

STANDARD SITE DRAINAGE AND EROSION CONTROL DETAILS

Revised 12/07/2023

Attached are the City Engineer's approved City standards dated October 2019, (Details S10-20, 21, 22 and 23) for the site drainage compliance and erosion control for building sites. These standard details are intended to aid the general public in understanding the process necessary to obtain approval for site drainage and erosion control. The attached plans are standard approved plans; however, signed and sealed civil drawings that comply with City water management should be approved.

Site Drainage:

Lot Grading Details S10-21, 22 and 23 are guides for the suggestive resolution of site drainage pertaining to three (3) major scenarios which are: drainage to roadway (front), drainage to roadway and alley (front and rear), and drainage to alley (rear). Final as-build surveys must be reviewed for compliance with the above guides including the following which are found within the Notes of each guide:

- The design engineer must provide existing and design elevations at every corner of the lot, high points on the lot and at the corners of the building.
- Upon completion of the work as permitted and **prior** to the issuance of a Certificate of Occupancy, the site engineer of record must submit a **signed and sealed** letter of site clarification.
- Roof gutters and down spouts shall be located as necessary to direct drainage to the front or rear of any property.
- Drainage onto adjoining properties is prohibited. All drainage shall be directed to the front or rear of the parcel in a minimum six-inch (6") deep side yard channel with 4:1 side slopes.

Erosion Control:

Every project shall be compliant with the City's erosion control standard which shall be known as and may be cited as the "Drainage and Surface Water Management Ordinance," and is located in Section 16-311 of the Municipal Code.

Exceptions:

- Regardless of lot size, single family home, duplex, triplex or quadruplex which is not part of a larger common plan of development.
- Residential in-fill lots may require silt fencing as ordered or directed by the Building Official.
- Reconstruction in association with projects required under the Florida Administrative Code for the assessment and remediation of contaminated soils and ground waters. The exemption is limited to the area reconstructed after remediation to restore the project site to its pre assessment/remediation condition.

Construction sites less than one (1) acre, which are compliant with Erosion Control Detail Standard S10-20, shall be considered in compliance with the "Drainage and Surface Water Management Ordinance."

SAMPLE LETTER

(Date)

City of St. Petersburg
Construction Services & Permitting Division
One 4th Street North
St. Petersburg, FL 33701

Re: Permit Number *(insert permit number)*

To Whom It May Concern:

This letter will serve to certify that the above referenced project has been constructed in accordance with the City of St. Petersburg's approved site construction plans for the items listed below. *(Each site item must be specified by the Certified Engineer of Record. Failure to specify those items being certified will result in the assumption that the letter is certifying all site items on the plans as submitted.)*

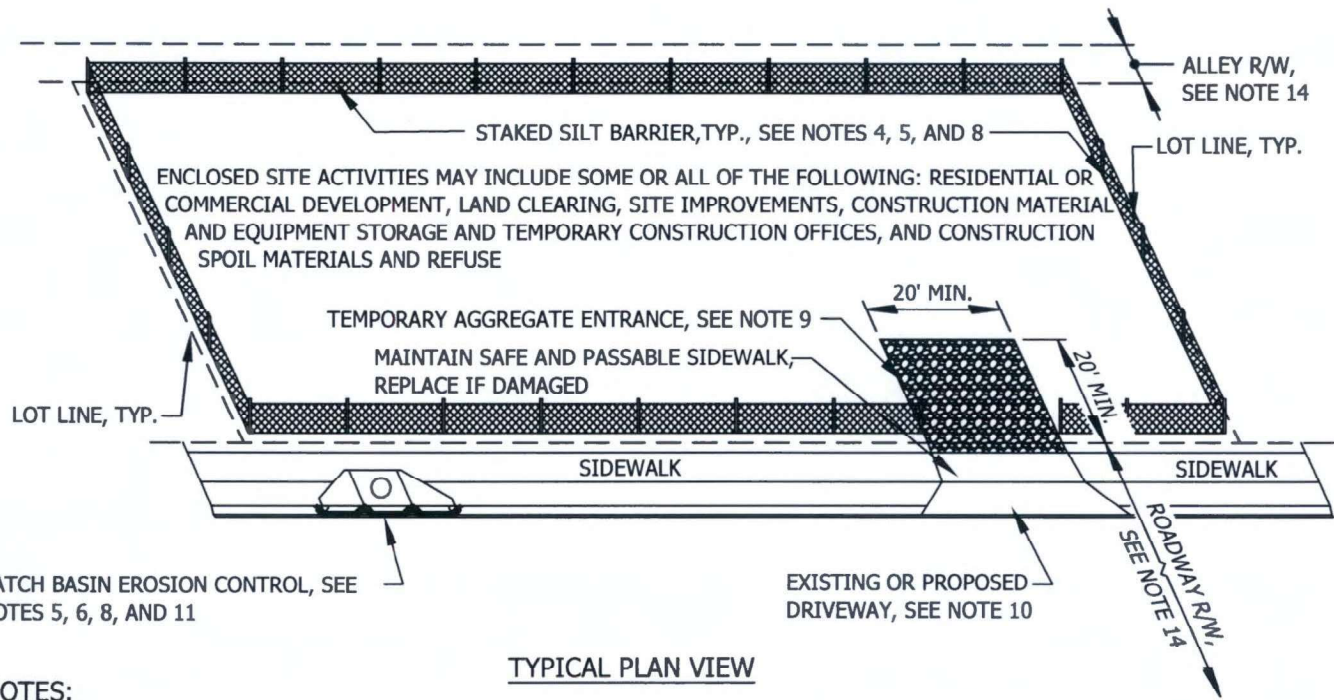
- 1) Paving and grading of parking lot
- 2) Stormwater drainage
- 3) Potable water service
- 4) Sanitary sewer system
- 5) Reclaimed water system

Sincerely,

(Name)

Engineer of Record
Florida Registration Number _____

(Please Note: Original Seal must be affixed.)



CATCH BASIN EROSION CONTROL, SEE NOTES 5, 6, 8, AND 11

EXISTING OR PROPOSED DRIVEWAY, SEE NOTE 10

TYPICAL PLAN VIEW

NOTES:

1. NON-CONFORMANCE WITH THE ITEMS LISTED OR SHOWN ON THIS DETAIL MAY RESULT IN A "STOP WORK" ORDER.
2. THE PURPOSE OF THIS DETAIL IS TO ASSIST THE DEVELOPER, BUILDER, AND/OR CONTRACTOR TO MEET THE MINIMUM REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT ISSUED TO THE CITY OF ST. PETERSBURG.
3. THIS DETAIL IS APPLICABLE FOR ALL CONSTRUCTION SITES AS DESCRIBED ABOVE OF LESS THAN ONE (1) ACRE; THOSE SITES GREATER THAN ONE (1) ACRE ALSO MUST OBTAIN COVERAGE UNDER AN NPDES STORM WATER PERMIT.
4. THE SILT BARRIER SHALL BE INSTALLED ONE FOOT INSIDE THE PROPERTY LINE OR TWO FEET FROM THE SIDEWALK AS SHOWN ABOVE. FOR SILT BARRIER REQUIREMENTS AND INSTALLATION REQUIREMENTS, SEE STANDARD DETAIL-STAKED SILT BARRIER; DRAWING NO. S40-60.
5. INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES DAILY AND/OR AFTER A RAINFALL.
6. FOR CURB INLET FILTER REQUIREMENTS, SEE STANDARD DETAIL-CURB INLET FILTER FOR EROSION CONTROL AT CATCH BASIN; DWG. NO. S40-35, OR FOR SYNTHETIC HAY BALE REQUIREMENTS, SEE STANDARD DETAIL-HAY BALES FOR EROSION CONTROL AT CATCH BASIN; DWG. NO. S40-36.
7. EXISTING GRASS VEGETATION SHALL BE MAINTAINED AT A 10 INCH HEIGHT OR LESS, AS PER CITY CODE, CHAPTER 16; SECTIONS 16-1070 THRU 1076.
8. ALL SOIL EROSION CONTROL DEVICES MUST REMAIN IN PLACE UNTIL NEW VEGETATION IS ESTABLISHED. ALL DISTURBED AREAS SHALL BE SODDED AFTER FINAL GRADING.
9. TEMPORARY AGGREGATE ENTRANCE SHALL BE A MINIMUM 6" THICK OF STANDARD GRADATION SIZE #1 OR #2 RANGE AS PER FDOT SECTION 901, AND SHALL BE COMPACTED. AGGREGATE SHALL BE QUARTZ OR CRUSHED GRANITE. LIMEROCK, DOLOMITE OR SANDSTONE SHALL NOT BE ACCEPTABLE.
10. IF THERE IS NO EXISTING DRIVEWAY OR AN ALTERNATE INGRESS/EGRESS IS TO BE USED DURING CONSTRUCTION, THE METHOD OF ACCESS SHALL CONFORM TO THE "TEMPORARY AGGREGATE ENTRANCE" AS DESCRIBED ABOVE. IF THE AGGREGATE IS DEEMED UNSAFE, THE ALTERNATE INGRESS/EGRESS SHALL BE CONSTRUCTED OF 1" ASPHALTIC CONCRETE OVER 6" OF COMPACTED LIMEROCK BASE.
11. REGULARLY REMOVE COLLECTED SEDIMENT AND DEBRIS FROM THE SILT BARRIERS AND GUTTER FLOW LINE.
12. FOR ALL SAND AND SOIL STOCKPILES DUST/EROSION CONTROL MEASURES SHALL BE IMPLEMENTED.
13. KEEP CONSTRUCTION SITE LITTER/DEBRIS, AND LEAKING CONTAINERS IN ORDERLY CONTAINMENT AREAS.
14. SWEEP ENTRANCE AND ADJACENT ROADWAY WEEKLY TO KEEP FREE OF CONSTRUCTION DEBRIS.
15. SWEEP PAVED SURFACES ONLY. DO NOT WASH DOWN UNTIL SITE IS FINISHED.
16. SINGLE FAMILY INFILL LOTS MAY REQUIRE SILT FENCE AS ORDERED OR DIRECTED BY THE CITY BUILDING OFFICIAL.

CITY STANDARDS

SITE DEVELOPMENT AND/OR CONSTRUCTION STAGING SITE EROSION CONTROL DETAIL

REVISIONS	
BY	DATE



ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT
CITY OF ST. PETERSBURG

SCALE: N.T.S.

APPROVED BY:

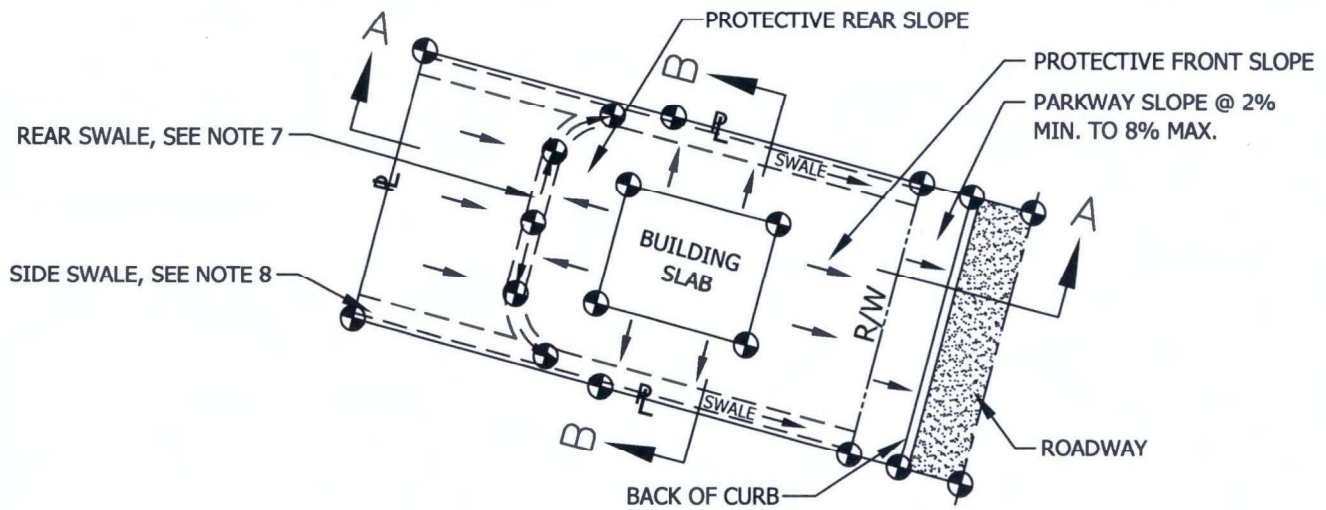
Brjisha Rajaraman
DIRECTOR

DATE: OCT. 2019

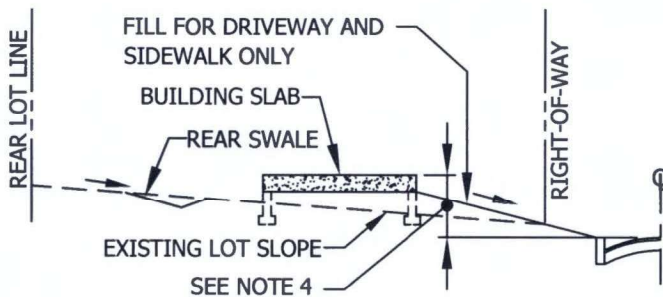
DWG. No.

S10-20

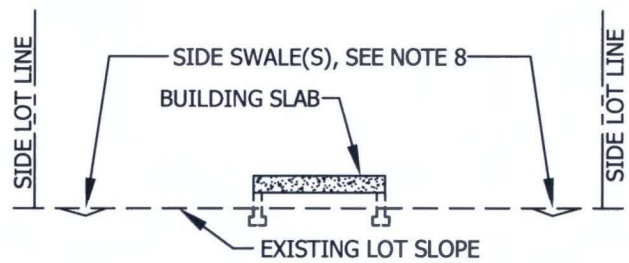
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TYPICAL GRADING PLAN VIEW



TYPICAL SECTION A-A



**TYPICAL SECTION B-B
(DOUBLE SCALE)**

NOTES:

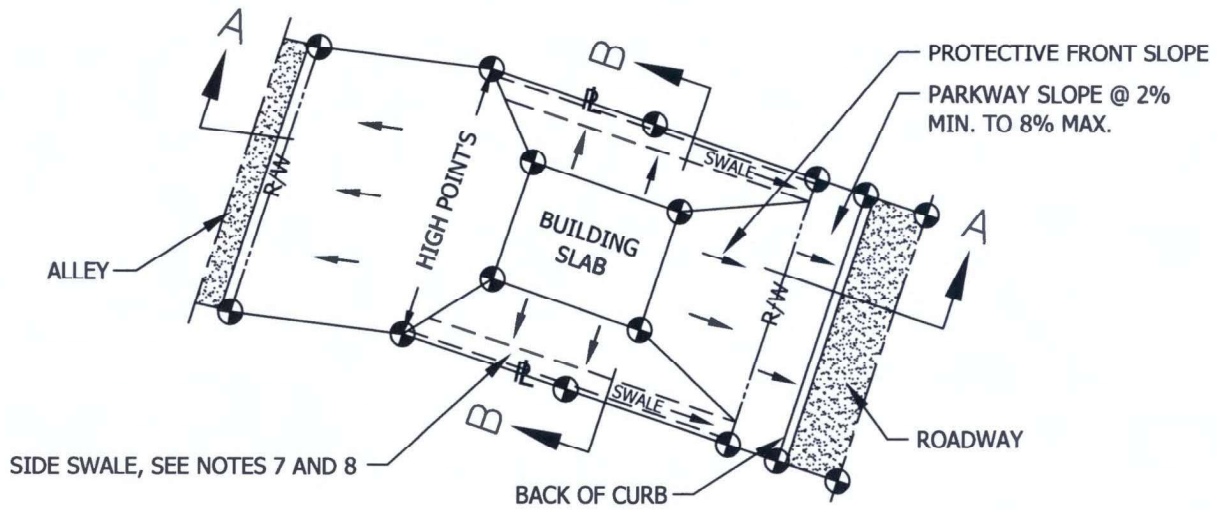
1. FILL IN FEMA FLOOD ZONES A AND AE IS LIMITED PER CITY CODE, SEE CHAPTER 16. A SEPERATE SITE PLAN SHOWING EXISTING AND PROPOSED ELEVATIONS AND DRAINAGE PLAN IS REQUIRED IN FEMA FLOOD AREAS. THESE PLANS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED ENGINEER.
2. FILL IN FLOOD ZONE VE IS PROHIBITED, PER CITY CODE, SEE CHAPTER 16.
3. EXISTING AND DESIGN ELEVATIONS ARE REQUIRED FOR POINTS IDENTIFIED BY THIS SYMBOL: ⊕
4. BUILDING SLAB SHALL BE 1' MINIMUM ABOVE THE CENTERLINE OF THE ROADWAY AND NOT LESS THAN A MINIMUM ELEVATION OF 103.00 PER CITY DATUM OR AS DICTATED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).
5. LOT GRADING SHALL MAINTAIN HISTORICAL FLOW PATHS AND PREVENT THE ACCUMULATION OF WATER OR EXCESSIVE RUNOFF ONTO ADJACENT PROPERTIES.
6. LOTS IN EXISTING SUBDIVISIONS REQUIRE EXISTING ELEVATIONS 5' INTO ADJOINING PROPERTIES OR EXISTING SWALE(S).
7. REAR SWALE SHALL DRAIN TO SIDE SWALES AND TO ROADWAY ON EACH LOT SIDE AND SHALL FUNCTION INDEPENDENTLY FROM ALL ADJOINING LOTS.
8. SIDE SWALES SHALL BE SIZED TO ACCOMMODATE A MINIMUM OF A 10 YEAR, 1 HOUR RAIN EVENT, MINIMUM SWALE SIZE SHALL BE 6" DEEP WITH 4:1 SIDE SLOPES.
9. ROOF GUTTERS AND LEADERS IN CONJUNCTION WITH YARD DRAINS AND INLETS ARE REQUIRED WHERE NECESSARY FOR ADEQUATE DRAINAGE.
10. WHEN SILT FENCING IS REQUIRED, SEE CITY STANDARD DETAIL, SITE PLAN-EROSION CONTROL; DWG. NO. S10-20.
11. FINAL AS-BUILT ELEVATIONS SHALL BE CERTIFIED BY A REGISTERED LAND SURVEYOR TO CONFIRM COMPLIANCE WITH THE PROPOSED DESIGN ELEVATIONS.

CITY STANDARDS

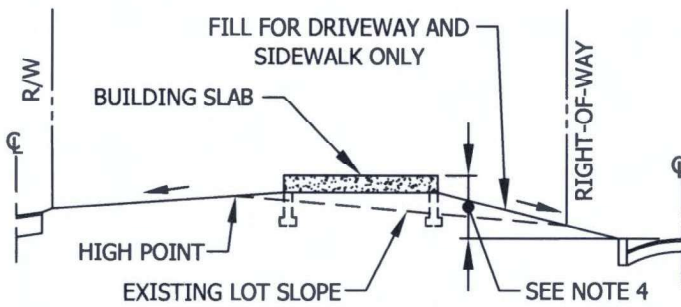
**GUIDE FOR TYPE "A"
LOT GRADING DETAIL**

(ALL DRAINAGE TO ROADWAY)

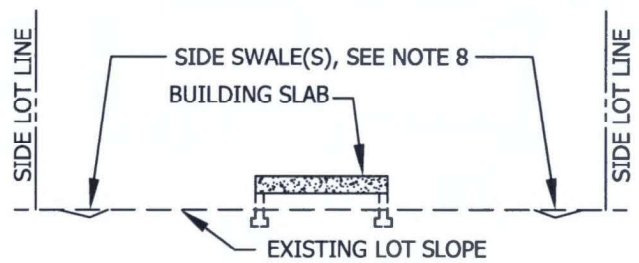
REVISIONS		 ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	APPROVED BY:		DATE:		
BY	DATE		 DIRECTOR		OCT. 2019		
					SCALE:	N.T.S.	DWG. No.
					S10-21		



TYPICAL GRADING PLAN VIEW



TYPICAL SECTION A-A



**TYPICAL SECTION B-B
(DOUBLE SCALE)**

NOTES:

1. FILL IN FEMA FLOOD ZONES A AND AE IS LIMITED PER CITY CODE, SEE CHAPTER 16. A SEPARATE SITE PLAN SHOWING EXISTING AND PROPOSED ELEVATIONS AND DRAINAGE PLAN IS REQUIRED IN FEMA FLOOD AREAS. THESE PLANS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED ENGINEER.
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3. EXISTING AND DESIGN ELEVATIONS ARE REQUIRED FOR POINTS IDENTIFIED BY THIS SYMBOL:
4. BUILDING SLAB SHALL BE 1' MINIMUM ABOVE THE CENTERLINE OF THE ROADWAY AND NOT LESS THAN A MINIMUM ELEVATION OF 103.00 PER CITY DATUM OR AS DICTATED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).
5. LOT GRADING SHALL MAINTAIN HISTORICAL FLOW PATHS AND PREVENT THE ACCUMULATION OF WATER OR EXCESSIVE RUNOFF ONTO ADJACENT PROPERTIES.
6. LOTS IN EXISTING SUBDIVISIONS REQUIRE EXISTING ELEVATIONS 5' INTO ADJOINING PROPERTIES OR EXISTING SWALE(S).
7. SIDE SWALES SHALL DRAIN TO ROADWAY ON EACH LOT SIDE AND SHALL FUNCTION INDEPENDENTLY FROM ALL ADJOINING LOTS.
8. SIDE SWALES SHALL BE SIZED TO ACCOMMODATE A MINIMUM OF A 10 YEAR, 1 HOUR RAIN EVENT, MINIMUM SWALE SIZE SHALL BE 6" DEEP WITH 4:1 SIDE SLOPES.
9. ROOF GUTTERS AND LEADERS IN CONJUNCTION WITH YARD DRAINS AND INLETS ARE REQUIRED WHERE NECESSARY FOR ADEQUATE DRAINAGE.
10. WHEN SILT FENCING IS REQUIRED, SEE CITY STANDARD DETAIL, SITE PLAN-EROSION CONTROL; DWG. NO. S10-20.
11. FINAL AS-BUILT ELEVATIONS SHALL BE CERTIFIED BY A REGISTERED LAND SURVEYOR TO CONFIRM COMPLIANCE WITH THE PROPOSED DESIGN ELEVATIONS.

CITY STANDARDS

**GUIDE FOR TYPE "B"
LOT GRADING DETAIL**

(ALL DRAINAGE ROADWAY AND ALLEY)

REVISIONS	
BY	DATE



ENGINEERING AND CAPITAL
IMPROVEMENT DEPARTMENT
CITY OF ST. PETERSBURG

SCALE: N.T.S.

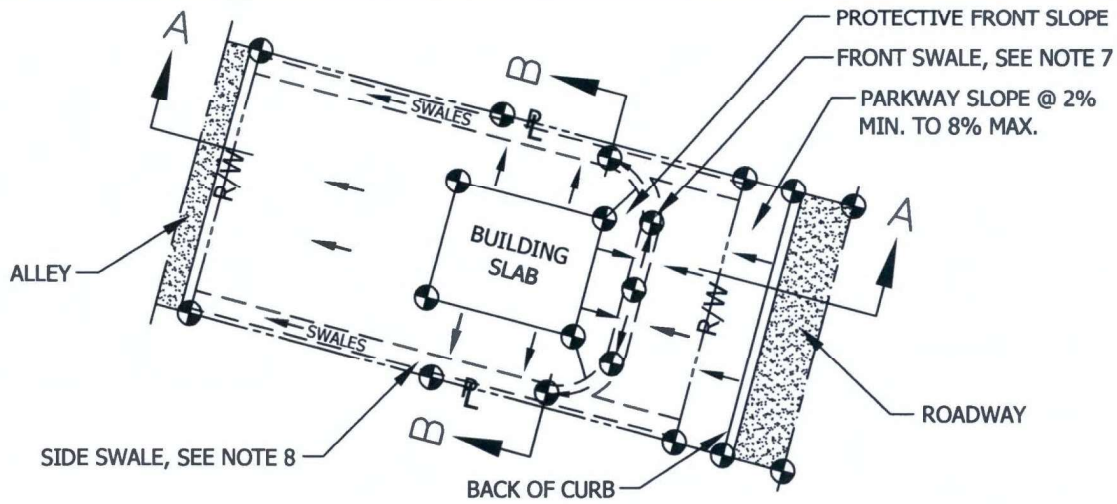
APPROVED BY:

Brijesh Prayman
DIRECTOR

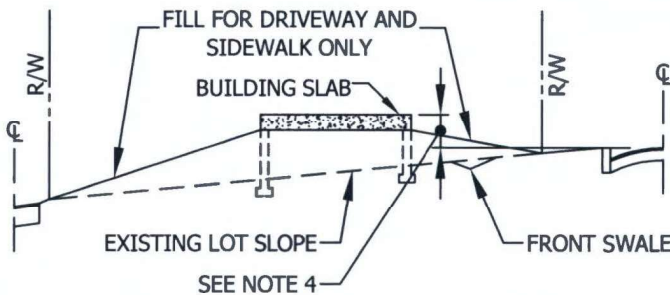
DATE: OCT. 2019

DWG. No.

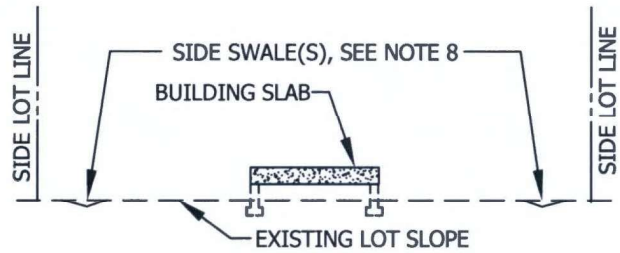
S10-22



TYPICAL GRADING PLAN VIEW



TYPICAL SECTION A-A



**TYPICAL SECTION B-B
(DOUBLE SCALE)**

NOTES:

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5. LOT GRADING SHALL MAINTAIN HISTORICAL FLOW PATHS AND PREVENT THE ACCUMULATION OF WATER OR EXCESSIVE RUNOFF ONTO ADJACENT PROPERTIES.
6. LOTS IN EXISTING SUBDIVISIONS REQUIRE EXISTING ELEVATIONS 5' INTO ADJOINING PROPERTIES OR EXISTING SWALE(S).
7. FRONT SWALE SHALL DRAIN TO SIDE SWALES AND TO ALLEY ON EACH LOT SIDE AND SHALL FUNCTION INDEPENDENTLY FROM ALL ADJOINING LOTS.
8. SIDE SWALES SHALL BE SIZED TO ACCOMMODATE A MINIMUM OF A 10 YEAR, 1 HOUR RAIN EVENT, MINIMUM SWALE SIZE SHALL BE 6" DEEP WITH 4:1 SIDE SLOPES.
9. ROOF GUTTERS AND LEADERS IN CONJUNCTION WITH YARD DRAINS AND INLETS ARE REQUIRED WHERE NECESSARY FOR ADEQUATE DRAINAGE.
10. WHEN SILT FENCING IS REQUIRED, SEE CITY STANDARD DETAIL, SITE PLAN-EROSION CONTROL; DWG. NO. S10-20.
11. FINAL AS-BUILT ELEVATIONS SHALL BE CERTIFIED BY A REGISTERED LAND SURVEYOR TO CONFIRM COMPLIANCE WITH THE PROPOSED DESIGN ELEVATIONS.

CITY STANDARDS

**GUIDE FOR TYPE "C"
LOT GRADING DETAIL**

(ALL DRAINAGE TO ALLEY)

REVISIONS	
BY	DATE



ENGINEERING AND CAPITAL
IMPROVEMENT DEPARTMENT
CITY OF ST. PETERSBURG

SCALE: N.T.S.

APPROVED BY:

Brijesh Prayman
DIRECTOR

DATE: OCT. 2019

DWG. No. **S10-23**