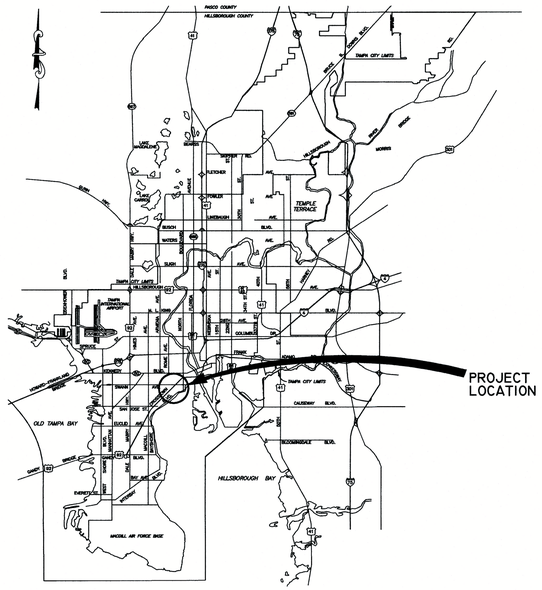
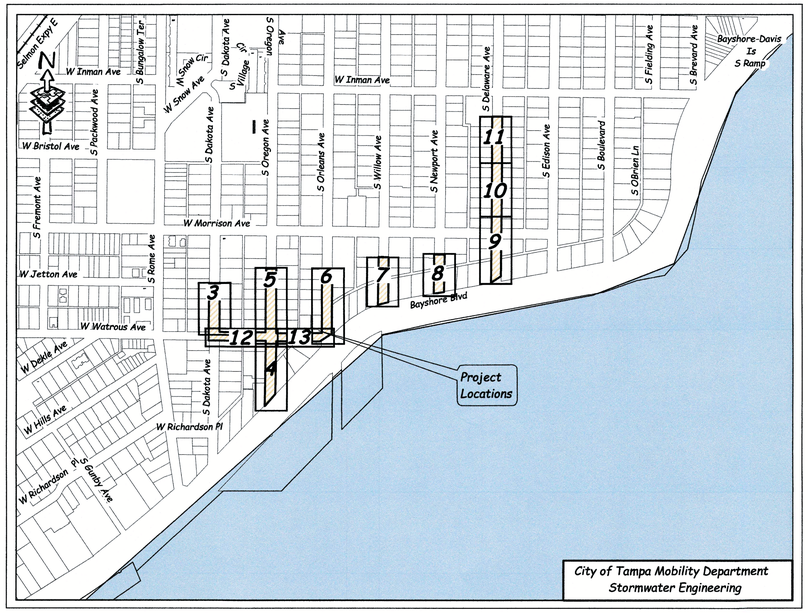
SW2022-03





CITY of TAMPA

MOBILITY DEPARTMENT
STORMWATER ENGINEERING DIVISION

PLANS FOR

HYDE PARK
GROUNDWATER DIVERSION
UNDERDRAINS PHASE II

RICHARD ALFRED HOEL, P.E. #41026
CHIEF ENGINEER

This item has been digitally signed and sealed by Richard Alfred Hoel, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

GENERAL NOTES

1. The Contractor shall perform all construction in accordance with the lines and grades shown on the Plans and to tolerances stated herein or in the specifications. Refer to the boundary and/or topographic survey for additional information on existing conditions. An electronic CADD drawing of the existing survey data and of the proposed site improvements is available and may be used for convenience in layout of the work. However, use of this electronic format is at the contractor's sole responsibility as all work must be in accordance with the contract documents for the project. The accuracy of these files shall be checked and verified by the user. Any discrepancies are to brought to the attention of the Engineer prior to use of this information.

2. Contractor shall be responsible for maintaining all horizontal and vertical control markers, right-of-way and property corners (monuments, pipes, etc.) for the duration of construction. Markers shall be continuously flagged and shall be reset immediately by a Florida licensed land surveyor if any should become disturbed.

3. Contractor is to exercise caution when operating near or adjacent to existing public and private utilities. Locations, elevations and dimensions of existing utilities, structures and other features are shown according to the best information available at the time of the preparation of these drawings and do not purport to be absolutely correct. The Contractor shall verify the locations, elevations and dimensions of all existing utilities, structures, etc. affecting his work prior to construction.

4. All utilities shall be kept in operation except with the express written consent of the utility owner. It shall be the Contractor's responsibility to preserve existing utilities and any and all damage to existing utilities as a result of the Contractor's actions shall be repaired at the Contractor's expense.

5. The Contractor shall endeavor to protect all adjacent improvements within the project area and replace all pavement, stabilized earth, driveways, sidewalks, retaining walls, mailboxes, traffic signs, etc. removed or damaged during construction with the same material removed or damaged or as otherwise directed by the Engineer.

6. The Contractor shall contact the Engineer prior to proceeding with any work with which a conflict has arisen during construction of any improvements shown in these documents.

7. All work to be performed on this project shall be constructed according to the best practices of the industry and in accordance with applicable Federal, State, County and/or City codes, ordinances, technical standards and permit conditions.

8. Contractor shall include the cost of sheeting and/or trench box in the linear foot cost of pipe. The contractor shall comply with the requirements of the Florida Trench Safety Act, Chapter 553.

PROJECT NOTES:

1. Reference Survey: Topographic survey prepared by Echezabal & Associates, Inc., dated 3/31/20.

2. Elevations shown hereon are based on the North American Vertical Datum of 1988 (NAVD88) and utilize City of Tampa Bench Mark HV-02 170 with an elevation of 12.83 feet.

3. Bearings and coordinates shown hereon are based on the Florida State Plane Coordinate System, West Zone as referenced to the North American Datum 1983, adjustment of 2011, NAD83(2011) and are shown in US Survey Feet.

4. Underdrain pipes shall be installed in a manner that will achieve line and grade as depicted hereon and to protect adjacent improvements to the greatest extent practical. It is the intent of the design to install underdrains at a distance of 4 feet inside the right-of-way line. Where horizontal deflections are shown to protect trees to remain, adjust alignment by 2 feet with 10' long transitions by use of 11 ¼° or 22 ½° bends.

ROAD, DRAINAGE AND GRADING CONSTRUCTION NOTES

1. All improvements within public rights-of-way shall be constructed in accordance with the project specifications, and the latest edition of City of Tampa Technical Standards, FDOT Standard Specifications for Road and Bridge Construction, the FDOT Roadway and Traffic Design Standard Indexes, and the FDOT Utility Accommodation Manual or in accordance with the requirements of the State or County having jurisdiction over the right-of-way, as applicable.

2. Pavement and grading shall be sloped to the proposed elevations and/or contours shown on the drawings. Smooth, constant slopes shall be maintained between proposed elevations and contours. Proposed contour elevations, spot elevations and finished grade elevations in non-paved areas refer to finished surface elevations once sodding or seeding is complete and in paved areas refer to finished pavement elevations.

3. Finished grade in lawn areas within the right-of- way shall be between ½" and 1" below sidewalks and shall be no greater than 1" above curb top once sod has been placed. These lawn areas shall be sloped to drain over the curb to the street. Lawn drainage shall be redirected around existing trees to avoid root damage.

7. All areas disturbed during construction (except landscape beds), shall be sodded, to provide a fully grassed site at substantial completion. Contractor is responsible for controlling site erosion and shall provide additional sod and shall fill, level, repair and re-grass all eroded or dead areas as necessary, to achieve an erosion-free site (free from rutting, etc.) to the lines & grades shown herein upon final acceptance. Sod shall be weed-free, required to match existing and shall be installed and maintained in accordance with FDOT Specification Section 570 and 575, as applicable, including the initial rolling to fully seat sod to the subgrade and eliminate irregular surfaces.

ENVIRONMENTAL PROTECTION NOTES

General:

1. Construction shall proceed such that all stormwater facilities (ponds, retention areas, control structures, storm sewers) to which a construction area drains are in place and operational prior to construction of impervious surfaces within that area.

2. No excavation shall extend below the permitted design depths or elevations shown on the drawings unless additional testing supports such over-excavation and no lower semi-confining unit clayey soil material and/or limestone materials shall be excavated regardless if these materials are encountered within the permitted excavation depths or elevations. If any lower semi-confining unit clayey soil materials or limestone materials are encountered above the permitted depths or elevations, excavation operations shall immediately cease in the general area. Contractor shall notify the Engineer prior to any further excavation in these areas.

Dewatering Activities:

1. Prior to any groundwater dewatering activities, Contractor shall obtain coverage under the FDEP Generic Permit for the Discharge of Produced Groundwater from any Non-Contaminated Site Activity pursuant to Chapter 62-621.300(2), F.A.C.

2. All water collected and pumped during trench dewatering activities shall be disposed of in upland areas into double staked hay bales. Discharge locations shall be a minimum of 75 feet from the nearest property boundary, wetland jurisdictional or surface water area, to allow for maximum overland filtration of soil particles.

Erosion & Sediment Control BMPs:

1. Staked or floating silt screens, hay bales, or other appropriate best management practices (BMPs), shall be utilized as silt barriers and placed in locations shown on the plans and at other locations as required to keep sediment from reaching water bodies, wetland areas, adjacent properties or rights-of-way. These barriers shall be installed prior to commencing construction and shall be considered as limits of construction. Perimeter clearing and grubbing along the limits of construction is allowed, if necessary, to facilitate installation of silt barriers providing that disturbance is the minimum width necessary for such work. Perimeter barriers shall be fully installed, including backfilling if necessary, prior to any additional clearing and grubbing operations within the construction limits.

2. Temporary stockpiles shall not be located adjacent to storm sewer inlets, ditches, undisturbed wetlands or surface water areas where sedimentation from stockpiles may cause damage. Additionally, silt barriers shall continuously and fully encircle all stockpiles which will remain for longer than 24 hours to contain materials within a reasonably confined area.

3. Off-site vehicle tracking of sediment shall be minimized by cleaning vehicle undercarriage areas or other effective methods prior to site departure. Streets, sidewalks and driveways shall be kept free of sediment for duration of construction.

4. All fugitive dust shall be controlled on site. Only areas scheduled for immediate construction shall be cleared or stripped of vegetation. Watering, application of calcium chloride or other prior approved means of dust control shall be employed to prevent the emanation of dust from the site. Permanent grassing, landscaping and other site work shall be incorporated as soon as possible.

5. Contractor shall use other structural BMPs, as necessary, to divert runoff from exposed soils, store runoff and/or sediment on-site, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site.

6. Contractor shall inspect and maintain all sediment and erosion control BMPs to assure proper operation. Inspections shall occur at a minimum interval of once every 7 calendar days and within 24 hours of the end of a storm that is 1/4-inch or greater.

7. Any maintenance operations needed to assure proper operation of all controls, shall be done in a timely manner, but in no case later than 7 calendar days following the inspection in which the need is identified.

8. Temporary or permanent stabilization BMPs shall be used as soon as practicable, but in no case less than 14 days, in portions of the site where construction activities have been temporarily or permanently ceased. Stabilization BMPs may include temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, swale sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures.

9. Once construction is completed and finished grading and final stabilization has been achieved, silt barriers shall be completely removed to the satisfaction of the Engineer and prior to final acceptance.

10. No debris shall be allowed to enter the existing storm or sanitary sewer system.

INDEX

LEGEND

- SPOT GRADE
- OAK TREE
- PALM TREE
- SPOT GRADE
- PINE TREE
- STUMP
- SHRUB
- UTILITY POLE
- SHARED POLE W/ TRANS
- SHARED POLE
- SPRINKLER
- GAS VALVE COVER
- GAS VALVE
- GAS METER
- TELEPHONE PEDESTAL
- BOLLARD
- CLEANOUT
- SANITARY MANHOLE
- CABLE TV SERVICE BOX
- WIRING PULL BOX
- DRILL HOLE
- POST
- GUY ANCHOR
- FLOOD LIGHT
- SERVICE CABINET

- FENCE
- CONCRETE SLAB
- BACK OF CURB
- EDGE OF PAVEMENT
- EXIST. R/W LINE
- STORM PIPE
- WASTE WATER PIPE
- WATER MAIN
- RECLAIMED WATER
- GAS MAIN
- FIBER OPTIC CABLE
- VERIZON

AC = AIR CONDITIONING
ASPH. = ASPHALT
BGV = BELOW GROUND VAULT
Conc. = CONCRETE
CSL = CONCRETE SLAB
C&G = CURB AND GUTTER
ELEC = ELECTRIC
ELEV. = ELEVATION
ICV = IRRIGATION CONTROL VALVE
LB = LICENSED BUSINESS
MAG = MAGNOLIA
PVC = POLYVINYL CHLORIDE
RCP = REINFORCED CONCRETE PIPE
RCW = RECLAIMED WATER
R/W = RIGHT OF WAY
SMND = SET MAG NAIL & DISK
TOB = TOP OF BANK
TOS = TOE OF SLOPE
TP-RP = TRAVERSE POINT – REFERENCE POINT
TYP. = TYPICAL
WBF = WOOD BOARD FENCE

- FIRE HYDRANT
- WATER VALVE COVER
- WATER METER
- LIGHT POLE
- SET NAIL & TIN TAB
- CARTOUCHE
- BENCH MARK/SMND
- TREE BARRICADE

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

DES: SEB
DRN: MB/JDM
CKD: BG
DATE: 9/22/22

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

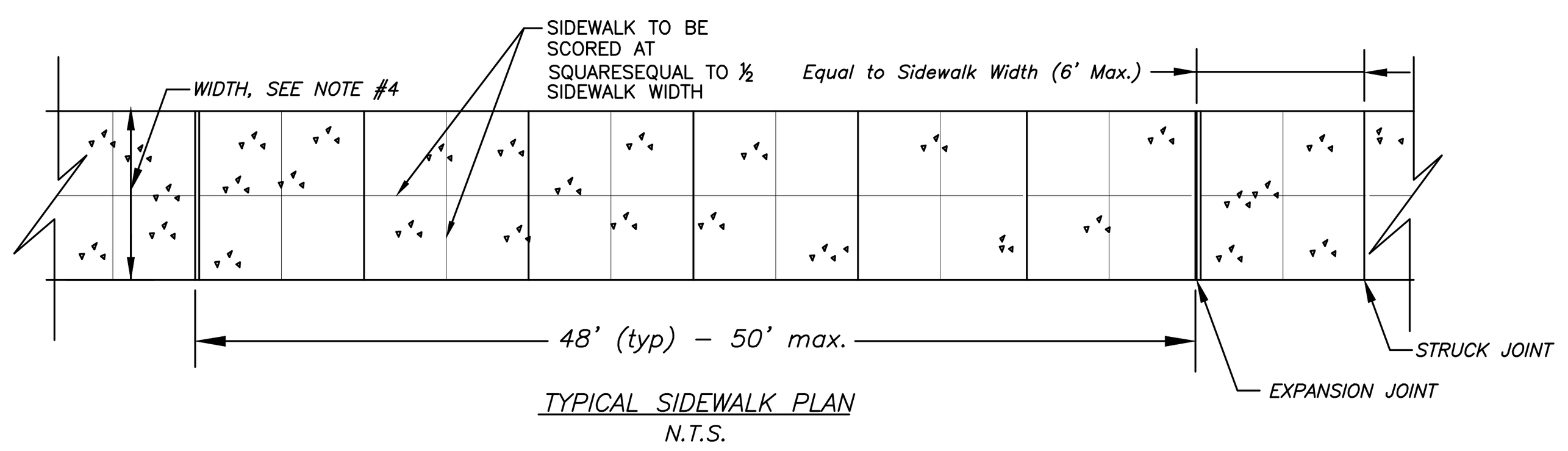
HYDE PARK
GROUNDWATER DIVERSION

SHEET 1 of 14

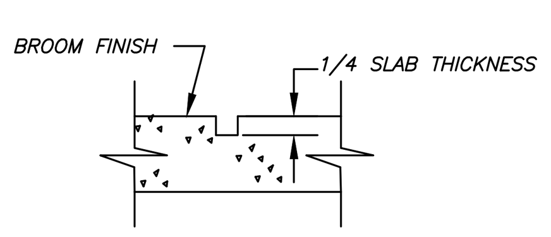
Plot Date: Thursday, September 22, 2022

EXAMPLE OF DRIVEWAY RECONSTRUCTION

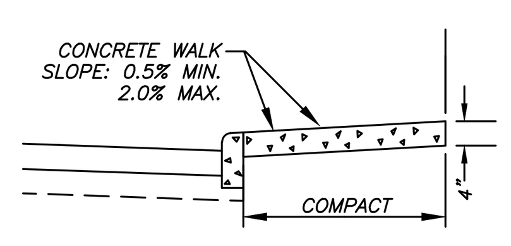
EXAMPLE OF SIDEWALK RECONSTRUCTION



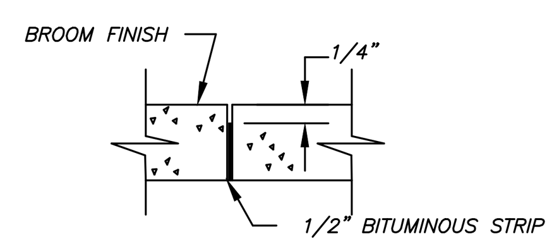
TYPICAL SIDEWALK PLAN
N.T.S.



STRUCK JOINT DETAIL



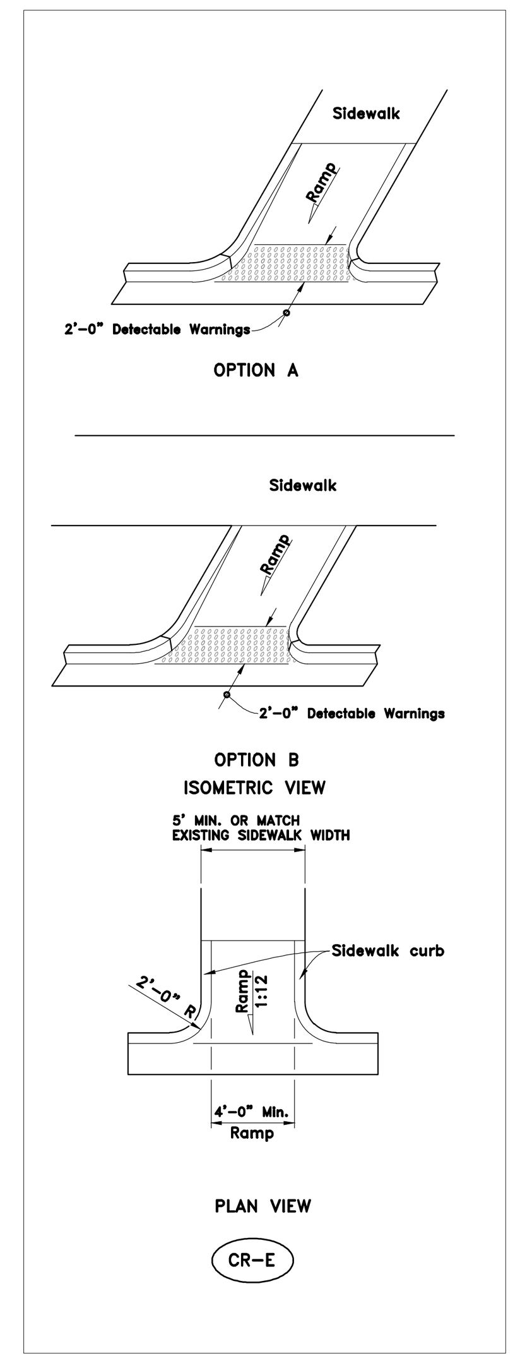
TYPICAL SIDEWALK DETAIL
N.T.S.



EXPANSION JOINT DETAIL

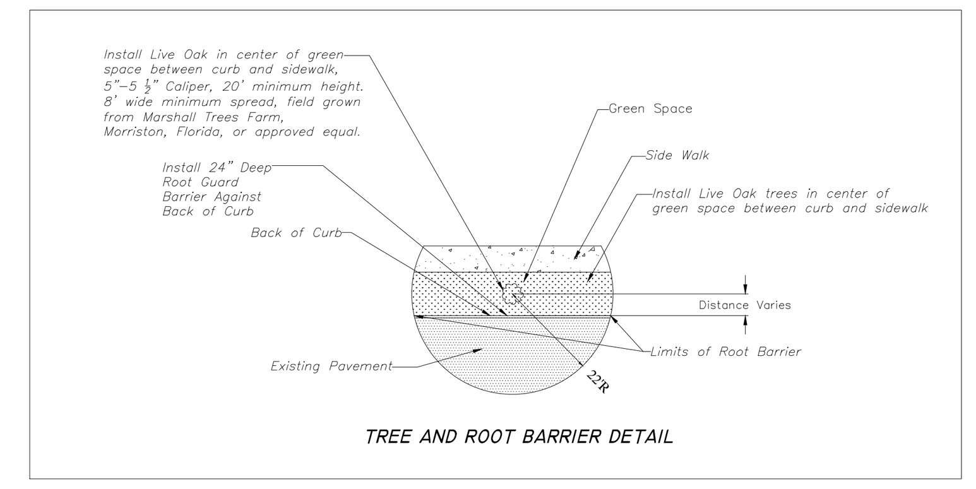
NOTES:
1. SIDEWALKS SHALL HAVE TOOLED EDGES.
2. CONSTRUCTION JOINTS SHALL BE LOCATED AT STRUCK JOINTS OR EXPANSION JOINTS ONLY.
3. EXPANSION JOINTS SHALL BE INSTALLED AS SHOWN AT60' MAX. INTERVALS AND ABUTTING CURB & DRIVEWAYS. EXPANSION JOINTS SHALL CONSIST OF CONTINUOUS 1/2" X 4" BITUMINOUS EXPANSION STRIP, AS SHOWN.
4. SIDEWALKS TO MATCH EXISTING WIDTHS. JOINTS IN NEW SIDEWALKS SHALL ALIGN W/JOINTS IN EXISTING SIDEWALKS.
5. CONCRETE SIDEWALK TO BE 4" THICK.
6. CONCRETE DRIVEWAYS TO BE 6" THICK.
7. CONCRETE SIDEWALK WITHIN DRIVEWAYS TO BE 6" THICK.
8. ALL CONCRETE TO BE FDOT CLASS III, 3,000 P.S.I.
9. ALL H.C. RAMPS TO BE REPLACED AND DETECTABLE WARNING STRIPS SHALL BE INSTALLED PER FDOT STANDARD PLANS INDEX 522–002
10. DAMAGED DRIVEWAYS AND SIDEWALKS TO BE RECONSTRUCTED TO THEIR ORIGINAL DIMENSIONS.

CONCRETE SIDEWALK CONSTRUCTION
N.T.S.



FDOT INDEX 522–002
SIDEWALK DETAIL
N.T.S.

NOTES:
1. INSTALL A LINEAR ROOT BARRIER, 24" DEEP AND EXTENDING TO THE LIMITS SHOWN ON THE ROOT BARRIER DETAIL FROM EACH SIDE OF THE CENTER OF THE TREE ALONG THE LENGTH OF THE ADJACENT CURB.
2. TOP OF BARRIER MUST BE BELOW TOP OF CURB.
3. POSITION BARRIER AGAINST THE BACK OF CURB OR AS CLOSE TO STRUCTURE AS POSSIBLE.
4. TRENCH SHALL BE BACKFILLED WITH SELECT NATIVE BACKFILL MATERIAL.
5. CONNECT ROOT BARRIER PANELS PER MANUFACTURER RECOMMENDATIONS.
6. RESTORE THE SITE TO PRE–EXISTING CONDITIONS OR BETTER. DAMAGE CURB SHALL BE REPLACED IN KIND AT NO COST TO THE CITY.
7. TREES FOR THIS PROJECT SHALL BE IDENTIFIED AND TAGGED BY THE PROJECT ARBORIST PRIOR TO SHIPPING.
8. MEASUREMENTS OF THE TREES SHALL BE CONDUCTED IN ACCORDANCE WITH THE CITY OF TAMPA'S TREE ORDINANCE AND TREE AND LANDSCAPE TECHNICAL MANUAL.


Install Live Oak in center of green space between curb and sidewalk, 5"–5 ½" Caliper, 20' minimum height. 8' wide minimum spread, field grown from Marshall Trees Farm, Morriston, Florida, or approved equal.
Install 24" Deep Root Guard
Green Space
Side Walk
TREE AND ROOT BARRIER DETAIL

BORE TABLE			
BORE LOCATION	BEGIN STATION	END STATION	BORE LENGTH
1	40+24	40+68	43
2	40+40	41+03	63
3	42+30	42+60	30
4	95+82	96+22	40
5	30+74	30+98	24
6	32+25	32+65	40
7	32+25	32+93	68
8	35+92	36+24	32
9	91+45	91+65	20
10	80+25	80+78	53

A.2. TREE PROTECTION DETAILS

Protection Standards for Construction Activities proximate to Protective Root Zone (Secs. 27–43, 27–284.2)

Specific Conditions

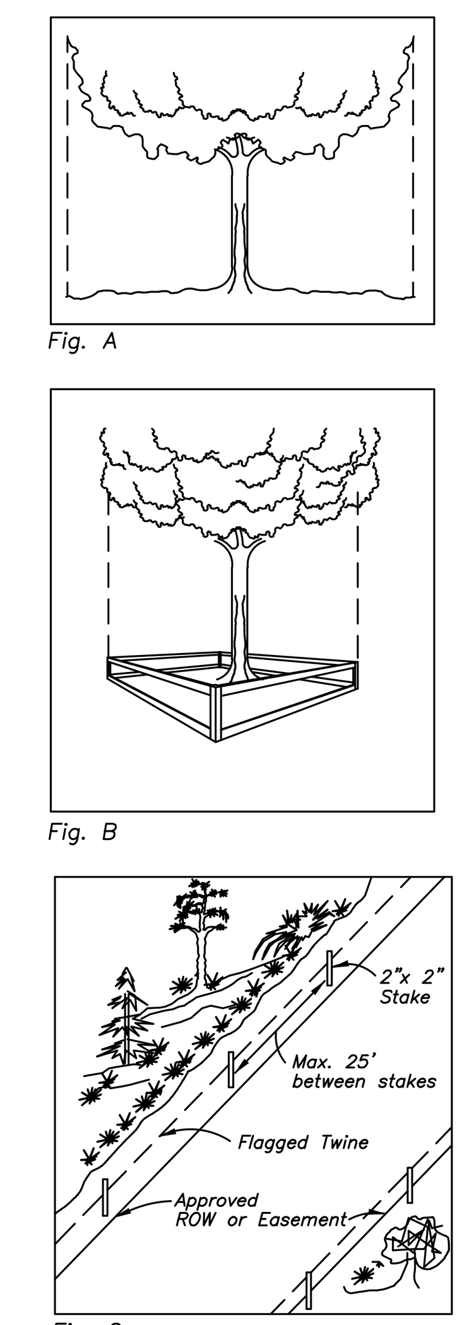
i. Minimum protection standards shall be met for all protected trees, prior to commencement of any construction activities on a development site and/or private right–of–way, in accordance with the tree protection graphic below.

ii. No changes to the predevelopment conditions within the approved protective root zone during the construction process.

iii. Protective barricades may be removed only to prepare the development site for final landscaping activities. During this activity only non–mechanical techniques may occur within the designated protective root zone. No alteration(s), of any kind, shall be made to any part of the tree (rrots, trunk, canopy/crown), other than those that are approved by the Natural Resources Coordinator or designee, as part of the related permit.

iv. No parking or storing of vehicles, equipment, or materials is permitted within the minimum protective area, at any time.

v. No site clearing or grading is permitted within the minimum protective area, other than those changes that are approved by the Natural Resources Coordinator or designee, as part of the related permit.



1. TREES – To restrict access into the area within the DRIPLINE of a tree, a physical structure not less than 3 feet in height, comprised of wood or other suitable material, is placed around the tree at the DRIPLINE, except where land alteration or construction activities are approved within the dripline.
2. The DRIPLINE of a tree is the imaginery, verticle line that extends downward from the outermost tips of the tree's branches to the ground. Fig. A.

BARRIER SPECIFICATIONS FOR TREES:
Four corner upright stakes of no less than 2" x 2" lumber connected by horizontal members of no less than 1" x 4" lumber; or upright stakes spaced at 4–5' intervals of no less 2" x 2" lumber connected by SILT FENCING.

3. NATURAL AREAS – To restrict access into areas where land alteration and construction activities are not authorized, a physical structure not less than 3 feet in height is placed along the perimeter of such areas.

BARRIER SPECIFICATIONS FOR NATURAL AREAS:
Upright stakes of no less than 2" x 2" lumber spaced no more than 25' apart and connected by twine flagged with plastic surveying tape at regular intervals of 5–10'. Fig. C. Other methods of demarcation will be considered depending upon the characteristics of the site.

WHY A BARRIER:
1. To protect all above ground portions of trees and other significant vegetation from mechanical damage.
2. To protect root systems from compaction.
3. To provide awareness of protected areas to equipment operators.

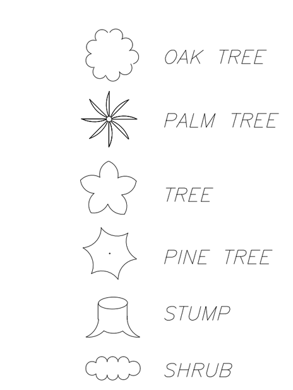
WHY IT WORKS:
A tree's chance for survival is greatly enhanced if no construction material, heavy equipment or stockpiling of soil is allowed inside the barrier; only hand labor.

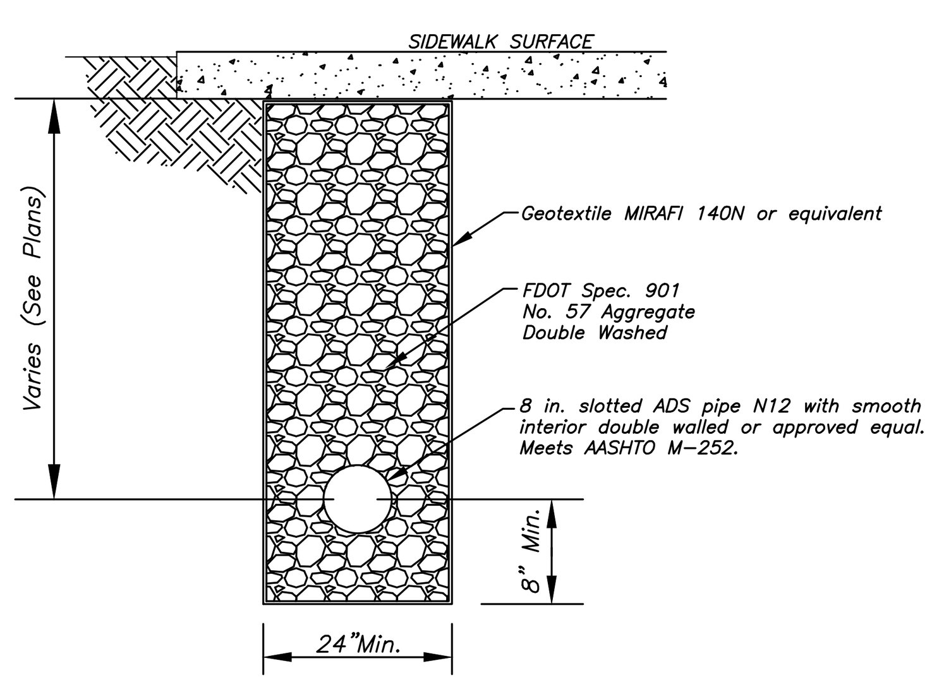
Protective barriers are used during land alteration natural areas to be retained on a site.

Protective barriers must be erected around TREES to construction activities will occur as well as along permitted land alteration and construction activities. land alteration and construction activities are sodding. No ground disturbance must occur within the barracaded area.

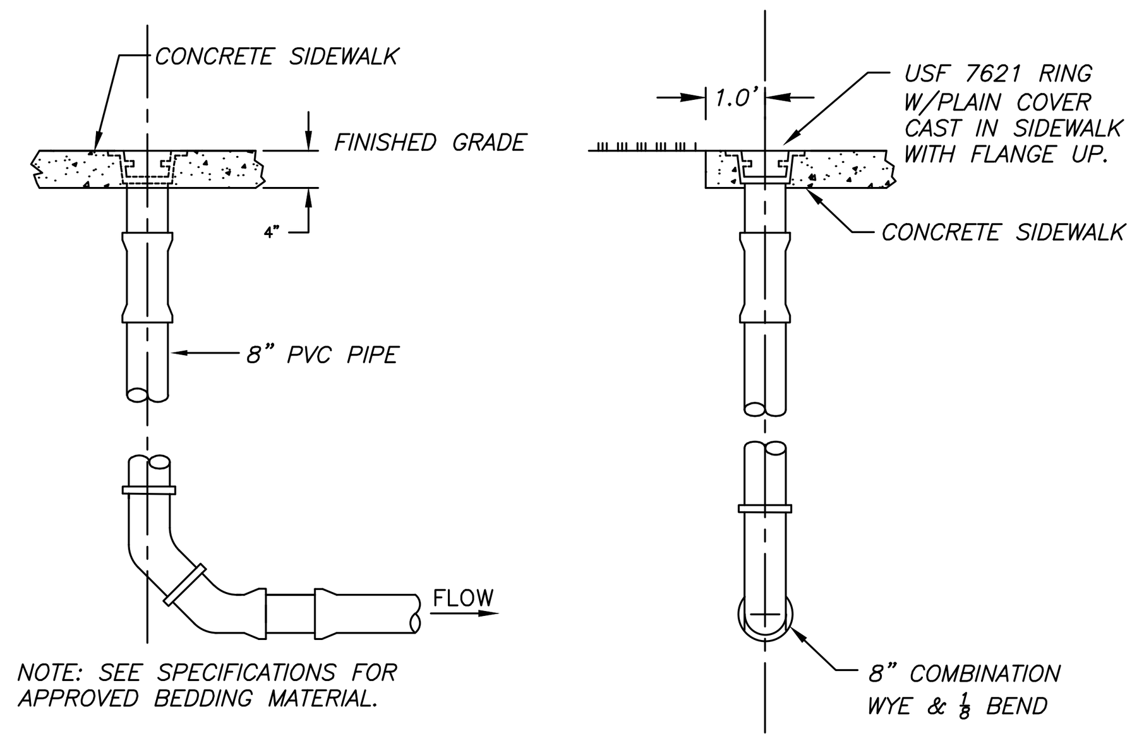
PROTECTIVE BARRICADE DETAIL
N.T.S.

TREE SPECIES





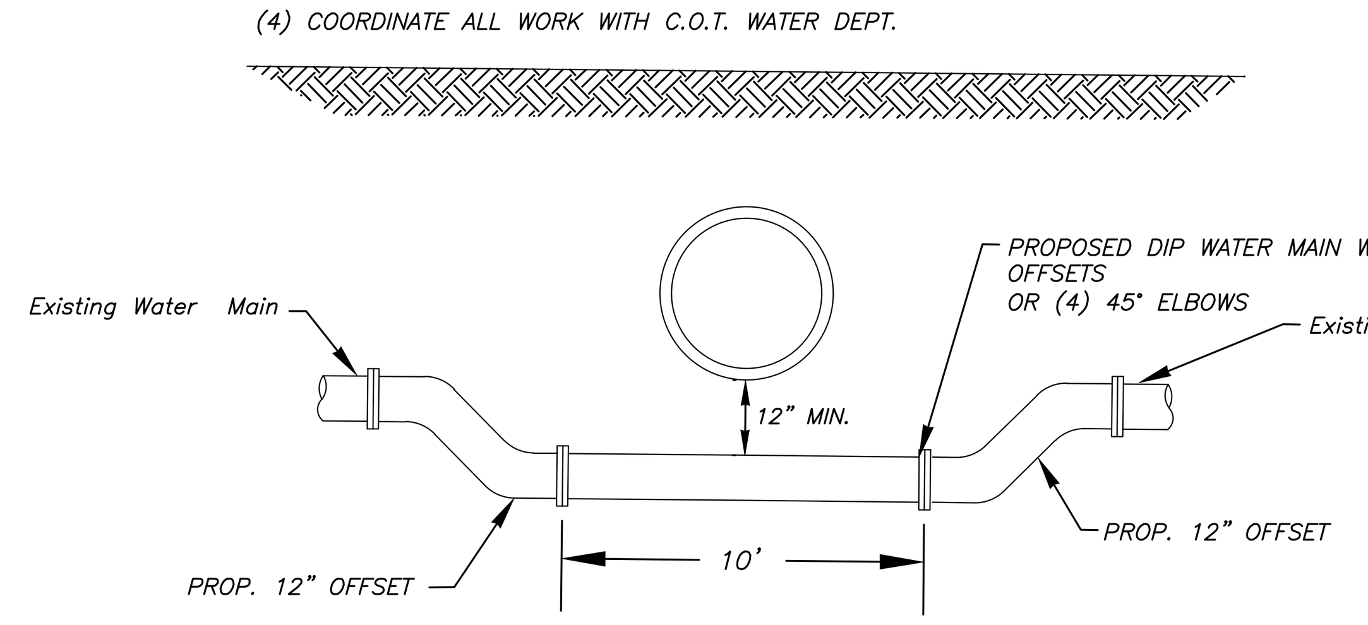
UNDERDRAIN DETAIL
N.T.S.



ONE WAY CLEAN–OUT

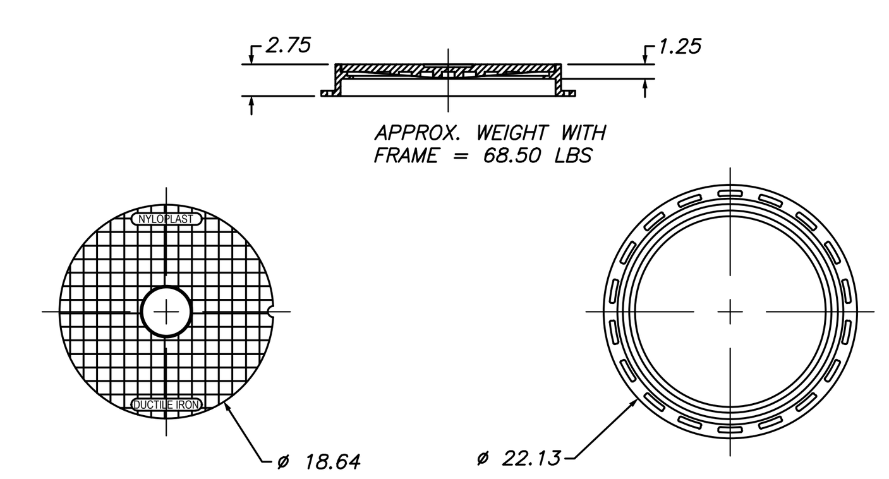
CLEAN OUT DETAIL
NTS

(1) CENTER A FULL JOINT OF WATER PIPE WHEN CROSSING UNDER UNDERDRAIN PIPE.
(2) CHLORINE INJECTION & SAMPLE TAP LOCATION TO BE DETERMINED BY ENGINEER.
(3) ALL WATER PIPE JOINTS TO BE MECHANICALLY RESTRAINED.
(4) COORDINATE ALL WORK WITH C.O.T. WATER DEPT.



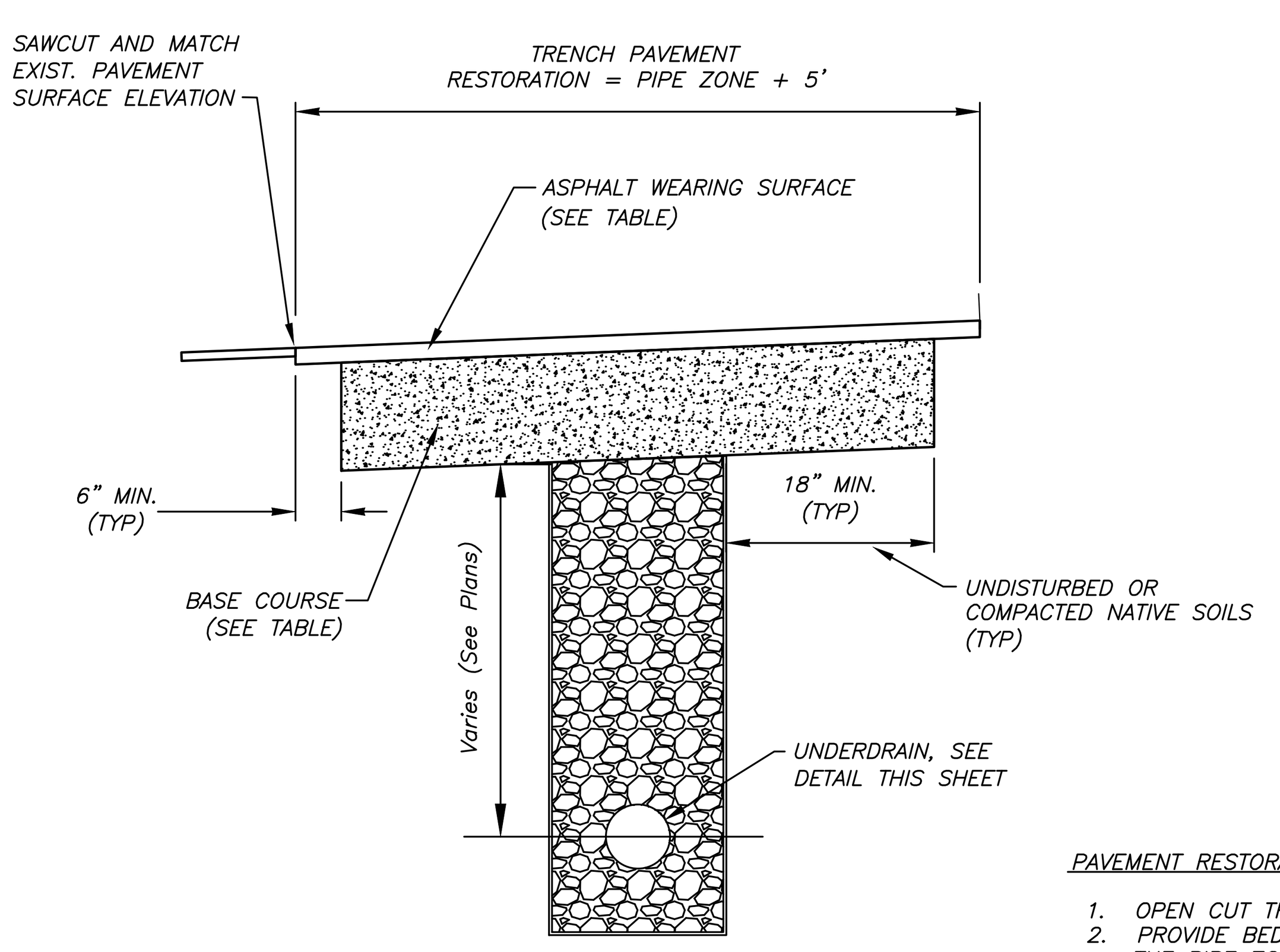
POTABLE & RECLAIMED WATER MAIN RELOCATION (TYP.)
NTS

NOTE: SEE PLAN/PROFILE SHEETS FOR LOCATIONS, WATER MAIN DIAMETER & DEPTH OR ELEVATIONS OF WATER MAIN & UNDERDRAIN.



NOTE: 18" DUCTILE IRON SOLID LID(H20 TRAFFIC LOADING) NYLOPLAST MODEL1899 CGC, OR APPROVED EQUAL.

18" SOLID LID
N.T.S.


SAWCUT AND MATCH EXIST. PAVEMENT SURFACE ELEVATION
TRENCH PAVEMENT RESTORATION = PIPE ZONE + 5'
ASPHALT WEARING SURFACE (SEE TABLE)
6" MIN. (TYP)
BASE COURSE (SEE TABLE)
18" MIN. (TYP)
UNDISTURBED OR COMPACTED NATIVE SOILS (TYP)
Varies (See Plans)
UNDERDRAIN, SEE DETAIL THIS SHEET

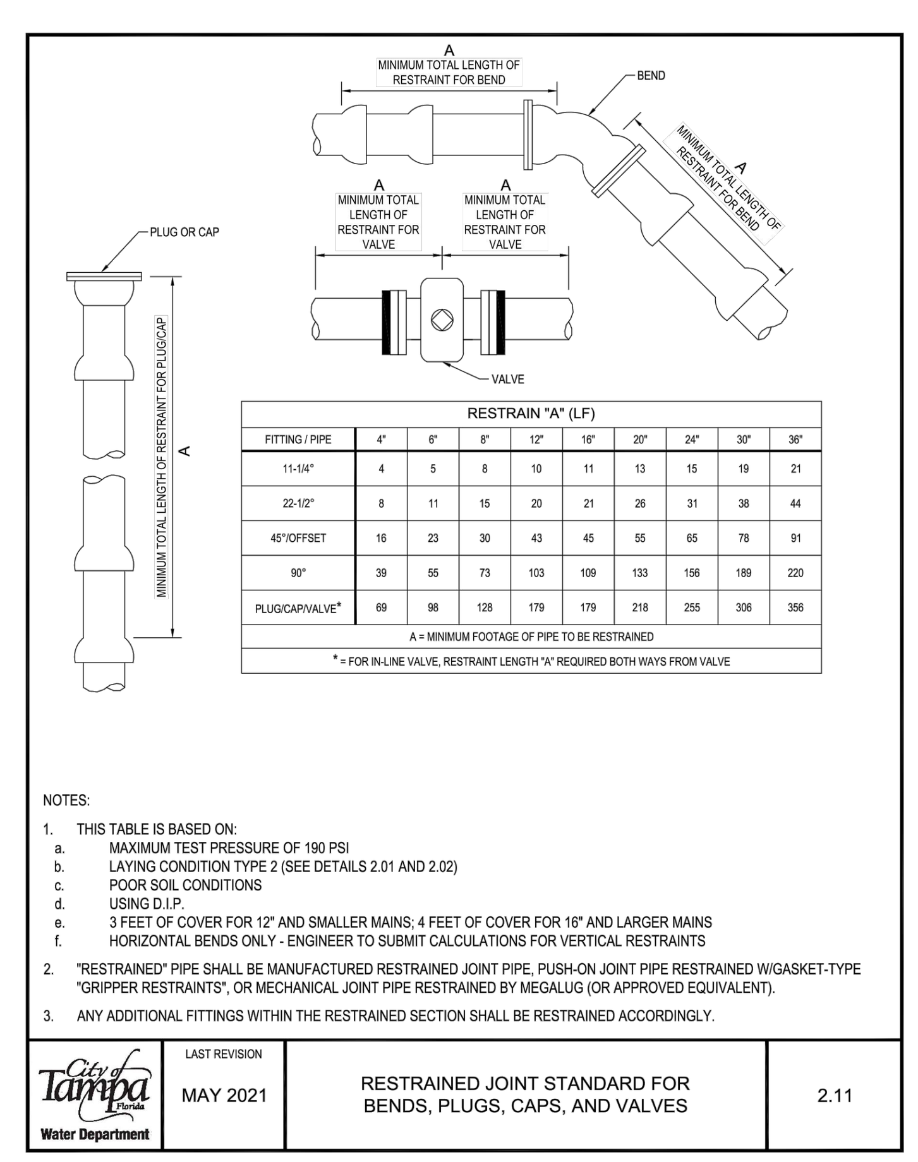
ROAD RESTORATION DETAIL
N.T.S.

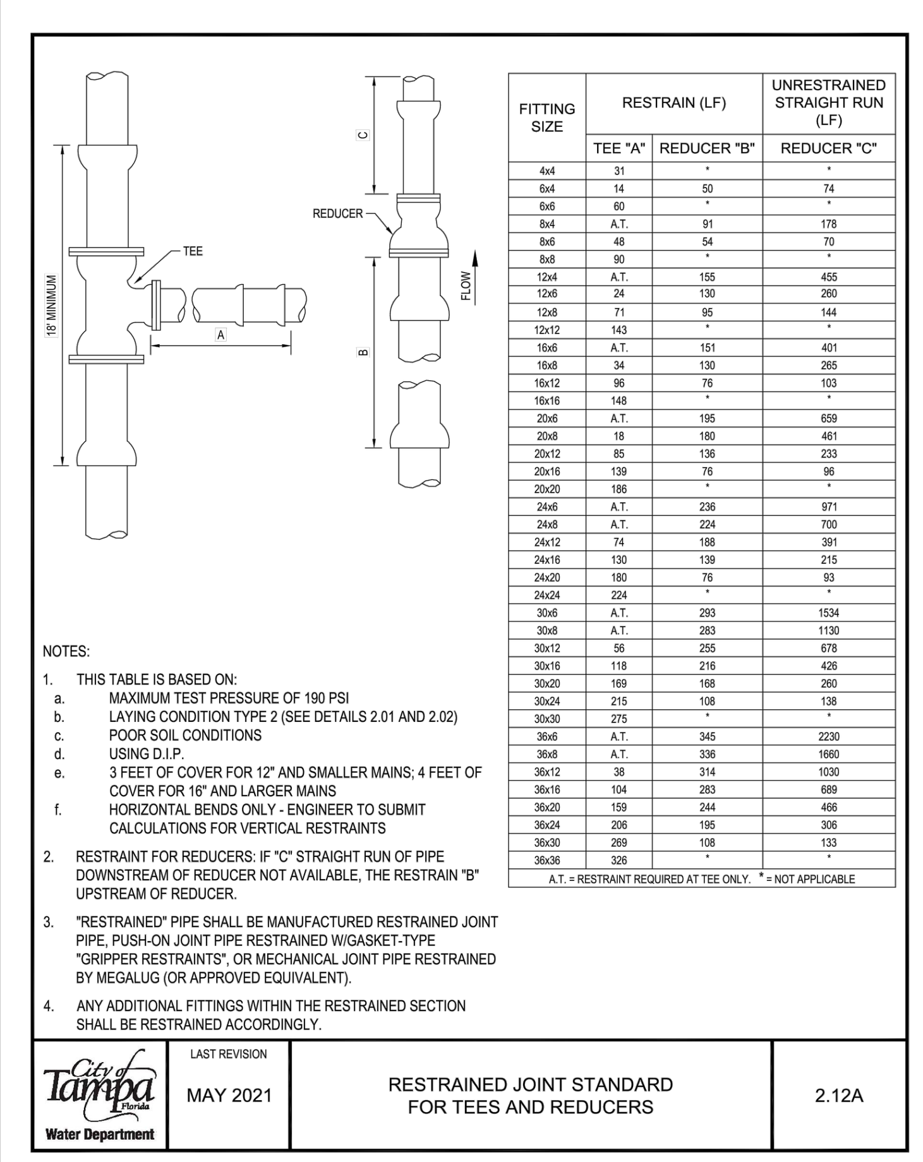
PAVEMENT RESTORATION NOTES:
1. OPEN CUT TRENCH FOR UTILITY INSTALLATION.
2. PROVIDE BEDDING AND PIPE BACKFILL WITHIN THE PIPE ZONE AS OTHERWISE REQUIRED.
3. ROAD BASE AND ASPHALT WEARING COURSES SHALL BE CONSTRUCTED IN ACCORDANCE WITH C.O.T. TRANSPORTATION TECHNICAL STANDARDS

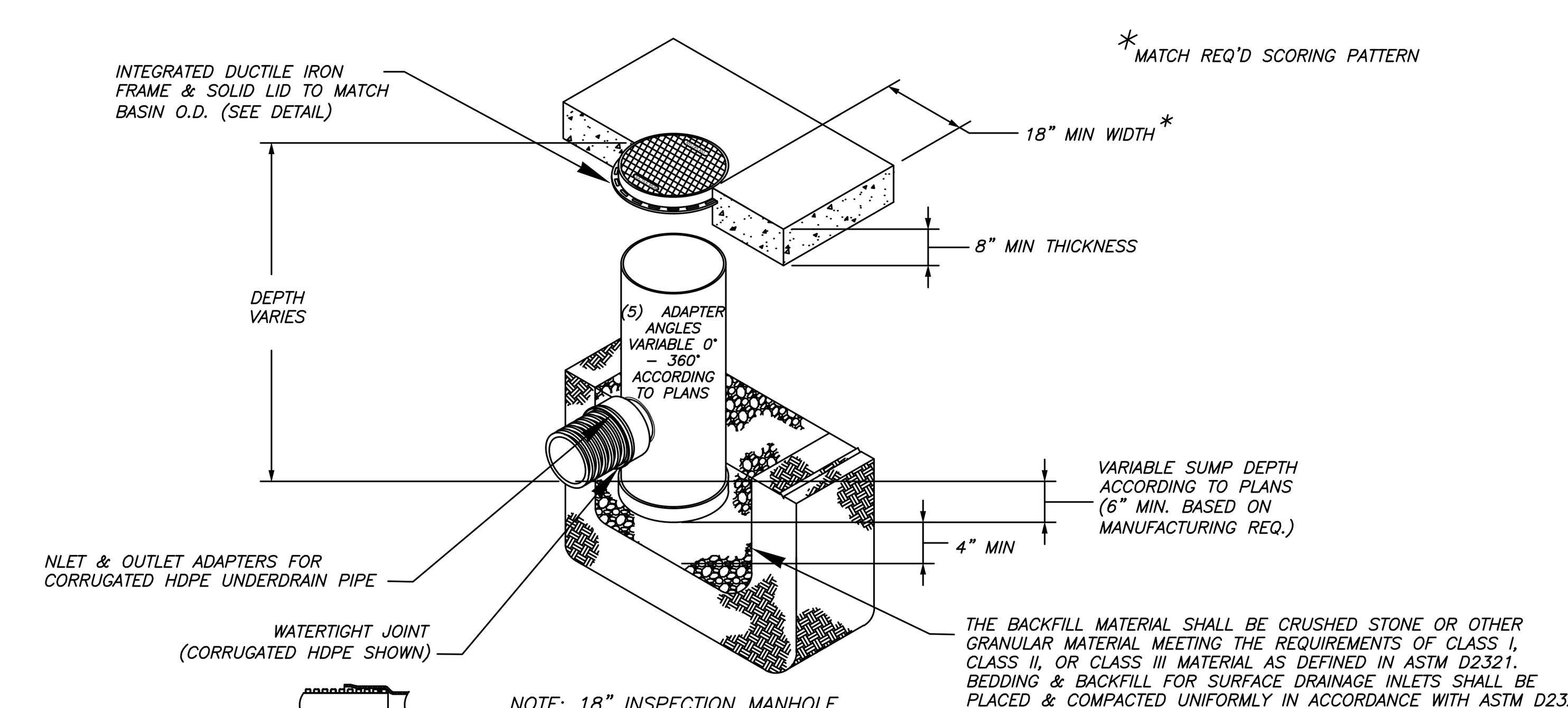
PAVEMENT REQUIREMENTS:

STREET CLASSIFICATION	BASE MATERIAL/THICKNESS (IN.)	ASPHALT MATERIAL/THICKNESS (IN.)
ALLEY (A)	CRUSHED CONC. / 6"	1"
RESIDENTIAL (I)	CRUSHED CONC. / 8"	2"
COLLECTOR / ARTERIAL (II)	CRUSHED CONC. / 12"	3"

PAVEMENT RESTORATION DETAIL
N.T.S.






*MATCH REQ'D SCORING PATTERN
INTEGRATED DUCTILE IRON FRAME & SOLID LID TO MATCH BASIN O.D. (SEE DETAIL)
18" MIN WIDTH*
8" MIN THICKNESS
DEPTH VARIES
(5) ADAPTER ANGLES VARIABLE 0° – 360° ACCORDING TO PLANS
VARIABLE SUMP DEPTH ACCORDING TO PLANS (6" MIN. BASED ON MANUFACTURING REQ.)
4" MIN
NLET & OUTLET ADAPTERS FOR CORRUGATED HDPE UNDERDRAIN PIPE
WATERTIGHT JOINT (CORRUGATED HDPE SHOWN)
NOTE: 18" INSPECTION MANHOLE
THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

18" INSPECTION MANHOLE
N.T.S.

Plot Date: Thursday, September 22, 2022

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

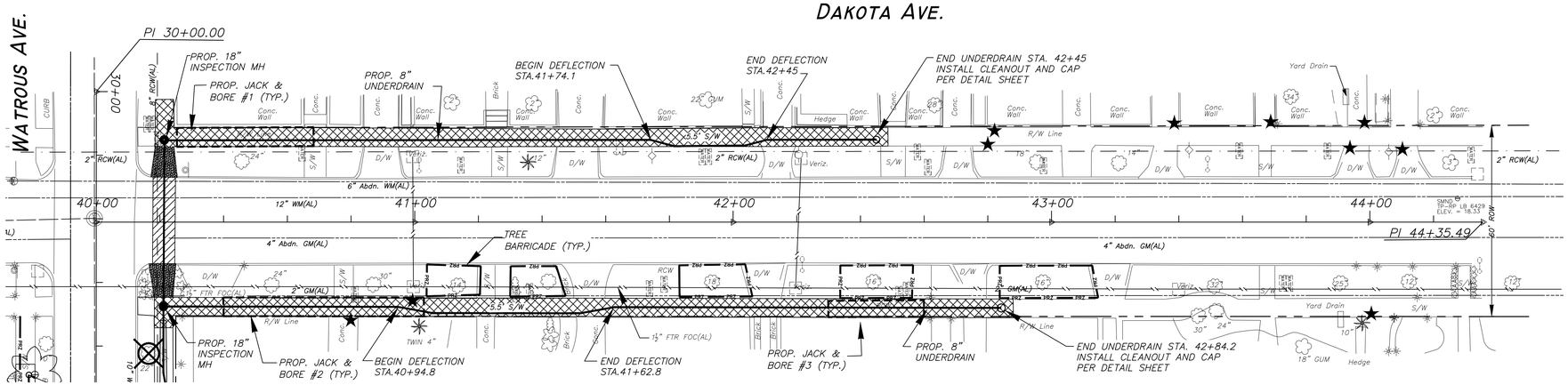
DES: SEB
DRN: ME/JDM
CKD: BG
DATE: 9/22/22

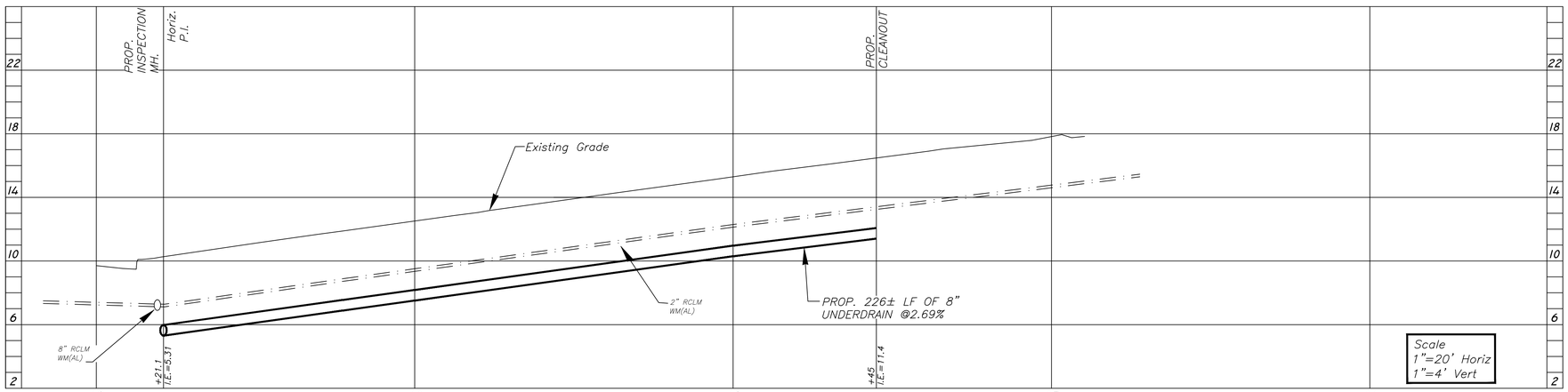
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

HYDE PARK GROUNDWATER DIVERSION

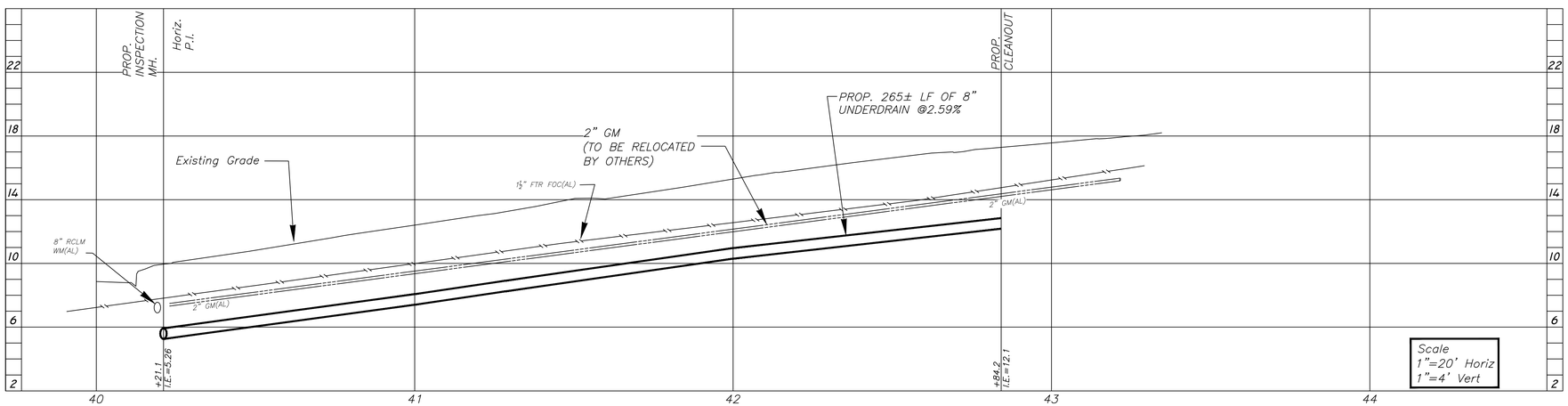
SW2022-03

DAKOTA AVE.





WEST SIDE



EAST SIDE

J-11

SEC.26 T29S R18E

0 20

1"=20'

NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.
2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.
3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

DES: SEB
DRN: ME/JDM
CKD: BG
DATE: 9/22/22

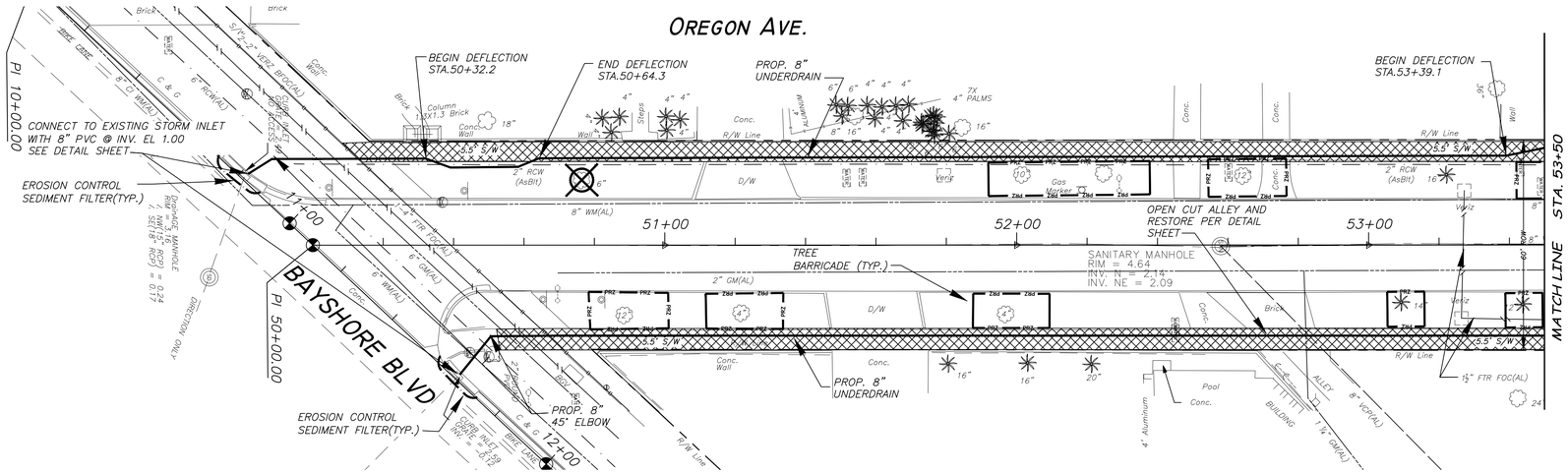
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

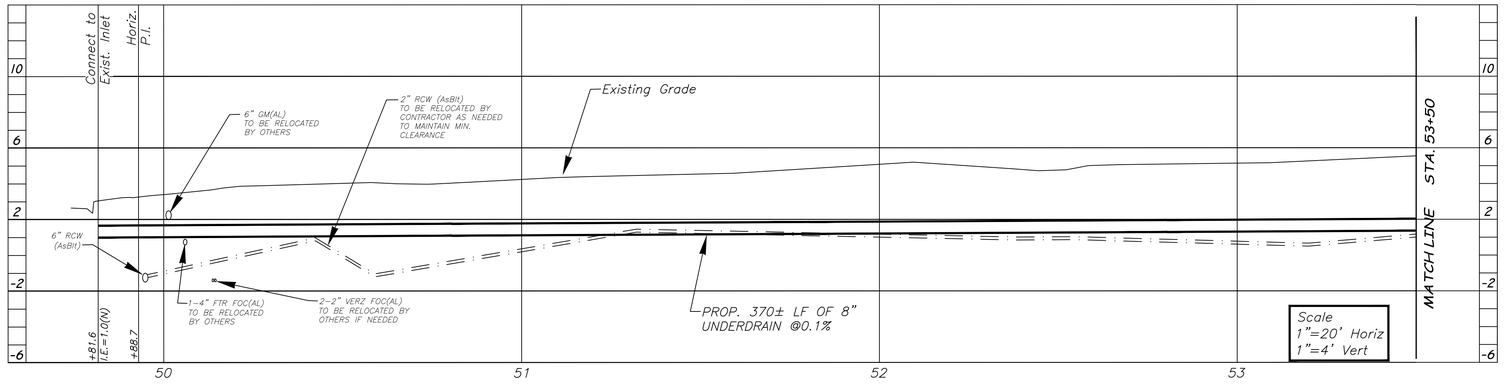
HYDE PARK GROUNDWATER DIVERSION

SHEET 3 OF 14

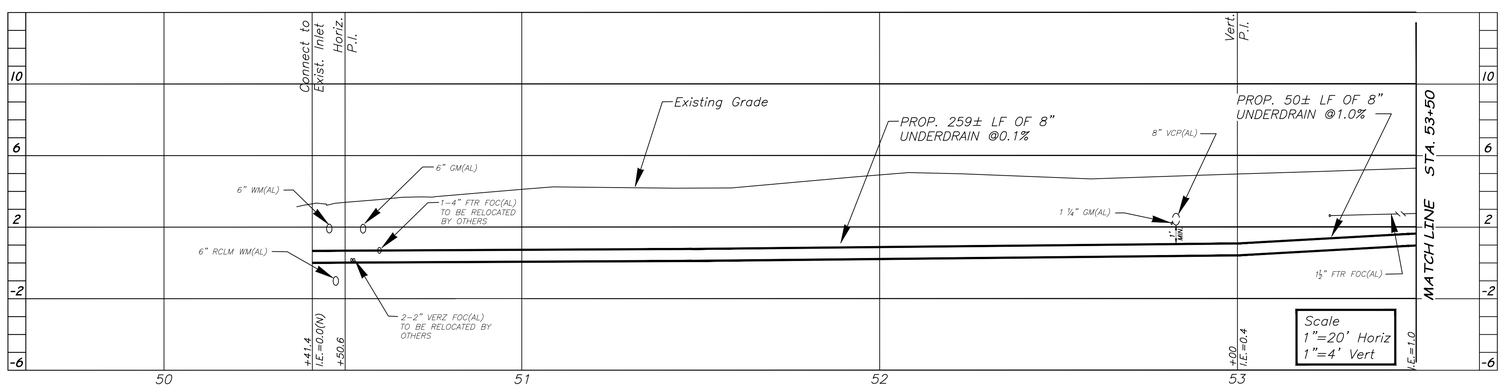
Plot Date: Thursday, September 22, 2022

SW2022-03

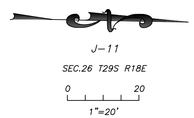




WEST SIDE



EAST SIDE



NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.

2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.

3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

REMOVE EXISTING TREES AND REPLACE WITH LIVE OAK TREES PER DETAIL AND SPECIFICATIONS.

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

DES: SEB
DRN: ~~MF~~ JDM
CKD: BG
DATE: 9/22/22

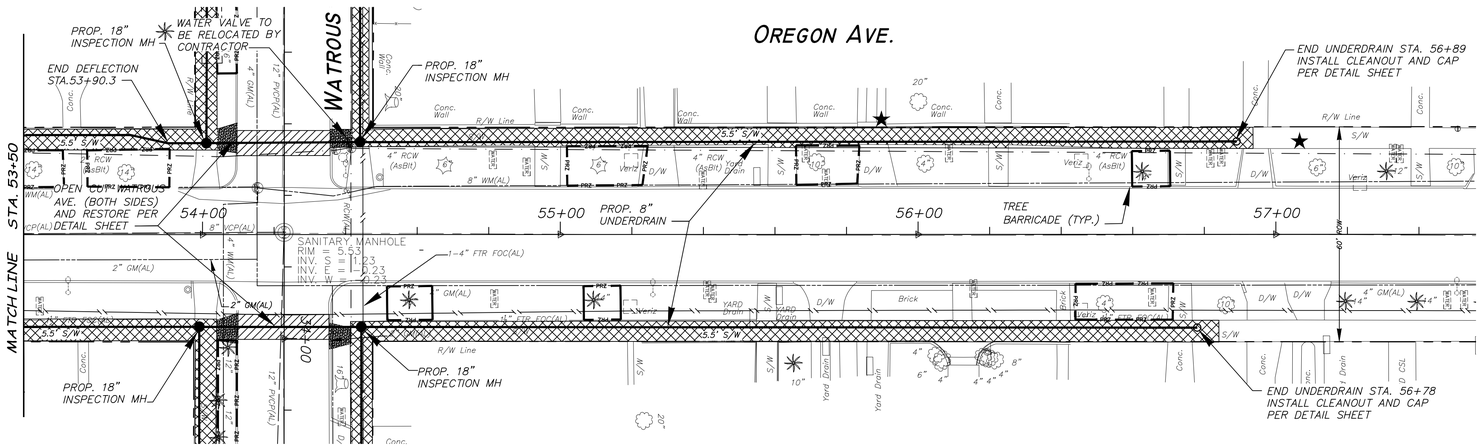
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

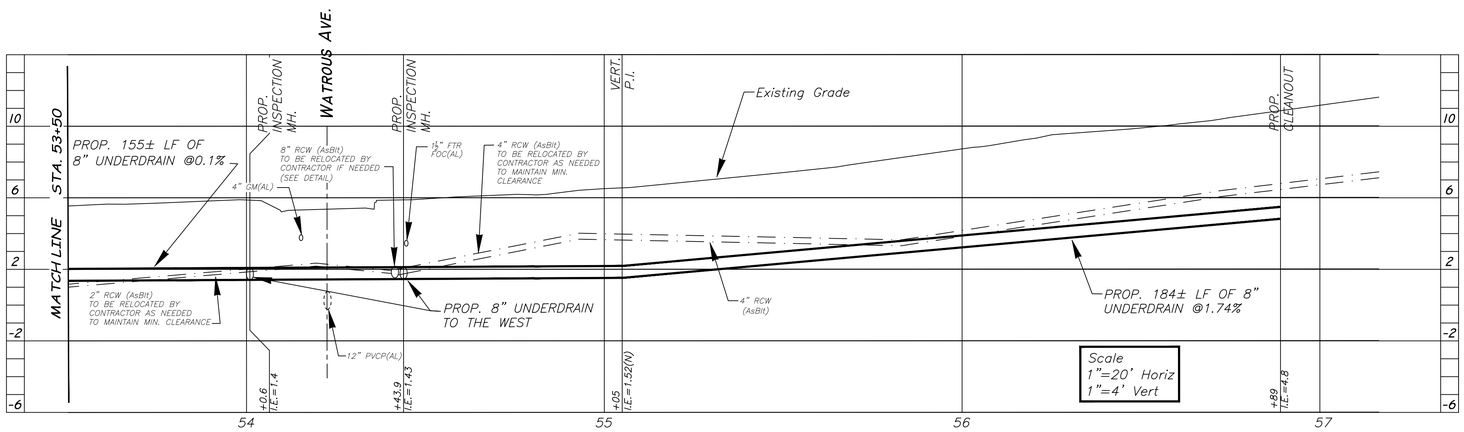
HYDE PARK GROUNDWATER DIVERSION

SHEET 4 OF 14

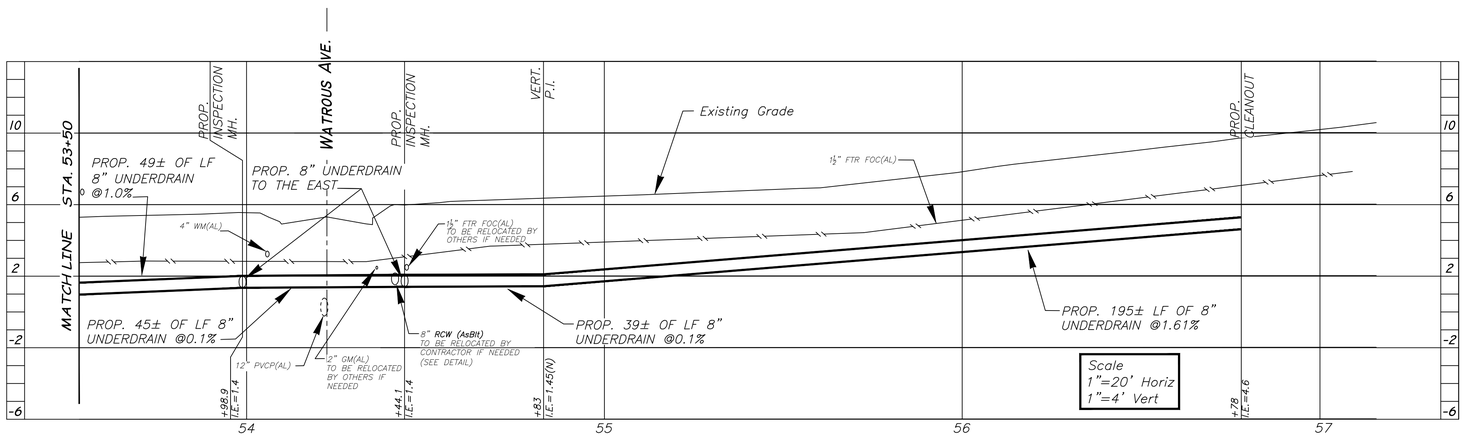
Plot Date: Thursday, September 22, 2022

SW2022-03

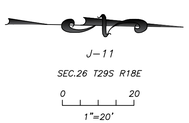




WEST SIDE



EAST SIDE



NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.

2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.

3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

DES: SEB
DRN: ME/JDM
CKD: BG
DATE: 9/22/22

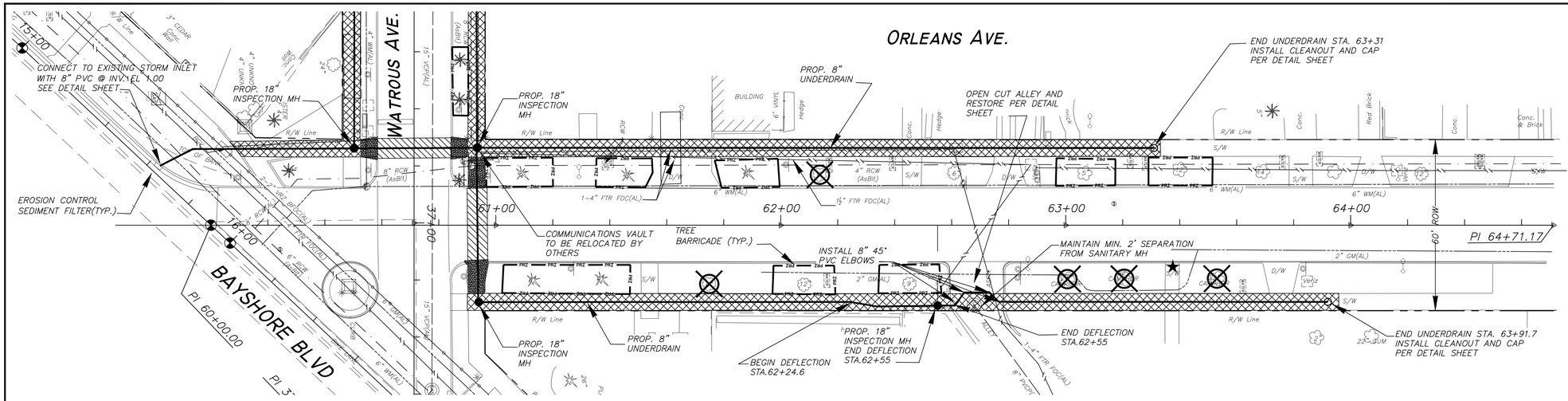
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

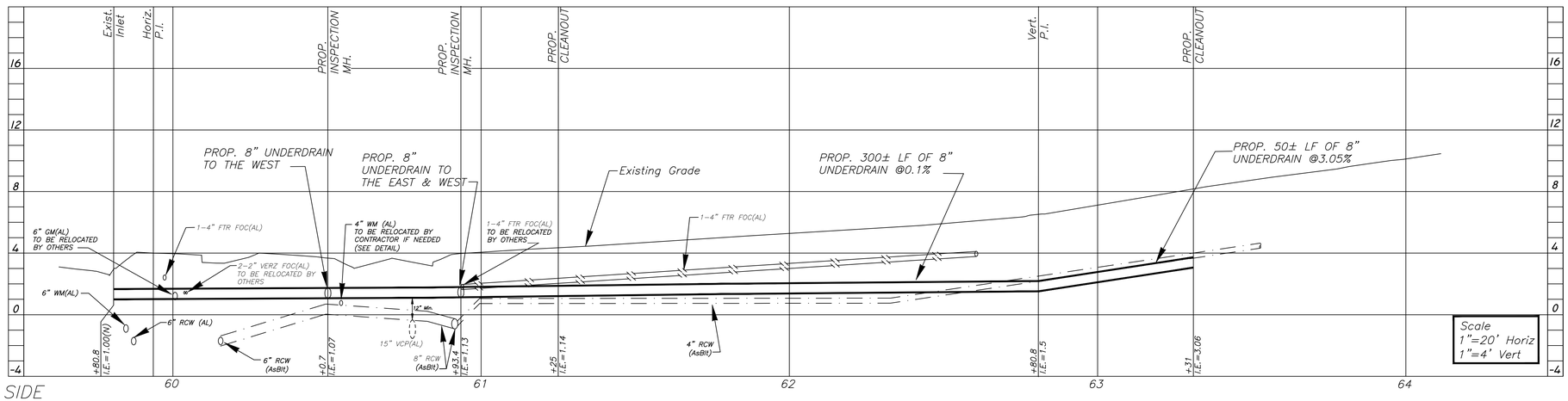
HYDE PARK GROUNDWATER DIVERSION

SHEET 5 OF 14

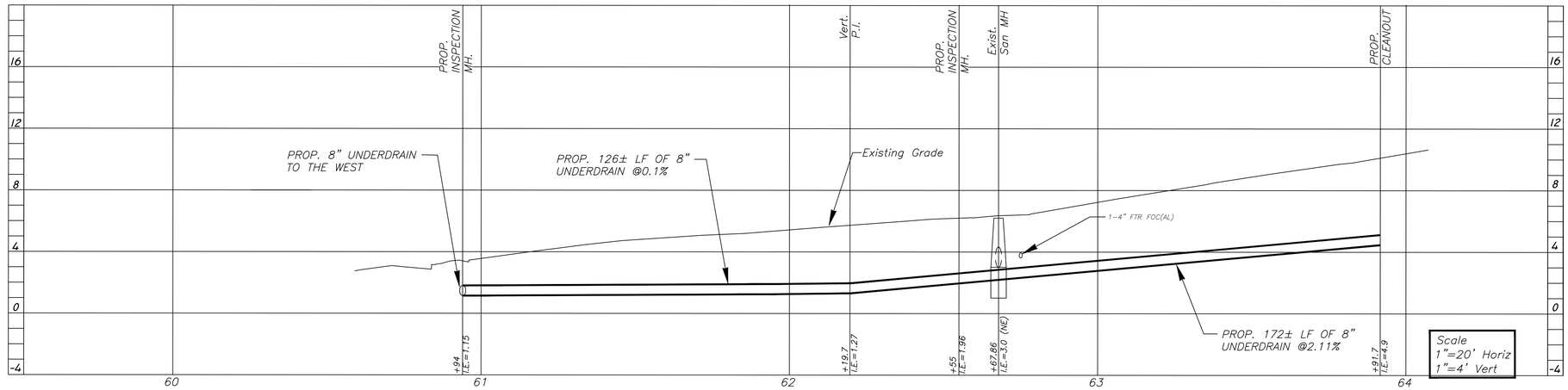
Plot Date: Thursday, September 22, 2022

SW2022-03





WEST SIDE



EAST SIDE

J-11

SEC.26 T29S R1BE

0 20

1"=20'

NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.
2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.
3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

REMOVE EXISTING TREES AND REPLACE WITH LIVE OAK TREES PER DETAIL AND SPECIFICATIONS.

Plot Date: Thursday, September 22, 2022

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

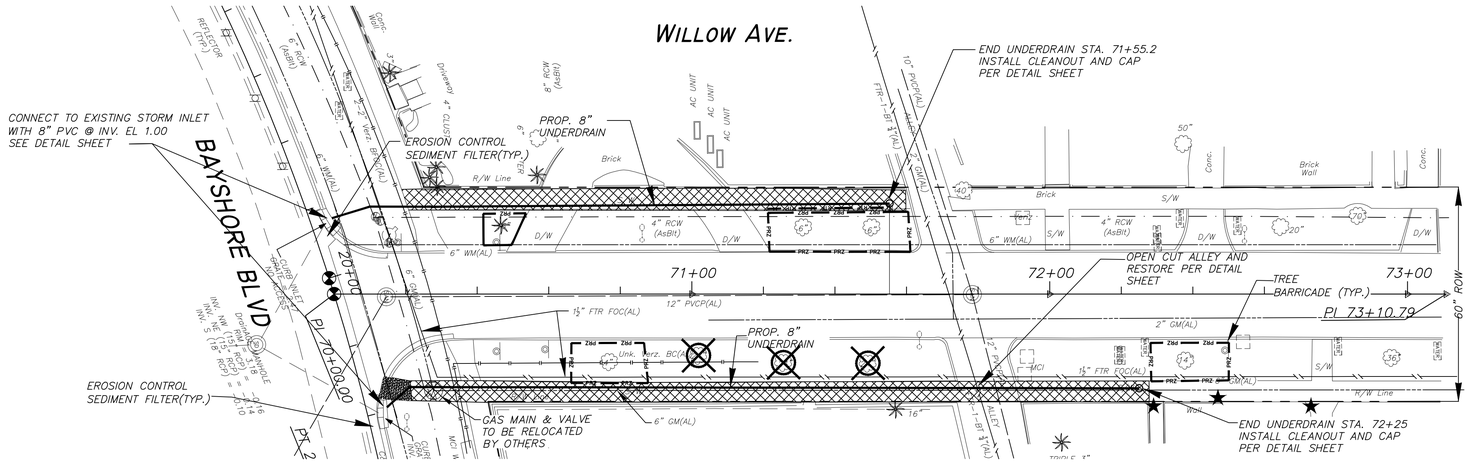
DES: SEB
DRN: ME/JDM
CKD: BG
DATE: 9/22/22

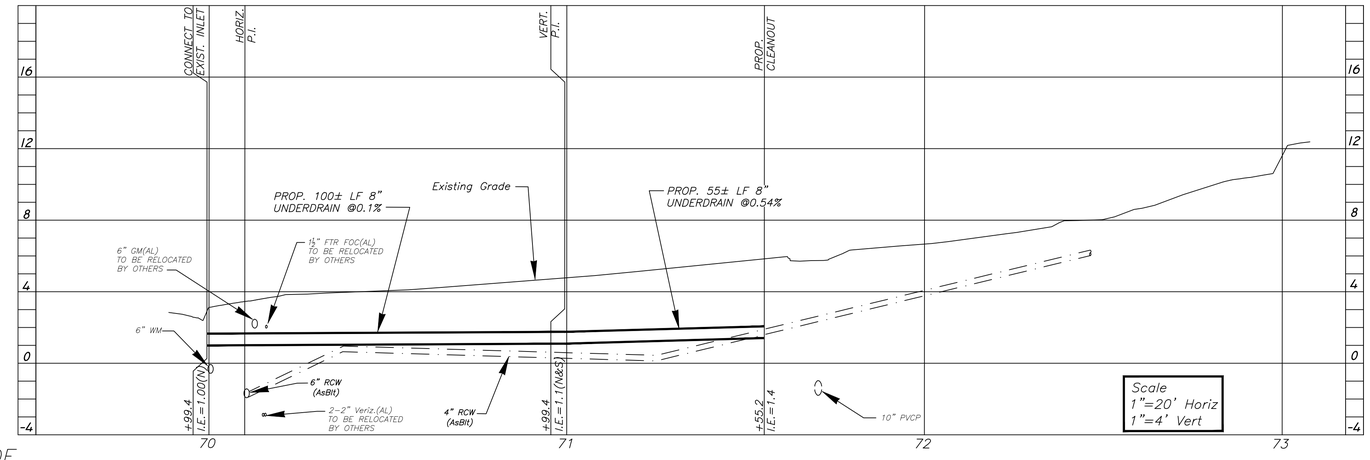
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

HYDE PARK GROUNDWATER DIVERSION

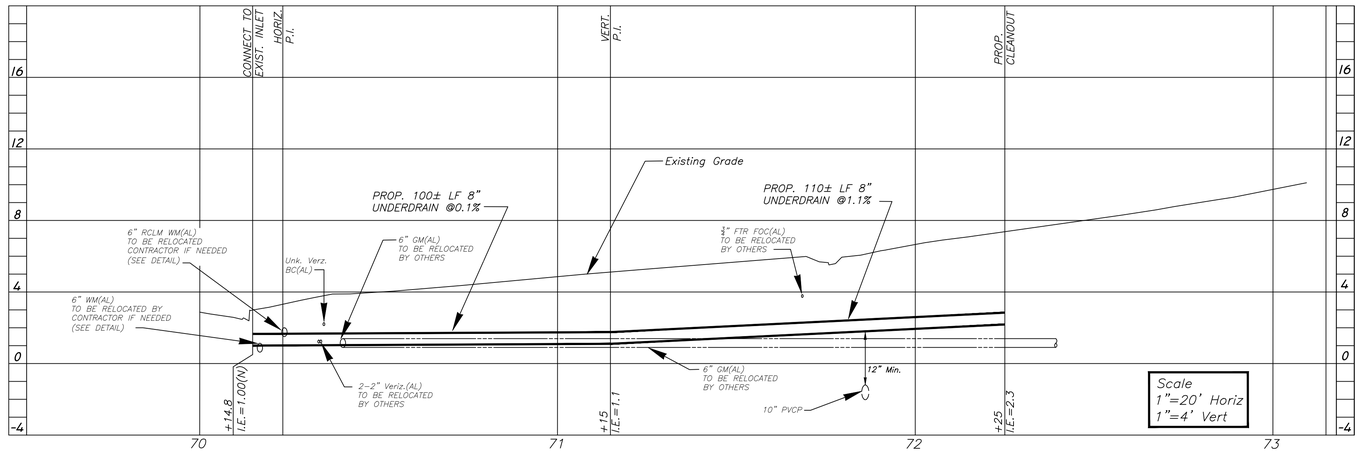
SHEET 6 OF 14

SW2022-03





WEST SIDE



EAST SIDE

J-11

SEC.26 T29S R18E

0 20

1"=20'

NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.

2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.

3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

REMOVE EXISTING TREES AND REPLACE WITH LIVE OAK TREES PER DETAIL AND SPECIFICATIONS.

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

DES: SEB
DRN: HE/JDM
CKD: BG
DATE: 9/22/22

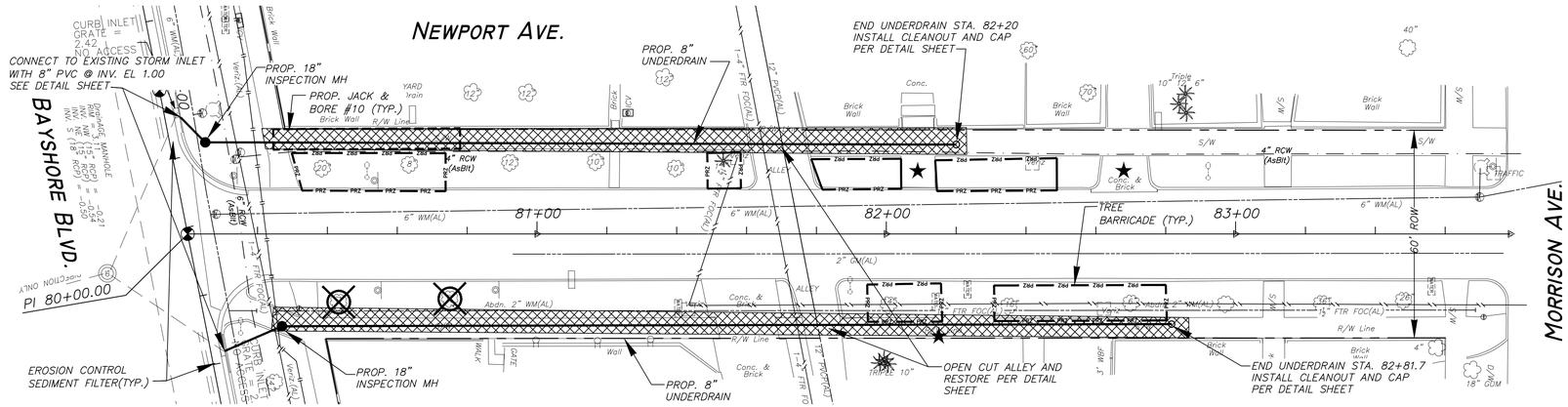
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

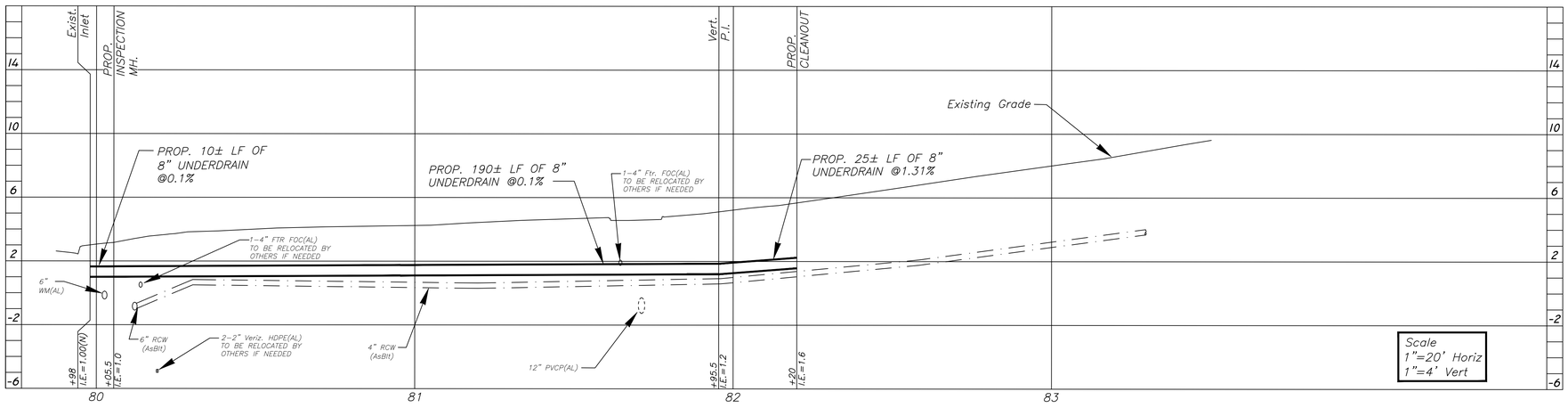
HYDE PARK GROUNDWATER DIVERSION

SHEET 7 OF 14

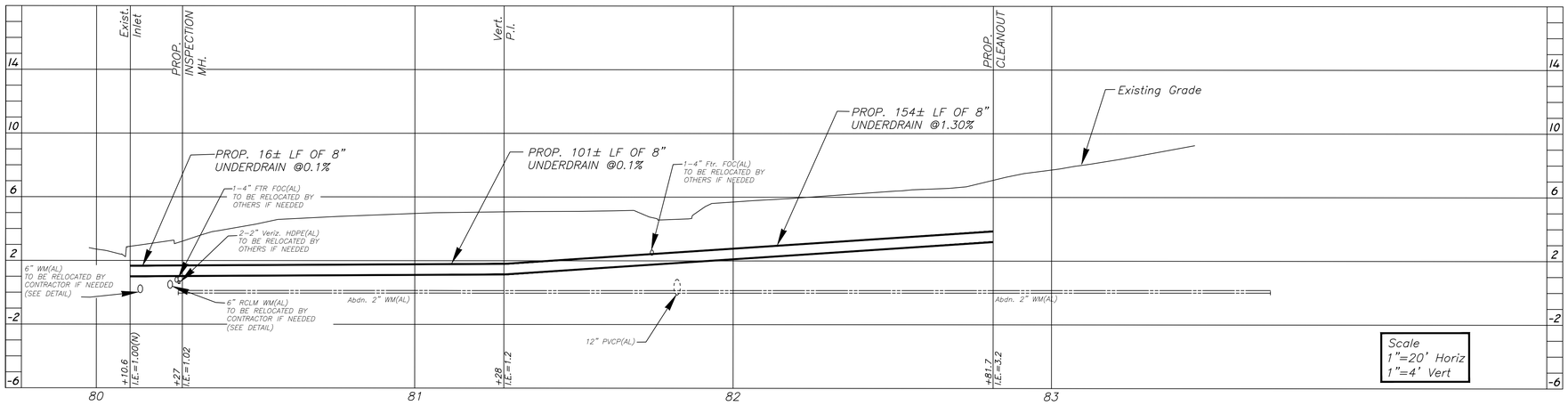
Plot Date: Thursday, September 22, 2022

SW2022-03





WEST SIDE



EAST SIDE

NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.
2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.
3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

REMOVE EXISTING TREES AND REPLACE WITH LIVE OAK TREES PER DETAIL AND SPECIFICATIONS.

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

DES: SEB
DRN: PE/JDM
CKD: BG
DATE: 9/22/22

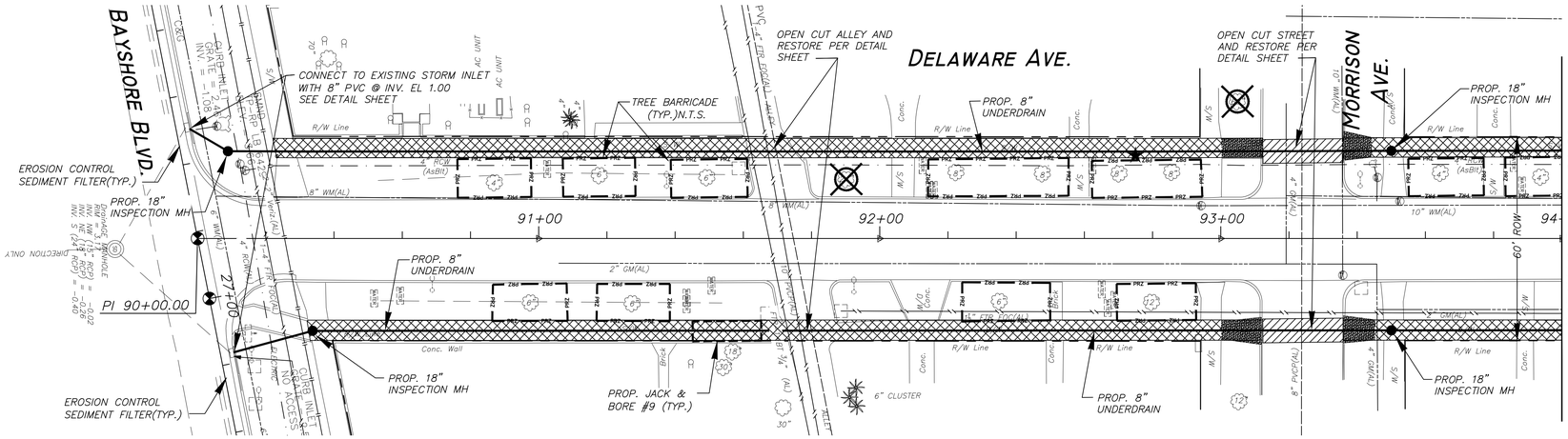
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

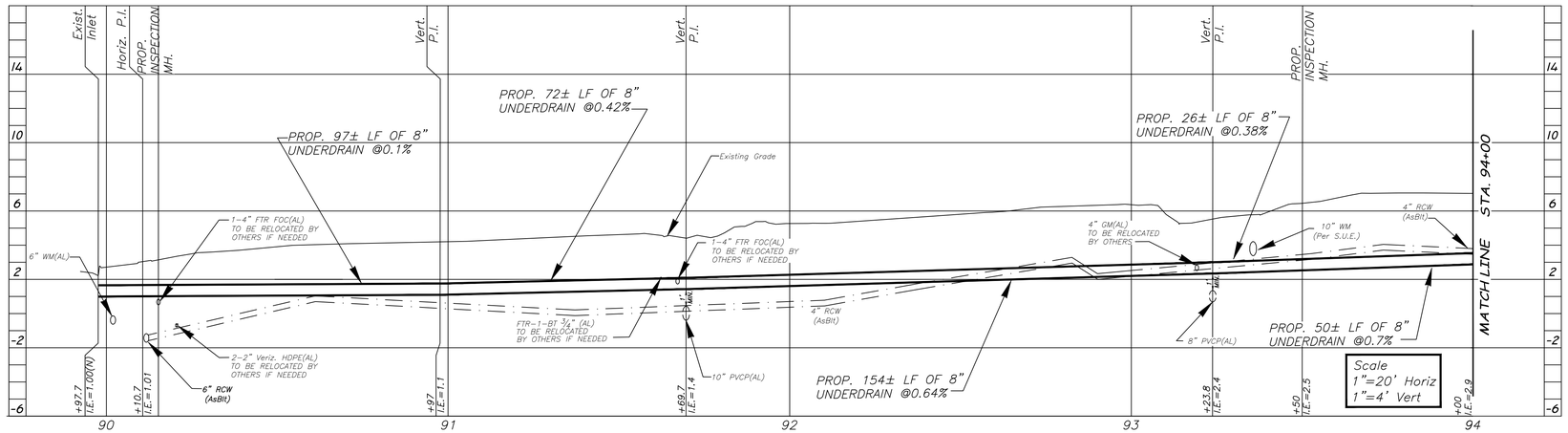
HYDE PARK GROUNDWATER DIVERSION

SHEET 8 OF 14

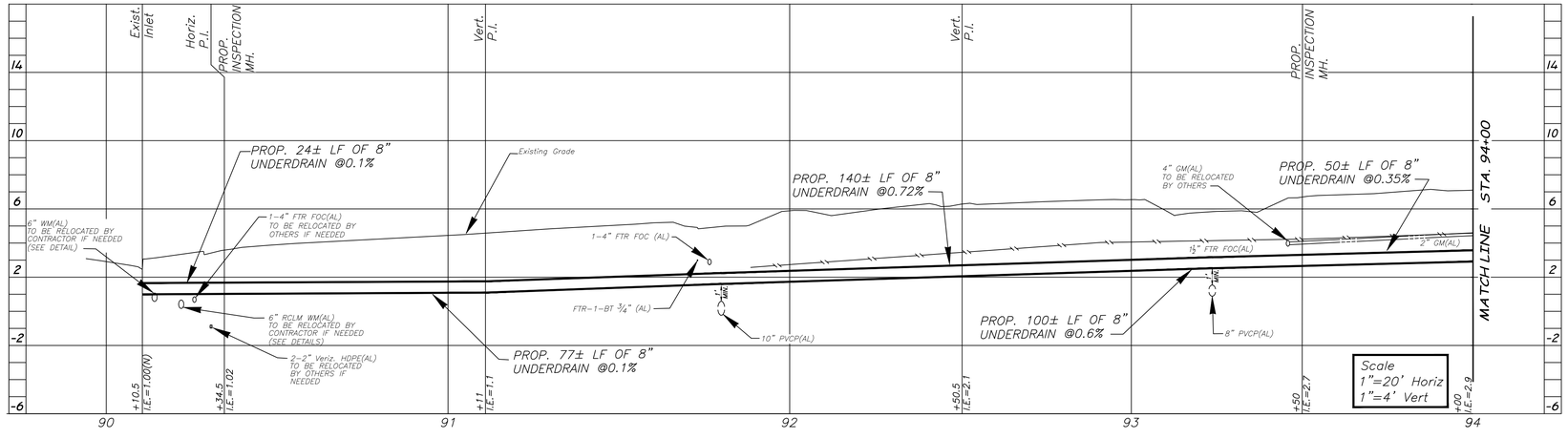
Plot Date: Thursday, September 22, 2022

SW2022-03





WEST SIDE



EAST SIDE

J-11

SEC.26 T29S R18E

0 20

1"=20'

NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.
2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.
3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

REMOVE EXISTING TREES AND REPLACE WITH LIVE OAK TREES PER DETAIL AND SPECIFICATIONS.

Plot Date: Thursday, September 22, 2022

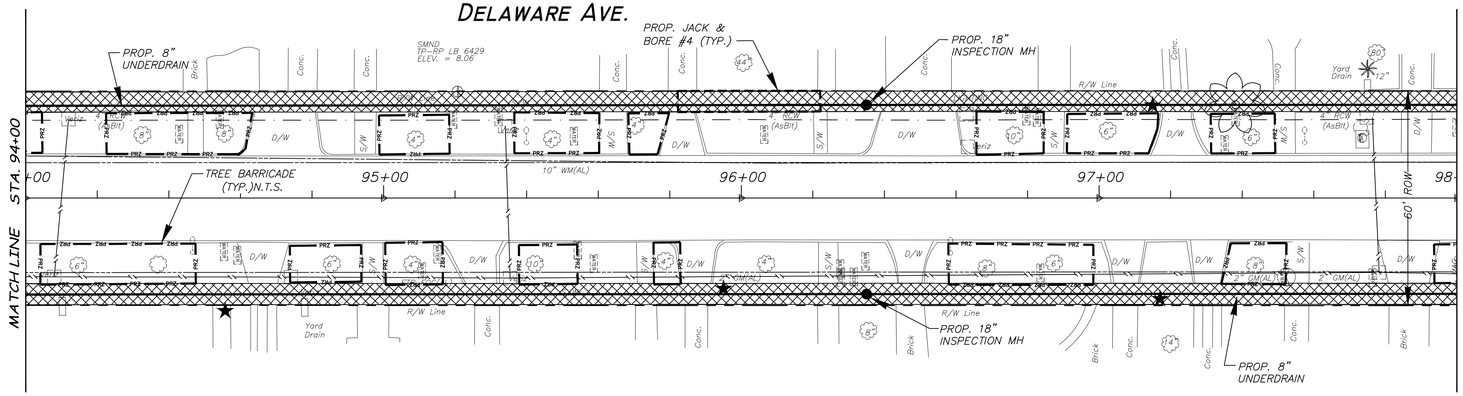
No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

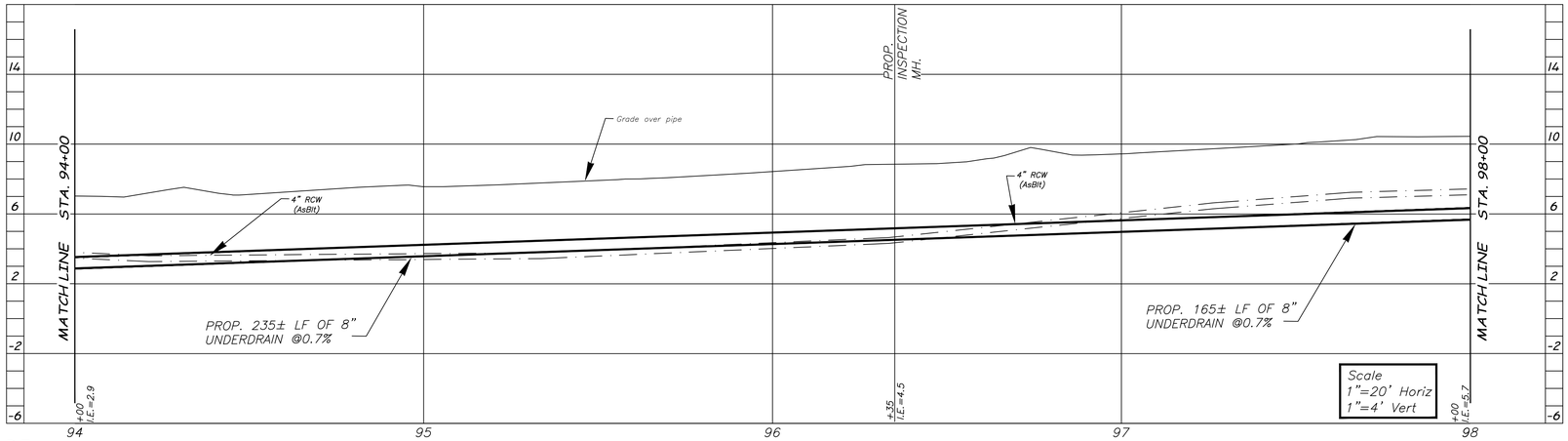
DES: SEB
DRN: ME/JDM
CKD: BG
DATE: 9/22/22

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

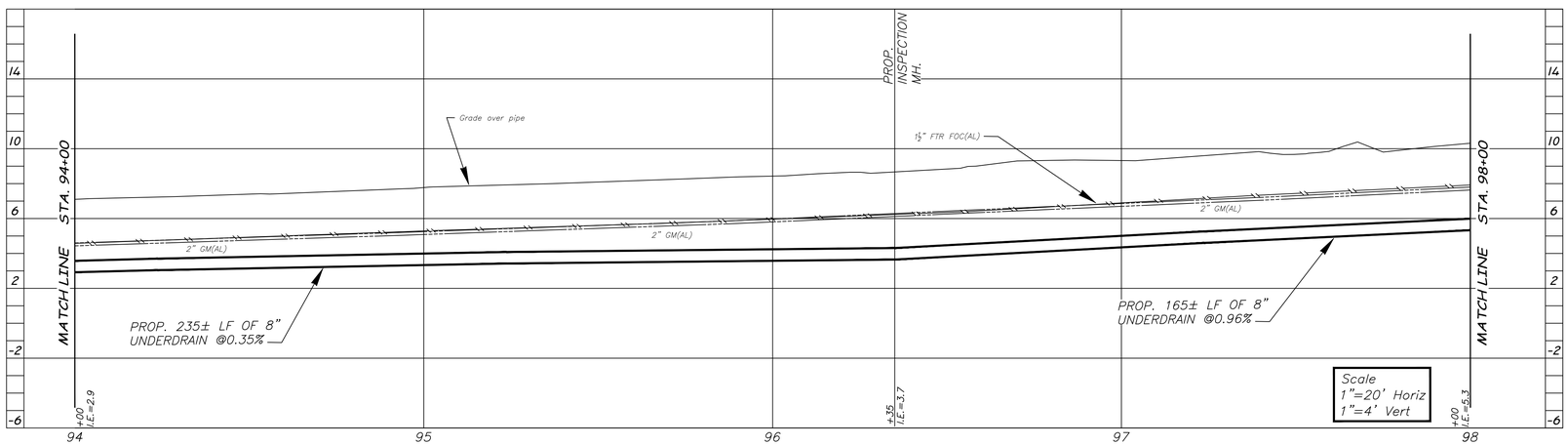
HYDE PARK GROUNDWATER DIVERSION

SHEET 9 OF 14





WEST SIDE



EAST SIDE

NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.
2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.
3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

DES: SEB
DRN: ##/JDM
CKD: BG
DATE: 9/22/22

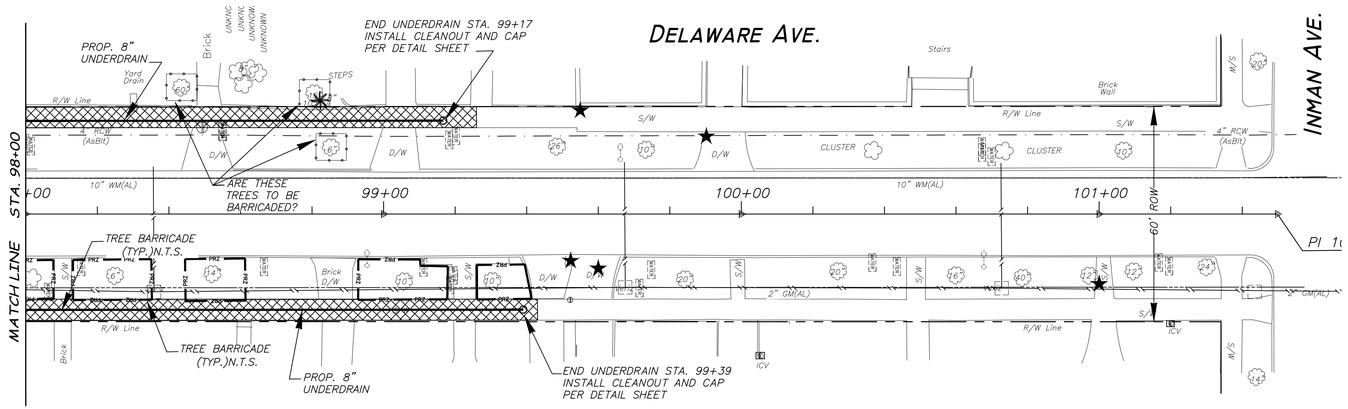
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

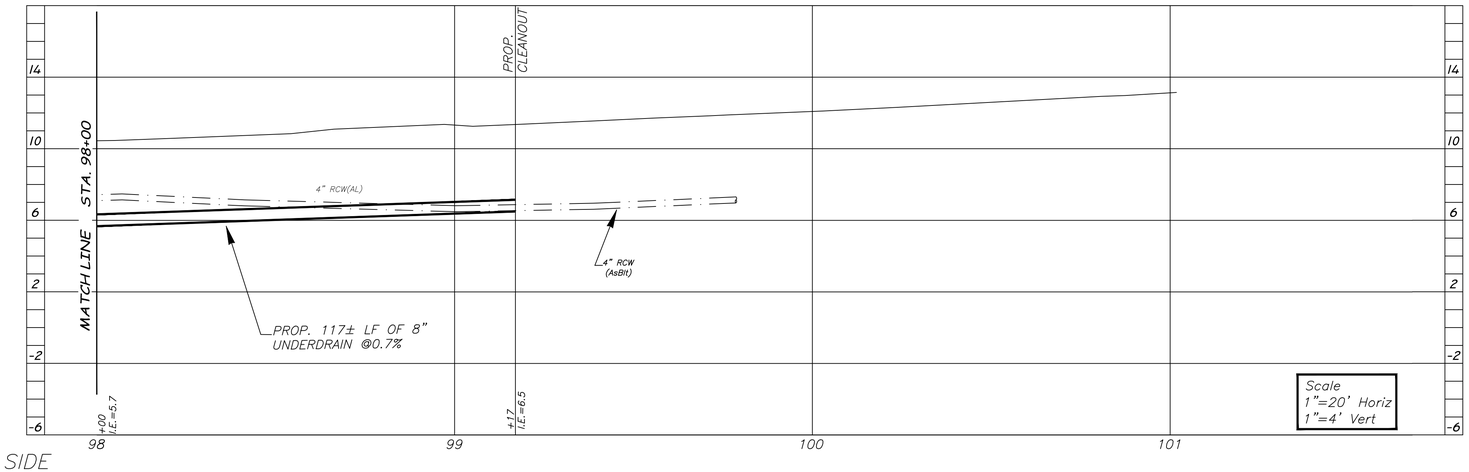
HYDE PARK GROUNDWATER DIVERSION

SHEET 10 OF 14

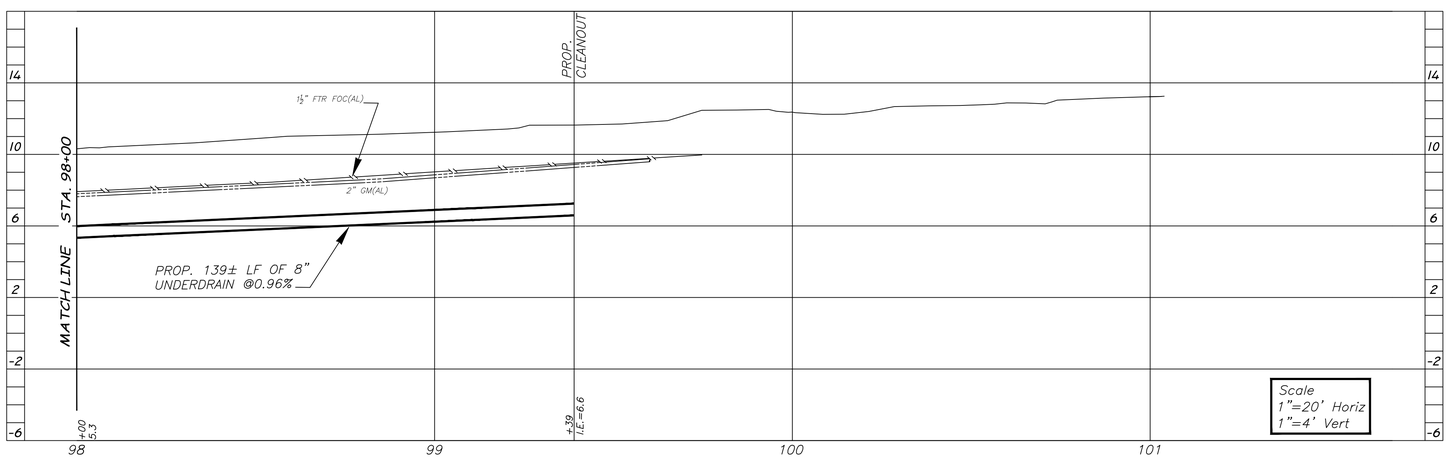
Plot Date: Thursday, September 22, 2022

SW2022-03





WEST SIDE



EAST SIDE

NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.
2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.
3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

DES: SEB
DRN: AE/JDM
CKD: BG
DATE: 9/22/22

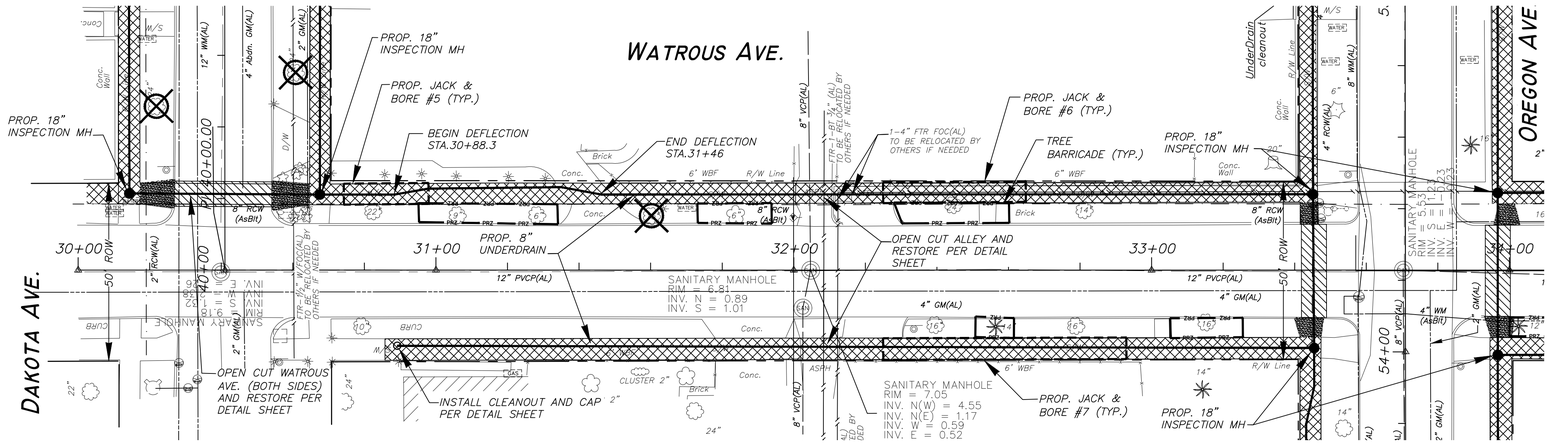
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

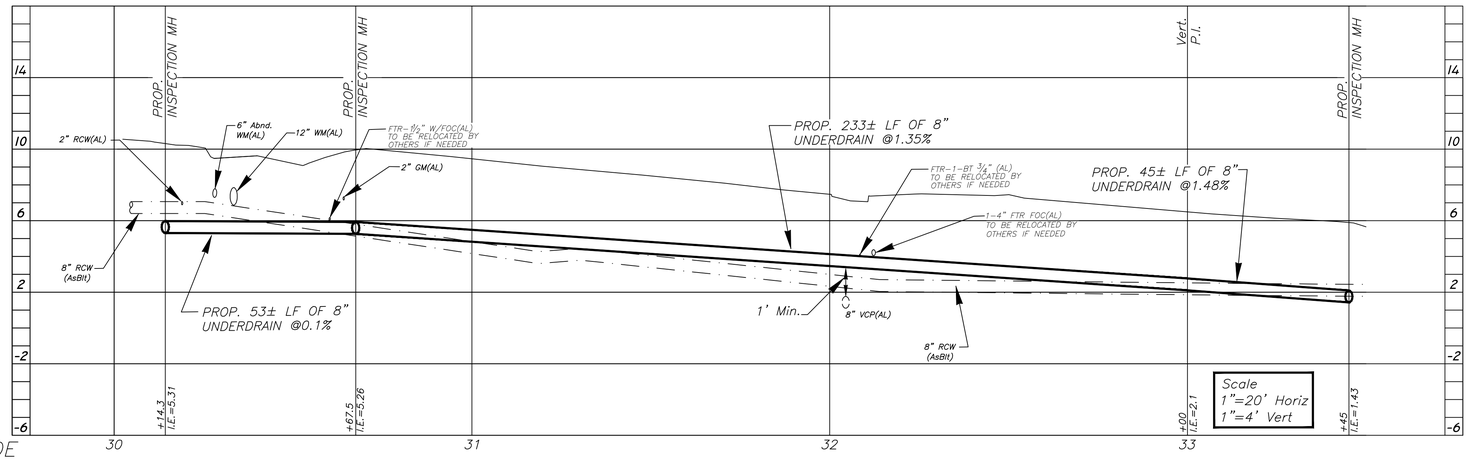
HYDE PARK GROUNDWATER DIVERSION

SHEET 11 OF 14

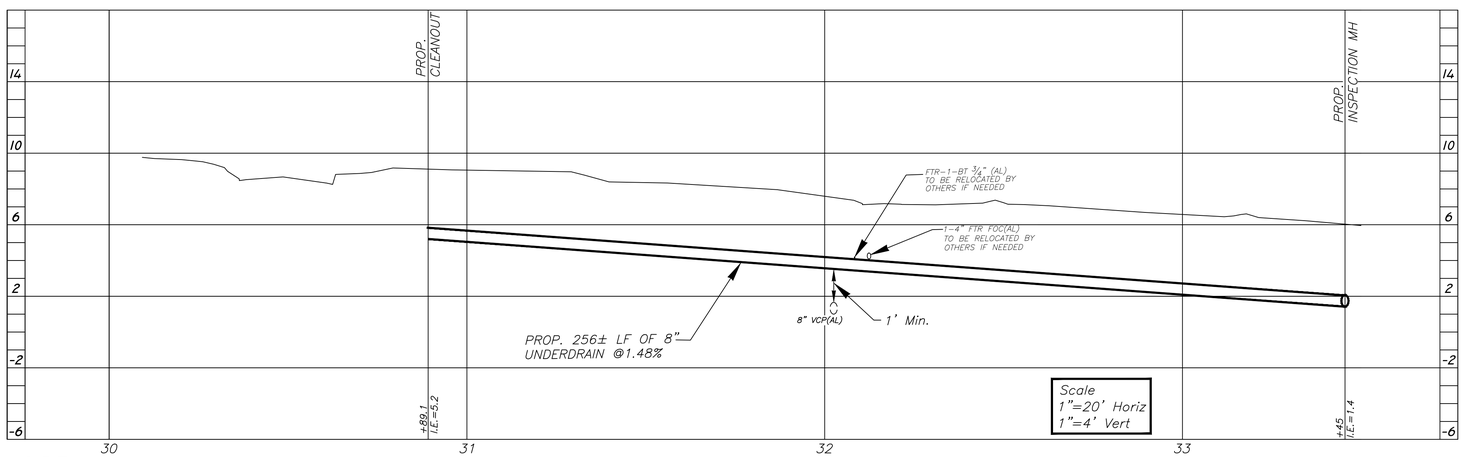
Plot Date: Thursday, September 22, 2022

SW2022-03





NORTH SIDE



SOUTH SIDE

NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.
2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.
3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

REMOVE EXISTING TREES AND REPLACE WITH LIVE OAK TREES PER DETAIL AND SPECIFICATIONS.

Plot Date: Thursday, September 22, 2022

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

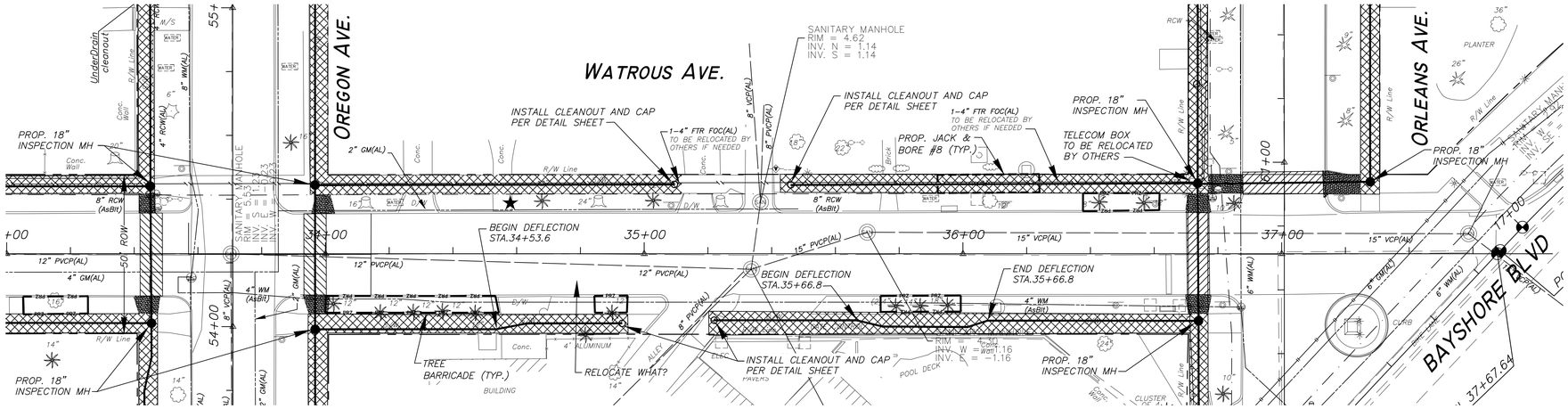
DES: SEB
DRN: ME/JDM
CKD: BG
DATE: 9/22/22

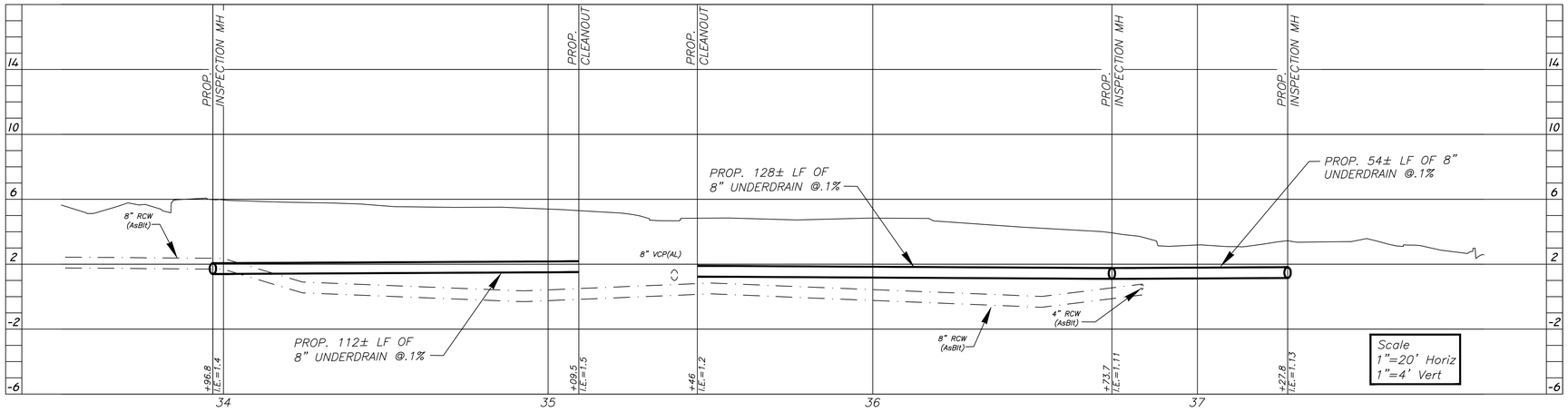
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

HYDE PARK GROUNDWATER DIVERSION

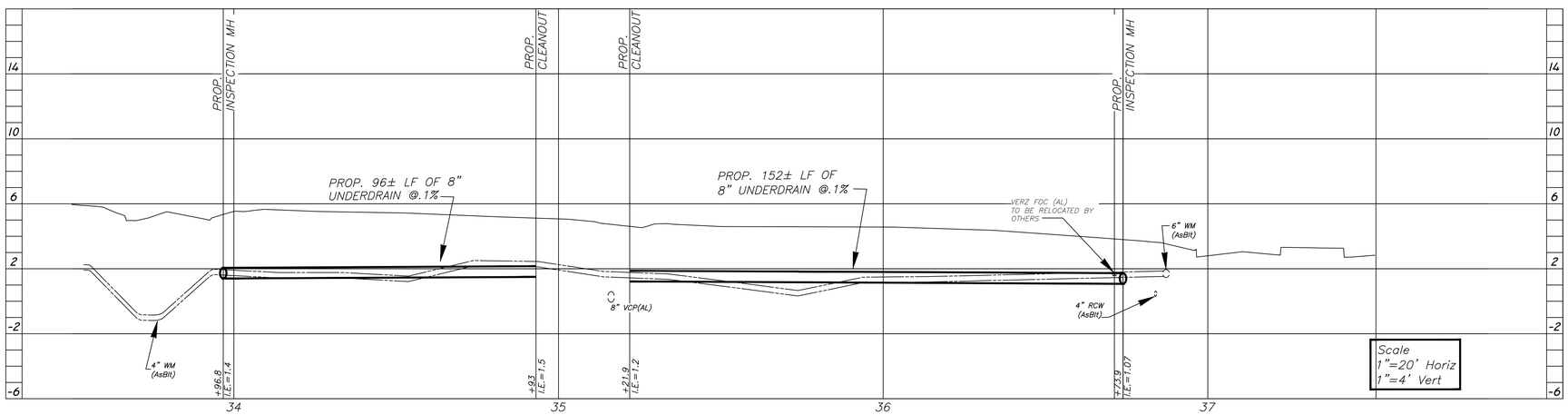
SHEET 12 OF 14

SW2022-03





NORTH SIDE



SOUTH SIDE

NOTES:

1. RESTORE DAMAGED OR REMOVED DRIVEWAYS & CURBS TO PRE-CONSTRUCTION CONDITIONS.
2. CAREFULLY REMOVE AND REPLACE ALL CARTOUCHE SIDEWALK PANELS, INCLUDING THE ONES NOT SHOWN ON PLANS.
3. FILL ALL DISTURBED AREAS TO MATCH ADJACENT GRADE AND INSTALL SOD IN KIND.

REMOVE AND REPLACE CONCRETE SIDEWALKS FOR UNDERDRAIN INSTALLATION(TYP.) SEE NOTE 2

CONSTRUCT FDOT TYPE CR-E ADA RAMPS PER FDOT INDEX 522-002

TYPICAL ROAD CROSSING WITH 7' WIDE PAVEMENT RECONSTRUCTION (TYP.)

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

DES: SEB
DRN: ME/JDM
CKD: BG
DATE: 9/22/22

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

HYDE PARK GROUNDWATER DIVERSION

SHEET 13 of 14

Plot Date: Thursday, September 22, 2022

SW2022-03

STORMWATER POLLUTION PREVENTION PLAN

Contained on these plans and within the following notes is a Stormwater Pollution Prevention Plan (SWPPP) which has been developed in accordance with the Florida Department of Environmental Protection (FDEP) program to administer the "National Pollutant Discharge Elimination System" (NPDES) Generic Permit for Stormwater Discharges from Construction Activities and the Southwest Florida Water Management District (SWFWMD) Environmental Resource Permit (ERP) Applicants Handbook. This SWPPP shall be updated during construction activities to comply with the requirements of FDEP Rule Chapter 62-621.300(4)(a), F.A.C. and Section 11.3.1 to 11.4 of the SWFWMD ERP Applicant Handbook, Volume I.

Project Name: Hyde Park Ground Water Diversion Underdrain

Location: Hyde Park Historic District

Project Description: *The Proposed Project will divert ground water flow with the installation of underdrain systems along each side of the streets. The new underdrain systems will be connected to the existing inlets along Bayshore Boulevard for discharge to Hillsborough Bay. The project comprises installation of eight (8) inch underdrains, well pointing and dewatering, repair and replacement of water and/or reclaimed water service, pavement restoration, ADA pedestrian ramps, concrete sidewalk, concrete curb, directional boring, backflow devices, tree root pruning, sodding, irrigation, and replacing damaged sidewalks and driveways, with all associated work required to complete the project.*

Runoff Coefficient: *Pervious surface Rational C's is **0.50**. The Rational C for the project area will be approximately **0.50**.*

Site Area: *Total site is approximately **3** acres, area of potential disturbance **2.42** ac, including sidewalks and road crossings, **0.90** acres, and pervious areas, **1.51** acres.*

Approximate Drainage Area(s): 87 acres.

Basin A = 9.74
Basin B = 6.88
Basin C = 8.08
Basin D = 5.79
Basin E = 6.17
Basin F = 8.93
Basin G = 14.03
Basin H = 13.98
Basin I = 13.87

Outfall Location(s):

1. 82°28'33" W 27°55'46" N
2. 82°28'32" W 27°55'47" N
3. 82°28'29" W 27°55'50" N
4. 82°28'28" W 27°55'51" N
5. 82°28'25" W 27°55'53" N
6. 82°28'24" W 27°55'54" N
7. 82°28'22" W 27°55'56" N
8. 82°28'18" W 27°55'56" N
9. 82°28'14" W 27°55'57" N

Construction Sequence: *Install temporary and permanent erosion control devices, clear and grub, demolition, grading and earthwork, relocate utilities, construct stormwater system, restore right of way, remove sediment, complete final stabilization, remove temporary erosion control devices.*

Design: *The ground water conveyance system has been designed to help alleviate the damage caused by ground water seepage to the surface. Underdrains will be installed under the sidewalks on both sides of the streets and will be connected to inlets along Bayshore Boulevard.*

Sediment & Erosion Controls: (See Environmental Protection Notes)

Receiving waters: The site drains into the City of Tampa's MS4 system.

Pollution Potential: *Soil erosion and sediments resulting from construction activities are potential sources of pollution to the receiving waters. To prevent surface water pollution, runoff from disturbed areas shall be diverted through sediment controls prior to leaving site.*

RESPONSIBILITIES:

The following entities are identified as team members of the SWPPP: *Engineer & Owner **(City of Tampa Stormwater Engineering Division)**, and the Contractor as applicable, (_____). In general, all team members, with regard to their involvement and responsibilities on the project, are to implement the SWPPP and assure compliance with Southwest Florida Water Management District (Chapter 62-330, Florida Administrative Code), and guidelines contained in "The Florida Development Manual: A Guide to Sound Land & Water Management" (FDEP 1988). More specifically, the responsibility of team members are as follows:*

Engineer:

A. Develop a stormwater design which includes pollution prevention, stormwater routing, control structures, erosion control methods and stabilization criteria. This design is included within the construction plans.

B. Prepare a base stormwater pollution prevention plan for the Contractor's use.

C. Upon request of the contractor, provide recommendations and engineering assistance when modifications to the plan are necessary to minimize or eliminate pollutant releases from the project area.

D. Submit/obtain necessary design related stormwater permits from the Southwest Florida Water Management District (SWFWMD) and other applicable government agencies, when required.

Contractor (or Construction Manager, as applicable):

A. Contractor shall be responsible for obtaining coverage under the Generic Permit, as Permittee, for compliance with all permit conditions, and for implementation of the SWPPP during the construction phase of the project.

B. Contractor shall be responsible for maintaining and updating the SWPPP provided by the Engineer, to include record keeping and reporting, inspections and maintenance of SWPPP/CSWMP control measures in accordance with FDEP Document No. 62-621.300(4)(a). A three-ring binder shall be maintained on-site to include this base plan and all other required records, reports and notifications.

C. Prior to commencement of construction, identify each subcontractor which will assume responsibility for measures identified within the SWPPP and require said subcontractors to provide the following certification statements for inclusion in the SWPPP/CSWMP:

"I certify under penalty of law, that I understand the terms and conditions of the generic stormwater permit issued pursuant to Section 403.0885, F.S., that authorizes the discharge of stormwater associated with industrial activity from the construction site identified as part of the certification."

Include the name and title of the person providing signature and the name, address, and telephone number of the contracting firm; the address of the site, and the date the certification is made.

D. At least 2 days prior to commencement of construction, execute and submit Notice of Intent (NOI) documents to the FDEP to obtain coverage under the general permit for stormwater discharges from construction activities. Additional notification shall be submitted to MSSS owners and others as required by the permit. This is commonly accomplished through the online website www.dep.state.fl.us/water/stormwater/npdes/ .

E. Notify the Engineer and the Owner in writing of any non-stormwater pollution sources which are being stored, or otherwise used on-site during construction (i.e. fuels, pesticides or other hazardous chemicals) and the methods to be utilized for prevention of potentially polluted runoff from these sources. A copy of this notification shall be added to the SWPPP.

F. Keep records including dates when major grading activities occur, when construction activities temporarily or permanently cease, and when interim or permanent stabilization measures are initiated in each construction area.

G. Complete inspection reports including scope of inspection, name and qualifications of inspector(s), date, major observations, and actions taken in accordance with the SWPPP.

H. Install the erosion and sediment control measures according to the Construction plans. The Contractor shall coordinate any modifications to the plan with the Engineer to assure that silted or otherwise polluted stormwater is not allowed to discharge to surface waters or wetlands.

I. Use the retention ponds as sedimentation basins or create temporary sedimentation areas as needed. Once installed, the stormwater management system may be utilized to accept non-stormwater discharges (see 62-621.300(4)(a)) provided that the discharge does not cause a violation of FAC 62-25 or part IV of Chapter 373 F.S. (Environmental Resource Permit).

J. During extreme rainfall events, modify stormwater management measures as necessary. Notify Engineer (in writing) of any emergency erosion and sediment control modifications made to the plan.

K. Inspect all erosion control devices and repair and/or replace as needed. Prepare report summaries for each inspection/maintenance activity to be retained as part of the SWPPP.

L. Collect all trash and construction debris produced from this project on a daily basis and stockpile or containerize in a manner to prevent accidental release. Dispose of solid waste materials in accordance with applicable municipal, County and State regulations.

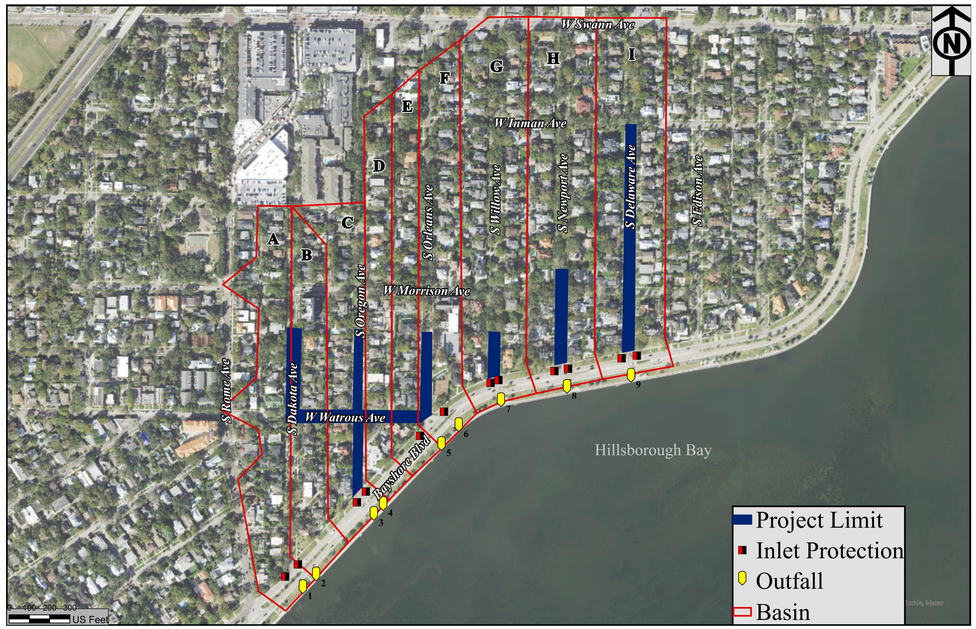
M. Provide and maintain portable sanitary waste units on-site for use by construction personnel.

N. Maintain control of any hazardous materials utilized on-site. Inspect storage containers, vehicles, etc. for leakage at least monthly. Establish and implement a Spill Prevention Plan which covers cleanup and notification of the appropriate government agencies.

O. Within 14 days after final stabilization of the site, execute and submit Notice of Termination (NOT) to the FDEP to terminate coverage under the generic permit. Additional notification shall be submitted to MSSS owners and others as required by the permit.

Owner:

A. Support Contractor and Engineer, as required.



Plot Date: Thursday, September 22, 2022

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1	9/8/22	FINAL REVISIONS	4		

DES: SEB
DRN: ~~KE~~ / JDM
CKD: BG
DATE: 9/22/22

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

HYDE PARK GROUNDWATER DIVERSION PH2
STORMWATER POLLUTION PREVENTION PLAN

SHEET 14 OF 14