THE SITE WILL INCORPORATE A WET DETENTION POND, DESIGNED TO TREAT THE RUNOFF TO MEET TOWN OF KNIGHTDALE STORMWATER CONTROL REQUIREMENTS.

GENERAL NOTES

- 1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF KNIGHTDALE, THE CITY OF RALEIGH (FOR PUBLIC UTILITIES) 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
- 3. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF
- 4. BOUNDARY AND SURVEY INFORMATION ON THESE PLANS IS FROM A SURVEY BY JONES SURVEYING AND
- 5. ALL CONSTRUCTION SHALL CONFORM TO NORTH CAROLINA STATE BUILDING AND HANDICAPPED ACCESSIBILITY CODE
- 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 JANUARY 2026.

ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.

CONSULTING, PLLC. TOPOGRAPHY IS FROM LIDAR, AND IS NOT FIELD SURVEYED.

- 8. ON SITE FENCES & GATES SHALL NOT EXCEED SIX FEET (6') IN THE FRONT YARD AND EIGHT FEET (8) IN THE SIDE AND REAR YARDS
- 9. OUTDOOR STORAGE OF MATERIALS IS PROHIBITED.
- 10. THE TOWN OF KNIGHTDALE HAS DETERMINED THAT THIS PROJECT MEETS THE REQUIREMENTS FOR THE WATER
- 11. THIS PROJECT IS PART OF THE "KNIGHTDALE INDUSTRIAL PARK UTILITY ALLOCATION AND DEVELOPMENT AGREEMENT" (BM015866, PG01153-01203 & BM017641, PG00587-00595)
- 12. FUTURE PARKING WILL REQUIRE A SITE PLAN REVISION.

ADDITIONAL USE STANDARDS

	ADDITIONAL GOL GTANDARDS
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	OUTDOOR STORAGE IS NOT PERMITTED.
AGRIBUSINESS	ACCESSORY BUILDINGS PERMITTED UNDER SECTION 5.10 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 5.10 AND AREAS USED FOR STORAGE OR 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
MANUFACTURING, LIGHT	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 7.6 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 7.6 AND IS RESTRICTED TO THE REAR YARD.
	ANY OPERATION WHICH RESULTS IN THE CREATION OF NOXIOUS VIBRATIONS, ODORS, DUST, GLARE OR SOUND IS PROHIBITED.

TREE COVER AREA CALCULATIONS

REQUIRED TREE COVER AREA EQUALS THE PERIMETER OF THE DEVELOPMENT IN FEET MULTIPLIED BY TWENTY (20).

REQUIRED TREE COVER AREA =5,527 LF X 20 = 110,540 SF = 2.54 AC

PROVIDED TREE COVER AREA = 8.13 ACRES

TOWN OF KNIGHTDALE CONTACTS

KNIGHTDALE PUBLIC WORKS

JOHN STOVER

919-217-2250 SWENGINEER@KNIGHTDALENC.GOV

INSPECTIONS MANAGER, TOK PUBLIC WORKS 919-349-2521 JOHN.STOVER@KNIGHTDALENC.GOV

TOWN ESC CONSTRUCTION INSPECTOR 919-919-2254

STORMWATER MANAGER, PUBLIC WORKS 919-217-2255

IKE.ARCHER@KNIGHTDALENC.GOV STORMWATER TECH, PUBLIC WORKS

DONOVAN APPLEWHITE

CODE ENFORCEMENT OFFICER, DS DONOVAN.APPLEWHITE@KNIGHTDALENC.GOV 919-217-2248

BUILDING TYPE:

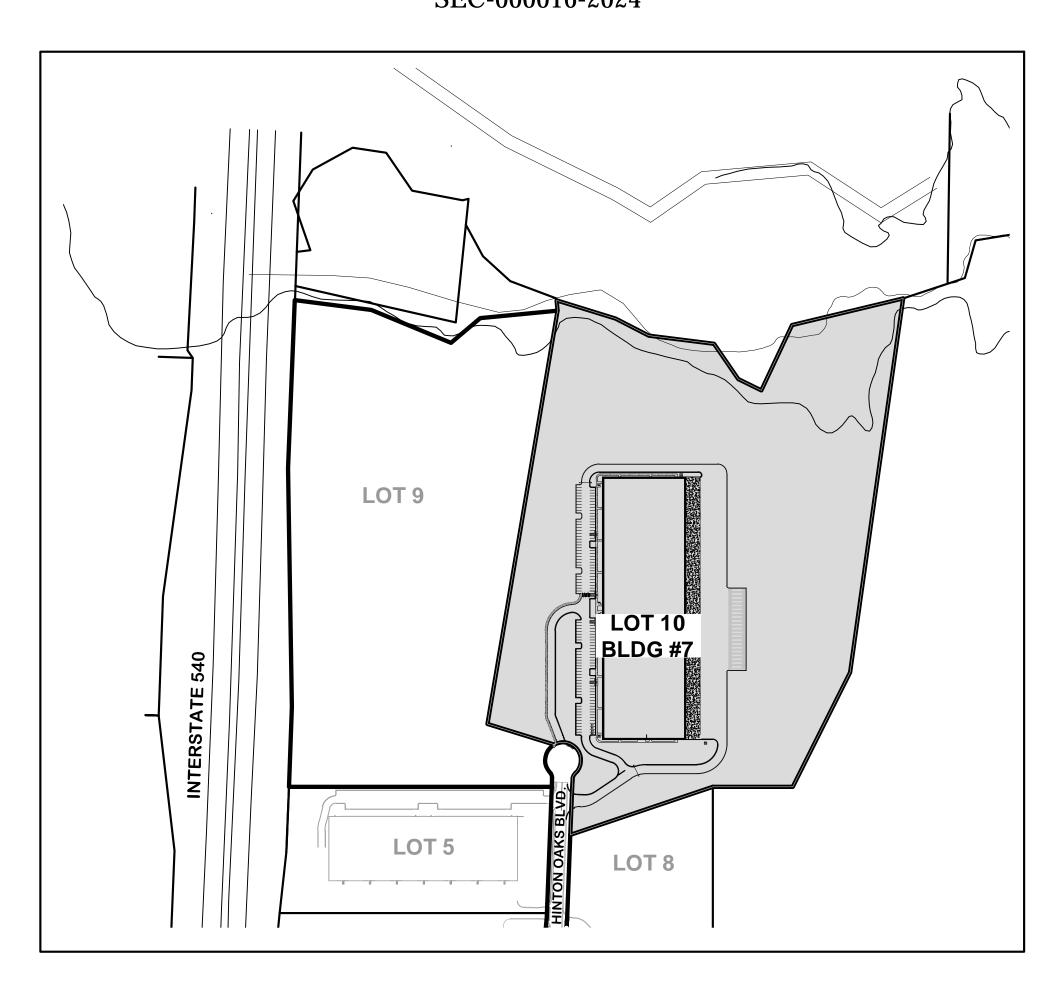
919-217-2256

BUIDING TYPE: SPRINKLERED TYPE IIB NON-COMBUSTIBLE CONSTRUCTION S-1 STORAGE OCCUPANCY BUILDING.

CONSTRUCTION DRAWINGS FOR: HINTON OAKS INDUSTRIAL PARK LOT 10

HINTON OAKS BOULEVARD KNIGHTDALE, NORTH CAROLINA

TOWN OF KNIGHTDALE PROJECT NUMBERS: ZMA-17-22 SEC-000016-2024

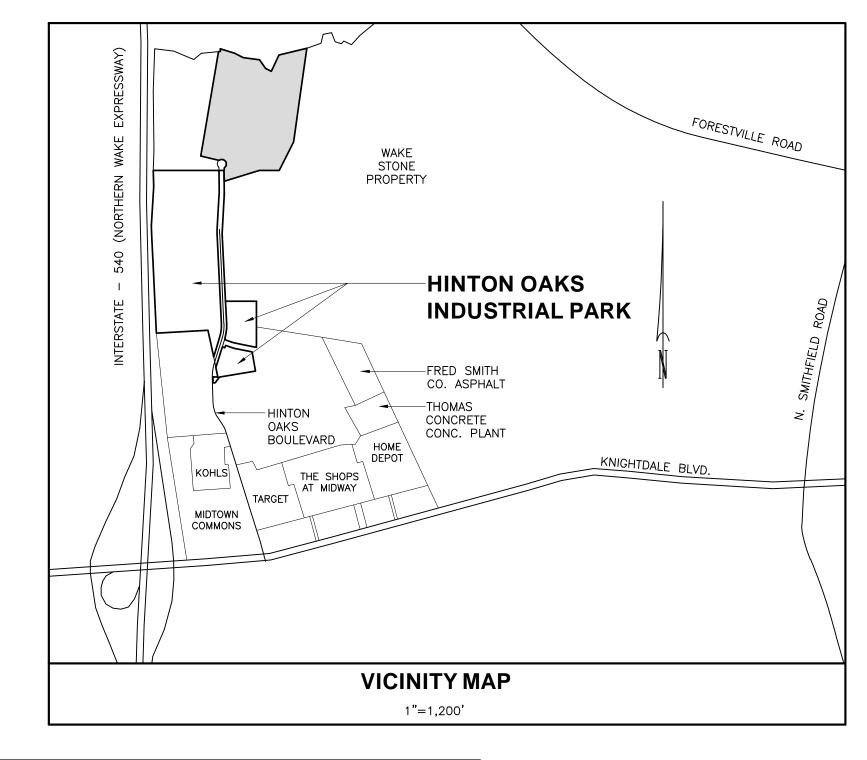


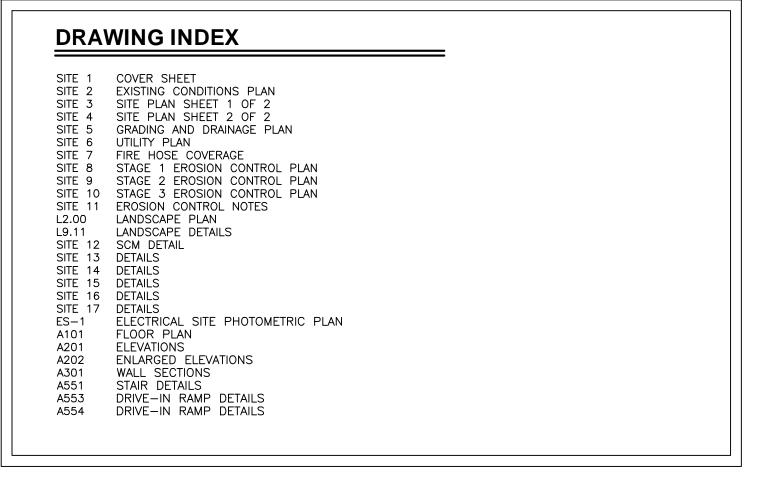
PUBLIC IMPROVEMENT **QUANTITY SUMMARY**

TREE PROTECTION FENCE

LOT NUMBER BY PHASE	N/A
NUMBER OF UNITS	N/A
LIVABLE BUILDINGS	0
OPEN SPACE	NO
NUMBER OF OPEN SPACE LOTS	NO
PUBLIC WATER (LF)	0 LF
PUBLIC SEWER (LF)	33 LF
PUBLIC STREET (LF) - FULL	O LF
PUBLIC CURB & GUTTER	0 LF
PUBLIC SIDEWALK (LF)	0 LF
STREET SIGNS	0
WATER SERVICE STUBS	1
SEWER SERVICE STUBS	2

3.803 LF





SITE DATA TABLE

 PROJECT NAME: 2. STREET ADDRESS:

SITE AREA:

4. ZONING: 5. PARCEL IDENTIFICATION NUMBER:

6. ACREAGE IN PARKS:

11. IMPERVIOUS SURFACE AREA:

14. OWNER NAME/ADDRESS:

7. ACREAGE IN NON-RESIDENTIAL USES:

8. TOTAL NUMBER OF HOUSING UNITS: 9. REQUIRED/PROVIDED RECREATIONAL OPEN SPACE: 0 ACRES

10. TOWNSHIP/COUNTY/STATE:

12. BUILDING USE & PARKING SUMMARY

BUILDING #7

208,200 SF WAREHOUSE + 5,000 SF OFFICE = 213,200 SF TOTAL MAXIMUM PARKING PERMITTED (WAREHOUSE) = 1 SP / 1,000 SF = (1/1,000) X 208,200 = 208 SPACES MAXIMUM ALLOWED

ST. MATTHEWS TOWNSHIP, WAKE COUNTY, NORTH CAROLINA

MAXIMUM PARKING PERMITTED (OFFICE) $= 4 \text{ SP/1,000 SF} = (4/1,000) \times 5,000 = 20 \text{ SPACES MAXIMUM ALLOWED}$

MI-MANUFACTURING AND INDUSTRIAL CONDITIONAL DISTRICT W/SHOD OVERLAY

TOTAL MAXIMUM SPACES PERMITTED = 208 + 20 = 228 SPACES MINIMUM PARKING REQUIRED = 1/2 MAXIMUM = 1/2 X 228 = 114 SPACES REQUIRED

142 SPACES PROVIDED (INCLUDES 4 STANDARD H/C SPACES AND 4 VAN ACCESSIBLE H/C SPACES)

ELECTRIC VEHICLE (EV) PARKING REQUIRED EV PARKING SPACES = 1 PER 40 SPACES (MINIMUM = 2, MAXIMUM = 15)

HINTON OAKS INDUSTRIAL PARK - LOT 10

O HINTON OAKS BOULEVARD KNIGHTDALE, NORTH CAROLINA

LOT 10 = 34.99 AC

LOT #10 = 10.0 AC

1745501546

0 ACRES

34.99 AC.

O UNITS

EV SPACES REQUIRED = 142/40 = 4 SPACES WAKE STONE PROPERTY COMPANY P.O. BOX 190 KNIGHTDALE, NORTH CAROLINA 27545

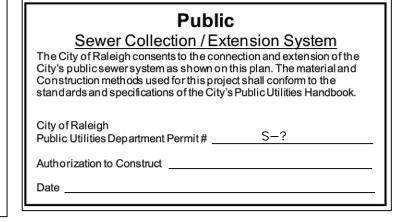
DISTURBED AREA = 22.0 ACRES

919/266-1100

ATTENTION CONTRACTORS The *Construction Contractor* responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Utilities Department at (919) 996-4540 at least *twenty four hours* prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of *monetary fines*, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for Inspection, Install a Downstream Plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.



CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Electronic Approval: This approval is being issued electronically. This approval is valid only upon signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval. City of Raleigh Development Approval _____

Raleigh Water Review Office



a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of K nightdale. Town Engineer These plans are approved by the Town of Knightdale and serve as

construction plans for this project.

Admini strator

b. Professional Design Engineer Certification. These improvements shall be constructed in accordance with the following drawings and with the Standard Specifications of the Town of Knightdale. PE, certify that the Standard Specifications of the

Town of Knightdale have been thoroughly checked and found to be applicable to this project. All exceptions to the applicable Town standards have been previously approved by the Town of Knightdale and said exceptions are shown on Sheet(s) of these drawings.

a. Town Approved Standards Shall Control In the event of a conflict or

PE Date:

inconsistency between these construction drawings and the Town of Knightdale's Approved Standards for this project, the Approved Standards shall control. Town of Knightdale Approved Standards shall mean all development documents necessary for approval for the Property including, but not limited to, any special use permit, subdivision plan, site plan, subdivision plat(s), phasing schedule, Development Agreement, Utility Allocation Agreement, Annexation Agreement, the Town of Knightdale Standard Specification and Details Manual and applicable provisions of the North Carolina State Building Code.

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



ISSUED: 16 SEPT 2024

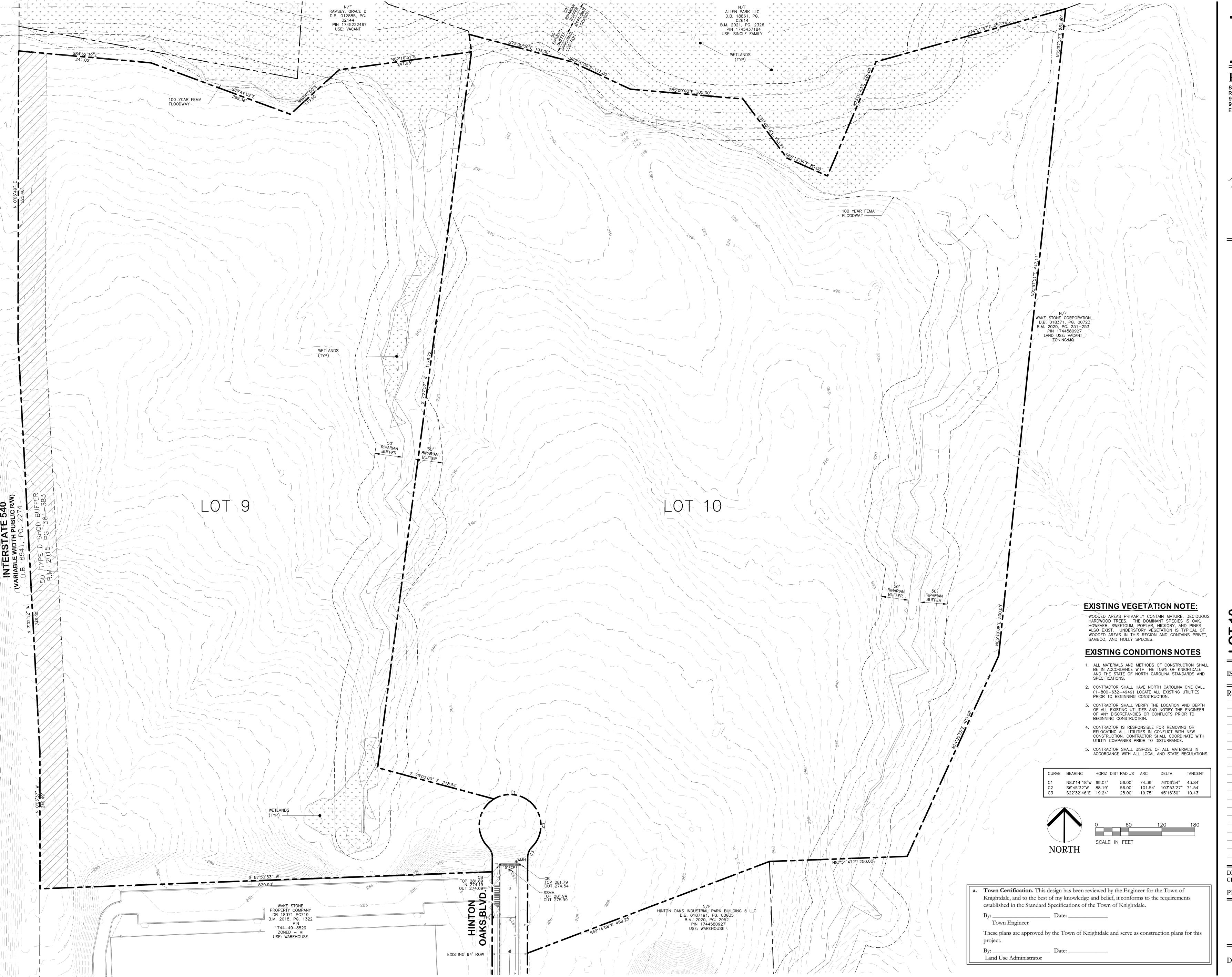
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REVISIONS: 1 29 OEF 2024 PER TOWN COMMENTS

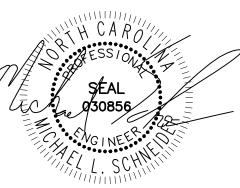
DRAWN BY: **JET** CHECKED BY: MLS

PROJECT: WSHOIB7L10

COVER



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



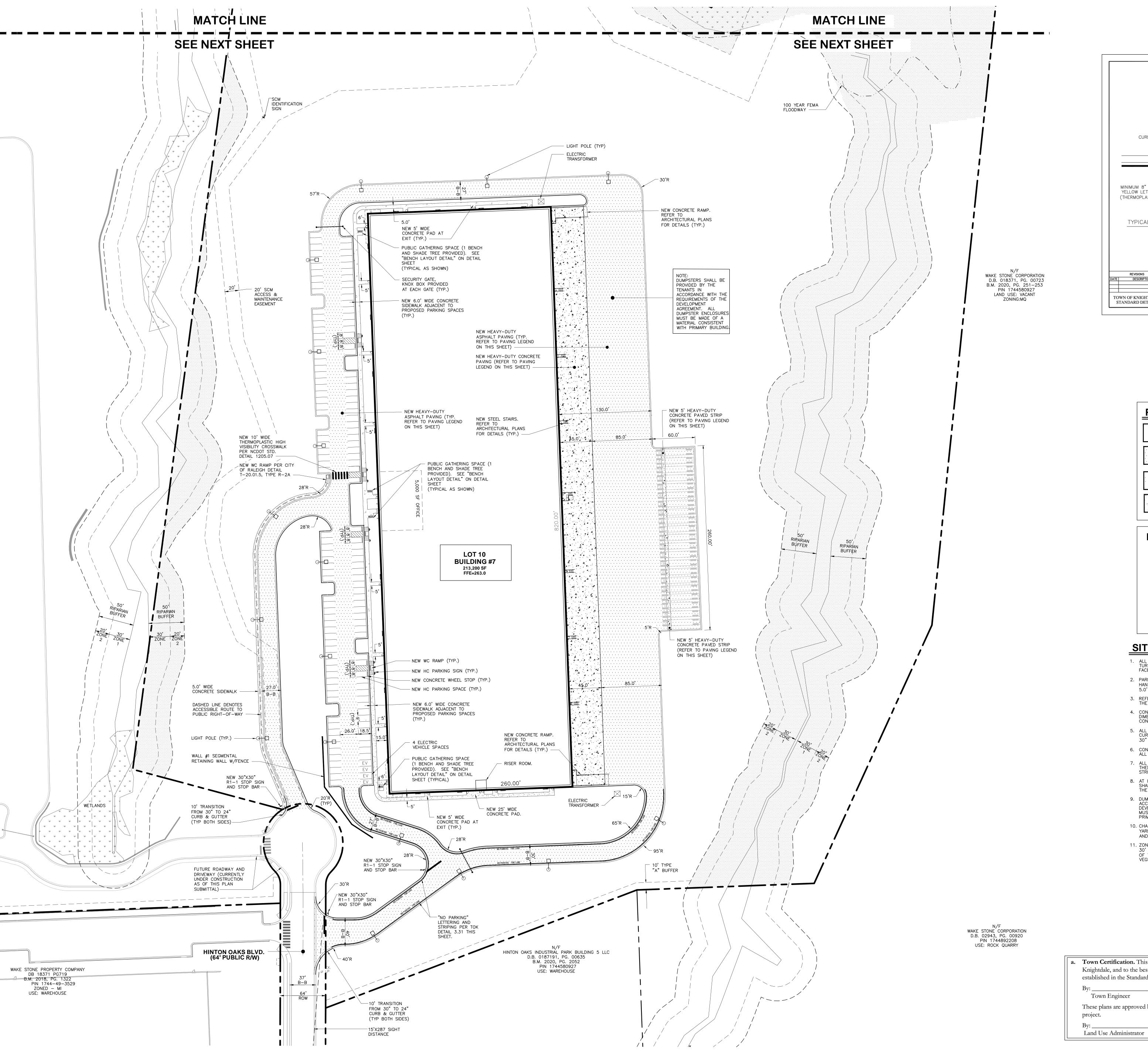
ISSUED: **16 SEPT 2024**

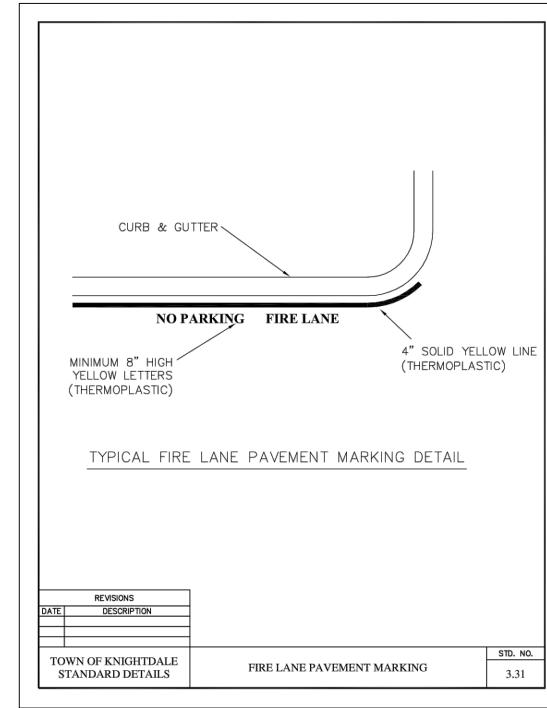
REVISIONS:

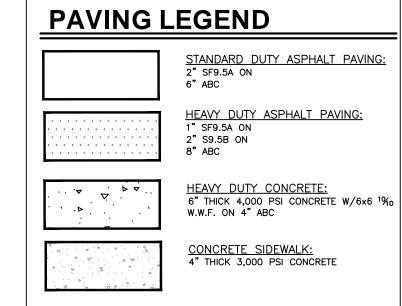
DRAWN BY: **JET** CHECKED BY: **MLS**

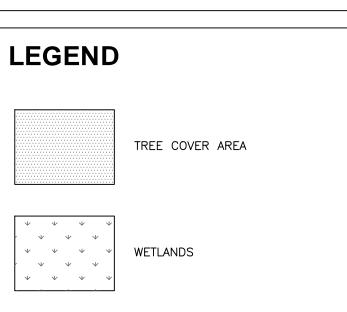
PROJECT: WSHOIPB7L10

EXISTING CONDITIONS









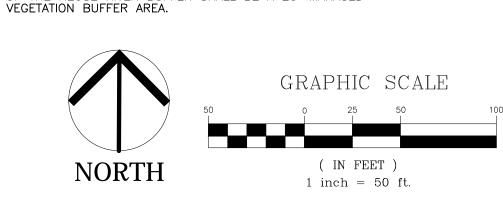
SITE PLAN NOTES

5.0' AISLES (8.0' AISLES - VAN).

- 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
- 3. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF THE BUILDING.
- 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 WITH WHEEL CHAIR RAMPS, THE CURB SHALL BE PLACED SUCH THAT THE CROSS SLOPE OF THE WHEEL CHAIR RAMP DOES NOT EXCEED 2%.
- 9. DUMPSTERS SHALL BE PROVIDED BY THE TENANTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEVELOPMENT AGREEMENT. ALL DUMPSTER ENCLOSURES MUST BE MADE OF A MATERIAL CONSISTENT WITH

OF THE NEUSE RIVER BUFFER SHALL BE A 20' MANAGED

- PRIMARY BUILDING. 10. CHAINLINK FENCING IS ONLY PERMITTED IN THE REAR
- YARD. FENCING CANNOT EXCEED 6' IN THE FRONT YARD AND 9' IN THE SIDE / REAR YARDS. 11. ZONE ONE OF THE NEUSE RIVER BUFFER SHALL BE A 30' UNDISTURBED FORESTED BUFFER AREA. ZONE TWO



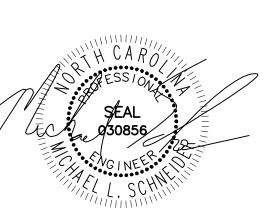
	a.	Town Certification. This design has been reviewed by the Engineer for the Town of
		Knightdale, and to the best of my knowledge and belief, it conforms to the requirements
		established in the Standard Specifications of the Town of Knightdale.
l		7

By: _____ Date: ____

These plans are approved by the Town of Knightdale and serve as construction plans for this

DWG. NO. SITE 3

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



12-11-24

0 Z

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ISSUED: **16 SEPT 2024 REVISIONS:**

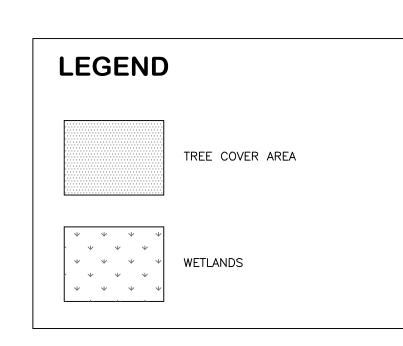
1 29 OCT 2024 PER TOWN COMMENTS

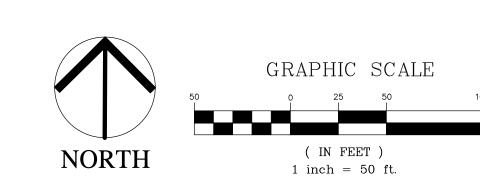
<u>2</u>11 DEC 2024 PER TOWN COMMENTS

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

PROJECT: WSHOIB7L10

SITE PLAN SHEET 1 OF 2





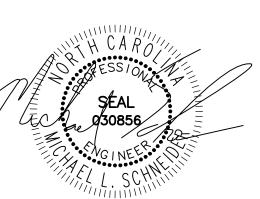
ication. This design has been reviewed by the Engineer for the Town of
nd to the best of my knowledge and belief, it conforms to the requirements
the Standard Specifications of the Town of Knightdale.
Date:
l.

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____ Land Use Administrator

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



REVISIONS:

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

PROJECT: WSHOIB7L10

SITE PLAN SHEET 2 OF 2

RIPARIAN BUFFER 20' 30' ZONE ZONE 2 1 SCM IDENTIFICATION SIGN	240 (211) (211) (207) (205) (201) (201) (201) (211) (210) (211) (212) (213) (215) (225) (230) (230) (230) (230) (230)	2 PRECAST CONCRETE HEADWALL		WETLANDS WERE NOT FIELD LOCATED IN THIS AREA BUT ARE ASSUMED TO BE PRESENT RISER 3 4 5 6 7 8 9 10
	260.50 261.70 261.70 261.70 261.70 261.70 262.51 262.50 262.50 262.50 262.50 262.50 262.50 262.50 263.50 263.50 264.70 262.50 263.50 264.70 262.50 263.50 264.70 262.50 264.70 262.50 264.70 262.50 264.70 262.50 264.70 262.50 264.70 262.50 264.70 262.50 264.70 262.50 264.70 265.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50 266.50	262.70 262.95 12" PVC INV=253.5 CO 258.2 CO 258.0 NEW CONCRETE RAMP AND RETAINING WALL. REFER TO ARCHITECTURAL PLANS FOR DETAILS NOTE: ALL WALLS OVER 30" WILL REQUIRE FALL PROTECTION. 12" PVC © 1.04% MINIMUM SLOPE (TYP) 258.0	257.0 257.0 257.0 257.0	11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Solution (Solution) RIPARIAN BUFFER 36' 20' ZONE ZONE 1 2 1 1 2 1 1 3 1 1 2 1 1 1 2 1 1 1 3 1 1 1 1	BU		255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0 255.0	NOTES: 1. 2. 3. 4. 50. PARIAN BUFFER BUFFER BUFFER BUFFER
	260.50 260.00 260.00 260.00 261.70 262.40 262.50 262.40 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50 262.50	12" PVC © 1.04% MINIMUM SLOPE (TYP) NEW CONCRETE RAMP AND RETAINING WALL REFER TO ARCHITECTURAL PLANS FOR DETAILS NOTE: ALL WALLS OVER 30" WILL REQUIRE FALL PROTECTION. 262.95 261.0	57.5 27 257.5 257.5 256.0 257.5 256.0	

			PIPE SCHE	EDUL					STR	UCTURE S	SCHEDULE	
UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	UPSTREAM INVERT	DOWNSTREAM INVERT	SIZE (IN)	LENGTH (FT)	SLOPE	MATERIAL	STRUCTURE	RIM	STRUCTURE TYPE	INV IN	INV OUT
RISER	32	200.90	200.70	36	37	0.55%	CLASS III RCP/PLASTIC	RISER	N/A	RISER		200.90 (36")
2	1	207.30	207.00	42	14	2.11%	CLASS III RCP/PLASTIC	1	N/A	HW	207.00 (42")	
3A	3	224.00	220.00	42	48	8.33%	CLASS III RCP/PLASTIC	2	213.00	JB	207.40 (42")	207.30 (42")
3	2	212.00	207.40	42	56	8.29%	CLASS III RCP/PLASTIC	3	228.00	JB	220.00 (42")	212.00 (42")
4	3A	242.90	240.00	42	41	7.16%	CLASS III RCP/PLASTIC	3A	248.00	JB	240.00 (42")	224.00 (42")
5	4	248.80	248.10	24	104	0.67%	CLASS III RCP/PLASTIC	4	261.60	CI	243.00 (36") 248.10 (24")	242.90 (42")
6	5	249.30	248.90	24	56	0.71%	CLASS III RCP/PLASTIC	5	261.60	CI	248.90 (24")	248.80 (24")
7	6	250.00	249.40	24	94	0.64%	CLASS III RCP/PLASTIC	6	260.40	CI	249.40 (24")	249.30 (24")
8	7	251.00	250.10	24	139	0.65%	CLASS III RCP/PLASTIC	7	260.40	CI	250.10 (24")	250.00 (24")
9	8	251.90	251.10	24	126	0.63%	CLASS III RCP/PLASTIC	8	260.20	CI	251.10 (24")	251.00 (24")
10	9	252.40	252.00	18	64	0.62%	CLASS III RCP/PLASTIC	9	260.60	CI	252.00 (18")	251.90 (24")
11	10	252.70	252.50	18	27	0.74%	CLASS III RCP/PLASTIC	10	262.40	CI	252.50 (18")	252.40 (18")
12	11	253.20	252.80	18	59	0.68%	CLASS III RCP/PLASTIC	11	263.10	CI	252.80 (18")	252.70 (18")
13	12	254.10	253.30	18	130	0.61%	CLASS III RCP/PLASTIC	12	260.60	CI	253.30 (18")	253.20 (18")
14	13	255.00	254.20	15	144	0.56%	CLASS III RCP/PLASTIC				254.20 (15")	
15	14	257.20	255.10	15	66	3.18%	CLASS III RCP/PLASTIC	13	260.20	CI	254.20 (15")	254.10 (18")
16	15	257.50	257.30	15	27	0.74%	CLASS III RCP/PLASTIC	14	260.40	CI	255.10 (15")	255.00 (15")
17	13	254.40	254.20	15	12	1.67%	CLASS III RCP/PLASTIC	15	262.10	CI	257.30 (15")	257.20 (15")
18	17	259.00	254.50	15	51	8.88%	CLASS III RCP/PLASTIC	16	262.40	CI		257.50 (15")
19	18	266.00	265.80	15	27	0.74%	CLASS III RCP/PLASTIC	17	258.00	YI	254.50 (15")	254.40 (15"
20	4	244.20	243.00	36	163	0.74%	CLASS III RCP/PLASTIC	18	271.90	CI	265.80 (15")	259.00 (15")
21	20	245.10	244.30	36	129	0.62%	CLASS III RCP/PLASTIC	19	271.60	CI		266.00 (15")
22	21	246.30	245.20	36	187	0.59%	CLASS III RCP/PLASTIC	20	261.00	CI	244.30 (36")	244.20 (36")
23	22	247.30	246.40	30	143	0.63%	CLASS III RCP/PLASTIC	21	256.40	CI	245.20 (36")	245.10 (36")
24	23	247.90	247.40	30	78	0.64%	CLASS III RCP/PLASTIC	22	256.40	CI	246.40 (30")	246.30 (36")
25	24	249.20	248.00	24	200	0.60%	CLASS III RCP/PLASTIC	23	256.80	CI	247.40 (30")	247.30 (30")
26	25	249.70	249.30	24	71	0.57%	CLASS III RCP/PLASTIC	24	255.40	CI	248.00 (24")	247.90 (30")
27	26	250.90	249.80	18	171	0.64%	CLASS III RCP/PLASTIC	25	255.40	CI	249.30 (24")	249.20 (24")
28	27	252.70	251.00	15	92	1.85%	CLASS III RCP/PLASTIC	26	256.70	CI	249.80 (18")	249.70 (24")
29	28	254.00	252.80	15	193	0.62%	CLASS III RCP/PLASTIC	27	256.40	CI	251.00 (15")	250.90 (18")
30	29	257.00	254.10	15	33	8.85%	CLASS III RCP/PLASTIC	28	260.10	CI	252.80 (15")	252.70 (15")
31	30	265.00	264.80	15	30	0.67%	CLASS III RCP/PLASTIC	29	259.00	YI	254.10 (15")	254.00 (15")
								30	269.30	CI	264.80 (15")	257.00 (15")
								31	269.50	CI		265.00 (15")
								32	N/A	HW	200.70 (36")	

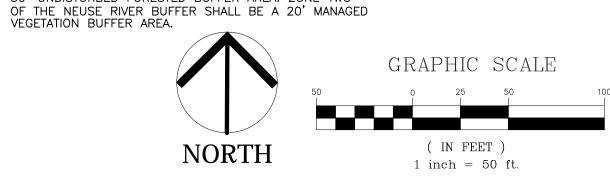
ALL PIPE SHALL BE CLASS III RCP OR TOWN APPROVED PLASTIC PIPE.

- RIM ELEVATIONS ARE TO TOP OF CURB FOR CI'S, TOP OF GRATE FOR DI'S, AND
- ELEVATION OF OPENING FOR YI'S. "CI" DESIGNATES CURB INLET PER TOK STD. NO. 5.05 1/2 AND 2/2 ON DETAIL SHEET.
- "DI" DESIGNATES DROP INLET PER TOK STD. NO. 5.04 ON DETAIL SHEET.
- "JB" DESIGNATES JUNCTION BOX PER NCDOT STD. DETAIL 840.31 WITH TOK STD. MANHOLE RING AND COVER PER TOK STD. NO. 5.10 ON DETAIL SHEET.
- "HW" DESIGNATES PRECAST CONCRETE HEADWALL
- "YI" REFERS TO YARD INLET WITH CONCRETE SLAB PER "YARD INLET WITH CONCRETE SLAB" DETAIL ON DETAIL SHEET.
- STEPS SHALL BE PROVIDED IN ALL STRUCTURES WITH A DEPTH OF 3.0' OR GREATER. STEPS SHALL BE CONSTRUCTED USING 1/2 INCH DIAMETER REINFORCING STEEL ENCAPSULATED IN POLYPROPYLENE MATERIAL. STEPS SHALL BE DESIGNED AND INSTALLED TO ACCOMMODATE A VERTICAL LOAD OF NOT LESS THAN 400 POUNDS AND A HORIZONTAL PULLOUT LOAD OF AT LEAST 1,000 POUNDS. STEPS SHALL HAVE A CLEAR WIDTH OF 12 INCHES AND SPACING OF 15 INCHES. REFER TO NCDOT STANDARD DRAWING FOR DRAINAGE STRUCTURE STEPS.

ENERGY DISSIPATER SCHEDULE						
OOWNSTREAM SIZE VELOCITY STRUCTURE (IN) (FPS) RIP RAP TYPE L X W X THK						
1	42	15.25	CLASS 1	30' X 12' X 24" (EXTEND TO POND BOTTOM		
32	36	6.99	CLASS B	18' X 9' X 18"		

GRADING 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.
- 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%.
- 5. ZONE ONE OF THE NEUSE RIVER BUFFER SHALL BE A 30' UNDISTURBED FORESTED BUFFER AREA. ZONE TWO



Town Certification. This design has been reviewed by the Engineer for the Town of
Knightdale, and to the best of my knowledge and belief, it conforms to the requirements
established in the Standard Specifications of the Town of Knightdale.

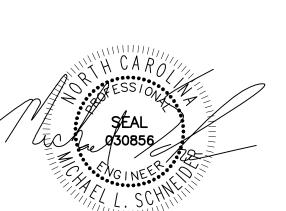
By: _____ Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this

1 ,			
By:	Date:		
Land Use Administrato			
Land Use Administrato	T .		

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



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ISSUED: **16 SEPT 2024**

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REVISIONS:	-
1 23 SEP 2024	
PER TOWN COMMENTS	
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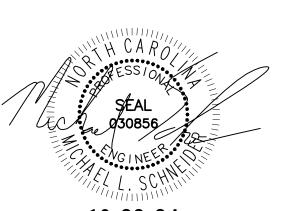
PROJECT: WSHOIB7L10

GRADING AND DRAINAGE PLAN

PEDMINIANDESIGN IIP

8522-204 SIX FORKS ROAD
RALEIGH, NORTH CAROLINA 27615
919.845.7600 PHONE
919.845.7703 FAX

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10-29-24

OT 10 INTON OAKS INDUSTRIAL PARK

ISSUED: **16 SEPT 2024**

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REVISIONS:

1 29 OCT 2024

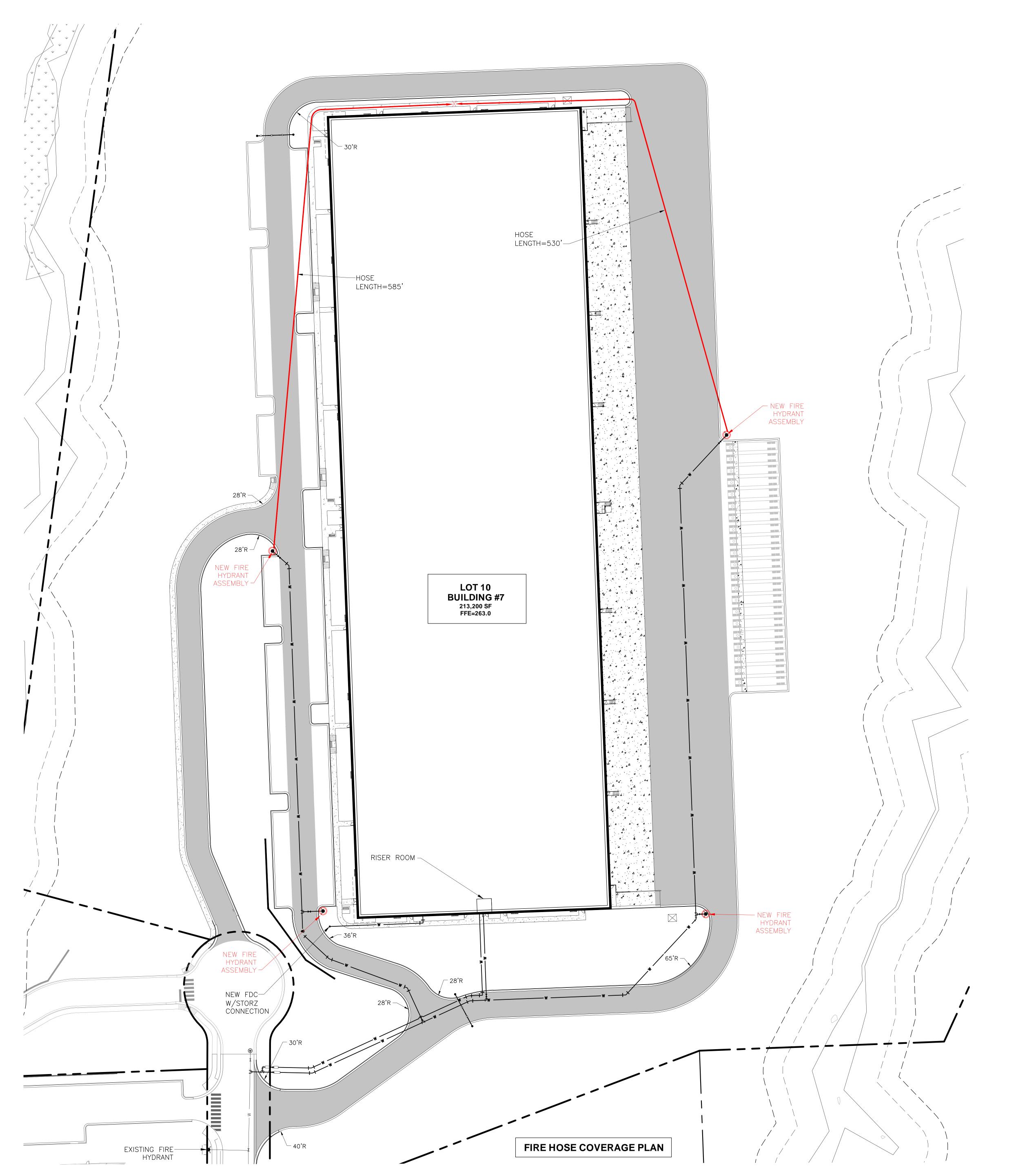
PER TOWN COMMENTS

UTILITY PLAN

PROJECT: WSHOIB7L10

DRAWN BY: **JET**

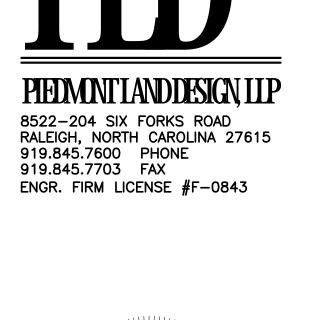
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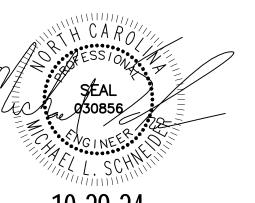




FIRE COVERAGE NOTE:

PER THE NORTH CAROLINA FIRE CODE, A SECOND APPARATUS ACCESS ROAD IS REQUIRED FOR SPRINKLERED BUILDING IN EXCESS OF 124,000 SF. AN ANALYSIS WAS PERFORMED TO DETERMINE IF REDUCING THE BUILDING SIZE WAS POSSIBLE, AND IT WAS DETERMINED THAT THIS WAS NOT ECONOMICALLY FEASIBLE. AN ANALYSIS WAS PERFORMED TO DETERMINE IF THE CONSTRUCTION OF A SECOND ACCESS ROAD WAS POSSIBLE, AND IT WAS DETERMINED THAT THIS WAS NOT ECONOMICALLY FEASIBLE.





LOT 10 HINTON OAKS INDUSTRIAL PARK

SSUED:	16 SEPT	2024

REVISIONS:

⚠ 29 OCT 2024
PER TOWN COMME

NORTH (IN FEET) 1 inch = 40 ft. CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Electronic Approval: This approval is being issued electronically. This approval is valid only upon signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval _____

Raleigh Water Review Office

a.	Town Certification. This design has been reviewed by the Engineer for the Town of
	Knightdale, and to the best of my knowledge and belief, it conforms to the requirement
	established in the Standard Specifications of the Town of Knightdale.

Date: _

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this

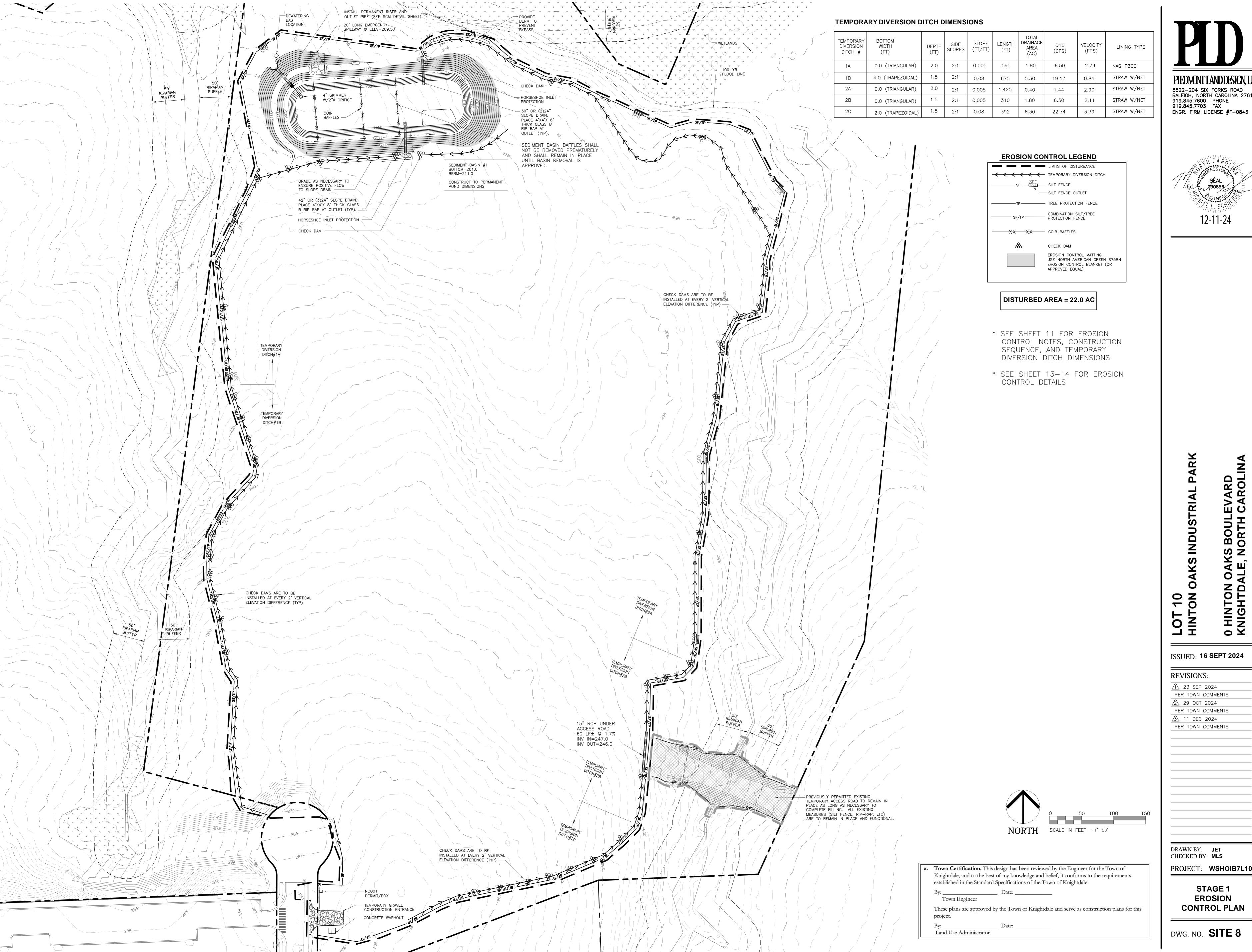
By: _____ Date: _____
Land Use Administrator

PROJECT: WSHOIB7L10

FIRE HOSE COVERAGE

DWG. NO. SITE 7

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



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ISSUED: **16 SEPT 2024 REVISIONS:**

1 23 SEP 2024 PER TOWN COMMENTS 29 OCT 2024 PER TOWN COMMENTS

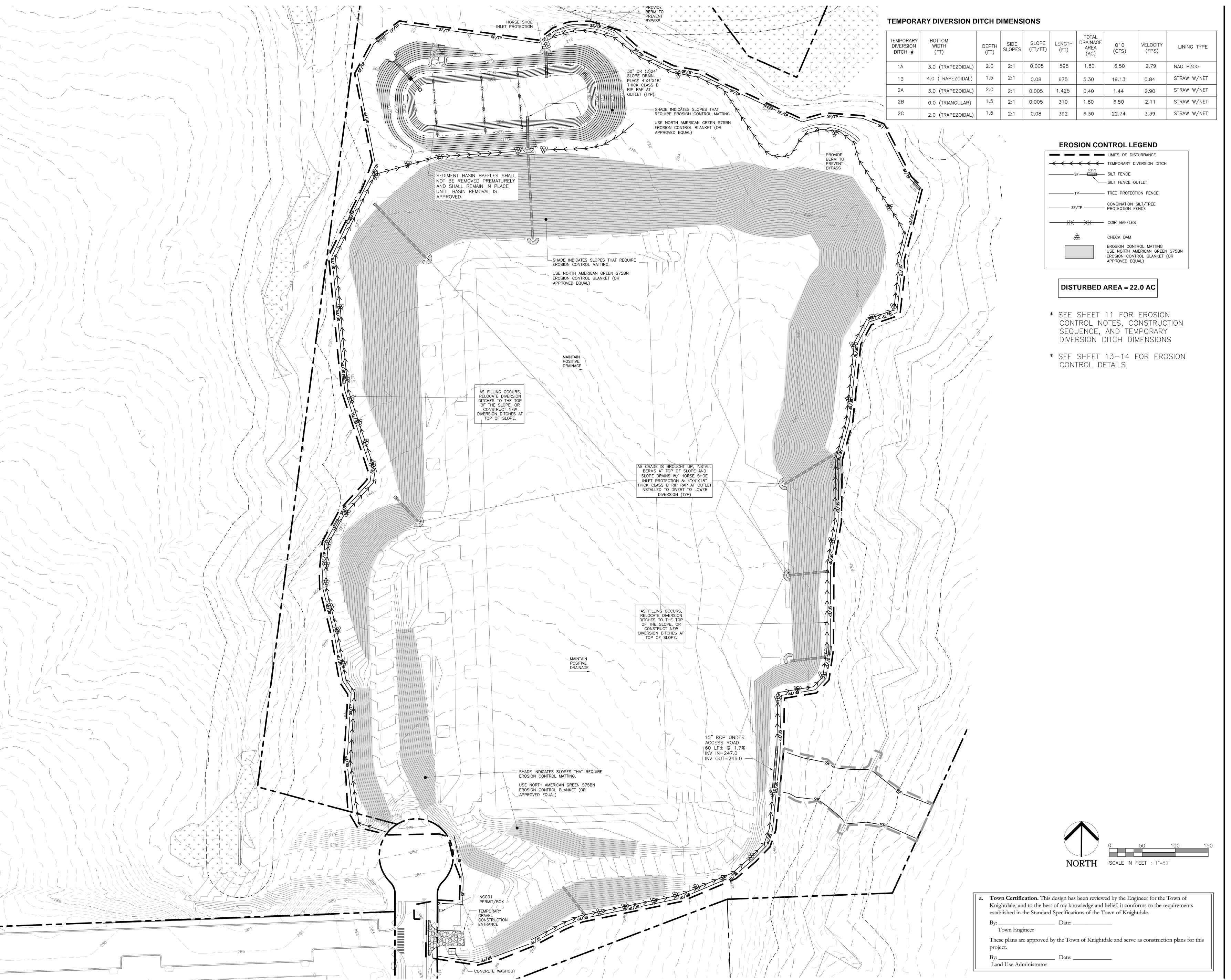
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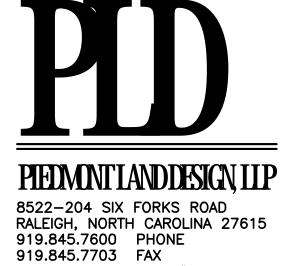
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PROJECT: WSHOIB7L10 STAGE 1

EROSION

CONTROL PLAN





ENGR. FIRM LICENSE #F-0843



12-11-24

LOT 10 HINTON OAKS INDUSTRIAL PARP

ISSUED: **16 SEPT 2024**

REVISIONS:

23 SEP 2024

PER TOWN COMMENTS

PER TOWN COMMENTS

29 OCT 2024

PER TOWN COMMENTS

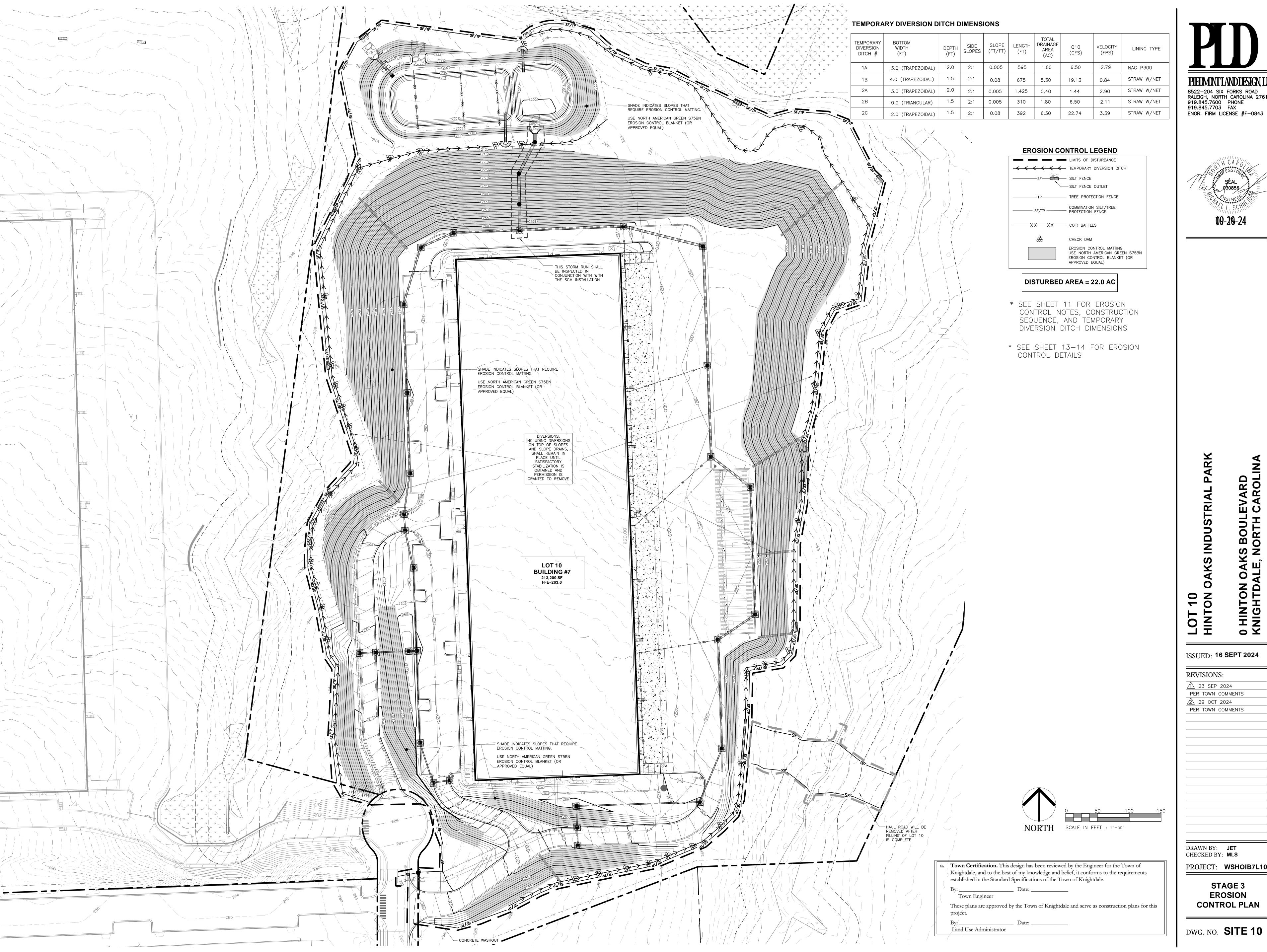
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PER TOWN COMMENTS

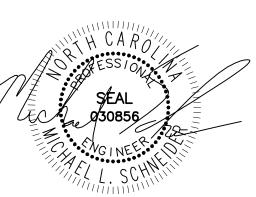
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PROJECT: WSHOIB7L10

STAGE 2 EROSION CONTROL PLAN



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ISSUED: **16 SEPT 2024**

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PER TOWN COMMENTS <u>2</u> 29 OCT 2024 PER TOWN COMMENTS

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

PROJECT: WSHOIB7L10

STAGE 3 **EROSION CONTROL PLAN**

PERMITTING AND ENVIRONMENTAL REGULATION NOTES

- 1.ESC PERMITTING AND INSPECTIONS: A. ONCE THE EROSION AND SEDIMENT CONTROL (ESC) PLAN HAS BEEN REVIEWED AND ACCEPTED BY THE TOWN OF KNIGHTDALE (TOK), A FORMAL PLAN APPROVAL LETTER WILL BE ISSUED TO THE FRP AND APPLICANTS. NOTE: AN ESC APPROVAL LETTER DOES NOT INDICATE PERMIT ISSUANCE.
- B. AN NCG01 CERTIFICATE OF COVERAGE MUST BE OBTAINED FROM THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY(NCDEQ). THE PERMIT CAN BE OBTAINED BY FILLING OUT THE ELECTRONIC NOTICE OF INTENT (E-N OI) FORM AT DEQ.NC.GOV/NCGO1. PLEASE NOTE, THE E-N OI FORM MAY ONLY BE COMPLETED ONCE ESC PLANS HAVE BEEN APPROVED (A).
- C. THE TOWN OF KNIGHTDALE STORMWATER DEPARTMENT REQUIRES AN ON-SITE PRE-CONSTRUCTION (PRECON) MEETING PRIOR TO ISSUING A DEVELOPMENT PERMIT. THIS MEETING IS AN OPPORTUNITY TO GO OVÈR SITE MANAGEMENT EXPECTATIONS AND DISCUSS ANY PROJECT CONCERNS.
- D. ONCE THE PRE-CON MEETING HAS BEEN HELD AND ALL FEES PAID, THE LAND DEVELOPMENT PERMIT (LDP) WILL BE ISSUED FOR THE PROJECT.
- E. FOLLOWING SITE MOBILIZATION, ROUTINE "CONSTRUCTION SITE INSPECTIONS" BY TOK STAFF WILL OCCUR AS OUTLINED IN THE TOK EROSION AND SEDIMENT CONTROL ENFORCEMENT TREE. TO NOTE, "COMPLIANT/SATISFACTORY" INSPECTIONS WILL NEED TO OCCUR FOLLOWING:
 - I. INSTALLATION OF INITIAL ESC PERIMETER CONTROLS(SF, SF/TP, SFOS) ONLY CLEARING THE PERIMETER RIBBON (25' MAX) - "PERIMETER CONTROL INSPECTION".
- II. INSTALLATION OF ALL PHASE 1ESC MEASURES INCLUDING ENGINEERED STRUCTURES "CERTIFICATE OF COMPLIANCE INSPECTION". IT IS THE RESPONSIBILITY OF THE SITE MANAGER TO FORMALLY REQUEST THESE TYPES OF INSPECTIONS BY CONTACTING TOK PUBLIC WORKS. CLEARING/GRUBBING OUTSIDE OF THE LIMITED AREAS REQUIRED TO COMPLETE THE ABOVE ITEMS WILL RESULT IN ENFORCEMENT ACTION
- F. FOLLOWING THE COMPLETION OF THE ITEMS ABOVE THE SITE CAN BE CLEARED AND DEVELOPED IN ACCORDANCE WITH THE APPROVED PLAN.
- 2. PERMITS BOX CONTENTS A COPY OF THE TOK LAND DEVELOPMENT PERMIT, THE NCG01 CERTIFICATE OF COVERAGE (COC) AND REGULAR NPDES INSPECTIONS, A COPY OF THE APPROVED/REVISED ESC PLAN, AND (WHEN OBTAINED) THE TOK CERTIFICATE OF COMPLIANCE - MUST BE KEPT ON SITE, PREFERABLY IN A PERMITS BOX, AND ACCESSIBLE DURING INSPECTION. LOCATE A RAIN GAUGE ON SITE FOR FACILITATION OF INSPECTIONS AND RECORD KEEPING.
- 3. 401/404 PERMITS APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL PLAN DOES NOT AUTHORIZE IMPACTS TO WETLANDS, COASTAL MARSH, STREAMS, OR OTHER WATERS OF THE STATE OR UNITED STATES OR SUPERSEDE ANY OTHER PERMITTING REQUIREMENT OF ANY FEDERAL, STATE OR LOCAL AGENCY. A.IF APPLICABLE, PROVIDE A COPY OF THE USACE 404 PERMIT AND DWR 401CERTIFICATIONS. PROVIDE A COPY OF THE DWR BUFFER AUTHORIZATION.
- I. SUBMIT DOCUMENTATION WITH MAPS SHOWING LOCATION AND EXTENT OF IMPACTS TO STREAMS AND WETLANDS WITH ANY SPECIAL CONDITIONS PERTAINING TO EROSION AND SEDIMENT CONTROL AND RESTORATION OF
- II. IDENTIFY THE STREAMS, WETLANDS, AND BUFFERS ON THE PLAN SHEETS. INCLUDE ANY ADDITIONAL MEASURES, CONSTRUCTION SPECIFICATIONS, MAINTENANCE REQUIREMENTS AND CONSTRUCTION SEQUENCING AS REQUIRED BY THE404/401/BUFFER DETERMINATION AND BUFFER AUTHORIZATION ON THE PLAN SHEETS.
- III. FOLLOW ALL CONDITIONS OUTLINED IN THE CERTIFICATIONS, SPECIFICALLY REPORTING ANY DISCHARGES OUTSIDE OF THE PERMITTED SCOPE OF WORK.
- 4. AREAS OF ENVIRONMENTAL CONCERN AND CULTURAL RESOURCES BEFORE ANY SITE WORK OCCURS ADEQUATELY IDENTIFY KEY ENVIRONMENTAL AND/OR CULTURAL RESOURCES BY USING APPROPRIATE IDENTIFIERS IN THE FIELD (TREE PROTECTION FENCING, FLAGGING, ETC.).
- 5. FILL/BORROW ANY OFF-SITE BORROW AND/OR FILL REQUIRED FOR THIS PROJECT MUST COME FROM A SITE WITH AN APPROVED EROSION CONTROL PLAN, A SITE REGULATED UNDER THE MINING ACT OF 1971, OR A LANDFILL REGULATED BY THE DIVISION OF SOLID WASTE MANAGEMENT. TRASH/DEBRIS FROM DEMOLITION ACTIVITIES OR GENERATED BY ANY ACTIVITIES ON SITE MUST BE DISPOSED OF AT A FACILITY REGULATED BY THE DIVISION OF SOLID WASTE MANAGEMENT OR PER DIVISION OF SOLID WASTE MANAGEMENT OR DIVISION OF WATER RESOURCES RULES AND REGULATIONS.

SOIL STOCKPILE NOTES

- SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEYED IN AT THE TOP OF THE SLOPE
- TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC. 2. THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE
- THE STOCKPILE IS IN USE. 3. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

GENERAL EROSION CONTROL NOTES

- SEDIMENT SHALL BE REMOVED FROM BASINS WHEN SEDIMENT STORAGE REACHES 50%. SEDIMENT BASINS ARE TO REMAIN IN PLACE DURING THE HOME CONSTRUCTION PHASE OF THE PROJECT AND ONLY REMOVED WITH APPROVAL FROM
- THE THE TOWN OF KNIGHTDALE . ALL SEDIMENT BASINS REQUIRE BAFFLES INSTALLED PER DETAILS ON DETAIL SHEET. . DIVERSIONS SHALL BE MODIFIED AS NEEDED TO ENSURE SEDIMENT LADEN WATER GOES INTO THE APPROPRIATE BASIN
- 4. THE WATERSHED MANAGER MAY DETERMINE THAT FLOCCULATES WILL BE REQUIRED DURING CONSTRUCTION, IF
- 5. SEDIMENT BASIN BAFFLES SHALL NOT BE REMOVED PREMATURELY AND SHALL REMAIN IN PLACE UNTIL BASIN REMOVAL IS APPROVED.

BASIN REMOVAL SEQUENCE

- 1. SCHEDULE A SITE MEETING WITH THE TOWN OF KNIGHTDALE EROSION CONTROL INSPECTOR TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OROTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.
- 2. CONTACT NCDEQ RALEIGH REGIONAL OFFICE (919) 791-4200 TO DETERMINE THE DIVISION OF ENERGY, MINERAL AND LAND RESOURCES CONTACT PERSON TO RECEIVE DEWATERING NOTIFICATIONS. AT LEAST 10 DAY SPRIOR TO BEGINNING DEWATERING ACTIVITY, SEND EMAIL TO NCDEQ-DEMLRCONTACT PERSON AND COPY ENVIRONMENTAL CONSULTANT THAT MET YOUONSITE. THE EMAIL SHOULD INCLUDE E&SC JURISDICTION: TOWN OF KNIGHTDALE, TOK PROJECT: NAME, NUMBER, AND LOCATION (CITY/TOWN), ENVIRONMENTAL CONSULTANT NAME, AND ADDRESS THE FOLLOWING: A) REASON FOR CONVERSION, B) BASIN #, C) DEWATERING METHOD, AND D) ALL OTHER NECESSARY INFO FROM PART II, SECTION G, ITEM 4 OF THE NCGO1. KEEP EMAIL FOR YOUR NPDES MONITORING DOCUMENTATION.
- 3. AFTER RECEIVING POSITIVE CONFIRMATION FROM NCDEQ-DEMLR THAT YOU MAY REMOVE THE BASIN OR ON > DAY 11, WHICHEVER IS SOONER. REMOVE BASIN(S) AND ASSOCIATED TEMPORARY DIVERSION DITCHES. IF PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.
- 4. PERFORM SEEDBED PREPARATION, SEED, MULCH AND ANCHOR ANY RESULTING BARE AREAS IMMEDIATELY USING NON-CLUMPING TURF GRASS(CENTIPEDE / HYBRID BERMUDA).
- 5. INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
- 6. WHEN SITE IS FULLY STABILIZED, CALL EROSION CONTROL INSPECTOR FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVICE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION. NOTE: A MEETING SHOULD ALSO BE SCHEDULED WITH THE EROSION CONTROL INSPECTOR AND STORMWATER TECHNICIAN TO DETERMINE WHEN A BASIN MAY BE CONVERTED FOR STORM WATER USE.

CONSTRUCTION SCHEDULE

- 1. SCHEDULE AN INITIAL PRE-CONSTRUCTION CONFERENCE WITH THE TOWN OF KNIGHTDALE. OBTAIN A LAND-DISTURBANCE PERMIT.
- 2. INSTALL ALL PERIMETER CONTROLS AS SHOWN ON THE APPROVED PLANS, CLEAR ONLY AS NECCESARY TO INSTALL THESE DEVICES. CLEARING SHOULD BE LIMITED TO A MAXIMUM 35' "RIBBON" AROUND PERIMETER TO INSTALL CONTROLS. NO GRADING OR EXCAVATION SHOULD OCCUR.
- 3. SCHEDULE AN ONSITE PRE-CONSTRUCTION MEETING WITH THE TOWN OF KNIGHTDALE TO INSPECT THE INSTALLED PERIMETER CONTROLS
- 4. IF APPROVED, PROCEED WITH INSTALLING GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLANS. CLEAR ONLY AS NECCESARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS, AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
- 5. CALL TOWN OF KNIGHTDALE EROSION CONTROL INSPECTOR TO SCHEDULE AN ONSITE INSPECTION AND OBTAIN A CERTIFICATE OF COMPLIANCE.
- 6. BEGIN CLEARING AND GRUBBING, MAINTAIN DEVICES AS NEEDED, ROUGH GRADE SITE. WHEN INSTALLING THE RETAINING WALLS, ADJUST DIVERSIONS AS NECESSARY AROUND CONSTRUCTION AREA.
- 7. INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL CONTROLS, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN IN THE APPROVED PLAN. BEING CONSTRUCTION, BUILDING, ETC.
- 8. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS PER GROUND STABILIZATION
- 9. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL

EROSION CONTROL INSPECTOR FOR AN INSPECTION.

- 10. IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OUT OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED. SEDIMENT BASIN BAFFLES SHALL NOT BE REMOVED PREMATURELY AND SHALL REMAIN IN PLACE UNTIL BASIN REMOVAL IS APPROVED.
- 11. WHEN VEGETATION HAS BECOME ESTABLISHED (90% GERMINATION), CALL FOR A FINAL INSPECTION BE THE EROSION CONTROL INSPECTOR. OBTAIN A CERTIFICATE OF

STABILIZATION NOTES

APPROVED EQUAL)

:1 AND FLATTER 3:1 TO 2:1 SLOPE SLOPE ADAPTIVE PLANTS (SHRUBS AND VINES) RIP-RAP (OR AS APPROVED BY GEO-TECH) 2:1 TO 1.5:1

*EROSION CONTROL MATTING IS REQUIRED FOR:

STEEPER THAN:1.5 TO 1 RETAINING WALL * SLOPES OF 2:1 OR STEEPER TO BE STABILIZED IMMEDIATELY WITH EXCELSIOR NETTING OR EQUAL

ALL SLOPES GREATER THAN 3:1 AND SLOPES GREATER THAN 5' TALL. ALL SLOPES GREATER THAN 8' TALL.

USE NORTH AMERICAN GREEN S75BN EROSION CONTROL BLANKET (OR

	Site Area Description	Stabilization Time Frame	Stabilization Tim Frame Exception
•	Perimeter dikes, swales, ditches and slopes	7 days	None
•	High Quality Water (HQW) Zones	7 days	None
•	Slopes steeper than 3:1	7 days	If slopes are 10' o less in length and a not steeper than 2: 14 days are allowe
•	Slopes 3:1 or flatter	14 days	7-days for slopes greater than 50 fee in length
•	All other areas with slopes flatter than 4:1	14 days	None (except for perimeters and HQW Zones)

based on weather or other site-specific conditions that make compliance

impracticable." (Section II.B(2)(b))

SEDIMENT BASIN DESIGN DATA

BASIN	DA	Q(10)	Width	Length	Surface	e Area	Side	Sediment	Total	Weir	SKIMMER	SKIMMER	DEWATERING
					Required	Provided	Slopes	Depth	Height		SIZE	ORIFICE DIA	TIME
	(Acres)	(cfs)	(ft)	(ft)	(sf)	(sf)		(ft)	(ft)		(in)	(in)	(days)
1	19.0	68.59	120' @ elev=211	316' @ elev=211	29,837	31,500 @ elev 208.5	varies -see plan	3' (elev=204)	10'	20' @ elev=209.5	4	2.0	3

TEMPORARY DIVERSION DITCH DIMENSIONS

TEMPORARY DIVERSION DITCH #	BOTTOM WIDTH (FT)	DEPTH (FT)	SIDE SLOPES	SLOPE (FT/FT)	LENGTH (FT)	TOTAL DRAINAGE AREA (AC)	Q10 (CFS)	VELOCITY (FPS)	LINING TYPE
1A	0.0 (TRIANGULAR)	2.0	2:1	0.005	595	1.80	6.50	2.79	NAG P300
1B	4.0 (TRAPEZOIDAL)	1.5	2:1	0.08	675	5.30	19.13	0.84	STRAW W/NET
2A	0.0 (TRIANGULAR)	2.0	2:1	0.005	1,425	0.40	1.44	2.90	STRAW W/NET
2B	0.0 (TRIANGULAR)	1.5	2:1	0.005	310	1.80	6.50	2.11	STRAW W/NET
2C	2.0 (TRAPEZOIDAL)	1.5	2:1	0.08	392	6.30	22.74	3.39	STRAW W/NET

a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: ____ These plans are approved by the Town of Knightdale and serve as construction plans for this

By: _____ Date: ____ Land Use Administrator

RALEIGH. NORTH CAROLINA 27615 919.845.7600 PHONE

919.845.7703 FAX

ENGR. FIRM LICENSE #F-0843



ISSUED: 16 SEPT 2024

REVISIONS: 1 23 SEP 2024 PER TOWN COMMENTS

LOT 10 HINTON

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

EROSION

PROJECT: WSHOIB7L10

CONTROL

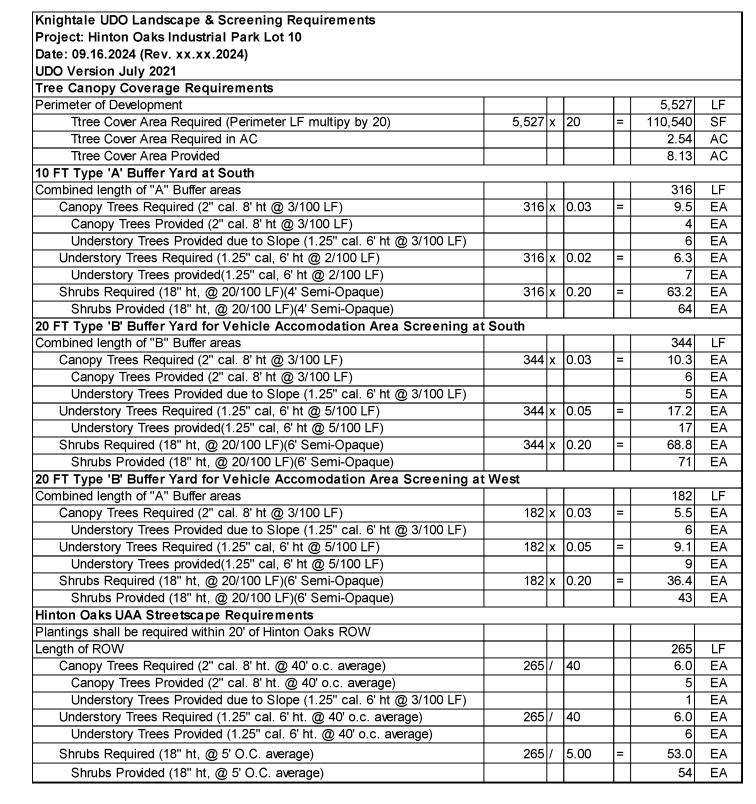
NOTES



Industrial

Boulevard Sarolina 25745

Hinton 0 Hinton Knightdale,



QTY	SYM	BOTANICAL NAME	COMMON NAME	CALIPER	HEIGHT	REMARKS
TRE	ES (A	II Tree to be Single Stem)				
28	AB	Acer buergerianum 'Aeryn'	Aeryn Trident Maple	1.25" MIN	6' MIN	Understory Tree/Street Tree, B Buffer
8	AS	Acer saccharum 'Legacy'	Legacy Sugar Maple	2" MIN	8' MIN	Canopy Tree/Driveway
7	CCTP	Cercis canadensis Tennessee Pink	Tennessee Pink Eastern Redbud	1.25" MIN	6' MIN	Understory Tree/A Buffer
11	MV	Magnolia virginiana	Sweetbay Magnolia	1.25" MIN	6' MIN	Understory Tree/B Buffer
11	PS	Prunus serrulata 'Kwanzan'	Kwanzan Japanese Cherry	1.25" MIN	6' MIN	Understory Tree/B Buffer
15	QLH	Quercus lyrata 'Highbeam'	Hibeam Overcup Oak	2" MIN	8' MIN	Canopy Tree/Parking
19	UP	Ulmus parvifolia 'Emer II'	Chinese Lacebark Elm	2" MIN	8' MIN	Canopy Tree/Parking, Street Tree, A Buffe
SHR	UBS	•				
58	DE	Distylium 'Emerald Heights'	Emerald Heights Dystilium	3 GAL	18" MIN	A & B Buffer
100	ICB	llex cornuta 'Burfordii Nana'	Dwarf Burford Holly	3 GAL	18" MIN	Streetscape, A&B Buffer
74	JP	Juniperus × pfitzeriana 'Sea Green'	Sea Green Juniper	3 GAL	18" MIN	A & B Buffer
45	LCR	Loropetalum chinense 'Ruby'	Ruby Chinese Loropetalum	3 GAL	18" MIN	Foundation Planting (Addt'l)
37	TO	Thuja occidentalis 'Emerald'	Emerald Arborvitae	7 GAL	18" MIN	Foundation Planting (Addt'l)
6	VAC	Viburnum awabuki 'Chindo'	Chindo Viburnum	3 GAL	18" MIN	Transformer Screening

- 50' TYPE D BUFFER REQUIREMENTS TO BE MET

HINTON OAKS

LOT 9

N/F WAKE STONE CORPORATION D.B. 019293, PG. 00309 B.M. 2023, PG. 014116 PIN 1745402554 LAND USE: WAREHOUSE ZONING: MI CD

TREE CANOPY
AREA BY LOT 9

TREE CANOPY
REQUIREMENT
SATISFIED PER

(15) JP FOR TYPE B BUFFER (WEST) (TYP)

(5) MV FOR TYPE B

(6) AB FOR TYPE B

STOP SIGN. KEEP TREE/TREE
BRANCHES, LEAVES TO NOT
OBSTRUCT THE VIEW FROM
DRIVEWAY. (TYP) —

WAKE STONE PROPERTY COMPANY DB 18371 PG719 B.M. 2018, PG. 1322 PIN 1744-49-3529

ZONED — MI USE: WAREHOUSE

TREES AND SHRUBS IN GRAY:
LOT 9 STREETSCAPE,
PROPOSED BY OTHERS (TYP)

15' X 287' SIGHT DISTANCE

SCM ACCESS &

BETWEEN BUILDING AND SIDEWALK ALONG SIDE OF BUILDING (TYP)

— (36) GS, 2' O.C. (TYP) — (45) LCR, 3' O.C. (TYP)

- (2) UP FOR PARKING

---- 60'R FOR PARKING SPACE COVERAGE (TYP)

— (15) QLH FOR PARKING (TYP)

MATCH PLANT SPECIES TO LOT 9, STREETSCAPE. (TYP)

LOT 10 BUILDING #7

10' TYPE A & 20' TYPE B BUFFER, AND

UNDERSTORY TREES ARE PROPOSED FOR

W/10'R CLEARANCE FOR CANOPY TREES. 5' FOR

(7) PS FOR TYPE B BUFFER

(21) DE, 5' O.C. FOR TYPE

(9) AB FOR TYPE B

CANOPY TREE REQUIREMENT AT AREAS WITH STEEP SLOPE. SEE GRADING PLAN

— (37) TO (TYP)

D.B. 18861, P.G. 02614 B.M. 2021, P.G. 2326

— NO LOADING DOCK AREA SCREENING IS REQUIRED. ADJACENT SITE IS/WILL BE UNDEVELOPED PER TOWN OF KNIGHTDALE.

CLEARANCE FOR FH (TYP) –

(6) VAC 5' O.C. FOR TRANSFORMER SCREENING (TYP)

(25) JP, 5' O.C. FOR TYPE A BUFFER (TYP)

HINTON OAKS INDUSTRIAL PARK BUILDING 5 LLC

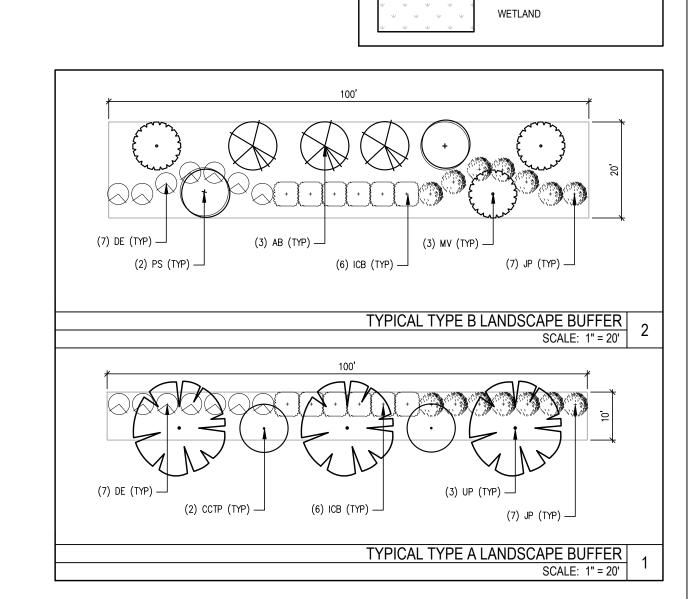
D.B. 0187191, PG. 00635 B.M. 2020, PG. 2052 PIN 1744580927 USE: WAREHOUSE

100 YEAR FEMA FLOODWAY —

(255) (245) (245) (235) (235) (235)

N/F WAKE STONE CORPORATION D.B. 018371, PG. 00723 B.M. 2020, PG. 251–253 PIN 1744799279 LAND USE: VACANT

WETLAND (TYP) —

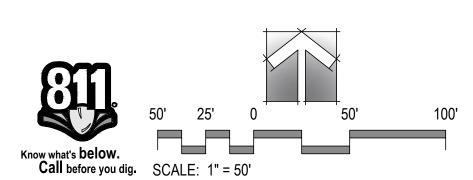


HATCH LEGEND:

TREE CANOPY COVERAGE AREA

SEE L9.11 FOR LANDSCAPE DETAILS.

CODE COMPLIANCE



	nd to the best of my knowledge and belief, it conforms to the Standard Specifications of the Town of Knightdale.	o the requirements
Ву:	Date:	
Town En	ineer	
These plans a project.	re approved by the Town of Knightdale and serve as cor	nstruction plans for the
By:	Date:	
Land Use Ac	ministrator	

LANDSCAPE PLAN Know what's **below**.

Call before you dig. SCALE: 1" = 50'

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PROJECT: PLD-24120

ISSUE: Construction Drawing 09.16.2024



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PROJECT:	PLD-24120	DATE
ISSUE:	Construction Drawing	09.16.20
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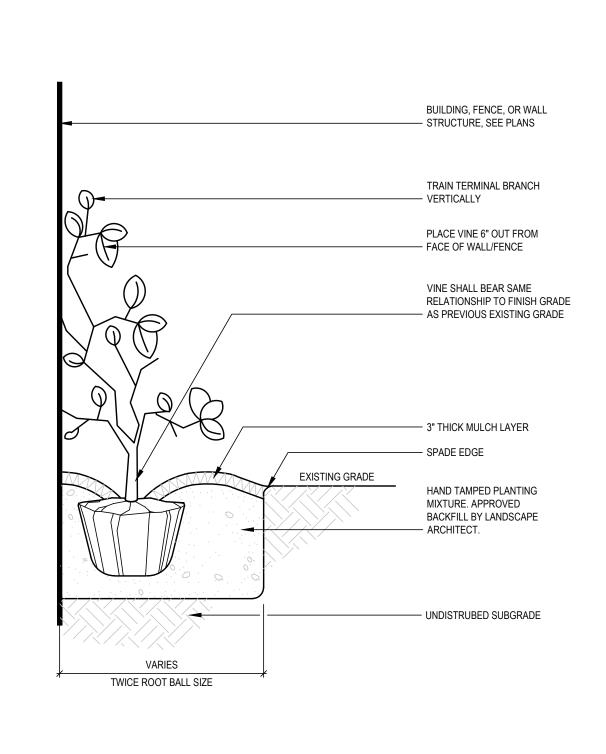
CONTENT: LANDSCAPE DETAILS AND NOTES

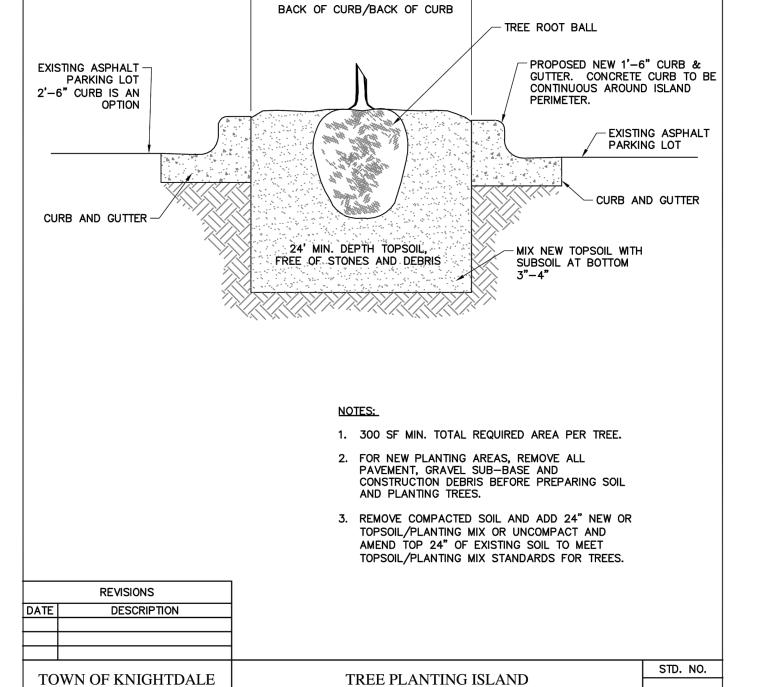
L9.11

CHECKED BY: KT

Land Use Administrator

TOWN OF KNIGHTDAALE PLANTING DETAILS





2. SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION. ——— 8' MIN. ———— 3/4" NYLON STRAP STAKING – REQUIRED FOR LEANING TREES OR AS REQUIRED BY CONTRACT. 6" SLIP KNOT WITH STOP KNOT. ROOT CROWN TO BE - AT FINISH GRADE \pm 1"X2"X18" WOOD STAKE WITH — CENTERED 3/8" HOLE DRIVEN IN LINE WITH STRAP UNDISTURBED SOIL -FINISH GRADE \neg REMOVE TYPICAL EXCESS SOIL FROM GROWER OVER ROOT SYSTEM, UP TO 1" DEPTH. REJECT PLANTS WITH MORE THAN 3". -REMOVE TOP 1/3 BURLAP — AND ANY NAILS/PINS, ETC. BASKET WHERE PRESENT RAISE PIT BOTTOM TO SET BUTTRESS -ROOTS AT THE CORRECT HEIGHT. FIRM SOIL UNDER ROOT BALL ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (AMSI, 1990, PART 1, "SHADE AND FLOWERING TREES") DESCRIPTION TREE PLANTING TREE PLANTING ISLAND TOWN OF KNIGHTDALE 3.23 STANDARD DETAILS IN PARKING LOTS STANDARD DETAILS (FOR SINGLE AND MULTI-STEM TREES)

1. REMOVE WIRE OR NYLON TWINE FROM

6" LARGER THAN TREE DIAMETER

KEEP MULCH 1" TO 2" AWAY FROM TRUNK

∠ 4" MAX. LAYER OF MULCH

✓ 4" MAX. HIGH WATER

BERM OUTSIDE OF BACKFILL

PLANTING MIX (AS SPECIFIED)

STD. NO.

3.25

SEE BED EDGING

GRADE

PLANTING SOIL MIXTURE HAND-TAMPED IN LIFTS SEE SPECS FOR COMPOSITION

SCALE: NTS

DETAIL ON THIS SHEET

-BUTTRESS ROOTS

TITLE VINE INSTALLATION SCALE: NTS SCALE: NTS

LANDSCAPE NOTES:

1. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF UTILITIES PRIOR TO INSTALLATION. 2. THE PLAN DEPICTS REQUIRED PLANTINGS REQUIRED BY THE TOWN OF KNIGHTDALE.

3. ALL PLANT MATERIAL TO COMPLY WITH AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.

4. ALL PLANTS TO BE COMPACT, UNIFORM AND WELL GROWN.

5. LOCATION OF PLANT MATERIAL TO BE REVIEWED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

6. ALL CONSTRUCTION TO CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE TOWN OF KNIGHTDALE.

ALL PLANTING BEDS ARE TO BE MULCHED TO A MINIMUM DEPTH OF 2" WITH AGED TRIPLE SHREDDED HARDWOOD MULCH FROM A SINGLE SOURCE COMMERCIAL VENDOR WITH A MAXIMUM PARTICLE SIZE OF 2 INCHES, FREE OF WEED SEED AND WASTE MATERIALS. NO PINE STRAW PERMITTED. KEEP MULCH 4 TO 6 INCHES 8. ALL LAWN AREAS TO BE SEEDED OR/AND SODDED AS PER MANUFACTURER'S SPECIFICATIONS. REFER TO LANDSCAPE PLAN(S). ALL DISTURBED AREA SHALL

EITHER BE MULCH OR LAWN. 9. WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, THERE SHALL BE NO SIGHT OBSTRUCTING OR PARTLY OBSTRUCTING WALL, FENCE, SIGN, FOLIAGE, BERMS, OR PARKED VEHICLES BETWEEN THE HEIGHTS OF 24 INCHES AND EIGHT FEET ABOVE THE CURB LINE ELEVATION OR THE NEAREST TRAVELED WAY IF

11. ALL CONFLICTS BETWEEN PROPOSED LANDSCAPE, UTILITIES AND STORMWATER WILL BE RESOLVED PRIOR TO APPLICATION FOR BUILDING PERMITS. UTILITY AND STORMWATER PLANS DEPICTED IN THIS SUBMITTAL ARE PRELIMINARY AND ARE SUBJECT TO CHANGE WITH THE DEVELOPMENT OF CONSTRUCTION

10. HVAC EQUIPMENT AND UTILITY DEVICES (TO INCLUDE, BUT NOT LIMITED TO TELEPHONE AND CABLE PEDESTALS; ELECTRICAL TRANSFORMERS; BACKFLOW-DEVICE HOTBOX; ETC) SHALL BE SCREENED FROM OFF-SITE VIEW BY EVERGREEN SHRUBS, FENCE OR WALL.

12. STREET TREES SHALL BE MAINTAINED IN GOOD, TRIMMED AND NEAT CONDITION, AND AT MATURITY SHOULD PROVIDE 13.5' OF CLEARANCE TO ACCOMMODATE

13. MIN. 10' DISTANCE SHALL BE PROVIDED BETWEEN LIGHT POLES AND CANOPY TREE TRUNKS.

14. TREES WITHIN 20 FT. OF OVERHEAD POWER LINE(S) SHALL BE SUBSTITUTED WITH 2 UNDERSTORY TREES. 15. CONTRACTOR SHALL NOT PLANT TREES/SHRUBS AT ANY LOCATION WHERE THEY WILL INTERFERE WITH PEDESTRIANS EXITING AUTOS PARKED IN PARALLEL

16. THE SITE SHALL BE STABILIZED AND SEEDED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO).

LANDSCAPE NOTES
SCALE: NTS

- APPROVED MULCH PLANTING MIXTURE

BED EDGING SCALE: NTS

5. KEEP MULCH AWAY FROM ROOT 2. SET SHRUB 2 INCHES HIGHER THAN ABOVE ADJACENT GRADE. - KEEP MULCH AWAY FROM ROOT CROWN - 3" MULCH LAYER SEE BED EDGING DETAIL ON THIS SHEET. REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL TAMPED PLANTING

1. IF PLANTING HOLES ARE DUG WITH A 3. SYNTHETIC BURLAP SHALL BE REMOVED 6. THOROUGHLY SOAK THE ROOT BALL

4. PROVIDE 2 INCH DEEP SAUCER AROUND

ENTIRELY FROM ROOT BALL.

SHRUB PLANTING NOTES

LARGE AUGER, BREAK DOWN THE SIDES

WITH A SHOVEL TO ELIMINATE GLAZING

AND CREATE THE SLOPING SIDE

PROFILE SHOWN ON THE DETAIL.

- PLANTING SOIL MIXTURE HAND-TAMPED IN LIFTS - BREAK UP SUBSOIL WITH PICK

B & B SHRUB INSTALLATION SCALE: NTS

AND ADJACENT PREPARED SOIL

MONTH AFTER PLANTING AND

MAINTENANCE PERIOD.

REGULARLY THROUGHOUT THE

SEVERAL TIMES DURING THE FIRST

CONTAINER PLANT INSTALATION

UNDISTURBED SUBGRADE -

MASS PLANTING NOTES

NEAREST DRAIN BASIN.

KEEP MULCH AWAY FROM ROOT CROWN —

3" MULCH LAYER

SEE LANDSCAPE

NOTES FOR TYPE -

3. KEEP MULCH AWAY FROM ROOT CROWN.

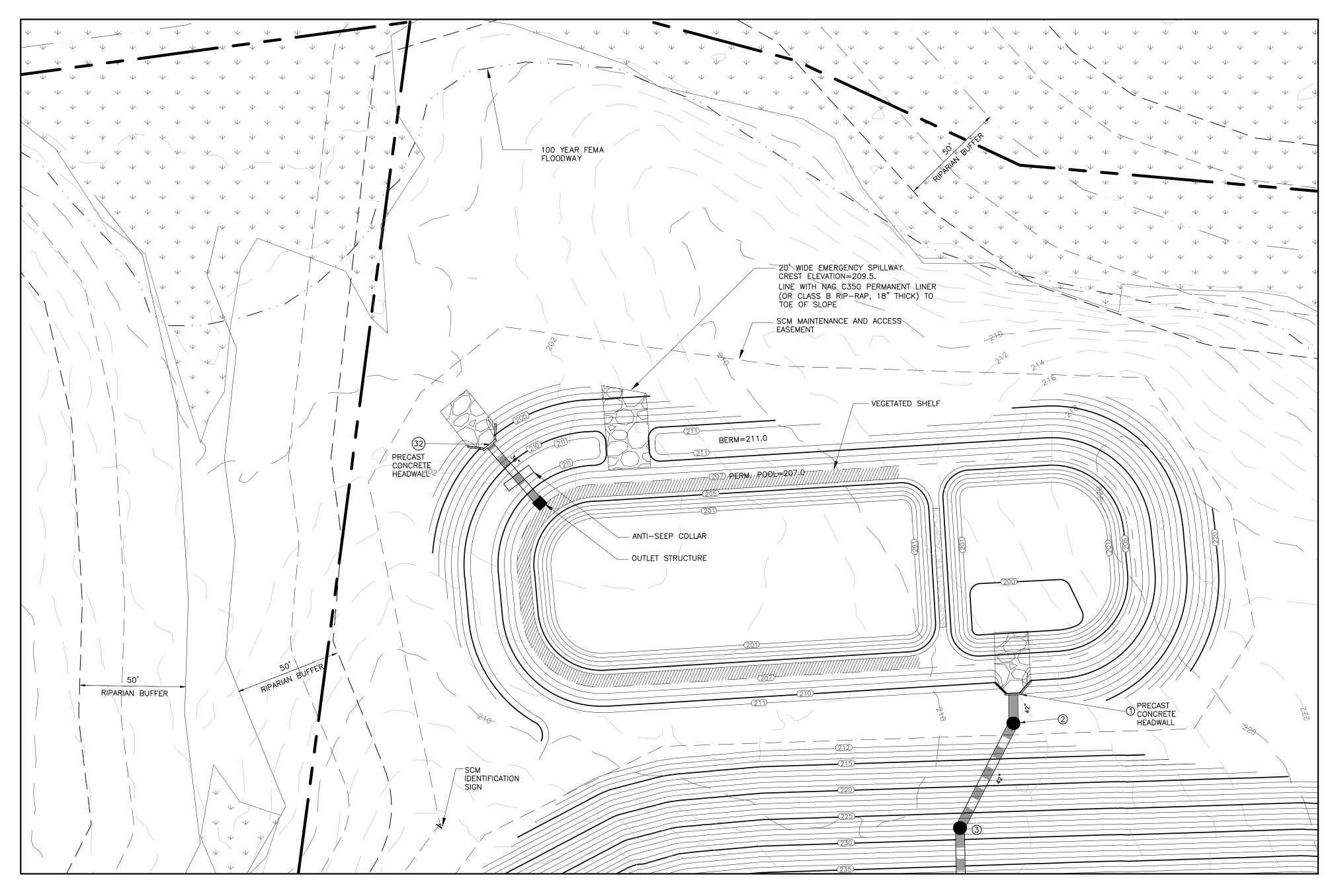
1. PRUNE CROWDED, BROKEN, OR STRAY BRANCHES.

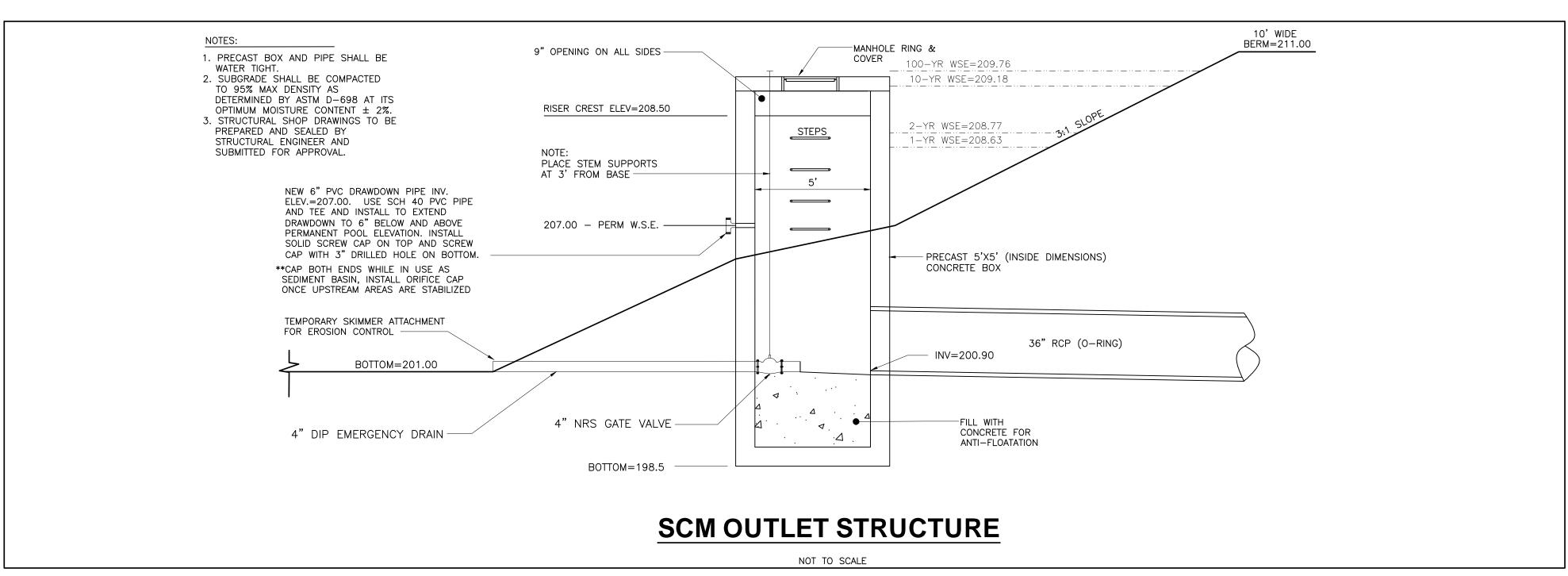
CUT FLUSH, LEAVING CAMBIUM EDGE CLEAN.

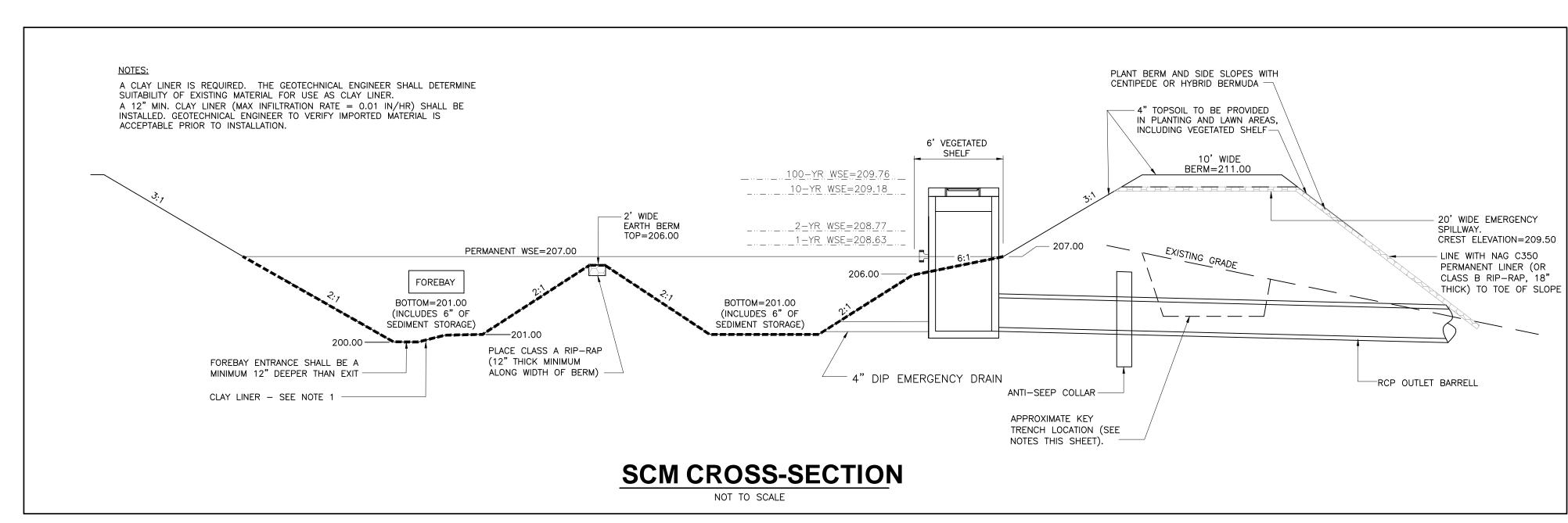
2. CROWN PLANTING BED A MIN. OF 3 INCHES ABOVE ADJACENT GRADE EXCEPT IN COURTYARD

SITUATIONS WHERE BEDS SHALL BE SLOPED TO

ι.	Knightdale, and to	n. This design has been reviewed by the l the best of my knowledge and belief, it co tandard Specifications of the Town of Kr	onforms to the requirements
	By: Town Engineer		
	These plans are app project.	proved by the Town of Knightdale and se	erve as construction plans for t
	R.	Date	







REQUIRED SCM INSPECTIONS SEQUENCE

- WHEN SCHEDULING INSPECTIONS, PLEASE CALL THE PUBLIC WORKS ADMINISTRATIVE ASSISTANT AT (919) 217-2250.
- PLEASE NOTE: THE FOLLOWING PERSONNEL MUST BE PRESENT AT ALL INSPECTIONS:
- 1) SITE SUPERVISOR
- 3) AS-BUILT CERTIFYING ENGINEER OR SOMEONE UNDER THEIR SUPERVISION
- THE FOLLOWING ITEMS MUST BE INSPECTED BY TOK STAFF DURING THE INSTALLATION OF ANY SCM WITH DAM:
- 1) KEYTRENCH EXCAVATION 2) PRINCIPAL SPILLWAY PIPE AND ASSOCIATED COMPONENTS:
- a. CONCRETE CRADLE
- b. ANTI-SEEP COLLAR c. SEEPAGE DIAPHRAGM 3) OUTLET STRUCTURE
- 4) ANTIFLOTATION BALLAST 5) ANY SITE-CONSTRUCTED REINFORCED CONCRETE STRUCTURES

APPROXIMATE AREA = 7,250 SF

SCM EMBANKMENT SPECIFICATIONS:

GREATER THAN 6", AND FROZEN OR OTHER OBJECTIONABLE MATERIAL.

REMOVED AND THE SURFACE PROPERLY PREPARED FOR FILL PLACEMENT.

1. ALL FILL MATERIALS TO BE USED FOR THE DAM EMBANKMENT SHALL BE TAKEN FROM BORROW AREAS APPROVED BY THE ON- SITE GEOTECHNICAL ENGINEER. THE FILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, WOOD, STONES

2. FILL PLACEMENT SHALL NOT EXCEED A MAXIMUM 8" LIFT. EACH LIFT SHALL BE CONTINUOUS FOR THE ENTIRE LENGTH OF EMBANKMENT. BEFORE PLACEMENT OF FILL FOR THE BERM SECTION, ALL UNSUITABLE MATERIAL SHALL BE

3. ALL FILL SOILS USED IN THE EMBANKMENT / KEY TRENCH CONSTRUCTION SHALL BE COMPACTED TO AT LEAST 98%

COMPACTION LEVEL HAS BEEN REACHED. THE FIII SHOULD BE COMPACTED USING A SHEEPSFOOT TYPE COMPACTOR. IN ORDER TO PREVENT DAMAGE TO THE PIPES, NO COMPACTION EQUIPMENT SHALL CROSS ANY PIPES UNTIL MINIMUM COVER IS ESTABLISHED ALONG THE PIPES.

4. A KEY TRENCH SHALL BE PROVIDED BENEATH ALL FILL AREAS OF THE BERM. THE TRENCH SHALL EXTEND A MINIMUM

5. FILL MATERIAL ADJACENT TO THE OUTLET BARREL, SHALL MEET THE SPECIFICATIONS LISTED IN ITEMS 1 THROUGH 3 ABOVE. THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO THE COMPACTION EFFORTS ALONG THE PIPE TO ENSURE

THAT ALL SPACES UNDER AND ADJACENT TO THE PIPE ARE FILLED WITH PROPERLY COMPACTED MATERIAL.

OF 5 FT BELOW EXISTING GRADE AND SHALL HAVE A MINIMUM BOTTOM WIDTH OF 5 FEET. THE KEY TRENCH SIDE SLOPES SHALL BE A MINIMUM OF 1:1 (H:V). THE KEY TRENCH SHALL BE COMPACTED TO THE SAME SPECIFICATION

OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM-69B). THE FILL SOILS SHALL BE COMPACTED AT A

PERFORMED BY THE ON- SITE GEOTECHNICAL ENGINEER DURING CONSTRUCTION TO VERIFY THAT THE PROPER

MOISTURE CONTENT WITHIN 2 PERCENT OF ITS OPTIMUM MOISTURE CONTENT. COMPACTION TESTS SHALL BE

TOWN OF KNIGHTDALE SCM PLANTING NOTES

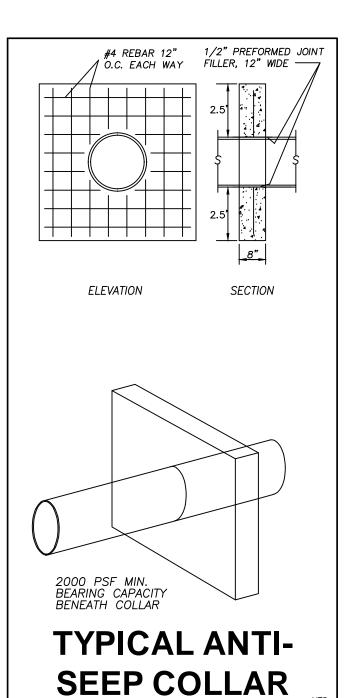
- 1. THE DAM STRUCTURE,INCLUDING FRONT AND BACK EMBANKMENT SLOPES, OF THE POND SHALL BE VEGETATED WITH NON-CLUMPING TURF GRASS OR SOD. (CENTIPEDE/HYBRID-BERMUDA) 90%GERMINATION OF NON-CLUMPING TURF WILL BE REQUIRED PRIOR TO FINAL CERTIFICATION
- 2. THE VEGETATED SHELF SHALL BE PLANTED WITH A MINIMUM OFTHREE DIVERSE SPECIES OF HERBACEOUS, NATIVE VEGETATION AT A MINIMUM DENSITY OF 50 PLANTS PER 200FEET OF SHELF AREA.
- 3. CONTRACTOR TO WORK WITH SOILS SCIENTIST TO ENSURE SOILS ARE ADEQUATE TO SUPPORT PROPER ESTABLISHMENT AND GROWTH OF THE AQUATIC PLANTINGS. CONTRACTOR TO AMEND SOILS AND INSTALL SOILS IN PLANT, SHRUB, AND TREE AREAS PER DETAILS, SOIL SPECIFICATIONS. NCDENR SPECIFICATION, AND SOIL SCIENTIST RECOMMENDATIONS.
- 4. ALL AQUATIC PLANTINGS ARE TO BE INSTALLED DURING THE APPROPRIATE TIME OF YEAR TO ENSURE SURVIVABILITY. (LAST SPRING FROST AND THE FIRST FALL FROST).
- 5. ALL DISTURBED AREAS AROUND THE OUTSIDE OF THE DEVICE SHALL BE SEEDED WITH A LAWN AREA SEED MIX (PER SEEDING SPECIFICATIONS) NATIVE GRASSES, LEGUMES, CLOVERS, AND WILDFLOWERS.
- 6. IF THE DEVICE WAS USED DURING CONSTRUCTION AS A SEDIMENT BASIN OR TRAP, THE BASIN MUST BE CLEANED OUT, GRADED, APPROPRIATE AREAS COVERED WITH 4 OF TOPSOIL AS SPECIFIED IN NOTE #2 ABOVE, AND VEGETATED WITHIN 14 DAYS OF THE COMPLETION
- 7. CONTRACTOR SHALL WATER ALL VEGETATION AND GRASS ON A WEEKLY BASIS AS NEEDED TO ENSURE GRASS AND PLANT SURVIVAL UNTIL AFTER THE SCM IS CERTIFIED AND ACCEPTED BY THE TOWN.

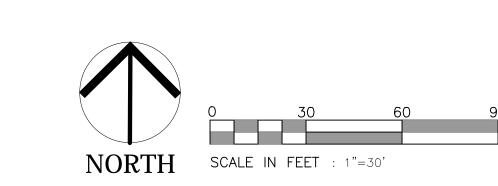
SCM PLANT SCHEDULE

REQUIRED PLANTS BASED ON 2,450 S.F. = 50 PLANTS / 200 S.F. = 613 PLANTS PLANT TYPE | QTY | BOTANICAL NAME | COMMON NAME 204 ASCLEPIAS INCARNATA SWAMP MILKWEED 2" PLUG | 2' O.C. 204 CAREX TENERA QUILL SEDGE 2" PLUG 2' O.C. WHITE TURTLEHEAD 205 CHELONE GLABRA 2" PLUG 2' O.C. NON-CLUMPING TURF GRASS MIX OF HYBRID BERMUDA OR CENTIPEDE PLANTED AT A RATE OF 7 LBS/1000 SF

SCM PLANTING/ACCEPTANCE NOTES:

THE FINAL SCM SHALL BE INSTALLED AND STABILIZED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE APPLICANT SHALL CERTIFY THAT THE COMPLETED PROJECT IS IN ACCORDANCE WITH THE APPROVED STORMWATER MANAGEMENT PLANS AND DESIGNS AND SHALL SUBMIT ACTUAL AS BUILT PLANS FOR ALL STORMWATER MANAGEMENT FACILITIES OR PRACTICES AFTER FINAL CONSTRUCTION IS COMPLETED. PRIOR TO CONVERTING THE SCM, SCHEDULE AN INSPECTION WITH THE APPROPRIATE TOWN/COUNTY REPRESENTATIVE TO OBTAIN APPROVAL TO BEGIN THE CONVERSION. 90% GERMINATION OF NON-CLUMPING TURF GRASS BE ESTABLISHED ON ALL SLOPES AND EMBANKMENTS PRIOR TO FINAL ACCEPTANCE BY THE TOWN. AQUATIC VEGETATION SHALL BE INSTALLED PER THE PLANTING SCHEDULE ON THIS SHEET PROIR TO FINAL ACCEPTANCE.



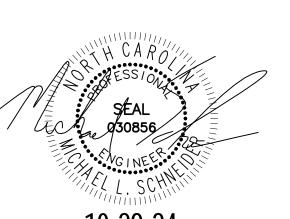


a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale. By: _____ Date: ____ Town Engineer These plans are approved by the Town of Knightdale and serve as construction plans for this

Land Use Administrator

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



10 0 N

ISSUED: 16 SEPT 2024

REVISIONS: 1 23 SEP 2024 PER TOWN COMMENTS 2 29 OCT 2024

PER TOWN COMMENTS

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

SCM DETAIL

PROJECT: WSHOIB7L10

TOWN OF KNIGHTDALE REQUIRED ESC PLAN MAINTENANCE

1. MAINTENANCE AND/OR CLEAN OUT, IS NECESSARY ANYTIME THE DEVICE IS AT 50% CAPACITY. ALL SEDIMENT STORAGE MEASURES WILL REMAIN ON SITE AND FUNCTIONAL UNTIL ALL GRADING AND FINAL LANDSCAPING OF THE PROJECT IS COMPLETE. 3. AS DESIGNATED BY NCDEQ NCG01 PERMITTING SELF-INSPECTIONS FOR EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PERFORMED AT LEAST

ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT OF 1 INCH OR GREATER ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN MEASURES AS DESIGNED.

4. PROVIDE THE MINIMUM MAINTENANCE STANDARDS TAILORED FOR RELEVANT PLAN MEASURES:

SURVEYOR FLAGS/TAPE/STAKES:

-REPLACE IDENTIFIERS IF DAMAGED OR KNOCKED DOWN DURING DEVELOPMENT. -ENSURE KEY ENVIRONMENTAL AND/OR CULTURAL RESOURCES MAINTAIN IDENTIFIERS. -COLORS SHOULD ADHERE TO THE APWA UNIFORM COLOR CODE. USE ACCEPTED SURVEY SYMBOLS AND ENSURE OPERATORS UNDERSTAND DESIGNATIONS. UTILITY LINE OWNERS/OPERATORS SHALL IDENTIFY THE DESIGNATING

PERMITS/NCGO1 INSPECTIONS BOX: -CONFIRM BOX IS SECURELY FASHIONS TO A POST OR WALL IN A VISIBLE LOCATION IN PROXIMITY TO THE CONSTRUCTION ENTRANCE -MAINTAIN RELEVANT IDENTIFICATION ON THE EXTERIOR OF THE BOX -ENSURE PAPER DOCUMENTS REMAIN DRY / LEGIBLE (LAMINATION, TICKET HOLDERS, BINDERS, ETC.) -REPLACE ANY MISSING DOCUMENTS IMMEDIATELY. CONSIDER PLACING TIES OR FASTENERS IF NECESSARY.

RAIN GUAGE: -CHECK AND REMOVE ANY ITEMS FROM THE RAIN FUNNEL AND THE DEBRIS FILTER (E.G., DUST, BUGS AND -OPEN THE RAIN GAUGE AND REMOVE ANY FOREIGN -PERFORM ROUTINE MAINTENANCE AS SPECIFIED BY THE MANUFACTURER. -CHECK THAT THE GAUGE IS NOT BEING OBSTRUCTED FROM RAIN CAPTURE AND IS LEVEL BEFORE AND AFTER

REASSEMBLY.

AREAS OF THE TREE.

TREE PROTECTION FENCE: -PRUNE ANY DAMAGED TREES. (IF) DAMAGE TO PROTECTED TREES OCCURS, REPAIR ANY DAMAGE TO THE CROWN, TRUNK, OR ROOT SYSTEM IMMEDIATELY. -REPAIR ROOTS BY CUTTING OFF THE DAMAGED AREAS AND PAINTING THEM WITH TREE PAINT. SPREAD PEAT MOSS OR MOIST TOPSOIL OVER EXPOSED ROOTS.
-REPAIR DAMAGE TO BARK BY TRIMMING AROUND THE DAMAGED AREA, TAPER THE CUT TO PROVIDE DRAINAGE AND PAINT WITH TREE PAINT -CUT OFF ALL DAMAGED TREE LIMBS ABOVE THE TREE COLLAR AT THE TRUNK OR MAIN BRANCH. USE THRE SEPARATE CUTS TO AVOID PEELING BARK FROM HEALTHY

-SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT -REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING -REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

SILT FENCE OUTLET: -FRESHEN STONE WHEN SEDIMENT ACCUMULATION FXCFFDS 6 INCHES. -KEEP MESH FREE OF DEBRIS TO PROVIDE ADEQUATE FLOW AND REPLACE STONE AS NEEDED TO FACILITATE

CONSTRUCTION ENTRANCE -MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE -IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.

-CONFIRM SKIMMER IS FUNCTIONAL, INSTALLED IN THE CORRECT ORIENTATION AND HAS MOBILITY TO FLOAT ON TOP OF THE WATER COLUMN. -ENSURE ROCK PAD STABILIZATION IS PRESENT UNDER -REPAIR ANY STRUCTURAL DEFICIENCIES (E.G., ORIFICE DISK, FLEX HOSE CONNECTION, VENT FUNCTIONING, CRACKED PVC)

SEDIMENT BASIN: -BASIN REQUIRES MAINTENANCE WHEN THE INLET ZONE (1ST QUADRANT) HAS BEEN FILLED WITH SEDIMENT. - BAFFLE MATERIAL SHALL BE MAINTAINED IN GOOD CONDITION FOR THE LIFE OF THE POND UNTIL REMOVAL OR CONVERSION. ENSURE PROPER MATERIAL USE AND NO SUBSTANDARD MATERIALS ARE IN PLACE INCLUDING: 1. FABRIC SHOULD BE 700 G/M2 COIR EROSION BLANKET OR EQUAL. 2. PRESENCE OF SUPPORT WIRE ACROSS THE TOP WITH APPROPRIATE TIES. 3. THE T-POSTS SHALL WEIGH 1.33 LB/LF AND BE A LENGTH OF AT MINIMUM 5'.

SEDIMENT BASIN / ROLLED EROSION CONTROL PRODUCT: -INSPECT INITIAL CHANNEL ANCHORING HAS BEEN INSTALLED CORRECTLY, CONFIRM SEGMENTS ARE ROLLED IN CORRECT ORIENTATION. -ANY AREAS THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND -MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED. BASIN CONVEYANCES / SLOPE DRAIN / RIP-RAP LINED CHANE -ANY EROSION OF THE SLOPE, BERM OR OUTLET SHOULD BE REPAIRED IMMEDIATELY TO PREVENT HEAD CUTTING BACK INTO THE SLOPE -CONVEYANCE SHOULD BE REFRESHED IF PORE SPACE HAS BEEN COMPROMISED. CLOGGED DRAINS SHOULD BE -ADDITIONAL PERFORMANCE MEASURES MAY BE REQUIRED AT CONVEYANCE ENTRANCE TO SLOW WATER ENTERING

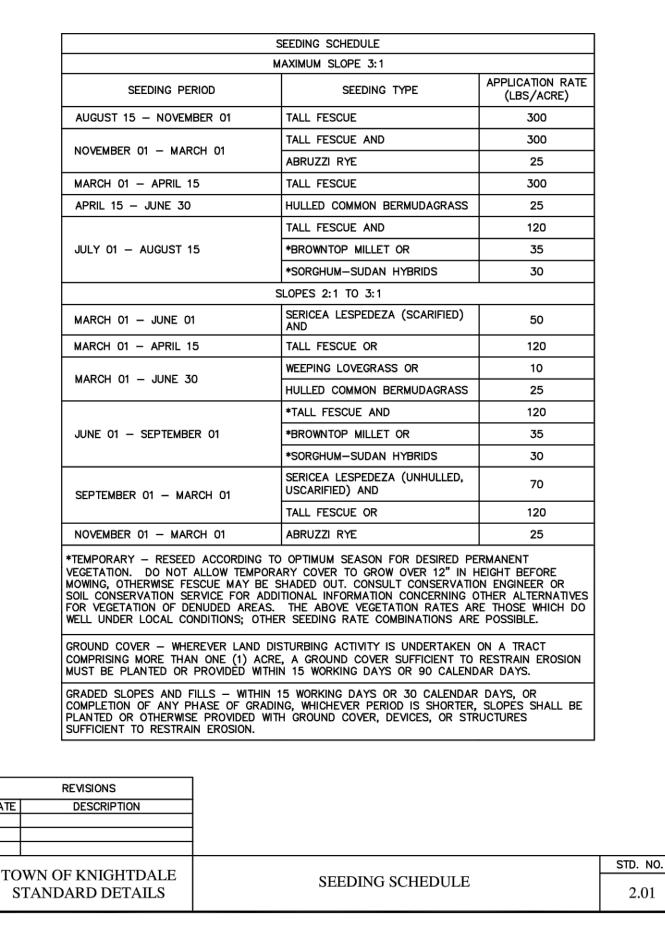
FILTER BAG / DEWATERING ACTIVITIES: -ENSURE THE DEWATERING PAD IS IN A GOOD -PRIOR TO USE INSPECT BAGS FOR ANY DEFECTS. ENSURE PUMP HOE IS SECURE AND A FLOATING INTAKE IS BEING USED (WHEN POSSIBLE) -FOLLOW ALL MÀNUFACTURER RÉCOMMENDATIONS FOR INSPECTION AND MAINTENANCE GUIDELINES. REPLACE WHEN TRAPPED SEDIMENT HAS ACCUMULATED TO 50% OF THE BAG CAPACITY OR IN ACCORDANCE WITH THE

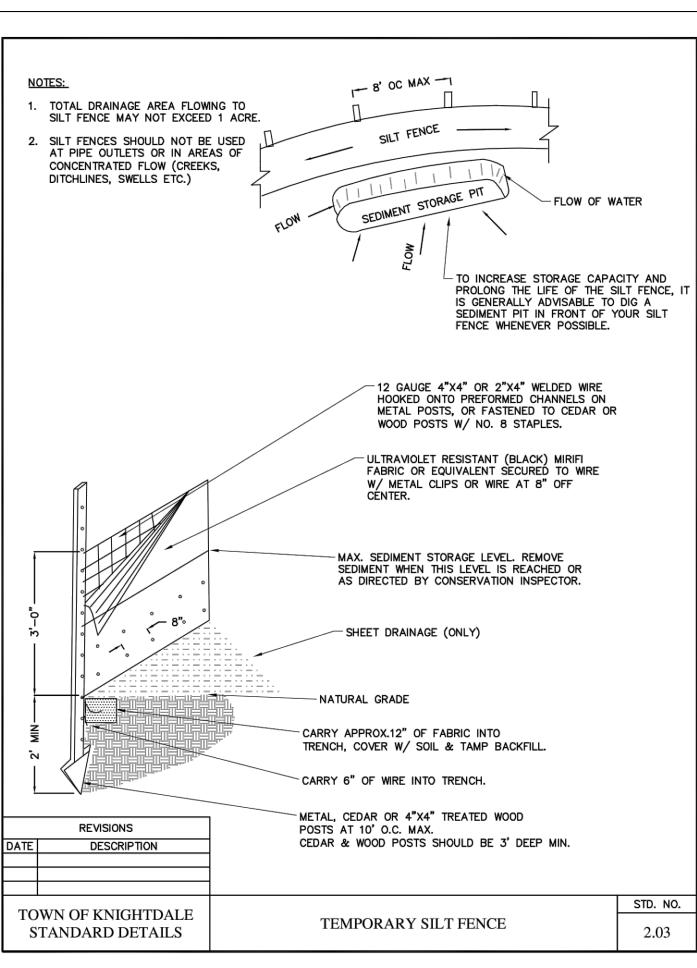
MANUFACTURERS RECOMMENDATIONS.

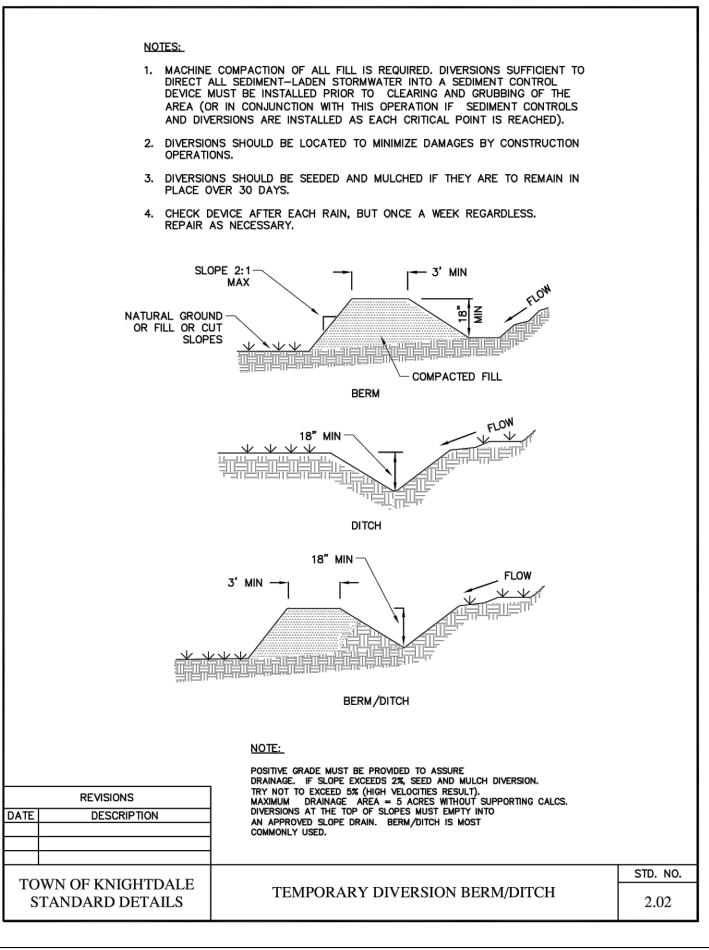
OF THE DEVICE.

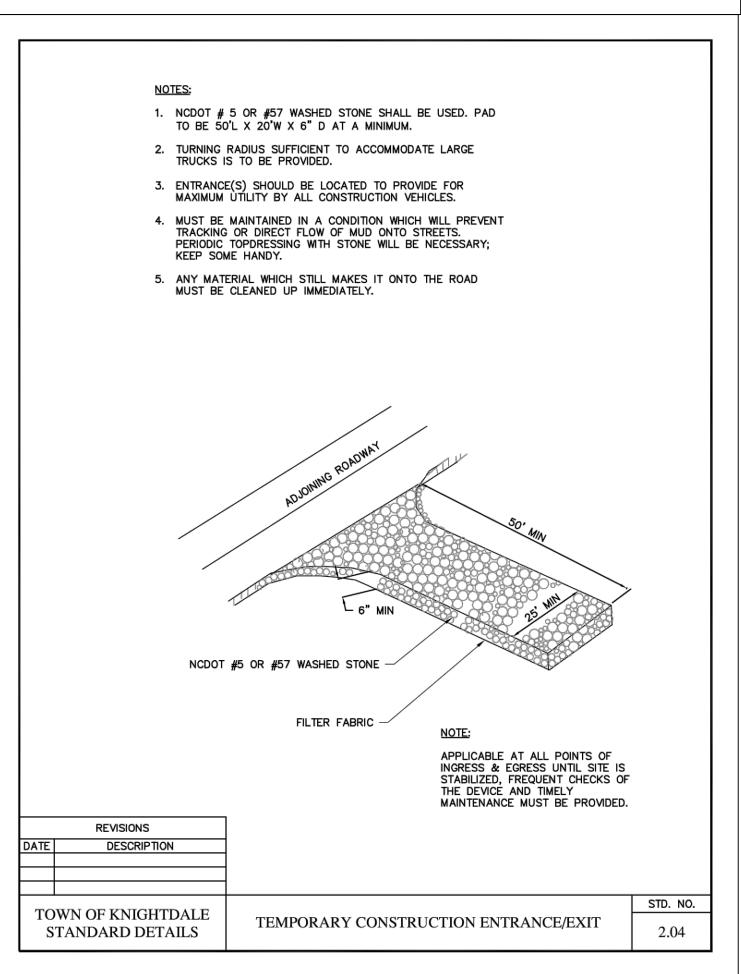
TEMPORARY DIVERSION DITCHES / ROLLED EROSION CONTROL PRODUCT: -ANY AREAS THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND -MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED. WITH WATTLES / SILT -REMOVE SEDIMENT ACCUMULATION BEHIND MEASURE AS NECESSARY TO PREVENT DAMAGE TO CHANNEL -REPLACE WATTLE/SOCK IF CLOGGED OR TORN. REINSTALL PER DETAIL IF DAMAGED OR DISLODGED -IF PONDING BECOMES EXCESSIVE, REPLACE WITH A LARGER DIAMETER WATTLE/SOCK OR A DIFFERENT ACCUMULATION BEHIND MEASURE AS NECESSARY TO PREVENT DAMAGE TO CHANNEL VEGETATION. -- CHECK FOR EROSION, PIPING, ROCK DISPLACEMENT AND CORRECT STONE SIZES, REPAIR IMMEDIATELY. CONFIRM WEIR PRESENT AND LOCATED AT THE CENTER

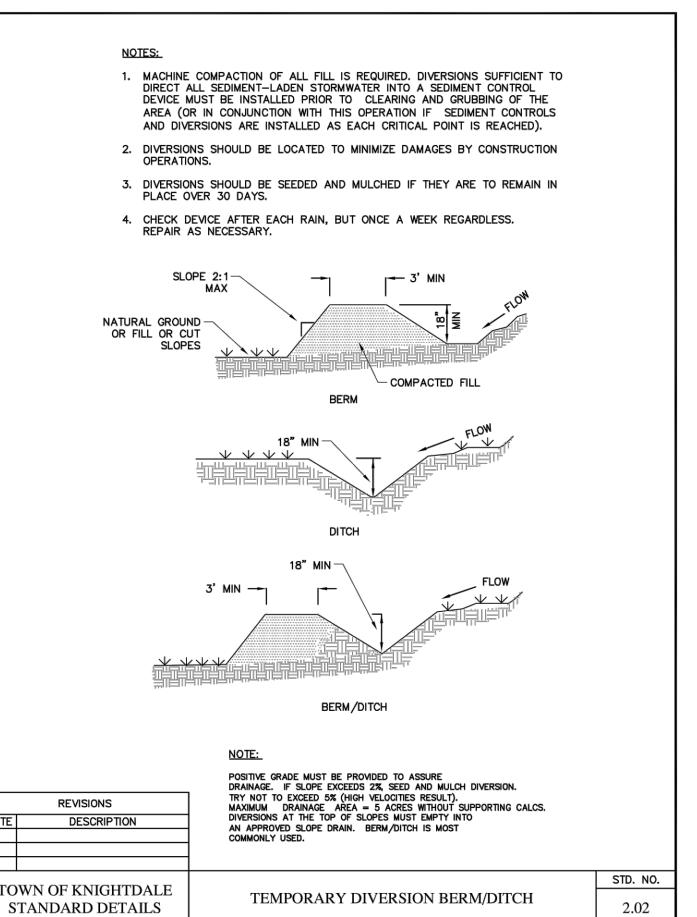
INLET PROTECTIONS (PIPE / YARD / DROP / CURB): -INSPECT INLET PROTECTION AND REMOVE SEDIMENT AFTER EACH RAIN EVENT. -KEEP FREE OF DEBRIS TO PROVIDE ADEQUATE FLOW AND IF PRESENT REPLACE STONE AS NEEDED TO FACILITATE DE-WATERING

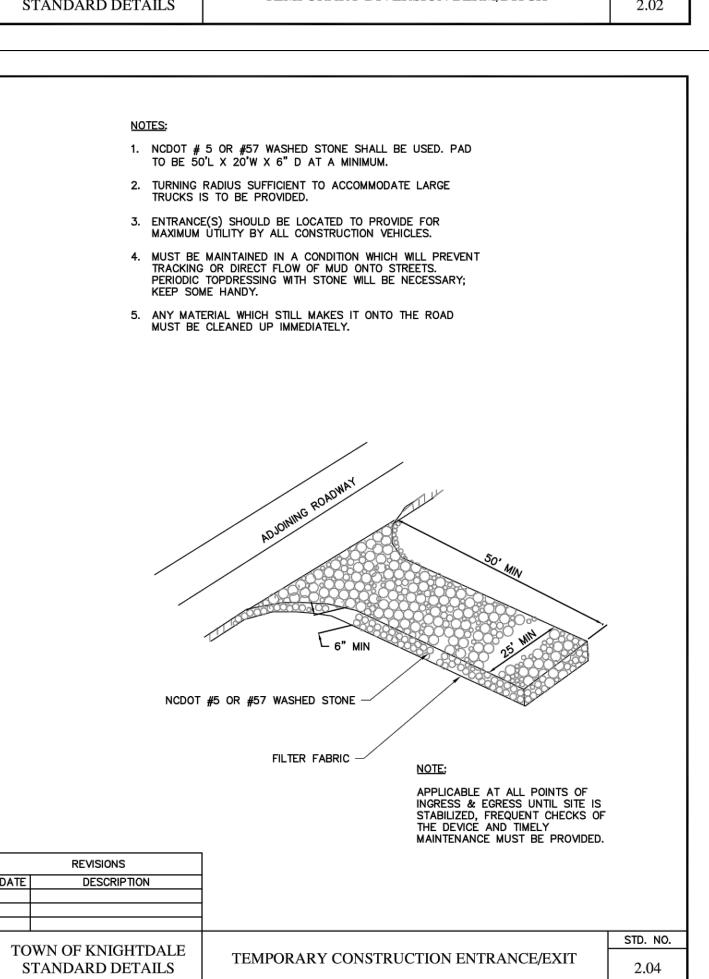














CTION E: GROUND STABILIZATION

Plastic sheeting

Required Ground Stabilization Timeframes tabilize within th many calendar Timeframe variations Site Area Description days after ceasing (a) Perimeter dikes swales, ditches, a None perimeter slopes) High Quality Wate (HQW) Zones f slopes are 10' or less in length and are slopes steeper that ot steeper than 2:1, 14 days are 7 days for slopes greater than 50' in ength and with slopes steeper than 4:1 7 davs for perimeter dikes, swales, (d) Slopes 3:1 to 4:1 ditches, perimeter slopes and HQW

10 days for Falls Lake Watershed days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones Areas with slopes 10 days for Falls Lake Watershed unless flatter than 4:1 ere is zero slope Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing ctivity. Temporary ground stabilization shall be maintained in a manner to render the

GROUND STABILIZATION SPECIFICATION tabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the echniques in the table below: Temporary grass seed covered with straw or Permanent grass seed covered with straw or other mulches and tackifiers other mulches and tackifiers Hydroseeding Geotextile fabrics such as permanent soil Rolled erosion control products with or reinforcement matting

urface stable against accelerated erosion until permanent ground stabilization is achieved

 Hvdroseeding without temporary grass seed Appropriately applied straw or other mulch Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULAN Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.

Apply flocculants at the concentrations specified in the NC DWR List of Approved *PAMS/Flocculants* and in accordance with the manufacturer's instructions. Provide ponding area for containment of treated Stormwater before discharging Store flocculants in leak-proof containers that are kept under storm-resistant cover

or surrounded by secondary containment structures

hazardous waste (recycle when possible) Remove leaking vehicles and construction equipment from service until the problem has been corrected. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials. TTER, BUILDING MATERIAL AND LAND CLEARING WAST Never bury or burn waste. Place litter and debris in approved waste containers Provide a sufficient number and size of waste containers (e.g dumpster, trash

Collect all spent fluids, store in separate containers and properly dispose as

Identify leaks and repair as soon as feasible, or remove leaking equipment from the

Maintain vehicles and equipment to prevent discharge of fluids.

receptacle) on site to contain construction and domestic wastes. Locate waste containers at least 50 feet away from storm drain inlets and surface vaters unless no other alternatives are reasonably available Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.

Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers. Anchor all lightweight items in waste containers during times of high winds. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.

Dispose waste off-site at an approved disposal facility On business days, clean up and dispose of waste in designated waste containers.

Paint and other liquid wast Do not dump paint and other liquid waste into storm drains, streams or wetlands

with properly operating unit

SECTION B: RECORDKEEPIN

1. E&SC Plan Documentation

UIPMENT AND VEHICLE MAINTENANCI

Provide drip pans under any stored equipment

Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available. Contain liquid wastes in a controlled area. Containment must be labeled, sized and placed appropriately for the needs of site. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from

construction sites Install portable toilets on level ground, at least 50 feet away from storm drains,

streams or wetlands unless there is no alternative reasonably available. If 50 foot

offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace

EARTHEN STOCKPILE MANAGEMENT Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls

and surface waters unless it can be shown no other alternatives are reasonably Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile. Provide stable stone access point when feasible. Stabilize stockpile within the timeframes provided on this sheet and in accordance

with the approved plan and any additional requirements. Soil stabilization is defined

SELF-INSPECTION, RECORDKEEPING AND REPORTING

The approved E&SC plan as well as any approved deviation shall be kept on the site. The

The following items pertaining to the E&SC plan shall be kept on site and available for

a) Each E&SC measure has been installed | Initial and date each E&SC measure on a copy

and does not significantly deviate from the of the approved E&SC plan or complete, date

ocations, dimensions and relative elevations | and sign an inspection report that lists each

(b) A phase of grading has been completed. | Initial and date a copy of the approved E&SC

oved E&SC plan must be kept up-to-date throughout the coverage under this permi

as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

inspection at all times during normal business hours.

Item to Document

shown on the approved E&SC plan.

(c) Ground cover is located and installed

in accordance with the approved E&SC

(d) The maintenance and repair

have been performed.

requirements for all E&SC measures

ONSITE CONCRETE WASHOU STRUCTURE WITH LINER NOTES:

1. ACTUAL LOCATION DETERMINED NOTES: 1. ACTUAL LOCATION DETERMINED IN FIELD CLEARLY MARKED SIGNAGE NOTING DEVICE (18"X24" MIN.) THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY. 3.CONCRETE WASHOUT STRUCTURE NEEDS TO E CLEARY MARKED WITH SIGNAGE NOTING DEVICE. 3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WI' SIGNAGE NOTING DEVICE. ABOVE GRADE WASHOUT STRUCTURE BELOW GRADE WASHOUT STRUCTURE

Do not discharge concrete or cement slurry from the site.

Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence

alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive

Install temporary concrete washouts per local requirements, where applicable. If a

spills or overflow. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.

Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.

At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

Store and apply herbicides, pesticides and rodenticides in accordance with label

Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.

Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately. Do not stockpile these materials onsite

IAZARDOUS AND TOXIC WASTE Create designated hazardous waste collection areas on-site.

Place hazardous waste containers under cover or in secondary containment. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/1

Documentation Requirements

E&SC measure shown on the approved E&SC

plan. This documentation is required upon the

initial installation of the E&SC measures or if

the E&SC measures are modified after initial

plan or complete, date and sign an inspection

Initial and date a copy of the approved E&SC

plan or complete, date and sign an inspection

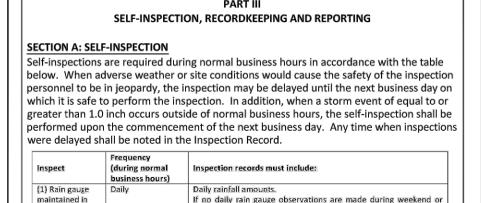
report to indicate compliance with approved

Complete, date and sign an inspection report.

report to indicate completion of the

nstruction phase.

round cover specifications



If no daily rain gauge observations are made during weekend or good working holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un-

		attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	Identification of the measures inspected, Date and time of the inspection, Name of the person performing the inspection, Indication of whether the measures were operating properly, Description of maintenance needs for the measure, Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDCs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	lidentification of the discharge outfalls inspected, Date and time of the inspection, Name of the person performing the inspection, Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, Indication of visible sediment leaving the site, Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit. 3. The phase of grading (installation of perimeter E&SC
stabilization measures	of grading	measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required

soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

timeframe or an assurance that they will be provided as

(e) Corrective actions have been taken Initial and date a copy of the approved E&SC to E&SC measures. plan or complete, date and sign an inspection report to indicate the completion of the 2. Additional Documentation to be Kept on Site In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received. (b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

Documentation to be Retained for Three Years All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items, (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit, (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include

properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems, (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above, (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and (f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

WIRE TIES

INTERMEDIATE

LANGUAGE IN BOTH

ENGLISH AND SPANISH,

SELF-INSPECTION, RECORDKEEPING AND REPORTING SECTION C: REPORTING 1. Occurrences that Must be Reported Permittees shall report the following occurrences:

(b) Oil spills if: They are 25 gallons or more, They are less than 25 gallons but cannot be cleaned up within 24 hours,

 They are within 100 feet of surface waters (regardless of volume). Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA

They cause sheen on surface waters (regardless of volume), or

(d) Anticipated bypasses and unanticipated bypasses

(Ref: 40 CFR 302.4) or G.S. 143-215.85.

e) Noncompliance with the conditions of this permit that may endanger health or the

122.41(m)(3)]

may endanger

CFR 122.41(I)(7)]

health or the

2. Reporting Timeframes and Other Requirements After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be

reported to the Department's Environmental Emergency Center personnel at (800) Reporting Timeframes (After Discovery) and Other Requirements

(a) Visible sediment | • Within 24 hours, an oral or electronic notification. deposition in a Within 7 calendar days, a report that contains a description of the stream or wetland sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis If the stream is named on the NC 303(d) list as impaired for sediment related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions

(b) Oil spills and shall include information about the date, time, nature, volume and hazardous substances per Ite A report at least ten days before the date of the bypass, if possible. bypasses [40 CFR

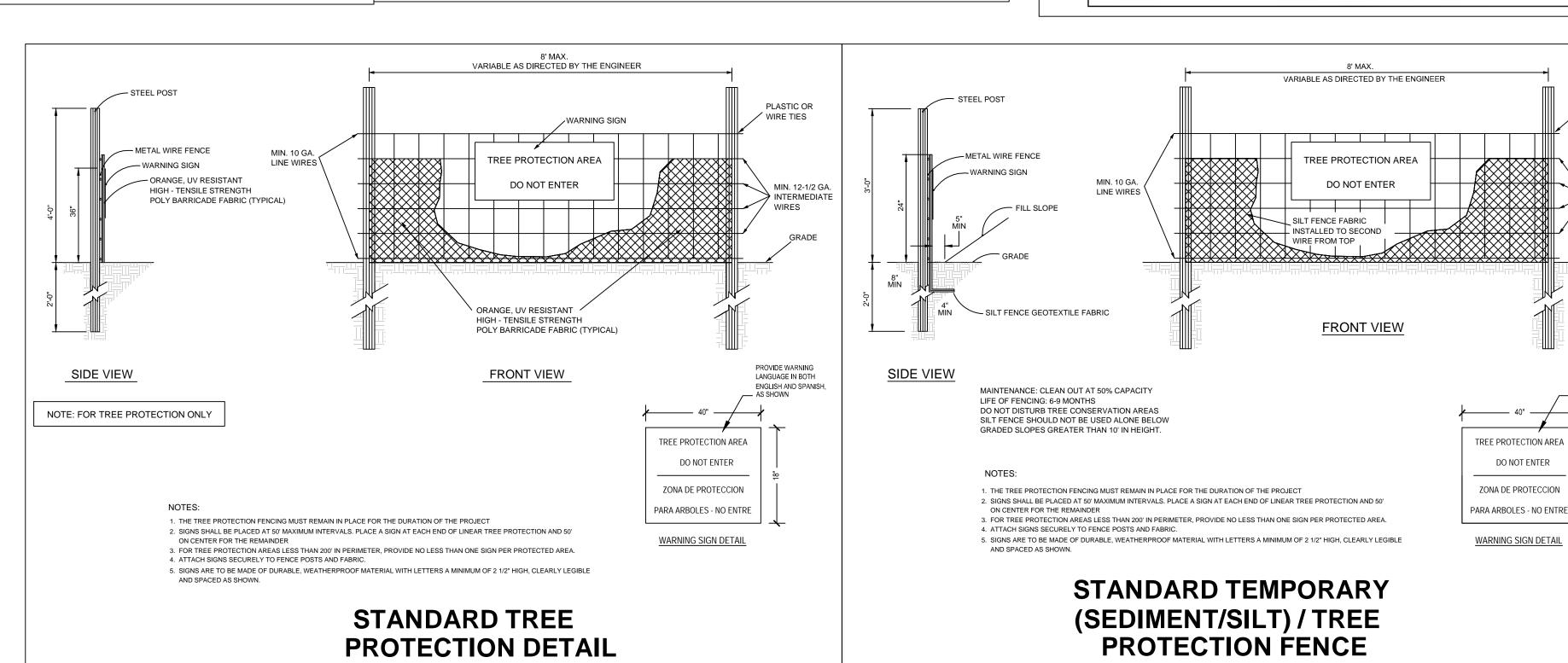
case-by-case basis.

The report shall include an evaluation of the anticipated quality and .22.41(m)(3)] effect of the bypass. (d) Unanticipated Within 24 hours, an oral or electronic notification bypasses [40 CFR Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass (e) Noncompliano Within 24 hours, an oral or electronic notification with the conditions • Within 7 calendar days, a report that contains a description of the of this permit that oncompliance, and its causes; the period of noncompliance, been corrected, the anticipated time noncompliance is expected to

Division staff may waive the requirement for a written report on a

NORTH CAROLINA **3** Environmental Quality

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING



a.	Town Certification. This design has been reviewed by the Engineer for the Town of
	Knightdale, and to the best of my knowledge and belief, it conforms to the requirements
	established in the Standard Specifications of the Town of Knightdale.
	By: Date:
	Town Engineer

___ Date: ____

Land Use Administrator

DETAILS

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

PROJECT: WSHOIB7L10

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ISSUED:

REVISIONS:

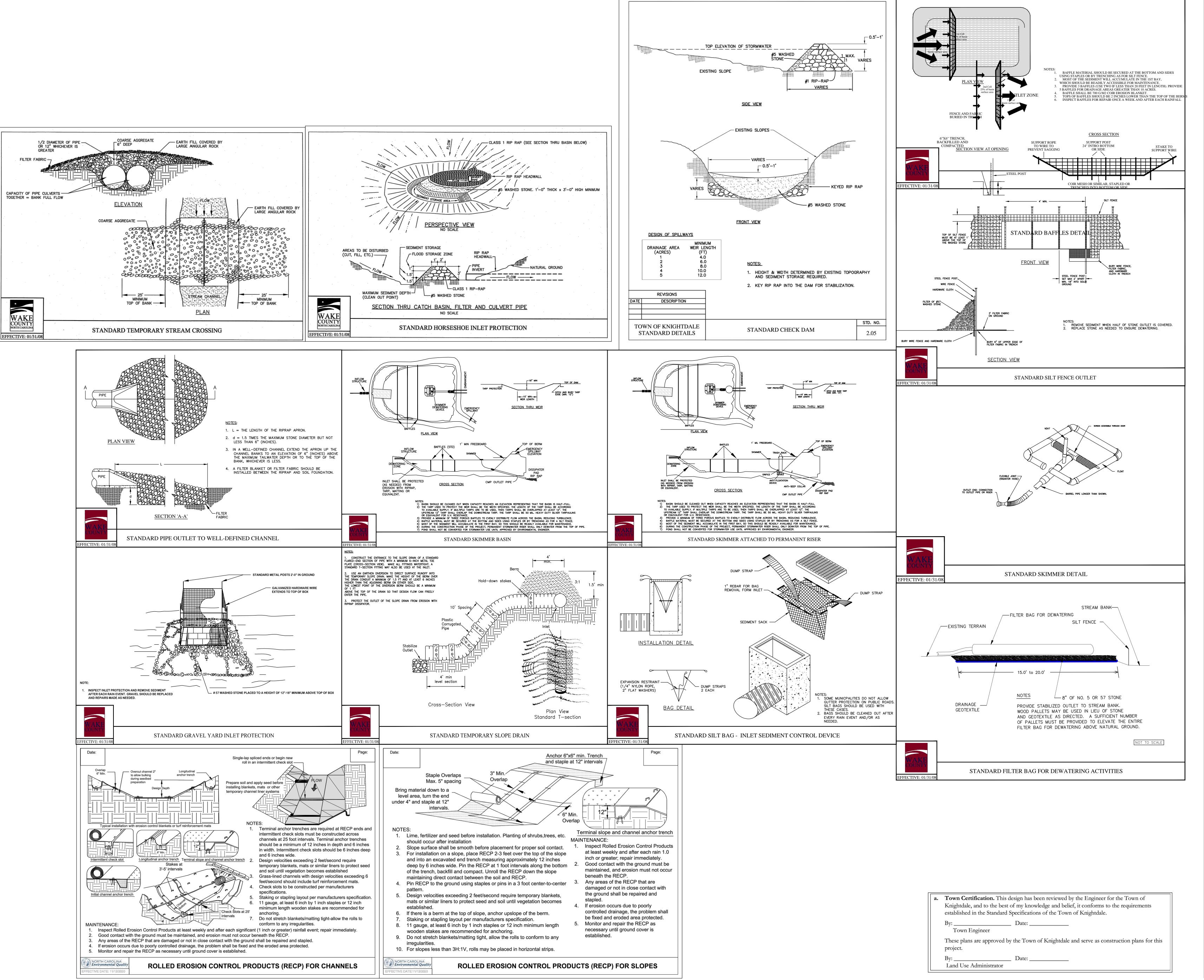
8522-204 SIX FORKS ROAD

ENGR. FIRM LICENSE #F-0843

919.845.7600 PHONE

919.845.7703 FAX

RALEIGH, NORTH CAROLINA 27615



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



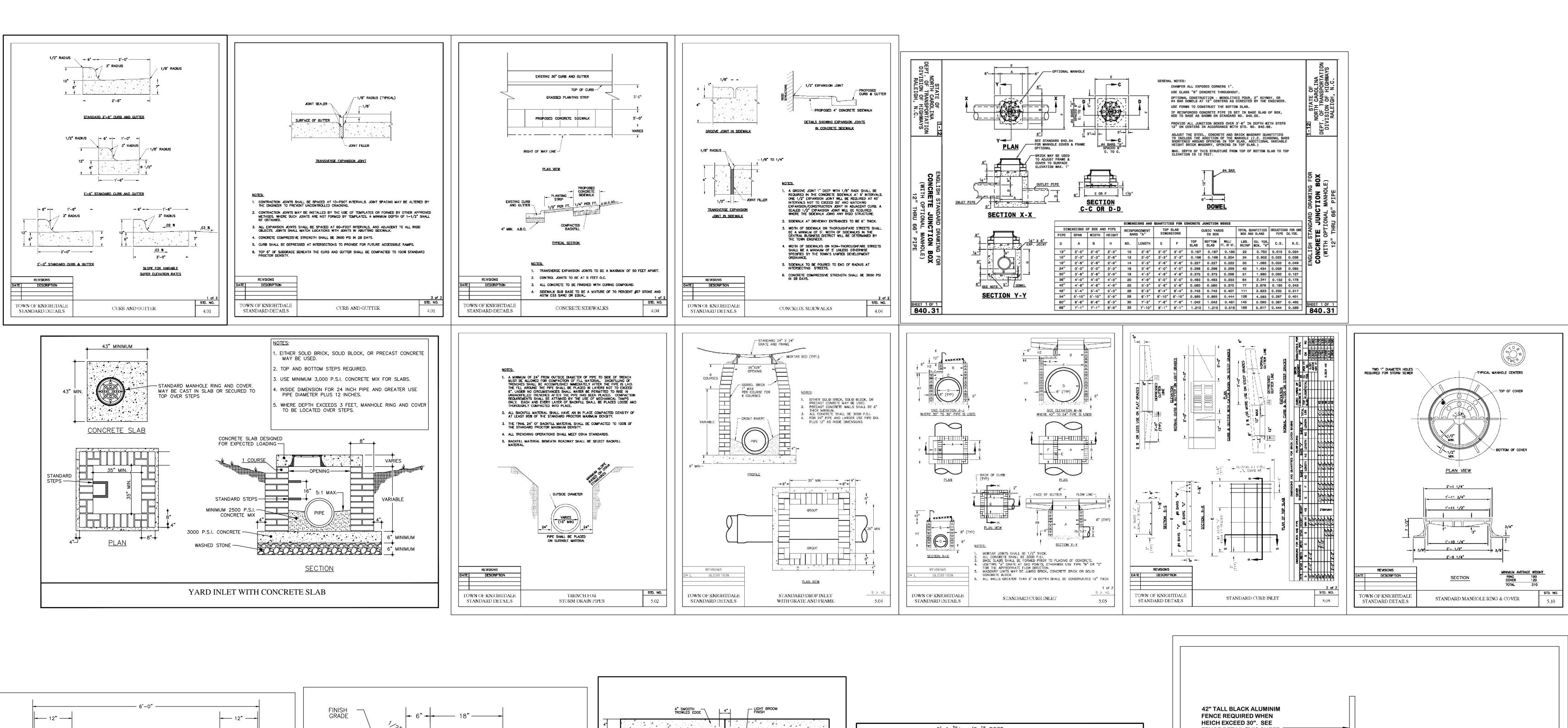
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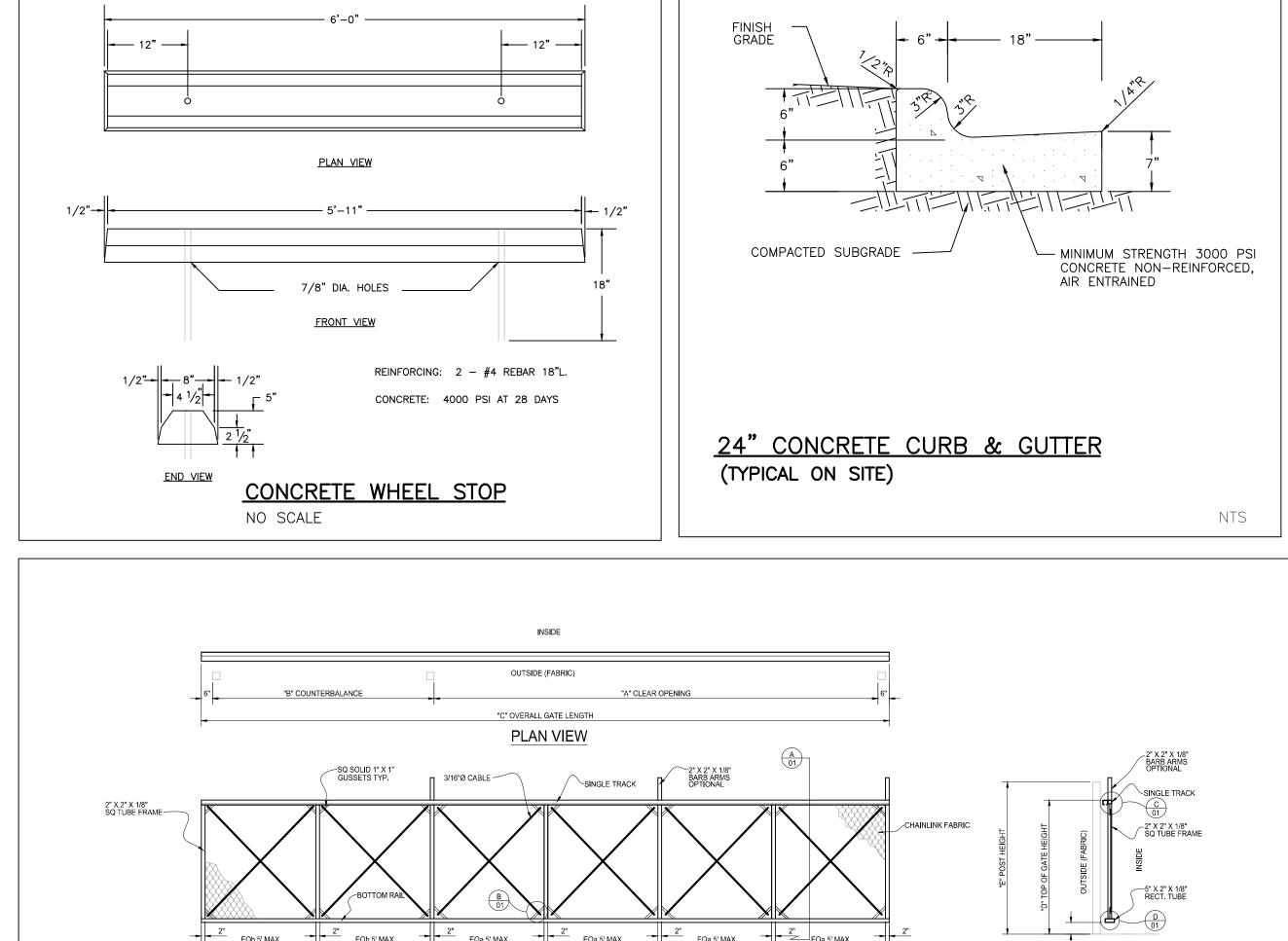
REVISIONS:

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

PROJECT: WSHOIB7L10

DETAILS





(OPENING SECTION)

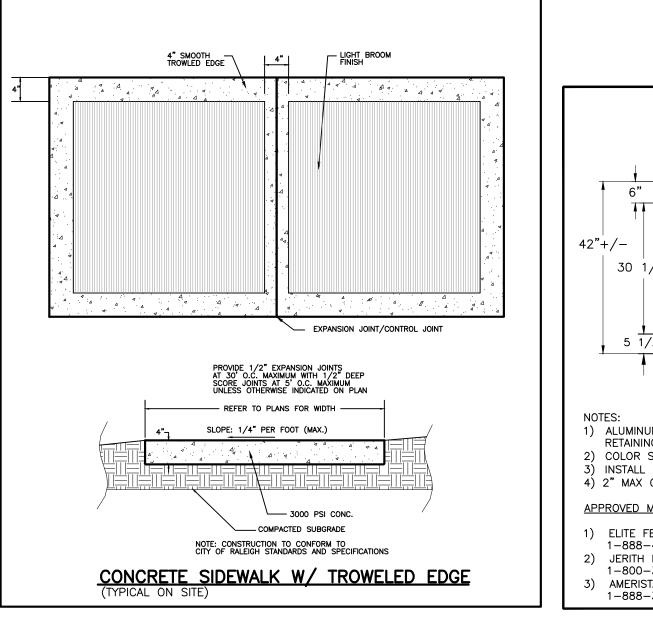
"C" OVERALL GATE LENGTH

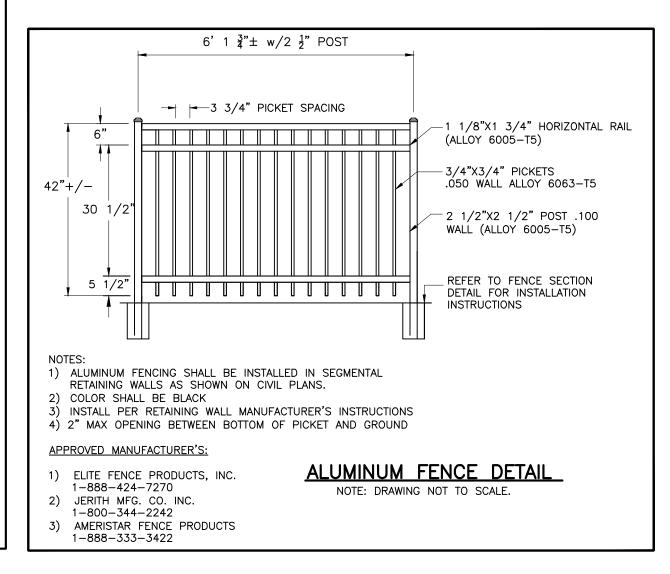
GATE DETAIL

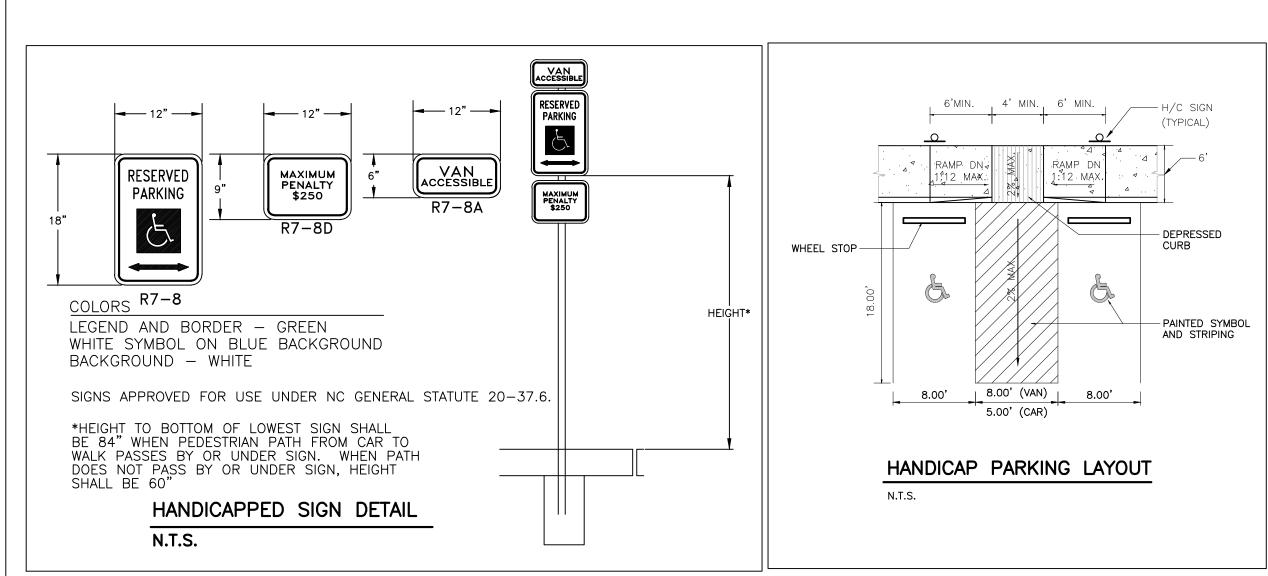
ELEVATION VIEW ALUMINUM CANTILEVER GATE

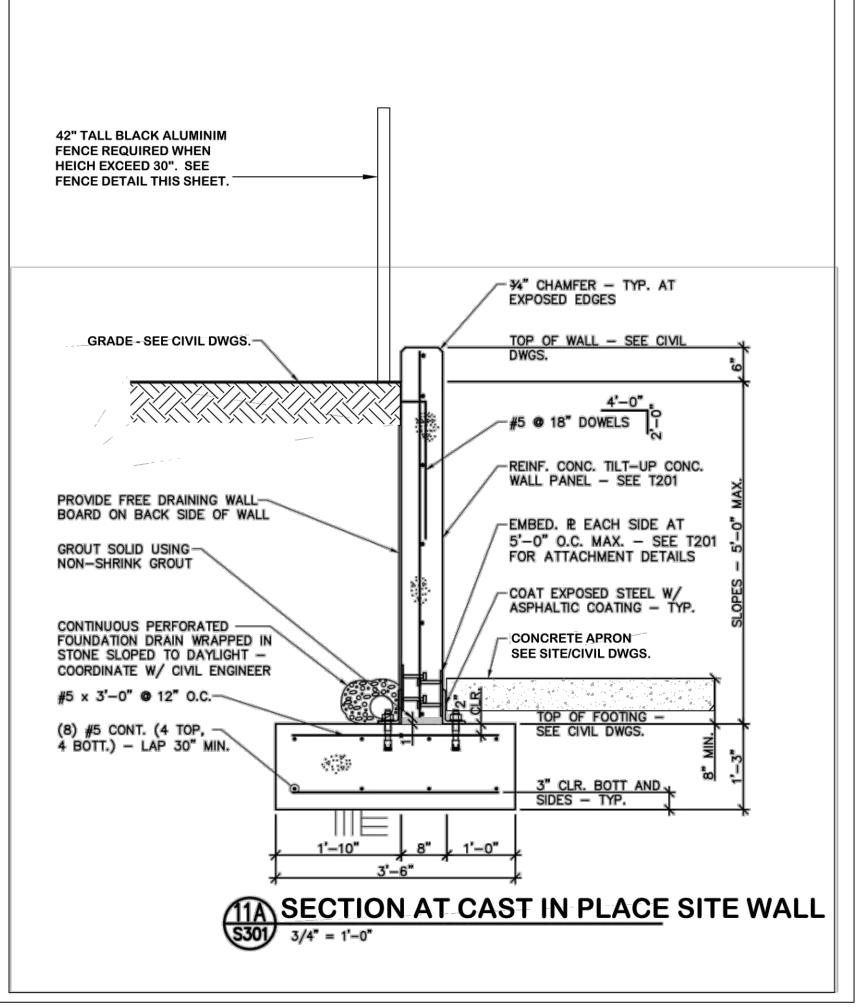
OUTSIDE LOOKING IN

(A) SECTION









a.	Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
	By: Date: Town Engineer
	These plans are approved by the Town of Knightdale and serve as construction plans for this project.
	By: Date: Land Use Administrator

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



LOT 10 HINTON

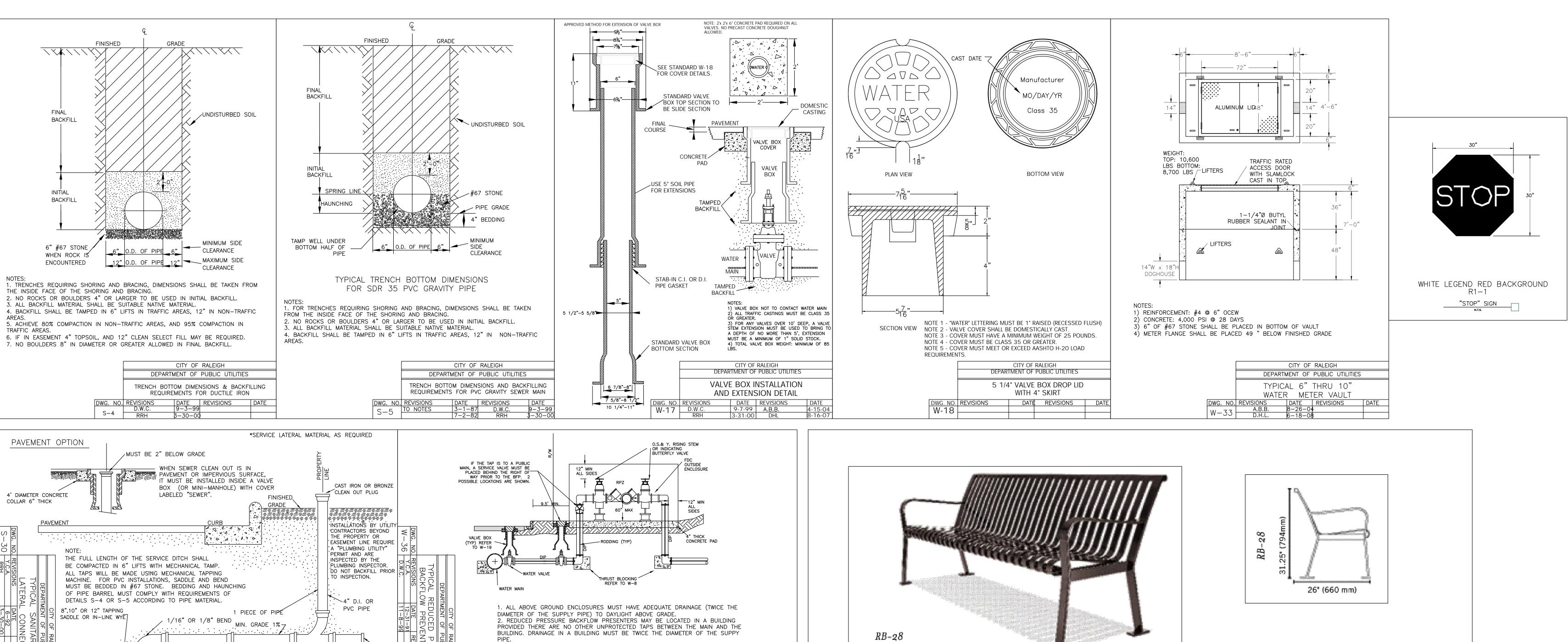
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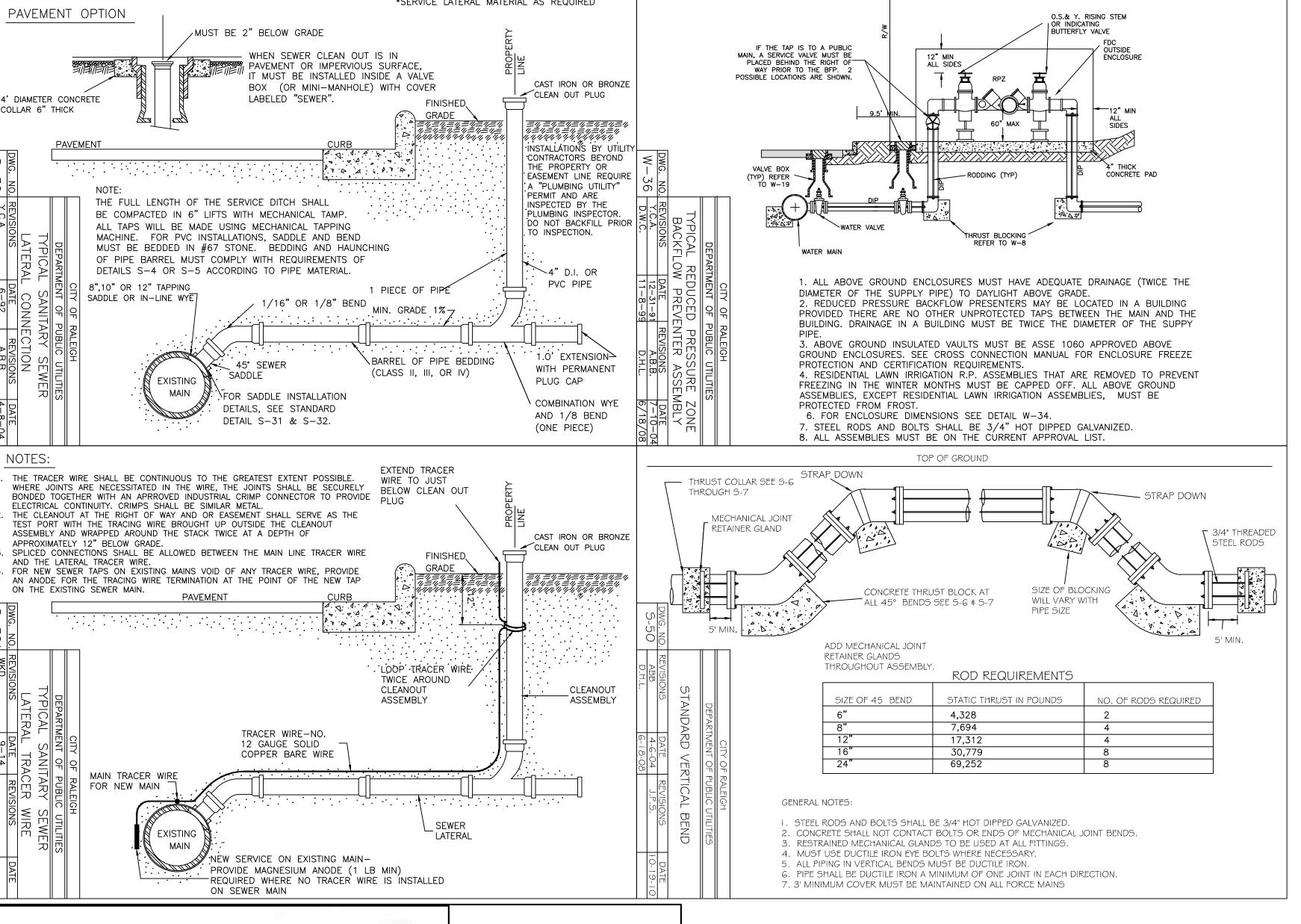
REVISIONS:

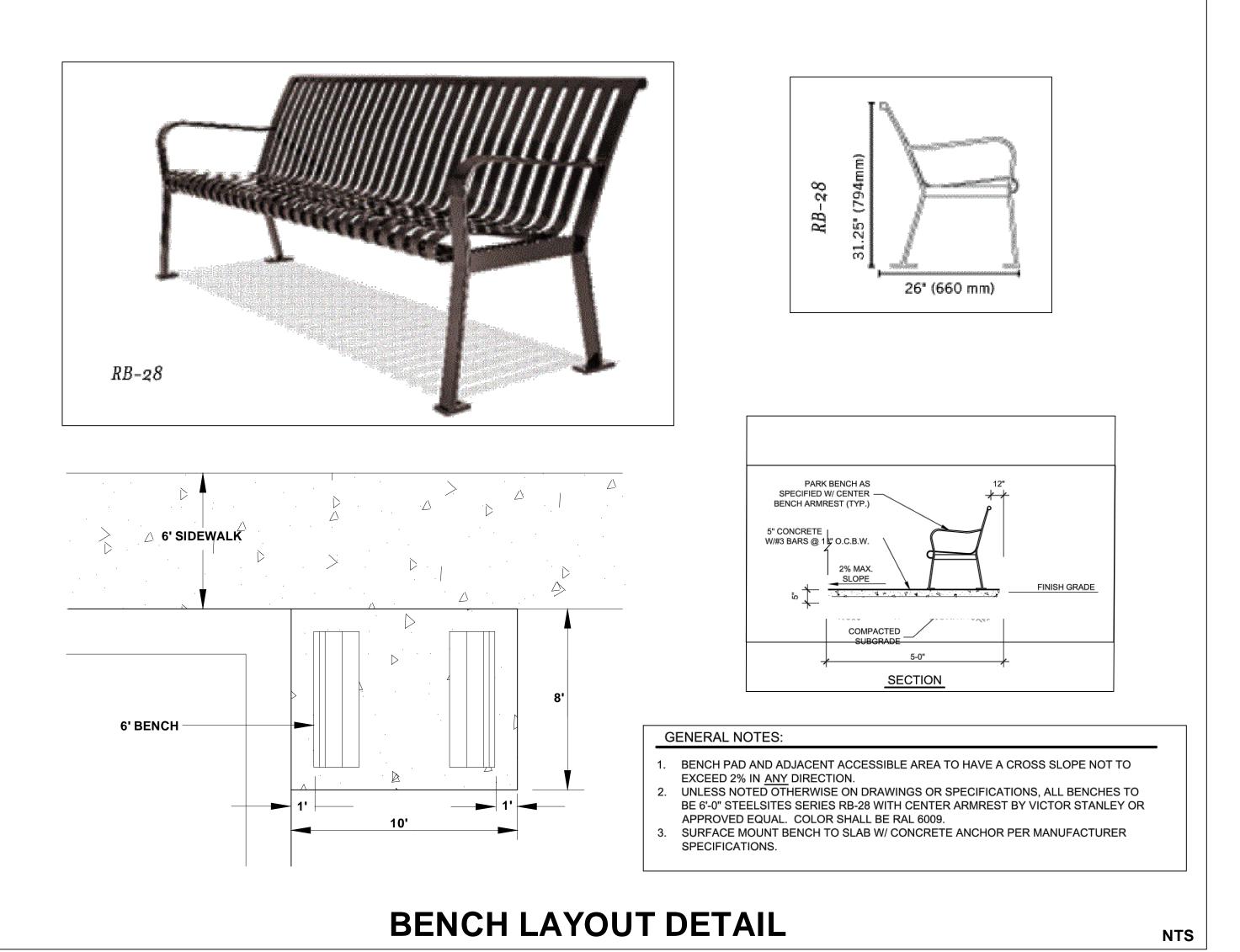
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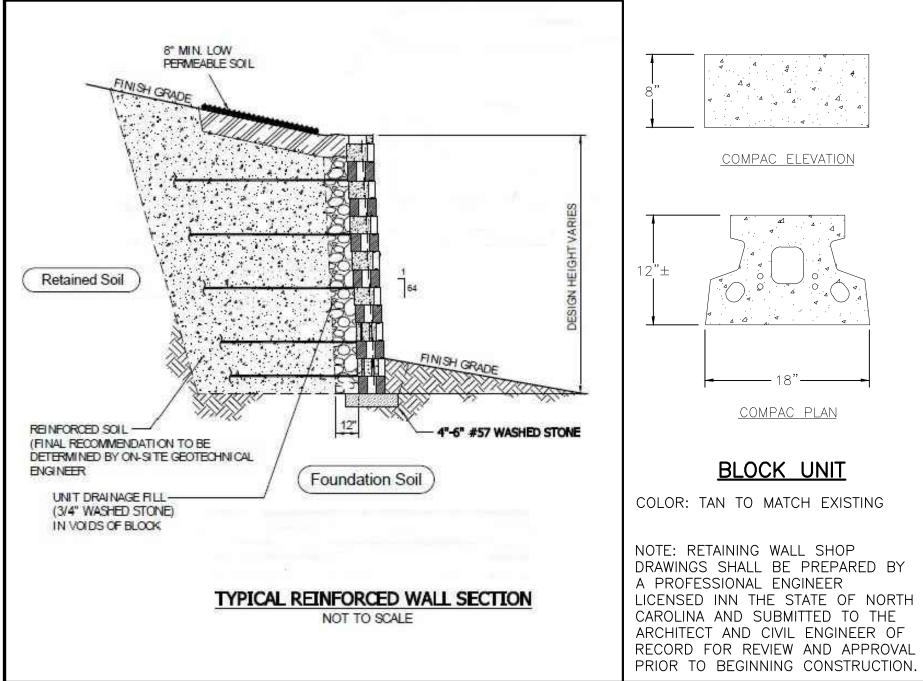
PROJECT: WSHOIB7L10

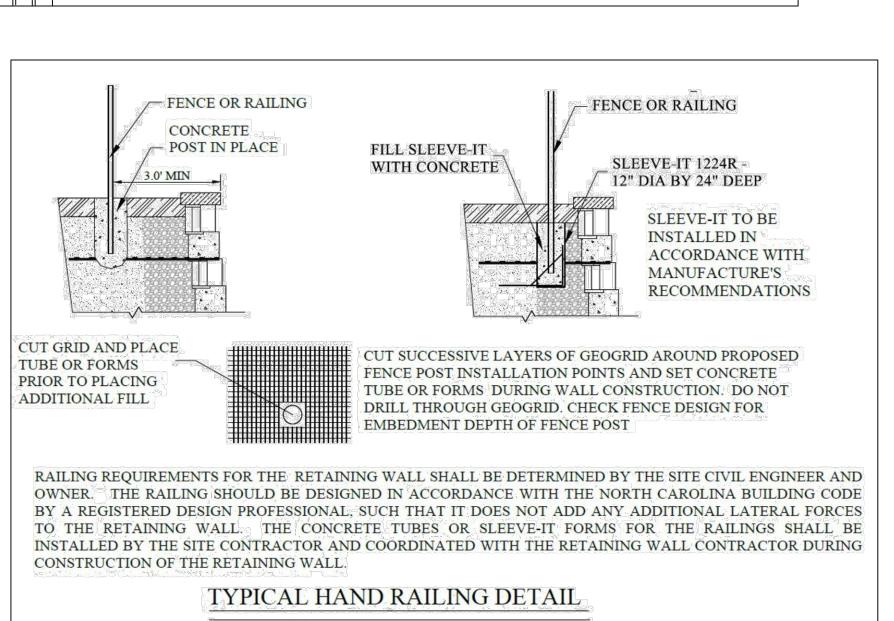
DETAILS



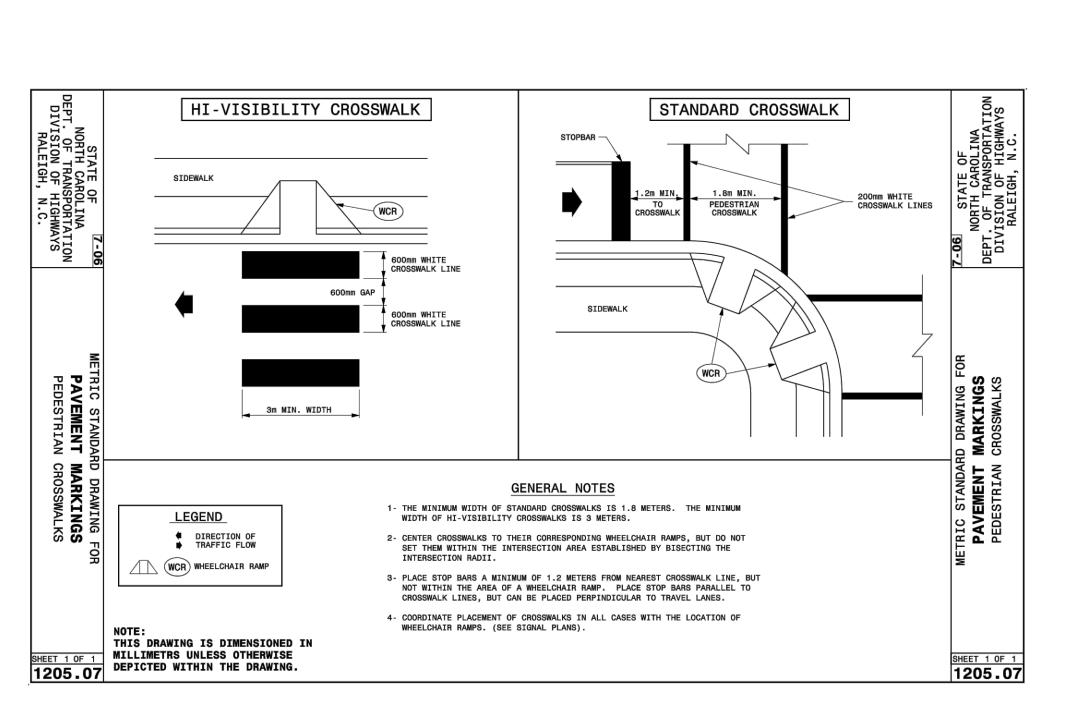








SCALE: NONE



CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Electronic Approval: This approval is being issued electronically. This approval is valid only upon signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval

Raleigh Water Review Office

Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.				
By: Town Engineer	Date:			
These plans are approved by the Town of Knightdale and serve as construction plans for this project.				
By: Land Use Administrator	Date:			

PEDMINIANDESIGN III

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



0 HINTON OAKS BOULEVARD

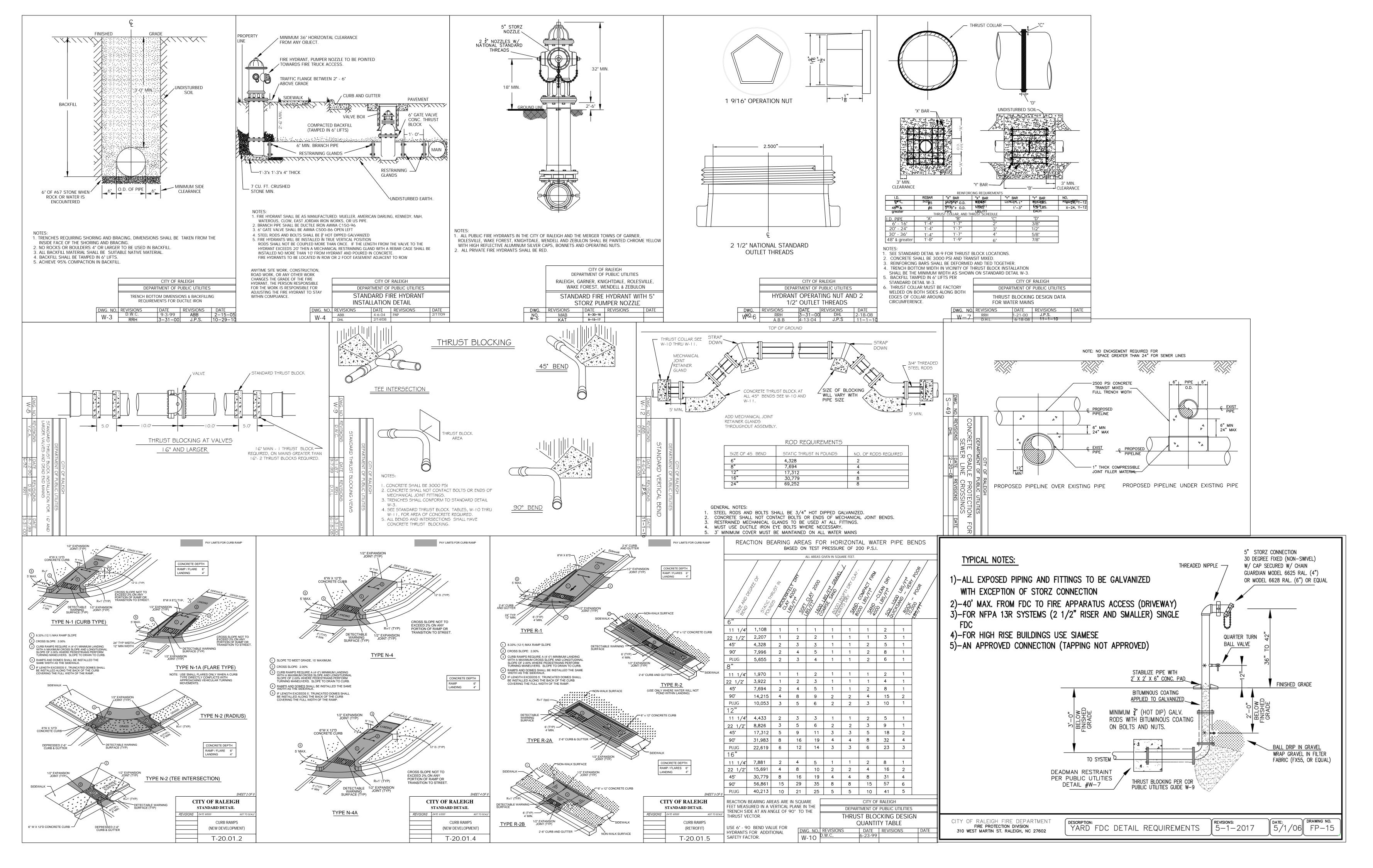
ISSUED:

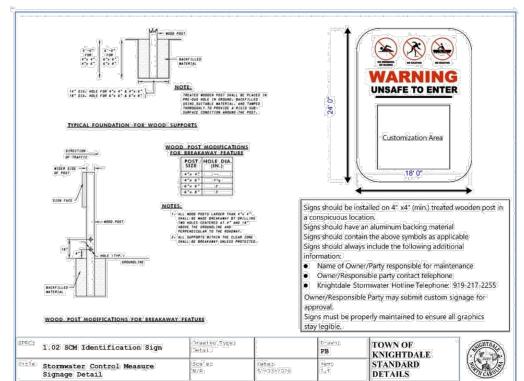
REVISIONS:

DRAWN BY: JET CHECKED BY: MLS

PROJECT: WSHOIB7L10

DETAILS





SCM IDENTIFICATION SIGN

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Electronic Approval: This approval is being issued electronically. This approval is valid only upon signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval

Raleigh Water Review Office

a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: ______ Date: ______

Town Engineer

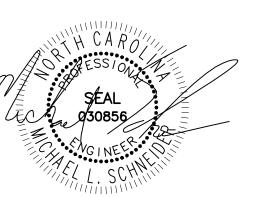
These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: ______ Date: ______

Land Use Administrator

PENNITANDESICN LIP

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



10-29-24

INTON OAKS INDUSTRIAL PARK

ISSUED:

REVISIONS:

29 OCT 2024

PER TOWN COMMENTS

DRAWN BY: JET CHECKED BY: MLS

DETAILS

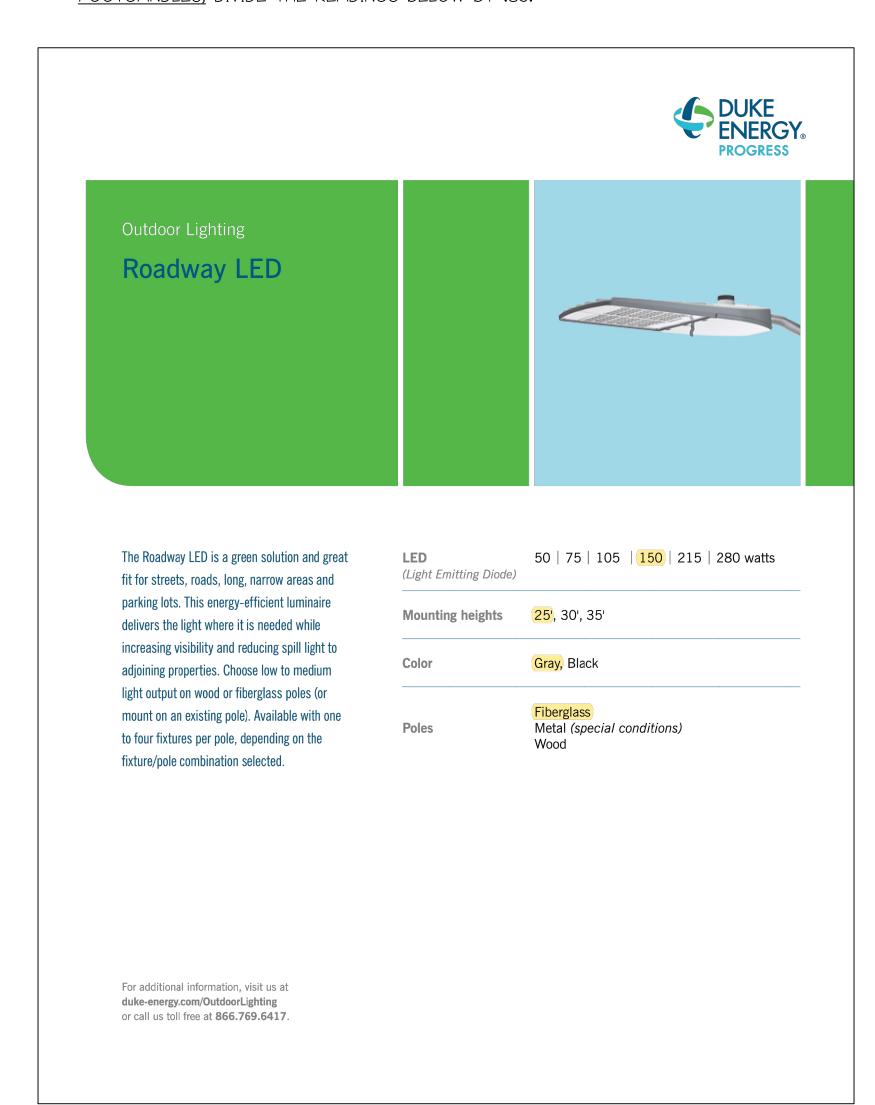
PROJECT: WSHOIB7L10

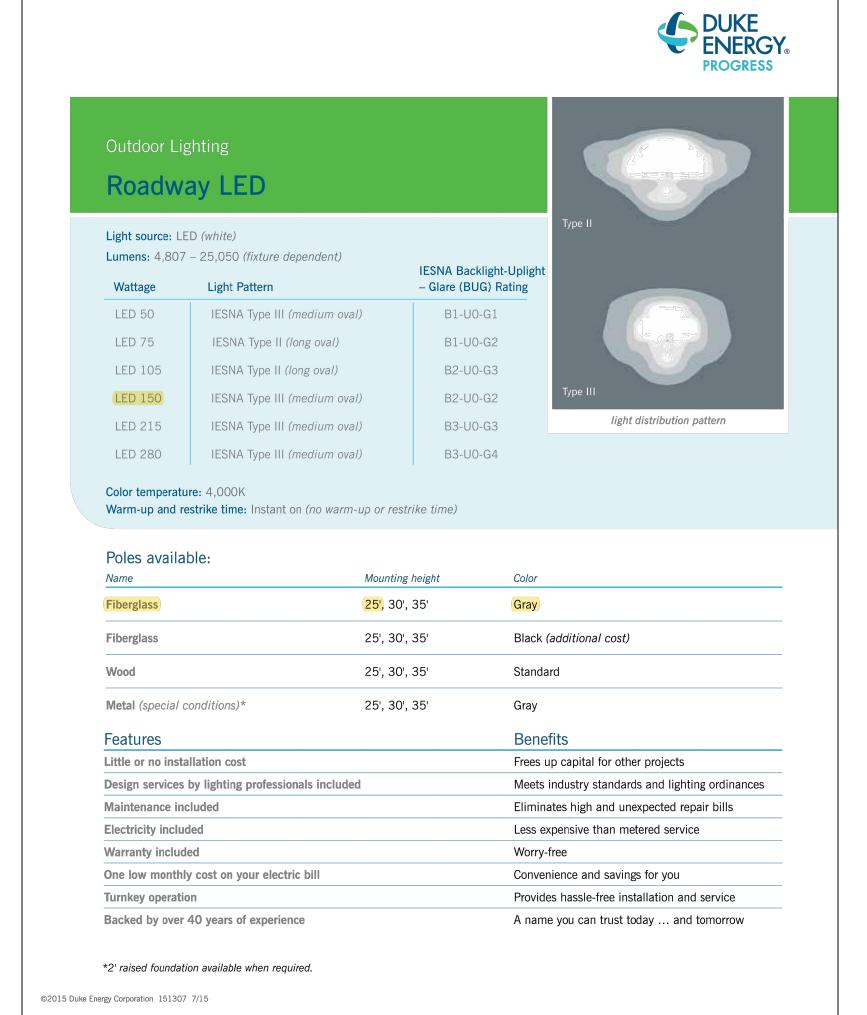
FIXTURE: LED 150 - AEL MOUNTING HEIGHT: 25 FT LIGHT SOURCE: 40 LED'S, 4000K, 70 CRI LUMENS - 16461

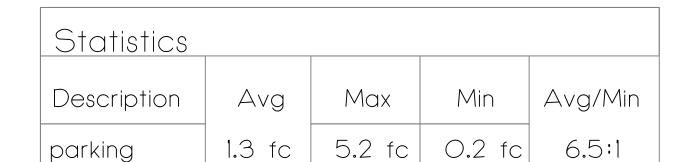
PATTERN: TYPE IV, B3-UO-G3 (zero light at or above 90 degrees)

NOTE: THE FOOTCANDLE READINGS ARE MAINTAINED AND HAVE BEEN DEPRECIATED FOR LED LUMEN DEPRECIATION AND LUMINAIRE DIRT DEPRECIATION. FOR INITIAL

FOOTCANDLES, DIVIDE THE READINGS BELOW BY .85.

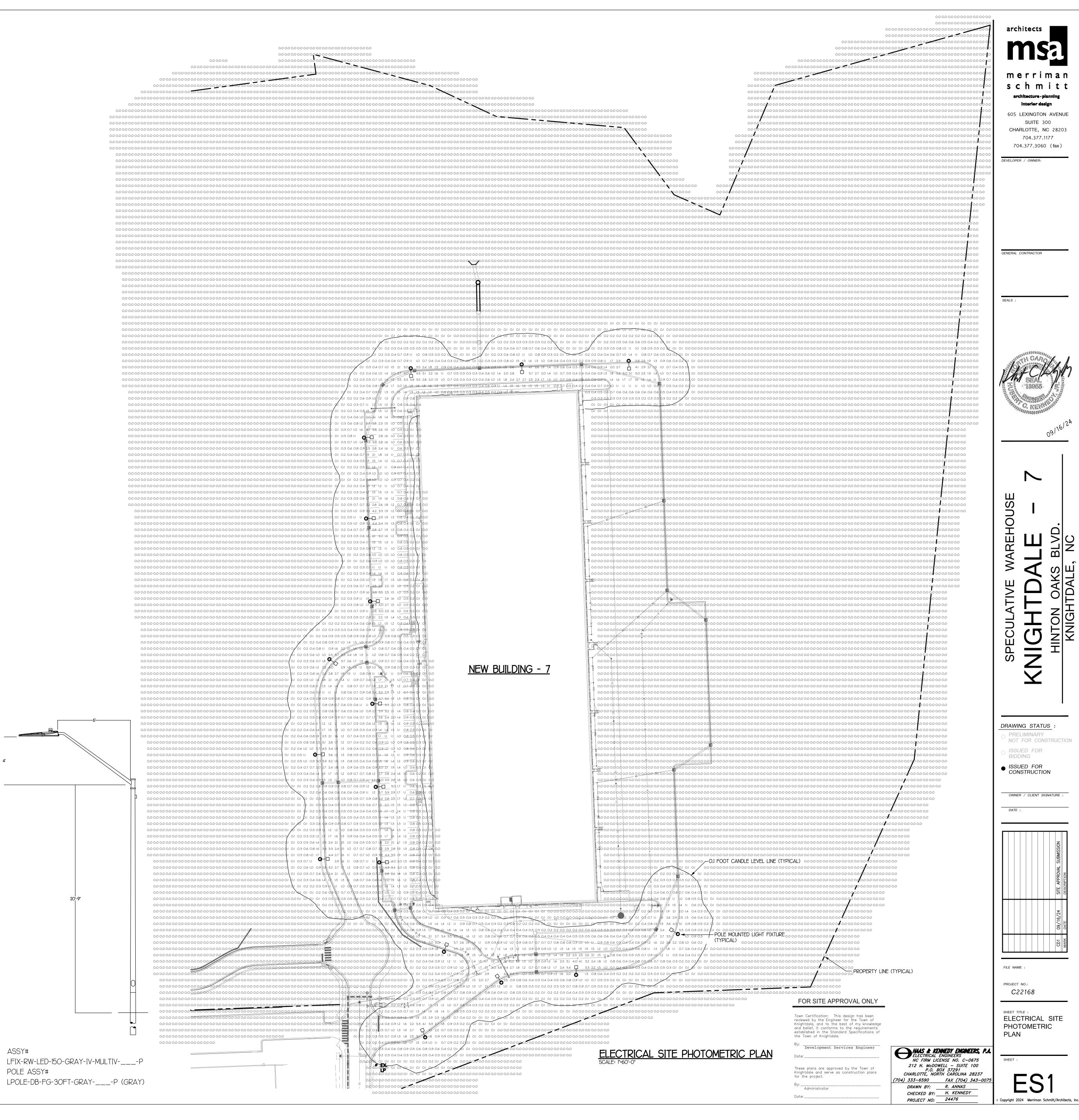


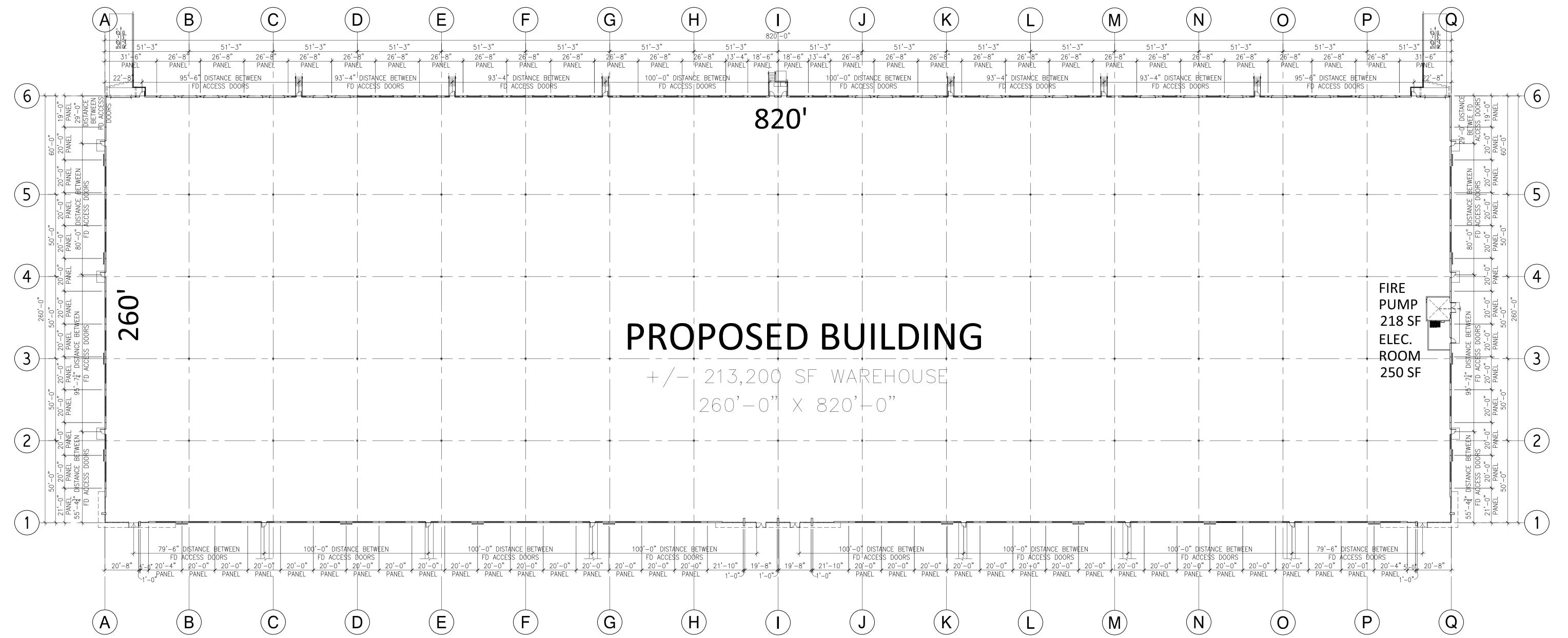


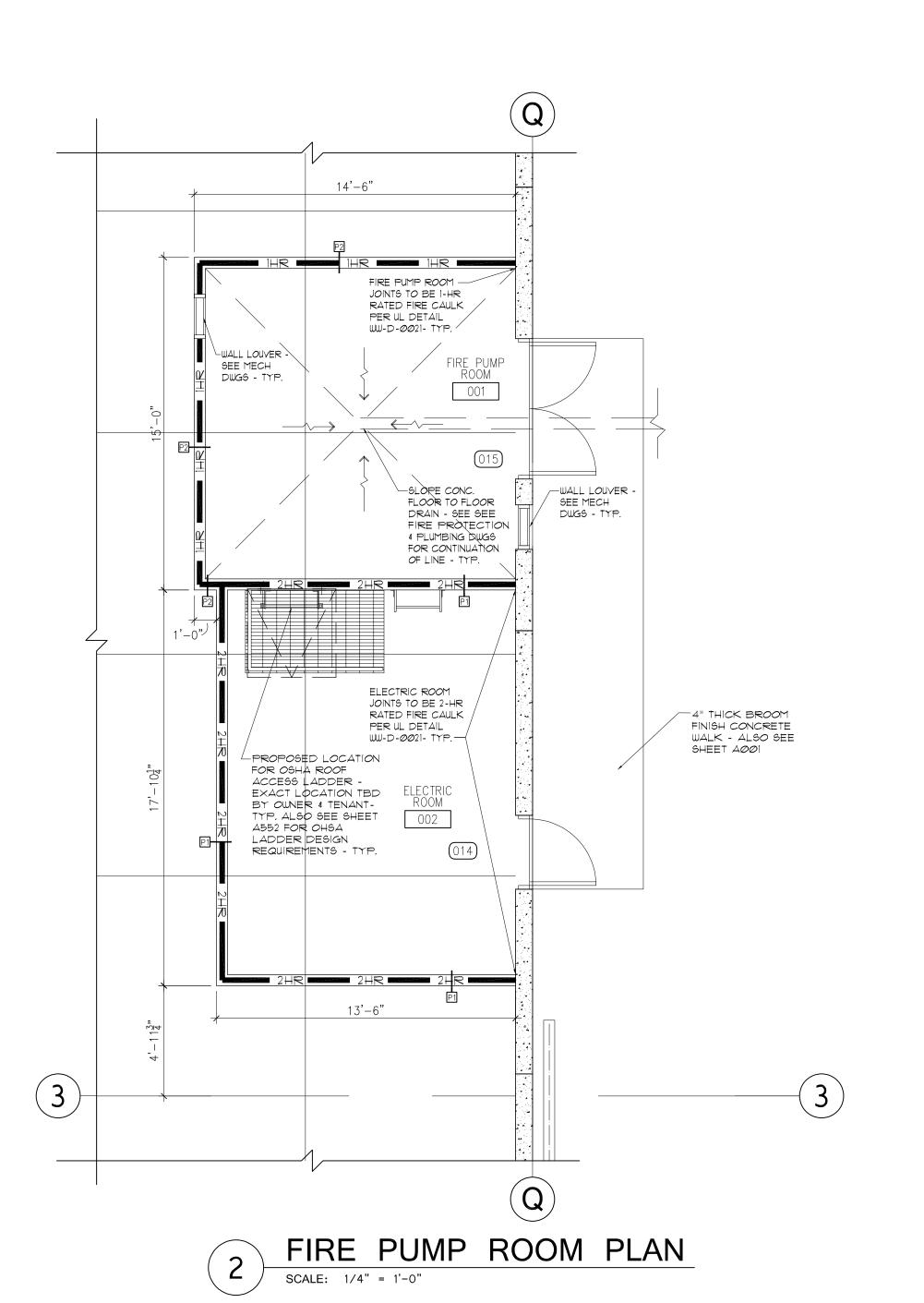


ASSY#

POLE ASSY#







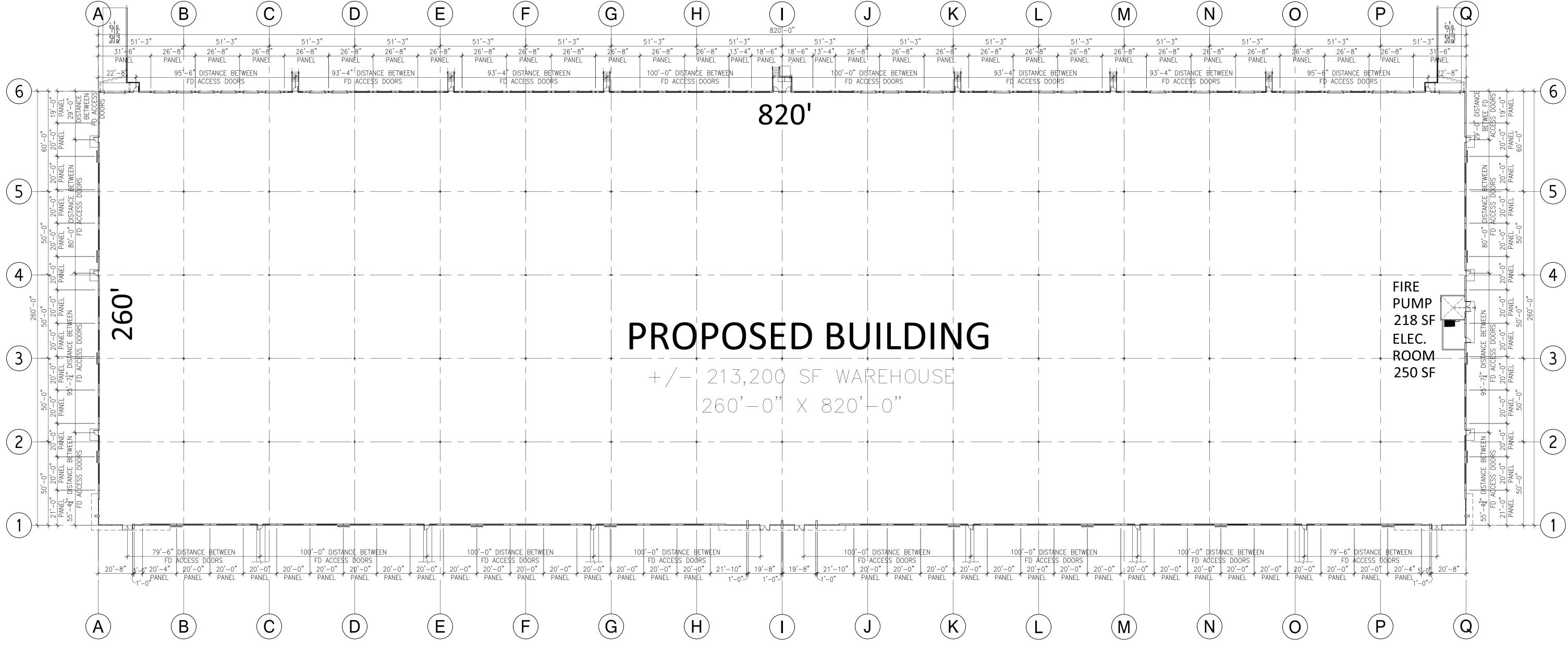
FOR SITE APPROVAL ONLY

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These plans are approved by the Town of Knightdale and serve as construction plans for the project. By: ______ Administrator

MIN. 36' CLEAR UNDER STRUCTURE - TYP.

SHEET :



ms3

schmitt

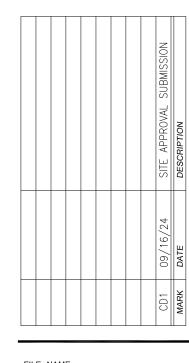


WAREHOUSE

DRAWING STATUS : ○ PRELIMINARY NOT FOR CONSTRUCTION O ISSUED FOR BIDDING

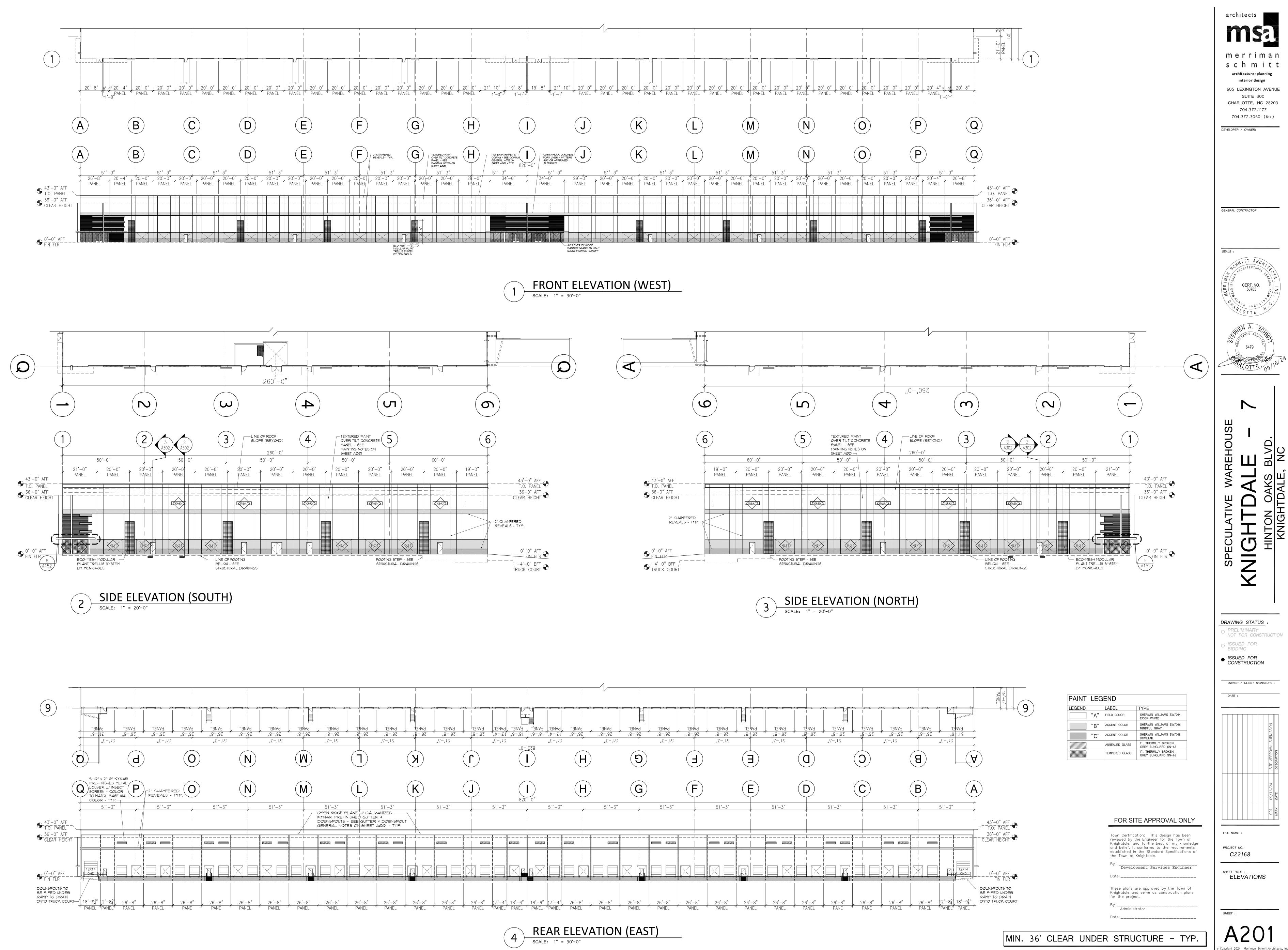
ISSUED FOR CONSTRUCTION

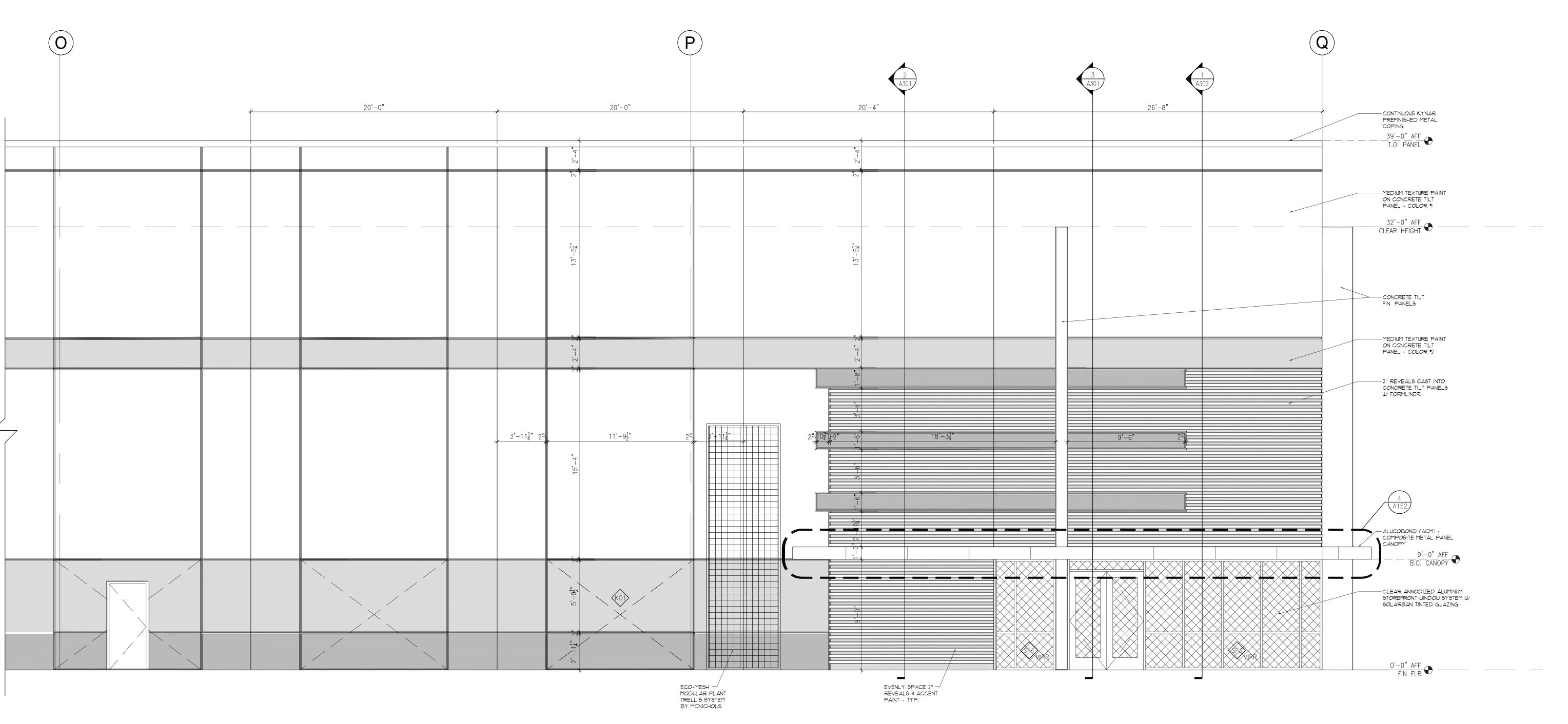
OWNER / CLIENT SIGNATURE :



FILE NAME : PROJECT NO.:

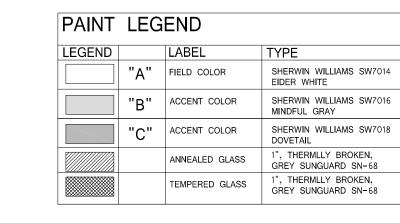
C22168 SHEET TITLE : FLOOR PLAN





ENLARGED FRONT ELEVATION

SCALE: 1/4" = 1'-0"



FOR SITE APPROVAL ONLY

Town Certification: This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

Date: _____

These plans are approved by the Town of Knightdale and serve as construction plans for the project. By: ______ Administrator

MIN. 36' CLEAR UNDER STRUCTURE - TYP.

Date: _____

DRAWING STATUS: NOT FOR CONSTRUCTION ISSUED FOR CONSTRUCTION OWNER / CLIENT SIGNATURE :

merriman schmitt architecture · planning interior design 605 LEXINGTON AVENUE SUITE 300 CHARLOTTE, NC 28203 704.377.1177 704.377.3060 (fax)

DEVELOPER / OWNER:

GENERAL CONTRACTOR

WAREHOUSE

SPECULATIVE KNIGHTD/

○ PRELIMINARY

O ISSUED FOR BIDDING

DATE :

FILE NAME :

PROJECT NO.: C22168

SHEET TITLE : ENLARGED ELEVATIONS

SHEET :

Copyright 2024 Merriman Schmitt/Architects, Inc

WERIFY PANEL THICKNESS WITH STRUCTURAL - TYP. FACTORY PREFINISHED KYNAR
METAL COPING CAP PER COPING
SPEC ON SHEET ADOI - TYP.
SINGLE PLY WHITE TPO ROOFING SYSTEM
PER SPEC ON SHEET ADOI - ATTACHED
W/ LAP SPLICE AND MASTIC - TYP. EXTEND TPO MEMBRANE UP SIDE OF WALL & UNDER METAL COPING - TYP.

RIGID INSULATION PER ROOFING SPECS ON SHEET A001 & FM 4450 AND UL 256 - TYP. SLOPE 1/8" PER FOOT STEEL JOIST - SEE STRUCT DWGS - TYP. DECK AND STRUCTURE TO
BE PRIMED PER SPECS
ON SHEET ADDI - TYP.

STEEL ANGLE FOR DECK
ATTACHMENT - SEE
STRUCT DUGS - TYP. A300 1 A300 CAULK AND BACKER ROD— CAULK COLOR TO MATCH ALUCOBOND AS CLOSELY AS POSSIBLE - TYP. ALUCOBOND (ACM)— PANEL SYSTEM - COLOR BY ARCH - TYP.

3" ALUMINUM STOREFRONT SYSTEM

2 ENLARGED WALL SECTION @ FRONT ENTRY

SCALE: 3/8" = 1'-0"

9'-0"
TOP OF
WINDOW /
BOTTOM OF
CANOPY 3 5/8" METAL STUD

BUILDING CROSS SECTION SCALE: 1" = 10'-0"

260'-0" SLOPE 1/8" PER FOOT

WAREHOUSE

DRAWING STATUS: → PRELIMINARY

SSUED FOR BIDDING

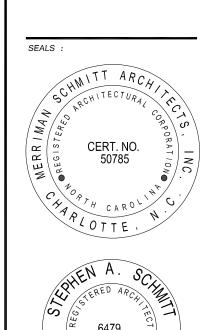
ISSUED FOR CONSTRUCTION

DATE :

OWNER / CLIENT SIGNATURE :

NOT FOR CONSTRUCTION









DEVELOPER / OWNER:

CHARLOTTE, NC 28203 704.377.1177 704.377.3060 (fax)

merriman schmitt

architecture · planning interior design 605 LEXINGTON AVENUE SUITE 300

architects

FILE NAME : PROJECT NO.: C22168

SHEET TITLE :
WALL SECTIONS

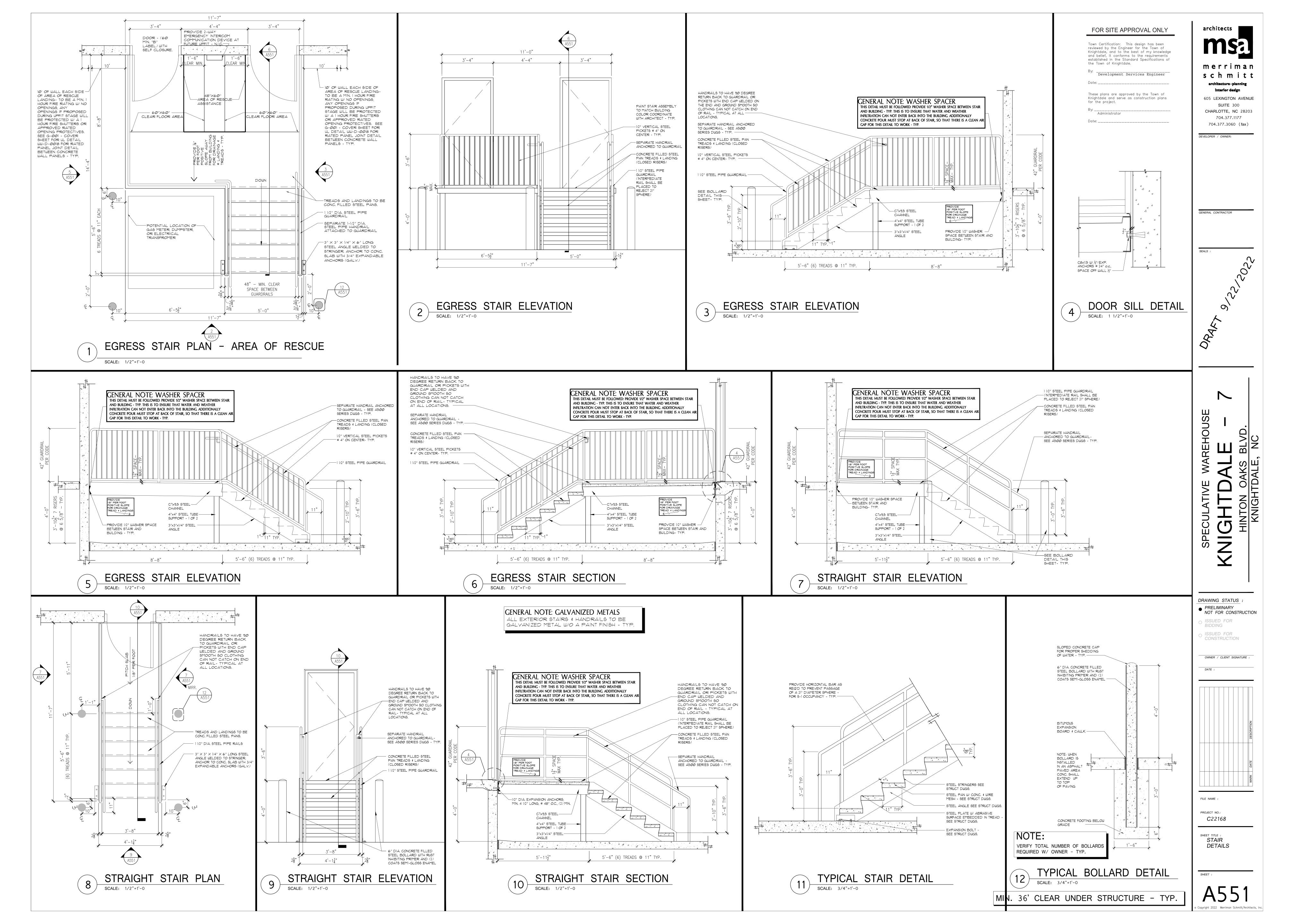
FOR SITE APPROVAL ONLY

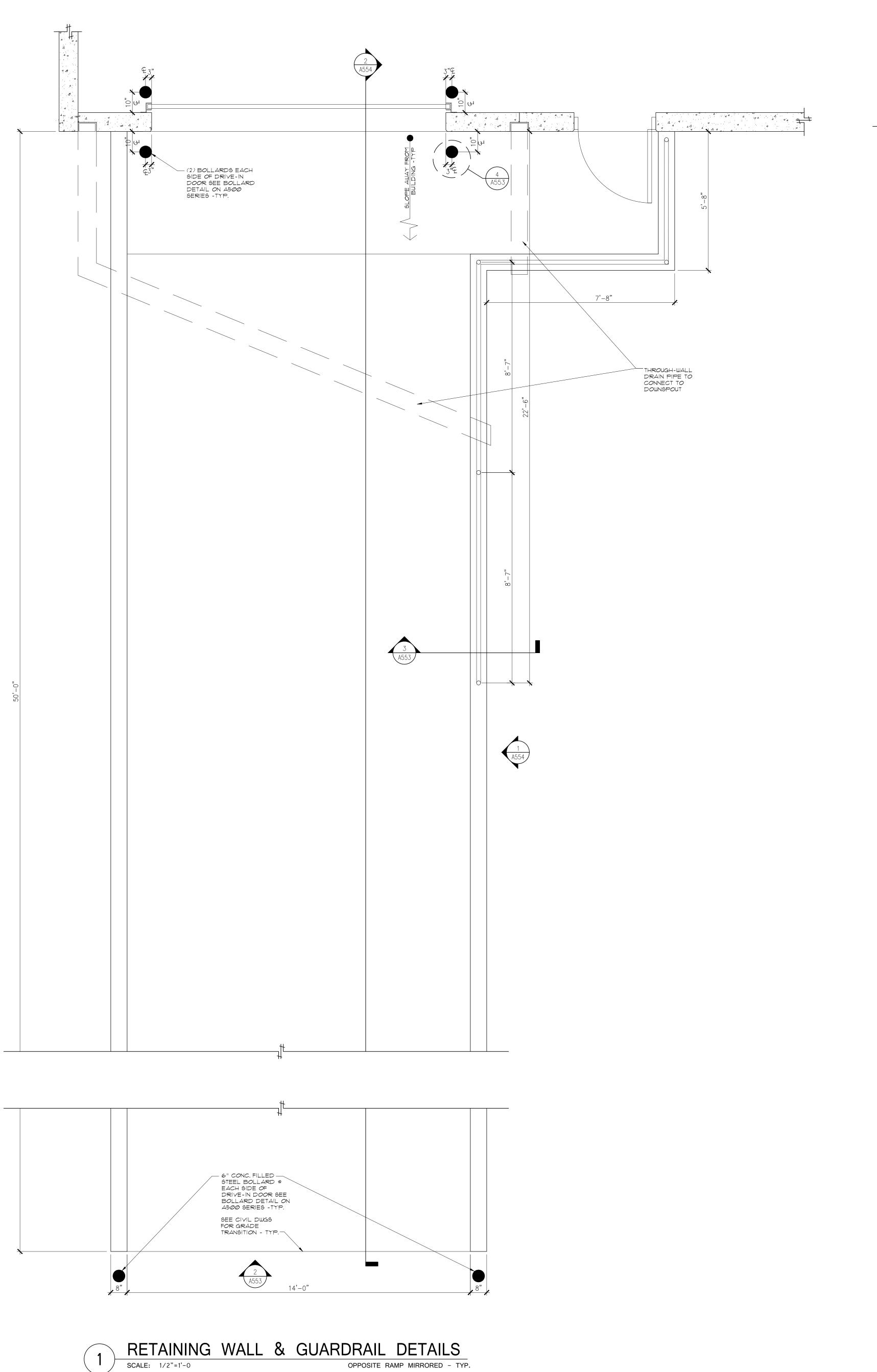
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These plans are approved by the Town of Knightdale and serve as construction plans for the project.

By: ______ Administrator

SHEET :





DRIVE-IN DOOR TO —— HAVE (2) BOLLARDS — EACH SIDE OF DOOR -SEE 500 SERIES - TYP. 42" GUARD RAIL, -SEE DETAIL 4/A553 - TYP.

GENERAL NOTE: PAINTING OF METALS

ENTIRELY WITH RUST INHIBITING GRAY PRIMER

AND (2) COATS OF SEMI GLOSS EPOXY - COLOR AS SELECTED BY ARCHITECT - TYP.

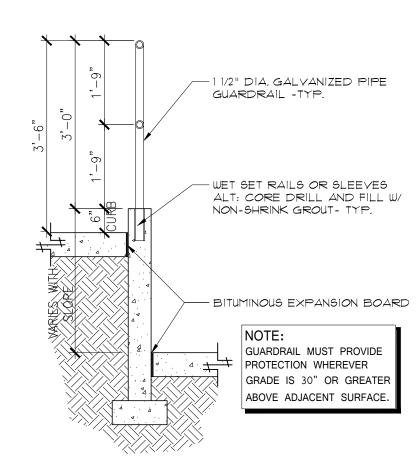
ALL EXPOSED METALS TO BE PAINTED

RAMP ELEVATION

SCALE: 1/2"=1'-0

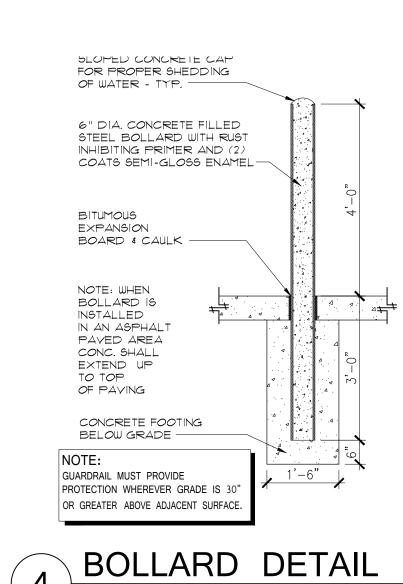
14'-0"

- SEE CIVIL DWGS FOR GRADE - TRANSITION - TYP.



3 GUARD RAIL DETAIL

SCALE: 1/2"=1'-0



SCALE: 1/2"=1'-0

GUARDRAIL MUST PROVIDE PROTECTION WHEREVER

GRADE IS 30" OR GREATER ABOVE ADJACENT SURFACE.

THROUGH-WALL
DRAIN PIPE TO
CONNECT TO
DOWNSPOUT

FOR SITE APPROVAL ONLY

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Date: _____

These plans are approved by the Town of Knightdale and serve as construction plans for the project. By: _____ Administrator

MIN. 36' CLEAR UNDER STRUCTURE - TYP.

Date: ___

SHEET :

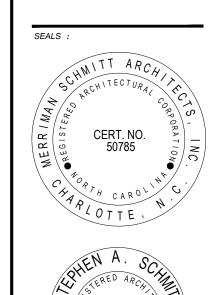
605 LEXINGTON AVENUE SUITE 300 CHARLOTTE, NC 28203 704.377.1177 704.377.3060 (fax) DEVELOPER / OWNER:

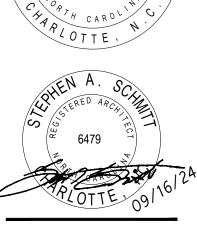
GENERAL CONTRACTOR

architects

merriman schmitt

> architecture · planning interior design





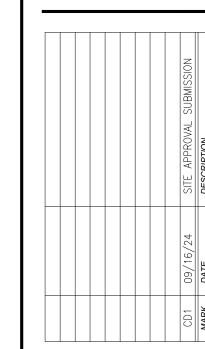
WAREHOUSE

DRAWING STATUS : ○ PRELIMINARY NOT FOR CONSTRUCTION

> BIDDING ISSUED FOR CONSTRUCTION

SSUED FOR

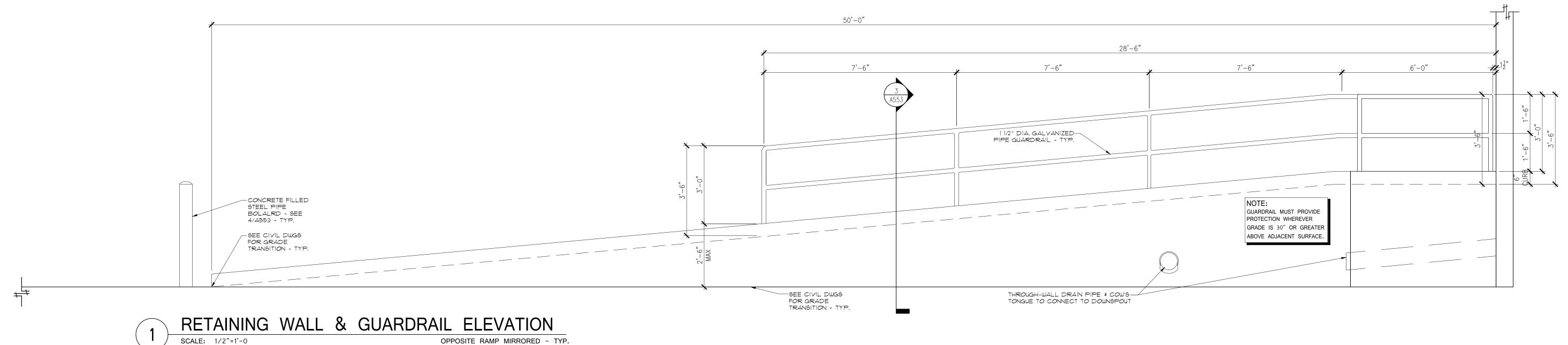
OWNER / CLIENT SIGNATURE : DATE :



FILE NAME : PROJECT NO .: C22168

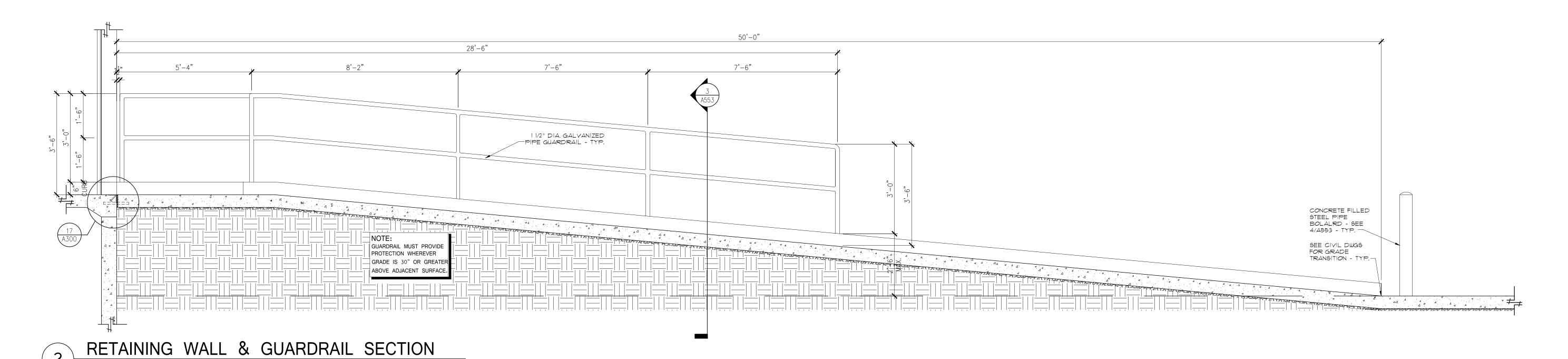
SHEET TITLE : DRIVE-IN RAMP DETAILS

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GENERAL NOTE: PAINTING OF METALS

ALL EXPOSED METALS TO BE PAINTED
ENTIRELY WITH RUST INHIBITING GRAY PRIMER
AND (2) COATS OF SEMI GLOSS EPOXY COLOR AS SELECTED BY ARCHITECT - TYP.



ISSUED FOR BIDDINGISSUED FOR CONSTRUCTION

DRAWING STATUS :

NOT FOR CONSTRUCTION

WAREHOUSE

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605 LEXINGTON AVENUE SUITE 300 CHARLOTTE, NC 28203 704.377.1177 704.377.3060 (fax)

DEVELOPER / OWNER:

GENERAL CONTRACTOR

CONSTRUCTIO

OWNER / CLIENT SIGNATURE

DATE :

CD1 09/16/24 SITE APPROVAL SUBMISSION

FILE NAME :

PROJECT NO.:

SHEET TITLE :

DRIVE-IN

RAMP DETAILS

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SHEET :

By: ______ Administrator

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