THE SITE WILL INCORPORATE A WET DETENTION POND. THIS WET POND IS DESIGNED TO TREAT THE RUNOFF TO MEET TOWN OF

#### CITY OF RALEIGH STANDARD UTILITY NOTES

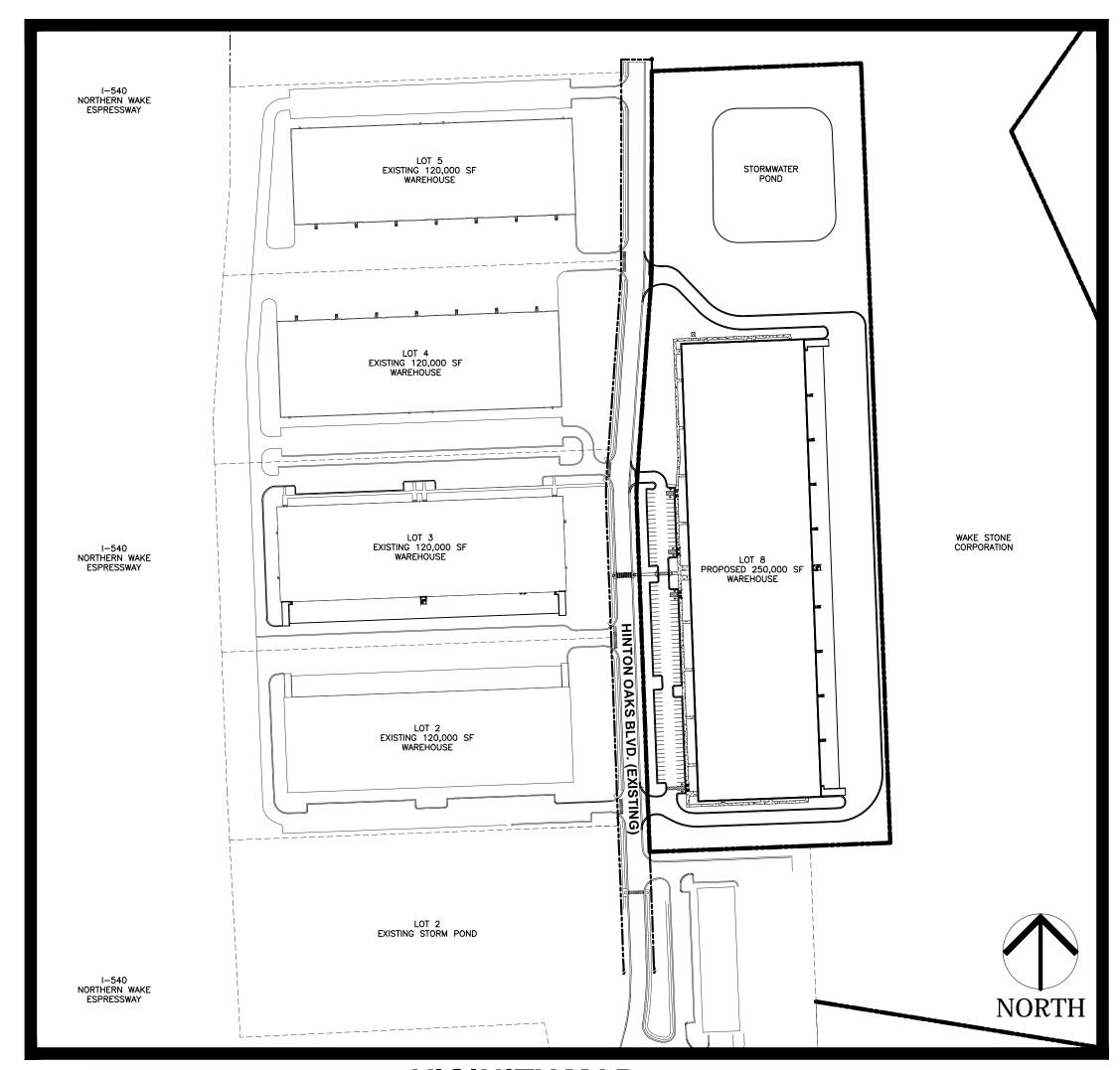
- STANDARD UTILITY NOTES (AS APPLICABLE):
- 1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION).
- 2. UTILITY SEPARATION REQUIREMENTS: A) A DISTANCE OF 100'SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLEDTO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATIONSHALL NOT BE LESS THAN 25'FROM A PRIVATE WELL OR 50'FROM A PUBLIC WELL.
- B) WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SÉPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER
- C) WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10'ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE
- D) 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER E) MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 24" MIN. VERTICAL
- SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & S-49) F) ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL
- 3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- 4. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE
- 5. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE
- 6. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- 7. INSTALL COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE
- 8. INSTALL PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75
- 9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
- 10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- 11. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
- 12. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919) 996-2334 OR TIMOTHY.BEASLEY@RALEIGHNC.GOV FOR MORE INFORMATION.
- 13. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 996-5923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR

ADD	ITIONAL USE STANDARDS
USE	CONDITION
WHOLESALING AND DISTRIBUTION	ALL VEHICLE STORAGE AREAS SHALL BE ENCLOSED BY AN OPAQUE FENCE OR WALL, RESTRICTED TO THE REAR YARD, AND SCREENED FROM OFF—SITE VIEW OF A PUBLIC RIGHT—OF—WAY BY A TYPE—A BUFFER YARD.
	NO OUTDOOR PUBLIC ADDRESS SYSTEM SHALL BE PERMITTED WHICH CAN BE HEARD BEYOND THE BOUNDARIES OF THE PROPERTY.
STORAGE-WAREHOUSE, INDOOR STORAGE	AN INDOOR STORAGE FACILITY IS LIMITED TO 5,000 SQUARE FEET PER FLOOR IN THE TC AND RR DISTRICTS.
	OUTDOOR STORAGE IS NOT PERMITTED.
	IN THE RR DISTRICT, ALL AREAS SHALL BE SCREENED FROM ANY PRE-EXISTING ADJACENT RESIDENCE (OTHER THAN THE OWNER'S) BY A TYPE-A BUFFER YARD (SECTION 8.6B(1)).
AGRIBUSINESS	ACCESSORY BUILDINGS PERMITTED UNDER SECTION 4.6 AND AREAS USED FOR SALES, STORAGE, THE KEEPING OF MATERIALS OR THE CARE OF ANIMALS SHALL NOT BE LOCATED WITHIN A 200-FOOT RADIUS OF THE FOOTPRINT OF ANY PRE-EXISTING ADJACENT RESIDENTIAL DWELLING (OTHER THAN THE OWNER'S).
	ACCESSORY BUILDINGS PERMITTED UNDER SECTION 4.6 AND AREAS USED FOR STORAGE OF KEEPING OF MATERIALS AND/OR ANIMALS SHALL HAVE ADEQUATE MEANS OF VENTILATION AND SHALL NOT CREATE OBJECTIONABLE FUMES, ODOR OR DUST TO THE SURROUNDING AREA.
LABORATORY-MEDICAL, ANALYTICAL, RESEARCH & DEVELOPMENT	NONE
MANUEA OTUDINO LUQUET	ALL MATERIALS OR EQUIPMENT SHALL BE STORED WITHIN AN ENCLOSED BUILDING, OR STORED
MANUFACTURING, LIGHT	WITHIN AN OUTDOOR STORAGE AREA ENCLOSED BY AN OPAQUE FENCE OR WALL THAT MEETS THE REQUIREMENTS OF SECTION 4.7 AND IS RESTRICTED TO THE REAR YARD.
	ANY OPERATION WHICH RESULTS IN THE CREATION OF NOXIOUS VIBRATIONS, ODORS, DUST GLARE OR SOUND IS PROHIBITED.
MANUFACTURING, NEIGHBORHOOD	ALL MATERIALS OR EQUIPMENT SHALL BE STORED WITHIN AN ENCLOSED BUILDING
	ANY OPERATION WHICH RESULTS IN THE CREATION OF NOXIOUS VIBRATIONS, ODORS, DUST GLARE OR SOUND IS PROHIBITED.
MANUFACTURING, HEAVY	NONE
MEDIA PRODUCTION	NONE
RESEARCH AND DEVELOPMENT	ALL MATERIALS OR EQUIPMENT SHALL BE STORED WITHIN AN ENCLOSED BUILDING, OR STORED WITHIN AN OUTDOOR STORAGE AREA ENCLOSED BY AN OPAQUE FENCE OR WALL THAT MEETS THE REQUIREMENTS OF SECTION 4.7 AND IS RESTRICTED TO THE REAR YARD
	ANY OPERATION WHICH RESULTS IN THE CREATION OF NOXIOUS VIBRATIONS, ODORS, DUST GLARE OR SOUND IS PROHIBITED.

## HINTON OAKS INDUSTRIAL PARK LOT 8, BUILDING 5

### MASTER PLAN

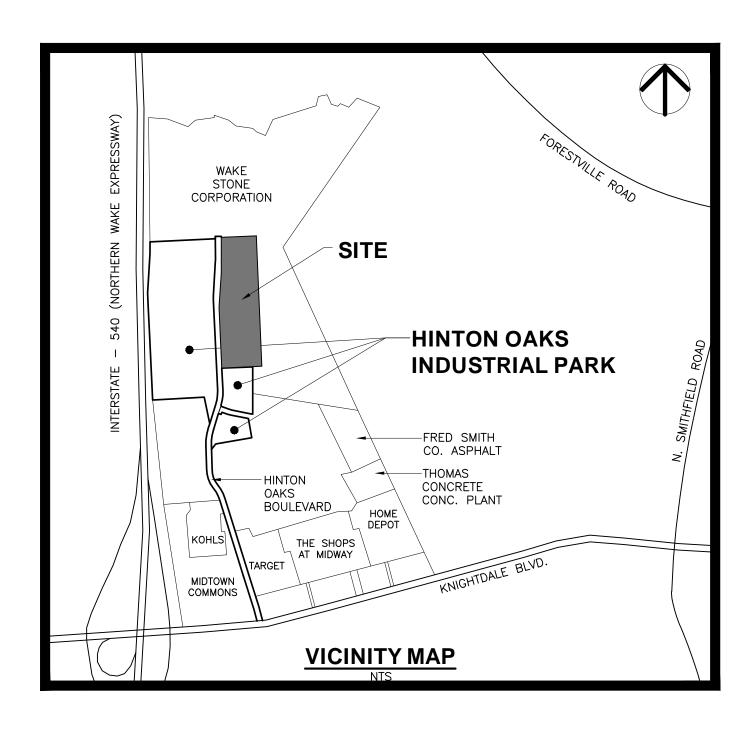
KNIGHTDALE, NORTH CAROLINA ZMA-7-21



VICINITY MAP SCALE: 1"=200

#### **GENERAL NOTES**

- 1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF KNIGHTDALE, THE CITY OF RALEIGH AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
- 2. CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (1-800-632-4949) LOCATE ALL EXIST. UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- 3. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXIST. UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
- 4. BOUNDARY AND SURVEY INFORMATION ON THESE PLANS IS FROM A SURVEY BY ROBINSON & PLANTE, P.C. VERTICAL DATUM FROM NAVD 88. HORIZONTAL DATUM FROM NAD 83.
- 5. ALL CONSTRUCTION SHALL CONFORM TO NORTH CAROLINA STATE BUILDING AND HANDICAPPED ACCESSIBILITY CODE AND A.D.A. STANDARDS
- 6. WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, NO OBSTRUCTION BETWEEN TWO (2) FEET AND EIGHT (8) FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION OR THE NEAREST TRAVELED WAY, IF NO CURBING EXISTS.
- 7. ESTIMATED PROJECT COMPLETION DATE IS MARCH 2022.
- 8. FUTURE PARKING WILL REQUIRE A SITE PLAN REVISION. 9. ON SITE FENCES & GATES SHALL NOT EXCEED SIX FEET (6') IN THE FRONT YARD AND EIGHT FEET (8) IN THE
- SIDE AND REAR YARDS 10. OUTDOOR STORAGE OF MATERIALS IS PROHIBITED.
- 11. THE TOWN OF KNIGHTDALE HAS DETERMINED THAT THIS PROJECT MEETS THE REQUIREMENTS FOR THE WATER



#### SITE DATA

1.	PROJECT NAME:
2.	STREET ADDRESS:
3.	SITE AREA:
4.	ZONING:
5.	PROPOSED BUILDING USE:
6.	PIN

7. CURRENT LAND USE:

8. WATERSHED CLASSIFICATION: 9. BUILDING USE / PARKING SUMMARY

10. ACREAGE IN PARKS: 11. ACERAGE IN NON-RESIDENTIAL UNITS: 12. TOTAL NUMBER OF HOUSING UNITS: 13. REQUIRED/PROVIDED RECREATIONAL OPEN SPACE:

14. TOWNSHIP/COUNTY/STATE: 15. TREE CANOPY AREA: 16. PUBLIC INFRASTRUCTURE SUMMARY:

17. IMPERVIOUS AREA: 18. OWNER:

19. CONTACT PERSON:

HINTON OAKS INDUSTRIAL PARK - LOT 8 - BLDG #5 O HINTON OAKS BOULEVARD KNIGHTDALE, NORTH CAROLINA TOTAL AREA: 18.13 AC. CURRENT=MQ. PROPOSED=MI

250,120 SF, STORAGE - WAREHOUSE, INDOOR STORAGE 1744-58-0927 VACANT

NEUSE RIVER BASIN (245,120 SF WAREHOUSE) MAXIMUM PARKING PERMITTED (WAREHOUSE) = 0.7 SP /1,000 SF $= 245,120/1,000 \times 0.7 = 172 \text{ SPACES}$ (5,000 SF OFFICE) MAXIMUM PARKING PERMITTED (OFFICE) = 4.0 SP /1,000 SF $= 5,000/1,000 \times 4.0 = 20 \text{ SPACES}$ 

MINIMUM PARKING REQUIRED = 96 SPACES REQUIRED 121 PARKING SPACES PROVIDED

ST. MATHEWS TOWNSHIP, WAKE COUNTY, NC

REQUIRED=4,217 LF PERIMITER X 20'= 84,340 SF PROVIDED=115,000 SF LENGTH OF ROADS CONSTRUCTED - 0 LF

LENGTH OF SIDEWALK CONSTRUCTED - 0 LF LENGTH OF CURB & GUTTER CONSTRUCTED - 0 LF LENGTH OF STORM DRAIN CONSTRUCTED - 0 LF 10.5 AC

WAKE STONE PROPERTY COMPANY KNIGHTDALE, NORTH CAROLINA 27545 919/266-1100

PIEDMONT LAND DESIGN, LLP ATTN. MIKE SCHNEIDER 8522-204 SIX FORKS ROAD RALEIGH, NORTH CAROLINA 27615 (919) 845-7600 (PHONE) (919) 845-7703 (FAX) MIKES@PIEDMONTLANDDESIGN.COM (E-MAIL)

#### **SHEET INDEX:**

COVER SHEET EXISTING CONDITIONS PLAN SITE PLAN MP 4 GRADING AND DRAINAGE PLAN UTILITY PLAN LANDSCAPE PLAN LIGHTING PLAN A101 FLOOR PLAN COLOR ELEVATIONS WALL SECTIONS

	AASHTO INTERSECTION SIGHT DISTANCE SUMMARY										
S	STOP SIGN CONTROL - LEFT & RIGHT TURNS FROM MINOR STREET ONTO A 2-LANE ROADWAY										
STREET NAME (THROUGH TRAFFIC)	STREET NAME (APPROACHING STREET, STOP CONDITION)	DESIGN SPEED OF THROUGH STREET, MPH	GRADE OF APPROACH STREET, %	LEFT TURN TIME GAP (SEC.)	RIGHT TURN TIME GAP (SEC.)	CALCULATED LEFT TURN SIGHT DISTANCE (FT.)	CALCULATED RIGHT TURN SIGHT DISTANCE (FT.)				
HINTON OAKS BLV	D NORTH DRIVEWAY	30	-2.0±	7.50	6.50	331	287				
HINTON OAKS BLV	D MIDDLE DRIVEWAY	30	-2.0±	7.50	6.50	331	287				
HINTON OAKS BLV	D SOUTH DRIVEWAY	30	-2.0±	7.50	6.50	331	287				

**CITY OF RALEIGH PUBLIC IMPROVEMENT QUANTITY SUMMARY** 

PUBLIC WATER (LF) - 0 LF PUBLIC SEWER (LF) - 0 LF STUB PERMITS - 0 EACH

PIEDMONT LANDDESIGN LLP 8522-204 SIX FORKS ROAD RALEIGH, NORTH CAROLINA 27615 919.845.7600 PHONE 919.845.7703 FAX ENGR. FIRM LICENSE #F-0843

> **PRELIMINARY** NOT FOR CONSTRUCTION

ISSUED: **26 APR 2021** 

**REVISIONS:** 

<u>/1</u>\ 19 MAY 2021 PER TOWN COMMENTS

DRAWN BY: **JET** CHECKED BY: MLS

PROJECT: WSHOIPB5L8

**COVER SHEET** 

**EXISTING VEGETATION NOTE:** 

WOODED AREAS PRIMARILY CONTAIN MATURE, DECIDUOUS HARDWOOD TREES. THE DOMINANT SPECIES IS OAK, HOWEVER, SWEETGUM, POPLAR, HICKORY, AND PINES ALSO EXIST. UNDERSTORY VEGETATION IS TYPICAL OF WOODED AREAS IN THIS REGION AND CONTAINS PRIVET, BAMBOO, AND HOLLY SPECIES.

EXISTING CONDITIONS/DEMOLITION NOTES

 ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF KNIGHTDALE AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.

CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (1-800-632-4949)
LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
 CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES
AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO
BEGINNING CONSTRUCTION.

 CONTRACTOR IS RESPONSIBLE FOR REMOVING OR RELOCATING ALL UTILITIES IN CONFLICT WITH NEW CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO DISTURBANCE.

5. CONTRACTOR SHALL DISPOSE OF ALL MATERIALS IN ACCORDANCE WITH ALL LOCAL AND STATE REGULATIONS.

CURVE TABLE

CURVE DELTA RADIUS ARC CHORD TANGENT CHORD BRG.

C1 4\*01'20" 565.00' 39.66' 39.66' 19.84' N 02\*05'22" E

C2 6\*14'49" 501.00' 54.62' 54.60' 27.34' S 00\*58'37" N

PEDMINIANDESICN IIP

8522-204 SIX FORKS ROAD
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919.845.7703 FAX
ENGR. FIRM LICENSE #F-0843

PRELIMINARY NOT FOR CONSTRUCTION

PROPOSED WAREHOUSE HINTON OAKS INDUSTRIAL PARK

AKS BOULEVARD
NORTH CAROLIN

CLIED: 26 ADD 2024

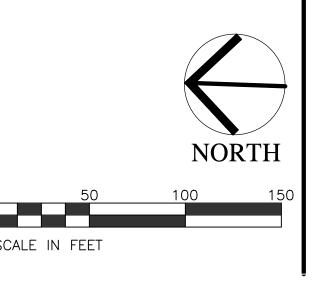
ISSUED: 26 APR 2021

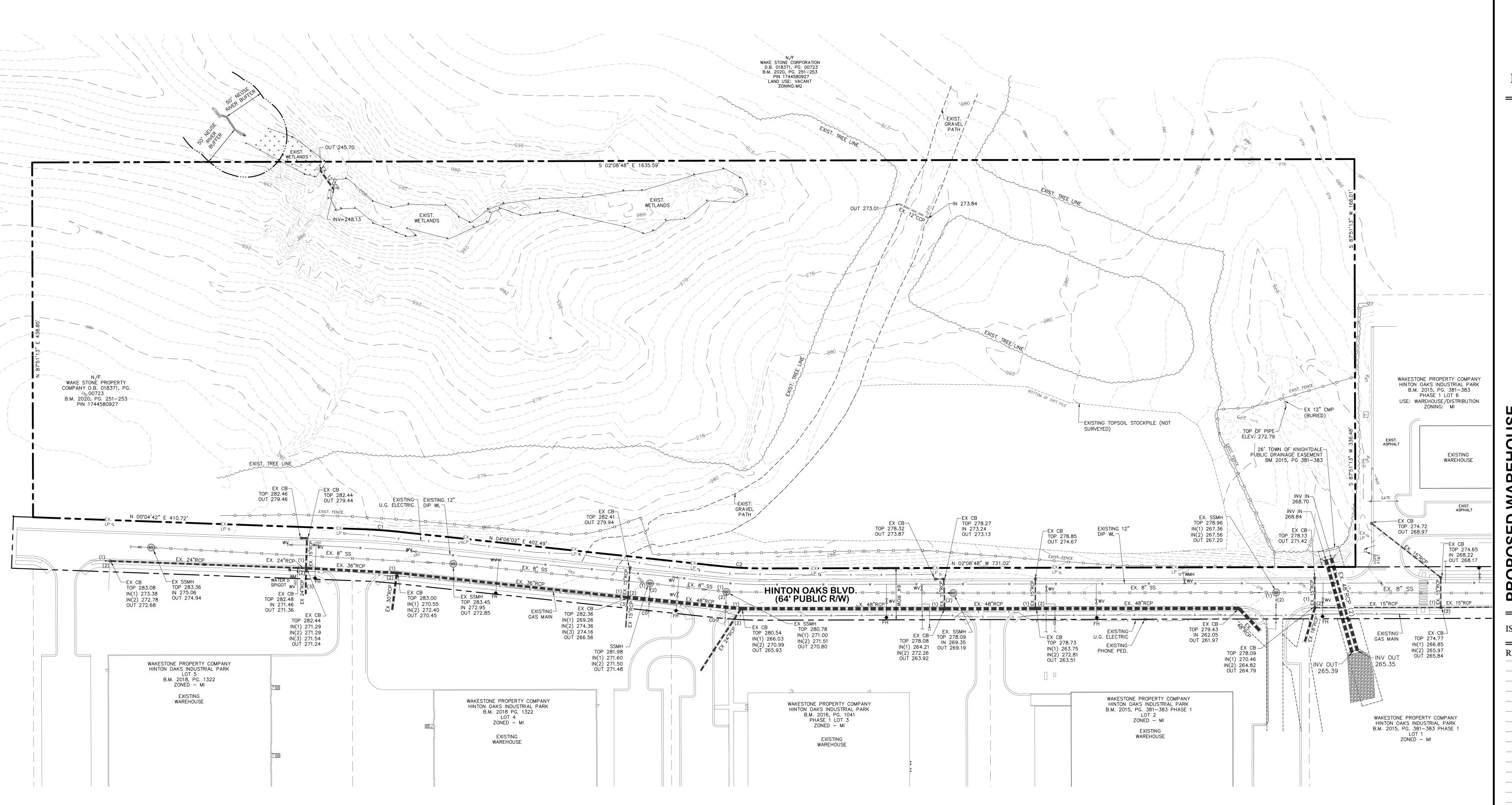
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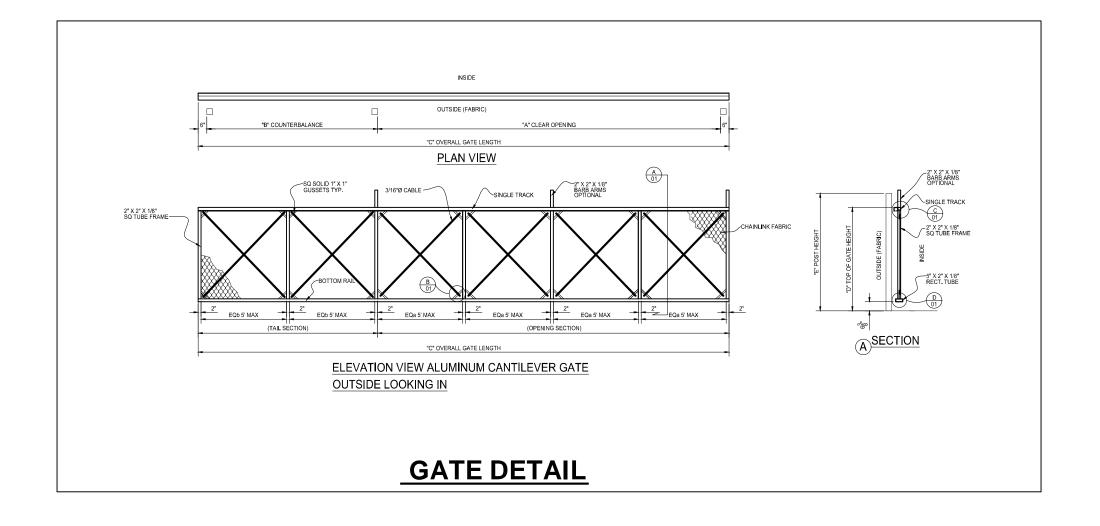
DRAWN BY: JET CHECKED BY: MLS

PROJECT: WSHOIPB5L8

EXISTING CONDITIONS PLAN







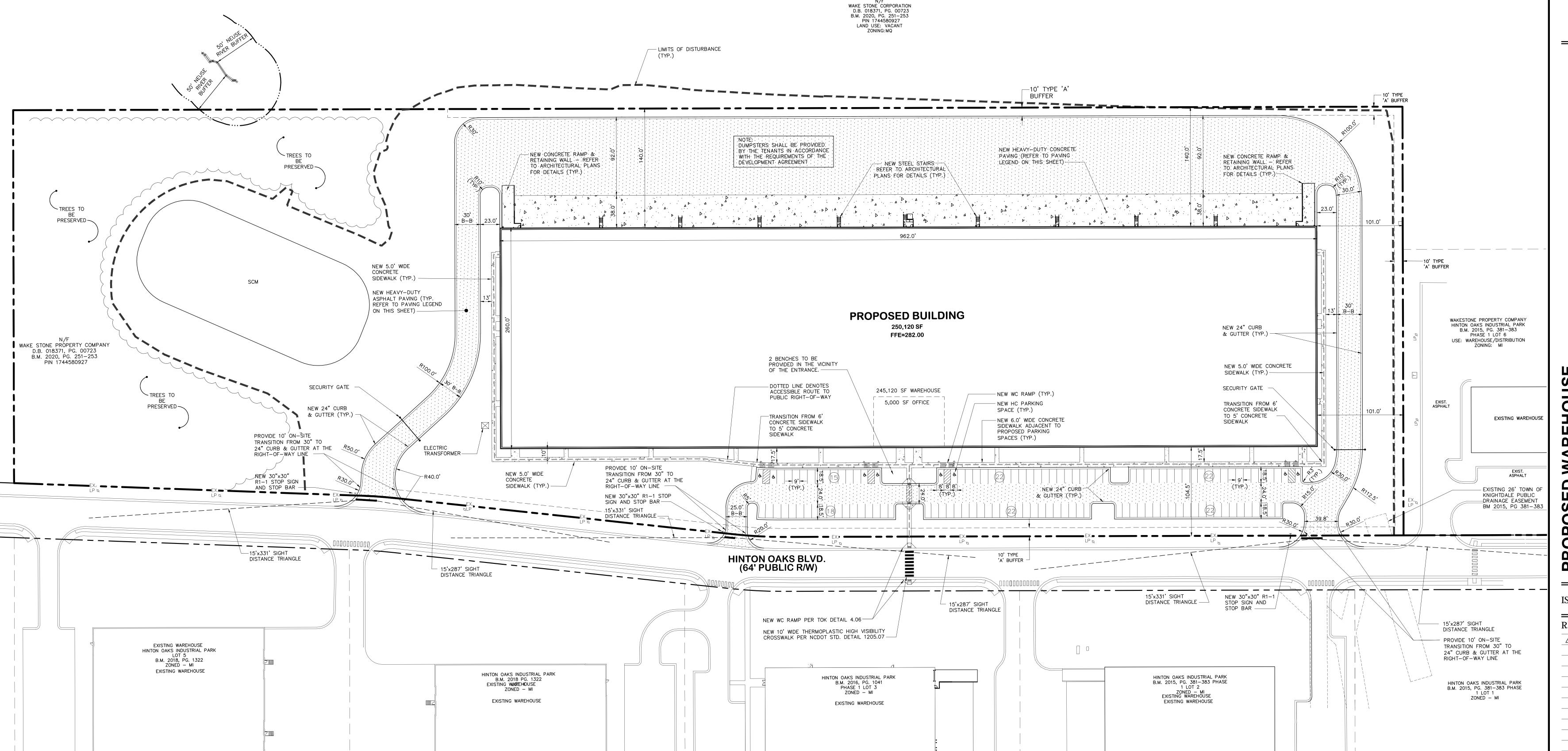
#### SITE PLAN NOTES

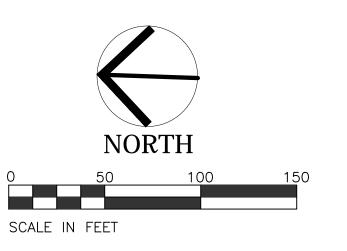
- 1. ALL DIMENSIONS ARE TO BACK OF CURB, FACE OF TURNED DOWN WALK, EDGE OF PAVING, BUILDING WALL FACE OR PROPERTY LINE.
- 2. PARKING SPACES ARE 9.0' WIDE MINIMUM EXCEPT HANDICAP SPACES WHICH ARE 8.0' WIDE MINIMUM WITH 5.0' AISLES (8.0' AISLES VAN).
- 3. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF THE BUILDING.
- 4. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DIMENSIONAL CONFLICTS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- 5. ALL CURB AND GUTTER ONSITE SHALL BE 24" WIDE. ALL CURB AND GUTTER IN THE ADJACENT STREETS SHALL BE 30" WIDE. PROVIDE 10' TRANSITION ON—SITE.
- 6. CONTRACTOR TO PROVIDE H/C RAMPS IN SIDEWALKS AT ALL DRIVEWAY CROSSINGS.
- 7. ALL ONSITE PAVEMENT MARKINGS SHALL BE THERMOPLASTIC WITH THE EXCEPTION OF PARKING STALL STRIPES WHICH MAY BE PAINTED.

  8. AT INTERSECTIONS WHITH WHEEL CHAIR RAMPS, THE CURB SHALL BE PLACED SUCH THAT THE CROSS SLOPE OF THE WHEEL CHAIR RAMP DOES NOT EXCEED 2%.

#### **PAVING LEGEND**







PEDMINIANDESIGNUP

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RALEIGH, NORTH CAROLINA 27615
919.845.7600 PHONE
919.845.7703 FAX

ENGR. FIRM LICENSE #F-0843

PROPOSED WAREHOUSE HINTON OAKS INDUSTRIAL PARK

ISSUED: **26 APR 2021** 

REVISIONS:

19 MAY 2021
PER TOWN COMMENTS

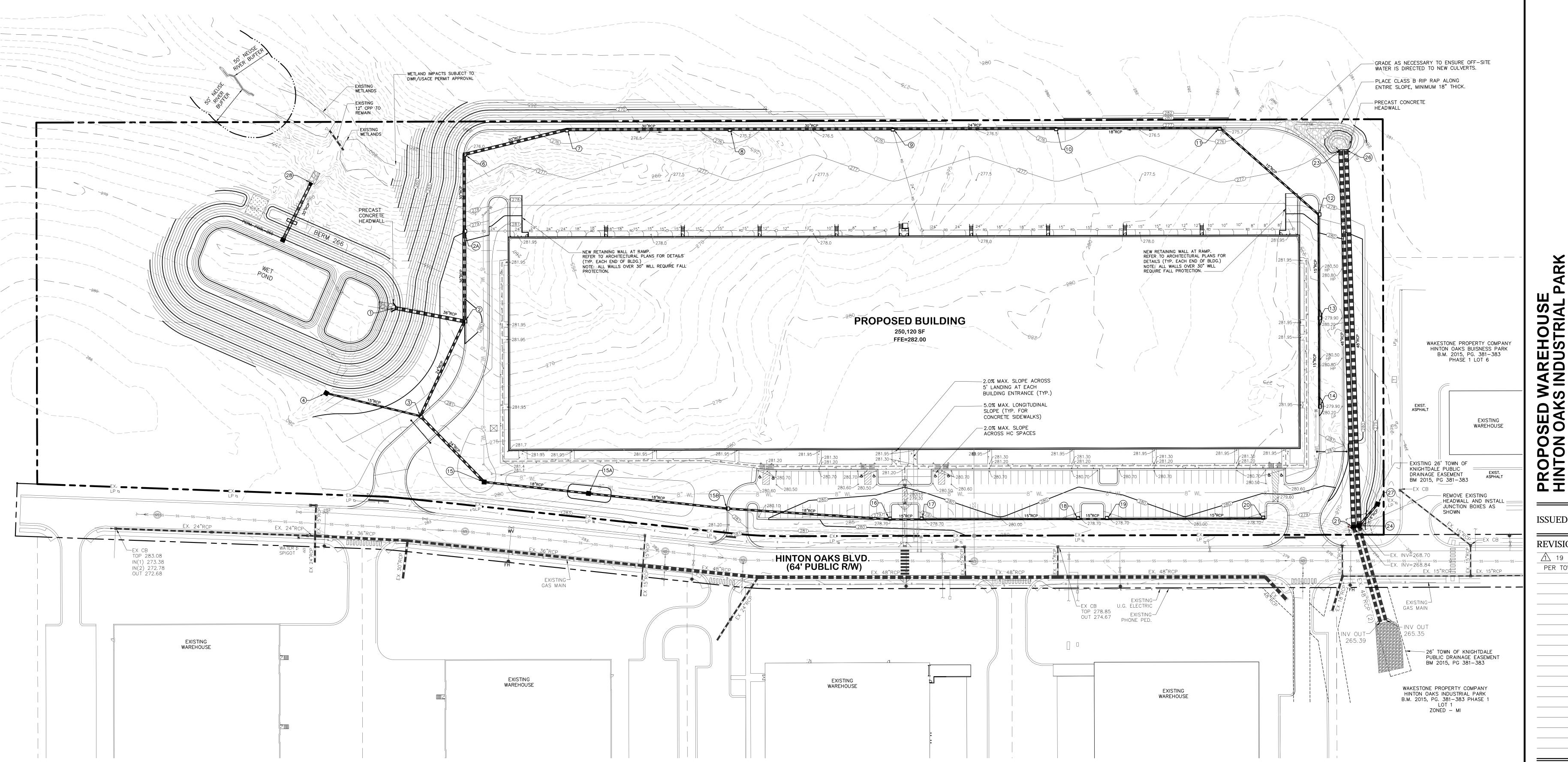
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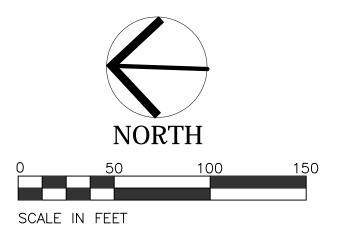
SITE PLAN

PROJECT: WSHOIPB5L8

- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF KNIGHTDALE AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
- 2. ALL CURB INLET, DROP INLET, MANHOLE, AND CLEAN-OUT FRAMES AND COVERS/GRATES SHALL BE PAINTED BLACK SEMI-GLOSS ENAMEL AFTER INSTALLATION.
- 3. ALL CLEAN-OUTS SHALL BE PROVIDED IN CAST IRON FRAME AND COVER SIMILAR TO A WATER VALVE BOX. PROVIDE HEAVY DUTY FRAME AND COVER IN PAVED AREAS.
- 4. AT INTERSECTIONS WITH WHEEL CHAIR RAMPS, THE CURB SHALL BE PLACED SUCH THAT THE CROSS SLOPE OF THE WHEEL CHAIR RAMP DOES NOT EXCEED 2%.

PIEDMONT LAND DESIGN LLP 8522-204 SIX FORKS ROAD RALEIGH, NORTH CAROLINA 27615 919.845.7600 PHONE 919.845.7703 FAX ENGR. FIRM LICENSE #F-0843





ISSUED: **26 APR 2021 REVISIONS:** 

19 MAY 2021 PER TOWN COMMENTS

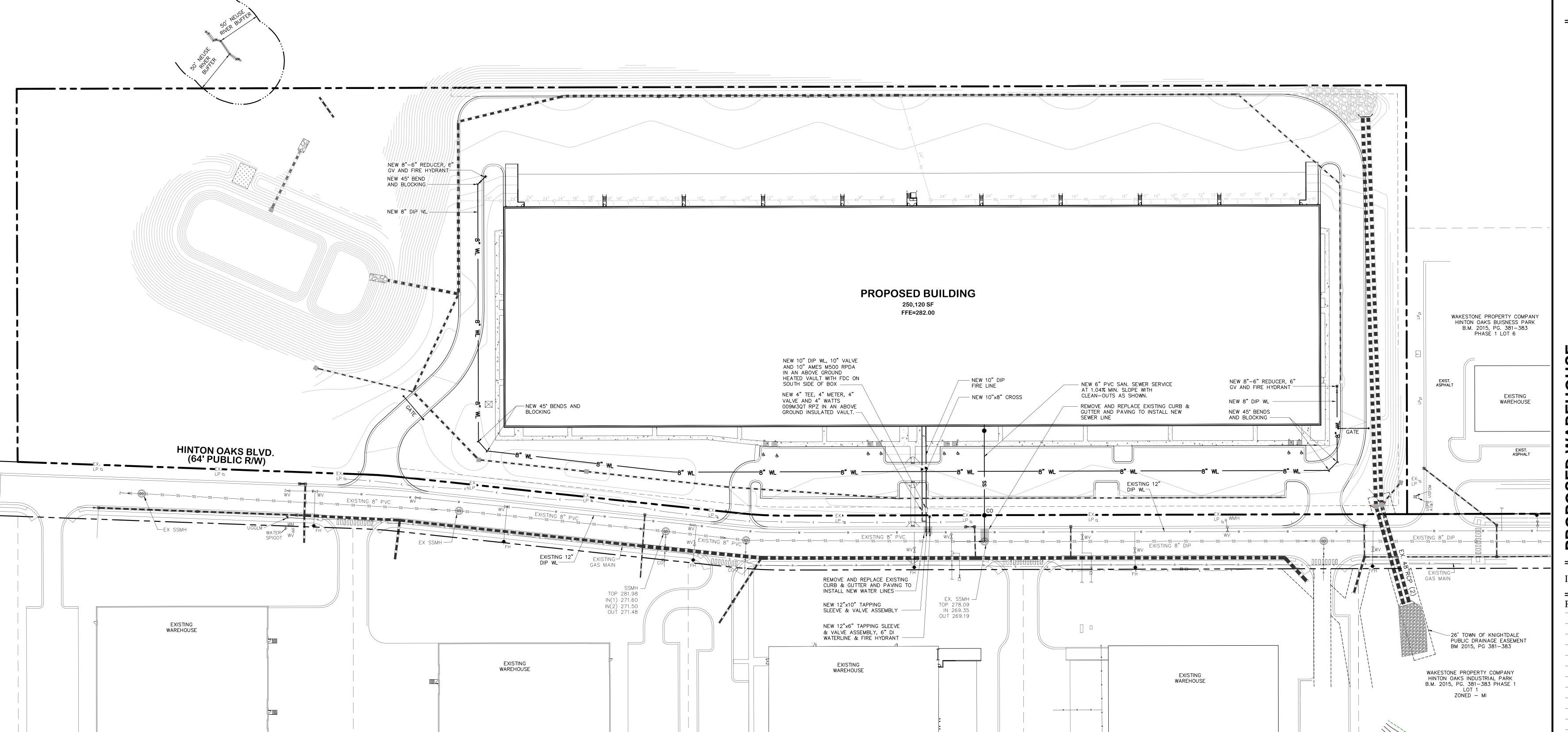
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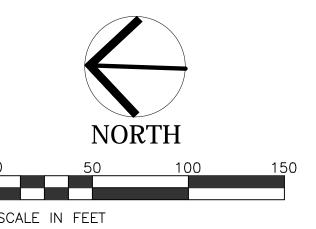
**GRADING AND** DRAINAGE PLAN

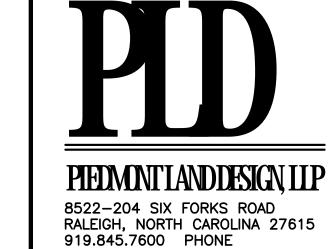
#### **UTILITY NOTES**

- 1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RALEIGH AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
- 2. CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (1-800-632-4949) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- 3. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
- 4. CONTRACTOR SHALL COORDINATE THE LOCATION OF THE ELECTRIC, GAS, AND TELEPHONE SERVICE WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL PROVIDE CONDUITS AS REQUIRED FOR THESE UTILITIES UNDER PAVED AREAS.
- 5. THIS PLAN IS DIAGRAMMATIC AND REPRESENTS THE APPROXIMATE LOCATION OF UTILITIES UNLESS SPECIFICALLY DIMENSIONED. THE CONTRACTOR SHALL COORDINATE THE ACTUAL AND PROPOSED LOCATION OF UTILITIES TO AVOID CONFLICTS.
- 6. CONTRACTOR SHALL COORDINATE THE LOCATION OF THE WATER AND SEWER SERVICE TO THE BUILDINGS WITH THE BUILDING PLUMBING CONTRACTOR AND THE BUILDING PLANS.
- 7. ALL CLEAN-OUTS SHALL BE PROVIDED IN CAST IRON FRAME AND COVER SIMILAR TO WATER VALVE BOX. PROVIDE HEAVY DUTY FRAME AND COVER IN PAVED AREAS.
- 8. ALL MANHOLE AND CLEAN OUT FRAMES AND COVERS/GRATES SHALL BE PAINTED BLACK SEMI-GLOSS ENAMEL AFTER INSTALLATION.

  9. CONTRACTOR SHALL PROVIDE CONDUITS FOR IRRIGATION LINES UNDER PAVED AREAS.
- 10. IRRIGATION METER, REDUCED PRESSURE ZONE DEVICE, AND SERVICE SHALL BE PROVIDED. (DESIGN-BUILD.)
- 11. CONTRACTOR SHALL PROVIDE PVC CONDUIT(S) UNDER PAVED AREAS FOR POWER TO LIGHT POLES AND MONUMENT SIGN.







919.845.7703 FAX

ENGR. FIRM LICENSE #F-0843

PROPOSED WAREHOUSE HINTON OAKS INDUSTRIAL PARK

SUED: **26 APR 2021** 

ISSUED: **26 APR 2021** 

REVISIONS:

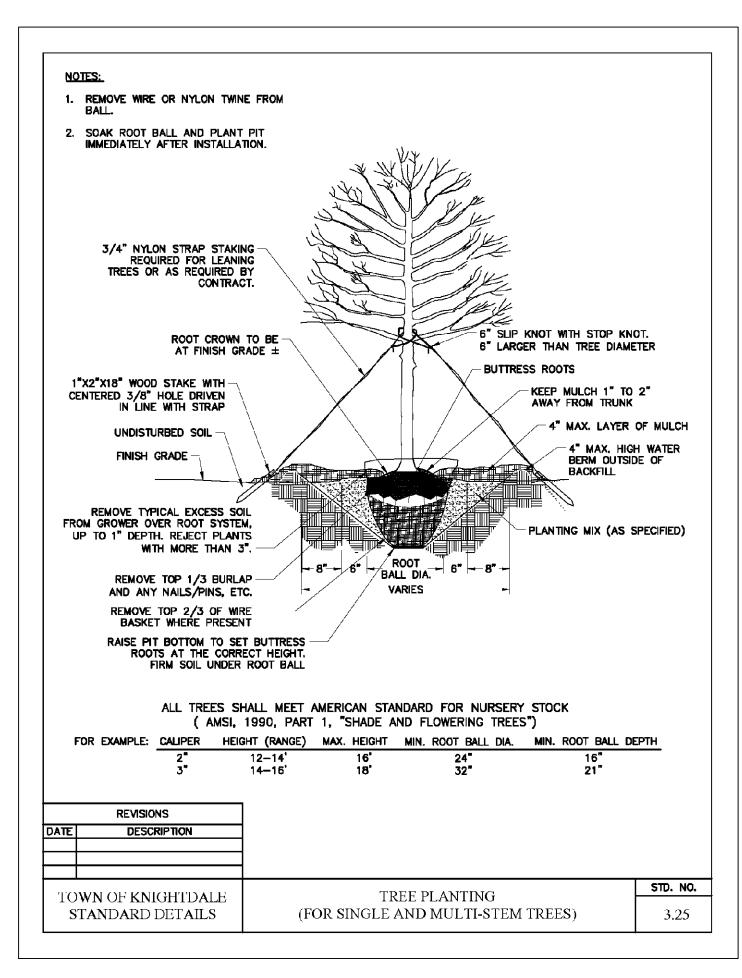
19 MAY 2021

PER TOWN COMMENTS

DRAWN BY: **JET** CHECKED BY: **MLS** 

PROJECT: WSHOIPB5L8

**UTILITY PLAN** 



DOTANIOAL MARE			Image: Section 1		Ŏ	
BOTANICAL NAME COMMON NAME		QUAN	3	보	ROO	REMARKS
EES						
Acer buergerignum	Trident Maple	21	1 1/4"	' <sub>6'</sub>	R&R	UNDERSTORY TREE
Betula niara 'Dura-heat'	Dura-heat River Birch	7	2"		B&B	CANOPY TREE
	arora' Crape Myrtle	25				MULTI-STEM TREE
	Chinese Lacebark Elm	23	2"	8'	B&B	STREET TREE
		67				
			3 CAL	10"		
	Chinese Witchingsel	1 <del>4</del> 0	D GAL	10		
Loropetalum chinense 'Ruby'	Chinese Witchhazel	40	3 GAL	18"		
	Acer buergerianum Betula nigra 'Dura—heat' Lagerstroemia indica x fauriei 'Tusco Ulmus parvifolia 'Emer II'	Acer buergerianum Betula nigra 'Dura—heat' Lagerstroemia indica x fauriei 'Tuscarora' Ulmus parvifolia 'Emer II'  Chinese Lacebark Elm  RUBS  Buxus microphylla japonica 'Wintergreen' Ilex cornuta 'Burfordii Nana'  Crape Myrtle Chinese Lacebark Elm  Japanese Boxwood Chinese Holly	Acer buergerianum Betula nigra 'Dura—heat' Lagerstroemia indica x fauriei 'Tuscarora' Ulmus parvifolia 'Emer II'  Chinese Lacebark Elm  RUBS  Buxus microphylla japonica 'Wintergreen' Ilex cornuta 'Burfordii Nana'  Crape Myrtle Crape Myrtle Chinese Lacebark Elm  23  Appanese Boxwood 67  Chinese Holly  142	Acer buergerianum  Betula nigra 'Dura—heat' Lagerstroemia indica x fauriei 'Tuscarora' Ulmus parvifolia 'Emer II'  Chinese Lacebark Elm  Chinese Boxwood  Buxus microphylla japonica 'Wintergreen' Ulex cornuta 'Burfordii Nana'  Trident Maple 21 1 1/4' Crape Myrtle 25 N/A Chinese Lacebark Elm 23 2"  Z'ACABBER  Chinese Holly  Dura—heat River Birch 7 2" Crape Myrtle 25 N/A 25 N/A 26 N/A 27 Chinese Holly  A GAL Chinese Holly  Dura—heat River Birch 7 2" A GAL Chinese Holly  Dura—heat River Birch 7 2" A GAL Chinese Holly	Acer buergerianum  Betula nigra 'Dura—heat' Lagerstroemia indica x fauriei 'Tuscarora' Ulmus parvifolia 'Emer II'  Buxus microphylla japonica 'Wintergreen' Ulex cornuta 'Burfordii Nana' Chinese Holly Loropetalum chinense 'Blush'  Trident Maple 21 1 1/4" 6' 2" 8' Crape Myrtle 25 N/A 6' Crape Myrtle 25 N/A 6' 2" 8'  NA 6' 2" 8' Chinese Lacebark Elm 23 2" 8'  Ack 18" Chinese Holly 142 3 GAL 18" Chinese Witchhazel 40 3 GAL 18"	Acer buergerianum Betula nigra 'Dura—heat' Dura—heat River Birch Trident Maple Betula nigra 'Dura—heat' Dura—heat River Birch Totale Myrtle Dura—heat River Birch Totale Myrtle Totale M

#### LANDSCAPE NOTES

BEFORE, DURING, AND AFTER INSTALLATION.

ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
 ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT

ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
 PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH

5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.

OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.

6. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF THE PLANTING AREAS AND LAWN UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.

7. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR (OR AS INDICATED IN THE LANDSCAPE SPECIFICATIONS) BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE

GUARANTEE PERIOD.

8. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM

REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.

ALL NEW TREES ARE TO BE COMPLETELY COVERED WITH HARDWOOD SHREDDED

MULCH TO A MINIMUM DEPTH OF FOUR (4) INCHES BY (5) FIVE FOOT DIAMETER.

10. CONTRACTOR SHALL SEED ONSITE DISTURBED AREAS THAT ARE NOT SCHEDULED TO BE PLANTED WITH TREES AND SHRUBS. WATER AS NEEDED FROM A SOURCE APPROVED BY THE TOWN OF KNIGHTDALE AND WAKE COUNTY TO ENSURE THAT SEED GERMINATES AND ESTABLISHES. ADDITIONAL SEEDING MAY BE REQUIRED IN BARE AREAS IF ORIGINAL SEED DOES NOT ESTABLISH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT SEEDED AREAS ARE FULLY COVERED WITH MATURE GRASSES ONE YEAR AFTER INITIAL DISTRIBUTION OF SEED.

PERMANENT LAWN NOTES:

(TWO DIFFERENT FESCUES TO BE SELECTED FROM

VARIETIES RECOMMENDED FOR PROJECT AREA)

SEEDED LAWN AREAS

SEEDING SHALL BE AT THE
FOLLOWING RATE:
PER 1000 S.F. OF LAWN AREA:
3 LBS. TURF TYPE FESCUE "TYPE A"
3 LBS. TURF TYPE FESCUE "TYPE B"

1 LB. KENTUCKY BLUE GRASS

PEDMOTIANDESIGN IIP

8522-204 SIX FORKS ROAD
RALEIGH, NORTH CAROLINA 27615
919.845.7600 PHONE
919.845.7703 FAX
ENGR. FIRM LICENSE #F-0843

PRELIMINARY NOT FOR CONSTRUCTION

PROPOSED WAREHOUSE
HINTON OAKS INDUSTRIAL PARK
550 HINTON OAKS BOULEVARD
KNIGHTDALE, NORTH CAROLINA

ISSUED: **26 APR 2021** 

REVISIONS:

19 MAY 2021
PER TOWN COMMENTS

PER TOWN COMMENTS

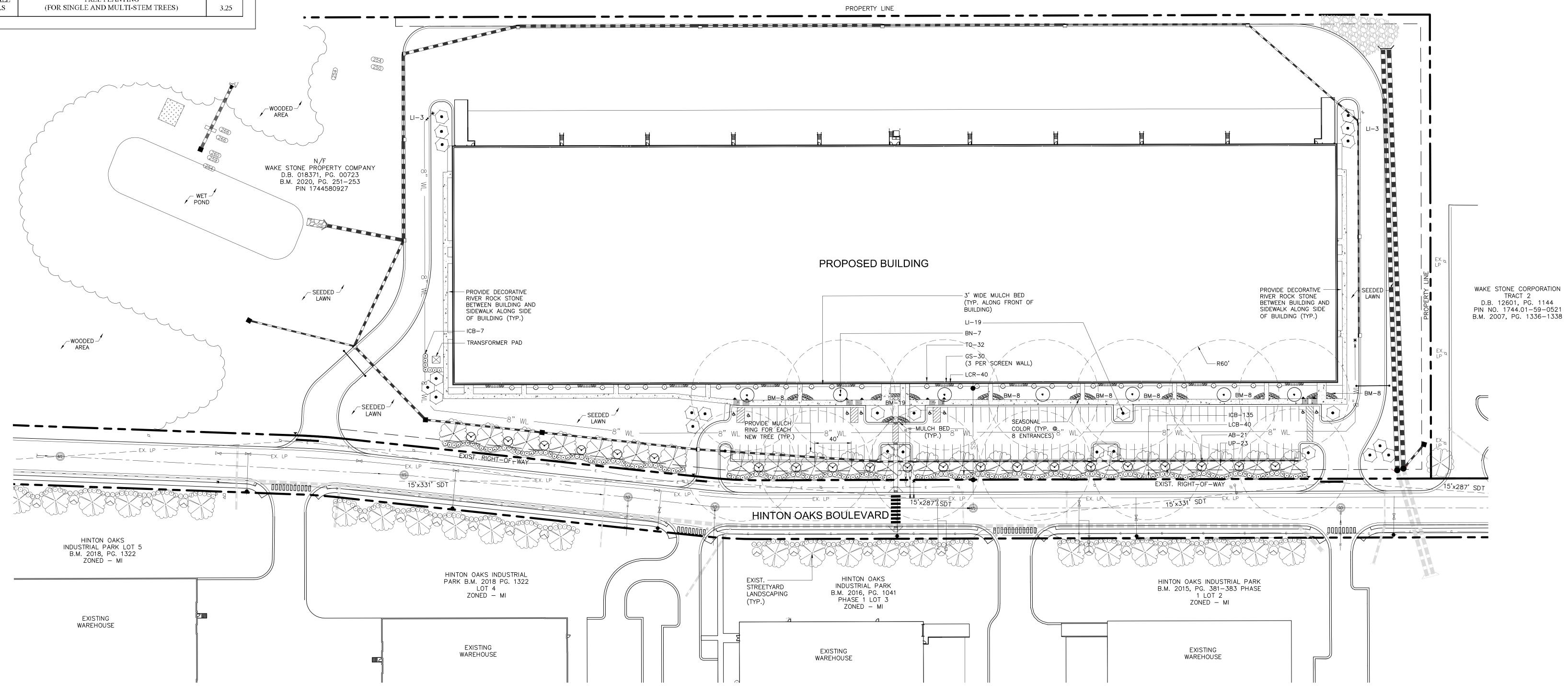
DRAWN BY: MGD

PROJECT: WSHOIPB5L8

CHECKED BY: MGD

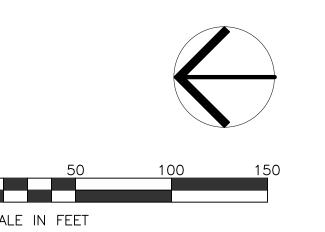
LANDSCAPE PLAN

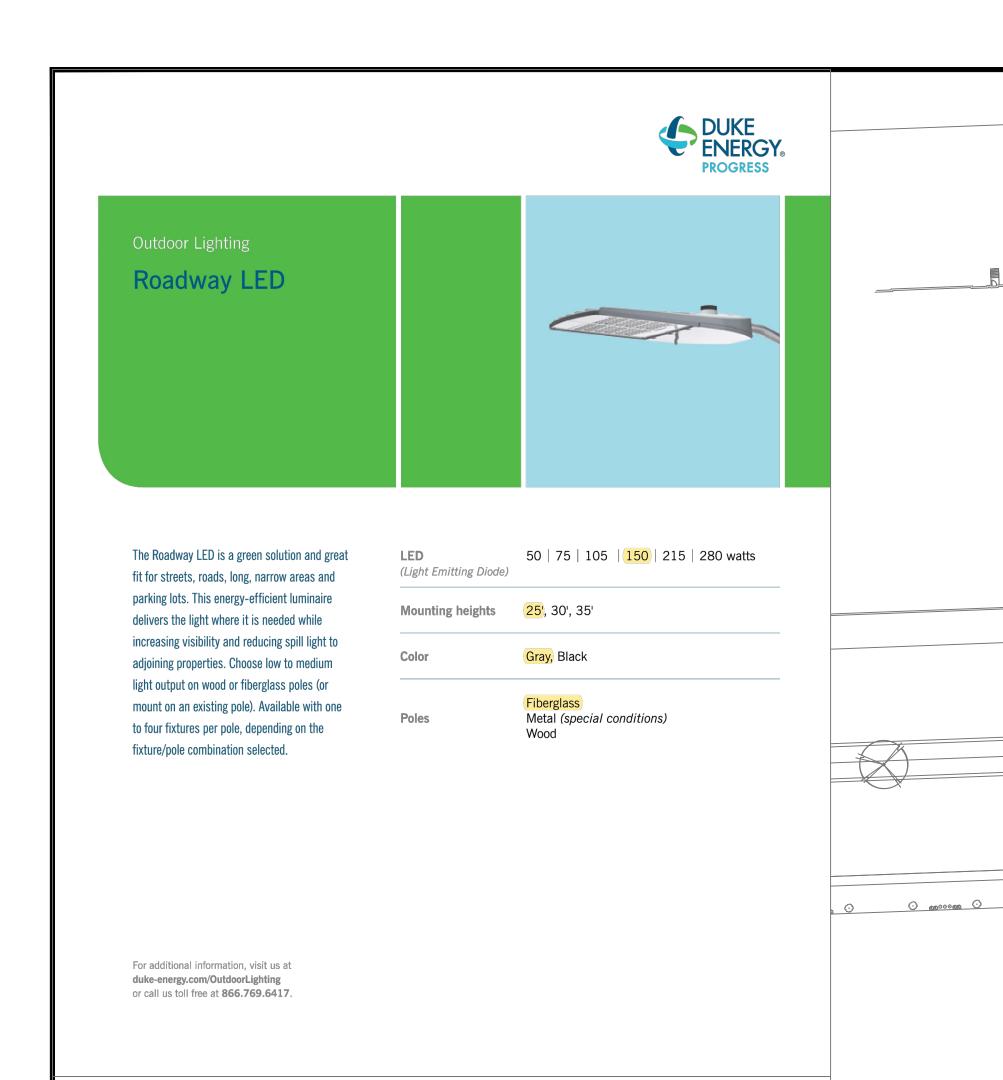
DWG. NO. MP 6



**EXISTING VEGETATION NOTE:** 

WOODED AREAS PRIMARILY CONTAIN MATURE, DECIDUOUS HARDWOOD TREES. THE DOMINANT SPECIES IS OAK, HOWEVER, SWEETGUM, POPLAR, HICKORY, AND PINES ALSO EXIST. UNDERSTORY VEGETATION IS TYPICAL OF WOODED AREAS IN THIS REGION AND CONTAIN PRIVET, BAMBOO, AND HOLLY SPECIES.







# Roadway LED

Light source: LED (white) **Lumens:** 4,807 – 25,050 (fixture dependent) IESNA Backlight-Uplight - Glare (BUG) Rating Light Pattern Wattage IESNA Type III (medium oval) B1-U0-G1 B1-U0-G2 LED 75 IESNA Type II (long oval) LED 105 IESNA Type II (long oval) B2-U0-G3 IESNA Type III (medium oval) B2-U0-G2 LED 215 IESNA Type III (medium oval) B3-U0-G3



Color temperature: 4.000K

IESNA Type III (medium oval)

Warm-up and restrike time: Instant on (no warm-up or restrike time)

#### Poles available:

LED 280

Name	Mounting height	Color
Fiberglass	<mark>25'</mark> , 30', 35'	Gray
Fiberglass	25', 30', 35'	Black (additional cost)
Wood	25', 30', 35'	Standard
Metal (special conditions)*	25', 30', 35'	Gray
Features		Benefits
Little or no installation cost		Frees up capital for other projects
Design services by lighting professionals includ	ed	Meets industry standards and lighting ordinances
Maintenance included		Eliminates high and unexpected repair bills
Electricity included		Less expensive than metered service
Warranty included		Worry-free
One low monthly cost on your electric bill		Convenience and savings for you
Turnkey operation		Provides hassle-free installation and service
Backed by over 40 years of experience		A name you can trust today and tomorrow

B3-U0-G4

LIGHTING DESIGN TOLERANCE

\*2' raised foundation available when required

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The calculated footcandle light levels in this lighting design are predicted values and are based on specific information that has been supplied to Duke Energy Progress. Any inaccuracies in the supplied information, differences in luminaire installation, lighted area geometry including elevation differences, reflective properties of surrounding surfaces, obstructions (foliage or otherwise) in the lighted area, or lighting from sources other than listed in this design may produce different results from the predicted values. Normal tolerances of voltage, lamp output, and ballast and luminaire manufacture will also affect results.

DISTANCE CALIBRATION (INCHES) 0 0.5 1.0 2, 0 3. 0



\*\*\* 0.0 ° 0. 

10. 60 Cm (20 Cm) (20 - \*0.0 \*\*O-# \*\*0.2#\_0 \*\*0.0 \*\* 

0.00 0.

0.00 0.

\$\frac{1}{2.0.0}\$\frac{1}{2.0

₹ \$\frac{1}{2}\$\$\frac{1}{2}\$\$\frac{1}{1.5}\$\$\frac{1}{1.6}\$\$\frac{

\$\$\frac{1-\frac{1}{2}}{2}\$\tilde{2}

\$\delta \delta \delta

73 1 30 1 1 20 1 1 20 1 1 20 1 1 20 1 1 20 1 2

\$\frac{1}{2}\frac{1}{

100 to \$\frac{1}{2} to \$\frac{ 

**1.4 1.1 | 1/0 00 | 1/0 1.1 1 | 1/0 00 | 1/0 | 1/0 1 | 1/0 00 | 1/0 | 1/0 1 | 1/0 00 | 1/0 1 | 1/0 00 | 1/0 1 | 1/0 00 | 1/0 00** 

**\* 1.3 ± 1.4 ± 1.** 

0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0 ° 0.0

0.8 1.3 1.4 1.2 1.1 1.9 0.8 0.6

7.4 1.6 1.4 1.1 1.0 0 6 to

\*\*\dot

\*0.0 \*0.0 \*0.0 \*0.0 \*0.0 \*6.0 \*0.0 \*2.0 \*0.0 \*0.0 \*0.1 \*0.1 

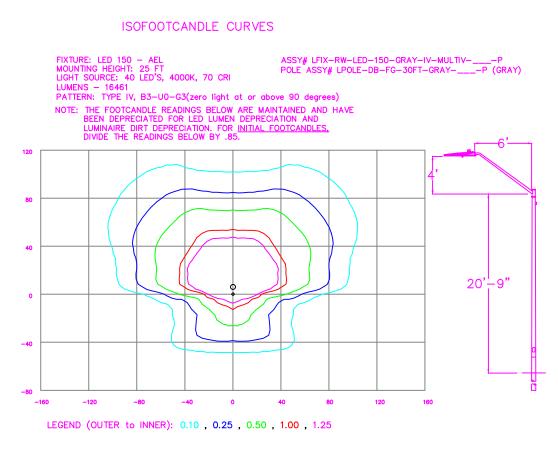
\*\* 0.0 \*\* 0.0 \*\* 0.0 \*\* 0.0 \*\* 0.0 \*\* 0.0 \*\* 0.0 \*\* 0.0 \*\* 0.0 \*\*

†0.0 †0.0 †0.0 †0.0 †0.0 †0.0 <u>50</u>0**00 †00 †00** †0.1 †0.1 <u>\*</u>0.5

\*0.0 \*0.0 \*0.0 \*0.0 \*0.0 \*0.0 \*

\*0.0 \*0.0 \*0.0 \*0.0 \*0.0 \*0.0

0.0 \*0.0 \*0.0 \*0.0 \*0.0 \*0.0



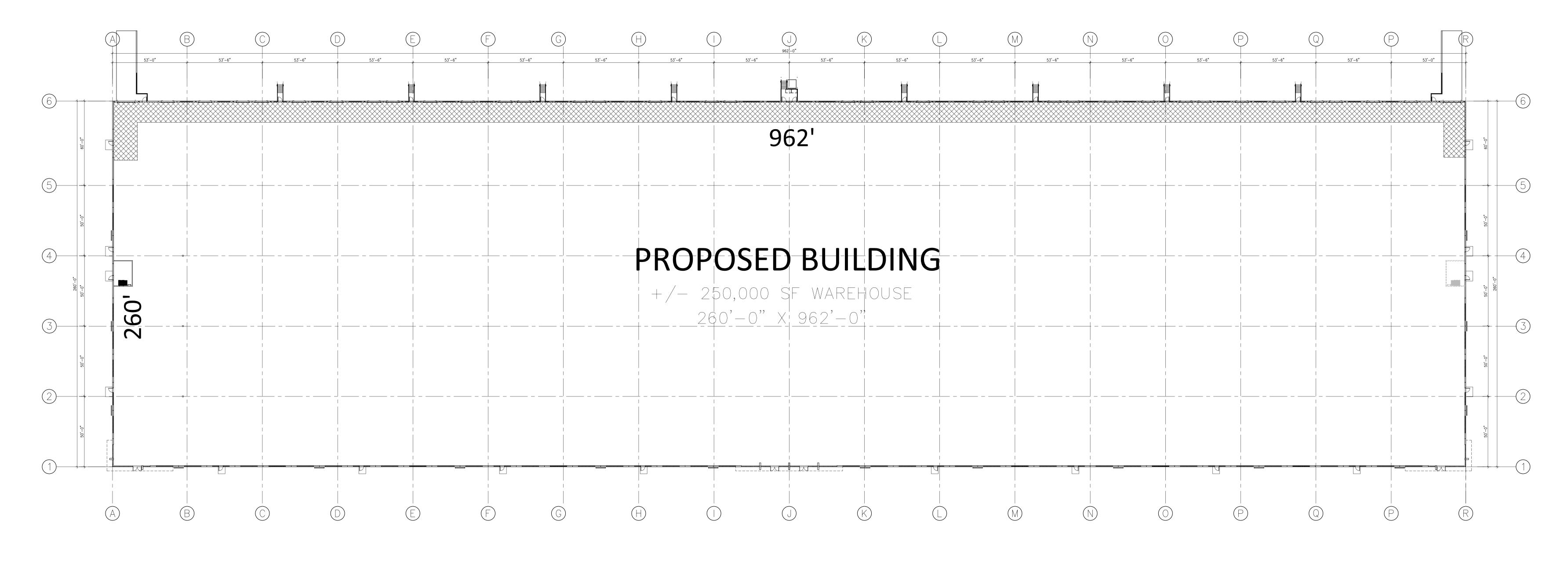
Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking	Ж	1.4 fc	3.4 fc	0.5 fc	6.8:1	2.8:1

Schedule						
Symbol	Label	Quantity	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor
<b>X</b>	150w Rdwy IV	13	LED 150w Roadway - Type IV - 4000K	1	16462	0.85

#### PROPRIETARY & CONFIDENTIAL

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HINTON OAKS 8
Knightdale, NC
SITE LIGHTING PLAN
Designed by DEP LIGHTING SOLUTIONS
Reviewed by <u>T. Ferguson</u> Scale <u>1" = 60'</u>
Date <u>04/29/2021</u> Size <u>"Arch D"</u>
Description_LED 150w Roadway
Drawing No. <u>21-0137A</u> Sht. <u>1 OF 1</u>
3



FLOOR PLAN

SCALE: 1" = 30'-0"





GENERAL CONTRACTOR:

WAKE STONE PROPERTY COMPANY P.O. BOX 190 P.P. KNIGHTDALE, NC 27545



COMPLETE PROJECT ADDRESS





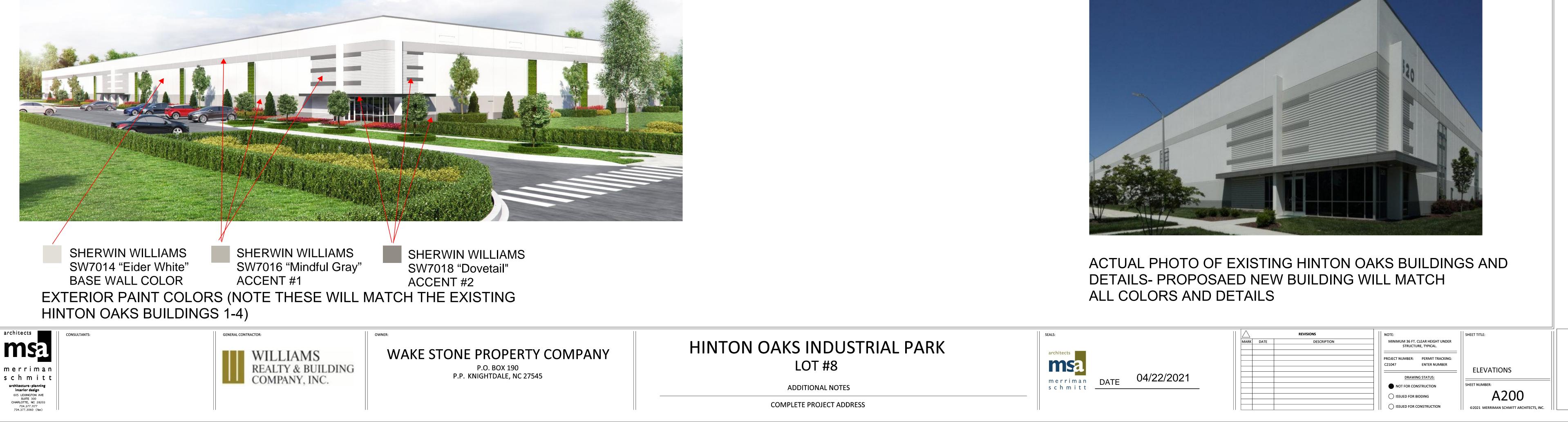
$\triangle$		REVISIONS	NOTE:	s
MARK	DATE	DESCRIPTION	MINIMUM 36 FT. CLEAR HEIGHT UNDER STRUCTURE, TYPICAL.	
			PROJECT NUMBER: PERMIT TRACKING: C21047 ENTER NUMBER	-
			DRAWING STATUS:	=       =
			NOT FOR CONSTRUCTION	S
			ISSUED FOR BIDDING	
			ISSUED FOR CONSTRUCTION	

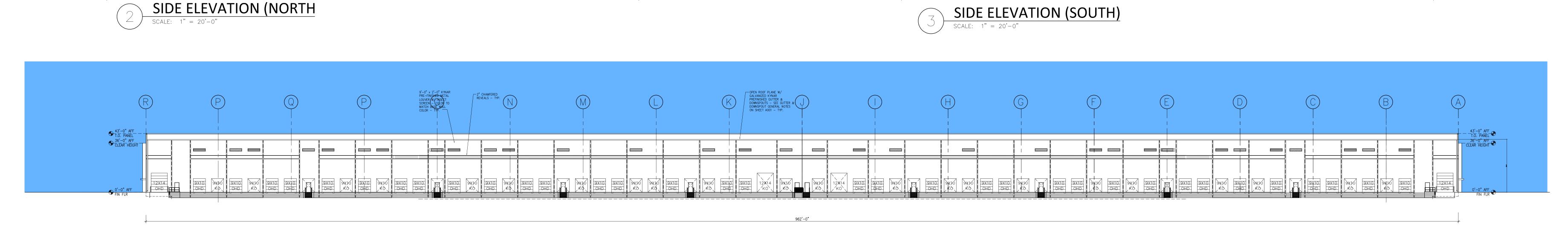
43'-0" AFF

CLEAR HEIGHT

architects

merriman
schm





**REAR ELEVATION (EAST** 

FRONT ELEVATION (WEST)

43'-0" AFF T.O. PANEL 36-0" AFF CLEAR HEIGHT

FOOTING STEP - SEE STRUCTURAL DRAWINGS

LINE OF FOOTING BELOW

- SEE STRUCTURAL
DRAWINGS

72" CHAMFERED
REVEALS - TYP.

TEXTURED PAINT OVER
TILT CONCRETE PANEL
- SEE PAINTING
NOTES ON SHEET A001

TEXTURED PAINT OVER
TILT CONCRETE PANEL
- SEE PAINTING
NOTES ON SHEET A001

TYP.

CUSTOMROCK CONCRETE
FORM LINER - PATTERN
4012 OR APPROVED
ALTERNATE

43'-0" AFF T.O. PANEL 36-0" AFF CLEAR HEIGHT

0'-0" AFF FIN FLR

TEXTURED PAINT OVER
TILT CONCRETE PANEL
- SEE PAINTING
NOTES ON SHEET A001



LINE OF ROOF
SLOPE (BEYOND)

LINE OF FOOTING BELOW

- SEE STRUCTURAL

DRAWINGS

260'-0"

43'-0" AFF

21047

