

**REQUEST FOR COMMITTEE ACTION**

**HENDERSON COUNTY**

**TECHNICAL REVIEW COMMITTEE**

**MEETING: March 6, 2018**

**SUBJECT: Major Site Plan Review – Lighthouse Gear**

**PRESENTER: Toby Linville**

**ATTACHMENTS: Staff Report**

**SUMMARY OF REQUEST: Major site plan review**

**SUGGESTED MOTION: I move that the TRC approve the major site plan for Leisure Craft**



## Henderson County, North Carolina Code Enforcement Services

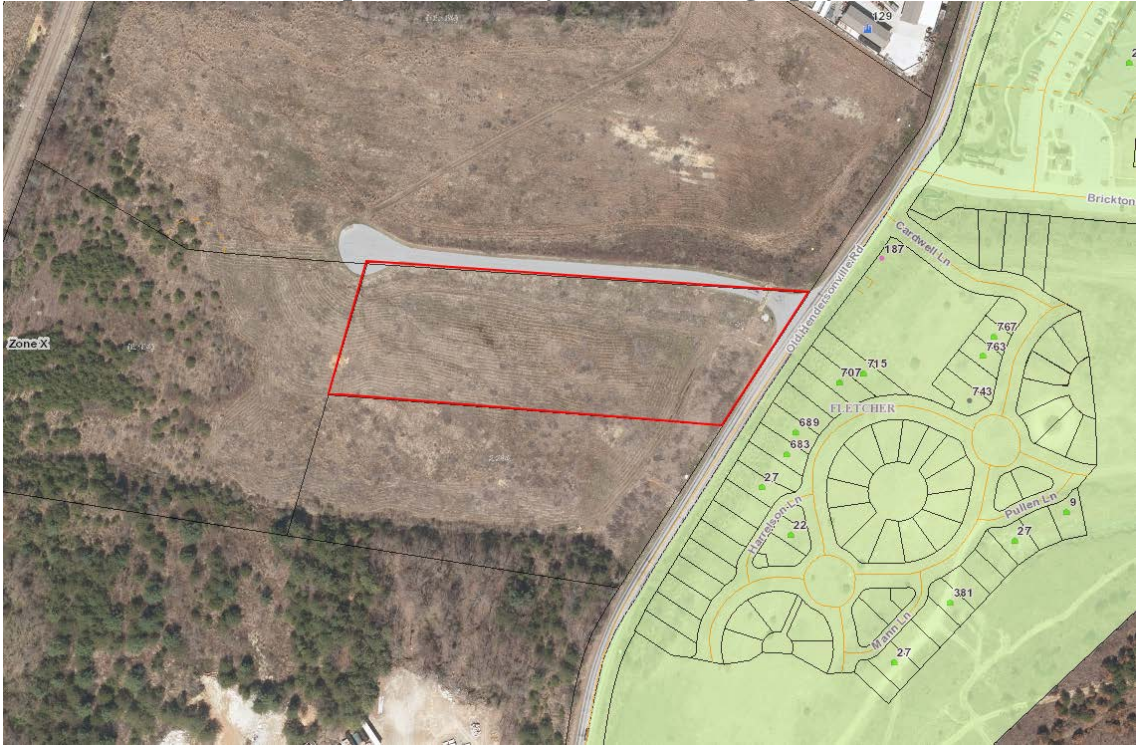
### 1. Committee Request

- 1.1. **Applicant:** LightHart Gear/POGO Land Holdings LLC
- 1.2. **Request:** Major Site Plan Approval
- 1.3. **PIN:** 9652524440
- 1.4. **Size:** 3.36 acres +/-
- 1.5. **Location:** 0 Old Hendersonville Rd
- 1.6. **Supplemental Requirements:**

#### **SR 10.8. *Manufacturing and Production Operations***

- (1) Site Plan. Major *Site Plan* required in accordance with §200A-331 (Major Site Plan Review).
- (2) Lighting. *Adequate lighting* shall be placed in areas used for vehicular/pedestrian access including, but not limited to: stairs, sidewalks, crosswalks, intersections, or changes in grade. *Lighting mitigation* required.
- (3) Dust Reduction. Unpaved *roads, travelways* and/or parking areas shall be treated to prevent dust from adverse effects to adjacent properties.

Map A: Pictometry/Aerial Photography



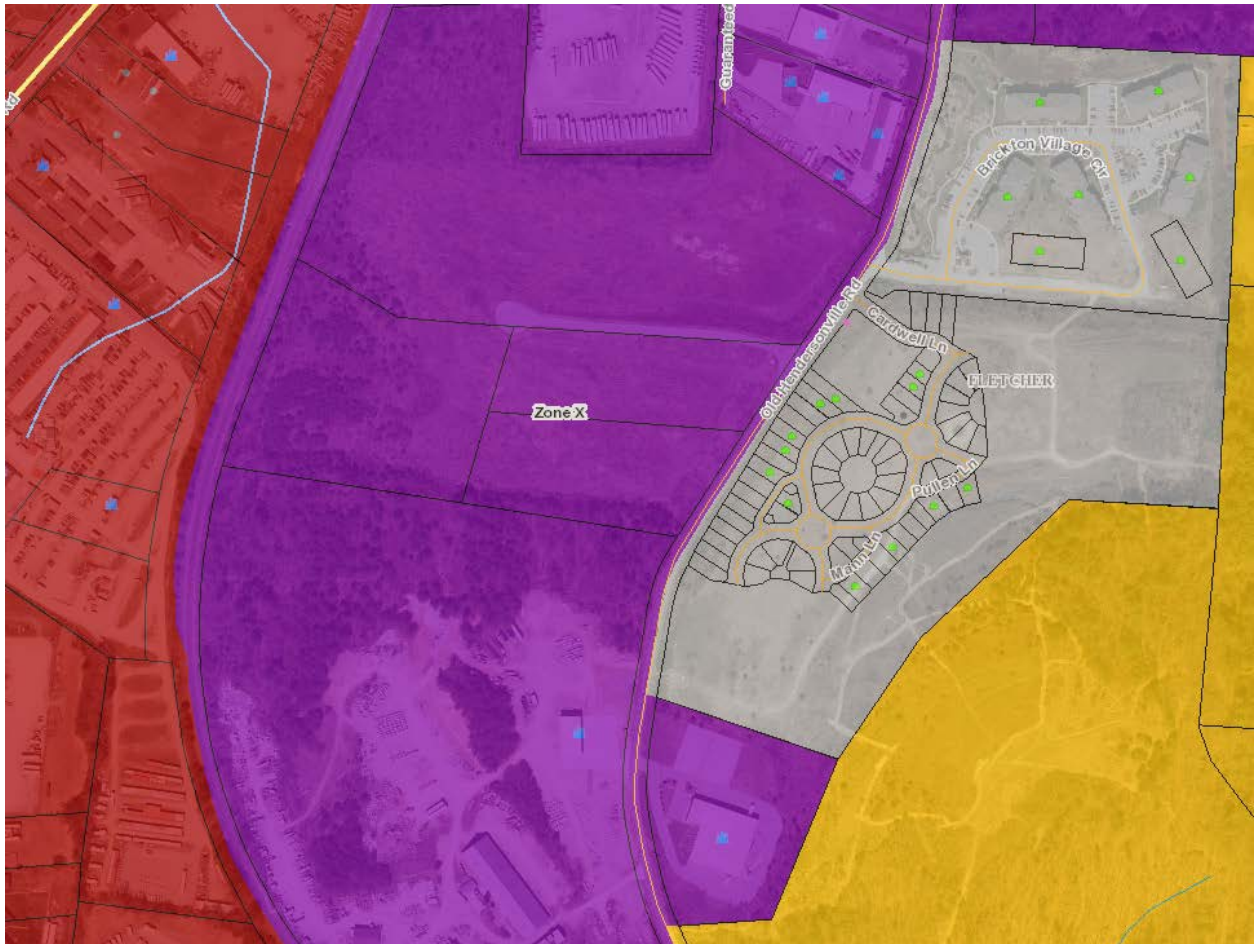
2. **Current Conditions**

**Current Use:** This parcel is currently industrial and vacant.

**Adjacent Area Uses:** The surrounding properties consist of residential, commercial and industrial uses.

**Zoning:** The surrounding property to the north is Industrial and East is Fletcher C-1 Conditional Zoning

**Map B: Current Zoning**



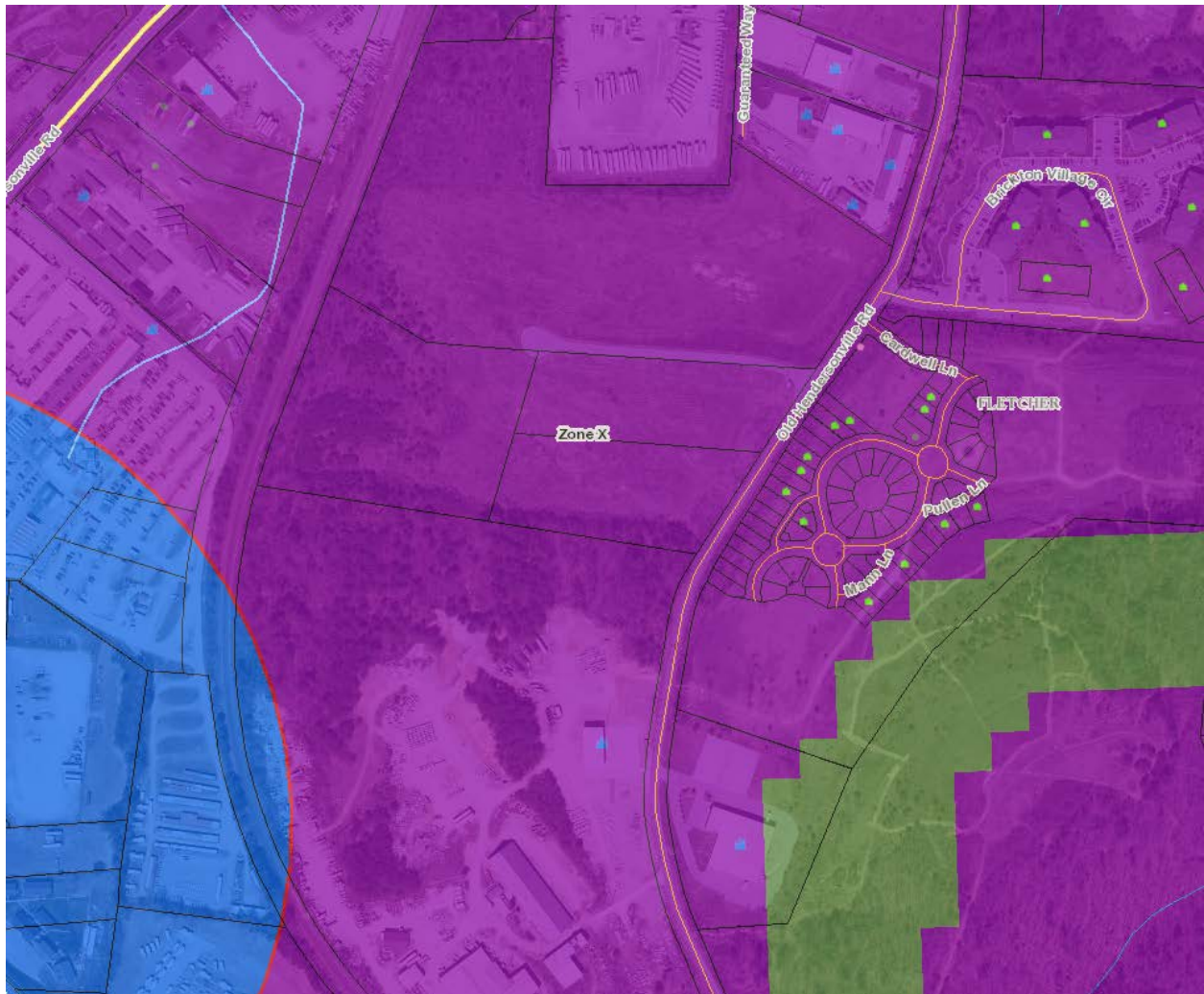
3. **Floodplain /Watershed Protection** The property is not located in a Special Flood Hazard Area. The property is not in a Water Supply Watershed district.

4. **Water and Sewer** This property is served by public water and sewer.

**Public Water:** City of Hendersonville

**Public Sewer:** Cane Creek

**Map C: CCP Future Land Use Map**



**5. Comprehensive Plan**

**The 2020 CCP:** The CCP Future Land Use Map places the Subject Area in the Industrial Area. The text and map of the 2020 CCP suggest that the Subject Area would be more suitable for the following: The purpose of the Industrial District (I) is to foster orderly growth where the principal use of land is a mixture of industrial and heavy commercial. The intent of this district is to allow for industrial and heavy commercial development consistent with the recommendations of the Comprehensive Plan. In accordance with the Comprehensive Plan, the district will allow for and provide industrial and heavy commercial development that: (1) is compatible with adjacent development and the surrounding community; (2) will minimize conflict between land uses; and (3) is sensitive to its impact on surrounding land uses and the environment (natural and man-made).

**6. Staff Recommendations**

Staff's Position at this time, under the guidelines of current plans, policies and studies, is to approve the Major Site Plan because it is consistent with the current surrounding land uses and future land use recommendations.

**7. Photographs**

LightHeart Gear-Manufacturing and Production



**HENDERSON COUNTY  
MAJOR SITE PLAN REVIEW APPLICATION**

**CONTACT INFORMATION**

**Property Owner:**

Name: Marc Penansky Phone: 828 279-0940  
Complete Address: 10 Ashbrook Meadows, Fletcher, NC 28732

**Applicant:**

Name: Same as Property Owner Phone: \_\_\_\_\_  
Complete Address: \_\_\_\_\_

**Agent:**

Name: Tony Hauser, PLA, PE Phone: 828 337-5173  
Complete Address: 231 Haywood Street, Asheville, NC 28801  
Agent Form (Circle One):  Yes  No

**Plan Preparer:**

Name: Anchor QEA of NC, PLLC c/o Tony Hauser, PLA, PE Phone: 828 771-0441  
Complete Address: 231 Haywood Street, Asheville, NC 28801

**GENERAL INFORMATION**

Date of Application: 2/14/2018

Site Plan Attached (Circle One):  Yes  No

**PARCEL INFORMATION**

PIN: <u>9652-52-4440</u>	Tract Size (Acres): <u>3.36 ac.</u>
Zoning District: <u>Industrial</u>	Fire District: <u>Fletcher</u>
Supplemental Requirement# _____	Watershed: <u>French Broad</u>
Permitted by Right _____	Floodplain: <u>NA</u>
Special Use Permit _____	

Location / Property to be developed: Along Brickton Road, approximately 0.22 miles south of the intersection of Old Brickyard Road and Old Hendersonville Road.

\*\*\*\*\*

**County Use Only**

Fee: \$ \_\_\_\_\_ Paid: \_\_\_\_\_ Method: \_\_\_\_\_ Received by: \_\_\_\_\_

APPLICATION IDENTIFICATION		N.C. DEPARTMENT OF TRANSPORTATION STREET AND DRIVEWAY ACCESS PERMIT APPLICATION
Driveway Permit No. <b>1</b>	Date of Application <b>2/14/2018</b>	
County: <b>Henderson</b>		
Development Name: <b>Lighthouse Gear</b>		

**LOCATION OF PROPERTY:**

Route/Road: **Brickton Road**

Exact Distance **0.22**       Miles      N   S   E   W  
 Feet     

From the Intersection of Route No. **1536** and Route No. **1537** Toward **1536**

Property Will Be Used For:    Residential /Subdivision    Commercial    Educational Facilities    TND    Emergency Services    Other  
Property:                                       is                       is not                      within \_\_\_\_\_ City Zoning Area.

**AGREEMENT**

- I, the undersigned property owner, request access and permission to construct driveway(s) or street(s) on public right-of-way at the above location.
- I agree to construct and maintain driveway(s) or street entrance(s) in absolute conformance with the current "Policy on Street and Driveway Access to North Carolina Highways" as adopted by the North Carolina Department of Transportation.
- I agree that no signs or objects will be placed on or over the public right-of-way other than those approved by NCDOT.
- I agree that the driveway(s) or street(s) will be constructed as shown on the attached plans.
- I agree that that driveway(s) or street(s) as used in this agreement include any approach tapers, storage lanes or speed change lanes as deemed necessary.
- I agree that if any future improvements to the roadway become necessary, the portion of driveway(s) or street(s) located on public right-of-way will be considered the property of the North Carolina Department of Transportation, and I will not be entitled to reimbursement or have any claim for present expenditures for driveway or street construction.
- I agree that this permit becomes void if construction of driveway(s) or street(s) is not completed within the time specified by the "Policy on Street and Driveway Access to North Carolina Highways".
- I agree to pay a \$50 construction inspection fee. Make checks payable to NCDOT. This fee will be reimbursed if application is denied.
- I agree to construct and maintain the driveway(s) or street(s) in a safe manner so as not to interfere with or endanger the public travel.
- I agree to provide during construction proper signs, signal lights, flaggers and other warning devices for the protection of traffic in conformance with the current "Manual on Uniform Traffic Control Devices for Streets and Highways" and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the District Engineer.
- I agree to indemnify and save harmless the North Carolina Department of Transportation from all damages and claims for damage that may arise by reason of this construction.
- I agree that the North Carolina Department of Transportation will assume no responsibility for any damages that may be caused to such facilities, within the highway right-of-way limits, in carrying out its construction.
- I agree to provide a Performance and Indemnity Bond in the amount specified by the Division of Highways for any construction proposed on the State Highway system.
- The granting of this permit is subject to the regulatory powers of the NC Department of Transportation as provided by law and as set forth in the N.C. Policy on Driveways and shall not be construed as a contract access point.
- **I AGREE TO NOTIFY THE DISTRICT ENGINEER WHEN THE PROPOSED WORK BEGINS AND WHEN IT IS COMPLETED.**





APPOINTMENT OF AGENT FORM (OPTIONAL)

I MARC PENANSKY owner of property located on OLD HENDERSONVILLE RD.  
(Name) (Street Name)

recorded in 2017/10965 and having a parcel identification number of 9652-52-4440  
(Deed Book/Page) (PIN)

located in Henderson County, North Carolina, do hereby appoint Tony Hauser, PLA, PE  
(Agent's Name)

to represent me in an **application to the Planning Department** and authorize him/her to act as my agent **in all matters**, formal and informal except as stated herein, and authorize him/her to receive all official correspondence.

I however understand that as the listed property owner, I must sign all affidavits and statements required by any applicable ordinance.

Marc Penansky  
Property Owner

Feb 15, 2018  
Date

**SIGNATURES OF APPLICANT**

PROPERTY OWNER (APPLICANT)		WITNESS	
COMPANY	X <u>POGO LAND HOLDINGS LLC</u>	NAME	X <u>RUSSELL C. ROBINETTE</u>
SIGNATURE	<u>Marc Lennanby</u>	SIGNATURE	<u>Russell C. Robinette</u>
ADDRESS	X <u>10 ASHBROOK MEADOWS</u>	ADDRESS	X <u>102 ELDEN ST.</u>
	X <u>FLETCHER, NC</u> Phone No. X <u>828 279-0940</u>		X <u>HENDERSONVILLE NC 28791</u>

AUTHORIZED AGENT		WITNESS	
COMPANY	_____	NAME	_____
SIGNATURE	_____	SIGNATURE	_____
ADDRESS	_____	ADDRESS	_____
	_____ Phone No. _____		_____

**APPROVALS**

APPLICATION RECEIVED BY DISTRICT ENGINEER

\_\_\_\_\_

SIGNATURE DATE

APPLICATION APPROVED BY LOCAL GOVERNMENTAL AUTHORITY (when required)

\_\_\_\_\_

SIGNATURE TITLE DATE

APPLICATION APPROVED BY DISTRICT ENGINEER

\_\_\_\_\_

SIGNATURE DATE

INSPECTION BY NCDOT

\_\_\_\_\_

SIGNATURE TITLE DATE

COMMENTS:

\_\_\_\_\_

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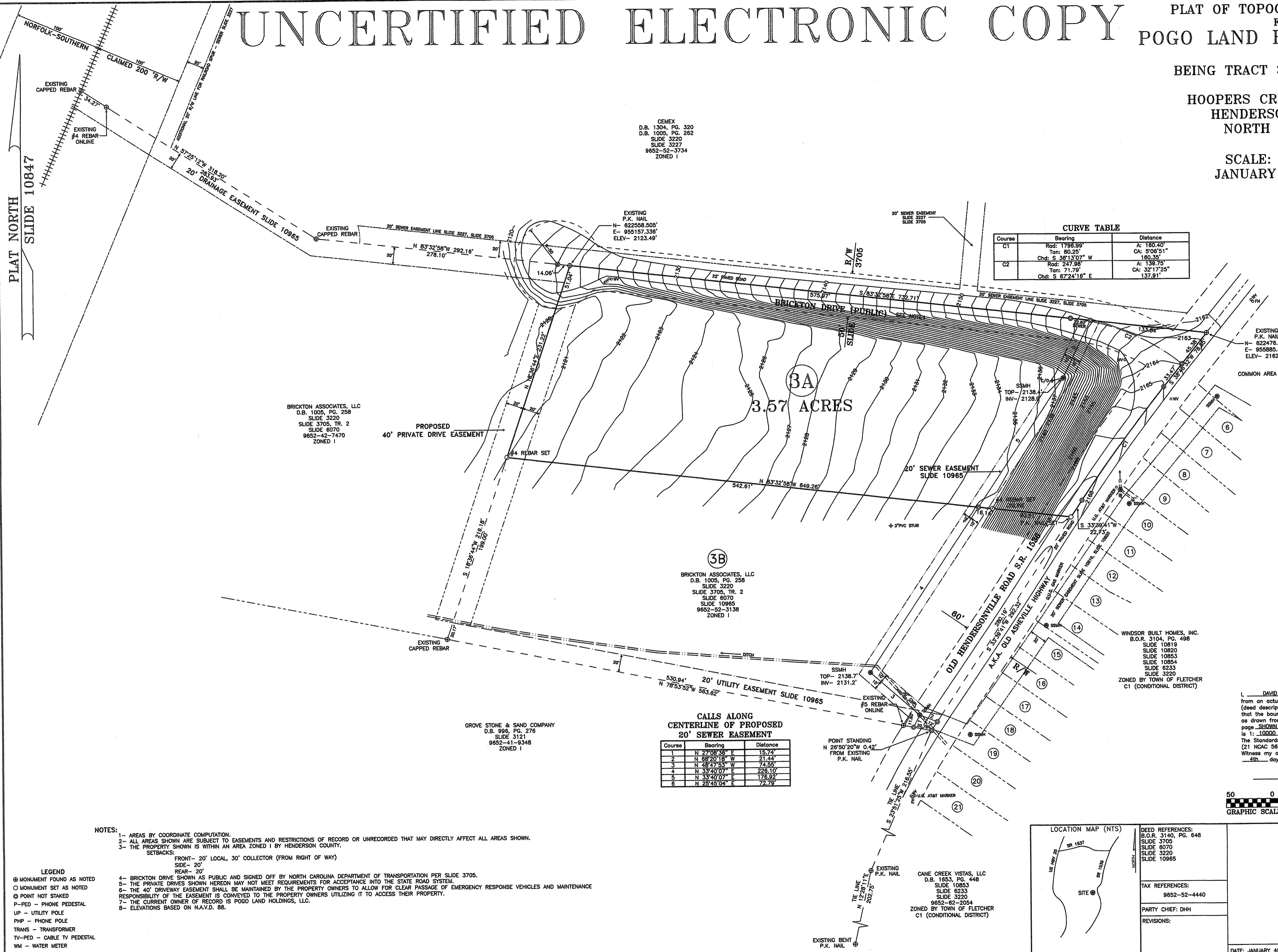
# UNCERTIFIED ELECTRONIC COPY

PLAT OF TOPOGRAPHIC SURVEY  
FOR  
POGO LAND HOLDINGS, LLC

BEING TRACT 3A, SLIDE 10965

HOOPERS CREEK TOWNSHIP  
HENDERSON COUNTY  
NORTH CAROLINA

SCALE: 1" = 50'  
JANUARY 4th, 2018



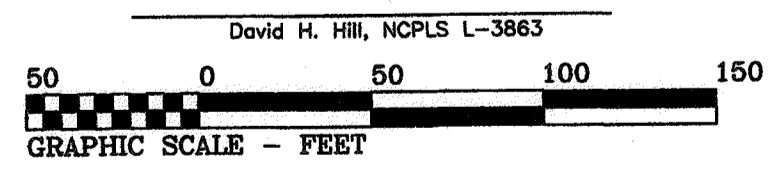
**CURVE TABLE**

Course	Bearing	Distance
C1	Rad: 1795.59'	A: 160.40'
	Tan: 80.25'	CA: 5'09"51"
	Chd: S 38°13'07" W	180.35'
C2	Rad: 247.98'	A: 139.75'
	Tan: 71.79'	CA: 32'17"25"
	Chd: S 67°24'16" E	137.91'

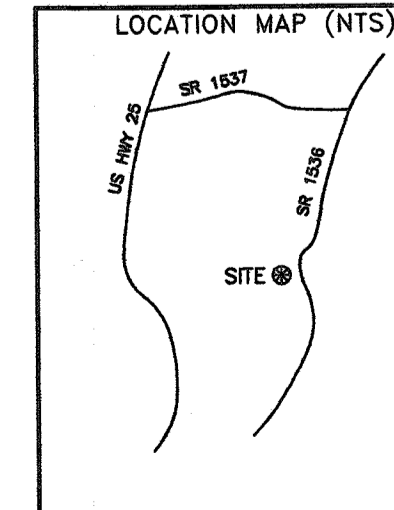
**CALLS ALONG CENTERLINE OF PROPOSED 20' SEWER EASEMENT**

Course	Bearing	Distance
1	N 27°08'58" E	15.74'
2	N 68°20'18" W	21.44'
3	N 48°47'53" W	74.55'
4	N 33°40'07" E	228.10'
5	N 33°40'07" E	176.92'
6	N 25°45'04" E	72.79'

I, DAVID H. HILL, certify that this plot was drawn from an actual survey made under my supervision (dead description recorded in Book SEE, page REFERENCES); that the boundaries not surveyed are clearly indicated as drawn from information found in Book AS, page SECTION; that the ratio of precision as calculated is 1:1,0000; that this plot meets the requirements of The Standards of Practice for Land Surveying in North Carolina (21 NCAC 56.1600). Witness my original signature, registration number and seal this 4th day of JANUARY, A.D., 2018.



- NOTES:**
- 1- AREAS BY COORDINATE COMPUTATION.
  - 2- ALL AREAS SHOWN ARE SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD OR UNRECORDED THAT MAY DIRECTLY AFFECT ALL AREAS SHOWN.
  - 3- THE PROPERTY SHOWN IS WITHIN AN AREA ZONED I BY HENDERSON COUNTY.
- SETBACKS:**  
FRONT- 20' LOCAL, 30' COLLECTOR (FROM RIGHT OF WAY)  
SIDE- 20'  
REAR- 20'
- LEGEND**
- ⊙ MONUMENT FOUND AS NOTED
  - MONUMENT SET AS NOTED
  - ⊙ POINT NOT STAKED
  - P-PED - PHONE PEDESTAL
  - UP - UTILITY POLE
  - PHP - PHONE POLE
  - TRANS - TRANSFORMER
  - TV-PED - CABLE TV PEDESTAL
  - WM - WATER METER
  - WV - WATER VALVE
- 4- BRICKTON DRIVE SHOWN AS PUBLIC AND SIGNED OFF BY NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PER SLIDE 3705.
  - 5- THE PRIVATE DRIVES SHOWN HEREON MAY NOT MEET REQUIREMENTS FOR ACCEPTANCE INTO THE STATE ROAD SYSTEM.
  - 6- THE 40' DRIVEWAY EASEMENT SHALL BE MAINTAINED BY THE PROPERTY OWNERS TO ALLOW FOR CLEAR PASSAGE OF EMERGENCY RESPONSE VEHICLES AND MAINTENANCE RESPONSIBILITY OF THE EASEMENT IS CONVEYED TO THE PROPERTY OWNERS UTILIZING IT TO ACCESS THEIR PROPERTY.
  - 7- THE CURRENT OWNER OF RECORD IS POGO LAND HOLDINGS, LLC.
  - 8- ELEVATIONS BASED ON N.A.V.D. 88.



**DEED REFERENCES:**  
B.O.R. 3140, PG. 648  
SLIDE 3705  
SLIDE 6070  
SLIDE 3220  
SLIDE 10965

**TAX REFERENCES:**  
9852-52-4440


**PARTY CHIEF:** DHH

**REVISIONS:**

**SURVEY BY**  
**HILL AND ASSOCIATES**  
**SURVEYORS, P.A.**  
LICENSE NUMBER: C-1991  
DAVID H. HILL  
N.C.P.L.S. 3863  
403 WEST BLUE RIDGE ROAD  
EAST FLAT ROCK, NORTH CAROLINA 28726  
(828) 693-1409

CHECKED BY: DHH      DRAWING: 201709P1P  
DATE: JANUARY 4th, 2018      DRAWN BY: DHH      FILE: 2017099

**GENERAL NOTES: (APPLICABLE TO ALL SHEETS)**

- BOUNDARY SURVEY PROVIDED BY HILL AND ASSOCIATES SURVEYORS PA.
- CONTOUR ELEVATIONS BASED ON FIELD VERIFIED SURVEY DATA.
- PROJECT TO BE CONSTRUCTED IN 1 PHASE.
- ALL IMPROVEMENTS, MATERIALS, AND METHODS SHALL CONFORM TO THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, LATEST EDITION, UNLESS OTHERWISE NOTED ON THE PLANS OR SUPERSEDED BY ANOTHER JURISDICTION HAVING AUTHORITY (JHA).
- ALL PAVEMENT MARKINGS SHALL CONFORM TO NCDOT STANDARDS.
- ALL TRAFFIC CONTROL SIGNS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES STANDARDS, LATEST EDITION.
- THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY MONUMENTATION AND PRIMARY CONTROL. ANY SUCH POINTS WHICH THE CONTRACTOR BELIEVES WILL BE DESTROYED SHALL HAVE OFFSET POINTS ESTABLISHED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY MONUMENTATION DESTROYED BY THE CONTRACTOR SHALL BE REESTABLISHED AT HIS EXPENSE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO: A.) PREVENT ANY DAMAGE TO PRIVATE PROPERTY AND PROPERTY OWNER'S POLES, FENCES, SHRUBS, ETC. B.) PROTECT ALL UNDERGROUND UTILITIES. C.) NOTIFY ALL UTILITY COMPANIES AND FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO START OF CONSTRUCTION. NOTIFY OWNER OF ANY POTENTIAL CONFLICTS WHICH MAY EXIST BETWEEN THE EXISTING UTILITIES AND CONSTRUCTION PLANS.
- BARRICADING AND TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO THE NCDOT STANDARD SPECIFICATIONS AND DRAWINGS. PEDESTRIAN AND VEHICULAR TRAFFIC FLOW SHALL BE MAINTAINED DURING ALL PHASES OF THE CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC SAFETY MEASURES FOR WORK ON PROJECT.
- CONTRACTOR SHALL MAINTAIN DRAINAGE AT ALL TIMES DURING CONSTRUCTION. PONDING OF WATER IN STREETS, DRIVES, TRUCK COURTS, TRENCHES, ETC. WILL NOT BE ACCEPTABLE.
- ANY DAMAGES THAT MAY OCCUR TO REAL PROPERTY OR EXISTING IMPROVEMENTS SHALL BE RESTORED BY THE CONTRACTOR TO AT LEAST THE SAME CONDITION THAT THE REAL PROPERTY OR EXISTING IMPROVEMENTS WERE IN PRIOR TO THE DAMAGES. THIS RESTORATION SHALL BE SUBJECT TO THE OWNER'S APPROVAL; HOWEVER, THIS RESTORATION SHALL NOT BE A BASIS FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR. RESTORATION SHALL INCLUDE, BUT NOT BE LIMITED TO, REGRASSING, REVEGETATION, REPLACING FENCES, REPLACING TREES, ETC.
- WHERE PRESENT, CONTRACTOR SHALL MAINTAIN EXISTING SANITARY SEWER AND WATER SERVICE AT ALL TIMES DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH UTILITY COMPANIES AND ADJUSTMENT OF EXISTING SANITARY SEWER CLEANOUTS, WATER METERS AND ANY OTHER APPURTENANCES TO NEW GRADE AS REQUIRED.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL STORM WATER POLLUTION PREVENTION LAWS AND ORDINANCES.
- PAVEMENT REMOVAL AND REPAIR SHALL CONFORM TO NCDOT REQUIREMENTS. ALL SAWCUTS SHALL BE FULL DEPTH CUTS. CONTRACTOR SHALL MAKE EFFORTS TO PROTECT CONCRETE EDGES. ANY LARGE SPALLED OR BROKEN EDGES SHALL BE REMOVED BY SAWCUTTING PAVEMENT PRIOR TO REPLACEMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES THROUGH THE COMPLETION OF THE PROJECT AND THROUGH THE ESTABLISHMENT OF VEGETATION SUFFICIENT TO PROVIDE EROSION PROTECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES PRIOR TO PROJECT CLOSE-OUT.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM ALL REGULATORY AUTHORITIES.
- ALL DISTURBED AREAS ARE TO BE STABILIZED AND SEEDED WITHIN 14 DAYS OF DISTURBANCE UNLESS OTHERWISE NOTED.
- LIGHTING MITIGATION IS REQUIRED FOR ALL OUTDOOR LIGHTING. 

**PAVING:**

- ALL CONCRETE CURB, WALK, AND HARDSCAPE SURFACES SHALL BE CONSTRUCTED ON 6" MIN. OF COMPACTED ABC.
- NEW CONCRETE WALK INSTALLED ADJACENT TO EXISTING CONCRETE CURB AND/OR WALK SHALL BE DOWELED OR OTHERWISE PHYSICALLY CONNECTED TO PREVENT DIFFERENTIAL MOVEMENT. SEE DETAIL.
- UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- CONTRACTOR SHALL COVER ALL CASTINGS WITH TAR PAPER, OR SIMILAR PROTECTION, PRIOR TO PAVING. CASTINGS WITH EVIDENCE OF PAVING MATERIALS SHALL BE CLEANED BY THE CONTRACTOR WITH NO ADDITIONAL COST TO THE CONTRACT.

**TESTING:**

- THIRD PARTY TESTING SHALL BE REQUIRED FOR THE SUBGRADE, AGGREGATE BASE COURSE (ABC) AND TRENCH BACKFILL.
- SUBGRADE MOISTURE DENSITY TESTING SHALL BE PROVIDED AT ONE TEST PER SOIL TYPE AND COMPACTION TESTING AT ONE TEST PER 400 SF. ABC TESTING SHALL INCLUDE 1 MOISTURE-DENSITY TEST PER SOURCE AND COMPACTION TESTING AT ONE TEST PER 400 SF.
- TRENCH BACKFILL SHALL INCLUDE ONE MOISTURE-DENSITY TEST PER SOIL TYPE AND ONE COMPACTION TESTING AT ONE PER 400 SF PER LIFT.

**GRADING NOTES: (APPLICABLE TO ALL SHEETS)**

- UNLESS OTHERWISE NOTED IN THESE PLANS, SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH APPENDIX J OF THE NC BUILDING CODE.
- THE SURFACE OF AREAS TO BE GRADED SHALL BE PREPARED TO RECEIVE FILL BY REMOVING VEGETATION, TOPSOIL, AND OTHER UNSUITABLE MATERIALS, AND SCARIFYING THE GROUND TO PROVIDE A BOND WITH THE FILL MATERIAL.
- WHERE EXISTING GRADE EXCEEDS 5:1 (HORIZONTAL:VERTICAL) AND THE DEPTH OF FILL EXCEEDS 5 FEET, BENCHING SHALL BE PROVIDED. A 2-FOOT DEEP BY 10-FOOT WIDE KEY SHALL BE PROVIDED AT THE TOE OF THE FILL SLOPE. REFER TO NC BUILDING CODE SECTION 107 FOR ADDITIONAL DETAIL.
- CERTIFICATION OF CUT AND FILL SLOPES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE BY A GEOTECHNICAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF NORTH CAROLINA. UNLESS OTHERWISE NOTED, ALL CUT AND FILL SLOPES PROPOSED BY THESE PLANS SHALL BE 2:1 (HORIZONTAL:VERTICAL) OR FLATTER.
- CUT AND FILL SLOPES (EMBANKMENTS) SHALL BE CONSTRUCTED IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATION SECTION 235 OR THE GEOTECHNICAL (SOILS) REPORT RECOMMENDATIONS, WHICHEVER IS MORE RESTRICTIVE. AT A MINIMUM, ALL FILL SLOPES SHALL BE PLACED IN 10-INCH MAXIMUM LIFTS COMPACTED TO NOT LESS THAN 95 PERCENT DENSITY (STANDARD PROCTOR). CONTRACTOR SHALL ARRANGE FOR INDEPENDENT COMPACTION TESTING RESULTS TO BE PAID FOR BY THE OWNER/DEVELOPER.
- NO GRADING SHALL OCCUR WITHIN 2 FEET OF A PROPERTY LINE WITHOUT WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER.
- UNLESS OTHERWISE INDICATED IN THESE PLANS TERRACES SHALL BE PROVIDED AS FOLLOWS: WHERE GRADES EXCEED 3:1 (HORIZONTAL:VERTICAL), TERRACES AT LEAST 6 FEET IN WIDTH SHALL BE CONSTRUCTED AT NOT MORE THAN 30-FOOT VERTICAL INTERVALS ON ALL CUT OR FILL SLOPES. SWALES SHALL BE PROVIDED ON TERRACES IN ACCORDANCE WITH NC BUILDING CODE SECTION J109.
- FINE GRADING AND SEEDING SHALL OCCUR AT ALL AREAS DISTURBED BY THE WORK OF THE PROJECT THAT ARE NOT PROGRAMMED FOR PAVEMENT OR BUILDINGS.
- FINE GRADING SHALL INCLUDE APPLICATION OF 2-3 INCHES OF TOPSOIL AND REMOVAL OF ALL DEBRIS (ROOTS, ROCKS, TRASH, AND OTHER FOREIGN MATERIAL) LARGER THAN 2 INCHES IN ANY DIMENSION. FINE GRADING SHALL ACHIEVE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND IN GENERAL ACCORDANCE WITH THE DRAINAGE PLANS. LANDSCAPE AREAS SHALL NOT BE SLOPED LESS THAN 2%.
- GROUND COVER REQUIREMENTS:  
ALL DISTURBED AREAS SHALL BE PLANTED WITH AN APPROVED GROUND COVER WITHIN 14 CALENDAR DAYS. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1 MUST BE STABILIZED IN 7 DAYS. SLOPES 50' OR GREATER IN LENGTH MUST BE STABILIZED WITHIN 7 DAYS EXCEPT WHEN THE SLOPE IS FLATTER THAN 4:1. SLOPES LESS THAN 50' MUST BE STABILIZED IN 14 DAYS EXCEPT WHEN THE SLOPE IS STEEPER THAN 3:1. THEN THE 7 DAY REQUIREMENT APPLIES. INSTALL TEMPORARY SEEDING ON ALL AREAS THAT WILL BE LEFT IDLE FOR MORE THAN 14 DAYS. HARDWOOD MULCH IS AN ACCEPTABLE TEMPORARY COVER BUT MAY NOT BE BLENDED INTO THE SUBGRADE AND WILL BE REQUIRED TO BE REMOVED PRIOR TO CONTINUATION OF THE WORK.  
FOR PROJECT AREAS WITHIN THE "HIGH QUALITY WATER ZONE" (15A NCAC 04A.0105), STABILIZATION SHOULD BE ACHIEVED AS SOON AS PRACTICABLE BUT NO LATER THAN 7 DAYS.
- DUST CONTROL:  
CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST GENERATED BY THE WORK OF THE PROJECT. INSTALL TEMPORARY OR PERMANENT SURFACE STABILIZATION MEASURES IMMEDIATELY AFTER COMPLETING LAND DISTURBANCE. LANDSCAPE AREAS SHALL BE PLANTED AND STABILIZED WITH MULCH OR GROUND COVER AS SOON AS POSSIBLE. AREAS SUBJECT TO TRAFFIC SHALL BE STABILIZED WITH THE APPLICATION OF WATER (SPRINKLING), SPRAY-ON ADHESIVES (E.G. ASPHALT EMULSION, ETC.), CALCIUM CHLORIDE, OR STONE.  
DUST CONTROL SHALL INCLUDE THAT CAUSED BY SAW-CUTTING AND SIMILAR DUST GENERATING ACTIVITIES. WIND FENCE OR SIMILAR BARRIERS MAY BE REQUIRED DURING PARTICULARLY WINDY, DRY CONDITIONS. TILLAGE (I.E. DEEP PLOWING TO BRING CLODS TO THE SURFACE) MAY BE USED AS AN EMERGENCY MEASURE FOR LARGE OPEN AREAS.  
DUST CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DRY WEATHER UNTIL ALL DISTURBED AREAS ARE STABILIZED.

**SEEDING NOTES: (APPLICABLE TO ALL SHEETS)**

- SEED MIXES:  
UNLESS OTHERWISE SPECIFIED ON THE LANDSCAPE PLAN, SEEDING SHALL CONSIST OF A MIX INCLUDING ALL OF THE FOLLOWING SPECIES:  
KENTUCKY BLUEGRASS - 1 LB/1000 SF  
TALL FESCUE - 5 LB/1000 SF  
FINE FESCUE - 1 LB/1000 SF  
ACCEPTABLE CULTIVARS OF THE ABOVE GRASSES ARE LISTED IN CAROLINA LAWN: A GUIDE TO MAINTAINING QUALITY TURF IN THE LANDSCAPE, TABLE 3. COOL-SEASON GRASS CULTIVARS WITH EXCELLENT PERFORMANCE IN NORTH CAROLINA AS PUBLISHED BY THE NORTH CAROLINA COOPERATIVE EXTENSION. THIS DOCUMENT IS AVAILABLE ONLINE AT: [HTTP://WWW.TURFFILES.NCSU.EDU/PDF/FILES/004175/CAROLINA\\_LAWNS.PDF](http://www.turffiles.ncsu.edu/pdf/files/004175/carolina_lawns.pdf) OR FROM THE ENGINEER. CONTRACTOR SHALL PROVIDE LABELS FOR THE SEED MIXES TO THE ENGINEER FOR APPROVAL PRIOR TO APPLICATION.
- FERTILIZING:  
UNLESS OTHERWISE DETERMINED BY A SOIL TEST FOR THE SUBJECT PROPERTY, FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATES:  
PRIOR TO PLANTING, SOIL SHALL BE PREPARED WITH THE FOLLOWING:  
GROUND LIMESTONE: 75 LB/1000 SF  
N-P-K STARTER FERTILIZER AT A RATE OF 1 LB NITROGEN/1000 SF  
AFTER PLANTING, SEEDED AREAS SHALL BE FERTILIZED A SECOND TIME, APPROXIMATELY SIX TO EIGHT WEEKS AFTER GERMINATION, USING A COMPLETE N-P-K TURF-GRADE FERTILIZER APPLIED AT A RATE OF 1 LB NITROGEN/1000 SF. THE FERTILIZER SHALL HAVE A 3-1-2 OR 4-1-2 ANALYSIS.  
CONTRACTOR SHALL PROVIDE LABELS FOR THE FERTILIZER TO THE ENGINEER FOR APPROVAL PRIOR TO APPLICATION.
- MOWING:  
CONTRACTOR SHALL BE RESPONSIBLE FOR MOWING GRASS THROUGHOUT THE DURATION OF THE PROJECT. GRASS SHALL BE CUT TO A HEIGHT NO LESS THAN 2.5" WHEN IT HAS ACHIEVED A HEIGHT OF APPROXIMATELY 4". MOWING WITH A SHARP, MULCHING TYPE BLADE IS PREFERRED AND CLIPPINGS MAY BE LEFT IN PLACE. WHEN GRASS IS ALLOWED TO EXCEED THE PREFERRED HEIGHT FOR MOWING OR IF THE GRASS IS CUT DURING WET CONDITIONS, THE CLIPPINGS SHALL BE BAGGED OR RAKED AND REMOVED FROM THE SITE.
- WATERING:  
CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING A CONTINUOUS, CLOSE STAND OF GRASS WITH NO GAPS OR BARE SPOTS EXCEEDING A HAND'S BREADTH. WHEN REQUIRED TO GERMINATE OR SUSTAIN THE GRASS UNTIL THE PROJECT IS COMPLETE, WATER SHALL BE APPLIED IN THE MORNING AT A RATE OF 0.5 INCH EVERY THREE TO FOUR DAYS.

**LANDSCAPE NOTES: (APPLICABLE TO ALL SHEETS)**

- APPLICABLE STANDARDS: ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. THE OWNER SHALL RECEIVE TAGS FROM EACH PLANT SPECIES AND A LIST OF PLANT SUPPLIERS. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL MEET THE NORMAL REQUIREMENTS FOR THE VARIETY OR CULTIVAR PER THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION PUBLISHED BY THE AMERICANHORT.
- SUBSTITUTIONS: NO SUBSTITUTIONS OF PRODUCTS, PLANT TYPES OR SIZES SHALL BE MADE WITHOUT THE APPROVAL OF THE OWNER, LANDSCAPE ARCHITECT AND COUNTY REVIEW AGENCY, IF APPLICABLE. REQUESTS FOR SUBSTITUTIONS SHALL STATE THE REASONS FOR THE SUBSTITUTION REQUEST, THE SUGGESTED ALTERNATE, AND THE CHANGES IN COST.
- QUANTITIES: QUANTITIES OF PLANTS AS SHOWN BY PLANT SYMBOL ON THE PLAN SHALL GOVERN OVER THE QUANTITIES SHOWN IN THE PLANT LIST. THE CONTRACTOR IS TO VERIFY PLANT LIST TOTALS WITH QUANTITIES SHOWN ON PLAN.
- WARRANTY: WARRANT EACH PLANT TO REMAIN ALIVE AND BE IN HEALTHY, VIGOROUS CONDITION FOR A PERIOD OF 1 YEAR AFTER COMPLETION AND ACCEPTANCE OF THE PLANT MATERIAL AND INSTALLATION. INSPECTION OF PLANTS WILL BE MADE BY THE LANDSCAPE ARCHITECT OR ENGINEER AT THE EXPIRATION OF THE ONE 1 YEAR WARRANTY PERIOD. ALL PLANTS THAT ARE MISSING OR NOT IN A LIVE, HEALTHY GROWING CONDITION SHALL BE LISTED AND THE CONTRACTOR SHALL BE HELD LIABLE FOR REPLACEMENT WITH EQUIVALENT PLANTS OF SAME SPECIES AND SIZE.
- ESTABLISHMENT PERIOD: THE PLANT ESTABLISHMENT PERIOD SHALL BE THE PERIOD OF TIME FROM THE BEGINNING OF THE CONTRACT TO THE END OF THE PLANT MATERIAL WARRANTY AND FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT OR ENGINEER.
- MAINTENANCE: THE CONTRACTOR SHALL CARE FOR ALL PLANTS DURING THE PLANT ESTABLISHMENT PERIOD AS MAY BE NECESSARY TO KEEP PLANTS IN A LIVE, HEALTHY GROWING CONDITION. THESE DUTIES SHALL INCLUDE :  
A. PRUNING, CULTIVATING, REMOVAL OF WEEDS FROM PLANTING BEDS AND MULCH AREAS; REMOVE ALL WEEDS PRIOR TO REVIEW FOR COMPLETION.  
B. WATERING AT THE MINIMUM RATE RECOMMENDED BY THE NURSERY TO ENHANCE EARLY ROOT GROWTH.  
C. ADJUSTMENT OF STAKES AND TIES TO MAINTAIN PLANT IN UPRIGHT AND PLUMB CONDITION.  
D. RE-SET SETTLED PLANTS TO PROPER GRADES AND POSITION. RESTORE PLANTING SAUCER AND MULCH; ADDING PLANTING SOIL AND MULCH AS MAY BE REQUIRED.
- PLANT CONDITION: ALL PLANTS SHALL BE IN A LIVE, HEALTHY, AND GROWING CONDITION BOTH AT THE DATE OF COMPLETION BEFORE ACCEPTANCE OF THE PROJECT BY THE JURISDICTIONAL ENGINEER AND AT THE END OF THE PLANT ESTABLISHMENT PERIOD.

**MATERIALS**

- PLANTS: ALL PLANTS SHALL BE NURSERY GROWN. THEY SHALL BE TYPICAL OF THEIR SPECIES, CULTIVAR OR VARIETY. THEY SHALL BE SOUND, HEALTHY AND VIGOROUS AND SHALL BE FREE OF DISEASE AND ANY EVIDENCE OF INSECTS. IF IN LEAF, THEY SHALL BE DENSELY FOLIATED, WITHOUT LEAF SPOTS, DISCOLORATION, CURL, WILTING, CHLOROSIS OR DAMAGE. THEY SHALL HAVE HEALTHY, WELL-DEVELOPED ROOT SYSTEMS.
- MINIMUM SIZES: SIZES SPECIFIED IN THE PLANT LIST ARE THE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE JUDGED. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH.
- PLANT HARDINESS: THE SUPPLIER OF ALL PLANTS SHALL CERTIFY THAT THE ORIGIN OF THE PLANTS IS FROM HARDINESS ZONE 5 THROUGH 7 ONLY.
- MULCH: IS TO BE DOUBLE SHREDDED HARDWOOD MULCH FOR TREES AND SHRUBS
- TOPSOIL: ACCEPTABLE TOPSOIL SHALL BE FERTILE, WEED FREE, FRIABLE NATURAL LOAM, UNIFORM IN COMPOSITION, FREE OF STONES, LIMBS, PLANTS AND THEIR ROOTS, DEBRIS AND OTHER EXTRANEUS MATTER OVER 1" IN DIAMETER. THE SOIL SHALL BE CAPABLE OF SUSTAINED PLANT GROWTH AND HAVE A 5% MINIMUM ORGANIC CONTENT. IN SITUATIONS REQUIRING A CUSTOM MIX OR STRUCTURAL SOIL, SPECIFICATIONS WILL BE PROVIDED BY THE LANDSCAPE ARCHITECT.
- SOIL TESTING: PRIOR TO PLANTING, EXISTING SOILS AND TOPSOILS TO BE SPREAD SHALL BE TESTED BY AN APPROVED SOIL TESTING LABORATORY OR AGRICULTURAL EXTENSION SERVICE LABORATORY. TESTS SHALL INCLUDE MECHANICAL AND CHEMICAL ANALYSIS. A SOILS REPORT SHALL INCLUDE RECOMMENDATIONS FOR THE ADDITION OF FERTILIZER AND ADJUSTMENTS TO PH OR OTHER AMENDMENTS AND INDICATE THE AMOUNT OF ORGANIC MATTER. A WRITTEN REVIEW OF THE ANALYSIS IS REQUIRED TO BE SUBMITTED TO THE OWNER PRIOR TO INSTALLATION.

**PERMITTING SUBMITTAL**

- LANDSCAPE INSTALLATION
- VERIFY GRADES: PRIOR TO PLANTING, THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTED GRADES ARE AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE OWNER AND LANDSCAPE ARCHITECT IF ADJUSTMENT TO PLANT MATERIAL IS REQUIRED.
  - STAKE PLANT LOCATIONS: PRIOR TO PLANTING, THE CONTRACTOR SHALL LAY OUT THE EXTENT OF THE PLANT BEDS AND THE PROPOSED LOCATION FOR B&B MATERIAL FOR REVIEW.
  - PLANT BED EDGES/LINES: GROUPS OF SHRUBS, PERENNIALS AND GROUNDCOVERS SHALL BE PLACED IN A CONTINUOUS MULCH BED WITH SMOOTH CONTINUOUS LINES. ALL MULCHED BED EDGES SHALL BE CURVILINEAR IN SHAPE FOLLOWING THE CONTOUR OF THE PLANT MASS.
  - FIELD ADJUSTMENTS: THE CONTRACTOR IS TO FINELY ADJUST PLANT LOCATIONS IN THE FIELD AS NECESSARY TO BE CLEAR OF DRAINAGE SWALES AND UTILITIES. FINISHED PLANTING BEDS SHALL BE GRADED SO AS NOT TO IMPEDE DRAINAGE AWAY FROM BUILDINGS. SHRUBS PLANTED NEAR HVAC UNITS TO BE LOCATED SO THAT SHRUBS AT MATURITY WILL MAINTAIN 1 FOOT OF AIRSPACE BETWEEN UNIT AND PLANT. ANY PLANTING WHICH IS SHOWN ADJACENT TO CONDENSER UNITS SHALL BE PLANTED AS REQUIRED TO SCREEN THE UNIT. SHOULD THE UNIT BE INSTALLED IN A LOCATION DIFFERENT FROM THAT ON THE PLAN, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE LANDSCAPE ARCHITECT, INSTALL THE MATERIALS IN THE NEW LOCATION AND ADJUST ADJACENT PLANTINGS ACCORDINGLY.
  - PLANTING: BACKFILL THE PLANTING HOLES WITH IN-SITU SOIL MATERIAL REMOVED FOR PLANTING PIT. FOLLOWING BACKFILL, WATER TO THE POINT OF SATURATION AND TAMP TO COMPACT BACKFILL. ADD EXISTING SOIL TO BRING THE FINAL GRADE OF THE PLANTING HOLE TO THE SURROUNDING SOIL SURFACE. RAKE THE UNUSED SOIL OUTSIDE OF THE PLANTING HOLE TO EVENLY DISTRIBUTE EXCESS THROUGHOUT THE BED. TAKING CARE NOT TO CREATE A SOIL MOUND OR TO ALTER THE EXISTING GRADE.
  - SLOPES: SHRUBS, GROUNDCOVERS AND PERENNIALS PLANTED ON SLOPES GREATER THAN 3:1 SHALL HAVE A NATURAL FIBER GEOTEXTILE WOVEN MESH MATERIAL PINNED TO THE GROUND PER MANUFACTURER'S SPECIFICATIONS. GROUNDCOVER BEDS SHALL HAVE 2" OF GROUND LEAF COMPOST SPREAD ONTO SLOPE PRIOR TO PLACING MESH. EXCAVATE PLANT PITS THROUGH MESH.

**CONSTRUCTION SEQUENCE (APPLICABLE TO ALL SHEETS):**

- PROJECT DESCRIPTION: THE PURPOSE OF THIS PROJECT IS TO DEVELOP A SMALL INDUSTRIAL FACILITY THE FACILITY WILL INCLUDE A METAL BUILDING (~7,500 SF), SMALL PARKING AREA (15 SPACES) WITH LOADING AREA AND DRIVEWAY TO ACCESS THE SITE. THE ANTICIPATED DISTURBANCE IS .87 AREAS WHICH FALLS UNDER THE ONE ACRE THRESHOLD FOR THE NEED OF A FORMAL EROSION AND SEDIMENT CONTROL PLAN. THE SITE IS 3.57 ACRES. DISTURBANCE WILL BE LIMITED TO 24% OF THE TOTAL SITE AREA. ALL SURROUNDING AREAS WILL BE PRESERVED IN THEIR NATURAL STATE.
- THE SITE IS LOCATED IN A APPROVED INDUSTRIAL SUBDIVISION AND IS CURRENTLY UNDEVELOPED. THERE IS AN LARGE BANK THAT SLOPES INWARD ALONG THE NORTHEAST AND EASTERN BOUNDARIES OF THE PROPERTY. THE PROJECT AREA HAS A GENTLE SLOPE OF LESS THAN 5% SLOPING FROM THE EAST TO WEST. THE MAJORITY OF THE VEGETATION ON THE SITE CONSISTS OF GRASSES.
- ADJACENT PROPERTIES ARE ALSO ZONED INDUSTRIAL AND ARE MAINLY UNDEVELOPED. DRAINAGE AREA FOR THE SITE IS MOSTLY CONTAINED WITHIN THE PROPERTY.

**PLANNED PRACTICES:**

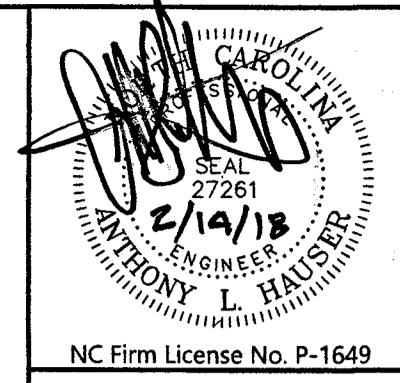
EVEN THOUGH THIS PROJECT FALLS UNDER THE REQUIREMNT FOR AN EROSION CONTROL PLAN AND PERMIT WITH HENDERSON COUNTY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN AND PROVIDE EROSION AND SEDIMENTATION CONTROL MEASURES TO CONTAIN SEDIMENT ON-SITE. ADDITIONAL MEASURES MY BE NEEDED BETWEEN THE TIME THE GRADING OPERATION IS BEGUN AND THE TIME IT IS COMPLETED.

INITIATE THE CLEARING (STRIPPING) AND GRADING OPERATION. MAINTAIN ALL SEDIMENT CONTROL DEVICES THROUGHOUT THE CONSTRUCTION PHASE AND UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.

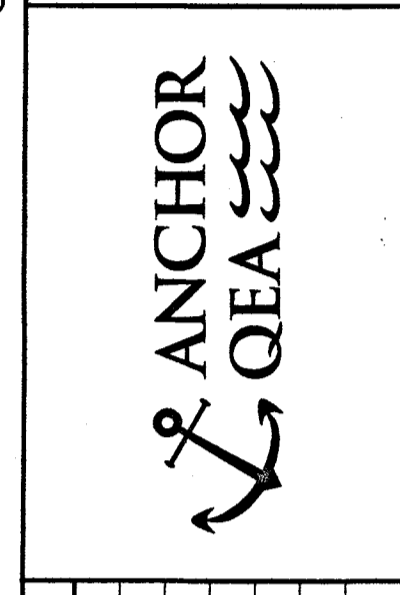
INSTALL PRINCIPAL STORM DRAINAGE STYSTEMS. INSTALL CULVERT AND DRAINAGE SWALES AND SEEDED OR OTHERWISE STABILIZED WITHIN 14 CALENDAR DAYS OF GRADING.

AFTER CONSTRUCTION AND ALL DISTURBED AREA HAVE BEEN STABILIZED, CONTRACTOR SHALL REMOVE ALL TEMPORARY SEDIMENT CONTROL MEASURES.

REQUEST FINAL APPROVAL FROM ENGINEER AND JURISDICTION HAVING AUTHORITY.



DESIGNED BY: I. HAUSER & M. DALE  
DRAWN BY: I. HAUSER & M. DALE  
CHECKED BY: M. DALE  
APPROVED BY: I. HAUSER  
SCALE: 1" = 30'  
DATE: 1/26/2018  
NC Firm License No. P-1649



REVISIONS		DESCRIPTION	APPROVED	DATE
REV	DATE	BY	APPROVED	DATE
1	2/14/18	ALH	ALH	

**GENERAL NOTES**

LIGHTHEART GEAR  
HENDERSON COUNTY  
FLETCHER, NC

**C-2.0**

SHEET NO. 3 OF 9

PROJ. #: TBD

SHEET NOTES:  
 1) ACCESSIBLE PARKING SPACE AND MANEUVERING ISLE SHALL NOT EXCEED 2% IN ANY DIRECTION.  
 2) NO DUMPSTER OR ENCLOSURE REQUIRED. PRIVATE GARBAGE COLLECTION WILL BE PROVIDED BY OWNER.



CEMEX  
 D.B. 1304, PG. 320  
 D.B. 1005, PG. 262  
 SLIDE 3220  
 SLIDE 3227  
 9652-52-3734  
 ZONED I

**DATA BLOCK**

PROPERTY OWNER:  
 POGO LAND HOLDINGS, LLC  
 10 ASHBROOK MEADOWS  
 FLETCHER, NC 28732  
 CONTACT PERSON:  
 MARC PENANSKY  
 PHONE NUMBER: 281-461-6815  
 DESIGN PROFESSIONAL:  
 ANCHOR QEA OF NORTH CAROLINA, PLLC.  
 231 HAYWOOD STREET  
 ASHEVILLE, NC 28801  
 CONTACT: TONY HAUSER, PLA, PE  
 (828) 281-3350  
 PROJECT NAME:  
 LIGHTHEART GEAR  
 PROJECT LOCATION:  
 LOT 3A - BRICKTON INDUSTRIAL SUBDIVISION  
 OLD HENDERSONVILLE ROAD  
 HOOPERS CREEK TOWNSHIP  
 HENDERSON COUNTY, NC  
 PIN #: 9652-52-4440  
 ZONING DISTRICT: I (INDUSTRIAL)  
 PROPOSED USE: INDUSTRIAL SEWING FACILITY  
 PROPERTY SIZE: 3.36 ACRES  
 TOTAL DISTURBED AREA: 0.87 ACRES  
 ESTIMATED EARTH WORK VOLUMES:  
 CUT: 157 CY  
 FILL: 1452 CY  
 BALANCE: -1295 CY  
 FILL FACTOR OF 1.15 ADDED  
 EARTHWORK VOLUMES INCLUDE IN SITU TOPSOIL  
 BUILDINGS:  
 PROPOSED BUILDING (1 STORY): 7,520 SF

**PERMITTING SUBMITTAL DEVELOPMENT REQUIREMENTS**

BUILDING AREA: 7,520 SF  
 REQUIRED PARKING - COMMERCIAL:  
 1 SPACE/500SF = 15 SPACES  
 TOTAL SPACES PROVIDED= 15  
 (INCLUDING 1 ACCESSIBLE SPACE)  
 REQUIRED LANDSCAPING  
 PARKING LOT:  
 1 TREE/5 PARKING SPACES = 3 TREES  
 TREES PROVIDED= 3

ONE INCH  
 AT FULL SIZE, IF NOT ONE  
 INCH SCALE ACCORDINGLY

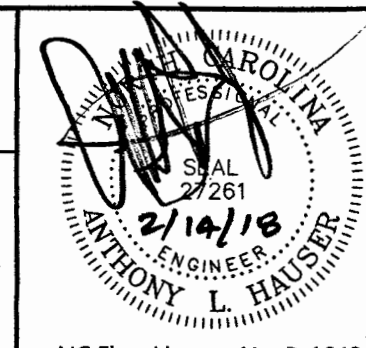


Know what's Below.  
 Call before you dig.



NORTH

0 30' 60'  
 1"=30'



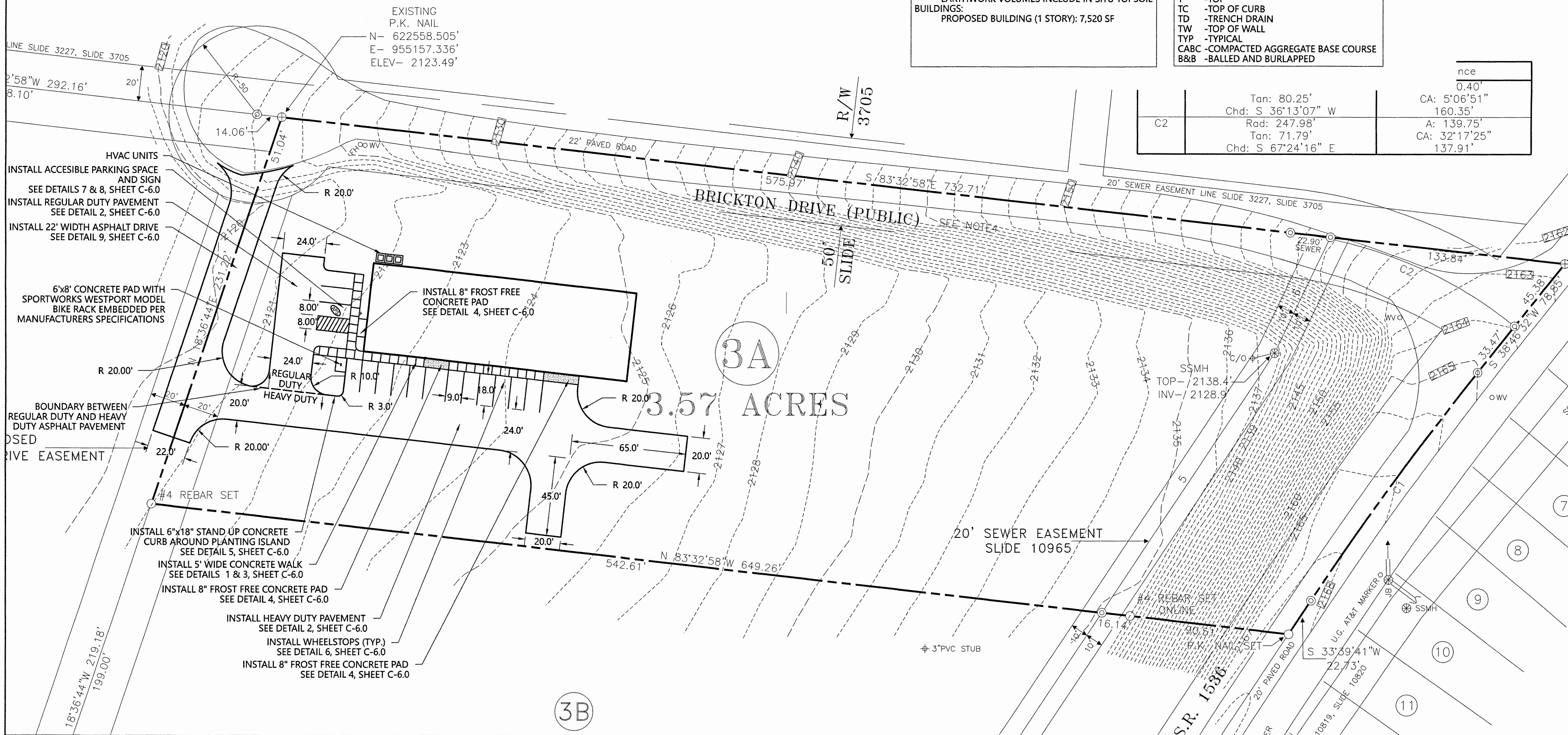
NC Firm License No. P-1649

DESIGNED BY: I. HAUSER & M. DALE  
 DRAWN BY: I. HAUSER & M. DALE  
 CHECKED BY: J.M. DALE  
 APPROVED BY: I. HAUSER  
 SCALE: 1"=30'  
 DATE: 1/26/2018

**ABBREVIATIONS TABLE**

B	-BOTTOM
BC	-BOTTOM OF CURB
BW	-BOTTOM OF WALL
DS	-DOWNSPOUT
EOP	-EDGE OF PAVEMENT
EX	-EXISTING
HP	-HIGH POINT
INV	-INVERT
LF	-LINEAR FEET
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T	-TOP
TC	-TOP OF CURB
TD	-TRENCH DRAIN
TW	-TOP OF WALL
TYP	-TYPICAL
CABC	-COMPACTED AGGREGATE BASE COURSE
B&B	-BALLED AND BURLAPPED

	Tan: 80.25'	CA: 5'06'51"
	Chd: S 36'13'07" W	160.35'
	Rad: 247.98'	A: 139.75'
	Tan: 71.79'	CA: 32'17'25"
	Chd: S 67'24'16" E	137.91'



HVAC UNITS  
 INSTALL ACCESSIBLE PARKING SPACE AND SIGN SEE DETAILS 7 & 8, SHEET C-6.0  
 INSTALL REGULAR DUTY PAVEMENT SEE DETAIL 2, SHEET C-6.0  
 INSTALL 22' WIDTH ASPHALT DRIVE SEE DETAIL 9, SHEET C-6.0

6'x8' CONCRETE PAD WITH SPORTWORKS WESTPORT MODEL BIKE RACK EMBEDDED PER MANUFACTURERS SPECIFICATIONS

BOUNDARY BETWEEN REGULAR DUTY AND HEAVY DUTY ASPHALT PAVEMENT  
 DRIVE EASEMENT

INSTALL 6"x18" STAND UP CONCRETE CURB AROUND PLANTING ISLAND SEE DETAIL 5, SHEET C-6.0  
 INSTALL 5' WIDE CONCRETE WALK SEE DETAILS 1 & 3, SHEET C-6.0  
 INSTALL 8" FROST FREE CONCRETE PAD SEE DETAIL 4, SHEET C-6.0  
 INSTALL HEAVY DUTY PAVEMENT SEE DETAIL 2, SHEET C-6.0  
 INSTALL WHEELSTOPS (TYP.) SEE DETAIL 6, SHEET C-6.0  
 INSTALL 8" FROST FREE CONCRETE PAD SEE DETAIL 4, SHEET C-6.0

REV	DATE	BY	APP'D	DESCRIPTION
1	1/27/18	IAH	IAH	ADDED NOTE

**SITE PLAN**  
 LIGHTHEART GEAR  
 HENDERSON COUNTY  
 FLETCHER, NC

**C-3.0**  
 SHEET NO. 4 OF 9  
 PROJ. #: TBD

DEVELOPMENT REQUIREMENTS

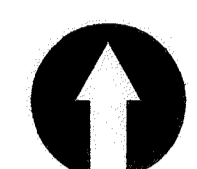
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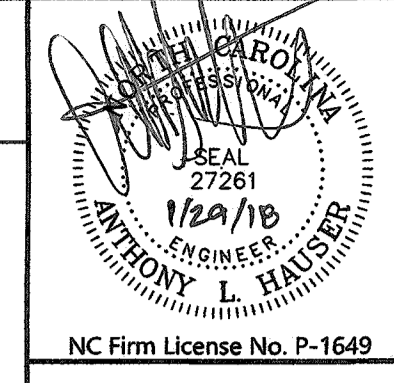
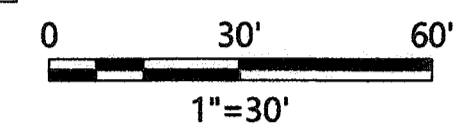
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Know what's below.  
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NORTH



DESIGNED BY: J. HAUSER & M. DALE  
 DRAWN BY: J. HAUSER & M. DALE  
 CHECKED BY: M. DALE  
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 POGO LAND HOLDINGS, LLC  
 10 ASHBROOK MEADOWS  
 FLETCHER, NC 28732  
 CONTACT PERSON:  
 MARC PENANSKY  
 PHONE NUMBER: 828-279-0940  
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 ANCHOR QEA OF NORTH CAROLINA, PLLC.  
 231 HAYWOOD STREET  
 ASHEVILLE, NC 28801  
 CONTACT: TONY HAUSER, PLA, PE  
 (828) 281-3350  
 PROJECT NAME:  
 LIGHTHEART GEAR  
 PROJECT LOCATION:  
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 HENDERSON COUNTY, NC  
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 PROPERTY SIZE: 3.36 ACRES  
 TOTAL DISTURBED AREA: 0.87 ACRES  
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 FILL: 1452 CY  
 BALANCE: -1295 CY  
 FILL FACTOR OF 1.15 ADDED  
 EARTHWORK VOLUMES INCLUDE IN SITU TOPSOIL  
 BUILDINGS:  
 PROPOSED BUILDING (1 STORY): 7,520 SF

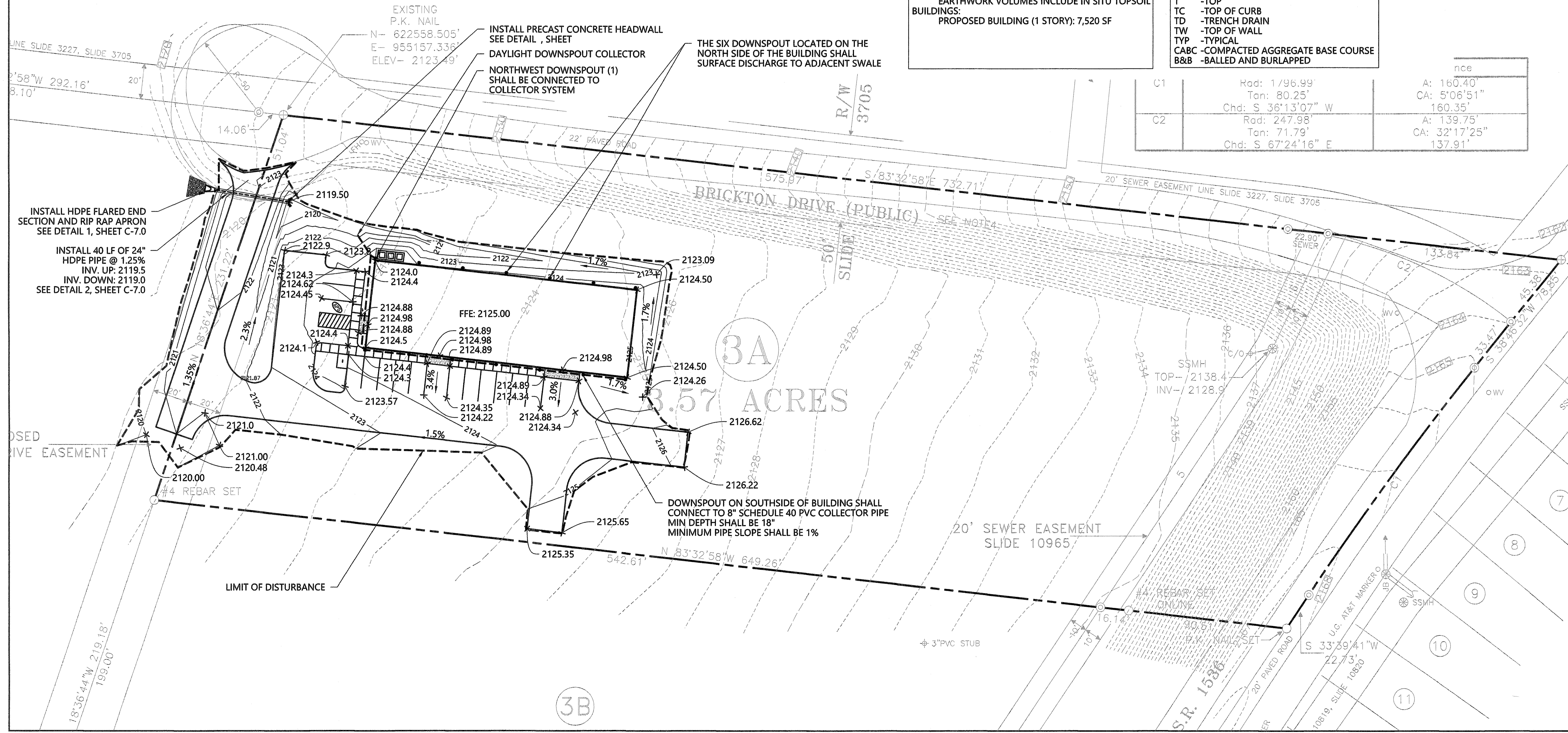
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Curve	Rad	Tan	Chd	A	CA
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CEMEX  
 D.B. 1304, PG. 320  
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 SLIDE 3220  
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 9652-52-3734  
 ZONED L



REV	DATE	BY	APPD	DESCRIPTION

GRADING & DRAINAGE PLAN

LIGHTHEART GEAR  
 HENDERSON COUNTY  
 FLETCHER, NC

C-4.0

SHEET NO. 5 OF 9  
 PROJ. #: TBD



**Plant List - Lighthouse Gear**

Sym.	Botanical Name	Common Name	Size	Condition	Height	QTY.	Comments	Size: HxS	Bloom Time
<b>Trees - Deciduous</b>									
AG	Acer Griseum	Paperbark Maple	2" Cal.	B&B	12'-14'	2		25'x20'	NA
CL	Cladrastis lutea	Yellowwood	2" Cal.	B&B	12'-14'	5	White, showy fragrant flowers. Good fall color	40'x45'	Spring
CK	Cornus Kousa	Kousa Dogwood	1.5" Cal.	B&B	8'-10' Min.	2	White showy flowers	25'x25'	May-June
<b>Shrubs - Deciduous</b>									
CA	Clethra alnifolia 'Ruby Spice'	Sweetshrub	3 Gal.	Cont.	18"	2	Red fragrant flowers	5'x4'	July August
FG	Fothergilla gardenia	Dwarf Fothergilla	3 Gal.	Cont.	18"	15	White flowers	4'x4'	April May
AE	Abelia 'Edward Groucher'	Dwarf Abelia	3 Gal.	Cont.	18"	8	Pink	4'x4'	May-September
IV	Ilex Verticillata	Winterberry	3 Gal.	Cont.	18"	4	Red berries in winter, Include 1 male for pollination	6'x6'	June-July

NOTES: 1) All plant material must meet the requirements for the most recent edition of the American Standards for Nursery Stock, ANSI Z60.1. 2) In case of a discrepancy, plant numbers and locations indicated on planting plan take precedence over numbers in plant list.

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**DEVELOPMENT REQUIREMENTS**

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**811**  
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 Call before you dig.

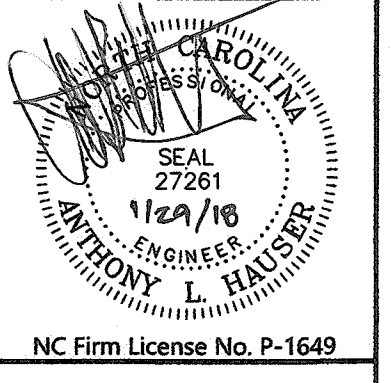
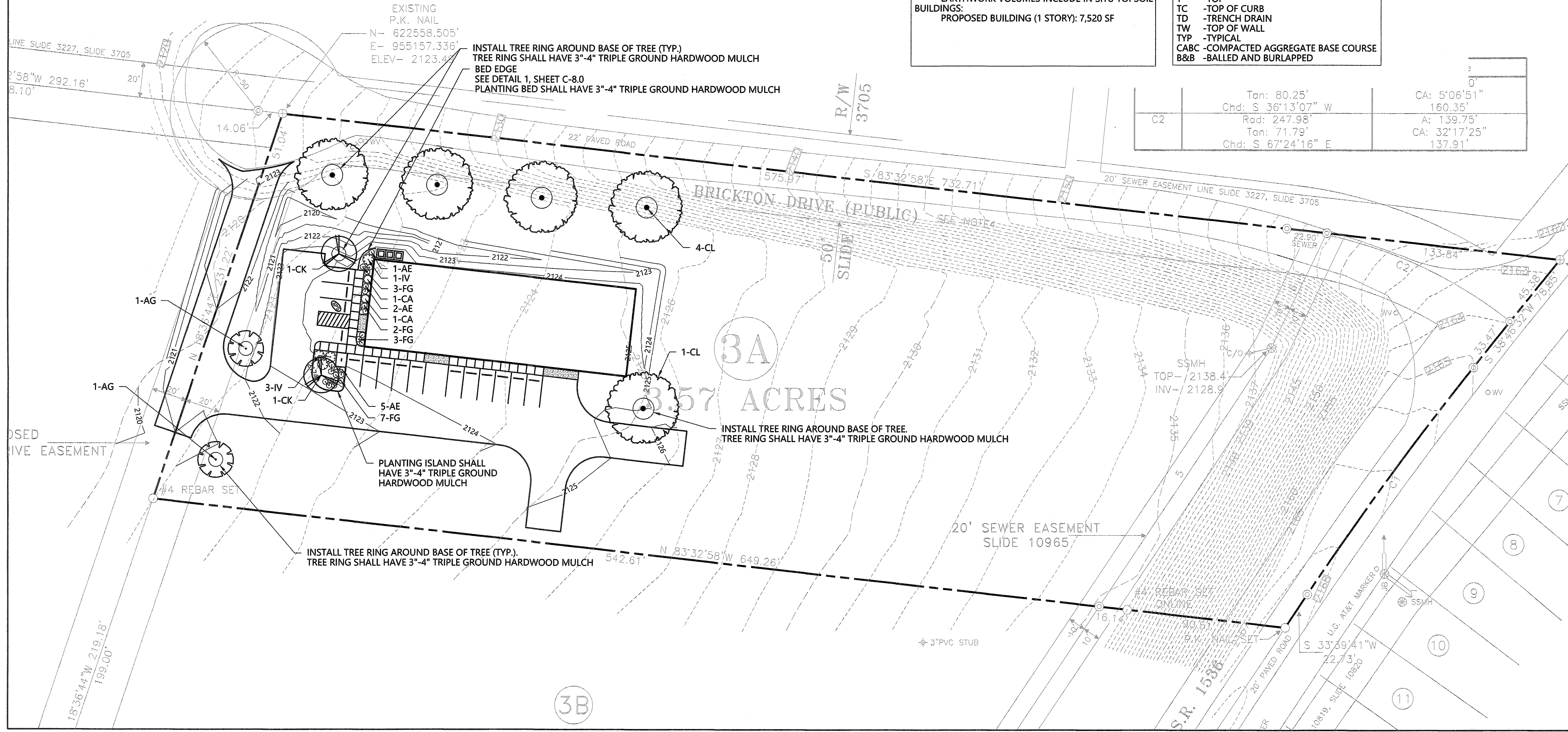
**NORTH**

0 30' 60'  
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B	-BOTTOM
BC	-BOTTOM OF CURB
BW	-BOTTOM OF WALL
DS	-DOWNSPOUT
EOP	-EDGE OF PAVEMENT
EX	-EXISTING
HP	-HIGH POINT
INV	-INVERT
LF	-LINEAR FEET
LP	-LOW POINT
MAX	-MAXIMUM
MIN	-MINIMUM
T	-TOP
TC	-TOP OF CURB
TD	-TRENCH DRAIN
TW	-TOP OF WALL
TYP	-TYPICAL
CABC	-COMPACTED AGGREGATE BASE COURSE
B&B	-BALLED AND BURLAPPED

C2	Tan: 80.25'	CA: 5'06"51"
	Chd: S 36°13'07" W	160.35'
	Rad: 247.98'	A: 139.75'
	Tan: 71.79'	CA: 32'17"25"
	Chd: S 67°24'16" E	137.91'



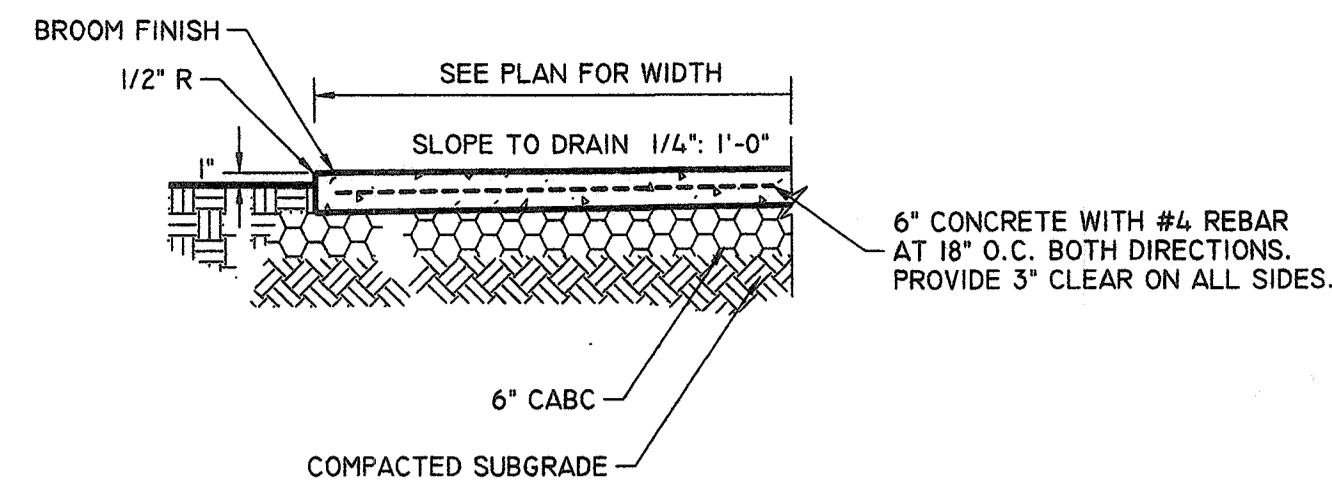
DESIGNED BY: J. HAUSER & M. DALE  
 DRAWN BY: J. HAUSER & M. DALE  
 CHECKED BY: M. DALE  
 APPROVED BY: J. HAUSER  
 SCALE: 1" = 30'  
 DATE: 1/25/2018



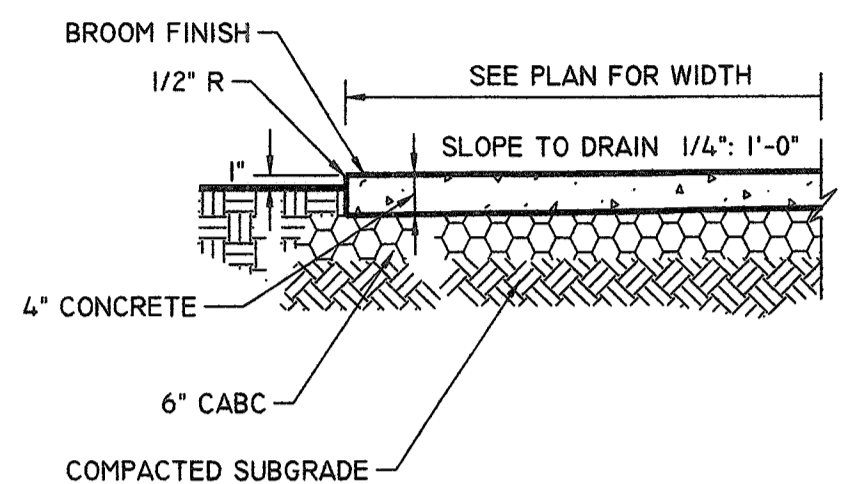
REV	DATE	BY	APPD	DESCRIPTION

**LANDSCAPE PLAN**  
 LIGHTHEART GEAR  
 HENDERSON COUNTY  
 FLETCHER, NC

**C-5.0**  
 SHEET NO. 6 OF 9  
 PROJ. #: TBD



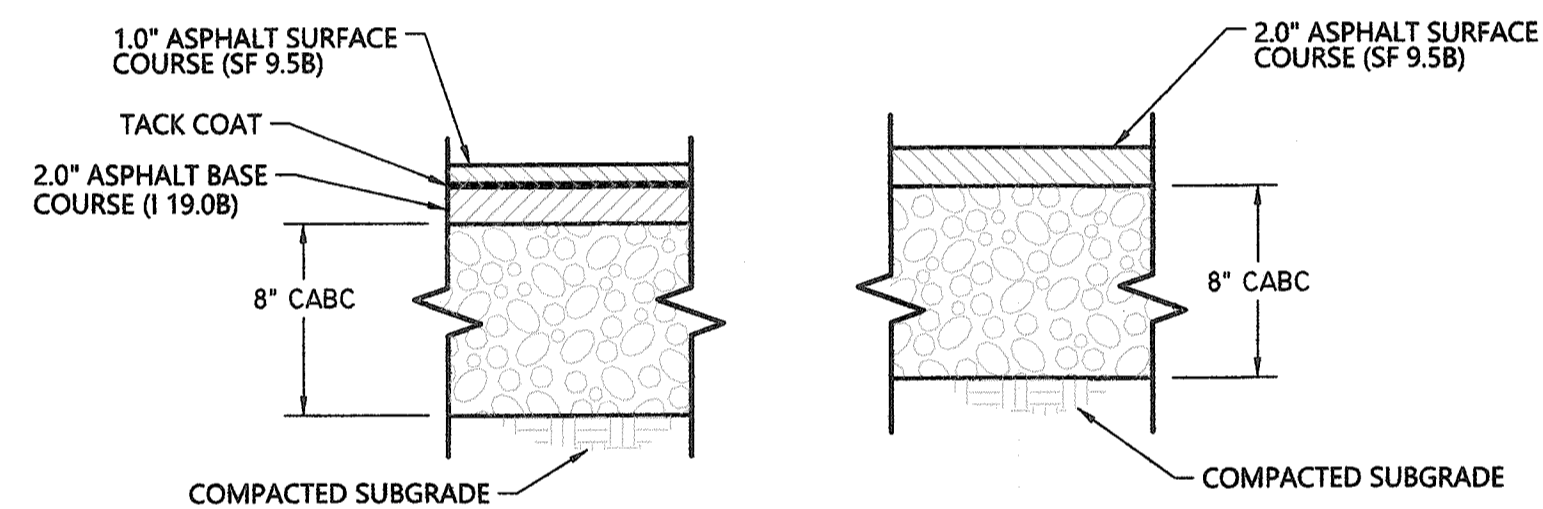
6" PAVEMENT



4" PAVEMENT

1 CONCRETE WALK

NOT TO SCALE



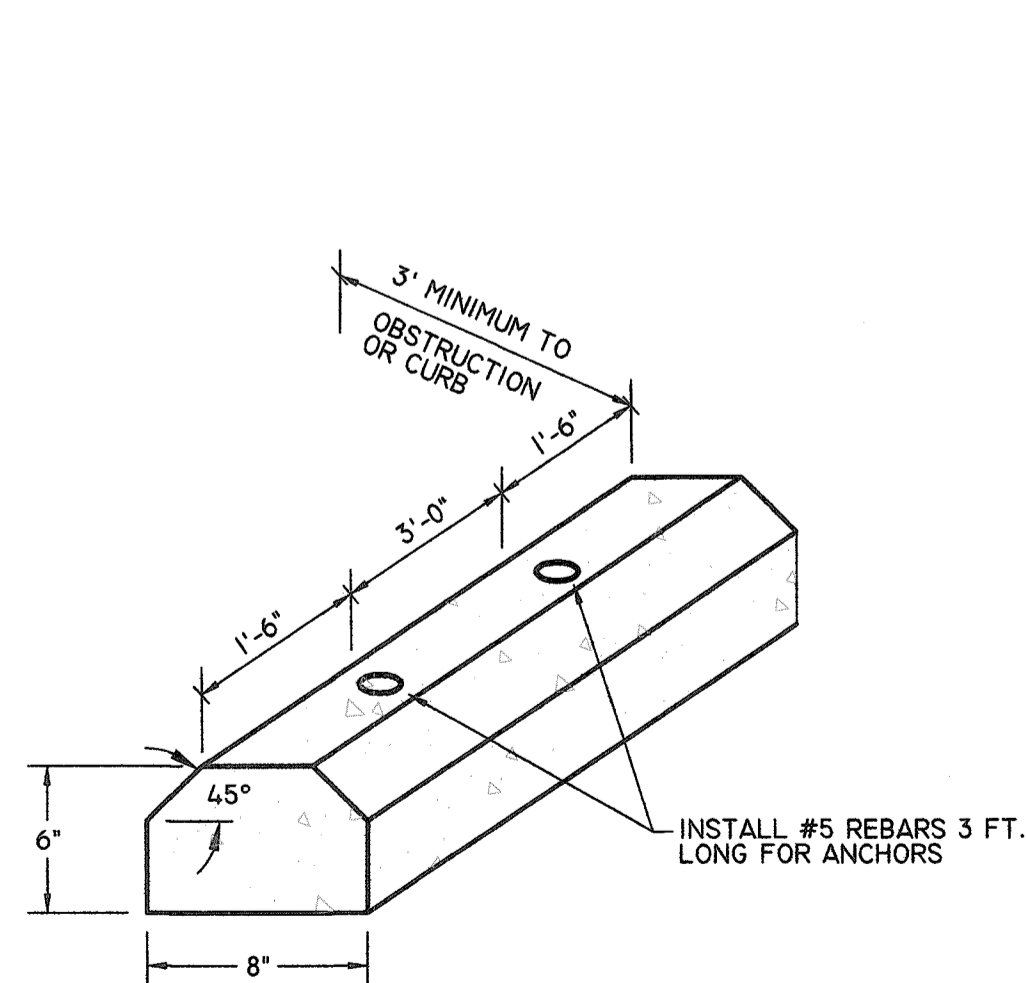
HEAVY DUTY

REGULAR DUTY

NOTE: MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH NC. D.O.T. SPECIFICATIONS.

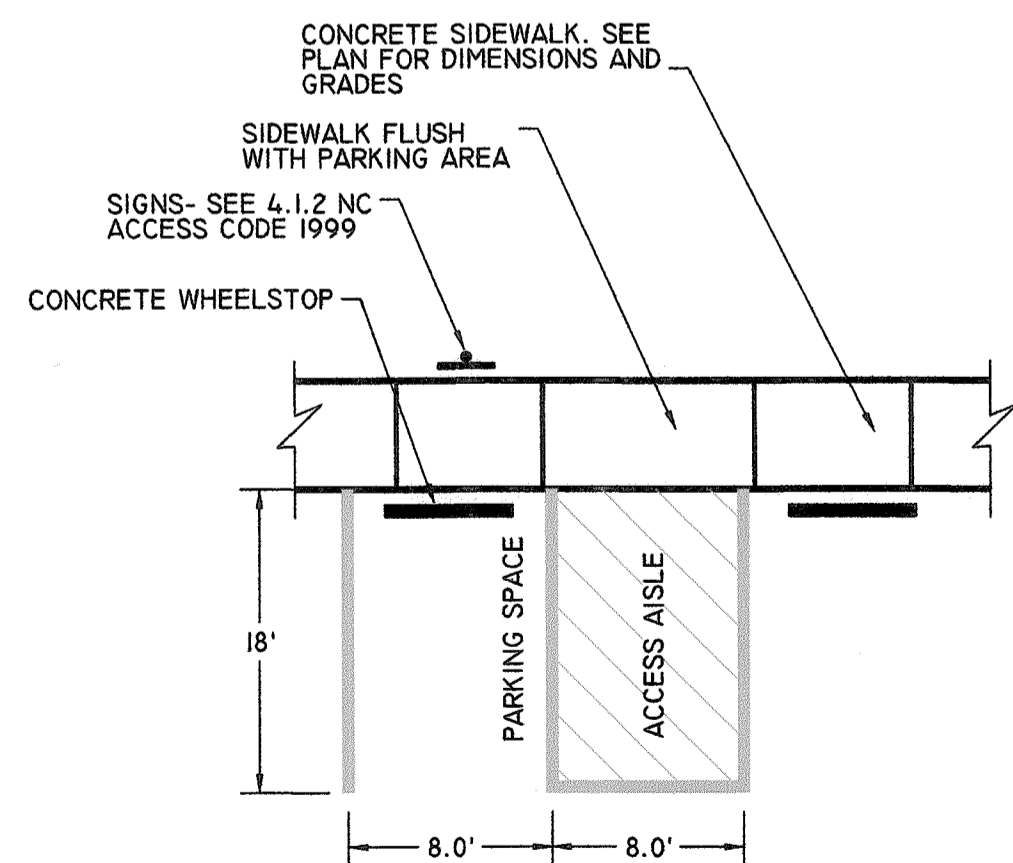
2 ASPHALT PAVEMENT SECTION

NOT TO SCALE



6 CONCRETE WHEELSTOP

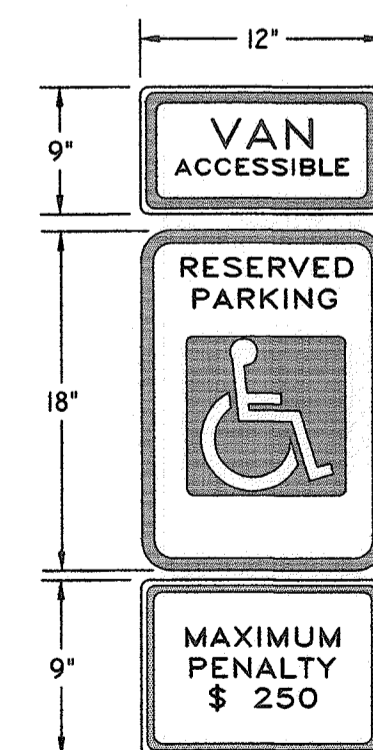
NOT TO SCALE



NOTES:  
 1) GRADES IN ACCESSIBLE PARKING AREA SHALL NOT EXCEED 2% IN ANY DIRECTION  
 2) HANDICAP PARKING AREA AND SIGNAGE SHALL CONFORM WITH THE NORTH CAROLINA ACCESSIBILITY CODE

7 VAN ACCESSIBLE PARKING

NOT TO SCALE

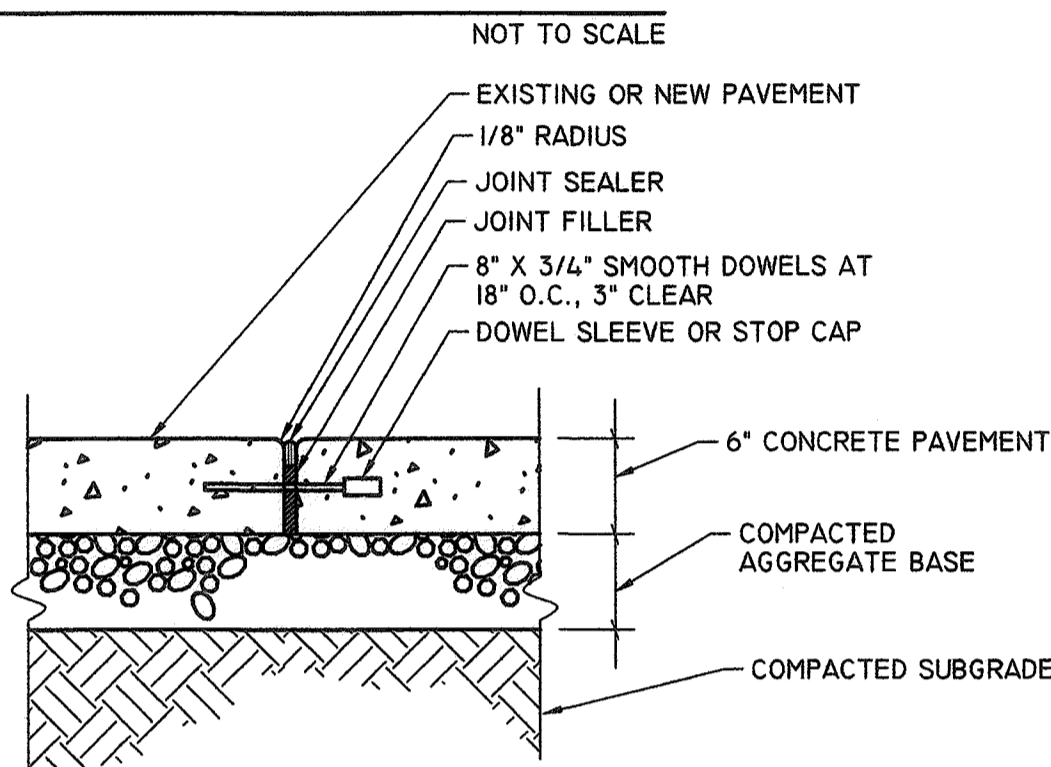


NOTE: SIGNS SHALL BE PLACED AND MOUNTED IN ACCORDANCE WITH THE NORTH CAROLINA STATE BUILDING CODE AND NC D.O.T. DETAILS.

8 ACCESSIBLE PARKING SIGN

NOT TO SCALE

EXPANSION JOINT



1) 30" O.C. OR AS SHOWN ON SITE PLAN.  
 2) JOINT MATERIALS SHALL COMPLY WITH NCDOT STANDARD SPECIFICATIONS SECTION 700, LATEST EDITION.  
 3) WHERE 3" CLEARANCE CANNOT BE ACHIEVED DUE TO LIMITED THICKNESS OF EXISTING PAVEMENT, PROVIDE A CONTINUOUS 6" X 18" SLEEPER SLAB BELOW THE JOINT. REFER TO SLEEPER SLAB SECTION, THIS DETAIL.

DOWELED JOINT

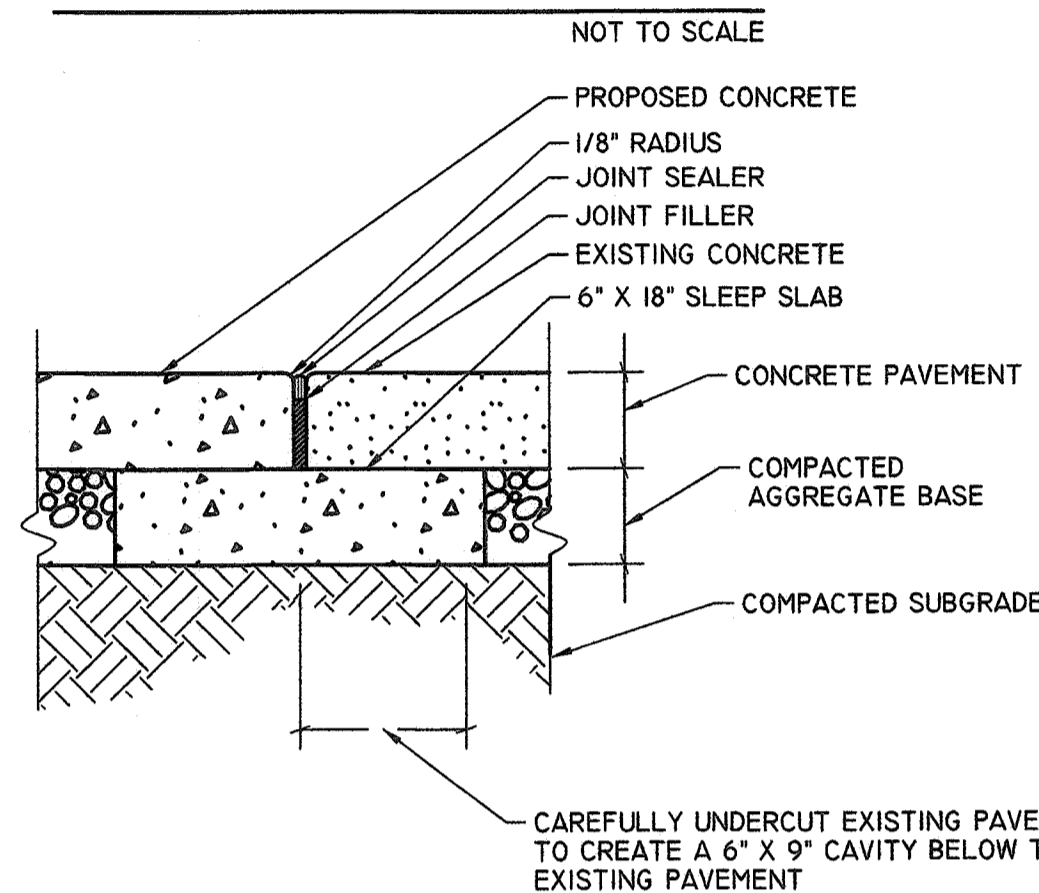
NOT TO SCALE

GENERAL NOTES:  
 1) ALL CONCRETE SHALL BE 4000 PSI FIBER REINFORCED.  
 2) FIBER REINFORCEMENT SHALL BE PROPEX FIBER MESH 300, BASF MASTER FIBER 100, OR AN EQUAL APPROVED BY THE ENGINEER AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.  
 3) ALL CONCRETE SHALL BE FINISHED WITH A CURING COMPOUND IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS SECTION 700 AND 1026.  
 4) DEPTH OF COMPACTED AGGREGATE BASE COURSE SHALL BE A MINIMUM OF 6".

3 CONCRETE PAVEMENT AND JOINTS

NOT TO SCALE

CONTRACTION JOINT



SLEEPER SLAB SECTION

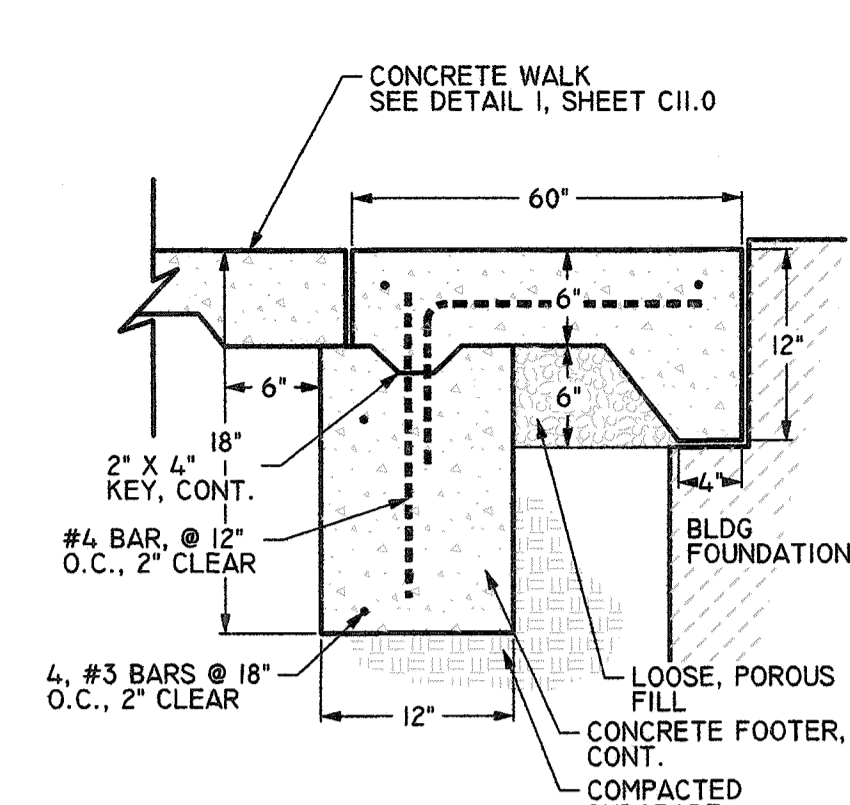
NOT TO SCALE

PERMITTING SUBMITTAL

ONE INCH  
 AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY



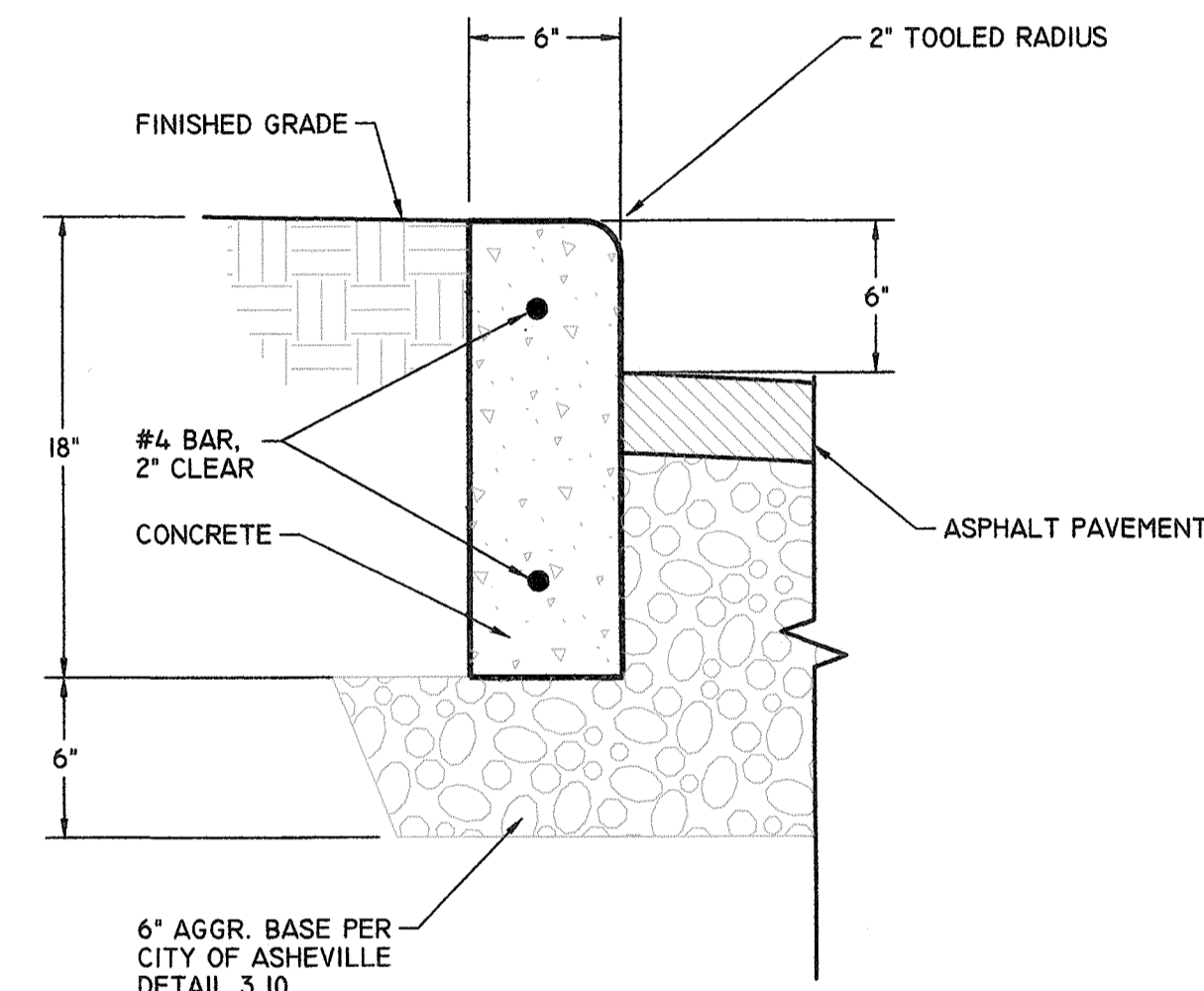
Know what's below.  
 Call before you dig.



NOTES:  
 1. PLACE EXPANSION JOINTS AS SHOWN ON PLAN.  
 2. ALL SCORING SHALL BE 1/4" DEPTH OF CONCRETE (TOOLED).  
 3. RUB OUT ALL SURFACE TOOL MARKS. BROOM FINISH ALL CONCRETE PERPENDICULAR TO PEDESTRIAN TRAFFIC.  
 4. IF NO BEARING LEDGE IS PROVIDED, A DOWELLED CONNECTION OR ADDITIONAL FOOTER IS REQUIRED.  
 5. BUNCOMBE COUNTY FROST LINE = 18"  
 6. THIS DETAIL REQUIRED AT ALL DOORS THAT OPEN OUTWARD.

4 FROST FREE CONCRETE PAD

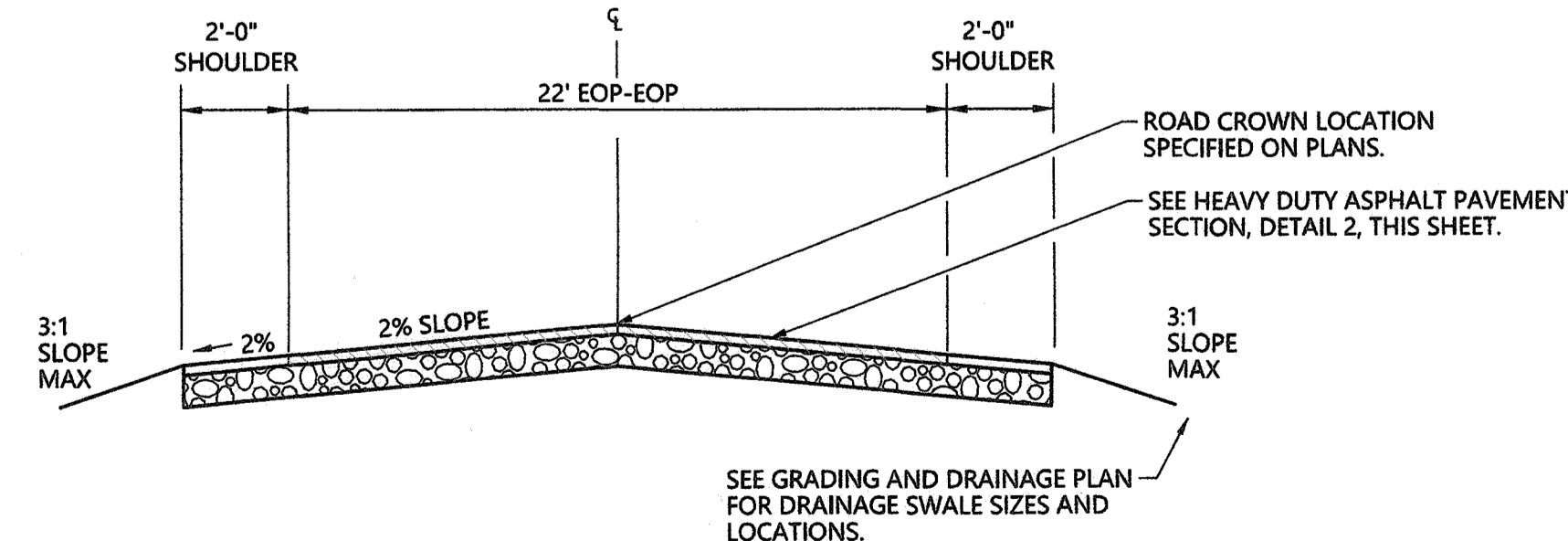
NOT TO SCALE



NOTES:  
 1. 4000 PSI FIBER REINFORCED CONCRETE. REFER TO NOTES DETAIL 1 THIS SHEET  
 2. LIGHT BROOM FINISH

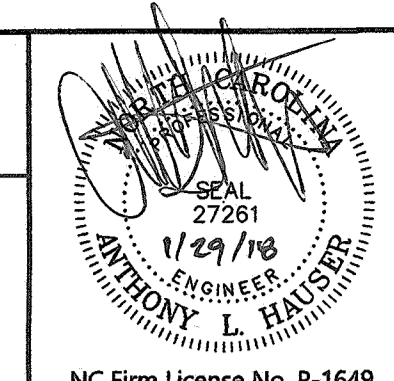
5 6'X18" STANDUP CURB

NOT TO SCALE

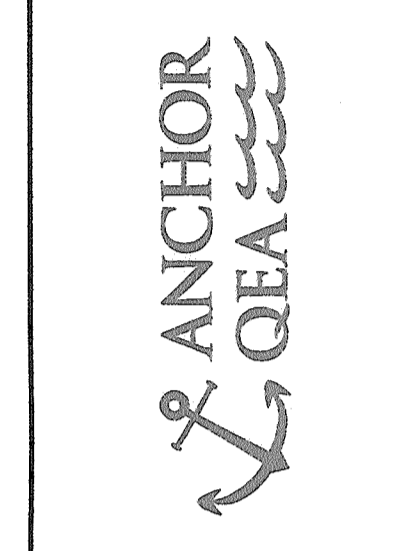


9 20' TWO-WAY ROAD SECTION

NOT TO SCALE



DESIGNED BY: J. HAUSER & MADALE  
 DRAWN BY: J. HAUSER & MADALE  
 CHECKED BY: M. DALE  
 APPROVED BY: J. HAUSER  
 SCALE: 1" = 30"  
 DATE: 1/26/2018



REV	DATE	BY	APPD	DESCRIPTION

**SITE DETAILS**

LIGHTHEART GEAR  
 HENDERSON COUNTY  
 FLETCHER, NC

**C-6.0**

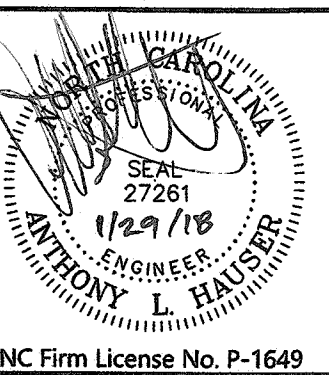
SHEET NO. 7 OF 9

PROJ. #: TBD

ONE INCH  
AT FULL SIZE, IF NOT ONE  
INCH SCALE ACCORDINGLY



Know what's below.  
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NC Firm License No. P-1649

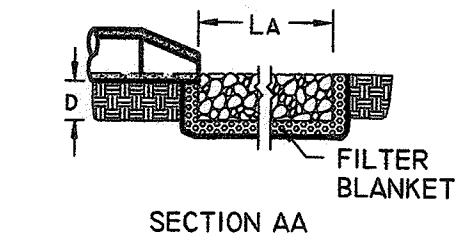
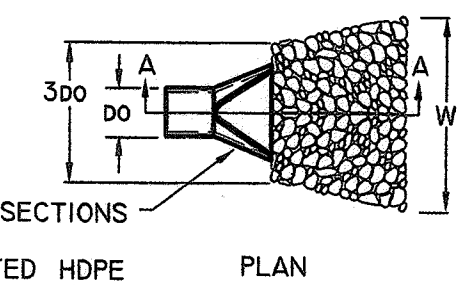
DO = PIPE DIAMETER  
D = 1.33'

DO	LA	W	SIZE OF STONE (MIN.)	SIZE OF STONE (MID.)	SIZE OF STONE (MAX.)
30"	16'	18.5'	6"	8"	12"

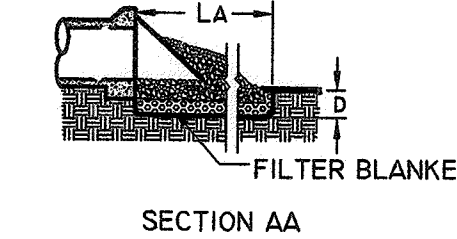
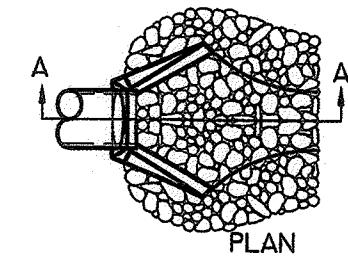
GENERAL NOTES:

- LA IS THE LENGTH OF THE RIP RAP APRON.
- D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 18"
- IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
- A FILTER BLANKET OR FILTER FABRIC SHALL BE INSTALLED BETWEEN THE RIP RAP AND SOIL FOUNDATION.
- COMPACT ANY REQUIRED FILL TO DENSITY OF SURROUNDING UNDISTURBED MATERIAL.
- RIP RAP MAY BE FIELDSTONE OR ROUGH QUARRY STONE AND SHALL BE HARD, ANGULAR AND WELL-GRADED.
- CONSTRUCT APRON AT ZERO GRADE. TOP OF RIP RAP SHALL BE LEVEL WITH THE RECEIVING CHANNEL OR SLIGHTLY LOWER.
- ALIGN APRON WITH RECEIVING CHANNEL OR STREAM. ASSURE APRON IS STRAIGHT THROUGHOUT ITS LENGTH.
- END WIDTH OF APRON TO BE EQUAL TO WIDTH OF RECEIVING CHANNEL.

PIPE OUTLET TO FLAT AREA NO WELL-DEFINED CHANNEL



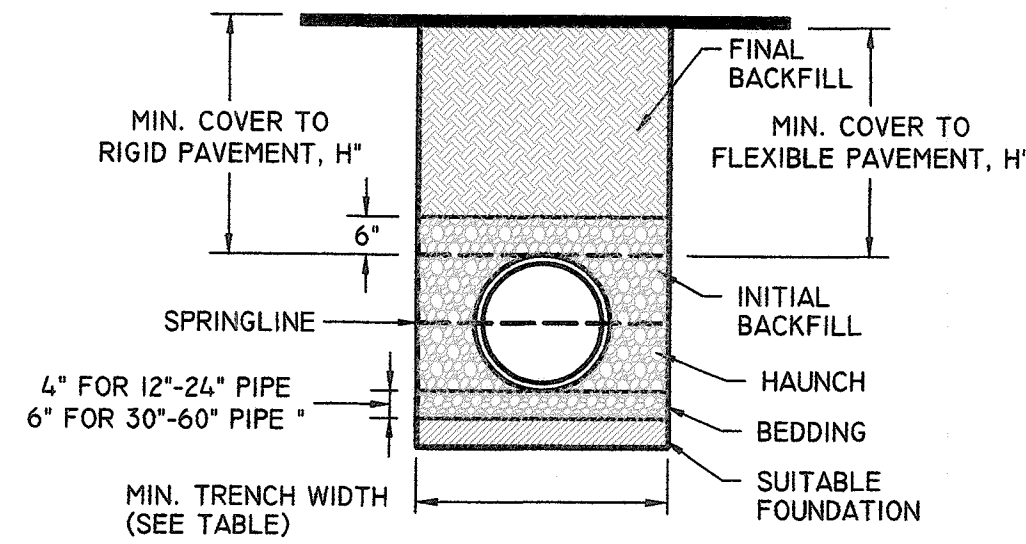
PIPE OUTLET TO WELL-DEFINED CHANNEL



FLARED END SECTIONS SHALL BE PREFABRICATED HDPE TO MATCH DISCHARGE OF PIPE

NOT TO SCALE

1 RIP RAP APRON



MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

\* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

MINIMUM RECOMMENDED COVER BASED ON RAILWAY LOADING CONDITIONS

PIPE DIAM.	COOPER E-80**
UP TO 24"	24"
30"-36"	36"
42"-60"	48"

\*\* COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE.  
\*\*\* E-80 COVER REQUIREMENTS, ARE ONLY APPLICABLE TO ASTM F 2306 PIPE.

RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

NOTES:

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING: SUITABLE MATERIAL SHALL BE ASTM CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm). EQUIVALENT TO NCDOT CLASS II, TYPE I OF CLASS III.
- INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE ASTM CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. EQUIVALENT TO NCDOT CLASS II, TYPE I OF CLASS III.
- MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

2 TYPICAL STORM PIPE BEDDING

NOT TO SCALE

**Oldcastle Precast®** WATER

14'-4" x 7'-4" x 8'-2" MAX O.D.  
PIPE CULVERT HEADWALL LRUOG  
MODEL #: PC HW-LFUCG-KY

PLAN VIEW

SECTION A-A

FRONT VIEW

Pipe Size	Hole Size	W	L	H	A	B	C	D	E	F	G	Weight
12"	12"Ø											
15"	15"Ø	63"	54"	43"	42"	24"	27"	16"	8.5"	9.75"	3.5"	3605 lbs.
18"	18"Ø											
24"	24"Ø	78"	66"	51"	51"	29"	33"	18"	5"	6"	4"	5488 lbs.

SPEIFICATIONS:  
1. Concrete minimum compression strength:  
P=6000 PSI @ 28 days.  
2. Reinforcing steel: ASTM A615, Fy=60,000 PSI

ITEMS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Oldcastle Precast  
Tri-State Region

For more information about our products  
please visit us on the web at:  
oldcastleprecast.com/distributors/

Lexington, KY  
859-299-1484

3 PRE CAST CONCRETE HEADWALL

NOT TO SCALE

DESIGNED BY: I. HAUSER & M. DALE  
DRAWN BY: I. HAUSER & M. DALE  
CHECKED BY: M. DALE  
APPROVED BY: I. HAUSER  
SCALE: 1" = 30"  
DATE: 1/26/2018



REV	DATE	BY	APPD	DESCRIPTION

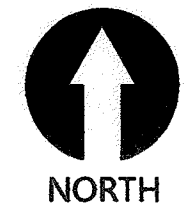
**DRAINAGE DETAILS**  
LIGHTEART GEAR  
HENDERSON COUNTY  
FLETCHER, NC

**C-7.0**  
SHEET NO. 8 OF 9  
PROJ. #: TBD

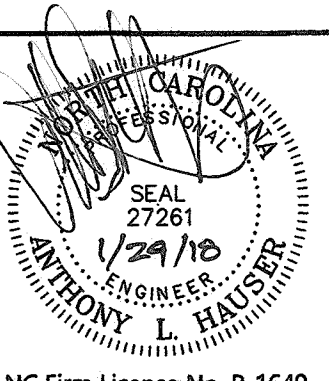
ONE INCH  
AT FULL SIZE, IF NOT ONE  
INCH SCALE ACCORDINGLY



Know what's below.  
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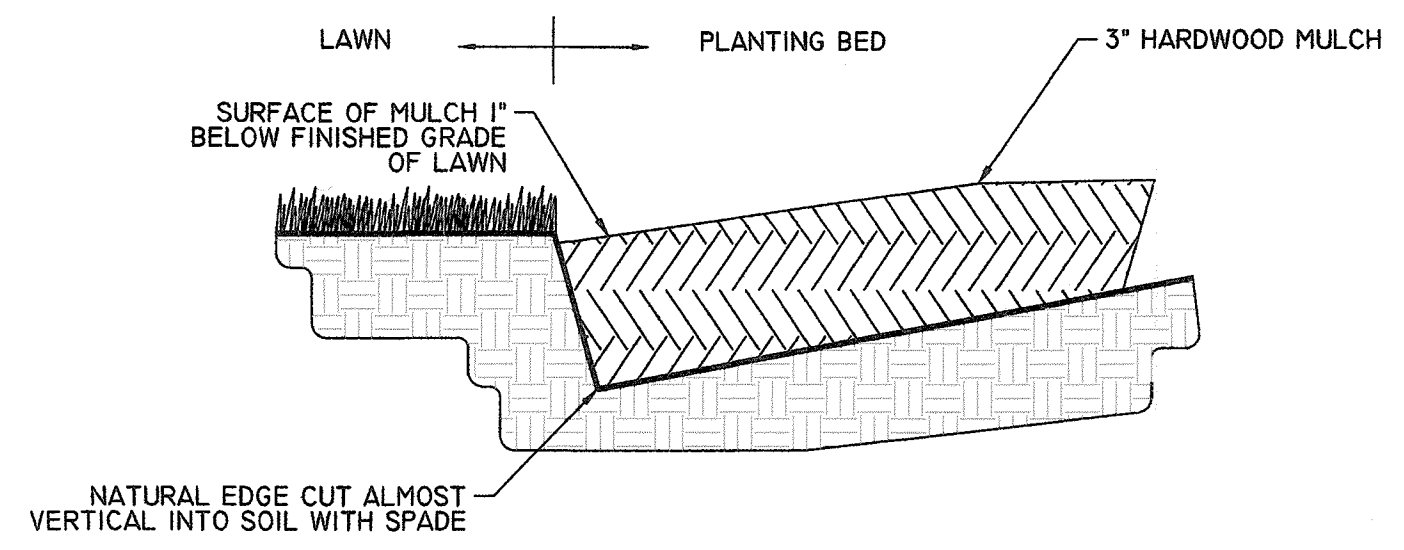


0 30' 60'  
1"=30'

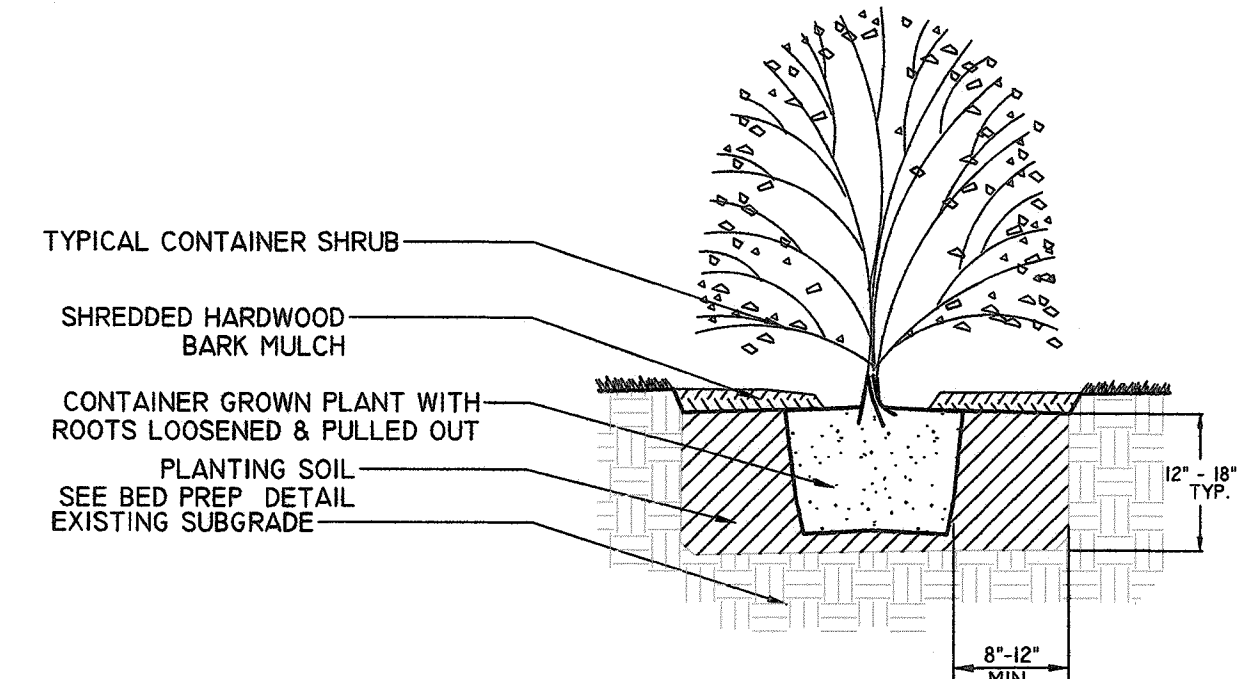


NC Firm License No. P-1649

DESIGNED BY: J. HAUSER & M. DALE  
DRAWN BY: J. HAUSER & M. DALE  
CHECKED BY: M. DALE  
APPROVED BY: J. HAUSER  
SCALE: \_\_\_\_\_  
DATE: 1/26/2018

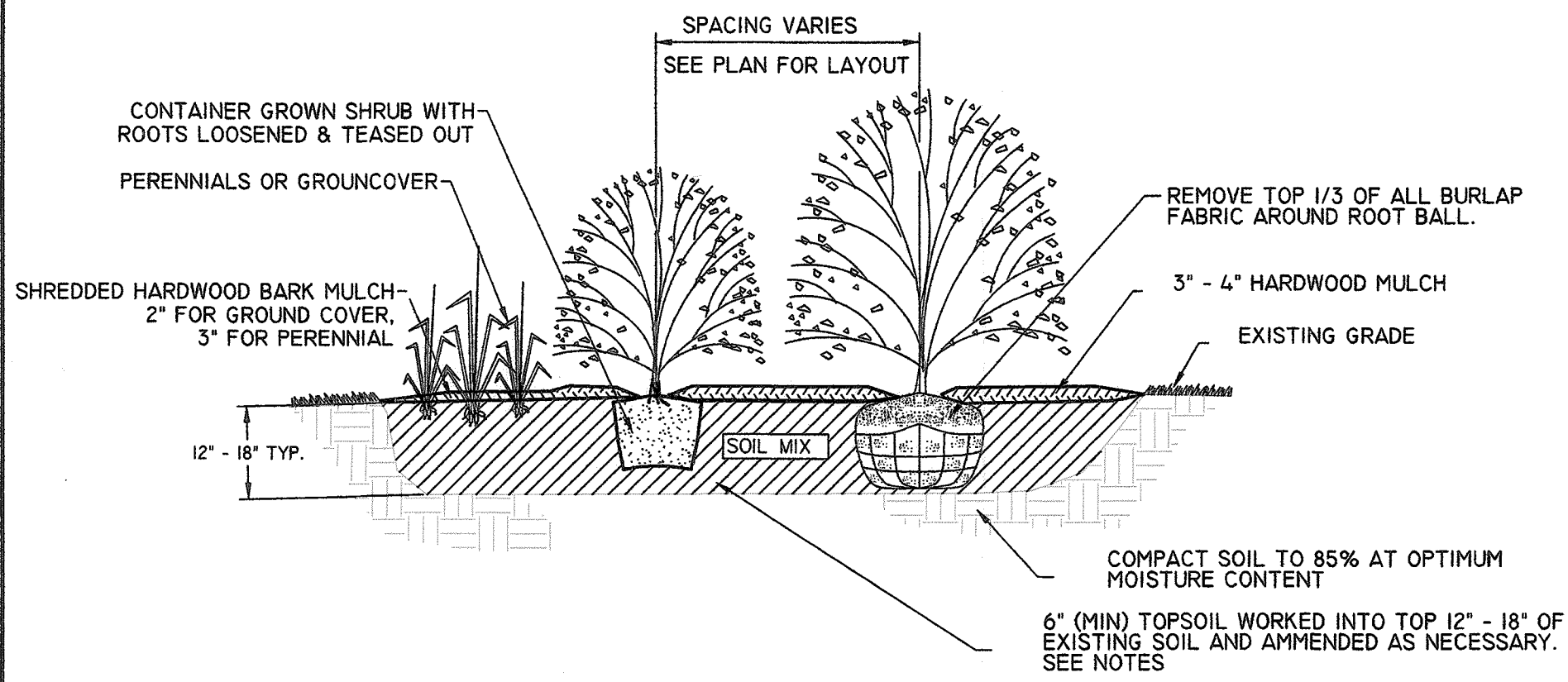


1 PLANTING BED EDGE  
NOT TO SCALE



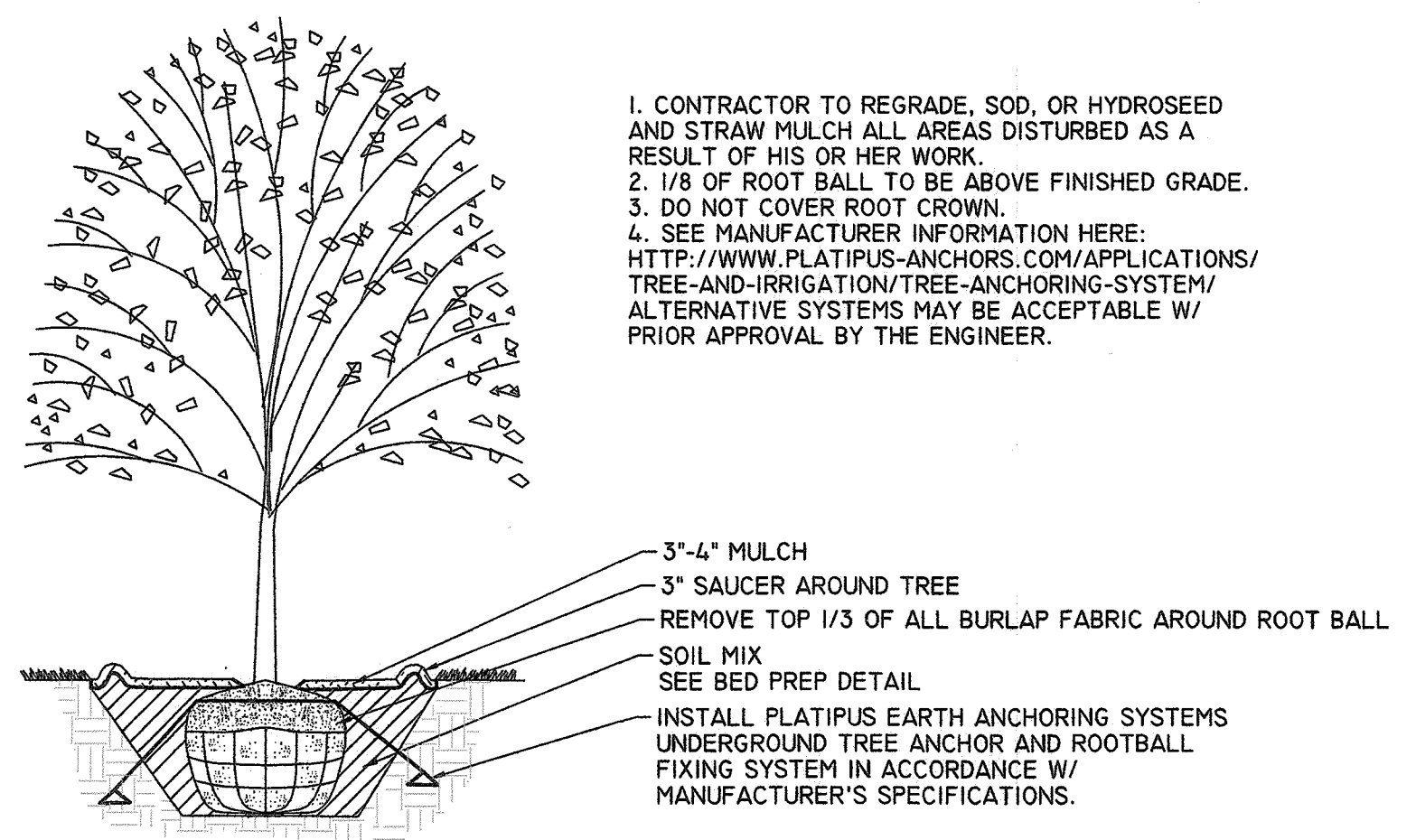
2 CONTAINER SHRUB PLANTING  
NOT TO SCALE

NOTES:  
1. FOR ROOT BALL DEEPER THAN 12", PIT SHOULD BE A MINIMUM OF 4" DEEPER THAN PLANT BALL.  
2. PRUNE SHRUB AS RECOMMENDED BY GROWER ONLY AFTER THE PLANT HAS BEEN WATERED IN TO THE PLANTING SOIL.



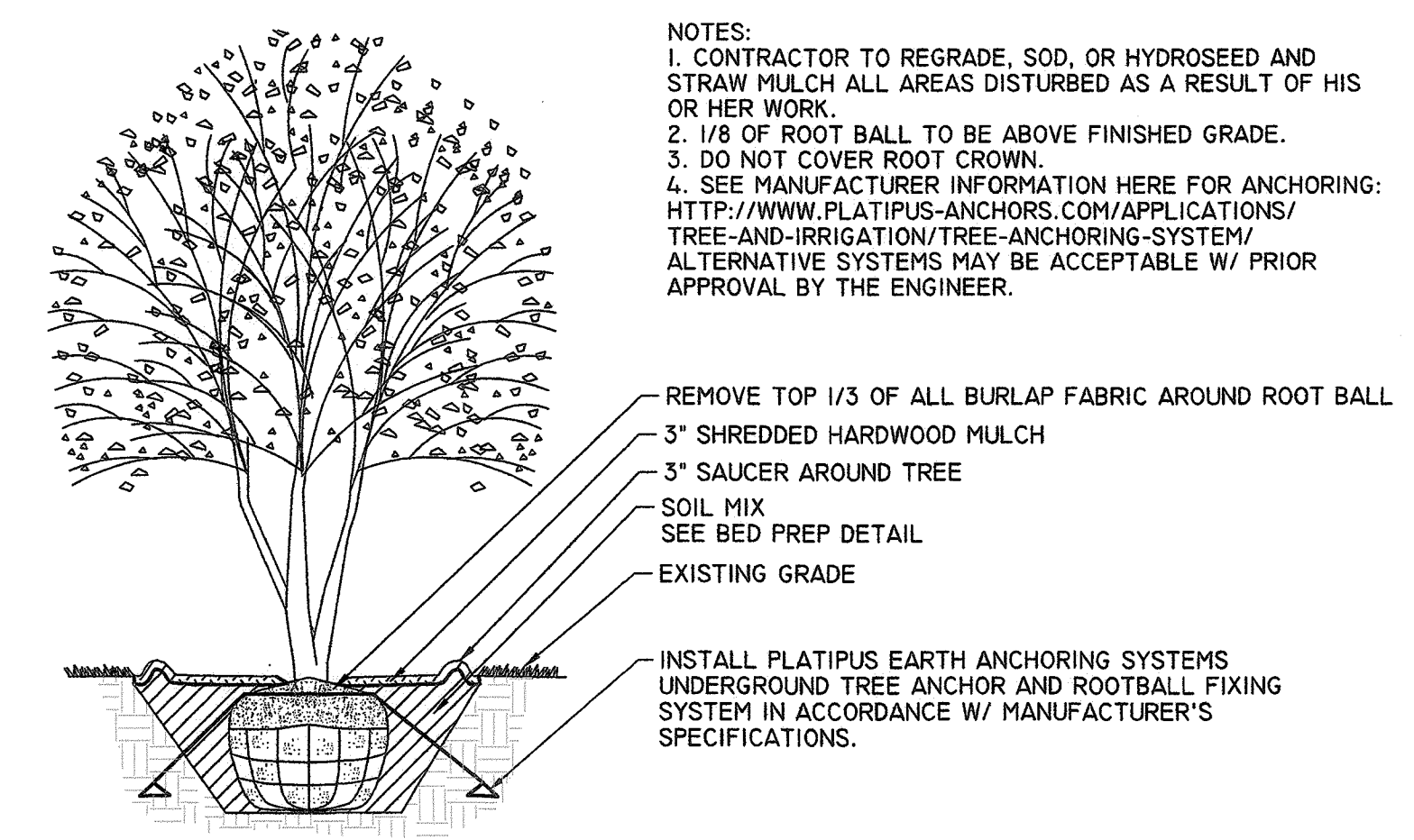
3 BED PREPARATION & PLANTING  
NOT TO SCALE

NOTE:  
1. BEDS TO HAVE SMOOTHLY COUNTOUNDED AND CLEANLY DEFINED EDGES (SEE PLANTING BED EDGE DETAIL). BEDS SHALL BE CURVILINEAR EXCEPT AS NOTED ON PLAN.  
2. PROPOSED BEDS MUST BE LAID OUT ON SITE AND APPROVED BY OWNER.  
3. COMPLETELY REMOVE ALL STRINGS, RIBBONS, AND TAGS FROM ALL PLANTS.  
4. PLANT SPACING VARIES - (SEE PLAN)  
5. ALL SHRUBS TO BE PLANTED IN MULCHED BEDS  
6. PRUNE ALL BROKEN, DISEASED, AND WEAK BRANCHES & LIMBS



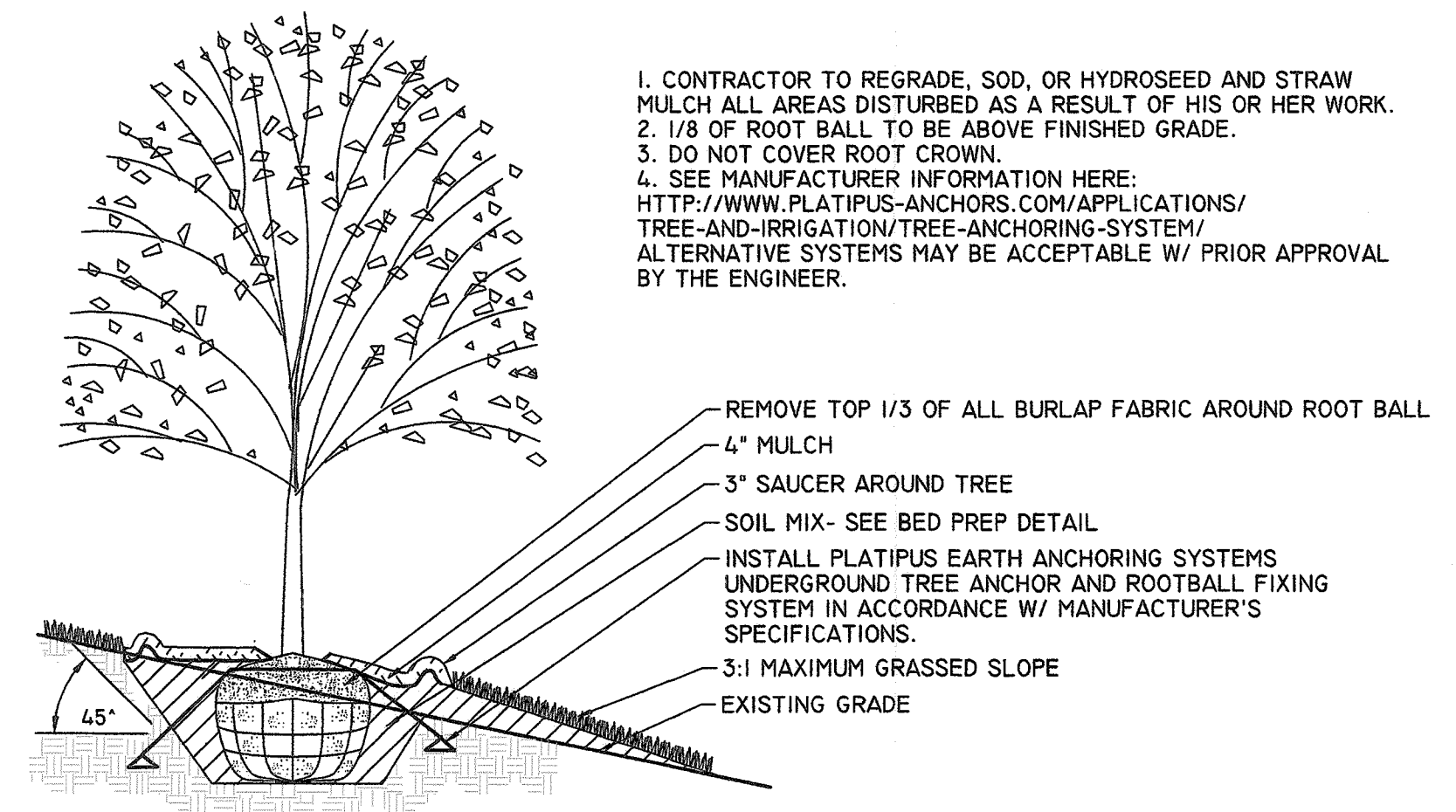
4 B&B DECIDUOUS TREE  
NOT TO SCALE

1. CONTRACTOR TO REGRADE, SOD, OR HYDROSEED AND STRAW MULCH ALL AREAS DISTURBED AS A RESULT OF HIS OR HER WORK.  
2. 1/8 OF ROOT BALL TO BE ABOVE FINISHED GRADE.  
3. DO NOT COVER ROOT CROWN.  
4. SEE MANUFACTURER INFORMATION HERE: [HTTP://WWW.PLATIPUS-ANCHORS.COM/APPLICATIONS/TREE-AND-IRRIGATION/TREE-ANCHORING-SYSTEM/](http://www.platipus-anchors.com/applications/tree-and-irrigation/tree-anchoring-system/) ALTERNATIVE SYSTEMS MAY BE ACCEPTABLE W/ PRIOR APPROVAL BY THE ENGINEER.



5 B&B MULTI-STEM DECIDUOUS TREE  
NOT TO SCALE

NOTES:  
1. CONTRACTOR TO REGRADE, SOD, OR HYDROSEED AND STRAW MULCH ALL AREAS DISTURBED AS A RESULT OF HIS OR HER WORK.  
2. 1/8 OF ROOT BALL TO BE ABOVE FINISHED GRADE.  
3. DO NOT COVER ROOT CROWN.  
4. SEE MANUFACTURER INFORMATION HERE FOR ANCHORING: [HTTP://WWW.PLATIPUS-ANCHORS.COM/APPLICATIONS/TREE-AND-IRRIGATION/TREE-ANCHORING-SYSTEM/](http://www.platipus-anchors.com/applications/tree-and-irrigation/tree-anchoring-system/) ALTERNATIVE SYSTEMS MAY BE ACCEPTABLE W/ PRIOR APPROVAL BY THE ENGINEER.



6 B&B DECIDUOUS TREE ON SLOPE  
NOT TO SCALE

1. CONTRACTOR TO REGRADE, SOD, OR HYDROSEED AND STRAW MULCH ALL AREAS DISTURBED AS A RESULT OF HIS OR HER WORK.  
2. 1/8 OF ROOT BALL TO BE ABOVE FINISHED GRADE.  
3. DO NOT COVER ROOT CROWN.  
4. SEE MANUFACTURER INFORMATION HERE: [HTTP://WWW.PLATIPUS-ANCHORS.COM/APPLICATIONS/TREE-AND-IRRIGATION/TREE-ANCHORING-SYSTEM/](http://www.platipus-anchors.com/applications/tree-and-irrigation/tree-anchoring-system/) ALTERNATIVE SYSTEMS MAY BE ACCEPTABLE W/ PRIOR APPROVAL BY THE ENGINEER.

REMOVE TOP 1/3 OF ALL BURLAP FABRIC AROUND ROOT BALL  
4" MULCH  
3" SAUCER AROUND TREE  
SOIL MIX- SEE BED PREP DETAIL  
INSTALL PLATIPUS EARTH ANCHORING SYSTEMS UNDERGROUND TREE ANCHOR AND ROOTBALL FIXING SYSTEM IN ACCORDANCE W/ MANUFACTURER'S SPECIFICATIONS.  
3:1 MAXIMUM GRASSED SLOPE  
EXISTING GRADE

REV	DATE	BY	APP'D	DESCRIPTION

LANDSCAPE DETAILS

LIGHTHEART GEAR  
HENDERSON COUNTY  
FLETCHER, NC

C-8.0

SHEET NO. 9 OF 9  
PROJ. #: TBD