PERMIT SET - VALID WITH APPROVAL STAMP SITE DEVELOPMENT PLANS FOR:

## Aero Center Wilmington

9/14/20220

1830, 1834 & 1835 Flightline Road Wilmington, NC 28405 313915.53.7748.000

Tax Parcel: R04200-001-025-000

24 HOUR CONTACT:
Aaron Hope (AMH Construction)
407-920-8550

Name and address of owner: New Hanover County 230 Government Center Drive Wilmington, NC 28403

Name of 24-hour contact who is responsible for erosion and sediment control: Aaron Hope (AMH Construction) 407-920-8550

30 S Ivey Lane Orlando, FL 32811

Name address and phone number of primary permittee: Marathon FBO Partners DBA Aero Center Wilmington (Lessee) 305-549-4011

19018 Eastwood Road Wilmington, NC 28403

Engineer's name, address and phone number

JASON M SMITH, PE J M Smith Engineering LLC 155 Clarkesville Street Cornelia, GA 30531 (678) 267-3690

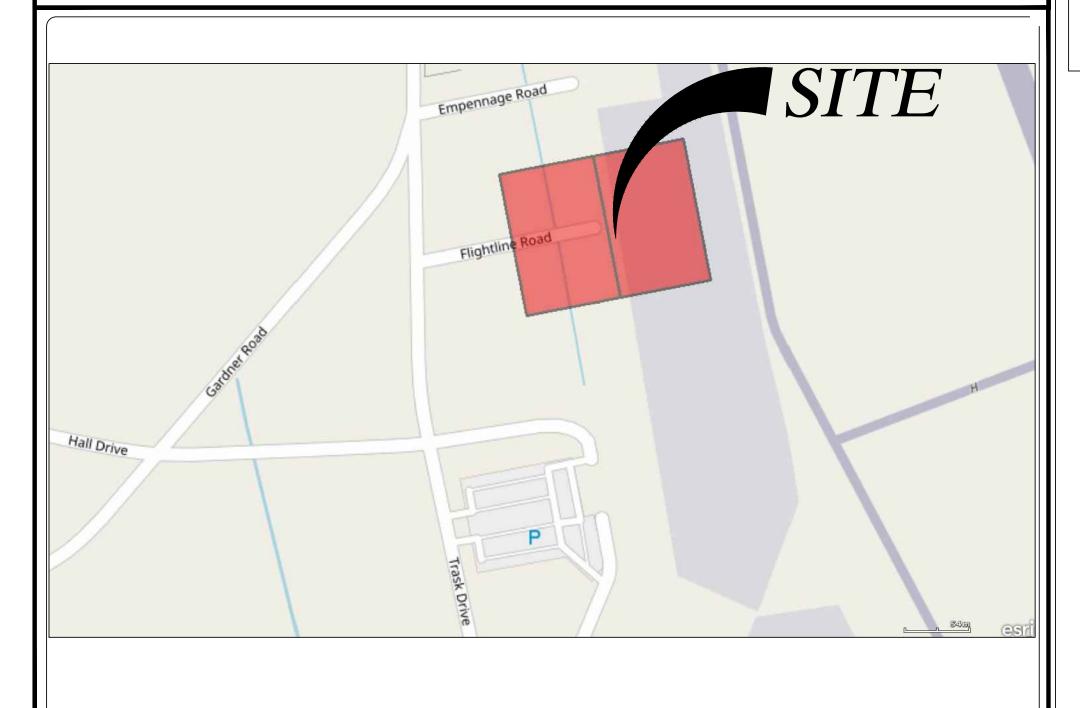
Cape Fear Public Utility Authority (CFPUA)

Sewer System Public Sewer

∠oning A-I-A-I

SETBACKS: Front: 50 ft from right of way Side: 15 ft from lease line Rear: Based on Minimum Taxiway clearance per FAA MAX BUILDING HEIGHT: per building code

TOTAL SITE ACREAGE/DISTURBED ACREAGE - 2.26 acres/ 2.5 ACRES
TOTAL SITE ACREAGE INCLUDES ALL PARCELS INVOLVED IN GRADING

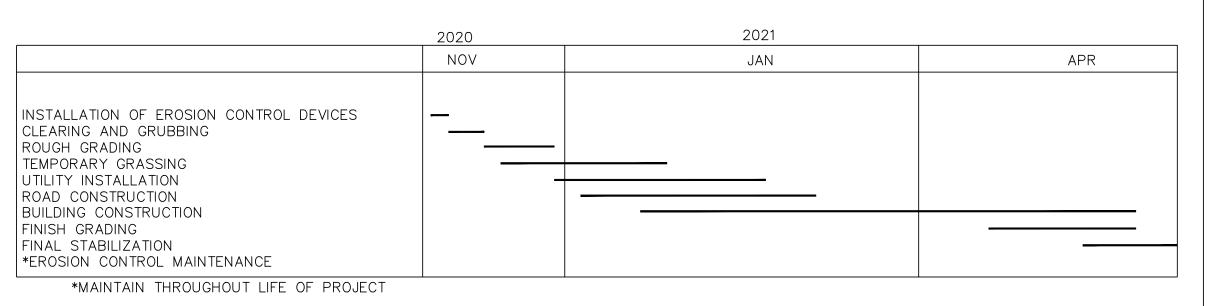


LOCATION MAP - NOT TO SCALE

2020-274-01

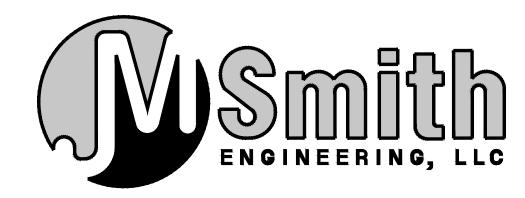
OWNER
New Hanover County
230 Government Center Drive
Wilmington, NC 28403
910-798-7187

ACTIVITY SCHEDULE



"The installation of erosion control measures and practices shall occur prior to or concurrent with land disturbing activities."





155 CLARKESVILLE STREET P.O. BOX 331 CORNELIA, GA 30531 PH: 678-267-3690 FAX: 678-267-3731 LOCAL: 706-894-2331

	SCHEDULE OF DRAWINGS
C0.0	COVER
C1.0	GENERAL NOTES
C1.1	EXISTING CONDITIONS
C2.0	DEMO PLAN
C2.1	SITE PLAN
C3.0	GRADING AND DRAINAGE PLAN
C4.0	ES&PC NOTES
C4.1	ES&PC PLAN
C4.2-C43	ES&PC DETAILS
C5.0	STORM PROFILES
C8.0-C8.2	DETAILS
L1.0-L2.0	LANDSCAPE PLAN

("Section 404") Permit has been obtained.

Wetland Certification: The design professional, whose seal appears hereon, certifies the following: 1.) The National Wetland <u>Inventory Maps</u> have been consulted; and, 2) The appropriate plan sheet [ ] Does / x] Does Not (circle appropriate box) indicate areas of United States Army Corps of Engineers Jurisdictional Wetlands as shown on the maps; and, 3) If wetlands are indicated, the land owner or developer has been advised that land disturbance of protected wetlands shall not occur unless the appropriate Federal Wetlands Alteration

General Notes: 1. All construction material and procedures shall conform to applicable municipality's latest revision of their standard specifications.

2. All underground utility locations are approximate and are based on field evidence. Exact locations of utilities shall be determined by the contractor at the time of construction. The contractor shall field locate all utilities prior to beginning construction activity. Damage to any utilities shall be replaced in kind and in good working order at the contractor's expense. In the event an existing utility requires relocating, the contractor shall contact and coordinate the work with the respective utility owners prior to relocation.

3. The contractor shall erect signs, barricades, flags, and/or other devices to adequately warn, control, direct, and maintain traffic at all times in accordance with the manual of uniform

- 4. All disturbed unpaved areas shall be permitted per local requirements.
- 5. Contractor is responsible to maintain access for emergency vehicles at all times.
- 6. Any construction trailers shall be permitted per local requirements.
- 7. No additional construction or improvements, including but not limited to walls, fences, signs, sprinkler systems, lights, trees, etc. will be allowed on the road right—of—way. 8. All construction and materials shall conform to their respective government

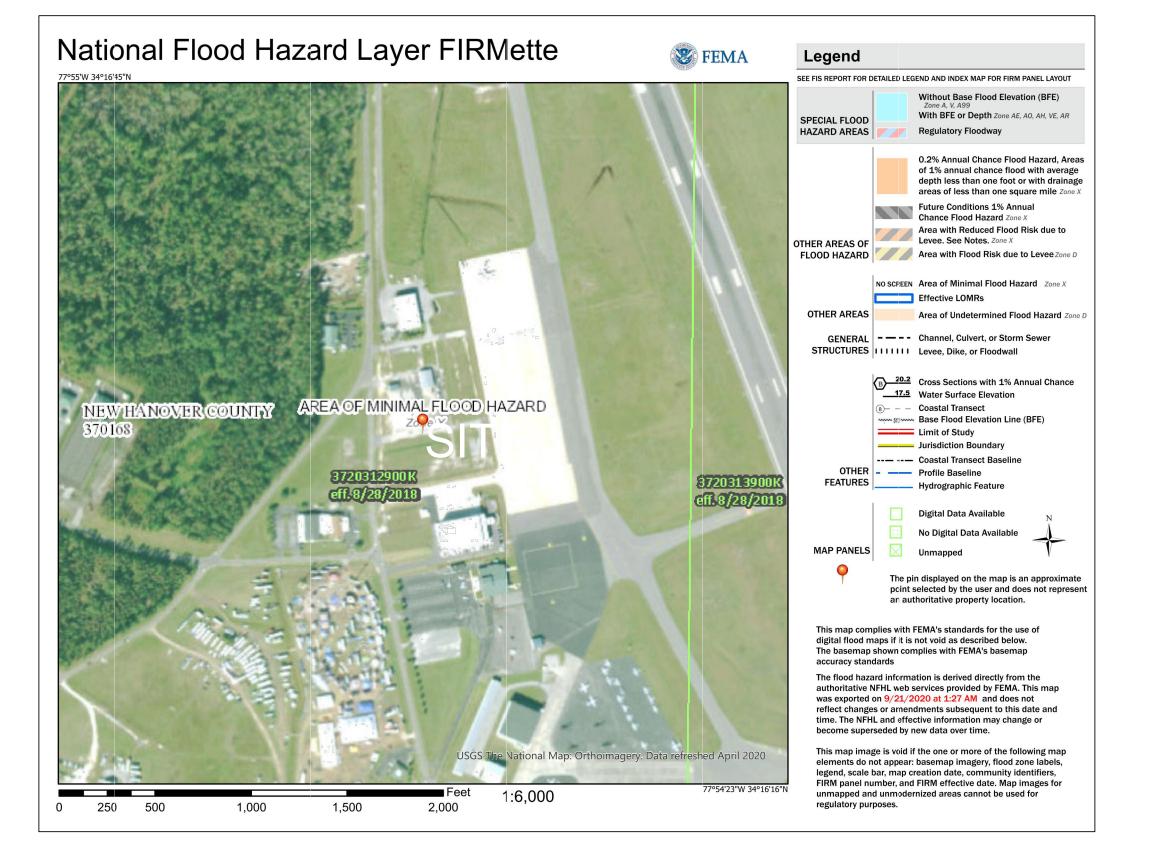
regulations. 9. The property shown hereon appears not to be located in Flood Zone and does not appear to be in a Special Flood Hazard Area (Subject to inundation by the 1% annual chance Flood) and also Other Flood Areas — Zone "X" (Area of 0.2% annual chance flood; areas of 1% annual flood with average depths of less than 1 foot or with drainage areas

less than 1 square miles; and areas protected by levees from 1% annual chance flood) as shown on Flood Insurance Rate Map having a Map Number of FM 3720312900K and having an Map Revised Date of 8/28/2018 as established by the Federal Emergency Management 10. The contractor will notify utility companies prior to any construction performed in the

area of existing utilities. Utility locations shown here are based on surface field locations and underground lines were not verified as to direction, size, depth, or condition.

## DEVELOPER INFORMATION

DEVELOPER: New Hanover County - Contact DEVELOPER ADDRESS: 230 Government Center Drive Wilmington, NC 28403 910-798-7187





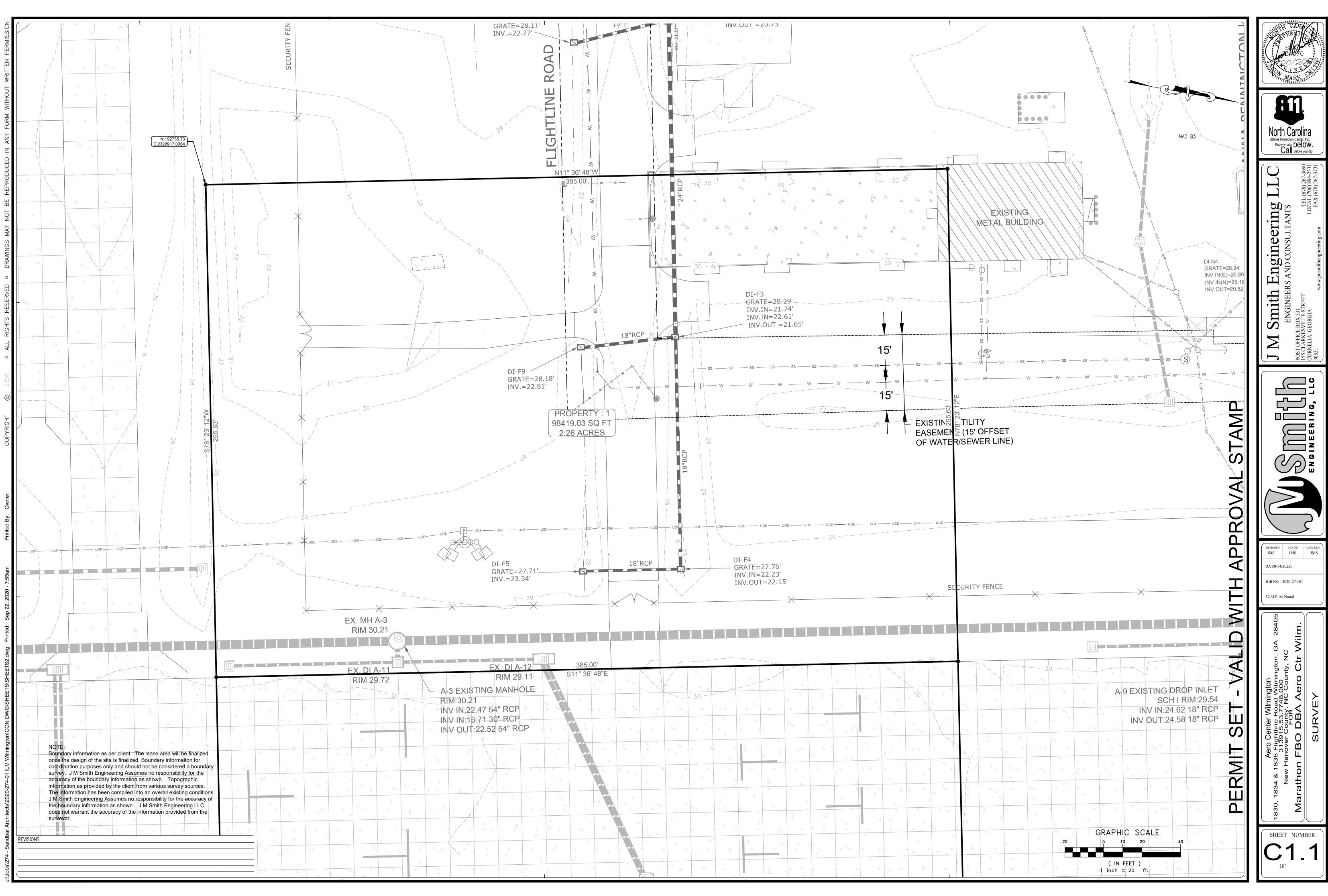


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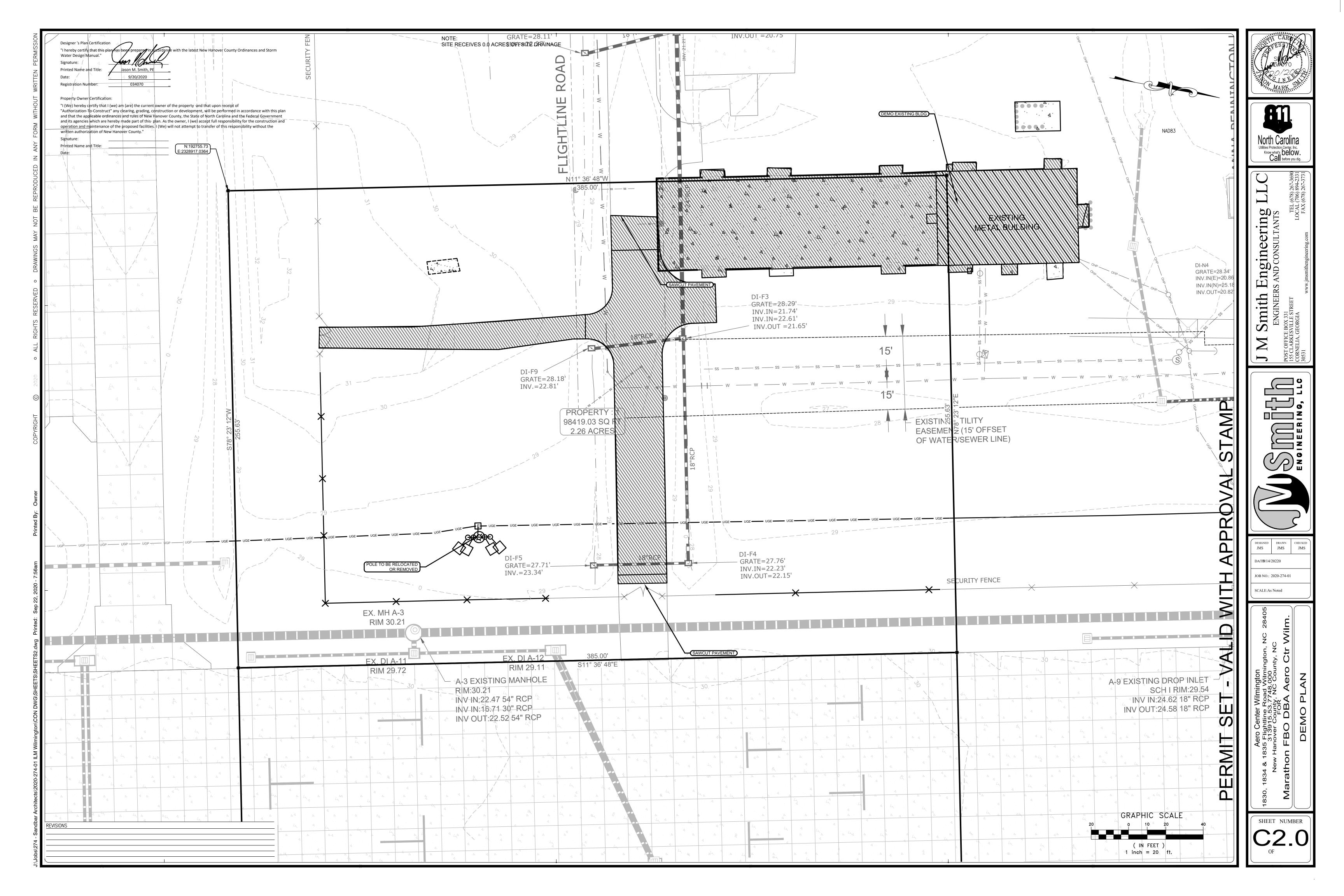
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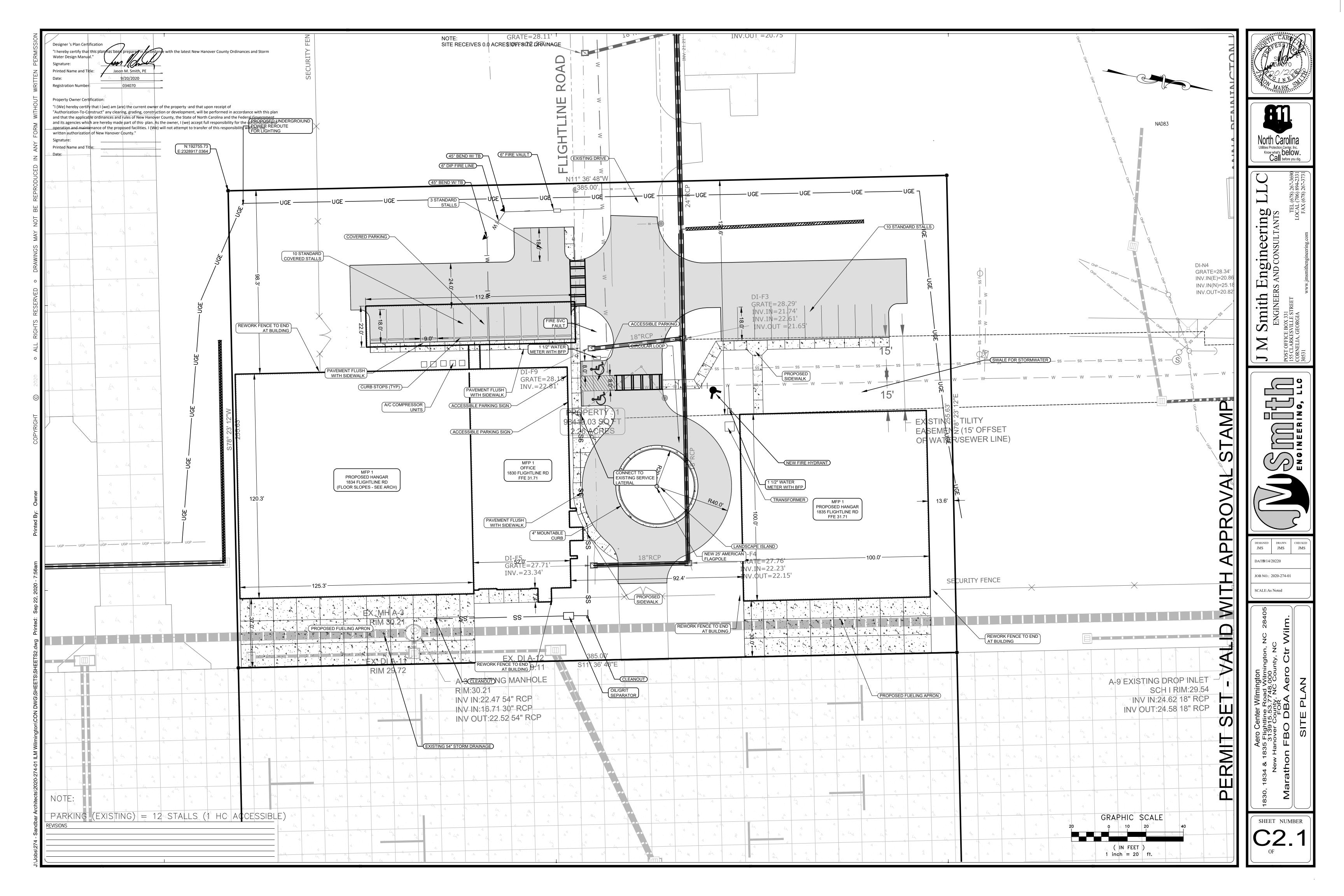
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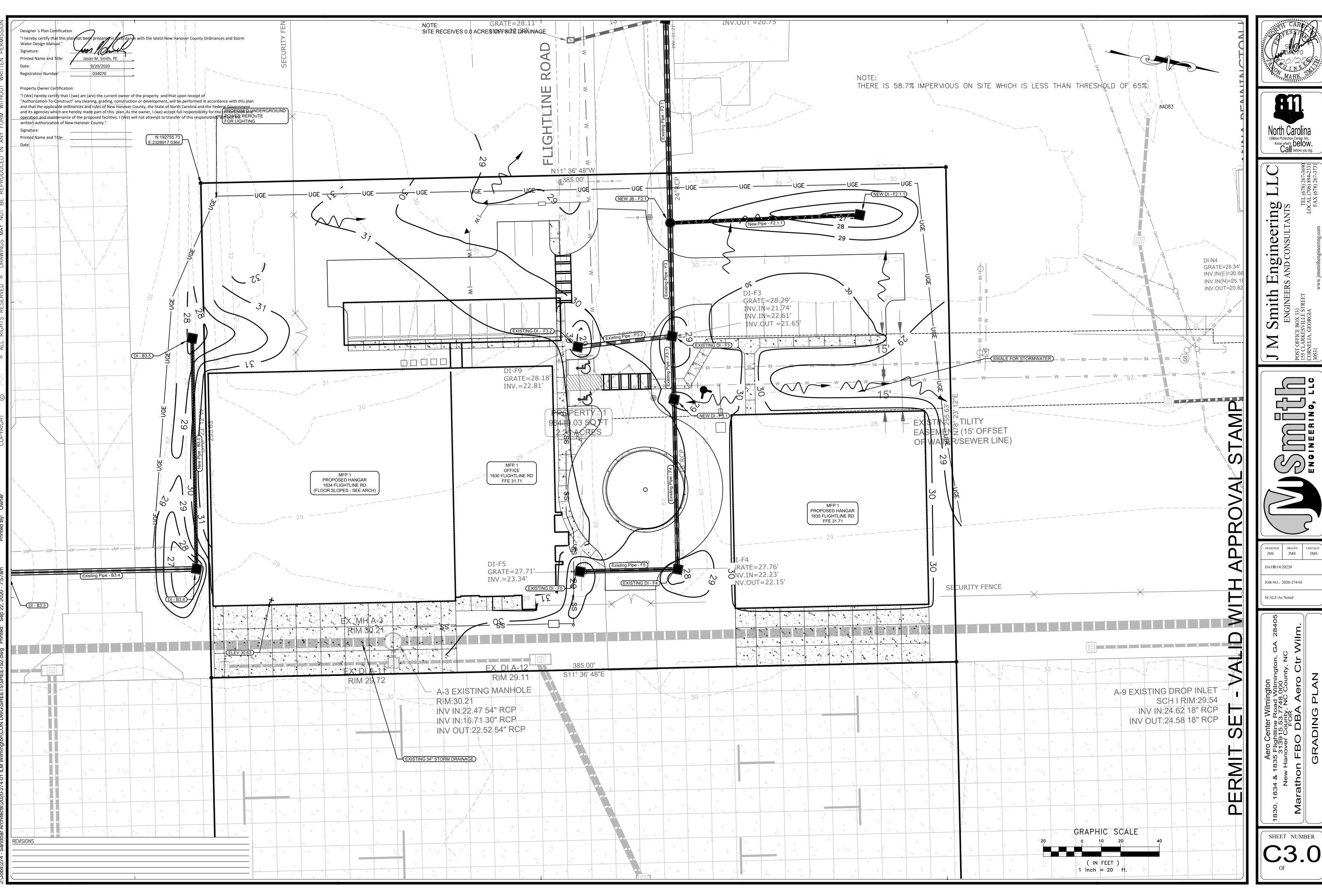
SCALE:As Noted













YDROSEEDING MAY BE USED IN PLACE OF MULCHING ON AREA OTHER THAN DITCH BANKS). STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS. DIVERSIONS, AND DITCH OR WATERCOURSE BEDS AND BANKS IMMEDIATELY AFTER INSTALLATION.

CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

BEFORE NEWLY CONSTRUCTED CONVEYANCE CHANNELS ARE MADE OPERATIONAL. ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.

A) CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE (1) YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED

B) CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL. FLUME.OR SLOPE DRAIN STRUCTURE.

PERIODIC INSPECTIONS AND REQUIRED MAINTENANCE MUST BE PROVIDED ESPECIALLY AFTER EACH SIGNIFICANT STORM. THE PROJECT SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION & SEDIMENT CONTROL PRACTICES.

THE CONTRACTOR SHALL MONITOR AND TAKE PRECAUTIONS TO CONTROL DUST INCLUDING (BUT NOT LIMITED TO) USE OF WATER OR CHEMICAL DUST PALLIATIVE

RUSLE2 Related Attributes-New Hanover County, North Carolina								
Map symbol and soil name	Pct. of map unit	Slope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% Clay
Pn—Pantego loam								
Pantego, drained	80	_	B/D	.28	5	46.0	44.0	10.0
Pantego, undrained	10	1—1	B/D	.28	5	46.0	44.0	10.0
St—Stallings fine sand								
Stallings, drained	80	_	A/D	.20	5	77.7	16.3	6.0
Stallings, undrained	10	_	A/D	.20	5	77.7	16.3	6.0

## **Data Source Information**

Soil Survey Area: New Hanover County, North Carolina Survey Area Data: Version 21, Jun 4, 2020

**New Hanover County Soil and Sedimentation Control Ordinance** 

**Section 23-248 Erosion and Sedimentation Control Plans** 

(a) An erosion control Plan shall be prepared for all land-disturbing activities subject to this Ordinance whenever the proposed activity will disturb more than one acre on a tract. The Plan shall be filed with the County Engineering Department, the New Hanover Soil and Water Conservation District, and for areas outside municipal corporate limits, the County Planning Department, at least 30 days prior to the commencement of the proposed activity.

(b) Persons conducting land-disturbing activity on a tract which covers more than one acres shall file three copies of the erosion control Plan with the County at least 30 days prior to beginning such activity and shall keep another copy of the approved Plan and a posted copy of the permit prominently displayed onsite until all construction is complete, all permanent sedimentation and erosion control measures are installed, and the site has been stabilized. After approving the Plan, if the County either upon review of such Plan or on inspection of the job site, determines that a significant risk of accelerated erosion or offsite sedimentation exists, the County will require a revised Plan. Pending the preparation of the revised Plan, work shall cease or shall continue under conditions outlined by the appropriate authority.

(c) Erosion control Plans may be disapproved unless accompanied by an authorized statement of financial responsibility and ownership. This statement shall be signed by the person financially responsible for the land-disturbing activity or his attorney in fact. The statement shall include the mailing and street addresses of the principle place of business of the person financially responsible, and of the owner of the land, and any registered agents. If the person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or noncompliance with the Plan, the Act, this Ordinance, or rules or orders adopted or issued pursuant to this Ordinance. Except as provided in subsection (d) and (k) of this section, if the applicant is not the owner of the land to be disturbed, the draft erosion and sedimentation control Plan must include the owner's written consent for the applicant to submit a draft erosion and sedimentation control plan and to conduct the

(d) If the applicant is not the owner of the land to be disturbed and the anticipated land- disturbing activity involves the construction of utility lines for the provision of water, sewer, gas, telecommunications, or electrical service, the draft erosion and sedimentation control Plan may be submitted without the written consent of the owner of the land, so long as the owner of the land had been provided prior notice of the

(e) The New Hanover Soil and Water Conservation District and the County Planning Department within 20 days of receipt of any Plan, shall review such Plan and submit its comments and recommendations to the County Engineering Department. Failure of the Soil and Water Conservation District and the County Planning Department to submit its comments and recommendations within 20 days or within the prescribed

(14) The County will review each complete Plan submitted to them and within 30 days of receipt. The person submitting the Plan will be notified that it has been approved, approved with modifications, approved with performance reservations, or disapproved. The County shall condition approval of an erosion control plan upon the applicant's compliance with Federal and State Water Quality laws, regulations, and rules. The County shall also disapprove an erosion control plan if implementation of the Plan would result in a violation of rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters. Failure to approve, approve with modifications, or disapprove a complete erosion and sedimentation control Plan within 30 days of receipt shall be deemed approval. Disapproval of an erosion control Plan or a revised erosion control Plan must specifically state in writing the reasons for disapproval. The County must approve, approve with modifications, or disapprove a revised Plan within 15 days of receipt, or it is deemed to be approved. If, following commencement of a land-disturbing activity pursuant to an approved Plan, the County determines that the Plan is inadequate to meet the requirements of this Ordinance, either upon review of such Plan or inspection of the job site determines that a significant risk of accelerated erosion or offsite sedimentation exist, the County shall require a revised Plan to comply with this Ordinance. Pending the preparation of the revised Plan, work shall cease or shall continue under conditions outlined by the appropriate authority.

(g) Any plan submitted for a land-disturbing activity for which an environmental document is required by the North Carolina Environmental Policy Act (G.S. 113A-1 et seq.) shall be deemed incomplete until a complete environmental document is available for review. The County shall promptly notify the person submitting the Plan that the 30-day time limit for review of the Plan pursuant to subsection (f) of this section shall not begin until a complete environmental document is available for review.

(h) The County shall approve a Plan upon determining that it complies with all applicable State and local regulations for erosion and sedimentation control. The County shall condition approval of Plans upon the applicant's compliance with the Federal and State water quality

laws, regulations and rules. Approval assumes the applicant's compliance with the Federal and State water quality laws regulations, and rules.

(i) The Plan required by this section shall contain architectural or engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this Ordinance. Plan content may vary to meet the needs of specific site requirements. Detailed guidelines for Plan preparation may be obtained from the County, on request. The Plan shall contain a schedule for inspections after each phase has been completed.

(j) The county may disapprove an erosion and sedimentation control Plan or disapprove a transfer of a Plan under subsection (k) of this section upon a finding that an applicant, or a parent, subsidiary, or other affiliate

(1) is conducting or has conducted land-disturbing activity without an approved Plan, or has received notice of violation of a Plan previously approved by the Commission or a local government pursuant to this Article and has not complied with the notice within the time specified in the notice:

(2) has failed to pay a civil penalty assessed pursuant to the act Article or a local Ordinance adopted pursuant to this Article by the time the payment is due;

(3) has been convicted of a misdemeanor pursuant to G.S. 113A-64(b) or any criminal provision of a local Ordinance adopted pursuant to this Article or;

(4) has failed to substantially comply with State rules or local Ordinances and regulations adopted pursuant to this Article.

For purposes of this subsection (j) an applicant's record or the proposed transferee's record may be considered for only two (2) years prior to the application date.

In the event that an erosion and sedimentation control Plan or transfer of a Plan is disapproved by the county pursuant to subsection, (j) of this section, the County shall notify the Director of the Division of Energy, Mineral, and Land Resources of such disapproval within 10 days of the disapproval. The County shall advise the applicant or the proposed transferee and the Director in writing as to the specific reasons that the Plan was disapproved. Notwithstanding the provisions of Section 23-249(a), the applicant may appeal the local government's disapproval of the Plan directly to the Commission.

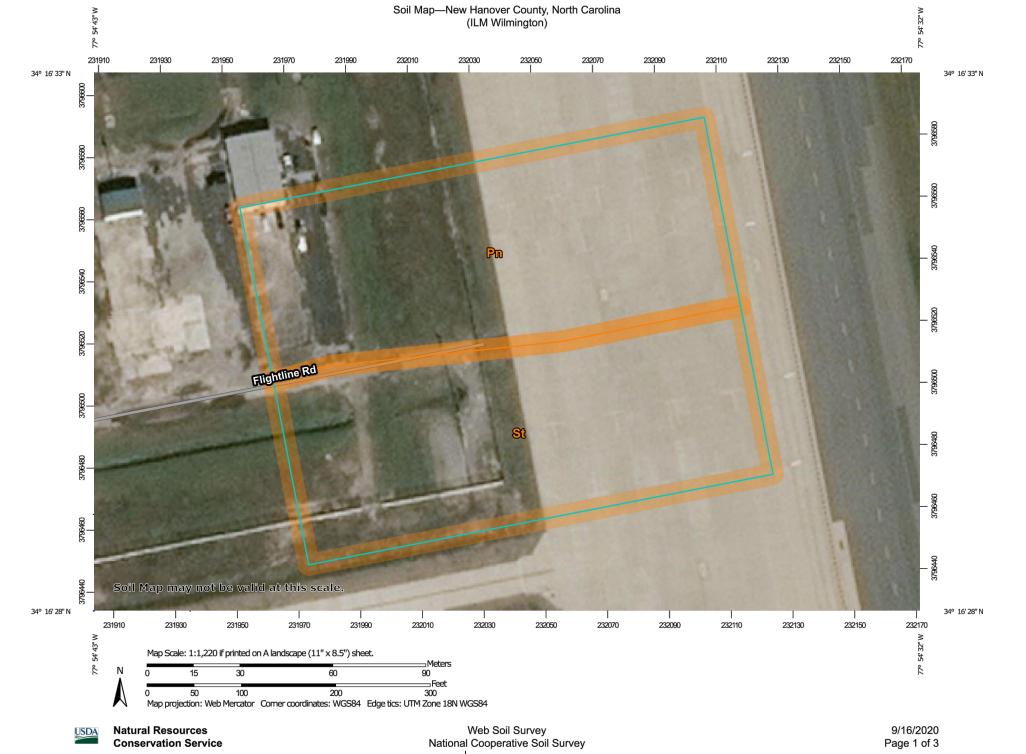
(k) The County administering an erosion and sedimentation control program may transfer an erosion and sedimentation control Plan approved pursuant to this section without the consent of the Plan holder to a successor-owner of the property on which the permitted activity is occurring or will occur as provided in this subsection.

(1) The County may transfer a Plan if all of the following conditions are met:

(a) The successor-owner of the property submits to the local government a written request for the transfer of the Plan and an authorized statement of financial responsibility and ownership.

(b) The County finds all of the following:

(1) The plan holder is one of the following:



(ii) A partnership, limited liability corporation, corporation, or any other business association that has been dissolved.

(iii) A person who has been lawfully and finally divested of title to the property on which the permitted activity is occurring or will occur.

(2) The Plan holder shall comply with all terms and conditions of the Plan until such time as the Plan is transferred.

(3) The successor-owner shall comply with all terms and conditions of the plan once the plan has been transferred.

(4) Notwithstanding changes to law made after the original issuance of the Plan,

(iv)A person who has sold the property on which the permitted activity is occurring or will occur.

the County may not impose new or different terms and conditions in the Plan without the prior express consent of the successor-owner. Nothing in this subsection shall prevent the County from requiring a revised plan pursuant to G.S. 113A-54.1 (b).

(I) No person may initiate a land-disturbing activity before notifying the agency that issued the Plan approval of the date that the land-disturbing activity will begin. Preconstruction meetings are optional.

(m) Applications for amendment of an erosion control Plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as said amendment is approved by the County, the land-disturbing activity shall not proceed except in accordance with the erosion control Plan as originally approved.

(n) Any person engaged in land-disturbing activity who fails to file a Plan in accordance with the Ordinance or who conducts a land disturbing activity except in accordance with provisions of an approved Plan shall be deemed in violation of this Ordinance

(o) The landowner, the financially responsible party, or the landowner's or the financially

responsible party's agent shall perform an inspection of the area covered by the Plan after each phase of the Plan has been completed and after establishment of temporary ground cover in accordance with G.S. 113A-57(2). The person who performs the inspections shall maintain and make available a record of the inspection at the site of the land-disturbing activity. The record shall set out any significant deviation from the approved erosion control Plan, identify any measures that may be required to correct the deviation, and document the completion of those measures. The record shall be maintained until permanent ground cover has been established as required by the approved erosion and sedimentation control Plan. The inspections required by this subsection shall be in addition to inspections required by G.S. 113A-61.1

Where inspections are required by Section 23-248 (n) of this Ordinance and G.S. 113A-54.1(e), the following apply:

(i) The person who performs the inspections shall make a record of the site inspection by documenting the following items:

(a) all of the erosion and sedimentation control measures, practices and devices, as called for in a construction sequence consistent with the approved erosion and sedimentation control Plan, including but not limited to sedimentation control basins, sedimentation traps, sedimentation ponds, rock dams, temporary diversions, temporary slope drains, rock check dams, sediment fence or barriers, all forms of inlet protection, storm drainage facilities, energy dissipaters, and stabilization methods of open channels, that have initially been installed and do not

(a) significantly deviate (as defined in Sub-item (1)(c) of this Rule) from the locations, dimensions and relative elevations shown on the approved erosion and sedimentation Plan. Such documentation shall be accomplished by initialing and dating each measure or practice shown on a copy of the approved erosion and sedimentation control Plan or by completing, dating and signing an inspection report that lists each measure, practice or device shown on the approved erosion and sedimentation control Plan. This documentation is required only upon the initial installation of the erosion and sedimentation control measures, practices and devices as set forth by the approved erosion and sedimentation control Plan or if the measure, practices and devices are modified after initial installation;

(b) the completion of any phase of grading for all graded slopes and fills shown on the approved erosion and sedimentation control Plan, specifically noting the location and condition of the graded slopes and fills. Such documentation shall be accomplished by initialing and dating a copy of the approved erosion and sedimentation control Plan or

by completing, dating and signing an inspection report;

(c) the location of temporary or permanent ground cover, and that the installation of the ground cover does not significantly deviate (as defined in Sub-item (i)(e) of this Rule) from the approved erosion and sedimentation control Plan. Such documentation shall be accomplished by initialing and dating a copy of the approved erosion and sedimentation control Plan or by completing, dating and signing an inspection report;

(d) that maintenance and repair requirement for all temporary and permanent erosion and sedimentation control measures, practices and devices have been performed. Such documentation shall be accomplished by completing, dating and signing an inspection report (the general storm water permit monitoring form may be used to verify the maintenance and repair requirements);

(e) any significant deviations from the approved erosion and sedimentation control Plan, corrective actions required to correct the deviation and completion of the corrective actions. Such documentation shall be accomplished by initialing and dating a copy of the approved erosion and sedimentation control Plan or by completing, dating and signing an inspection report. A significant deviation means an omission, alteration or relocation of an erosion or sedimentation control measure that prevents the measure from performing as intended;

(ii) The documentation, whether on a copy of the approved erosion and sedimentation control Plan or an inspection report, shall include the

(i) name, address, affiliation, telephone number, and signature of the person conducting the inspection and the date of the inspection. Any relevant licenses and certifications may also be included. Any document of the person conducting the inspection and the date of the inspection. of inspections that occur on a copy of the approved erosion and sedimentation control Plan shall occur on a single copy of the Plan and that Plan shall be made available on the site. Any inspection reports shall alse

(iii)The inspection shall be performed during or after each of the following phases of a Plan:

(a) installation of perimeter erosion and sediment control measures;

(b) clearing and grubbing of existing ground cover;

(c) completion of any phase of grading on slopes or fills that requires provision of temporary or permanent ground cover pursuant to

inspections quarterly until the establishment of permanent ground cover sufficient to restrain erosion.

G.S. 113A-57(2);

(d) completion of storm drainage facilities;

(e) completion of construction or development; and

(f) quarterly until the establishment of permanent ground cover sufficient to restrain erosion or until the financially responsible party has conveyed ownership or control of the tract of land for which the eros sedimentation control Plan has been approved and the agency that approved the Plan has been notified. If the financially responsible party has conveyed ownership of control of the tract of land for which the erosion and sedimentation control Plan has been approved, the new owner or person in control shall conduct and document

Map Unit	Legend		
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
<u> </u>	·	'	·

## 49.0% Stallings fine sand **Totals for Area of Interest** 100.0%

**GENERAL NOTES** 

1. "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to, or concurrent with, land disturbing activities." "Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective control, additional erosion and sediment control measures shall be implemented to

control or treat the sediment source." .. "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."

4. Maintenance statement - "All erosion and sediment control measures will be checked daily and any deficiencies noted will be corrected by the end of each day. Additional erosion and sediment control measures will

be installed if deemed necessary after an on-site inspection by the issuing authority. 5. "The only material to be buried on site is vegetative material, provided it is not buried within 100 feet of any property line or enclosed structure. Construction waste may neither be burned nor buried and must be taken

to a state approved landfill." 6. All construction debris will be carried to a state approved landfill.

. "The installation of erosion control measures and practices shall occur prior to or concurrent with land disturbing activities."

8. Maximum cut or fill slopes are 2 horizontal to 1 vertical

All silt fence must be DOT approved fabric 10. All fill slopes will have silt fence at the toe of slope.

11. All cut and fill slopes must be surface roughened and vegetated within seven (7) days of their construction.

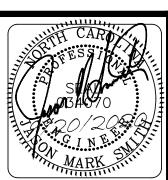
12. Existing utilities locations are for convenience and informational purposes only and are to be considered approximate. Have all utilities located before construction or grading begins 13. Off-site vehicle tracking of sediments shall be minimized or eliminated by any means available. Construction exits are to be maintained in a manner that helps to minimized off-site tracking of soils and should be

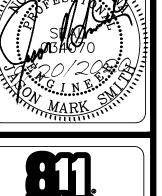
repaired if they no longer are effective. Brooms, rakes, shovels and other hand tools may be necessary to remove any sedimentation tracked off-site onto the adjacent roadway and should be on-site at all times. 14. Non-exempt activities shall not be conducted within the 25 or 50 foot stream buffers as noted on these plans measured from the point of wrested vegetation without first acquiring necessary variances and permits. 15. Ammendments/revisions to the ES&PC Plan which have a significant effect on BMP's with a hydraulic component must be certified by a design professional.

16. The measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed may include storm water detention and retention structures, use of vegetated swales and natural depressions for flow attenuation or a combination of these practices (sequential systems). Details for any of these practices are provided as part of these plans. Velocity dissipation devices will be placed at discharge locations and along the length of any outflow channel in order to provide a non-erosive flow so that the natural physical and biological characteristics and functions of the water course are maintained and protected. The installation of these devices may be subject to Section 404 of the Federal Clean Water Act. Note: The permitttee is only responsible for the installation and maintenance of storm water management devices prior to final stabilization of the site and not the operation and maintenance of such structures after construction activities have been completed.

17. Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit. Waste materials, including waste building materials, construction and demolition debris shall be properly disposed of in a state landfill; concrete washout, excavated sediment, etc., will be properly disposed on-site. Any disposal of solid waste to waters of the State is prohibited unless authorized by a Section 404 permit.

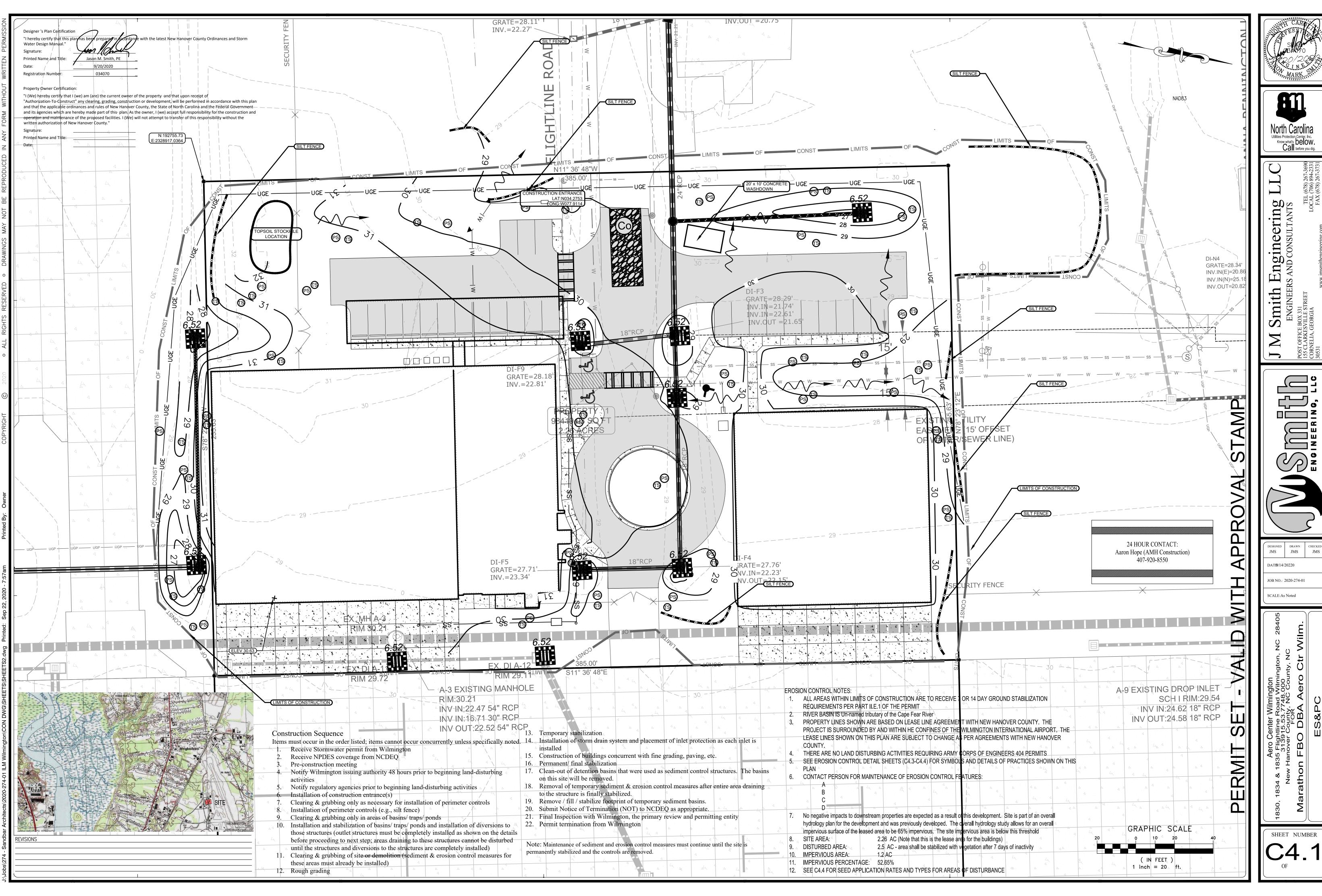
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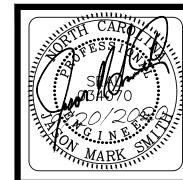




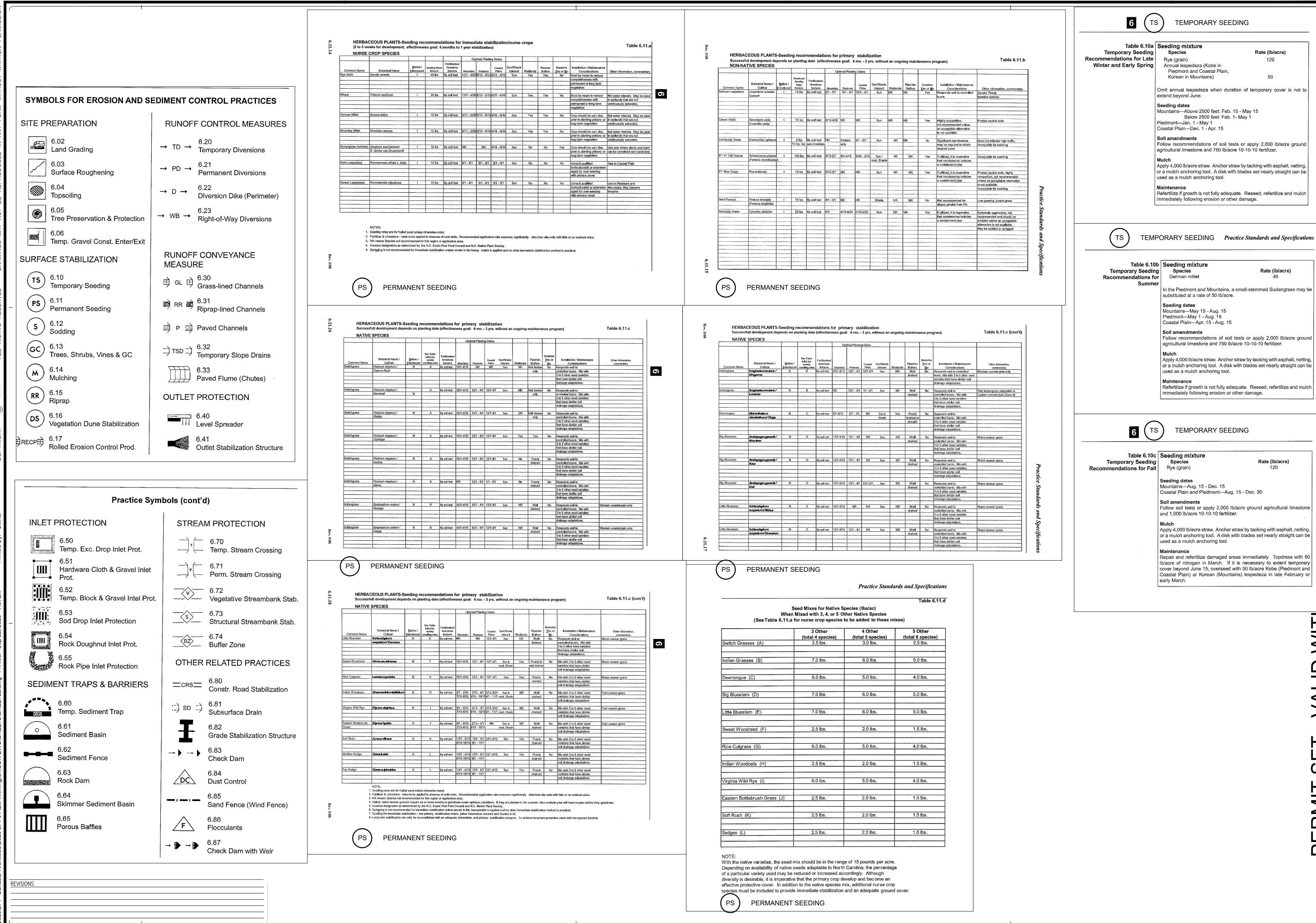
DATE9/14/20220 JOB NO.: 2020-274-01

SCALE: As Noted









North Carolina Utilities Protection Center, Inc.
Know what's Delow.
Call before you dig. 267-3690 894-233 267-373

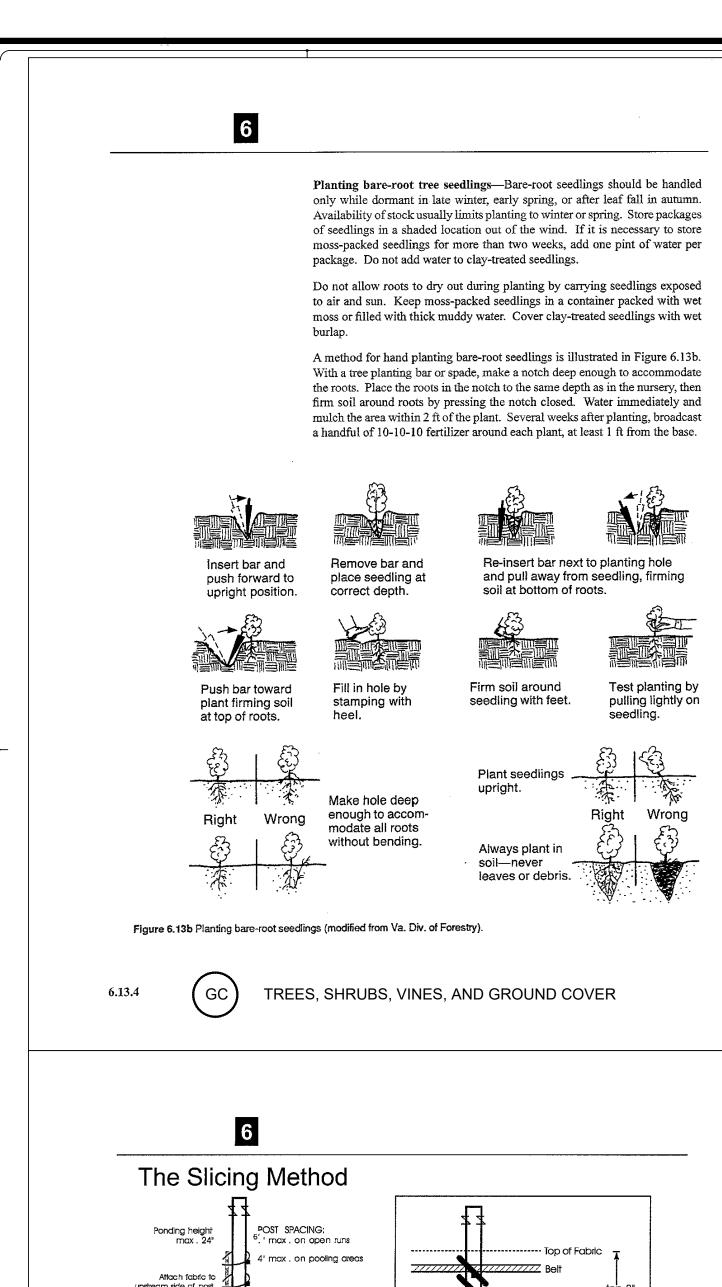
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be

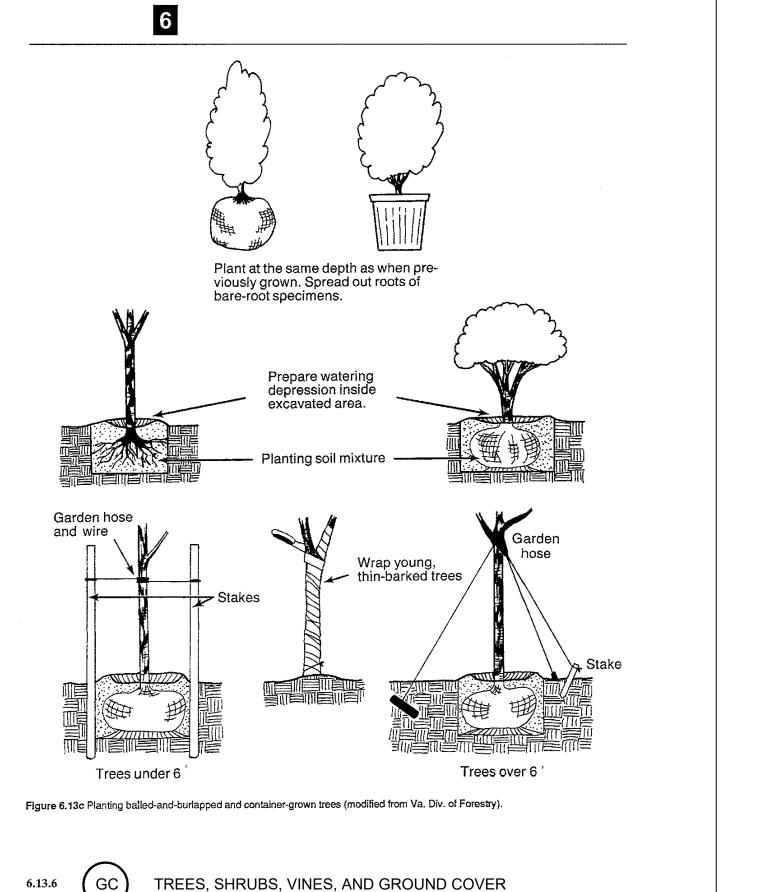
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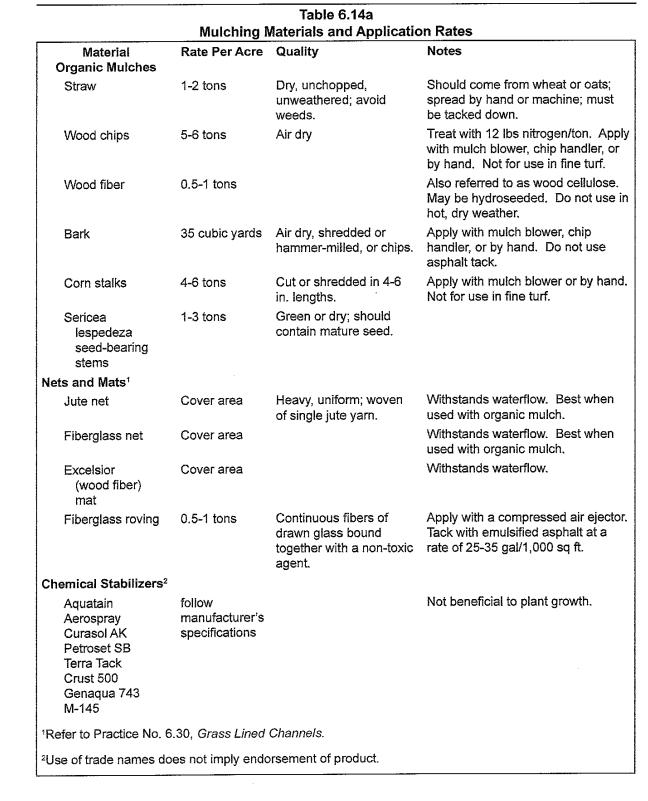
JMS DATI9/14/20220

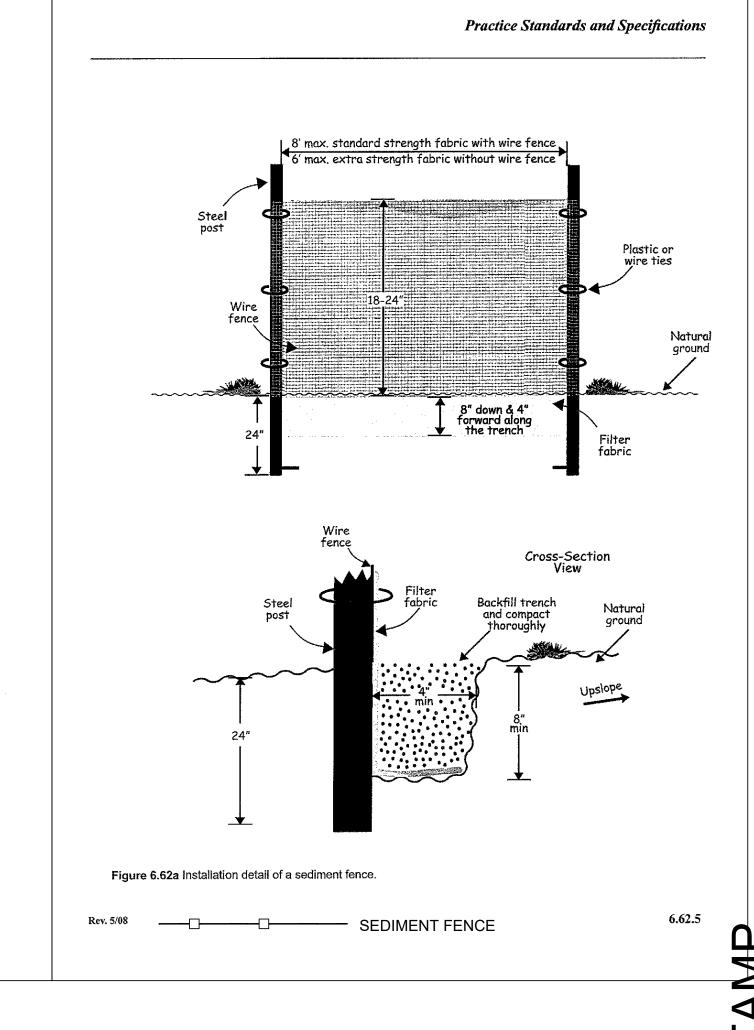
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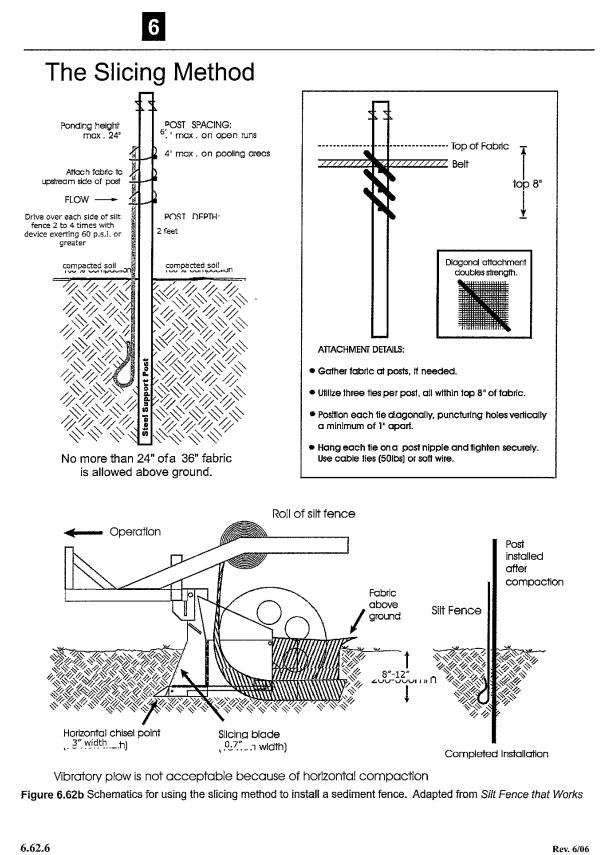
SCALE:As Noted



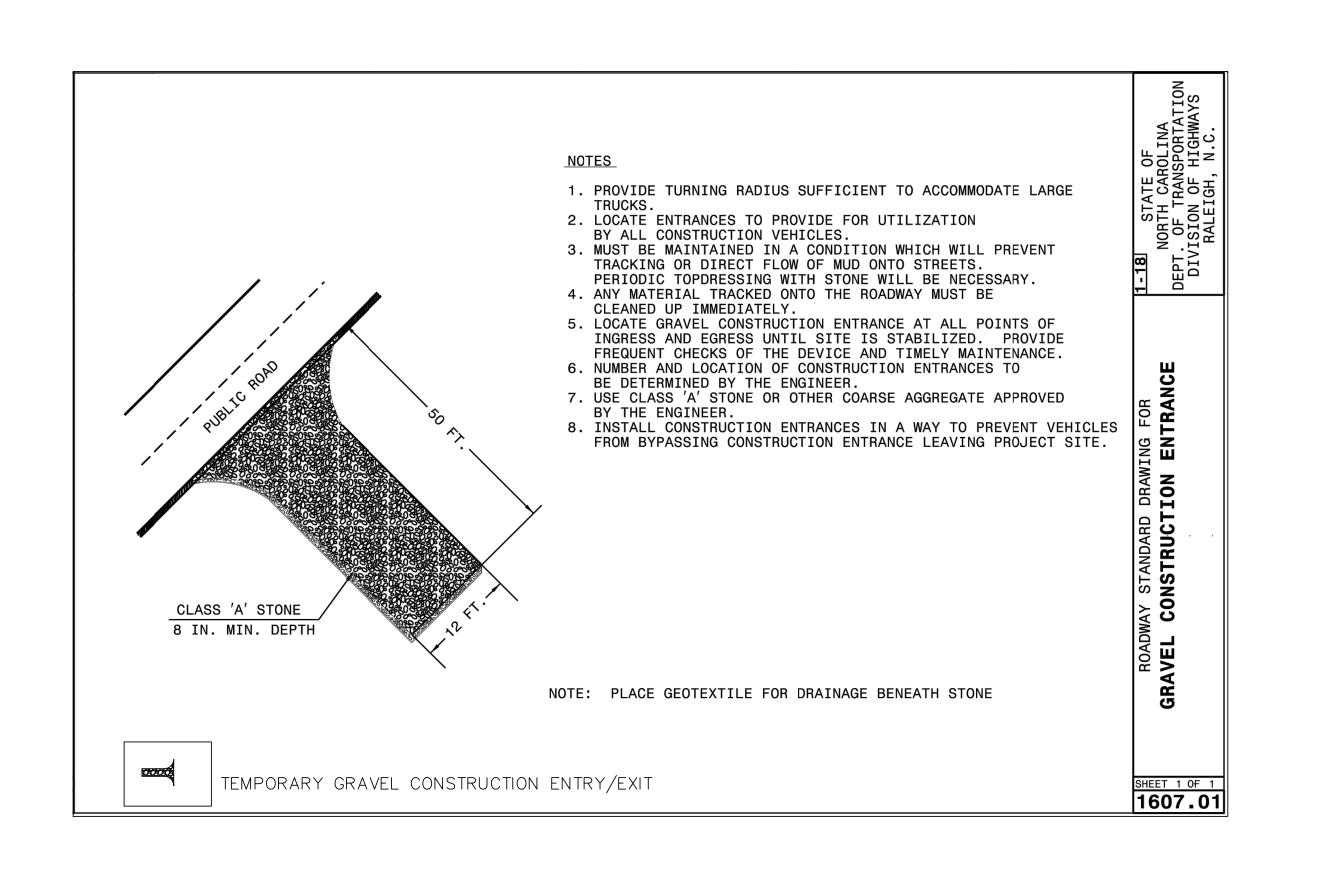








SEDIMENT FENCE





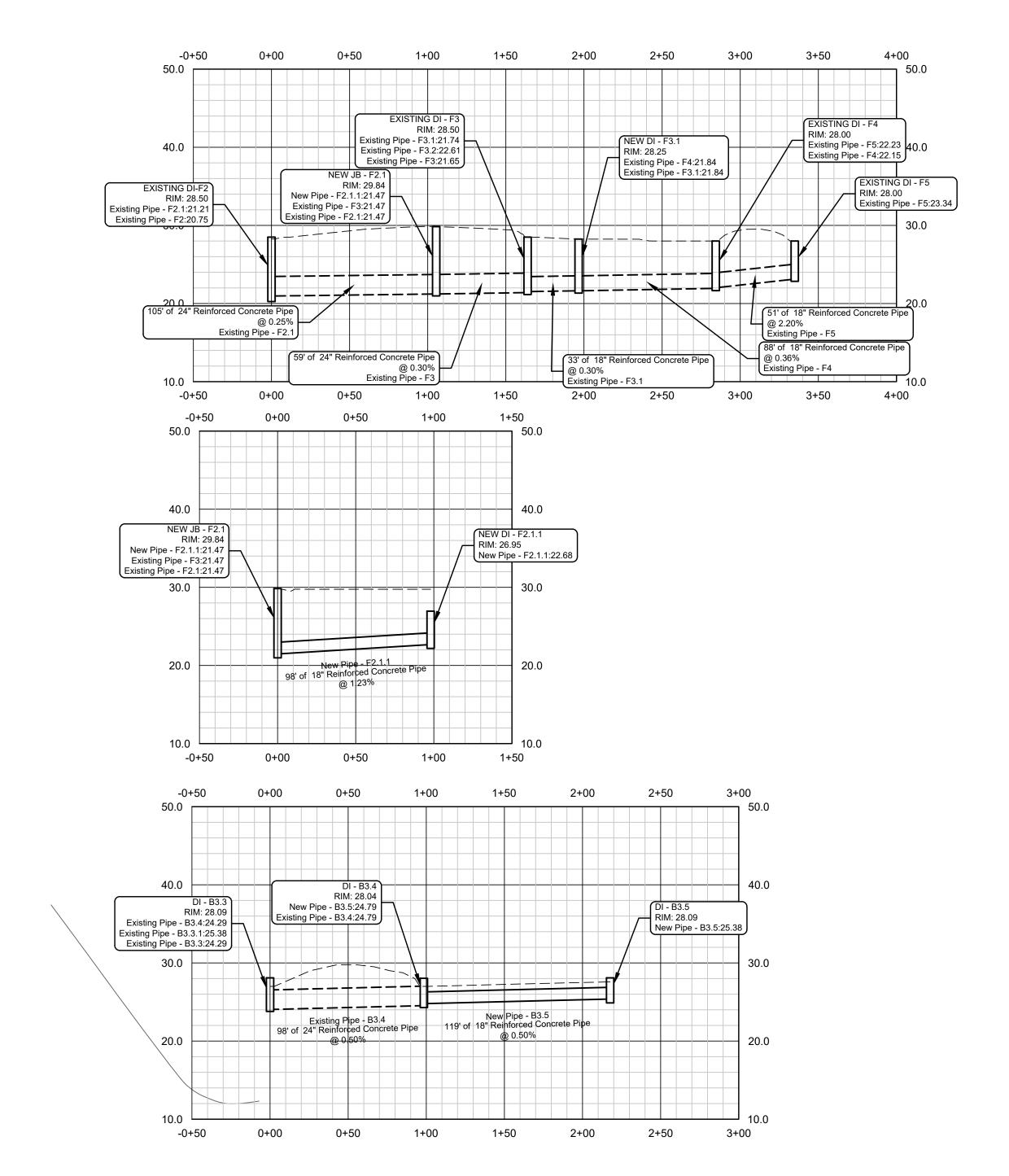
24 HOUR CONTACT: Aaron Hope (AMH Construction) 407-920-8550

267-894-267-

TEL OCAL FAX

DATI9/14/20220 JOB NO.: 2020-274-01

SCALE:As Noted



InletID	QCaptured	InletTime	iInlet	DrainageArea	LineSize	-valuePip	HGLUp	HGLDn	VelDn
	(cfs)	(min)	(in/hr)	(ac)	(in)		(ft)	(ft)	(ft/s)
JB B3.1	••••	0	0	0	24	0.013	22.94	22.82	4.75
DI B3.2	1.55	5.2	10.58	0.12	24	0.013	22.99	22.94	4.78
DI - B3.3	3.29	11.9	8.43	0.6	24	0.013	25.26	23.03	4.98
DI - B3.3.1	0.71	5	10.99	0.1	18	0.013	26.07	25.83	3.29
DI - B3.3.2	1	5	10.99	0.14	18	0.013	26.57	26.07	2.2
DI - B3.4	1.14	5	10.99	0.16	24	0.013	25.4	25.26	2.05
DI - B3.5	2.25	7.5	9.87	0.35	18	0.013	25.95	25.4	3.31
Existing DI-F1	3.86	22.8	6.31	0.94	24	0.013	22.19	21.89	5.7
Existing DI-F2	4.26	24.7	6.06	1.08	24	0.013	22.75	22.65	2.46
NEW JB - F2.1	0	0	0	0	24	0.013	22.83	22.8	1.49
Existing DI - F3	1.58	5.2	10.58	0.18	24	0.013	22.91	22.9	1.28
Existing DI - F3.2	0.79	0.1	10.99	0.11	18	0.013	23.16	22.96	2.51
NEW DI - F3.1	1.44	5.9	10.56	0.21	18	0.013	22.97	22.96	1.58
Existing DI - F4	1.25	6.25	10.11	0.18	18	0.013	23.01	23	0.84
Existing DI - F5	1.29	5	10.99	0.18	18	0.013	23.76 j	23.04	1.32
NEW DI - F2.1.1	1.79	17	7.26	0.38	18	0.013	23.18 j	22.9	1.03

PPRO

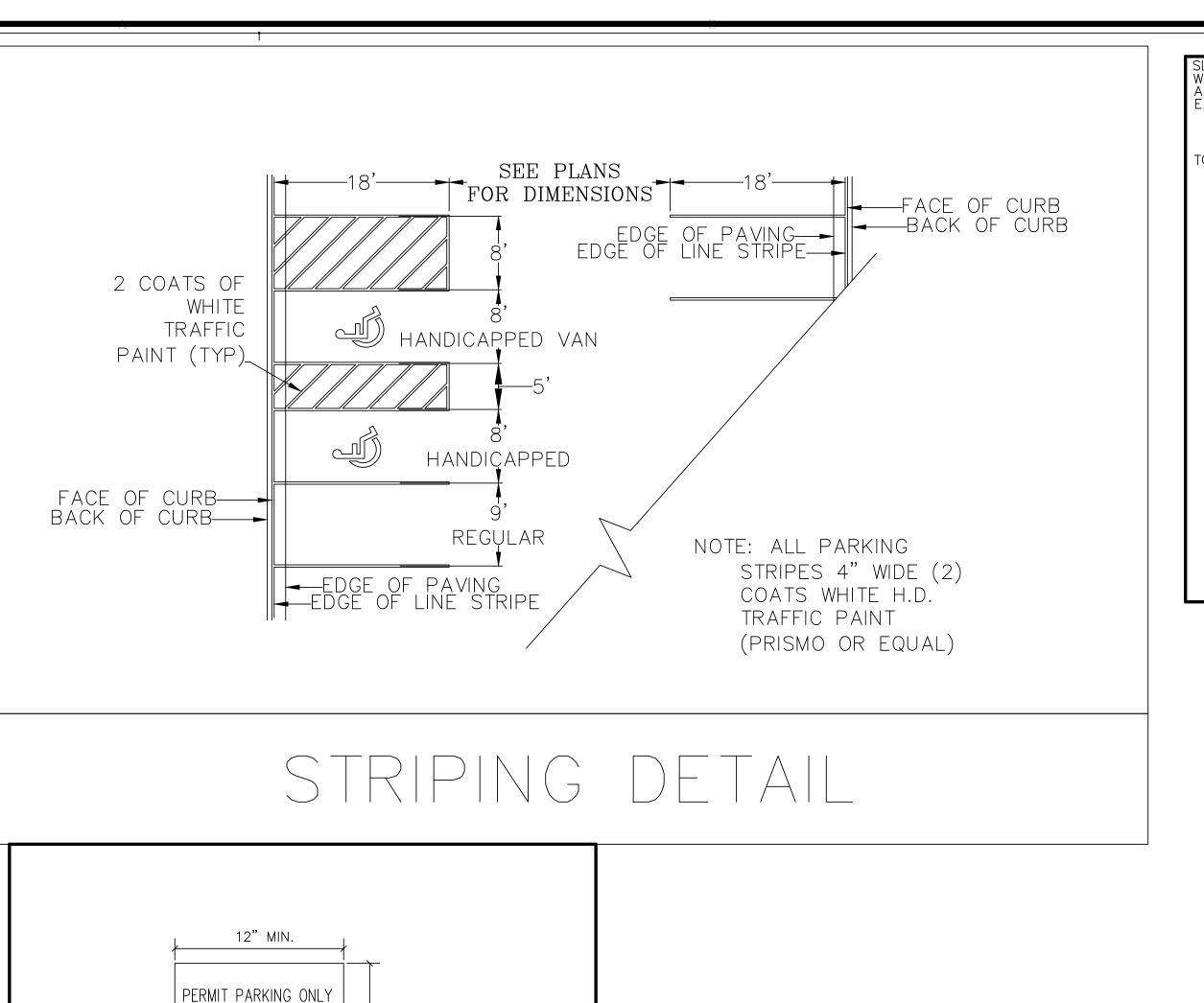
24 HOUR CONTACT: Aaron Hope (AMH Construction) 407-920-8550

North Carolina Utilities Protection Center, Inc.
Know what's DeloW.
Call before you dig.

DESIGNED DRAWN
JMS JMS

DATI9/14/20220

JOB NO.: 2020-274-01 SCALE:As Noted



REFLECTIVE:
BLUE BACKGROUND

ATTACH THIS SIGN FOR

▼ VAN ACCESSIBLE PARKING

LETTERING: MIN. 1" HIGH\_

(LETTERING &

SYMBOL IN

WHITE)

TOW-AWAY ZONE

MAXIMUM FINE \$500.00

ACCESSIBLE

NOTE: THE HANDICAP SIGN SHALL BE A BLUE METAL REFLECTIVE

NOT TO SCALE

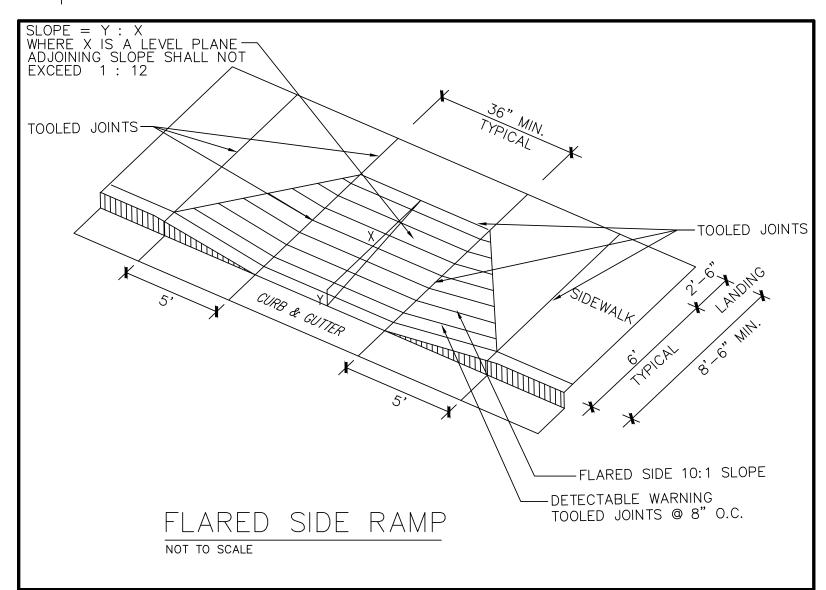
SIGN WHICH IS AT LEAST 12"x18" AND SHALL BE ERECTED AT SUCH

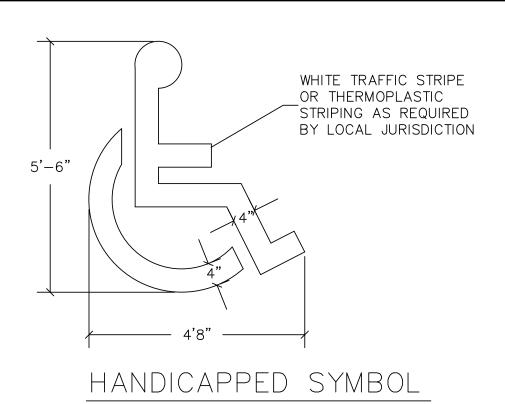
HEIGHT THAT IT WILL NOT BE OBSCURED BY A PARKED VEHICLE.

THE SIGN SHALL BEAR THE FOLLOWING LEGEND: "PERMIT PARKING ONLY, TOW AWAY ZONE: OR THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. THE LEGEND SHALL BE CENTERED ON THE SIGN, BE PRINTED IN WHITE AND OCCUPY NOT LESS THAN 75 PERCENT OF THE SURFACE AREA.

THE HANDICAP SIGN SHALL BE POST MOUNTED 60 IN. FROM GRADE TO CENTER OF SIGN.

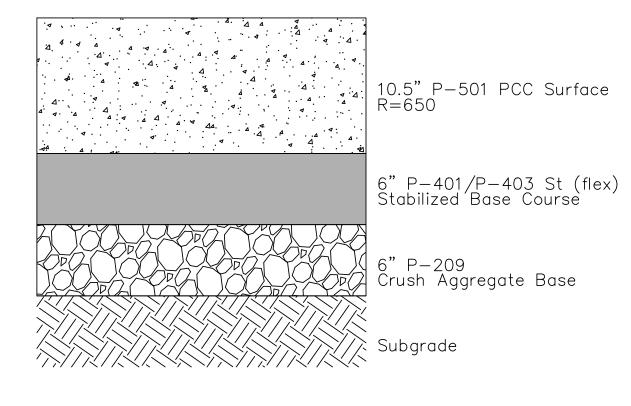
HANDICAP SIGN DETAIL



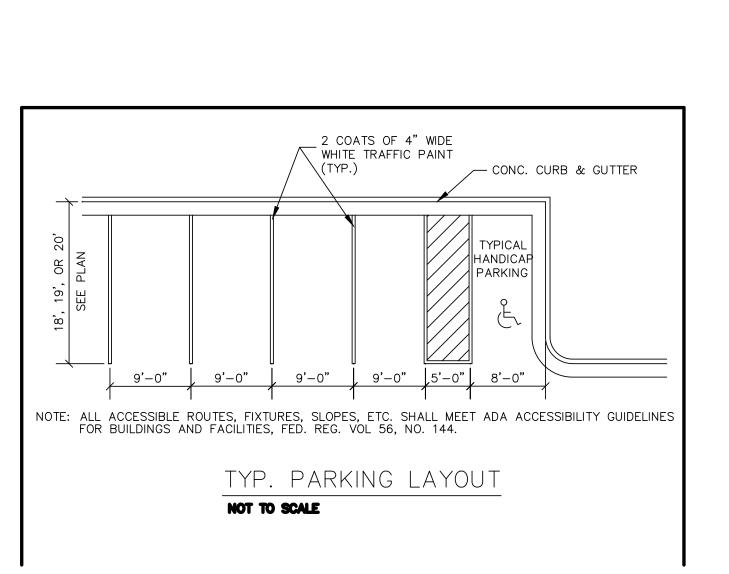


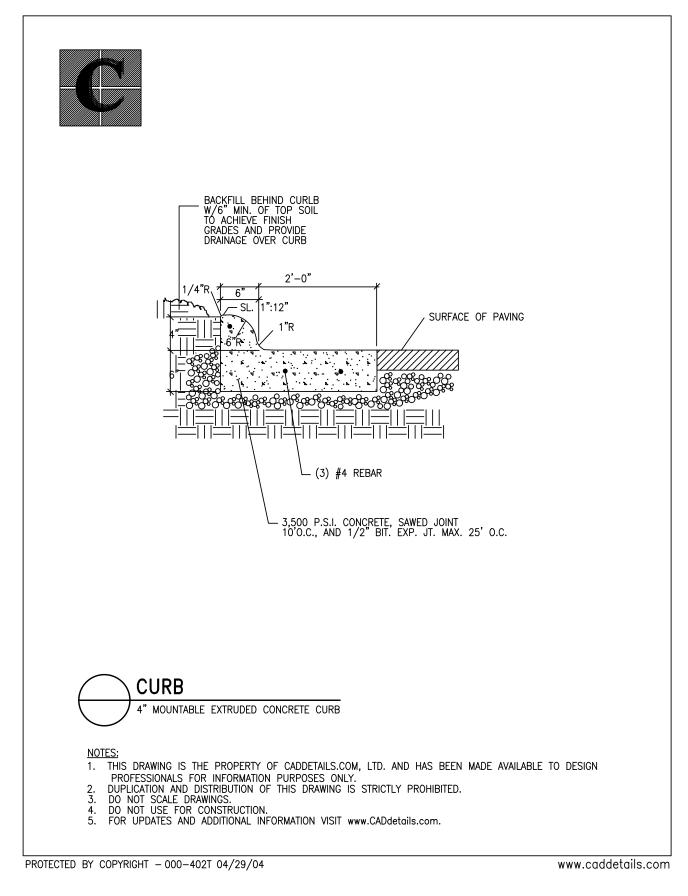
STRIPING DETAIL

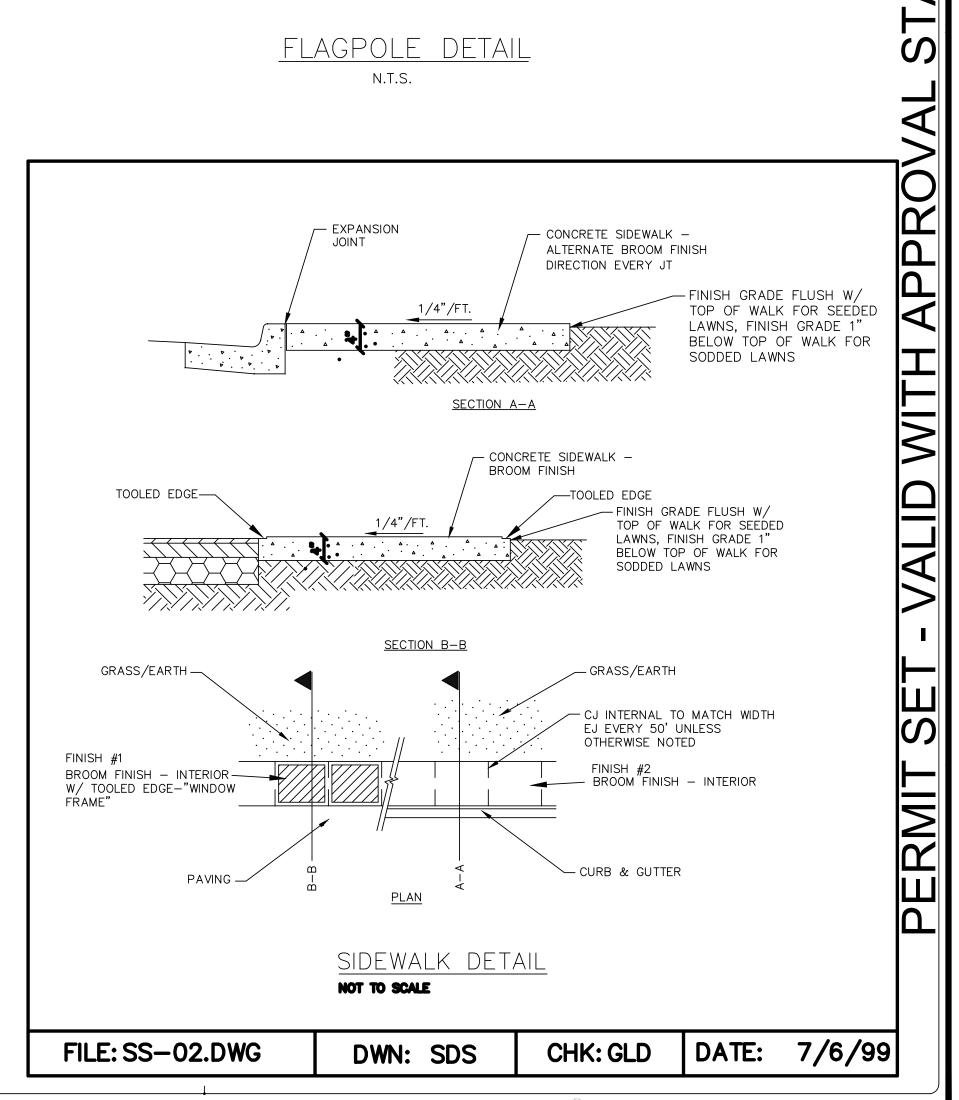




APRON CONCRETE PAVING NOT TO SCALE







-2" 9.5mm ASPHALT TOPPING

3" 19mm ASPHALT TOPPING

— PRIME COAT — 8" GRADED AGGREGATE BASE

COMPACTED SUBGRADE (98% STANDARD PROCTOR)

#4 BAR CONTINUOUS

PARKING AREA ASPHALT PAVING

NOT TO SCALE

CONC. FOUNDATION COORDINATE SIZE W
MFG RECOMMENDATIONS

CORRUGATED METAL TUB W/ RATES

WEDGES & SPIKE

(FILL W/ DRY SAND)

3'-6" MIN.

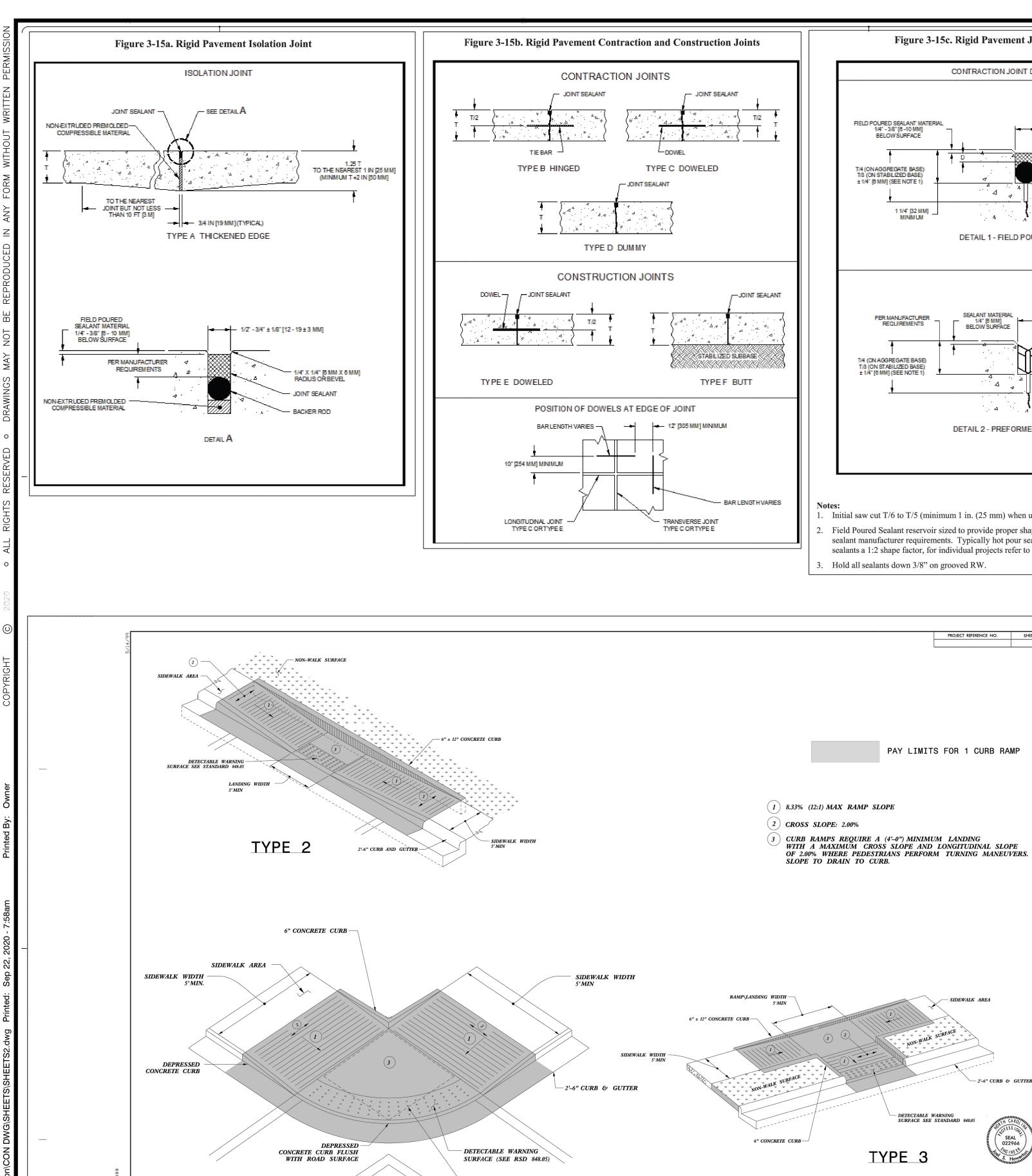




JMS DATI9/14/20220 JOB NO.: 2020-274-01

SCALE:As Noted

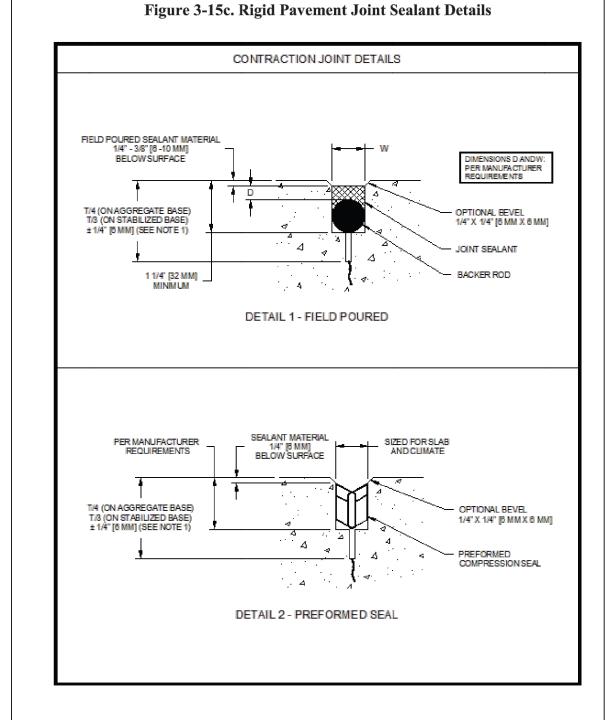
SHEET NUMBER C8.0



MIN LANDING BEHIND BACK OF CURB

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

TYPE 2A



Initial saw cut T/6 to T/5 (minimum 1 in. (25 mm) when using early entry saw.

PAY LIMITS FOR 1 CURB RAMP

- Field Poured Sealant reservoir sized to provide proper shape factor, depth (D): width (W) base upon sealant manufacturer requirements. Typically hot pour sealants require a 1:1 shape factor and silicon sealants a 1:2 shape factor, for individual projects refer to sealant manufacturer recommendations.
- 3. Hold all sealants down 3/8" on grooved RW.

TYPE 3

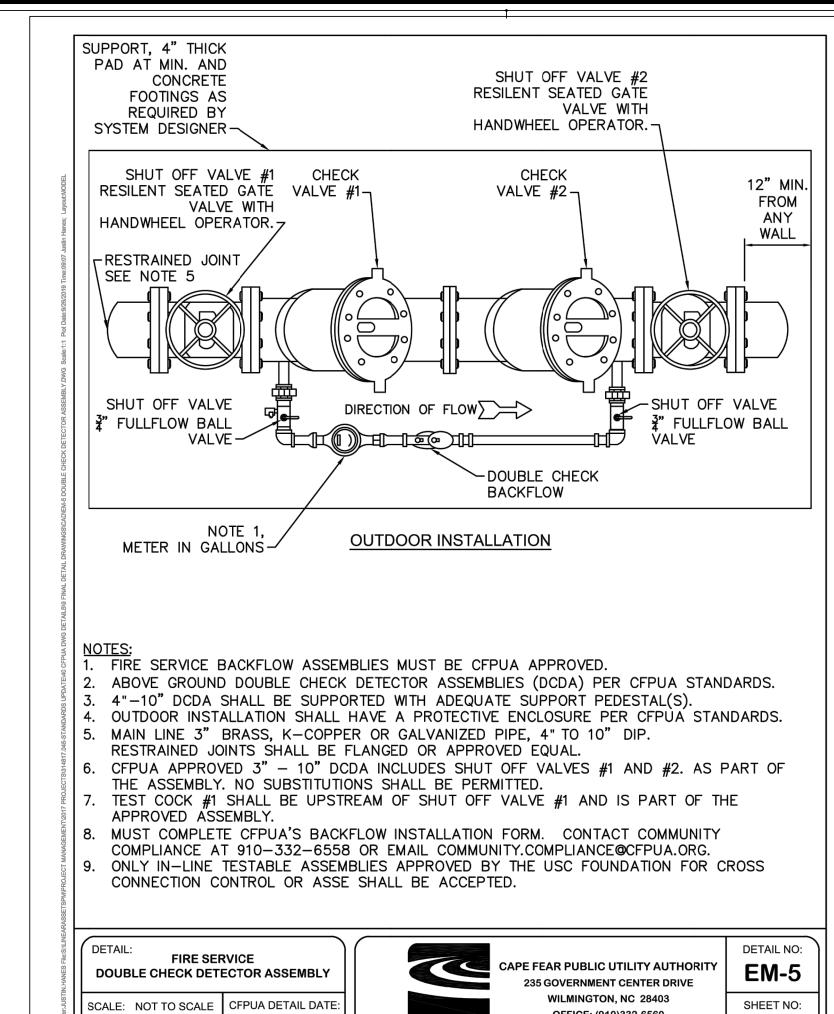
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

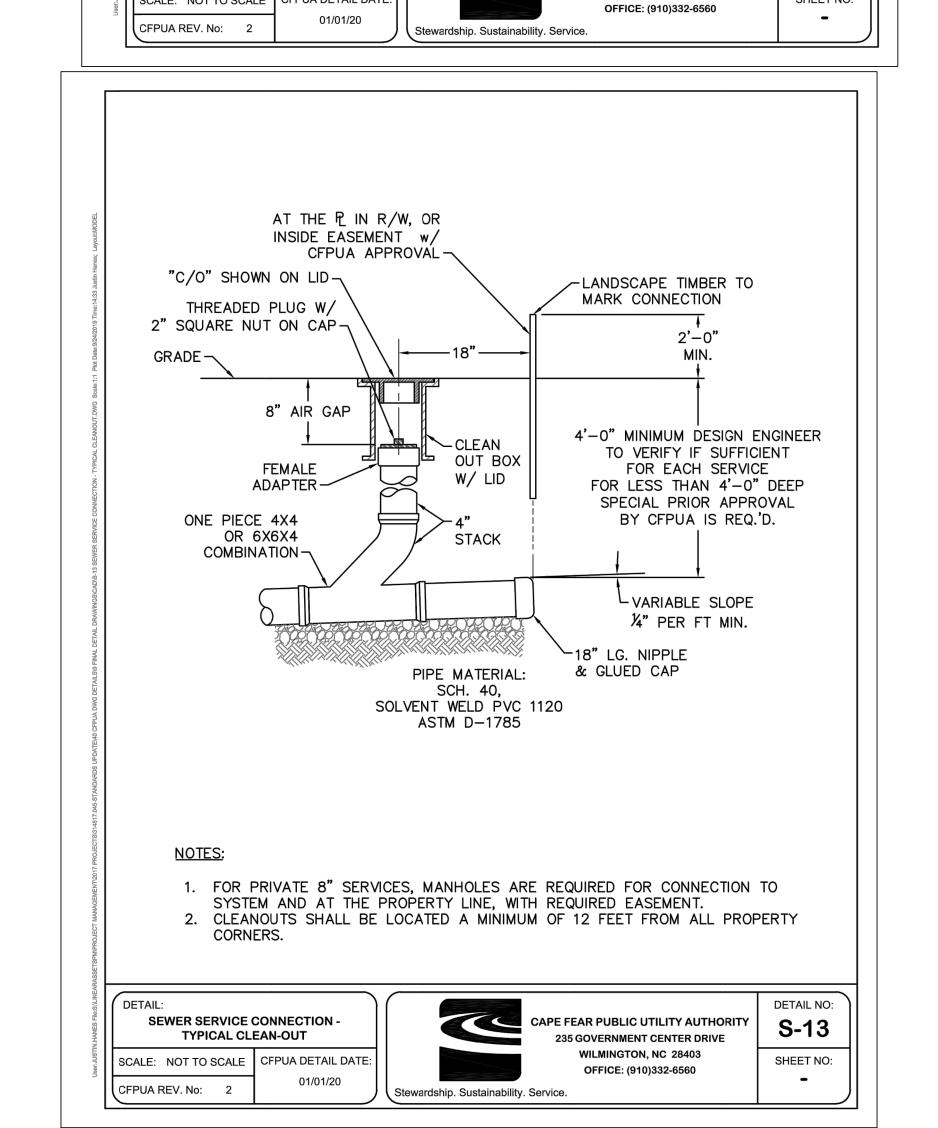
CONTRACT STANDARDS AND DEVELOPMENT UNIT 919-707-6950 FAX 919-25

**CURB RAMPS** 

Parallel Ramps

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE: TATE:







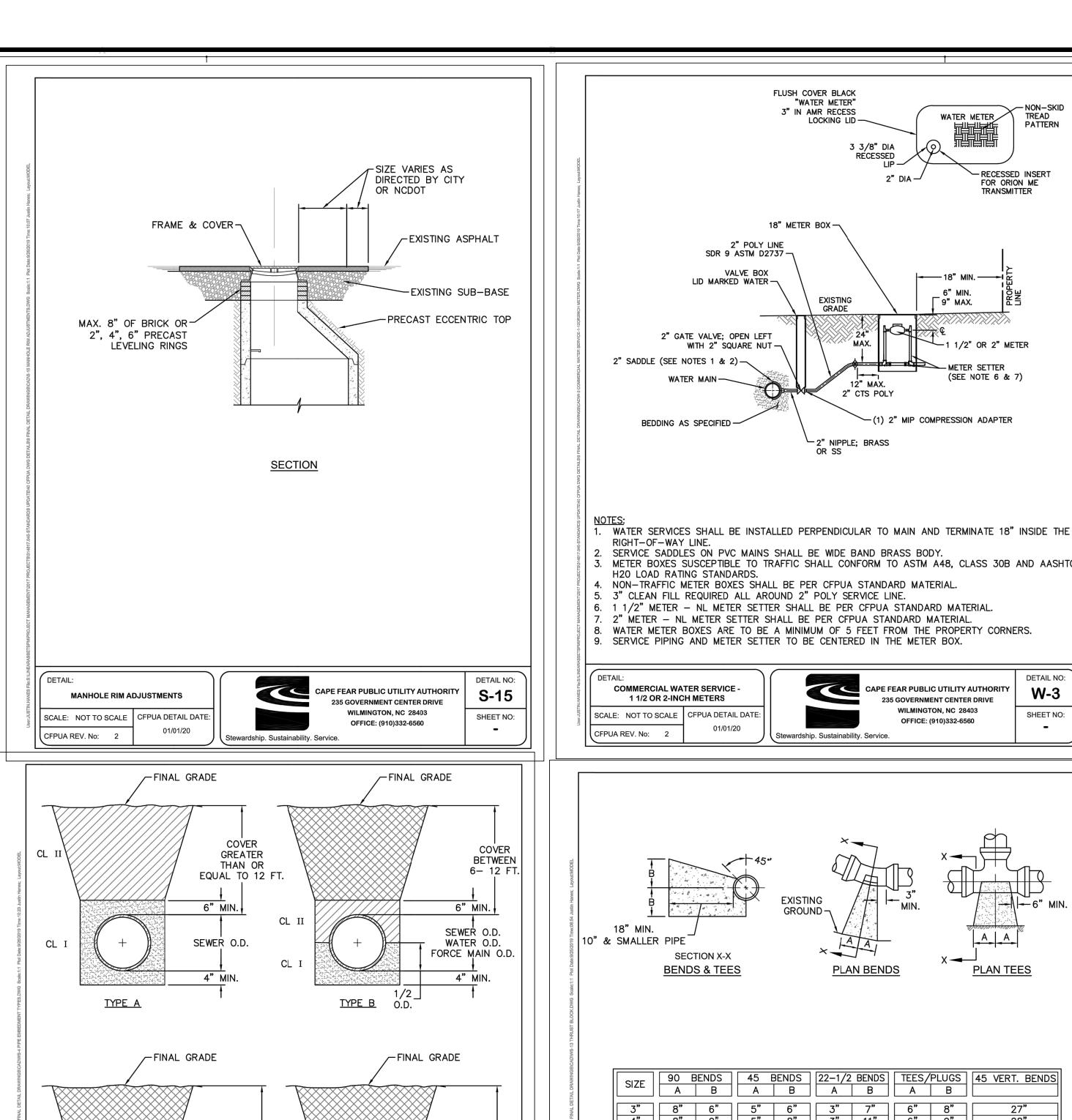


267-894-267-

JMS DATI9/14/20220

JOB NO.: 2020-274-01

SCALE:As Noted



COVER

BETWEEN

3-6 FT.

ALL ZONES: 95% STD EFFORT PER ASTM D698, EXCEPT AS STATED IN COMPACTION NOTE 2.

Stewardship. Sustainability. Service.

6" MIN.

SEWER O.D.

WATER O.D.

FORCE MAIN O.D.

2. 12" SUBGRADE UNDER PAVEMENT: 98% STD EFFORT PER ASTM D698.

CL I

**COMPACTION NOTES:** 

CFPUA REV. No: 2

PIPE EMBEDMENT TYPES

SCALE: NOT TO SCALE | CFPUA DETAIL DATE:

COVER

3" MIN.

SERVICE LINES O.D.

 $(1^{\prime\prime}-4^{\prime\prime} NOMINAL)$ 

3" MIN.

DETAIL NO:

SHEET NO:

TYPE S

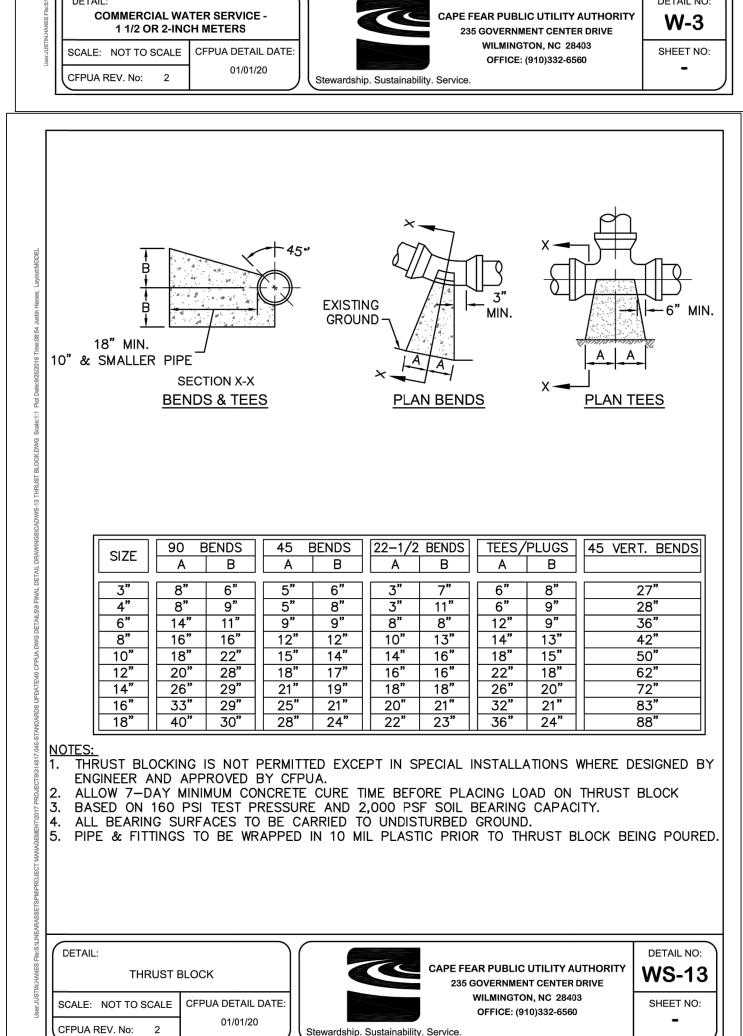
CAPE FEAR PUBLIC UTILITY AUTHORITY

235 GOVERNMENT CENTER DRIVE

WILMINGTON, NC 28403

OFFICE: (910)332-6560

BETWEEN



FLUSH COVER BLACK "WATER METER" 3" IN AMR RECESS

18" METER BOX -

SDR 9 ASTM D2737-

VALVE BOX

SERVICE SADDLES ON PVC MAINS SHALL BE WIDE BAND BRASS BODY.

NON-TRAFFIC METER BOXES SHALL BE PER CFPUA STANDARD MATERIAL.

D. SERVICE PIPING AND METER SETTER TO BE CENTERED IN THE METER BOX.

LID MARKED WATER -

2" GATE VALVE; OPEN LEFT

2" SADDLE (SEE NOTES 1 & 2)-

RIGHT-OF-WAY LINE.

H20 LOAD RATING STANDARDS.

BEDDING AS SPECIFIED -

WITH 2" SQUARE NUT -

3 3/8" DIA

2" CTS POLY

2" NIPPLE; BRASS

METER BOXES SUSCEPTIBLE TO TRAFFIC SHALL CONFORM TO ASTM A48, CLASS 30B AND AASHTO

B. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNERS.

RÉCESSED

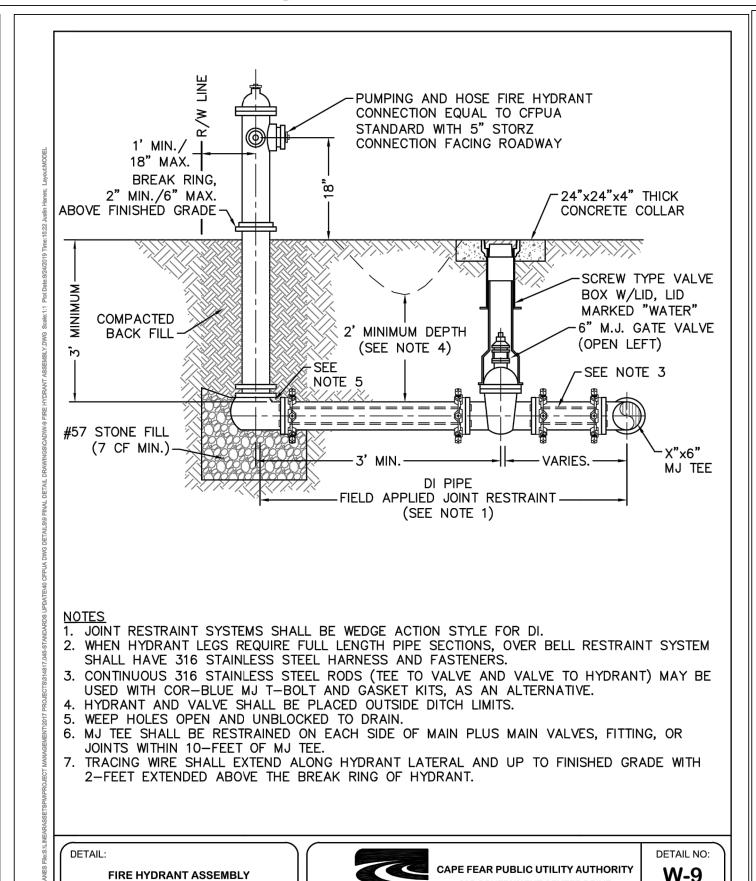
— RECESSED\_INSERT

FOR ORION ME

TRANSMITTER

(SEE NOTE 6 & 7)

(1) 2" MIP COMPRESSION ADAPTER



Stewardship, Sustainability, Service

1. ALL PROPOSED ADDITIONS TO THE CAPE FEAR PUBLIC UTILITY

HEREIN, SHALL BE DESIGNED AND CONSTRUCTED TO CONFORM

STANDARDS. THE CFPUA MINIMUM TECHNICAL STANDARDS ARE

MATERIAL SPECIFICATION MANUAL, TECHNICAL SPECIFICATIONS

STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN

MAIN AND TERMINATE 18" INSIDE RIGHT-OF-WAY LINE. SEWER

AUTHORITY (CFPUA) WATER DISTRIBUTION AND SANITARY

SEWER COLLECTION SYSTEMS, AS SHOWN AND SPECIFIED

TO STATE RULES AND THE CFPUA'S MINIMUM TECHNICAI

CONTAINED IN THE CURRENT DESIGN GUIDANCE MANUAL,

FOR CONSTRUCTION, AND STANDARD DRAWING DETAILS.

3. WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO

MANHOLE AND TERMINATE 18" INSIDE RIGHT-OF-WAY LINE. 4. ALL SEWER SERVICES CONNECTING INTO DUCTILE IRON MAINS

2. SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS

SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE

5. MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE

FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW

7. ALL STAINLESS STEEL FASTENERS SHALL BE TYPE 316.

SERVICES SHALL BE DISCONNECTED FROM MAIN.

11. A MINIMUM OF 10' OF MAIN LINE, 5' UPSTREAM AND 5'

DOWNSTREAM SHALL BE REPLACED FOR NEW CUT IN MANHOLES ON EXISTING CLAY GRAVITY SEWER MAINS

13. PROVIDE A MINIMUM DISTANCE OF SIX (6) INCHES BETWEEN

EDGE OF MANHOLE CORE HOLES AND MANHOLE BARREL

JOINTS. PROVIDE A MINIMUM DISTANCE OF SIX (6) INCHES

14. WATER MAIN AND FORCE MAIN PIPE INSTALLED BY OPEN CUT

INSTALLED AT A MINIMUM OF CROWN TO CROWN OF THE

Stewardship. Sustainability. Service.

15. ALL MANHOLE MAIN LÌNÉ AND SERVICE PIPING TO BE

BETWEEN EDGES OF CORE HOLES. CORING THE MANHOLE CONE

SHALL BE BURIED AT A MINIMUM OF THREE (3) FEET AND A

MAXIMUM OF FIVE (5) FEET BELOW FINISHED GRADE. DEPTHS

GREATER THAN FIVE (5) FEET MUST BE APPROVED BY CFPUA.

DETAIL NO:

WS-14

SHEET NO:

SCALE: NOT TO SCALE | CFPUA DETAIL DATE:

CFPUA REV. No: 2

CAPE FEAR PUBLIC UTILITY AUTHORITY

235 GOVERNMENT CENTER DRIVE

WILMINGTON, NC 28403

OFFICE: (910)332-6560

8. CLEANOUTS SHALL BE LOCATED A MINIMUM OF 6 FEET FROM

9. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM

10. UNUSED SERVICES SHALL BE ABANDONED. ABANDONED WATER

DOWNSTREAM SHALL BE REPLACED FOR NEW SEWER SERVICE CONNECTIONS TO EXISTING CLAY GRAVITY SEWER MAINS. 12. A MINIMUM OF 20' OF MAIN LINE, 10' UPSTREAM AND 10'

SHALL ALSO BE CONSTRUCTED OF DIP.

6. NO FLEXIBLE COUPLINGS SHALL BE USED.

CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:

SCALE: NOT TO SCALE | CFPUA DETAIL DATE:

TRAFFIC AREAS.

DEVELOPMENTS.

ALL PROPERTY CORNERS.

THE PROPERTY CORNER.

IS NOT PERMITTED

DETAIL:

CFPUA REV. No: 2

STANDARD NOTES

(REQUIRED ON ALL PLAN AND PROFILE SHEETS)

SCALE: NOT TO SCALE | CFPUA DETAIL DATE:

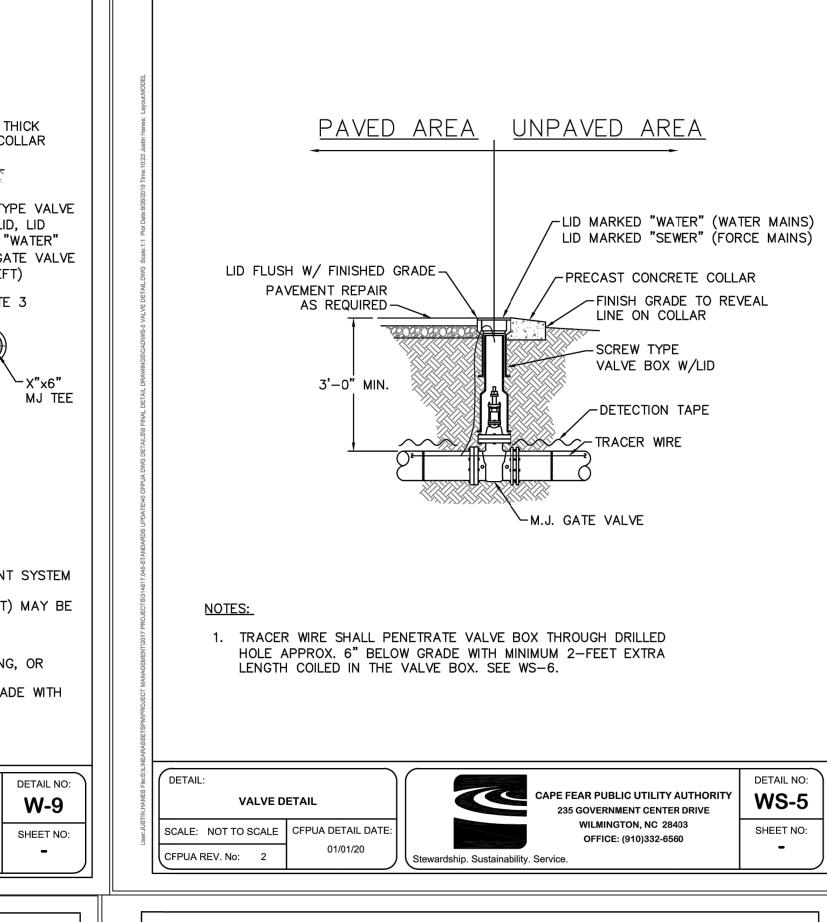
LARGEST DIAMETER PIPE.

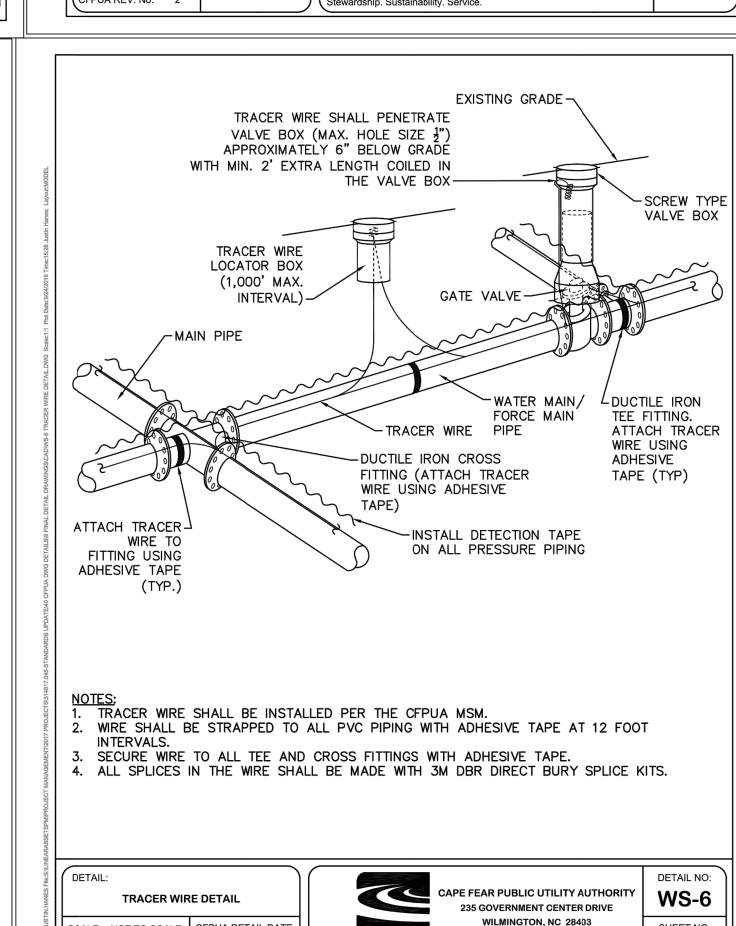
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SHEET NO:

OFFICE: (910)332-6560



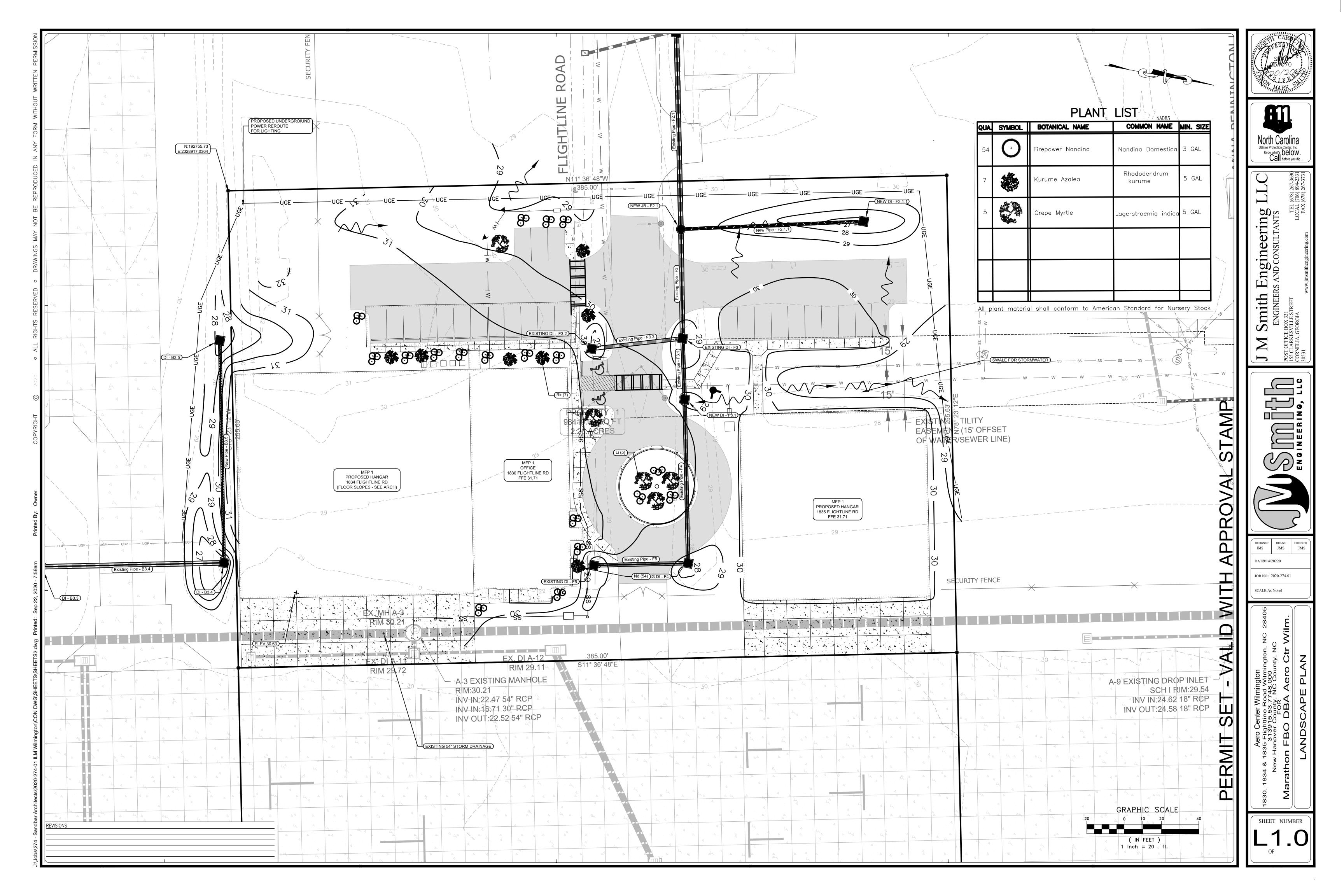
JMS

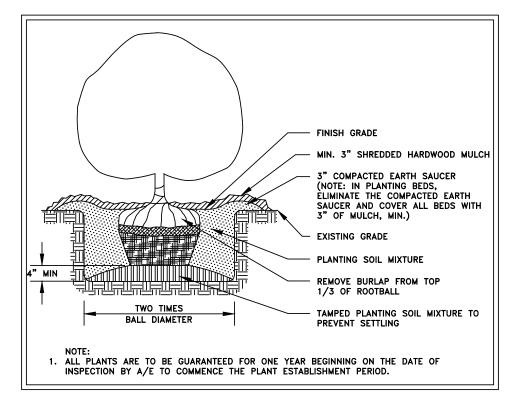
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JOB NO.: 2020-274-01

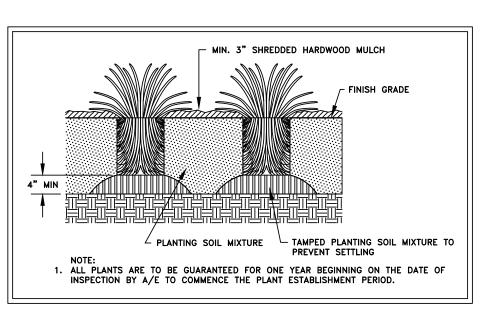
SCALE:As Noted

SHEET NUMBER  $\neg$  O



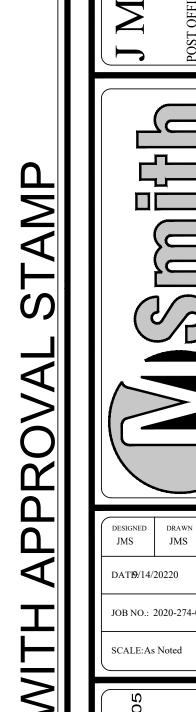


SHRUB PLANTING DETAIL SCALE: NONE



GROUND COVER PLANTING DETAIL

SCALE: NONE



DESIGNED DRAWN CHECKED
JMS JMS JMS

PERMIT