

Case File / Name: SUB-0056-2023 DSLC - Parc Vue City of Raleigh
Development Services Department
One Exchange Plaza
Raleigh, NC 27602
(919) 996-2492
currentplanning@raleighnc.gov
www.raleighnc.gov

LOCATION: This 5.52 acre site zoned RX-4-PL CU (Z-41-19) is located on the northwest corner

of the intersection of North Hills Drive and Millbrook Road at 714, 716, and 724

Millbrook and 5825 North Hills Drive.

REQUEST: This is a conventional 28 lot townhome subdivision consisting of 26 residential lots,

one HOA lot and another open lot labeled for future development.

DESIGN

ADJUSTMENT(S)/

ALTERNATES, ETC: N/A

FINDINGS: City Administration finds that this request, with the below conditions of

approval being met, conforms to the Unified Development Ordinance. This approval is based on a preliminary plan dated April 3, 2024 by Pinellas

Corporation.

CONDITIONS OF APPROVAL and NEXT STEPS:

This document must be applied to the second sheet of all future submittals except for final plats. This is a preliminary plan and as such no permits have been issued with this approval. To obtain permits and/or completion of the project, the following steps are required:

☑ <u>SITE PERMITTING REVIEW</u> - For land disturbance of 12,000 square feet or greater, public or private infrastructure, shared stormwater devices, etc. Site Permitting Review may be submitted upon receipt of this signed approval document.

The following items are required prior to approval of Site Permitting Review plans:

General

- 1. Correction of cover sheet (see C0.00) The section entitled Z-41-19 should be amended to read TCZ-33-22 (8/11/22)
- 2. On the SPR plans please add a note clarifying ownership of the proposed 0.64 acre Future Phase 2 lot on the south side of the development. The note shall state whether it will be owned and managed by the proposed homeowner's association or reserved by the property owner for future development.

Public Utilities

3. The New Sanitary Sewer Lines must be built, tested, and accepted before the existing sewer can be abandoned. A note of this should be added to the Utility sheets.

Stormwater

- 4. The State of North Carolina shall approve any proposed disturbance within the riparian buffer prior to the issuance of any grading or site permit (UDO 9.2.3.E).
- 5. A surety equal to of the cost of clearing, grubbing and reseeding a site, shall be paid to the City (UDO 9.4.4).



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- 6. A stormwater control plan with a stormwater operations and maintenance manual and budget shall be approved (UDO 9.2).
- 7. A nitrogen offset payment must be made to a qualifying mitigation bank (UDO 9.2.2.B).

Urban Forestry

- 8. Submit a final tree conservation plan that includes metes and bounds descriptions of all tree conservation areas and tree protection fencing as required (UDO 9.1.5).
- 9. Tree protection fence must be inspected by Urban Forestry staff prior to the issuance of a grading permit.

☑ <u>LEGAL DOCUMENTS</u> - Email to legaldocumentreview@raleighnc.gov. Legal documents must be approved, executed, and recorded prior to or in conjunction with the recorded plat on which the associated easements are shown. Copies of recorded documents must be returned to the City within one business day of recording to avoid withholding of further permit issuance.

✓	Right of Way Deed of Easement Required
V	Public Access Deed of Easement Required

☑	Transit Deed of Easement Required

☑ <u>RECORDED MAP(S)</u> - Submit plat to record new property lines, easements, tree conservation areas, etc.). Plats may be submitted for review when the Site Permitting Review plans, if required, have been deemed ready for mylar signature.

The following items must be approved prior to recording the plat:

General

- 1. Demolition permits shall be issued and building permit numbers shown on all maps for recording.
- 2. Street names for this development shall be approved by the Raleigh GIS Division and by Wake County.
- 3. Provide documentation indicating a Property Owner's Association has been established for the subject development.

Engineering



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- 4. A public street right-of-way deed of easement, in addition to a plat showing the location of the easement, shall be submitted to the Planning and Development Services Department for review, and if acceptable, approved for recordation. Approved plats must be recorded at the Wake County Register of Deeds Office on or before the 14th day following approval by the City. The 14-day expiration date shall be clearly indicated on the plat. By the end of the next business day following recordation of the plat, all required legal instruments (including deeds of easement) shall be recorded, and recorded copies of the plat and all legal instruments required by the City in association with development approval shall be provided to the City. (Reference: UDO 8.1.7.A; 10.2.5.F.4.d)
- 5. A public infrastructure surety shall be provided to City of Raleigh Transportation Development Engineering Division (UDO 8.1.3) in the amount of 100% of the improvement cost for the NCDOT portion and 125% of the improvement cost for the City of Raleigh infrastructure.
- 6. A public access deed of easement, in addition to a plat showing the location of the easement, shall be submitted to the Planning and Development Services Department for review, and if acceptable, approved for recordation. Approved plats must be recorded at the Wake County Register of Deeds Office on or before the 14th day following approval by the City. The 14-day expiration date shall be clearly indicated on the plat. By the end of the next business day following recordation of the plat, all required legal instruments (including deeds of easement) shall be recorded, and recorded copies of the plat and all legal instruments required by the City in association with development approval shall be provided to the City. (Reference: UDO 8.1.7.A; 10.2.5.F.4.d)

Stormwater

- 7. The riparian buffers, in accordance with the preliminary plan and the State of North Carolina regulations, shall be shown on plats for recording along with required buffer statement (Recorded Map Checklist).
- 8. A surety equal to 125% of the cost of the construction of a stormwater device shall be paid to the Engineering Services Department (UDO 9.2.2.D.1.d).
- 9. All stormwater control measures and means of transporting stormwater runoff to and from any nitrogen and stormwater runoff control measures shall be shown on all plats for recording as private drainage easements (UDO 9.2).
- 10. If demolition causes a land disturbance of more than 12,000 sf, a mass grading permit will be required. (UDO 9.4.6)
- 11. The maximum allocated impervious area for all applicable lots in the subdivision should be identified on all maps for recording.
- 12. The City form document entitled Declaration of Maintenance Covenant and Grant of Protection Easement for Stormwater Control Facilities shall be approved by the City and recorded with the county register of deeds office (UDO 9.2.2.G).

Transportation



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13. A transit deed of easement, in addition to a plat showing the location of the easement, shall be submitted to the Planning and Development Services Department for review, and if acceptable, approved for recordation. Approved plats must be recorded at the Wake County Register of Deeds Office on or before the 14th day following approval by the City. The 14-day expiration date shall be clearly indicated on the plat. By the end of the next business day following recordation of the plat, all required legal instruments (including deeds of easement) shall be recorded, and recorded copies of the plat and all legal instruments required by the City in association with development approval shall be provided to the City. (Reference: UDO 8.1.7.A; 10.2.5.F.4.d)

Urban Forestry

- 14. A public infrastructure surety for 14 street trees along Shelley Retreat Lane, 22 street trees along Public Street B, and 15 street trees along North Hills Drive. shall be provided to City of Raleigh Transportation Development Engineering Division (UDO 8.1.3) in the amount of 100% of the improvement cost for the NCDOT portion and 125% of the improvement cost for the City of Raleigh infrastructure.
- 15. A tree conservation plat shall be recorded with metes and bounds showing the designated tree conservation areas (UDO 9.1). This development proposes .43 acres of tree conservation area.

☑ <u>BUILDING PERMITS</u> - For buildings and structures shown on the approved plans. Commercial building permit plans must include the signed, approved Site Permitting Review plans attached, if applicable. Permit sets may be reviewed prior to the recordation of required plats, but cannot be approved.

The following items must be approved prior to the issuance of building permits:

Engineering

 A Traffic Control and Pedestrian (TCPED) Plan must be approved and a right-of-way occupancy permit must be obtained from Right-of-way Services for any construction activities within the right-of-way.

Urban Forestry

- 2. A tree conservation plat shall be recorded with metes and bounds showing the designated tree conservation areas (UDO 9.1).
- A tree impact permit must be obtained for the approved streetscape tree installation in the right of way. This development proposes 14 street trees along Shelley Retreat Lane, 22 street trees along Public Street B, and 15 street trees along North Hills Drive.

The following are required prior to issuance of building occupancy permit:

General

1. Final inspection of all tree conservation areas and right of way street trees by Urban Forestry Staff



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Stormwater

- 2. As-built impervious survey is accepted by the Engineering Services Department (UDO 9.2).
- 3. As-built drawings and associated forms for all Stormwater devices are accepted by the Engineering Services Department (UDO 9.2.2.D.3).

EXPIRATION DATES: If significant construction has not taken place on a project after preliminary subdivision approval, that approval may "sunset" and be declared void, requiring re-approval before permits may be issued. To avoid allowing this preliminary approval to "sunset", the following must take place by the following dates:

3-Year Sunset Date: June 7, 2027

Record at least ½ of the land area approved.

5-Year Sunset Date: June 7, 2029

I hereby certify this administrative decision.

Record entire subdivision.

Signed:	hat late	_ Date:	06/07/2024
	Development Services Dir/Designee	_	

Staff Coordinator: Michael Walters

SUB-0056-2023

PRELIMINARY SUBDIVISION DRAWINGS FOR A TOWNHOUSE DEVELOPMENT

PHASE 1 PROJECT STATISTICS

NORTH HILLS INVESTMENT PARTNERS LLA

TABLE OF LANI	OWNERS						TABLE C1
PIN	OWNER	DEED BOOK	DEED PAGE	SURVEY SF	SURVEY ACRES	SITE ADDRESS	ZONING
1706-17-1294	NORTH HILLS INVESTMENT PARTNERS LLC	18079	742	26,572	0.61	724 W MILLBROOK RD	RX-4-PL-CU
1706-17-2240	NORTH HILLS INVESTMENT PARTNERS LLC	19079	729	26,126	0.60	716 W MILLBROOK RD	PX-4-PL-CU
1706-17-3253	NORTH HILLS INVESTMENT PARTNERS LLC	18079	738	26,136	0.60	714 W MILLBROOK RD	RX-4-PL-CU
1706-17-5188	NORTH HILLS INVESTMENT PARTNERS LLC	17869	1448	161,608	3.71	5825 NORTH HILLS DR	RX-4-PL-CU
NOTALS				240,451	E.E20		

EXISTING USE			SINGLE FAMILY RESIDENTIA	L AND VACANT
PROPOSED USE			SINGLE FAM	IILY ATTACHED
PROPOSED BUILDING	TYPE			TOWNHOMES
TOTAL NUMBER OF UN	VITS PROPOSED			26
RIVER BASIN				NEUSE
FEMA FLOOD PANEL	THIS SITE CONTAINS FEMA D	SESIGNATED FLOOD ZONES		1706J
AREA CALCULAT	IONS			
GROSS AREA OF SITE			240,592 SF	5.523 AC
AREA IN PUBLIC RIG	HT-OF-WAY DEDICATION	N ALONG NORTH HILLS DRIVE	4,946 SF	0.114 AC
AREA IN SITE DEDICA	ATED PUBLIC RIGHT-OF-	WAY	50,526 SF	1.160 AC
AREA RESERVED IN I	HOA LOT FOR FUTURE DI	EVELOPMENT OF PHASE 2	27,874 SF	0.640 AC
NET SITE AREA			157,247 SF	3.610 AC
	IN TOWNHOUSE LOTS		59,992 SF	
AREA	IN OPEN SPACE		82,930 SF	1.904 AC
	IN PRIVATE ALLEY EASE		16,761 SF	0.385 AC
MINIMUM LOT AREA	IN THE RX ZONING DIST	RICT FOR AN APARTMENT TYPE BUIL	DING	3300 SF
OUTDOOR AMENITY		10.00%	15,725 SF	
OUTDOOR AMENITY			16.186 SF	
		AREA - RIGHT OF WAY DEDICATION	185,121 SF	
TREE CONSERVATIO		10.00%	18,512 SF	
TREE CONSERVATIO	N AREA PROVIDED		18,730 SF	0.430 AC
MAXIMUM BUILDING	HEIGHT		SEE Z-41-19 ZONING	CONDITIONS #5

PARKING CALCULATIONS	
MULTI-UNIT LIVING: TOWNHOUSE BUILDING TYPE	
VEHICLE MAXIMUM	NO MAXIM
SHORT-TERM BICYCLE MINIMUM	NO MINIM
LONG-TERM BICYCLE MINIMUM	NO MINIM

BUILDING SETBACK AND BUILI	D-TO REQUIREM	IENTS	
BUILDING SETBACKS		PARKING SETBACKS	
FROM PRIMARY STREET (MIN.)	10 FT	FROM PRIMARY STREET (MIN.)	20 F
FROM SIDE STREET (MIN.) FROM SIDE LOT LINE (MIN.)	10 FT 10 FT	FROM SIDE STREET (MIN.) FROM SIDE LOT LINE (MIN.)	10 F
FROM REAR LOT LINE (MIN.)	20 FT	FROM REAR LOT LINE (MIN.)	3 F
FROM ALLEY	4' OR 20'	FROM ALLEY	4 F

PARKING LIMITED (-PL) REQUIREMENTS				
BUILD-TO	REQU	IRED	PROV	VIDED
PRIMARY ST = NORTH HILLS DR. LENGTH OF FRONTAGE = 423 LF				
PRIMARY STREET BUILD-TO MIN (ALONG NORTH HILLS DRIVE)	5 FT		5 FT	
PRIMARY STREET BUILD-TO MAX (ALONG NORTH HILLS DRIVE)	100 FT		100 FT	
BUILDING WIDTH IN PRIMARY BUILD-TO MINIMUM	50%	(212 LF)	63%	(265 LF)
SIDE STREET BUILD-TO MINIMUM (N/A FOR THIS PROJECT)	0 FT		0 FT	
SIDE STREET BUILD-TO MAXIMUM (N/A FOR THIS PROJECT)	100 FT		100 FT	
BUILDING WIDTH IN SIDE BUILD-TO MINIMUM	25%		25%	
PHASE 1 IMPERVIOUS CALCULATIONS				
STREETS/PARKING			42,746 SF	0.98 AC
SIDEWALK			13,180 SF	0.30 AC

GENERAL NOTES:

- BOURDARY INFORMATION TAKEN FROM A SURVEY BY THIS OFFICE.

 STEET OFFICIAL HISTORY HORIZON ARE TAKEN FROM A SURVEY BY THIS OFFICE.

 PLANIMETRIC DATA IS TAKEN FROM A COMBINATION OF A SURVEY BY THIS OFFICE AND 2017 AERIAL PHOTOS

 FROM WAKE COUNTY.
- FROM WAKE COUNTY. WETLAND AND STREAM BUFFERS NOT LOCATED ON THESE PROPERTIES.
- WETLAND AND STREAM BUFFILES NOT LOCATED ON THESE PROPERTIES.

 ALL MATERIALS AND CONSTRUCTION SHALL BE IN STREAM CACORDANCE WITH THE CITY OF RALEGI, NCDOT, AND NCDENS TARDARDS AND SECRETACTIONS.

 AND NCDENS TARDARDS AND SECRETACTIONS.

 NOT SHARP THE TOWN OF THE TOWN OWN OF THE TOWN OF THE TOWN OF THE TOWN OF THE TOWN OWN OWN OWN

- THE PRIMARY STREET FOR THIS PROJECT IS NORTH HILLS DRIVE.
 THE SITE WILL RECEIVE PRIVATE WASTE COLLECTION.

8311 BANDFORD WAY, SUITE 3

_				TABLE C1.1
D E	SURVEY SF	SURVEY ACRES	SITE ADDRESS	ZONING
2	26,572	0.61	724 W MILLBROOK RD	RX-4-PL-CU
,	26,126	0.60	716 W MILLBROOK RD	RX-4-PL-CU
3	26,136	0.60	714 W MILLBROOK RD	RX-4-PL-CU
8	161,608	3.71	5825 NORTH HILLS DR	RX-4-PL-CU
	240,451	5.520		
		S	SINGLE FAMILY RESIDENTLY SINGLE FAM	AL AND VACANT

0.81 AC

VICINITY MAP SHEET INDEX

SHEET #	SHEET TITLE
C0.00	COVER SHEET
C1.00	EXISTING CONDITIONS & DEMOLITION PLAN
G1.00	GENERAL NOTES AND LEGENDS
C2.00	PRELIMINARY SITE LAYOUT & TRANSPORTATION PLAN
C3.00	PRELIMINARY SITE UTILITY PLAN
C3.01	FIRE APPARATUS ACCESS PLAN
C4.00	PRELIMINARY GRADING & DRAINAGE PLAN
C4.01	PRELIMINARY RETAINING WALL PLAN
C4.20	OFFSITE CHANNEL LINING IMPROVEMENTS
C5.00	PRELIMINARY STORMWATER MANAGEMENT PLAN
C7.00	EXISTING STRIPING FOR NORTH HILLS DRIVE
C7.01	STRIPING AND WIDENING PLAN FOR NORTH HILLS DRIVE
LS1.00	PRELIMINARY CODE COMPLIANT LANDSCAPE PLAN
LS2.00	PRELIMINARY TREE CONSERVATION PLAN
LT1.00	PRELIMINARY SITE LIGHTING PLAN

OWNER / DEVELOPER:

NORTH HILLS INVESTMENT PARTNERS, LLC

C/O PINELLAS CORPORATION 8321 BANDFORD WAY SUITE 105. RALEIGH. NORTH CAROLINA 27615 (919) 971-9643 JLASSITER@PINELLASCORP.COM

PLANS PREPARED BY:

PRIEST, CRAVEN & ASSOCIATES, INC.

PLANNERS / LANDSCAPE DESIGNERS / SURVEYORS / ENGINEERS 3803 - B COMPUTER DRIVE, SUITE 104, RALEIGH, N.C. 27609 PHONE 919 / 781-0300 FAX 919 / 782-1288 EMAIL PCA@PRIESTCRAVEN.COM FIRM#: C-0488

Preliminary Subdivision Application

Conventional Subdivision Compact Developm
Cottage Court Flag lot

NOTE: Subdivisions me	ay require City Counc	il approval if i	ocated in a H	listo	ric Overlay District.		
		GENERAL II	NFORMATIO	N			
Scoping/sketch plan ca	ise number(s): SCOF	E-0101-20	23				
Development name (su	ibject to approval): Pe	are Vue					
Property Address(es): 724	W MILLBROOK RD, 7	16 W MILLBR	100K RD, 71-	4 W	MILLBROOK RD, 58	125	ORTH HILLS DR
Recorded Deed PIN(s):	1706-17-1294, 17	06-17-3349	1706-17-3	253	3, 1706-17-5188		
Building type(s):	Detached House	Attach	ed House	V	Townhouse	Г	Apartment
General Building	Mixed Use Buildin	g Civic E	Building	П	Open Lot	Т	Tiny House
CII	RRENT PROPERTY	OWNED/ADE	H ICANT/DE	VEI	ODED INCODMAT	ON	
						1014	
Current Property Owne	er(s) Names: Joseph	1 Lassiter (C	wher and u	Jev	eioper)		
Company: NORTH HILL	S INVESTMENT PART	TNERS LLC	Title: Deve	lop	ment Manager		
Address: 8321 Bandio	ord Way, Suite 105,	, Raleigh, N	C 27615				
Phone #: 919-971-964	13	Email: jlassit	er@pinella:	scor	rp.com		
Applicant Name (If diff	erent from owner. Se	ee "who can	apply" in in	stru	ctions):		
Relationship to owner: [Lessee or contract	t purchaser [Owner's a	utho	orized agent Ea	sem	ent holder
Company: Same as Or	wner	Address: Sar	ne as Own	er .			
Phone #: Same as Ow	mer	Email: Same	as Owner				
NOTE: please attach p	urchase agreement	or contract, I	ease or eas	eme	nt when submittin	g th	is form.
Developer Contact Nar	nes: Ben Williams						

Email: bwilliams@priestcraven.com

DEVELOPMENT TYPE + SITE DATE TABLE - ZONING INFORMATION Gross site screage: 5.52 acres Zoning districts (if more than one, provide acreage of each) RX-4-PL-GU Impervious Area for Compliance (includes right sed total (st) 102,522 Existing (st) ? Proposed total (st) ? NUMBER OF LOTS AND DENSITY # of Attached House Lots: 0 # of Townthis # of Adaptined I Total # of Lots: 34 Total # Dwalling Units: 2

reposed density for each zoning district (UDO 1.5.2.F): 4.71	
SIGNATURE BLOCK	
ursusart to state law (N.C. Gen. Stat. § 1600-400(a)), applications for don indownor, a leasee or person holding an option or contract to pushhase o indowner. An exsement holder may also apply for development approval assement.	r lease land, or an authorized agent of the
y submitting this application, the undersigned applicant acknowledges the persons authorized by state law (ILC.G.S. 1600–481(j)) to make this a richesinghed stan acknowledges that the information and elaborates made information and subments made in security and acknowledges as as subject to reson control or the standard of the security the development approach, pursuant	application, as specified in the application. The a in the application are correct and the sation for false statements or
he undersigned indicates that the property owner(s) is aware of this appli this application will be maintained in all respects in accordance with the rid in accordance with the provisions and regulations of the City of Raleig	plans and specifications submitted herewith.
he undersigned hereby acknowledges that, pursuarit fo state law (N.C.G. laced on held at the request of the applicant for a period of six consocials sported to commenter or provide additional information requested by the C area, then the application review is discontinued and a new application in spotkedost to "(but at the time point provisionally be reasoned statel apply w	re months or more, or if the applicant fails to fly for a period of six consecutive months or required to proceed and the development a the new application.
gnature	Date: 9/25/23
rinted Names Speed Lagrater	90.000
ignature:	Date:
rinled Name:	

Z-41-19 ZONING CONDITIONS:

Phone #: 919-781-0300

ress: 3803B Computer Drive, Suite 104, Raleigh, NC 27609

THE MAXIMUM NUMBER OF DWELLING UNITS PERMITTED ON THE PROPERTY SUBJECT TO THIS REZONING ORDINANCE SHALL BE 97 DWELLING UNITS
COMPLIANCE STATEMENT - THIS SUBDIVISION PLAN PROPOSES 26 UNITS.

Frequent Transit Development Option

- 2. THE FOLLOWING PRINCIPAL USES AS DEFINED IN UIO SECTION 6.1.4 ALLOWED PRINCIPAL USE TABLE SHALL BE PROHIBITED: DORMITORY, FRATERITY, SORORITY; SCHOOL, PUBLIC OR PRIVATE (K-12), DAY CARE, OFFICE; MEDICAL, OUTDOOR RECREATION, BED AND BREAKFAST, HOSPITALITY HOUSE, REMOTE PARKING LOT, PERSONAL SERVICE, EATING ESTABLISHMENT,

- PRIVATE (G.12), DAY CARE, OFFICE, MEDICAL OUTFOUR RELACED FOR DEPOSIT OF THE STREET STREET OF THE STREET ST
- DRIVE.

 COMPLIANCE STATEMENT THE TOWNHOME BUILDINGS WILL THERE STORIES OR LESS AND LESS THAN SO TALL.

 COMPLIANCE STATEMENT THE TOWNHOME BUILDINGS WILL THERE STORIES OR LESS AND LESS THAN SO TALL.

 THIS CONDITION APPLIES TO THAT FORTION OF THE PROPERTY MEASURING AT LEAST 20 FEET IN WIDTH AN MEASURED ALONG THE PROPERTY'S COMMON BOTHODAY LINE WITH THAT

 THIS CONDITION AND THE TOWN THE THAT THE STORY OF THE PROPERTY OF THE PR
- PROVIDING THE 20' BUFFER AREA WITH THE LISTED PLANTINGS AS SHOWN ON THE LANDSCAPE PLAN.

 ONE OF THE FOLLOWING PLANTING SCHEDULES SHALL APPLY TO THE PROPERTY'S FRONTAGE ALONG THE NORTH HILLS DRIVE RIGHT-OF-WAY:
- A. IN THE EVENT THE POWER LINE IS LOCATED BELOW GROUND: 4 SHADE TREES, 2 UNDERSTORY TREES AND 15 SHRURS PER 100 LINEAR FEET, WITHIN AN AREA MEASURING AN

AVERAGE OF 15 FEET FROM THE RIGHT-OF-WAY OF NORTH HILLS DRIVE (BUT IN NO EVENT LESS THAN 10 FEET WIDE). ANY STREET TREES REQUIRED ALONG NORTH HILLS DRIVE, EVEN IF PLANTED WITHIN THE RIGHT-OF-WAY, SHALL COUNT TOWARD THE REQUIRED NUMBER OF SHADE TREES.

B. IN THE EVENT THE POWER LINE IS LOCATED ABOVE GROUND. 6 UNDERSTORY TREES AND 15 SHRUBS PER 100 LINEAR FEET, WITHIN AN AREA MEASURING AN AVERAGE OF 15 FEET FROM THE RIGHT-OF-WAY OF NORTH HILLS DRIVE, BUT IN NO EVENT LESS THAN 10 FEET WIDE), ANY STREET TREES REQUIRED ALONG NORTH HILLS DRIVE, EVEN IP PLANTED WITHIN THE RIGHT-OF-WAY, SHALL COUNT NOWARD THE REQUIRED ANDRES OF WIDENSTORY TREES.

THE CONTRACT OF THE STATEMENT - THE CURRENT FLAN IS TO COMPLY WITH 7.4 BECAUSE DRIVE SERROR WILL BE LOCATING THE POWER UNDERGROUND ALONG THE FRONTY AS ELECTRIC PROPERTY OF THE STREET AND THE STATEMENT - THE CURRENT FLAN IS TO SCHOOL THE STREET ALL BE NO PRINCIPAL BUILDING LOCATED WITHIN 215 FEET OF THE SHELLY LAKE PROPERTY (PIN

- 1706-08-7302).
 COMPLIANCE STATEMENT NO TOWINHOMES ARE LOCATED CLOSER THAN 250' AWAY FROM THE PROPERTY LINE REFERENCED IN CONDITION 80
 AS PART OF THE FIRST DEVELOPMENT FLAS FOR THE PROPERTY. THE DEVELOPES SHALL PROPOSE TO PROVIDE LEFT TURN LANES ON NORTH HILLS DRIVE TO SERVE MILL GREENS
 COURT AND THE SET ACCESS FOR THE DEVELOPMENT OF THE SUBJECT PROPERTY. SUBJECT TO APPROVABLE 9THE CLYO FLAB.GIGH, THE DEVELOPER SHALL PROVIDE THESE LEFT TURN
 LANES PRIOR TO THE ESULANCE OF THE FIRST CERTIFICATE OF OCCUPANCY.

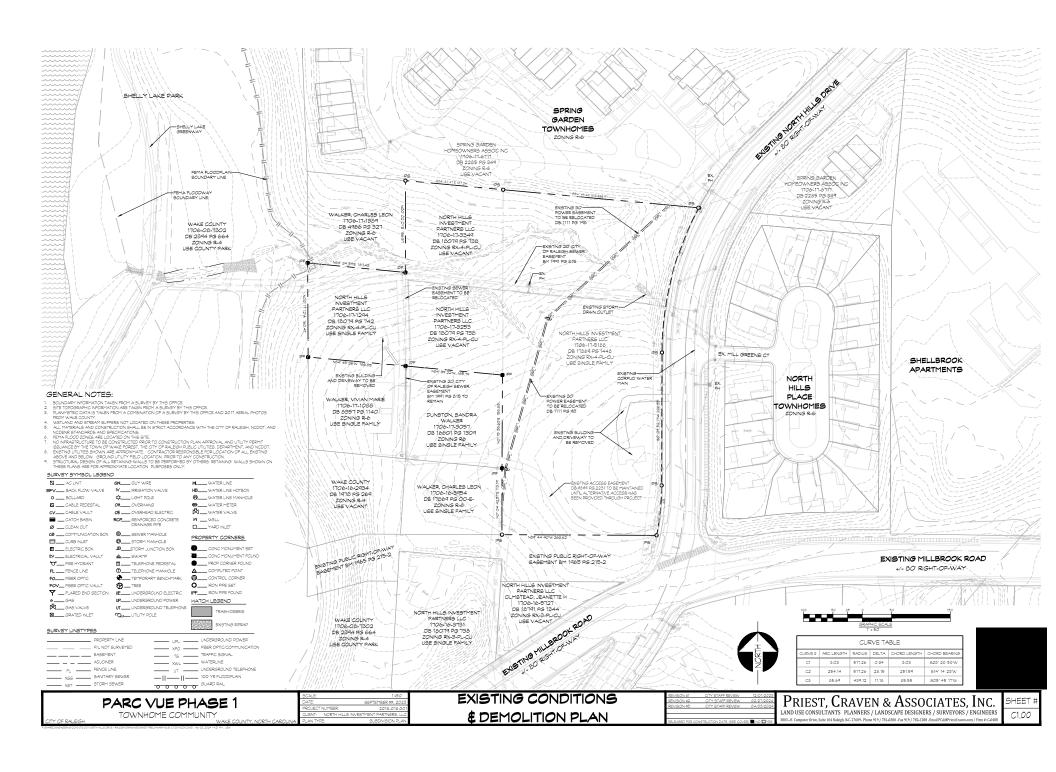
 COMPLIANCE STATEMENT—THE STRIPMENT CALL AND SERVE INSURTED TO THE ASSOCIATION WITH THIS SUBDIVISION PLAN SUBMITTAL.

O LE: E THIS PROJECT WILL INCLUDE THE DEVELOPMENT OF THE 0.78 ACRE AREA LISTED ON THIS SURDIVISION PLAN

EXISTING RIGHT-OF-WAY BM 1965 PG 215-2" ON SHEET C2.00, ONCE THE RIGHT-OF-WAY HAS BEEN ABANDONED. PHASE

REVISIONS:	SUBMITTAL DATE:	SEPTEMBER 29, 2023	
REVISION #1	CITY STAFF REVIEW	12/01/2023	SHEET #
REVISION #2	CITY STAFF REVIEW	02/27/2024	DUEE1 #
REVISION #3	CITY STAFF REVIEW	04/03/2024	1
			1 CO.OO
RELEASED FOR	R CONSTRUCTION DAT	E: .	

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GENERAL NOTES:

- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL JOB SITE SAFETY, NOLUDING BUT NOT LIMITED TO TRENCH SAFETY DURNS ALL PHASES OF CONSTRUCTION.
- 2. THE CONTRACTOR SHALL GALVAGE AND ODOTECT ALL GIGNE MANHOLISE TELEDIONE DISERS WATER VALVES STC. DUE ALL CONSTRUCTOR PHASES THE CONTRACTOR SHALL BEAR AT THE GIVEN PERSERS, WATER VALVES, ETC. DURNS ALL CONSTRUCTOR PHASES THE CONTRACTOR SHALL BEAR AT THE GIVEN PERSER, ANY ENSTRUCTOR CONSTRUCTOR ALL PERPOSED UTILITIES ON-SITE SHALL BE UNDERGROUND AND ALL EXISTING ON-SITE POWER LINES WILL BE UNDERGROUND AND ALL EXISTING ON-SITE POWER LINES WILL BE UNDERGROUND AND ALL EXISTING ON-SITE POWER LINES WILL BE
- TRAFFIC CONTROL, ON PUBLIC STREETS IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN CONFORMANCE WITH TRAFFIC CONTROL, PLAN, THE MANUAL OF UNFORM TRAFFIC CONTROL DEVICES," AND AS FLRTHER DIRECTED BY LOCAL AND STATE INSPECTORS.
- ALL MANUFACTURERS PRODUCTS SPECIFIED IN THESE PLANS OR USED AS APPROVED ALTERNATES SHALL BE INSTALLED PER THE MANUFACTURERS' CURRENT SPECIFICATIONS.
- 5. ANY DISCREMANCES FOR DETENDENT HE DOWNINGS AND SPECIALISMS AND SPECIALISMS OR ANY MICROSORPHICES. OR AMBURINGS FORWANGE OF SEPERANCES SAME IN PREPARATIVE SHOPPING TO THE BROWNINGS WHITE THE AMBURINGS WHITE AMBURINGS AND THE CONTRACTOR AFTER HIS DISCOVERY OF SUICH DISCREMANCES, NOOWINGS TOOKING, OR AMBURINGS WHILE SHOW IT THE CONTRACTOR AFTER HIS DISCOVERY OF SUICH DISCREMANCES, NOOWINGS TOOKING, OR AMBURINGS HAVE BEAULT BOTH OF THE CONTRACTOR AFTER HIS DISCOVERY OF SUICH DISCREMANCES, NOOWINGS TOOKING, OR AMBURINGS HAVE BEAULT BOTH OF THE CONTRACTORS AFTER HIS DISCOVERY OF SUICH DISCREMANCES, NOOWINGS TOOKING, OR AMBURINGS HAVE BEAULT BOTH OF THE CONTRACTORS AND THE CONTRAC
- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ARRANGE THE MEETING WITH THE CITY OF RALEIGH, ENGINEER, AND OWNER.
- CONTRACTOR IS RESPONSIBLE FOR VERPYING OR OBTAINING ALL REQUIRED PERMITS AND APPROVALS PROR TO COMMENCING CONSTRUCTION.
- THE FRAMES AND COVERS OF ALL EXISTING AND PROPOSED DRAINAGE, SANITARY SEWER, WATER MAIN, GAS, AND WIRE UTILITY STRUCTURES SHALL BE ADJUSTED TO MATCH PROPOSED FINSHED BLEVATIONS AND SLOPES.
- ROADWAYS MUST BE CAPABLE OF SUPPORTING FIRE APPARATUS DURING CONSTRUCTION.
- PLANMETRIC AND TOPOGRAPHIC INFORMATION FOR AREAS OUTSIDE OF THE OVERALL DEVELOPMENT ARE TAKEN FROM WAKE COUNTY GIS INFORMATION.
- NO TITLE SEARCH WAS PERFORMED BY THIS OFFICE FOR THIS PROPERTY. THIS PLAN MAY NOT SHOW ALL ENCUMBRANCES OR EASEMENTS THAT A TITLE SEARCH MAY DISCLOSE.
- ALL STREET DIMENSIONS SHOWN ON PLANS ARE FROM THE BACK OF CURB (B-B), FACE OF CURB (F-F), OR EDGE OF PAVEMENT (ECP) ON NON-CURB AND GUTTER STREETS UNLESS OTHERWISE NOTED.
- 13, NO INFRASTRUCTURE TO BE CONSTRUCTED PROR TO CONSTRUCTION PLAN APPROVAL AND UTILITY PERMIT ISSUANCE BY THE CITY OF RALBIGH.
- CONTRACTOR RESPONSIBLE FOR COORDINATING FRANCHSE UTILITIES AND OTHER SERVICES (I.E. GAS, ELECTRIC, CABLE, PHONE, MAL, WASTE COLLECTION, ETC.).
- CONTRACTOR RESPONSIBLE FOR COORDINATING LOCATION, SIZE, AND INSTALLATIONS OF SLEEVES REQUIRED FOR OTHER UTILITY INSTALLATION INCLIDING, BUT NOT LIMITED TO ELECTRIC, PHONE, CABLE, GAS, IRRIGATION, ETC.

SOIL EROSION AND SEDIMENT CONTROL

- ALL LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH AN APPROVED EROSION CONTROL PLAN.
- 2. THE CONTRACTOR SHALL NOTE THAT A SOIL BROSION CONTROL PERMIT IS REQUIRED.
- 3. SEE EROSION CONTROL SHEETS FOR ADDITIONAL NOTES AND DETAILS.

STORMWATER MANAGEMENT NOTES:

THE DESIGN OF ALL REQUESTS STOCKMANTER SOLVES WILL BE REQUESTED AT CONSTRUCTOR DAMINISS OR SITE SENSIV. THE STOCKMANTS CONCESS SHALL BE REAL WOOD AND DESIGNED IN ACCIDIONANCE WITH HE CAT OF EASIER AND HE ACT DISON OF WATER CHAIN'T STACKARDS AND SHEDIFICATIONS AND IN ACCIDIANCE WITH ALL APPLICABLE LOCAL, PEDERAL, AND STATE PERMITS AND REQUESTATION SHOULDING ALL STOCKMANTER CETETION OF EQUIPMENTS.

GRADING:

- REFER TO SITE CONSTRUCTION PLANS FOR CLEARING LIMITS AND TEMPORARY EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION. PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO INSTALLATION OF MEASURES.
- EROSION AND SEDMENT CONTROL MEASURES SHALL BE MANTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSA AND SHALL BE CHECKED AFTER EVERY RAINFALL SEEDED AREAS SHALL BE CHECKED REPULARLY AND SHALL BE WATERED PERFLUZED, RESEDED, AND MULCHED AS NECESSARY TO GETAM A DENSE STAND OF GRASS.
- ALLARRAS SHALL BS GRAPED FOR DETINE CRANAGE. AND AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL MADE AS THE CONTRACTOR SHALL MADE TO REPORT SHALL MADE AS THE CONTRACTOR SHALL BE SHALL MADE AS THE CONTRACTOR CONSERVATION, AND SILITATION ORDINANCES, CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSON CONTROL DEVICES LPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS OR OTHER GROWTH
- THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER REFOR TO PLACE FROM
- GRADING CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR BRI CONTRACTORS
- 6. ALL MATERIALS USED FOR ALL FILLING OPERATIONS SHALL BE PLACED AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER
- TOP OF WALL (TW) AND BOTTOM OF WALL (BW) GRADES SHOWN ON THESE PLANS REPRESENT FINISHED GROUND ADJACENT TO WALL THE RETIANNEW WALL DESIGNER/CONTRACTOR SHALL PROVIDE ADDITIONAL WALL HEIGHT AS NECESSARY FOR FOOTINGS AND CAP BLOOKS.
- 8. ALL DEMOLITION DEBRIS SHALL BE HAULED OFF-SITE AS DIRECTED BY THE OWNER AND PROPERLY DISPOSED OF
- NO TREE WITHIN THE TREE PROTECTION AREA SHALL BE REMOVED OR DAMAGED WITHOUT PRIOR AUTHORIZATION OF THE TOWN / CITY
- THE TREE PROTECTION FENCE SHALL BE MANTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS COMPLETE.
- BULDING PAD AND PAVING SUB GRACE INFORMATION TO BE PER GEOTECHNICAL ENGINEERS RECOMMENDATION AND DRECTION.
- PROPOSED CONTOURS AND GUTTER GRADIENTS ARE APPROXIMATE, PROPOSED SPOT ELEVATIONS AND ROADWAY PROFILES ARE TO BE USED IN CASE OF DISCREPANCY.
- 13. WHERE FILL IS TO BE PLACED ON EXISTING SLOPES STEEPER THAN 4:1, CONTRACTOR SHALL EXCAVATE BENCHES WITH A
- 14. THE CONTRACTOR SHALL STABILIZE ALL SLOPES STEEPER THAN 3:1 WITH MEASURES INDICATED WITHIN THESE PLANS.
- 15. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR BLASTING ROCK IF BLAST ROCK IS ENCOUNTERED, CONTRACTOR SHALL BE SOURLY RESPONSIBLE FOR COMPLYING WITH ALL BLASTING AND SAPETY REQUIREMENTS.
- 16. THE CONTRACTOR SHALL VOTE THAT THE PLACETION OF ANY FILL MATERIAL MUST BE CONJUCTED LAYER THE OBSERVATION OF A QUALIFIED LICKNESS THE OBSERVATION OF A QUALIFIED LICKNESS THE DESCRIPTION OF THE BRINGHAME AND LICKNESS THE SERVICE AND REPORT THAT INCLIDES THE CORRESPONDING COMPACTIONS TEST RESULTS AND CERTIFIED THE TYPE OF FILL MATERIAL AND ITS RECIPIED A ACCIPIENT.

STORM DRAINAGE

- THE CONTRACTOR SHALL VERRY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF OURS INLETS AND GRATE INLETS AND ALL UTILITIES CROSSING THE STORM SEWER.
- THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER.
- THE INSPECTOR SHALL INSPECT ALL PUBLIC AND PRIVATE CONSTRUCTION. THE CONTRACTORS BID PRICE SHALL INCLUDE ALL INSPECTION FEES, THE TOWN OF WAKE FOREST IS RESPONSIBLE FOR INSPECTION OF PUBLIC DRAINAGE EASEMENTS.
- ALL RCP SEWER MANS AND LATERALS SHALL BE MINMUM CLASS III REINFORCED CONCRETE RIPE OR PER TOWN STANDARDS AND SPECIFICATIONS, WHICHEVER IS MORE STRINGENT, CLASS IV/V RCP TO BE USED IT INDICATED.
- WHERE PROPOSED STORM SEWER PIPING TIE TO EXISTING STRUCTURES, PPES, SWALES, ETC., THE CONTRACT ADJUST PROPOSED STORM SEWERS AS REQUIRED TO MATCH THE LOCATIONS OF THESE EXISTING FEATURES
- 6. SEE CURRENT CITY OF RALEIGH UDD FOR ADDITIONAL NOTES AND DETAILS.
- ALL PRIVATE CURB NLETS TO BE NCDOT BOXES AND NCDOT FRAMES, GRATES, AND HOODS EXCEPT AS NOTED ON PLANS. CITY OF RALEIGH BOXES TO BE USED IN PUBLIC STREETS WITHIN CITY OF RALEIGH PUBLIC R.O.W.
- 8. LANDSCAPE INLETS: TOP ELEVATION TO BE FELD ADJUSTED AS REQUIRED AT THE TIME OF FINAL GRADING.
- ALL PRIVATE STORM DRAINAGE TO BE LOCATED WITHIN PRIVATE EASEMENTS. EASEMENTS & STORMWATER MEASURES WILL BE MAINTAINED BY THE DWINERS ASSOCIATION.

TOWNHOME COMMUNITY

SEPTEMBER ##, 20

12. SEE CURRENT CITY OF RALEIGH UDO FOR ADDITIONAL NOTES AND DETAILS.

GENERAL UTILITY NOTES:

THE LOCATION AND SIZE OF ENSITING UILLIES AS SHOWN IS APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR HOME WHICH IS AN EXPENDIALLY AND VERTICALLY LOCATING AND PROFESTIONS ALL PUBLIC OF PROVISE UILLIES SHOWN OR NOT SHOWN) WHICH LEEP OR AD ALL POPOLITION GRAVED ON SIZE AT LEES AT SHOWN SERVICE OF UPPOLITION GRAVED, OR CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL NOTIFY THE NORTH CARDILAND ASSCRIBE UILLIES LOCATION SERVICE (LLOCOL) AT LACTORY THE CONTRACTOR SHALL NOTIFY THE NORTH CARDILAND WHICH THE SIZE AT CONTRACTOR SHALL NOTIFY THE NORTH CARDILAND.

CONTRACTOR TO WORK CLOSELY WITH ALL UTLITY COMPANES TO ENSURE THAT ONCE FINAL GRADES HAVE BEEN ESTABLISHED, PROPER DEPTH AND COVER IS HANTIANED ON ALL ENSTING UTLITY LINES, CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF MAY NEGRESHARY RELUCATIONS OF ENSTING UTLITIES.

THE STEUTUTY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND ARK STEWANCES ASSESSABLY FOR COMPLETE MATERIAL PROVIDED AND THE CONTRACTOR THE CONTRACTOR THE CONTRACTOR THE CONTRACTOR THE CONTRACTOR FOR THE CONTRACTOR SHALL PROVIDE THE CONTRACTOR SHALL PROVIDE AND THE

NO INFRASTRUCTURE TO BE CONSTRUCTED PROR TO CONSTRUCTION PLAN APPROVAL AND UTILITY PERMIT ESUANCE, ALL CONSTRUCTION AND MERRIALS TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF RALEIGH, DWG, INCIDENC, AND INCIDIT STANDARDS AND SPECIFICATIONS AS APPLICABILITY.

THE TOP OF THE SEWER IS AT LEAST 10 INCHES BELOW THE BOTTOM OF THE WATER MAIN AND THERE IS A MINMUM 3 FEET OF HORIZONTAL SEPARATION PROMITIE CLOSEST EDGES OF THE RIPES.

VERTICAL RELATION OF WARTER MANS TO SENSES CROSSING A WAITER MAN OVER A SENSE. WHENEVER IT IS NECESSARY FOR A WAITER MAN TO CROSS OVER A SENSE. THE WAITER HAN SHALL BE LAD AT SUCH AN ELEVATION HAT THE SET OFFICE OF THE WAITER HAN SHALL BE LAD AT SUCH AN ELEVATION HAT THE SET OFFICE OF THE TOP OF THE SENSE (LINES ELEVATION OF THE WAITER HAN SHALL BE LAD OFFICE OFFI

VERTICAL RELATION OF SANTARY SEWER MANS TO STORM SEWER WHEN A SANTARY SEWER IS CROSSING OVER OR UNDER A STORM SEWER, A VERTICAL SEPARATION OF 24 NO-65 SHALL BE MANTANED UNLESS BOTH LINES ARE OF A PERROUS MATERIAL, ENCASED IN CONCRETE, OR VIOLD SPACE FILLED WITH CONCRETE. PER CITY OF RALBERT STANDARDS.

GENERAL VERTICAL CLEARANCE WHEN OTHER UNDERGROUND UTILITIES ARE ENCOUNTERED, 16 NOTES OF SEPARATION SHALL BE MANTAINED.

. ALL MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF RALEIGH. STANDARDS, MANHOLE DIAMETER SHALL VARY DEPENDING ON PIPE DIAMETER AND DEPTH. SEE PROFILES AND CITY OF RALEIGH. STANDARDS AND SPECIFICATIONS FOR MANHOLE SIZES.

13. SEWER CLEANOUTS ARE TO BE INSTALLED ON ALL 4" SANITARY SERVICE LINES IN ACCORDANCE WITH NORTH CAROLINA.

14. SANTAM SERVICE CLEANOUT LOCATIONS SHOWN ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED DURING CONSTRUCTION. CLEANOUT LOCATION AND CONSTRUCTION TO MET THE APPLICABLE NORTH CAROLUNA PLUMENG CODE AND ICK OFFO REALBH AND DURING STANDARDS AND SECRICATIONS. CLEANOUT LOCATIONS SHOWN ON THESE PLUMENT STANDARDS AND SECRICATIONS. CLAYBOUT LOCATIONS SHOWN ON THESE PLUMENTS AND STANDARDS AND STANDARD AND STANDARD

16 THE MINIMUM SLOPE ON 4' SANITARY SERVICE AND COLLECTOR LINES IS 1.0%.

16 WATER GERWICE: TYPICAL WATER GERWICE TO EACH LOT TO BE AG GHOWN ON THE DLANG

20. WATER MAINS SHALL HAVE A MINIMUM COVER OF \$4" BELOW DRODOSED GRACE.

PAVING/CURBING

THE CONTROL OF MACHINE AND EDWANDS OF ALL INTRO WHERE IT SAMES THAT SERVICE COLLECTION AND CONTROL WEST CONTROL OF THE CONTROL

ALL SANTARY SEWER MANS, LATERALS, AND SERVICES ARE TO BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE APPLICABLE NORTH CAROLINA PLLIMBING CODE AND/OR MUST BE CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE NODEN AND CITY OF RALLIGHT STANDANDS AND SPECIFICATIONS.

6. ALL SANTARY SEWER COLLECTOR LINES SHALL HAVE A HINNIM COVER OF 5 FEST (MEAGURED FROM THE TOP OF PINSHED GRAVE) IN TRAFFIC AREA TO POP COCKIN ULLESS OIL IS EXCUSED IN CLASS I BEDONG WHERE HINNIM COVER SHALL BE 3 FEST. HANG AND SERVICES IN NOTHING AREA SHALL HANDIM CORE OF PIET FESTERS FROM TOO OF PINSHED GRAVE) TO THE OFFE COMIN. ANY SANTARY SEWER HANG OR SERVICES WITH A DEPTH SERVISTE THAN 12.0 FEST ARE TO BE DIET. LINES FOR CHASSING OR SERVICES WITH A DEPTH SERVISTE THAN 12.0 FEST ARE.

21, ANYTHE A WATER MAN CROSSES UNDER A SANTARY SEWER COLLECTOR MAN, BOTH THE WATER MAN AND THE SEWER UNE MUST BE CONSTRUCTED OF DUP, CONTRACTOR TO ADJUST MATERIAL ACCORDINGLY.

22. ALL UNDERGROUND LITLITIES AND FIRE HYDRANTS MUST BE FUNCTIONALLY APPROVED PRIOR TO STRUCTURAL CONSTRUCTION

24. IN THE EVENT THAT A UTILITY ITEM IS NOT COVERED BY THESE PLANS, THEN THE STANDARDS AND SPECIFICATIONS OF THE CITY OF RALBISH COVERING SUCH ITEMS SHALL APPLY.

CONTRACTOR TO MAKE APPROPRIATE FELD ADJUSTMENT TO PROVIDE A SMOOTH TRANSITION FROM EXISTING CURB AND GUTTER/PAVEMENT TO PROPOSED CURB & GUTTER/PAVEMENT.

ALL PAYERS (SUS GRADES SHALL BE SURPRIST) OF REFIT OF 1 NOTES AND COPPACTED TO 4 WHALL TERRITOR FOR FOR THE RECEIPT OF AN OFFICE AND OFFICE AND

THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOSTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL SE APPROVED BY THE GEOTECHNICAL ENGINEER RORR TO PLACEMENT.

ALL CURB JONTS SHALL EXTEND THROUGH THE CURB. MINIMUM LENGTH OF OPPSET JONTS AT RADIUS POINTS IS 1.5 PEET. ALL JONTS SHALL BE SEALED WITH JONT SEALANT.

CURB RAMPS SHALL BE LOCATED AND INSTALLED FER THE CITY OF RALEIGH LATEST DETAILS. CONTRACTOR SHALL CONFRIGORATIONS, GRADE AND DETAILS WITH THE LOCAL INSPECTOR PRIOR TO PLACING CONCRETE.

SPILL GUTTER TO BE INSTALLED IN AREAS AS INDICATED ON PLAN AND/OR IN AREAS AS REQUIRED TO PROVIDE ADEQUATE DRAINAGE AND TO PREVENT PONDING OF WATER.

CURB, GUTTER, AND PAVEMENT TO BE PELD ADJUSTED AS REQUIRED TO PROVIDE ACEQUATE DRAINAGE AND TO PREVENT ANY PONDING OF WATER.

TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAINNS PPROVENENTS SHALL BE PERFORMED BY AN APPROVED ABENCH FOR TESTING MATERIALS. THE NOTIMATION OF THE TESTING LABORATION AND THE PAINHST OF BLICH TESTING SERVICES SHALL BE MIDE BY THE CONTRACTION SHOWER SHALL APPROVED THE LABORATION MONHARDED TO OF THE TESTING OF MATERIALS IT SHALL BE THE CONTRACTIONS RESPONSIBILITY TO SHOW BY STANDARD TESTING PROCEDURES THAT THE VICENCE CONTRACTION TO SHEET THE REQUIREMENTS OF THE LIBRIDGHOURS SEPECHATION.

ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES ON PUBLIC STREETS SHALL CONFORM TO MUTCD, NCDOT, AND CITY OF RALEIGH STANDARDS.

CONTRACTOR TO INSTALL SPILL GUTTER IN ARBAS AS REQUIRED TO PREVENT ANY PONDING OF WATER IN THE GUTTER. CO 68T CIRS STRING LINE AND DENTIFY SPILL GUTTER ARBAS PRIOR TO CONSTRUCTION OF CIRS AND GUTTER, PARTICULAR AT 6FOLD DE PLACED ON INTERESECTION ADD.

10. ALL PAINT FOR PAVEMENT MARKINGS SHALL ACHERE TO CITY OF RALEIGH AND NODOT STANDARDS

23. CLEAN OUT SYMBOLS SHOWN ON THESE PLANS REPRESENT LOCATION OF SURFACE ACCESS POINT, CONTRACTOR SHALL LOCATE WIVE APPROPRIATELY BASED ON PIPE DEPTH.

CROSSING A WATER MAN UNDER A SEWER. WHENEVER IT IS NECESSARY FOR A WATER MAN TO CROSS UNDER A BOTH THE WATER MAN AND THE SEWER SHALL BE CONSTRUCTED OF PERVOLEN HATERALS AS MO WITH JOINTS EQU. TO WATER MAN STANDARDS A SECTION OF WATER MAN DRES SHALL BE CENTERED AT THE POINT OF CROSSING.

HORIZONTAL RELATION OF WATER MAINS TO SEWERS. LATERAL SEPARATION OF SEWERS AND WATER MAINS. WATER M.

SHALL BE LAD AT LEAST 10 PEET LATERALLY PROM EXISTING OR PROPOSED SEWERS, UNLESS LOCAL CONDI PREVENT A 10 POOT LATERAL SEPARATION - - IN WHICH CASE:

GENERAL NOTES AND LEGENDS

CITY OF RALEIGH STANDARD UTILITY NOTES: 2. UTILITY SEPARATION REQUIREMENTS:

- 4 SPECIFICATIONS (REFERENCE: CORP. ID HANDROOK, CURRENT FORTON
- - A) AD STANCE OF 100 SHALL BE HANTANED BETWEEN SANTARY SENSE 8 ANY PRIVATE OR PLEIC WATER SUPPLY SOURCE SUPPLY AS A PHOLIUSED RESERVOR USES A SOURCE SUCH PROLING WATER F. ROGULATE LATERS, SEPARATIC CANNOT BE ACHEVED, PERSOUS SANTARY SENSE POR SHALL BE SPECIFED & INSTALLED TO WATER LAS EXPERIENCES AND ANY PARK SENSE POR SHALL BE STAND SHALL OF BE CONTINUED AND ANY PARK SHALL BE SPECIFICATIONS.
- WHEN INSTALLING WATER BYOR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10° IF THIS
- C) WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANTARY SEWER PASSES OVER A WATERHAIN, DIP MERMALS OR STEEL BLACASHENT EXTENDED 10° ON EACH SIDE OF CROSSINS MUST BE SPECIFIED 8 NOTALLED TO WATERLINE SPECIFICATIONS.
- D) 5.0' MINIMUM HORZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES UNLESS DIP MATERIAL IS SPECIFED FOR SANITARY SEWER
- E) MANTAN IN 'NA VESTCA, SERBARTON AT ALL WATERHAND ECO STORM DRAN CROSSINGS HARTAN AT 'MN VESTCAL SERBARTON AT ALL BANTAN SINES E (SO TOMP DRAN CROSSINGS) WHERE ADDINGS ESPARATION CANNOT BE ACHIVED, SPECIFY OF MATERIALS 5 A CONCRETE CRADLE HAVING 6" YM, CLEARANCE (PER CORPLO DETALS WLT (§ 549)
- F). ALL OTHER UNDERGROUND LITLITES SHALL CROSS WATER & SEWER FACULTES WITH 16" MIN. VERTICAL SEPARATION REQUIRED.
- DEVELOPER SHALL PROVIDE 90 DAYS ADVANCE WRITTEN NOTICE TO OWNER FOR ANY WORK REQUIRED WITHIN AN EXISTING CITY OF RALEIGH UTILITY EASEMENT TRAVERSING PRIVATE PROPERTY
- CONTRACTOR SHALL MANTAN CONTINUOUS WATER & SEWER SERVICE TO ENSITING RESIDENCES & BUSINESSES
 THROUGHOUT CONSTRUCTION OF PROJECT, MY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR
 ADVANCE NOTICE TO THE CITY OF RALBERT RELICE UTILITIES DEPRACED.
- 6. 3.0 MNMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMANS, 4.0 MNMUM COVER IS REQUIRED ON ALL
- IT IS THE DEVELOPERS RESPONSIBLITY TO ABANCON OR REMOVE ENSTING WATER E SEWER SERVICES NOT BEING USED IN REDUKLICHPINIT OR A TERM ULAESO OFFICIALS PRECIDED WHILE CITY OF RALBOH FUGIC. UTLIFED SEPARTHENT THIS RELUCIOS ABANCONING TAP AT HAN E REMOVAL OF SERVICE FROM TOWN OR SESSION FER CITY OF RALBOH HANDSCOR.
- NSTALL 4" PVC SEWER SERVICES Ø 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR BASEMENT LINE & SPACED EVERY 15 LINEAR PEET MANIMUM
- PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING BY PSI: BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN LO 'ABOVE THE NEXT UPSTREAM MAYOUR.
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NODWO, USAGE EVOR FEMA FOR ANY RPARIAN BUPFER, WETLAND EVOR FLOCOPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- NCDOT / RALROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLIDING MAIN EXTENSIONS & SERVICE TARS) WITHIN STATE OR RALROAD ROW PROR TO CONSTRUCTION
- GREASE INTERCEPTOR / DIL WATER SEPARATOR SOINS CALCULATIONS \$ INSTALLATON SPECIFICATIONS SHALL BE APPROVED BY THE RIV FOSE PROGRAM COORDINATION PRIOR TO ISSUANCE OF A U.S./ BLDS PERMIT, CONTACT (1919) 996-4516 OR POSPRAL
- AGGS AN ACTIVAL CONTROL RETISTANCE SOLVED AS EXPLANED AS EXCEPTION DESIGNATION CONTROL RESISTANCE AND LISTED AN ACCOUNT OF THE SLEED SOCKED PLANED AND CONTROL RESISTANCE AND CONTROL AND CONTROL RESISTANCE A

HDPE PIPE NOTES, DESIGN CRITERIA, & INSTALLATION DATA:

- HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE SHALL BE USED ONLY IN AREAS OUTSIDE OF PUBLIC RIGHT OF WAY AND EASEMENTS, WHEN USED IN PROVATE LOCATIONS, PIPE MATERIAL SHALL BE RATED ON APPROVADE JUANS AND INCLUDE THE SUBMISSION OF DESIGN COTERIA.
- NOT WITH OUT OF DRESS BALL FOREST OF SESSION CERTIS AS TAXABLES OF THE MESSION SHALL FREE PROPERTY OF THE SESSION OF THE SESSI
- 3. ALL HDPE TO BE ADS N-12 ST IB PIPE (PER AGTM F2648) SPECIFICATION (OR APPROVED EQUAL)
- SCOPE: THIS SPECIFICATION DESCRIBES 4- THROUGH 60-INCH (100 TO 1500 MM), ADS N-12 ST IB PPE (PER ASTM F2648) FOR USE IN GRAVITY-FLOW LAND DRAINAGE APPLICATIONS.
- PIPE REQUIREMENTS: ADS N-12 ST IB PIPE (PER ASTM F2648) SHALL HAVE A SMOOTH INTERIOR AND ANNL EXTERIOR CORRUGATIONS.
- A JUNCH THROUGH AGUNCH (100 TO 1500 MM) SHALL MEET ASTM FOA4A
- 7. MANNING'S INVALUE FOR USE IN DESIGN SHALL BE 0.012.
- JON'T PERFORMANCE, PPE SHALL BE JONED USING A SELL É SPIGOT JON'T HEETING ASTIM FASAS. THE JON'T SHALL BE SOULTENT AND GASKETS, WHEN APPLICABLE, SHALL MEET THE REQUIREMENTS OF ASTIM FATT, GASKETS SHALL BE NÉVALLED BY THE POR MANUFACTURE AND COVERED WITH A REPOVANCE WARP TO BISJIKE THE GASKET IS PRES PROOF DEBBS, A JON'T LUBRICANT SUPPLIED BY THE MANUFACTURES SHALL BE USED ON THE GASKET AND SELL DAYS ASSISTMENT.
- NAZIONALITÀNI DI PROTO I 2000.

 IN MITRIAR ADDRIBES MATERIA POR PER RODUCTION SHALL BE AN ENGRERED COMPOUND OF VISION AND RECYCLED HIGH DESCRIPCO, YERINA CASO RECYCLED HIGH DESCRIPCO, YERINA CONFORME MET HER HAMMER REQUIREMENTS OF CELL. CASSIGNATION ACRESIONE CONTROL SET ON THE CONFORME METAL AND THE SECRIPCO TO SECRIPCO AND THE SECRIPCO AND TH
- APPLIATON INSTALLATON SHALL BEIN ACCORDANCE WITH ASTYN D2321 AND AGS'S RUBJERD NSTALATON GUIDELINES. WITH THE EXCEPTION THAT TINNHAN COVER IN TOWNFOLDS AREA FOR A THADUGH AND AGG SHALL BOOM POOL OF THE AND AGG SHALL BOOM POOL OF THE AND AGG SHALL CONSIST OF CLASS IS THANKING SHALL CONSIST OF CLASS IS (COPPACTED, OR CLASS IS THANKING SHALL CONSIST OF CLASS IS (COPPACTED, OR CLASS IS THANKING SHALL CONSIST OF CLASS IS (COPPACTED, OR CLASS IS THANKING SHALL CONSIST OF CLASS IS (COPPACTED, OR CLASS IS THANKING SHALL CONSIST OF CLASS IS COPPACTED, AND AGG SHALL CONSIST OR CLASS IS THANKING SHALL CONSIST OF CLASS IS THANKING SHALL CONSIST OF
- 12. (HDPE SPECIFICATIONS FROM ADS WEBSITE)

HATCH LEGEND

Know what's below. Call before you dig.

TREE CONSERVATION AREA SEWER EASEMENTS (CORSSE)

WETLAND AND BUFFER IMPACTS

- LINE ELEVATION.
 ALL LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH AN APPROVED EROSION.
 CONTROL PLAN.

D.I.P. STORM NOTES:

- ALL DIP STORM SEWER TO BE CONSTRUCTED TO CITY OF RALEIGH WATER MAIN STANDARDS AND SPECIFICATIONS AS DETAILED IN THE CITY OF RALEIGH PUBLIC LITLITY HANDBOOK.
- CONTRACTOR TO PROVIDE WATERTIGHT JOINTS ON ALL STORM PIPING. CONTRACTOR TO PROVIDE WATERTIGHT JOINTS AND CONNECTIONS AT ALL PIPE CONNECTIONS TO STORM STRUCTURES.
- PLACEMENT OF STORM PIPES, BACKFLLING, AND COMPACTION IN ALL TRENCHES TO BE PER THE DIRECTION OF THE GEOTECHNICAL ENGINEER.
- PRIOR TO POURING CONCRETE ENCAGEMENT ON DUP. STORM PIPES, CONTRACTOR TO PRESSURE TEST PIPE TO CITY OF RALEIGH WATER MAIN STANDARDS TO VERIFY THAT ALL PIPES AND JOINTS ARE WATERTIGHT WITH NO LEAKS.
- CONTRACTOR TO POUR CONCRETE ENCAGEMENT IN A MANNER THAT PROVIDES ADEQUATE SUPPORT FOR THE PIPES AND JOINTS TO REMAIN UNDAMAGED AND WATERTIGHT DURING THE ENCAGEMENT POUR.

RETAINING WALL AND HEADWALL NOTES:

- A HADRAL OR FINGS SHALL BE NOTALED ALONG THE TOP OF ALL RETAINING WALLS, HADWALS, AND DOWN THE TOP OF ALL RETAINING WALLS, HAD DOWN THE TOP OF THE RETAINING WALL OR HADWALL TO HEADWALL TO THE ADMINIST CHAIR OF SERVINGET WHEN DESCRIPTION OF SERVINGET WAS DESCRIPTION OF ADMINIST SHALL NOLDER NO MOSE THAN TWO HORIZONTAL HERBESS (E.G. ONE NAME THE BOTTOM, AND ONE AT THE TOP) AND SHALL NOLLDE. WITH THE TOP AND SHALL NOLLDE.
- 5. GUARDRALS TO BE INSTALLED IN AREAS INDICATED ON THE PLANS.

SURVEY SYMBOL LEGEND



FL ____ FENCE LINE

TEMPORARY BENCHMARK FOV FIRED COTIC VALUE **®**—™EE TLARED END SECTION UE____ UNDERGROUND ELECTRIC UP____ UNDERGROUND POWER

SAS VALVE ☑ GRATED INLET



UT____ UNDERGROUND TELEPHON

TO UTILITY POLE

CONTROL CORNER

TRASH/DEBRIS

EXISTING RIPRAP

○ IRON PIPE SET.

HATCH LEGEND

IPF RON PIPE FOUND

UTILITY SYMBOL LEGEND

#₩I______ RRE HYDRANT ELARED END SECTION HEADWALL **♦ ▶** ■ GATE VALVE NCDOT CATCH BASIN ____ BLOW OFF & GATE VALVE ___ OPEN THROATED CURB INI PT ___ WATER SERVICE STORM MANHOLE ___ WATER MAIN __ YARD INLET SEWER MANHOLE GRATED INLET __ SEWER SERVICE SWALE / DITCH _____ STORM DRANAGE PIPE SCM______ STORMWATER MANGEMENT AREA _____ . ____ . ____ POND - NORMAL POOL _____ UTILITY EASEMENT LINETYPE

CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING OF ANY EXCAVATION, EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE AND ALL ARE NOT SHOWN.

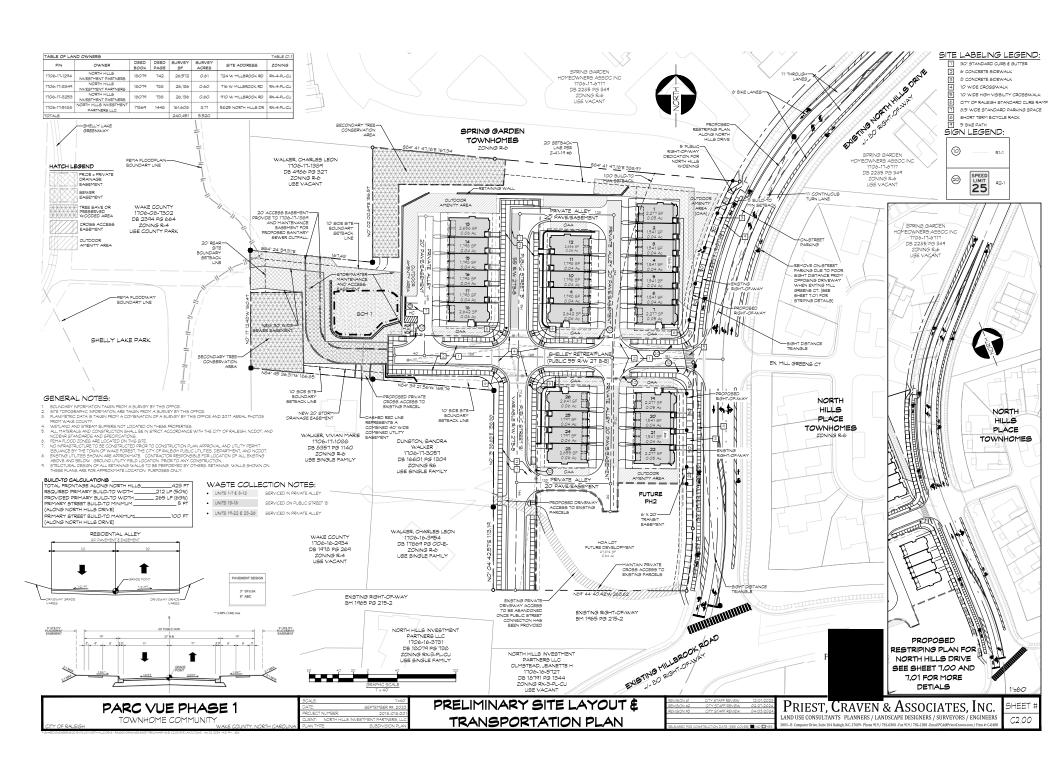
NOTE: ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NODOT STANDARDS AND SPECIFICATIONS

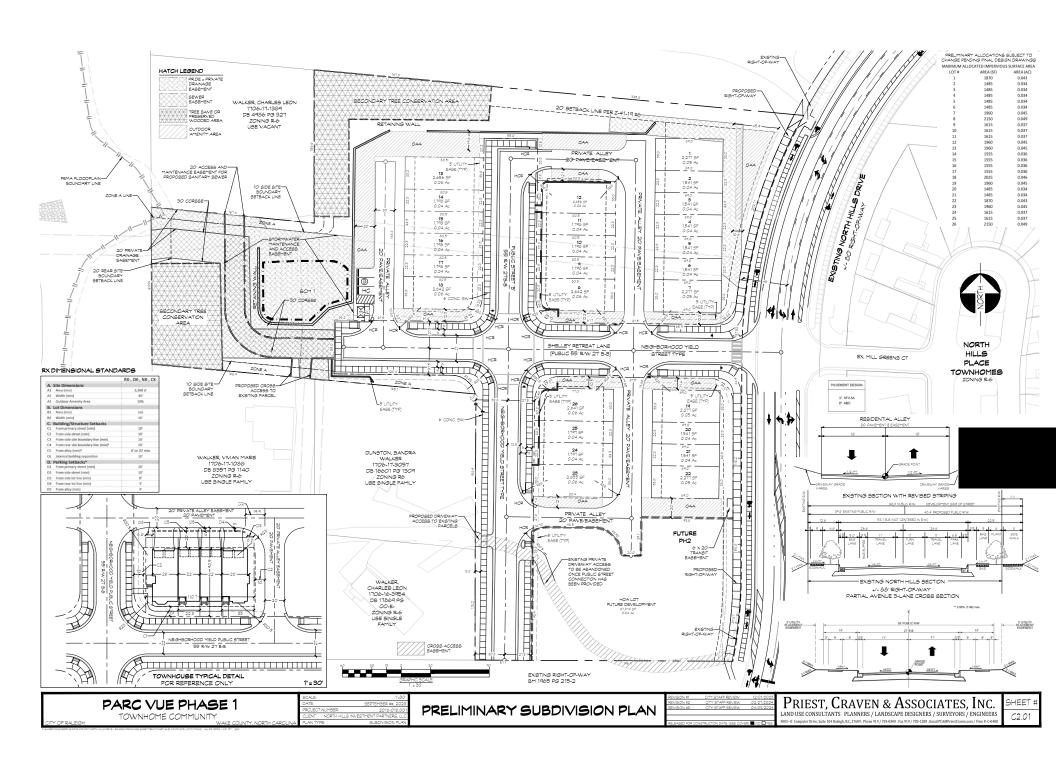
Priest, Craven & Associates, Inc.

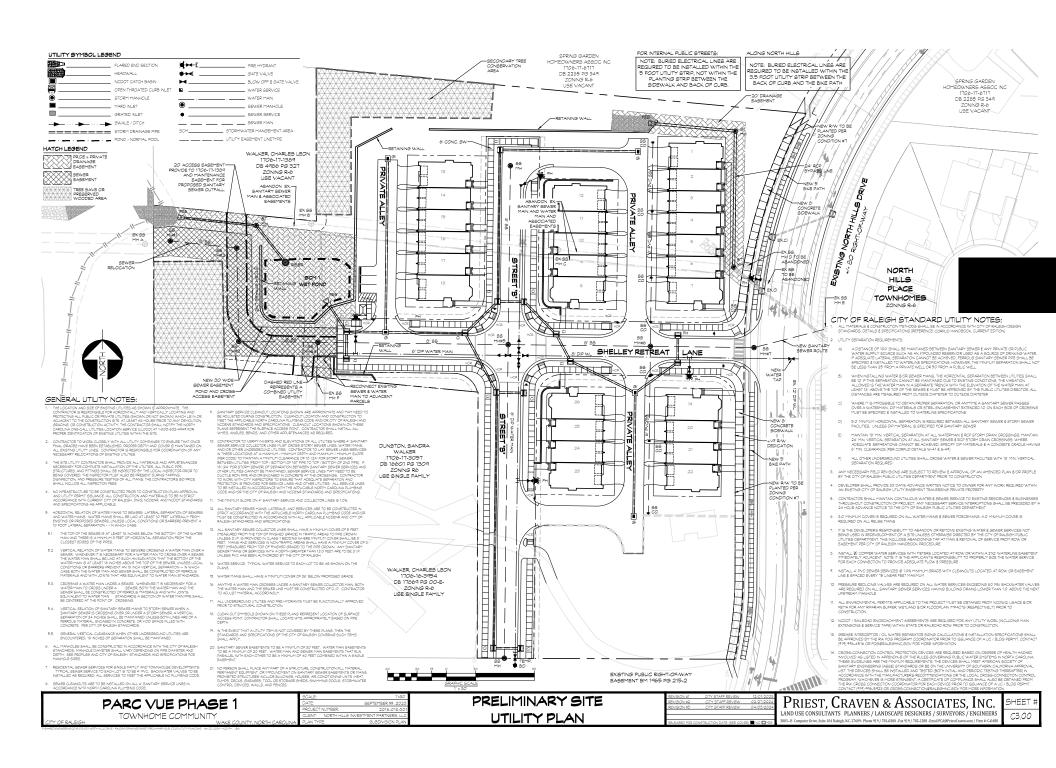
LAND USE CONSULTANTS PLANNERS / LANDSCAPE DESIGNERS / SURVEYORS / ENGINEERS 3803 - B. Commuter Drive, Suite 104 Raleigh, N.C. 27609, Phone 919 / 781-0300, Fax 919 / 782-1288, Email PCA69 PriestCrav

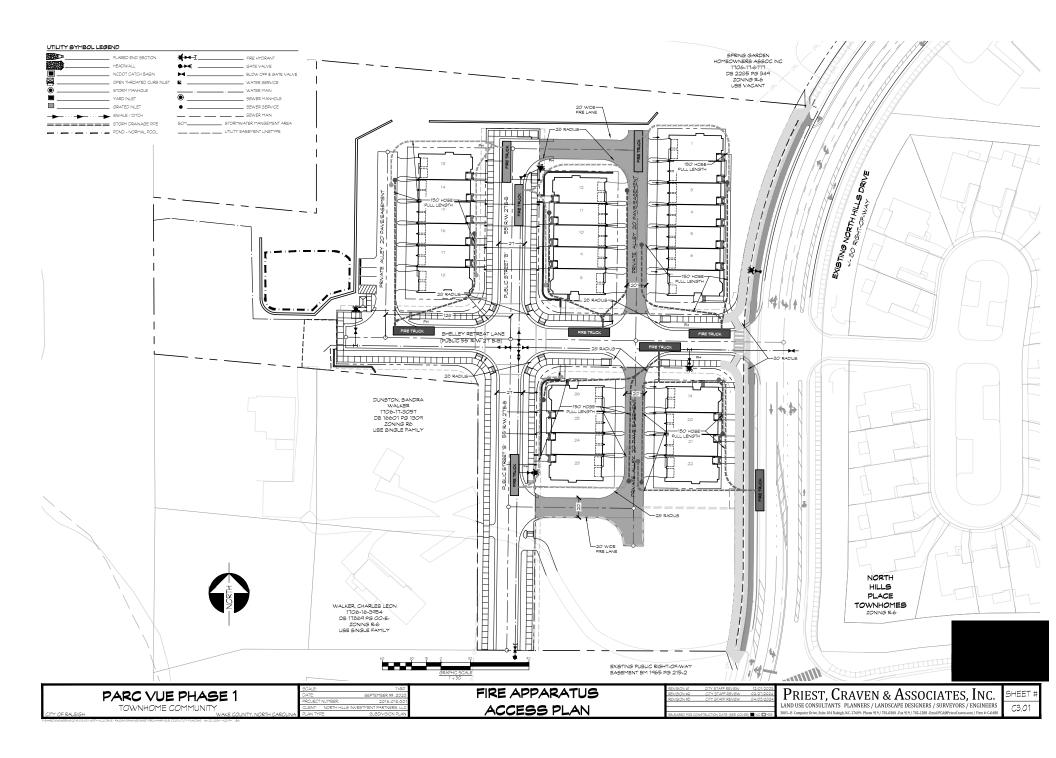
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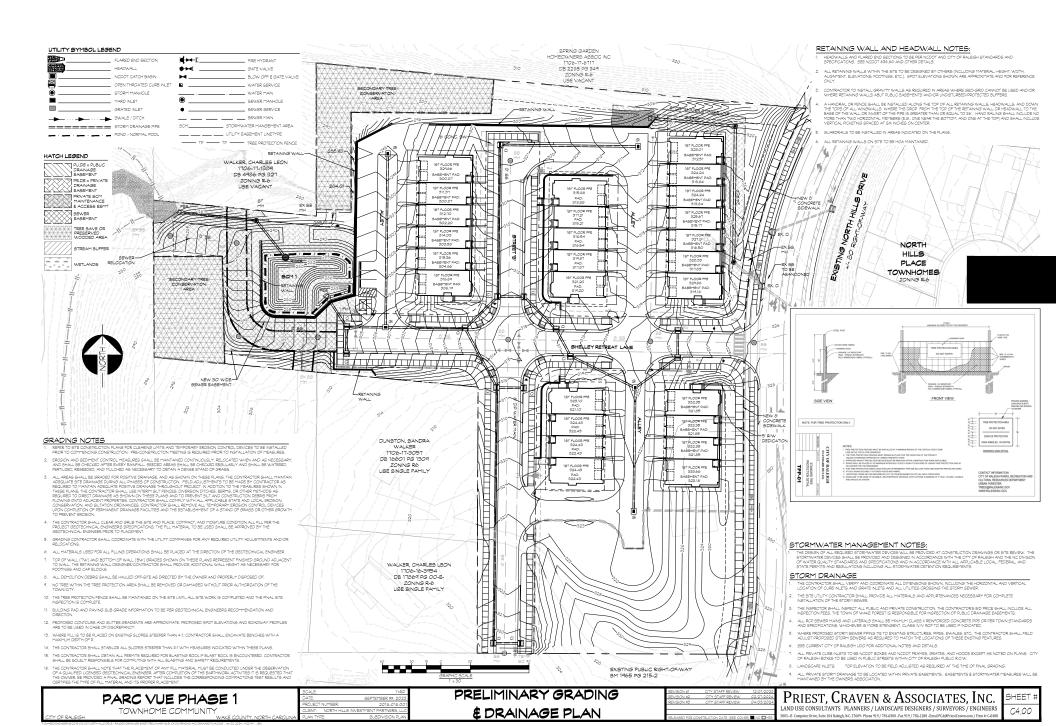
PARC VUE PHASE 1

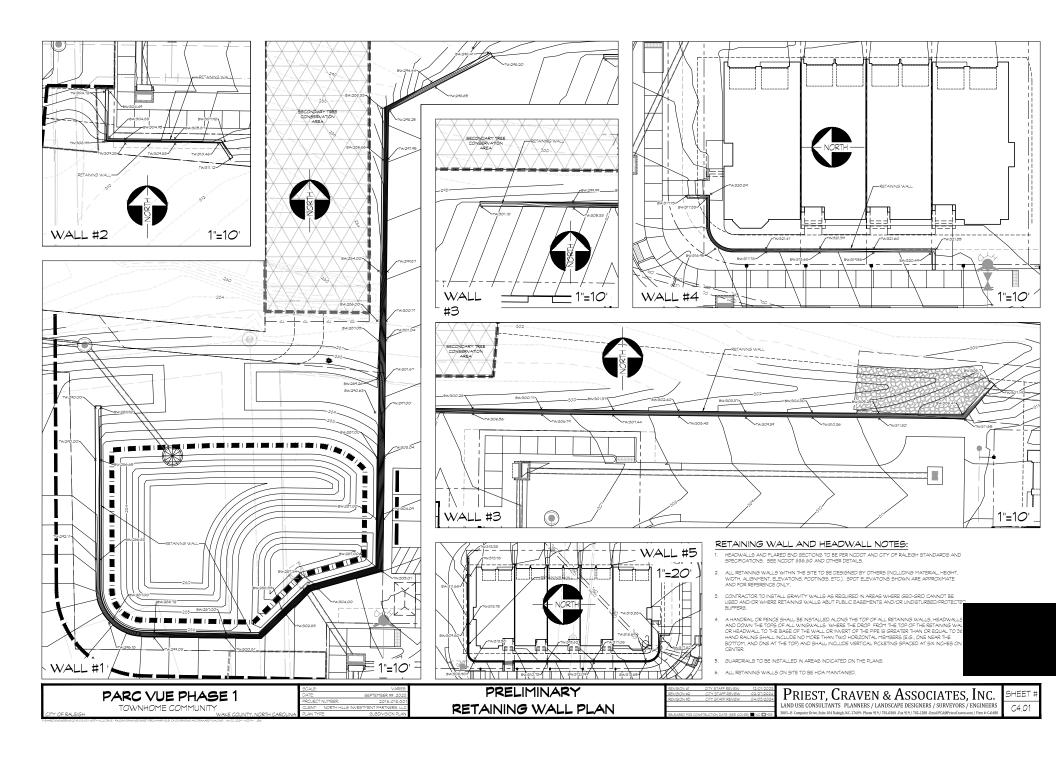


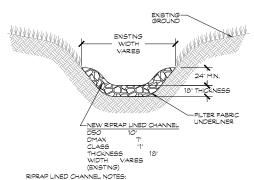










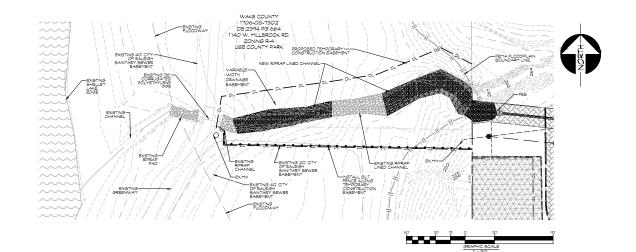


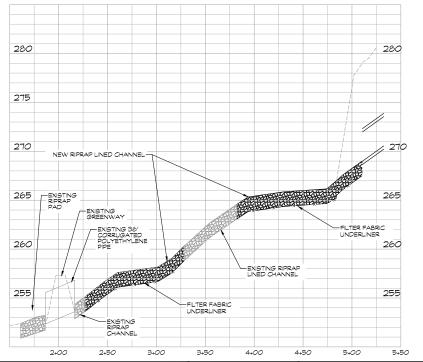
NEW RIP RAP CHANNEL LINING IS TO BE INSTALLED AS INDICATED IN TWO SECTIONS OF THE EXISTING CHANNEL.

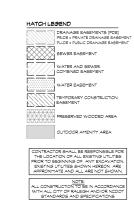
- 1. NEW BRIDGE CHANGE, LINKS & TO BE INSTALLED AS INDICATED IN TWO SECTIONS OF THE DRIFTING CHANGE, BRITTON AND THE READING CHANGE SHALL BE PLACED ON BRITTON THE CHANGE IN TO BE READING THE AND LINKS TO BE READING THE AND LINKS TO BE READING THE AND THE A

NEW RIPRAP LINED CHANNEL TYPICAL CROSS-SECTION

EXISTING 1	DRAII	NAGE DIT	CH		esign of Divers DEQ Erosion &				
Project Name:			Parc Vue			sec	tion 8.05.		
Project Number:		20	18-018.001						
Erosion Control Measur	e:	Armor Exis	sting Swale						
Swale #:			DP1.0						
			Chann	el A	nalysis				
hannel			Basin De	tails	from Anothe	r Source		Known Q	
Start Elev:		266.00 ft	Description		<u>c</u>	Area	Basin Cc		
End Elev:		253.53 ft	Total Drain	age A	irea		Tc		
Length:		275.00 ft	Impervious				Event	10 year	
Slope:		4.53%	Lawn / Ope	n			Intensity		
Side Slopes:	2.0 : 1	2.0 : 1	Wooded				Runoff	59.38 cfs	
Bottom Width:		7.00 ft	Normal Depth Procedure (Zreq = Zav) trial and error						
Channel Depth:		2.00 ft	Z	req =	Qn / (1.49 * S	0.5)			5.61
Width of Flow:		10.36 ft	Bottom		Normal	Area	Wetted	Hydraulic	Zav
Channel Width:		15.00 ft	Width		Depth	of Flow	Perimeter	Radius	A*R2/3
Soil Type		Clay Mix	7.0		0.84	7.28	10.75	0.68	5.61
Channel Slope Range		0-5%				of Channel is			
Vegetation / Liner		Tall fescue			Velo	city and She	ar Stress		
Retardance Class		C	Velocity	=	8.16	fps		Velocity i	s too high.
Mannings Coeff (n)		0.030	Provide line						
Permissible Velocity		5.5 fps	Shear Stres	s =	2.37	lbs/sf			
			Line	An	alysis				
	Intensity			Nori	mal Depth Pro	cedure (Zre	q = Zav) tri	al and error	
Runoff 59.38 cfs			Zreq =		Qn / (1.49	9 * S0.5)			11.42
Type of Liner	Class 1	Riprap (10")	Bottom		Normal	Area	Wetted	Hydraulic	Zav
Permissible Shear		3.63 lbs/sf	Width		Depth	of Flow	Perimeter	Radius	A*R2/3
Mannings Coeff (n)		0.061	7.0		1.25	11.87	12.59	0.94	11.42
Velocity 5.00 fps Liner is acceptable	Shear	3.54 lbs/sf			Depth	of Channel is	acceptable.		







PARC VUE PHASE 1 TOWNHOME COMMUNITY

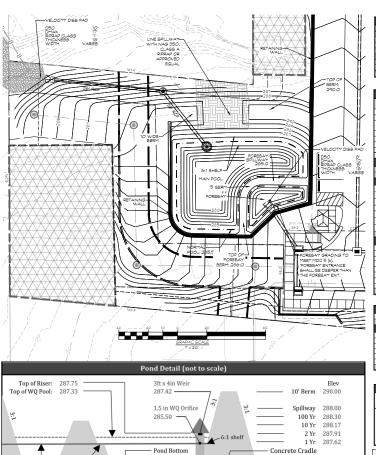
SEPTEMBER ##, 20

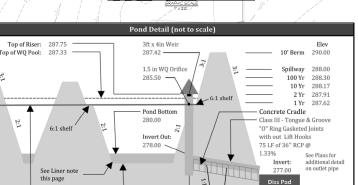
OFFSITE CHANNEL LINING IMPROVEMENTS

PRIEST, CRAVEN & ASSOCIATES, INC. LAND USE CONSULTANTS PLANNERS / LANDSCAPE DESIGNERS / SURVEYORS / ENGINEERS

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SHEET: C4.20





279.00 ft "IMPERMEABLE SOIL/CLAY GEOMEMBRANE LINER

Sediment Bottom

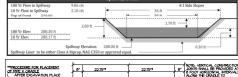
Perm Pool

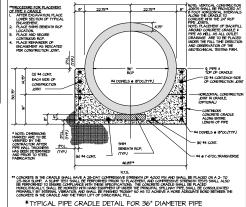
285.50

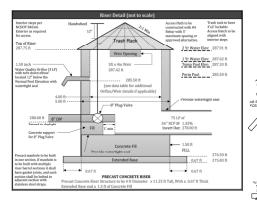
Surface Area to Drainage Area Ratio for Permanent Pool Sizing					
Drainage Area to SC	М	Required Surface Area of Permanent Pool	(Forebay &		
Impervious Area	Acres	Main Pond Combined)	(Forebuy &		
Offsite Impervious Area	0.122	Mulii Fond Combined)			
Onsite Impervious Area	2.610	Average Depth (ft) =	3.5		
Total Impervious Area	2.732	SA/DA Ratio =	2.19		
		Required SA (ft2) =	3,859		
Total Drainage Area To SCM	4.05	SA as Shown (ft2) =	4,837		
Percent Impervious Area 67% SA/DA Ratio from latest NCDENR BMP Manual					

		ity and Quantity				
Elevation	Main	Forebay	Depth	Inc Total	Accum'	
(ft)	Area (sf)	Area (sf)	(ft)	Vol (cf)	Vol (
285.5	3450	788	0.00	Permanent Por	ol Elevation	Notes
286.0	4971		0.50	2302	2302	
287.0	5748		1.50	5360	7662	
288.0	6084		2.50	5916	13578	
289.0	6413		3.50	6248	19826	
290.0	6740		4.50	6576	26403	
			0.00	0	26403	
			0.00	0	26403	
Total			4.5			
	Top of W	ater Quality Ele	vation / Begin T	emporary Pool E	levation	
Elevation	Area (sf)		Depth		Volume	Notes
287.33	5858		1.83		9593	WQE / TPE
		erify the Averag	e Depth of Pool	(D _{ave}) - Equation 3.		
d	Veces accel a [0.5 y	Denth may over shelf	y Perimeter nom por	o x Width submerged par	r of shalf] / Aborton	of about
Garg -	Voerm =	Department and		S.F. (Main Pond)	coranaj/raonas	in siniii
				S.F. (Main Pond)		
Donth of	A _{bottom shelf} = Water over shelf=			FT (Main Ponu)		
	imeter perm pool =			L.F. (Main Pond)		
Width subs	merged part of shelf =		3.00	FT		
	D _{avg} =		3.60			
De	epth for SA/DA =		3.50	FT (Round Day down	to nearest 0.5 ft)
		1.0" Water Qua	ılity Runoff Volu	ıme Calculation		
Ţ	Ising the runoff v	olume calculations	in the "Simple Me	thod" as described b	y Schueler (1987)
			Rv = Runoff Coeffic			
	I - Percent Imper		I-	67.0%		
	Rv = 0.05 + 0.009		Rv =	0.653		
	1.0 inch runoff vo					
		(Design rainfall) (Ry			% of Req'	
	Design Rainfall =			inch	100	%
	Drainage Area -			acres		
Stor	age Required =		9,593	cu. ft.		

	Volume Storage For 1.0" Runoff Above Permanent Pool (Provided)								
Depth (FT)	PPE SA (SF)	Top Temp Pool SA (SF)	Volume (CF)	Elevation					
1.83	4,237	5,858	9,593	287.33					
	Size Water Quality Orifice for (2-5) Day Drawdown for 1" Runoff Volume								
Q ₁ .	$= CdA(2g(H_0/3))^{1/2}$	(Orifice Equation; Cd=0.60, Ho/3 pe	r NCDENR recommendation	1)					
-	1.50	Orfice Diameter (inches)							
	1.76	Driving Head to Centroid of Orfice (ft)						
	0.05	O1.0" Drawdown Rate (cfs)							
	9,593	Water Quality Volume (Vwo)							
V,	wo/(Q1" x 86,400)	Drawdown Time (days)							
	2.5	Drawdown Time (days) (2 - 5)	days)						





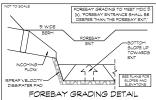


V =	7.58	rps D	MAX	12 1	n
		R	iprap Class	В	
		A	Apron Thickness		n
1		Apron Length		24 f	t
		A	pron Width	9 f	
		A	pron Ending Width	18 f	t
		Anti-Bouyancy Calo	ulations for the Riser St	ructure	
Riser Dime	ensions		eight of Structure	Displaced V	
Outside Dia'	5.00 ft	Walls =	11922 LBS	V = LxWx(HT+Fo	ooter) = C.F.
Inside Dia'	4.00 ft	Base =	3171 LBS		
		Fill =	2826 LBS	Displaced Water =	
				C.F. * 6	52.4 PCF = LBS
Height	11.25 ft	Outlet Pipe =	530 LBS		
Base Thick' (ft)	0.67 ft	WQ Orifice =	1 LBS	Add 15% Factor of	Safety
Add Concrete (ft)	1.50 ft				
Wall Thick' (ft)	0.50 ft				
Extend' Base (ft)	0.67 ft	Weir #1 =	112.5 LBS	V =	242 C.F.
Areas removed	from Riser	Weir #2 =	0 LBS	Disp. Water =	15,096 LBS
Outlet Pipe	7.07 ft	Weir #3 =	0 LBS	15% F.S. =	2,264 LBS
WQ Orifice	0.01 ft	Weir #4 =	0 LBS		
Orifice #1	1.50 ft	Orifice #2 =	0 LBS	Min Weight=	17,360 LBS
Orifice #2	0.00 ft				
Orifice #3	0.00 ft	Weight =	17,276 LBS LBS	Saftey Factor	114.44%
Orifice #4	0.00 ft	Precast Concrete Ris	ser Structure to be 4 ft Diamet	er x 11.25 ft Tall, With a	0.67 ft Thick



EMBANKMENT CUTOFF TRENCH (KEYWAY)





PRECAST REINFORCED CONCRETE MANHOLE

ACCESS HATCH (ONE QUADRANT

ALUMINUM TRASH RACK 48" DIAMETER RISER

PARC VUE PHASE 1

TOWNHOME COMMUNITY

SEPTEMBER ##, 20

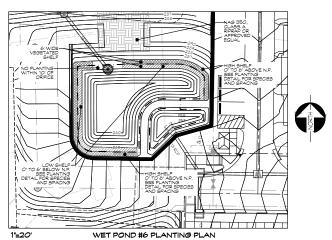
Cut-Off Trench. See Notes this page and Sheet G1.00 for Embankment Construction

Procedures and Requirements

PRELIMINARY STORMWATER MANAGEMENT PLAN

Priest, Craven & Associates, Inc LAND USE CONSULTANTS PLANNERS / LANDSCAPE DESIGNERS / SURVEYORS / ENGINEERS 3803 - B. Computer Drive, Suite 104 Raleich, N.C. 27609 - Phone 919 / 781-0300 - Fax 919 / 782-1288 - Email PCASP Priest Craves.com / Firm #: C-0488

SHEET



WET POND #6	LA	NDSCAPE CALCULAT	IONS & PL	ANT LIST	
DAM/BERM		VEGETA	ATION REQUIRE	ED: NON-CLUMPING TI	JRF GRAS
VEGETATED SHELF	SHALLOW LAND	50 PLANTS PER 200 SF:	AREA=	540 SF	136
KEY	BOTANICAL NAME	COMMON NAME	TYPE	SPACING	QTY. (2° PLUGS)
AA	ACORUS AMERICANUS	SWEETFLAG	PERENNIAL	24" OC (MAX.)	34
Al	ASCLEPIAS INCARNATA	SWAMP MILKWEED	PERENNIAL	24" OC (MAX.)	34
JE	JUNGUS EFFUSUS	SOFT RUSH	PERENNIAL	24" OC (MAX.)	34
ED	EUPATORIUM DUBIUS	DWARF JOE PYE WEED	PERENNIAL	24" OC (MAX.)	34
				TOTAL PROVIDED:	136
VEGETATED SHELF	SHALLOW WATER	50 PLANTS PER 200 SF:	AREA=	499 SF	125
KEY	BOTANICAL NAME	COMMON NAME	TYPE	SPACING	QTY. (2° PLUGS)
CG	CHELONE GLABRA	WHITE TURTLEHEAD	PERENNIAL	24" OC (MAX.)	32
HC	HIBISCUS COCCINEUS	SCARLET ROSE MALLOW	PERENNIAL	24" OC (MAX.)	31
LC	LOBELIA CARDINALIS	CARDINAL FLOWER	PERENNIAL	24" OC (MAX.)	31
98	SACCHARUM BALDWINII	NARROW PLUMEGRASS	PERENNIAL	24" OC (MAX.)	31
			•	TOTAL PROVIDED:	125

SCM SOIL AND PLANTING NOTES:

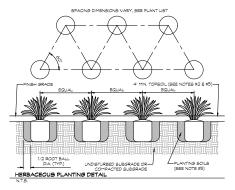
- 1. IN-SITU TOPSOIL TO BE STOCKPILED ON-SITE FOR USE IN THE VEGETATED SHELF PLANTING AREAS.
- 2. TORSOL BHOLLD BE SPERAD TO A MINIMUM DEPTH OF 4" HEQUISHOUT THE VESTATED SHELF, NCLIDING THE DAM TROOK TO SEEDINGS TAKING VESTATION, OTPOSIL SHOULD BE HANDSTANDED AND LIGHTLY COMPACTED WHILE MANTANING THE MINIMUM AT OF TOPSOL DEPTH FOR PLANT SHOWTH. CONTRACTOR TO ACCOUNT FOR SETTLING OF LOOSELY COMPACTED SCLES FOR THE WESTLAND PLANNES SUCH THAT ONCE SETTLING SOCIES. THE RIVAL SHOPES AS SHOWN ON THESE PLANS
- 3. SEE NOTES RELATED TO VEGETATED SHELF SOIL ANALYSIS AND TREATMENT ON THIS PAGE.
- 4. ACCEPTABLE FERTILIZERS CAN BE: MINERAL, ORGANIC (MANURE), COMPOST OR GREEN CROPS.
- 5. CONTRACTOR TO WORK WITH SOLL SCENTIST TO ENSURE SOLLS ARE ADEQUATE TO SUPPORT ESTABLISHMENT AND GROWTH OF THE PLANTINGS. CONTRACTOR TO AREA SOLLS AND NISTALL SOLLS IN PLANT AREAS PER DETAILS, SOLL SPECIFICATIONS, NOTICES SPECIFICATION, AND SOLL SCENTIST RECONTRICULATIONS.
- 6. THE CPTIMAL PERIOD FOR PLANTING HERBACEOUS VEGETATION EXTENDS FROM LATE MARCH TO EARLY JUNE. THE BEST TIME TO PLANT SHRUBS IN A WET POND IS FROM NOVEMBER TO MID MARCH. CONTRACTOR SHOULD SCHEDULE PLANT INSTALLATION ACCORDING.
- ONCE THE PLANTINGS HAVE BEEN DELIVERED TO THE SITE FROM THE NURSERY THEY SHOULD BE FREQUENTLY WATERED, FERTILIZED AND SHADED UNTIL THEY ARE INSTALLED.
- 8. ALL DISTURBED AREAS AROUND THE OUTSIDE OF THE WET POND SHALL BE SEEDED WITH A LAWN AREA SEED MIX (PER SEEDING SPECIFICATIONS) NATIVE GRASSES, LEGUMES, CLOVERS AND WILDFLOWERS.
- 9. PLANTING AREAS SHOWN IN THE VEGETATED SHELF SHALL BE PLANTED IN A "NATURALIZED" MANNER WITH PLANTS GROUPE
- 10. Find NET PORD WAS USED DURNS CONSTRUCTION AS FOR REPORTS CONTROL. THE BASIN MUST BE CLEANED OUT. SKAREDE, ARPORANTE ARRAD CASES WITH 4 OF FORDS. LAS SEPECIED IN SOTTE 2 A DOCK. AND VESIGITATION WITH 1 IA DAYS OF CONSTRUCTION COMPLETION. THE CONVERSION OF THE DEVICE TO A PREVIAMENT DEVICE SHOULD NOT OCCUR. WITH, ALL CONSTRUCTION IS CONDETE AND THE FORMANDE ARRAD THE SOTHS COMPLETE FRISLIED WITH PARKETENT, STRUCTURES, AND VESIGITATION OR BASED ON ALTERNATIVE DIRECTION BY THE REVIEWING AGENCY, PLANTINGS ON THE VESIGITATION ENEMS FORCIDE OR THAT LESS PER OFFICE AROUSE.
- 11. THE SCM DRAIN SHOULD BE FULLY OPENED FOR NO MORE THAN 3 DAYS PRIOR TO THE PLANTING DATE TO PRESERVE SOIL MOISTURE AND WORKABILITY.
- 2. ALL NEW PLANTINGS ON THE VEGETATED SHELF ARE TO BE WATERED AS REQUIRED DURING INITIAL GROWING SEASON TO
- 13. A MINIMUM TWO-YEAR WARRANTY PERIOD SHALL BE PROVIDED BY THE CONTRACTOR FOR PLANT SURVIVAL/REPLACEMENT.
- 14. AT THE BNO OF THE FRST YEAR AND AGAIN AT THE BND OF THE TWO-YEAR WARRANTY PERCO, ALL PLANTS THAT DO NOT SURWING MUST BE REPLACED, ESTABLISHMENT PROCEDURES, SUCH AS CONTROL, OF NAMEN EWEDS, AMMAL, AND VANDAL DAMAGE, MULHONIS, RESTANDA, WATERIN, AND THEN OR TUBE REPORTION REPLACEMENT, SHALL BE IMPLIENTED TO THE EXTENT NEEDED TO DISJUSE PLANT SURVIAL. STANDS MUST BE REMOVED AFTER ESTABLISHMENT (APPROXIMATELY 12 MONTHS), TO REVIENT SPOUND (STRANDSING) OR AUTOODY PLANTS.

VEGETATED SHELF SOILS ANALYSIS AND TREATMENT:

- CONTRACTOR TO WORK WITH SECTECHNICAL ENGINEER OR SOLL SCENTIST TO PERFORM A SOLL ANALYSIS WITHIN THE STORWINATER RACILITY AREA TO DETERMINE VABILITY OF SOLDS TO ASSIGNE HEALTHY VESSTATON GROWN IN THE VESSTATON SELE THE AND TO REVIOUS AREQUIATE HIS TOPICAL LAYER. IMPROFILE OR IN-SITU SOLDS SHOULD BE AMENDED WITH ORSAIN AMERICAN DRATE GEOTECHNICAL, ENGINEER/SOLL SCENTIST RECOMMENDATIONS SASED ON THE RESULTS OF THE SOLL ANALYSIS.
- THE SOL ANALYSIS SHALL AT A MINIMUM INCLIDE THE FOLLOWING: SOL pH (WHETHER ACID, NEUTRAL, OR ALKALINE), SOL
 TEXTURE, SOL TEST NICHA 6 CS (NUTBENT CONTENT), CONTENT (PERCENT CLAY, ORGANIC MATERIAL, ETC.), HYDRAULIC
 CONDUCTIVITY, AND INITIATION ARTE.
- SOLS USED WITHN THE VEGETATED SHELF SHOULD BE UNFORM AND PREE OF STONES, STUMPS, ROOTS, OR OTHER SIMLAR MATERIAL GREATER THAN 2 INCHES.
- 4. THE pH SHOULD BE BETWEEN 4.5 AND T.O. IF THE PH FALLS OUTSIDE OF THIS RANGE, IT MAY BE MODIFIED WITH LIME TO NOREASE THE pH OR IRON SULFATE AND SULFUR TO LOWER THE pH. THE LIME OR IRON SULFATE MUST BE MINED UNIFORMLY NTO SOLI PROOR TO USE.
- 5. N-SITL EXCAVATED SOLITAY ES USES FOR THE VESTIATED SHELF FITHS SOLITANIANS BY THE SECTEMBACA. EXPLIES FOR LOCATIFIT DETERMINES HE N-HONEL SACE ASSECTATE TO SECTION HALT HAVE VESTIAN OR SOLVENH WHILE PROVIDING ADEQUATE NEITHATION RATES THROUGH HE TOSPILL IN-SITU SOLIS SHOULD BE AMBIEDD AS REQUIRED TO PROVIDE FOR AN APSIGLATE SECTIONS EXPLICATIVE TOR THE FLANTINGS ON THE VESTIATED SHELF.
- 6. CONTRACTOR TO WORK WITH QUALIFIED NOVIDIALS, SUCH AS A GEOTECHNICAL ENGINEER, SOLL SCIENTIST, OR THE LOCAL COOPERATIVE ENTENSION OR NOSC OFFICE, TO DETERMINE IN WRITING THE RECOMMENDED SOLL AMEDICATION RATES, AND TECHNICISE FOR ALCOPERATING AN REQUIRED AMEDICATE TO THE HIST BOLLS BASED ON THE SOLL ANALYSIS. CONTRACTOR TO AMENO IN SITU SOLLS IN ACCORDANCE WITH RECOMMENDATIONS OF SOLLS SCIENTIST OR OTHER QUALIFIED TRAFFESSIONAL.
- 7. AVOID SMEARING/SMOOTHING OF SOILS WHEN EXCAVATING VEGETATED SHELF. INSTALL TOPSOIL LOOSELY COMPACTED IN THE VEGETATED SHELF AREA.
- 8. CONTRACTOR TO ACCOUNT FOR SETTLING OF LOOSELY COMPACTED SOILS FOR THE PLANTINGS SUCH THAT ONCE SETTLING OCCURS THE FINAL GRADES AS SHOWN ON THESE PLANS ARE MAINTAINED.
- 9. CONTRACTOR TO OBTAIN AND FAMILIARIZE THEMSELVES WITH THE MOST RECENT EDITION OF THE NODERN SOM MANUAL AND THE TOWN OF WAAE FOREST STANDADS AND SPECIFICATIONS. CONTRACTOR TO REPER TO THESE RESOURCES FOR ADDITIONAL DETAIL, DESIGN, CONSTRUCTION, PROFAMION, AND REQUIREMENTS FOR THE STORMANTER BY PAGILITIES.

GEESE/ANIMAL PEST CONTROL NOTE:

CONTRACTOR SHOULD CONTACT LOCAL NURSERIES FOR PLANT SELECTION					
CLL DE NATIVE PLANT NURSERY	621 STARBURST LANE, RALEIGH, NC 27603	(919) 662-5566			
NICHE GARDENS	1111 DAWSON ROAD, CHAPEL HLL, NC 27516	(919) 967-0078			
PLANT DELIGHTS NURSERY	9241 SAULS ROAD, RALEIGH, NC 27603	(919) 772-4794			
TARHEEL NATIVE TREES	4339 PEELE ROAD, CLAYTON, NC 27520	(919) 553-5927			
TAYLORS NURSERY, NC.	STOS NEW BERN AVE., RALEIGH, NC 2T610	(919) 231-6161			
MELLOW MARSH FARM	1912 WOODY STORE ROAD, SILER CITY, NC 27844	(919) 742-1200			



HATCH LEGEND

SHALLOW LAND
PLANTING AREA
PLANTING AREA

PARC VUE PHASE 1

TOWNHOME COMMUNITY

 SGALE:
 1'=

 DATE:
 SEPTEMBER ##, 20

 PROJECT NUMBER:
 2018-018,

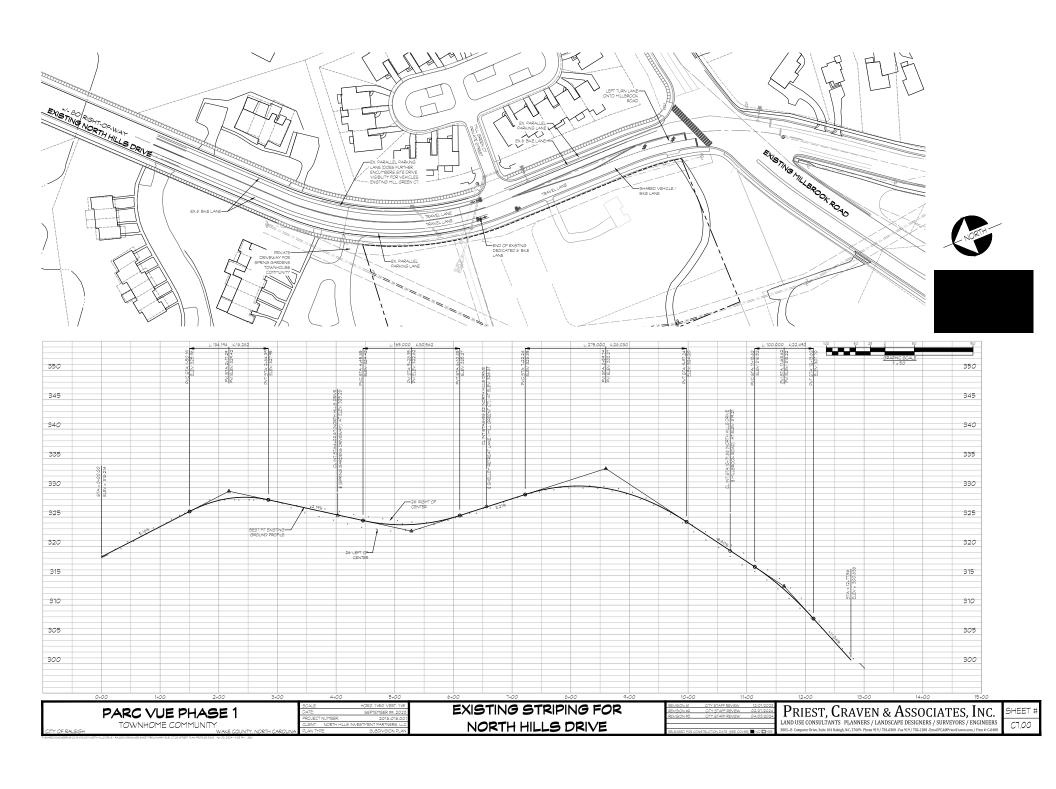
 CUENT:
 NORTH HILLS NVESTMENT PARTNERS,

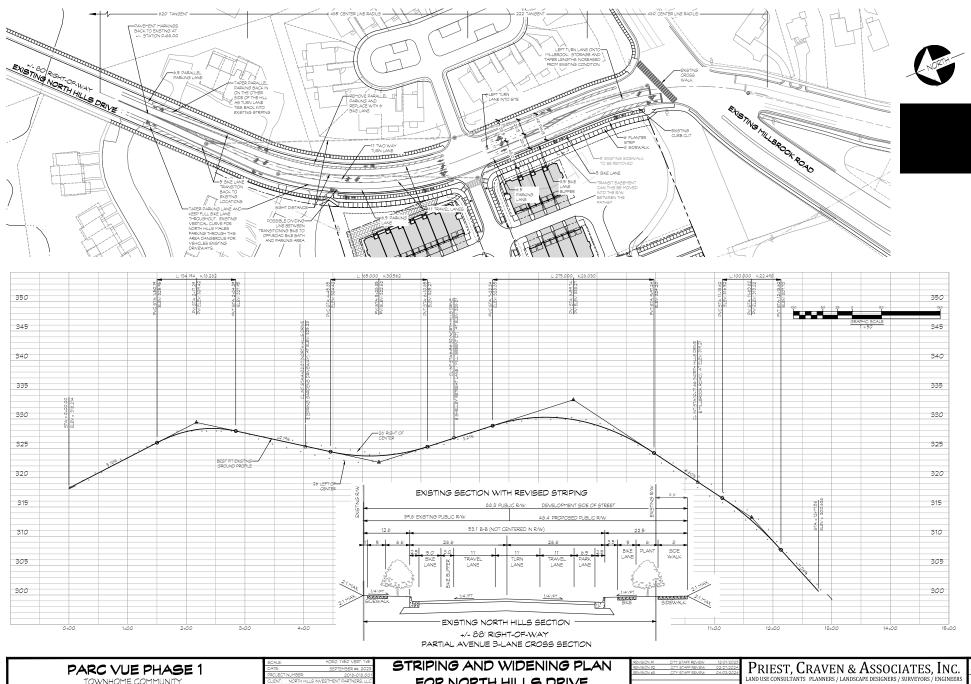
WET POND PLANTING PLAN

PRIEST, CRAVEN & ASSOCIATES, INC.

LAND USE CONSULTANTS PLANNERS / LANDSCAPE DESIGNERS / SURVEYORS / ENGINEERS
3803 - B. Computer Drive, State 104 Rabital, NC 27609 - Phone 919 / 781-4300 - Eas 919 / 782-1288 - Email PCASP resistiatives com / Fram 91: C-0488

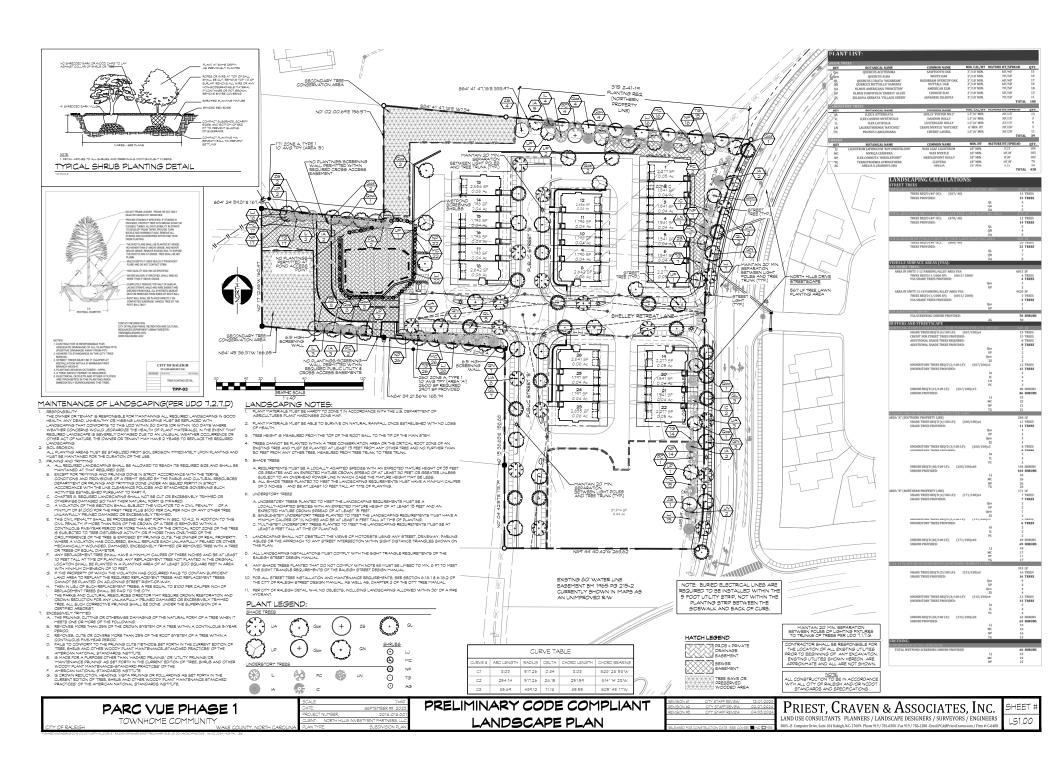
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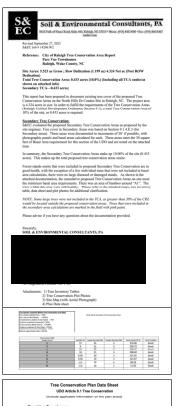


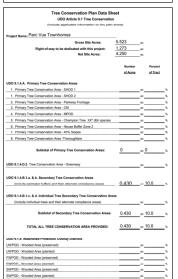


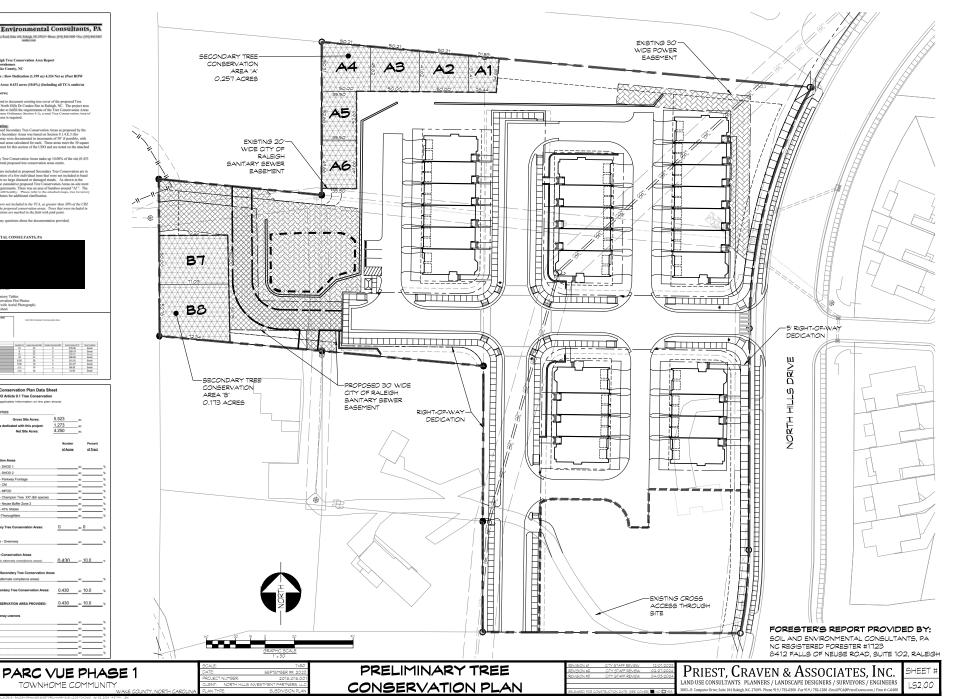
FOR NORTH HILLS DRIVE

TOWNHOME COMMUNITY



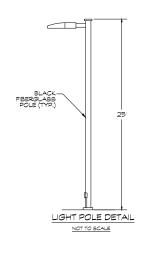


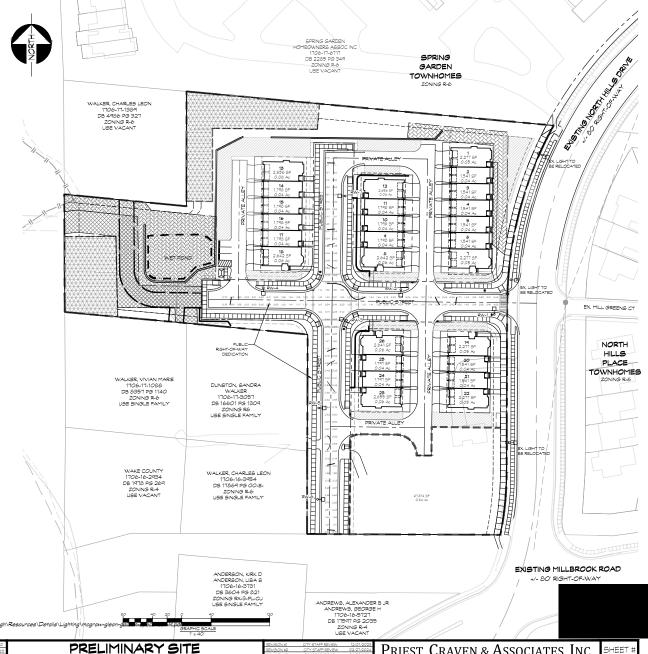




LUMINAI	RE SCHEDULE					
SYMBOL	LIGHT SOURCE	DESCRIPTION	BALLAST	MOUNTING	QUANTITY	LUMENS
	American Electric Lighting, ATBO , 4000K, TYPE IV, AF-04-LED-U-T4W	DUKE ENERGY ROADWAY LED215 GAN-AF-04-LED-U-T4W	LLLO I NO INIO	25' BLACK SINGLE MOUNTED ON SINGLE POLE	7	18,562

STATISTICS - STREET LIGHTS							
LLF	AVG	MAX	MIN	AVG/MIN	MAX/MIN		
0.85	1.7 FC	4.5 FC	0.38 FC	5:1	12:1		





Missing or invalid reference Missing or invalid reference File: Fil. Land Projects 2018-018,001 North Hills Drive - Roleigh Refiner Estables Religight (2018) Sheet: 1 Sheet: 1

> PARC VUE PHASE 1 TOWNHOME COMMUNITY

SEPTEMBER ##, 20

LIGHTING PLAN

PRIEST, CRAVEN & ASSOCIATES, INC. LAND USE CONSULTANTS PLANNERS / LANDSCAPE DESIGNERS / SURVEYORS / ENGINEERS 3803 - B. Computer Drive, Suite 104 Raleigh, N.C. 27609 - Phone 919 / 781-0300 - Fax 919 / 782-1288 - Email PCA@PriestCrave