



Case # BZA-03-24-00758

Charleston County BZA Meeting of April 1, 2024

Applicant: Clayton Stoddard of Mitchell Construction Co.
Property Owner: Truss Johnson, Fire Chief, St. Paul's Fire District
Representative: Kelsey Santiago of Hussey Gay Bell
Property Location: 5536 and 5228 Hyde Park Road – St. Pauls Area
TMS#: 233-00-00-049 and 233-00-00-051
Zoning District: Agricultural Residential (AGR) Zoning District

Request:

Variance request for a new fire station:

- To reduce the required 50' Type G right-of-way landscape buffer along Hyde Park Road;
- To reduce the required 15' Type B land use buffer adjacent to a residential use/AGR Zoning District;
and
- To reduce the number of plantings in the required Type G buffer adjacent to Hyde Park Road.

Requirement:

The *Charleston County Zoning and Land Development Regulations Ordinance (ZLDR), Chapter 9 Development Standards, Article 9.4 Landscaping, Screening, and Buffers, Sec. 9.4.4 Landscape Buffers, A. Right-of-way Buffers, Table 9.4.4-1 Buffer Types by Roadway*, states Hyde Park Road requires a 50' (Type G) right-of-way buffer.

Sec. 9.4.4 Landscape Buffers, D. Land Use Buffers, Table 9.4.4-2, Land Use Buffers, and Table 9.4.4-3, Buffer Depth and Landscaping Standards requires a 15' (Type B) land use buffer.

ARTICLE 9.4 LANDSCAPING, SCREENING, AND BUFFERS

Sec. 9.4.1 Applicability

Unless expressly exempted, the landscaping, screening and buffering standards of this Article shall apply to all new Development with the exception of Single-Family Detached Dwelling Units, Manufactured Housing Units not located in Manufactured Housing Parks, and all new major Roadways that serve Residential Major Subdivisions. Minor Subdivisions may be required to provide landscaping, screening or buffering on major Roadways when the Zoning and Planning Director determines that such landscaping, screening or buffering is necessary to ensure that the purposes of this Ordinance are met. When modifications or Additions are being made to an existing Building or site, the standards of this Article shall apply to those portions of the subject Parcel that are directly affected by the proposed improvements, as determined by the Zoning and Planning Director; provided that when modifications or Additions are proposed that would increase the number of parking spaces, the area of vehicular use areas, or gross Floor Area of buildings by more than 25 percent (above existing), the entire Parcel shall be brought into compliance with all applicable standards of this Article. Before calculating the percentage of area for redevelopment and improvement, any proposed demolition of Structures and parking is subtracted from the existing gross Floor Area of Buildings and number of parking spaces.

Sec. 9.4.2 Exhibits

Drawings included as exhibits at the end of this Chapter are meant to complement the language of the Ordinance. In the event of a conflict with the text of the Ordinance, the text shall apply.

Sec. 9.4.3 Parking, Loading, and Vehicular Use Area Landscaping

A. Parking, Loading and Vehicular Use Area Perimeters.

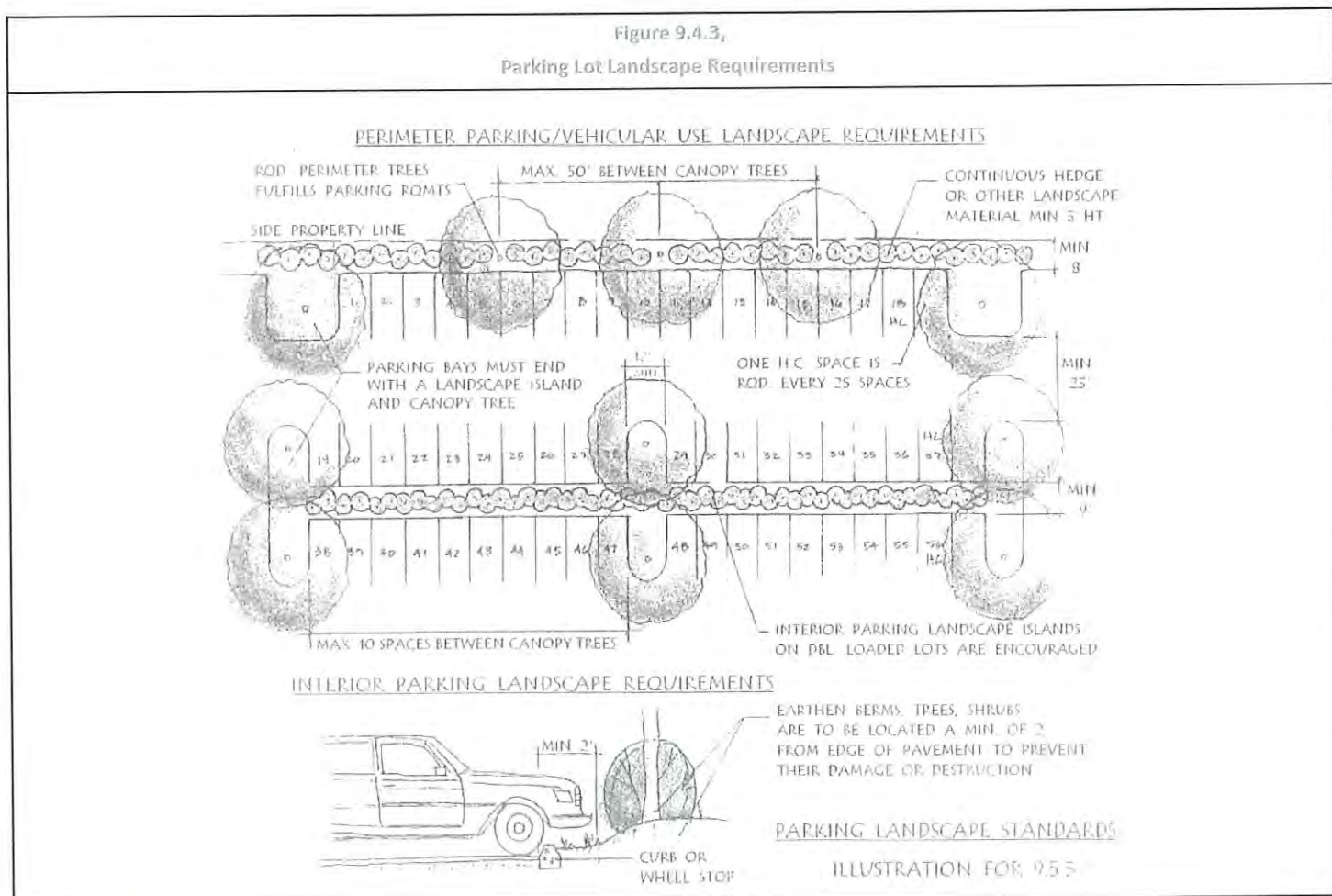
1. *Required.* Unless otherwise expressly stated, perimeter landscaping shall be required around the outer perimeter of all off-street surface parking, loading, and vehicular use areas.
2. *Exemptions.*
 - a. Parking areas for the exclusive use of Single-Family Detached Dwelling Units or agricultural uses where there are no on-site customers and less than 10 employees are exempt from these requirements.
 - b. Any off-street parking, loading, or vehicular use area that is or will be entirely screened from view by an intervening Building or Structure or by a buffer on the Subject Property provided to satisfy the standards of this Article are exempt from the perimeter landscaping requirements.
3. *Standards.*
 - a. A perimeter landscape area at least eight feet in depth shall be provided at the perimeter of all off-street parking, loading, and vehicular use areas, except where permitted driveway openings are to be provided. Where drainage or other utility Easements exist along property lines, the perimeter landscape area shall be located adjacent to the Easement. No buffer plantings will be allowed within any Easement of record, without written approval of the Easement holder.
 - b. Required perimeter landscape areas shall be planted as follows:
 1. One Canopy Tree shall be provided for each 50 linear feet along the perimeter of all parking, loading, or vehicular use areas. These Trees may be used to satisfy the interior Parking Lot landscaping requirements outlined below.
 2. A combination of a hedge with Trees, Shrubs, ornamental grasses, or an approved Fence, Wall, or earthen Berm shall be used to form a continuous landscape screen of at least three feet in height (at maturity) within the perimeter landscape area;
 3. All portions of the perimeter landscape area not planted with Shrubs or Trees or covered by a Wall or Fence barrier shall be planted in grass or wood-based mulch and inorganic Ground Cover; including rock and wood chips; and
 4. Parked vehicles may overhang a landscaped area provided curbing or wheel stops are installed to prevent damage to any plants within the required perimeter landscape area. Landscaping, Walls, Fences, or earth Berms will be so located as to prevent their damage and/or destruction by overhanging vehicles.

B. Interior Areas. The following interior Parking Lot landscaping requirements apply to all Parking Lots except those exclusively serving single-family residential or agricultural uses.

1. Each single- or double-loaded Parking Lot bay must terminate with a Tree island. A minimum of one landscape island shall be provided and evenly disbursed for maximum canopy coverage for each 10 parking spaces within an off-street parking area. Required landscape islands shall have a minimum of 162 square feet (minimum nine feet x 18 feet) or 324 square feet (minimum 9 feet x 36 feet).

2. Each required landscaping island shall contain at least one Canopy Tree per each 162 square feet. Canopy Trees in these islands must be planted in line with the parking stripes (between vehicles) and may be used to satisfy the Parking Lot Tree requirements, subject to all Parking Lot bays terminating with a Tree island. (See Figure 9.4.3, Parking Lot Landscape Requirements)
3. All Parking Lot islands shall be landscaped with a combination of mulch and/or Ground Cover. Pavers, Pavement, and similar hard surfacing shall not be permitted within a Parking Lot island.
4. Curbs, wheel stops, or other protective barriers shall be installed around all required landscape islands, as approved by the Zoning and Planning Director. Protective barriers, such as Curbs, wheel stops or other edging material, must complement on-site drainage patterns. This may require utilizing Curb Cuts, open Fencing, and appropriate placement of Berms.
5. Landscaping provided to meet the standards of Sec. 9.4.4, Landscape Buffers, shall not satisfy the interior Parking Lot landscaping requirements. Canopy Trees planted to meet the Landscape Buffer requirements may be counted toward the interior Parking Lot landscaping requirements provided the buffer is immediately adjacent to the Parking Lot perimeter.

Figure 9.4.3,
Parking Lot Landscape Requirements



Sec. 9.4.4 Landscape Buffers

A. Right-of-Way Buffers.

1. Applicability. Right-of-Way buffers shall be required adjacent to road Rights-of-Way and ingress/egress Easements for all uses except for agricultural and Residential Uses existing on or prior to November 20, 2001. Minor Subdivisions may not have to comply with the requirements of this Section if the Zoning and Planning Director determines that compliance is not necessary to satisfy the purposes of this Ordinance.
2. Buffer Types by Roadway. Landscape Buffers are required along Roadways in accordance with Table 9.4.4-1, Buffer Types by Roadway. Streets, Rights-of-Way, and ingress/egress Easements not indicated in this table shall comply with the Type B buffer requirements.
3. Development within Buffer Areas.
 - a. No Development, storage, or display may occur within required buffer areas except for sidewalks and permitted drives and Signs;

- b. All buffer areas shall accommodate the required Plant materials;
- c. Drainage swales and stormwater Detention ponds may be placed in the buffer only when Protected Trees and Grand Trees are not endangered and when they meander through the buffer in a natural manner; and
- d. Stormwater ponds and swales may not occupy more than 25 percent of the buffer depth.

Roadway	Buffer Type	Notes
Abbapoola Road	G	Main Road (Limehouse Bridge to Maybank Hwy.) I
Ashley Hall Road	B	Main Road Corridor Overlay Zoning District [3]
Hwy. 61/Ashley River Road (Saint Andrews Boulevard to Sam Rittenberg Boulevard)	B	Main Road (Bees Ferry Road to Limehouse Bridge) G
Hwy. 61/Ashley River Road (Mark Clark Expressway to Church Creek)	E	Manse Road G
Hwy. 61/Ashley River Road (Church Creek to Muirfield Parkway/MaLaura Hall Ave.) [1]	I	Mark Clark Expressway I
Hwy. 61/Ashley River Road (Muirfield Parkway/ MaLaura Hall Avenue intersection to Charleston County Line) [1]	J	Mary Ann Point Road E
Bears Bluff Road	I	Mathis Ferry Road [1] G
Bees Ferry Road	G	Maybank Highway Corridor Overlay Zoning District [Johns Island] [2]
Belvedere Road	G	Maybank Highway Corridor Overlay Zoning District [James Island] [4]
Betsy Kerrison Parkway [1]	I	Maybank Highway (Main Road to Rockville) I
Bohicket Road [1]	I	Meeting Street B
Botany Bay Road [1]	I	Murraywood Road G
Brownswood Road	G	Old Georgetown Road G
Cane Slash Road	G	Liberia Road G
Chisolm Road	G	Old Georgetown Road in the "Loop" area (designated on the Mount Pleasant Overlay map) B
Chuck Dawley Boulevard	B	Old Jacksonboro Road G
Coleman Boulevard	B	Old Pond Road G
Doar Road	G	Old Towne Road B
Dorchester Road	A	Orange Grove Road B
Eddingsville Beach Road	G	Orleans Road B
Edenvale Road	G	Parkers Ferry Road G
Fort Johnson Road [1]	E	Patton Avenue/Fickling Hill Road G
Hamlin Road	E	Peters Point Road G
Harborview Road	B	Pine Landing Road G
Highway 162	G	Plow Ground Road G
Highway 165	G	Raccoon Island Road G
Highway 17 (Hwy. 41 to County Line)	I	Rifle Range Road E
Highway 17 (east of Isle of Palms Connector to Hwy. 41, not including Old Georgetown Hwy "Loop" Area)	G	River Road [1] I

Highway 17 in the Old Georgetown Road "Loop" area (as designated on the Mount Pleasant Overlay map)	B	Riverland Drive [1]	G
Highway 17 (west of Isle of Palms Connector including bypass)	B	Rivers Avenue	B
Highway 174 (Highway 164 to Edisto Beach) [1]	I	Rutledge Road	G
Highway 174 (Highway 17 to Highway 164)	E	Saint Andrews Boulevard	B
Highway 41	G	Savannah Highway [Bees Ferry Rd. to County Line] otherwise C	E
Highway 45	G	Seewee Road	G
Humbert Road	E	South Santee Road	G
Hyde Park Road	G	Steamboat Landing Road (Jenkins Hill to Steamboat Creek)	G
James Island Bridge/Highway 61 Connector	C	Tibwin Road	G
James Island Expressway	G	Toogoodoo Road	G
Liberia Road	G	Venning Road	E
Long Point Road (SPA Wando Terminal to I-526)	B	Wappoo Road	B
Long Point Road (Outside of MP-O District) [1]	G	Wescott Road	G
Magwood Road	E	Willtown Road	G

[1] Denotes Scenic Road designation that shall require protection under the provisions of this Ordinance of all Trees 6 inches or greater in Diameter Breast Height (DBH) which are located within Rights-of-Way.

[2] Buffer type as described in the Johns Island Maybank Highway Corridor Overlay Zoning District.

[3] Buffer type as described in the Main Road Corridor Overlay District.

[4] Buffer type as described in the James Island Maybank Highway Corridor Overlay Zoning District.

4. Buffer Depth and Planting Standards. (See Table 9.4.4-3)

5. The Zoning and Planning Director is authorized to reduce the depth of a required Right-of-Way buffer as follows:

a. A required Right-of-Way buffer not within an Overlay Zoning District may be reduced by up to one-third its depth when the following circumstance exist:

1. The Parcel is located on a Corner Lot with required Right-of-Way buffers of 35 feet or more; or
2. The area of all the required buffers, including land use buffers and Tree protection areas, exceeds 30 percent of the site.

b. A required Right-of-Way buffer of 35 feet or less located within the Urban/Suburban Area defined by the Urban Growth Boundary (UGB) and not within an Overlay Zoning District may be reduced as follows:

1. When no parking or vehicular use area is located between the building and the Right-of-Way, the required buffer may be reduced to no less than eight feet (Type A land use buffer) provided the site layout and building elevations meet all applicable sections of Article 9.5, Architectural and Landscape Design Standards.
2. When no more than 10 parking spaces are located between the Building and the Right-of-Way the required buffer may be reduced to no less than 15 feet (Type B buffer) provided the site layout and Building elevations meet all applicable sections of Article 9.5, Architectural and Landscape Design Standards.
3. Buffers required on Parcels that are part of redevelopment that preserves existing Structures may be reduced up to a depth no less than 10 feet (Type A land use buffer) in order to meet the parking and Tree preservation requirements of this Ordinance.
4. Buffers are not required along newly created internal Rights-of-Way and ingress/egress Easements on Parcels containing exclusively Duplex, Triplex, Fourplex, or Single Family Attached Dwellings.

c. The Zoning and Planning Director may require additional site improvements, including but not limited to, enhanced Building architecture and materials and/or increased plant material sizes and density when a buffer reduction is granted.

D. Land Use Buffers.

1. Applicability. Land use buffers shall be provided in accordance with the standards of this Section. In the case of conflict between the land use buffer requirements of this section and those contained in CHAPTER 6, Use Regulations, of this Ordinance, the land use buffer requirements contained in CHAPTER 6, Use Regulations, shall govern.

2. Single-Family Detached Dwelling Units on individual Lots are exempt from the land use buffer requirements of this Section.

3. The Zoning and Planning Director is authorized to modify or waive the buffer or landscape planting requirements and may require that additional plant material be added within remaining buffers or elsewhere on the site, as described below:
 - a. When buffers will not serve any useful purpose due to the location of the following as determined by the Zoning and Planning Director: fences, walls, berms, or landscaping of at least equivalent height, opacity, and maintenance; uses; vehicles; buildings; structures; or storage; parking; loading; display or service areas; or
 - b. The Zoning and Planning Director is authorized to allow a one-third reduction of required buffers, if all required buffers would exceed 25 percent of the site proposed for Development.
4. Determination of Required Buffers. The following procedure shall be used in determining which of the buffer types in Table 9.4.4-2, Land Use Buffers, apply:
 - a. Determine the type of proposed use for the site being developed. (Column 1);
 - b. Determine the residential use type (if residential) or the Zoning District that exists on the adjacent Parcel. This is the "Adjacent Site's Use or Zoning";
 - c. At the intersection of the proposed use and the use or zoning of the adjacent site, identify the land use buffer type (A, B, C, D, E, or F) required along the developing site's boundary(ies); and
 - d. Lastly, refer to Table 9.4.4-3, Buffer Depth and Landscaping Standards, for the applicable buffer type.
5. Land Use Buffer Table. Land use buffers are required along Side and Rear Yards in accordance with the requirements of the following table:

Table 9.4.4-2, Land Use Buffers									
Proposed <u>Use</u>	Use or Zoning of Adjacent Site								
	Residential Type			Civic/Institutional	Commercial Type		Industrial Type		Agricultural
	1	2	3		1	2	1	2	
Agricultural	B	B	B	-	-	-	-	-	-
Residential Type 1	-	-	-	-	-	-	-	-	-
Residential Type 2	A	-	A	B	B	C	E	F	B
Residential Type 3	B	A	-	A	B	C	E	F	B
Civic/Institutional	B	B	A	-	B	C	D	E	B
Commercial Type 1	B	B	B	A	-	C	D	E	B
Commercial Type 2	D	D	C	D	-	-	D	D	D
Industrial Type 1	H	H	H	F	E	B	-	A	G
Industrial Type 2	J	J	J	J	G	B	A	-	I

General Notes:

Residential Use Types:
 Type 1 = Single family Detached and undeveloped Residential Lots; Type 2 = Duplex and Single family Attached; Type 3 = Triplexes, Fourplexes, and Multi-Family and all other residential use types, including Manufactured Housing Parks

Commercial Use Types:
 Type 1 = Any commercial use allowed by right in an RO, GO, or NC district and undeveloped Commercial Lots; Type 2 = all other commercial uses

Industrial Use Types:
 Type 1 = Any industrial or commercial use that is first allowed in an industrial (IN) Zoning District and undeveloped Industrial Lots; Type 2 = Waste-Related uses and Recycling Centers.

6. Buffer Depth and Landscaping Standards.

Table 9.4.4-3, Buffer Depth and Landscaping Standards										
Standard	Buffer Type									
	A	B	C	D	E	F	G	H	I	J
MINIMUM BUFFER DEPTH (feet from property line) [1]	10	15	20	25	35	40	50	60	75	100
MINIMUM LAND USE BUFFER LANDSCAPING (Plants per 100 linear feet) [2] [3]										
Canopy Trees [4]	2	2	2	3	4	5	6	7	9	12
Understory Trees (at least 50 percent evergreen)	3	3	4	4	6	7	9	10	12	15
Shrubs	20	25	30	35	40	45	50	55	60	75

TABLE NOTES:

1. Buffers may be traversed by permitted driveways and pedestrian ways.
2. The retention of natural buffers is required along all road or street Rights-of-Way of Buffer Type C designation or greater. The Zoning and Planning Director is authorized to waive or modify the minimum buffer planting requirements when an undisturbed natural buffer exists that is the same depth and amount of plant material as that which is required.
3. Bradford Pears cannot be used to fulfill any of the Tree requirements of this Ordinance. Any exotic species proposed by a designer are subject to approval by the Zoning and Planning Director.
4. Palmetto Trees may be substituted to fulfill the Canopy Tree requirements. These Trees are to be planted at a ratio of three Palmetto Trees for each Canopy Tree and are to be planted in groupings of three.

GENERAL NOTES:

1. The Zoning and Planning Director shall be authorized to require the installation of Berms within required buffers where deemed necessary to protect the visual quality of a road corridor or ensure land use compatibility.
2. All Trees with a Diameter Breast Height (DBH) of eight inches or greater within buffers shall be preserved.

C. General.

1. *Location of Buffers.* Buffers shall be located along the perimeter of a Lot or Parcel and shall extend to the boundary of the Lot or Parcel. They shall not be located on any portion of public Right-of-Way. Where drainage or other utility Easements exist along property lines, required Landscape Buffers shall be located adjacent to the Easement and may be reduced in width by the width of the Easement, but in no case shall the buffer width be less than 10 feet and shall be located adjacent to the Easement. Required buffers shall be noted on all Plats, plans and permit requests submitted for review and approval under this Ordinance.
2. *Plant Material within Buffers.* Plant material shall be selected and spaced properly to allow the Plants to thrive considering site specific conditions. Plant materials located adjacent to public Drainage Easements and Right-of-Ways shall be selected and placed so as not to impede access or maintenance, including low-lying lateral branches. Additionally, plant material within required buffers that contain Utility Easements shall be selected and located to minimize pruning for future maintenance and clearance of such Utilities. All selections are subject to the review and approval of the Zoning and Planning Director and may also require modifications (substitutions and relocation) of plant materials on proposed landscape plans when necessary to assure access and ease of maintenance to any Easements or Rights-of-Way and to preserve the public health, safety, and welfare.
3. *Use of Buffers.* The Zoning and Planning Director is authorized to allow On-Premises Signs, Fences, Walls, Berms, mailboxes, access to community Boat Ramps, permitted driveways, and sidewalks within required buffers. Other improvements may be allowed within buffers if the Zoning and Planning Director determines that such improvements will not detract from the intended purpose and function of the buffer or have any adverse effect on adjacent property.

(Ord. No. 2239, 12/06/2022)

Effective on: 2/13/2023, as amended

Sec. 9.4.5 Landscape Plans

Landscape and planting plans submitted to meet the requirements of this Article shall be drawn to the same scale as the Site Plan. Trees and Shrubs shall be depicted at maturity. Landscape plans shall be prepared by a licensed, registered Landscape Architect whenever the area of land disturbance or Development activity exceeds one acre or when the total area of proposed Building footprint exceeds 5,000 square feet. For all other projects, use of a licensed registered Landscape Architect or Landscape Designer familiar with the growth habits and characteristics of plant material available in the Charleston area is recommended.

Sec. 9.4.6 Landscape Material Standards**A. Plant Materials.**

1. *Existing Plant Materials.* Utilization of vegetation and Plant materials that exist on a Parcel prior to its Development may be used to satisfy the landscaping standards, provided they meet the size and locational requirements of this Article, is strongly encouraged.
2. *Size.* Unless otherwise expressly stated, all Plant materials used to satisfy the requirements of this Ordinance shall meet the following minimum size standards:

Table 9.4.6, Plant Material Size	
PLANT TYPE	MINIMUM SIZE
Canopy Tree	2 1/2 inches caliper and 12 feet in height
Understory/Ornamental Tree	Eight feet (height)
Evergreen/Conifer Tree	Five feet (height)
Shrubs	Three gallon and 18 inches to 24 inches in height or spread

TABLE NOTE: At least 50 percent of the required Understory Trees shall be evergreens. Any Plant material that grows to an ultimate height of less than 18 inches shall be considered Ground Cover and shall not be used to fulfill any of the Shrub requirements of this Ordinance.

3. *Species.* Species of Plant material used to satisfy the requirements of this Article shall be indigenous to the Charleston County area or cultivated to survive in this climate. However, the use of indigenous Plants is preferred. No single Plant species shall represent more than 40 percent of the total landscape plantings per plant type, except for projects whose landscape requirements for Canopy Trees are less than 10 Trees.
 4. All Plants installed to satisfy the requirements of this Section shall meet or exceed the Plant quality standards of the most recent edition of American Standard for Nursery Stock, published by the American Association of Nurserymen. Plants shall be nursery-grown and either balled-and-burlapped or container-grown.
 5. *Additional Landscape Treatment.* All required landscape and buffer areas, including drainageways and detention/retention ponds, not dedicated to Trees, Shrubs or preservation of existing vegetation shall be landscaped with grass, Ground Cover, or another landscape treatment, excluding sand, rock, Pavement, or other impervious surfaces. All grass areas are to be installed using proper and accepted landscape methods to assure germination and erosion control.
- B. Berms and landscape Structures.**
1. *Fences and Walls.* Fences and Walls used as screens shall be at least 95 percent opaque, with a minimum height of six feet. Fences must provide an opening for surface water flow every 20 linear feet.
 2. *Berms.* Earthen Berms shall have a minimum height of three feet, with a slope not to exceed 3:1, which may vary depending on the soil type and plant materials used. The toe of any Berm shall be located at least three feet from any Right-of-Way or property line.

(Ord. No. 2239, 12/06/2022)

Effective on: 12/6/2022, as amended

Sec. 9.4.7 Installation, Maintenance, and Replacement

- A. Installation.** All landscaping shall be installed according to American Association of Nurserymen Standards and sound nursery practices in a manner designed to encourage vigorous growth. Sites for Plant materials shall be prepared or improved in accordance with American Association of Nurserymen Standards for soil preparation and drainage. Subsurface drainage shall be provided where Berms, elevated planting areas, or other proper surface drainage do not exist.
- B. Irrigation.** The Zoning and Planning Director is authorized to require the installation of automatic irrigation (sprinkler) systems when deemed necessary to ensure plant survival and proper growth.
- C. Maintenance and Replacement.** Required Trees, Shrubs, Walls, Fences, and other landscape features shall be considered elements of the project in the same manner as parking, Building materials, etc. The landowner, or successors in interest, shall be jointly and independently responsible for the following:
1. Regular maintenance of all landscaping in good condition and in a way that presents a healthy, neat, and orderly appearance. All landscaping shall be maintained free from disease, pests, weeds and litter. This maintenance shall include weeding, watering, fertilizing, pruning, mowing, edging, mulching, or other maintenance, as needed, and in accordance with acceptable horticultural practices, including American National Standards Institute (ANSI) standards for Tree Care Operations and American Association of Nurserymen Standards;
 2. The repair or replacement of required landscape Structures (e.g., Fences) to a structurally sound condition;
 3. The regular maintenance, repair, or replacement of any landscaping required by this Section and shown on the approved site plan; and
 4. Continuous maintenance of the site as a whole. When replacement of Trees, Plant material, or other landscape features is required, such replacement shall be accomplished within the shorter of one growing season, one year, or such time-frame required by the Zoning and Planning Director.

CASE # BZA-03-24-00758
TMS # 233-00-00-049 & 233-00-00-051
ZONING MAP

COUNTY LINE RD



CC

SUBJECT PROPERTIES

RM

AGR
010

009

AG-10

053

050

051

004

049

HYDE PARK RD

002

HYDE FARM RD

AGR

003
AG-10

AGR

RM

Legend

SUBJECT PROPERTIES

RM; RESOURCE MANAGEMENT

Parcel Boundaries

MUNICIPAL BOUNDARIES

Zoning Districts

AG-10; AGRICULTURAL PRESERVATION

CITY OF CHARLESTON

AGR; AGRICULTURAL RESIDENTIAL

WATER

CC; COMMUNITY COMMERCIAL

MARSH

Streets

AGR

RM

CASE # BZA-03-24-00758
TMS # 233-00-00-049 & 233-00-00-051
300' RADIUS MAP

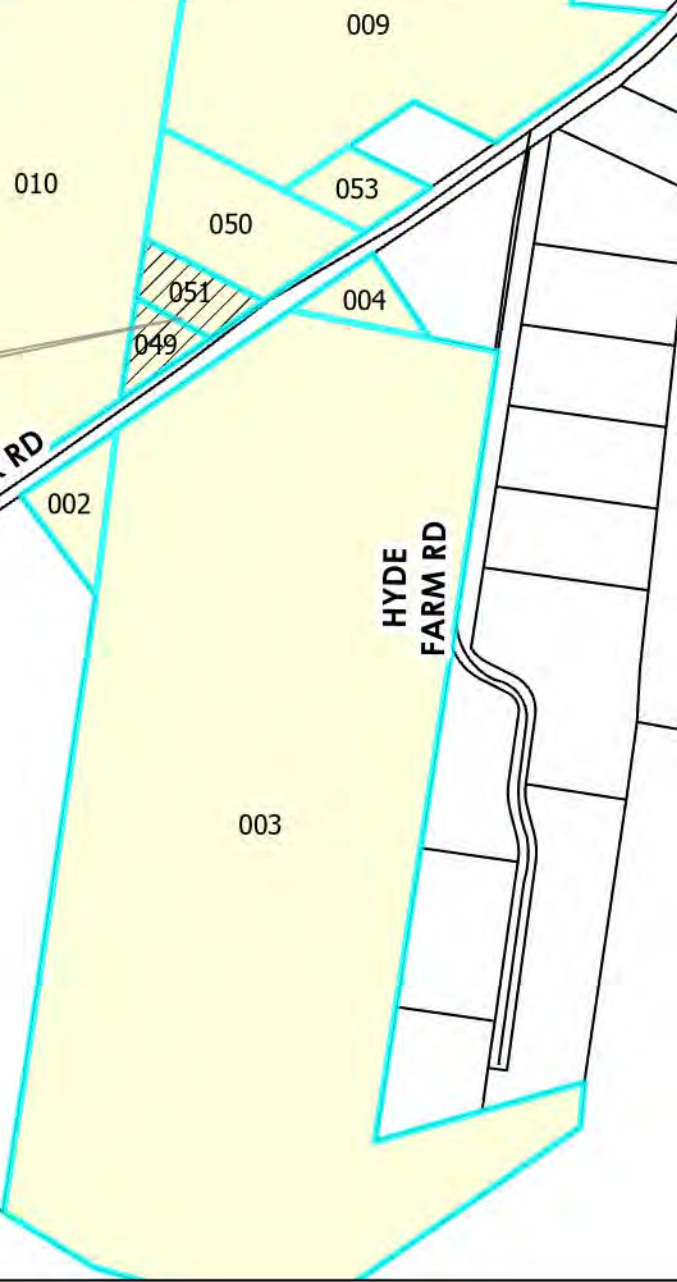
SUBJECT PROPERTIES

HYDE PARK RD

COUNTY LINE RD

HUMMINGBIRD
WAY

HYDE
FARM RD



CASE # BZA-03-24-00758
TMS # 233-00-00-049 & 233-00-00-051
AERIAL VIEW

SUBJECT PROPERTIES

HYDE PARK RD

HYDE FARM RD



CASE # BZA-03-24-00758
TMS # 233-00-00-049 & 233-00-00-051
AERIAL VIEW



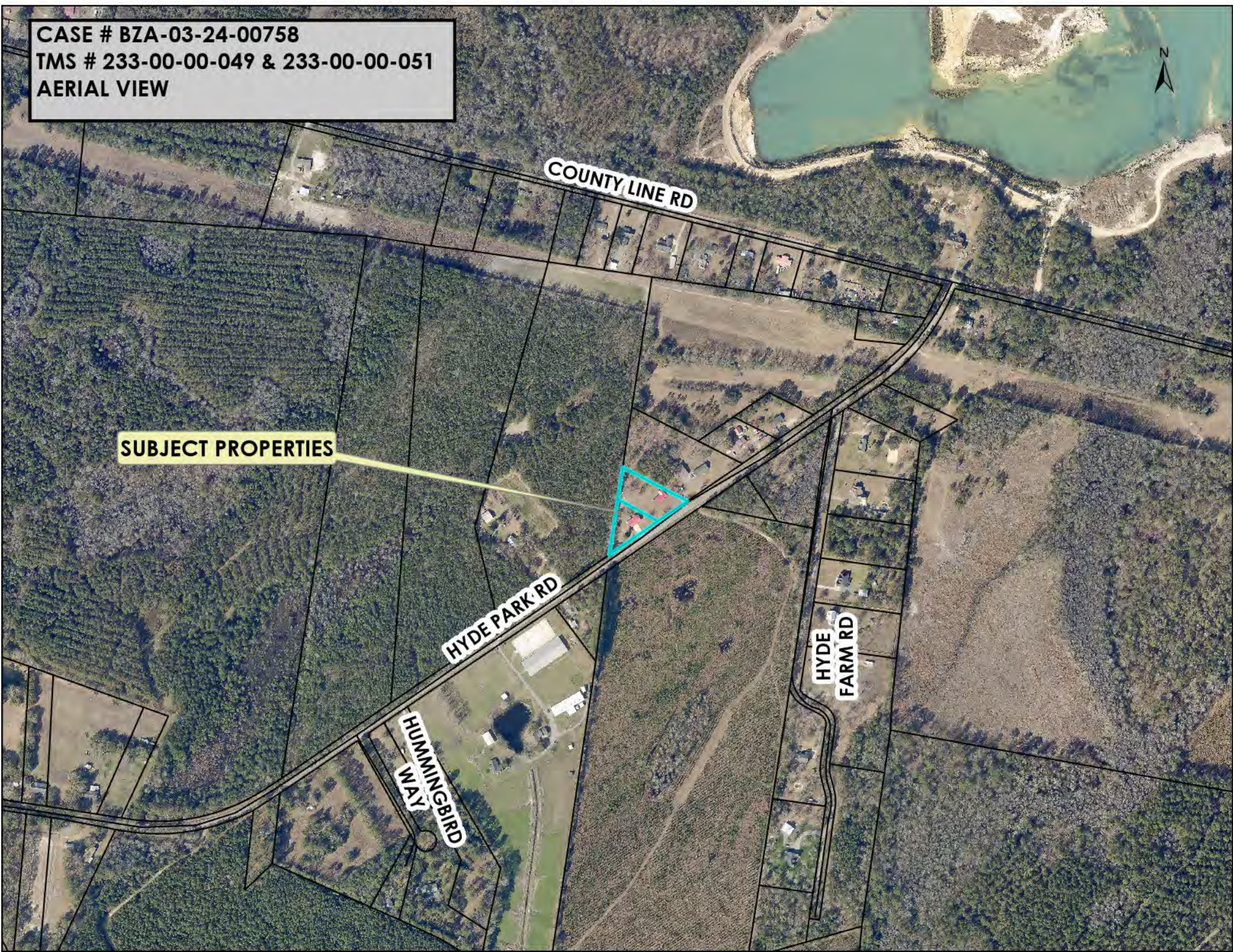
COUNTY LINE RD

SUBJECT PROPERTIES

HYDE PARK RD

HYDE FARM RD

HUMMINGBIRD WAY



Case # BZA-03-24-00758

BZA Meeting of April 1, 2024

Subject Property: 5536 & 5228 Hyde Park Road – St. Pauls Area

Proposal: Variance request to reduce the required buffers for a new fire station.



Subject Property



Subject Property



Hyde Park Road



Staff Review:

The applicant, Clayton Stoddard of Mitchell Construction Co., the property owner, Truss Johnson, Fire Chief, St. Paul's Fire District, represented by Kelsey Santiago of Hussey Gay Bell, are requesting a variance to reduce the required buffers and plantings for a new fire station at 5536 and 5228 Hyde Park Road (TMS # 233-00-00-049 and 233-00-00-051) in the St. Pauls Area of Charleston County.

More specifically, the applicant is requesting a variance for a new fire station:

- To reduce the required 50' Type G right-of-way landscape buffer along Hyde Park Road;
- To reduce the required 15' Type B land use buffer adjacent to a residential use/AGR Zoning District; and
- To reduce the number of plantings in the required Type G buffer adjacent to Hyde Park Road.

The subject properties are located in the Agricultural Residential (AGR) Zoning District. Surrounding properties to the north, east, and west are also located in the AGR Zoning District. The adjacent property to the south is located in the Agricultural Preservation (AG-10) Zoning District. TMS # 233-00-00-049 (Lot A) is 0.7 acres and contains an existing building that will be demolished. TMS # 233-00-00-051 (Lot B) is 1 acre and contains an existing one-story block fire station that will be demolished.

The project is currently in the Site Plan Review Process (ZSPR-11-23-00965). The applicant's letter of intent explains,

1. BZA Variance requested to reduce ROW buffer adjacent to SCDOT ROW for building installation with associated drainage infrastructure and pond grading; ROW buffer is reduced (to 10' for the pond, 27' for the building and 18' for the parking) for approx. 335 linear feet.
2. BZA Variance requested to reduce land use buffer adjacent to a residential use parcel (zoned AGR) for pond grading; adjacent to TMS 2330000010, 15' land use buffer is reduced by 7' to approx. 8' at the narrowest point for approx. 175 linear feet.
3. BZA Variance requested to reduce the number of plantings in the required Type G buffer adjacent to Hyde Park Road.

The property owner's letter of intent explains,

"From the beginning of the St. Paul's Fire District Station 2 project, the leadership of the St. Paul's Fire District has been directly involved in the design development of the new station in the Sauldam Community located on Hyde Park Rd. As currently designed and laid out, the features contained within are essential to the operation of this new station, integral to our standard operating procedures, and typical of all new fire stations.

The existing site is centrally located within the Sauldam service area and uniquely

situated to provide the best access to the residents there. It is also already owned by the St. Paul's Fire District. For these reasons, the existing parcel is the most advantageous location for the construction of the new facility, despite the site's limitations in size and dimension.

Finally, to address any concerns regarding future effects on traffic and noise, the staffing size and subsequent level of activity at this particular site will not increase. The replacement of the existing building(s) with an updated and larger facility is intended to improve the work conditions of current firefighters and ultimately enhance the quality of services for the residents of the Sauldam and surrounding communities. I appreciate your consideration and accommodation of this much-needed improvement to our services."

Applicable ZLDR requirement:

The Charleston County Zoning and Land Development Regulations Ordinance (ZLDR), Chapter 9 Development Standards, Article 9.4 Landscaping, Screening, and Buffers, Sec. 9.4.4 Landscape Buffers, A. Right-of-way Buffers, Table 9.4.4-1 Buffer Types by Roadway, states Hyde Park Road requires a 50' (Type G) right-of-way buffer.

Sec. 9.4.4 Landscape Buffers, D. Land Use Buffers, Table 9.4.4-2, Land Use Buffers, and Table 9.4.4-3, Buffer Depth and Landscaping Standards requires a 15' (Type B) land use buffer.

Staff conducted a site visit on the subject property on March 13, 2024. Please review the attachments for further information regarding this request.

Planning Director Review and Report regarding Approval Criteria of §3.10.6:

§3.10.6(1): *There are extraordinary and exceptional conditions pertaining to the particular piece of property;*

Response: There are extraordinary and exceptional conditions pertaining to the 1.7-acre subject properties. The **applicant's letter of intent states**, "1. Due to the limited size and triangular nature of the site, design requirements necessary for the fire station building, design requirements for stormwater and designated fire station visitor parking locations development (parking) to be located within ROW buffer; a variance is being requested to reduce the ROW buffer from 50' (to 10' for the pond, 27' for the building and 18' for the parking) for approx. 335 linear feet. Additionally, encroachment into the right-of-way buffer saves a 28" Oak Tree and significantly reduces the encroachment of site improvements into the tree protection (encroachments are less than 25%). 2. Due to the proposed size of the fire station building to meet current design standards, requirements for a looped driveway system around the fire station for emergency vehicles, and limited site size constraints, the land use buffer adjacent to the

residential parcel for the pond grading must be reduced to approx. 8' or approx. 175 linear feet. 3. Due to the proposed size of the fire station building to meet current design standards, requirements for a looped driveway system around the fire station for emergency vehicles, and limited site size constraints, plantings in the Type G Buffer must be reduced from 28 to 21 canopy trees and 41 to 38 under-story trees adjacent to the Hyde Park ROW." Therefore, the request meets this criterion.

§3.10.6(2): These conditions do not generally apply to other property in the vicinity;
Response: These conditions do not generally apply to other property in the vicinity. The **applicant's letter of intent states**, "These conditions are unique to this subject property due to the size and triangular nature of the site. Required emergency service/fire station parameters must also be met for the proposed fire station use. There is no increase nor plans to increase fire department staff or operations from existing operations." Therefore, the request meets this criterion.

§3.10.6(3): Because of these conditions, the application of this Ordinance to the particular piece of property would effectively prohibit or unreasonably restrict the utilization of the property;
Response: The application of this Ordinance, Chapter 9 Development Standards, Article 9.4 Landscaping, Screening, and Buffers, Sec. 9.4.4 Landscape Buffers, A. Right-of-way Buffers, Table 9.4.4-1 Buffer Types by Roadway, D. Land Use Buffers, Table 9.4.4-2, Land Use Buffers, and Table 9.4.4-3, Buffer Depth and Landscaping Standards to 5536 and 5228 Hyde Park Road would unreasonably restrict the utilization of the property. **The applicant's letter of intent states**, "The application of these Ordinances to the subject property would effectively prohibit or unreasonably restrict the utilization of the property for the upgrades of the existing fire station. These variances being requested are due to the small and unique design requirements that are necessary for a fire station/emergency service building." Therefore, the request meets this criterion.

§3.10.6(4): The authorization of a variance will not be of substantial detriment to adjacent property or to the public good, and the character of the zoning district will not be harmed by the granting of the variance;
Response: The authorization of this variance request may not be of substantial detriment to the adjacent properties or to the public good, and the character of the AGR Zoning District may not be harmed if the variance is granted. **The applicant's letter of intent states**, "The character of the zoning district will not be harmed if these variances are granted. The uses of the fire station is existing and based on the site's size constraint and required

emergency service standards of the property was developed in the most efficient way possible. There is no increase nor plans to increase fire department staff or operations at this location from existing operations.” Therefore, the request may meet this criterion.

§3.10.6(5): *The Board of Zoning Appeals shall not grant a variance the effect of which would be to allow the establishment of a use not otherwise permitted in a zoning district, to extend physically a nonconforming use of land, or to change the zoning district boundaries shown on the official zoning map. The fact that property may be utilized more profitably, should a variance be granted, may not be considered grounds for a variance;*

Response: The variance does not allow a use that is not permitted in this zoning district, nor does it extend physically a nonconforming use of land or change the zoning district boundaries. In addition, the **applicant’s letter of intent states**, “The existing use is a fire station and proposed use is an upgraded fire station to meet current fire department/emergency service standards and better care for the people of the community.” Therefore, the request meets this criterion.

§3.10.6(6): *The need for the variance is not the result of the applicant's own actions;*

Response: The need for the variance may not be **the result of the applicant’s own actions**. **The applicant’s letter of intent states**, “These variances are not a result of any actions. No modifications to the site have been made at this time.” Therefore, the request may meet this criterion.

§3.10.6(7): *Granting of the variance does not substantially conflict with the Comprehensive Plan or the purposes of the Ordinance;*

Response: Granting of the variance may not substantially conflict with the *Comprehensive Plan* or the purposes of the *Ordinance* if the Board finds that the strict application of the provisions of the *Ordinance* results in an unnecessary hardship. Therefore, the request may meet this criterion.

Board of Zoning Appeals’ Action:

According to Article 3.10 Zoning Variances, Section §3.10.6 Approval Criteria of the *Charleston County Zoning and Land Development Regulations Ordinance (ZLDR)*, (adopted July 18, 2006), The Board of Zoning Appeals has the authority to hear and decide appeals for a Zoning Variance when strict application of the provisions of this Ordinance would result in unnecessary hardship (§3.10.6A). A Zoning Variance may be granted in an individual case of unnecessary hardship if the Board of Zoning Appeals makes and explains in writing their findings (§3.10.6B Approval Criteria).

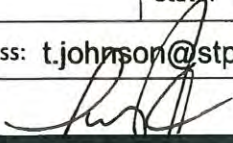
In granting a variance, the Board of Zoning Appeals may attach to it such conditions

regarding the location, character, or other features of the proposed building or structure as the Board may consider advisable to protect established property values in the surrounding area or to promote the public health, safety, or general welfare (§3.10.6C).

The Board of Zoning Appeals may approve, approve with conditions or deny Case BZA-03-24-00758 [Variance request to reduce the required buffers and plantings for a new fire station at 5536 and 5228 Hyde Park Road (TMS # 233-00-00-049 and 233-00-00-051) in the St. Pauls Area of Charleston County] based on the BZA's "Findings of Fact", unless additional information is deemed necessary to make an informed decision. In the event the BZA decides to approve the application, Staff recommends the following condition:

1. Prior to zoning permit approval, the applicant shall complete the Site Plan Review process and the applicant shall complete the subdivision process to combine the two properties.

ZONING VARIANCE APPLICATION
Charleston County Board of Zoning Appeals (BZA)

Property Information St. Paul's Fire Station #2			
Subject Property Address: 5536 HYDE PARK RD Hollywood, SC 29449			
Tax Map Number(s): 2330000049, 2330000051			
Current Use of Property: Fire Station			
Proposed Use of Property: Fire Station			
Zoning Variance Description:			
Applicant Information (Required)			
Applicant Name (please print): Clayton Stoddard			
Name of Company (if applicable): Mitchell Construction Co.			
Mailing Address: PO Box 559			
City: Walterboro	State: SC	Zip Code: 29448	
Email Address: Clayton@mitchellcon.com		Phone #: 843-549-7112	
Applicant Signature:			Date:
Representative Information (Complete only if applicable. Attorney, Builder, Engineer, Surveyor etc.)			
Print Representative Name and Name of Company: Hussey Gay Bell (POC Kelsey Santiago)			
Mailing Address: 474 Wando Park Blvd. Suite 201			
City: Mt. Pleasant	State: SC	Zip Code: 29464	
Email Address: ksantiago@husseygaybell.com		Phone #: 843 849 7500	
Designation of Agent (Complete only if the Applicant listed above is not the Property Owner.)			
I hereby appoint the person named as Applicant and/or Representative as my (our) agent to represent me (us) in this application.			
Property Owner(s) Name(s) (please print): Truss Johnson, Fire Chief			
Name of Company (if applicable, LLC etc.): St. Paul's Fire District			
Property Owner(s) Mailing Address: 6488 Hwy 162			
City: Hollywood	State: SC	Zip Code: 29470	Phone #: 843-889-8874
Property Owner(s) Email Address: t.johnson@stpfd.org			
Property Owner(s) Signature: 			Date: 2-8-2024
FOR OFFICE USE ONLY:			
Zoning District: AGR	Flood Zone: X (455K)	Date Filed: 03-01-2024	Fee Paid: 250.00
Application #: BZA 03-24-00758	TMS #: 233-0000-049	Staff Initials: JAC	

233-00-00-051

Description of Request

Please describe your proposal in detail. You may attach a separate sheet if necessary. Additionally, you may provide any supporting materials that are applicable to your request (photographs, letter of support, etc.) Additional Letter from Fire Department is forthcoming

- 1. BZA Variance requested to reduce ROW buffer adjacent to SCDOT ROW for building installation with associated drainage infrastructure and pond grading; ROW buffer is reduced (to 10' for the pond, 27' for the building and 18' for the parking) for approx 335 linear feet.
- 2. BZA Variance requested to reduce land use buffer adjacent to a residential use parcel (zoned AGR) for pond grading; adjacent to TMS 2330000010, 15' land use buffer is reduced by 7' to approx. 8' at the narrowest point for approx. 175 linear feet.
- 3. BZA Variance requested to reduce the number of plantings in the required Type G buffer adjacent to Hyde Park Road.

Applicant's response to Article 3.10 Zoning Variances, §3.10.6 Approval Criteria

Zoning Variances may be approved only if the Board of Zoning Appeals finds that the proposed use meets all 7 of the approval criteria. In evaluating your request, the members of the board will review the answers below as a part of the case record. You may attach a separate sheet if necessary.

1. Are there extraordinary and exceptional conditions pertaining to the subject property? Explain:

- 1. Due to the limited size and triangular nature of the site, design requirements necessary for the fire station building, design requirements for stormwater and designated fire station visitor parking locations development (parking) to be located within ROW buffer; a variance is being requested to reduced the ROW buffer from 50' (to 10' for the pond, 27' for the building and 18' for the parking) for approx 335 linear feet. Additionally, encroachment into the right-of-way buffer saves a 28" Oak Tree and significantly reduces the encroachment of site improvements into the tree protection (encroachments are less than 25%).
- 2. Due to the proposed size of the fire station building to meet current design standards, requirements for a looped driveway system around the fire station for emergency vehicles, and limited site size constraints, the land use buffer adjacent to the residential parcel for the pond grading must be reduced to approx 8' for approx. 175 linear feet.
- 3. Due to the proposed size of the fire station building to meet current design standards, requirements for a looped driveway system around the fire station for emergency vehicles, and limited site size constraints, plantings in the Type G Buffer must be reduced from 28 to 21 canopy trees and 41 to 38 under-story trees adjacent to the Hyde Park ROW.

2. Do these conditions generally apply to other property in the vicinity or are they unique to the subject property? Explain:

These conditions are unique to this subject property due to the size and triangular nature of the site. Required emergency service/fire station parameters must also be met for the proposed fire station use. There is no increase nor plans to increase fire department staff or operations from existing operations.

3. Because of these extraordinary and exceptional conditions, would the application of this Ordinance to the subject property effectively prohibit or unreasonably restrict the utilization of the property? Explain:

The application of these Ordinances to the subject property would effectively prohibit or unreasonably restrict the utilization of the property for the upgrades of the existing fire station. These variances being requested are due to the small and unique design requirements that are necessary for a fire station/emergency service building.

4. Will the authorization of a variance be a substantial detriment to adjacent property or to the public good? Will the character of the zoning district be harmed if this variance is granted? Explain:

The character of the zoning district will not be harmed if these variances are granted. The uses of the fire station is existing and based on the site's size constraint and required emergency service standards of the property was developed in the most efficient way possible. There is no increase nor plans to increase fire department staff or operations at this location from existing operations.

5. The BZA shall not grant a variance the effect of which would be to allow the establishment of a use not otherwise permitted in a zoning district, to extend physically a Nonconforming Use of land, or to change the zoning district boundaries shown on the Official Zoning Map. The fact that property may be utilized more profitably if a Zoning Variance is granted shall not be considered grounds for granting a Zoning Variance. Does the variance request meet this criterion?

Yes, the variances request meet the criterion. The existing use in an fire station and proposed use is an upgraded fire station to meet current fire department/emergency service standards and better care for the people of the community.

6. Is the need for the variance the result of your own actions? Explain:

These variances are not a result of any actions. No modifications to the site have been made at this time.

7. Does the variance substantially conflict with the Charleston County Comprehensive Plan or the purposes of the Ordinance? Explain

The variances do not substantially conflict with the Charleston County Comprehensive Plan.

In granting a variance, the Board of Zoning Appeals may attach to it such conditions regarding the location, character, or other features of the proposed building or structure as the Board may consider advisable to protect established property values in the surrounding area or to promote the public health, safety, or general welfare.



6488 Hwy 162, Hollywood, SC 29449
843-889-8874 office
843-889-6459 fax
www.stpaulsfiredept.org

Date: February 20, 2024

To: Charleston County Zoning Board of Appeals

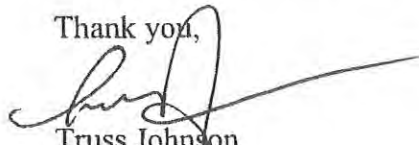
Re: St. Paul's Fire District Station #2

From the beginning of the St. Paul's Fire District Station 2 project, the leadership of the St. Paul's Fire District has been directly involved in the design development of the new station in the Sauldam Community located on Hyde Park Rd. As currently designed and laid out, the features contained within are essential to the operation of this new station, integral to our standard operating procedures, and typical of all new fire stations.

The existing site is centrally located within the Sauldam service area and uniquely situated to provide the best access to the residents there. It is also already owned by the St. Paul's Fire District. For these reasons, the existing parcel is the most advantageous location for the construction of the new facility, despite the site's limitations in size and dimension.

Finally, to address any concerns regarding future effects on traffic and noise, the staffing size and subsequent level of activity at this particular site will not increase. The replacement of the existing building(s) with an updated and larger facility is intended to improve the work conditions of current firefighters and ultimately enhance the quality of services for the residents of the Sauldam and surrounding communities. I appreciate your consideration and accommodation of this much-needed improvement to our services.

Thank you,



Truss Johnson
Fire Chief

Jan 25, 2024 - 3:36pm Printed By: kaantago
 F:\0859 Mitchell Construction\423153600 St. Paul Fire Station 2\CAD\CAD\PLANS\3600 - COVER SHEET.dwg
 ALL RIGHTS RESERVED
 COPYRIGHT © 2024
 DRAWINGS MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM WITHOUT WRITTEN PERMISSION
 Hussey, Gay, Bell & DeYoung, Inc. Consulting Engineers of SC
 474 Wando Park Blvd, Suite 201
 Mt. Pleasant, SC 29464

LEGEND		
EXISTING	PROPOSED	
		BOUNDARY LINE / ROAD R/W
		ROAD / DRIVEWAY CENTERLINE
		SANITARY SEWER
		STORM DRAIN
		WATER MAIN
		OVERHEAD POWER LINE
		UNDERGROUND PRIMARY POWER
		UNDERGROUND SECONDARY POWER
		UNDERGROUND TELEPHONE
		SILT FENCE
		FIRE HYDRANT
		FIRE DEPARTMENT CONNECTION
		POWER POLE
		WATER METER
		GAS/WATER VALVE
		CLEAN OUT
		INLET (TYPE AS NOTED)
		SANITARY SEWER MANHOLE
		STORM DRAIN MANHOLE
		SITE LIGHT POLE AND FIXTURE
		FINISHED GRADE ELEVATION
		TOP OF WALK ELEVATION
		TOP OF CURB ELEVATION
		TOP OF PAVING ELEVATION
		GUTTER ELEVATION
		INVERT ELEVATION
		ASPHALT PAVEMENT
		CONCRETE PAVEMENT
		CONCRETE CURB
		CONCRETE CURB & GUTTER
		CONTOUR
		DRAINAGE FLOW
		REINFORCED CONCRETE PIPE
		CORRUGATED PLASTIC PIPE
		POLYVINYL CHLORIDE PIPE
		DUCTILE IRON PIPE

SITE DEVELOPMENT PLANS

FOR

ST. PAUL'S FIRE STATION

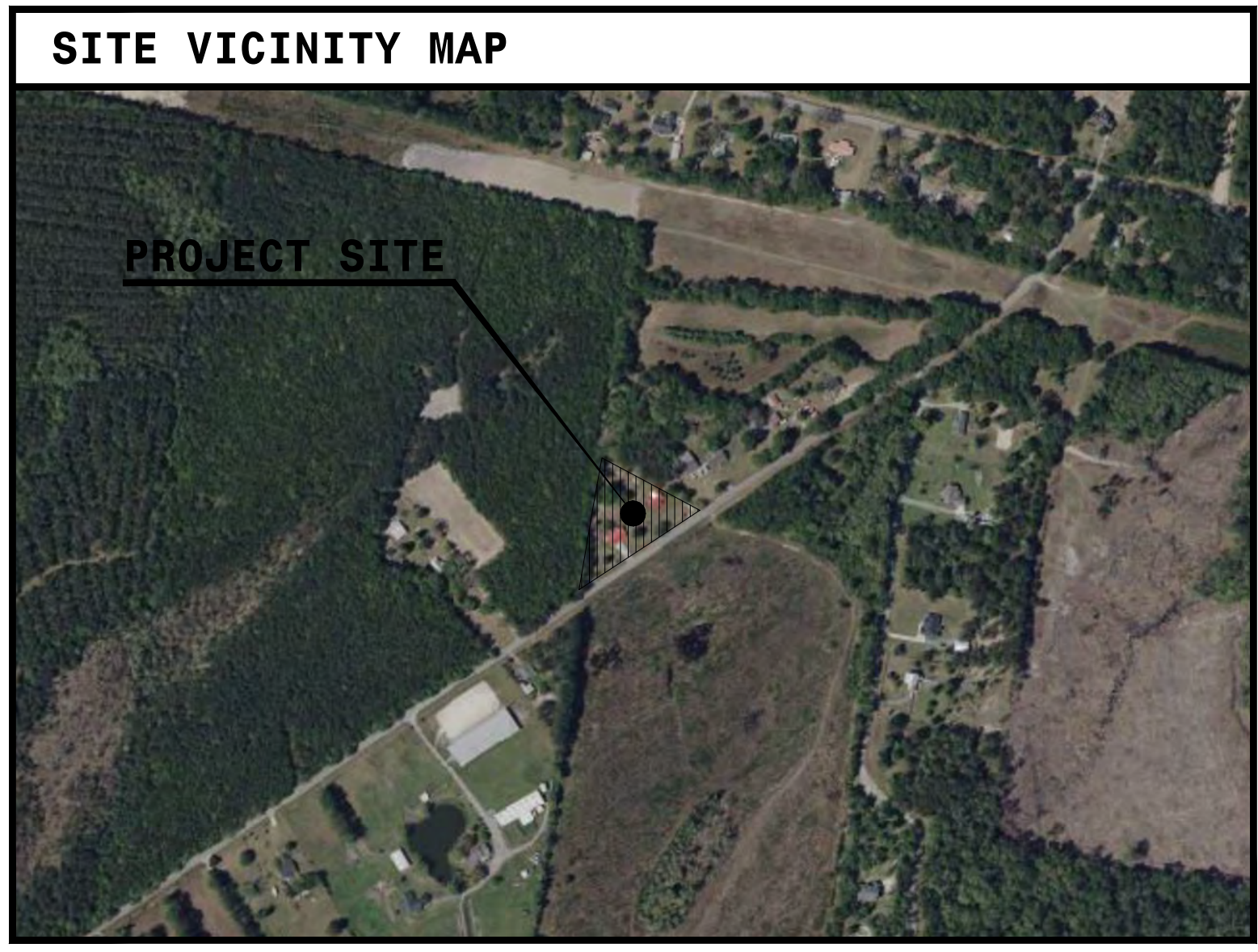
HYDE PARK ROAD

CHARLESTON COUNTY, SC

TMS# 233-00-00-049 & 233-00-00-051

- GENERAL NOTES:**
- A COMPLETE SET OF APPROVED DRAWINGS MUST BE MAINTAINED ON SITE AT ALL TIMES THAT THE CONTRACTOR IS PERFORMING WORK.
 - WITHIN ALL NOTES, THE TERM CONTRACTOR SHALL MEAN THE GENERAL CONTRACTOR AND ANY SUBCONTRACTOR OR VENDOR PERFORMING CONSTRUCTION ON THE SITE.
 - SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES ON THE DRAWINGS, OR IN THE FIELD PRIOR TO BEGINNING WORK OR DURING CONSTRUCTION, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER.
 - BOUNDARY AND TOPOGRAPHIC SURVEY PROVIDED BY HUSSEY GAY BELL & DEYOUNG, INC. AND HAS NOT BEEN FIELD VERIFIED BY THE ENGINEER. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING FIELD CONDITIONS AND REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION AND IS RESPONSIBLE FOR ANY DAMAGE TO THEM DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE STATE'S LOCATION SERVICE AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
 - THE CONTRACTOR SHALL COMPLY WITH ALL RULES AND REGULATIONS OF FEDERAL, STATE, COUNTY AND LOCAL MUNICIPALITIES.
 - ALL MATERIALS, METHODS AND DETAILS OF CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE LOCAL MUNICIPALITY AND/OR THE APPROPRIATE UTILITY COMPANY, WHICHEVER TAKES PRECEDENCE.
 - ALL RIGHT-OF-WAY CONSTRUCTION SHALL MEET LOCAL AND STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, LATEST EDITION.
 - THE CONTRACTOR IS REQUIRED TO MEET ALL APPLICABLE FEDERAL, OSHA, STATE, & LOCAL REGULATIONS CONCERNING PROJECT SAFETY AND ASSUMES FULL RESPONSIBILITY FOR SAFETY ON THE PROJECT.
 - GENERAL CONTRACTOR SHALL VERIFY THAT ALL NECESSARY PERMITS FOR CONSTRUCTION HAVE BEEN OBTAINED PRIOR TO THE START OF THE PROJECT.
 - ANY CONSTRUCTION TRAILERS USED ON-SITE SHALL BE PERMITTED THROUGH LOCAL GOVERNING AGENCY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE ALL NECESSARY PERMITS.
 - GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING INFRASTRUCTURE WITHIN THE SITE OR ADJOINING PROPERTIES (I.e. PAVEMENT, CURB, SIDEWALK, UTILITIES, LANDSCAPED AREAS etc.). CONTRACTOR SHALL REPAIR/REPLACE ALL DAMAGED ITEMS IMMEDIATELY, IF NECESSARY, OR PRIOR TO THE END OF THE JOB AND AT NO COST TO THE OWNER IN ACCORDANCE WITH LOCAL REGULATOR REQUIREMENTS.
 - SITE WORK CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS-BUILT RECORD DRAWINGS PREPARED BY A SOUTH CAROLINA REGISTERED LAND SURVEYOR FOR SANITARY SEWER AND WATER DISTRIBUTION UTILITIES AS-BUILTS TO MEET THE REQUIREMENTS OF THE UTILITY PROVIDER AND STORM DRAINAGE AS-BUILTS TO MEET THE REQUIREMENTS OF SCDEH/OCRM AND/OR THE NPDES REVIEW AUTHORITY TO INCLUDE AS-BUILTS, PIPING PROFILES, EASEMENT PLATS, VALVE CARDS, AND OTHER CLOSE-OUT DOCUMENTATION AS NECESSARY TO OBTAIN FINAL CERTIFICATIONS FOR UTILITIES AND STORM DRAINAGE SYSTEMS BY THE ENGINEER AND ASSOCIATED REVIEW AUTHORITIES.
 - THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF ALL UTILITIES BY THE APPROPRIATE UTILITY COMPANY AND SUBCONTRACTORS PERFORMING WORK TO AVOID CONFLICTS. GENERAL CONTRACTOR IS ALSO RESPONSIBLE FOR SCHEDULING INSTALLATION OF ALL UTILITIES IN A TIMELY, ORGANIZED, AND SYSTEMATIC MANNER.
 - IN THE EVENT OF A CONFLICT WITH WATER, SEWER, DRAINAGE OR OTHER UTILITY LINES, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER PRIOR TO MAKING FIELD ADJUSTMENTS.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL IN A LEGAL MANNER.
 - THE CONTRACTOR SHALL REFERENCE THE GEOTECHNICAL REPORT AVAILABLE FROM THE OWNER AND COMPLY WITH ALL REPORT RECOMMENDATIONS. IF A CONFLICT ARISES BETWEEN CIVIL DOCUMENTS AND GEOTECHNICAL REPORT, THE MORE STRINGENT SHALL GOVERN.

Sheet Number	Sheet Title
C-001	COVER SHEET
C-101	EXISTING CONDITIONS & DEMO PLAN
C-201	SITE PLAN
C-221	ROAD PROFILES
C-250	SITE DETAILS
C-251	SITE DETAILS
C-301	GRADING PLAN
C-311	DRAINAGE PLAN
C-321	DRAINAGE PROFILES
C-350	DRAINAGE DETAILS
C-351	DRAINAGE DETAILS
C-401	UTILITY PLAN
C-450	WATER DETAILS
C-451	SEWER DETAILS
C-501	EROSION CONTROL PLAN - PHASE 1
C-502	EROSION CONTROL PLAN - PHASE 2
C-550	EROSION CONTROL NOTES
C-551	EROSION CONTROL DETAILS
C-552	EROSION CONTROL DETAILS
L-101	LANDSCAPE PLAN
L-150	LANDSCAPE DETAILS



PROJECT CONTACTS

<p>DEVELOPER</p> <p>MITCHELL CONSTRUCTION COMPANY 1807 HAMPTON STREET WALTERBORO, SC 29488 CONTACT: CLAYTON STODDARD PHONE: 843-549-7112 FAX: 843-549-7112 EMAIL: cclayton@mitchellcon.com</p>	<p>SURVEYOR</p> <p>ATLANTIC SURVEYING 1723 SAVANNAH HIGHWAY CHARLESTON, SC 29407 CONTACT: COVERT NELSON PHONE: 843-763-6669 FAX: 843-766-7411 EMAIL: bgodwin@husseygaybell.com SURVEYOR OF RECORD: COVERT NELSON, PLS</p>	<p>CIVIL/SITE</p> <p>HUSSEY GAY BELL 474 WANDO PARK BOULEVARD MOUNT PLEASANT, SC 29464 CONTACT: WILLIAM GODWIN PHONE: 843-849-7500 FAX: 843-849-7502 EMAIL: bgodwin@husseygaybell.com ENGINEER OF RECORD: WILLIAM GODWIN, PE</p>	<p>PLANNING</p> <p>CHARLESTON COUNTY ZONING AND PLANNING 4045 BRIDGE VIEW DRIVE NORTH CHARLESTON, SC 29405 CONTACT: JOEL EVANS PHONE: 843-202-7200 FAX: 843-202-7200 EMAIL: j.evans@charcountysc.gov</p>	<p>TRANSPORTATION</p> <p>SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION 6355 FAIN STREET NORTH CHARLESTON, SC 29406 CONTACT: WADE GROOMS PHONE: 843-746-6748 FAX: 843-746-6748 EMAIL: wgrooms@scdot.org</p>	<p>* SEE SITE UTILITY PLAN FOR UTILITY CONTACTS.</p> <p>* THE INDIVIDUALS LISTED HERE-IN ARE INTENDED TO BE POINTS OF CONTACT AND ARE NOT NECESSARILY THE PROFESSIONALS OF RECORD. REFER TO THE INDIVIDUAL DISCIPLINE PLANS FOR INFORMATION REGARDING THE RESPECTIVE PROFESSIONALS OF RECORD.</p>
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Hussey, Gay, Bell & DeYoung, Inc. Consulting Engineers of SC
474 Wando Park Blvd, Suite 201
Mt. Pleasant, SC 29464

PERMITTING - NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
 HUSSEY GAY BELL & DEYOUNG, INC.
 CONSULTING ENGINEERS OF SC
 No. C00194
 STATE OF SOUTH CAROLINA

HUSSEY GAY BELL
Established 1958

474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T: 843.849.7500

REVISIONS:	
DESIGNED LP	DRAWN LP
CHECKED BG	
DATE:	
JOB NO. 423153600	
SCALE: NTS	

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION
 COVER SHEET

DRAWING NUMBER

C-001

Jan 25, 2024 - 3:36pm Printed By kaantago
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 F:\0859 Mitchell Construction\423153600 St. Paul Fire Station 2\CAD\CD\PLANS\3600 - EXISTING CONDITIONS & DEMO PLAN.dwg

MAP NOTE:

1. ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: ATLANTIC SURVEYING, INC.
2. TRANSFER OF SITE BENCHMARK(S) IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL ONLY BE COMPLETED BY A SURVEYOR LICENSED/REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
3. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING BENCHMARK PRIOR TO ANY CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. FIELD VERIFICATION CAN BE ACCOMPLISHED BY CHECKING A MINIMUM OF TWO FIXED OBJECTS DISPLAYED ON THE SURVEY (I.E. MANHOLE RIM, STORM GRATE, PIPE INVERTS, ETC.).
4. VERTICAL DATUM IS NAVD 88.

Hussey, Gay, Bell & DeYoung, Inc. Consulting Engineers of SC
 474 Wando Park Blvd, Suite 201
 Mt. Pleasant, SC 29464

PERMITTING - NOT FOR CONSTRUCTION

HUSSEY, GAY, BELL & DEYOUNG, INC.
 CONSULTING ENGINEERS OF SC
 No. 00194
 STATE OF SOUTH CAROLINA

HUSSEY GAY BELL
 Established 1958
 474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T:843.849.7500

REVISIONS:

DESIGNED LP	DRAWN LP	CHECKED BG

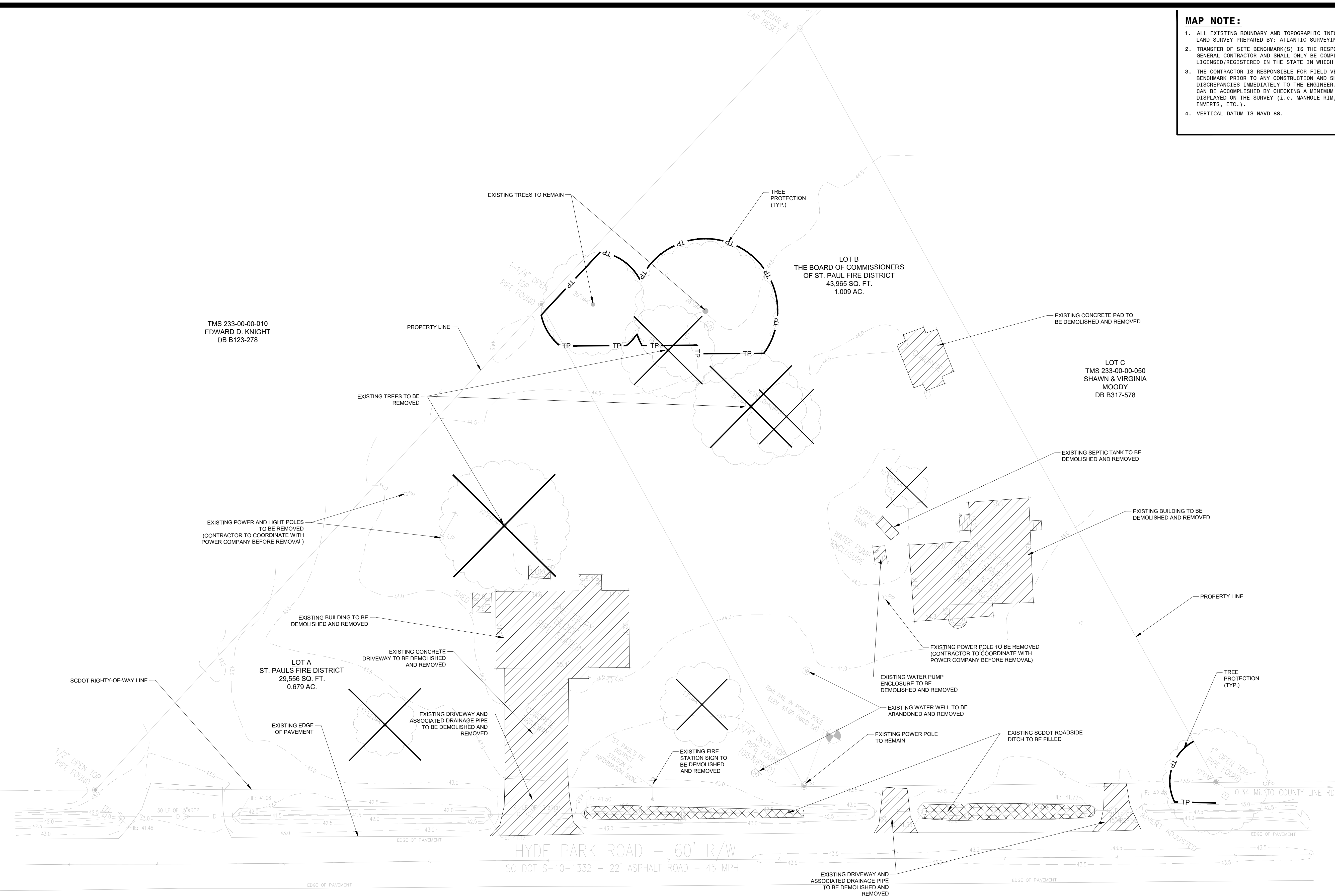
DATE: _____

JOB NO. 423153600

SCALE: AS NOTED

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION
 EXISTING CONDITIONS & DEMO PLAN

DRAWING NUMBER
C-101



- DEMOLITION KEYNOTES:**
1. DRIVEWAYS AND ASSOCIATED DRAINAGE PIPES TO BE REMOVED.
 2. EXISTING BUILDINGS TO BE REMOVED.
 3. ROADSIDE DRAINAGE DITCHES TO BE FILLED.
 4. POWER POLE TO BE REMOVED. CONTACT POWER PROVIDER BEFORE DEMOLITION.
 5. TREE TO BE REMOVED.

- DEMOLITION NOTES:**
1. OWNER'S REPRESENTATIVE, GOVERNING AGENCIES AND UTILITY COMPANIES SHALL BE NOTIFIED 72 HOURS PRIOR TO ANY DEMOLITION OPERATIONS.
 2. CONTRACTOR SHALL COORDINATE WITH GOVERNING AGENCIES AND ALL UTILITY COMPANIES TO COORDINATE TIMING OF AND RESPONSIBILITY OF DEMOLITION OPERATIONS INCLUDING ANY REQUIRED INSPECTIONS.
 3. CONTRACTOR SHALL REMOVE ALL BUILDINGS, FOUNDATIONS, PAVEMENT, CURBS, SIGNS, LIGHTS, FENCES, TREES, SHRUBS, UTILITIES AND ANY OTHER STRUCTURES AS INDICATED AND DISPOSE OF THAT MATERIAL IN A LEGAL MANNER.
 4. UTILITIES TO REMAIN IN-PLACE SHALL BE PROTECTED BY THE THE CONTRACTOR FROM DAMAGE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING UTILITIES.
 5. DEMOLITION OF ASPHALT PAVING SHALL INCLUDE REMOVAL OF SURFACE AND ANY BINDER SECTIONS. AFTER ASPHALT REMOVAL, THE SITE GEOTECHNICAL ENGINEER SHALL INSPECT STONE BASE COURSE TO DETERMINE CONDITION. IF EXISTING STONE BASE COURSE IS ACCEPTABLE TO PROJECT GEOTECHNICAL ENGINEER, IT SHALL BE REUSED. UNACCEPTABLE STONE BASE COURSE SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
 6. ALL EXISTING PAVEMENT EDGES SHALL BE SAW CUT TO A STRAIGHT EDGE. ALL NEW PAVEMENT EDGES SHALL BE CONSTRUCTED IN A STRAIGHT AND NEAT MANNER.
 7. ANY HISTORICALLY SIGNIFICANT ARTICLES (CORNER STONES, ETC.) FOUND DURING CONSTRUCTION SHALL BE PRESENTED TO THE OWNER FOR CLASSIFICATION. CONTRACTOR SHALL STOP WORK IN THE AREA OF THE FIND AND IMMEDIATELY NOTIFY THE OWNER AND GOVERNING AGENCIES FOR DIRECTION. THE OWNER SHALL RETAIN ALL MATERIAL IT CONSIDERS SIGNIFICANT. ALL OTHER MATERIAL SHALL BE DISPOSED OF OFF-SITE.
 8. THE CONTRACTOR SHALL TURN OVER ANY REMOVED PUBLIC UTILITY ITEMS, I.E. WATER METERS, TO THE UTILITY DEPARTMENT. ALL OTHER MATERIAL SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.

9. ALL DEBRIS FROM DEMOLITION OPERATIONS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
10. TREES TO BE SAVED SHALL BE PROTECTED FROM CONSTRUCTION DISTURBANCE PER DETAIL. TREES NOT SHOWN TO BE SAVED SHALL BE REMOVED.
11. THE CONTRACTOR IS REQUIRED TO MEET ALL APPLICABLE LOCAL, STATE, OSHA, AND FEDERAL REGULATIONS CONCERNING PROJECT SAFETY AND ASSUMES FULL RESPONSIBILITY FOR SAFETY ON THE PROJECT.
12. CONTRACTOR IS TO VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO AND DURING CONSTRUCTION AND REPORT ANY CONFLICTS OR DISCREPANCIES TO THE ENGINEER.
13. CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING AS NECESSARY AND AT THE DIRECTION OF THE OWNER OR GOVERNING AGENCIES FOR PUBLIC SAFETY AND JOB SITE SECURITY.
14. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO ANY SITE CONSTRUCTION OR DEMOLITION. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, BOTH MAIN AND SERVICE LINES FOR THE FOLLOWING:
 - POTABLE WATER LINES
 - SANITARY SEWER LINES
 - ELECTRIC LINES (OVERHEAD AND UNDERGROUND)
 - GAS LINES
 - TELEPHONE LINES
 - CABLE TELEVISION LINES
 - STORMWATER CONVEYANCE LINES

15. ANY SUBCONTRACTOR BIDDING ON THIS JOB SHALL BE REQUIRED TO PERFORM A SITE VISIT PRIOR TO SUBMITTAL OF BID.
16. UNLESS SPECIFICALLY NOTED ON THE PLAN TO BE ABANDONED IN PLACE OR PROTECTED, ALL UTILITIES ON SITE (OVERHEAD OR UNDERGROUND) SHALL BE ENTIRELY REMOVED TO THE PROPERTY LINE, OR SERVICE POLE ENDS OF PIPES BEYOND PROPERTY LINE TO BE ABANDONED SHALL BE PROPERLY CAPPED OR PLUGGED AS REQUIRED BY GOVERNING UTILITY COMPANY.
17. DEMOLITION OF BUILDINGS SHALL INCLUDE ALL PORTIONS OF THE STRUCTURE, BOTH ABOVE GROUND AND SUBSURFACE.
18. CONTRACTOR IS RESPONSIBLE FOR PROVIDED ANY TRAFFIC CONTROL MEASURES NECESSARY FOR DEMOLITION OPERATIONS.
19. DEMOLITION OF CONCRETE CURB, CURB AND GUTTER, AND SIDEWALK SHALL BE CONSIDERED TO EXTEND TO THE NEXT CONSTRUCTION JOINT PAST THE LIMITS SHOWN ON THE DEMOLITION PLAN.

LEGEND:

PAVEMENT OR BUILDING AREA TO BE DEMOLISHED

UTILITY OR FENCE TO BE DEMOLISHED

TREE PROTECTION FENCE

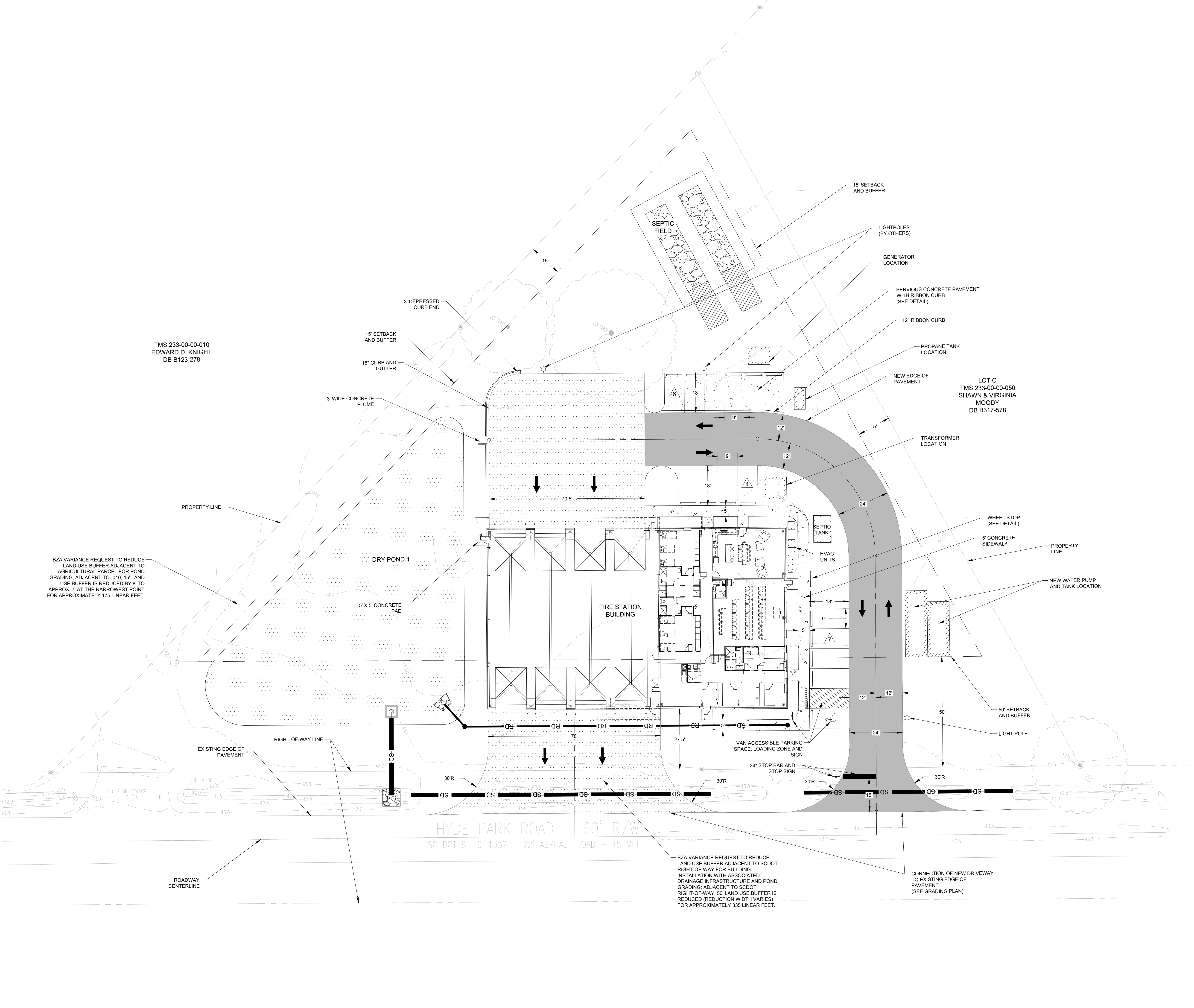
TREES TO BE REMOVED

NORTH

GRAPHIC SCALE
 1 INCH = 20 FT

NOTE: THIS SCALE APPLIES FOR 24"x36" SHEETS ONLY

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- MAP NOTE:**
- ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: ATLANTIC SURVEYING, INC.
 - TRANSFER OF SITE BENCHMARK(S) IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL ONLY BE COMPLETED BY A SURVEYOR LICENSED/REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
 - THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING BENCHMARK PRIOR TO ANY CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. FIELD VERIFICATION CAN BE ACCOMPLISHED BY CHECKING A MINIMUM OF TWO FIXED OBJECTS DISPLAYED ON THE SURVEY (I.E. MANHOLE RIM, STORM GRATE, PIPE INVERTS, ETC.).
 - VERTICAL DATUM IS NAVD 88.

- PAVING AND MARKING NOTES:**
- SEE SITE DIMENSIONAL CONTROL PLAN FOR LAYOUT INFORMATION.
 - ALL PAVEMENT SECTION MATERIALS AND INSTALLATION SHALL MEET THE STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (LATEST EDITION).
 - GRADED AGGREGATE BASE COURSE SHALL MEET THE REQUIREMENTS OF THE STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECS (LATEST EDITION).
 - ASPHALTIC CONCRETE SHALL BE A PLANT MIX MEETING THE REQUIREMENTS OF THE STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECS (LATEST EDITION) THE JOB MIX SHALL MEET THE REQUIREMENTS OF THE STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECS (LATEST EDITION) AND SHALL HAVE A MARSHALL STABILITY OF 1250 POUNDS AND A PERCENT VOIDS BETWEEN 4 AND 5.
 - PAINTED PARKING STRIPING SHALL BE 4" WIDE WHITE STRIPES AND BE LOCATED AS SHOWN ON THE PLANS. HANDICAP PARKING STRIPING SHALL BE #14 LIGHT BLUE. DIRECTIONAL STRIPING SHALL BE PAINTED WHITE. PAINT AND ALL WORK SHALL BE IN ACCORDANCE WITH THE STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECS (LATEST EDITION).
 - ALL PAINTED PARKING AREAS SHALL RECEIVE TWO COATS OF STATE DEPARTMENT OF TRANSPORTATION APPROVED PAINT.
 - ALL PAVEMENT MARKINGS WITHIN THE RIGHT-OF-WAY SHALL BE OF THE THERMOPLASTIC OR EPOXY TYPE PER THE STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECS (LATEST EDITION).

SITE DATA

PARCEL #:	233-00-00-049 & -051
SITE AREA:	73,521 ± SF = 1.69 ± ACRES
SITE ADDRESS:	HYDE PARK ROAD, RAVENEL, SC 29470
CURRENT ZONING:	AGR
NUMBER OF LOTS:	1
NUMBER OF BUILDINGS:	1
BUILDING AREA:	APPR. 11,152 ± SF
BUILDING COVERAGE:	15%
POND AREA:	10,177.14 ± SF = 0.24 ± ACRES
PARKING:	REQUIRED = 4 PARKING SPACES (4 EMPLOYEES * 1 SPACE PER EMPLOYEE) PROVIDED = 17 SPACES PROVIDED (INCLUDING 1 VAN ACCESSIBLE PARKING SPACE)
PERVIOUS PAVEMENT PARKING:	REQUIRED = 30% * 17 SPACES = 5.1 SPACES PROVIDED = 6 SPACES

* BUILDING INFORMATION PROVIDED FOR INFORMATION ONLY. REFER TO ARCHITECTURAL PLAN.

SITE LEGEND

	LIGHT DUTY PAVEMENT SECTION
	HEAVY DUTY PAVEMENT SECTION
	CONCRETE PAVEMENT SECTION
	HEAVY DUTY CONCRETE PAVEMENT SECTION
	PERVIOUS PAVEMENT SECTION

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENEL, SC
 FOR MITCHELL CONSTRUCTION

SITE PLAN

DRAWING NUMBER
C-201

GRAPHIC SCALE
 1 INCH = 20 FT

NOTE: THIS SCALE APPLIES FOR 24"x36" SHEETS ONLY

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 Consulting Engineers of SC
 474 Wando Park Blvd, Suite 201
 Mt. Pleasant, SC 29464

HUSSEY GAY BELL
Established 1958

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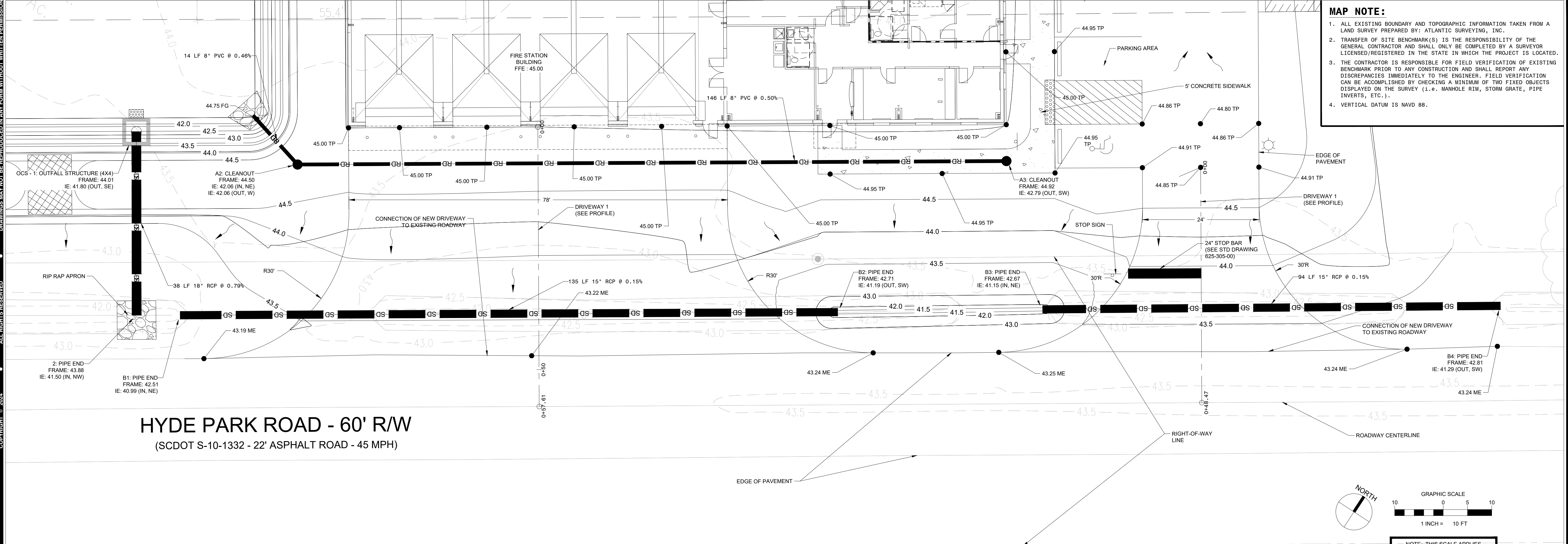
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DATE: _____

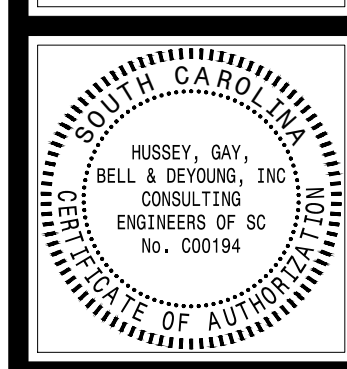
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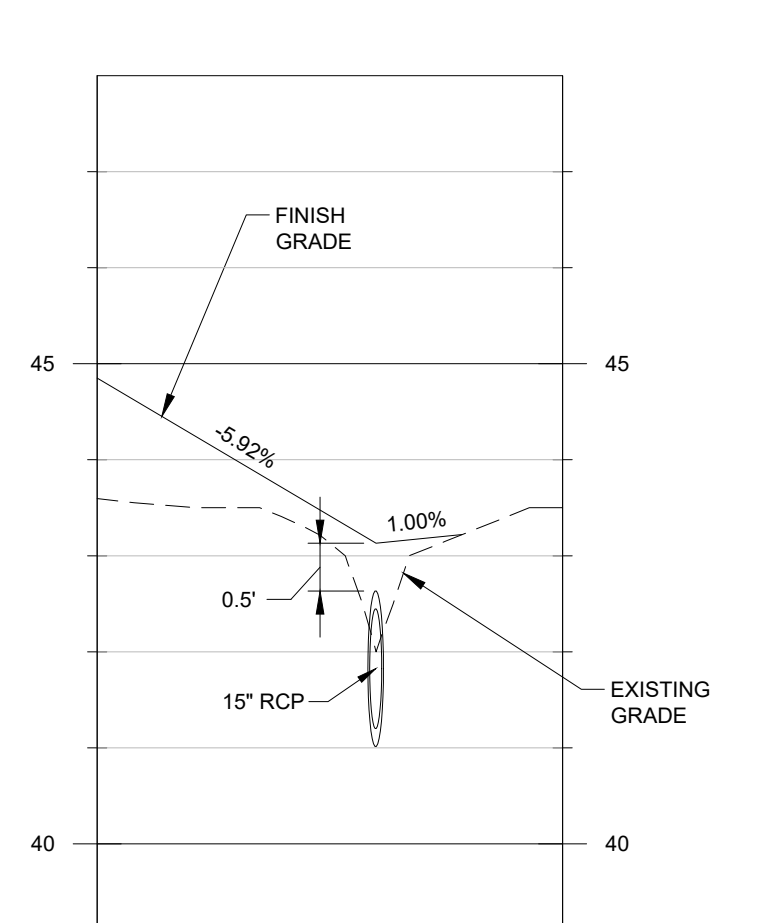
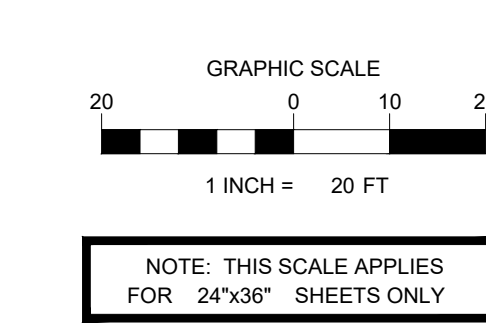
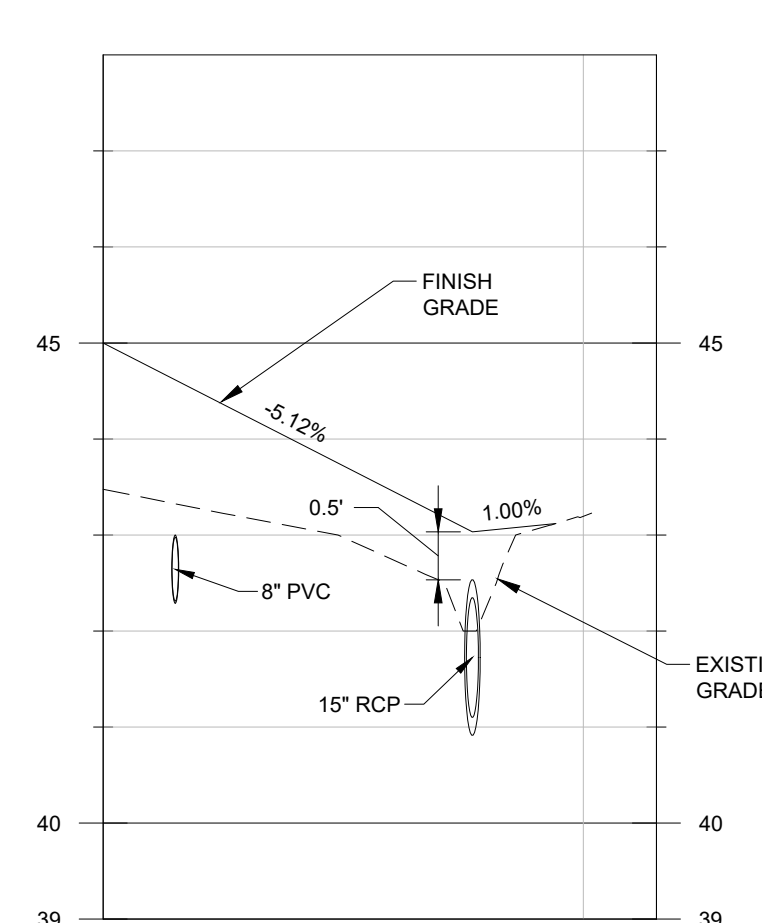
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DATE:

JOB NO. 423153600

SCALE: AS NOTED

ST. PAUL FIRE STATION #2
55% HYDE PARK RD
RAVENAL, SC

MITCHELL CONSTRUCTION

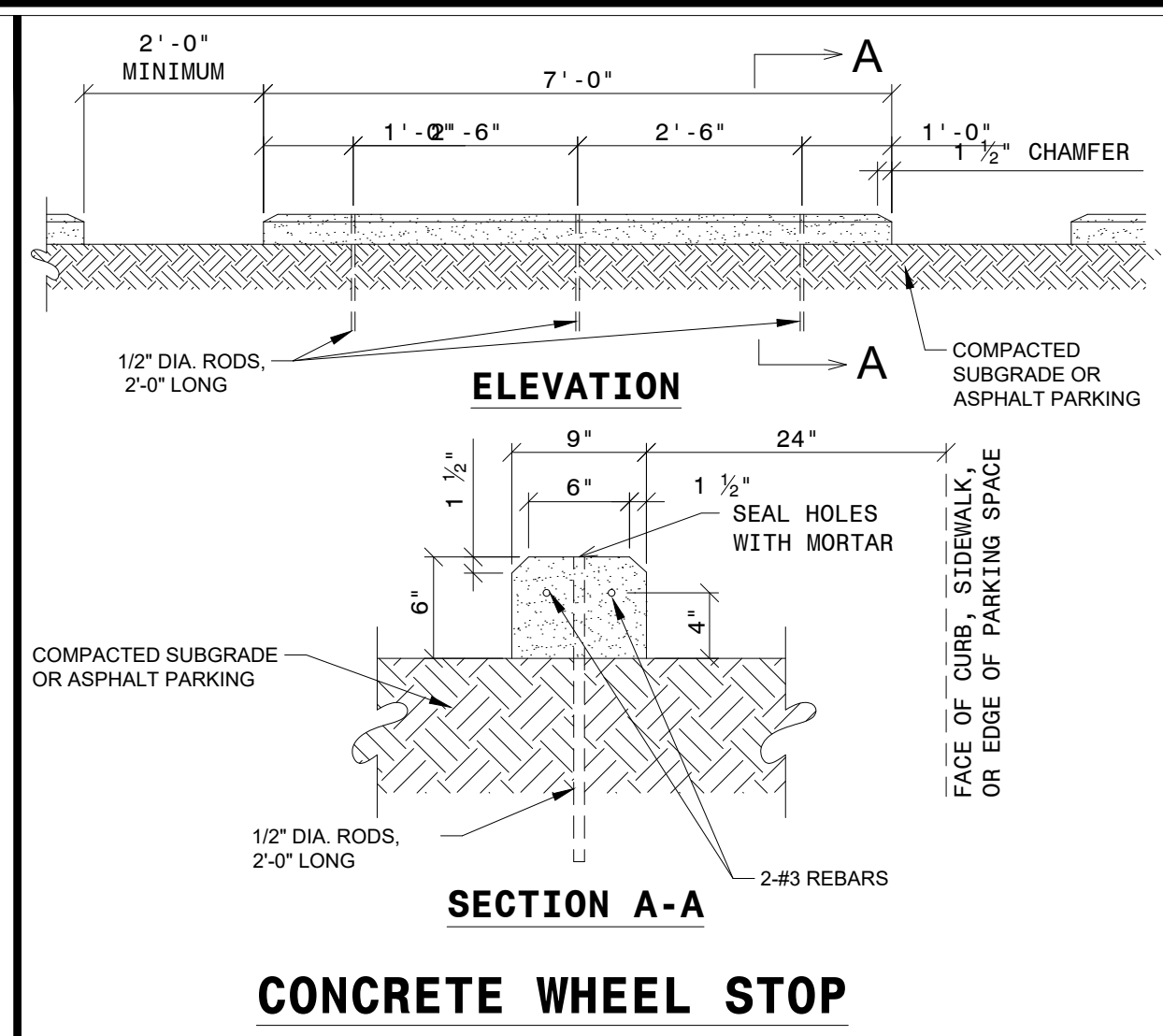
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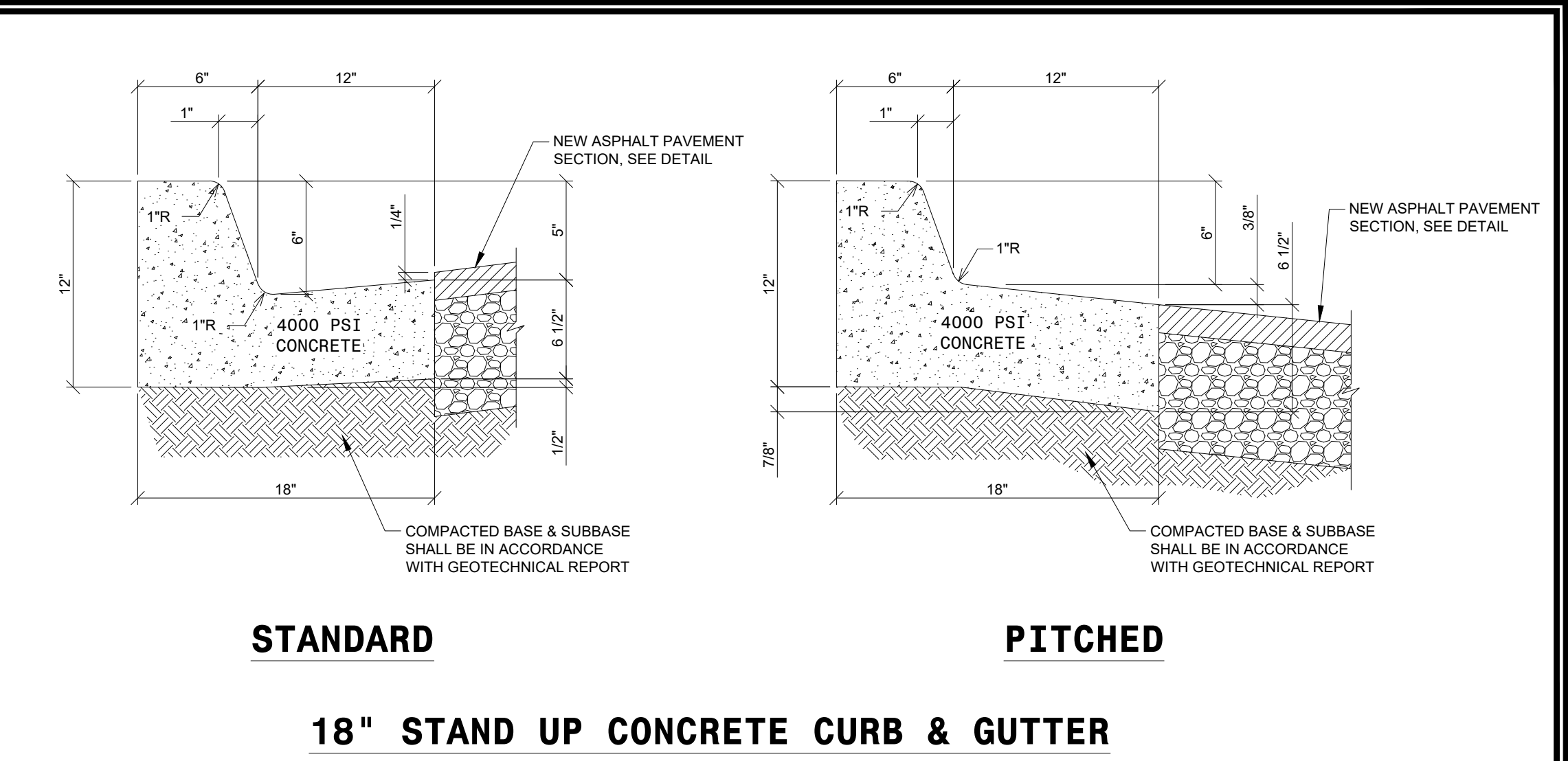
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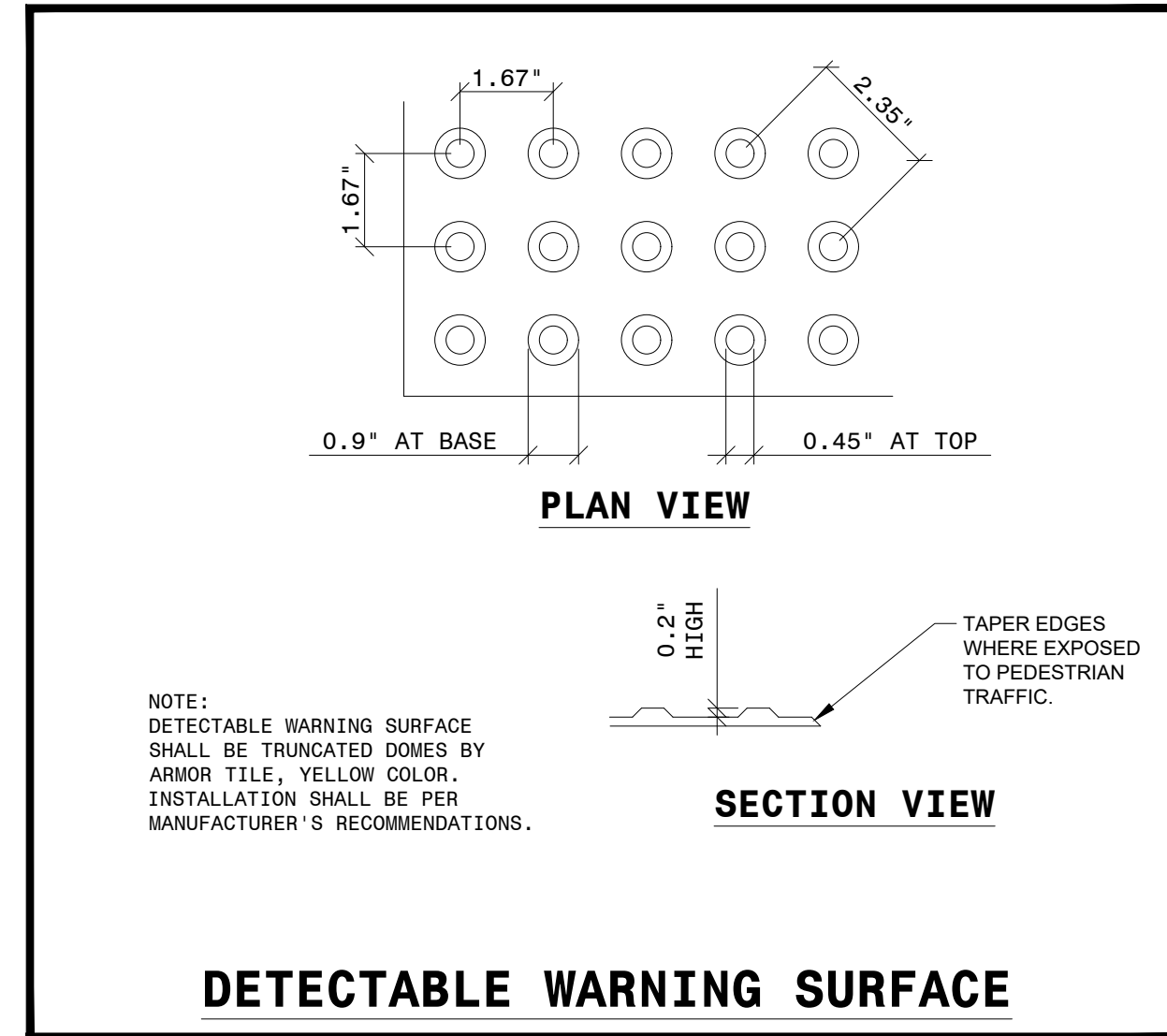
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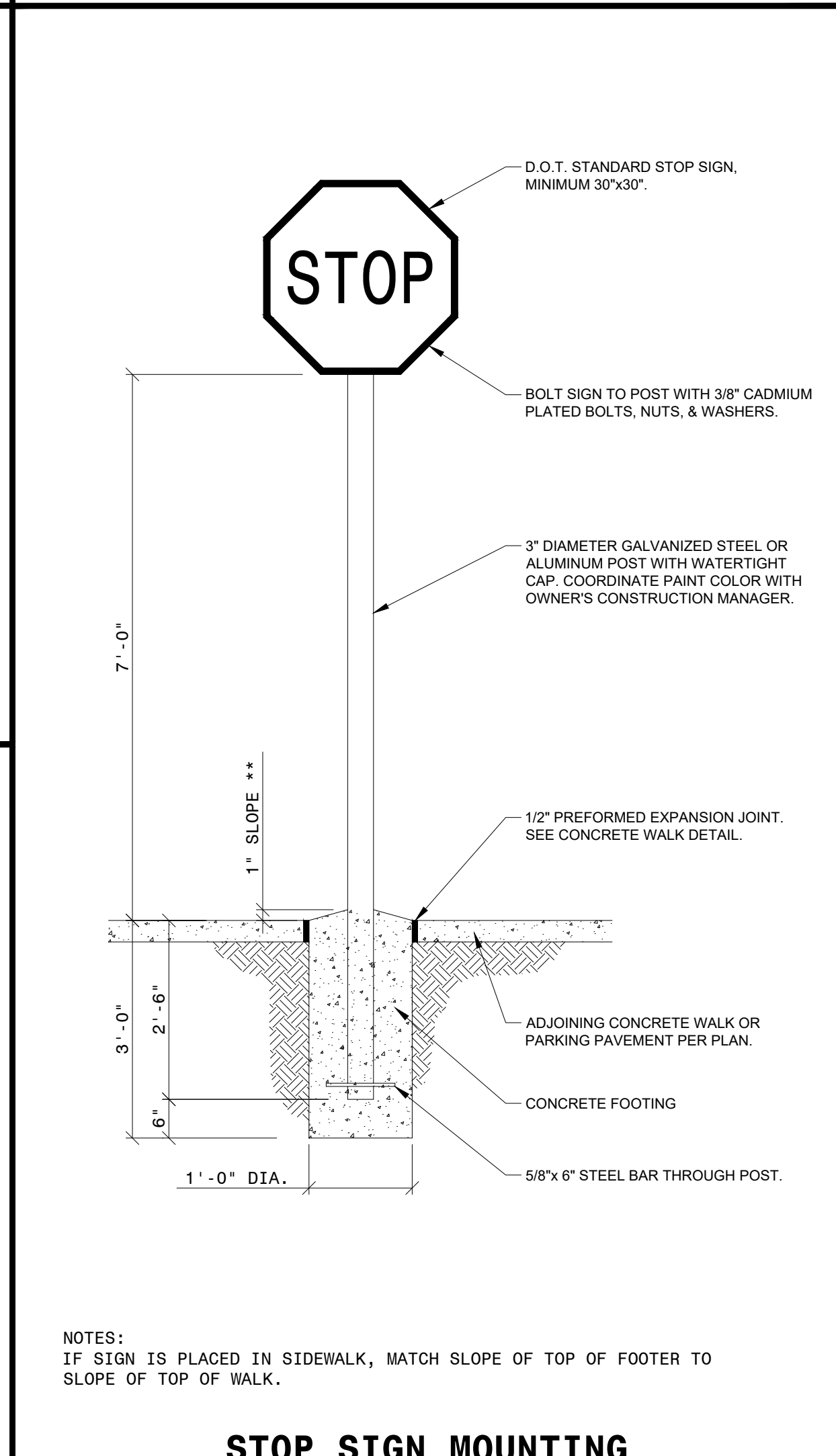
CONCRETE WHEEL STOP



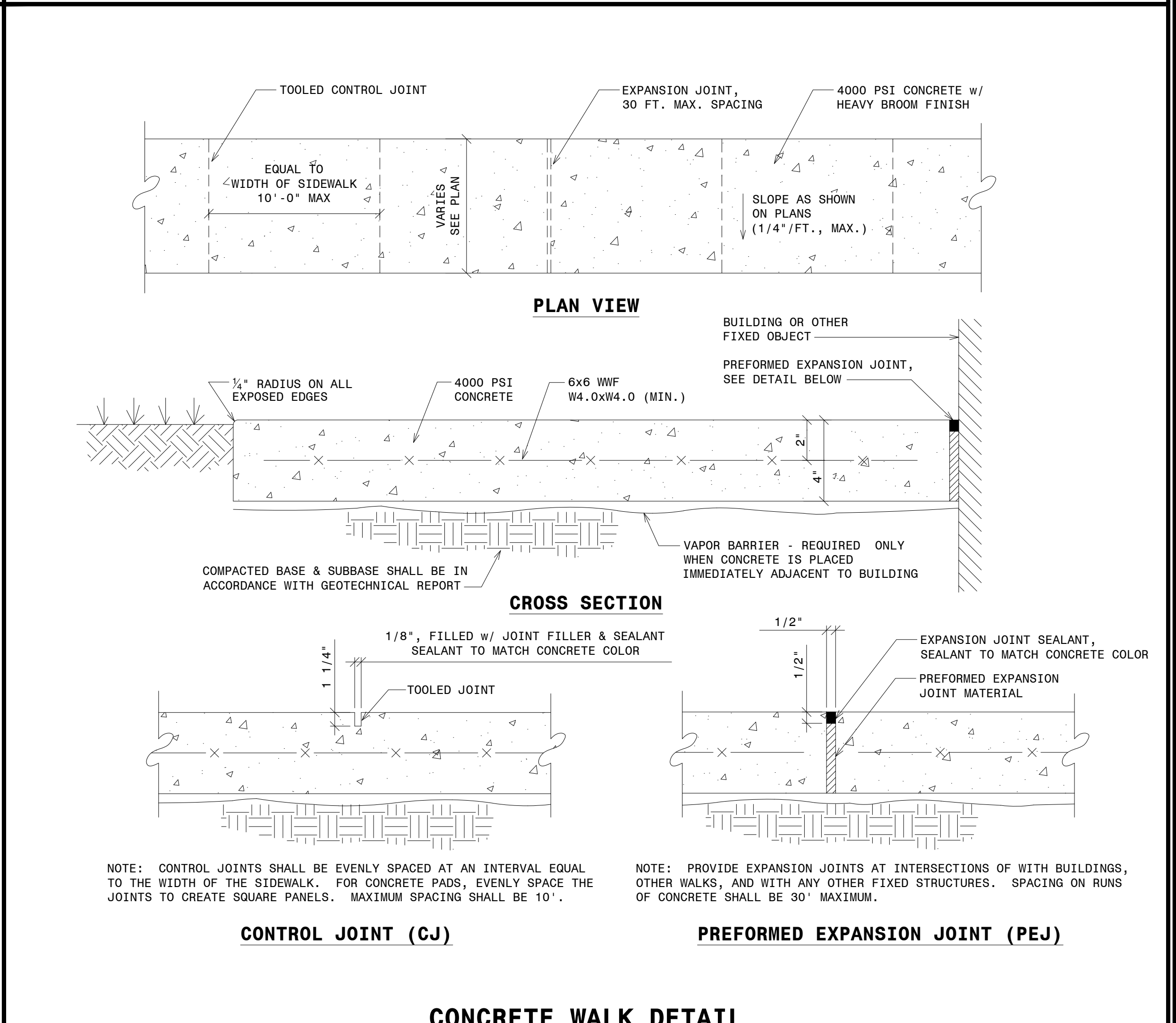
18" STAND UP CONCRETE CURB & GUTTER



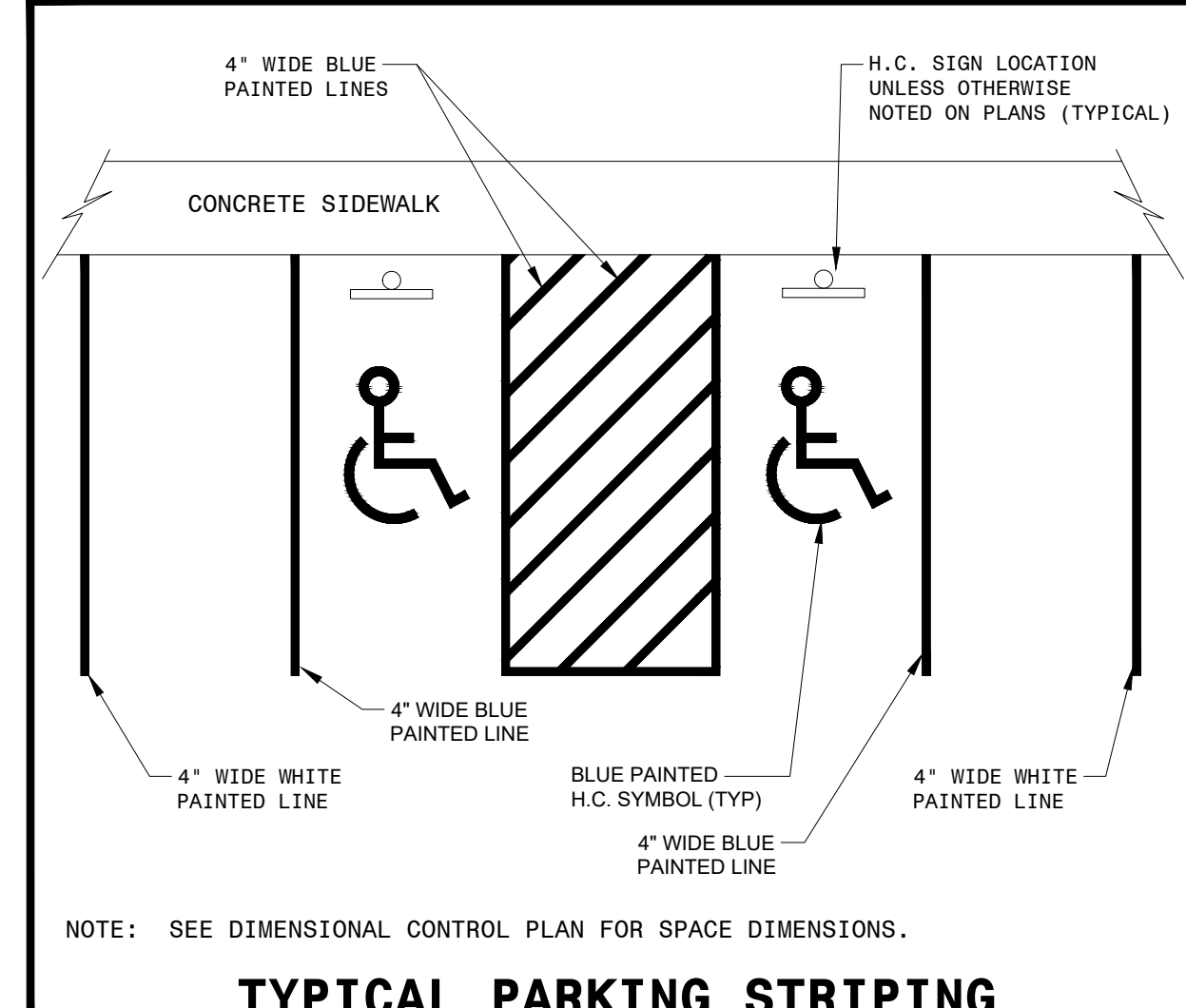
DETECTABLE WARNING SURFACE



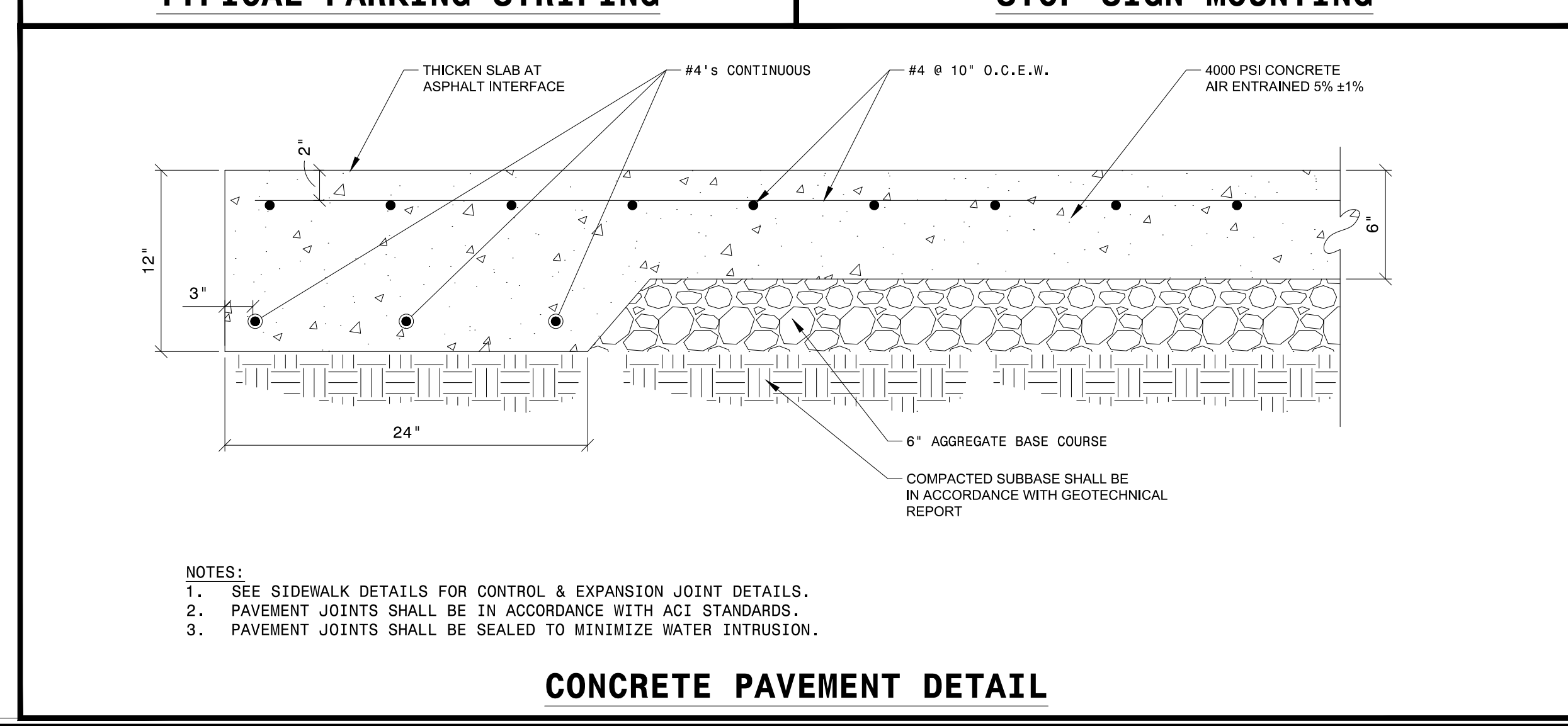
STOP SIGN MOUNTING



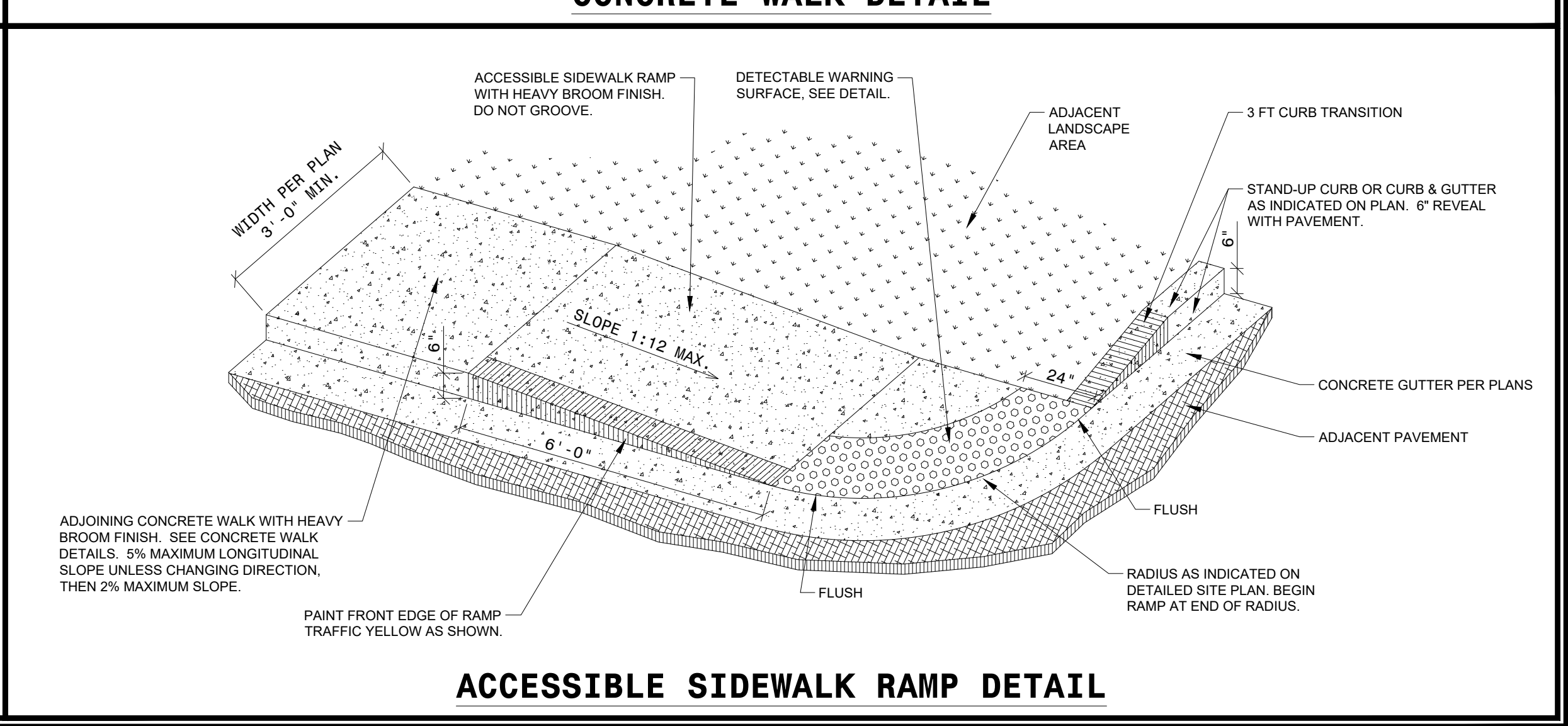
CONCRETE WALK DETAIL



TYPICAL PARKING STRIPING



CONCRETE PAVEMENT DETAIL



ACCESSIBLE SIDEWALK RAMP DETAIL

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ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR
MITCHELL CONSTRUCTION
 SITE DETAILS

DRAWING NUMBER
C-250

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PERVIOUS CONCRETE PAVEMENT INSTALLATION/EROSION SEDIMENT CONTROL NOTES:

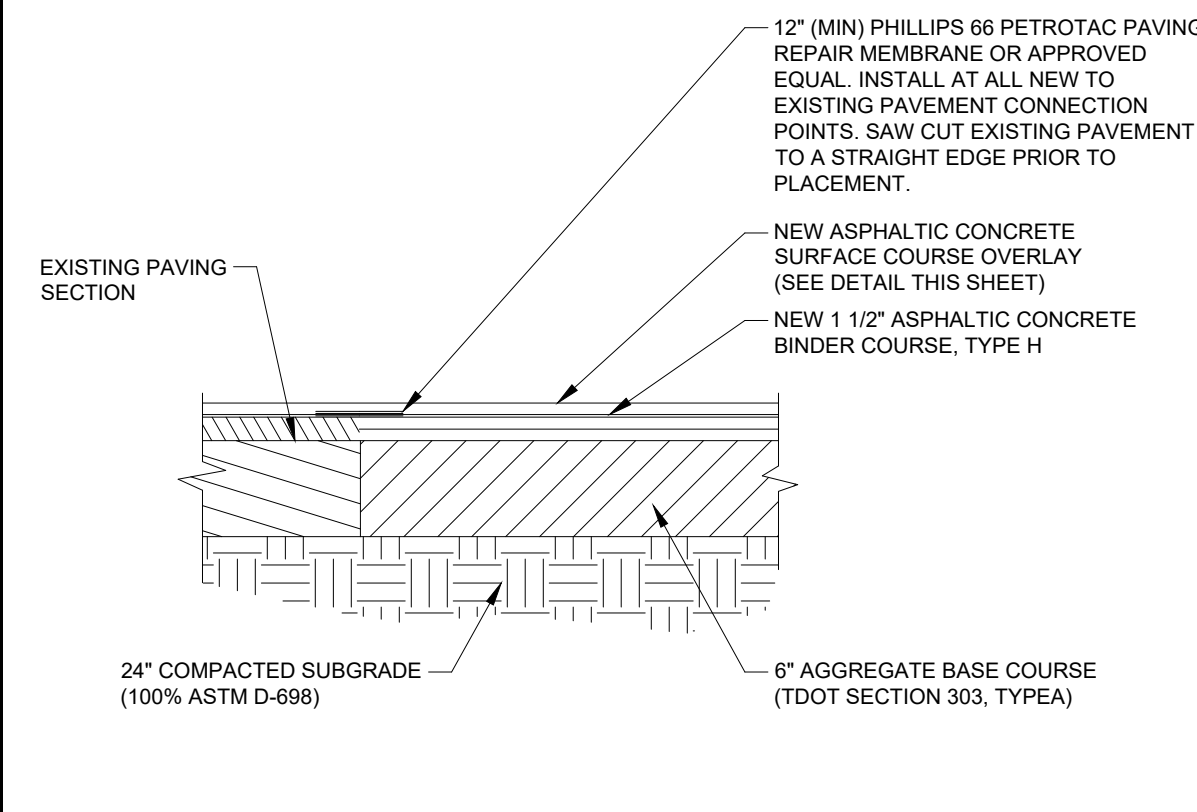
REFERENCE: LOW IMPACT DEVELOPMENT IN COASTAL SOUTH CAROLINA: A PLANNING AND DESIGN GUIDE

EROSION AND SEDIMENT CONTROLS. THE FOLLOWING EROSION AND SEDIMENT CONTROL GUIDELINES MUST BE FOLLOWED DURING CONSTRUCTION:

1. ALL PERMEABLE PAVEMENT AREAS SHOULD BE FULLY PROTECTED FROM SEDIMENT INTRUSION BY SILT FENCE OR CONSTRUCTION FENCING, PARTICULARLY IF THEY ARE INTENDED TO INFILTRATE RUNOFF.
2. INTENDED PERMEABLE PAVEMENT AREAS MUST REMAIN OUTSIDE THE LIMIT OF DISTURBANCE DURING CONSTRUCTION TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT (UNLESS THE AREA HAS BEEN DETERMINED TO HAVE A LOW CBR AND WILL REQUIRE COMPACTION DURING THE PERMEABLE PAVEMENT CONSTRUCTION PHASE). WHERE THIS IS UNAVOIDABLE, THE IMPACTED AREA SHOULD NOT BE EXCAVATED BELOW 2 FEET ABOVE THE FINAL DESIGN ELEVATION OF THE BOTTOM OF THE AGGREGATE RESERVOIR COURSE UNTIL FURTHER COMPACTION BY HEAVY EQUIPMENT CAN BE AVOIDED. ONCE THE AREA IS EXCAVATED TO GRADE, THE IMPACTED AREA SHOULD BE TILLED TO A DEPTH OF 12 INCHES BELOW THE BOTTOM OF THE RESERVOIR LAYER. PERMEABLE PAVEMENT AREAS MUST BE CLEARLY MARKED ON ALL CONSTRUCTION DOCUMENTS AND GRADING PLANS.
3. DURING CONSTRUCTION, CARE SHOULD BE TAKEN TO AVOID TRACKING SEDIMENTS ONTO ANY PERMEABLE PAVEMENT SURFACE TO AVOID CLOGGING.
4. ANY AREA OF THE SITE INTENDED ULTIMATELY TO BE A PERMEABLE PAVEMENT AREA SHOULD GENERALLY NOT BE USED AS THE SITE OF A TEMPORARY SEDIMENT BASIN. WHERE LOCATING A SEDIMENT BASIN ON AN AREA INTENDED FOR PERMEABLE PAVEMENT IS UNAVOIDABLE, THE INVERT OF THE SEDIMENT BASIN MUST BE A MINIMUM OF 2 FEET ABOVE THE FINAL DESIGN ELEVATION OF THE BOTTOM OF THE AGGREGATE RESERVOIR COURSE. ALL SEDIMENT DEPOSITS IN THE EXCAVATED AREA SHOULD BE CAREFULLY REMOVED PRIOR TO INSTALLING THE SUB-BASE, BASE, AND SURFACE MATERIALS.

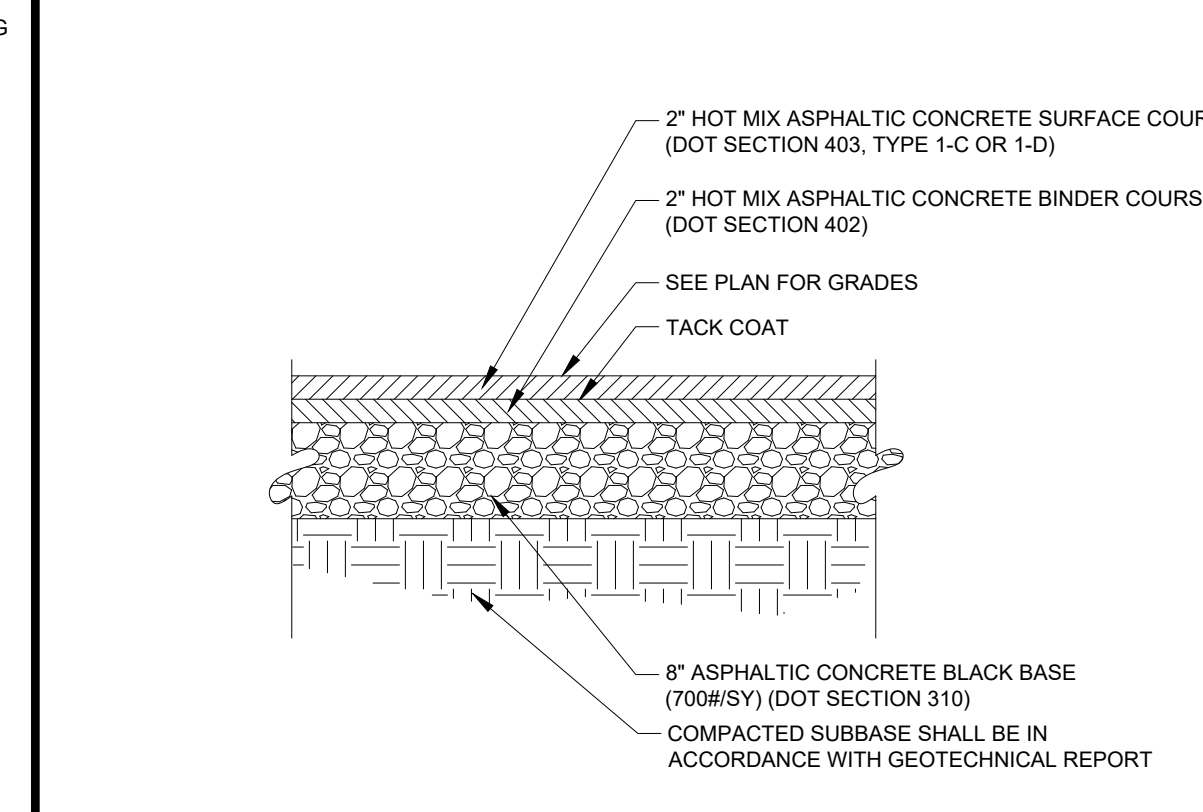
INSTALLATION OF PERVIOUS CONCRETE. THE BASIC INSTALLATION SEQUENCE FOR PERVIOUS CONCRETE IS OUTLINED BY THE NATIONAL READY MIXED CONCRETE ASSOCIATION (NRMCA, 2004). IT IS STRONGLY RECOMMENDED THAT CONCRETE INSTALLERS SUCCESSFULLY COMPLETE A RECOGNIZED PERVIOUS CONCRETE INSTALLERS TRAINING PROGRAM, SUCH AS THE PERVIOUS CONCRETE CONTRACTOR CERTIFICATION PROGRAM OFFERED BY THE NRMCA. THE BASIC INSTALLATION PROCEDURE IS AS FOLLOWS:

1. DRIVE THE CONCRETE TRUCK AS CLOSE TO THE PROJECT SITE AS POSSIBLE.
2. WATER THE UNDERLYING AGGREGATE (RESERVOIR LAYER) BEFORE THE CONCRETE IS PLACED, SO THE AGGREGATE DOES NOT DRAW MOISTURE FROM THE FRESHLY LAID PERVIOUS CONCRETE.
3. AFTER THE CONCRETE IS PLACED, APPROXIMATELY 3/4 TO 1/2 INCH IS STRUCK OFF, USING A VIBRATORY SCREED. THIS IS TO ALLOW FOR COMPACTION OF THE CONCRETE PAVEMENT.
4. THE CURING PROCESS IS VERY IMPORTANT FOR PERVIOUS CONCRETE. CONCRETE INSTALLERS SHOULD FOLLOW MANUFACTURER SPECIFICATIONS TO THE EXTENT ALLOWED BY ON-SITE CONDITIONS WHEN CURING PERVIOUS CONCRETE.
5. REMOVE THE PLASTIC SHEETING ONLY AFTER THE PROPER CURING TIME. INSPECT THE FACILITY 18 TO 30 HOURS AFTER A SIGNIFICANT RAINFALL (GREATER THAN 1/2 INCH) OR ARTIFICIAL FLOODING, TO DETERMINE THE FACILITY IS DRAINING PROPERLY.
6. COMPACT THE PAVEMENT WITH A STEEL PIPE ROLLER. CARE SHOULD BE TAKEN TO ENSURE OVER COMPACTION DOES NOT OCCUR.
7. CUT JOINTS FOR THE CONCRETE TO A DEPTH OF 1/4 INCH.



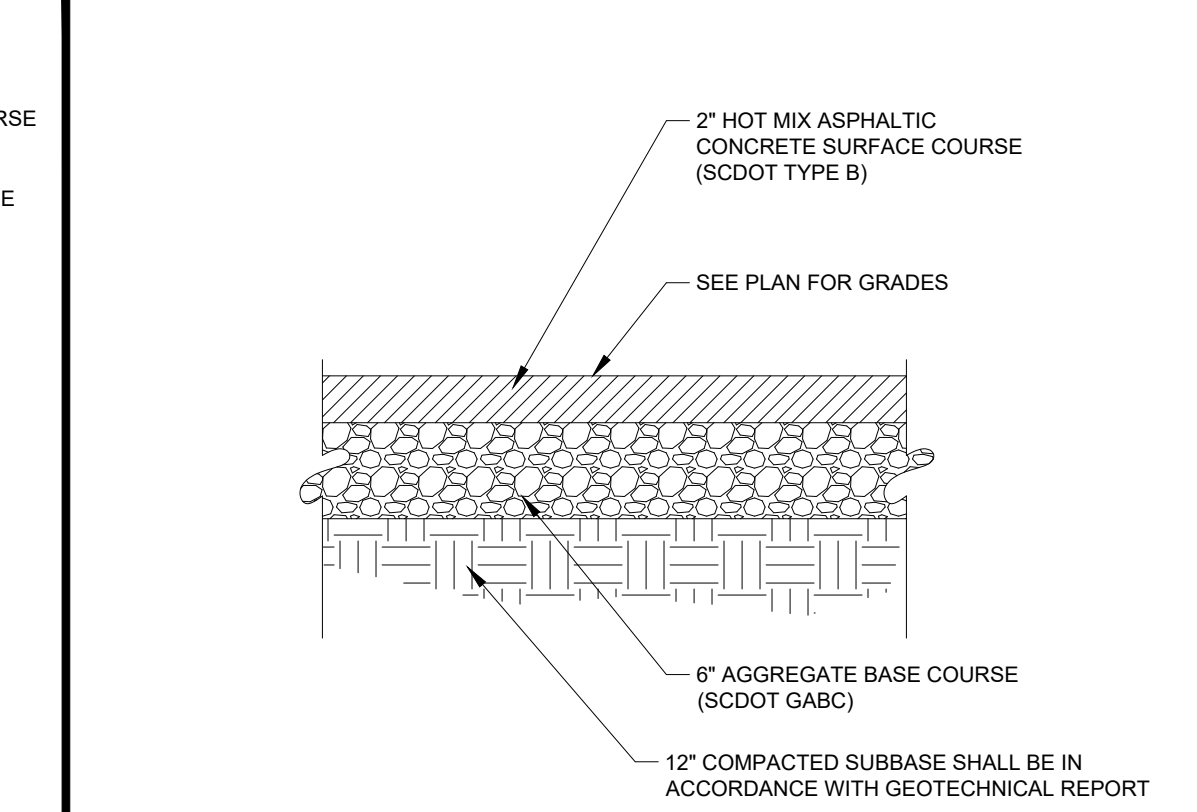
- NOTES:
1. ALL PAVING MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (LATEST EDITION).
 2. SEE GENERAL NOTES.

TYPICAL NEW TO EXISTING ASPHALT PAVEMENT CONNECTION



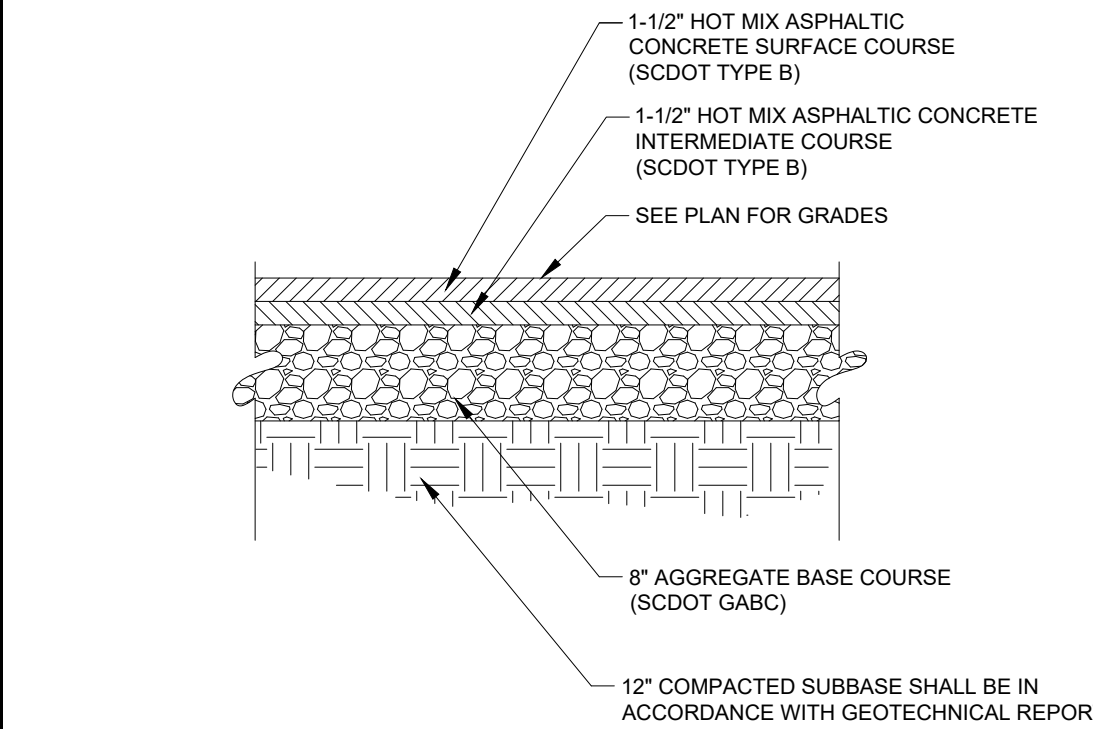
- NOTES:
1. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH STATE DOT STANDARD SPECIFICATION (LATEST EDITION).
 2. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR FURTHER RECOMMENDATIONS.

DOT RIGHT-OF-WAY ASPHALT PAVEMENT



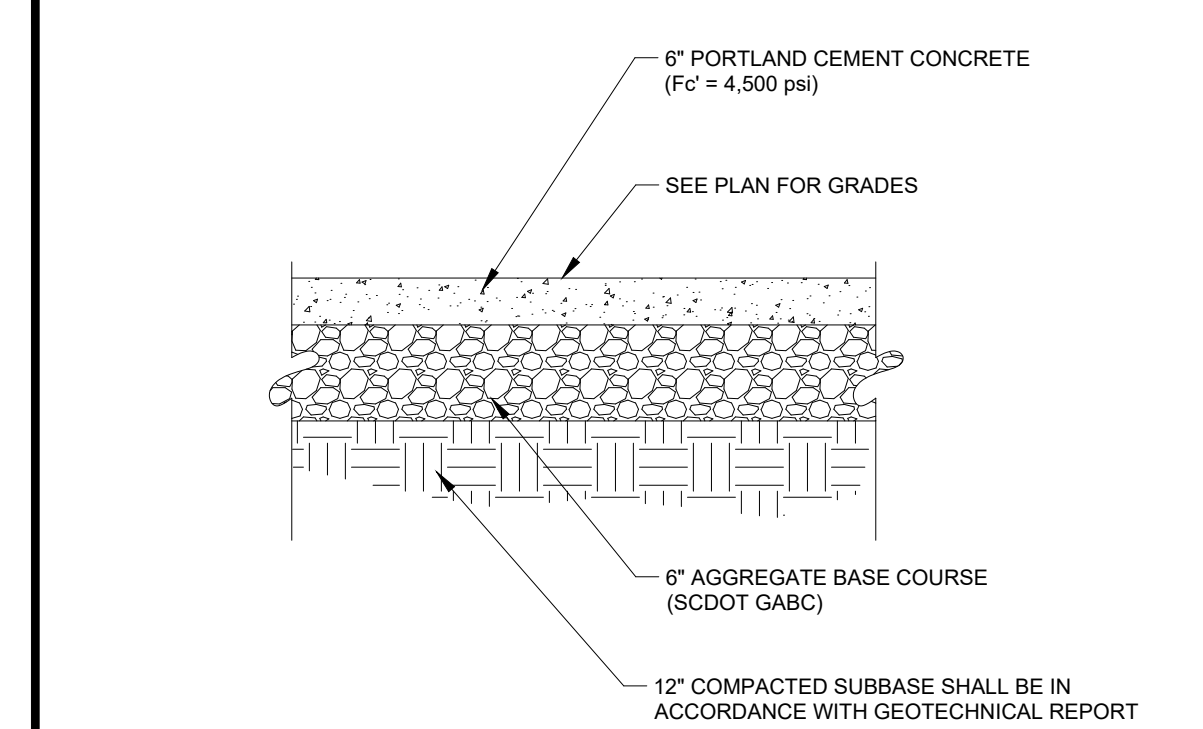
- NOTES:
1. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH STATE DOT STANDARD SPECIFICATION (LATEST EDITION).
 2. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR FURTHER RECOMMENDATIONS.

STANDARD DUTY ASPHALT PAVEMENT



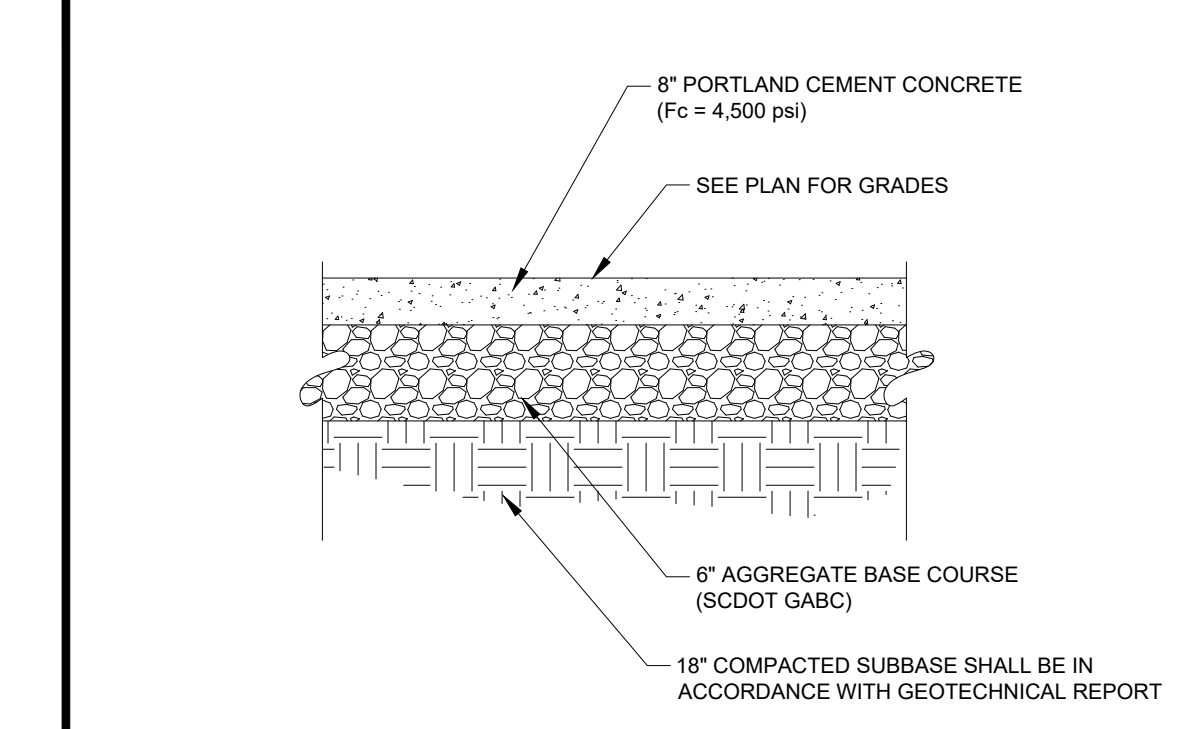
- NOTES:
1. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH STATE DOT STANDARD SPECIFICATION (LATEST EDITION).
 2. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR FURTHER RECOMMENDATIONS.

HEAVY DUTY ASPHALT PAVEMENT



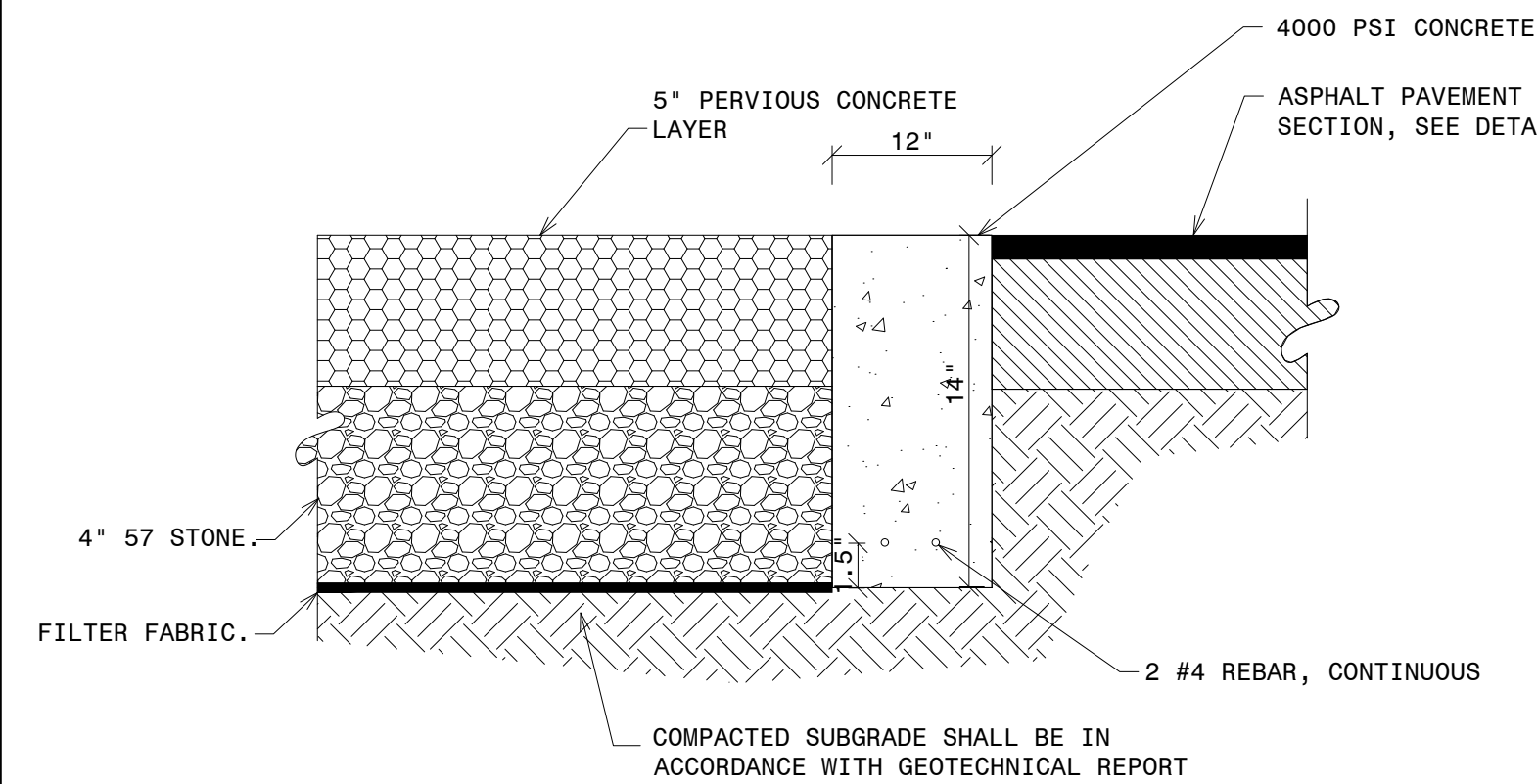
- NOTES:
1. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH STATE DOT STANDARD SPECIFICATION (LATEST EDITION) (SEE SECTION 720).
 2. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR FURTHER RECOMMENDATIONS.

STANDARD DUTY CONCRETE PAVEMENT



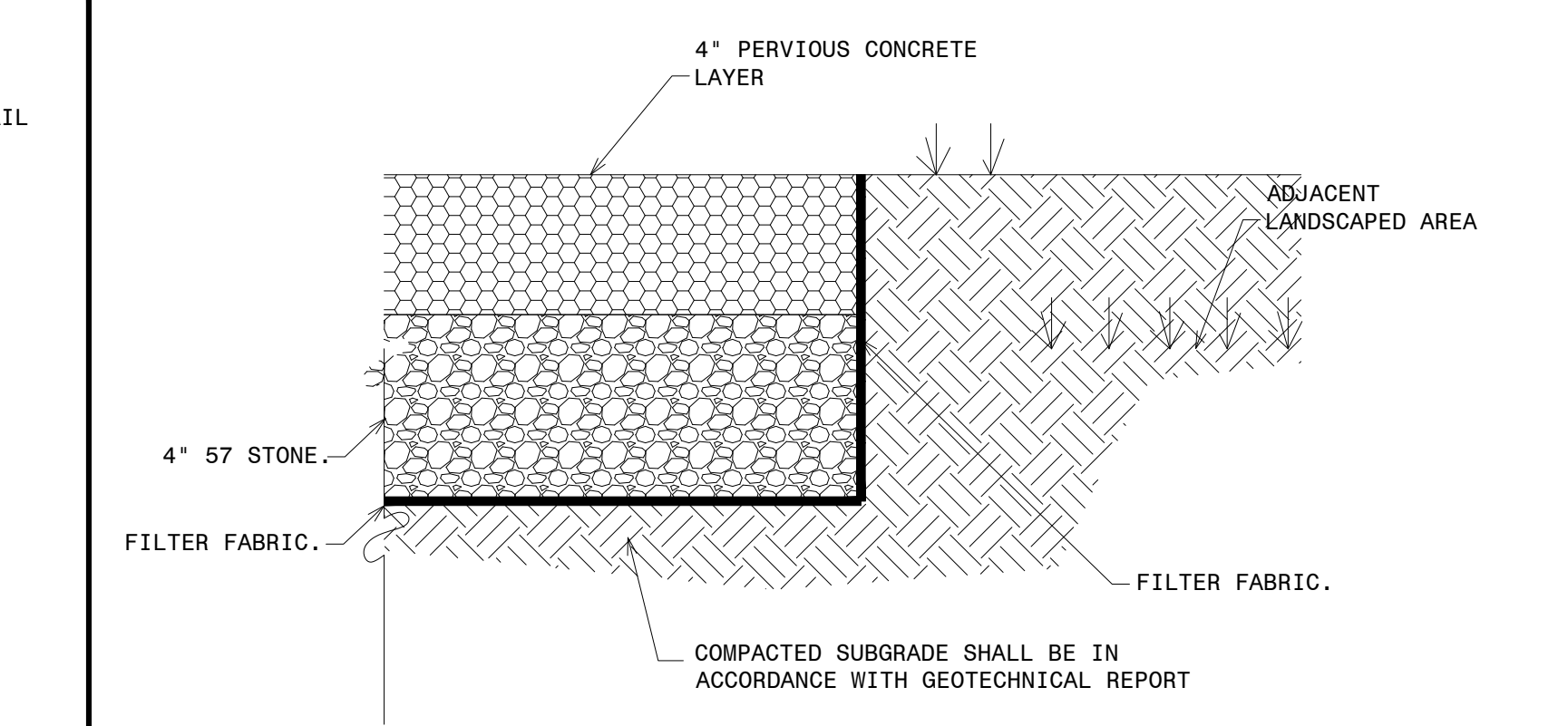
- NOTES:
1. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH STATE DOT STANDARD SPECIFICATION (LATEST EDITION) (SEE SECTION 720).
 2. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR FURTHER RECOMMENDATIONS.

HEAVY DUTY CONCRETE PAVEMENT



- NOTES:
- PERVIOUS CONCRETE TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF ACI 522.1 SPECIFICATION FOR PERVIOUS CONCRETE.
 - OPEN GRADED SURFACE COURSE SHALL HAVE A MINIMUM 15% VOID RATIO.
 - ALL 57-STONE SHALL BE DOUBLE WASHED
 - GEOTEXTILE FABRIC SHALL BE GEOTEX-104F OR US-670.

TYPICAL PERVIOUS CONCRETE PAVEMENT SECTION WITH RIBBON CURB



- NOTES:
- PERVIOUS CONCRETE TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF ACI 522.1 SPECIFICATION FOR PERVIOUS CONCRETE.
 - OPEN GRADED SURFACE COURSE SHALL HAVE A MINIMUM 15% VOID RATIO.
 - ALL 57-STONE SHALL BE DOUBLE WASHED
 - GEOTEXTILE FABRIC SHALL BE GEOTEX-104F OR US-670.

TYPICAL PERVIOUS CONCRETE SIDEWALK PAVEMENT SECTION

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 474 Wando Park Blvd, Suite 201
 Mt. Pleasant, SC 29564

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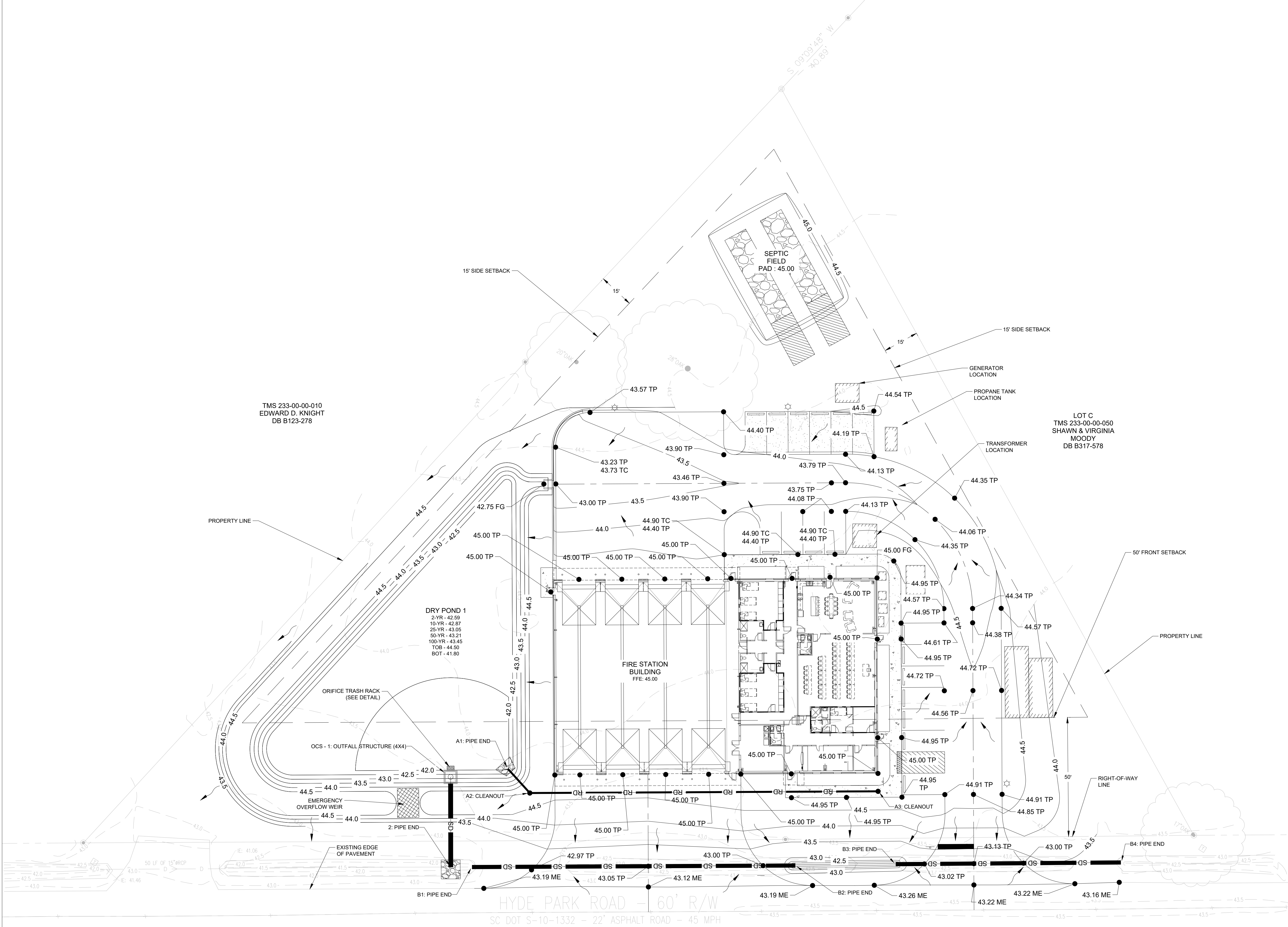
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JOB NO. 423153600		
SCALE: AS NOTED		

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION
 SITE DETAILS

DRAWING NUMBER

C-251

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MAP NOTE:

1. ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: ATLANTIC SURVEYING, INC.
2. TRANSFER OF SITE BENCHMARK(S) IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL ONLY BE COMPLETED BY A SURVEYOR LICENSED/REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
3. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING BENCHMARK PRIOR TO ANY CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. FIELD VERIFICATION CAN BE ACCOMPLISHED BY CHECKING A MINIMUM OF TWO FIXED OBJECTS DISPLAYED ON THE SURVEY (I.E. MANHOLE RIM, STORM GRATE, PIPE INVERTS, ETC.).
4. VERTICAL DATUM IS NAVD 88.

GRADING NOTES:

1. ALL LAND DISTURBING OPERATIONS SHALL BE IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL SURVEY CONTROLS.
3. CONTRACTOR SHALL REMOVE ALL STRIPPINGS, DEBRIS AND EXCESS EXCAVATED MATERIALS FROM THE SITE AND DISPOSE OF IN A LEGAL MANNER.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATIONS AND GRADING INCLUDING FURNISHING OFF-SITE BORROW AS REQUIRED TO MEET PLAN GRADES.
5. IF UNSUITABLE SUBGRADE MATERIALS ARE ENCOUNTERED, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT (FROM OFF-SITE BORROW MATERIAL) OF ALL UNSUITABLE MATERIAL TO MEET COMPACTION REQUIREMENTS UNDER PAVED SURFACES. UNSUITABLE MATERIALS ARE THOSE CLASSIFIED AS MH, CH, OH, OL AND PEAT IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, UNLESS APPROVED IN WRITING BY THE PROJECT GEOTECHNICAL ENGINEER, THE SITE ENGINEER AND GEOTECHNICAL ENGINEER. SHALL BE NOTIFIED IMMEDIATELY UPON ENCOUNTERING UNSUITABLE SUBGRADE MATERIAL.
6. CONTRACTOR SHALL UNIFORMLY GRADE BEHIND CURBS, BUILDINGS, ROADS, ETC. TO MATCH EXISTING GRADES. LANDSCAPE ISLANDS SHALL BE GRADED TO DRAIN OVER CURBS.
7. GRADE ENTIRE SITE TO PROVIDE POSITIVE DRAINAGE TO EXISTING OR NEW DRAINAGE FACILITIES.
8. COMPACTION REQUIREMENTS ARE AS FOLLOWS OR AS STATED IN THE GEOTECHNICAL REPORT, WHICHEVER IS MORE STRINGENT.
 - A. SUBGRADES UNDER PAVED AREAS AND STRUCTURES 100 PERCENT STANDARD PROCTOR (ASTM 698) - 24 INCHES.
 - B. UNPAVED AREAS TO BE GRASSED OR LANDSCAPED 95 PERCENT STANDARD PROCTOR (ASTM D698) - FULL DEPTH
9. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING AS NECESSARY TO MEET REQUIRED EXCAVATIONS AND GRADES. DEWATERING OPERATIONS SHALL NOT DISCHARGE DIRECTLY INTO MARSH OR WETLAND AREAS. MUDDY WATER TO BE PUMPED FROM EXCAVATION AND WORK AREAS MUST BE HELD IN SETTLING BASINS OR FILTERED PRIOR TO ITS DISCHARGE INTO SURFACE WATERS OR STORM DRAINAGE SYSTEMS. WATER MUST BE DISCHARGED THROUGH A PIPE, WELL, GRASSED OR LINED CHANNEL, OR OTHER EQUIVALENT MEANS SUCH THAT DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENTATION.

ACCESSIBILITY NOTES:

1. ALL WORK SHALL MEET THE GUIDELINES OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, THE AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG), LATEST EDITION, AND ANY ADDITIONAL STATE OR LOCAL REQUIREMENTS REGARDING ACCESSIBILITY.
2. THERE SHALL BE A 5' "LEVEL" LANDING AREA AT THE EXTERIOR OF ALL DOORWAYS. FOR THIS PURPOSE, "LEVEL" SHALL MEAN THE SLOPE IN ANY DIRECTION, INCLUDING THE DIAGONALS, SHALL NOT EXCEED 1:50 (2.0%).
3. CONTRACTOR SHALL ENSURE THAT THE DOORWAY THRESHOLDS MEET ACCESSIBILITY REQUIREMENTS.
4. LONGITUDINAL (RUNNING) SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20 (5.0%).
5. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED 1:50 (2.0%).
6. SLOPES IN ANY DIRECTION, INCLUDING THE DIAGONALS, WITHIN THE ACCESSIBLE PARKING SPACES OR ACCESS AISLES SHALL NOT EXCEED 1:50 (2.0%).
7. ALL EXTERIOR CONCRETE SURFACES SHALL RECEIVE A HEAVY BROOM FINISH FOR PEDESTRIAN SLIP-RESISTANCE.

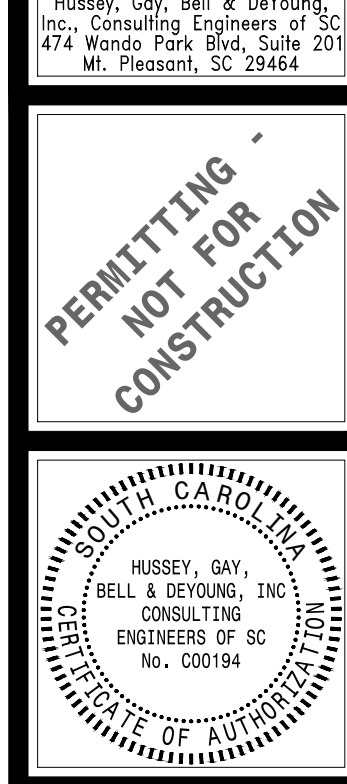
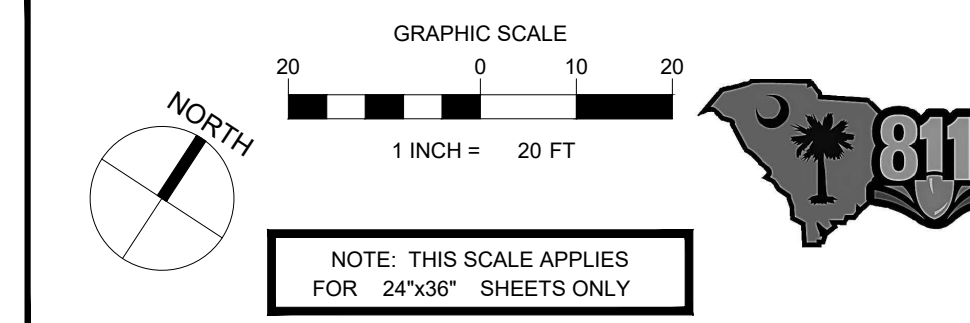
GRADING LEGEND:

XX.XX TP - TOP OF PAVEMENT
 XXXX FG - FINISH GRADE
 XXXX FFE - FINISH FLOOR ELEVATION
 XXXX ME - MATCH EXISTING
 XXXX FR - FRAME ELEVATION
 XX.XX TC - TOP OF CURB

- - - 44.5 - EXISTING CONTOUR
 - - - 44.5 - PROPOSED CONTOUR
 - - - DRAINAGE FLOW ARROW

DESIGNED LP: DATE: JOB NO. 423153600 SCALE: AS NOTED

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION
 GRADING PLAN



HUSSEY GAY BELL
 Established 1958
 474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T: 843.949.7500

REVISIONS:

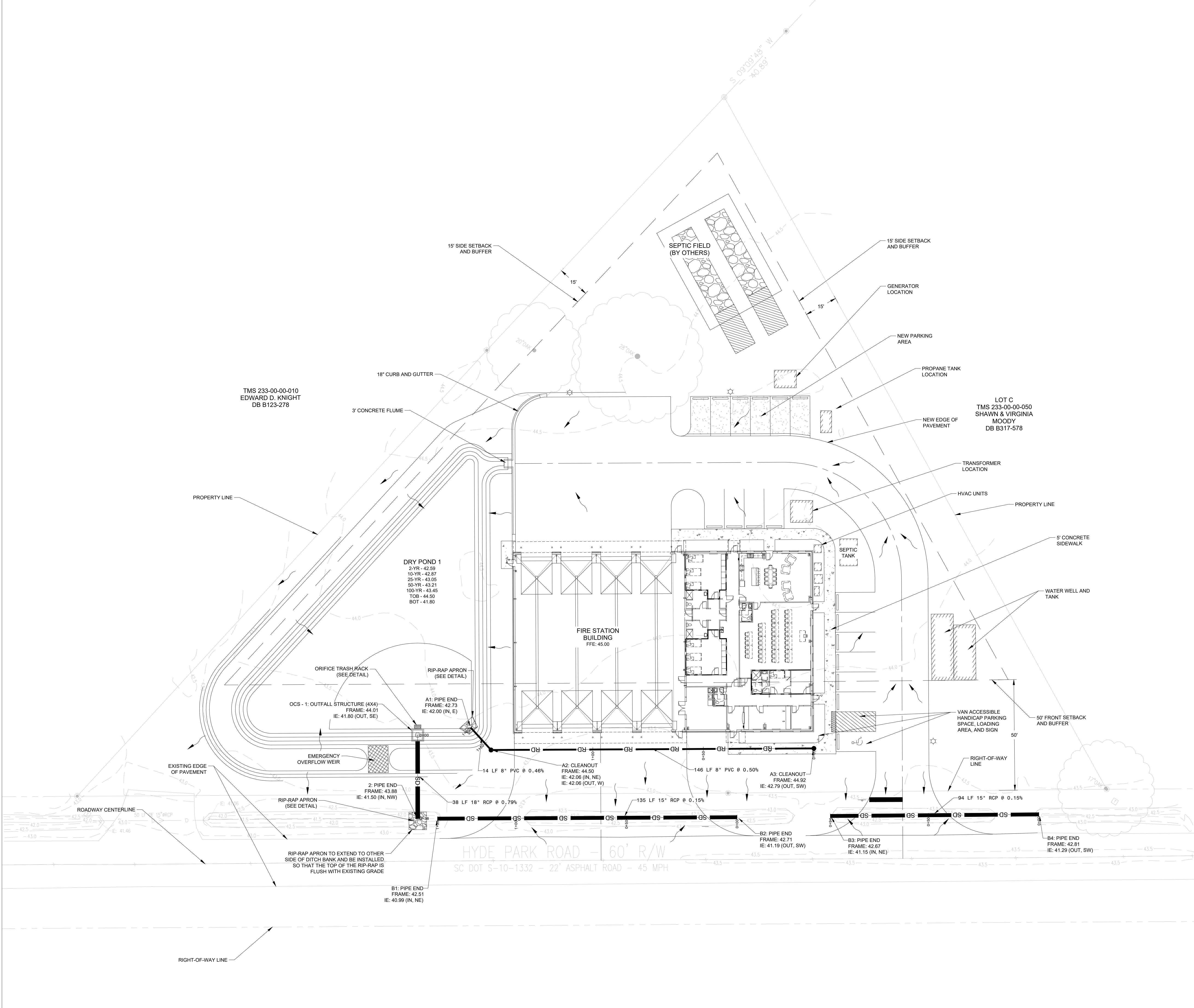
NO.	DATE	DESCRIPTION

DATE: JOB NO. 423153600 SCALE: AS NOTED

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION
 GRADING PLAN

DRAWING NUMBER
C-301

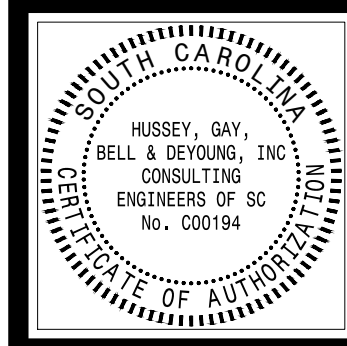
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- MAP NOTE:**
- ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: ATLANTIC SURVEYING, INC.
 - TRANSFER OF SITE BENCHMARK(S) IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL ONLY BE COMPLETED BY A SURVEYOR LICENSED/REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
 - THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING BENCHMARK PRIOR TO ANY CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. FIELD VERIFICATION CAN BE ACCOMPLISHED BY CHECKING A MINIMUM OF TWO FIXED OBJECTS DISPLAYED ON THE SURVEY (I.E. MANHOLE RIM, STORM GRATE, PIPE INVERTS, ETC.).
 - VERTICAL DATUM IS NAVD 88.

- STORM DRAINAGE NOTES:**
- ALL RCP PIPE SHALL BE CLASS III WATERTIGHT REINFORCED CONCRETE PIPE UNLESS OTHERWISE NOTED.
 - ALL PVC STORM PIPE SHALL BE SDR-35 BELL & SPIGOT.
 - ALL CORRUGATED PLASTIC PIPE (CPP) AND FITTINGS SHALL BE ADS N-12, WR OR APPROVED EQUAL WITH WATERTIGHT CONNECTIONS.
 - LOCATIONS AND TOP ELEVATIONS OF INLETS AND STRUCTURES WILL BE ADJUSTED IN THE FIELD BY THE CONTRACTOR WHERE NECESSARY AND SHALL BE APPROVED BY THE ENGINEER.
 - INVERTS SHOWN ON PLAN DRAWING ARE PIPE INVERTS.
 - MAINTENANCE RESPONSIBILITY OF ALL STORM DRAINAGE PIPING AND STRUCTURES SHALL BE AS FOLLOWS:
 DURING CONSTRUCTION: GENERAL CONTRACTOR
 AFTER CONSTRUCTION: OWNER
 - SITE CONTRACTOR IS RESPONSIBLE FOR MAKING TIE-IN TO UNDER-SLAB ROOF DRAIN CONNECTIONS AT BUILDING. ALL BUILDING CONNECTION POINTS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM ALL BUILDING CONNECTION POINT LOCATIONS AND ELEVATIONS WITH APPROVED ARCHITECTURAL AND MECHANICAL PLANS.
 - SITE CONTRACTOR IS RESPONSIBLE FOR EXTENDING ROOF DRAIN LEADERS TO WITHIN 5 FEET OF BUILDING FOR CONNECTION OF EXTERNAL DOWNSPOUTS/ROOF DRAINS. ALL CONNECTION POINTS SHOWN ARE FOR REFERENCE ONLY. PLUMBING CONTRACTOR/GENERAL CONTRACTOR IS RESPONSIBLE FOR MAKING TRANSITION AND CONNECTION TO ROOF DRAIN LEADERS.

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NO.	DATE	DESCRIPTION

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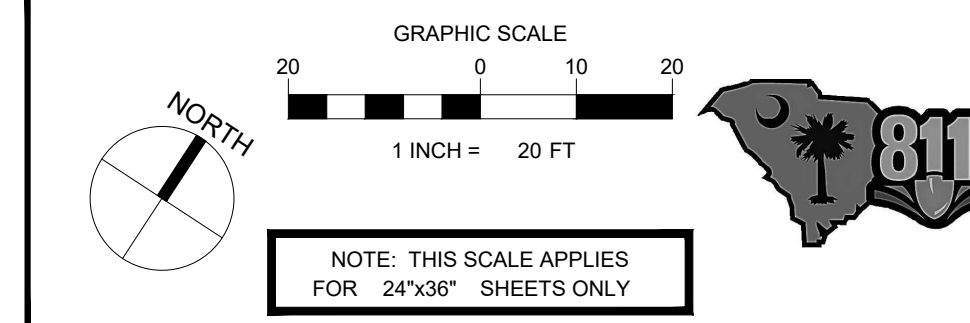
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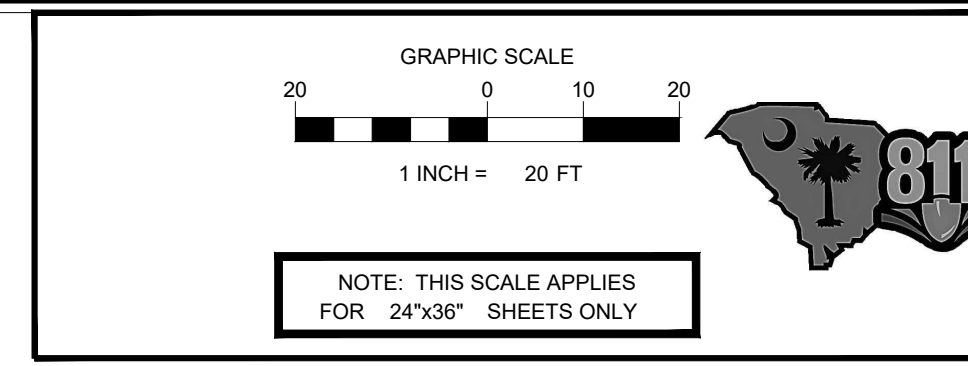
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SCALE: AS NOTED

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION
 DRAINAGE PLAN

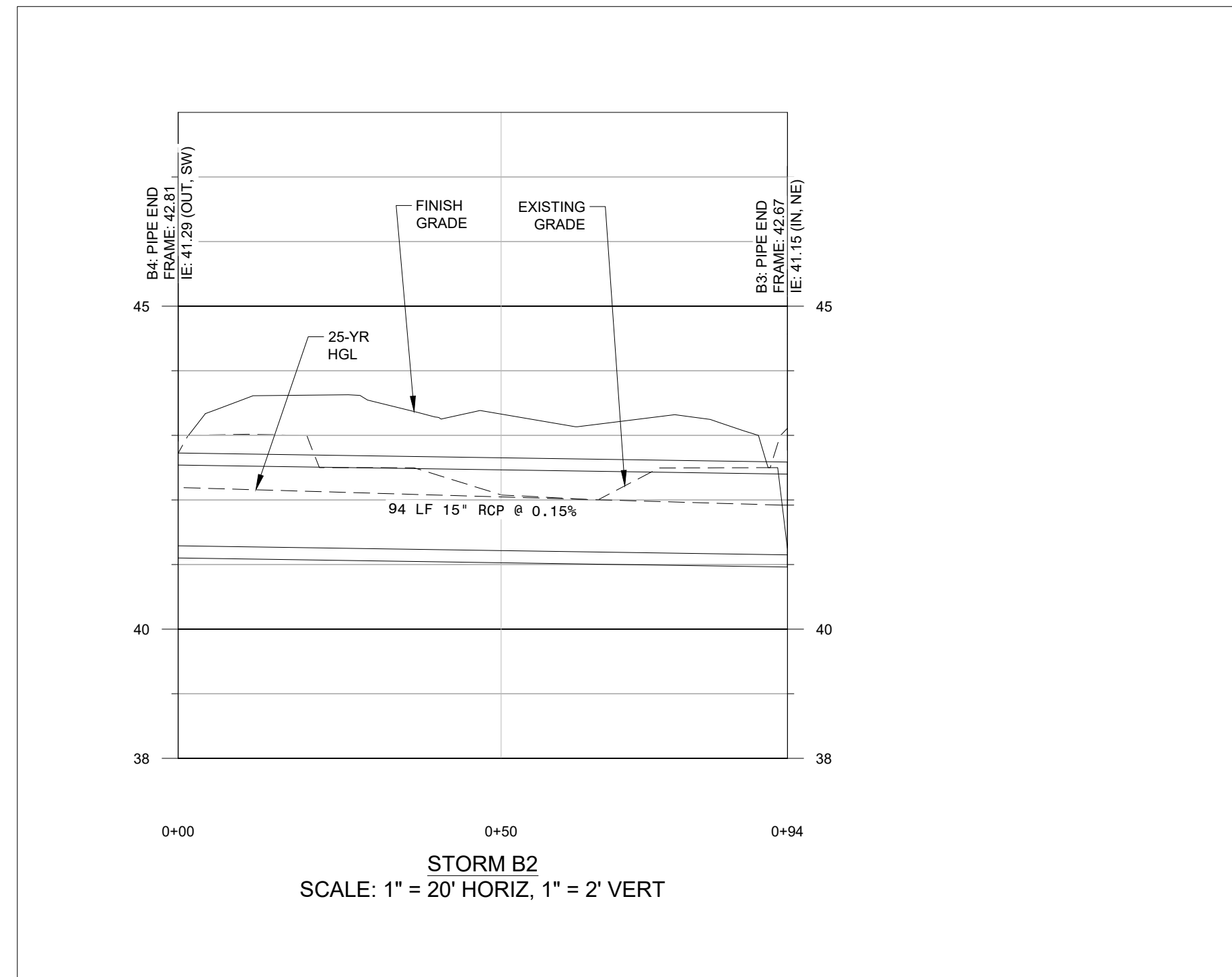
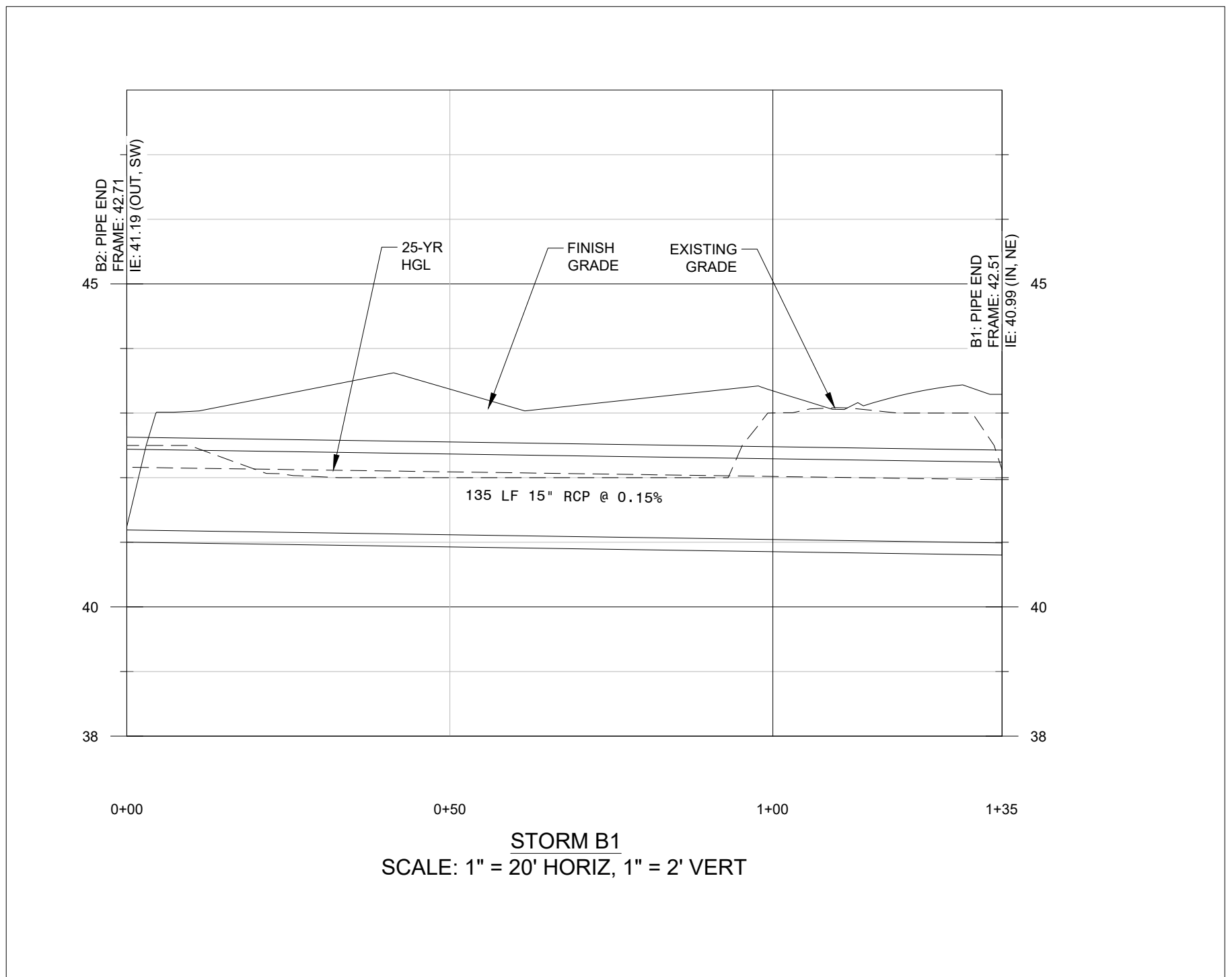
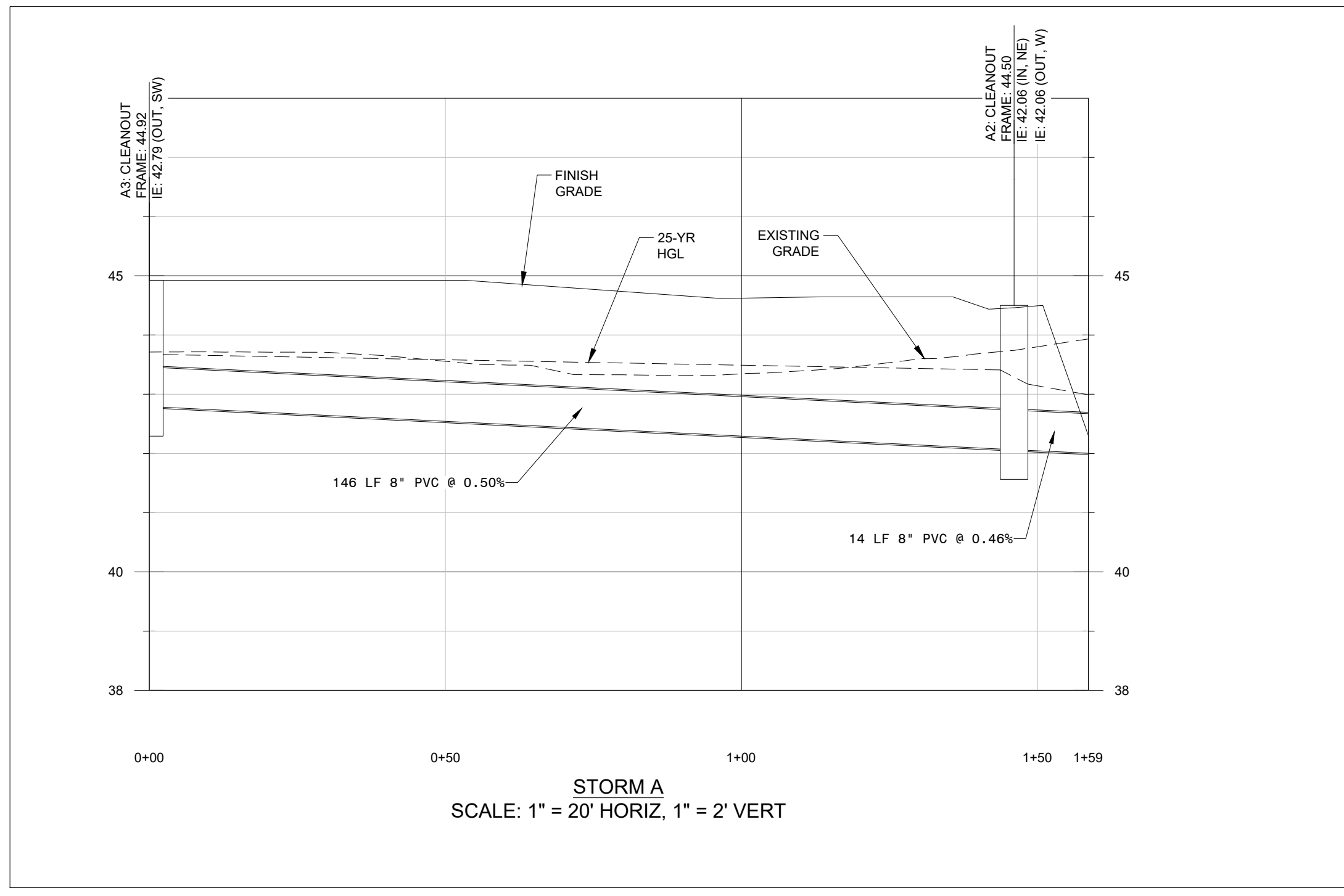
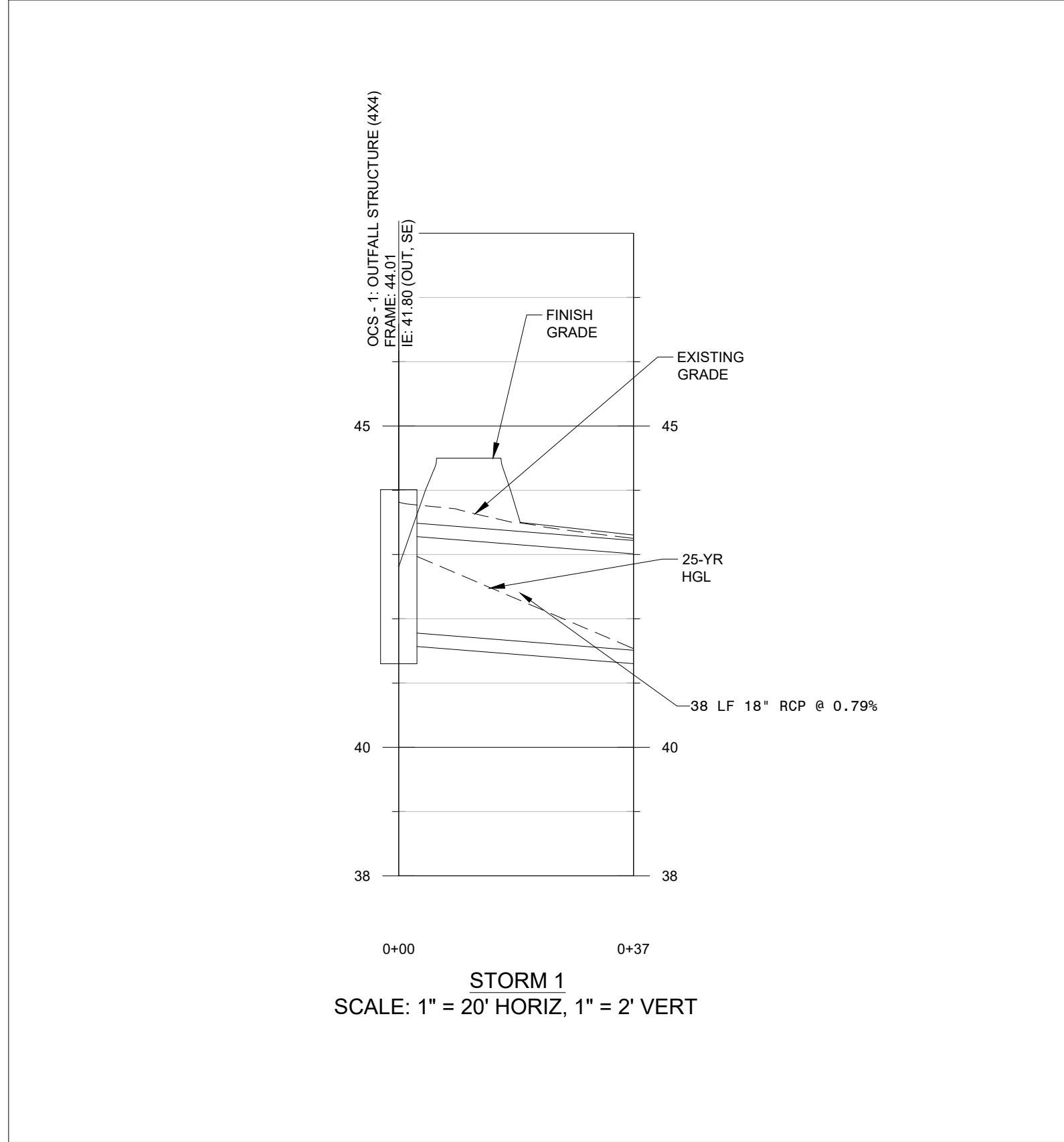
DRAWING NUMBER
C-311





- MAP NOTE:**
1. ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: ATLANTIC SURVEYING, INC.
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 4. VERTICAL DATUM IS NAVD 88.

PERMITTING - NOT FOR CONSTRUCTION



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DATE: _____

JOB NO. 423153600

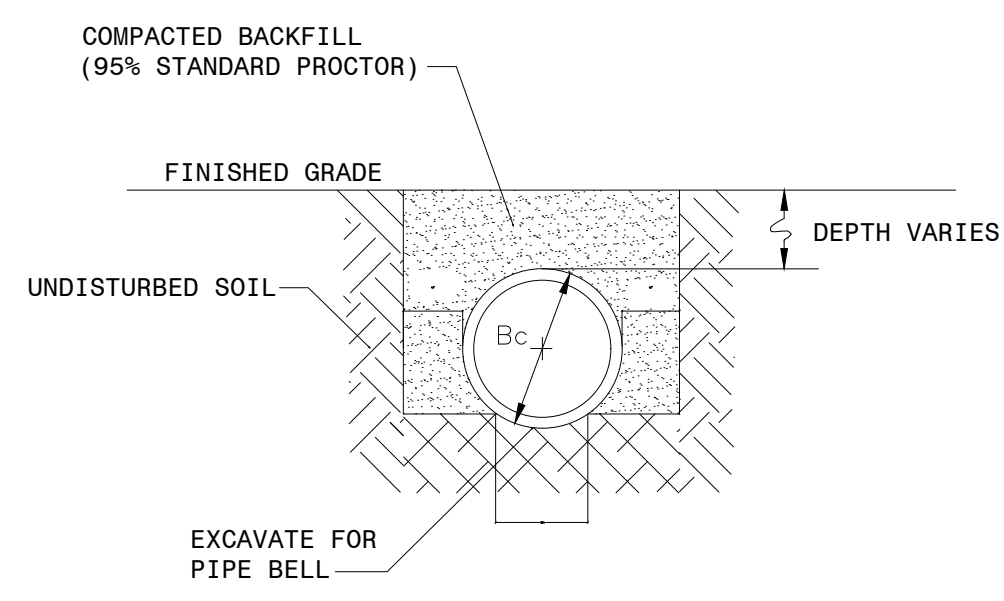
SCALE: AS NOTED

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 FOR RAVENAL, SC
MITCHELL CONSTRUCTION
 DRAINAGE PROFILES

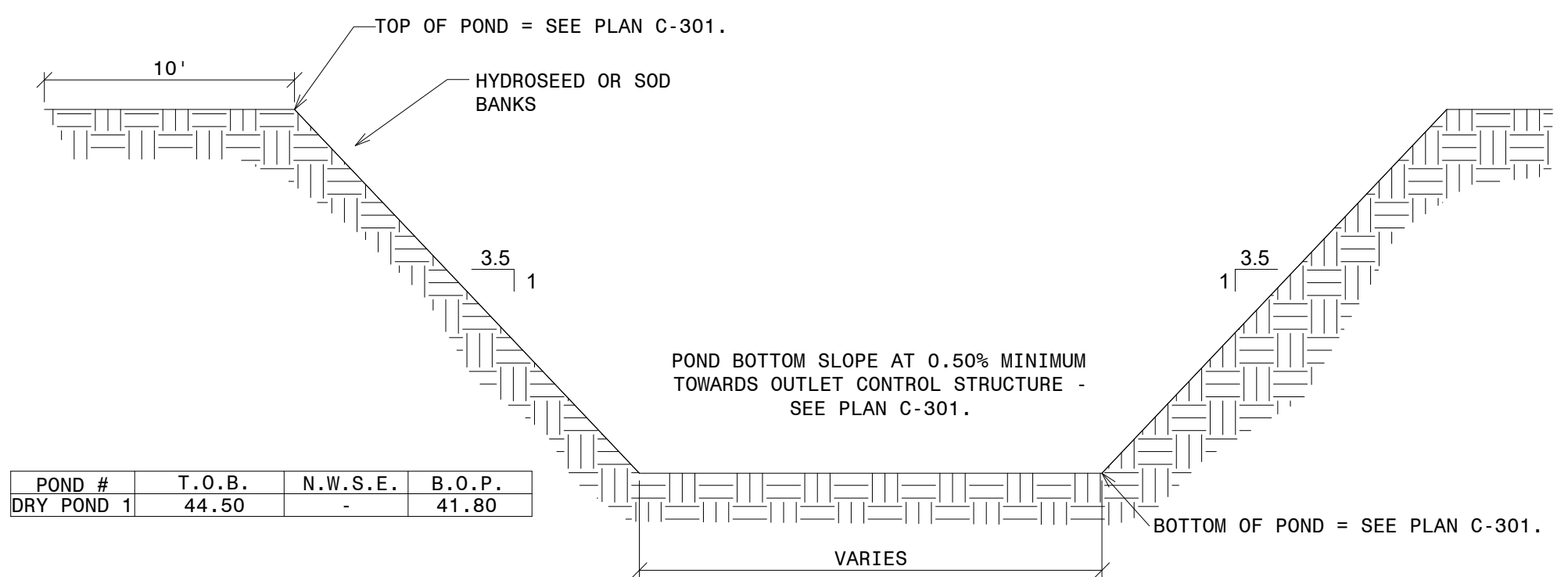
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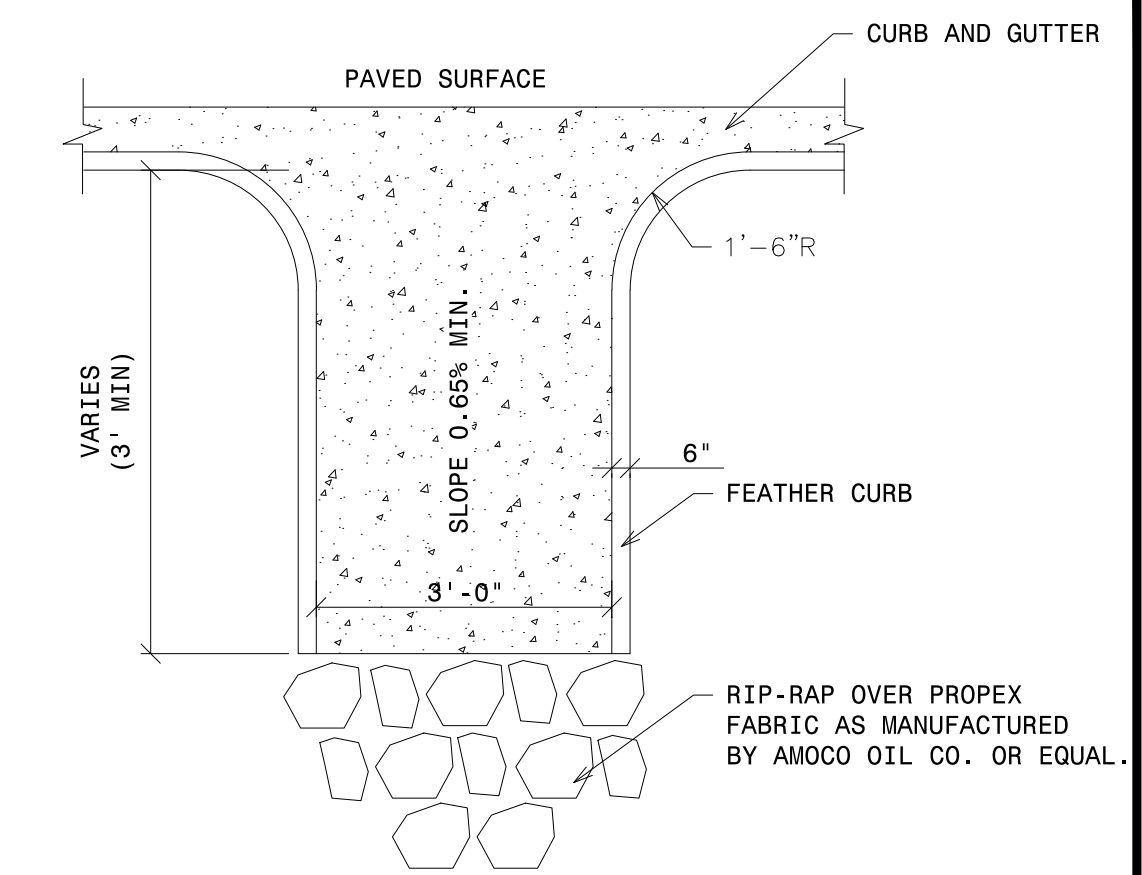


CLASS "C" BEDDING DETAIL FOR CONCRETE STORM DRAINAGE PIPE

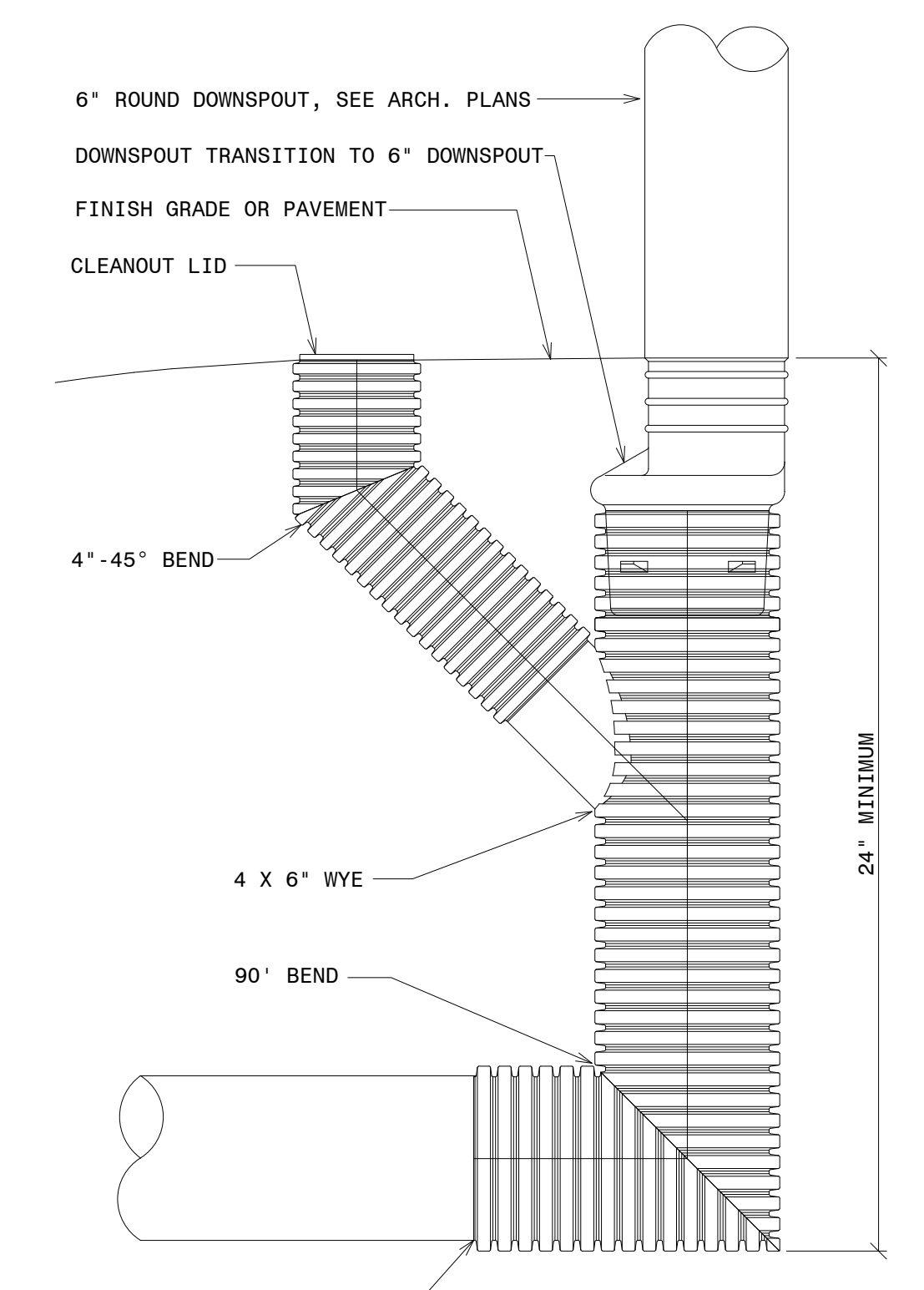


POND #	T.O.B.	N.W.S.E.	B.O.P.
DRY POND 1	44.50	-	41.80

DRY POND SECTION



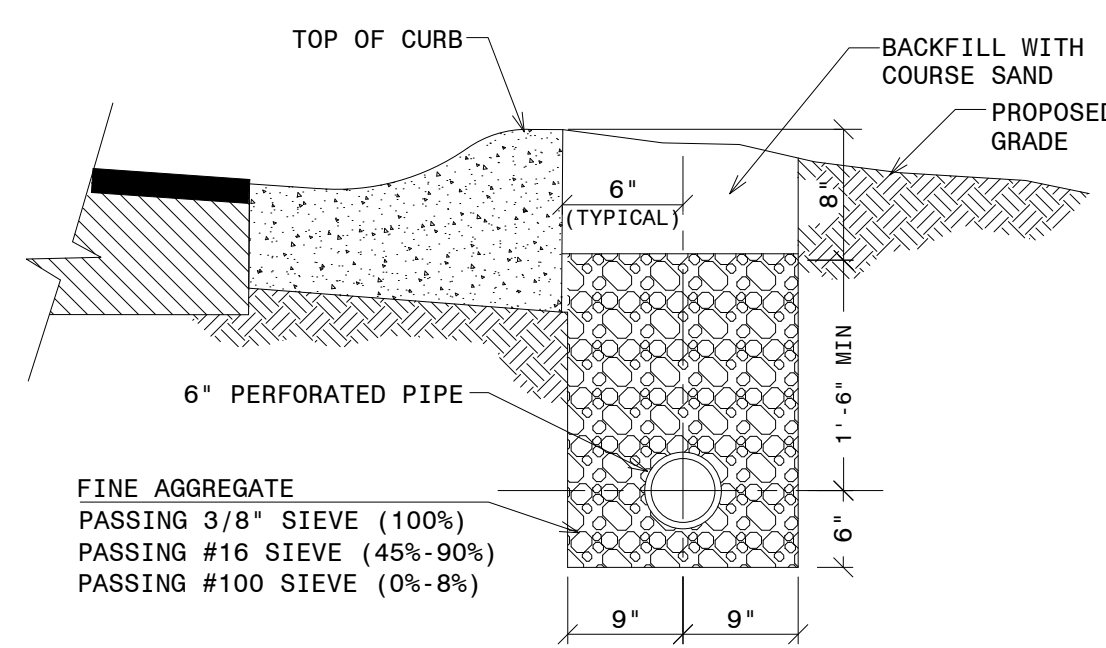
CONCRETE FLUME DETAIL



DOWNSPOUT CONNECTION DETAIL

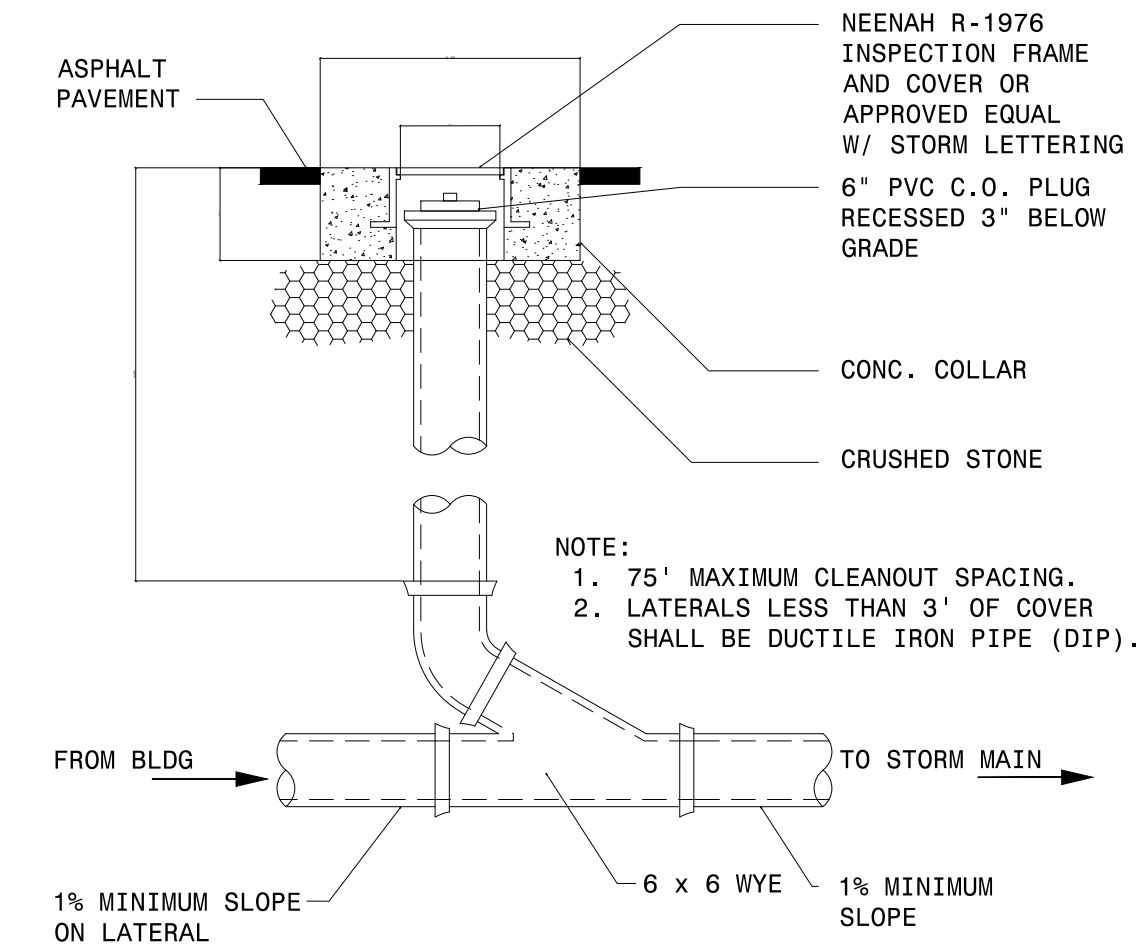
Required Maintenance	Frequency
Note erosion of pond banks or bottom	Semi-Annual Inspection
Inspect for damage to the embankment Monitor for sediment accumulation in the facility and forebay. Ensure that inlet and outlet devices are free of debris and operational	Annual Inspection
Repair undercut or eroded areas Mow side slopes Pesticide/ Nutrient management Litter/ Debris Removal	Standard Maintenance
Seed or sod to restore dead or damaged ground cover.	Annual Maintenance (As needed)
Removal of sediment from the forebay	5 to 7 year Maintenance
Monitor sediment accumulations, and remove sediment when the pond volume has been reduced by 25%.	25 to 50 year Maintenance
Repair undercut or eroded areas Mow side slopes Pesticide/ Nutrient management Litter/ Debris Removal	Standard Maintenance

DRY POND MAINTENANCE NOTES

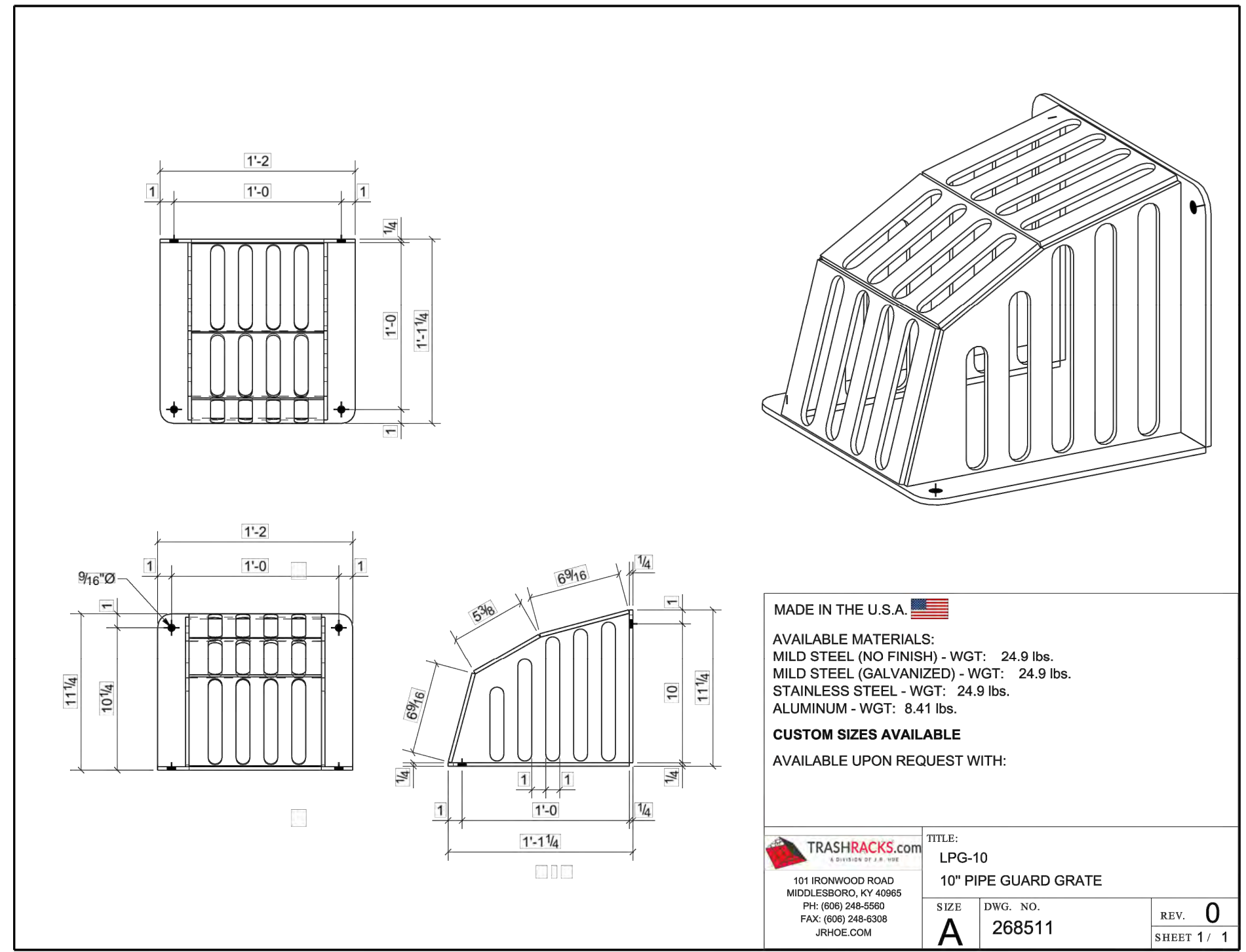


NOTE:
EXCEPT WHERE PLANS NOTE OTHERWISE, SUBGRADE DRAINS EXTEND 50' (EACH WAY) FROM ALL CURB INLETS.

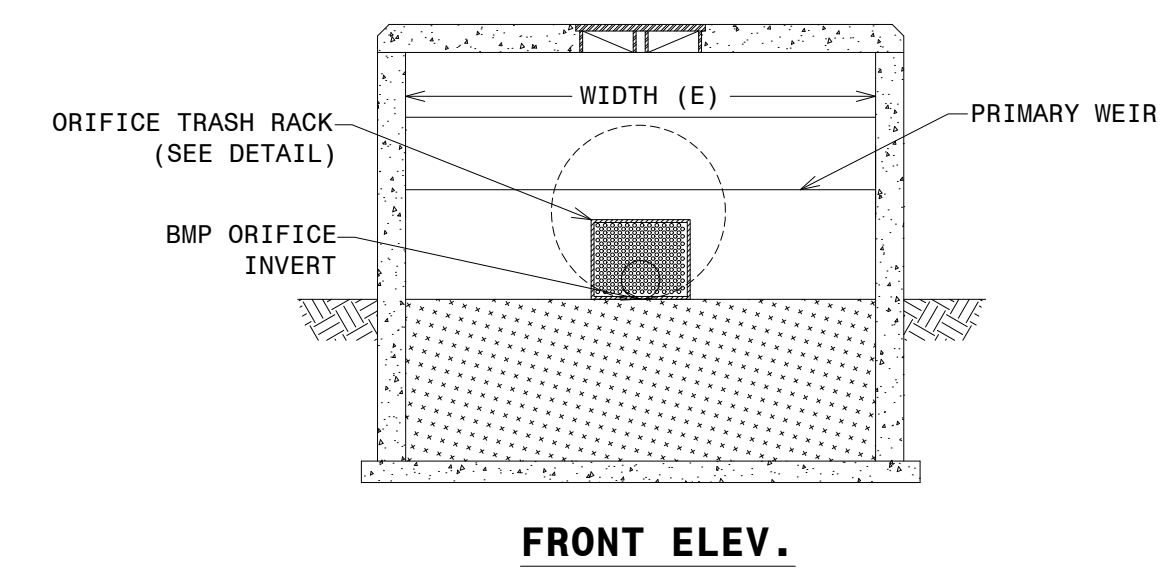
SUBGRADE DETAIL



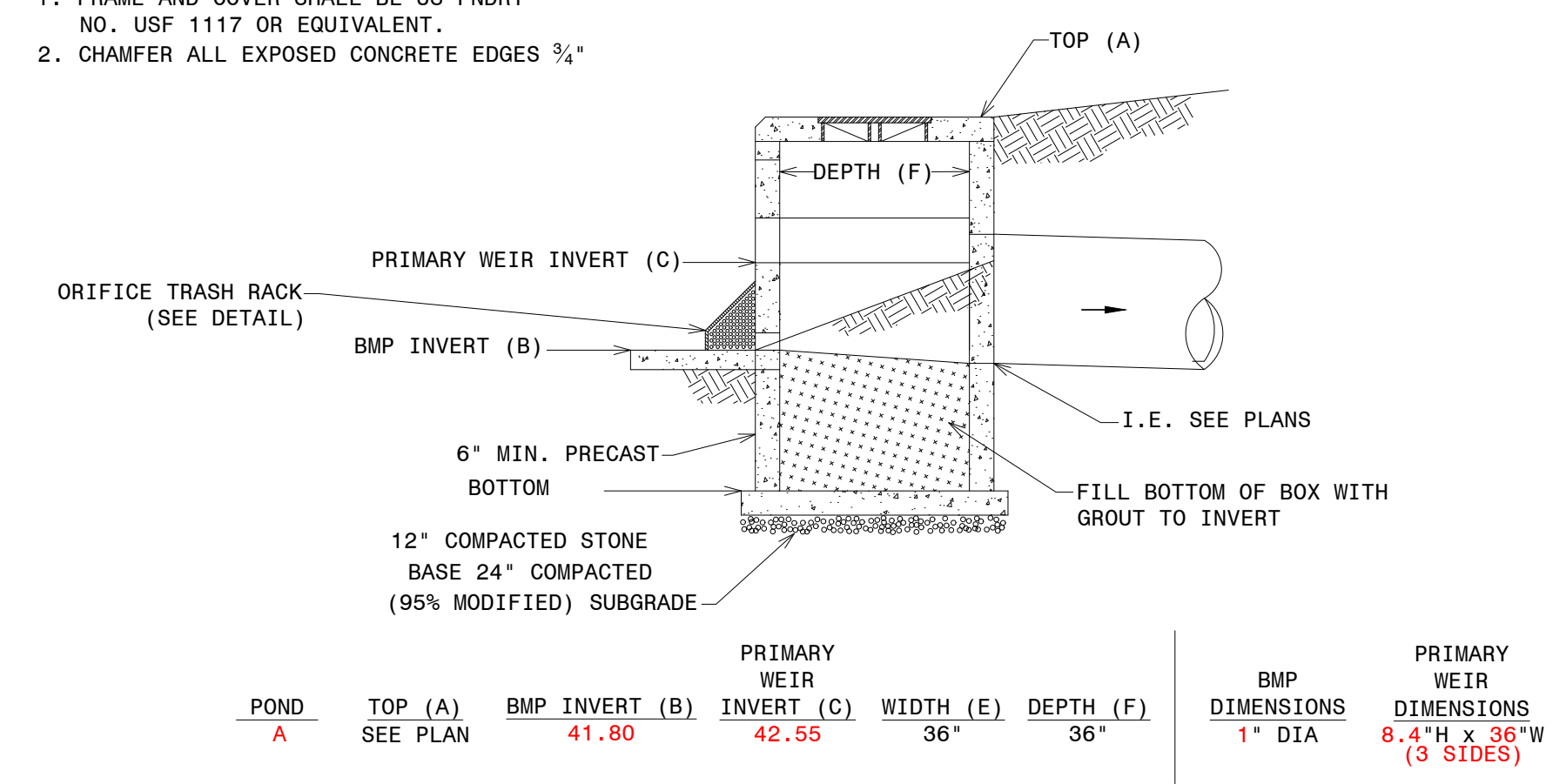
STORM CLEANOUT



NOTES:
1. 3/4" OPENING SIZES TO BE REQUESTED AS A CUSTOM SIZE SO THAT THE OPENING SIZE IS SMALLER THAN THE ORIFICE OF THE DRY POND OUTFALL CONTROL STRUCTURE.



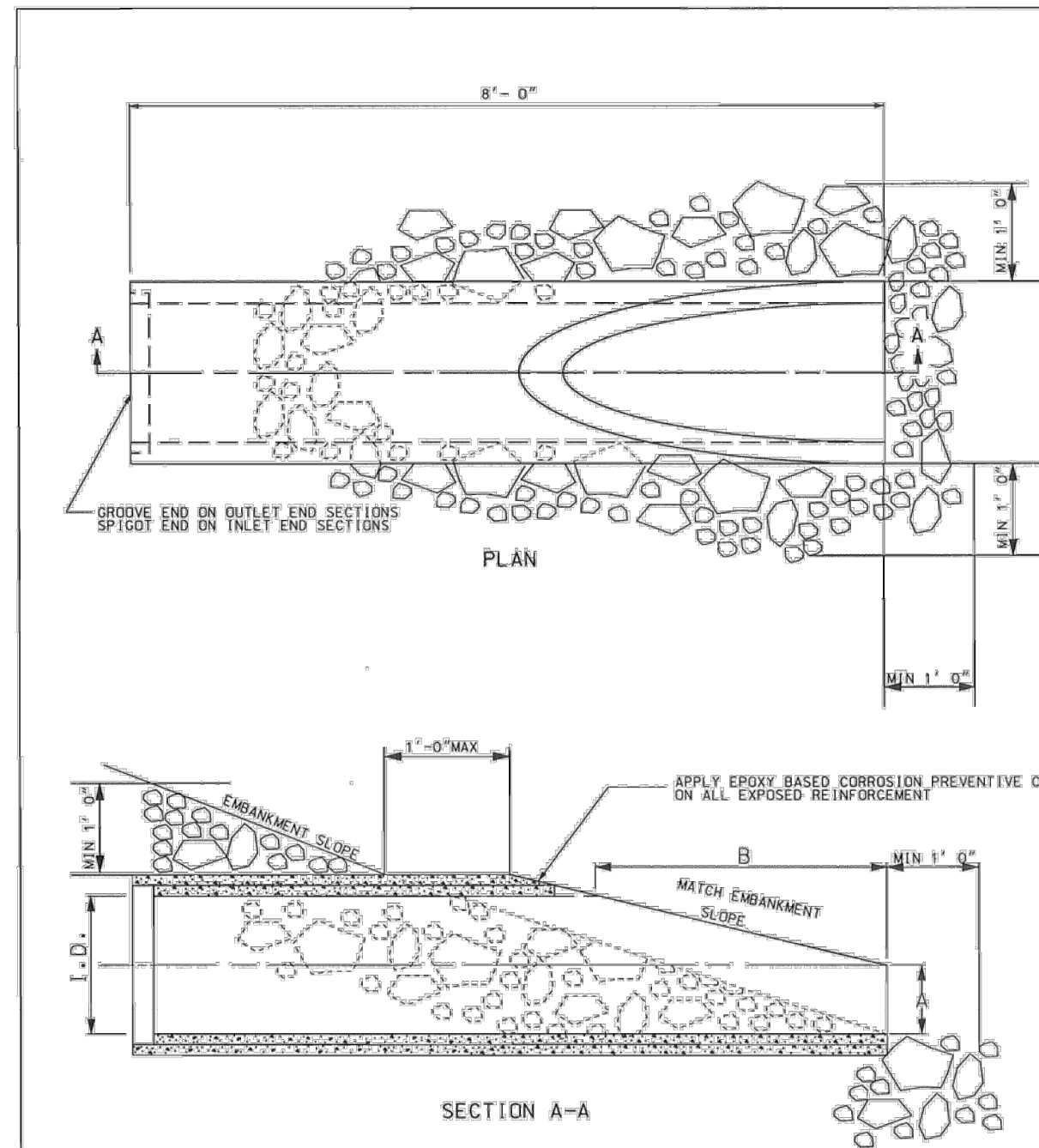
NOTES:
1. FRAME AND COVER SHALL BE US FNDRY NO. USF 1117 OR EQUIVALENT.
2. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4"



OUTFALL STRUCTURE

Hussey, Gay, Bell & DeYoung, Inc. Consulting Engineers of SC
 474 Wando Park Blvd, Suite 201
 Mt. Pleasant, SC 29464
 PERMITTING - NOT FOR CONSTRUCTION
 HUSSEY, GAY, BELL & DEYOUNG, INC.
 REGISTERED PROFESSIONAL ENGINEERS OF SC
 No. C00194
HUSSEY GAY BELL
 Established 1958
 474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T:843.849.7500

REVISIONS:
 DESIGNED LP DRAWN LP CHECKED BG
 DATE:
 JOB NO. 423153600
 SCALE: AS NOTED
ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION
 DRAINAGE DETAILS
 DRAWING NUMBER
C-350



- NOTES:
1. BEVELED END SECTIONS WILL BE MANUFACTURED IN ACCORDANCE WITH SCDOT SUPPLEMENTAL TECHNICAL SPECIFICATIONS 8048XXX. THESE SPECIAL PIPE SECTIONS WILL BE MADE DURING THE MANUFACTURING OF OTHER STATE APPROVED REINFORCED CONCRETE PIPE.
 2. THE PIPE LEVEL MAY BE RAISED IN THE FIELD IN LIEU OF BEING MANUFACTURED IN FIELD SAWING. THE PIPE OPENING MAY COME TO A POINT AT THE PIPE CREST RATHER THAN A RADIUS IF APPROVED BY THE PIPE MANUFACTURER. ALTERNATE PORE FOR STEELINES MUST HAVE EACH END BEVELED TO MATCH THE ADJACENT SLOPES.
 3. PLACE RIPRAP AS DIRECTED BY THE RISE.
 4. PAYMENT FOR BEVELED END SECTIONS WILL BE AS DIRECTED IN SC-M-114.
 5. THE PAY ITEM SHALL BE:
 - 7198100 BEVELED END OF PIPE ENDS
 - 8048XXX RIPRAP CLASS 2
 - 8048XXX GEOTEXTILE FOR EROSION CONTROL UNDER RIPRAP CLASS 2 TYPE.....S.V.

CHART 719-610B
RIPRAP PLACEMENT

CLASS	Ø 36" (FT)	MINIMUM (INCHES)	MAXIMUM (FT)
B	0.75	1.50	
C	1.30	2.60	

TABLE 719-610A
EMBANKMENT SLOPE

D (IN)	A (IN)	B (BEVELED LENGTH) (IN)			
		3	4	5	6
15	6	54	45	36	27
18	9	54	45	36	27
24	10	NA	70	56	42
30	12	NA	NA	72	54
36	15	NA	NA	NA	63
42	20	NA	NA	NA	66
48	24	NA	NA	NA	72
54	24	NA	NA	NA	60
60	24	NA	NA	NA	72

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

SCDOT SUPPLEMENTAL TECHNICAL SPECIFICATION 8048XXX

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
 No. 21242
 JAMES W. KENDALL, P.E.

Amorin Kendall
 STAMPEDE
 AUGUST 21, 2017
 DATE

NO.	DATE	BY	DESCRIPTION
1			
2			
3			
4			

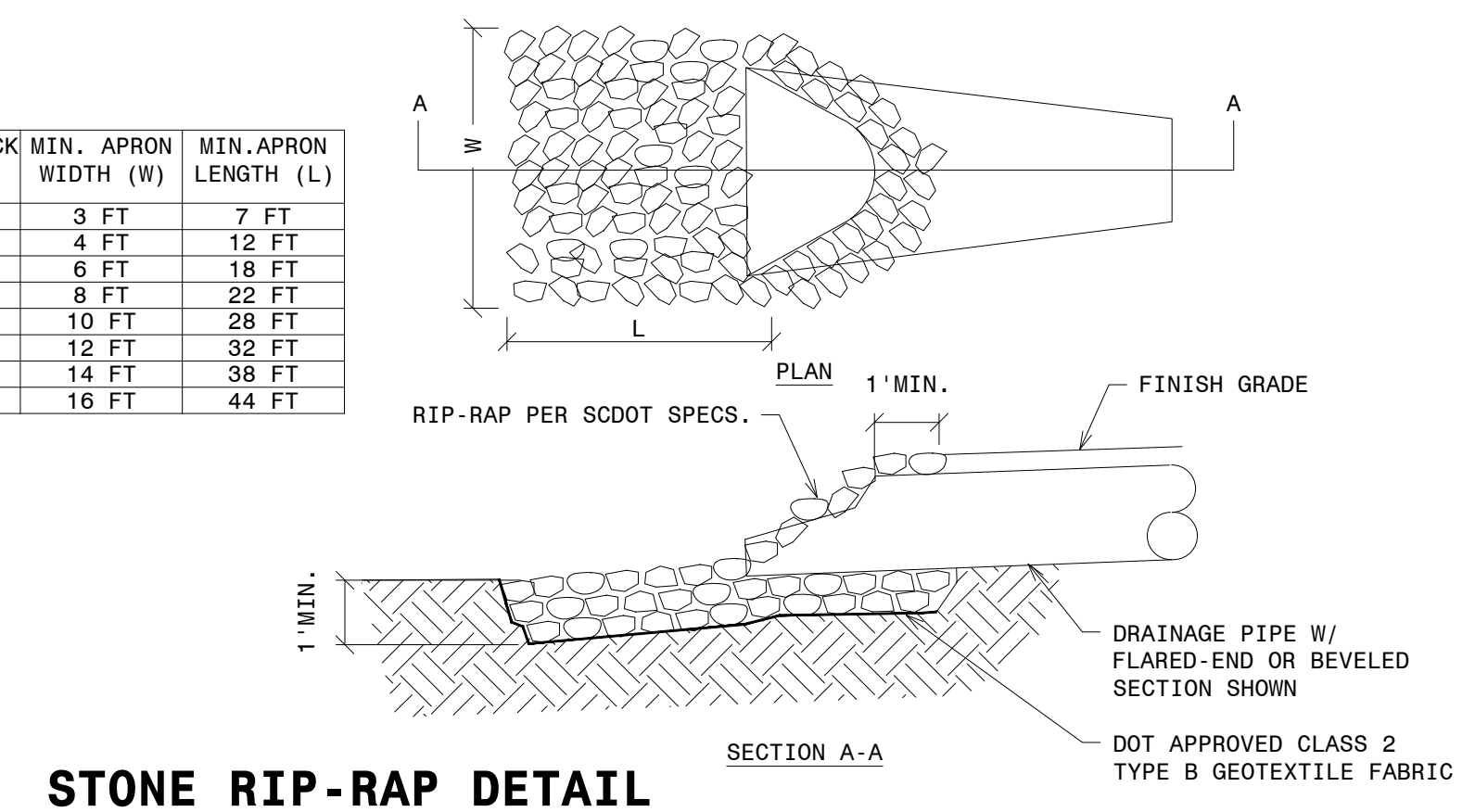
SCDOT
 SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DESIGN STANDARDS OFFICE
 955 PARK STREET
 ROOM 405
 COLUMBIA, SC 29201

STANDARD DRAWING
 END TREATMENT (RCP BEVELED END)

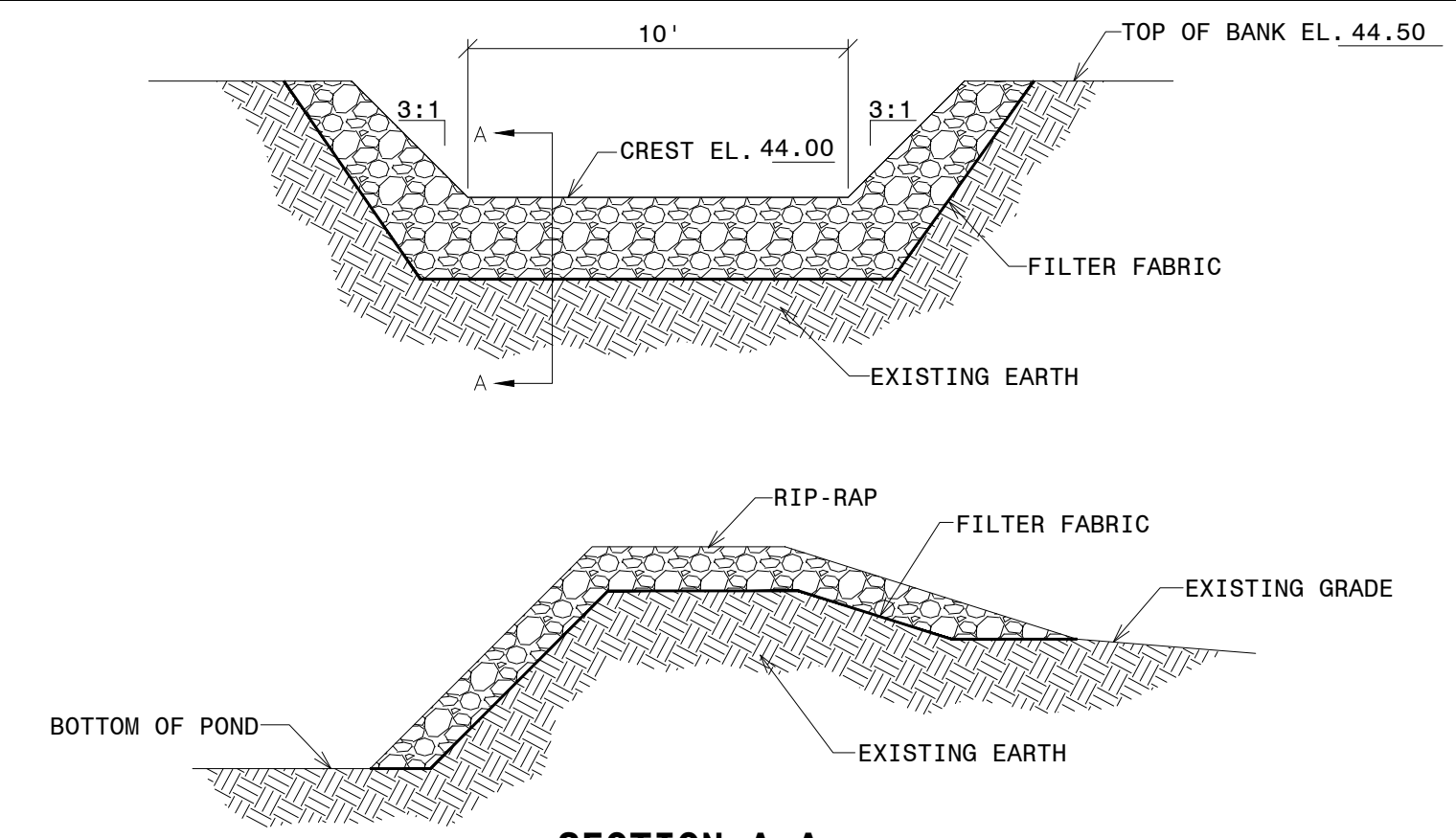
719-610-00
 EFFECTIVE TESTING DATE: JAN. 2013

THIS DRAWING IS NOT TO SCALE.

CULVERT SIZE	AVERAGE ROCK DIAMETER	MIN. APRON WIDTH (W)	MIN. APRON LENGTH (L)
8"	3"	3 FT	7 FT
12"	5"	4 FT	12 FT
18"	8"	6 FT	18 FT
24"	10"	8 FT	22 FT
30"	12"	10 FT	28 FT
36"	14"	12 FT	32 FT
42"	16"	14 FT	38 FT
48"	20"	16 FT	44 FT

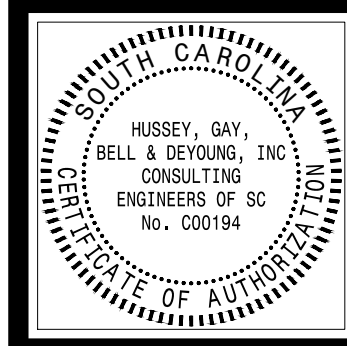


STONE RIP-RAP DETAIL



SECTION A-A
 POND A EMERGENCY SPILLWAY DETAIL

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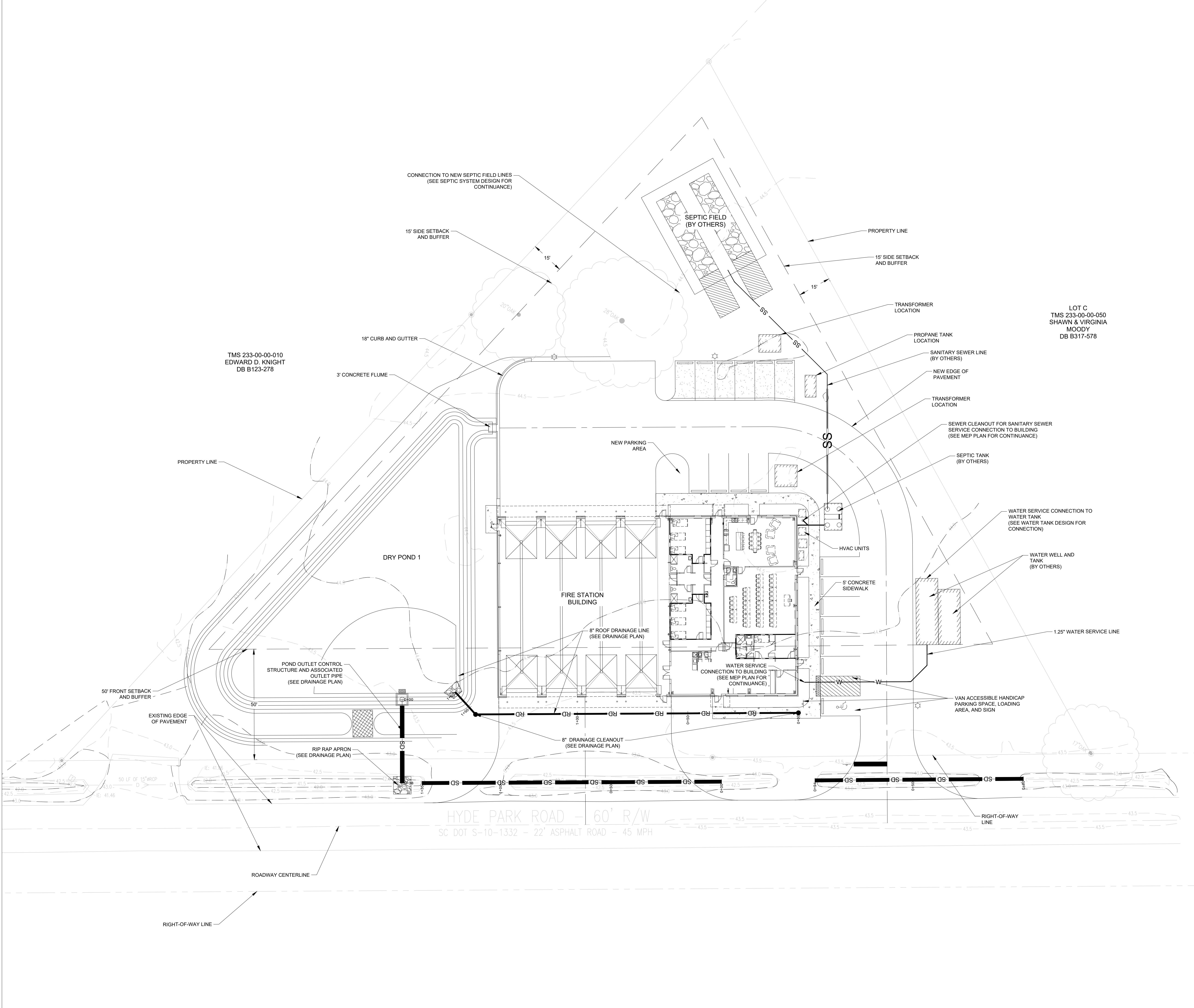
JOB NO. 423153600

SCALE: AS NOTED

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION
 DRAINAGE DETAILS

DRAWING NUMBER
C-351

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- MAP NOTE:**
1. ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: ATLANTIC SURVEYING, INC.
 2. TRANSFER OF SITE BENCHMARK(S) IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL ONLY BE COMPLETED BY A SURVEYOR LICENSED/REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
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 4. VERTICAL DATUM IS NAVD 88.

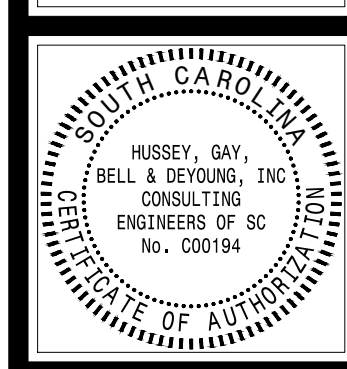
- SITE UTILITY NOTES:**
1. IN THE EVENT THESE NOTES CONFLICT WITH THE REQUIREMENTS OF THE LOCAL UTILITY AUTHORITY, THE LOCAL UTILITY'S REQUIREMENTS SHALL GOVERN.
 2. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES (LOCATION AND INVERT) PRIOR TO ANY SITE CONSTRUCTION OR DEMOLITION. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, BOTH MAIN AND SERVICE LINES FOR THE FOLLOWING:
 POTABLE WATER LINES, SANITARY SEWER LINES, ELECTRIC LINES (OVERHEAD AND UNDERGROUND), GAS LINES, TELEPHONE LINES, CABLE TELEVISION LINES, STORMWATER CONVEYANCE LINES
 3. LOCATIONS AND TOP ELEVATIONS OF STRUCTURES WILL BE ADJUSTED IN THE FIELD BY THE CONTRACTOR WHERE NECESSARY AND SHALL BE APPROVED BY THE ENGINEER.
 4. CONSTRUCTION OF THE SANITARY SEWER SYSTEM AND CONNECTION TO THE EXISTING SEWER SYSTEM SHALL MEET THE REQUIREMENTS/SPECIFICATIONS AND SHALL BE INSTALLED UNDER THE DIRECTION OF THE LOCAL UTILITY AUTHORITY.
 5. PVC SANITARY SEWER PIPE SHALL MEET THE REQUIREMENTS OF ASTM D3034, LATEST REVISION (SDR-35) IN SIZES SPECIFIED.
 6. SANITARY SEWER LINES NOT HAVING 36" OF COVER SHALL BE DUCTILE IRON PIPE. LOCAL UTILITY APPROVED ADAPTERS SHALL BE CONSTRUCTED AT ANY PVC CONNECTIONS.
 7. CONTRACTOR SHALL CONFIRM LOCATION AND INVERT ELEVATION OF SEWER TIE-IN POINT PRIOR TO ANY SITE OR BUILDING CONSTRUCTION.
 8. ROOF DRAINS, FOUNDATION DRAINS OR OTHER STORM WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
 9. CONSTRUCTION OF THE WATER SYSTEM AND CONNECTION TO THE EXISTING WATER SYSTEM SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED UNDER THE DIRECTION OF THE LOCAL UTILITY AUTHORITY.
 10. MATERIALS, INSTALLATION AND TESTING OF THE PRIVATE FIRE SERVICE MAINS AND APPURTENANCES SHALL BE IN ACCORDANCE WITH NFPA 24 AND THE REQUIREMENTS OF THE LOCAL / STATE FIRE JURISDICTION.
 11. COPPER WATER PIPE AND FITTINGS SHALL BE TYPE "K" COPPER.
 12. DUCTILE IRON WATER PIPE AND FITTINGS SHALL BE CLASS 350, AS SPECIFIED BY AWWA C150 AND C151 FOR LAYING CONDITION TYPE 2. FITTINGS SHALL BE RATED TO 250 PSI. PIPE JOINTS AND FITTINGS SHALL BE RESTRAINED.
 13. PVC WATER PIPE AND FITTINGS LESS THAN 4" SHALL BE CLASS 200 WITH DIMENSION RATIO 21 OR LOWER CONFORMING TO ASTM D2241.
 14. PVC WATER PIPE 4" THROUGH 12" SHALL MEET AWWA C-900 (SDR-18). ASSOCIATED FITTINGS SHALL BE MECHANICAL JOINT DUCTILE IRON. PIPE JOINTS AND FITTINGS SHALL BE RESTRAINED.
 15. ALL MECHANICAL JOINTS ARE TO BE RESTRAINED USING "MEGALUG" OR "FORD" EQUAL.
 16. ALL WATER LINES SHALL BE BELOW THE FROST LINE OR HAVE 36" (MIN) COVER FROM FINISHED GRADE, WHICHEVER IS THE GREATER DEPTH. FIRE SERVICE LINES SHALL ALSO MEET THE COVER REQUIREMENTS INDICATED IN NFPA-24.
 17. WATER METERS, BOXES, VAULTS AND BACKFLOW PREVENTORS SHALL MEET ALL REQUIREMENTS OF THE UTILITY COMPANY. CONTRACTOR SHALL CONFIRM ALL ITEMS AGAINST CURRENT UTILITY LIST OF APPROVED DEVICES PRIOR TO ORDERING.
 18. WATER WORK SHALL NOT BEGIN UNTIL AREAS OF WATERLINE CONSTRUCTION ARE ROUGH GRADED (WITHIN 1 FOOT OF FINISHED GRADE) AND FILL AREAS ARE COMPLETED AND COMPACTED.
 19. ALL PIPE AND APPURTENANCES INSTALLED ON A DEPRESSURIZED WATERMAIN ARE TO BE WIRED CLEAN AND ALL INTERIOR SURFACES SATURATED WITH A MINIMUM 1% CHLORINE SOLUTION.
 20. CHLORINATED DISINFECTION WATER SHALL NOT BE DISCHARGED DIRECTLY INTO A STORM DRAINAGE SYSTEM OR SURFACE WATERS WITHOUT THE PRIOR USE OF APPROPRIATE DE-CHLORINATION METHODS.
 21. A MINIMUM OF 5 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN UTILITY CONDUIT CROSSOVER AND WATERLINE APPURTENANCES, I.E. HYDRANTS, VALVES, TEES, ETC.
 22. WATER LINES CROSSING ANY AND ALL SEWERS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" BETWEEN THE OUTSIDE OF THE WATER MAIN PIPE AND THE SEWER PIPE. ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SUCH THAT BOTH JOINTS WILL BE EQUIDISTANT AND AS FAR FROM THE SEWER AS POSSIBLE. IF WATER CROSSES BELOW SANITARY SEWERS, THE SEWER MUST BE WATER MAIN MATERIAL FOR THAT SPAN.
 23. SITE CONTRACTOR IS RESPONSIBLE FOR MAKING TIE-IN TO WATER AND SANITARY SEWER CONNECTIONS AT BUILDINGS. ALL BUILDING UTILITY CONNECTION POINTS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM ALL BUILDING CONNECTION POINT LOCATIONS WITH APPROVED ARCHITECTURAL AND MECHANICAL PLANS.
 24. THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PUMPING, HYDRANTS, FIRE DEPARTMENT CONNECTION POINTS, OR OTHER WATER USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ANY REQUIRED BACKFLOW PREVENTOR.
 25. CONTRACTOR SHALL COORDINATE THE RELOCATION OF ANY EXISTING POWER/TELEPHONE POLES OR LINES WITH THE LOCAL UTILITY COMPANY AND NOTIFY THE CORRESPONDING PROPERTY OWNER PRIOR TO COMMENCEMENT OF ANY WORK INCLUDING STATE DOT ENCROACHMENT PERMITS WHERE APPLICABLE.
 26. ALL IRRIGATION SLEEVES UNDER PAVED AREAS SHALL BE 4" IN DIAMETER, SCHEDULE 40 PIPE. SLEEVES SHALL BE EXTENDED A MINIMUM OF 12" BEYOND EDGE OF PAVEMENT AND PIPE ENDS SHALL BE CAPPED USING PVC CAPS AND MARKED WITH PVC OR WOOD POSTS. SITE CONTRACTOR SHALL COORDINATE WITH IRRIGATION CONTRACTOR FOR FINAL LOCATION OF SLEEVES PRIOR TO PARKING LOT BASE COURSE.
 27. CONTRACTOR SHALL INSTALL ALL NECESSARY CONDUITS AND WIRING FOR POWER AND CONTROL OF SIGN AND SITE LIGHTING. REFER TO BUILDING ELECTRICAL PLANS FOR DETAILS.

GRAPHIC SCALE
 20 0 20
 1 INCH = 20 FT

NOTE: THIS SCALE APPLIES FOR 24"x36" SHEETS ONLY

811

HUSSEY, GAY, BELL & DEYOUNG, INC. Consulting Engineers of SC
 474 Wando Park Blvd, Suite 201
 Mt. Pleasant, SC 29564



HUSSEY GAY BELL
 Established 1958
 474 Wando Park Blvd, Suite 201, Mt. Pleasant, SC 29564 / T:843.949.7500

REVISIONS:

NO.	DATE	DESCRIPTION

DESIGNED LP	DRAWN LP	CHECKED BG

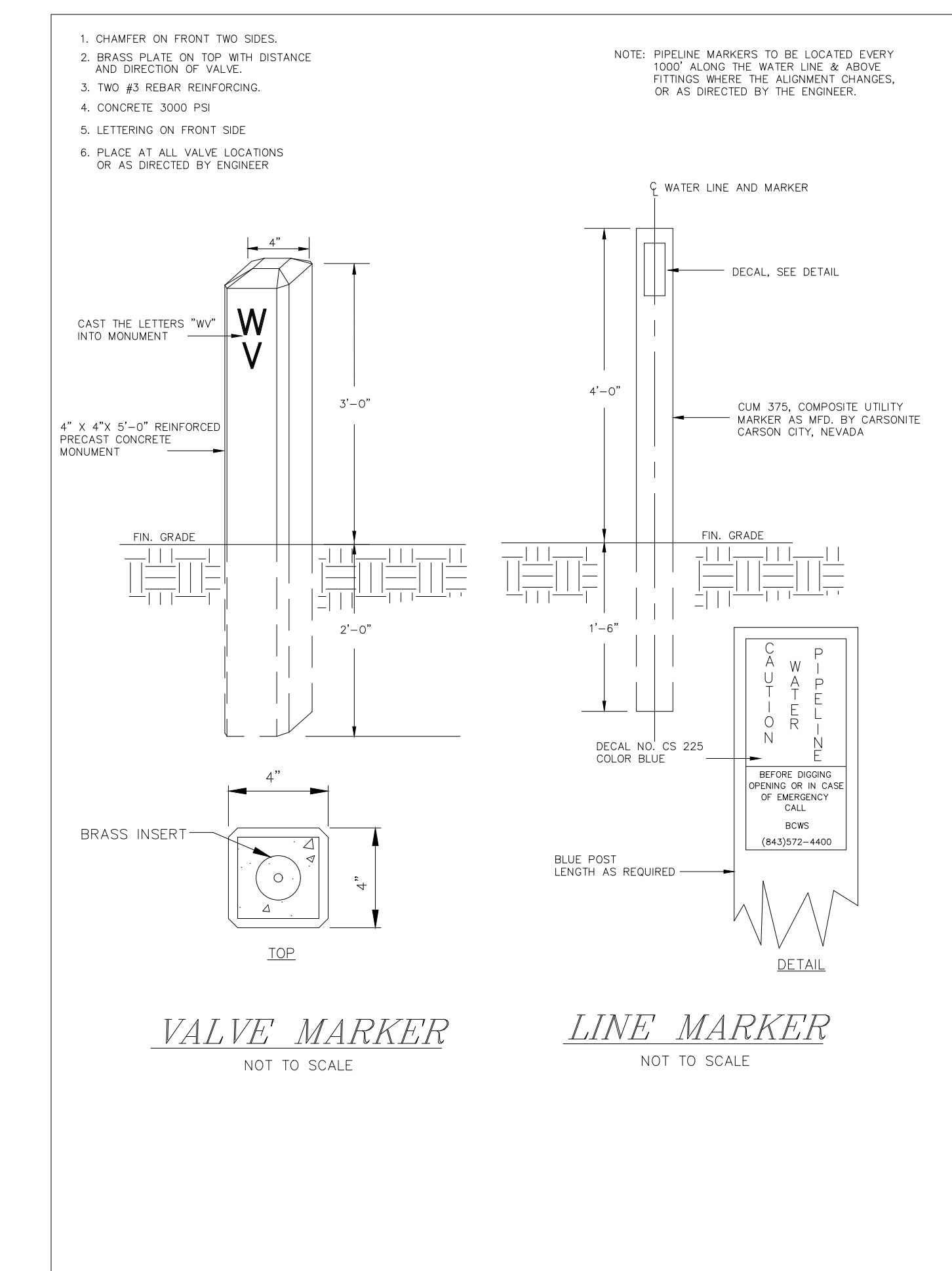
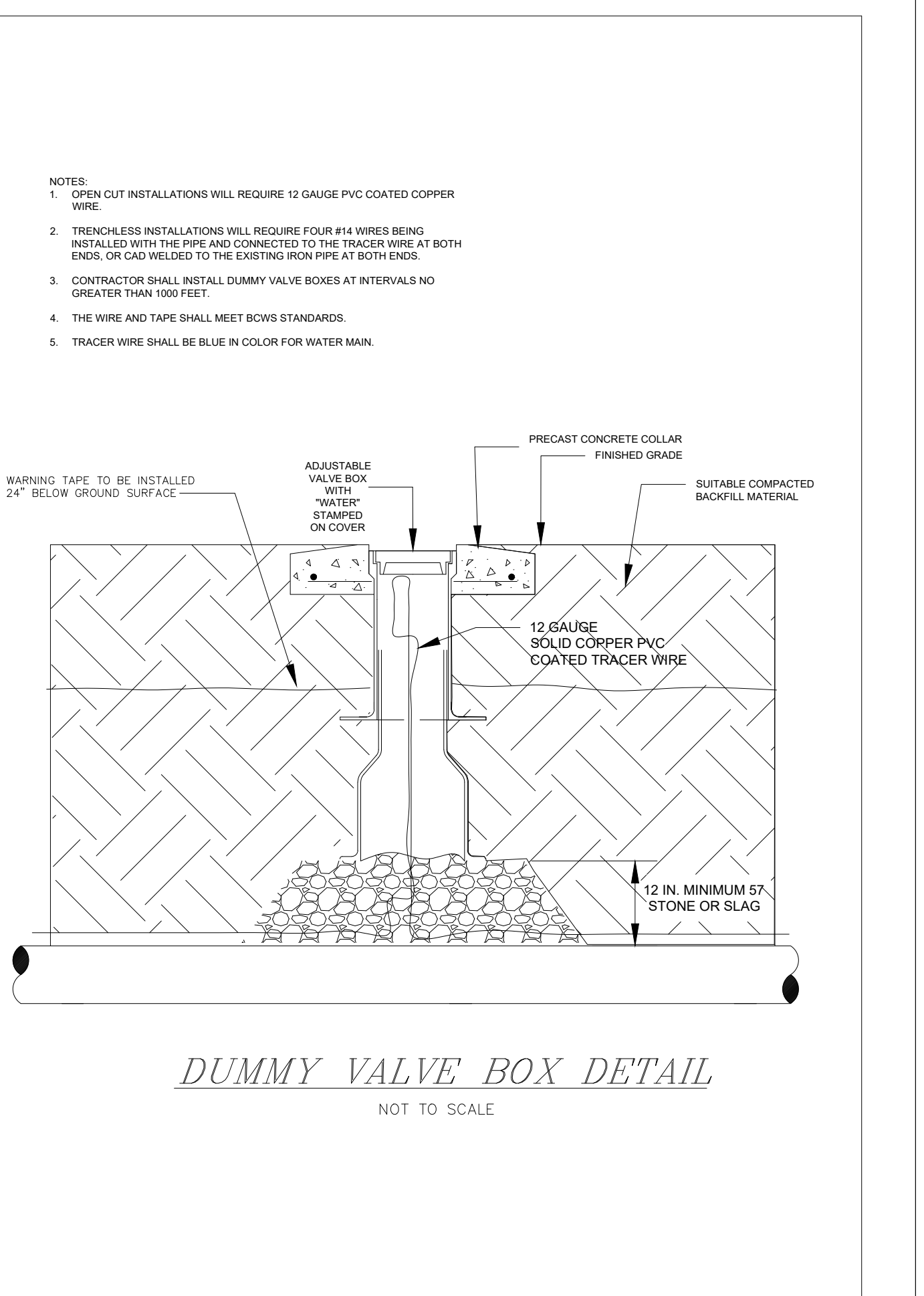
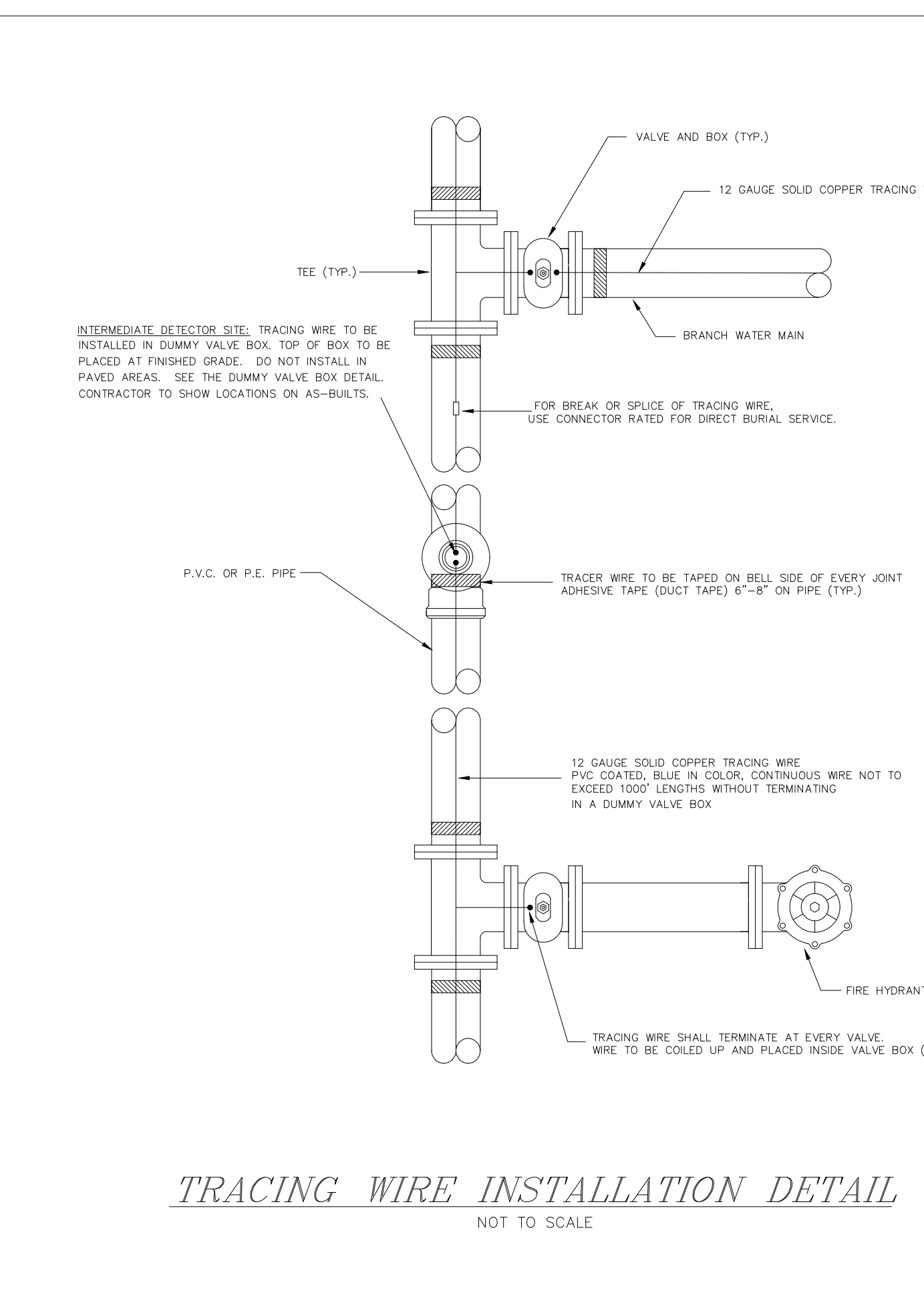
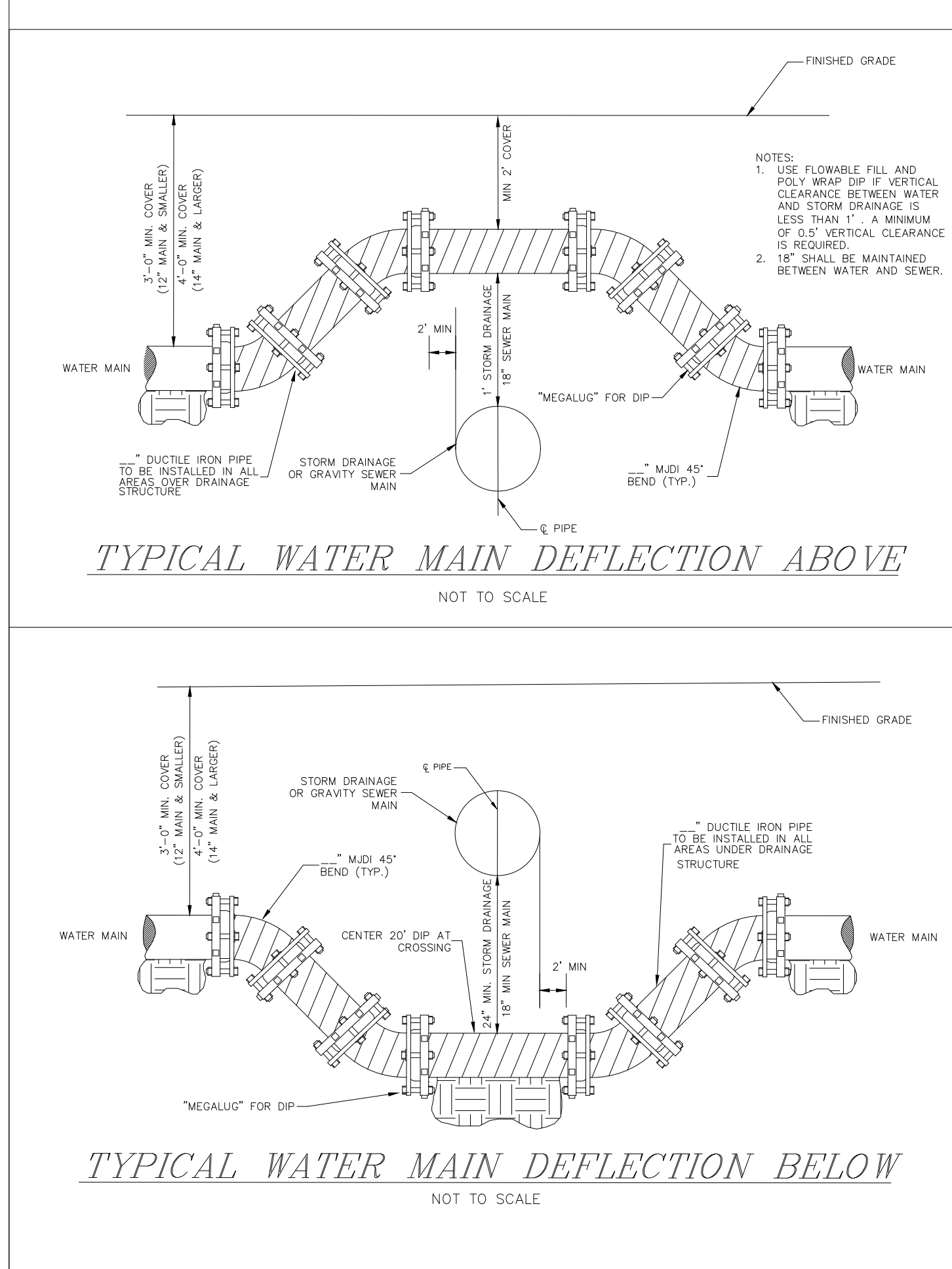
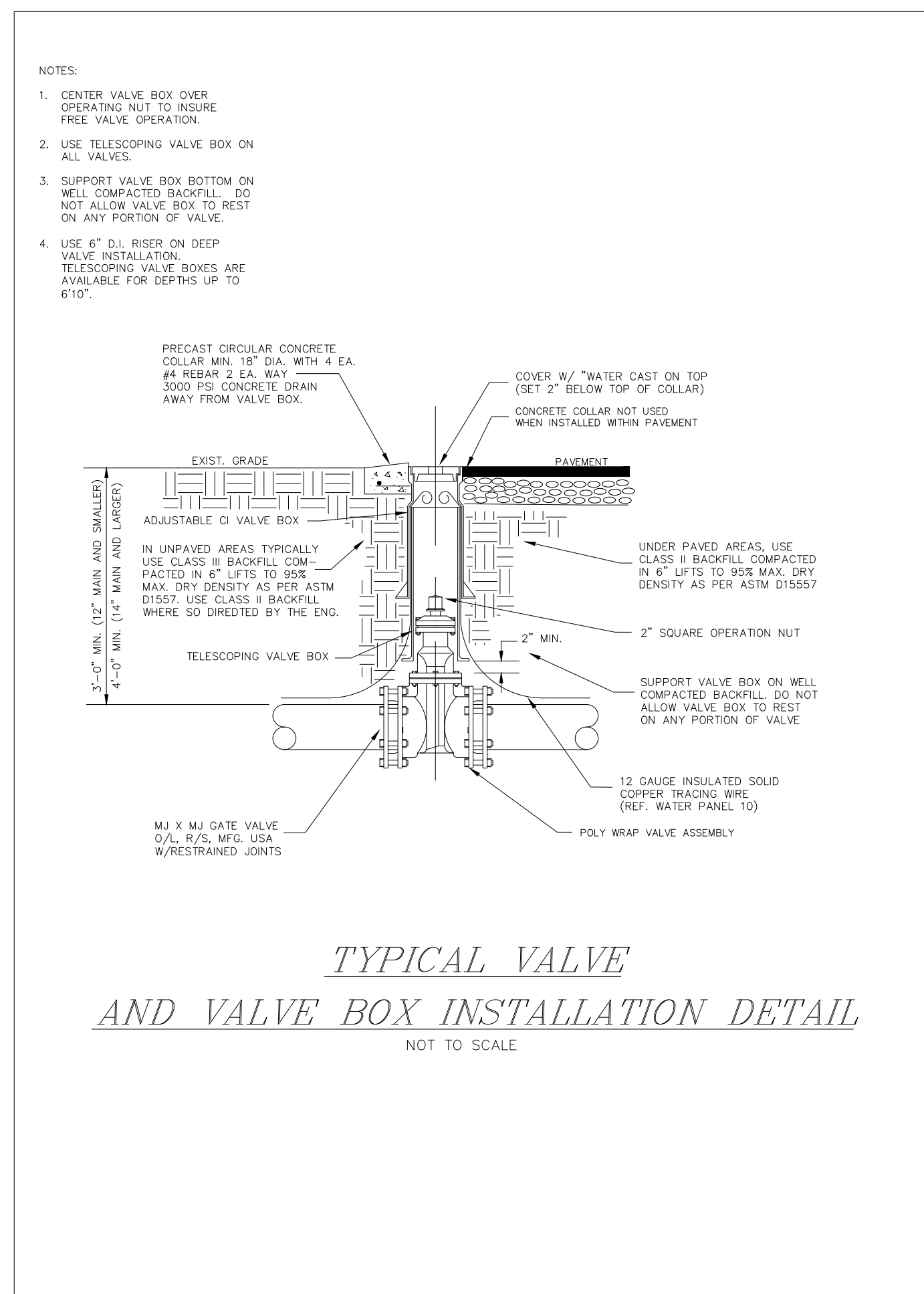
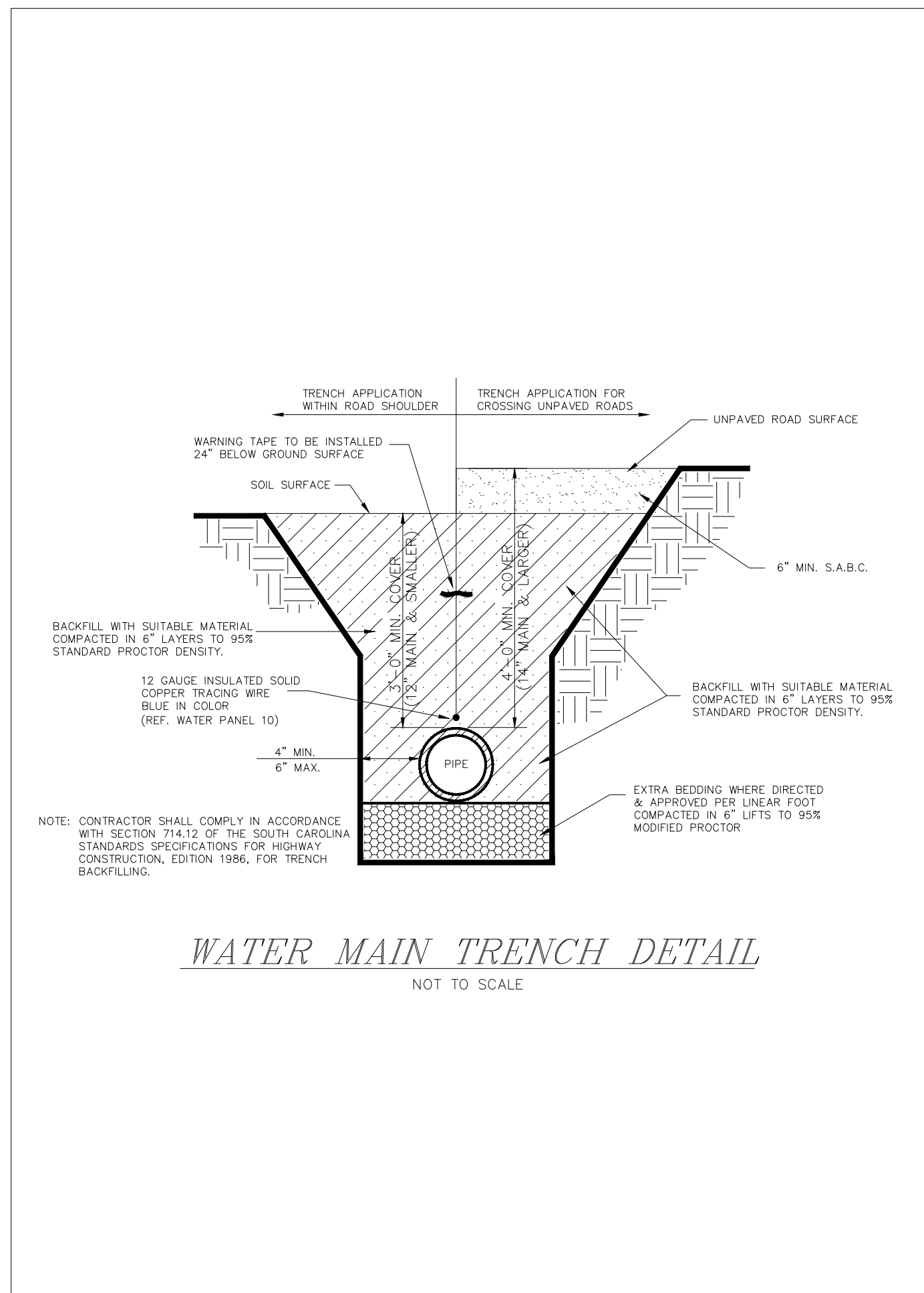
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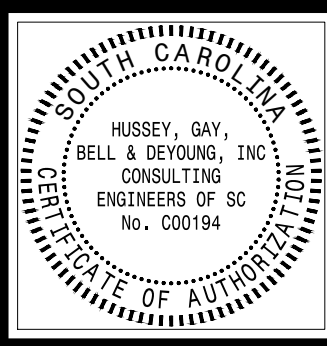
SCALE: AS NOTED

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION
 UTILITY PLAN

DRAWING NUMBER
C-401



PERMITTING - NOT FOR CONSTRUCTION



HUSSEY GAY BELL
 Established 1958
 474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T:843.849.7500

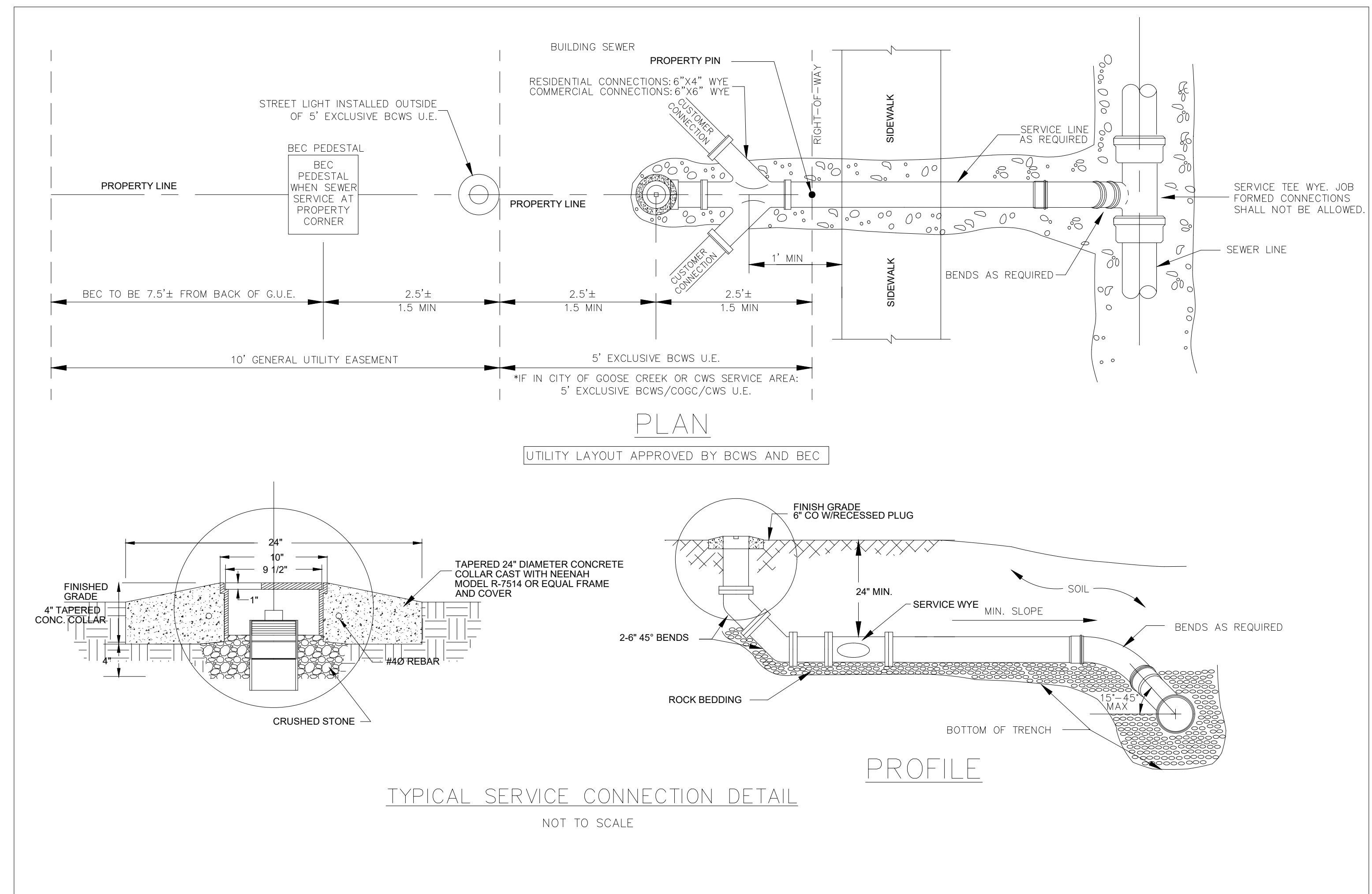
REVISIONS:

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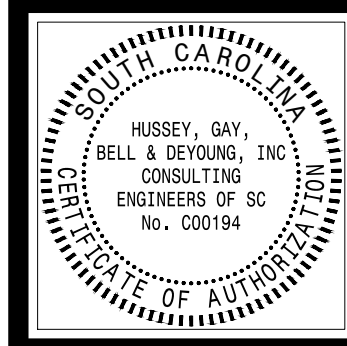
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JOB NO. 423153600		
SCALE: AS NOTED		

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION
 WATER DETAILS

DRAWING NUMBER
C-450



PERMITTING - NOT FOR CONSTRUCTION



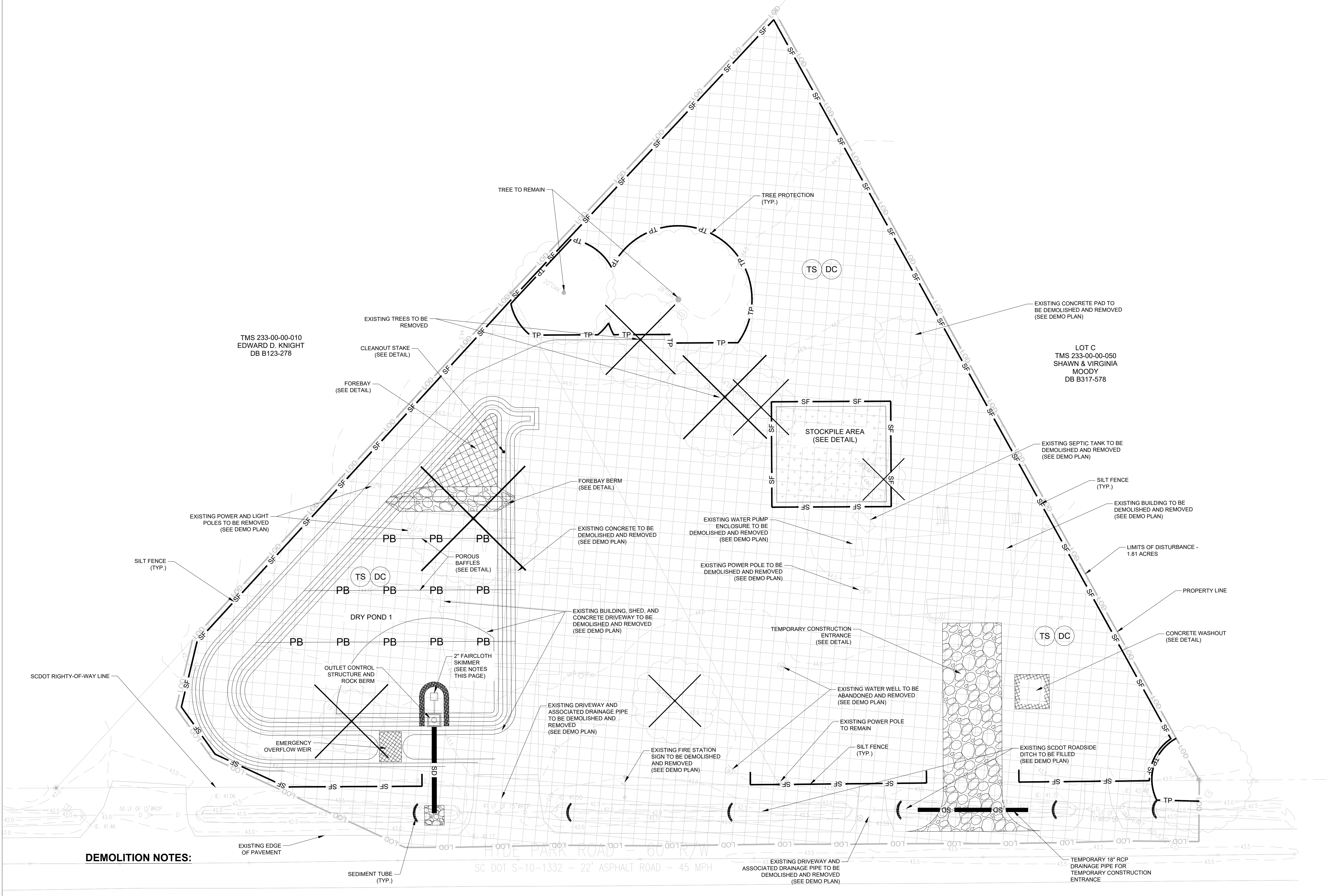
HUSSEY GAY BELL
 — Established 1958 —
 474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T:843.849.7500

REVISIONS:

DESIGNED LP	DRAWN LP	CHECKED BG
DATE:		
JOB NO. 423153600		
SCALE: AS NOTED		

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR
MITCHELL CONSTRUCTION
 SEWER DETAILS

DRAWING NUMBER
C-451



MAP NOTE:

1. ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: ATLANTIC SURVEYING, INC.
2. TRANSFER OF SITE BENCHMARK(S) IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL ONLY BE COMPLETED BY A SURVEYOR LICENSED/REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
3. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING BENCHMARK PRIOR TO ANY CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. FIELD VERIFICATION CAN BE ACCOMPLISHED BY CHECKING A MINIMUM OF TWO FIXED OBJECTS DISPLAYED ON THE SURVEY (i.e. MANHOLE RIM, STORM GRATE, PIPE INVERTS, ETC.).
4. VERTICAL DATUM IS NAVD 88.

LEGEND

SF	SILT FENCE, SEE DETAIL
TP	TREE PROTECTION
SD	STORM DRAIN PIPE
[AI]	STORM INLET PROTECTION, SEE DETAIL
[SI]	SILT SACK INLET PROTECTION, SEE DETAIL
[PS]	TEMPORARY SEEDING AREA
PS	TEMPORARY SEEDING
DC	DUST CONTROL

SEQUENCE OF CONSTRUCTION

PHASE I

1. OBTAIN NPDES PERMIT.
2. SCHEDULE AND CONDUCT ON-SITE SWPPP PRECONSTRUCTION CONFERENCE WITH OWNER, CONTRACTOR, ENGINEER, OWNER'S SWPPP INSPECTOR, AND CHARLESTON COUNTY INSPECTOR PRIOR TO BEGINNING LAND DISTURBANCE ACTIVITIES.
3. NOTIFY DHEC/OCRM OFFICE AND MS-4 OPERATOR 48 HOURS PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES AND ENSURE TOWN OF MONCK'S CORNER CLEARING AND GRADING PERMIT HAS BEEN APPROVED.
4. CLEAR AND GRUB ONLY PORTIONS OF THE SITE NECESSARY TO INSTALL TEMPORARY CONSTRUCTION ENTRANCE, TREE PROTECTION, AND SILT FENCE. OBTAIN APPROVAL FOR INSTALLATION.

PHASE II

5. CLEAR AND GRUB PORTIONS OF THE SITE WITHIN LIMITS OF DISTURBANCE.
6. USE EROSION CONTROL PREVENTION PER PLANS AS NECESSARY.
7. GRADE SITE TO PLAN GRADES.
8. INSTALL SITE UTILITIES AND STORM DRAINAGE PIPING, DETENTION PONDS, AND INLETS.
9. INSTALL NEW INLET PROTECTION.
10. BEGIN BUILDING CONSTRUCTION AND ROADS AND PAVING.
11. REPLACE SILT FENCE INLET PROTECTION WITH SILT SACKS AS CURBS ARE CONSTRUCTED AND PAVING BASE COURSE IS INSTALLED.

PHASE III

12. PROCEED WITH FINE GRADING, LANDSCAPING AND GRASSING.
13. REMOVE EROSION PROTECTION DEVICES AFTER SOIL STABILIZATION AND AGENCY APPROVAL.
14. REMOVE SEDIMENT CAUSED BY CONSTRUCTION FROM EXISTING PONDS.
15. PERFORM CONTINUOUS MAINTENANCE UNTIL OWNER TAKEOVER OR PER CONTRACT.

SWPPP NOTES:

1. REFERENCE SWPPP NOTES ON SHEET C-550.
2. REFERENCE SCDHEC STANDARD NOTES ON SHEET C-550.
3. APPROVED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, EXCAVATION, FILLING OR OTHER LAND-DISTURBING ACTIVITIES, EXCEPT THOSE OPERATIONS NEEDED TO INSTALL SUCH MEASURES.
4. WHEN ACCESSING SITE, PROVIDE A 100' LONG BY 24' WIDE TEMPORARY CONSTRUCTION ENTRANCE STABILIZED WITH GEOTEXTILE FABRIC AND 6" THICK STONE GRAVEL SURFACE COURSE. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
5. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION.
6. TEMPORARY SEDIMENT TRAPS SHALL BE ACCEPTED WITH THE UNDERSTANDING THAT MASONRY INLETS SHALL BE LEFT LOW ENOUGH, DURING CONSTRUCTION, FOR WATER TO ENTER.
7. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF PRECIPITATION DURING ANY 24-HOUR PERIOD. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED. AS NECESSARY, ALL SEDIMENT CONTROL FEATURES SHALL BE MAINTAINED UNTIL FINAL STABILIZATION HAS BEEN OBTAINED.
8. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFF-SITE SEDIMENTATION IF DEEMED NECESSARY BY ON-SITE INSPECTION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND SITE IS STABILIZED.
9. FAILURE TO PROPERLY INSTALL AND MAINTAIN EROSION CONTROL PRACTICES SHALL RESULT IN CONSTRUCTION BEING HALTED.
10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED, UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN TWENTY ONE (21) DAYS.
11. ESTABLISHMENT OF PERMANENT AND TEMPORARY VEGETATION FOR THIS PROJECT SHALL CONSIST OF THE FOLLOWING: THE GROUND PREPARATION, FURNISHING AND PLANTING, SEEDING, FERTILIZING AND MULCHING OF ALL DISTURBED AREAS IN THE PROJECT AREA.

SWPPP KEY NOTES:

1. CONSTRUCTION ENTRANCE. SEE DETAIL SHEET C-551
2. SILT FENCE, TYP. SEE DETAIL SHEET C-551
3. CONCRETE WASHOUT. SEE DETAIL SHEET C-551
4. TREE PROTECTION. SEE DETAIL SHEET C-551
5. DOUBLE ROW SILT FENCE.

LEGEND:

X	UTILITY OR FENCE TO BE DEMOLISHED
TP	TREE PROTECTION FENCE
X	TREES TO BE REMOVED

GRAPHIC SCALE

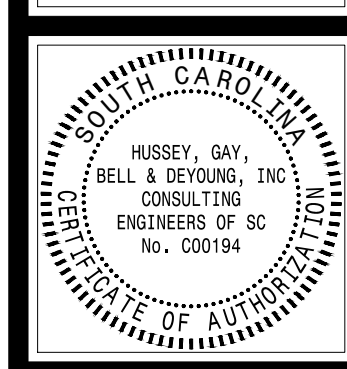
1 INCH = 20 FT

NOTE: THIS SCALE APPLIES FOR 24"x36" SHEETS ONLY

DEMOLITION NOTES:

1. OWNER'S REPRESENTATIVE, GOVERNING AGENCIES AND UTILITY COMPANIES SHALL BE NOTIFIED 72 HOURS PRIOR TO ANY DEMOLITION OPERATIONS.
2. CONTRACTOR SHALL COORDINATE WITH GOVERNING AGENCIES AND ALL UTILITY COMPANIES TO COORDINATE TIMING OF AND RESPONSIBILITY OF DEMOLITION OPERATIONS INCLUDING ANY REQUIRED INSPECTIONS.
3. CONTRACTOR SHALL REMOVE ALL BUILDINGS, FOUNDATIONS, PAVEMENT, CURB, SIGNS, LIGHTS, FENCES, TREES, SHRUBS, UTILITIES AND ANY OTHER STRUCTURES AS INDICATED AND DISPOSE OF THAT MATERIAL IN A LEGAL MANNER.
4. UTILITIES TO REMAIN IN-PLACE SHALL BE PROTECTED BY THE CONTRACTOR FROM DAMAGE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING UTILITIES.
5. DEMOLITION OF ASPHALT PAVING SHALL INCLUDE REMOVAL OF SURFACE AND ANY BINDER SECTIONS. AFTER ASPHALT REMOVAL, THE SITE GEOTECHNICAL ENGINEER SHALL INSPECT STONE BASE COURSE TO DETERMINE CONDITION. IF EXISTING STONE BASE COURSE IS ACCEPTABLE TO PROJECT GEOTECHNICAL ENGINEER, IT SHALL BE REUSED. UNACCEPTABLE STONE BASE COURSE SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
6. ALL EXISTING PAVEMENT EDGES SHALL BE SAW CUT TO A STRAIGHT EDGE. ALL NEW PAVEMENT EDGES SHALL BE CONSTRUCTED IN A STRAIGHT AND NEAT MANNER.
7. ANY HISTORICALLY SIGNIFICANT ARTICLES (CORNER STONES, ETC.) FOUND DURING CONSTRUCTION SHALL BE PRESENTED TO THE OWNER FOR CLASSIFICATION. CONTRACTOR SHALL STOP WORK IN THE AREA OF THE FIND AND IMMEDIATELY NOTIFY THE OWNER AND GOVERNING AGENCIES FOR DIRECTION. THE OWNER SHALL RETAIN ALL MATERIAL IT CONSIDERS SIGNIFICANT. ALL OTHER MATERIAL SHALL BE DISPOSED OF OFF-SITE.
8. THE CONTRACTOR SHALL TURN OVER ANY REMOVED PUBLIC UTILITY ITEMS, i.e. WATER METERS, TO THE UTILITY DEPARTMENT. ALL OTHER MATERIAL SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
9. ALL DEBRIS FROM DEMOLITION OPERATIONS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
10. TREES TO BE SAVED SHALL BE PROTECTED FROM CONSTRUCTION DISTURBANCE PER DETAIL. TREES NOT SHOWN TO BE SAVED SHALL BE REMOVED.
11. THE CONTRACTOR IS REQUIRED TO MEET ALL APPLICABLE LOCAL, STATE, OSHA AND FEDERAL REGULATIONS CONCERNING PROJECT SAFETY AND ASSUMES FULL RESPONSIBILITY FOR SAFETY ON THE PROJECT.
12. CONTRACTOR IS TO VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO AND DURING CONSTRUCTION AND REPORT ANY CONFLICTS OR DISCREPANCIES TO THE ENGINEER.
13. CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING AS NECESSARY AND AT THE DIRECTION OF THE OWNER OR GOVERNING AGENCIES FOR PUBLIC SAFETY AND JOB SITE SECURITY.
14. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO ANY SITE CONSTRUCTION OR DEMOLITION. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, BOTH MAIN AND SERVICE LINES FOR THE FOLLOWING:
 - POTABLE WATER LINES
 - SANITARY SEWER LINES
 - ELECTRIC LINES (OVERHEAD AND UNDERGROUND)
 - GAS LINES
15. TELEPHONE LINES
16. CABLE TELEVISION LINES
17. STORMWATER CONVEYANCE LINES
18. ANY SUBCONTRACTOR BIDDING ON THIS JOB SHALL BE REQUIRED TO PERFORM A SITE VISIT PRIOR TO SUBMITTAL OF BID.
19. UNLESS SPECIFICALLY NOTED ON THE PLAN TO BE ABANDONED IN PLACE OR PROTECTED, ALL UTILITIES ON SITE (OVERHEAD OR UNDERGROUND) SHALL BE ENTIRELY REMOVED TO THE PROPERTY LINE, OR SERVICE POLE. ENDS OF PIPES BEYOND PROPERTY LINE TO BE ABANDONED SHALL BE PROPERLY CAPPED OR PLUGGED AS REQUIRED BY GOVERNING UTILITY COMPANY.
20. DEMOLITION OF BUILDINGS SHALL INCLUDE ALL PORTIONS OF THE STRUCTURE, BOTH ABOVE GROUND AND SUBSURFACE.
21. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY TRAFFIC CONTROL MEASURES NECESSARY FOR DEMOLITION OPERATIONS.
22. DEMOLITION OF CONCRETE CURB, CURB AND GUTTER, AND SIDEWALK SHALL BE CONSIDERED TO EXTEND TO THE NEXT CONSTRUCTION JOINT PAST THE LIMITS SHOWN ON THE DEMOLITION PLAN.

PERMITTING - NOT FOR CONSTRUCTION



HUSSEY GAY BELL
Established 1958
474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T:843.849.7500

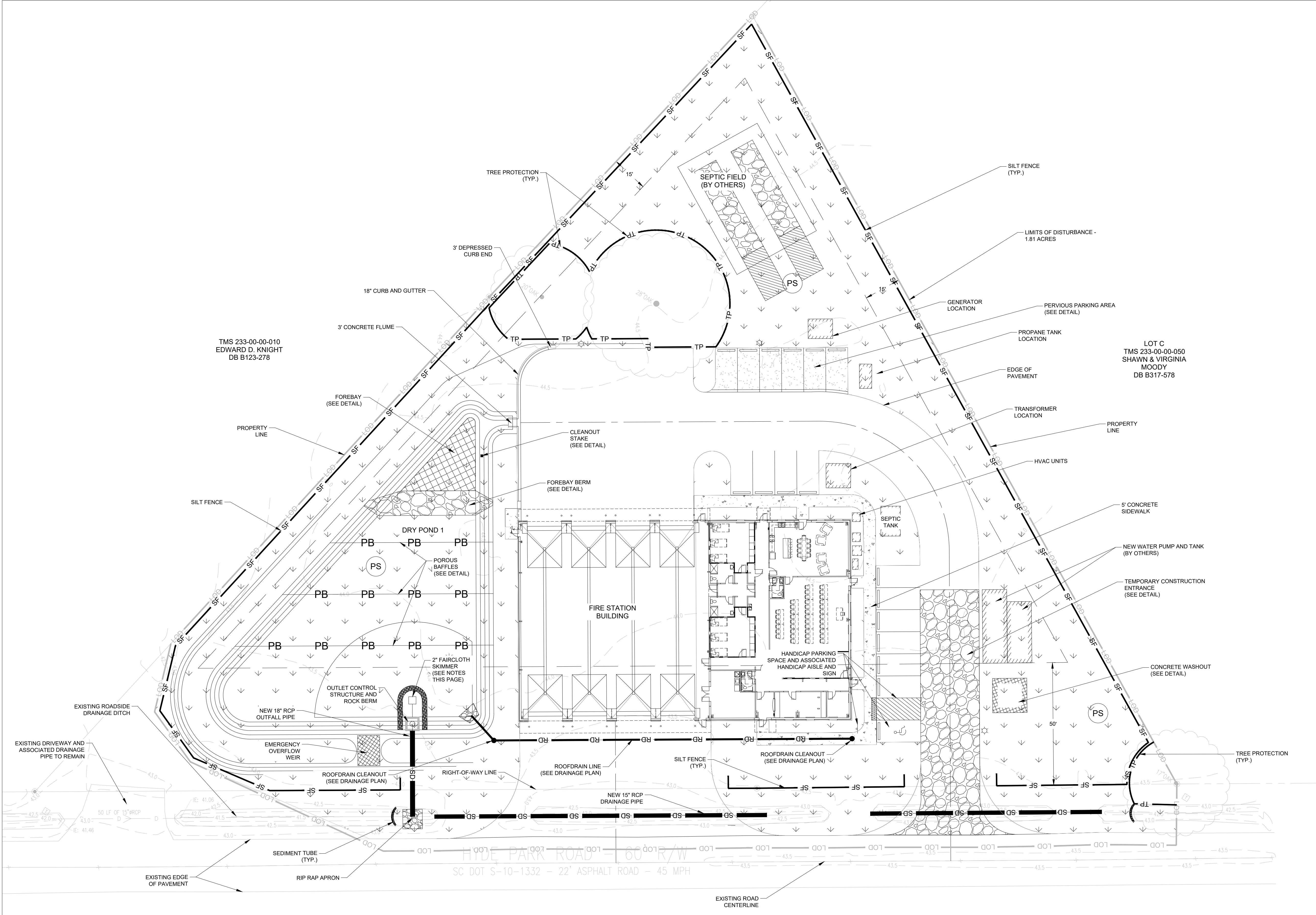
REVISIONS:

DESIGNED LP	DRAWN LP	CHECKED BG

DATE: _____
JOB NO. 423153600
SCALE: AS NOTED

ST. PAUL FIRE STATION #2
55% HYDE PARK RD
RAVENEL, SC
FOR
MITCHELL CONSTRUCTION
EROSION CONTROL PLAN - PHASE I

DRAWING NUMBER
C-501



MAP NOTE:

1. ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: ATLANTIC SURVEYING, INC.
2. TRANSFER OF SITE BENCHMARK(S) IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL ONLY BE COMPLETED BY A SURVEYOR LICENSED/REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
3. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING BENCHMARK PRIOR TO ANY CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. FIELD VERIFICATION CAN BE ACCOMPLISHED BY CHECKING A MINIMUM OF TWO FIXED OBJECTS DISPLAYED ON THE SURVEY (I.E. MANHOLE RIM, STORM GRATE, PIPE INVERTS, ETC.).
4. VERTICAL DATUM IS NAVD 88.

LEGEND

- SF SILT FENCE, SEE DETAIL
- Storm Inlet Structures
- SD STORM DRAIN PIPE
- Storm Inlet Protection, SEE DETAIL
- SILT SACK INLET PROTECTION, SEE DETAIL
- PERMANENT SEEDING AREA
- PS PERMANENT SEEDING

SEQUENCE OF CONSTRUCTION

PHASE I

1. OBTAIN NPDES PERMIT.
2. SCHEDULE AND CONDUCT ON-SITE SWPPP PRECONSTRUCTION CONFERENCE WITH OWNER, CONTRACTOR, ENGINEER, OWNER'S SWPPP INSPECTOR, AND CHARLESTON COUNTY INSPECTOR PRIOR TO BEGINNING LAND DISTURBANCE ACTIVITIES.
3. NOTIFY DHEC/ORM OFFICE AND MS-4 OPERATOR 48 HOURS PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES.
4. CLEAR AND GRUB ONLY PORTIONS OF THE SITE NECESSARY TO INSTALL TEMPORARY CONSTRUCTION ENTRANCE, TREE PROTECTION, AND SILT FENCE. OBTAIN APPROVAL FOR INSTALLATION.

PHASE II

5. CLEAR AND GRUB PORTIONS OF THE SITE WITHIN LIMITS OF DISTURBANCE.
6. USE EROSION CONTROL PREVENTION PER PLANS AS NECESSARY.
7. GRADE SITE TO PLAN GRADES.
8. INSTALL SITE UTILITIES AND STORM DRAINAGE PIPING, DETENTION PONDS, AND INLETS.
9. INSTALL NEW INLET PROTECTION.
10. BEGIN BUILDING CONSTRUCTION AND ROADS AND PAVING.
11. REPLACE SILT FENCE INLET PROTECTION WITH SILT SACKS AS CURBS ARE CONSTRUCTED AND PAVING BASE COURSE IS INSTALLED.

PHASE III

12. PROCEED WITH FINE GRADING, LANDSCAPING AND GRASSING.
13. REMOVE EROSION PROTECTION DEVICES AFTER SOIL STABILIZATION AND AGENCY APPROVAL.
14. REMOVE SEDIMENT CAUSED BY CONSTRUCTION FROM EXISTING PONDS.
15. PERFORM CONTINUOUS MAINTENANCE UNTIL OWNER TAKEOVER OR PER CONTRACT.

SWPPP NOTES:

1. REFERENCE SWPPP NOTES ON SHEET C-550.
2. REFERENCE SCDHEC STANDARD NOTES ON SHEET C-550.
3. APPROVED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, EXCAVATION, FILLING OR OTHER LAND-DISTURBING ACTIVITIES, EXCEPT THOSE OPERATIONS NEEDED TO INSTALL SUCH MEASURES.
4. WHEN ACCESSING SITE, PROVIDE A 100' LONG BY 24" WIDE TEMPORARY CONSTRUCTION ENTRANCE STABILIZED WITH GEOTEXTILE FABRIC AND 6" THICK STONE GRAVEL SURFACE COURSE. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
5. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION.
6. TEMPORARY SEDIMENT TRAPS SHALL BE ACCEPTED WITH THE UNDERSTANDING THAT MASONRY INLETS SHALL BE LEFT LOW ENOUGH, DURING CONSTRUCTION, FOR WATER TO ENTER.
7. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF PRECIPITATION DURING ANY 24-HOUR PERIOD. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED, AS NECESSARY. ALL SEDIMENT CONTROL FEATURES SHALL BE MAINTAINED UNTIL FINAL STABILIZATION HAS BEEN OBTAINED.
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9. FAILURE TO PROPERLY INSTALL AND MAINTAIN EROSION CONTROL PRACTICES SHALL RESULT IN CONSTRUCTION BEING HALTED.
10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED, UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN TWENTY ONE (21) DAYS.
11. ESTABLISHMENT OF PERMANENT AND TEMPORARY VEGETATION FOR THIS PROJECT SHALL CONSIST OF THE FOLLOWING: THE GROUND PREPARATION, FURNISHING AND PLANTING, SEEDING, FERTILIZING AND MULCHING OF ALL DISTURBED AREAS IN THE PROJECT AREA.

SWPPP KEY NOTES:

1. CONSTRUCTION ENTRANCE. SEE DETAIL SHEET C-551
2. SILT FENCE, TYP. SEE DETAIL SHEET C-551
3. CONCRETE WASHOUT. SEE DETAIL SHEET C-551
4. TREE PROTECTION. SEE DETAIL SHEET C-551
5. DOUBLE ROW SILT FENCE.

LEGEND:

- X X X UTILITY OR FENCE TO BE DEMOLISHED
- TP TP TREE PROTECTION FENCE
- X X TREES TO BE REMOVED

GRAPHIC SCALE
1 INCH = 20 FT
NOTE: THIS SCALE APPLIES FOR 24"x36" SHEETS ONLY

DEMOLITION NOTES:

1. OWNER'S REPRESENTATIVE, GOVERNING AGENCIES AND UTILITY COMPANIES SHALL BE NOTIFIED 72 HOURS PRIOR TO ANY DEMOLITION OPERATIONS.
2. CONTRACTOR SHALL COORDINATE WITH GOVERNING AGENCIES AND ALL UTILITY COMPANIES TO COORDINATE TIMING OF AND RESPONSIBILITY OF DEMOLITION OPERATIONS INCLUDING ANY REQUIRED INSPECTIONS.
3. CONTRACTOR SHALL REMOVE ALL BUILDINGS, FOUNDATIONS, PAVEMENT, CURB, SIGNS, LIGHTS, FENCES, TREES, SHRUBS, UTILITIES AND ANY OTHER STRUCTURES AS INDICATED AND DISPOSE OF THAT MATERIAL IN A LEGAL MANNER.
4. UTILITIES TO REMAIN IN-PLACE SHALL BE PROTECTED BY THE CONTRACTOR FROM DAMAGE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING UTILITIES.
5. DEMOLITION OF ASPHALT PAVING SHALL INCLUDE REMOVAL OF SURFACE AND ANY BINDER SECTIONS. AFTER ASPHALT REMOVAL, THE SITE GEOTECHNICAL ENGINEER SHALL INSPECT STONE BASE COURSE TO DETERMINE CONDITION. IF EXISTING STONE BASE COURSE IS ACCEPTABLE TO PROJECT GEOTECHNICAL ENGINEER, IT SHALL BE REUSED. UNACCEPTABLE STONE BASE COURSE SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
6. ALL EXISTING PAVEMENT EDGES SHALL BE SAW CUT TO A STRAIGHT EDGE. ALL NEW PAVEMENT EDGES SHALL BE CONSTRUCTED IN A STRAIGHT AND NEAT MANNER.
7. ANY HISTORICALLY SIGNIFICANT ARTICLES (CORNER STONES, ETC.) FOUND DURING CONSTRUCTION SHALL BE PRESENTED TO THE OWNER FOR CLASSIFICATION. CONTRACTOR SHALL STOP WORK IN THE AREA OF THE FIND AND IMMEDIATELY NOTIFY THE OWNER AND GOVERNING AGENCIES FOR DIRECTION. THE OWNER SHALL RETAIN ALL MATERIAL IT CONSIDERS SIGNIFICANT. ALL OTHER MATERIAL SHALL BE

8. THE CONTRACTOR SHALL TURN OVER ANY REMOVED PUBLIC UTILITY ITEMS, I.E. WATER METERS, TO THE UTILITY DEPARTMENT. ALL OTHER MATERIAL SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
9. ALL DEBRIS FROM DEMOLITION OPERATIONS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
10. TREES TO BE SAVED SHALL BE PROTECTED FROM CONSTRUCTION DISTURBANCE PER DETAIL. TREES NOT SHOWN TO BE SAVED SHALL BE REMOVED.
11. THE CONTRACTOR IS REQUIRED TO MEET ALL APPLICABLE LOCAL, STATE, OSHA AND FEDERAL REGULATIONS CONCERNING PROJECT SAFETY AND ASSUMES FULL RESPONSIBILITY FOR SAFETY ON THE PROJECT.
12. CONTRACTOR IS TO VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO AND DURING CONSTRUCTION AND REPORT ANY CONFLICTS OR DISCREPANCIES TO THE ENGINEER.
13. CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING AS NECESSARY AND AT THE DIRECTION OF THE OWNER OR GOVERNING AGENCIES FOR PUBLIC SAFETY AND JOB SITE SECURITY.
14. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO ANY SITE CONSTRUCTION OR DEMOLITION. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, BOTH MAIN AND SERVICE LINES FOR THE FOLLOWING:
 - POTABLE WATER LINES
 - SANITARY SEWER LINES
 - ELECTRIC LINES (OVERHEAD AND UNDERGROUND)

- GAS LINES
- TELEPHONE LINES
- CABLE TELEVISION LINES
- STORMWATER CONVEYANCE LINES

15. ANY SUBCONTRACTOR BIDDING ON THIS JOB SHALL BE REQUIRED TO PERFORM A SITE VISIT PRIOR TO SUBMITTAL OF BID.

16. UNLESS SPECIFICALLY NOTED ON THE PLAN TO BE ABANDONED IN PLACE OR PROTECTED, ALL UTILITIES ON SITE (OVERHEAD OR UNDERGROUND) SHALL BE ENTIRELY REMOVED TO THE PROPERTY LINE, OR SERVICE POLE. ENDS OF PIPES BEYOND PROPERTY LINE TO BE ABANDONED SHALL BE PROPERLY CAPPED OR PLUGGED AS REQUIRED BY GOVERNING UTILITY COMPANY.

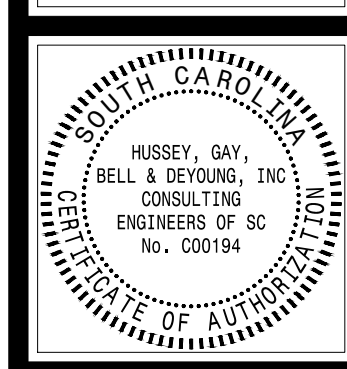
17. DEMOLITION OF BUILDINGS SHALL INCLUDE ALL PORTIONS OF THE STRUCTURE, BOTH ABOVE GROUND AND SUBSURFACE.

18. CONTRACTOR IS RESPONSIBLE FOR PROVIDED ANY TRAFFIC CONTROL MEASURES NECESSARY FOR DEMOLITION OPERATIONS.

19. DEMOLITION OF CONCRETE CURB, CURB AND GUTTER, AND SIDEWALK SHALL BE CONSIDERED TO EXTEND TO THE NEXT CONSTRUCTION JOINT PAST THE LIMITS SHOWN ON THE DEMOLITION PLAN.

SKIMMER NOTE:
TEMPORARY SKIMMER TO BE LEFT INSTALLED UNTIL FINAL STABILIZATION OF THE SITE HAS OCCURRED AND PERMISSION BY THE LOCAL AGENCY HAVING JURISDICTION HAS GRANTED APPROVAL FOR REMOVAL.

PERMITTING - NOT FOR CONSTRUCTION



HUSSEY GAY BELL
Established 1958
474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T:843.849.7500

REVISIONS:

DESIGNED LP	DRAWN LP	CHECKED BG

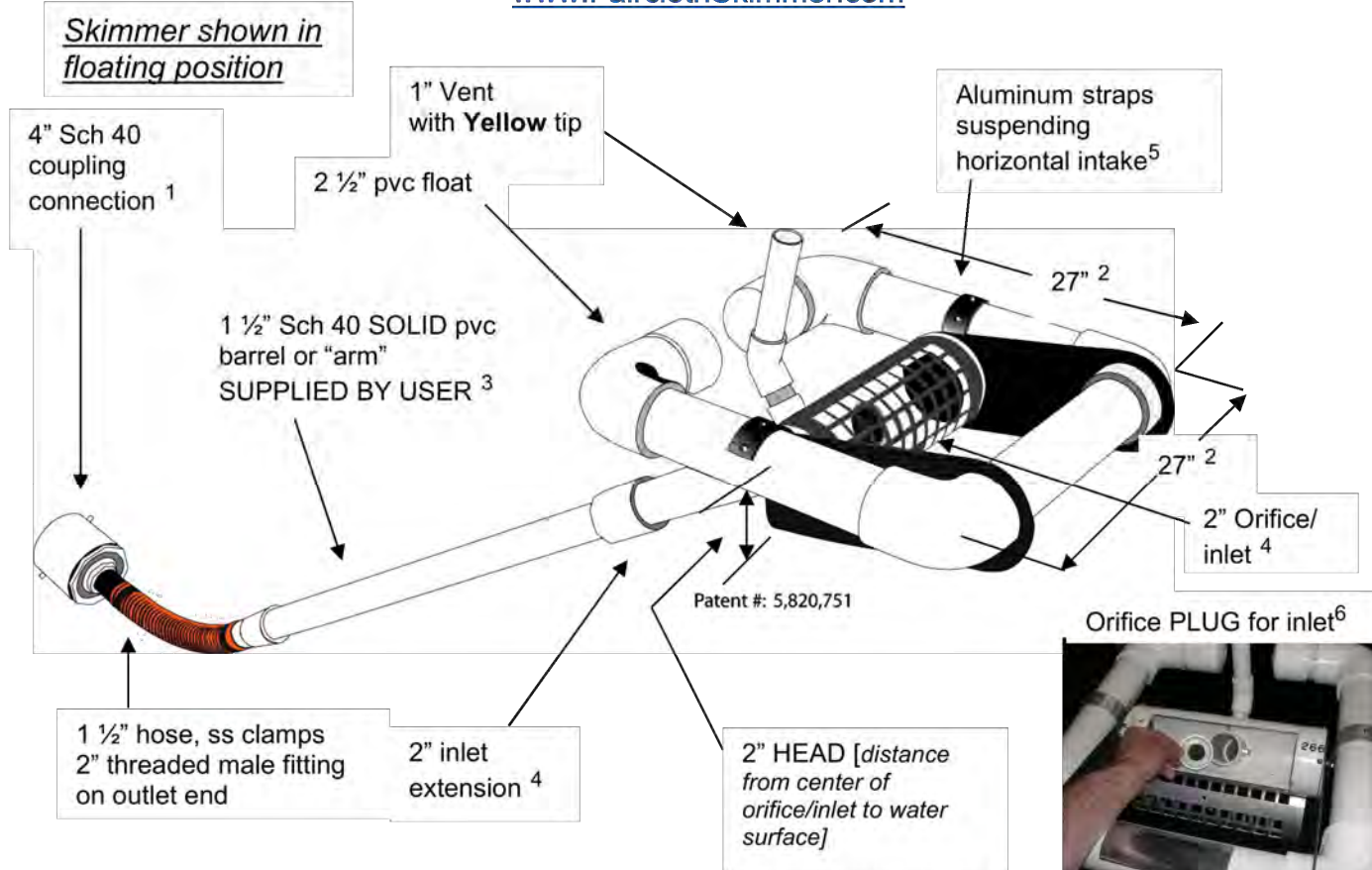
DATE: _____
JOB NO. 423153600
SCALE: AS NOTED

ST. PAUL FIRE STATION #2
55% HYDE PARK RD
RAVENAL, SC
FOR MITCHELL CONSTRUCTION
EROSION CONTROL PLAN - PHASE 2

DRAWING NUMBER
C-502

2" Faircloth Skimmer® Cut Sheet

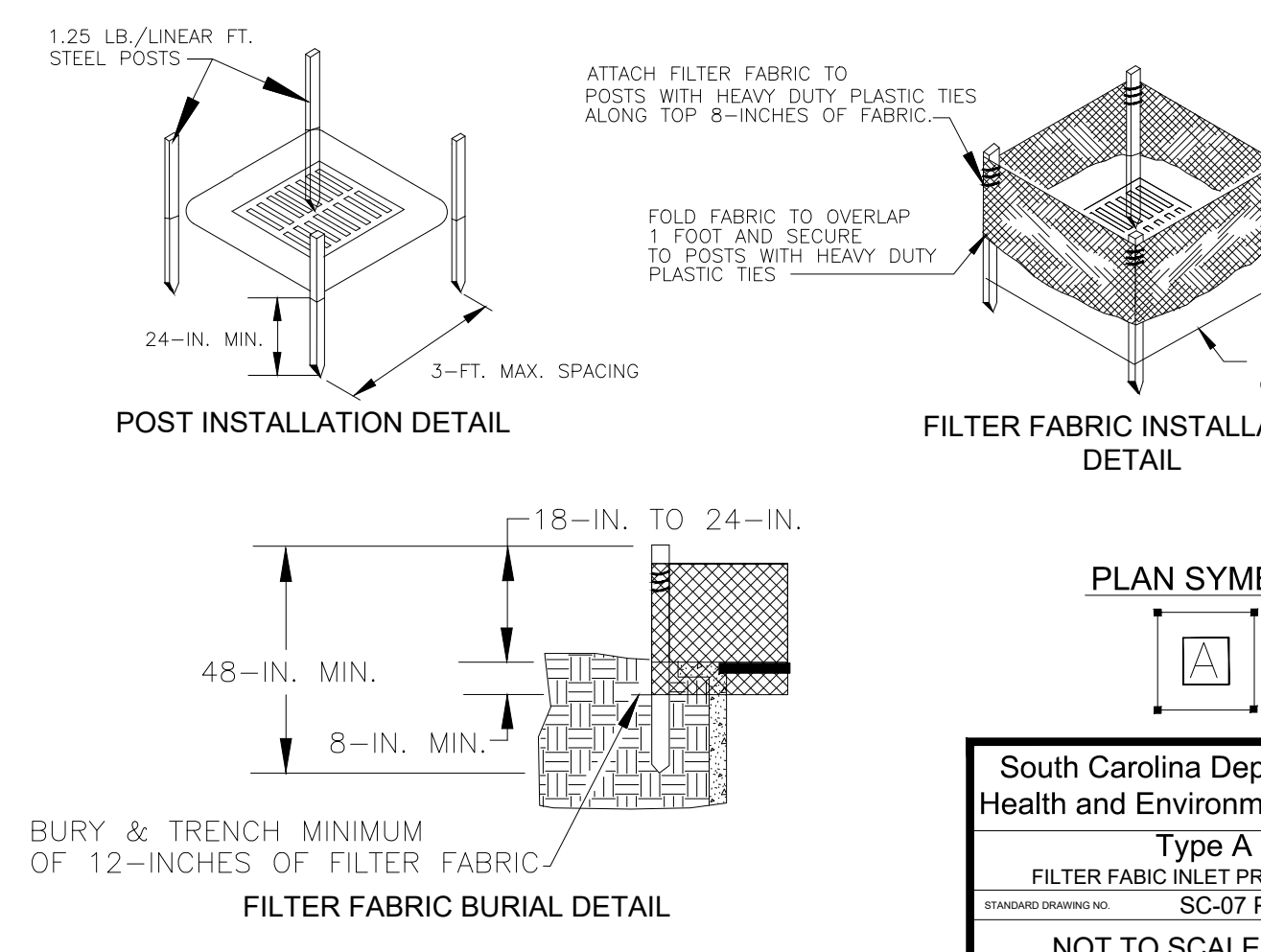
J. W. Faircloth & Son, Inc.
www.FairclothSkimmer.com



- Skimmer can be attached to a straight 4" sch 40 pipe through the dam but the pipe may need to be anchored to the bottom at the connection so it is secure. Coupling can be removed and hose attached to outlet using the threaded 2" fitting. Typical methods used: a) on a metal structure a steel stub out welded on the side at the bottom with a 2" threaded coupling or reducer(s); b) a concrete structure with a hole or orifice at the bottom - use a steel plate with a hole cut in it and coupling welded to it that will fit over the hole in the concrete and bolted to the structure with sealant; or c) grout a 4" pvc pipe in a hole in the concrete to connect the skimmer.
- Dimensions are approximate, not intended as plans for construction.
- Barrel (solid, not foam core pipe) should be 1.4 times the depth of water with a minimum length of 6' so the inlet can be pulled to the side for maintenance. If more than 8' long, weight may have to be added to inlet to counter the increased buoyancy.
- Orifice/inlet tapers down from 2" maximum inlet to a 1 1/2" barrel and hose. Barrel is smaller to reduce buoyancy and tendency to lift inlet but is sufficient for flow through inlet because of slope. The orifice/inlet can be reduced using the plug and cutter provided to control the outflow rate - see #6.
- Horizontal intake is 4" pipe between the straps with aluminum screen door for access to the inlet and orifice inside.
- Capacity: 3,283 cubic feet per day maximum with 2" inlet and 2" head. Inlet can be reduced by installing a smaller orifice using the plug and cutter provided to adjust flow rate for the particular drawdown time required. Please use the sizing template available at www.fairclothskimmer.com.
- Ships assembled. User glues inlet extension and barrel, installs vent, cuts orifice in plug and attaches to outlet pipe or structure. Includes float, flexible hose with fittings, rope, orifice plug & cutter. Does NOT include 1 1/2" Sch 40 SOLID pvc barrel or "arm" SUPPLIED BY USER.

2inchCut 5-1-19 © J. W. Faircloth & Son, Inc. 2019

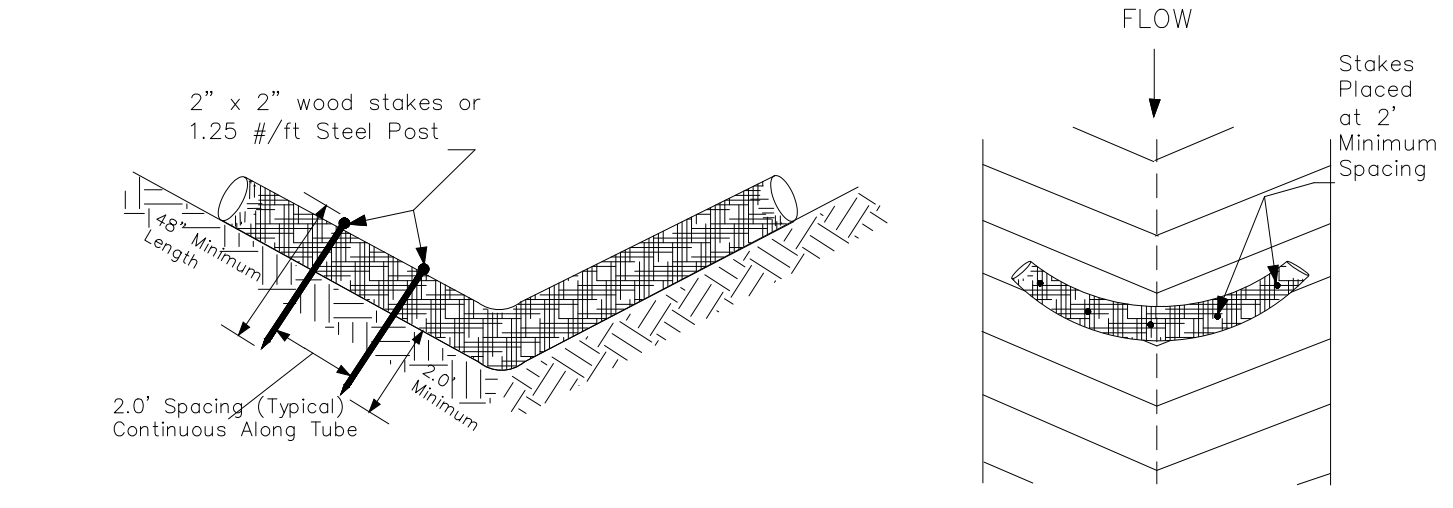
2" FAIRCLOTH SKIMMER n.t.s.



- #### TYPE A - FILTER FABRIC REQUIREMENTS
- Silt fence must be composed of woven geotextile filter fabric that consists of the following characteristics:
 - Composed of fibers consisting of long chain synthetic polymers or of at least 85% by weight of polypropylene, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other;
 - Free of any treatment or coating which might adversely affect its physical properties after installation;
 - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and,
 - Have a minimum width of 36-inches.
 - Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
 - 12-inches of the fabric should be placed within excavated trench and tied in when the trench is backfilled.
 - Filter Fabric shall be purchased in continuous rolls and cut to the length of the trench to avoid joints.
 - Filter fabric shall be installed at a minimum of 24-inches above the ground.
- #### TYPE A - POST REQUIREMENTS
- Silt fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics:
 - Composed of a high strength steel with a minimum yield strength of 50,000 psi;
 - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches;
 - Weight 1.25 pounds per foot (± 8%).
 - Posts shall be equipped with projections to aid in fastening of filter fabric.
 - Install posts to a minimum of 24-inches. A minimum height of 1- to 2-inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
 - Post spacing shall be at a maximum of 3-feet on center.

South Carolina Department of Health and Environmental Control
Type A
FILTER FABRIC INLET PROTECTION
SC-07 PAGE 2 of 2
GENERAL NOTES
FEBRUARY 2014
NOT TO SCALE

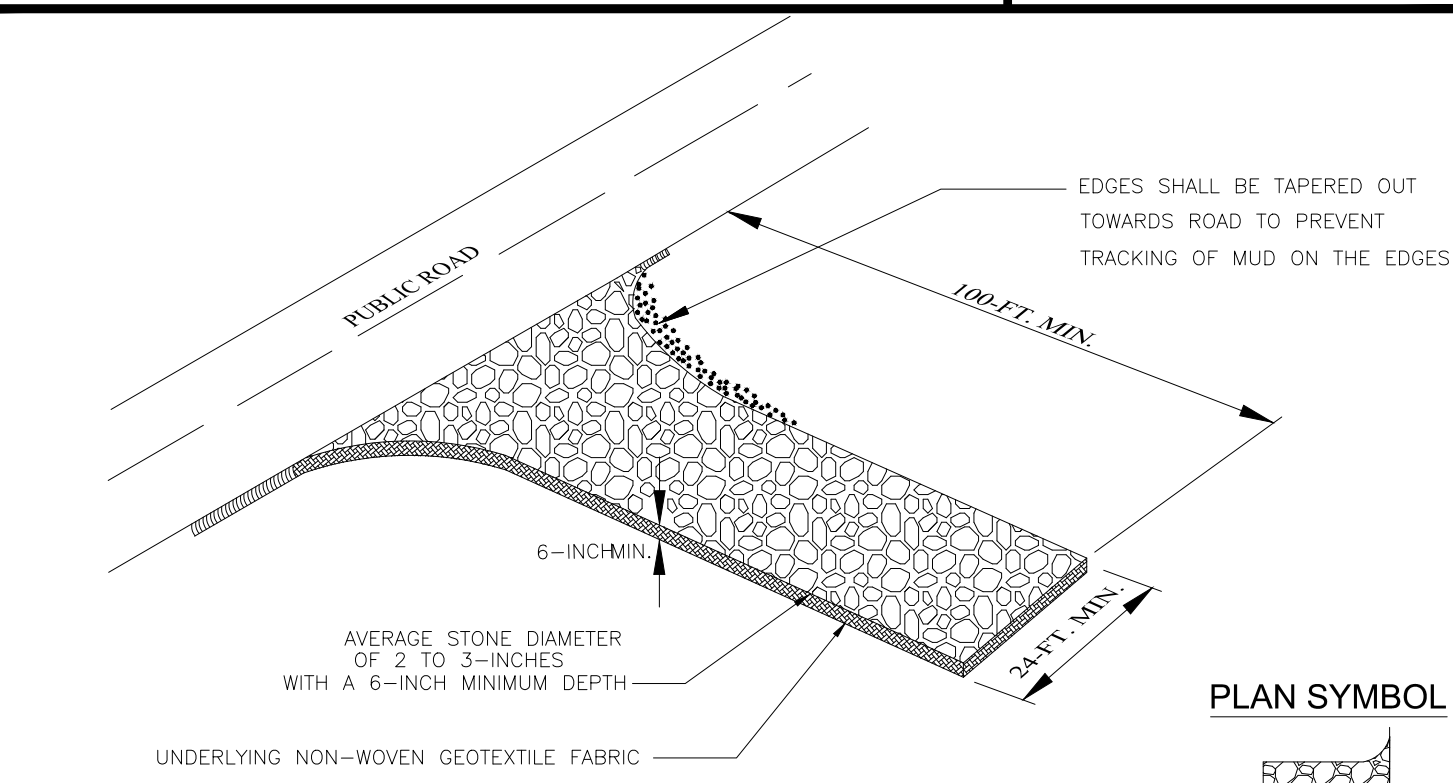
SEDIMENT TUBE INSTALLATION



SEDIMENT TUBE SPACING

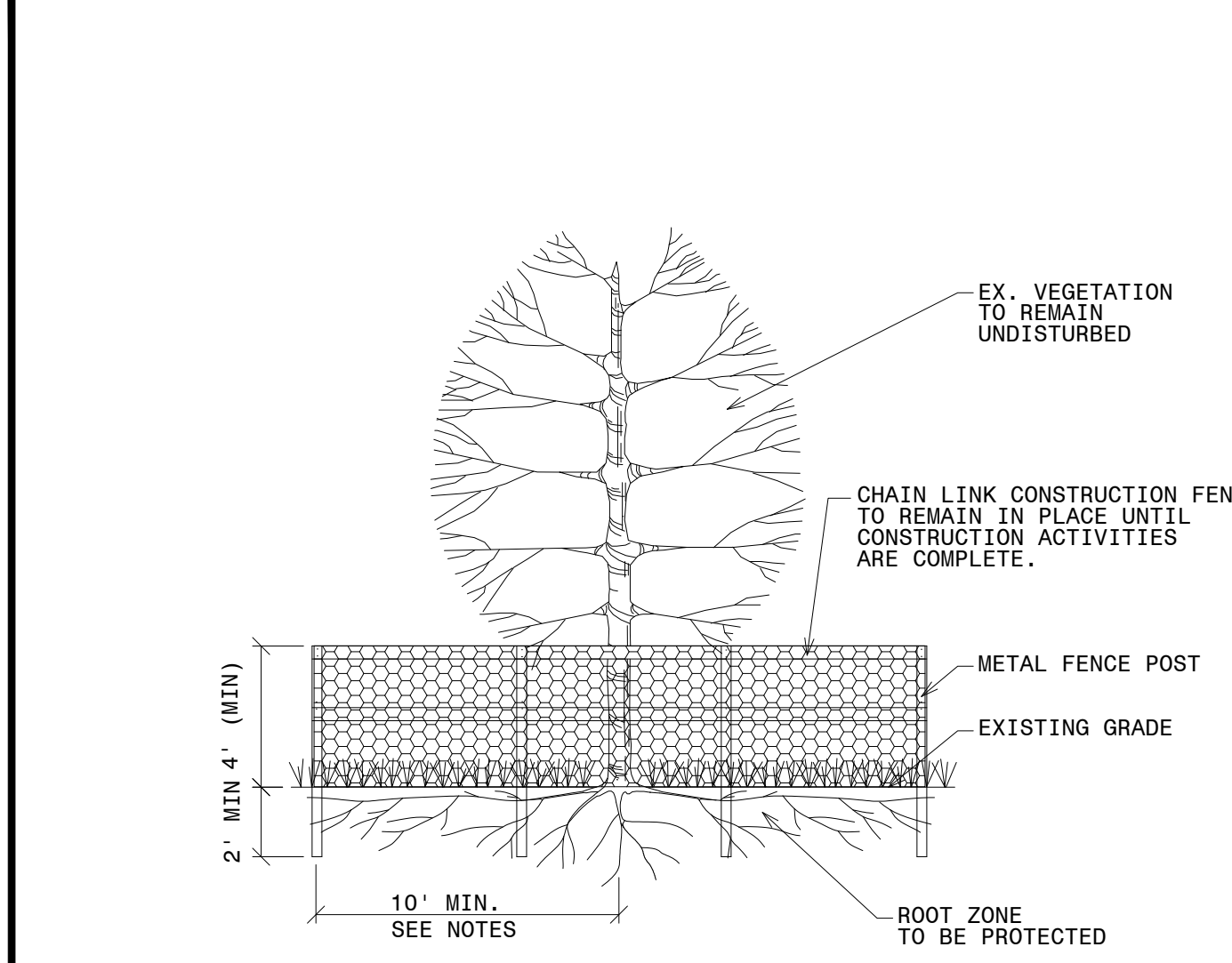
SLOPE	MAX. SEDIMENT TUBE SPACING
LESS THAN 2%	150-FEET
2%	100-FEET
3%	75-FEET
4%	50-FEET
5%	40-FEET
6%	30-FEET
GREATER THAN 6%	25-FEET

South Carolina Department of Health and Environmental Control
SC-05 PAGE 1 of 2
SEDIMENT TUBES
FEBRUARY 2014
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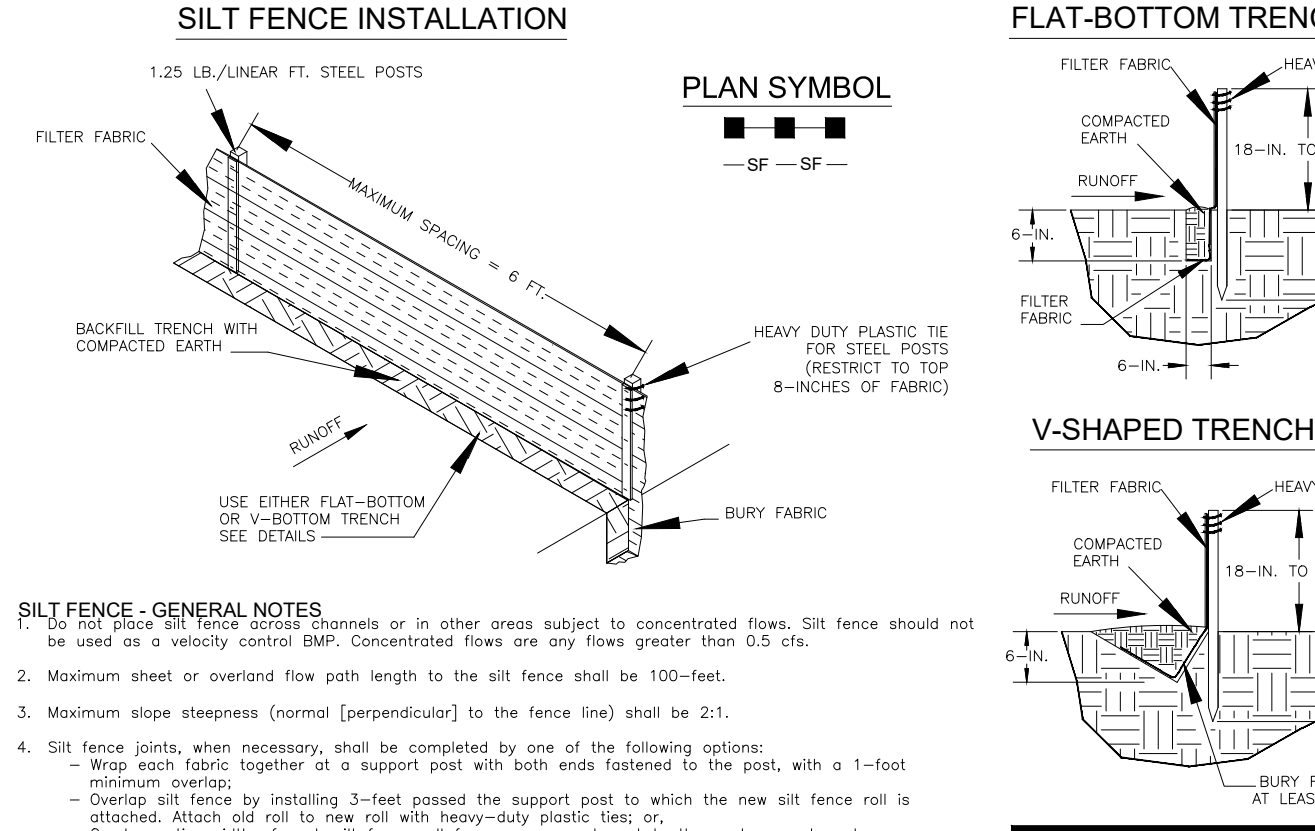
SPECIFICATION	SIZE
ROCK PAD THICKNESS	6 INCHES
ROCK PAD WIDTH	24 FEET
ROCK PAD LENGTH	100 FEET
ROCK PAD STONE SIZE	D = 2-3 INCHES

South Carolina Department of Health and Environmental Control
CONSTRUCTION ENTRANCE
SC-06 PAGE 2 of 2
GENERAL NOTES
FEBRUARY 2014
NOT TO SCALE



- #### PROTECTIVE TREE BARRICADE
- NOTES:
- TREE BARRICADES ARE REQUIRED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES, EXCEPT THOSE OPERATIONS REQUIRED TO INSTALL SUCH MEASURES.
 - MAINTAIN TREE BARRICADES AT ALL TIMES.
 - BARRICADE SHALL PROVIDE A DIAMETER OF PROTECTION EQUAL IN FEET TO 1" x TREE DIAMETER AT BREAST HEIGHT AS A RADIUS FROM THE TRUNK (I.E. A 24" D.B.H. TREE SHALL HAVE A BARRICADE 24 FEET ON ALL SIDES.)
 - ALL WORK DONE WITHIN PROTECTIVE BARRICADES IS TO BE DONE BY HAND.
 - ALL ROOTS TO BE REMOVED DURING DEVELOPMENT SHALL BE SEVERED CLEAN AND A 3" LAYER OF MULCH SHALL BE APPLIED OVER THE SURFACE OF EXPOSED ROOTS DURING DEVELOPMENT.
 - ALL PRUNING OF TREES SHALL BE DONE BY A QUALIFIED TREE SERVICE DURING DEVELOPMENT ACCORDING TO THE LATEST APPLICABLE ANSI PRUNING STANDARDS.
 - INSTALL SILT FENCE 1' OUT FROM TREE PROTECTION.

South Carolina Department of Health and Environmental Control
SILT FENCE
SC-03 PAGE 2 of 2
GENERAL NOTES
FEBRUARY 2014
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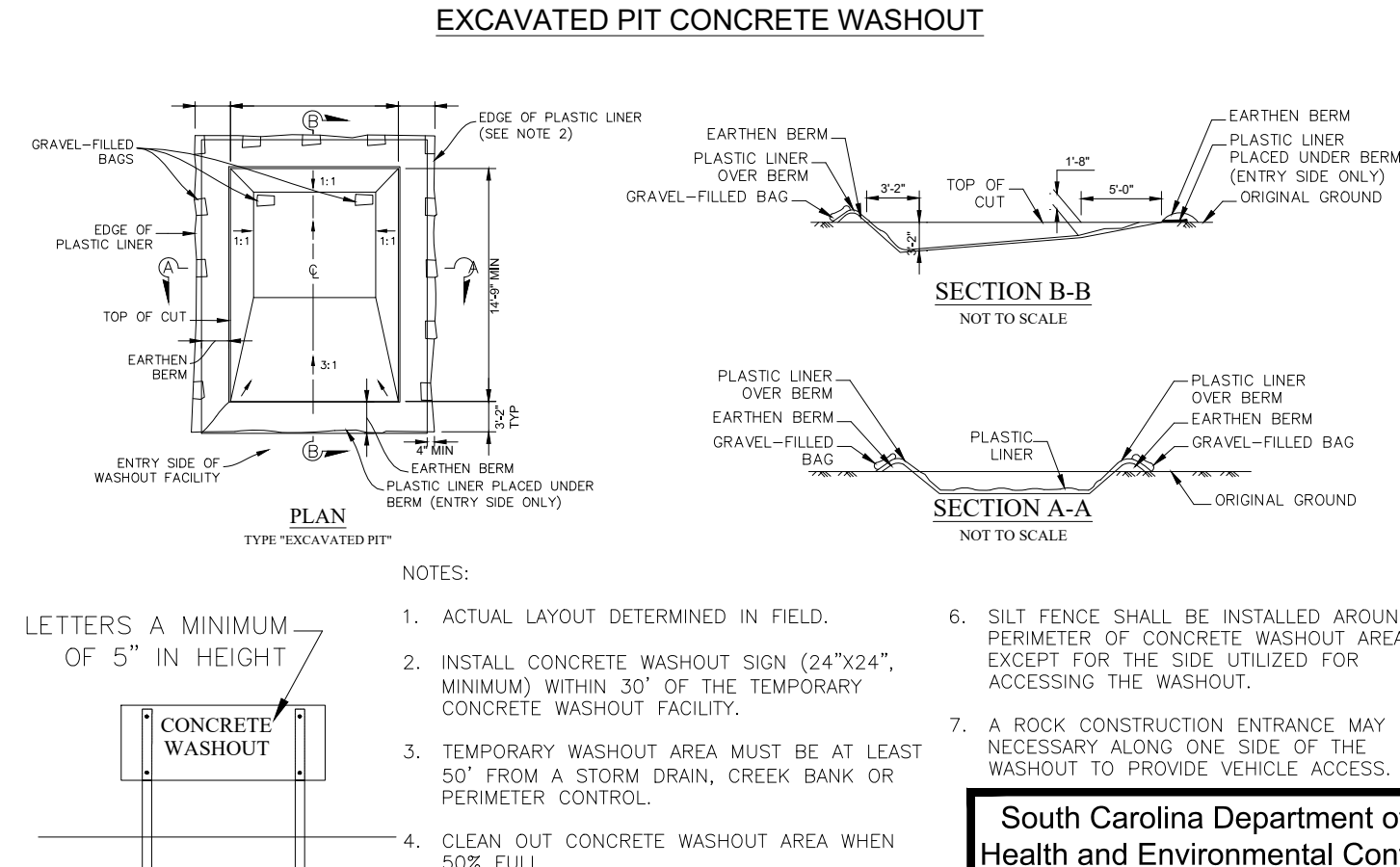
South Carolina Department of Health and Environmental Control
SILT FENCE
SC-03 Page 1 of 2
GENERAL NOTES
FEBRUARY 2014
NOT TO SCALE

- #### SILT FENCE - POST REQUIREMENTS
- Silt fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics:
 - Composed of a high strength steel with a minimum yield strength of 50,000 psi;
 - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches;
 - Weight 1.25 pounds per foot (± 8%).
 - Posts shall be equipped with projections to aid in fastening of filter fabric.
 - Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 1/2 inch steel, at a minimum. The metal soil stabilization plate should be completely buried.
 - Install posts to a minimum of 24-inches. A minimum height of 1- to 2-inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
 - Post spacing shall be at a maximum of 3-feet on center.
- #### SILT FENCE - FABRIC REQUIREMENTS
- Silt fence must be composed of woven geotextile filter fabric that consists of the following characteristics:
 - Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polypropylene, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other;
 - Free of any treatment or coating which might adversely affect its physical properties after installation;
 - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and,
 - Have a minimum width of 36-inches.
 - Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
 - 12-inches of the fabric should be placed within excavated trench and tied in when the trench is backfilled.
 - Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
 - Filter fabric shall be installed at a minimum of 24-inches above the ground.
- #### SILT FENCE - INSPECTION & MAINTENANCE
- The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
 - Regular inspections of silt fence shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
 - Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
 - Remove accumulated sediment when it reaches 1/3 the height of the silt fence.
 - Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
 - Check for areas where stormwater runoff has eroded a channel beneath the silt fence, or where the fabric has sagged or collapsed due to runoff overtopping the silt fence. Install check/drop-backs and/or re-install all fence, as necessary.
 - Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstances that may render the silt fence ineffective. Removed damaged fabric and re-install new silt fence immediately.
 - Silt fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

South Carolina Department of Health and Environmental Control
SILT FENCE
SC-03 PAGE 2 of 2
GENERAL NOTES
FEBRUARY 2014
NOT TO SCALE

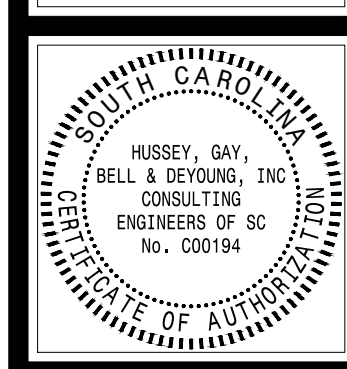
- #### CONSTRUCTION ENTRANCE - GENERAL NOTES
- Stabilized construction entrances should be used at all points where traffic will ingress/egress a construction site onto a public road or any impervious surfaces, such as parking lots.
 - Install a non-woven geotextile fabric prior to placing any stone.
 - Install a culvert pipe across the entrance when needed to provide positive drainage.
 - The entrance shall consist of 2-inch to 3-inch D50 stone placed at a minimum depth of 6-inches.
 - Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.
 - The edges of the entrance shall be tapered out towards the road to prevent tracking at the edge of the entrance.
 - Divert all surface runoff and drainage from the stone pad to a sediment trap or basin or other sediment trapping structure.
 - Limestone may not be used for the stone pad.
- #### CONSTR. ENTRANCE - INSPECTION & MAINTENANCE
- The key to functional construction entrances is weekly inspections, routine maintenance, and regular sediment removal.
 - Regular inspections of construction entrances shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
 - During regular inspections, check for mud and sediment buildup and pad integrity. Inspection frequencies may need to be more frequent during long periods of wet weather.
 - Reshape the stone pad as necessary for drainage and runoff control.
 - Wash or replace stones as needed and as directed by site inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce the amount of mud being carried off-site by vehicles. Frequent washing will extend the useful life of stone pad.
 - Immediately remove mud and sediment tracked or washed onto adjacent impervious surfaces by brushing or sweeping. Flushing should only be used when the water can be discharged to a sediment trap or basin.
 - During maintenance activities, any broken pavement should be repaired immediately.
 - Construction entrances should be removed after the site has reached final stabilization. Permanent vegetation should replace areas from which construction entrances have been removed, unless area will be converted to an impervious surface to serve post-construction.

South Carolina Department of Health and Environmental Control
CONSTRUCTION ENTRANCE
SC-06 PAGE 2 of 2
GENERAL NOTES
FEBRUARY 2014
NOT TO SCALE



South Carolina Department of Health and Environmental Control
CONCRETE WASHOUT
EXCAVATED PIT
RC-08 PAGE 1 of 1
GENERAL NOTES
FEBRUARY 2014
NOT TO SCALE

PERMITTING NOT FOR CONSTRUCTION



HUSSEY GAY BELL
Established 1958
474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T:843.849.7500

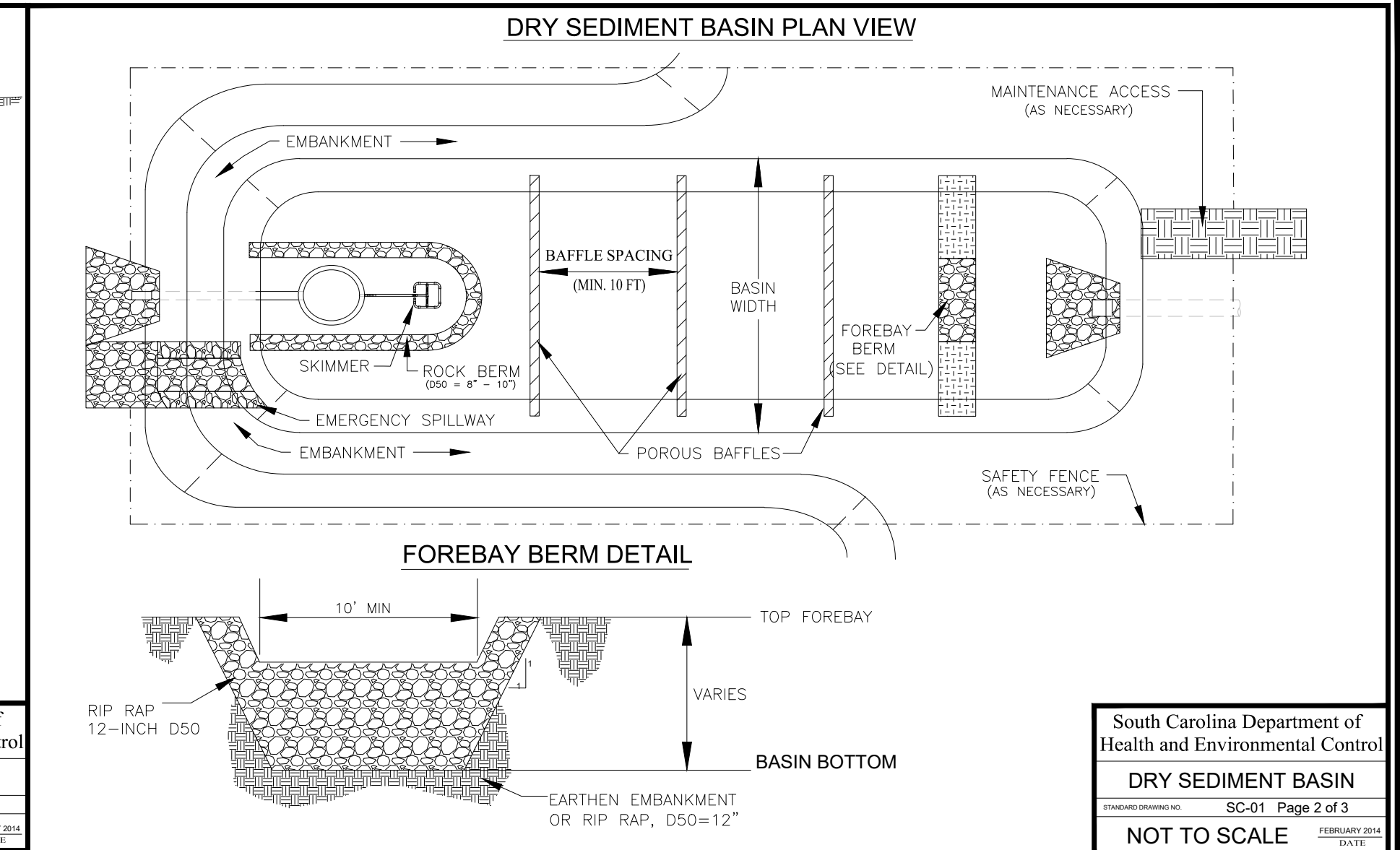
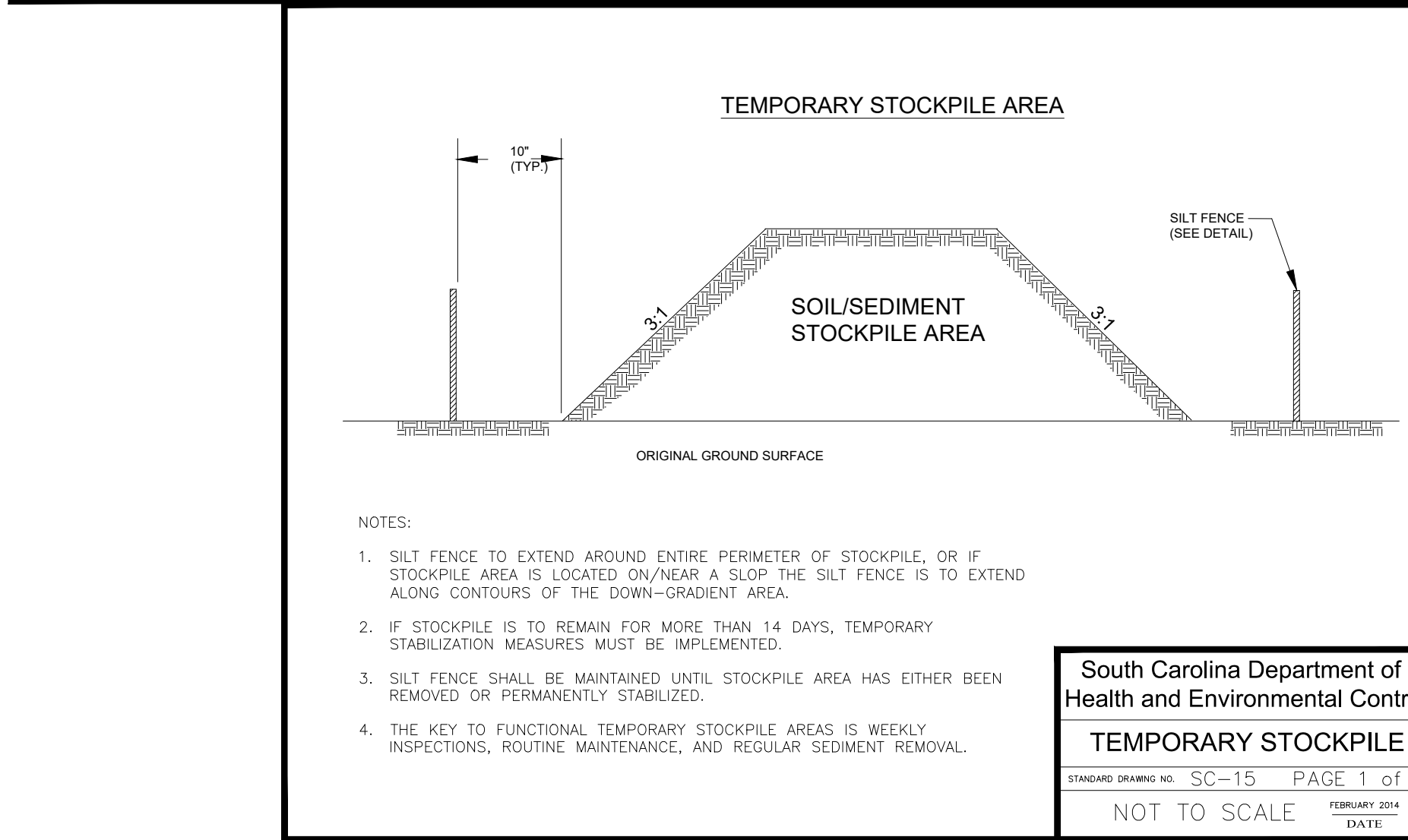
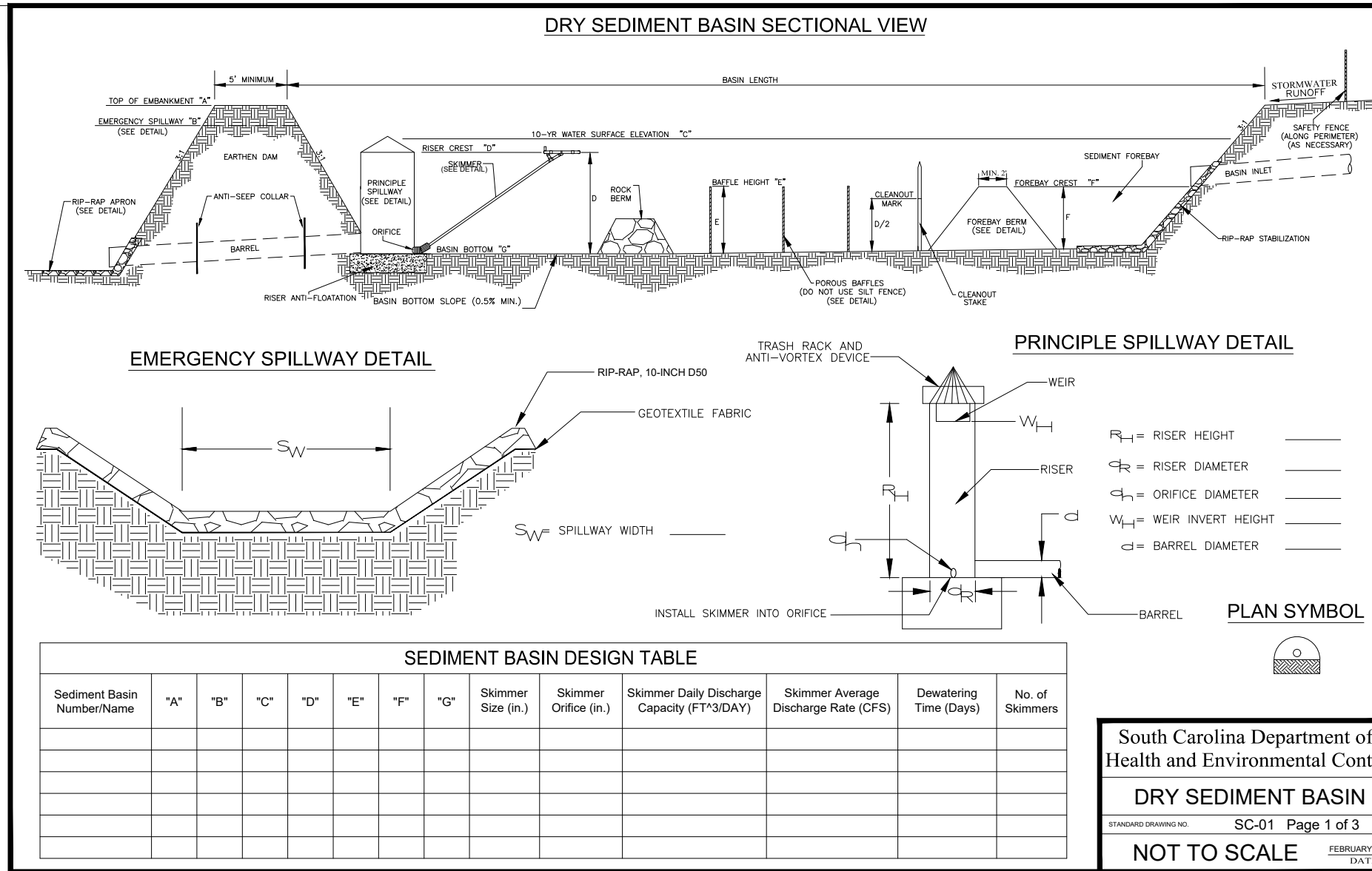
REVISIONS:

DESIGNED LP	DRAWN LP	CHECKED BG

DATE: _____
JOB NO. 423153600
SCALE: AS NOTED

ST. PAUL FIRE STATION #2
55% HYDE PARK RD
RAVENEL, SC
FOR MITCHELL CONSTRUCTION
EROSION CONTROL DETAILS

DRAWING NUMBER
C-551



- DRY SEDIMENT BASIN - GENERAL NOTES**
- Sediment basins should not be placed in Waters of the State or USGS blue-line streams (unless approved by Federal Authorities).
 - Sediment basin's side slopes shall be seeded and, when necessary, stabilized with vegetative or synthetic matting to prevent the formation of rills and gullies.
 - Install three (3) rows of porous baffles with a minimum spacing of 10 feet. Baffles should ultimately be placed to maximize the space between each row of baffles and the basin's inlets/outlets. Only two (2) rows of baffles are necessary for basins that are less than 50 feet in length.
 - Porous Baffles should be composed of coir-based materials or TRMs with a light penetration (open spaces) between 10-35%. These materials should not have loose straw. Silt Fence may not be used as Porous Baffles.
 - Each porous baffles shall be installed across the entire width of the basin and along the basin's side slope until the height of the baffle intersects the slope.
 - Install skimmer and coupling (as necessary) to riser structure at orifice along bottom of the principle spillway's riser structure. (Refer to skimmer manufacturer for installation procedures and skimmer specifications.)
 - Skimmer should be equipped with a mechanism, such as a rope, to allow easy access to skimmer to unclogged orifice or perform other necessary maintenance.
 - Stormwater runoff entering the basin must be directed into proper BMPs to prevent erosion along side slopes and to prevent scour at the basin's inlets.
 - The forebay berm should consist of riprap, gabion, or an earthen berm with a rock filled outlet that is constructed across the bottom of the basin's width.
 - An additional cleanout stake for the forebay area is recommended and should be marked for cleanout at 50% of provided sediment storage.
 - The elevation of the emergency spillway should be at least 1 foot below the top of the embankment. The emergency spillway should not be located on fill material, when possible. Riprap and geotextile liner should be placed on all spillways that must be located on fill material.
- DRY SEDIMENT BASIN - INSPECTION AND MAINTENANCE**
- The key to a functional sediment basin is weekly inspections, routine maintenance, and regular sediment removal.
 - Attention to sediment accumulations within the basin is extremely important. Accumulated sediment deposition should be continually checked and removed when necessary.
 - Remove accumulated sediment when it reaches 50% of the design sediment storage volume or 1/2 the height of the riser structure, whichever is reached first.
 - Removed sediment from the basin shall be placed in stockpile storage areas or spread thinly across the disturbed area. Stabilize the removed sediment after it is relocated.
 - Inspections of sediment basins should be conducted once every calendar week and, as recommended, within 24-hours of each rainfall event that produces 1/2-inch or more of precipitation.
 - All temporary sediment basins, which are not to be converted to a detention basin post-construction, should be removed within 30 days after final site stabilization is achieved.
 - Disturbed areas resulting from the removal of the sediment basin should be permanently stabilized and additional BMPs, such as silt fence, should be utilized to accept stormwater runoff from this disturbed area until final stabilization is reached.
- South Carolina Department of Health and Environmental Control
DRY SEDIMENT BASIN
SC-01 Page 3 of 3
FEBRUARY 2014 DATE
GENERAL NOTES

Hussey, Gay, Bell & DeYoung, Inc. Consulting Engineers of SC
474 Wando Park Blvd, Suite 201
Mt. Pleasant, SC 29464

PERMITTING - NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SOUTH CAROLINA
HUSSEY, GAY, BELL & DEYOUNG, INC.
CONSULTING ENGINEERS OF SC
NO. C00194

HUSSEY GAY BELL
Established 1958

474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T:843.849.7500

REVISIONS:

DESIGNED LP	DRAWN LP	CHECKED BG

DATE:

JOB NO. 423153600

SCALE: AS NOTED

ST. PAUL FIRE STATION #2
55% HYDE PARK RD
RAVENAL, SC
FOR
MITCHELL CONSTRUCTION

EROSION CONTROL DETAILS

DRAWING NUMBER
C-552

Jan 25, 2024 - 3:41 pm Printed By: kaantago
 F:\0859 Mitchell Construction\423153600 St. Paul Fire Station 2\CAD\CD\PLANS\3600 - LANDSCAPE PLAN.dwg
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PLANT SCHEDULE							
SYMBOL	ABBR	QTY	BOTANICAL NAME COMMON NAME	SIZE	CONT.	REMARKS	
CANOPY TREES							
	QV1	12	QUERCUS VIRGINIANA LIVE OAK	10'-12" HT 2.5" CAL	B&B	CANOPY TREE - SPECIMENS 5' CLEAR TRUNK	
	TAD1	11	TAXODIUM DISTICHUM BALD CYPRESS	10'-12" HT 2.5" CAL	B&B	CANOPY TREE 5' CLEAR TRUNK	
	ACB1	11	ACER BURGERIANUM TRIDENT MAPLE	10'-12" HT 2.5" CAL	B&B	CANOPY TREE 5' CLEAR TRUNK	
UNDERSTORY TREES							
	MAV1	20	MAGNOLIA VIRGINIANA SWEETBAY MAGNOLIA	10'-12" HT	CONT	UNDERSTORY EVERGREEN TREE MULTI-STEM	
	MAV1	20	CERCIS CANADENSIS 'OKLAHOMA' OKLAHOMA REDBUD	6'-8" HT	B&B OR CONT	UNDERSTORY TREE PURPLE-RED FLOWERS	
	LAIN	20	MAGNOLIA GRANDIFLORA 'LITTLE GEM' LITTLE GEM MAGNOLIA	8'-10" HT	B&B OR CONT	EVERGREEN UNDERSTORY TREE SINGLE STEM TREE FORM	
SHRUBS							
	SERR	26	SABAL MINOR DWARF PALMETTO	24"-36" HT	3 GAL	FILL WELL FORMED	
	POVA	128	PODOCARPUS MACROPHYLLUS 'PRINGLES' DWARF PODOCARPUS	12"-24" HT	3 GAL	FILL WELL FORMED	
	ILVO	128	ILEX VOMITORIA 'NANA' DWARF YALOUP HOLLY	12"-24" HT	3 GAL	FILL WELL FORMED	
	AZOO	33	AZALEA X 'CONILEE' AUTUMN ROYALTY ENCORE AZALEA	12"-24" HT	3 GAL	FLOWERING EVERGREEN	
	MUHF	128	MILKBERGRIA FILIPES SWEET GRASS	36" HT	3 GAL	ACCENT GRASS PINK COLOR	
GROUND COVER							
	900	CYNODON DACTYLON 'CELEBRATION' CELEBRATION BERMUDA GRASS (LOCALLY GROWN)				900	ALL DISTURBED AREAS NOT PLANTED

PLANT SCHEDULE NOTES:
 1. TOTAL NUMBER OF PLANTS SHALL BE VERIFIED ON THE LANDSCAPE PLAN. IF PLANT TOTAL DIFFERS FROM THE SCHEDULE THE PLAN SHALL GOVERN.
 2. ALL TREES LOCATED OUTSIDE OF PLANTING BEDS SHALL BE WOLODED, 4" THICK, IN A 4" DIAMETER CIRCLE AROUND THE TRUNK OF THE TREE.
 3. ALL DISTURBED AREAS NOT PLANTED TO BE SOODED.

TREE CALCULATIONS	
EXISTING SITE ACREAGE :	1.69 ACRES
EXISTING TREE COUNT (IN):	183 INCHES
EXISTING RATIO :	108.28 INCHES/ACRE
PROPOSED SITE ACREAGE :	1.69 ACRES
REMAINING TREE COUNT (IN):	65 INCHES (34 TREES X 2.5 INCH CAL.)
PROPOSED BUFFER TREES :	88.76 INCHES/ACRE
PROPOSED RATIO :	

- MAP NOTE:**
- ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: ATLANTIC SURVEYING, INC.
 - TRANSFER OF SITE BENCHMARK(S) IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL ONLY BE COMPLETED BY A SURVEYOR LICENSED/REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
 - THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING BENCHMARK PRIOR TO ANY CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. FIELD VERIFICATION CAN BE ACCOMPLISHED BY CHECKING A MINIMUM OF TWO FIXED OBJECTS DISPLAYED ON THE SURVEY (I.E. MANHOLE RIM, STORM GRATE, PIPE INVERTS, ETC.).
 - VERTICAL DATUM IS NAVD 88.

- LANDSCAPE NOTES:**
- SUBSTITUTION OF PLANT MATERIALS BASED ON AVAILABILITY, ETC. MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT OR CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
 - ALL PLANT MATERIAL SHALL COMPLY WITH THE PROVISIONS SET FORTH BY THE AMERICAN STANDARD FOR NURSERY STOCK, (LATEST EDITION).
 - PRIOR TO ORDERING ANY PLANT MATERIALS, CONTRACTOR SHALL VERIFY THE SELECTED PLANTS WILL SURVIVE BASED ON LOCAL SITE CONDITIONS / ZONES.
 - IRRIGATION IS TO BE PROVIDED BY THE CONTRACTOR FOR A PERIOD OF ONE (1) YEAR AFTER INSTALLATION.
 - NO LANDSCAPING SHALL BE INSTALLED IN SCOTD RIGHT OF WAY.

LANDSCAPE CALCULATIONS:

HYDE PARK ROAD BUFFER - 2 CANOPY TREES, 3 UNDERSTORY TREES (50% OF WHICH MUST BE EVERGREEN), 25 SHRUBS

NORTHERN BUFFER - 2 CANOPY TREES, 3 UNDERSTORY TREES (50% OF WHICH MUST BE EVERGREEN), 25 SHRUBS

EASTERN BUFFER - 2 CANOPY TREES, 3 UNDERSTORY TREES (50% OF WHICH MUST BE EVERGREEN), 25 SHRUBS

LANDSCAPE BUFFER CALCULATIONS

REQUIRED BUFFER AREA:	30,920.36 SF = 0.71 AC. (42% OF SITE)
PROPOSED BUFFER AREA:	17,383.98 SF = 0.41 AC. (24% OF SITE)

SEEDING SCHEDULES

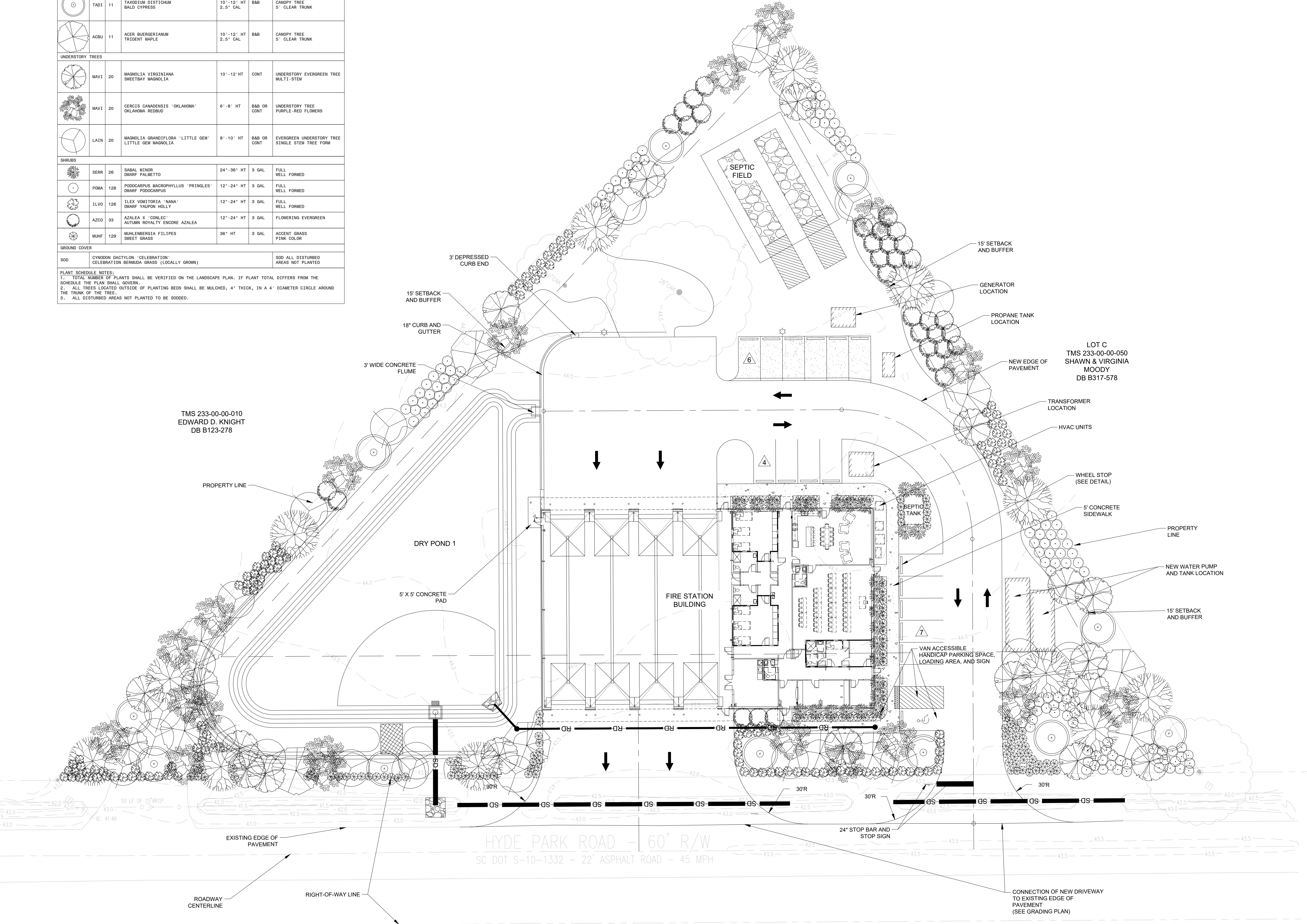
TEMPORARY SEEDING											
SPECIES	lbs./ac	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
BROWNTOP WHEAT (ALONE)	40										
BROWNTOP WHEAT (MIX)	10										
RYE, GRAIN (MIX)	56										
RYE, GRAIN (ALONE)	10										
RYEGRASS (ALONE)	50										
RYEGRASS (MIX)	8										
FOR STEEP SLOPES/CUT SLOPES											
KEEPING LOVEGRASS (ALONE)	4										
KEEPING LOVEGRASS (MIX)	2										
PERMANENT SEEDING											
SPECIES	lbs./ac	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
BAHIA GRASS (ALONE)	40										
BAHIA GRASS (MIX)	30										
BERMUDA GRASS (MULLED) (ALONE)	8-12										
BERMUDA GRASS (MULLED) (MIX)	4-6										
FESCUE, TALL (KYS1) (ALONE)	40										
FESCUE, TALL (KYS1) (MIX)	20										
LADINO CLOVER (MIX ONLY)	2										
FOR STEEP SLOPES/CUT SLOPES											
KEEPING LOVEGRASS (ALONE)	4										
KEEPING LOVEGRASS (MIX)	2										
CROWNVECH (MIX) TYPE II INOCULANT	8-10										

Hussey, Gay, Bell & DeYoung, Inc. Consulting Engineers of SC
 474 Wando Park Blvd, Suite 201
 Mt. Pleasant, SC 29464

PERMITTING - NOT FOR CONSTRUCTION

HUSSEY, GAY, BELL & DEYOUNG, INC.
 CONSULTING ENGINEERS OF SC
 No. C00194

HUSSEY GAY BELL
 Established 1958
 474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T:843.849.7500



GRAPHIC SCALE

1 INCH = 20 FT

NOTE: THIS SCALE APPLIES FOR 24"x36" SHEETS ONLY

811

REVISIONS:

DESIGNED LP	DRAWN LP	CHECKED BG

DATE:

JOB NO. 423153600

SCALE: AS NOTED

ST. PAUL FIRE STATION #2
 55% HYDE PARK RD
 RAVENAL, SC
 FOR MITCHELL CONSTRUCTION

LANDSCAPE PLAN

DRAWING NUMBER

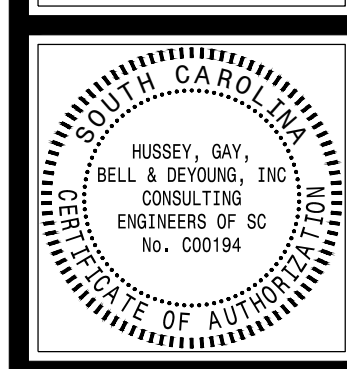
L-101

MAP NOTE:

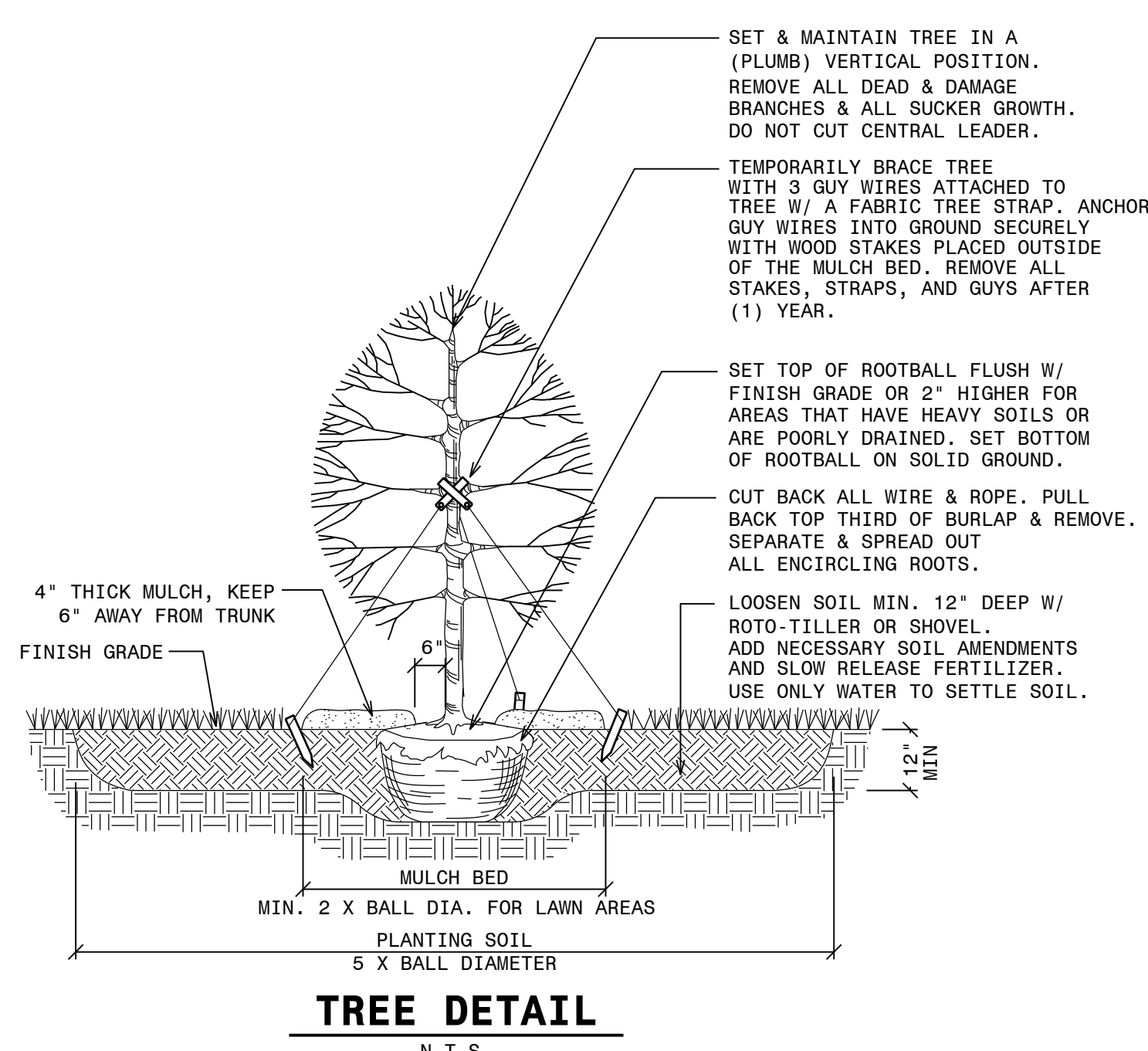
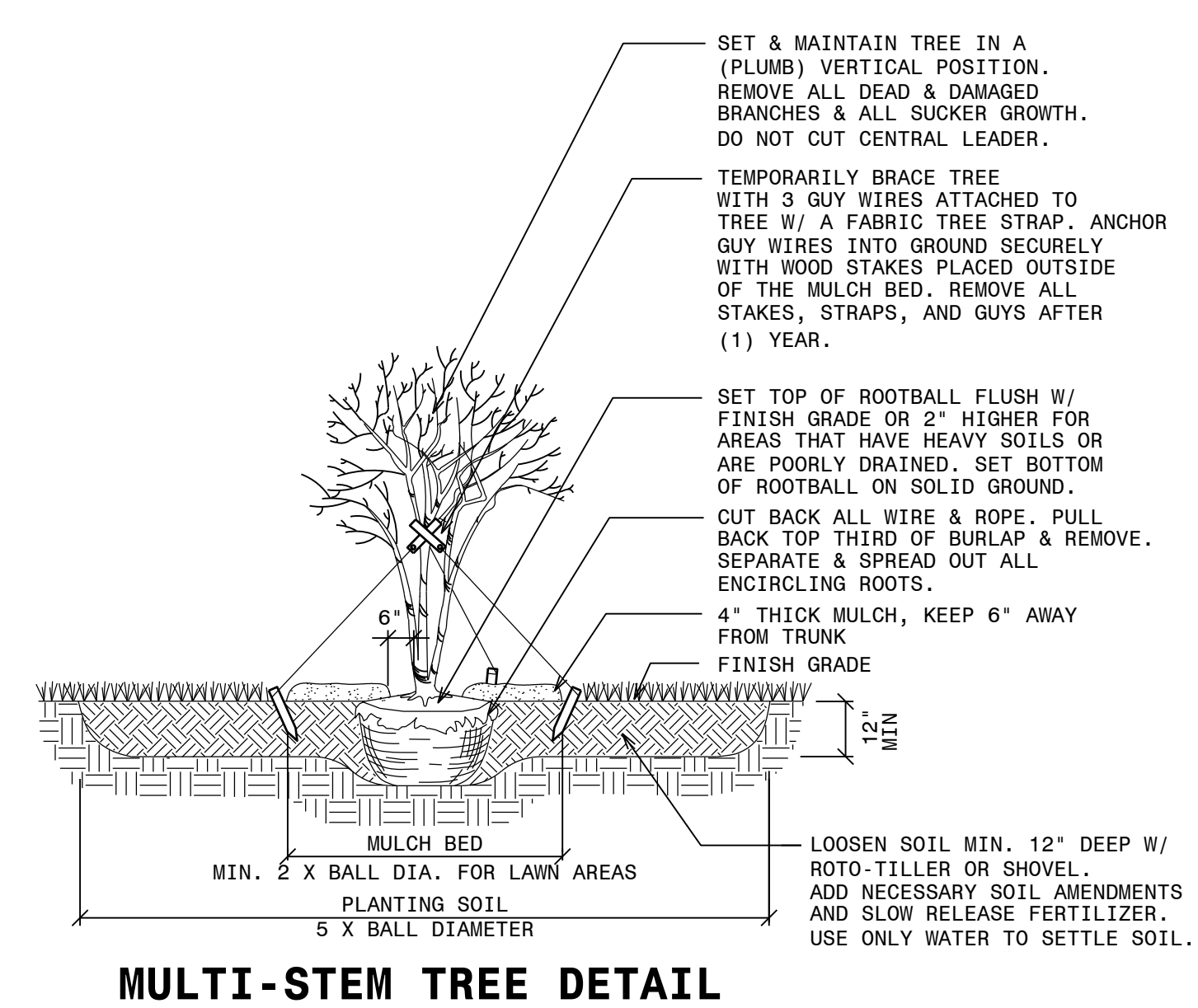
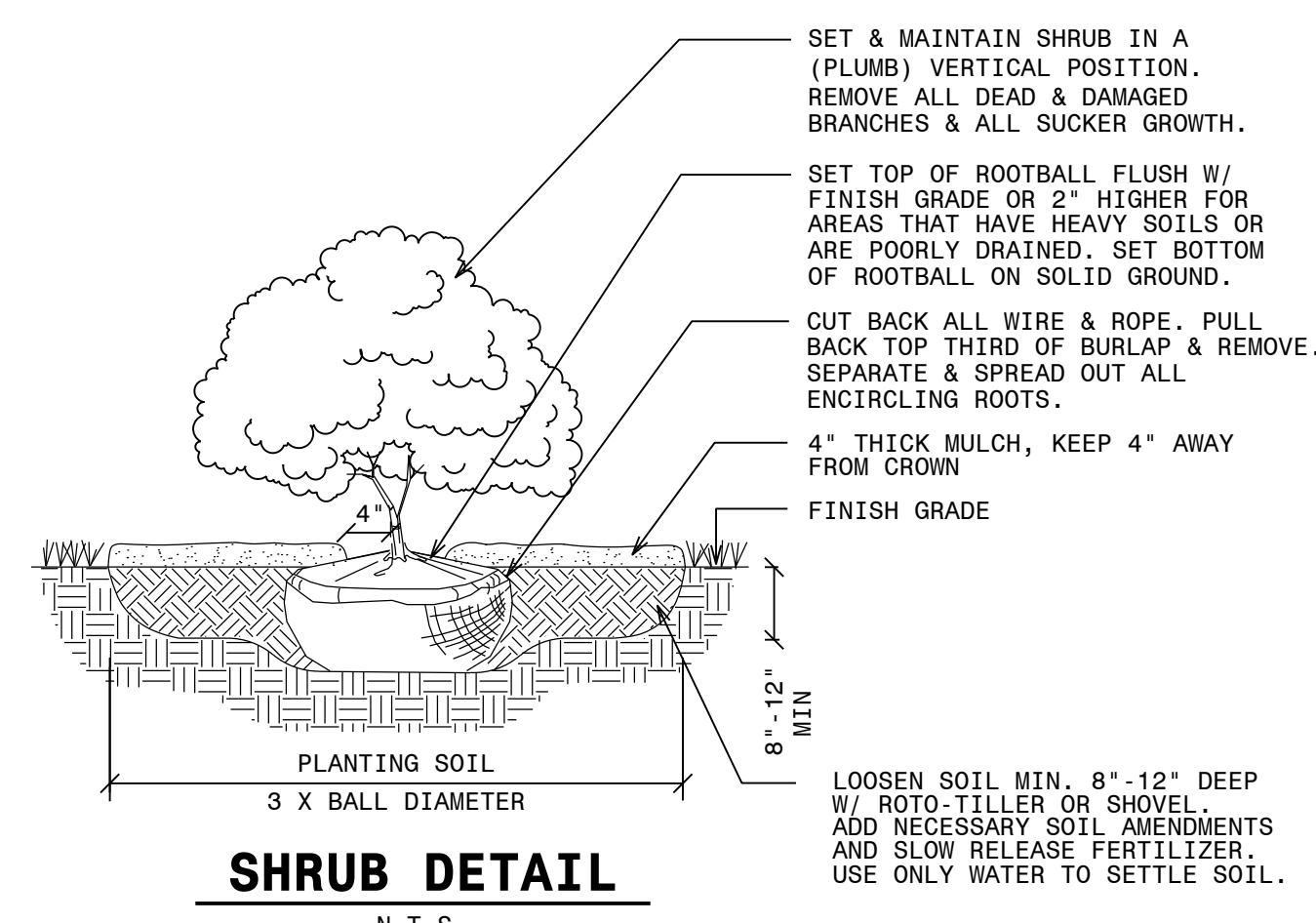
1. ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: ATLANTIC SURVEYING, INC.
2. TRANSFER OF SITE BENCHMARK(S) IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL ONLY BE COMPLETED BY A SURVEYOR LICENSED/REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
3. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING BENCHMARK PRIOR TO ANY CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. FIELD VERIFICATION CAN BE ACCOMPLISHED BY CHECKING A MINIMUM OF TWO FIXED OBJECTS DISPLAYED ON THE SURVEY (I.E. MANHOLE RIM, STORM GRATE, PIPE INVERTS, ETC.).
4. VERTICAL DATUM IS NAVD 88.

Hussey, Gay, Bell & DeYoung, Inc. Consulting Engineers of SC
474 Wando Park Blvd, Suite 201
Mt. Pleasant, SC 29464

PERMITTING - NOT FOR CONSTRUCTION



HUSSEY GAY BELL
Established 1958
474 WANDO PARK BLVD., SUITE 201, MT. PLEASANT, SC 29464 / T:843.849.7500



LANDSCAPE & IRRIGATION NOTES:

1. SEE GENERAL NOTES.
2. ALL TREES LOCATED OUTSIDE OF PLANTING BEDS SHALL BE MULCHED, 4" THICK, IN A 4' DIAMETER CIRCLE AROUND THE TRUNK OF THE TREE.
3. SUBSTITUTION OF PLANT MATERIALS BASED ON AVAILABILITY, ETC., MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT OR CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
4. ALL PLANT MATERIAL SHALL COMPLY WITH THE PROVISIONS SET FORTH BY THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1 (LATEST EDITION)
5. PRIOR TO ORDERING ANY PLANT MATERIALS, CONTRACTOR SHALL VERIFY THE SELECTED PLANTS WILL SURVIVE BASED ON LOCAL SITE CONDITIONS / ZONES.
6. ALL DISTURBED AREAS NOT PLANTED TO BE SODDED OR SEEDED.
7. LANDSCAPE AND IRRIGATION CONTRACTOR SHALL BE THE SAME.
8. FULL IRRIGATION COVERAGE SHALL BE PROVIDED. SEE IRRIGATION SPECIFICATION.
9. IRRIGATION SHALL BE A DESIGN/BUILD BY LANDSCAPE CONTRACTOR.

REVISIONS:

DESIGNED LP	DRAWN LP	CHECKED BG
DATE:		
JOB NO. 423153600		
SCALE: AS NOTED		

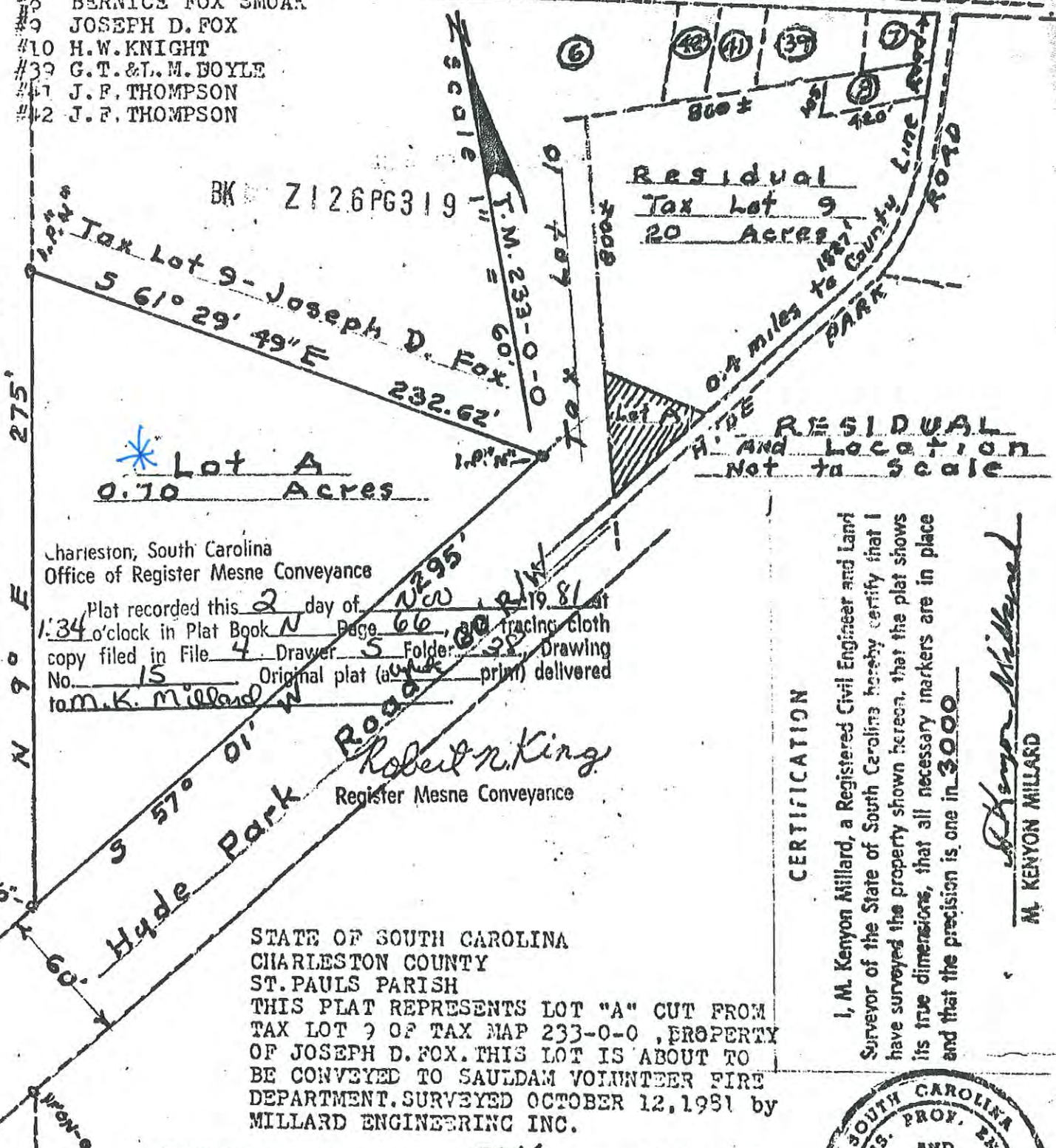
ST. PAUL FIRE STATION #2
55% HYDE PARK RD
RAVENAL, SC
FOR
MITCHELL CONSTRUCTION
LANDSCAPE DETAILS

DRAWING NUMBER
L-150

TAX LOT IDENTIFICATION
 #6 WESVAGO
 #8 BERNICE FOX SMOAK
 #9 JOSEPH D. FOX
 #10 H.W. KNIGHT
 #39 G.T. & T.M. BOYLE
 #41 J.F. THOMPSON
 #42 J.F. THOMPSON

County Line Road

Tax Lot 10 H.W. Knight



BK Z126PG319
 Tax Lot 9 - Joseph D. Fox
 5 61° 29' 49" E 232.62'
 Lot A
 0.70 Acres

Charleston, South Carolina
 Office of Register Mesne Conveyance
 Plat recorded this 2 day of Nov 1981 at 1:34 o'clock in Plat Book N Page 66, tracing cloth copy filed in File 4 Drawer 5 Folder 38 Drawing No. 15 Original plat (as made print) delivered to M.K. Millard

Robert N. King
 Register Mesne Conveyance

STATE OF SOUTH CAROLINA
 CHARLESTON COUNTY
 ST. PAULS PARISH
 THIS PLAT REPRESENTS LOT "A" CUT FROM TAX LOT 9 OF TAX MAP 233-0-0, PROPERTY OF JOSEPH D. FOX. THIS LOT IS ABOUT TO BE CONVEYED TO SAULDAM VOLUNTEER FIRE DEPARTMENT. SURVEYED OCTOBER 12, 1981 by MILLARD ENGINEERING INC.

APPROVED PLAT
 IB (20)
Samuel H. Frank (Ray Brown)

M. Kenyon Millard
 N. KENYON MILLARD
 REG. C. E. & L. S. #635

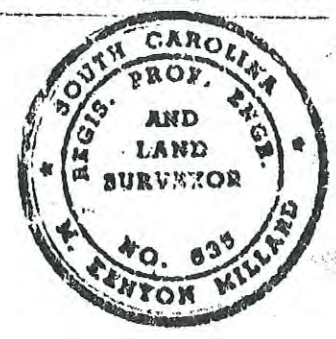
DIRECTOR OF PLANNING
 CHARLESTON COUNTY PLANNING BOARD
 9137
 AFPL #

OCT. 28, 1981
 DATE

CERTIFICATION

I, M. Kenyon Millard, a Registered Civil Engineer and Land Surveyor of the State of South Carolina hereby certify that I have surveyed the property shown hereon, that the plat shows its true dimensions, that all necessary markers are in place and that the precision is one in 3000

M. Kenyon Millard
 M. KENYON MILLARD



BK Y127PG270

APPROVED PLAT
I B(2a)

Sam H Frank (Ray Brown)

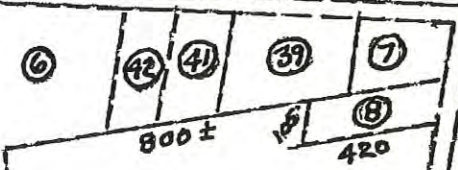
DIRECTOR OF PLANNING
CHARLESTON COUNTY PLANNING BOARD

9351
APPL #

MARCH 15, 1982
DATE

Scale 1" = 100
Magnetic

County line Road



Residual ⑨
16 ACRES

HYDE PARK ROAD
Residual and Location
Not to Scale
25 mi to County Line Road

Lot 10 H. W. KNIGHT

IRON-N
S 11° 16' 25" W
294.21

Tax Lot 9 Joseph D Fox
N 61° 29' 26" W
590.10

Lot "C"
3.02 Acres

Charleston South Carolina
Office of Register Mesne Conveyance

Plat recorded this 16 day of March 1982 at
12:38 o'clock in Plat Book All Page 122, and tracing cloth
copy filed in file 4 Drawer 5 folder 43, Drawing
No. 19A Original plat (a white print) delivered
to Fletcher Sawyer

* Lot "B" Register Mesne Conveyance
1.0 Acres
350.32
S 29° 33' W
ROBERT KING

Lot A - SAULDAM
VOLUNTEER
FIRE DEPT
S 61° 29' 49" E
222.33
IRON-N

HYDE PARK ROAD
170.68'

60' R/W



TAX LOT IDENTIFICATION
#6 WESTVAGE; #8 BERNICE FOX SMOAK
#9 JOSEPH D FOX; #10 H.W KNIGHT
#39 G T & L M BOYLE, #41 and 42
J.F THOMPSON

Address Joseph D Fox
R1 - Box 310
Ravenel, S.C, 29470

STATE OF SOUTH CAROLINA
CHARLESTON COUNTY
ST PAULS PARISH- THIS PLAT
REPRESENTS LOTS "B" AND "C"
CUT FROM TAX LOT 9 TAX MAP
233-0-0 PROPERTY OF JOSEPH
D, FOX SURVEYED MARCH 1, 1982
BY MILLARD ENGINEERING INC
M. Kenyon Millard
M KENYON MILLARD
REG C E & S #635

CERTIFICATION

I M Kenyon Millard, a Registered Civil Engineer and Land
Surveyor of the State of South Carolina hereby certify that
I have surveyed the property shown hereon that the plat shows
its true dimensions, that all necessary markers are in place
and that the precision is one in 3000

M Kenyon Millard
M. KENYON MILLARD

Graphic Scale

