SPRINGS ACADEMY PARKING LOT

FOR

SPRINGS CHAPEL CORPORATION

1106 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043

CLAY COUNTY

PROJECT OWNER AND CONSULTANTS

OWNER: Springs Chapel Corporation
Dr. Christian Pope
1106 N. Orange Avenue
Green Cove Springs, FL 32043
TEL: 904-531-9669

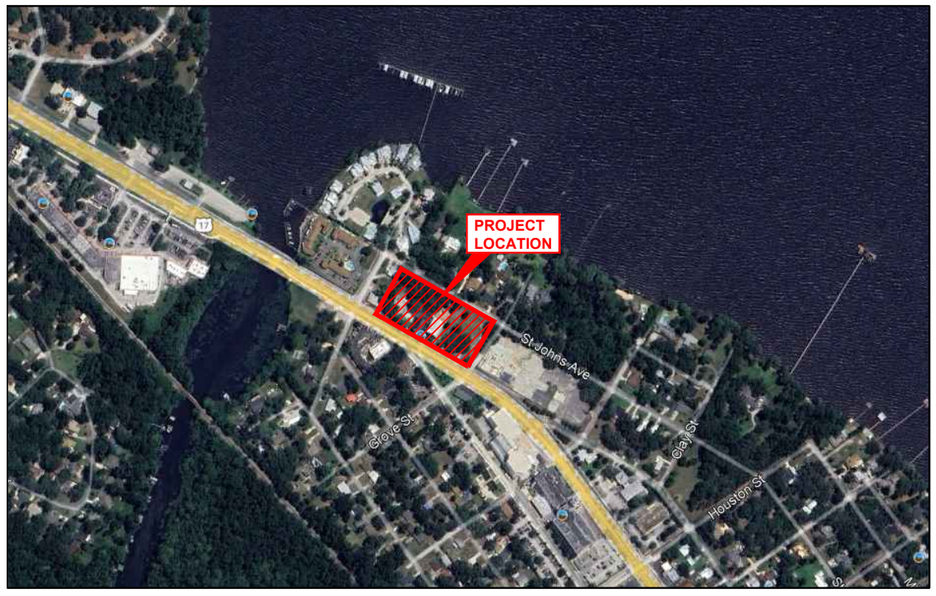
SURVEYOR: Compass Surveying
6250 N. Military Trail, Suite 102
West Palm Beach, FL 33407
TEL: (561) 640-4800

ENGINEER: Tocoi Engineering, LLC
Charles Sohm, P.E.
714 North Orange Avenue
Green Cove Springs, FL 32043
TEL: 904-215-1388

TE JOB NO: 24-671

SAFETY IS IN YOUR HANDS. EVERY DIG. EVERY TIME.

CALL BEFORE YOU DIG
800-432-4770



LOCATION MAP
N.T.S.

N

INDEX OF DRAWINGS

TOCOI Engineering, LLC

714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383
"TURNING YOUR IDEAS INTO REALITY"
www.tocoi.com

PRELIMINARY PLANS
January 16, 2025

CHARLES SOHM, P.E.
FLA. REGISTERED ENGINEER, #79289

Date: 1/16/25 Time: 12:07 PM DWG Name: \TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\01_24-671 COVER SHEET - CLAY.dwg Layout: 1

Clay County General Notes (Commercial) – Revised 10/15/19

1. Clay County Engineering Division requires twenty–four hours (24–hr) notice on all meetings and or testing procedures.

2. Construction warning signs are to be post mounted and erected before construction can commence. These and all traffic control devices shall follow the standards set forth by the Manual of Uniform Traffic Control Devices (MUTCD) and the Florida Department of Transportation Standard Specifications and Details.

3. All construction projects 1 acre or more in size shall be required to abide by the provisions of the National Pollutant Discharge Elimination (NPDES) permit. The owner or contractor is responsible for preparing the Stormwater Pollution Prevention Plan (SWPPP) and submitting the NPDES "Notice of Intent" (NOI) and "Notice of Termination" (NOT) to the EPA or local state agency having jurisdiction over the NPDES program. The contactor shall keep onsite copies of the SWPPP, NOI, and water management district permits.

4. It is the responsibility of the contractor to recognize and abide by all OSHA safety standards.

5. All disturbed Clay County Rights–of–Way shall be sodded to the discretion and approval of the Clay County Engineering Division.

6. The contractor shall verify all utility locations prior to excavation and take all measures necessary to protect utilities during construction. Should any utility line or component become damaged or require relocation the contractor shall immediately notify the responsible utility company, the engineer, and the county.

CALL BEFORE YOU DIG
1–800–432–4770
&
904–269–6359

- Call 800–432–4770 two full business days before digging. Call 10 days before digging when digging under water.
- Call 904–269–6359 (Clay County Signal & Maintenance Division) two full business days before digging
- Wait the required time for buried utilities to be located and marked.
- Protect the marks during your project. If marks are destroyed, call again.
- Dig safely, using extreme caution when digging within 24 inches on either side of the marks to avoid hitting the buried utility lines.

7. Before working in existing county rights–of–way, the contractor shall be required to obtain a right–of–way permit. The permit can be obtained at the Clay County Engineering Division, 477 Houston Street, 3rd/ Floor, Green Cove Springs, Florida.

8. All swale sections and ponds are to be sodded within 15 days of their final grading.

9. Any offsite swales or ditches impacted by the development, the contactor shall re–grade and restore, to obtain positive drainage.

10. A copy of the contractors' general license and the under ground utility license shall be provided at the time of the pre–construction conference.

11. Any applicable Saint Johns River Water Management District (SJRWMD), FDEP (Generic Permit for Stormwater Discharge from Large and Small Construction Activities, Army Corp of Engineers, and a Florida Department of Transportation (FDOT) permits shall be provided to the county by the pre–construction conference. No work shall begin without all applicable permits on file.

12. The contractor must obtain approval from the Saint Johns River Water Management District (SJRWMD) before the county will accept the project.

13. All storm pipes shall be videoed prior to a final inspection and all data shall be recorded in High quality DVD format with sound or any equipment approved by the Engineering Division (Ref. FDOT SSRBC latest edition).

14. There shall be a minimum five (5) days notice given for scheduling the final inspection.

15. At the final inspection a letter of compliance will need to be filled out and signed by the State of Florida Registered Professional Engineer of record for the project. The letter shall state that the project has been built in accordance of the approved design plans and other agency permits.

16. All soil and debris tracked out of the project shall be cleaned in accordance with the approved SWPPP or at the discretion of the Clay County Engineering Division.

17. Prior to any inspection or testing, all pipe line, structures, roadway, etc. shall be cleaned.

Erosion Control

18. Pursuant to Comprehensive Plan Policy 9:1 of the conservation element, the use of one or more erosion control measures, as requested by the Clay County Engineering Division, shall be used during construction. These will be, but not limited to, items such as temporary grass cover, sediment basins or ponds, mulching, temporary fences, diversion channels, and hay bales.

19. Pursuant to Comprehensive Plan Policy 9:1 of the conservation element, scheduling of construction shall be given special consideration to minimize exposure of bare soil. The contractor will formulate a construction schedule to be given to the county representative.

20. The governing publications for erosion control are current FDOT Roadway and Traffic Design Standards and the NPDES Stormwater and Erosion Control Manual latest edition.

21. The contractor shall check each day to insure that all erosion control devices are in place and working properly.

22. All erosion control measures shall be in compliance with the rules, regulations and standards of the Saint Johns River Water Management District, The Florida Department of Environmental Protection, and The United States Army Corp of Engineers and Clay County Regulations and Ordinances.

23. The contractor shall take whatever means necessary to prevent the erosion of soil and deposition of sediment on adjacent and downstream properties.

24. All erosion control measures shall be installed prior to commencement of construction. Sediment control consists of silt fencing, hay bales, and floating turbidity barriers per FDOT Erosion and Sediment Control Manual. Erosion control consists of seeding and mulching, sodding, wetting surfaces, placement of coarse aggregate, temporary paving.

25. The contactor shall respond to erosion and sediment control maintenance with 24–hours of being informed by Clay County, unless the situation requires an immediate response. The contractor will then respond immediately after notification by the county. The contactors erosion control inspector shall be a qualified stormwater management inspector by the Florida Department of Environmental Protection.

26. The contractor shall be required to incorporate permanent erosion control measures at the earliest practical time so as to minimize the need for temporary controls.

27. The erosion and sediment control measures shown on the plans are minimum requirements. The contractor shall be responsible for additional erosion control measures as determined by the county or the contractor to insure quality control.

28. All disturbed areas shall be grassed within 7 days of the initial disturbance. Types of grassing shall be as follows: Sodding is required for around all drainage structures, retention/detention areas, swales, ditches, and where 4:1 slopes are exceeded. Seed and mulch may be used at all other locations unless specifically called out for on these drawings. There shall be a standing row of grass at the time of final acceptance. If seed and mulch has been used and has not taken to, sod will be required for established grass.

29. The contractor shall inspect and report erosion and sediment control methods every week and after ½ inch of rain during construction. The contractor shall remove any sediment build up, repair or reinstall any control measures.

30. The county requires background testing of local waterways and additional periodic testing during construction for water quality and conformity with Clay County Standards.

Drainage Structures & Pipe Installation

31. The governing publications for pipe are the current FDOT Roadway and Traffic Design Standards and the current FDOT STD. Spec. for Roadway & Bridge Const.

32. The governing publications for Inlets, Junction Boxes and Manholes are the current FDOT Roadway and Traffic Design Standards, Index 425.

33. All joints of pipe regardless of material type shall be wrapped with fabric filter cloth per Florida Department of Transportation, type D–3, A.O.S. 70–100. The fabric shall be installed in accordance with FDOT. The contractor will provide a minimum 12" overlap in the fabric.

34. All storm sewer pipes are to be steel reinforced concrete pipe (SRCP) unless otherwise noted on these drawings. Round concrete pipe shall comply with ASTM C76. Elliptical pipe shall comply with ASTM C507. Pipe joints and O ring gaskets shall comply with ASTM C443.

35. All storm sewer pipes shall be subjected to leakage testing and shall be videoed/ TV prior to the final inspection.

36. All storm sewer pipes shall be cut flush with the interior wall of any type manhole or curb and ditch bottom inlets.

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37. If the approved design requires the inlet or storm run be surcharged, all inlets shall be inspected before being exposed to the system.

38. Mitered End Sections shall meet the requirements under the current FDOT Roadway and Traffic Design Standards, Index 430.

39. No manhole shall be placed within 2.5' of the curb.

40. No brick adjustment shall be allowed for manholes underneath the pavement.

41. The maximum threshold for manhole adjustment underneath the roadway shall be between 0" to 4".

42. Final Pipe Inspection in the Right–of–Way or County's easement: After the final pavement operation, the contractor shall dewater and video the pipe/culvert; the County will only review the video Data post asphalt construction supplied by the contractor/developer, and the tests and DVD must meet the latest edition of the FDOT Standard Specifications for Road and Bridge Construction.

Signage & Pavement Markings

43. All signs and pavement markings shall be in accordance with the "Manuel of Uniform Traffic Control Devices" and the latest implemented addition of the FDOT Roadway and Traffic Design Standards Index numbers 700 & 706 and the current FDOT STD. Spec. for Roadway & Bridge Const, Index 630.

44. All final pavement markings within the rights–of–way shall be thermoplastic.

45. All signs shall be on a ten–foot (10') pole a minimum seven feet (7') from the ground.

46. Street signs shall be mounted with tee caps.

47. Street signs shall be a six inches (6") wide with green backings and white letters and bordering.

48. Stop signs shall meet the minimum size requirements of the MUTCD.

49. Stop signs are to be placed four feet (4') from back of curb, four feet (4') behind cross walks and on the right hand side of the road.

50. All regulatory signs shall be black and white. All construction warning signs shall be orange and black. All warning signs shall be yellow and black. All no parking and stop signs shall be red and white.

51. Stop bars shall be twenty–four inches (24") wide and lane width. All stop bars shall be thermoplastic.

52. All signs must meet Florida Department of Transportation (FDOT) standards for engineering grade sign faces in reflectivity.

53. For county maintained roads, street signs shall be colored with a green background and white lettering. For private roads, the sign shall be a white background with green lettering.

54. All pavement markings require layout approval by Clay County.

Sidewalks

55. The governing publications for sidewalk are the current FDOT Roadway and Traffic Design Standards, Index 522.

56. Sidewalks are a minimum of 5' in width for a local road and 6' in width for a residential collector. All other roadway classifications shall refer to the details herein. In no case shall the sidewalk be less than 5' without written approval from the Engineering Division.

57. All sidewalks that are not in front of a build able lot, shall be installed prior to the final inspection

58. Pedestrian crossing/handicap ramps shall be installed wherever the sidewalk meets the curb. The ramps shall be in accordance with Florida Department of Transportation standard index number 522. All ADA ramps shall be installed prior to final acceptance unless otherwise approved by the Engineering Division.

59. Whether depicted on the plans or not, a sidewalk is to be installed at the subdivision entrance running parallel to the right of way for the extent of the property.

60. Sidewalks are to be placed, at a minimum, 3' from the property line or as otherwise approved by the Engineering Division.

Maintenance of Traffic

61. The governing publications for maintenance of traffic are the current FDOT Roadway and Traffic Design Standards, Index 102 and the current FDOT STD. Spec. for Roadway & Bridge Const., Section 102, and the latest edition of the MUTCD.

62. When FDOT Standard Indexes do not apply and hauling is necessary for the construction of the site, additional MOT maybe necessary. Installation of "Trucks Entering and Leaving Highway" signs shall be installed and maintained throughout the limits of the construction schedule.

TOCOI Engineering, LLC
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PH: 904–215–1388 EB. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM
FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

CLAY COUNTY GENERAL NOTES

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
2A

AS–BUILT REQUIREMENTS
PAVING AND DRAINAGE

General

1. Submit one signed and sealed paper copy (24"x36") of the as–builts overlaid on the approved plans. Submit a CAD file compatible with AutoCad 2017 and a pdf that exactly matches the paper copy.

2. All as–builts must use the NAVD 1988 vertical datum and the State Plane Coordinate NAD 83 horizontal datum.

3. As–built must contain at least the following:
   a. Project name
   b. Project/Development number
   c. Street names
   d. Physical address (commercial sites)
   e. North arrow
   f.Scale
   g. 4 boundary corners
   h. The word "as–built" must be in at least one inch high letters.
   i.Reference all benchmarks by station and offset
   j.Minimum of 2 benchmarks for every 1000' feet of road

Paving

4. As–builts should include elevation, station, and offset at the following every 100':
   a. Centerline or profile grade line
   b. Top of curb
   c. Gutter or edge of pavement (specify width)
   d. Back of sidewalks (minimum ever 100')

5. As–builts should include elevation, station, and offset at each:
   a. PC, and PT
   b. Low and high points
   c. Centerline intersections
   d. Beginning and end valley gutter
   e. Begin and end super elevation transition
   f.Gutter line (Cul–De–Sac every 25')

Drainage

6. Location of all drainage structures by station and offset, including
   a. Structure throat top and/or grate elevation (specify which)
   b. Weir and slot elevations and orifice sizes
   c. Pipe invert elevation and flow direction. Including underdrain.

7. Size, lengths and types of drainage pipes to include underdrain.

8. Cross sections through all swale and ditches. Minimum of every 25'. Must include elevation and locations of centerline, toe of slope, and top of bank.

9. Pond details to include:
   a. Elevations located top of bank a minimum of every 100'
   b. Dated elevation of pond water level at time of the as–built
   c. Elevations along bottom of the pond, two shots per acre minimum

10. Show all drainage easements to include water flow direction

Signage

11. Location of all street signs by station and offset

Lot Information

12. Lot elevations need to be included for each individual parcel. This must be at every elevation shown on the approved plans.

Letter of Certification

13. The as–built needs to be reviewed by the EOR and their approval must be included in the Engineers Certification letter and submitted with the close–out package.

SE–24–002 Special Exception for Springs Chapel

The City of Green Cove Springs recognizes a modification for special exception by Springs Chapel for the Springs Academy on the property located at 1106 N Orange Avenue/Parcel #017553–000–00 on May 6, 2024.

The special exception was approved by the Planning and Zoning Commission on June 25, 2024 subject to the following conditions and submittal timelines:

Conditions–

1. Define the maximum number of students to no more than 156 students.
2. Addition of or modification to any existing structure/facility on the site as of the approval of this modification, will require a modification to the Special Exception.
3. Provide parking calculations along with site plans.
4. Provide a tree survey showing the location of existing trees, comply with the tree preservation requirements set forth in Sec. 113–274~279.
5. Secure permits from FDOT for state road access/driveway.
6. Ingress and egress are prohibited on St. Johns Avenue. Provide a gate on the St. Johns Avenue driveway, to be closed during school hours.
7. A 6' high wall and trees (1 per 25 feet) to be provided along St. Johns Avenue as part of the required landscape buffer per Sec. 113–243.
8. Gate at access to St. Johns Avenue must be closed and secured during drop–off hours, school hours and pick–up hours.
9. Provide vehicle stacking to scale, each vehicle should be 10' in width and 20' in length. A minimum of 200' of stacking shall be provided.
10. Grove Street must be closed prior to the start of the school year, which is August 13, 2024, subject to City Council approval.
11. Provide a temporary stacking plan for school drop off and pickup with no access from St. Johns Avenue.
12. Special Exception shall be limited to Springs Chapel Corp. Any change in ownership shall require modification to the Special Exception.
13. Upon approval, failure to comply will result in pulling of the current and past Special Exceptions.

Submittal timeframes–

1. Secure a Site Development Plan approval subject to the special exception requirements within 120 days; and
2. Completion of construction of the improvements set forth in the approved Site Development Plan and conditions within the Special Exception within 6 months subsequent to Site Plan approval; and
3. Not meeting these timeframes shall be considered a violation of the approved Special Exception and shall be grounds for the special exception to be returned to the Planning and Zoning Commission for revocation of the Special Exception; and
4. Any other violations of the Special Exception and Site Development Plan shall follow the Code Enforcement procedure set forth in Chapter 22 of the Green Cove Springs City Code.

Please contact me directly at mdaniels@greencovesprings.com if you have any questions.

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904–215–1388 E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM
FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

CLAY COUNTY GENERAL NOTES

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
2B

11.00'(P)
10.64'(M)

FOUND 4"X4" CONCRETE MONUMENT

SEWAGE MANHOLE
RIM EL.=17.84'
BOTTOM EL.=8.60'
12" R.C.P. INV=9.54'
12" R.C.P. INV.=11.24'

ST. JOHNS AVENUE

APPARENT 60.0' RIGHT OF WAY

60.00'

FOUND 5/8" IROD PIPE (WITNESS CORNER)

(12.8')

UNABLE TO FIND OR SET DUE TO OAK TREE & FENCE @ PROPERTY CORNER

4.0'N

3.9'N

498.70'(C)

1.6'N

0.3'E

90°08'17"(C)

30.00'

HYDRANT

1/2" FOUND IROD PIPE ILLEGIBLE

89°51'43"(C)

19.0'

19.2'

METAL BUILDING ON CONCRETE

20.2'

40.6'

LOT 15 BLOCK 3

LOT 13 BLOCK 3

LOT 11 BLOCK 3

LOT 9 BLOCK 3

LOT 7 BLOCK 3

LOT 5 BLOCK 3

LOT 3 BLOCK 3

LOT 1 BLOCK 3

123.0'

123.0'

244.00' (C)

CONCRETE

WELL

1.6'W

(11.7')

FOUND 1/2" IROD PIPE (WITNESS CORNER)

144.3'

A/C

A/C

80.6'

16.9'

COVERED

5.9'

7.0'

60.0'

206.8'

46.8'

ASPHALT

BUILDING # 1106

LOT 16 BLOCK 3

LOT 14 BLOCK 3

LOT 12 BLOCK 3

LOT 10 BLOCK 3

LOT 8 BLOCK 3

LOT 6 BLOCK 3

LOT 4 BLOCK 3

LOT 2 BLOCK 3

144.4'

11.9'

16.5'

83.3'

A/C

CONCRETE

244.00'(C) / 243.62'(M)

42.9'

61.1'

ASPHALT

CATCH BASIN
RIM EL.=17.13'
BOTTOM EL.=15.50'

BROKEN CONCRETE

ASPHALT

CONCRETE

65.7'

A/C

41.6'

5.9'

7.6'

5.9'

11.3'

206.7'

F.F.=19.28'

COVERED

13.9'

3.9'

30.8'

3.9'

14.0'

90°08'22"

FOUND 1/2" IROD ROD ILLEGIBLE

50.00'(P)

89°51'38"(C)

498.70'(M)

FOUND 1/2" IROD PIPE ILLEGIBLE

SITE BENCHMARK
EL. = 18.63'

4.6'

4.6'

NORTH ORANGE AVENUE MAGNOLIA AVENUE(P) RIGHT OF WAY UNDETERMINED

CURB INLET DRAIN
STORM MANHOLE
RIM EL.=17.19'
15"R.C.P. INV.=13.05'
6" R.C.P. INV.=13.85'
6" R.C.P. INV.=15.85'

GROVE STREET

UNKNOWN RIGHT OF WAY

0 20 40

SCALE: 1" = 20'
SCALE: 1" = 40'
FOR: 22"x34" SHEET
FOR: 11"x17" SHEET

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FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

EXISTING GROUND

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
3

Date: 1/9/25 Time: 10:45 AM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN 010625.dwg Layout: 3-EXIST

LEGEND

ITEMS TO BE REMOVED UNLESS OTHERWISE NOTED

SILT FENCE

PROPERTY BOUNDARY

SITE DATA

PARCEL AREA	= 2.79 AC
PROJECT AREA	= 1.10 AC
IMPERVIOUS AREA	= 0.78 AC
WETLANDS AREA	= 0.00 AC

NOTE: STABILIZED CONSTRUCTION ENTRANCE TO BE DETERMINED BY ONSITE PERSONNEL

N

11.00'(P)
10.64'(M)

FOUND 4"X4" CONCRETE MONUMENT

SEWAGE MANHOLE
RIM EL.=17.84'
BOTTOM EL.=8.60'
12" R.C.P. INV=9.54'
12" R.C.P. INV.=11.24'

ST. JOHNS AVENUE

APPARENT 60.0' RIGHT OF WAY

60.00'

FOUND 5/8" IROD PIPE (WITNESS CORNER)

(12.8')

UNABLE TO FIND OR SET DUE TO OAK TREE & FENCE @ PROPERTY CORNER

4.0'N

3.9'N

498.70'(C)

1.6'N

0.3'E

90°08'11"(C)

30.00'

89°51'43"(C)

HYDRANT

FOUND 1/2" IROD PIPE ILLEGIBLE

19.0'

19.2'

METAL BUILDING ON CONCRETE

SILT FENCE ±200 LF

SILT FENCE ±47 LF

SILT FENCE ±7 LF

TREE TO BE REMOVED (TYP)

LOT 15 BLOCK 3

LOT 13 BLOCK 3

LOT 11 BLOCK 3

LOT 9 BLOCK 3

LOT 7 BLOCK 3

LOT 5 BLOCK 3

LOT 3 BLOCK 3

LOT 1 BLOCK 3

244.00'(C)

123.0'

123.0'

PROJECT BOUNDARY

WELL

SILT FENCE ±188 LF

244.00'(C) / 243.62'(M)

CONCRETE

A/C

A/C

80.6'

16.9'

COVERED

5.9'

7.0'

60.0'

206.8'

SILT FENCE ±120 LF

EXIST. ASPHALT TO BE REMOVED (TYP)

46.8'

ASPHALT

BUILDING #1106

LOT 16 BLOCK 3

LOT 14 BLOCK 3

LOT 12 BLOCK 3

LOT 10 BLOCK 3

LOT 8 BLOCK 3

LOT 6 BLOCK 3

LOT 4 BLOCK 3

LOT 2 BLOCK 3

144.4'

11.9'

16.5'

83.3'

A/C

EXIST. TREES TO REMAIN

EXIST. CATCH BASIN TO BE REMOVED

EXIST. CONCRETE TO BE REMOVED (TYP)

50'

15'

SILT FENCE ±34 LF

SILT FENCE ±30 LF

42.9'

61.1'

65.7'

BROKEN CONCRETE

ASPHALT

CONCRETE

A/C

41.6'

5.9'

5.9'

11.3'

7.6'

F.F.=19.28'

13.9'

3.9'

30.8'

3.9'

14.0'

COVERED

206.7'

TEMPORARY CONSTRUCTION ENTRANCE

SILT FENCE ±24 LF

SILT FENCE ±192 LF

90°08'22"

FOUND 1/2" IROD PIPE ILLEGIBLE

50.00'(P)

89°(C)

498.70'(M)

FOUND 1/2" IROD PIPE ILLEGIBLE

SITE BENCHMARK
EL. = 18.63'

NORTH ORANGE AVENUE MAGNOLIA AVENUE(P) RIGHT OF WAY UNDETERMINED

CURB INLET DRAIN
STORM MANHOLE
RIM EL.=17.19'
15"R.C.P. INV.=13.05'
6" R.C.P. INV.=13.85'
6" R.C.P. INV.=15.85'

GROVE STREET - UNKNOWN RIGHT OF WAY

0 20 40

SCALE: 1" = 20'
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ENGINEER OF RECORD
CHARLES SOHM

FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

DEMOLITION PLAN

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
6

Date: 1/9/25 Time: 1:41 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN 010625.dwg Layout: 6-DEMO

FOUND 4"X4" CONCRETE MONUMENT

11.00'(P)
10.64'(M)

SEWAGE MANHOLE
RIM EL.=17.84'
BOTTOM EL.=8.60'
12" R.C.P. INV=9.54'
12" R.C.P. INV.=11.24'

ST. JOHNS AVENUE — APPARENT 60.0' RIGHT OF WAY

60.00'

FOUND 5/8" IROD PIPE (WITNESS CORNER)

(12.8')

UNABLE TO FIND OR SET DUE TO OAK TREE & FENCE @ PROPERTY CORNER

4.0'N 3.9'N 498.70'(C) 1.6'N

0.3'E
90°08'11"(C)

30.00'

HYDRANT

FOUND 1/2" IROD PIPE ILLEGIBLE

89°51'43"(C)

19.0' 19.2'

METAL BUILDING ON CONCRETE

LOT 15 BLOCK 3
LOT 13 BLOCK 3
LOT 11 BLOCK 3
LOT 9 BLOCK 3
LOT 7 BLOCK 3
LOT 5 BLOCK 3
LOT 3 BLOCK 3
LOT 1 BLOCK 3

123.0' 123.0'

PROJECT BOUNDARY

ENTRANCE

WELL

VEHICLE STACKING X2

244.00'(C)

244.00'(C) 243.62'(M)

1.6'W

(11.7')

FOUND 1/2" IROD PIPE (WITNESS CORNER)

CONCRETE

A/C A/C

80.6'

16.9' COVERED 60.0'

5.9' 7.0'

206.8'

EXIT

ASPHALT

46.8'

BUILDING # 1106

LOT 16 BLOCK 3
LOT 14 BLOCK 3
LOT 12 BLOCK 3
LOT 10 BLOCK 3
LOT 8 BLOCK 3
LOT 6 BLOCK 3
LOT 4 BLOCK 3
LOT 2 BLOCK 3

11.9'

144.4'

16.5'

83.3'

A/C

42.9'

61.1'

65.7'

ASPHALT

CATCH BASIN
RIM EL.=17.13'
BOTTOM EL.=15.50'

206.7'

BROKEN CONCRETE

CONCRETE

A/C

7.6'

41.6'

5.9' 5.9'

11.3'

F.F.=19.28'

13.9' 3.9' 30.8' 3.9' 14.0'

COVERED

50.00'(P)

88°(C)

90°08'22"

FOUND 1/2" IROD ROD ILLEGIBLE

498.70'(M)

FOUND 1/2" IROD PIPE ILLEGIBLE

SITE BENCHMARK
EL. = 18.63'

NORTH ORANGE AVENUE MAGNOLIA AVENUE(P) RIGHT OF WAY UNDETERMINED

GROVE STREET UNKNOWN RIGHT OF WAY

CURB INLET DRAIN
STORM MANHOLE
RIM EL.=17.19'
15"R.C.P. INV.=13.05'
6" R.C.P. INV.=13.85'
6" R.C.P. INV.=15.85'

NOTE: CONSTRUCTION WILL COMMENCE AFTER THE SPRINGS CHAPEL SCHOOL YEAR ENDS.

0 20 40
SCALE: 1" = 20'
SCALE: 1" = 40'
FOR: 22"x34" SHEET
FOR: 11"x17" SHEET

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388
E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM
FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

TEMPORARY STACKING PLAN

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
6A

Date: 1/16/25 Time: 12:20 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN 011625.dwg Layout: 6A-TSP

LEGEND

- AREAS WHERE NEW CONCRETE CONSTRUCTION IS TO OCCUR
- AREAS WHERE NEW ASPHALT CONSTRUCTION IS TO OCCUR
- PROPERTY BOUNDARY
- SOLID ARROWS ARE FOR DIRECTIONAL PURPOSES ONLY NOT FOR PAVEMENT MARKINGS
- (10) NUMBER OF STANDARD PARKING SPACES
- NOTE: FOR ADA PARKING AND SIDEWALK DETAILS SEE MISC. DETAILS

SITE DATA

PARCEL AREA	= 2.79 AC
IMPERVIOUS AREA (EXISTING)	= 1.13 AC
PERVIOUS AREA	= 1.66 AC
WETLANDS AREA (PONDS)	= 0.00 AC
PROJECT AREA	= 1.11 AC
IMPERVIOUS AREA (PROPOSED)	= 0.85 AC
PERVIOUS AREA	= 0.26 AC
WETLANDS AREA (PONDS)	= 0.00 AC

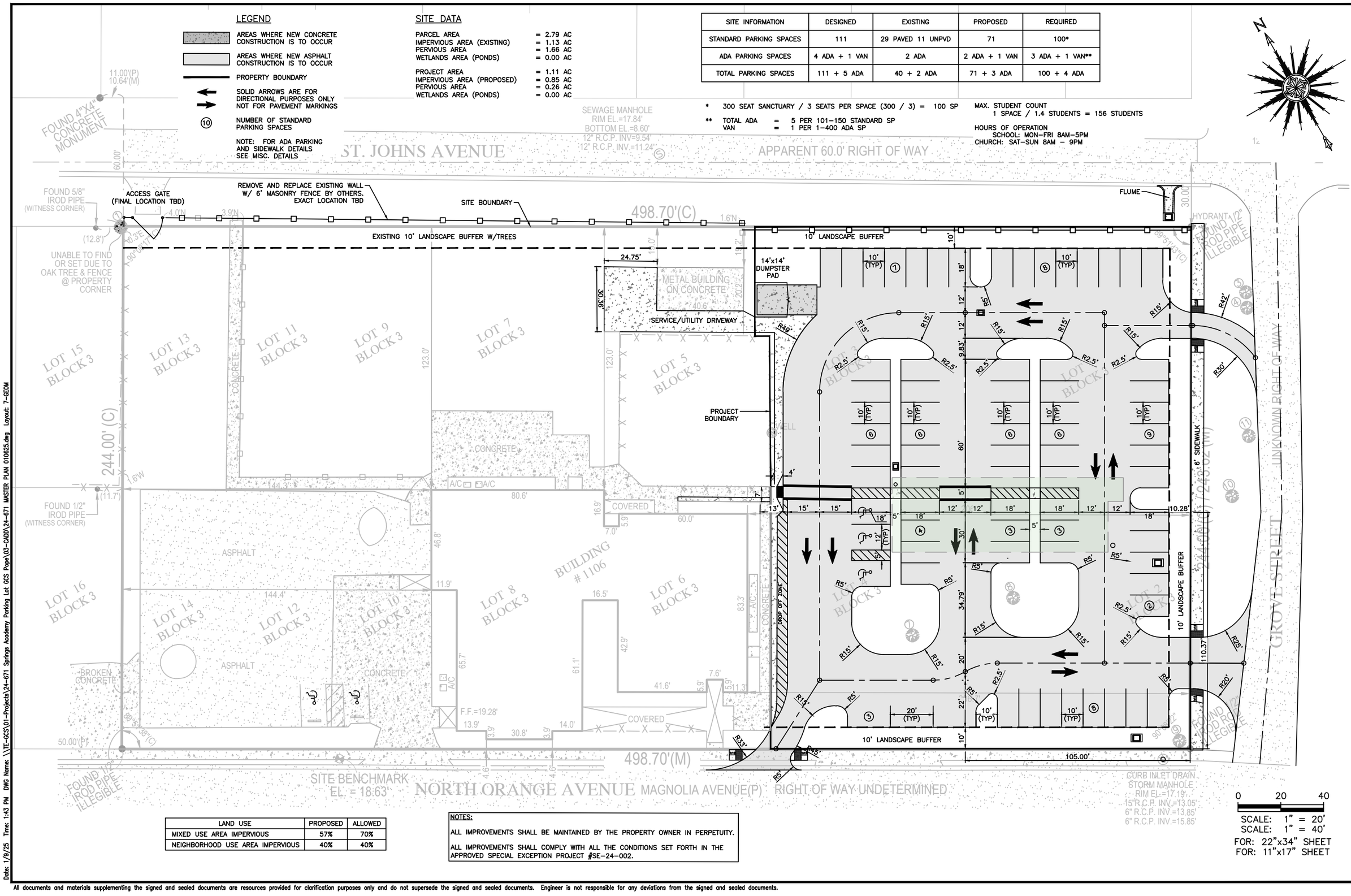
SITE INFORMATION	DESIGNED	EXISTING	PROPOSED	REQUIRED
STANDARD PARKING SPACES	111	29 PAVED 11 UNPVD	71	100*
ADA PARKING SPACES	4 ADA + 1 VAN	2 ADA	2 ADA + 1 VAN	3 ADA + 1 VAN**
TOTAL PARKING SPACES	111 + 5 ADA	40 + 2 ADA	71 + 3 ADA	100 + 4 ADA

* 300 SEAT SANCTUARY / 3 SEATS PER SPACE (300 / 3) = 100 SP

** TOTAL ADA = 5 PER 101–150 STANDARD SP
VAN = 1 PER 1–400 ADA SP

MAX. STUDENT COUNT
1 SPACE / 1.4 STUDENTS = 156 STUDENTS

HOURS OF OPERATION
SCHOOL: MON–FRI 8AM–5PM
CHURCH: SAT–SUN 8AM – 9PM



LAND USE	PROPOSED	ALLOWED
MIXED USE AREA IMPERVIOUS	57%	70%
NEIGHBORHOOD USE AREA IMPERVIOUS	40%	40%

NOTES:

ALL IMPROVEMENTS SHALL BE MAINTAINED BY THE PROPERTY OWNER IN PERPETUITY.

ALL IMPROVEMENTS SHALL COMPLY WITH ALL THE CONDITIONS SET FORTH IN THE APPROVED SPECIAL EXCEPTION PROJECT #SE–24–002.

0 20 40

SCALE: 1" = 20'
SCALE: 1" = 40'
FOR: 22"x34" SHEET
FOR: 11"x17" SHEET

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388
E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM

FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

GEOMETRY PLAN

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
7

Date: 1/9/25 Time: 1:43 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN 010625.dwg Layout: 7-GEOM

ST. JOHNS AVENUE

APPARENT 60.0' RIGHT OF WAY

11.00'(P)
10.64'(M)

FOUND 4"X4" CONCRETE MONUMENT

60.00'

SEWAGE MANHOLE
RIM EL.=17.84'
BOTTOM EL.=8.60'
12" R.C.P. INV=9.54'
12" R.C.P. INV.=11.24'

FOUND 5/8" IROD PIPE (WITNESS CORNER)

(12.8')

UNABLE TO FIND OR SET DUE TO OAK TREE & FENCE @ PROPERTY CORNER

4.0'N

3.9'N

498.70'(C)

1.6'N

0.3'E

90°04'41"(C)

HYDRANT

30.00'

FOUND 1/2" IROD PIPE ILLEGIBLE

89°31'19"(C)

METAL BUILDING ON CONCRETE

15.0'

19.2'

20.2'

40.6'

ENTRANCE

LOT 15 BLOCK 3

LOT 13 BLOCK 3

LOT 11 BLOCK 3

LOT 9 BLOCK 3

LOT 7 BLOCK 3

LOT 5 BLOCK 3

LOT 3 BLOCK 3

LOT 1 BLOCK 3

244.00'(C)

123.0'

PROJECT BOUNDARY

WELL

DOUBLE STACK

DOUBLE STACK

DOUBLE STACK

SINGLE STACK

206.8'

PICKUP/DROP-OFF

CONCRETE

A/C

A/C

144.3'

80.6'

COVERED

16.9'

5.9'

7.0'

60.0'

46.8'

ASPHALT

BUILDING # 1106

LOT 16 BLOCK 3

LOT 14 BLOCK 3

LOT 12 BLOCK 3

LOT 10 BLOCK 3

LOT 8 BLOCK 3

LOT 6 BLOCK 3

LOT 4 BLOCK 3

LOT 2 BLOCK 3

11.9'

144.4'

16.5'

83.3'

42.9'

61.1'

65.7'

BROKEN CONCRETE

ASPHALT

CONCRETE

A/C

7.6'

41.6'

5.9'

5.9'

111.3'

F.F.=19.28'

13.9'

3.9'

30.8'

3.9'

14.0'

COVERED

SOUTH EXIT

206.7'

244.00'(C) / 243.62'(M)

GROVE STREET - UNKNOWN RIGHT OF WAY

(11.7')

1.6'W

FOUND 1/2" IROD PIPE (WITNESS CORNER)

89°58'38"(C)

50.00'(P)

498.70'(M)

FOUND 1/2" IROD PIPE ILLEGIBLE

SITE BENCHMARK
EL. = 18.63'

NORTH ORANGE AVENUE MAGNOLIA AVENUE(P) RIGHT OF WAY UNDETERMINED

CURB INLET DRAIN
STORM MANHOLE
RIM EL.=17.19'
15"R.C.P. INV.=13.05'
6" R.C.P. INV.=13.85'
6" R.C.P. INV.=15.85'

FOUND 1/2" IROD PIPE ILLEGIBLE

90°04'02"

0 20 40

SCALE: 1" = 20'
SCALE: 1" = 40'
FOR: 22"x34" SHEET
FOR: 11"x17" SHEET

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388
E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM

FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

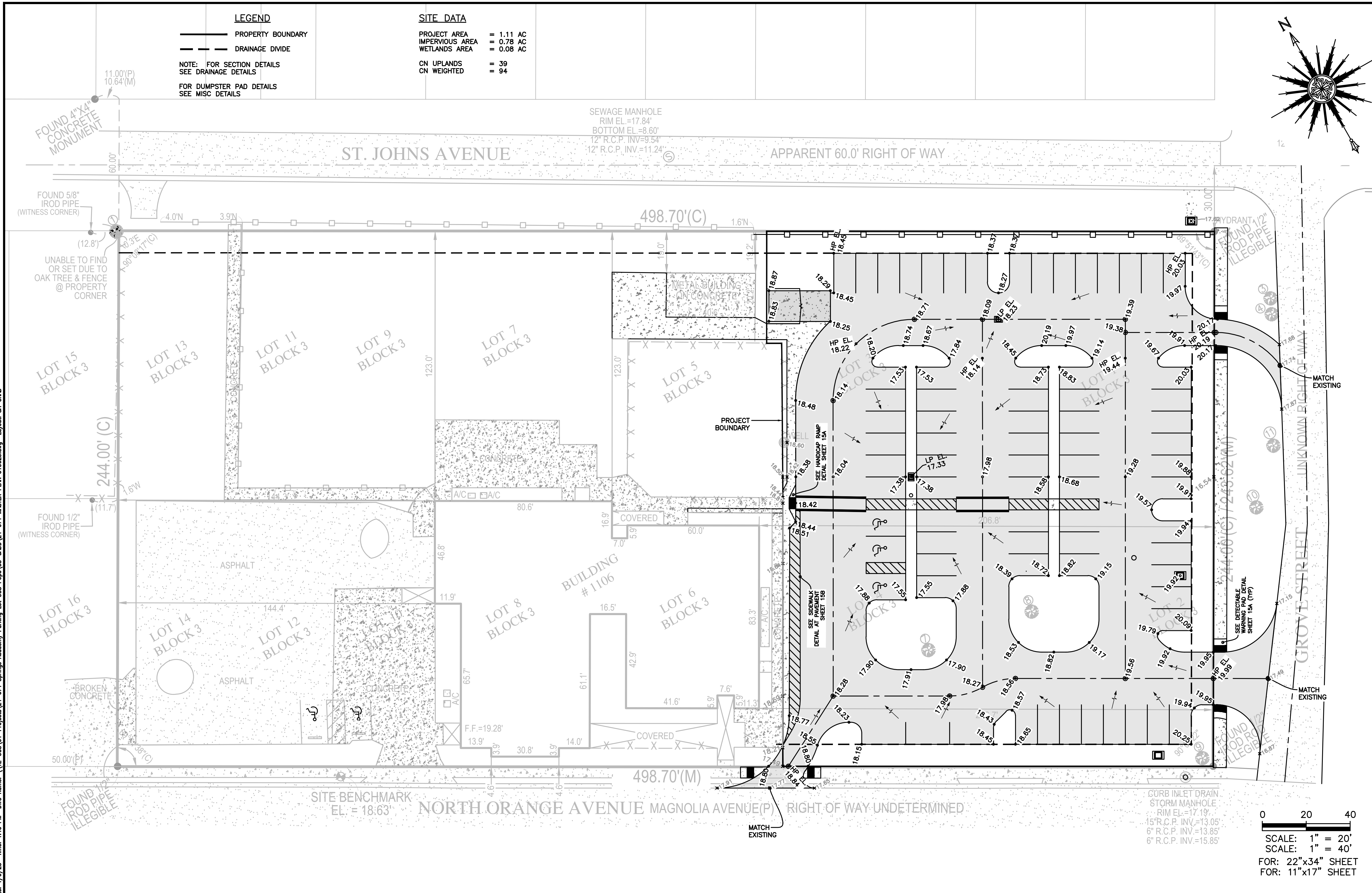
STACKING PLAN

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
7A

Date: 1/16/25 Time: 12:38 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN 011625.dwg Layout: 7A-STAC


LEGEND
PROPERTY BOUNDARY
DRAINAGE DIVIDE
NOTE: FOR SECTION DETAILS SEE DRAINAGE DETAILS
FOR DUMPSTER PAD DETAILS SEE MISC DETAILS
SITE DATA
PROJECT AREA = 1.11 AC
IMPERVIOUS AREA = 0.78 AC
WETLANDS AREA = 0.08 AC
CN UPLANDS = 39
CN WEIGHTED = 94
ST. JOHNS AVENUE
APPARENT 60.0' RIGHT OF WAY
SEWAGE MANHOLE
RIM EL.=17.84'
BOTTOM EL.=8.60'
12" R.C.P. INV.=9.54'
12" R.C.P. INV.=11.24'
FOUND 4"X4" CONCRETE MONUMENT
FOUND 5/8" IROD PIPE (WITNESS CORNER)
UNABLE TO FIND OR SET DUE TO OAK TREE & FENCE @ PROPERTY CORNER
498.70'(C)
244.00' (C)
FOUND 1/2" IROD PIPE (WITNESS CORNER)
LOT 15 BLOCK 3
LOT 13 BLOCK 3
LOT 11 BLOCK 3
LOT 9 BLOCK 3
LOT 7 BLOCK 3
LOT 5 BLOCK 3
LOT 16 BLOCK 3
LOT 14 BLOCK 3
LOT 12 BLOCK 3
LOT 10 BLOCK 3
LOT 8 BLOCK 3
LOT 6 BLOCK 3
METAL BUILDING ON CONCRETE
PROJECT BOUNDARY
BUILDING # 1106
F.F.=19.28'
COVERED
ASPHALT
CONCRETE
BROKEN CONCRETE
SEE HANDICAP RAMP DETAIL SHEET 15A
SEE SIDEWALK DETAIL AT PAVEMENT SHEET 15B
SEE DETECTABLE WARNING PAD DETAIL SHEET 15A (TYP)
MATCH EXISTING
HYDRANT
FOUND 1/2" IROD PIPE ILLEGIBLE
UNKNOWN RIGHT OF WAY
GROVE STREET
244.00'(C) / 243.62'(M)
498.70'(M)
SITE BENCHMARK EL. = 18.63'
NORTH ORANGE AVENUE MAGNOLIA AVENUE(P) RIGHT OF WAY UNDETERMINED
CURB INLET DRAIN STORM MANHOLE
RIM EL.=17.19'
15" R.C.P. INV.=13.05'
6" R.C.P. INV.=13.85'
6" R.C.P. INV.=15.85'
0 20 40
SCALE: 1" = 20' FOR: 22"x34" SHEET
SCALE: 1" = 40' FOR: 11"x17" SHEET

Date: 1/9/25 Time: 1:46 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN 010625.dwg Layout: 8A-GRAD

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM
FLORIDA REGISTRATION NUMBER: 79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

GRADING PLAN

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
8A

LEGEND

PROPERTY BOUNDARY

DRAINAGE DIVIDE

NOTE: FOR SECTION DETAILS SEE DRAINAGE DETAILS

FOR DUMPSTER PAD DETAILS SEE MISC DETAILS

SITE DATA

PROJECT AREA	= 1.11 AC
IMPERVIOUS AREA	= 0.78 AC
WETLANDS AREA	= 0.08 AC
CN UPLANDS	= 39
CN WEIGHTED	= 94

STRUCTURE TABLE				
NAME	TYPE	RIM/TOP	IN DATA	OUT DATA
S-1	C INLET	18.23 STANDARD		INV OUT: 14.50 (P-1)
S-2	C INLET	17.33 STANDARD	INV IN: 14.00 (P-1)	INV OUT: 14.00 (P-2)
S-3	SC-800 SYSTEM	17.38	INV IN: 13.50 (P-2)	
S-4	E INLET	17.62 STANDARD		INV OUT: 13.50 (P-3)
S-5	SC-800 SYSTEM	19.48		INV OUT: 13.50 (P-4)
S-6	E INLET	19.92 STANDARD	INV IN: 14.00 (P-3) INV IN: 14.00 (P-4)	INV OUT: 14.00 (P-5)
S-7	E INLET	18.66 STANDARD	INV IN: 13.50 (P-5)	INV OUT: 13.50 (P-6)
S-8	EXIST. MH	17.19	INV IN: 13.25 (P-6)	

PIPE DATA TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
P-1	12"	82.10'	0.61%	Reinforced Concrete Pipe
P-2	12"	8.37'	5.97%	Reinforced Concrete Pipe
P-3	18"	161.63'	-0.31%	PVC
P-4	18"	22.54'	-2.22%	Reinforced Concrete Pipe
P-5	18"	82.42'	0.61%	Reinforced Concrete Pipe
P-6	18"	15.93'	1.57%	Reinforced Concrete Pipe

ST. JOHNS AVENUE — APPARENT 60.0' RIGHT OF WAY

NORTH ORANGE AVENUE MAGNOLIA AVENUE(P) — RIGHT OF WAY UNDETERMINED

GROVE STREET — UNKNOWN RIGHT OF WAY

FOUND 4"X4" CONCRETE MONUMENT

11.00'(P) 10.64'(M)

FOUND 5/8" IROD PIPE (WITNESS CORNER)

(12.8')

UNABLE TO FIND OR SET DUE TO OAK TREE & FENCE @ PROPERTY CORNER

SEWAGE MANHOLE RIM EL.=17.84' BOTTOM EL.=8.60' 12" R.C.P. INV=9.54' 12" R.C.P. INV.=11.24'

498.70'(C) — 498.70'(M)

244.00'(C) — 244.00'(M) / 246.62'(M)

50.00'(P)

FOUND 1/2" IROD PIPE (WITNESS CORNER)

FOUND 1/2" IROD PIPE ILLEGIBLE

SITE BENCHMARK EL. = 18.63'

HYDRANT

METAL BUILDING ON CONCRETE

BUILDING #1106

ASPHALT

CONCRETE

BROKEN CONCRETE

COVERED

F.F.=19.28'

LOT 15 BLOCK 3 · LOT 13 BLOCK 3 · LOT 11 BLOCK 3 · LOT 9 BLOCK 3 · LOT 7 BLOCK 3 · LOT 5 BLOCK 3 · LOT 16 BLOCK 3 · LOT 14 BLOCK 3 · LOT 12 BLOCK 3 · LOT 10 BLOCK 3 · LOT 8 BLOCK 3 · LOT 6 BLOCK 3 · LOT 3 BLOCK 3 · LOT 1 BLOCK 3

PROJECT BOUNDARY

SEE HANDICAP RAMP DETAIL SHEET 15A

SEE SIDEWALK AT PAVEMENT DETAIL SHEET 15B

(7x) 6" CLEANOUT PLUG W/ PREFAB CONC. VALVE BOX COLLAR

CONST. S - STORMTECH SC-800 STORM CHAMBER SYSTEM (SEE DRAINAGE DETAILS)

SEE DETECTABLE WARNING PAD DETAIL SHEET 15A (TYP)

MATCH EXISTING

CURB INLET DRAIN STORM MANHOLE RIM EL.=17.19' 15"R.C.P. INV.=13.05' 6" R.C.P. INV.=13.85' 6" R.C.P. INV.=15.85'

0 20 40

SCALE: 1" = 20'
SCALE: 1" = 40'
FOR: 22"x34" SHEET
FOR: 11"x17" SHEET

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388
E.B. NUMBER: 26383

ENGINEER OF RECORD CHARLES SOHM
FLORIDA REGISTRATION NUMBER: 79289

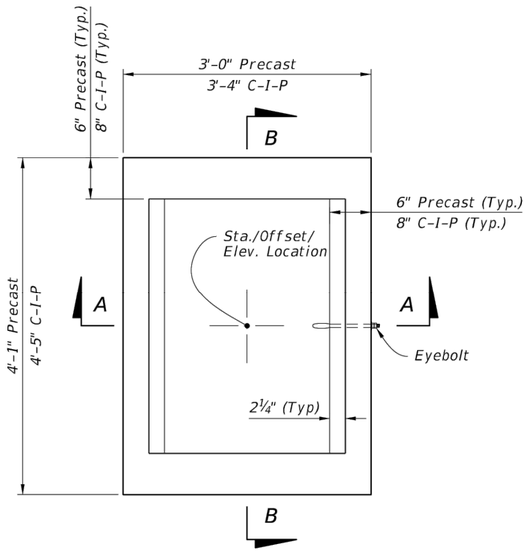
SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.
DRAINAGE PLAN

REVISIONS

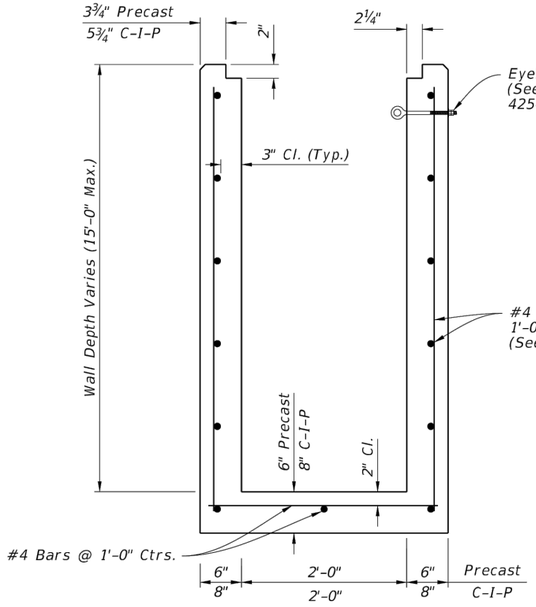
PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
8B

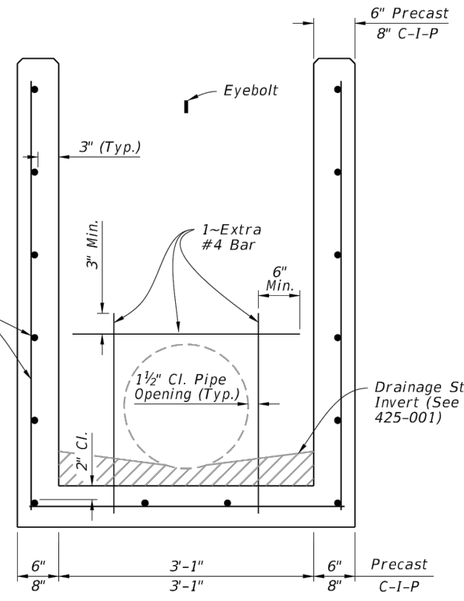
Date: 1/9/25 Time: 1:47 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN 010625.dwg Layout: 8B-DRNG



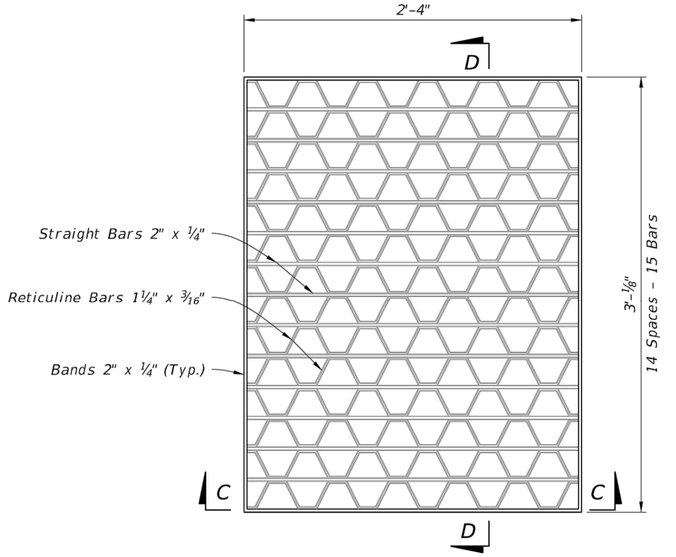
PLAN

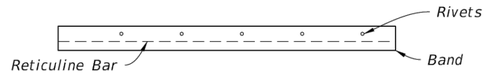


SECTION A-A
(Pipe Opening Not Shown)

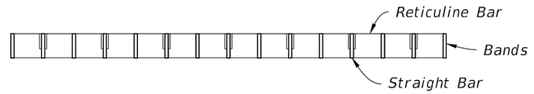


SECTION B-B
(Pipe Opening Shown)





SECTION C-C



SECTION D-D

STEEL GRATE DETAIL

(Approx. 104 Lbs. - See Sheet 7 For Cast Iron Grates)

TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING	
			BARS	WWF
0' - 15'	A12	0.20	12"	8"

NOTES:

1. Grate, Concrete Apron, and Sod not shown on structure detail.
2. See Sheet 8, 9, and 10 for Concrete Apron and Sodded Area details.

DIMENSIONAL AND REINFORCING DETAILS

TYPE C - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E, AND H	INDEX	SHEET
10/01/20						425-052	2 of 14

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

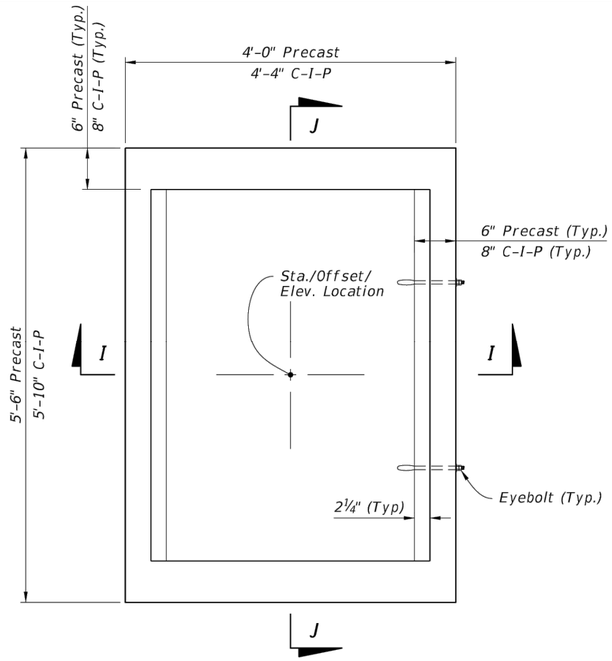
DRAINAGE DETAILS - FDOT DITCH BOTTOM INLETS

REVISIONS

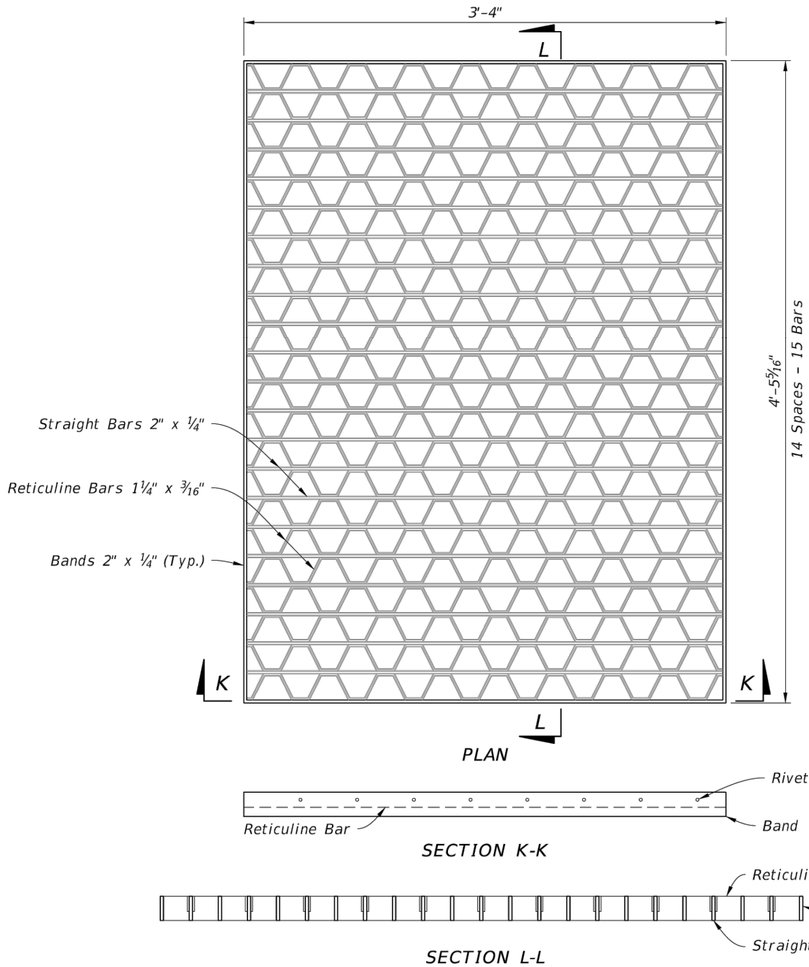
PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
9A

Date: 1/16/25 Time: 12:43 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\09_24-671 DRAINAGE DETAILS 2.dwg Layout: 9A
10/20/2022 8:14:24 AM



PLAN



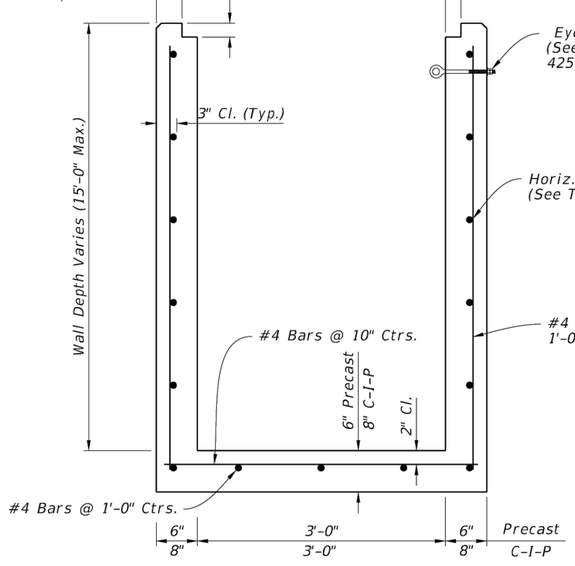
PLAN

SECTION K-K

SECTION L-L

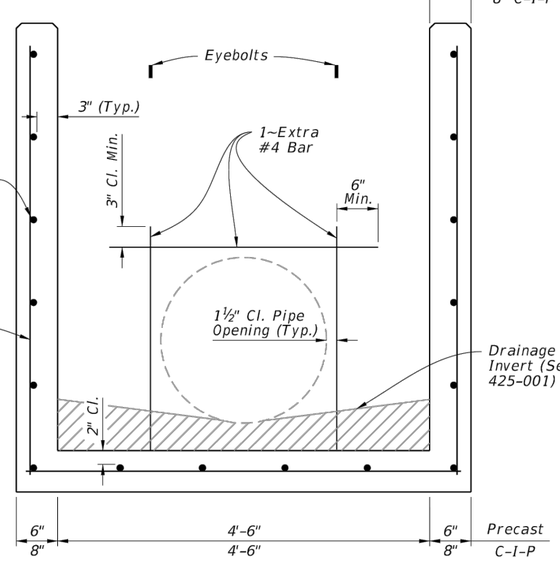
STEEL GRATE DETAIL

(Approx. 215 lbs. – See Sheet 7 For Cast Iron Grates)



SECTION I-I

(Pipe Opening Not Shown)



SECTION J-J

(Pipe Opening Shown)

TABLE 3
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING	
			BARS	WWR
0' – 5'	A12	0.20	12"	8"
0' – 7.5'	A6	0.20	6"	5"
7.5' – 10'	B5.5	0.24	5½"	5"
10' – 15'	C6.5	0.37	6½"	6"

NOTES:

1. Grate, Concrete Apron, and Sod not shown on structure detail.
2. See Sheet 8, 9, and 10 for Concrete Apron and Sodded Area details.

DIMENSIONAL AND REINFORCING DETAILS

TYPE E - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E, AND H	INDEX	SHEET
10/01/20						425-052	4 of 14

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

DRAINAGE DETAILS - FDOT DITCH BOTTOM INLETS

REVISIONS

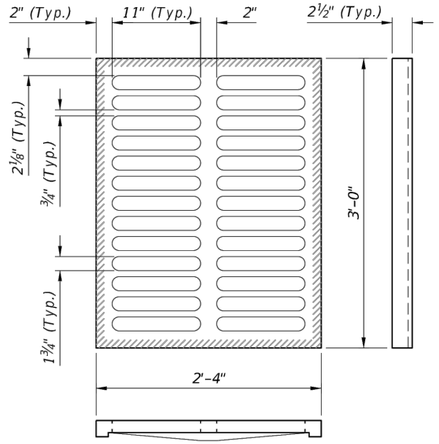
PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
9B

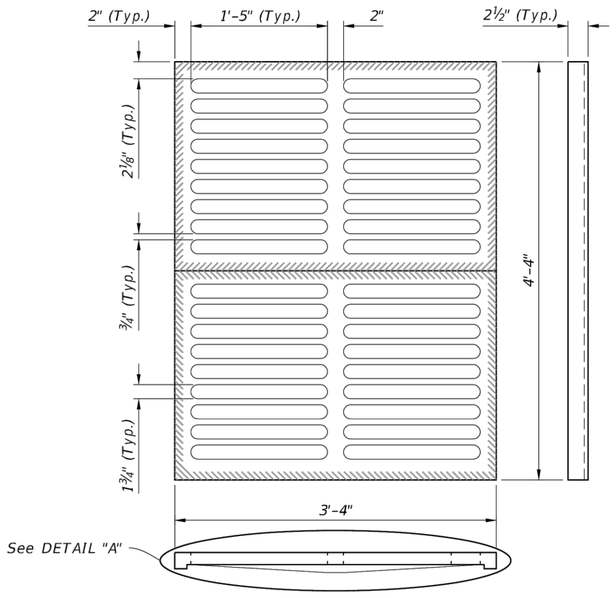
Date: 1/16/25 Time: 12:44 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\09_24-671 DRAINAGE DETAILS 2.dwg Layout: 9B
10/20/2022 8:14:26 AM

NOTES:

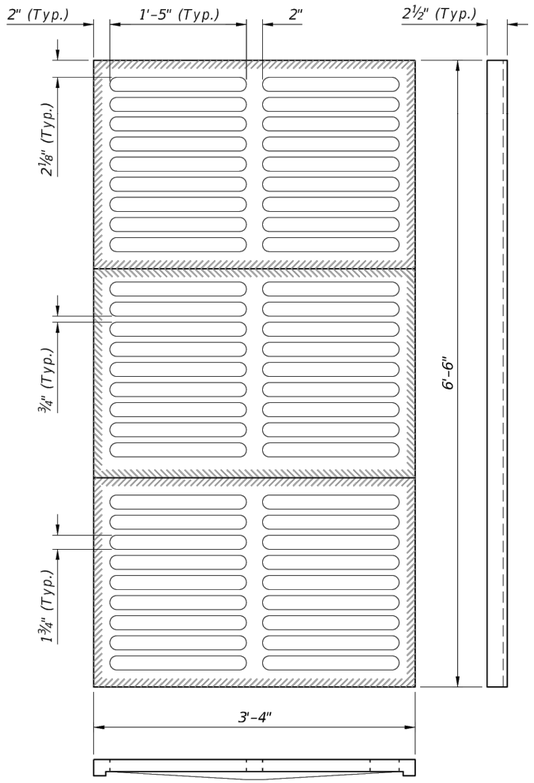
1. Steel Grates are required on inlets with traversable slots and on Inlets where bicycle traffic is anticipated.
2. Cast Iron Grates are not permitted on Inlet Type D.



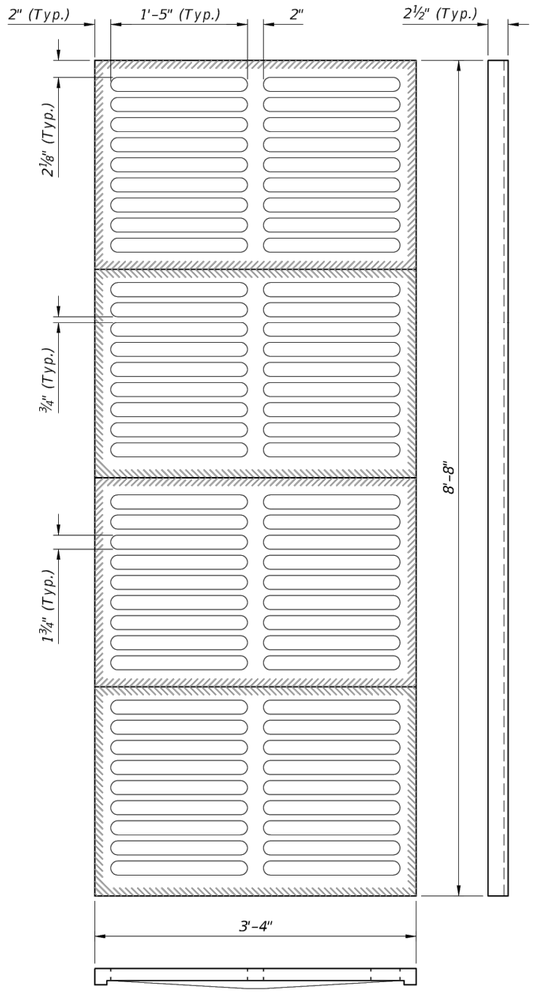
TYPE C
Approx. 235 lbs.



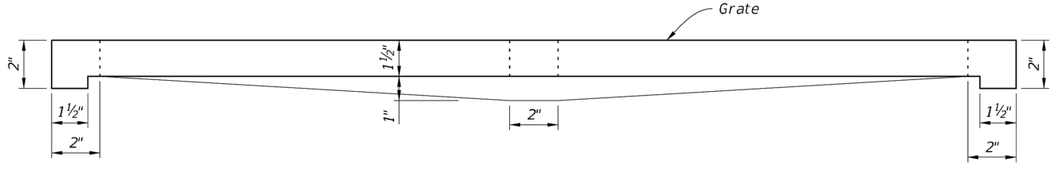
TYPE E
Approx. 465 lbs.



TYPE H
(3-Grate Inlet)
Approx. 725 lbs.



TYPE H
(4-Grate Inlet)
Approx. 967 lbs.



DETAIL "A"
(Typical Section)

CAST IRON GRATE DETAILS

LAST REVISION	REVISION	DESCRIPTION:
10/01/20		

FY 2023-24 STANDARD PLANS

DITCH BOTTOM INLET TYPES C, D, E, AND H

INDEX 425-052

SHEET 7 of 14

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

DRAINAGE DETAILS - FDOT DITCH BOTTOM INLETS

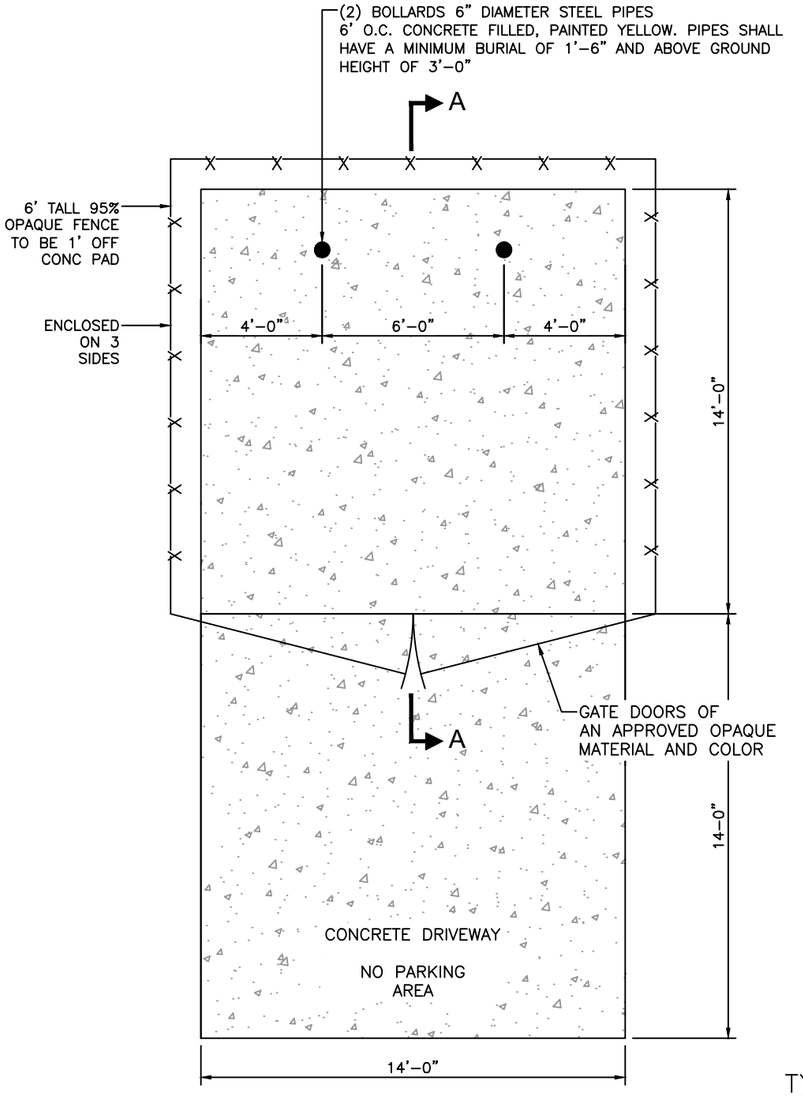
REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

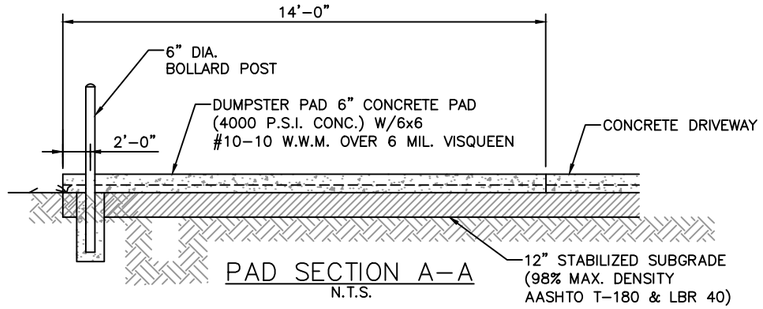
SHEET NO.
9C

Date: 1/16/25 Time: 12:44 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\09_24-671 DRAINAGE DETAILS 2.dwg Layout: 9C

10/20/2022 8:14:28 AM

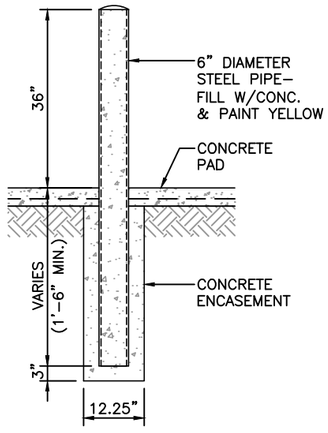


DUMPSTER PAD AND SWALE DETAIL
N.T.S.

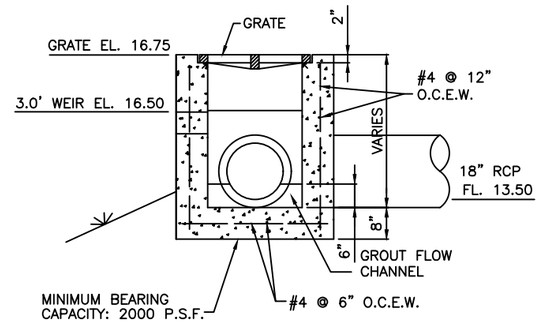


PAD SECTION A-A
N.T.S.

NOTES:
1. MAXIMUM ANGLE OF CONTAINER PAD TO DIRECTION OF AISLE TO BE 30°.
2. AREA TO BE FREE OF OVERHEAD LINES AND WIRES.
3. DUMPSTER PAD TO BE A MINIMUM OF 12' WIDE FOR DUMPSTER RECYCLING.
4. APPLICANT TO PROVIDE A SIDE ELEVATION TO DEMONSTRATE COLOR, MATERIAL AND DESIGN CONSISTANCY WITH THE PRINCIPAL BUILDING.
5. DRAINAGE PATTERNS AROUND PADS SHALL BE SUBJECT TO CITY REVIEW AND APPROVAL.
6. INGRESS AND EGRESS ROUTES TO/FROM DUMPSTER PADS SHALL BE IN ACCORDANCE WITH WASTE HANDLING CONTRACTORS REQUIREMENTS.

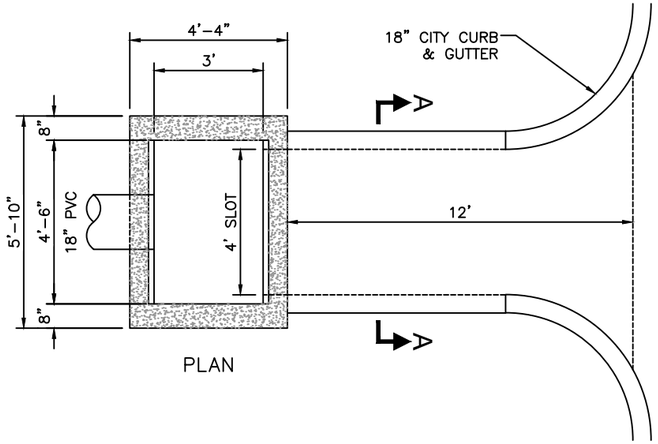


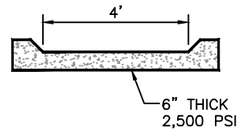
TYPICAL BOLLARD DETAIL
N.T.S.



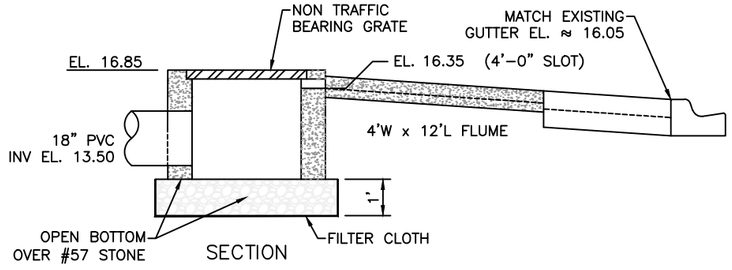
NOTE
INLETS WITH SLOTS GREATER THAN 6" SHALL BE CONSTRUCTED WITH HORIZONTAL BARS AT THE MAXIMUM VERTICAL SPACING OF 6-INCHES. 1" DIA. GALVANIZED PIPE IMBEDDED 2" IN PRECAST STRUCTURE OR OTHER APPROVED METHOD.

MODIFIED TYPE "E" INLET (S-7)
N.T.S.





SECTION A-A



SECTION

POND OUTFALL-CONTROL STRUCTURE (S-4)
N.T.S.

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM
FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

DRAINAGE DETAILS

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
9D

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

Advanced Drainage Systems, Inc.

SiteAssist™
FOR STORMTECH
INSTALLATION INSTRUCTIONS
VISIT OUR APP

SPRINGS CHAPEL

GREEN COVE SPRINGS, FL, USA

SC-800 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-800.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
10. MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
11. ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-800 SYSTEM

1. STORMTECH SC-800 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE; AASHTO M43 #3, 357, 4, 467, 5, 56, OR 57.
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-800 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

DRAINAGE DETAILS - STORMTECH SC-800

REVISIONS

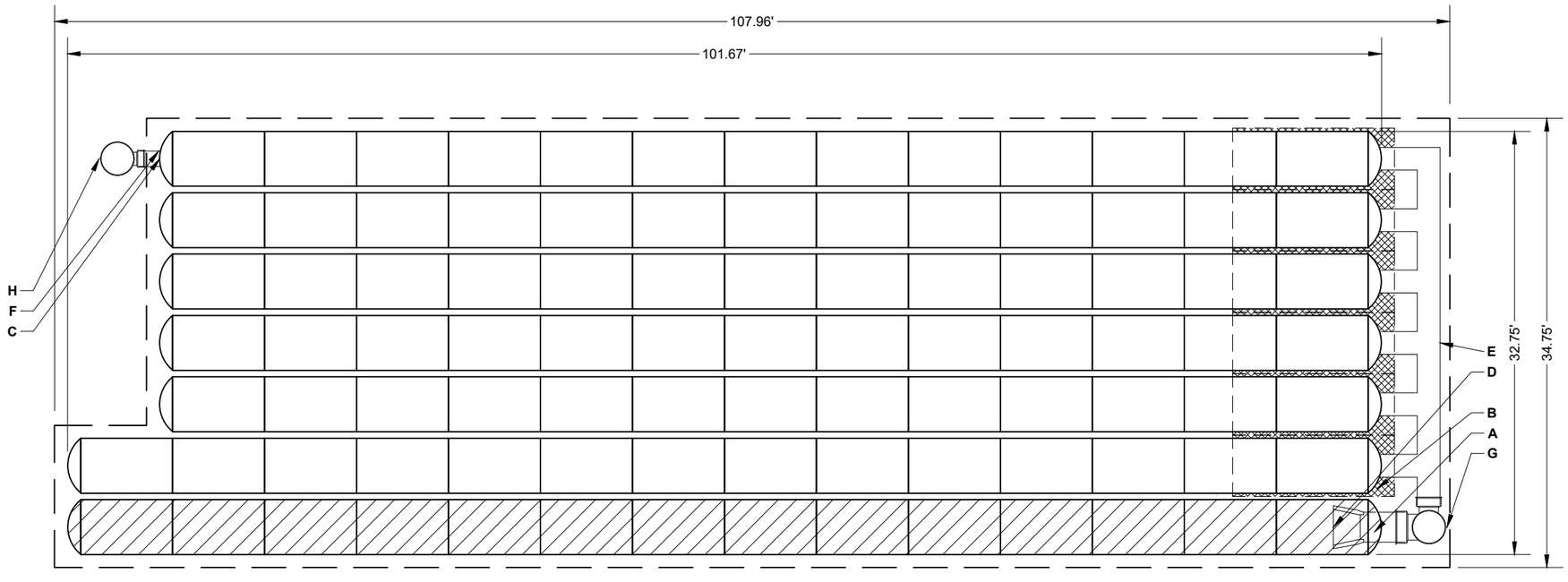
PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
9E

PROPOSED LAYOUT		PROPOSED ELEVATIONS:	
93	STORMTECH SC-800 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	23.25
12	STORMTECH SC-800 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	17.00
6	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	16.50
6	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	16.50
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	16.50
8196	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	15.75
		TOP OF SC-800 CHAMBER:	15.25
		18" x 18" TOP MANIFOLD INVERT:	13.17
		24" ISOLATOR ROW PLUS INVERT:	12.69
3564	SYSTEM AREA (SF)	12" BOTTOM CONNECTION INVERT:	12.63
304.4	SYSTEM PERIMETER (ft)	BOTTOM OF SC-800 CHAMBER:	12.50
		BOTTOM OF STONE:	12.00

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM CORED END CAP, PART#: SC800EPE24BPC / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.30"	
PREFABRICATED END CAP	B	18" TOP CORED END CAP, PART#: SC800EPE18TPC / TYP OF ALL 18" TOP CONNECTIONS	8.00"	
PREFABRICATED END CAP	C	12" BOTTOM CORED END CAP, PART#: SC800EPE12BPC / TYP OF ALL 12" BOTTOM CONNECTIONS	1.60"	
FLAMP	D	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: SC74024RAMP		
MANIFOLD	E	18" x 18" TOP MANIFOLD, ADS N-12	8.00"	
PIPE CONNECTION	F	12" BOTTOM CONNECTION	1.60"	
NYLOPLAST (INLET W/ ISO PLUS ROW)	G	30" DIAMETER (24.00" SUMP MIN)		14.0 CFS IN
NYLOPLAST (OUTLET)	H	30" DIAMETER (DESIGN BY ENGINEER)		2.0 CFS OUT



ISOLATOR ROW PLUS
(SEE DETAIL)

PLACE MINIMUM 12.50' OF ADSPLUS625 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

NOTES

- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
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SPRINGS CHAPEL CORP.

DRAINAGE DETAILS - STORMTECH SC-800

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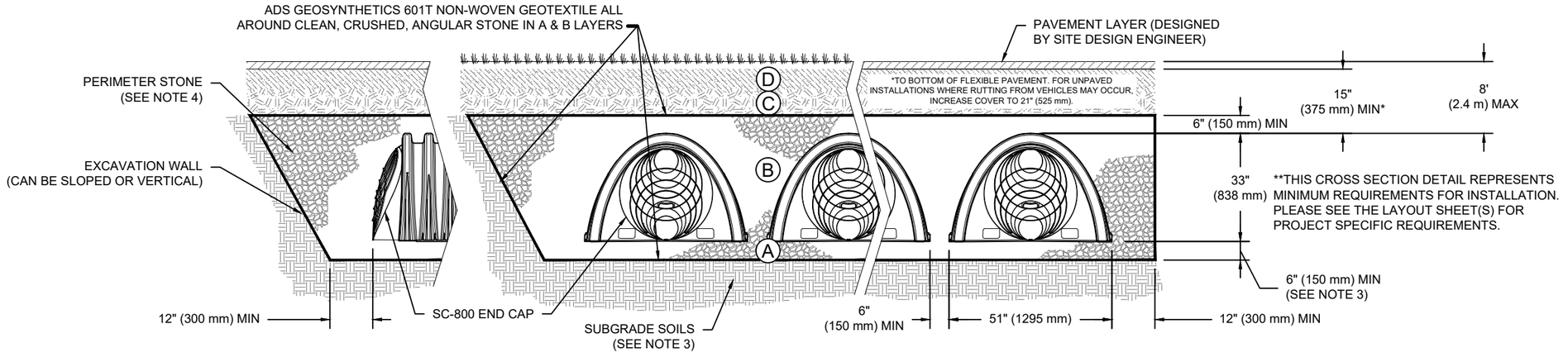
ACCEPTABLE FILL MATERIALS: STORMTECH SC-800 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 15" (375 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-800 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

DRAINAGE DETAILS - STORMTECH SC-800

REVISIONS

PLOT DATE:
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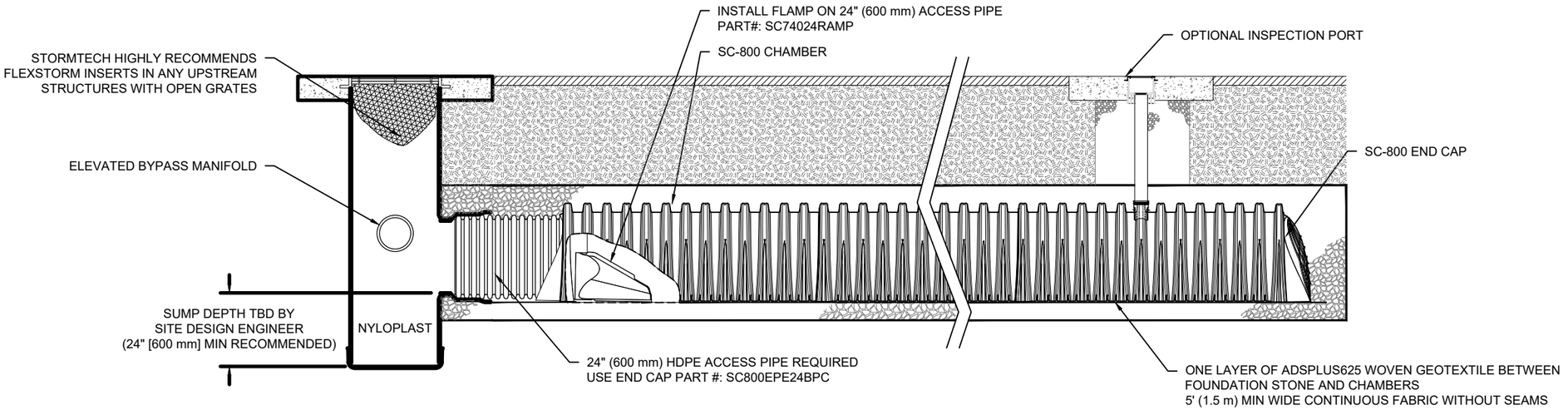
9G



SC-800 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.

2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

TOCOI Engineering, LLC
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PH: 904-215-1388 E.B. NUMBER: 26383

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

DRAINAGE DETAILS - STORMTECH SC-800

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
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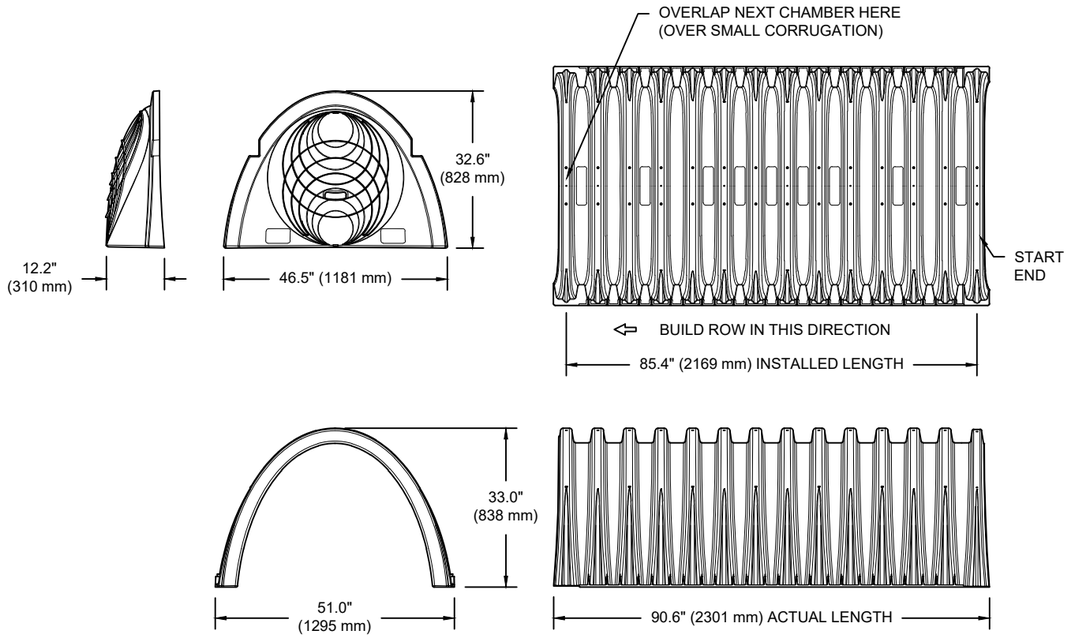
SCALE:
JOB NO.:

SHEET NO.
9H

SC-800 TECHNICAL SPECIFICATION

NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 33.0" X 85.4"	(1295 mm X 838 mm X 2169 mm)
CHAMBER STORAGE	50.6 CUBIC FEET	(1.43 m³)
MINIMUM INSTALLED STORAGE*	81.0 CUBIC FEET	(2.29 m³)
WEIGHT	81.8 lbs.	(37.1 kg)

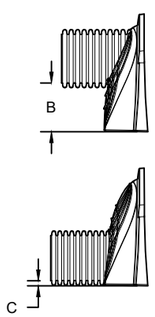
NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	46.5" X 32.6" X 10.5"	(1181 mm X 828 mm X 267 mm)
END CAP STORAGE	3.4 CUBIC FEET	(0.09 m³)
MINIMUM INSTALLED STORAGE**	15.4 CUBIC FEET	(0.43 m³)
WEIGHT	15.7 lbs.	(7.1 kg)

* ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS
**ASSUMES 6" (152 mm) STONE ABOVE AND BELOW END CAPS, 6" (152 mm) BETWEEN ROWS, 12" (305 mm) BEYOND END CAPS

PRE-CORED HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "BPC"
PRE-CORED HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "TPC"

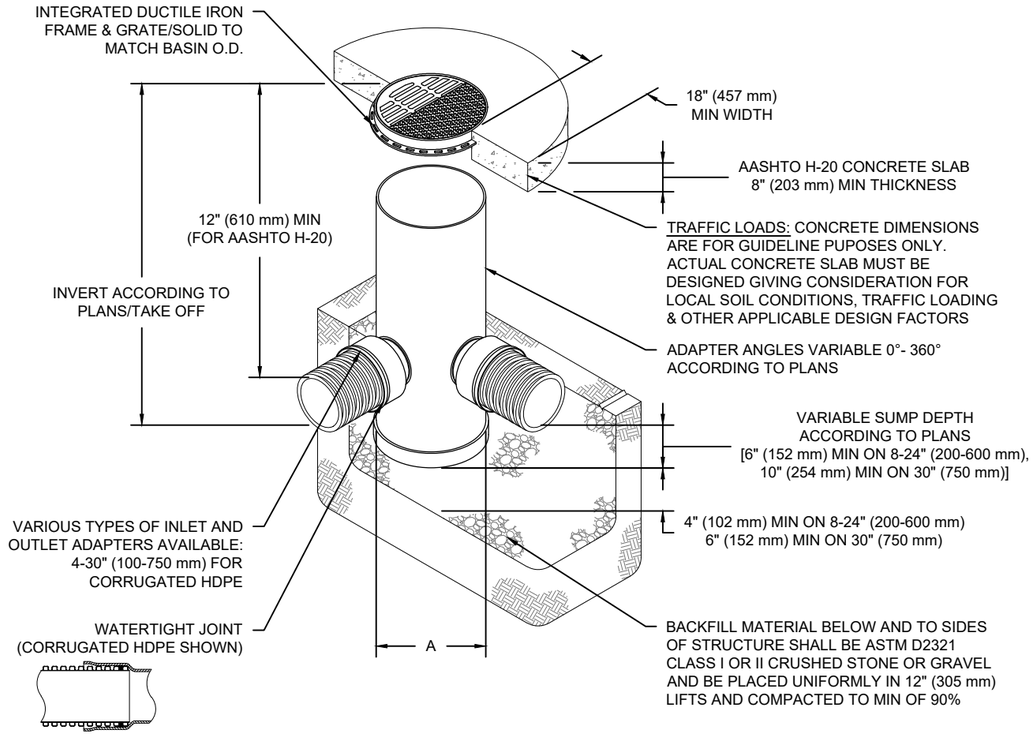
PART #	STUB	B	C
SC800EPE06TPC	6" (150 mm)	21.4" (544 mm)	---
SC800EPE06BPC		---	0.9" (23 mm)
SC800EPE08TPC	8" (200 mm)	19.2" (488 mm)	---
SC800EPE08BPC		---	1.0" (25 mm)
SC800EPE10TPC	10" (250 mm)	17.0" (432 mm)	---
SC800EPE10BPC		---	1.2" (30 mm)
SC800EPE12TPC	12" (300 mm)	14.4" (366 mm)	---
SC800EPE12BPC		---	1.6" (41 mm)
SC800EPE15TPC	15" (375 mm)	11.3" (287 mm)	---
SC800EPE15BPC		---	1.7" (43 mm)
SC800EPE18TPC	18" (450 mm)	8.0" (203 mm)	---
SC800EPE18BPC		---	2.0" (51 mm)
SC800EPE24BPC	24" (600 mm)	---	2.3" (58 mm)
SC800EPE	NONE	SOLID END CAP	



NOTE: ALL DIMENSIONS ARE NOMINAL

NYLOPLAST DRAIN BASIN

NTS



NOTES

1. 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
2. 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: **WWW.NYLOPLAST-US.COM**
6. TO ORDER CALL: **800-821-6710**

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

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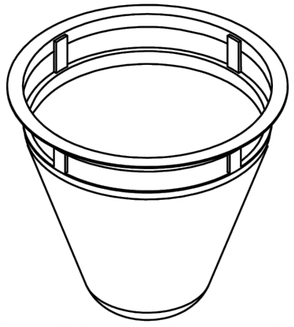
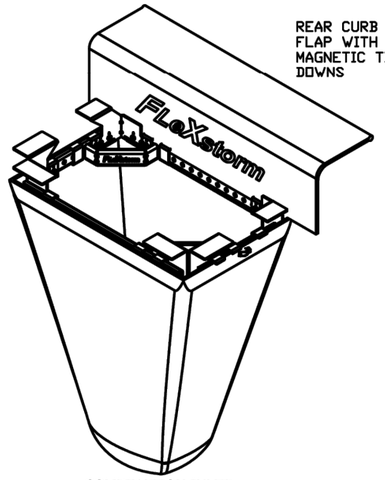
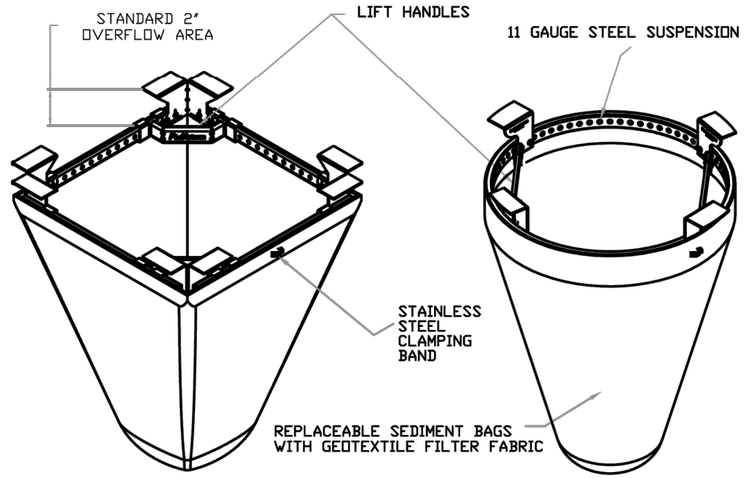
FLEXSTORM INLET FILTERS PRODUCT SELECTION AND SPECIFICATION DRAWING



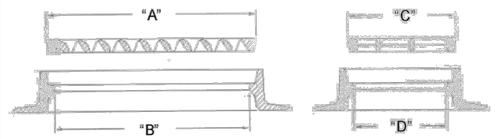
STAINLESS STEEL ROUND INLET FILTERS for NYLOPLAST CASTINGS
CATCH-ITS SPECIFIED W/ FX or FX-S BAGS



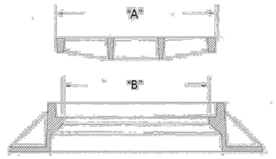
COMBINATION INLET FILTER FOR CURB HOODS



TYPICAL RECTANGULAR INLET FILTER



TYPICAL ROUND INLET FILTER

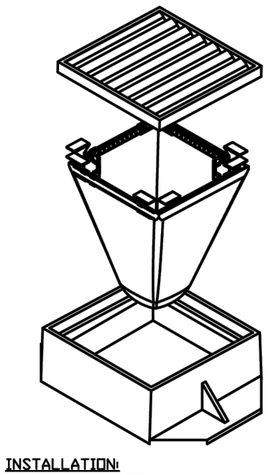


1. INDENTIFY YOUR FRAME STYLE, SIZE, AND MATERIAL

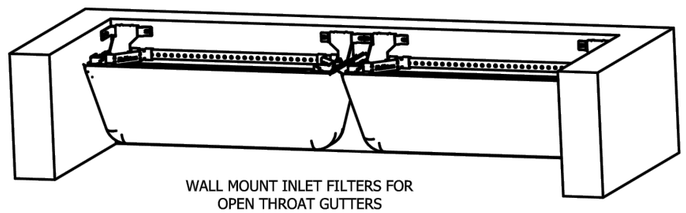
STYLE	*FRAME STYLE AND SIZE*	Frame P/N:
ROUND	Small Round (up to 20.0" dia grates (A) dim)	62SRD
	Med Round (20.1" - 26.0" dia grates (A) up to 25" dia openings (B))	62MRD
	Large Round (26.1" - 32.0" dia grates (A) up to 30" openings (B))	62LRD
	XL Round (32.1" dia - 39" dia grates (A) up to 37" dia openings (B))	62XLRD
RECT/ SQUARE	Small Rect / Square (up to 16" (B) x 16" (D) openings or 64" perimeter)	62SSQ
	Med Rect / Square (up to 24" (B) x 24" (D) openings or 96" perimeter)	62MSQ
	Large Rect / Square (up to 36" (B) x 24" (D) openings or 120" perimeter)	62LSQ
	XL Rect / Square (side by side 2 pc set to fit up to 48" (B) x 36" (D) openings)	62XLSQ
COMBO INLETS	Small Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62SCB
	Med Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62MCB
	Large Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62LCB
	XL Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62XLCB
NYLOPLAST	12" diameter Nyloplast castings (Stainless Steel Framing standard)	6212NY
	15" diameter Nyloplast castings (Stainless Steel Framing standard)	6215NY
	18"diameter Nyloplast castings (Stainless Steel Framing standard)	6218NY
	24" diameter Nyloplast castings (Stainless Steel Framing standard)	6224NY
	30" diameter Nyloplast castings (Stainless Steel Framing standard)	6230NY
WALL MOUNT	Open Throat Gutters - Curb Opening Size	
	Up to 4' (1 Filter and Mounting Hardware)	62WM1
	Between 4' and 8' (2 Filters and Mounting Hardware)	62WM2
	Between 8' and 12' (3 Filters and Mounting Hardware)	62WM3
	Between 12' and 16' (4 Filters and Mounting Hardware)	62WM4
UPGRADED FRAMING MATERIAL OPTIONS (STANDARD IS ZINC PLATED)		SUFFIX
CHROME PLATED FRAMING FOR HIGH SALT EXPOSURE		- CHR
STAINLESS STEEL FRAMING FOR HIGH SALT AND/OR CHEMICAL EXPOSURE		- SS

2. SELECT YOUR FILTER BAG PART NUMBER

FLEXSTORM FILTER BAGS	(22" depth) STD Bag P/N	(12" depth) Short Bag P/N	Clean Water Flow Rate (GPM/SqFt)	Min A.O.S. (US Sieve)
FX: Standard Woven Bag	FX	FX-S	200	40
FX+: Woven w/ MyCelx	FXP	FXP-S	200	40
FXO: Woven w/ Oil Boom	FXO	FXO-S	200	40
PC: Post Construction Bag	PC	PC-S	137	140
PC+: PC Bag w/ MyCelx	PCP	PCP-S	137	140
LL: Litter and Leaf Bag	LL	LL-S	High	3.5
IL: IDOT Non-Woven Bag	IL	IL-S	145	70



INSTALLATION:
1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE



WALL MOUNT INLET FILTERS FOR OPEN THROAT GUTTERS

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE

Nominal Bag Size	Solids Storage (CuFt)	Filtered Flow Rate at 50% Max FX (Woven)	PC (Post Constr)	IL (Non Woven)	* PC Oil Retent (Oz)	**PCP Oil Retent (Oz)
Small	1.6	1.2	0.8	0.9	66	155
Medium	2.1	1.8	1.2	1.3	96	185
Large	3.8	2.2	1.5	1.6	120	209
XL	4.2	3.6	2.4	2.6	192	370

* PC filter bag at 50% max adsorption capacity

** PC filter bag at 50% capacity and MyCelx skimmer at 100% capacity

3. CREATE YOUR FLEXSTORM INLET FILTER PART NUMBER

		-	
Frame P/N from Step 1.	Filter Bag P/N from Step 2.		Framing Material

ALL PRODUCTS MANUFACTURED
BY INLET & PIPE PROTECTION, INC
DISTRIBUTED BY ADS
WWW.INLETFILTERS.COM
(866) 287-8655 PH
(630) 355-3477 FX
INFO@INLETFILTERS.COM

SIZE		DWG NO	REV
C		FLEXSTORM_SPECS	
SCALE		SHEET 1 OF 1	

TOCOL Engineering, LLC
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DRAINAGE DETAILS - STORMTECH SC-800

REVISIONS

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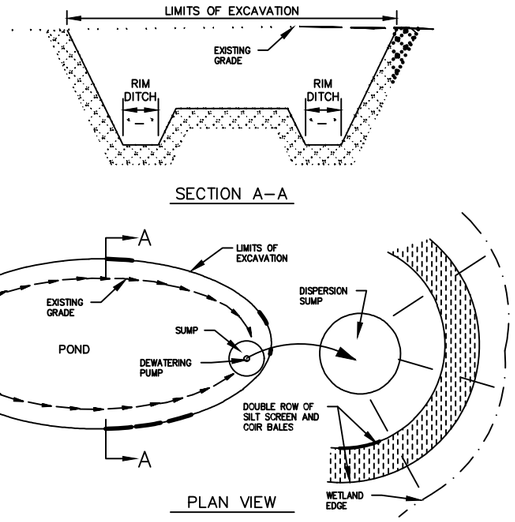
9J

Date: 1/16/25 Time: 12:46 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\09_24-671 DRAINAGE DETAILS 2.dwg Layout: 9J

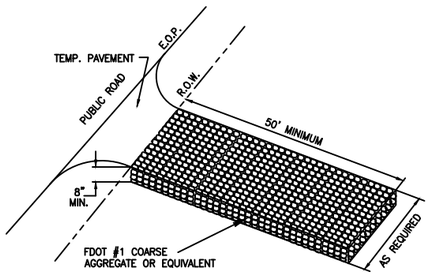
SEDIMENT AND EROSION CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
3. ADDITIONAL PROTECTION – ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
5. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS REQUIRED, THE STRIPS SHALL BE OVERLAPPED.
6. FDOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED ON SEDIMENT FILTER DETAIL (SEE DETAIL THIS SHEET). THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
7. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
8. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
9. BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
10. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
11. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
12. LOOSE COIR SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
13. COIR BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
14. CLOSE ATTENTION SHALL BE GIVEN TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
15. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
16. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. IT MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
17. ANY SEDIMENT DEPOSITS REMAINING IN PLACE, AFTER THE COIR BALE OR FILTER BARRIERS, AND OR SILT FENCES ARE NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
18. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
19. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED IMMEDIATELY.
20. STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS REQUIRED.
21. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
22. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT RULES AND REGULATIONS.
23. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL – A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (F.D.E.P.) CHAPTER 6.
24. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAILS (THIS SHEET) FOR TYPICAL CONSTRUCTION.
25. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
26. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
27. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
28. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED AND MULCHED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR SHALL USE ADDITIONAL MEASURES TO STABILIZE DISTURBED AREAS THROUGH COMPACTION, SILT SCREENS, COIR BALES, AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.
29. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL SHALL REMAIN IN PLACE UNTIL AFTER COMPLETION OF CONSTRUCTION, AND REMOVED ONLY WHEN AREAS HAVE BEEN STABILIZED.
30. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
31. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPLIANCE OF SJRWMD FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.
32. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS AND PRESERVATION EASEMENTS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS PER THE CONTRACT DOCUMENTS AND MEETING THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, ST. JOHNS COUNTY, AND NPDES FINAL STABILIZATION REQUIREMENTS.
34. THESE PLANS INCLUDING THE POLLUTION PREVENTION PLAN INDICATE THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES REQUIRED FOR THIS PROJECT. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL – A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (F.D.E.P.) CHAPTER 6. CONTRACTOR SHALL PROVIDE EROSION PROTECTION AND TURBIDITY CONTROL AS REQUIRED TO INSURE CONFORMANCE TO STATE AND FEDERAL WATER QUALITY STANDARDS AND MAY NEED TO INSTALL ADDITIONAL CONTROLS TO CONFORM TO AGENCIES REQUIREMENTS. IF A WATER QUALITY VIOLATION OCCURS, THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ALL DAMAGE AND ALL COSTS WHICH MAY RESULT INCLUDING LEGAL FEES, CONSULTANT FEES, CONSTRUCTION COSTS, AND FINES.
35. 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR WILL SUBMIT A "NOTICE OF INTENT" TO THE EPA IN ACCORDANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM RULES AND REGULATIONS. (FOR ANY CONSTRUCTION NOT COVERED BY THE OWNER'S "NOTICE OF INTENT" PERMIT)



TEMPORARY DEWATERING DETAIL

N.T.S.



STABILIZED CONSTRUCTION ENTRANCE

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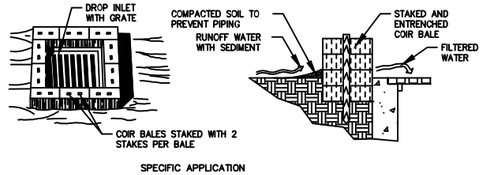
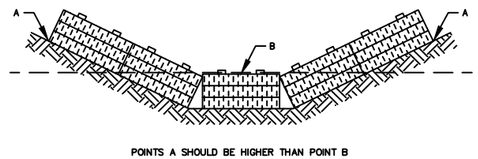


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 cfs) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

COIR BALE DROP INLET SEDIMENT FILTER

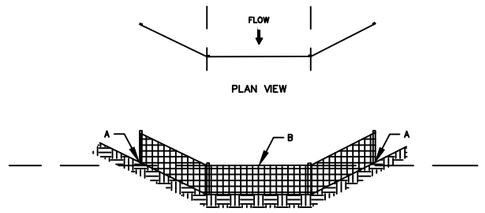
N.T.S.



POINTS A SHOULD BE HIGHER THAN POINT B

PROPER PLACEMENT OF COIR BALE IN A DRAINAGE WAY

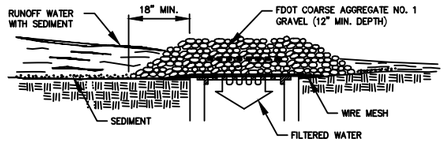
N.T.S.



POINTS A SHOULD BE HIGHER THAN POINT B

PROPER PLACEMENT OF A FILTER BARRIER IN DRAINAGE WAY

N.T.S.

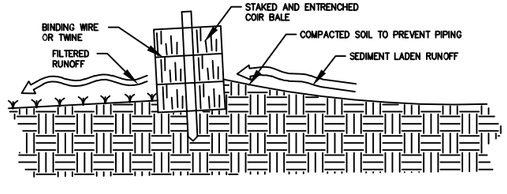


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

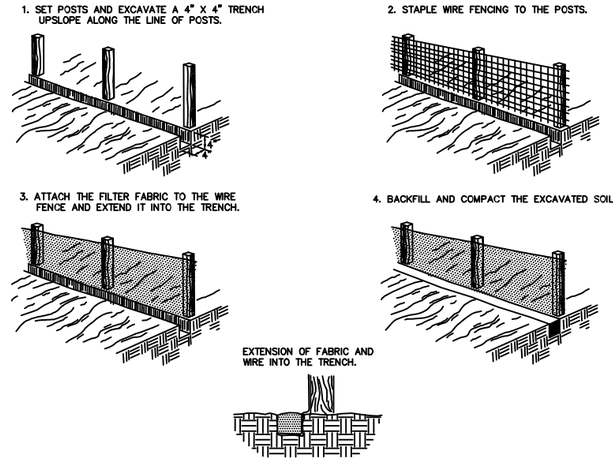
GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

N.T.S.



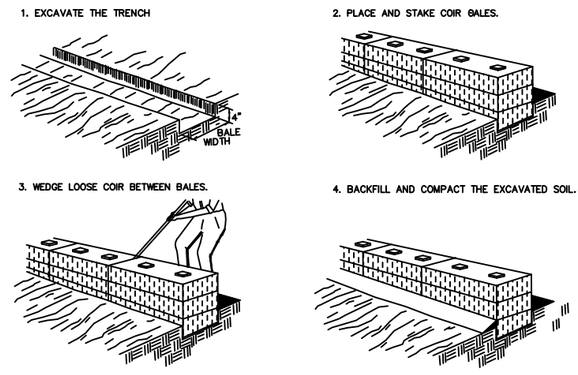
CROSS-SECTION OF A PROPERLY INSTALLED COIR BALE

N.T.S.



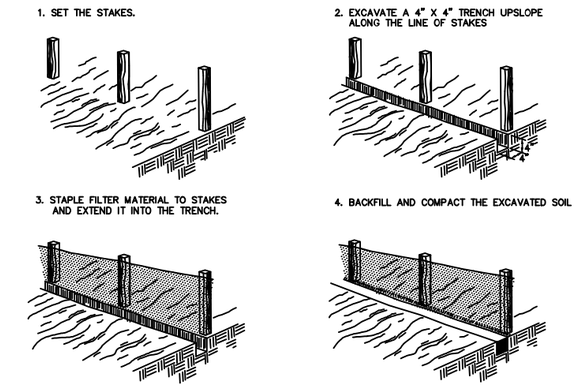
CONSTRUCTION OF SILT FENCE

N.T.S.



CONSTRUCTION OF A COIR BALE BARRIER

N.T.S.



CONSTRUCTION OF A FILTER BARRIER

N.T.S.

TOCOI ENGINEERING, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM
FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

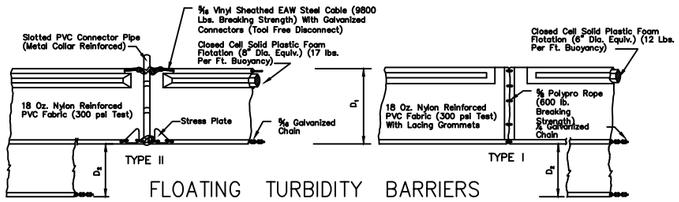
EROSION CONTROL DETAILS

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

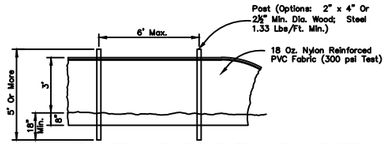
SHEET NO.
10A

Date: 1/16/25 Time: 12:50 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\10_24-671 EROSION CONTROL DETAILS.dwg Layout: 10A

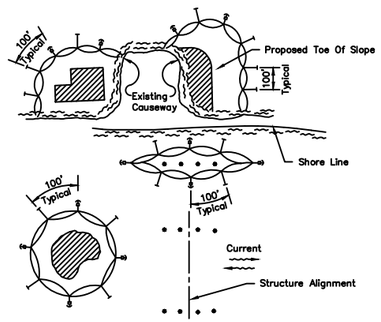


FLOATING TURBIDITY BARRIERS

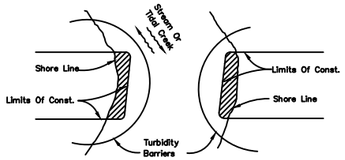
NOTICE:
COMPONENTS OF TYPES I & TYPE II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.



STAKED TURBIDITY BARRIER



LEGEND
- Pile Locations
- Dredge Or Fill Area
- Mooring Buoy w/Anchor
- Anchor
- Barrier Movement Due To Current Action



Note:
Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in the plans, however payment will be under the contract lump sum price established in the bid proposal for Erosion & Sediment Control Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.

NOTES:
1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the FDOT Standard Specifications.

TURBIDITY BARRIER APPLICATIONS

TURBIDITY BARRIERS

(D-907)
N.T.S.

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM
FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

EROSION CONTROL DETAILS

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
10B

LEGEND

PROPERTY BOUNDARY

NOTES:
1. SEE MISC. DETAILS FOR ADA PARKING DETAILS

2. PARKING LOT ILLUMINATION SHALL MEET THE REQUIREMENTS OF CITY ORDINANCE 113-160(D).

3. LUMINAIRES WILL BE MOUNTED ON POLES.

ST. JOHNS AVENUE

APPARENT 60.0' RIGHT OF WAY

498.70'(C)

244.00' (C)

ALL PARKING STRIPES TO BE 6" WIDE WHITE THERMOPLASTIC

CONST. 12" WIDE WHITE THERMOPLASTIC CROSSWALK STRIPE (TYP)

R3-1

ONLY

R3-5L 24"x30"

CONST. 12" WIDE WHITE THERMOPLASTIC CROSSWALK STRIPE (TYP)

PARKING BY DISABLED PERMIT ONLY

VAN ACCESSIBLE

$250.00 FINE

FTP-20-06 AND R7-8A AND FTP-22-06 (MOUNTED TO POST)

R1-1 36"x36"

STOP

CONST. WHITE THERMOPLASTIC STRAIGHT ARROW (TYP)

ONLY

R3-5L 24"x30"

R1-1 36"x36"

STOP

CONST. 12" WIDE WHITE THERMOPLASTIC CROSSWALK STRIPE (TYP)

CONST. 24" WIDE WHITE THERMOPLASTIC STOP BAR

12"x18"

EXIT ONLY

DO NOT ENTER

CONST. WHITE THERMOPLASTIC RIGHT TURN ARROW (TYP)

CONST. 24" WIDE WHITE THERMOPLASTIC STOP BAR

CONST. 12" WIDE WHITE THERMOPLASTIC CROSSWALK STRIPE (TYP)

498.70'(M)

SITE BENCHMARK
EL. = 18.63'

NORTH ORANGE AVENUE MAGNOLIA AVENUE(P) RIGHT OF WAY UNDETERMINED

UNKNOWN RIGHT OF WAY

GROVE STREET

244.00' (C) / 248.62' (M)

0 20 40

SCALE: 1" = 20'
SCALE: 1" = 40'
FOR: 22"x34" SHEET
FOR: 11"x17" SHEET

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388
E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM

FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

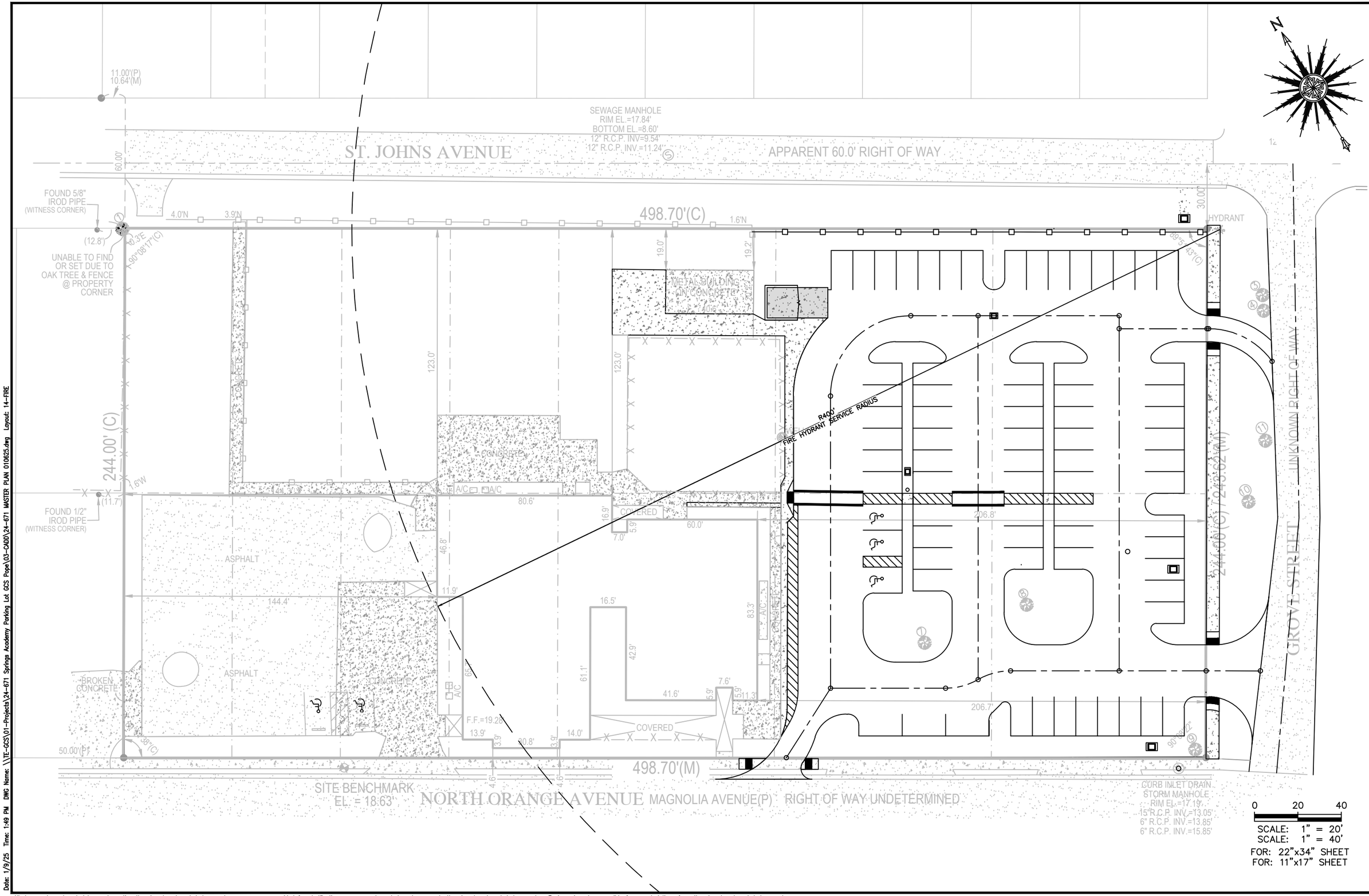
SIGNAGE & PAVEMENT MARKING PLAN

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
13

Date: 1/9/25 Time: 1:48 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN 010625.dwg Layout: 13-SMPM



TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM

FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

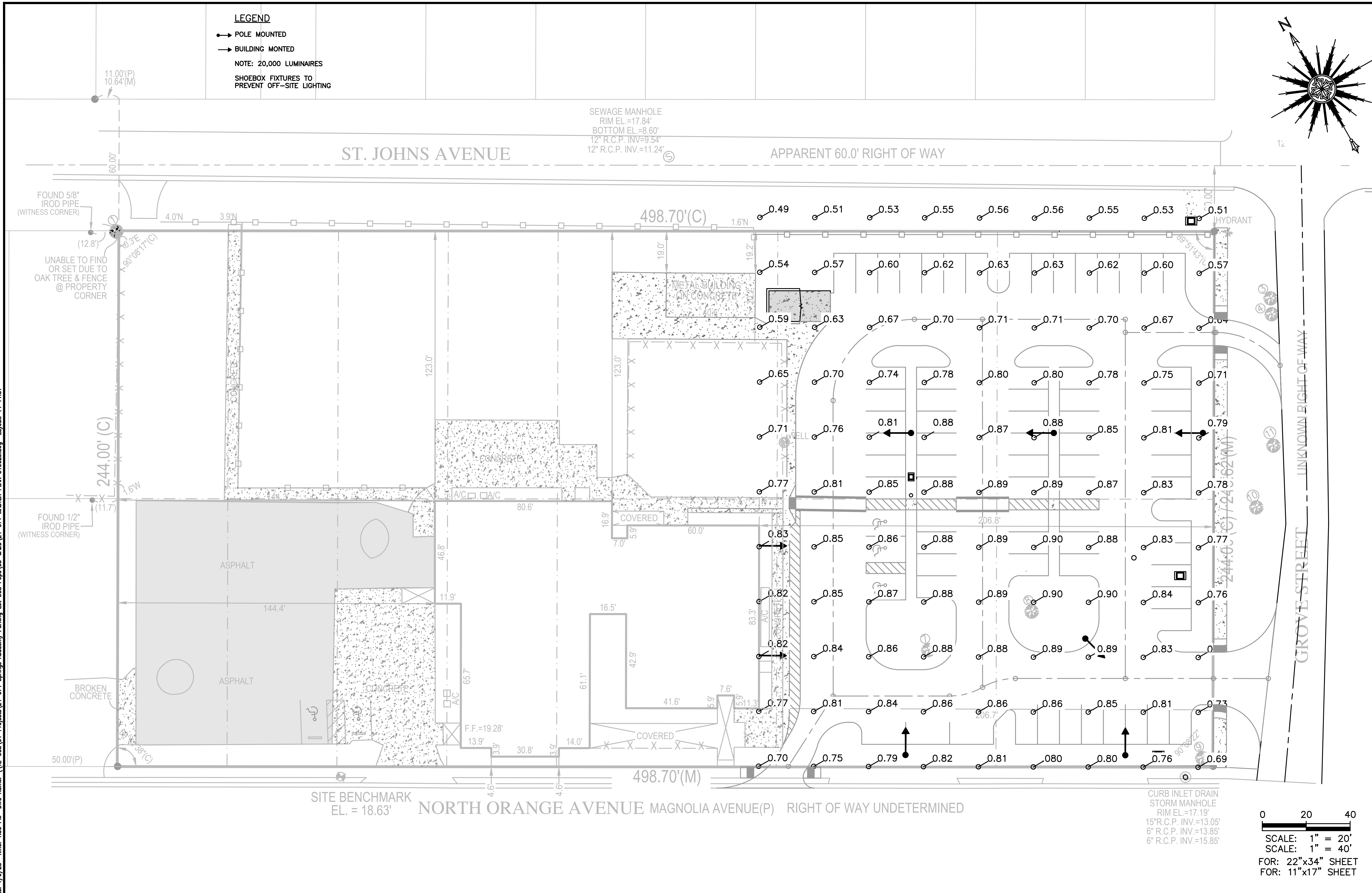
FIRE SUPPRESSION PLAN

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
14

Date: 1/9/25 Time: 1:49 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN 010625.dwg Layout: 14-FIRE



LEGEND
POLE MOUNTED
BUILDING MONTED
NOTE: 20,000 LUMINAIRES
SHOEBOX FIXTURES TO PREVENT OFF-SITE LIGHTING
ST. JOHNS AVENUE
SEWAGE MANHOLE
RIM EL.=17.84'
BOTTOM EL.=8.60'
12" R.C.P. INV.=9.54'
12" R.C.P. INV.=11.24'
APPARENT 60.0' RIGHT OF WAY
FOUND 5/8" IROD PIPE (WITNESS CORNER)
UNABLE TO FIND OR SET DUE TO OAK TREE & FENCE @ PROPERTY CORNER
498.70'(C)
244.00' (C)
METAL BUILDING ON CONCRETE
CONCRETE
HYDRANT
WELL
COVERED
ASPHALT
FOUND 1/2" IROD PIPE (WITNESS CORNER)
BROKEN CONCRETE
F.F.=19.28'
UNKNOWN RIGHT OF WAY
GROVE STREET
498.70'(M)
SITE BENCHMARK EL. = 18.63'
NORTH ORANGE AVENUE
MAGNOLIA AVENUE(P)
RIGHT OF WAY UNDETERMINED
CURB INLET DRAIN
STORM MANHOLE
RIM EL.=17.19'
15"R.C.P. INV.=13.05'
6" R.C.P. INV.=13.85'
6" R.C.P. INV.=15.85'
0 20 40
SCALE: 1" = 20'
SCALE: 1" = 40'
FOR: 22"x34" SHEET
FOR: 11"x17" SHEET

TOCOI π Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM

FLORIDA REGISTRATION NUMBER: 79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

PHOTOMETRIC PLAN

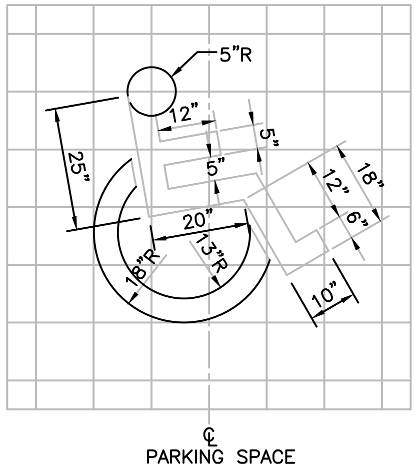
REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
14A

Date: 1/9/25 Time: 1:50 PM DWG Name: \\TE-GS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN 010625.dwg Layout: 14-PHOT

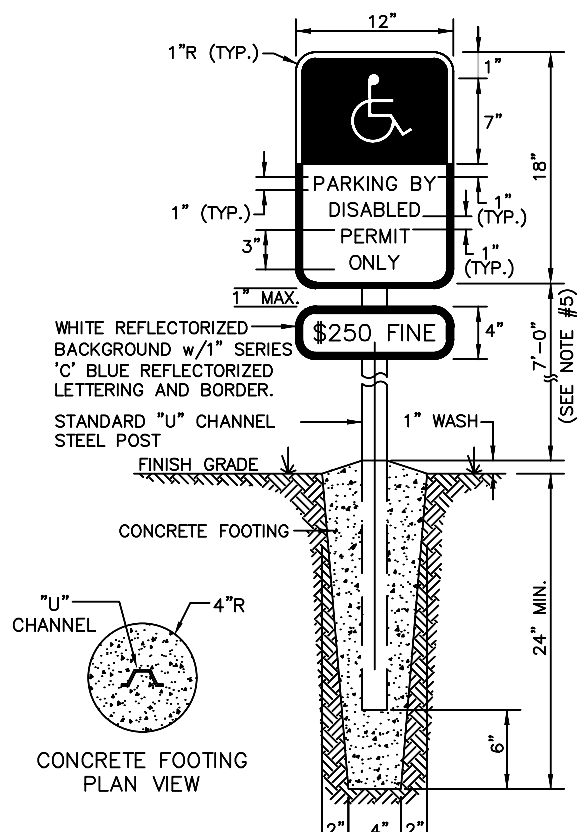
All documents and materials supplementing the signed and sealed documents are resources provided for clarification purposes only and do not supersede the signed and sealed documents. Engineer is not responsible for any deviations from the signed and sealed documents.



NOTE: SYMBOL SHALL BE PAINTED WITH WHITE TRAFFIC PAINT WITHIN OUTLINE SHOWN.

HANDICAPPED SYMBOL DETAIL

N.T.S.

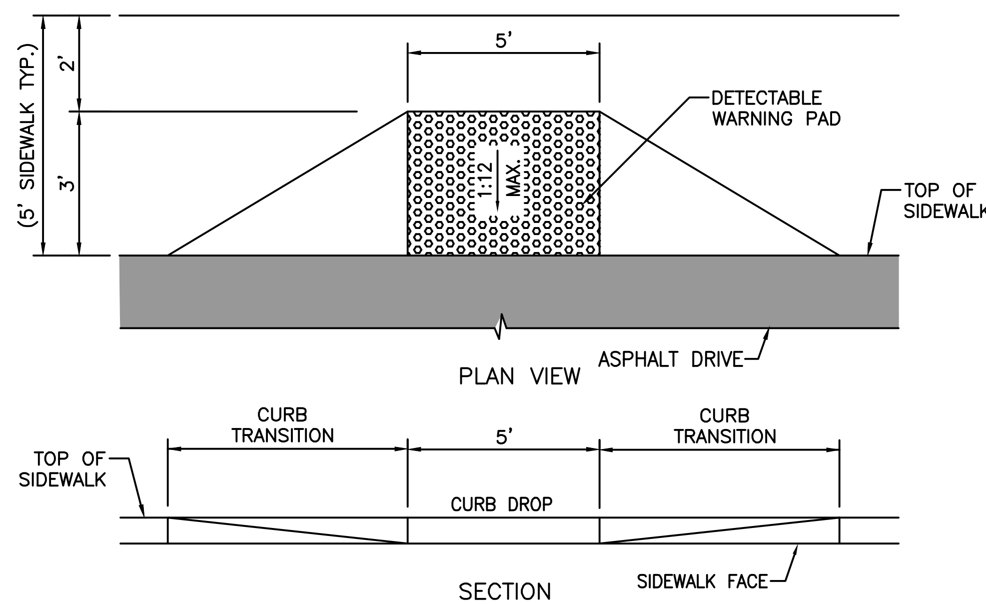


NOTES:

1. ALL LETTERS ARE 1" SERIES.
2. TOP PORTION OF SIGN SHALL HAVE A REFLECTORIZED BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND & BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED WHITE BACKGROUND WITH BLOCK OPAQUE LEGEND & BORDER
4. LETTERS AND NUMBERS ON SIGN SHALL HAVE A WIDTH-TO-HEIGHT RATIO BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH-TO-HEIGHT RATIO BETWEEN 1:5 AND 1:10.
5. SIGNS SHALL NOT BE OSCURED BY A VEHICLE PARKED IN THE SPACE.
6. HANDICAPPED PARKING SPACE SIZE, STRIPING, AND SIGNAGE SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CITY, STATE, & FEDERAL REGULATIONS.

HANDICAP SIGN DETAIL

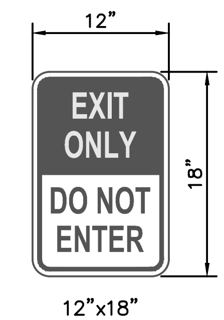
N.T.S.



NOTE: ALL NEW CONCRETE RAMP SURFACES TO RECEIVE BROOM FINISH. SEE FDOT STANDARD SPECIFICATIONS 522-7.2 (SURFACE REQUIREMENTS)

HANDICAP RAMP DETAIL

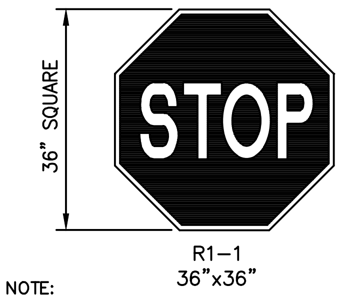
N.T.S.



NOTES:

1. ALL LETTERS ARE 1" SERIES.
2. TOP PORTION OF SIGN SHALL HAVE A BLACK BACKGROUND WITH BLACK LEGEND & BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED WHITE BACKGROUND WITH BLOCK OPAQUE LEGEND & BORDER
4. LETTERS AND NUMBERS ON SIGN SHALL HAVE A WIDTH-TO-HEIGHT RATIO BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH-TO-HEIGHT RATIO BETWEEN 1:5 AND 1:10.

SIGN DETAILS

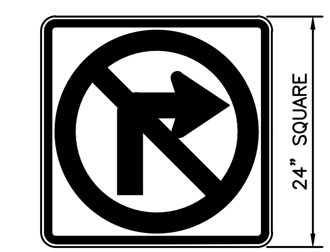


NOTE:

THE STOP SIGN SHALL BE OCTAGON WITH WHITE MESSAGE AND BORDER ON A RED BACKGROUND.

THE POSTS AND BRACKETS WILL BE PER FDOT STANDARD INDEX 11860 AND 11861.

STOP SIGN DETAILS

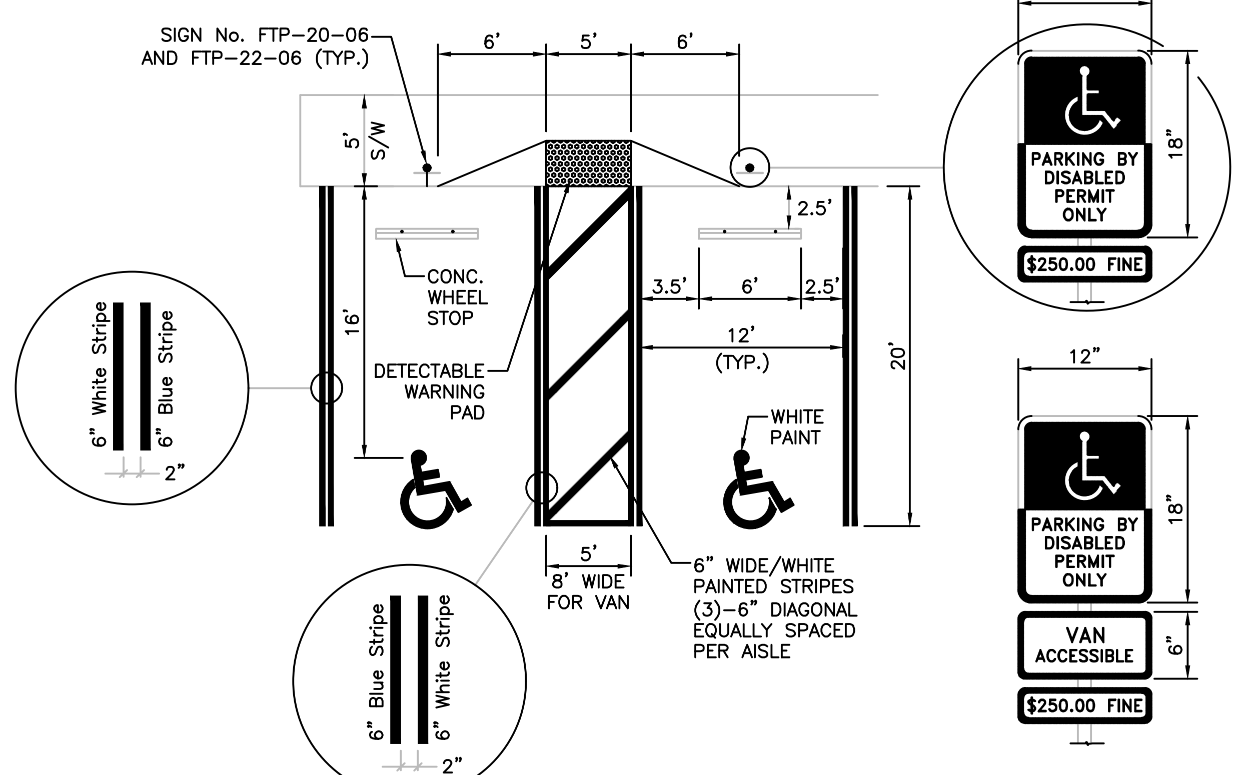


NOTE:

THE SIGN SHALL BE 24" X 24: WITH BLACK ARROW AND BORDER, A RED NUL SYMBOL, ON A WHITE BACKGROUND.

THE POSTS AND BRACKETS WILL BE PER FDOT STANDARD INDEX 11860 AND 11861.

NO RIGHT TURN SIGN DETAILS

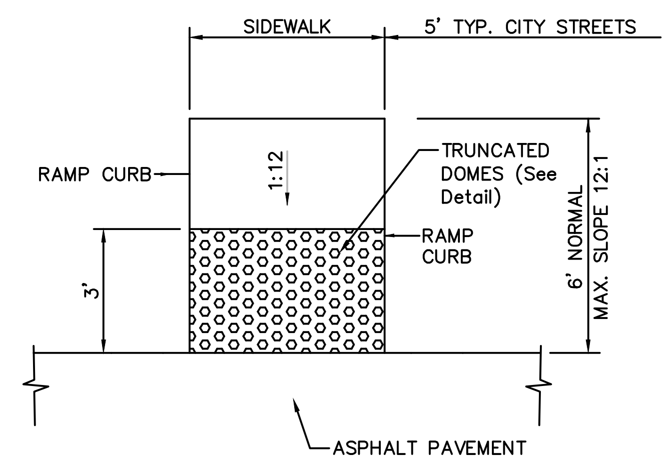


NOTES:

1. EACH SUCH PARKING SPACE SHALL BE CONSPICUOUSLY OUTLINED IN BLUE PAINT, AND SHALL BE POSTED AND MAINTAINED WITH A PERMANENT, ABOVE-GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY OR THE CAPTION "PARKING BY DISABLED PERMIT ONLY", OR BEARING BOTH SUCH SYMBOLS AND CAPTION. SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. ALL HANDICAPPED PARKING SPACES MUST BE DESIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE DEPARTMENT OF TRANSPORTATION.
2. THE FTP-22-06 PANEL SHALL BE MOUNTED BELOW THE FTP-20-06 SIGN.

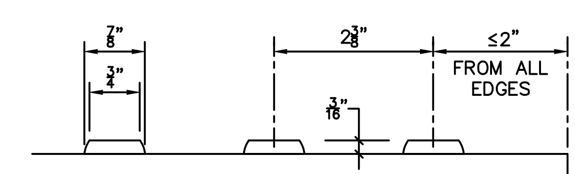
HANDICAP PARKING DETAIL

N.T.S.



PLAN VIEW

N.T.S.



TRUNCATED DOME - DETECTABLE WARNING PAD DETAIL

N.T.S.

TOCOI π Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388 E.B. NUMBER: 26383

ENGINEER OF RECORD

FLORIDA REGISTRATION NUMBER:

SPRINGS ACADEMY PARKING LOT FOR SPRINGS CHAPEL CORP.

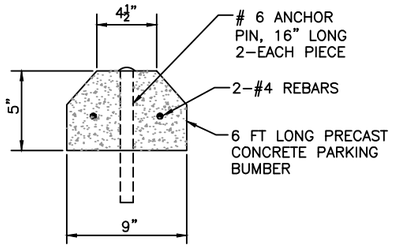
MISCELLANEOUS DETAILS

REVISIONS

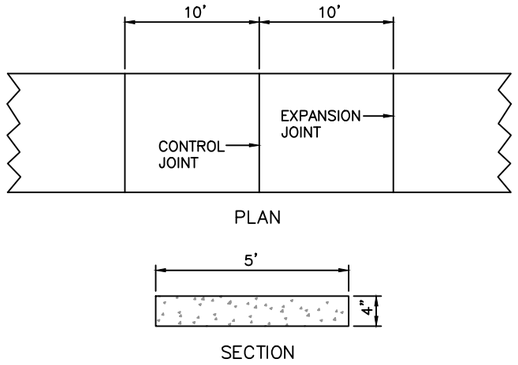
PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
15A

Date: 1/9/25 Time: 11:29 AM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\15_24-671 MISC DETAILS.dwg Layout: 15A

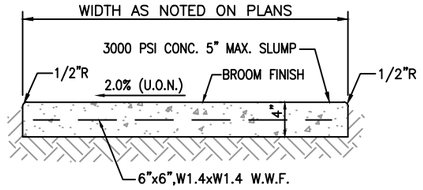


CONCRETE PARKING BLOCK
N.T.S.

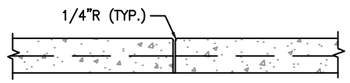


1. 1/2" EXPANSION JOINTS PLACED AT 20' O.C. WITH TOOLED CONTROL JOINTS (1 1/2" DEEP) EVERY 10' O.C.
2. SIDEWALKS SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE, CLASS NON–STRESS (NS), AND ALL METHODS OF CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDING TO THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

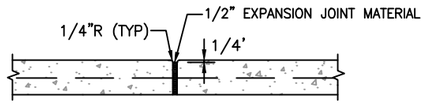
CONCRETE SIDEWALK
N.T.S.



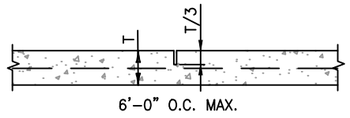
WALK SECTION



CONSTRUCTION JOINT



EXPANSION JOINT

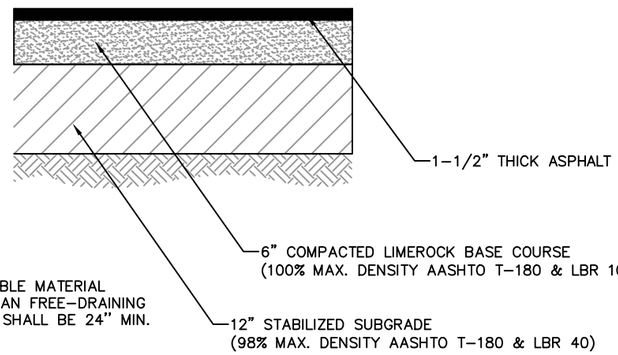


SAWCUT

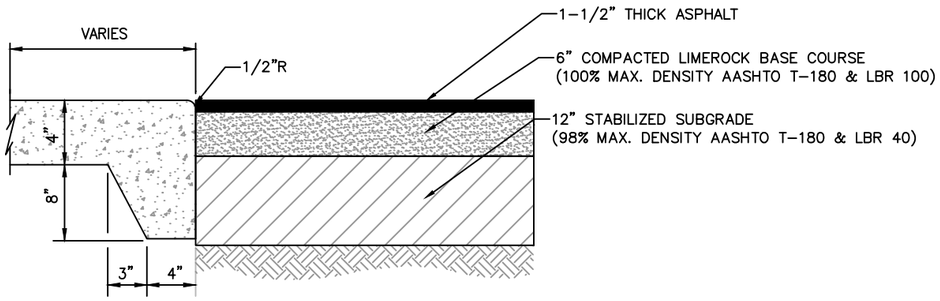
1. 1/2" EXPANSION JOINTS PLACED AT 20' O.C. WITH
2. TOOLED CONTROL JOINTS (1 1/2" DEEP) EVERY 10' O.C.

SIDEWALKS SHALL BE CONSTRUCTED OF COQUINA CONCRETE, CLASS NON–STRESS (NS), AND ALL METHODS OF CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDING TO THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

SIDEWALK DETAILS
N.T.S.

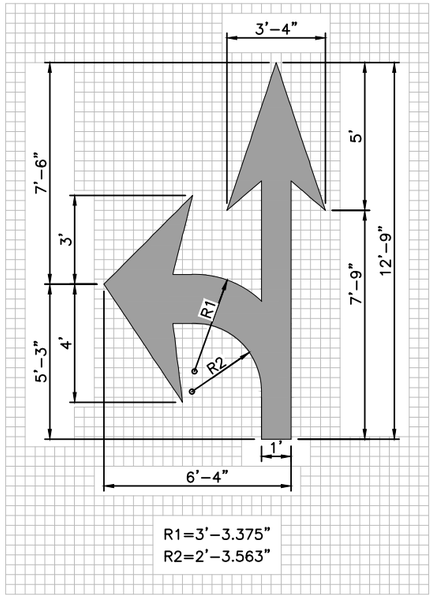


NEW ASPHALT PAVEMENT SECTION
N.T.S.

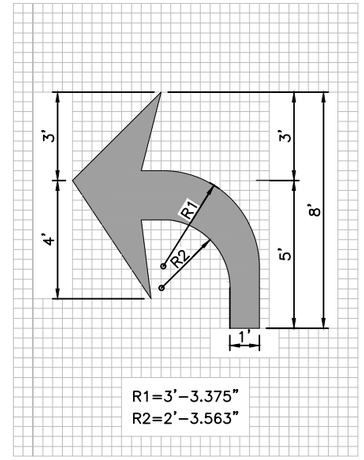


NOTE:
UNDERCUT ALL UNSUITABLE MATERIAL AND BACKFILL WITH CLEAN FREE–DRAINING SAND (BOTTOM OF CUT SHALL BE 24" MIN. BELOW FINISH GRADE)

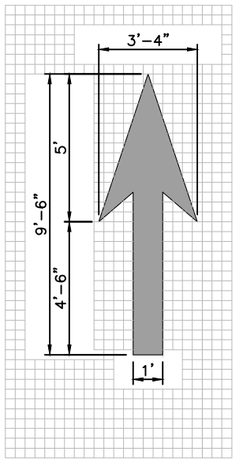
SIDEWALK DETAIL AT PAVEMENT
AND
NEW ASPHALT PAVEMENT SECTION
N.T.S.



TURN AND THROUGH LANE–USE ARROW



TURN LANE–USE ARROW
(LEFT TURN SHOWN – RIGHT TURN SIMILAR)



THROUGH LANE–USE ARROW

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904–215–1388 E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM
FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

MISCELLANEOUS DETAILS

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
15B

Date: 6/26/24 Time: 2:31 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\16_24-671 SWPPP CONTRACTOR REQUIREMENTS2.dwg Layout: REQ

STORM WATER POLLUTION PREVENTION PLAN

CITY'S REQUIREMENTS

SITE DESCRIPTION

PROJECT NAME AND LOCATION:
SPRINGS ACADEMY PARKING LOT
1106 NORTH ORANGE AVENUE
GREEN COVE SPRINGS, FL 32043

OWNER NAME AND ADDRESS:
DR. CHRISTIAN POPE
SPRINGS ACADEMY CORPORATION
1106 NORTH ORANGE AVENUE
GREEN COVE SPRINGS, FL 32043

DESCRIPTION
SECTION 38, TOWNSHIP 6, RANGE 26
LOTS 1–14 BLK; N.S. GCS AS REQ O R 30 PG 304; 181 PG 30; 417 PG 109; 1501 PG 1848; 1701 PG 1419; 1708 PG 1475, 2436 PG 1391 & 4558 PG 389

SOIL DISTURBING ACTIVITIES WILL INCLUDE:
CLEARING AND GRUBBING; EARTHWORK, PAVEMENT AND GRADING; STORM SEWER, UTILITIES, AND PREPARATION FOR FINAL PLANTING AND SEEDING.

RUNOFF CURVE NUMBERS:
1. PRE–CONSTRUCTION =
2. DURING CONSTRUCTION =
3. POST–CONSTRUCTION =

SOILS:
SEE SOIL BORING REPORT FOR SOILS DATA

SITE MAPS:
* SEE ATTACHED GRADING PLAN FOR PRE & POST DEVELOPMENT GRADES, AREAS OF SOILS, DISTURBANCE, LOCATION OF SURFACE WATERS, WETLANDS, PROTECTED AREAS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS AND STORM WATER DISCHARGE POINTS.
* SEE ATTACHED EROSION & TURBIDITY CONTROL PLAN FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES, AND TURBIDITY BARRIERS
* SEE GENERAL NOTES FOR REQUIRMENTS FOR TEMPORARY AND PERMANENT STABILIZATION.

SITE AREA:
1. TOTAL AREA OF SITE =
2. TOTAL AREA TO BE DISTURBED =

NAME OF RECEIVING WATERS:

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN OFF. AN EROSION AND TURBIDITY PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTORS RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

STORM WATER MANAGEMENT

STORM WATER DRAINAGE WILL BE PROVIDED BY (DESRIPTION:) ________
____

FOR THE PROJECT. AREAS WHICH ARE NOT TO BE CONSTRUCTED ON, BUT WILL BE REGRADED SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE, WHEN CONSTRUCTION IS COMPLETE, A TOTAL OF ____ ACRES WILL HAVE BEEN REGRADED, ____ ACRES LEFT UNDISTURBED. THE SITE DISCHARGES TO A WET DETENTION SYSTEM. WHERE PRACTICAL, TEMPORARY SEDIMENT BASINS WILL BE USED TO INTERCEPT SEDIMENT BEFORE ENTERING THE PERMANENT DETENTION BASIN. THE WET DETENTION SYSTEM IS DESIGNED WITH A ____ DAY MINIMUM RESIDENCE VOLUME. THIS IS IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT FOR THIS TYPE OF DEVELOPMENT AT THE TIME OF PERMITTING.

TIMING OF CONTROLS/MEASURES

REFER TO " CONTRACTORS RESPONSIBILITY" FOR THE TIMING OF CONTROL/MEASURES.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED.

D.E.R. DREDGE/FILL PERMIT # ________________
C.O.E. DREDGE/FILL PERMIT # ________________
S.J.R.W.M.D. M.S.S.W. PERMIT #________________

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNED:_______________________________________
CITY ENGINEER

CONTRACTOR'S REQUIREMENTS

GENERAL

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS. DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND HAY BALES AS REQUIRED
3. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN
4. CONSTRUCT SEDIMENTATION BASIN
5. CONTINUE CLEARING AND GRUBBING
6. STOCK PILE TOP SOIL IF REQUIRED
7. PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED
8. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICABLE
9. INSTALL UTILITIES, STORM SEWER, CURBS & GUTTER.
10. APPLY BASE TO PROJECT
11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING
12. COMPLETE FINAL PAVING
13. REMOVE ACCUMULATED SEDIMENT FROM BASINS
14. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/SOD AS REQUIRED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION & TURBIDITY CONTROL PLAN.

CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED , MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE EROSON AND TURBIDITY CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED,TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

EROSION AND SEDIMENT CONTROLS
STABILIZATION PRACTICES

1. HAY BALE BARRIER: HAY BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
   C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
   D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE AGAINST WASHOUT.

   REFER TO CITY STANDARD DETAIL D–913 FOR CONSTRUCTING THE HAY BALE BARRIER. ALSO REFER TO D–901, D–911 AND D–12 FOR PROPER LOCATION, MATERIAL & USAGE.
2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.

   REFER TO CITY STANDARD DETAIL D–910 FOR PROPER CONSTRUCTION OF THE FILTER FABRIC BARRIER.
3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.
4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT–FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE. LEVEL SPREADER SHALL BE CONSTRUCTED IN ACCORDANCE TO CITY STANDARD DETAIL D–914.
5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.
6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF–SITE DEPOSIT OF SEDIMENTS.
7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF–SITE SHALL BE PROTECTED FROM SEDIMENT–LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE–EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.
9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.
11. TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.
12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.
14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG–TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT–TRAPPING FACILITY. AND IT SHALL BE CONSTRUCTED IN ACCORDANCE TO D–914.
2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN AN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA.
   THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER INDEPENDANTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION DIKE:
   A. BLOCK & GRAVEL SEDIMENT FILTER – THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. REFER TO D–902 FOR CONSTRUCTION OF A CURB INLET SEDIMENT FILTER, AND D–904 FOR CONSTRUCTION OF A DROP INLET SEDIMENT FILTER.
   B. GRAVEL SEDIMENT TRAP – THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED AREAS. REFER TO D–903 FOR CONSTRUCTION OF CURB INLET & DROP SEDIMENT TRAP.
   C. DROP INLET SEDIMENT TRAP – THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS. REFER TO D–905 FOR CONSTRUCTION OF HAY BALE & FABRIC SEDIMENT FILTER.
3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY. SILT FENCES & HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.
4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE.

THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL

WASTE MATERIALS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES THE DAY–TO–DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY–TO–DAY SITE OPERATIONS,WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

☐ Concrete
☐ Asphalt
☐ Tar
☐ Detergents
☐ ________
☐ Fertilizers
☐ Petroleum Based Products
☐ Cleaning Solvents
☐ Paints
☐ ________
☐ Wood
☐ Masonry Blocks
☐ Roofing Materials
☐ Metal Studs
☐ ________

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY–TO–DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE–THIRD THE HEIGHT OF THE FENCE.
* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.
* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED.
  THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS.
  THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON–COMPLIANCE.
* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE. SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON–STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON–STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING
* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON–STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

RESPONSIBLE FOR/DUTIES	BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS	SIGNATURE
GENERAL CONTRACTOR		
SUB–CONTRACTOR		
SUB–CONTRACTOR		
SUB–CONTRACTOR		
SUB–CONTRACTOR		

TOCOI π Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904–215–1388 E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM
FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

SWPPP CONTRACTOR REQUIREMENTS

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.
16

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

TO BE COMPLETED EVERY 7 DAYS AND WITHIN 24 HOURS OF
A RAINFALL EVENT OF 0.25 INCHES OR MORE

INSPECTOR:_____ DATE:_____

INSPECTOR'S QUALIFICATIONS:
_____
_____
_____
_____

DAYS SINCE LAST RAINFALL:_____ AMOUNT OF LAST RAINFALL _____ INCHES

STABILIZATION MEASURES

INSPECTION AREA (DESCRIPTION OF LOCATION)	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABLIZED ? (YES/NO)	STABILIZED WITH	CONDITION

STABILIZATION REQUIRED:
_____
_____
_____
_____

TO BE PERFORMED BY:_____ ON OR BEFORE:_____

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

STRUCTURAL CONTROLS

DATE:_____

EARTH DIKES/SWALES

DIKE OR SWALE	FROM	TO	IS DIKE/SWALE STABILIZED ?	IS THERE EVIDENCE OF WASHOUT OR OVERTOPPING

MAINTENANCE REQUIRED FOR EARTH DIKE/SWALE:
_____
_____
_____
_____

TO BE PERFORMED BY:_____ ON OR BEFORE:_____

CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS

STRUCTURE/ OUTFALL	ARE TURBIDITY CONTROLS IN PLACE	ANY EVIDENCE OF CLOGING/WASHOUT OR BYPASSING ?	ARE TURBIDITY CONTROLS IN NEED OF REPLACING	DOES SILT NEED TO BE REMOVED FROM AROUND CONTROL

MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLETS/OUTFALLS TURBIDITY CONTROLS:
_____
_____
_____
_____

TO BE PERFORMED BY:_____ ON OR BEFORE:_____

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

SEDIMENT BASIN

DEPTH OF SEDIMENT IN BASIN	DEPTH OF SEDIMENT SIDE BASIN	ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT ?	CONDITION OF OUTFALL FROM SEDIMENT BASIN

MAINTENANCE REQUIRED FOR SEDIMENT BASIN:
_____
_____
_____
_____

TO BE PERFORMED BY:_____ ON OR BEFORE:_____

OTHER CONTROLS

STABILIZED CONSTRUCTION ENTRANCE

DOES MUCH SEDIMENT GET TRACKED ON TO ROAD ?	IS THE GRAVEL CLEAN OR IS IT FILLED WITH SEDIMENT?	DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO LEAVE THE SITE ?	IS THE CULVERT BENEATH THE ENTRANCE WORKING? (IF APPLICABLE)

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE:
_____
_____
_____

TO BE PERFORMED BY:_____ ON OR BEFORE:_____

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:
_____
_____
_____
_____
_____
_____
_____
_____
_____

REASONS FOR CHANGES:
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE:_____

DATE:_____

NOTE TO CONTRACTOR:
THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER 5 ACRES. THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.25 INCHES. IT IS SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR.

SHEET NO. 17

JOB NO.:
SCALE:
CHECKED BY:
DESIGNED BY:
DRAWN BY:
PLOT DATE:

REVISIONS

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.

SWPPP CONTRACTOR CERTIFICATION

ENGINEER OF RECORD
CHARLES SOHM

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