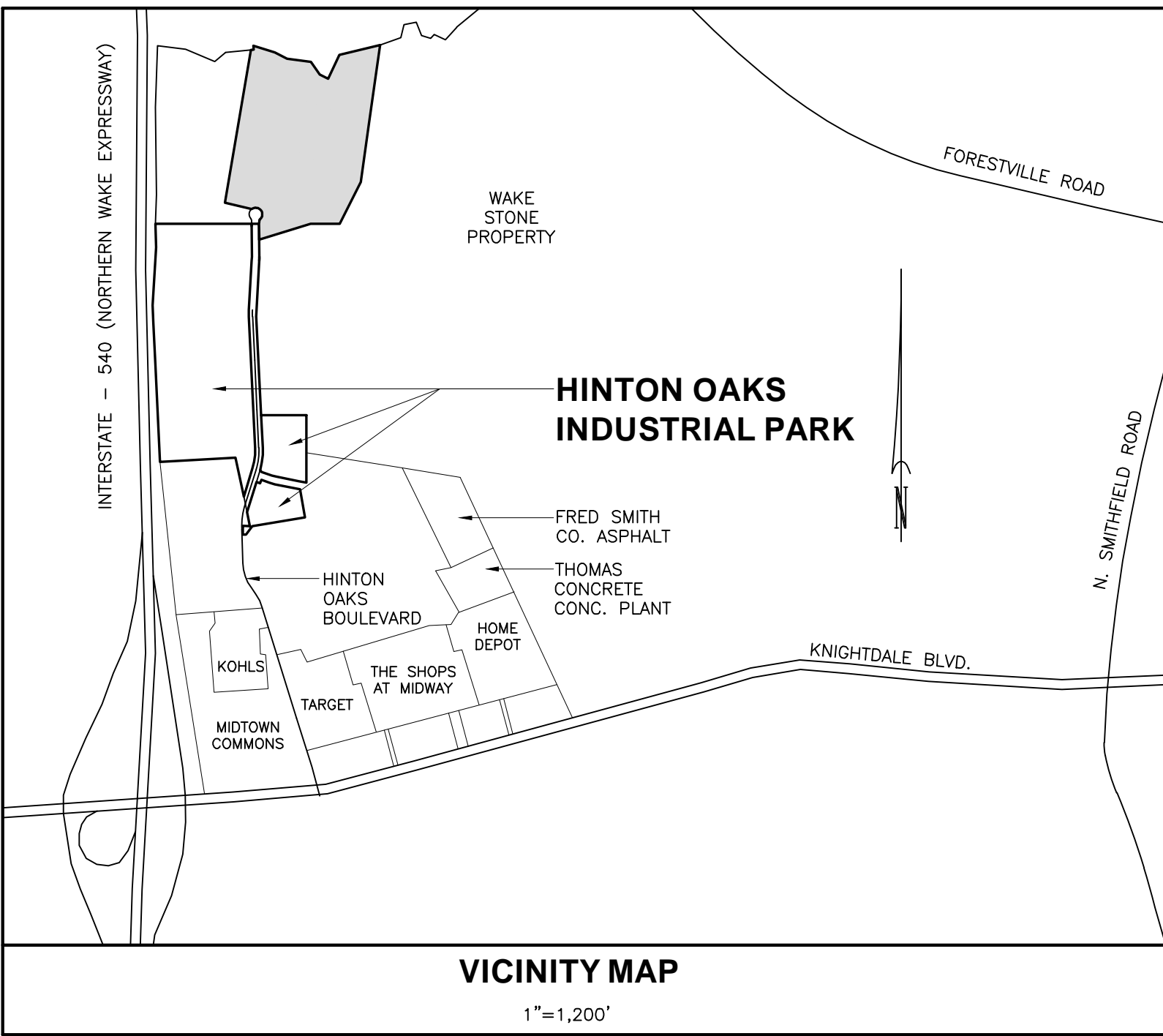


CONSTRUCTION DRAWINGS FOR: HINTON OAKS INDUSTRIAL PARK

LOT 10 HINTON OAKS BOULEVARD KNIGHTDALE, NORTH CAROLINA

TOWN OF KNIGHTDALE PROJECT NUMBERS:

ZMA-17-22
SEC-000016-2024



DRAWING INDEX

SITE 1	COVER SHEET
SITE 2	EXISTING CONDITIONS PLAN
SITE 3	SITE PLAN SHEET 1 OF 2
SITE 4	SITE PLAN SHEET 2 OF 2
SITE 5	GRADING AND DRAINAGE PLAN
SITE 6	UTILITY PLAN
SITE 7	FIRE HOSE COVERAGE
SITE 8	STAGE 1 EROSION CONTROL PLAN
SITE 9	STAGE 2 EROSION CONTROL PLAN
SITE 10	STAGE 3 EROSION CONTROL PLAN
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L2.00	LANDSCAPE PLAN
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SITE 12	SCM DETAIL
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ES-1	ELECTRICAL SITE PHOTOMETRIC PLAN
A101	FLOOR PLAN
A201	ELEVATIONS
A202	ENLARGED ELEVATIONS
A301	WALL SECTIONS
A551	STAIR DETAILS
A553	DRIVE-IN RAMP DETAILS
A554	DRIVE-IN RAMP DETAILS

SITE DATA TABLE

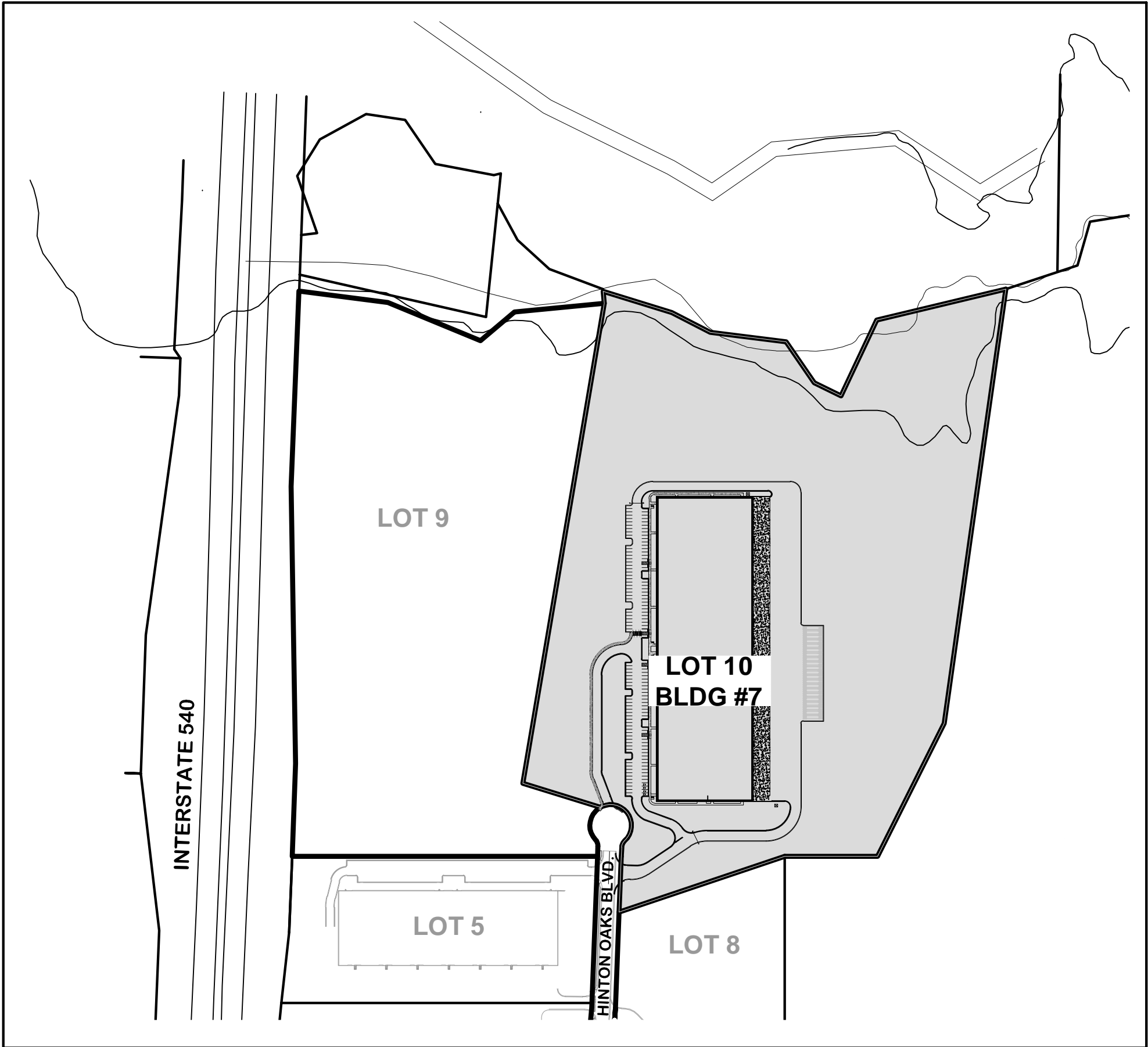
1. PROJECT NAME:	HINTON OAKS INDUSTRIAL PARK - LOT 10
2. STREET ADDRESS:	0 HINTON OAKS BOULEVARD KNIGHTDALE, NORTH CAROLINA
3. SITE AREA:	LOT 10 = 34.99 AC
4. ZONING:	M1-MANUFACTURING AND INDUSTRIAL CONDITIONAL DISTRICT W/SHOD OVERLAY
5. PARCEL IDENTIFICATION NUMBER:	1745501546
6. ACREAGE IN PARKS:	0 ACRES
7. ACREAGE IN NON-RESIDENTIAL USES:	34.99 AC.
8. TOTAL NUMBER OF HOUSING UNITS:	0 UNITS
9. REQUIRED/PROVIDED RECREATIONAL OPEN SPACE:	0 ACRES
10. TOWNSHIP/COUNTY/STATE:	ST. MATTHEWS TOWNSHIP, WAKE COUNTY, NORTH CAROLINA
11. IMPERVIOUS SURFACE AREA:	LOT #10 = 10.0 AC

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 MAXIMUM PARKING PERMITTED (OFFICE) = 4 SP/1,000 SF = (4/1,000) X 5,000 = 20 SPACES MAXIMUM ALLOWED TOTAL MAXIMUM SPACES PERMITTED = 208 + 20 = 228 SPACES MINIMUM PARKING REQUIRED = 1/2 X 228 = 114 SPACES REQUIRED 142 SPACES PROVIDED (INCLUDES 4 STANDARD H/C SPACES AND 4 VAN ACCESSIBLE H/C SPACES)
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13. ELECTRIC VEHICLE (EV) PARKING	REQUIRED EV PARKING SPACES = 1 PER 40 SPACES (MINIMUM = 2, MAXIMUM = 15) EV SPACES REQUIRED = 142/40 = 4 SPACES
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14. OWNER NAME/ADDRESS:	WAKE STONE PROPERTY COMPANY P.O. BOX 190 KNIGHTDALE, NORTH CAROLINA 27545 919/266-1100
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DISTURBED AREA = 22.0 ACRES



PUBLIC IMPROVEMENT QUANTITY SUMMARY

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	0 LF
PUBLIC CURB & GUTTER	0 LF
PUBLIC SIDEWALK (LF)	0 LF
STREET SIGNS	0
WATER SERVICE STUBS	1
SEWER SERVICE STUBS	2
TREE PROTECTION FENCE	3,803 LF

STORMWATER COMPLIANCE NOTE

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

GENERAL NOTES

- 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.
- CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (1-800-632-4949) LOCATE ALL EXIST. UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
- BOUNDARY AND SURVEY INFORMATION ON THESE PLANS IS FROM A SURVEY BY JONES SURVEYING AND CONSULTING, PLLC. TOPOGRAPHY IS FROM LIDAR, AND IS NOT FIELD SURVEYED.
- ALL CONSTRUCTION SHALL CONFORM TO NORTH CAROLINA STATE BUILDING AND HANDICAPPED ACCESSIBILITY CODE AND A.D.A. STANDARDS
- 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.
- ESTIMATED PROJECT COMPLETION DATE IS JANUARY 2026.
- ON SITE FENCES & GATES SHALL NOT EXCEED SIX FEET (6') IN THE FRONT YARD AND EIGHT FEET (8) IN THE SIDE AND REAR YARDS
- OUTDOOR STORAGE OF MATERIALS IS PROHIBITED.
- THE TOWN OF KNIGHTDALE HAS DETERMINED THAT THIS PROJECT MEETS THE REQUIREMENTS FOR THE WATER ALLOCATION POLICY.
- THIS PROJECT IS PART OF THE "KNIGHTDALE INDUSTRIAL PARK UTILITY ALLOCATION AND DEVELOPMENT AGREEMENT" (BM015866, PG01153-01203 & BM017641, PG00587-00595)
- FUTURE PARKING WILL REQUIRE A SITE PLAN REVISION.

ADDITIONAL USE STANDARDS

USE	CONDITION
WHOLESALE 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 OWNERS'). 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
919-217-2250
SWENGINEER@KNIGHTDALENC.GOV

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

TOWN ESC CONSTRUCTION INSPECTOR
919-919-2254

IKE ARCHER
STORMWATER MANAGER, PUBLIC WORKS
919-217-2255
IKE.ARCHER@KNIGHTDALENC.GOV

STORMWATER TECH, PUBLIC WORKS
919-217-2256

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

BUILDING TYPE:

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

ATTENTION CONTRACTORS

The **Construction Contractor** responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for **conducting the Public Utilities Department** at 919/919-4540 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 installation 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 **Jobite**, 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**.

**Public
Sewer Collection / Extension System**
The City of Raleigh consents to the connection and extension of the City's public sewer system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh
Public Utilities Department Permit # _____ S-? _____
Authorization to Construct _____
Date _____

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

EROSION AND SEDIMENT CONTROL APPROVED PLAN

DATE: _____

PERMIT NO. SEC-000016-2024

Town of Knightdale Public Works
Sedimentation & Erosion Control
(919) 217-2250



Town of Knightdale Construction Inspector Signature

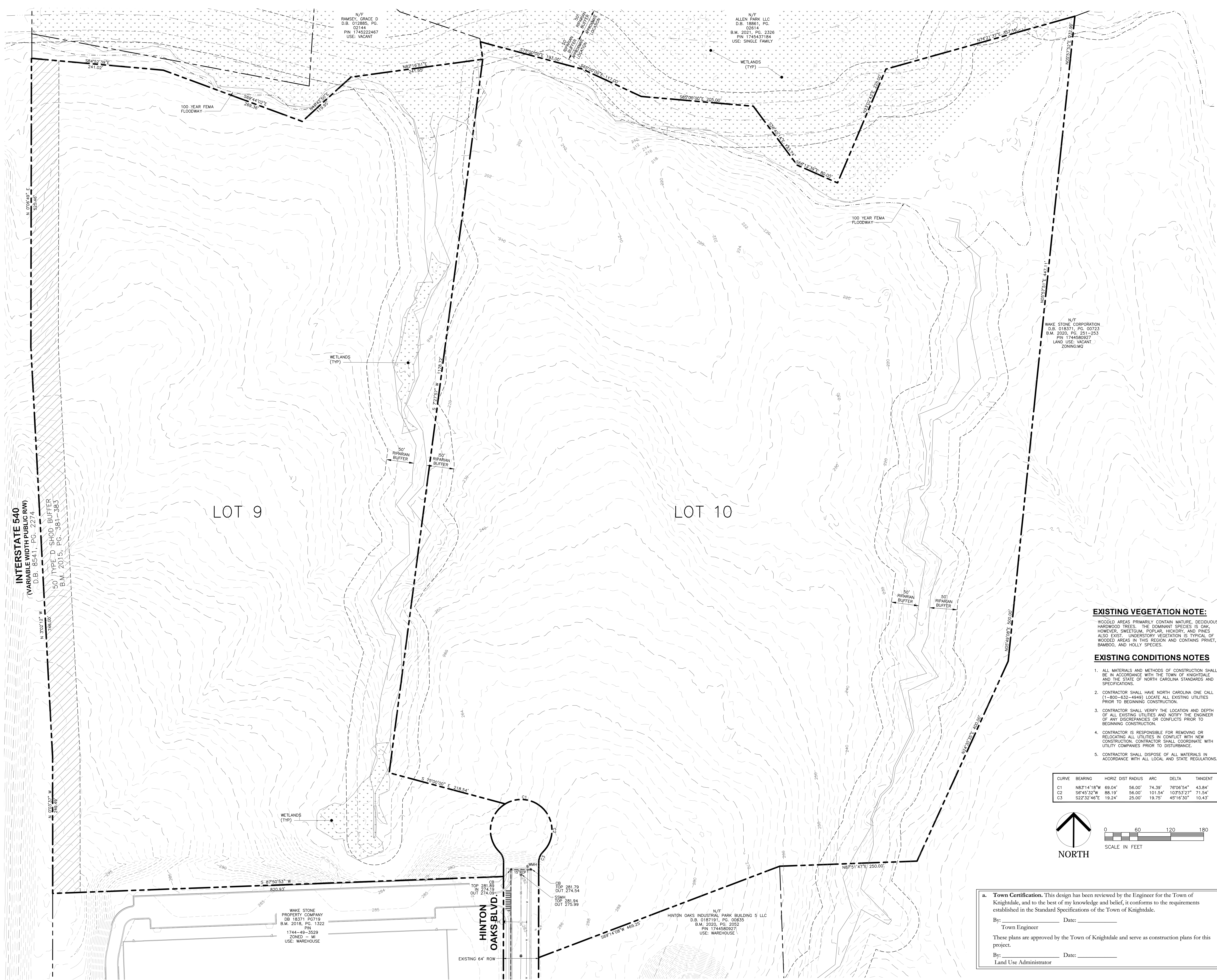
a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
By: _____ Date: _____
Town Engineer

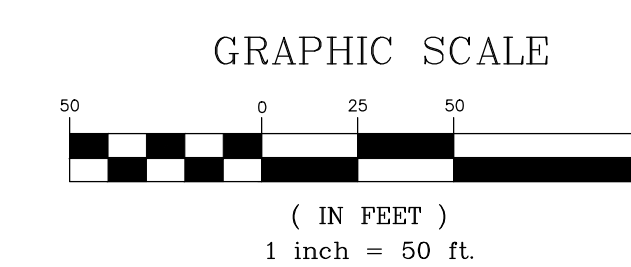
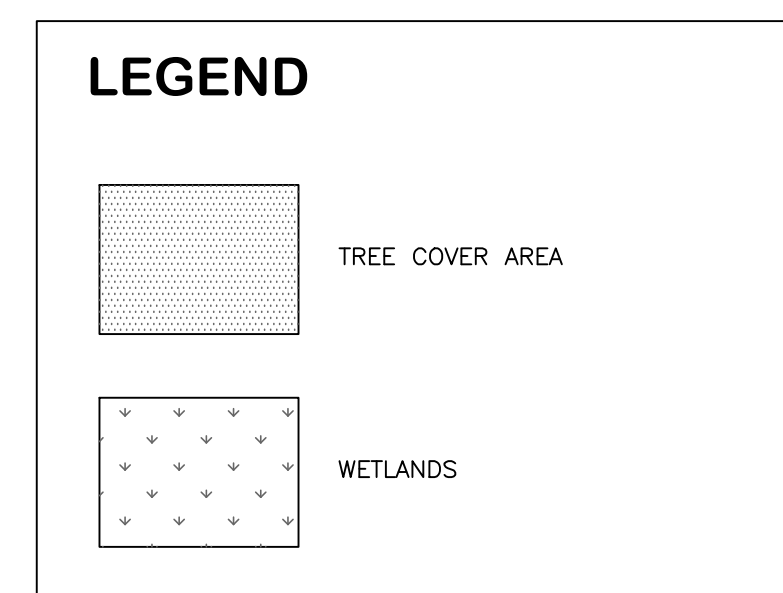
These plans are approved by the Town of Knightdale and serve as construction plans for this project.
By: _____ Date: _____
Administrator

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.

I, _____ 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.
Seal By: _____
PE Date: _____

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



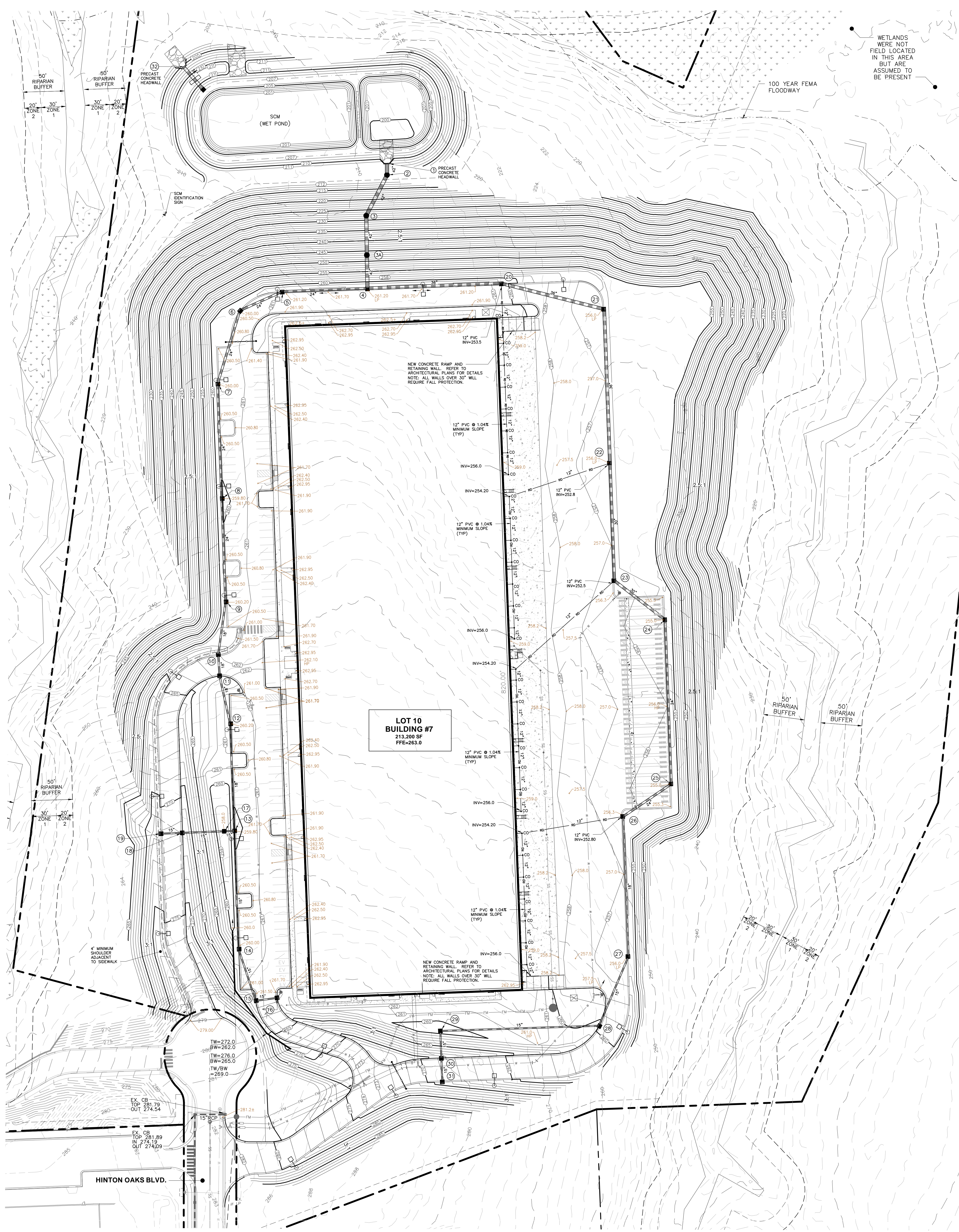


a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

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



PIPE SCHEDULE							
UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	UPSTREAM INVERT	DOWNSTREAM INVERT	SIZE (IN)	LENGTH (FT)	SLOPE	MATERIAL
RISER	32	200.90	200.70	36	37	0.55%	CLASS III RCP/PLASTIC
2	1	207.30	207.00	42	14	2.11%	CLASS III RCP/PLASTIC
3A	3	224.00	220.00	42	48	8.33%	CLASS III RCP/PLASTIC
3	2	212.00	207.40	42	56	8.29%	CLASS III RCP/PLASTIC
4	3A	242.90	240.00	42	41	7.16%	CLASS III RCP/PLASTIC
5	4	248.80	248.10	24	104	0.67%	CLASS III RCP/PLASTIC
6	5	249.30	248.90	24	56	0.71%	CLASS III RCP/PLASTIC
7	6	250.00	249.40	24	94	0.64%	CLASS III RCP/PLASTIC
8	7	251.00	250.10	24	139	0.65%	CLASS III RCP/PLASTIC
9	8	251.90	251.10	24	126	0.63%	CLASS III RCP/PLASTIC
10	9	252.40	252.00	18	64	0.62%	CLASS III RCP/PLASTIC
11	10	252.70	252.50	18	27	0.74%	CLASS III RCP/PLASTIC
12	11	253.20	252.80	18	59	0.66%	CLASS III RCP/PLASTIC
13	12	254.10	253.30	18	130	0.61%	CLASS III RCP/PLASTIC
14	13	255.00	254.20	15	144	0.56%	CLASS III RCP/PLASTIC
15	14	257.20	255.10	15	66	3.18%	CLASS III RCP/PLASTIC
16	15	257.50	257.30	15	27	0.74%	CLASS III RCP/PLASTIC
17	13	254.40	254.20	15	12	1.67%	CLASS III RCP/PLASTIC
18	17	259.00	254.50	15	51	8.88%	CLASS III RCP/PLASTIC
19	18	266.00	265.80	15	27	0.74%	CLASS III RCP/PLASTIC
20	4	244.20	243.00	36	163	0.74%	CLASS III RCP/PLASTIC
21	20	245.10	244.30	36	129	0.62%	CLASS III RCP/PLASTIC
22	21	246.30	245.20	36	187	0.59%	CLASS III RCP/PLASTIC
23	22	247.30	246.40	30	143	0.63%	CLASS III RCP/PLASTIC
24	23	247.90	247.40	30	78	0.64%	CLASS III RCP/PLASTIC
25	24	249.20	248.00	24	200	0.60%	CLASS III RCP/PLASTIC
26	25	249.70	249.30	24	71	0.57%	CLASS III RCP/PLASTIC
27	26	250.90	249.80	18	171	0.64%	CLASS III RCP/PLASTIC
28	27	252.70	251.00	15	92	1.85%	CLASS III RCP/PLASTIC
29	28	254.00	252.80	15	193	0.62%	CLASS III RCP/PLASTIC
30	29	257.00	254.10	15	33	8.85%	CLASS III RCP/PLASTIC
31	30	265.00	264.80	15	30	0.67%	CLASS III RCP/PLASTIC

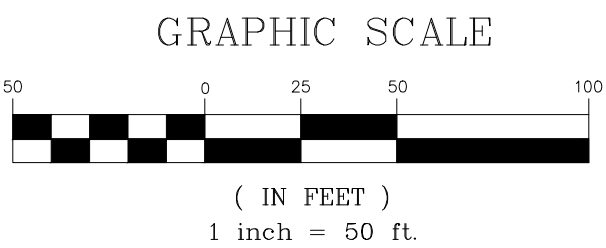
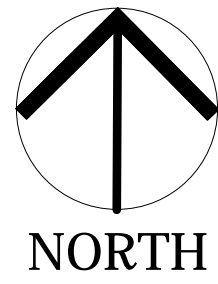
STRUCTURE SCHEDULE				
STRUCTURE	RIM	STRUCTURE TYPE	INV IN	INV OUT
RISER	N/A	RISER		200.90 (36")
1	N/A	HW	207.00 (42")	
2	213.00	JB	207.40 (42")	207.30 (42")
3	228.00	JB	220.00 (42")	212.00 (42")
3A	248.00	JB	240.00 (42")	224.00 (42")
4	261.60	CI	243.00 (36") 248.10 (24")	242.90 (42")
5	261.60	CI	248.90 (24")	248.80 (24")
6	260.40	CI	249.40 (24")	249.30 (24")
7	260.40	CI	250.10 (24")	250.00 (24")
8	260.20	CI	251.10 (24")	251.00 (24")
9	260.60	CI	252.00 (18")	251.90 (24")
10	262.40	CI	252.50 (18")	252.40 (18")
11	263.10	CI	252.80 (18")	252.70 (18")
12	260.60	CI	253.30 (18")	253.20 (18")
13	260.20	CI	254.20 (15") 254.20 (15")	254.10 (18")
14	260.40	CI	255.10 (15")	255.00 (15")
15	262.10	CI	257.30 (15")	257.20 (15")
16	262.40	CI		257.50 (15")
17	258.00	YI	254.50 (15")	254.40 (15")
18	271.90	CI	265.80 (15")	259.00 (15")
19	271.60	CI		266.00 (15")
20	261.00	CI	244.30 (36")	244.20 (36")
21	256.40	CI	245.20 (36")	245.10 (36")
22	256.40	CI	246.40 (30")	246.30 (36")
23	256.80	CI	247.40 (30")	247.30 (30")
24	255.40	CI	248.00 (24")	247.90 (30")
25	255.40	CI	249.30 (24")	249.20 (24")
26	256.70	CI	249.80 (18")	249.70 (24")
27	256.40	CI	251.00 (15")	250.90 (18")
28	260.10	CI	252.80 (15")	252.70 (15")
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")	

- NOTES:
- ALL PIPE SHALL BE CLASS III RCP OR TOWN APPROVED PLASTIC PIPE.
 - RIM ELEVATIONS ARE TO TOP OF CURB FOR C'S, TOP OF GRATE FOR D'S, AND ELEVATION OF OPENING FOR Y'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 #40.31 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				
DOWNSTREAM STRUCTURE	SIZE (IN)	VELOCITY (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.
- ALL CURB INLET, DROP INLET, MANHOLE, AND CLEAN-OUT FRAMES AND COVERS/GRATES SHALL BE PAINTED BLACK SEMI-GLOSS ENAMEL AFTER INSTALLATION.
- 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.
- 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%.
- ZONE ONE OF THE NEUSE RIVER BUFFER SHALL BE A 30' UNDISTURBED FORESTED BUFFER AREA. ZONE TWO OF THE NEUSE RIVER BUFFER SHALL BE A 20' MANAGED VEGETATION BUFFER AREA.



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

REVISIONS:

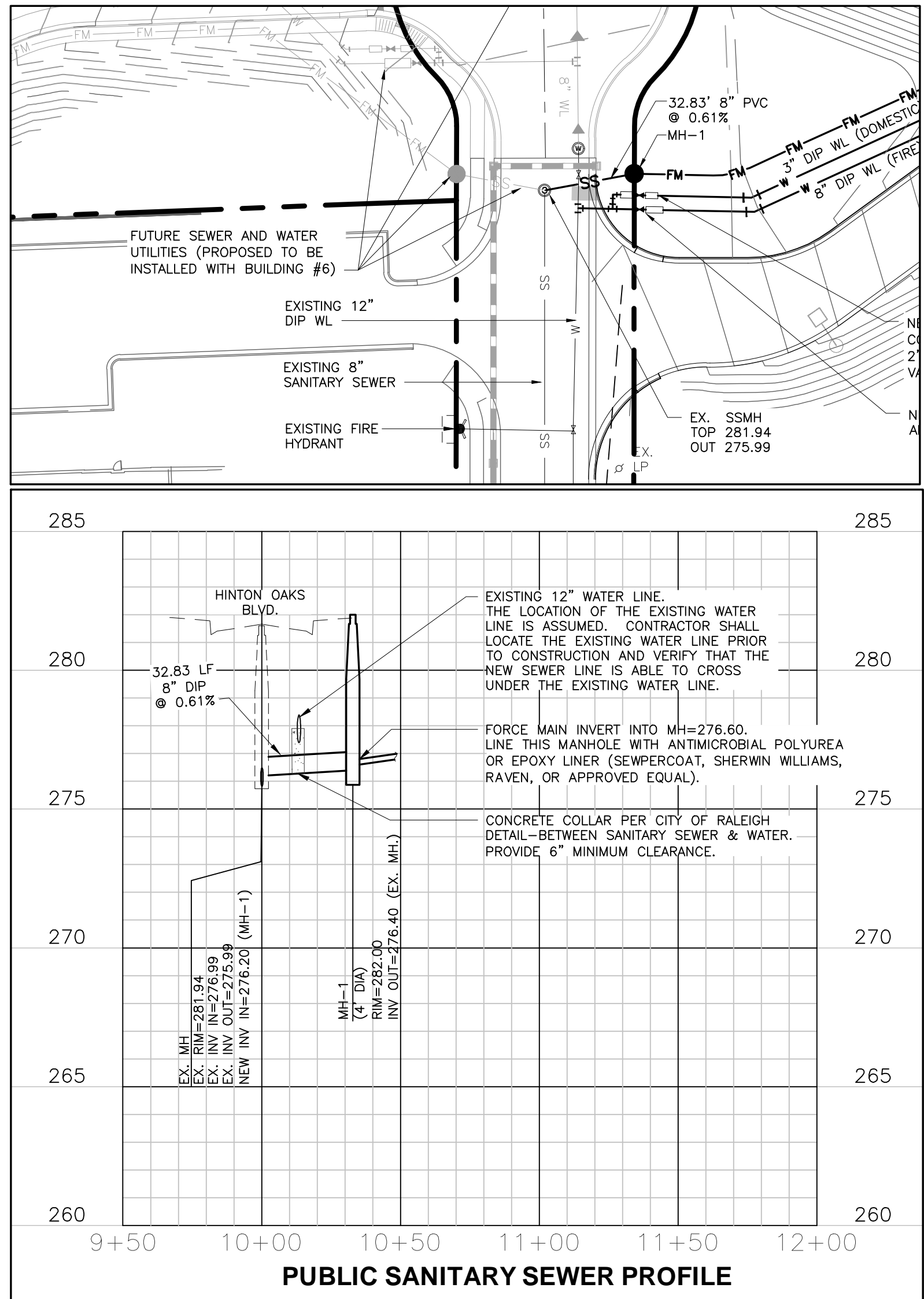
- 23 SEP 2024
PER TOWN COMMENTS
29 OCT 2024
PER TOWN COMMENTS
11 DEC 2024
PER TOWN COMMENTS

DRAWN BY: JET
CHECKED BY: MLS

PROJECT: WSHOIB7L10

GRADING AND
DRAINAGE PLAN

1. All materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications (reference: CORPUSD Handbook, current edition)
2. Utility separation requirements:
 - a) A minimum 10' separation shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified & installed to watermain specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well.
 - b) When installing water &/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the sewer main at least 18" above the top of sewer pipe. The variation allowed & must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter.
 - c) Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extending 10' on each side of crossing must be specified & installed to waterline specifications.
 - d) 3.0" minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, except DIP materials is specified in watermain specifications.
 - e) Maintain 18" minimum separation between all watermain & RCP storm drain crossings; maintain 18" vertical separation at all sanitary sewer & RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete grade having 6" min. clearance between the RCP and DIP materials.
 - f) All other underground utilities shall cross water & sewer facilities with 18" min. vertical separation required.
3. Any necessary field revisions are subject to review & approval of an amended plan &/or profile by the City of Raleigh Public Utilities Department.
4. Developer shall provide 30 days advance written notice to owner for any work required within an existing City of Raleigh Utility Easement necessary service property.
5. Construction shall maintain existing easements & shall not encroach into existing residences & businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24-hour advance notice to the City of Raleigh Public Utilities Department.
6. SEWER BYPASS PUMPING – A bypass plan sealed by an NC Professional Engineer shall be provided to Raleigh Water prior to pumping operations for approval. The operations and equipment shall comply with the Public Utilities Handbook.
7. 3.0" minimum cover is required on all water mains & sewer force mains. 4.0" minimum cover is required on all sanitary sewer lines.
8. It is the developer's responsibility to abandon or remove existing water & sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning at main & removal of service from ROW or easement per CORPUSD Handbook procedure.
9. Install 5", copper* water mains with meters located at ROW or within a 2'x2' Waterline Easement immediately adjacent. NOTE: it is the applicant's responsibility to properly size the water service for each connection & provide the necessary backflow prevention.
10. Install 4" PVC* sewer service (3.0% minimum gradient with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum).
11. Pressure reducing valves are required on all water services exceeding 80 psi; backwater valves are required on all sanitary sewer services having standing drains less than 1' above the next upstream manhole.
12. Any environmental permits applicable to the project must be obtained from NCDWQ/USACE &/or FEMA for all riparian buffer, wetland &/or floodplain impacts (respectively) prior to construction.
13. NCDWQ Wetland Easement Agreements are required for any utility work (including main extensions & service trips) within state or railroad ROW prior to construction.
14. Grantee Interceptor / Oil Water Separator sizing calculations & installation specifications shall be approved by all City of Raleigh Program Connection prior to issuance of A/C and/or building Permit. Contact 919/996-4316 or fr@raleigh.gov for more information.
15. Cross-connection control protection devices are required based on the degree of health hazard involved as listed in Appendix B of the Rules Governing Public Water Systems in North Carolina.
16. The standards shall meet the American Society of Sanitary Engineering (ASSE) standards and be on the University of Southern California approval list.
17. The device and installation shall meet the guidelines of Appendix A – Guidelines and Requirements for the Cross-connection Program in Raleigh's Water Area.
18. The devices shall be installed and tested (both, initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross connection control program, whichever is more stringent.
19. Contact CrossConnection@raleigh.gov for more information.
20. The project shall include a cross-connection control program for water main replacement. Any city reimbursement greater than \$250,000 must be submitted to the public bidding process.

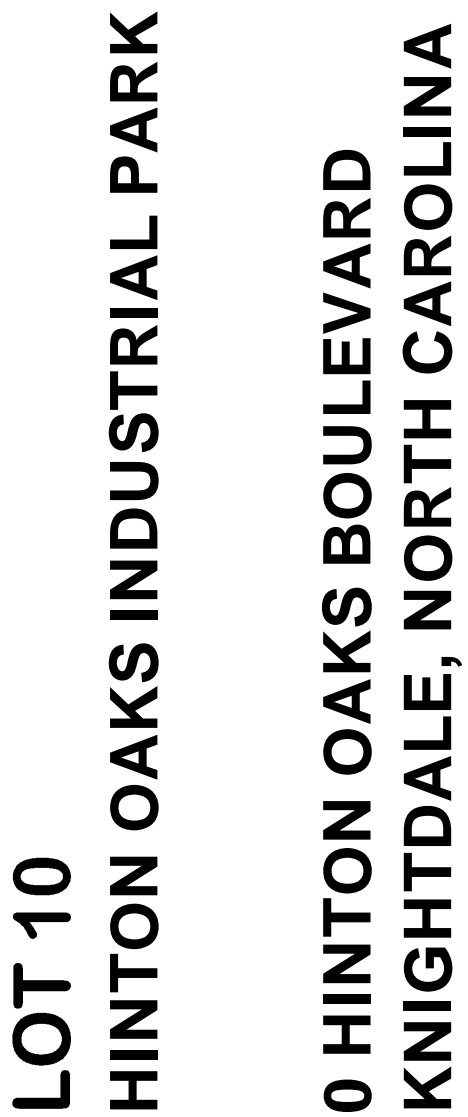


NORTH

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

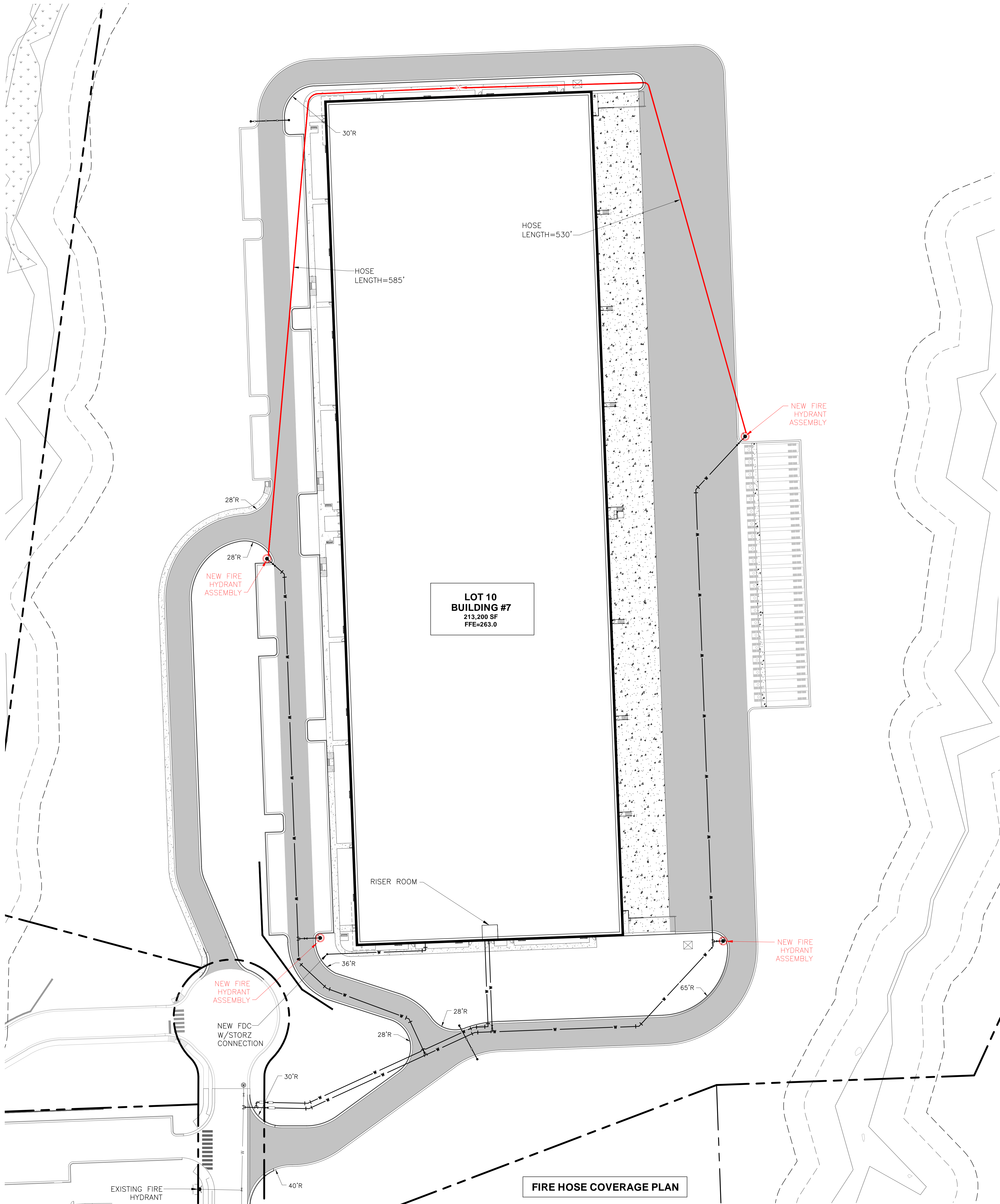
	<p>a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.</p> <p>By: _____ Date: _____</p> <p>Town Engineer</p> 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




REVISIONS:

1	29 OCT 2024
	PER TOWN COMMENTS

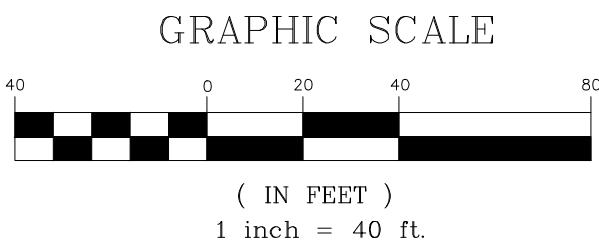
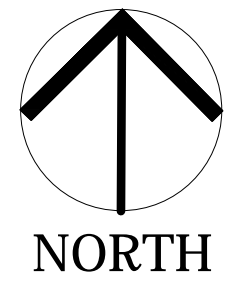
DWG. NO. **SITE 6**



LEGEND

 FIRE TRUCK ACCESS ROUTE

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.



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.

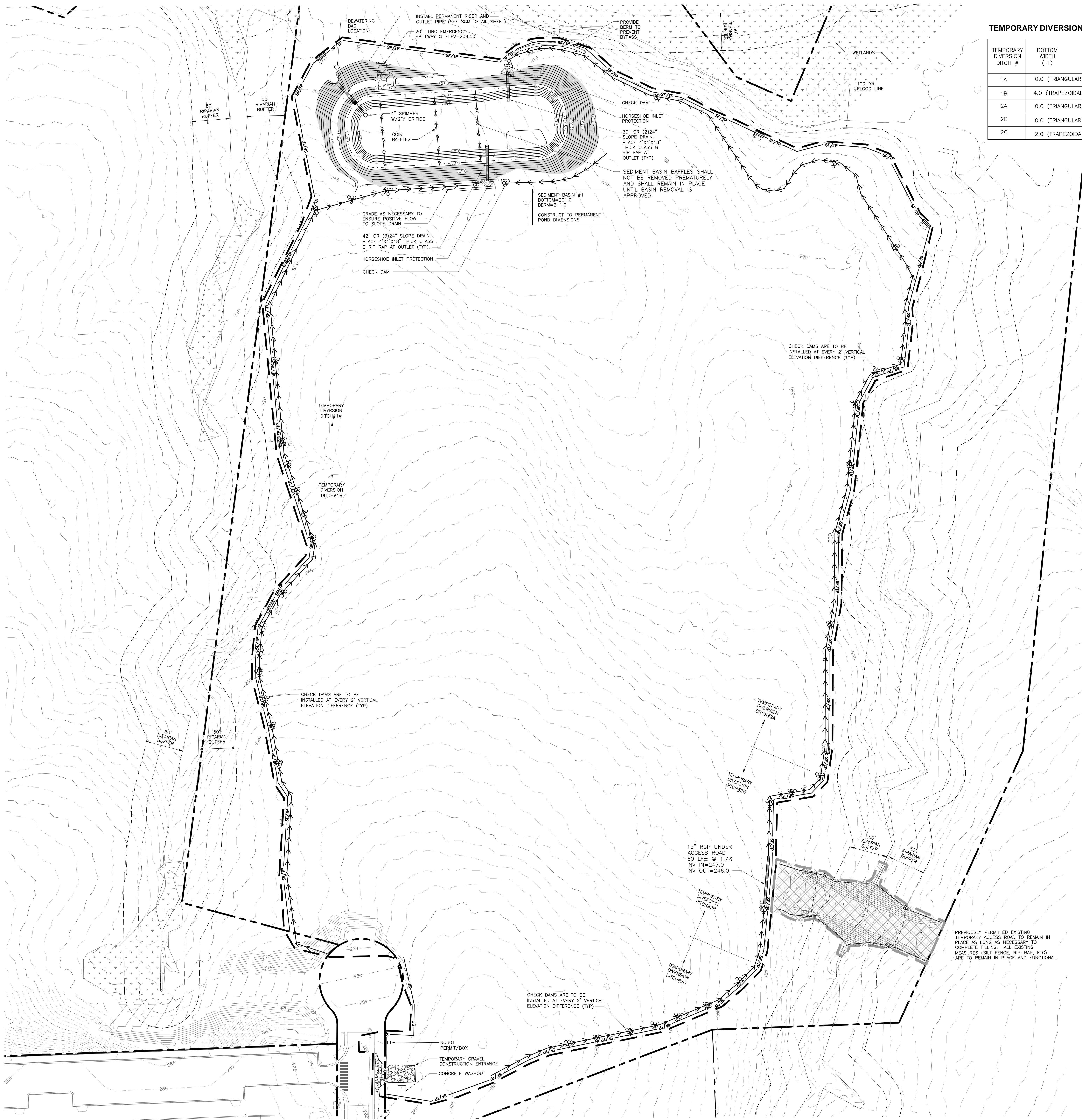
By: _____ Date: _____
Town Engineer

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

By: _____ Date: _____
Land Use Administrator

FIRE HOSE COVERAGE PLAN

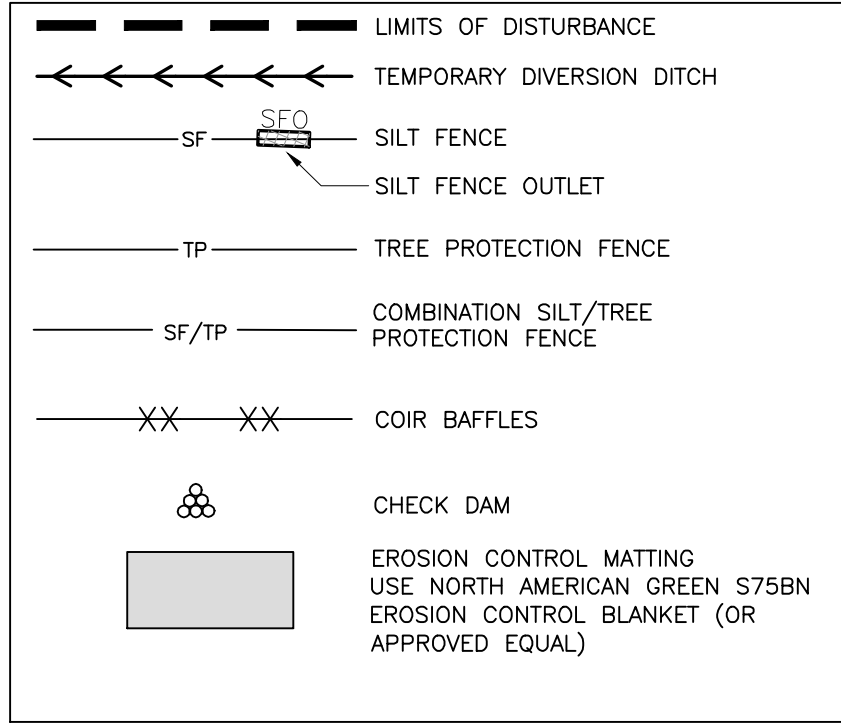
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TEMPORARY DIVERSION DITCH DIMENSIONS

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

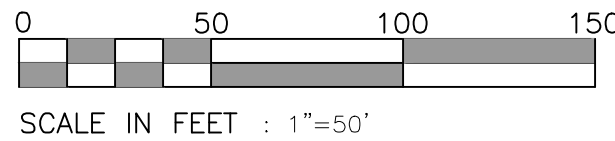
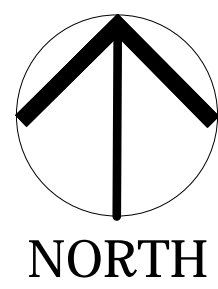
EROSION CONTROL LEGEND



DISTURBED AREA = 22.0 AC

* SEE SHEET 11 FOR EROSION CONTROL NOTES, CONSTRUCTION SEQUENCE, AND TEMPORARY DIVERSION DITCH DIMENSIONS

* SEE SHEET 13-14 FOR EROSION CONTROL DETAILS



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.

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Town Engineer

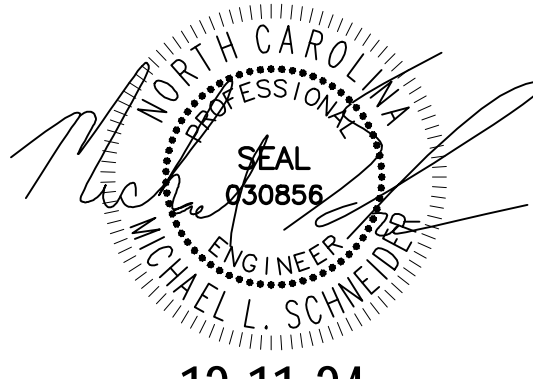
These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____
Land Use Administrator

PLD

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



12-11-24

LOT 10
HINTON OAKS INDUSTRIAL PARK
0 HINTON OAKS BOULEVARD
KNIGHTDALE, NORTH CAROLINA

ISSUED: 16 SEPT 2024

REVISIONS:

△ 23 SEP 2024
PER TOWN COMMENTS
△ 29 OCT 2024
PER TOWN COMMENTS
△ 11 DEC 2024
PER TOWN COMMENTS

DRAWN BY: JET
CHECKED BY: MLS

PROJECT: WSHOIB7L10

STAGE 1
EROSION
CONTROL PLAN

DWG. NO. **SITE 8**

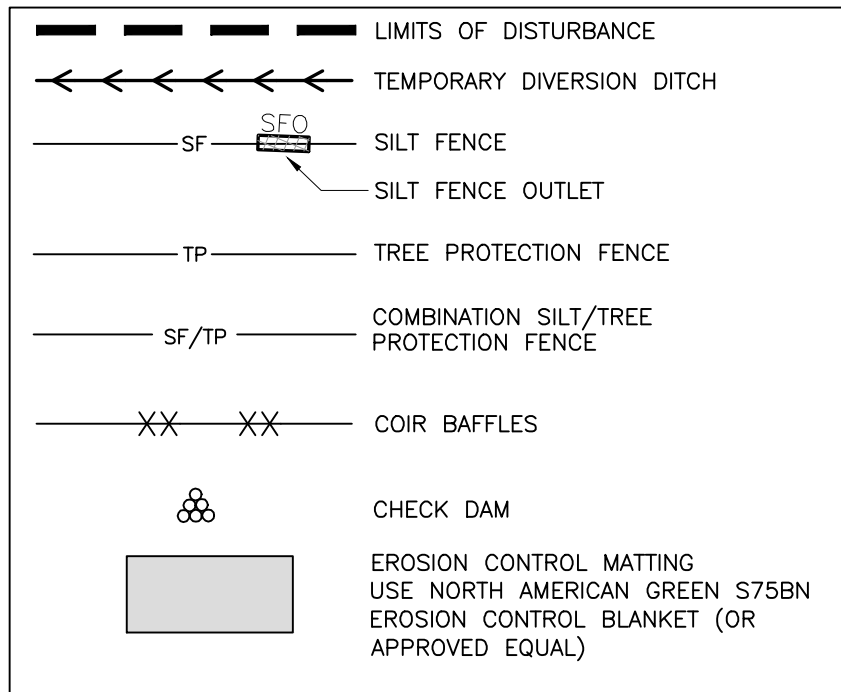
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TEMPORARY DIVERSION DITCH DIMENSIONS

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
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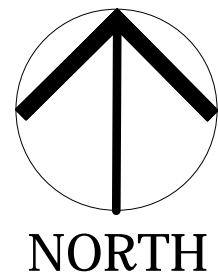
EROSION CONTROL LEGEND



DISTURBED AREA = 22.0 AC

* SEE SHEET 11 FOR EROSION CONTROL NOTES, CONSTRUCTION SEQUENCE, AND TEMPORARY DIVERSION DITCH DIMENSIONS

* SEE SHEET 13-14 FOR EROSION CONTROL DETAILS



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By: _____ Date: _____
Town Engineer

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By: _____ Date: _____
Land Use Administrator

PID

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8522-204 SIX FORKS ROAD
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919.845.7600 PHONE
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ENGR. FIRM LICENSE #F-0843

NORTH CAROLINA

REGISTERED PROFESSIONAL ENGINEER

SEAL

030856

MICHAEL L. SCHMIDT

12-11-24

LOT 10

HINTON OAKS INDUSTRIAL PARK

0 HINTON OAKS BOULEVARD

KNIGHTDALE, NORTH CAROLINA

ISSUED: 16 SEPT 2024

REVISIONS:

△	23 SEP 2024	PER TOWN COMMENTS
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

DRAWN BY: JET
CHECKED BY: MLS

PROJECT: WSHOIB7L10

STAGE 2
EROSION
CONTROL PLAN

DWG. NO. **SITE 9**

REVISIONS:

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

DRAWN BY: JET
CHECKED BY: MLS

PROJECT: WSHOIB7L10

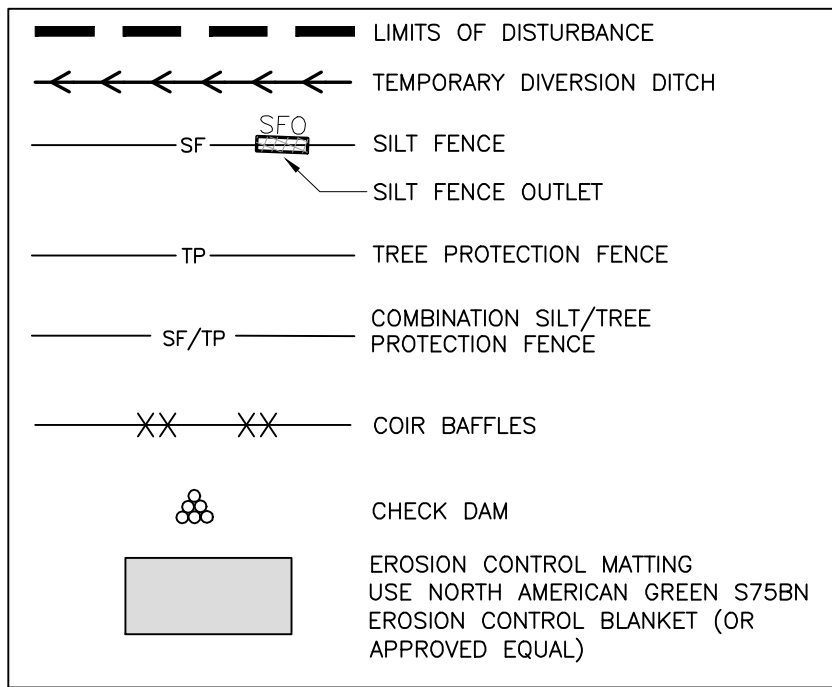
STAGE 3
EROSION
CONTROL PLAN

DWG. NO. **SITE 10**

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
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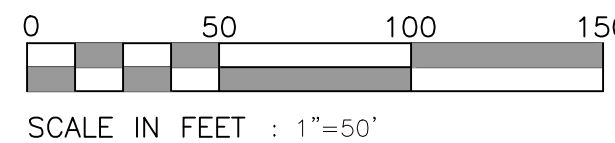
EROSION CONTROL LEGEND



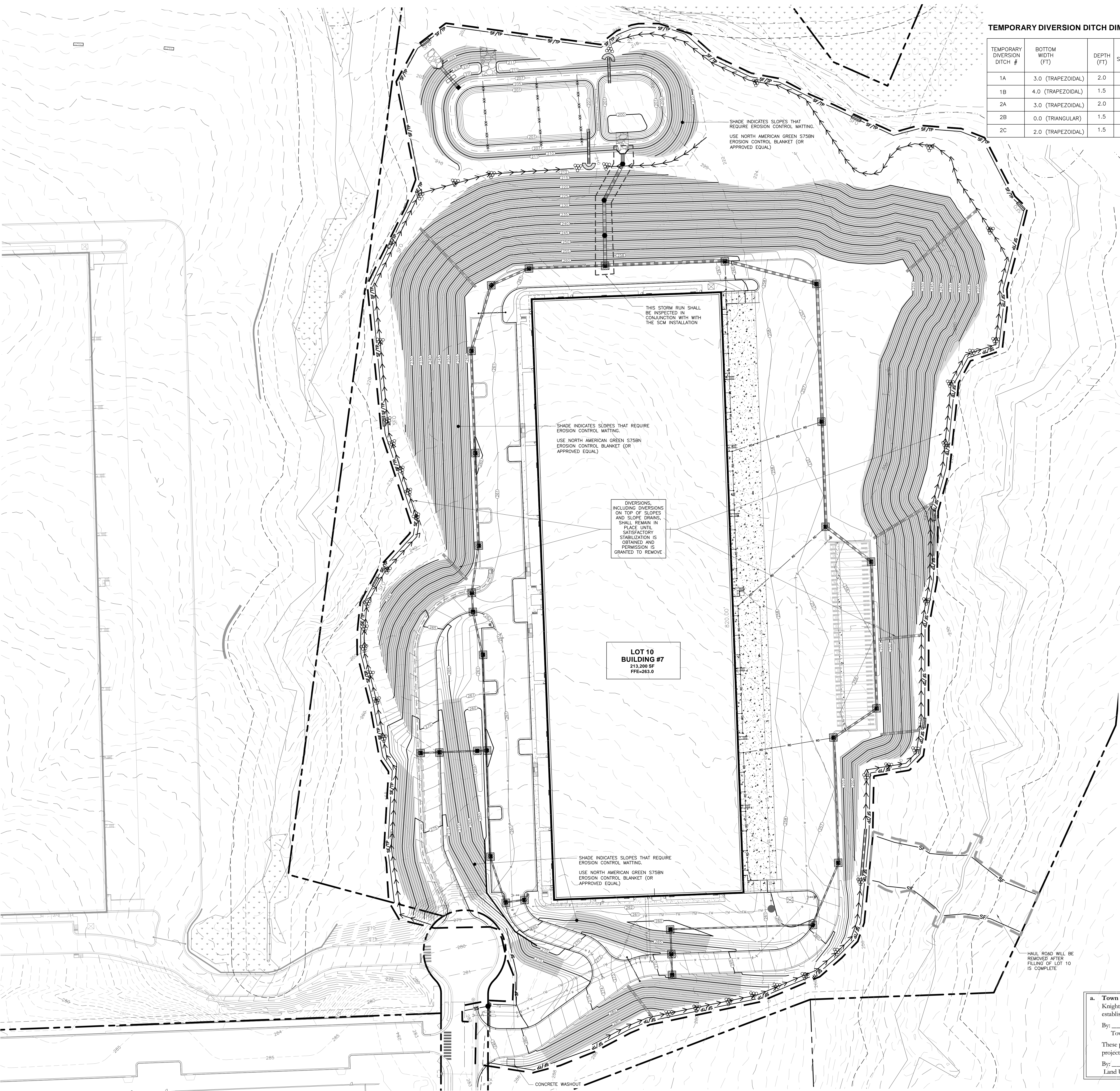
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By: _____ Date: _____
Town Engineer
These plans are approved by the Town of Knightdale and serve as construction plans for this project.
By: _____ Date: _____
Land Use Administrator



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/NCG01. 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 OVER 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, SF05) 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 BY THE TOK.
- 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 AFFECTED AREAS.
- 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

1. 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

1. 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 TOWN OF KNIGHTDALE
2. ALL SEDIMENT BASINS REQUIRE BAFFLES INSTALLED PER DETAILS ON DETAIL SHEET.
3. DIVERSIONS SHALL BE MODIFIED AS NEEDED TO ENSURE SEDIMENT LADEN WATER GOES INTO THE APPROPRIATE BASIN AT ALL TIMES.
4. THE WATERSHED MANAGER MAY DETERMINE THAT FLOCCULATES WILL BE REQUIRED DURING CONSTRUCTION, IF NECESSARY.
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 OR OTHER 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-DEMULSIONCONTACT PERSON AND COPY ENVIRONMENTAL CONSULTANT THAT MET YOU@NSITE. THE EMAIL SHOULD INCLUDE EASC 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 NCG01. KEEP EMAIL FOR YOUR NPDES MONITORING DOCUMENTATION.
3. AFTER RECEIVING POSITIVE CONFIRMATION FROM NCDEQ-DEMULR 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/CENTIPEEDE / 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 ADVISE 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.

SEDIMENT BASIN DESIGN DATA

BASIN	DA (Acres)	Q(10) (cfs)	Width (ft)	Length (ft)	Surface Area		Side Slopes	Sediment Depth (ft)	Total Height (ft)	Weir	SKIMMER SIZE (in)	SKIMMER ORIFICE DIA (in)	DEWATERING TIME (days)
					Required (sf)	Provided (sf)							
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
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2C	2.0 (TRAPEZOIDAL)	1.5	2:1	0.08	392	6.30	22.74	3.39	STRAW W/NET

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 NECESSARY 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 NECESSARY 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. BEGIN 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 TIME FRAMES.
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 COMPLETION.

STABILIZATION NOTES

SLOPE	STABILIZATION
3:1 AND FLATTER	GRASS
3:1 TO 2:1 SLOPE	SLOPE ADAPTIVE PLANTS (SHRUBS AND VINES)
2:1 TO 1.5:1	PIP-RAP OR AS APPROVED BY GEO-TECH)
STEEPER THAN 1.5 TO 1	RETAINING WALL
* SLOPES OF 2:1 OR STEEPER TO BE STABILIZED IMMEDIATELY WITH EXCEL SLOPE NETTING OR EQUAL	

*EROSION CONTROL MATTING IS REQUIRED FOR:

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

USE NORTH AMERICAN GREEN S75BN EROSION CONTROL BLANKET (OR APPROVED EQUAL)

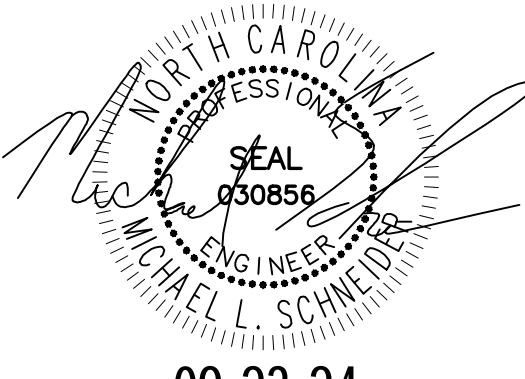
1) Ground Stabilization*		
Site Area Description	Stabilization Time Frame	Stabilization Time Frame Exceptions
• Perimeter dikes, swales, ditches, and slopes	7 days	None
• High Quality Water (HQW) Zones	7 days	None
• Slopes steeper than 3:1	7 days	If slopes are 10° or less in length and are not steeper than 2:1, 14 days are allowed.
• Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50 feet in length
• All other areas with slopes flatter than 4:1	14 days	None (except for perimeters and HQW Zones)

* Extension of time may be approved by the permitting authority based on weather or other site-specific conditions that make compliance impracticable" (Section 11.B(2)(b))



PEDMONT 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



09-23-24

LOT 10

HINTON OAKS INDUSTRIAL PARK

0 HINTON OAKS BOULEVARD
KNIGHTDALE, NORTH CAROLINA

ISSUED: 16 SEPT 2024

REVISIONS:

△ 23 SEP 2024
PER TOWN COMMENTS

DRAWN BY: JET
CHECKED BY: MLS

PROJECT: WSHOIB7L10

EROSION CONTROL NOTES

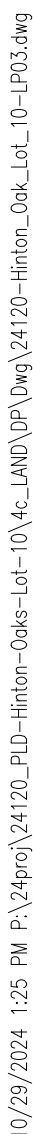
DWG. NO. SITE 11

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



COMMON NAME	CALIPER	HEIGHT	REMARKS
Aeryn Trident Maple	1.25" MIN	6' MIN	Understory Tree/Street Tree, B Buffer
Legacy Sugar Maple	2" MIN	8' MIN	Canopy Tree/Driveway
Tennessee Pink Eastern Redbud	1.25" MIN	6' MIN	Understory Tree/A Buffer
Sweetbay Magnolia	1.25" MIN	6' MIN	Understory Tree/B Buffer
Kwanzan Japanese Cherry	1.25" MIN	6' MIN	Understory Tree/B Buffer
Hibeam Overcup Oak	2" MIN	8' MIN	Canopy Tree/Parking
Chinese Lacebark Elm	2" MIN	8' MIN	Canopy Tree/Parking, Street Tree, A Buffer
Emerald Heights Dystilium	3 GAL	18" MIN	A & B Buffer
Dwarf Burford Holly	3 GAL	18" MIN	Streetcape, A&B Buffer
Sea Green Juniper	3 GAL	18" MIN	A & B Buffer
Ruby Chinese Loropetalum	3 GAL	18" MIN	Foundation Planting (Addtl)
Emerald Arborvitae	7 GAL	18" MIN	Foundation Planting (Addtl)
Chindo Viburnum	3 GAL	18" MIN	Transformer Screening
Carolina Jessamine	3 GAL	18" MIN	Foundation Planting

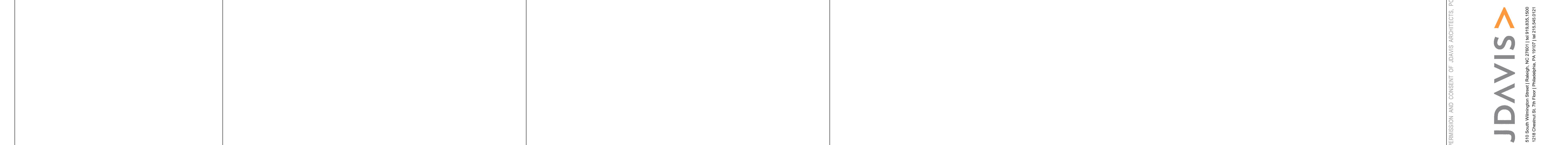
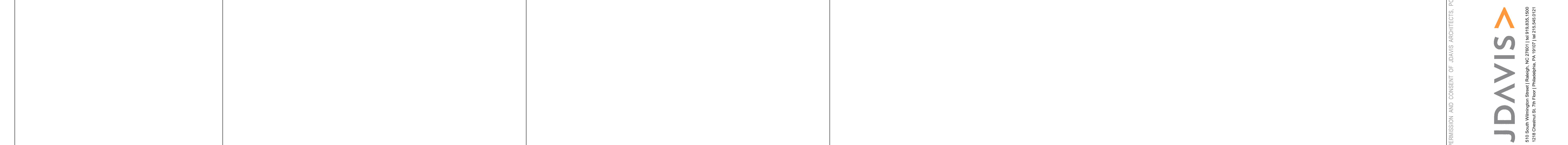


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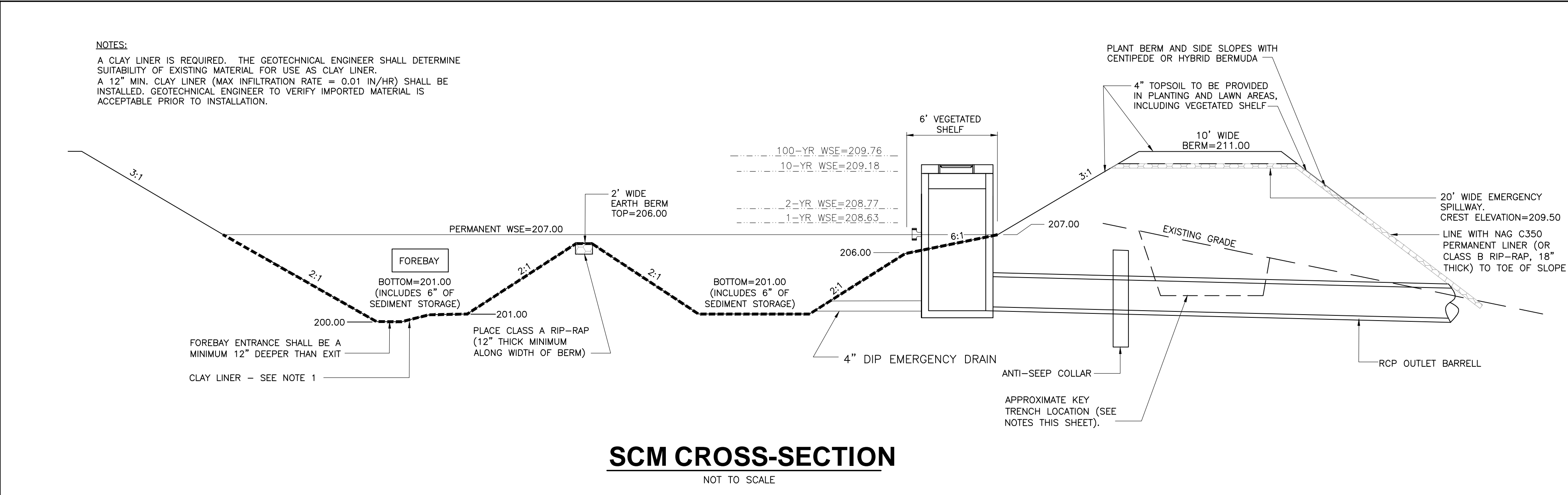
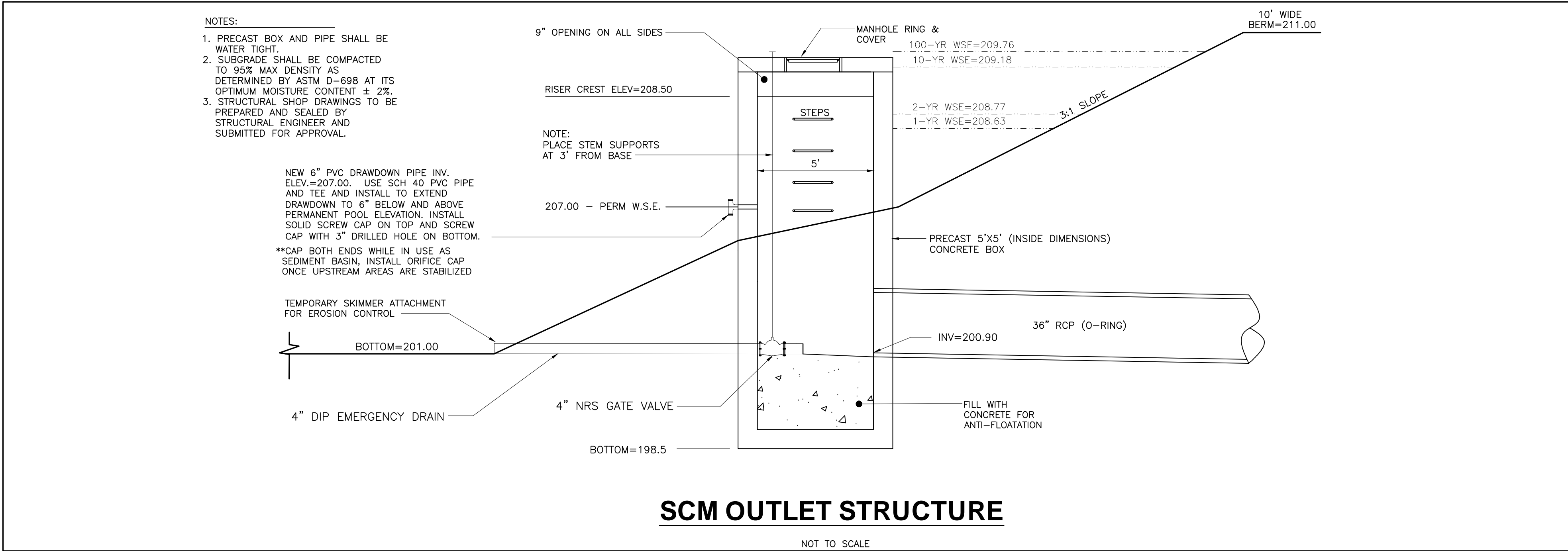
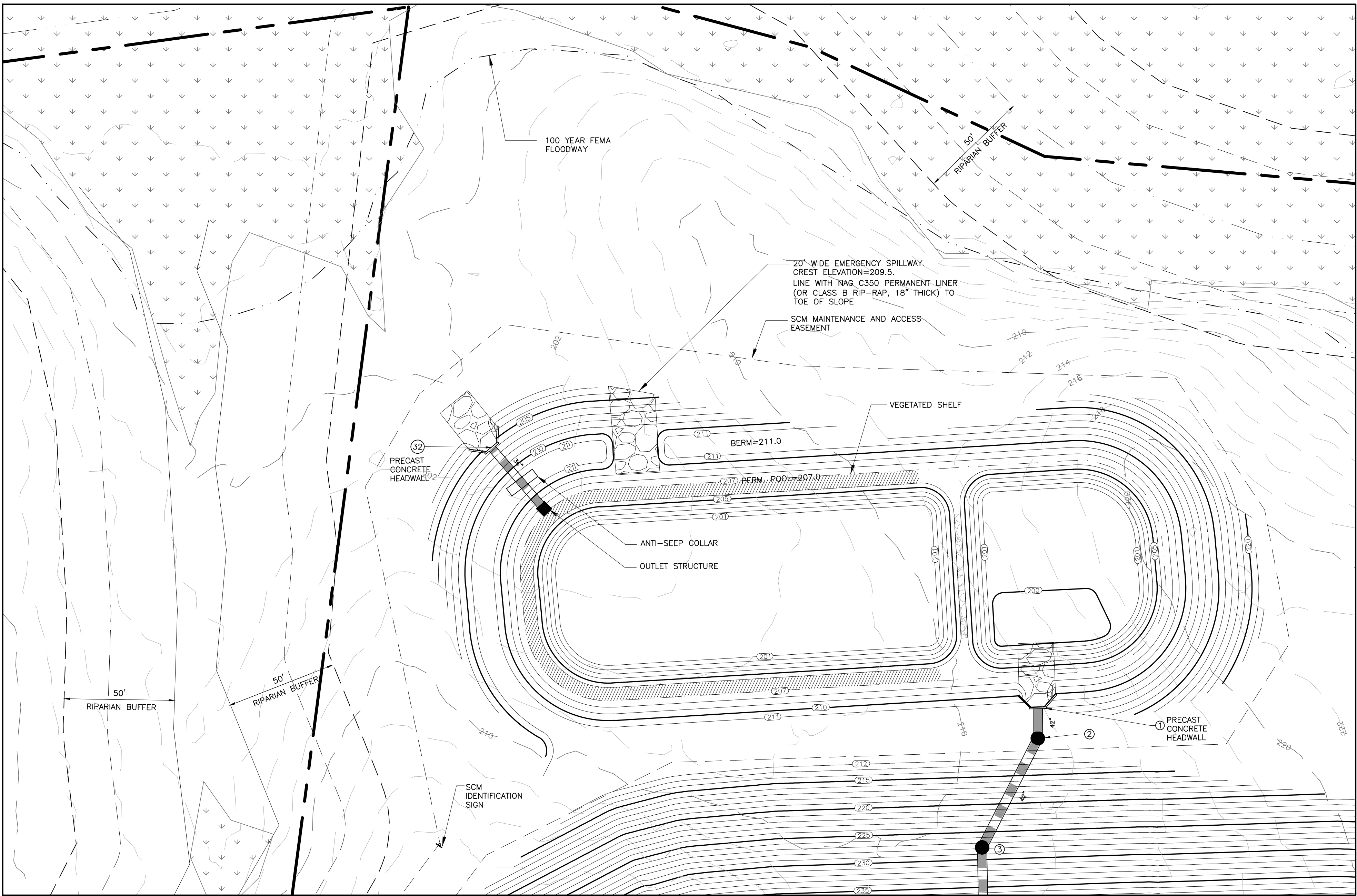
By: _____ Date: _____
Town Engineer

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

By: _____ Date: _____
Land Use Administrator



F:\Projects\WSHOIB7L10\Drawings\Site\WSHOIB7L10_sitework.dwg - 12-SCM DETAIL Oct 29, 24 - 1:31pm



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
- 2) GEOTECH
- 3) AS-BUILT CERTIFYING ENGINEER OR SOMEONE UNDER THEIR SUPERVISION

THE FOLLOWING ITEMS MUST BE INSPECTED BY TOW 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) ANTI-FLOUTATION BALLAST
- 5) ANY SITE-CONSTRUCTED REINFORCED CONCRETE STRUCTURES

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 FORM THE TOWN.
2. THE VEGETATED SHELVE SHALL BE PLANTED WITH A MINIMUM OF THREE DIVERSE SPECIES OF HERBACEOUS, NATIVE VEGETATION AT A MINIMUM DENSITY OF 50 PLANTS PER 200 FEET OF SHELVE 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, NODUR 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 OF CONSTRUCTION.
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	ROOT
	204	ASCLEPIAS INCARNATA	SWAMP MILKWEED	2" PLUG
	204	CAREX TENERA	QUILL SEDGE	2" PLUG
	205	CHELONE GLABRA	WHITE TURTLEHEAD	2" PLUG

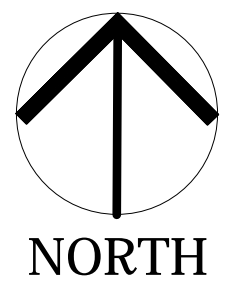
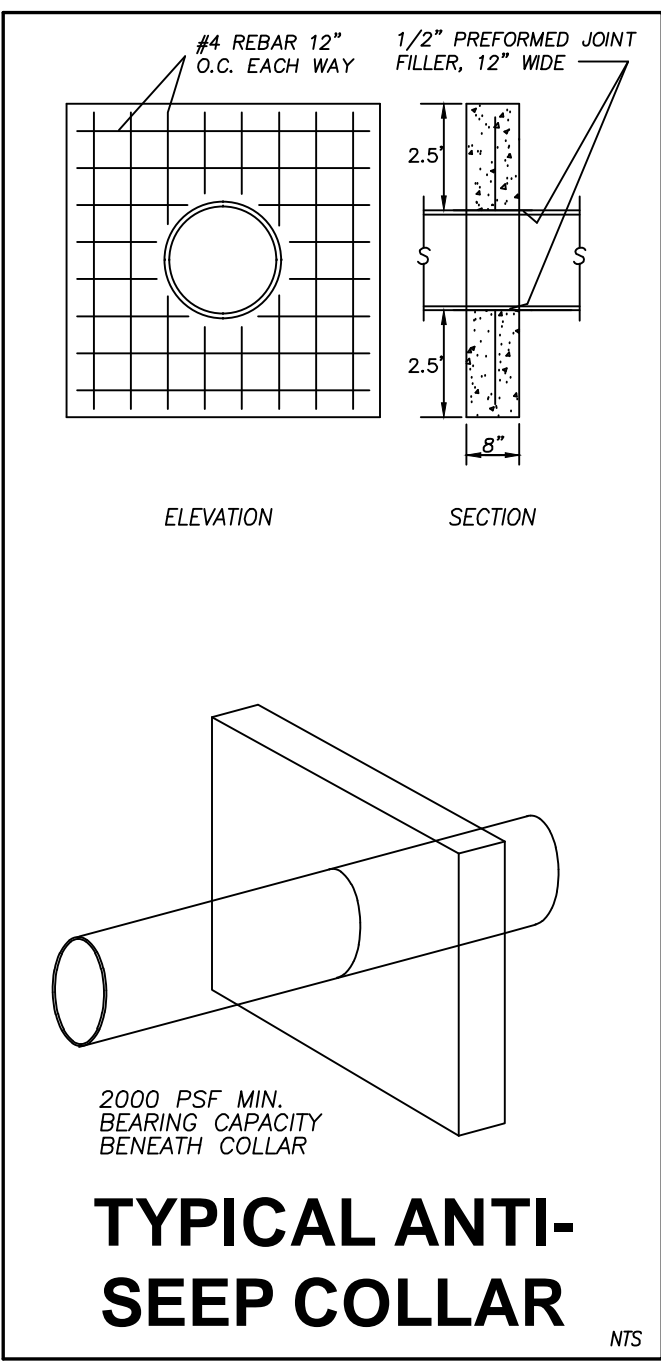
NON-CLUMPING TURF GRASS MIX OF HYBRID BERMUDA OR CENTIPEDE PLANTED AT A RATE OF 7 LBS/1000 SF
APPROXIMATE AREA = 7,250 SF

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 PRIOR TO FINAL ACCEPTANCE.

SCM EMBANKMENT SPECIFICATIONS:

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 GREATER THAN 6", AND FROZEN OR OTHER OBJECTIONABLE MATERIAL.
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 REMOVED AND THE SURFACE PROPERLY PREPARED FOR FILL PLACEMENT.
3. ALL FILL SOILS USED IN THE EMBANKMENT / KEY TRENCH CONSTRUCTION SHALL BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM-698). THE FILL SOILS SHALL BE COMPACTED AT A MOISTURE CONTENT WITHIN 2 PERCENT OF ITS OPTIMUM MOISTURE CONTENT. COMPACTION TESTS SHALL BE PERFORMED BY THE ON-SITE GEOTECHNICAL ENGINEER DURING CONSTRUCTION TO VERIFY THAT THE PROPER COMPACTION LEVEL HAS BEEN REACHED. THE FILL 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 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 LISTED IN ITEM 2 ABOVE.
5. FILL MATERIAL ADJACENT TO THE OUTLET BARRELL, 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.



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

ISSUED: 16 SEPT 2024

REVISIONS:

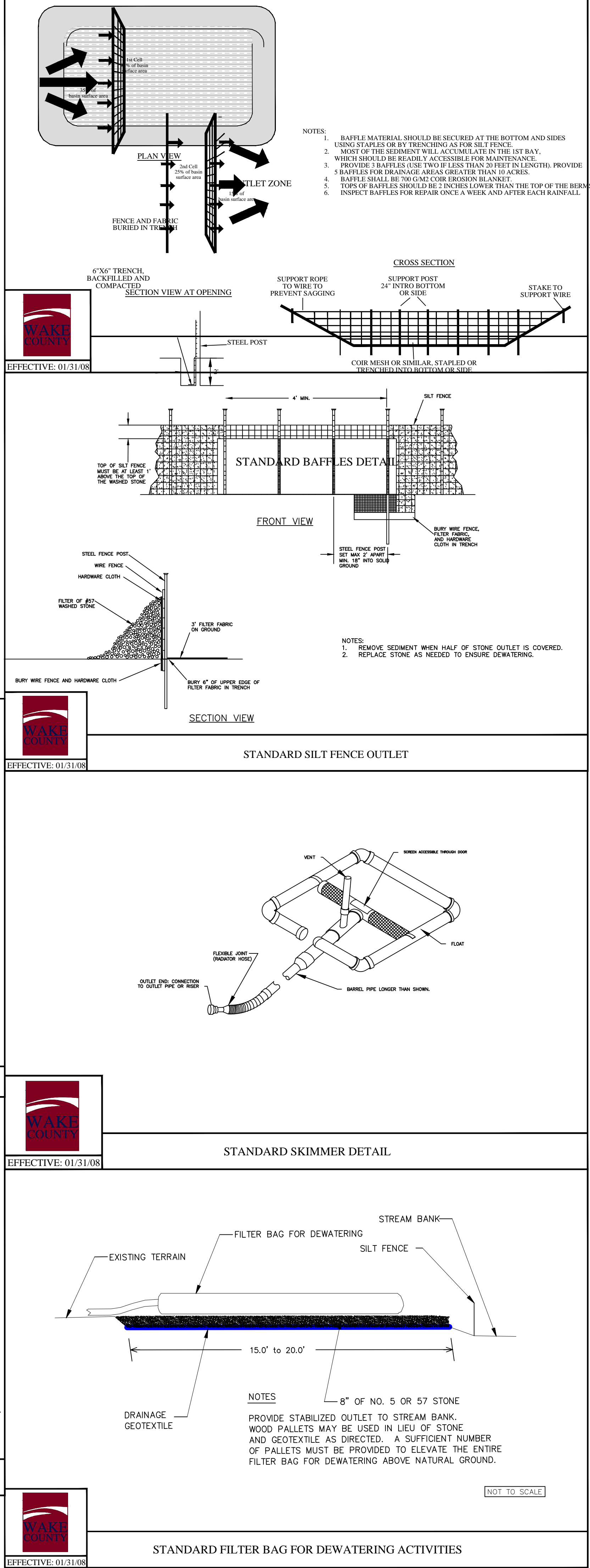
- | | |
|-------------|-------------------|
| 23 SEP 2024 | PER TOWN COMMENTS |
| 29 OCT 2024 | PER TOWN COMMENTS |

DRAWN BY: JET
CHECKED BY: MLS

PROJECT: WSHOIB7L10

SCM DETAIL

DWG. NO. SITE 12

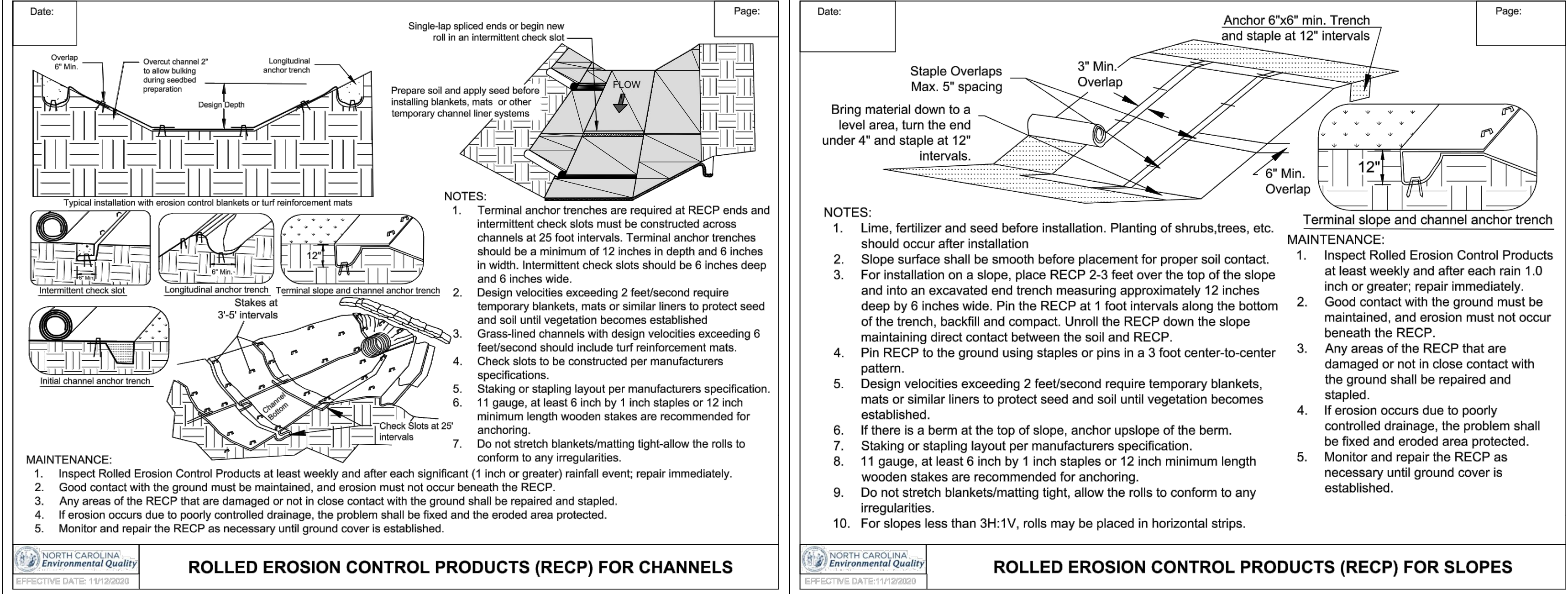
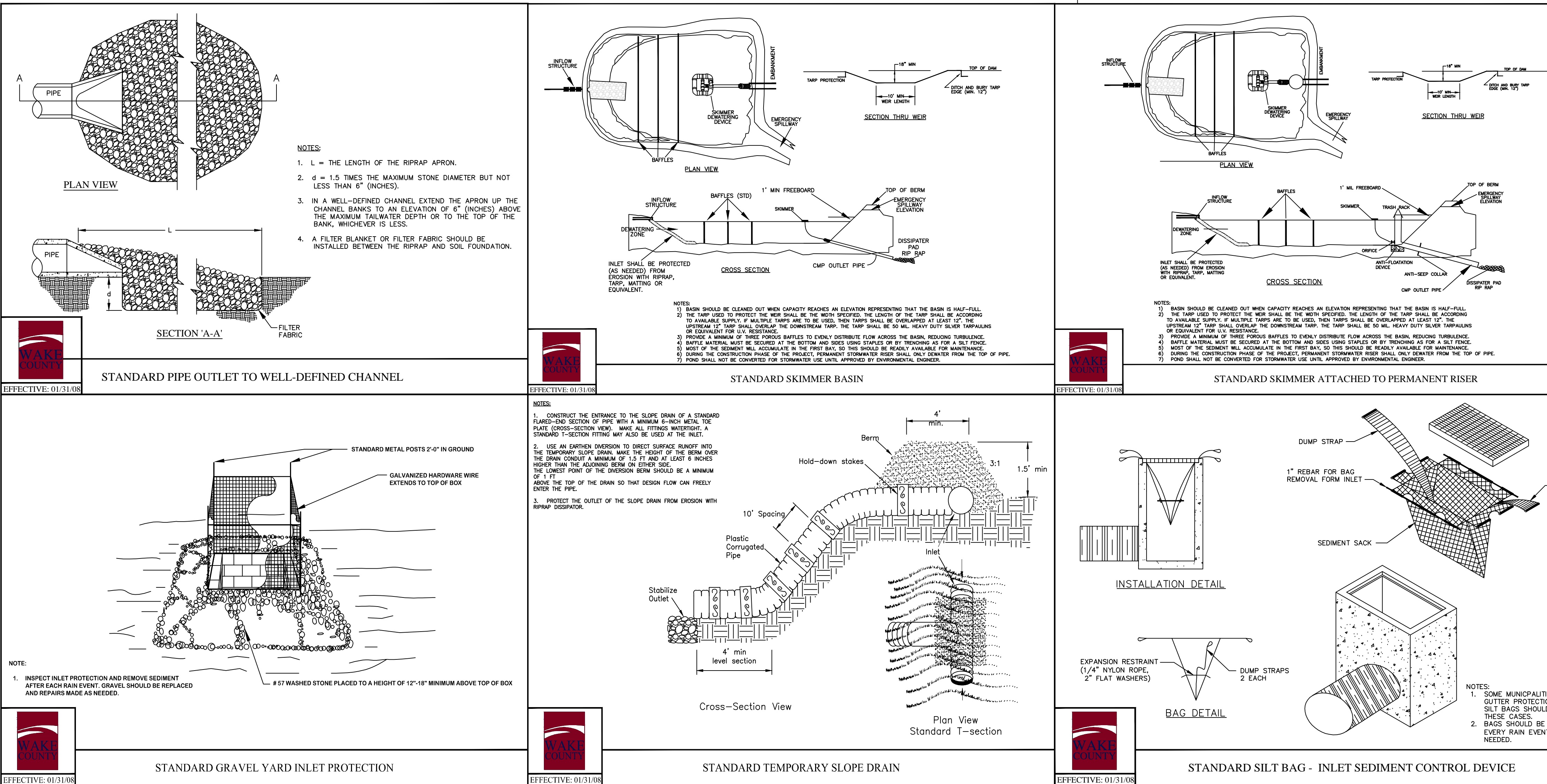
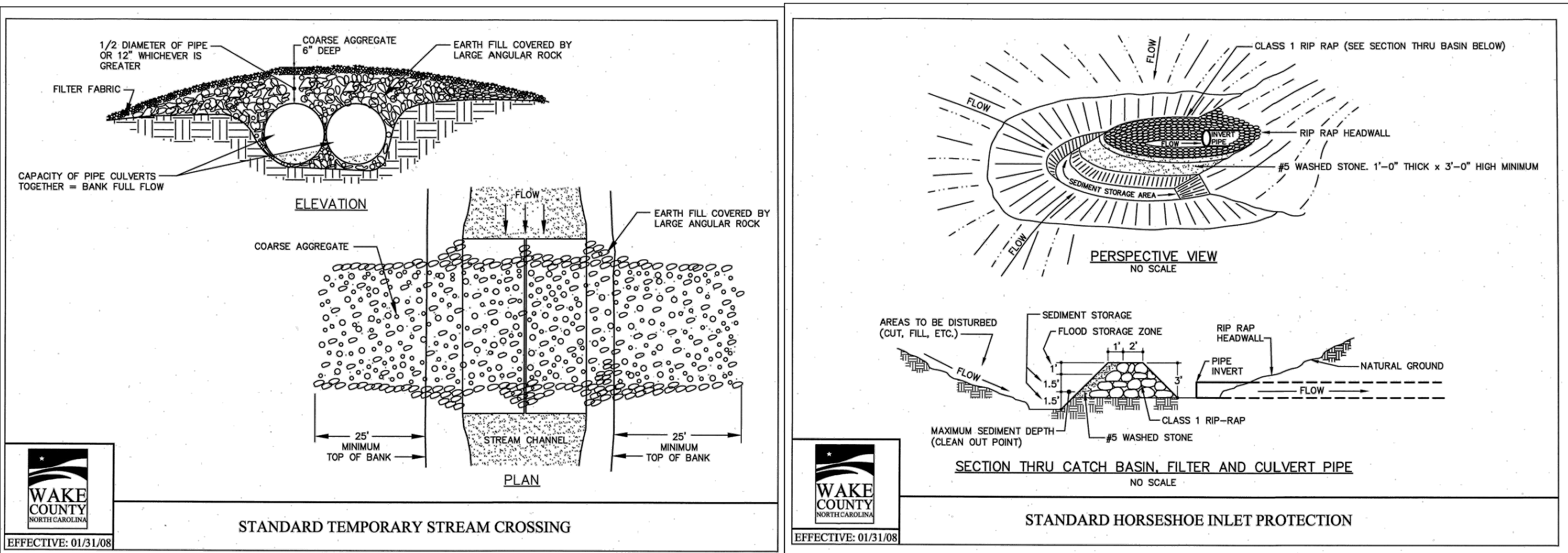


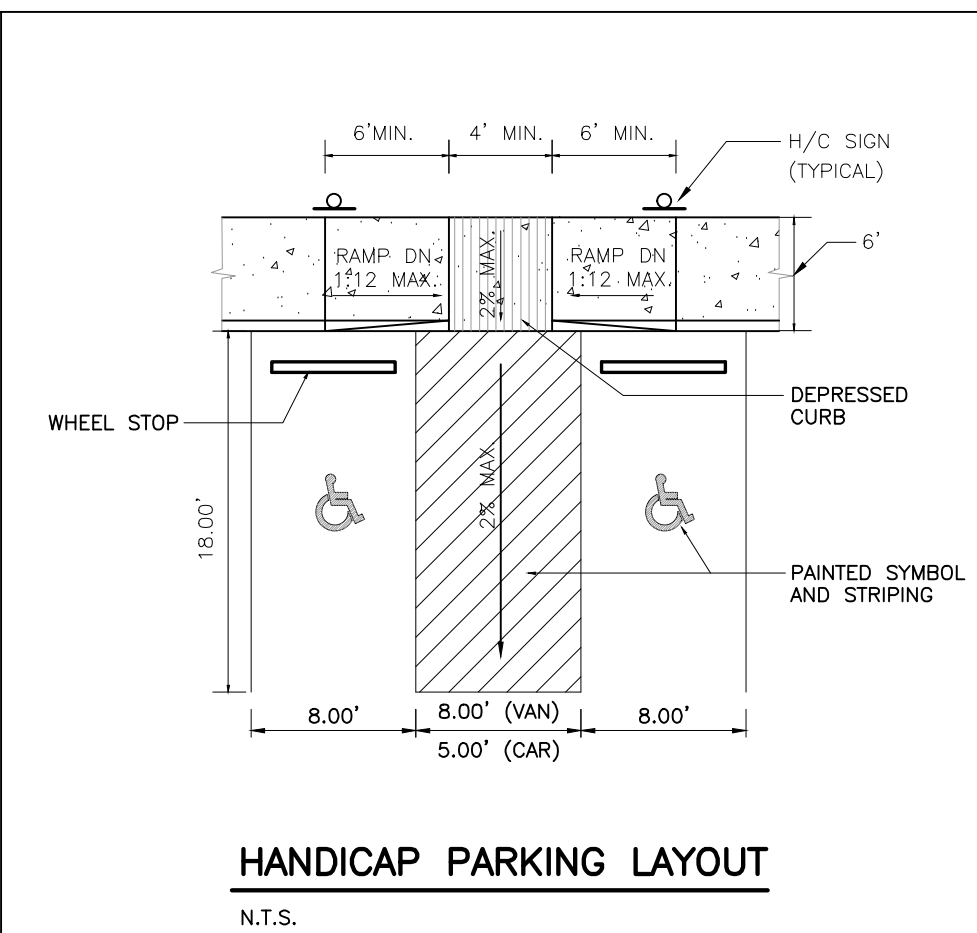
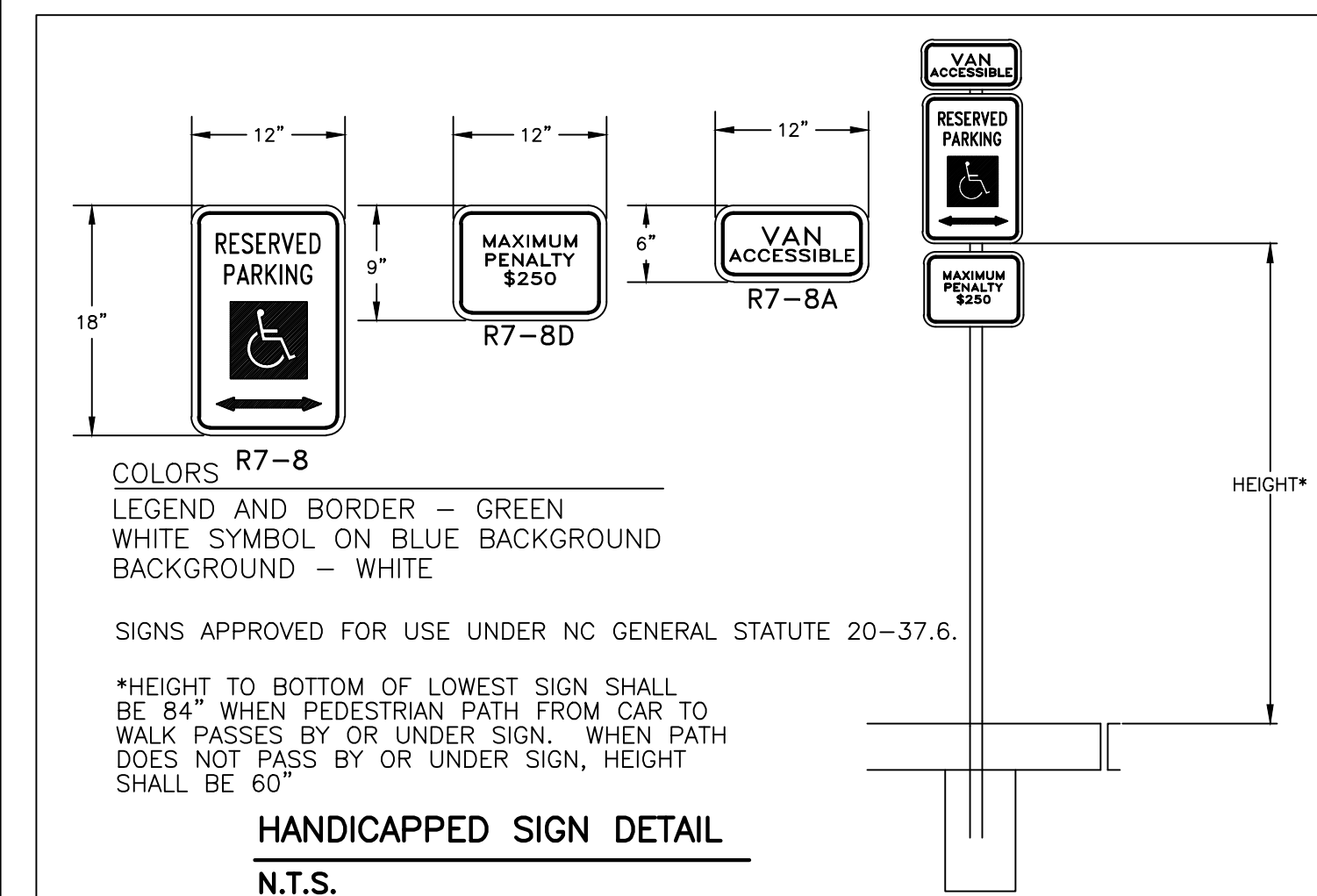
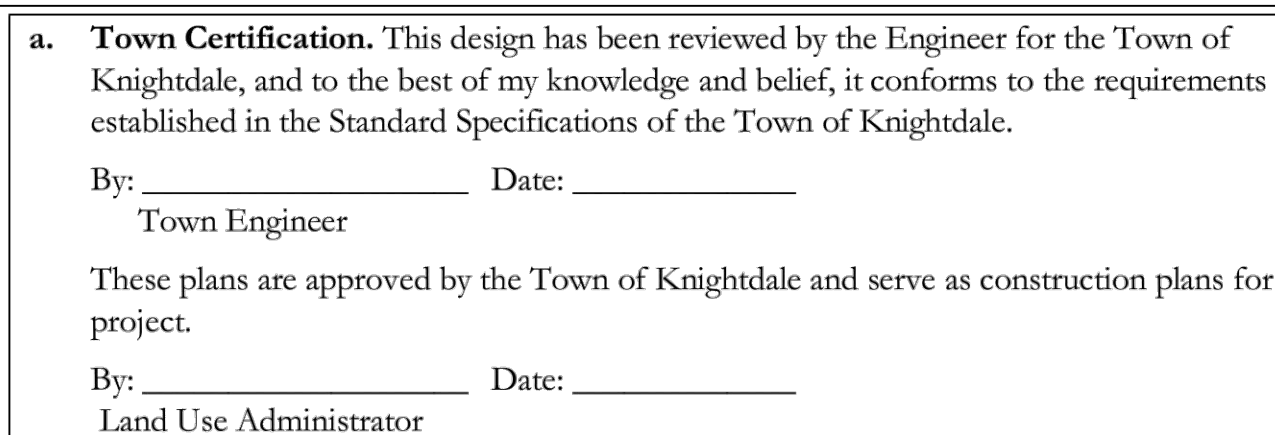
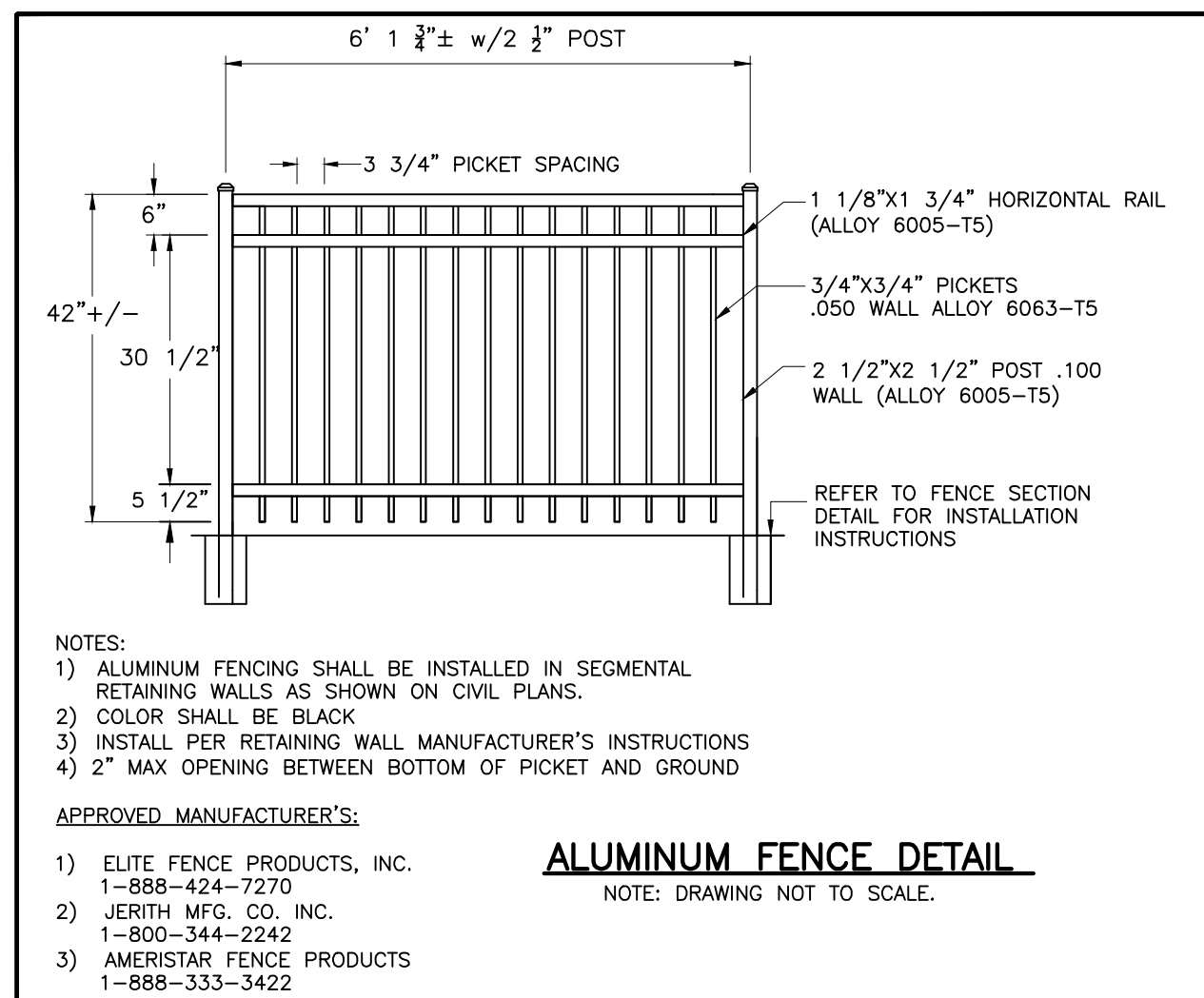
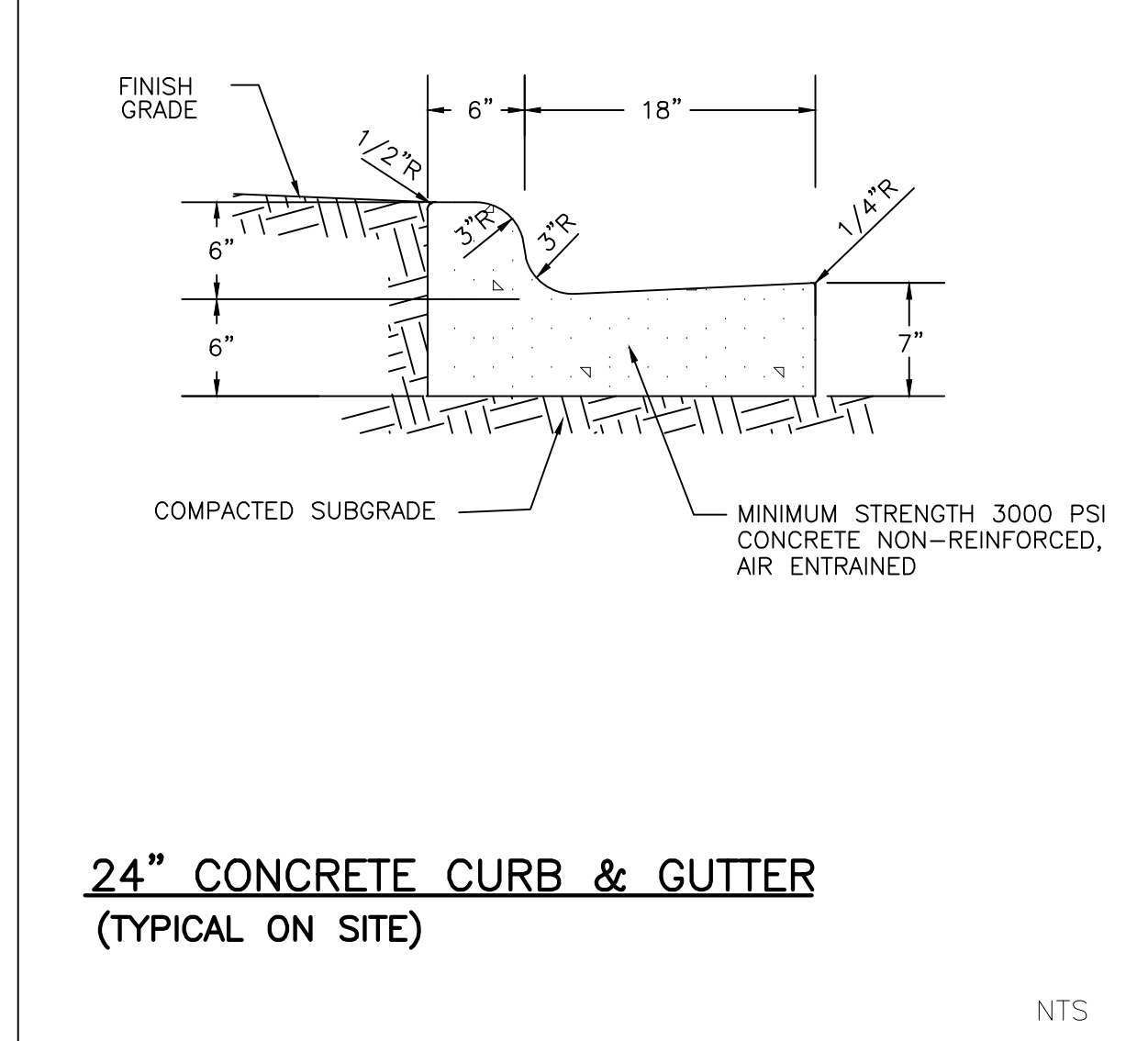
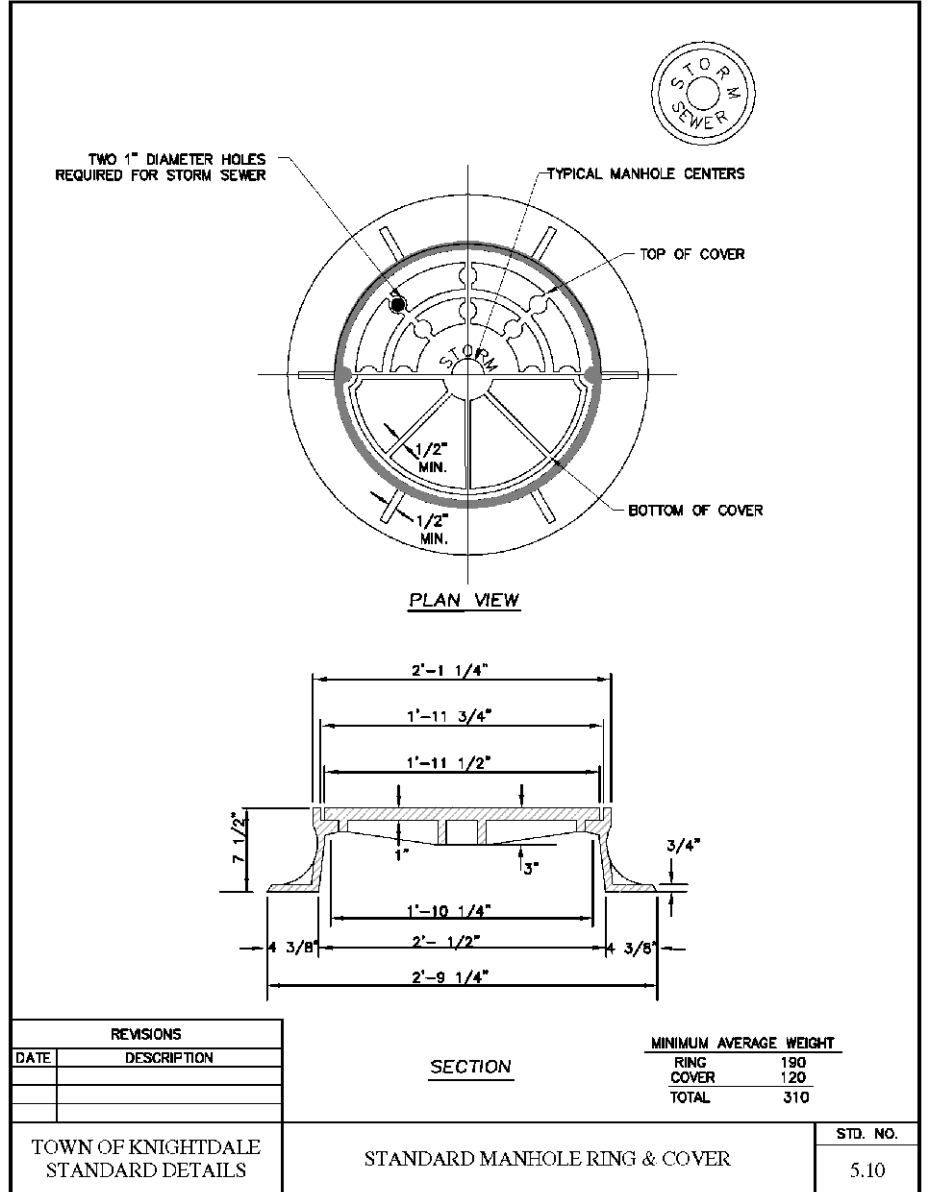
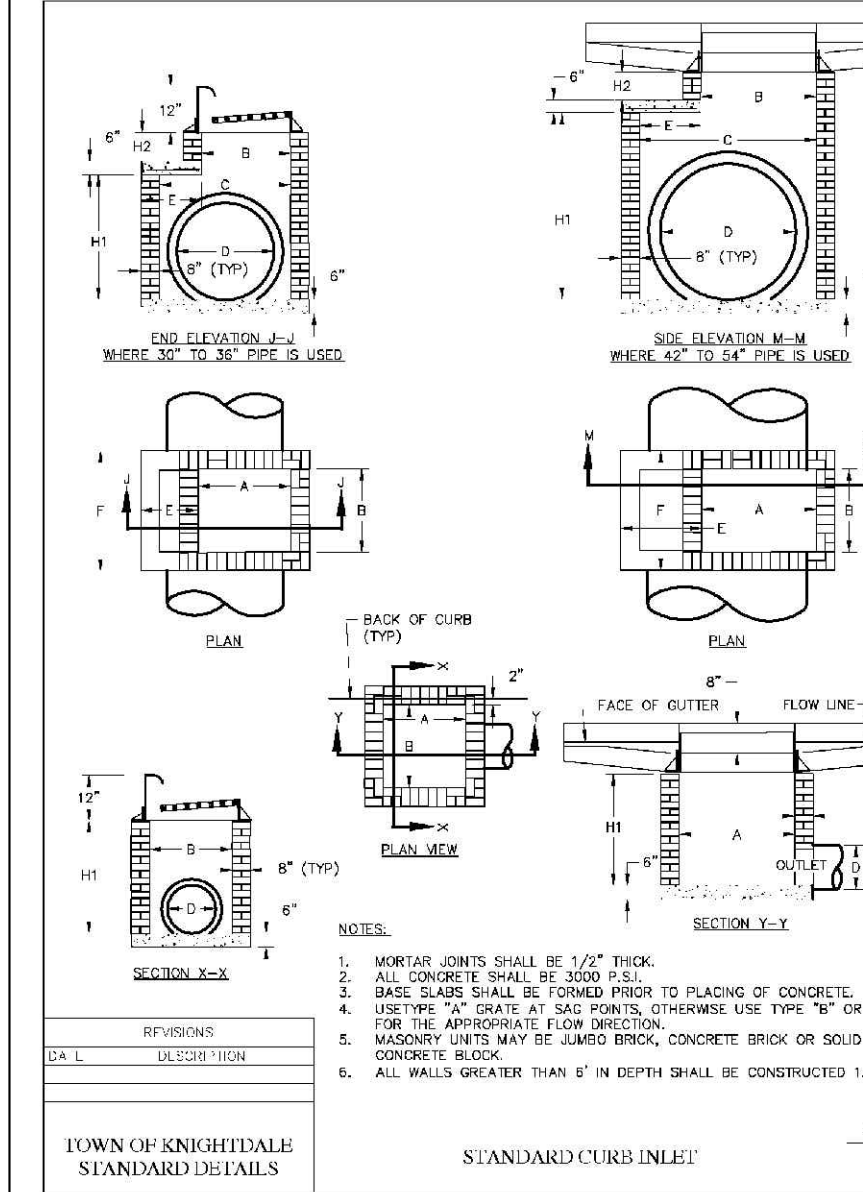
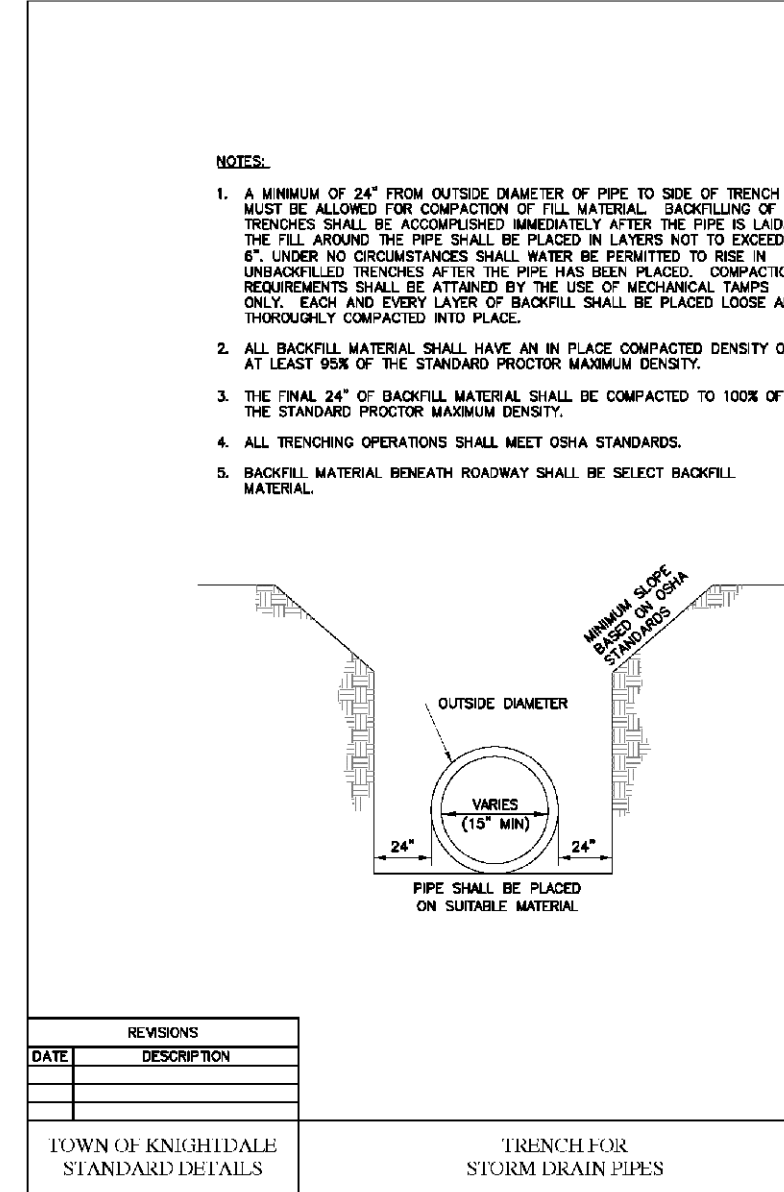
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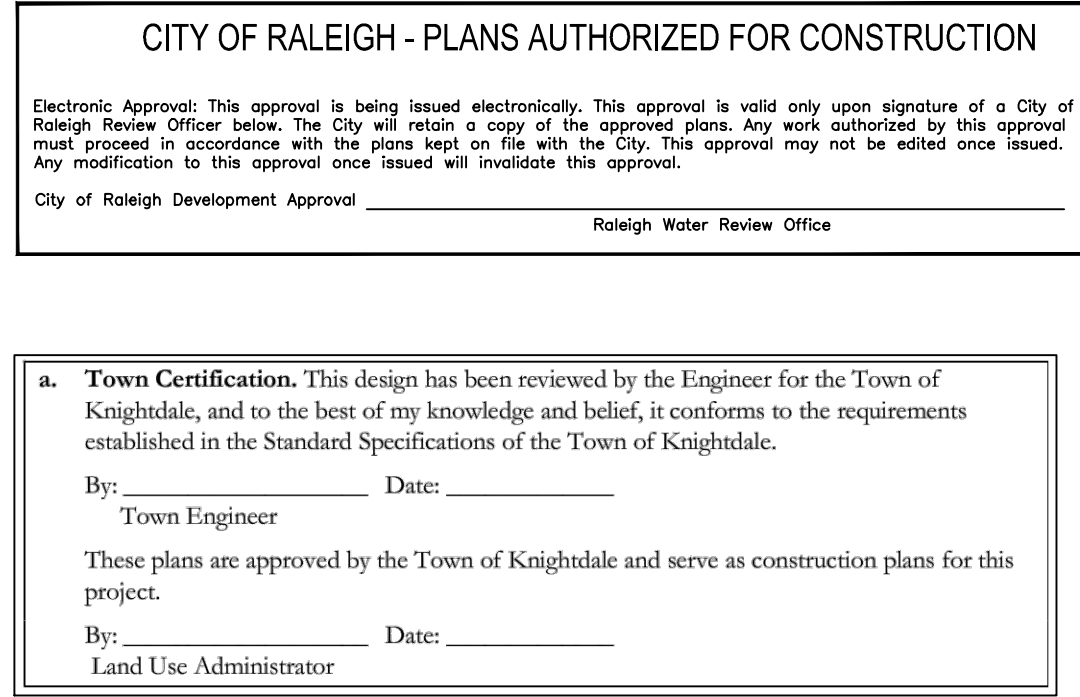
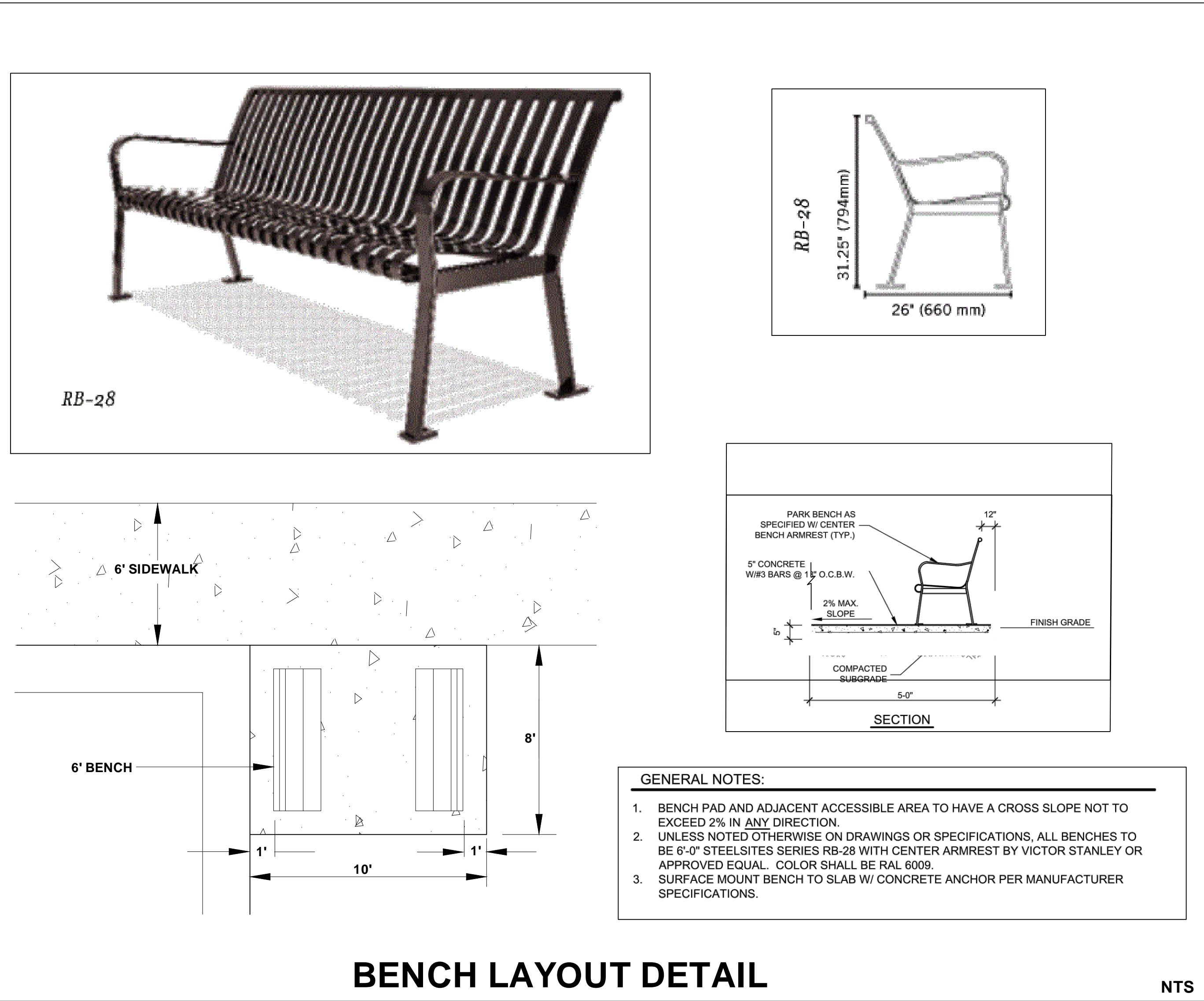
By: _____ Date: _____
Town Engineer

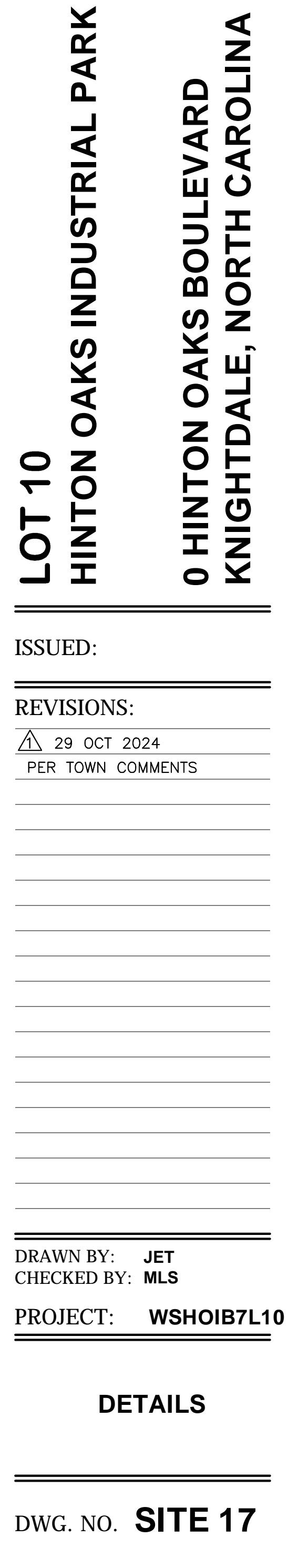
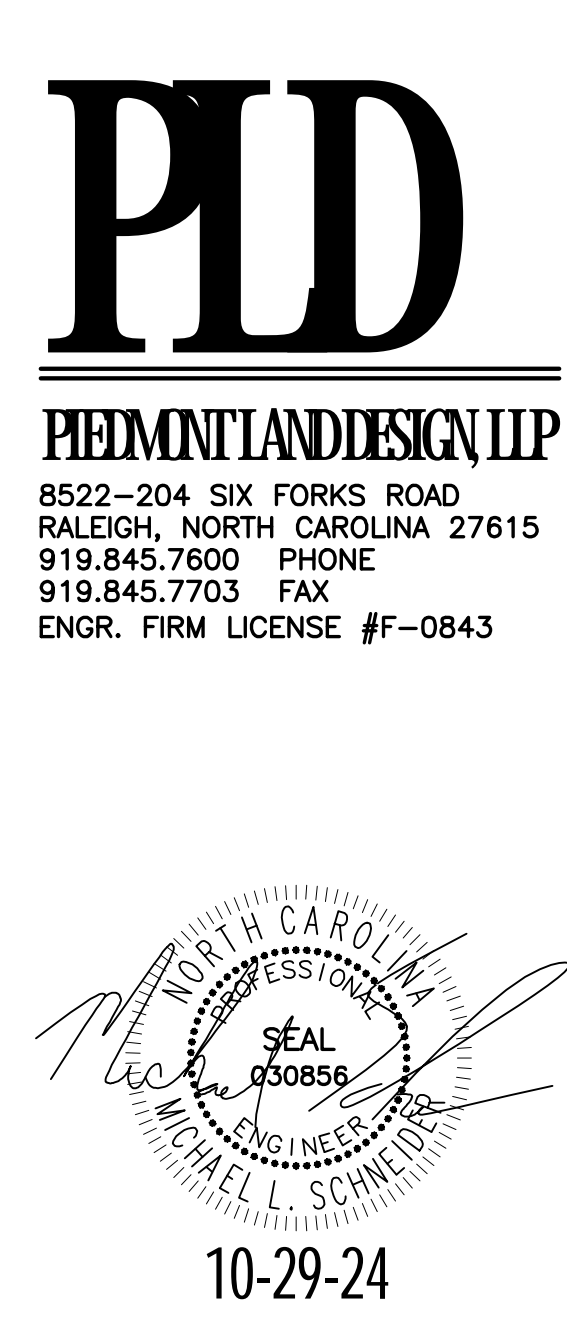
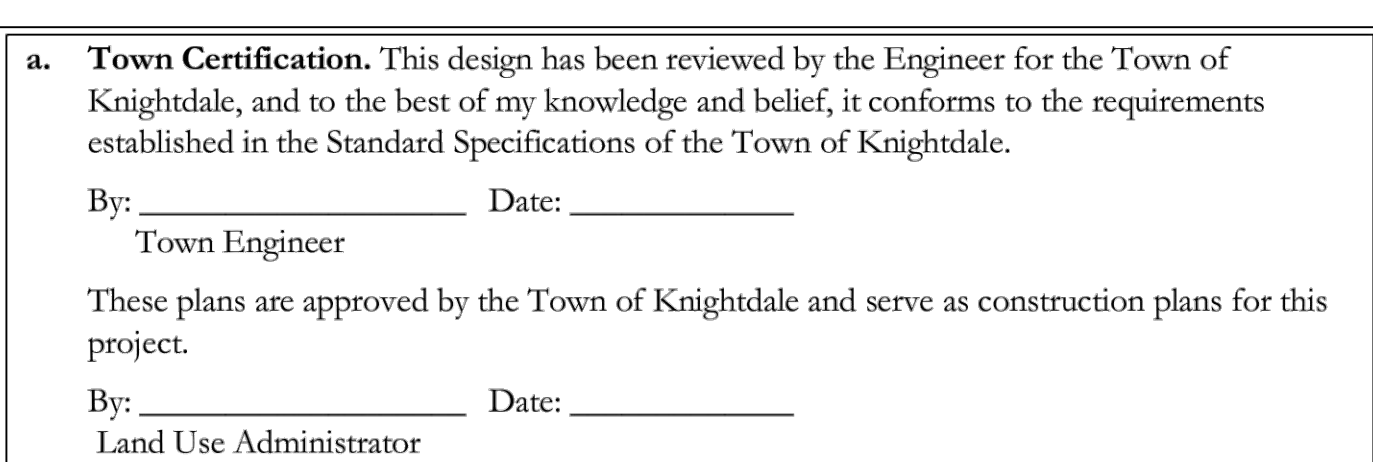
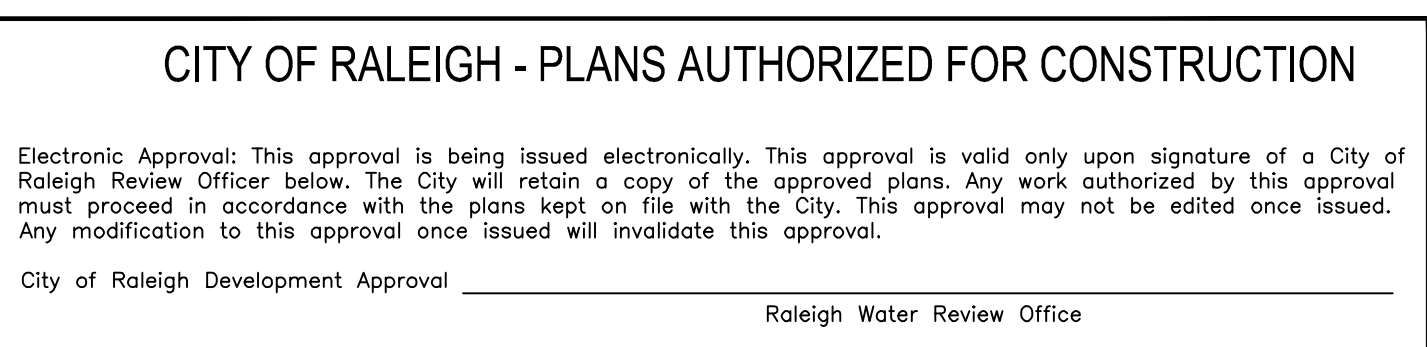
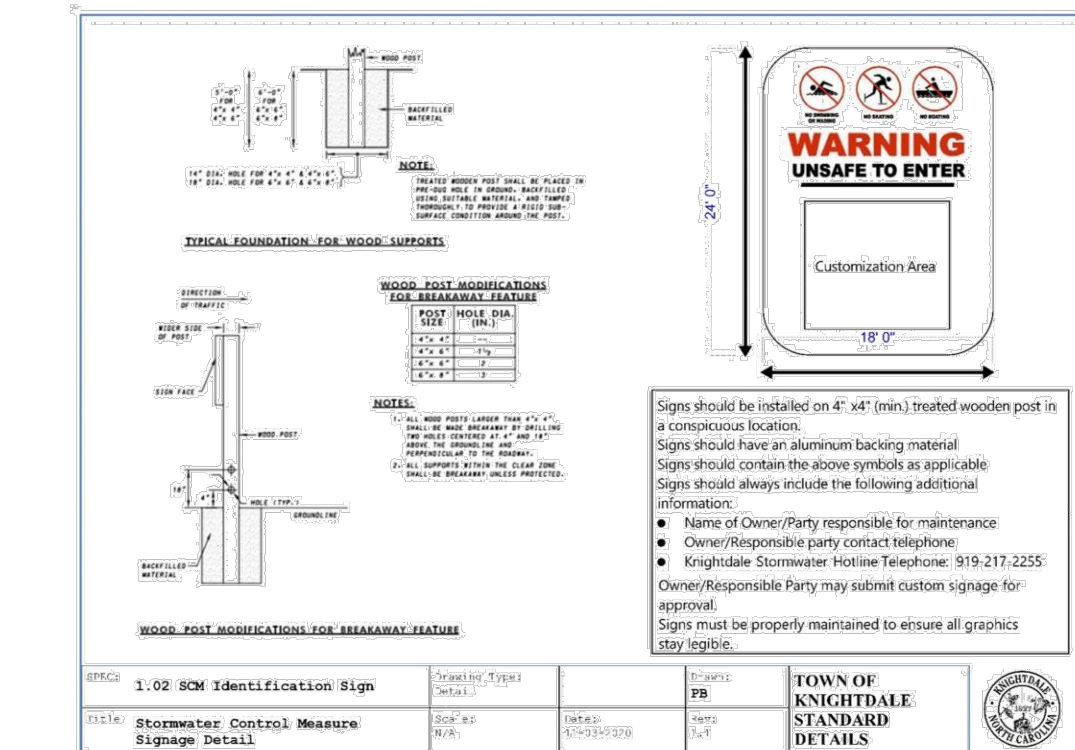
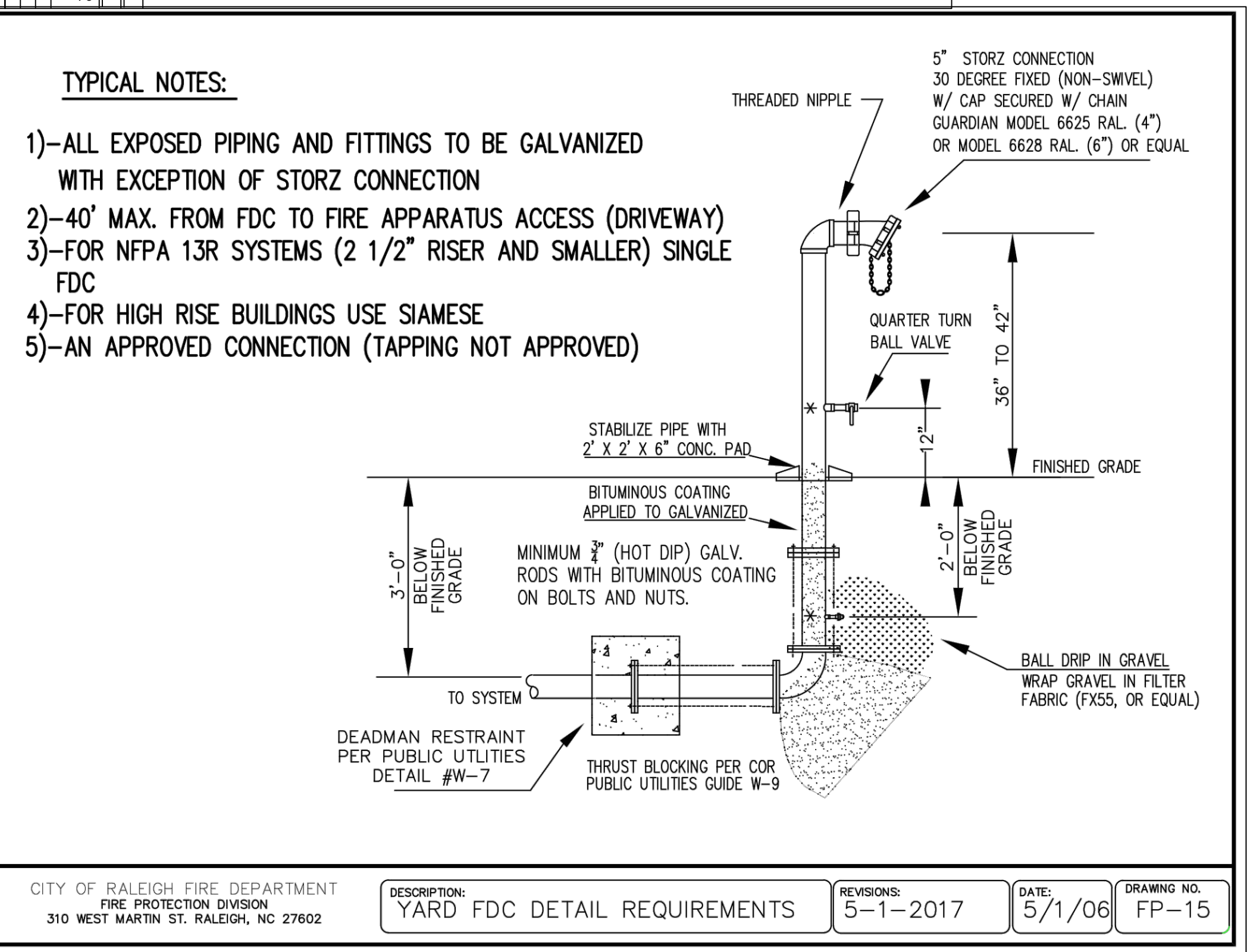
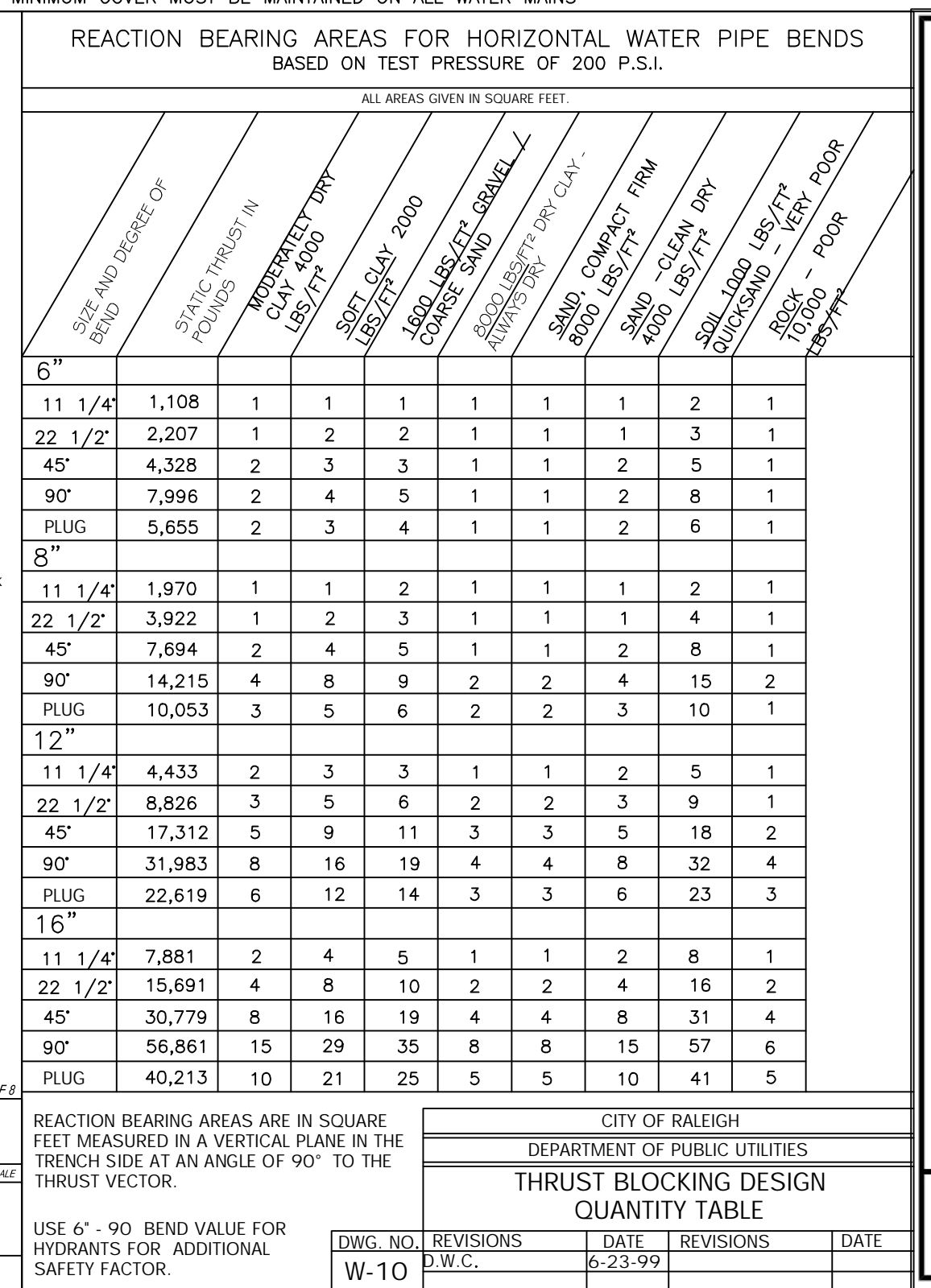
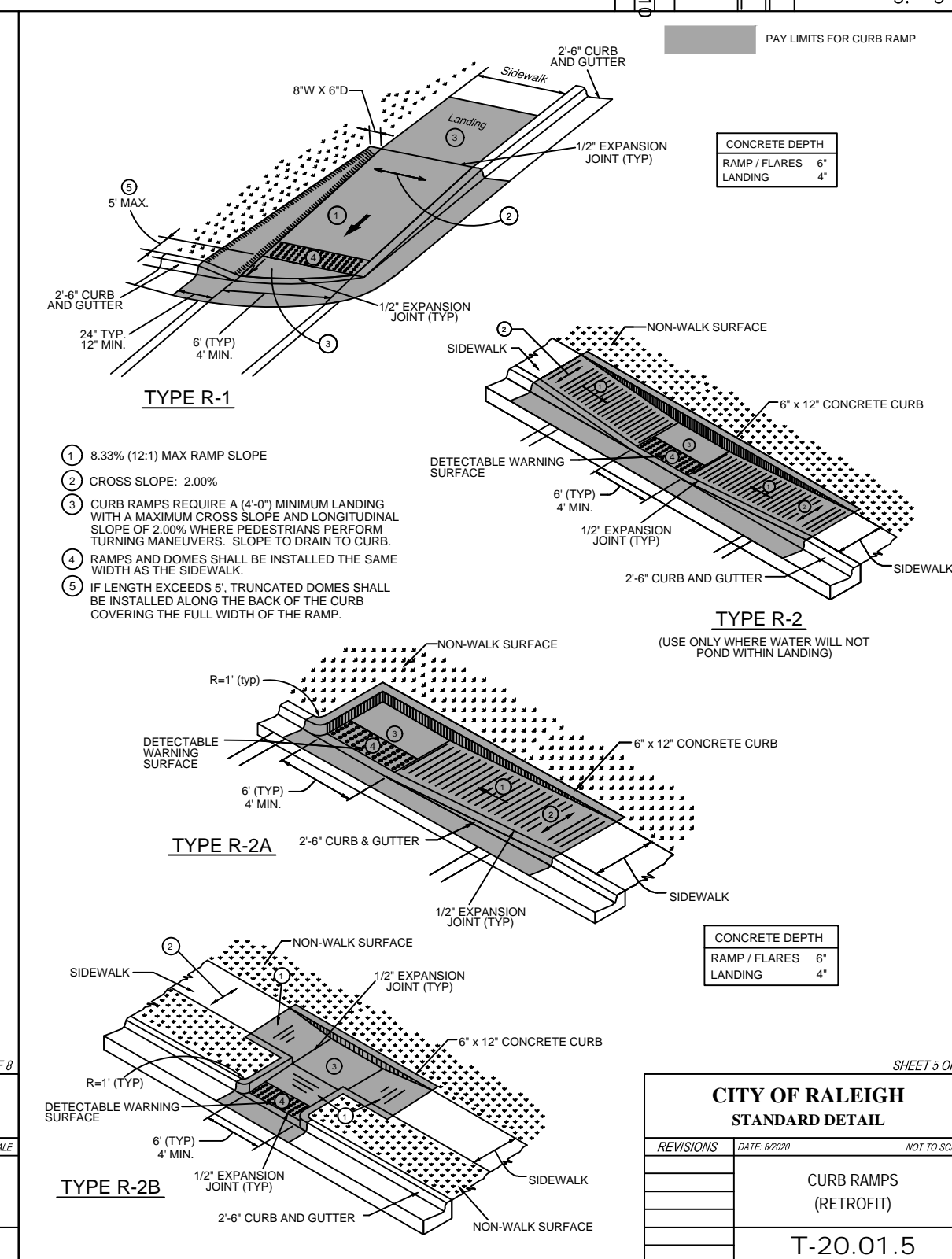
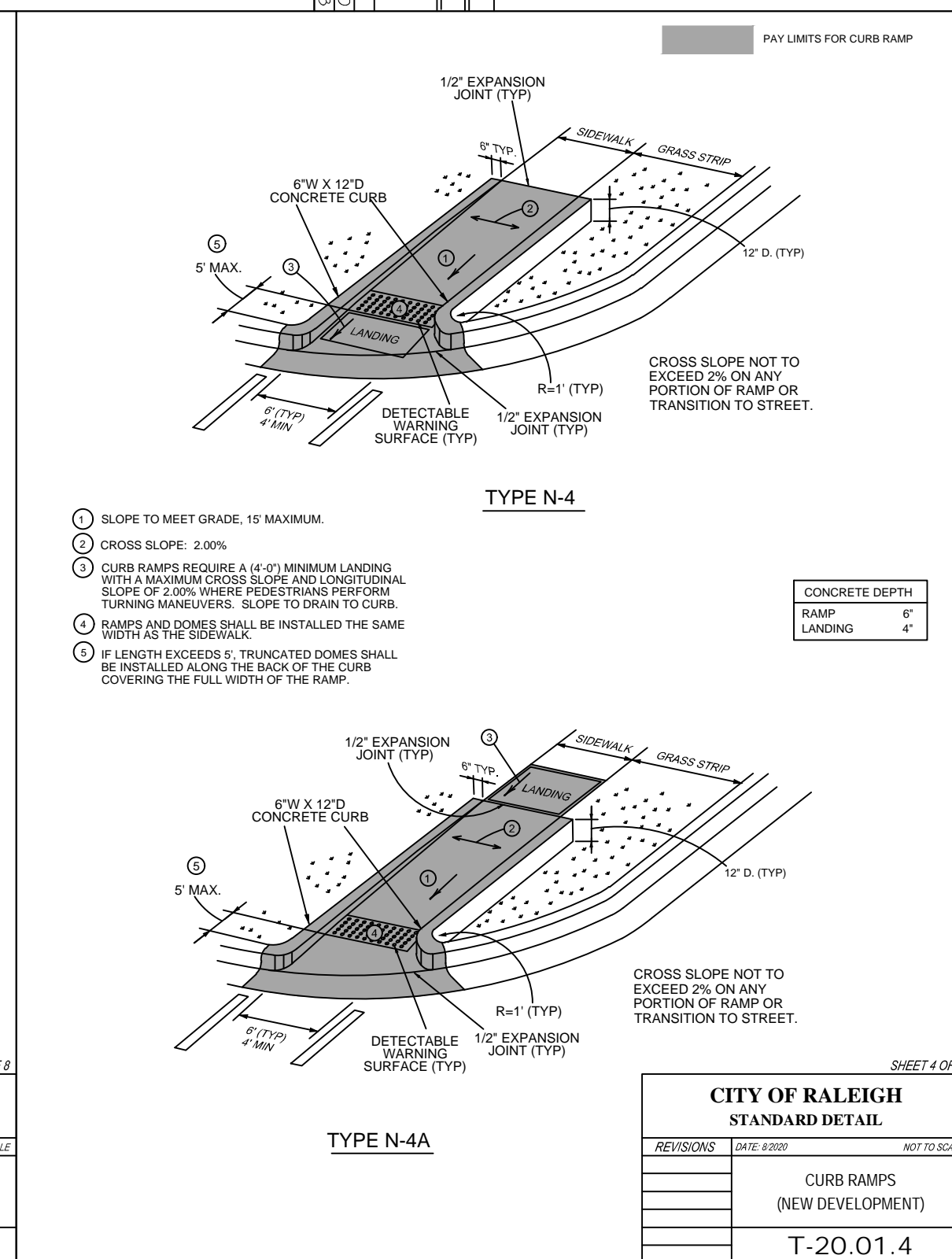
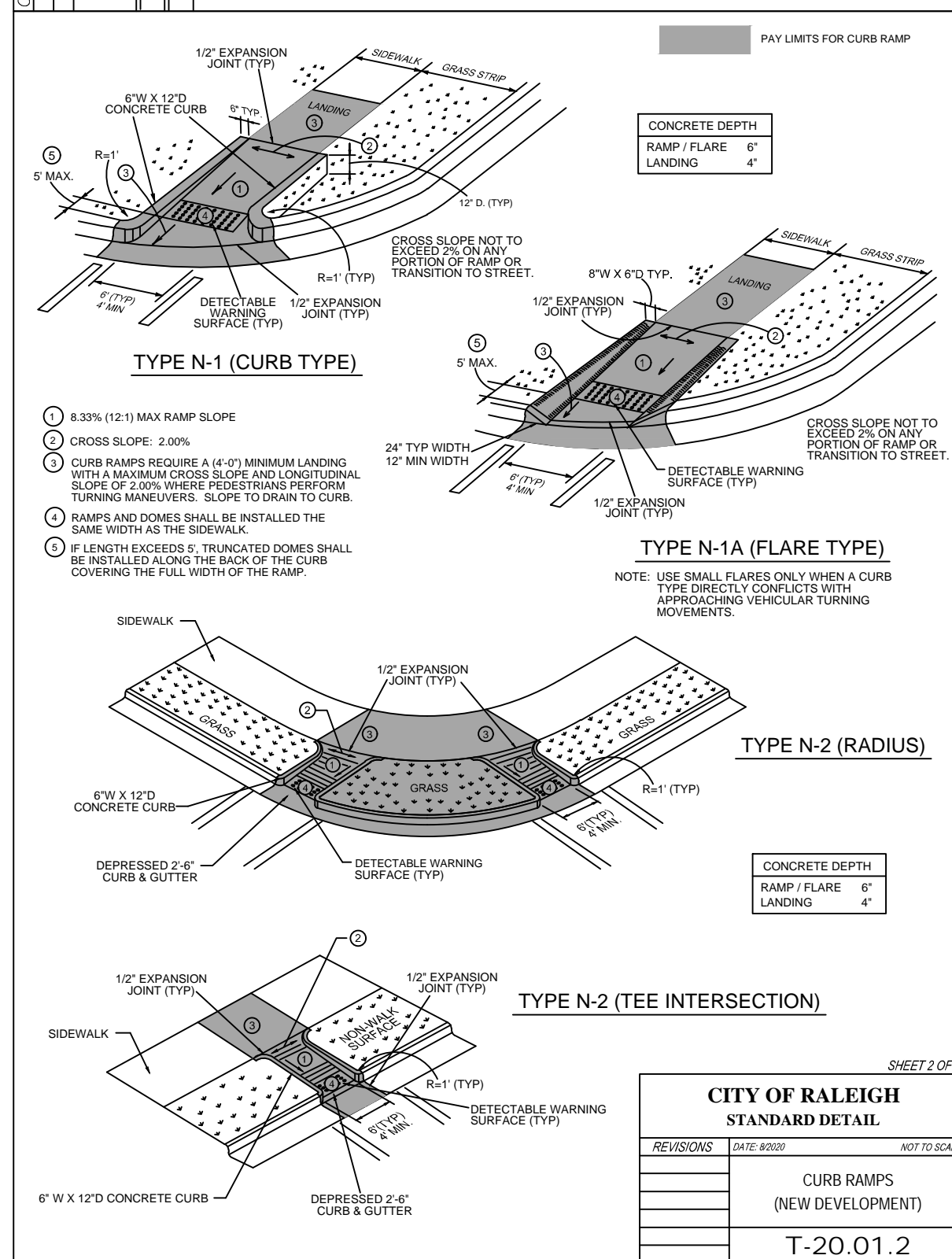
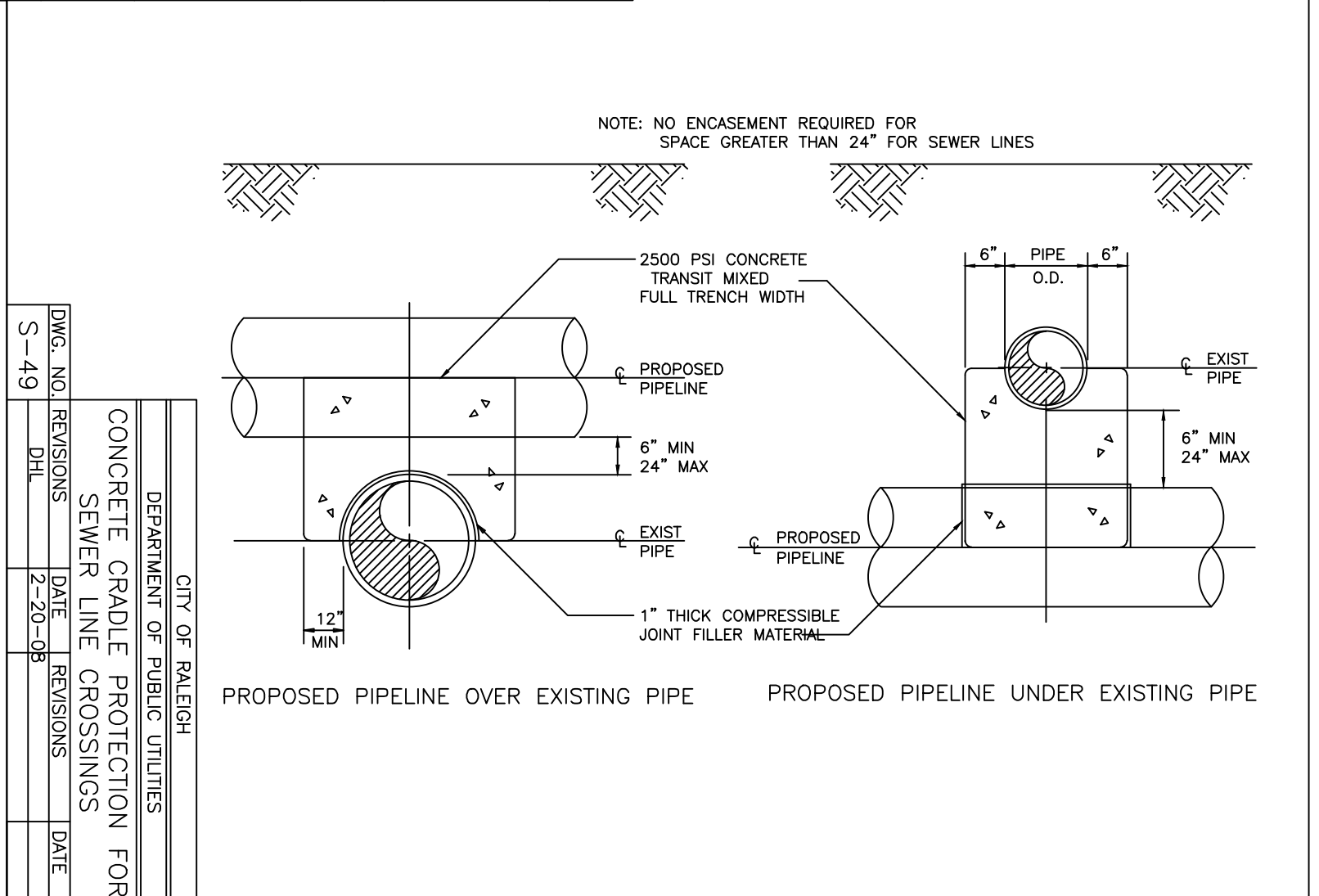
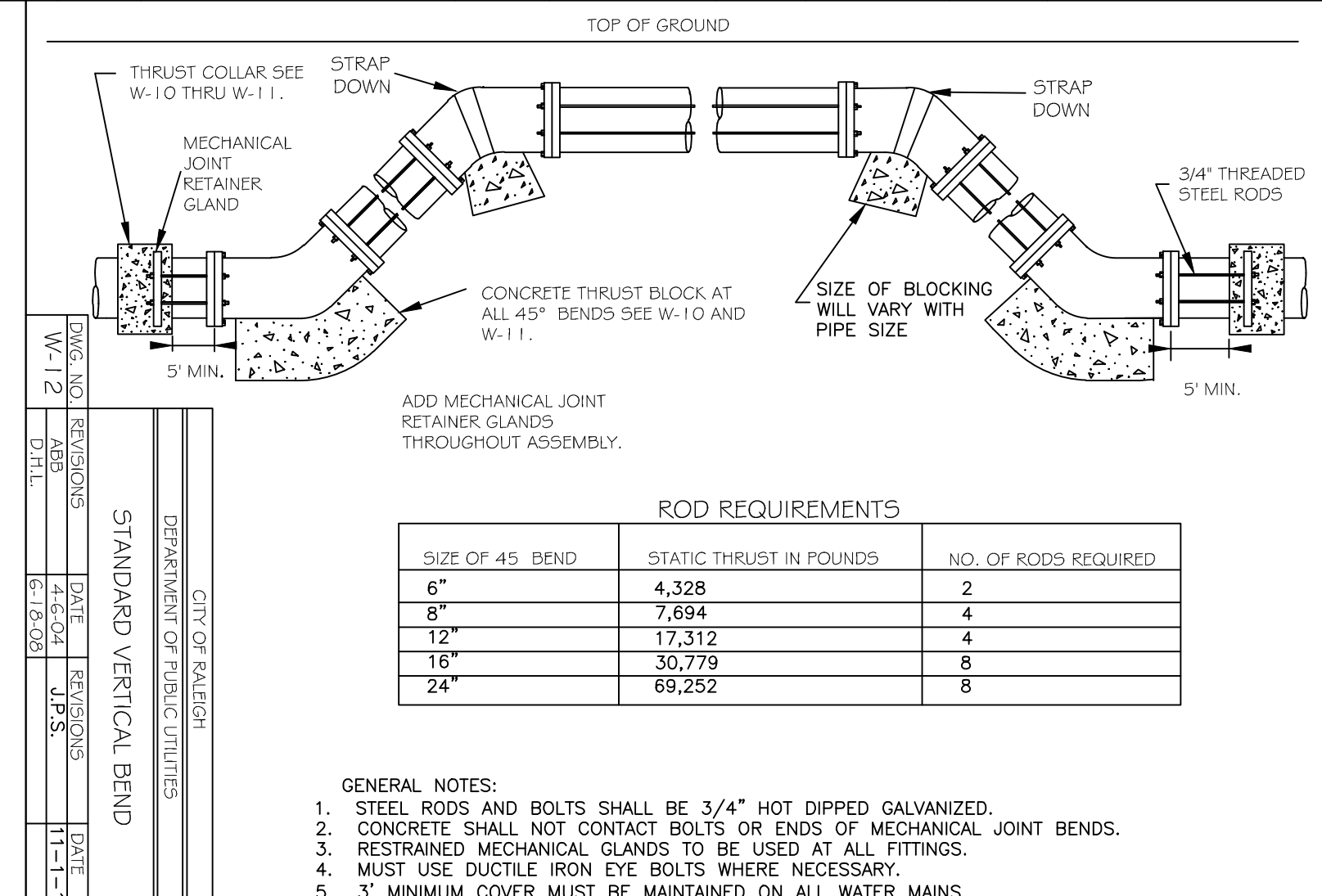
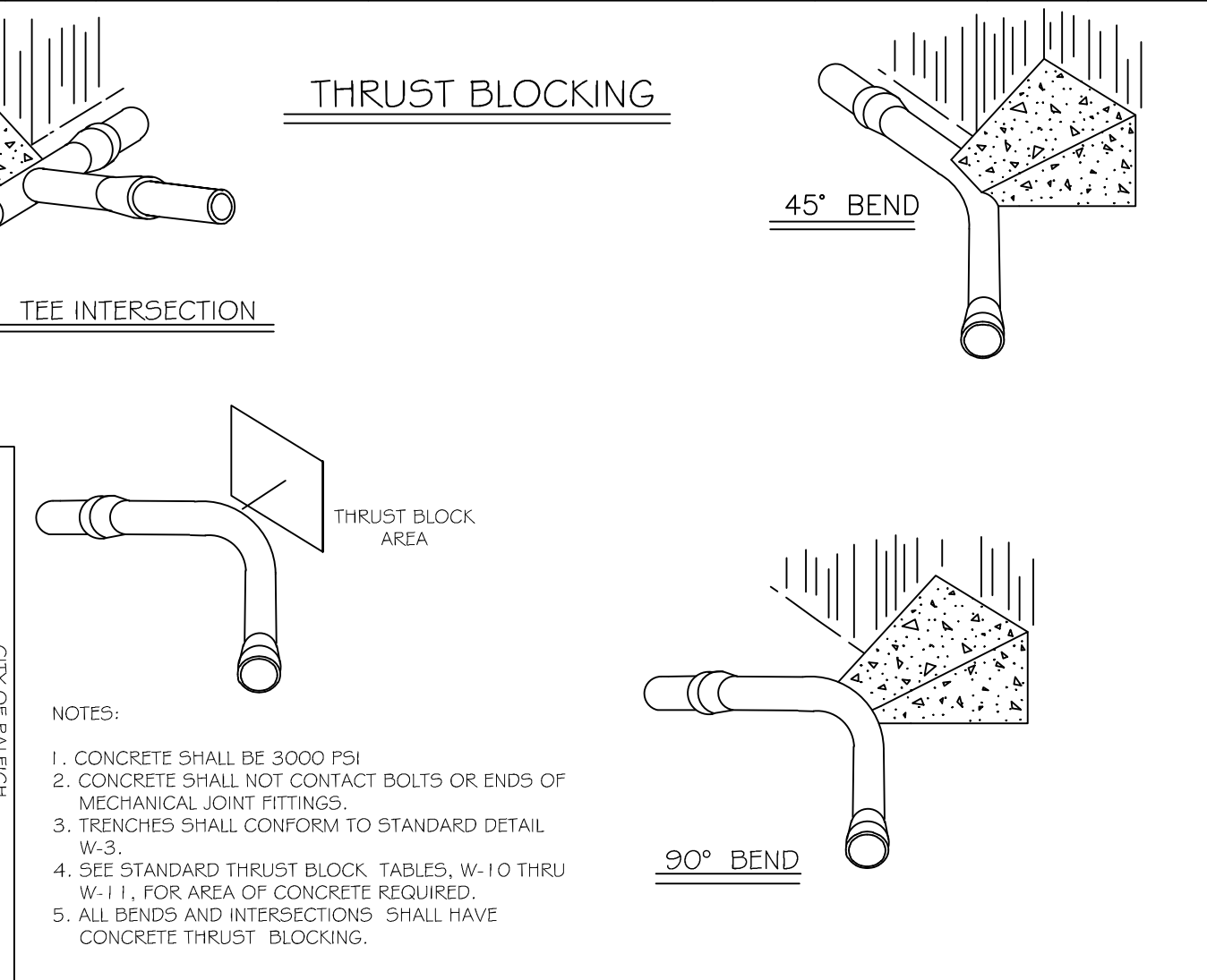
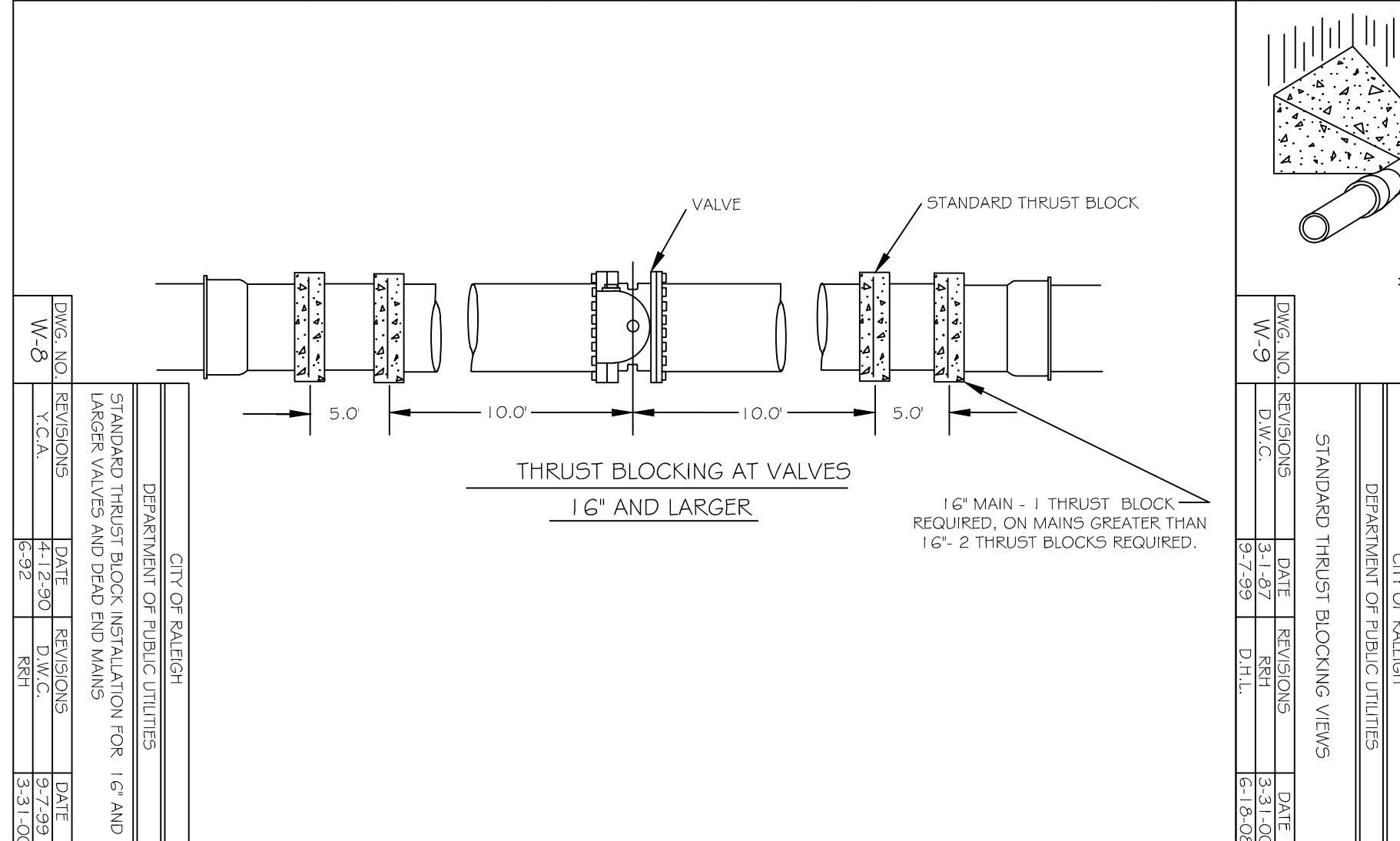
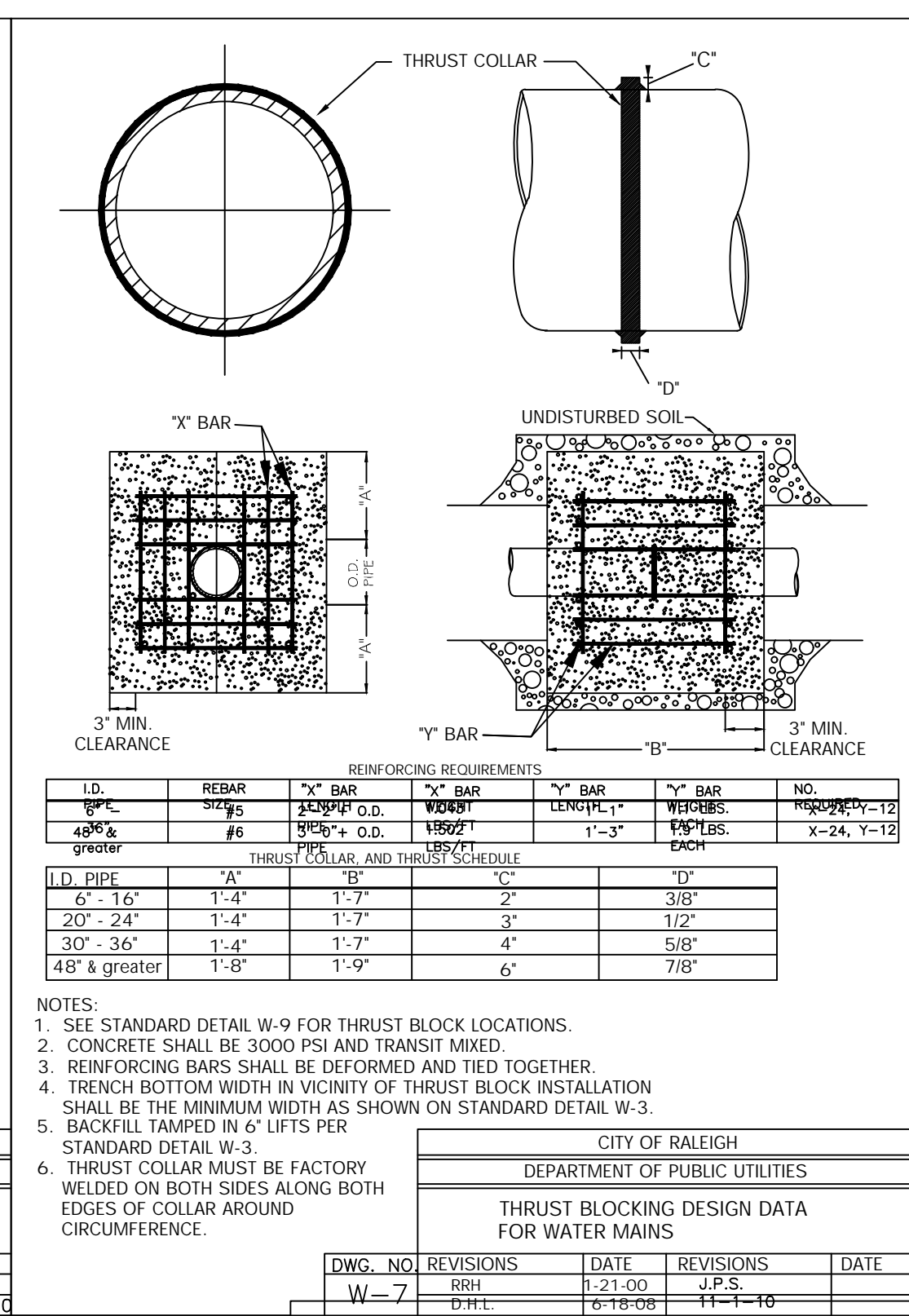
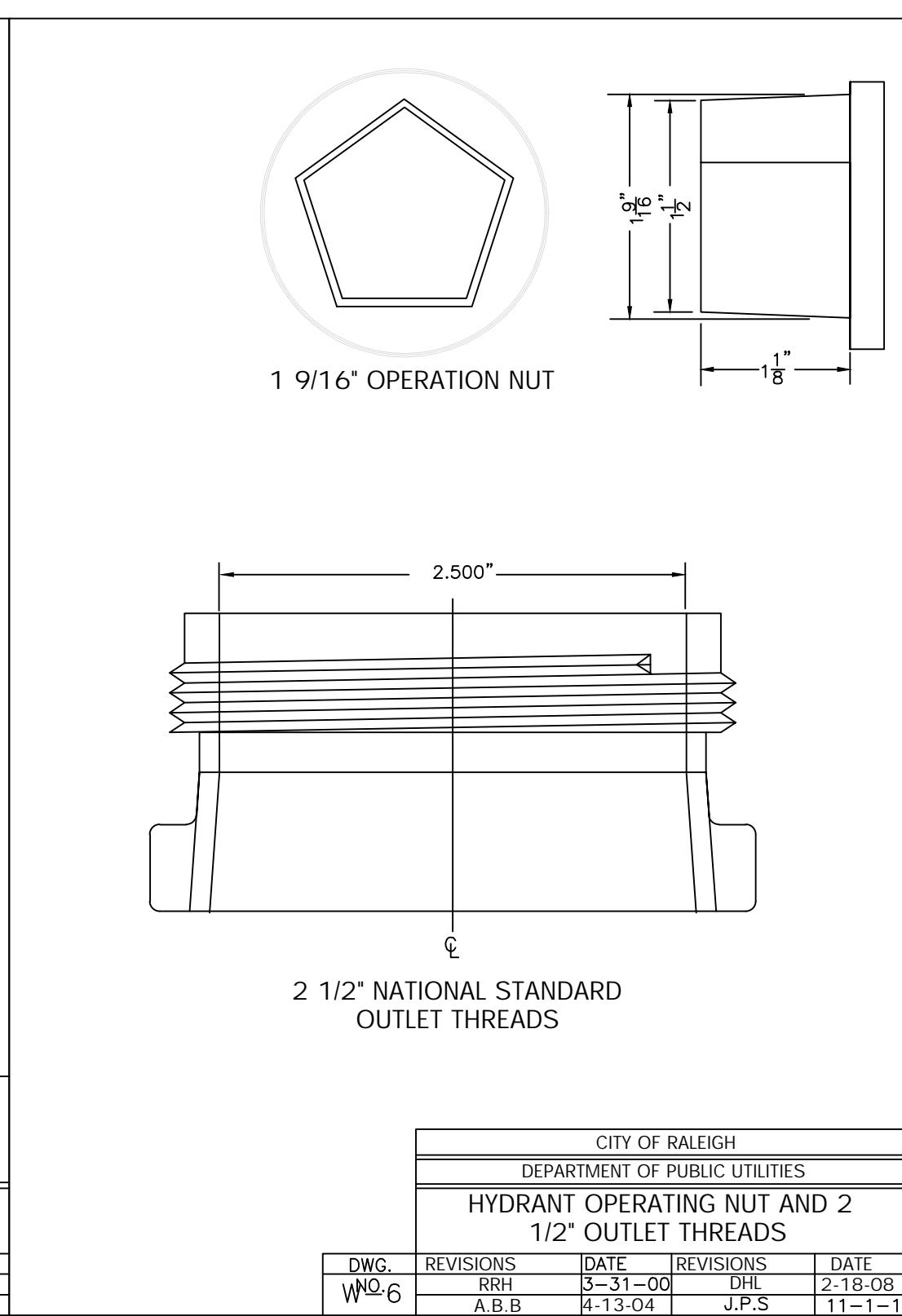
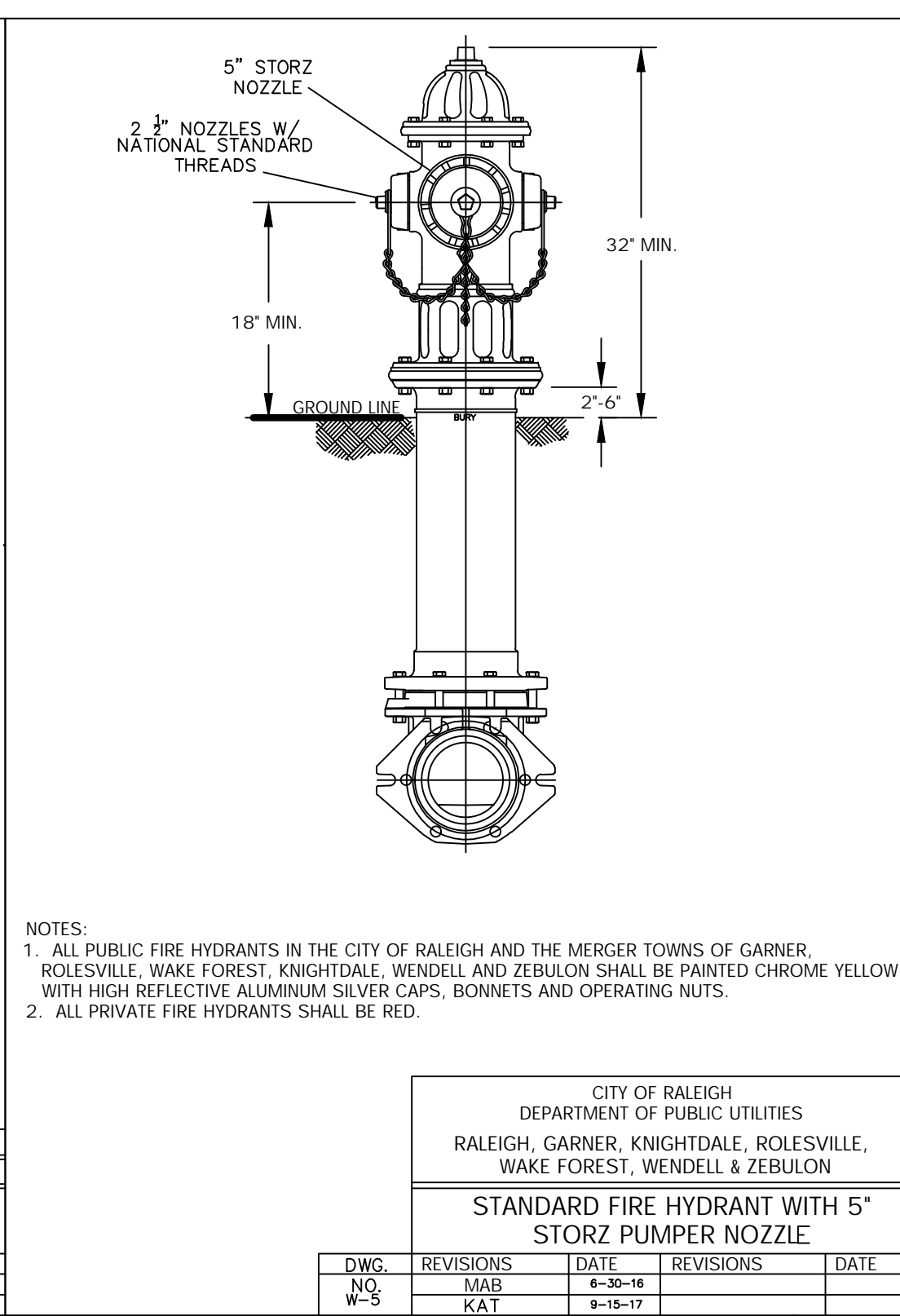
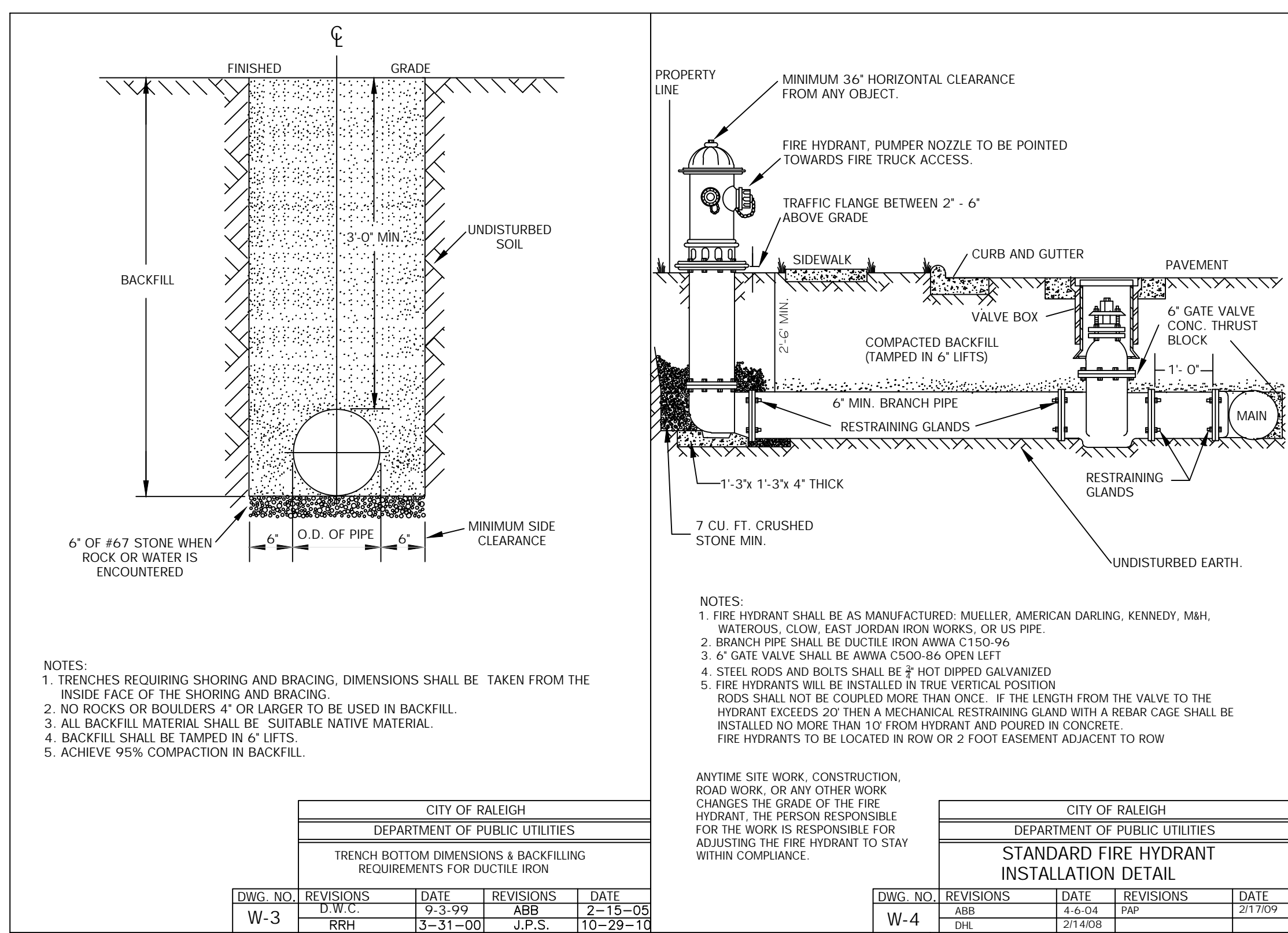
These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____
Land Use Administrator











09/16/24

SPECULATIVE WAREHOUSE
7
KNIGHTDALE -
HINTON OAKS BLVD.
KNIGHTDALE, NC

DRAWING STATUS :
● PRELIMINARY
● NOT FOR CONSTRUCTION
● ISSUED FOR BIDDING
● ISSUED FOR CONSTRUCTION

OWNER / CLIENT SIGNATURE :

DATE :

DATE	BY	APP. / SUBMITTER
09/16/24	CD	MSA

FILE NAME :

PROJECT NO.:
C22168

SHEET TITLE:
ELECTRICAL SITE
PHOTOMETRIC
PLAN

ES1

© Copyright 2024 Merriman Schmitt/Architects, Inc.

FIXTURE: LED 150 - AEL
MOUNTING HEIGHT: 25 FT
LIGHT SOURCE: 40 LED'S, 4000K, 70 CRI
LUMENS - 16461
PATTERN: TYPE IV, B3-LU-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.



Outdoor Lighting
Roadway LED



The Roadway LED is a green solution and great fit for streets, roads, long, narrow areas and parking lots. This energy-efficient luminaire delivers the light where it is needed while increasing visibility and reducing spill light to adjoining properties. Choose low to medium light output on wood or fiberglass poles (or mount on an existing pole). Available with one to four fixtures per pole, depending on the fixture/pole combination selected.

LED
(Light Emitting Diode)

50 | 75 | 105 | **150** | 215 | 280 watts

Mounting heights

25, 30, 35'

Color

Gray, Black

Poles

Fiberglass
Metal (special conditions)
Wood

For additional information, visit us at
duke-energy.com/OutdoorLighting
or call us toll free at 866-769-6417.



Outdoor Lighting
Roadway LED

Light source: LED (white)
Lumens: 4,807 - 25,050 (fixture dependent)

Wattage	Light Pattern	IESNA Backlight-Uplight -Glare (BUGI) Rating
LED 50	IESNA Type III (medium oval)	B1-UO-G1
LED 75	IESNA Type II (long oval)	B1-UO-G2
LED 105	IESNA Type II (long oval)	B2-UO-G3
LED 150	IESNA Type III (medium oval)	B2-UO-G2
LED 215	IESNA Type III (medium oval)	B3-UO-G3
LED 280	IESNA Type III (medium oval)	B3-UO-G4

Color temperature: 4,000K
Warm-up and restrike time: Instant on (no warm-up or restrike time)

Poles available:

Name	Mounting height	Color
Fiberglass	25, 30, 35'	Gray
Fiberglass	25, 30, 35'	Black (additional cost)
Wood	25, 30, 35'	Standard
Metal (special conditions)*	25, 30, 35'	Gray

Features	Benefits
Little or no installation cost	Frees up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance included	Eliminates high and unexpected repair bills
Electricity included	Less expensive than metered service
Warranty included	Worry-free
One low monthly cost on your electric bill	Convenience and savings for you
Turnkey operation	Provides hassle-free installation and service

Backed by over 40 years of experience
A name you can trust today ... and tomorrow

*2" raised foundation available when required.

©2015 Duke Energy Corporation 151307 7115

Statistics				
Description	Avg	Max	Min	Avg/Min
parking	1.3 fc	5.2 fc	0.2 fc	6.5:1

ASSY#
LFIX-RW-LED-150-GRAY-IV-MULTIV-____-P
POLE ASSY#
LPOLE-DB-FG-30FT-GRAY-____-P (GRAY)

NEW BUILDING - 7

ELECTRICAL SITE PHOTOMETRIC PLAN
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.

By: Development Services Engineer

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

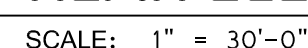
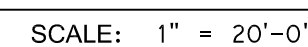
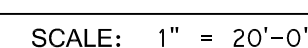
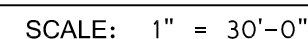
By: _____
Administrator

MIN. 36' CLEAR UNDER STRUCTURE - TYP.

[illegible]

Date: _____

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MIN. 36' CLEAR UNDER STRUCTURE - TYPE






SPECULATIVE WAREHOUSE
KNIGHTDALE - 7
HINTON OAKS BLVD.
KNIGHTDALE, NC

DRAWING STATUS :

- ☐ PRELIMINARY
NOT FOR CONSTRUCTION
- ☐ ISSUED FOR
BIDDING
- ☒ ISSUED FOR
CONSTRUCTION

[illegible]

DATE : _____

PAINT LEGEND		
LEGEND	LABEL	TYPE
	"A" FIELD COLOR	SHERWIN WILLIAMS SW7014 EGG WHITE
	"B" ACCENT COLOR	SHERWIN WILLIAMS SW7016 MINDFUL GRAY
	"C" ACCENT COLOR	SHERWIN WILLIAMS SW7018 DOVETAIL
	ANNEALED GLASS	1", THERMALLY BROKEN, GREY SILINGUARD SN-68
	TEMPERED GLASS	1", THERMALLY BROKEN, GREY SILINGUARD SN-68

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.

By: _____
Development Services Engineer

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By: _____
Administrator

Date: _____

FILE NAME /

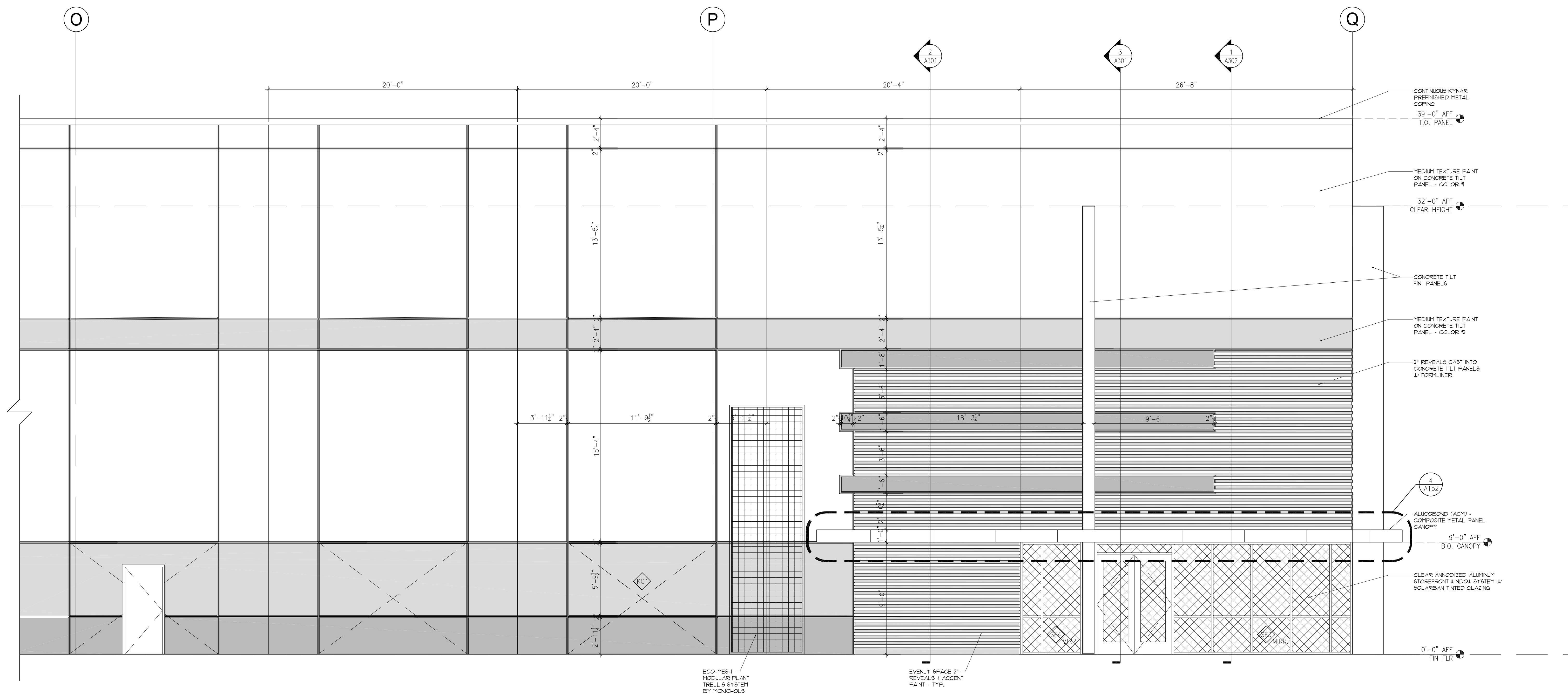
PROJECT NO.:
C22168

SHEET TITLE :
**ENLARGED
ELEVATIONS**

SHEET 1

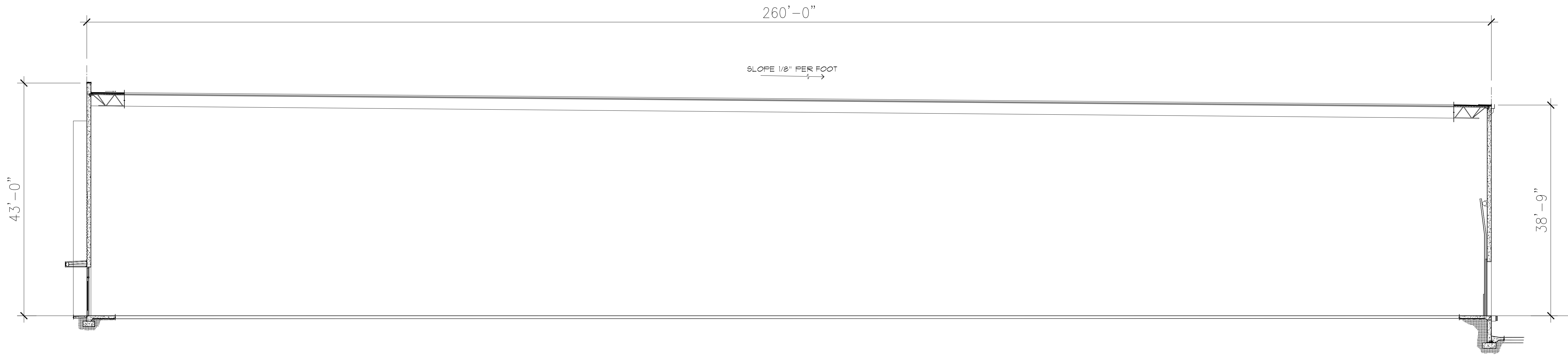
A202

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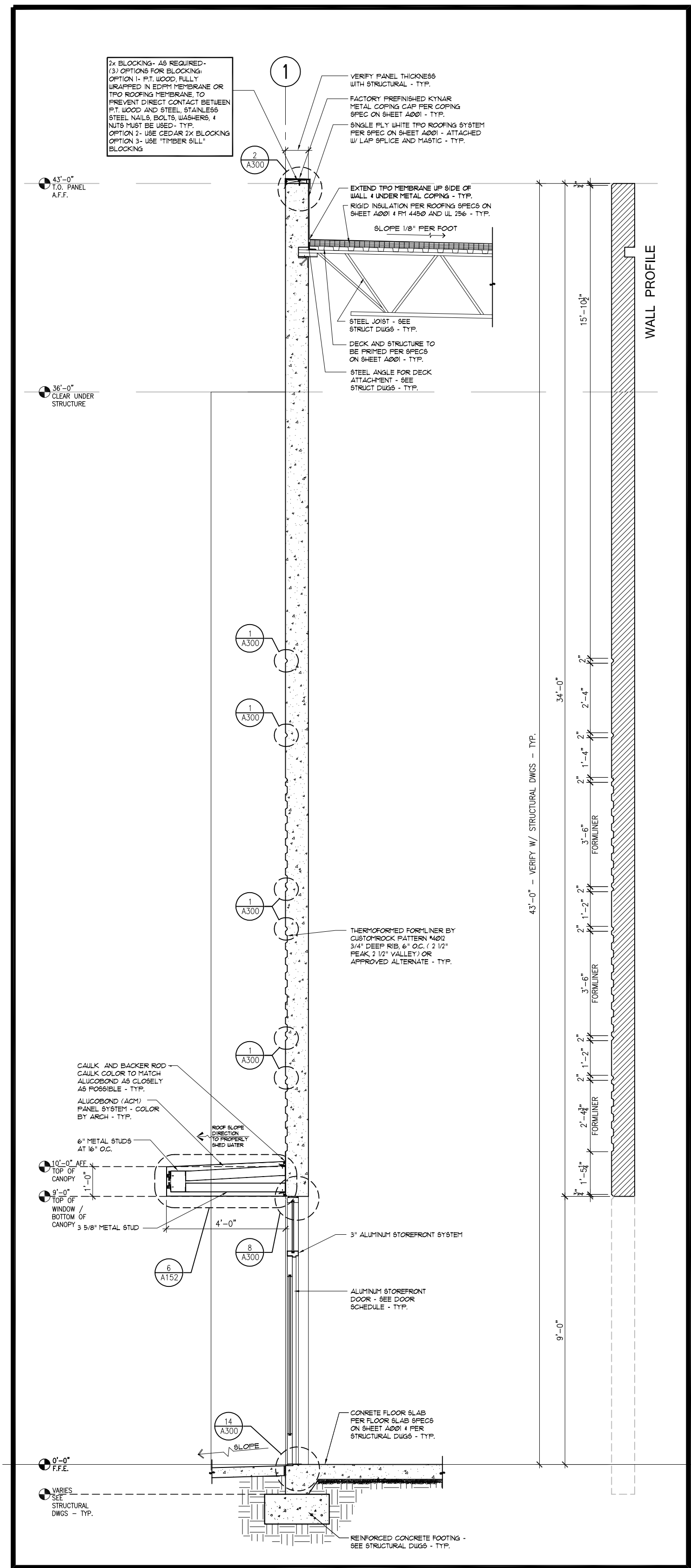


1 ENLARGED FRONT ELEVATION
SCALE: 1/4" = 1'-0"

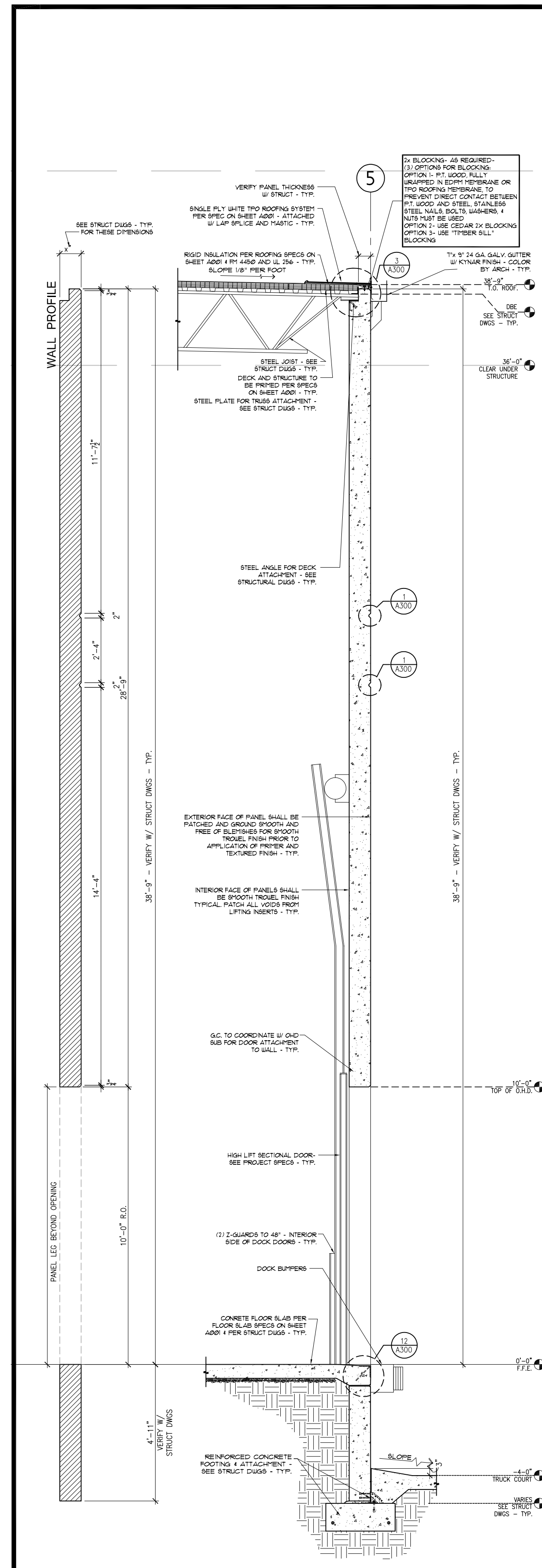
MIN. 36' CLEAR UNDER STRUCTURE - TYP.



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



2 ENLARGED WALL SECTION @ FRONT ENTRY
SCALE: 3/8" = 1'-0"



3 ENLARGED WALL SECTION @ LOADING DOCK
SCALE: 3/8" = 1'-0"

FOR SITE APPROVAL ONLY

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By: Development Services Engineer

Date: _____

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By: Administrator

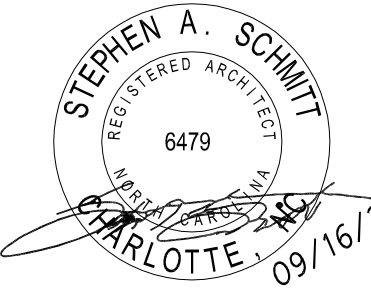
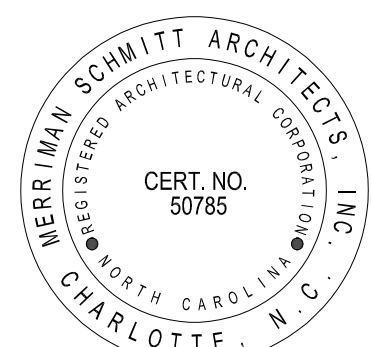
Date: _____

MIN. 36' CLEAR UNDER STRUCTURE - TYP.

DEVELOPER / OWNER

GENERAL CONTRACTOR

SEALS



SPECULATIVE WAREHOUSE - 7
KNIGHTDALE - 7
HINTON OAKS BLVD.
KNIGHTDALE, NC

DRAWING STATUS :

- ☐ PRELIMINARY
- ☐ NOT FOR CONSTRUCTION
- ☐ ISSUED FOR BIDDING
- ☒ ISSUED FOR CONSTRUCTION

OWNER / CLIENT SIGNATURE :

DATE :

DATE	REVISION
03/10/24	1.00
03/10/24	1.01
03/10/24	1.02
03/10/24	1.03
03/10/24	1.04
03/10/24	1.05
03/10/24	1.06
03/10/24	1.07
03/10/24	1.08
03/10/24	1.09
03/10/24	1.10
03/10/24	1.11
03/10/24	1.12
03/10/24	1.13
03/10/24	1.14
03/10/24	1.15
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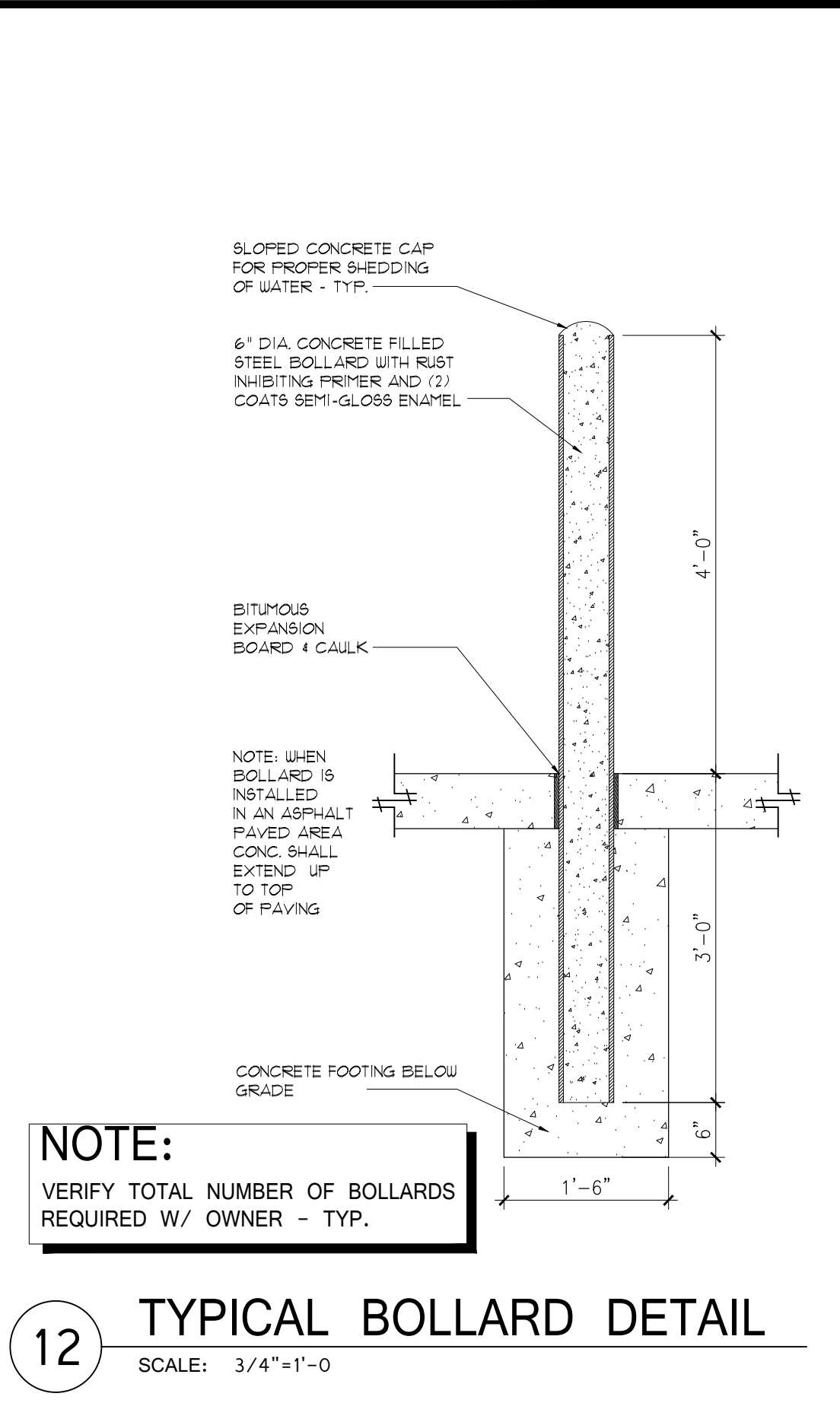
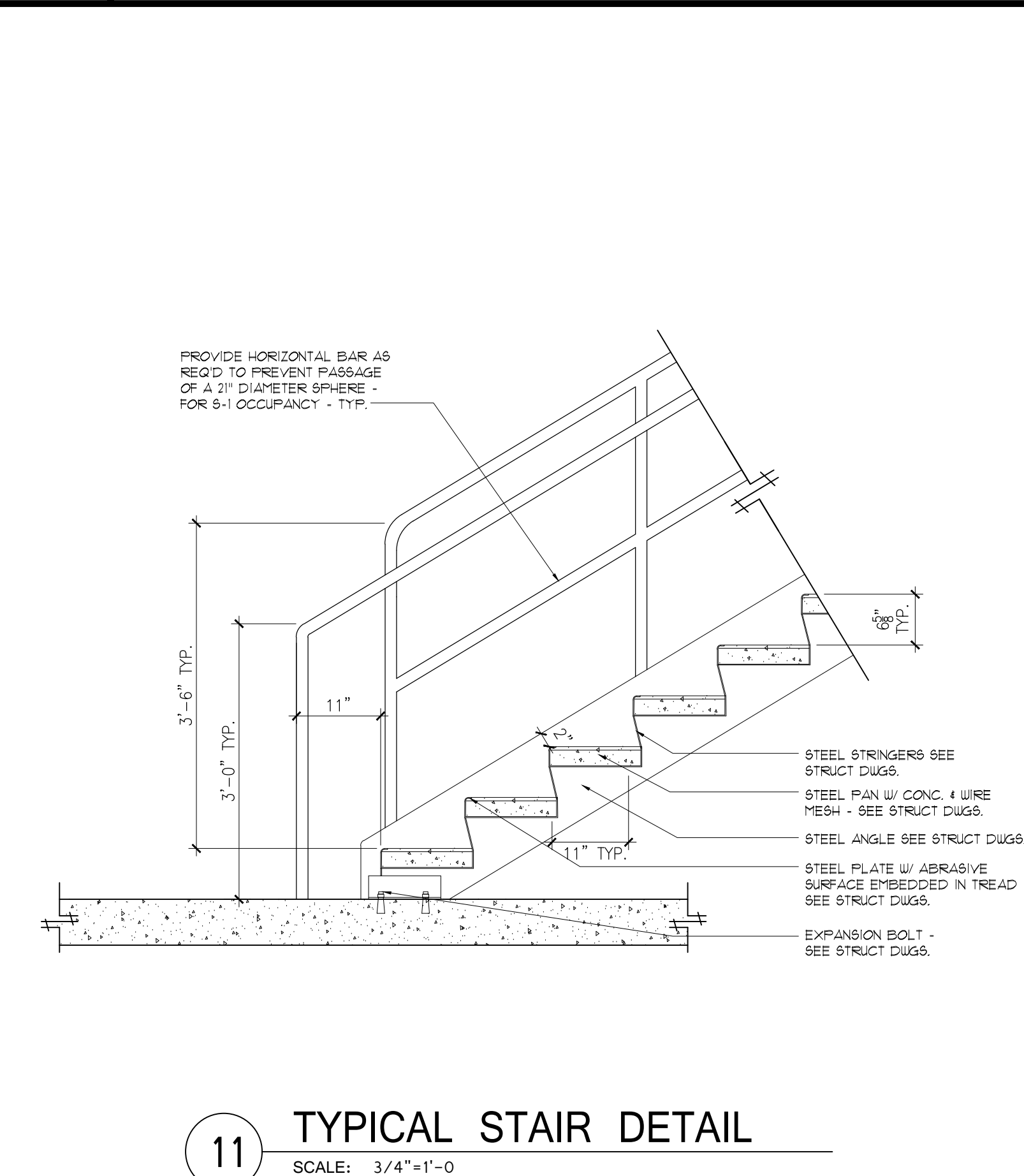
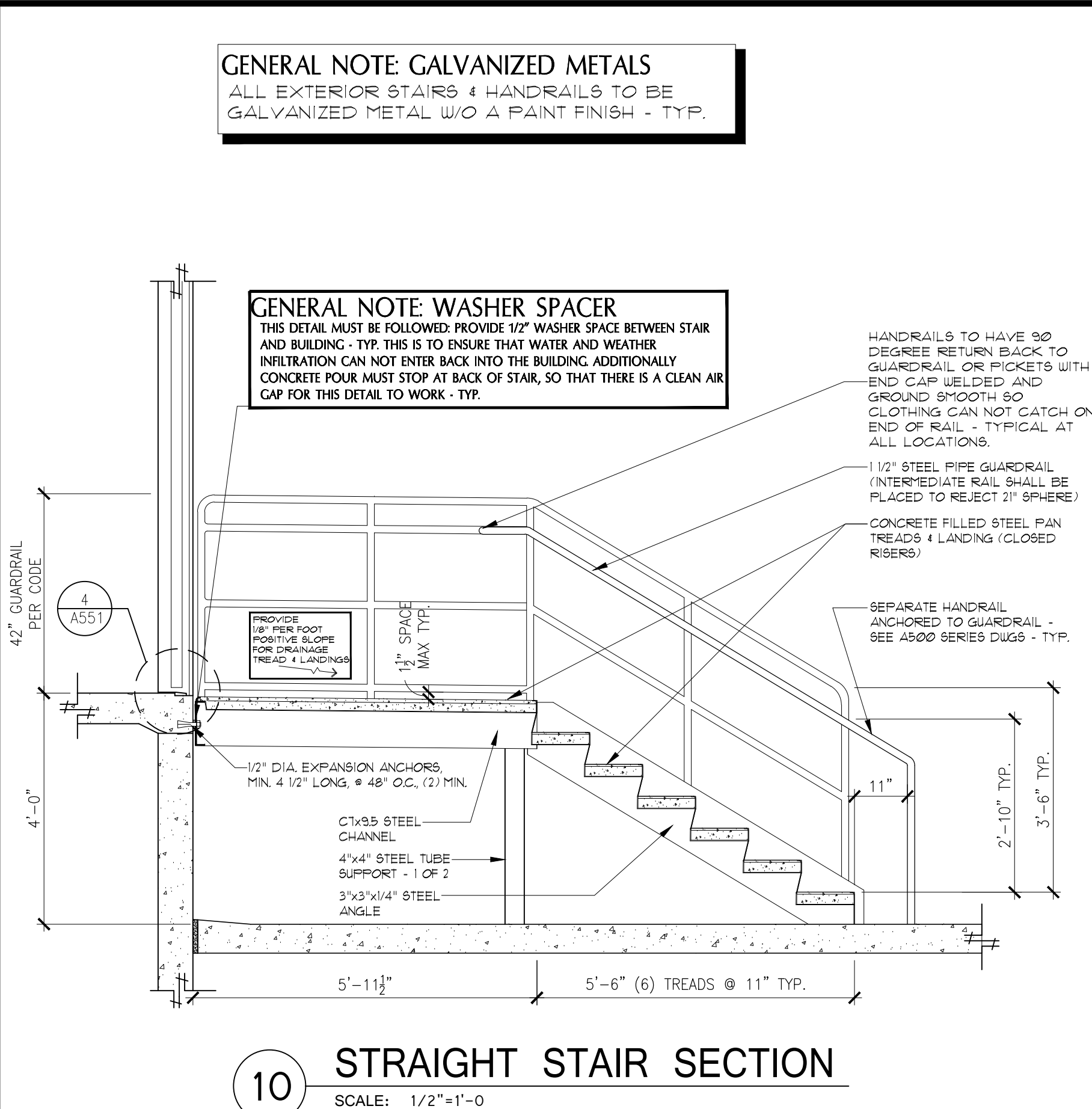
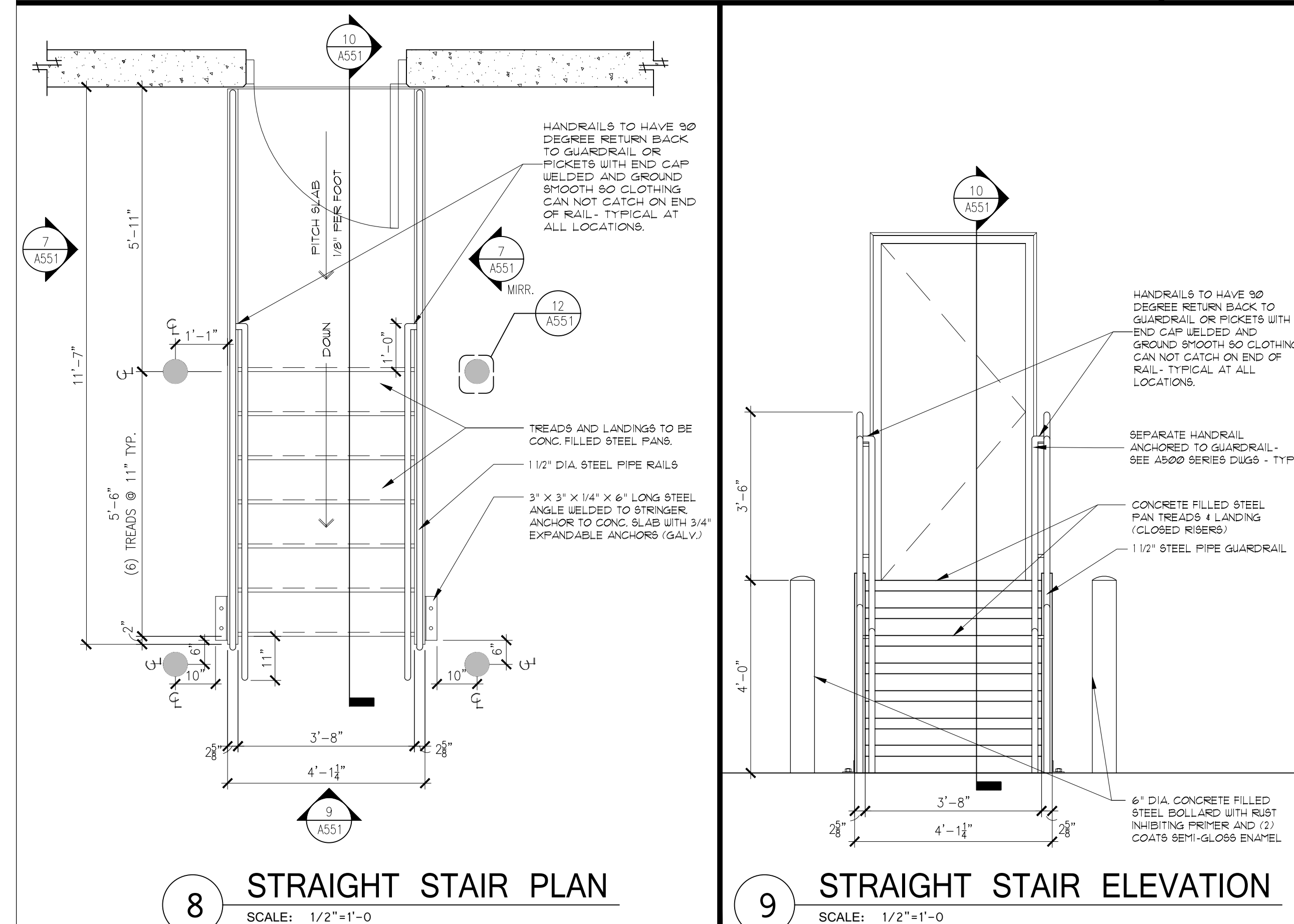
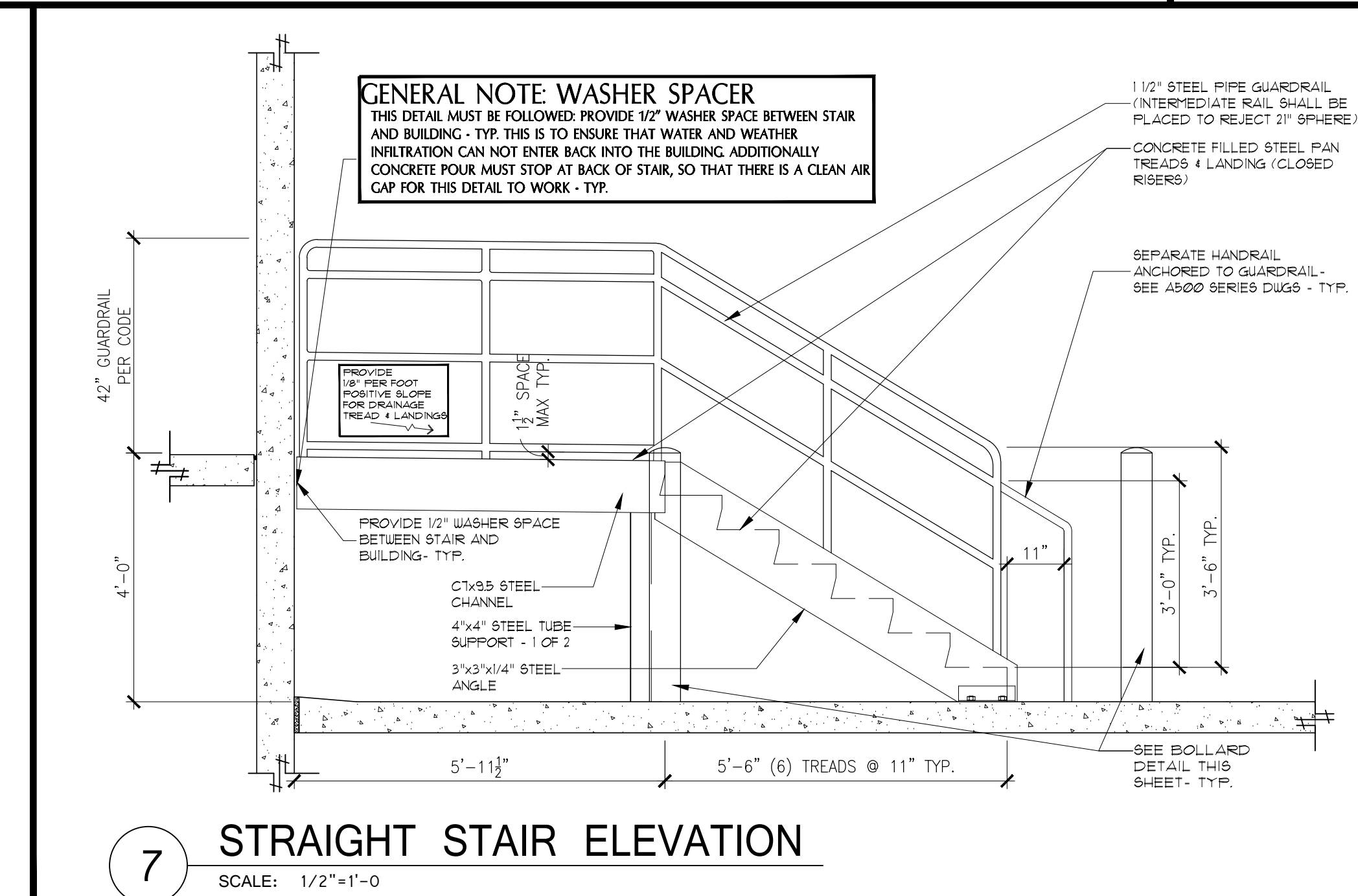
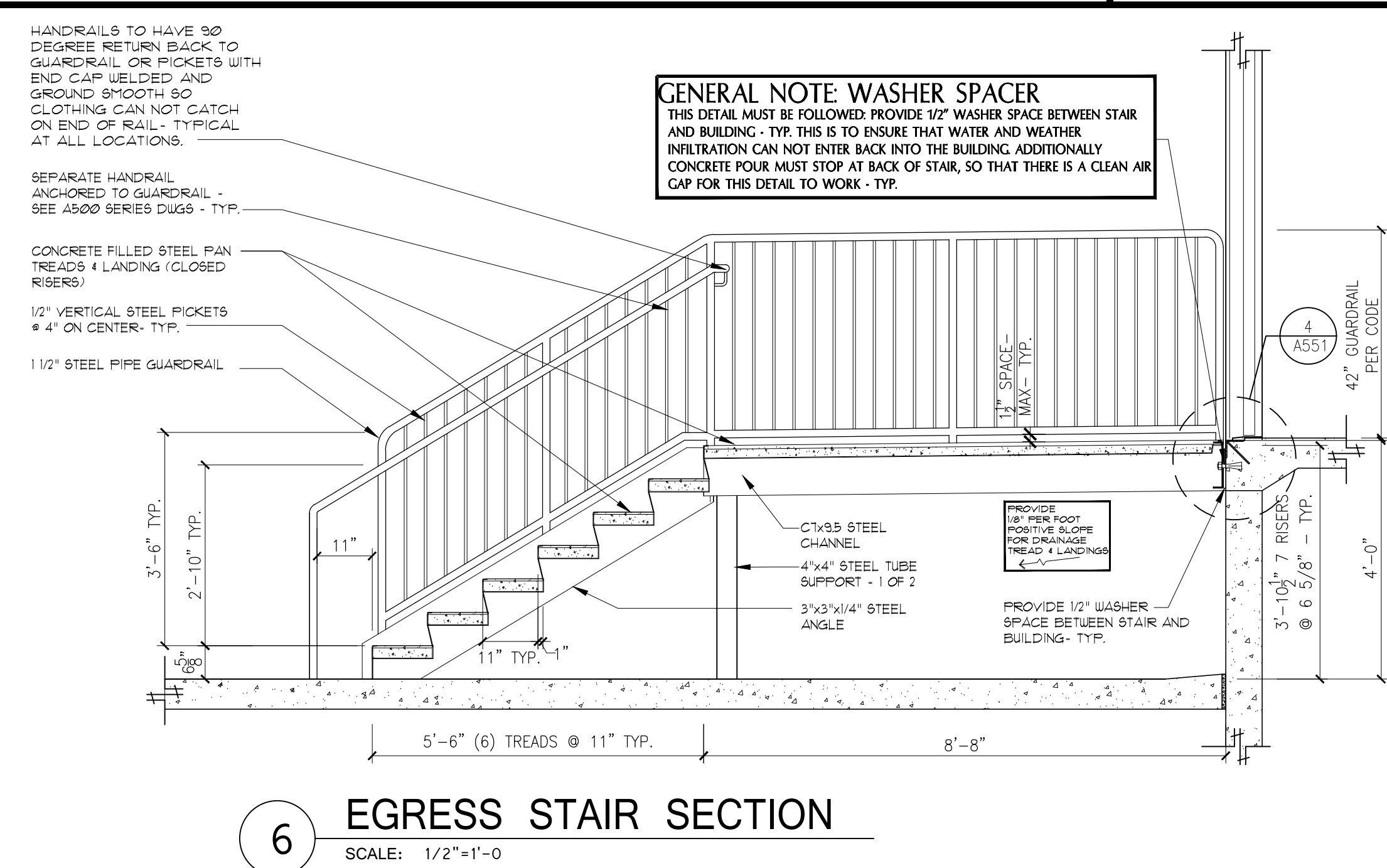
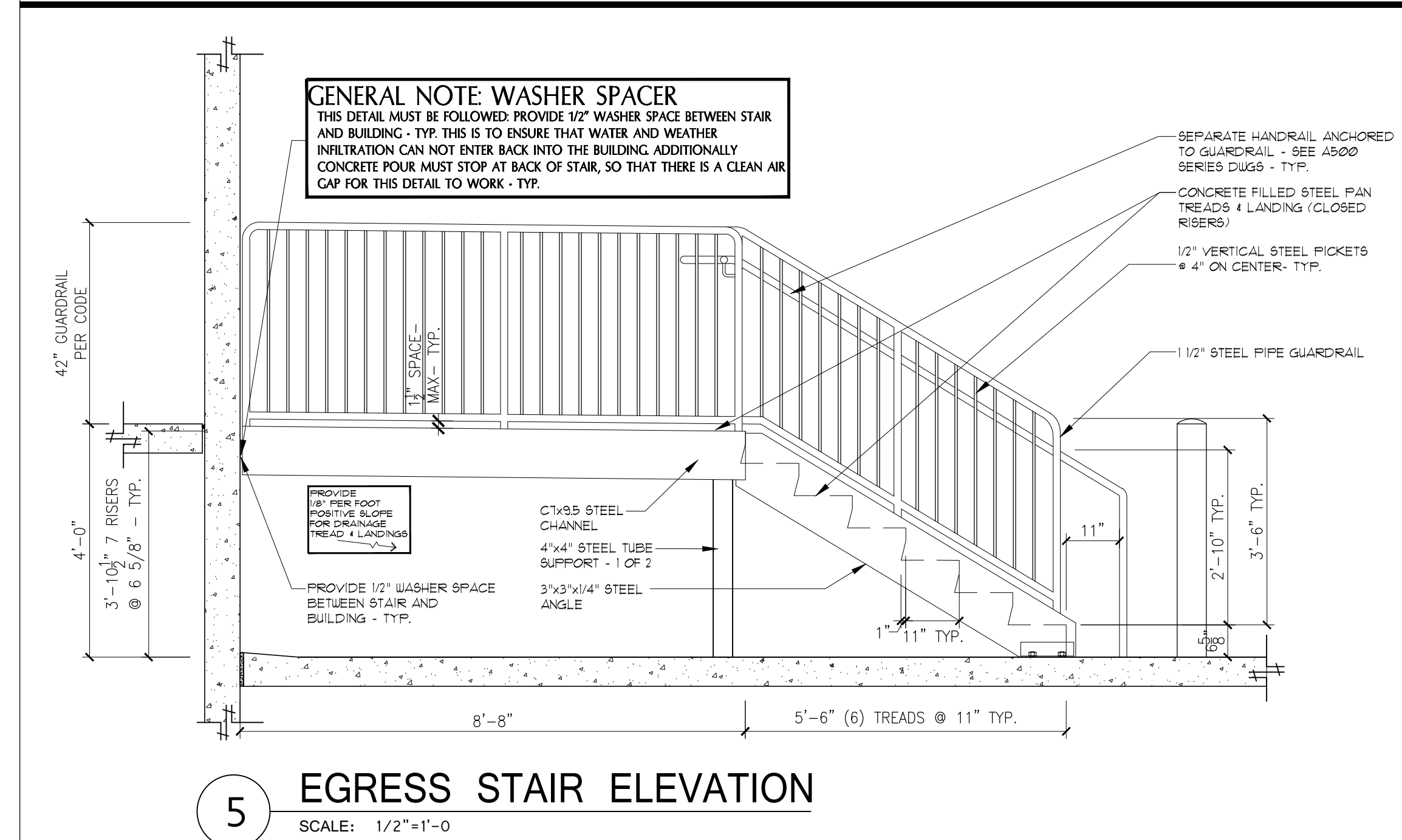
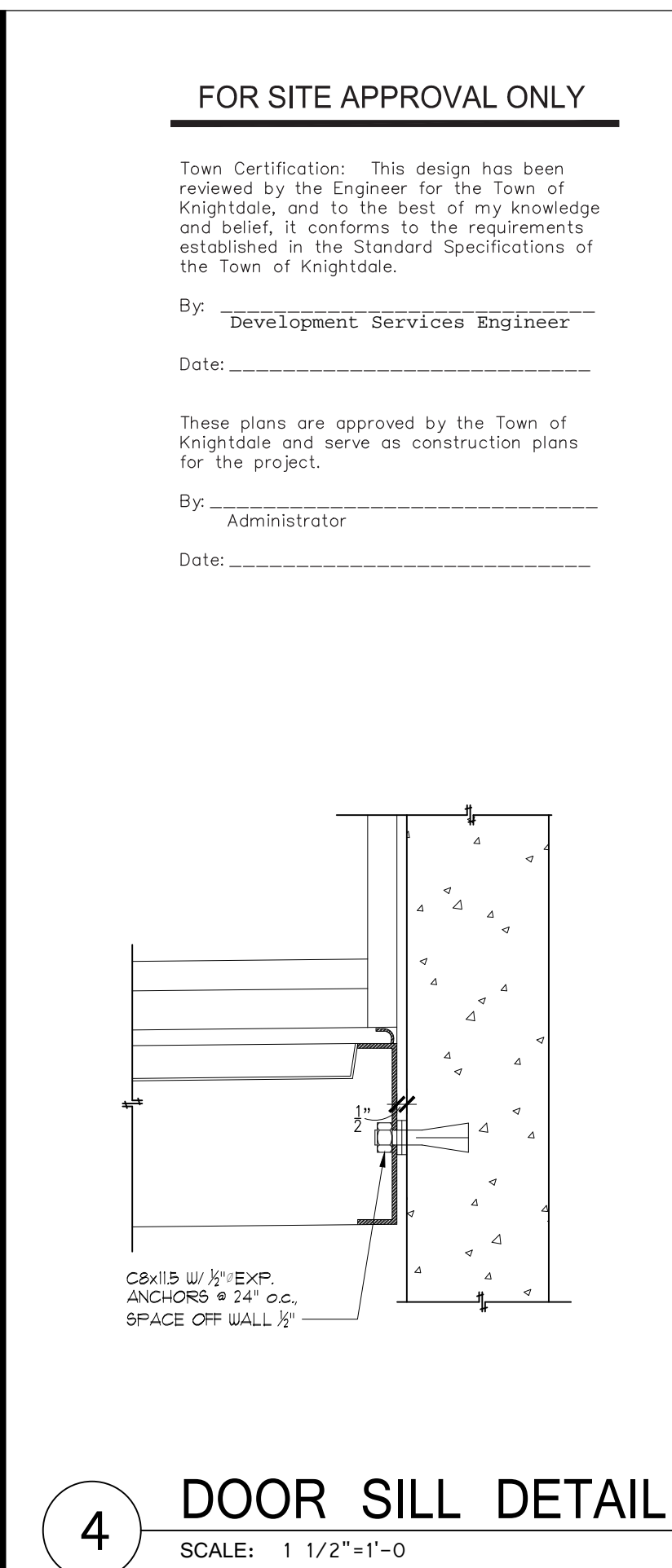
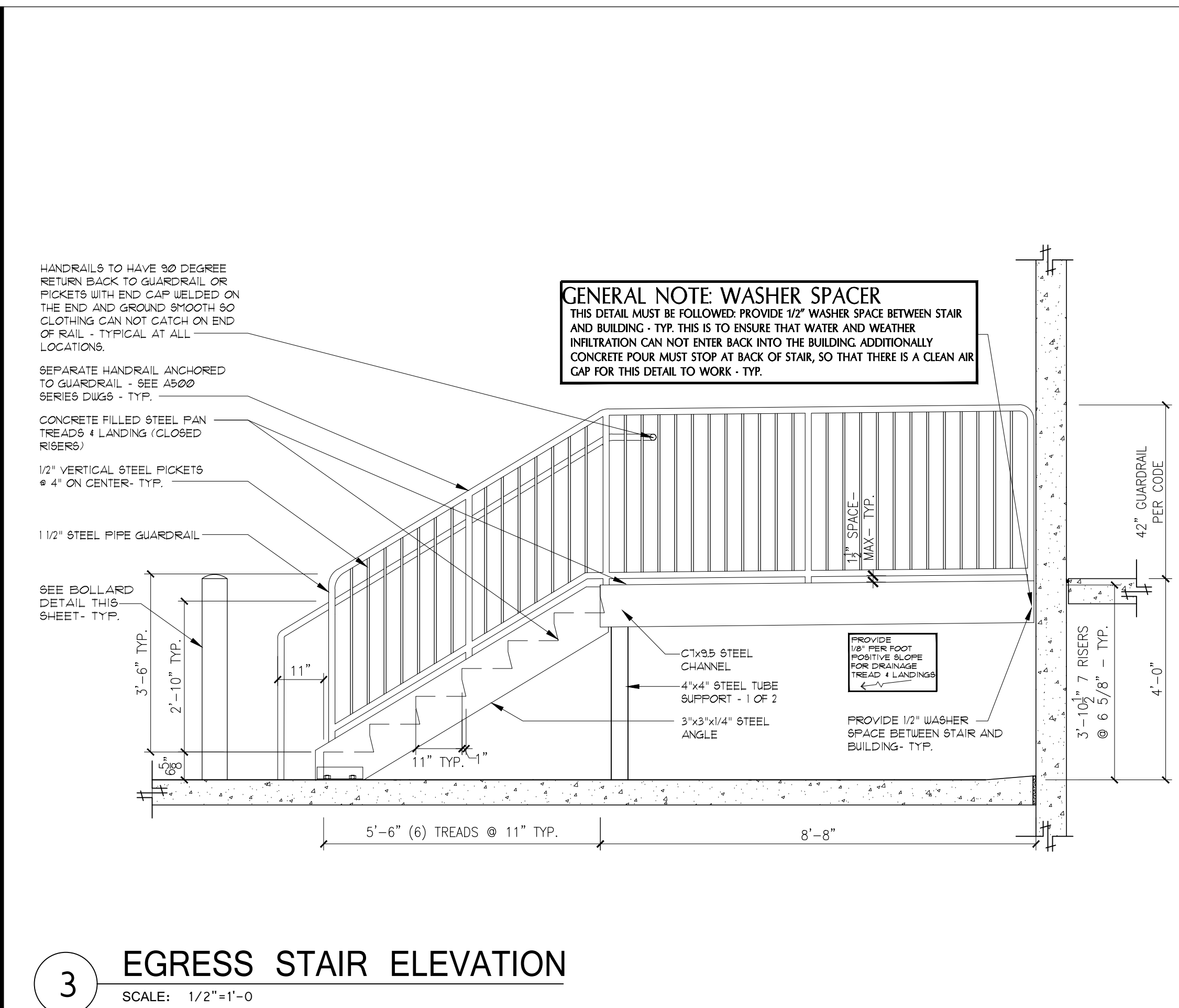
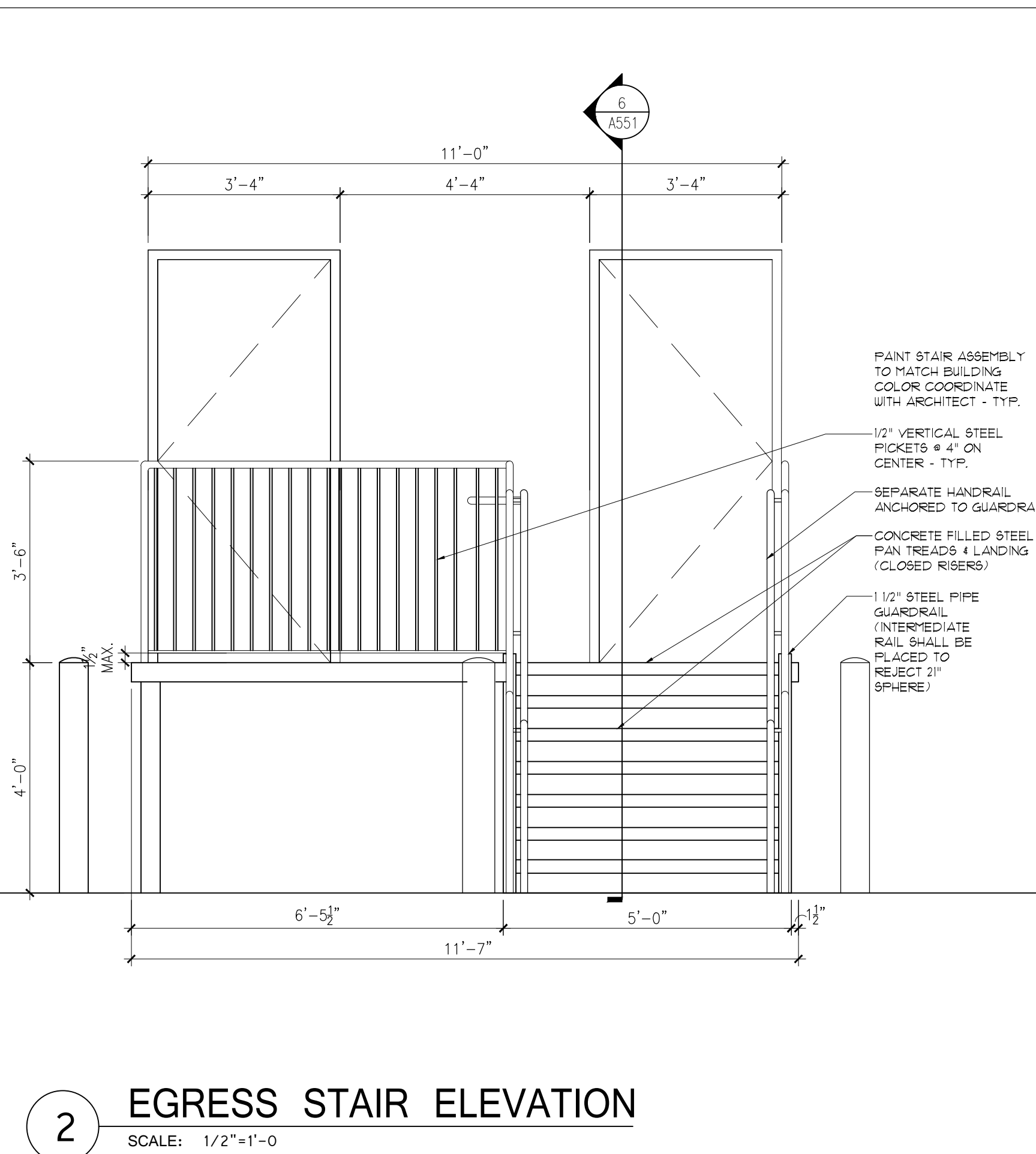
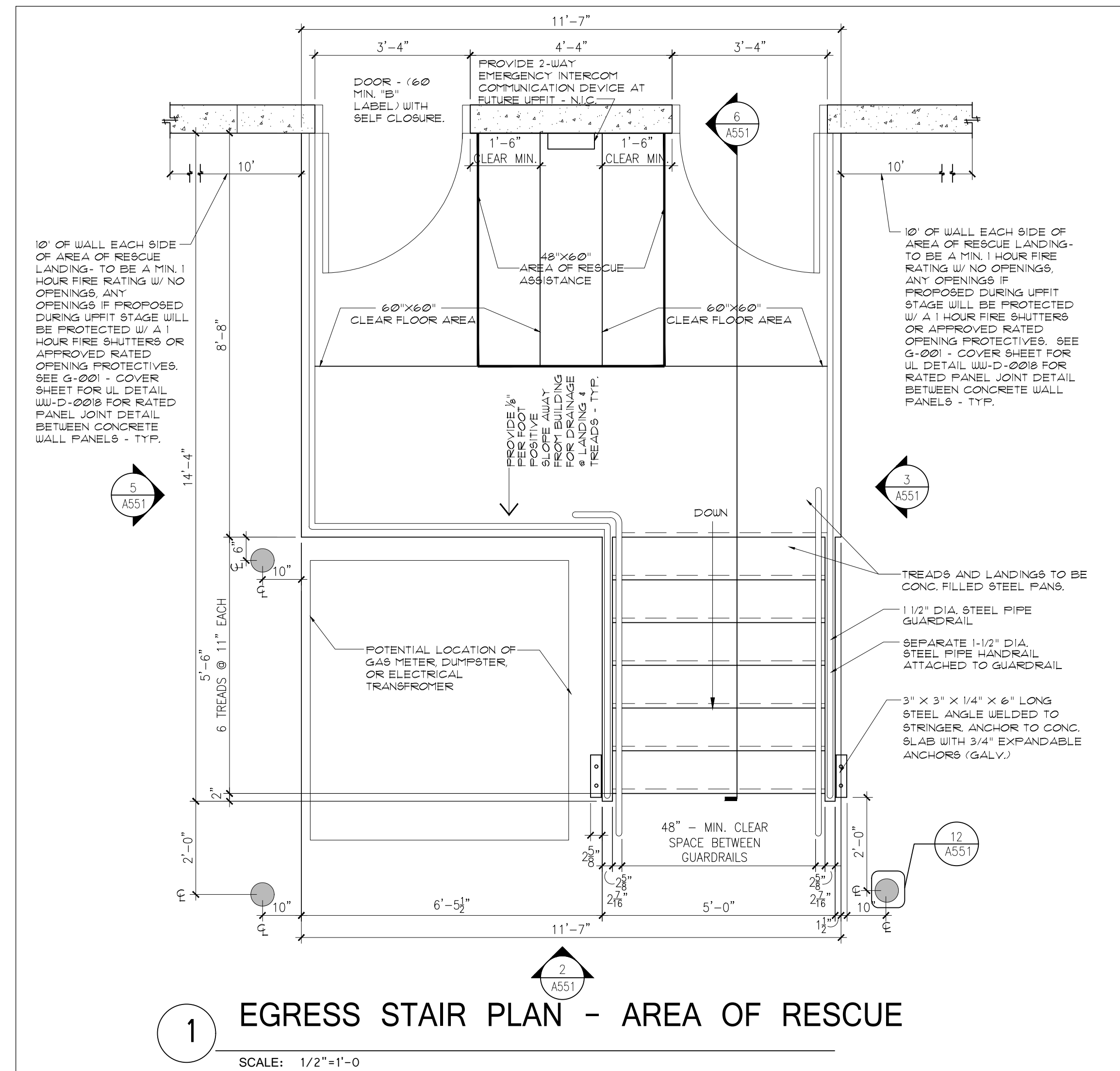
FILE NAME :

PROJECT NO. : C22168

SHEET TITLE : WALL SECTIONS

SHEET :

A301



MIN. 36' CLEAR UNDER STRUCTURE - TYP.

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.

By: _____
Development Services Engineer

Date: _____

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By: _____
Administrator

Date: _____

architects
msa
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

RESULTS :

DRAFT 9/22/2022

SPECULATIVE WAREHOUSE
KNIGHTDALE - 7
HINTON OAKS BLVD.
KNIGHTDALE, NC

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

OWNER / CLIENT SIGNATURE : _____

DATE : _____

[illegible]

FILE NAME :

PROJECT NO.:
C22168

SHEET TITLE :
**STAIR
DETAILS**

MEET

A551

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DRAWING STATUS :

- ☐ PRELIMINARY
NOT FOR CONSTRUCTION
- ☐ ISSUED FOR
BIDDING
- ☒ ISSUED FOR
CONSTRUCTION

OWNER / CLIENT SIGNATURE :

DATE : _____

[illegible]

FILE NAME :

PROJECT NO.:
C22168

SHEET TITLE :
**DRIVE-IN
RAMP DETAILS**

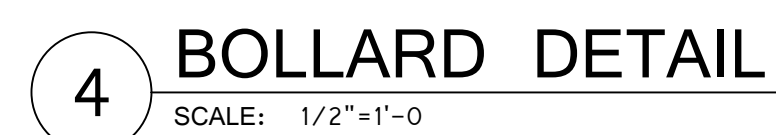
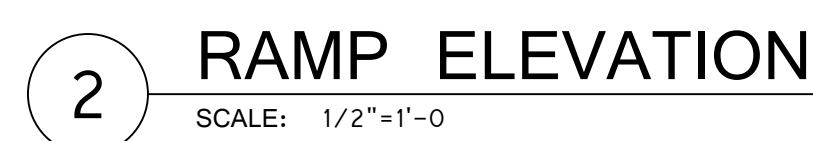
SHEET 1

A553

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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.



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Development Services Engineer

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By: _____
Administrator

Date: _____

MIN. 36' CLEAR UNDER STRUCTURE - TYP.

SPECULATIVE WAREHOUSE
KNIGHTDALE - 7
HINTON OAKS BLVD.
KNIGHTDALE, NC

DRAWING STATUS :

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NOT FOR CONSTRUCTION
- ISSUED FOR
BIDDING
- ISSUED FOR
CONSTRUCTION

OWNER / CLIENT SIGNATURE :

DATE : _____

[illegible]

FILE NAME :

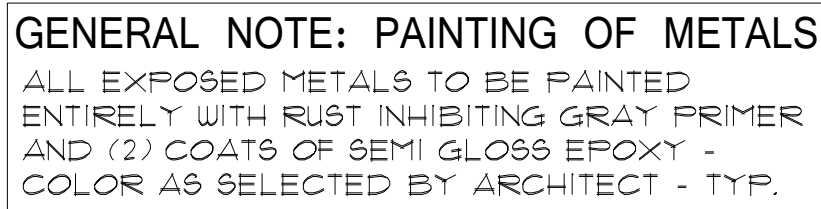
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C22168

HEET TITLE :
**DRIVE-IN
RAMP DETAILS**

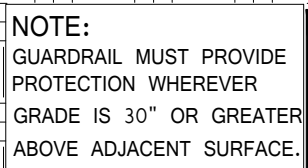
MEET /

A554

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1 RETAINING WALL & GUARDRAIL ELEVATION
SCALE: 1/2"=1'-0" OPPOSITE RAMP MIRRORED - TYP.



2 RETAINING WALL & GUARDRAIL SECTION
SCALE: 1/2"=1'-0"

MIN. 36' CLEAR UNDER STRUCTURE - TYP.