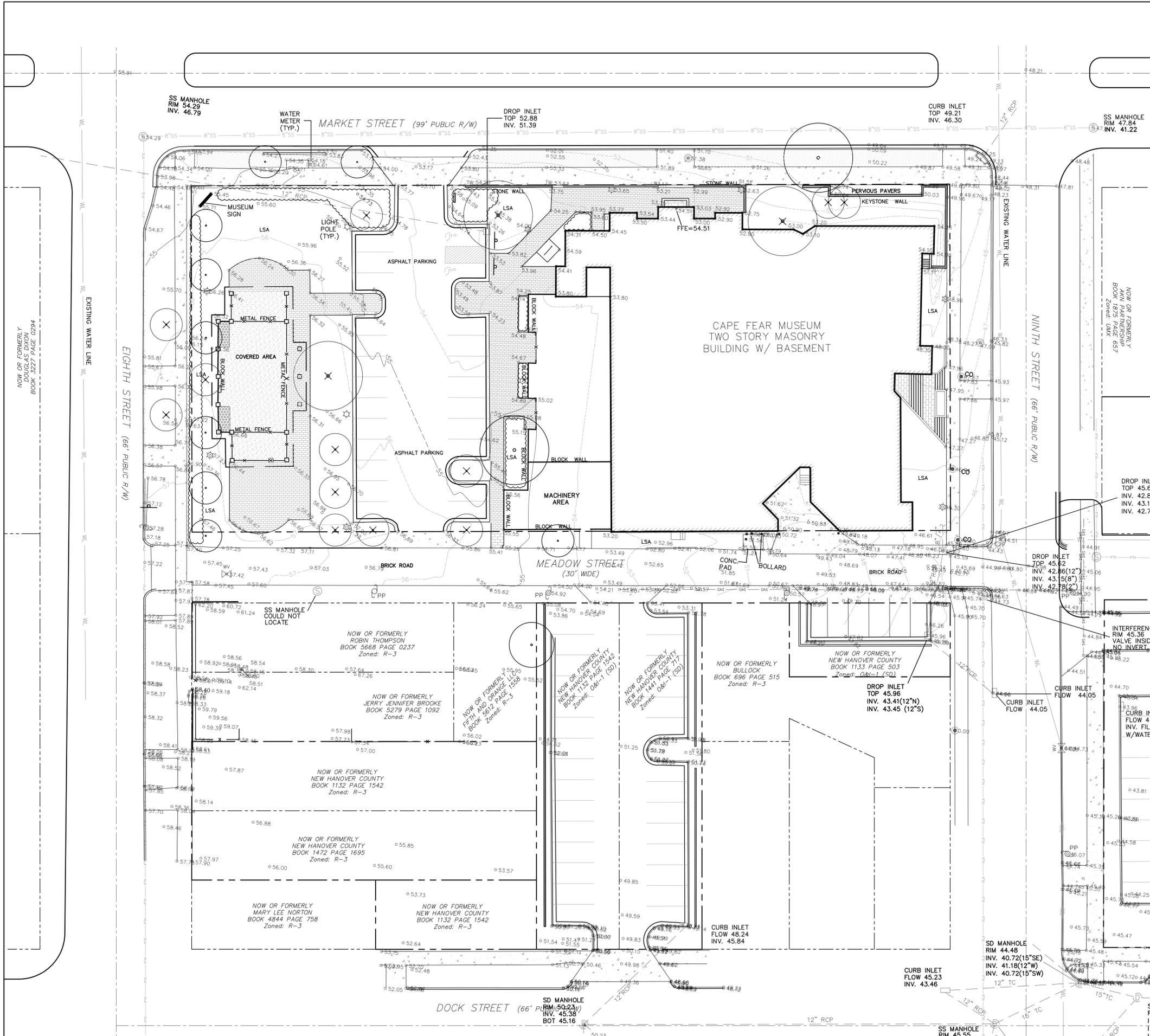
DESIGN DEVELOPMENT

SHEET NO.

L600

NOTES:

- Survey provided by Michael Underwood and Associates, PA, dated May 14, 2014. Landscape Architect assumes no responsibility for the accuracy of the survey.



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DESIGN DEVELOPMENT

SHEET NO.
S100

SURVEY

