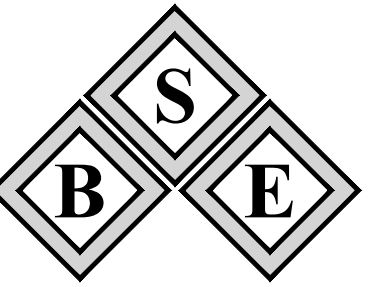


BASIN 1 DRAINAGE IMPROVEMENTS

SECTION 6, TOWNSHIP 28 SOUTH, RANGE 38 EAST MELBOURNE BEACH, BREVARD COUNTY, FLORIDA



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SHEET INDEX		
SHEET #	DRAWING #	SHEET TITLE
1	1144025_400_001	COVER SHEET
2	1144025_400_002	SYMBOLS AND ABBREVIATIONS
3	1144025_400_003	OVERALL PLAN
4	1144025_400_004	DRAINAGE PLAN
5	1144025_400_005	DRAINAGE PLAN
6	1144025_400_006	DRAINAGE PLAN
7	1144025_400_007	DRAINAGE PLAN
8	1144025_400_008	DRAINAGE PLAN
9	1144025_400_009	DRAINAGE PLAN



LOCATION MAP
NTS

VERTICAL DATUM: NAVD88

DATE: 11/01/24
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE

COVER SHEET

PROJECT NO.

11440.25

DRAWING NO.

1144025_400_001

SHEET

1 of 9

TOWN OF MELBOURNE BEACH

507 OCEAN AVENUE
MELBOURNE BEACH, FL 32951
(321) 724-5860

- PREPARED BY -

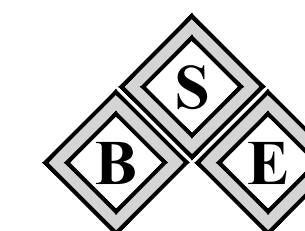
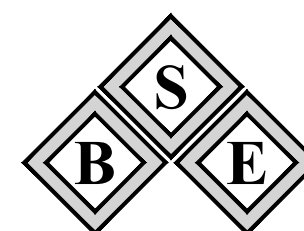
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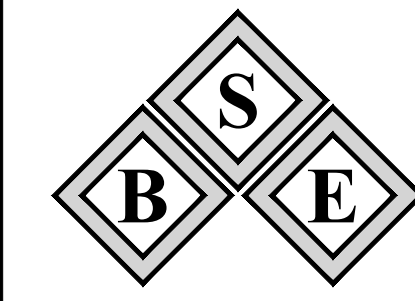
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**LANDSCAPE
SYMBOL LEGEND**

- CABBAGE PALM TREE
- PALM TREE
- PINE TREE
- OAK TREE
- TREE LINE
- SHRUB 1
- SHRUB 2

**IRRIGATION
SYMBOL LEGEND**

- SPRINKLER
- RAINBIRD 1/4
- RAINBIRD 1/2
- RAINBIRD 3/4
- RAINBIRD FULL

LINE TYPES

- BEL --- EXISTING BURIED ELECTRIC
- BTL --- EXISTING BURIED TELEPHONE
- CATV --- EXISTING CABLE TV
- FENCE (TYPE, HEIGHT AS NOTED)
- FM --- EXISTING FORCE MAIN (SIZE, TYPE AS NOTED)
- FO --- EXISTING FIBER OPTIC
- GAS --- EXISTING GAS LINE
- IRR --- EXISTING IRRIGATION (SIZE, TYPE AS NOTED)
- OHE --- EXISTING OVERHEAD ELECTRIC
- OHU --- EXISTING OVERHEAD UTILITY
- RM --- EXISTING REUSE MAIN (SIZE, TYPE AS NOTED)
- SF --- SILT FENCE
- SS --- EXISTING SANITARY SEWER (SIZE, TYPE AS NOTED)
- WM --- EXISTING WATER MAIN (SIZE, TYPE AS NOTED)
- CENTERLINE
- BASIN BOUNDARY
- COLUMN / WALL
- GUARD RAIL
- TREE LINE
- DRAINAGE PIPE (SIZE, TYPE AS NOTED)

SYMBOL LEGEND

- EXISTING SANITARY MANHOLE
- EXISTING MANHOLE (TYPE NOTED)
- PROPOSED MANHOLE
- TYPE 2 INLET
- TYPE 3 INLET
- TYPE 4 INLET
- TYPE 5 INLET
- CATCH BASIN
- YARD DRAIN
- FLARED END SECTION
- MITERED END SECTION
- EXISTING GATE VALVE
- PROPOSED GATE VALVE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING BLOW-OFF
- PROPOSED BLOW-OFF ASSEMBLY WITH GATE VALVE
- EXISTING FIRE DEPT. CONNECTION
- PROPOSED FIRE DEPT. CONNECTION
- EXISTING WATER METER
- PROPOSED WATER METER
- EXISTING WATER SERVICE
- PROPOSED WATER SERVICE
- EXISTING REUSE SERVICE
- PROPOSED REUSE SERVICE
- SANITARY SERVICE
- STUB OUT
- EXISTING AIR RELEASE VALVE
- AIR RELEASE VALVE
- EXISTING CLEAN OUT
- CLEAN OUT
- CROSS TEE
- TEE
- BACK FLOW PREVENTION DEVICE
- REDUCER
- POST INDICATOR VALVE
- UTILITY RISER
- CONCRETE POWER POLE
- WOOD UTILITY POLE
- GUY WIRE
- GUY POLE
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- EXISTING SIGN
- PROPOSED SIGN
- DIRT PAD ELEVATION
- FINISHED FLOOR ELEVATION
- TYPE A LOT DRAINAGE
- TYPE B LOT DRAINAGE
- LOT NUMBER
- FLOW ARROW

ABBREVIATIONS

- ' MINUTES/FEET
- " SECONDS/INCHES
- * DEGREES
- (C) CALCULATED DIMENSION
- (D) DEED DIMENSION
- (F) FIELD MEASURED DIMENSION
- (M) METER(S)
- (NR) NOT RADIAL
- (P) PLAT DIMENSION
- A/C AIR CONDITIONER
- AC ACRES
- ADS ADVANCED DRAINAGE SYSTEMS (CPP)
- AL ARC LENGTH
- ARV AIR RELEASE VALVE
- AVE AVENUE
- BLVD BOULEVARD
- BM BENCH MARK
- BVC BEGIN VERTICAL CURVE
- BVP BEGIN VERTICAL PROFILE
- CL CENTERLINE
- C/O CLEAN OUT
- CA CENTRAL ANGLE
- CATV CABLE TELEVISION
- CB CHORD BEARING
- CBS CONCRETE BLOCK STRUCTURE
- CH CHORD LENGTH
- CM CONCRETE MONUMENT
- CMP CORRUGATED METAL PIPE
- CONC CONCRETE
- COR CORNER
- CPP CORRUGATED PLASTIC PIPE
- DE DRAINAGE EASEMENT
- DEL DELTA/CENTRAL ANGLE
- DI DITCH INLET/ CATCH BASIN
- DIP DUCTILE IRON PIPE
- DS DRAINAGE STRUCTURE
- E EAST
- EG EXISTING GROUND
- ELEC ELECTRIC
- ELEV ELEVATION
- EOP EDGE OF PAVEMENT
- EW EDGE OF WATER
- ERCP ELLIPTICAL REINFORCED CONCRETE PIPE
- ESMT EASEMENT
- EVC END VERTICAL CURVE
- EVP END VERTICAL PROFILE
- EX EXISTING
- FD FOUND
- FDC FIRE DEPARTMENT CONNECTION
- FDOT FLORIDA DEPARTMENT OF TRANSPORTATION
- FES FLARED END SECTION
- FFE FINISHED FLOOR ELEVATION
- FH FIRE HYDRANT
- FL FLOW LINE
- FM FORCE MAIN
- FPL FLORIDA POWER AND LIGHT
- FT FEET
- GLO GENERAL LAND OFFICE
- GR GROUND
- GV GATE VALVE(S)
- H/C HANDICAP
- HP HIGH POINT
- HWY HIGHWAY
- ID# IDENTIFICATION NUMBER
- INV INVERT
- IP IRON PIPE
- IPC IRON PIPE AND CAP
- IR IRON ROD
- IRC IRON ROD AND CAP
- JCT JUNCTION
- LF LINEAR FEET
- L LEFT
- LP LOW POINT

ABBREVIATIONS

- LS LANDSCAPE
- LWP LIGHTER WOOD POST
- MAX MAXIMUM
- MES MITERED END SECTION
- MH MANHOLE
- MHW MEAN HIGH WATER
- MI MILE(S)
- MIN MINIMUM
- N NORTH
- N&D NAIL AND DISK
- NAVD88 NORTH AMERICAN VERTICAL DATUM 1988
- NGVD29 NATIONAL GEODETIC VERTICAL DATUM 1929
- NG NATURAL GROUND
- NIC NOT IN CONTRACT
- NTS NOT TO SCALE
- NWL NORMAL WATER LEVEL
- OHE OVERHEAD ELECTRIC/ UTILITY
- OR/ORB OFFICIAL RECORDS BOOK
- PL PROPERTY LINE
- PAVT PAVEMENT
- PB PLAT BOOK
- PC POINT OF CURVATURE
- PCC POINT OF COMPOUND CURVATURE
- PCP PERMANENT CONTROL POINT
- PD&UE PUBLIC DRAINAGE AND UTILITY EASEMENT
- PDE PUBLIC DRAINAGE EASEMENT
- PG(S) PAGE(S)
- PGL PROPOSED GRADE LINE
- PK PARKER-KALEN
- POB POINT OF BEGINNING
- POC POINT OF COMMENCEMENT
- POL POINT ON LINE
- PP POWER/UTILITY POLE
- PR PRIVATE
- PRC POINT OF REVERSE CURVATURE
- PT POINT OF TANGENCY
- PVC POLYVINYL CHLORIDE PIPE
- PVI POINT OF VERTICAL INTERSECTION
- R RADIUS/RIGHT
- R/W RIGHT-OF-WAY
- RAD RADIAL
- RB RADIAL BEARING
- RCP REINFORCED CONCRETE PIPE
- REF REFERENCE
- RGE RANGE
- RM REUSE MAIN
- RND ROUND
- RPB ROAD PLAT BOOK
- RR RAILROAD
- S SOUTH
- SEC SECTION
- SF SQUARE FOOT
- SMH SEWER MANHOLE
- SPK SPIKE
- SS SANITARY SEWER
- ST STREET
- STA STATION
- SVC SERVICE
- SW SIDEWALK
- TEL TELEPHONE
- TOB TOP OF BANK
- TOE TOE OF SLOPE
- TWP TOWNSHIP
- TYP TYPICAL
- UE UTILITY EASEMENT
- UG UNDERGROUND
- UTIL UTILITY
- W WEST
- WM WATER MAIN

DATE: 11/01/24
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE

**SYMBOLS AND
ABBREVIATIONS**

PROJECT NO.

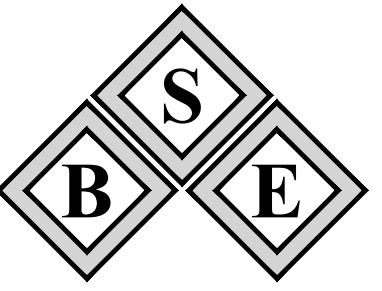
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DRAWING NO.

1144025_400_002

SHEET

2 of 9

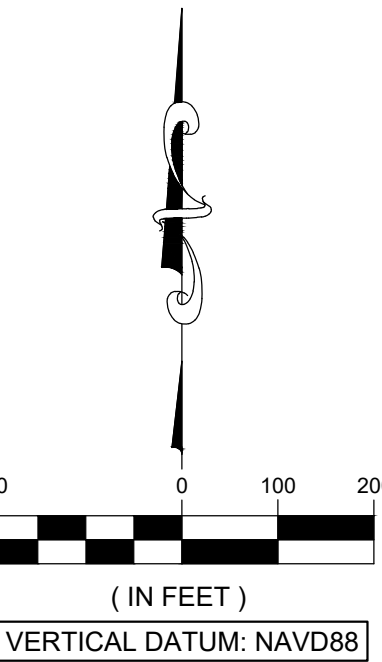


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HASSAN A. KAMAL, P.E.
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DATE: 11/01/24
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE
**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE
OVERALL PLAN

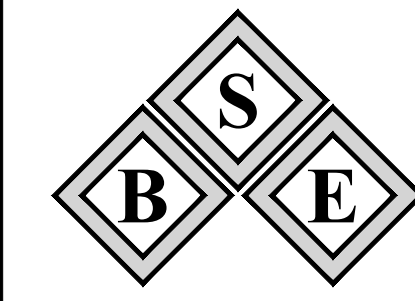
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DRAWING NO.
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SHEET
3 of 9

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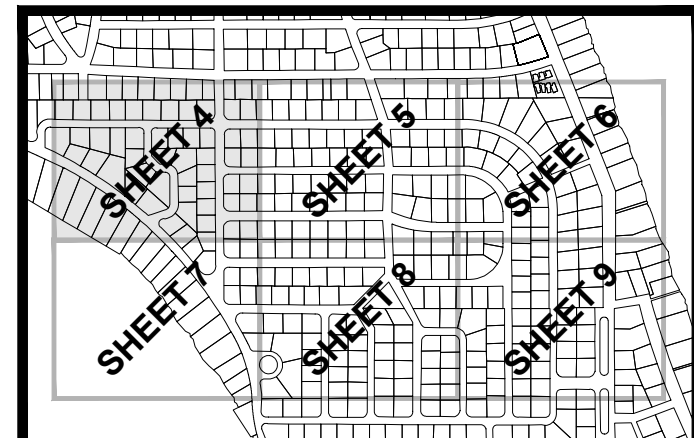
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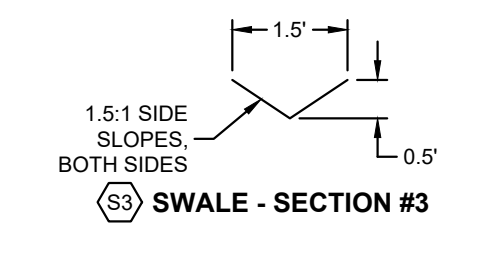
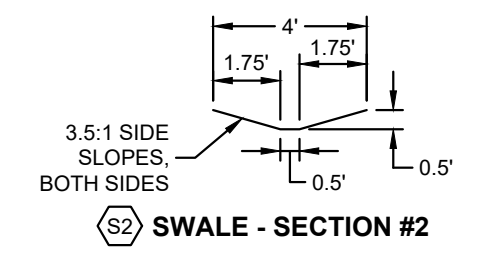
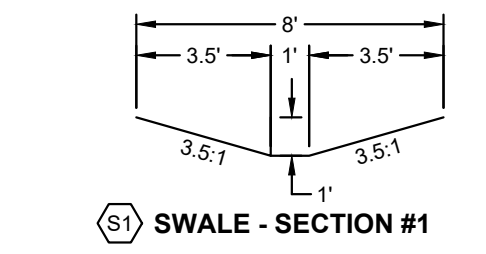
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STATE OF FLORIDA, No. 41951



KEY MAP
N.T.S.

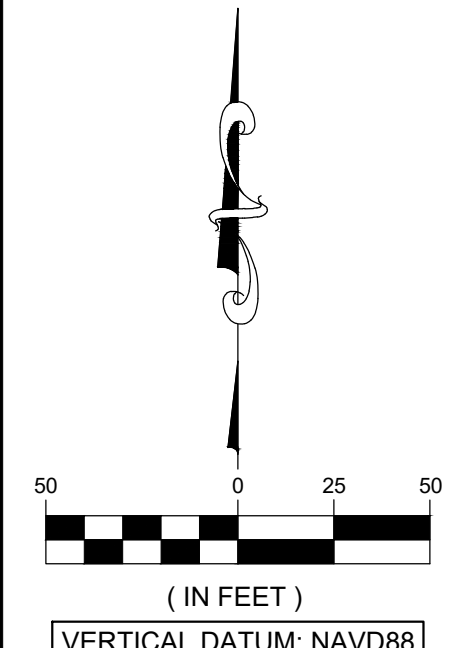


NOTE: SWALE LOCATIONS SHOWN ARE APPROXIMATE;
CONTRACTOR SHALL CONSTRUCT SWALES WHERE
SHOWN FOLLOWING THE PLAN INDICATORS AND THE
DETAIL SECTIONS ABOVE. CONTRACTOR TO MINIMIZE
IMPACTS TO EXISTING TREES, SHRUBS, AND
LANDSCAPED AREAS UNLESS NOTED OTHERWISE.
WHERE EXISTING CONDITIONS DICTATE, SWALE
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ABOVE SECTION DESIGNS (I.E. LARGER "S1" SECTION
MAY TRANSITION TO A "S2" SECTION)

WHERE NEW PIPE INSTALLATION CONFLICTS WITH
EXISTING DRIVEWAYS:
CONCRETE DRIVEWAYS SHALL BE SAW CUT AT NEAREST
JOINT. REPLACE WITH:
• 8" THICK CONCRETE, 3000 PSI REINFORCED WITH
FIBER MESH
• 6" THICK STABILIZED SUBGRADE COMPACTED TO
98% MAXIMUM DENSITY PER AASHTO T-180

ASPHALT DRIVEWAY REPLACEMENT:
• 1-1/2" TYPE SP 12.5 ASPHALTIC CONCRETE
• 6" LIMEROCK / COQUINA, MINIMUM LBR 100
COMPACTED TO 98% MAXIMUM DENSITY PER
AASHTO T-180
• 6" THICK STABILIZED SUBGRADE COMPACTED TO
98% MAXIMUM DENSITY PER AASHTO T-180
OR
• FULL DEPTH RECLAMATION MAY BE UTILIZED

PAVER DRIVEWAY REPLACEMENT:
ADDITIONAL CARE SHALL BE TAKEN TO NOT DAMAGE
EXISTING PAVERS DURING REMOVAL
• REINSTALL REMOVED PAVERS
• 4" LIMEROCK / COQUINA, MINIMUM LBR 100
COMPACTED TO 98% MAXIMUM DENSITY PER
AASHTO T-180
• 6" THICK STABILIZED SUBGRADE COMPACTED TO
98% MAXIMUM DENSITY PER AASHTO T-180



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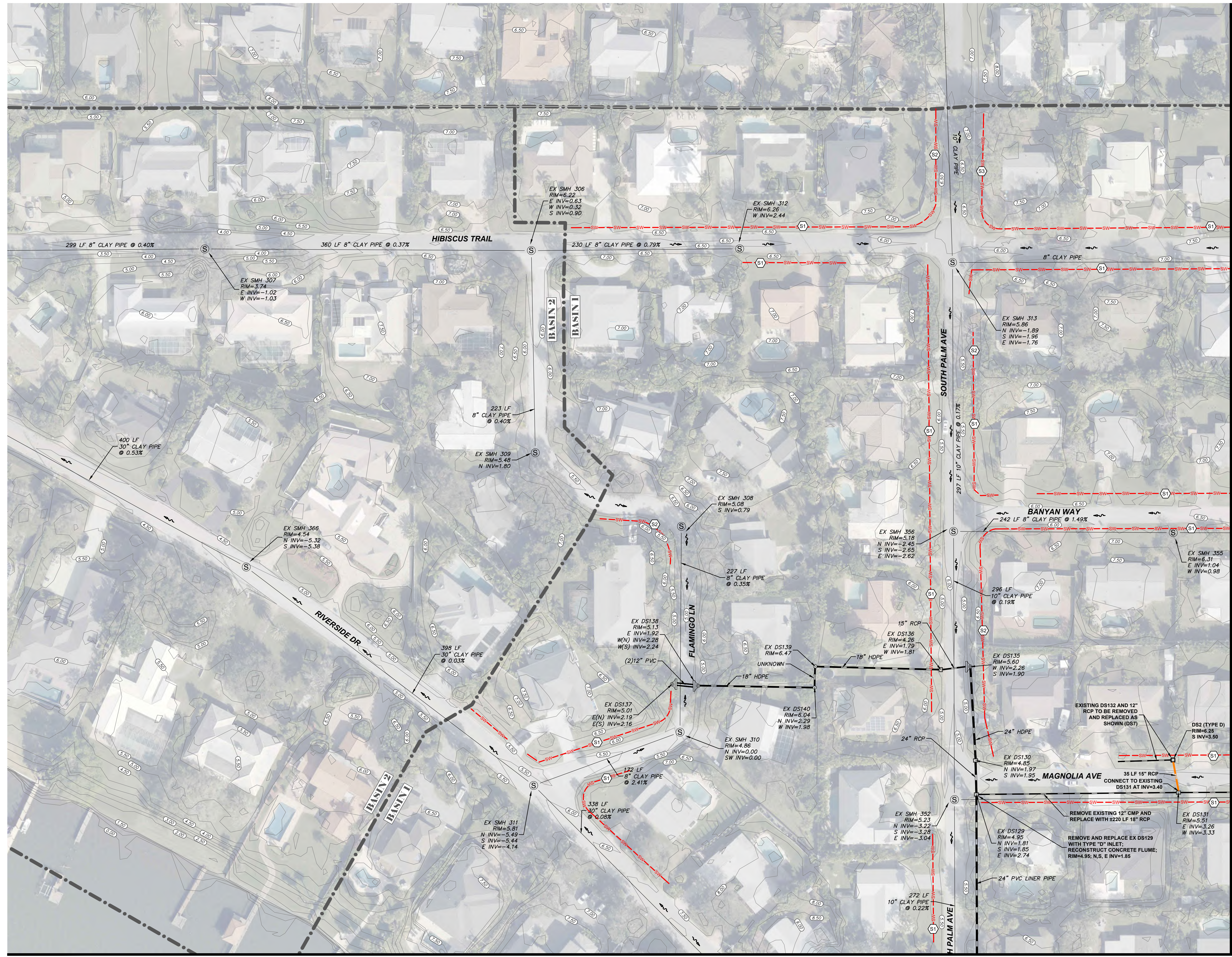
PROJECT TITLE
**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE
DRAINAGE PLAN

PROJECT NO.
11440.25

DRAWING NO.
1144025_400_004

SHEET
4 of 9

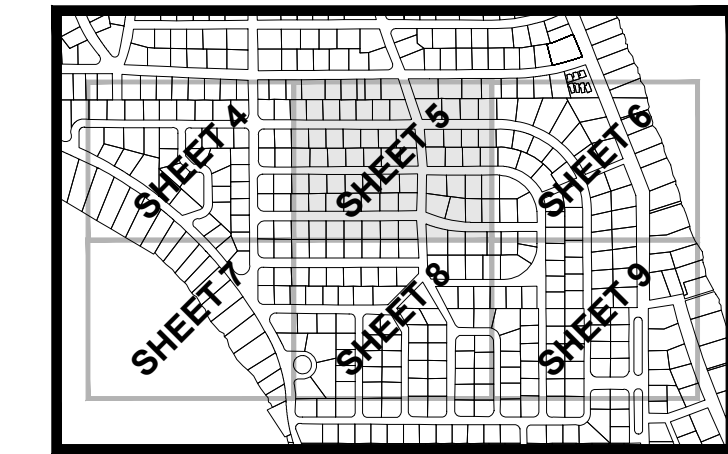


SEE SHEET 7 FOR CONTINUATION

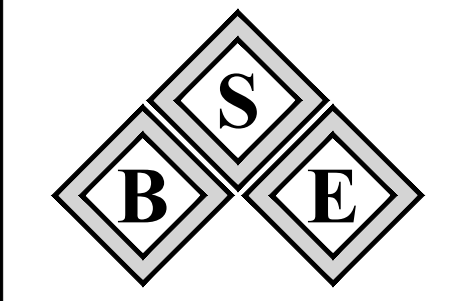
SEE SHEET 5 FOR CONTINUATION

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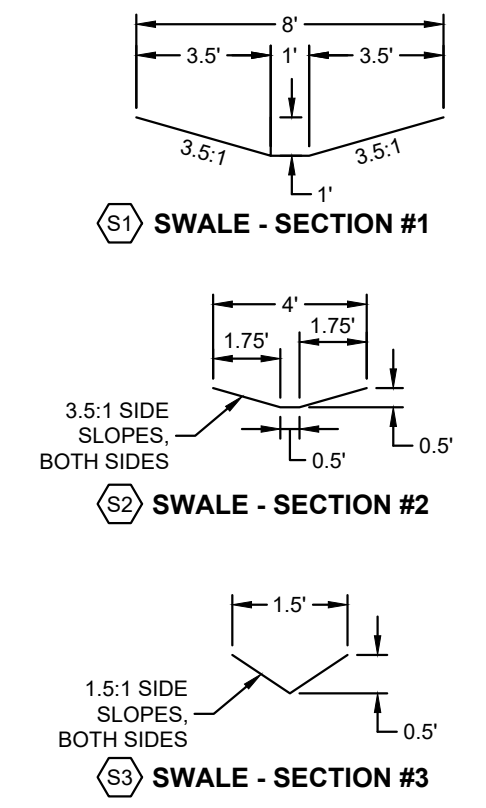
KEY MAP
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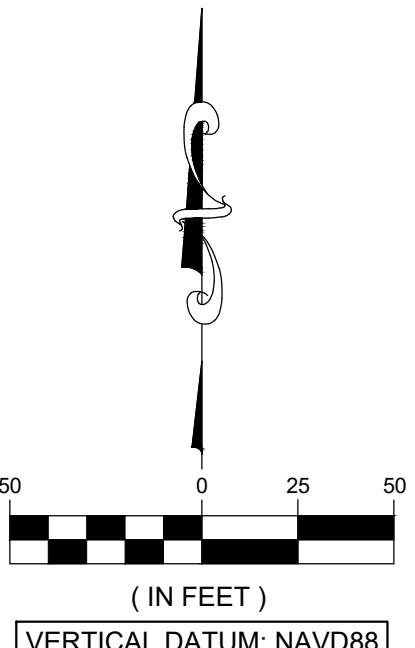
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WHERE NEW PIPE INSTALLATION CONFLICTS WITH EXISTING DRIVEWAYS:

- CONCRETE DRIVEWAYS SHALL BE SAW CUT AT NEAREST JOINT. REPLACE WITH:
- 8" THICK CONCRETE, 3000 PSI REINFORCED WITH FIBER MESH
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER ASHTO T-180

- ASPHALT DRIVEWAY REPLACEMENT:
- 1-1/2" TYPE SP 12.5 ASPHALTIC CONCRETE
 - 6" LIMEROCK / COQUINA, MINIMUM LBR 100 COMPACTED TO 98% MAXIMUM DENSITY PER ASHTO T-180
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER ASHTO T-180
- OR
- FULL DEPTH RECLAMATION MAY BE UTILIZED

- PAVER DRIVEWAY REPLACEMENT:
ADDITIONAL CARE SHALL BE TAKEN TO NOT DAMAGE EXISTING PAVERS DURING REMOVAL
- REINSTALL REMOVED PAVERS
 - 4" LIMEROCK / COQUINA, MINIMUM LBR 100 COMPACTED TO 98% MAXIMUM DENSITY PER ASHTO T-180
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER ASHTO T-180



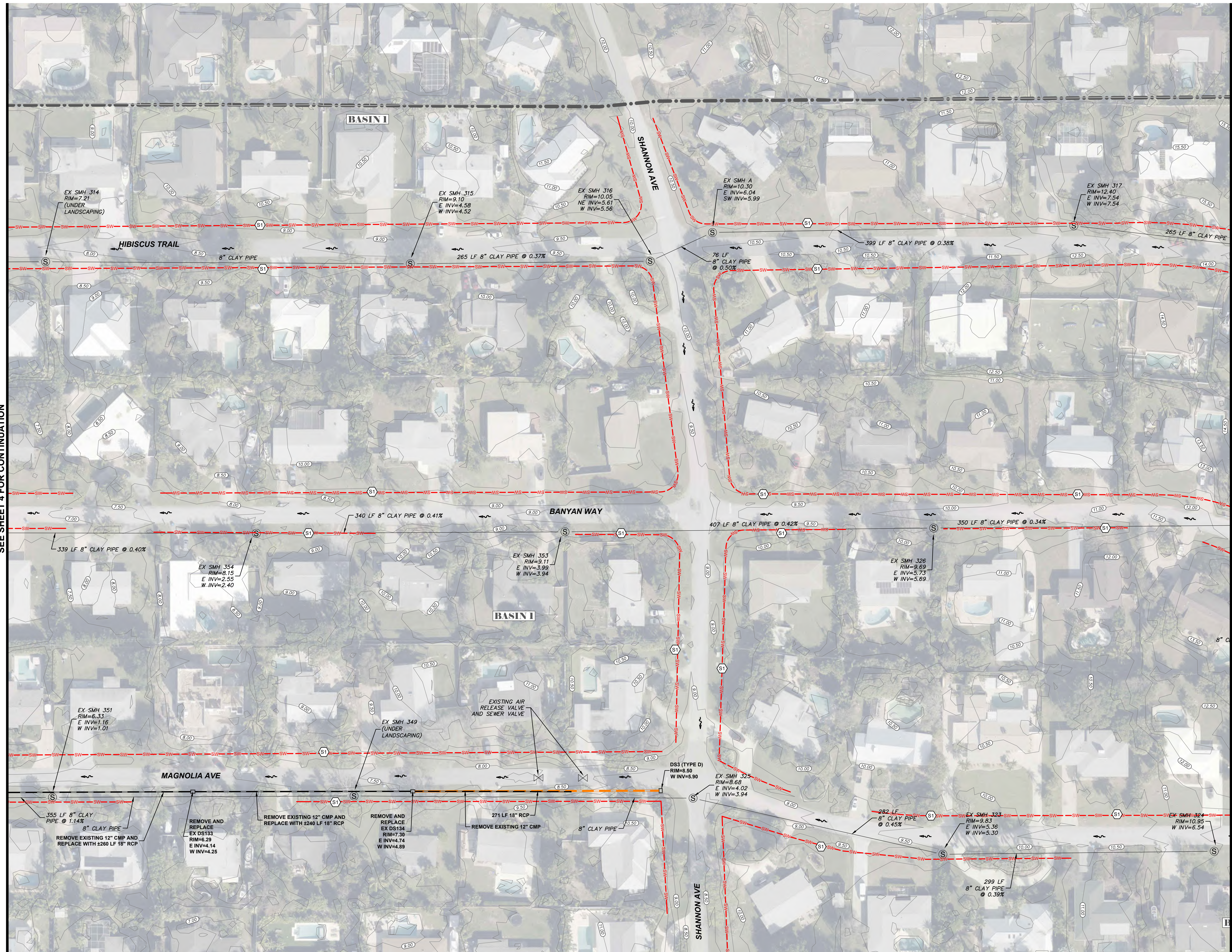
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VERTICAL DATUM: NAVD83

DATE: 11/01/24
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE
**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE
DRAINAGE PLAN

PROJECT NO.
11440.25
DRAWING NO.
1144025_400_005
SHEET
5 of 9

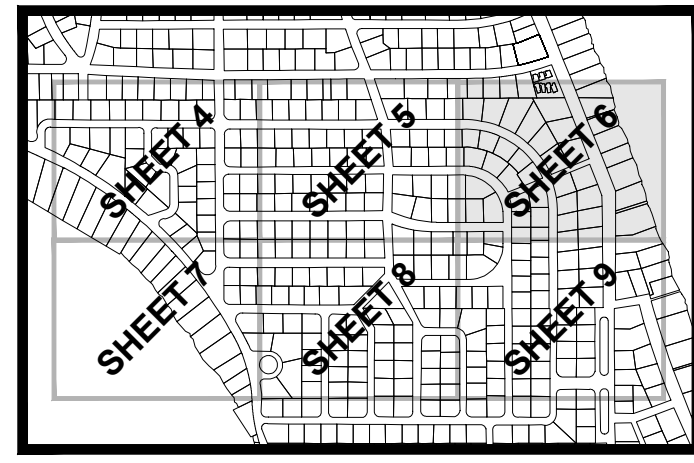


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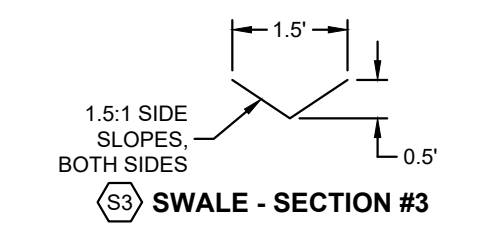
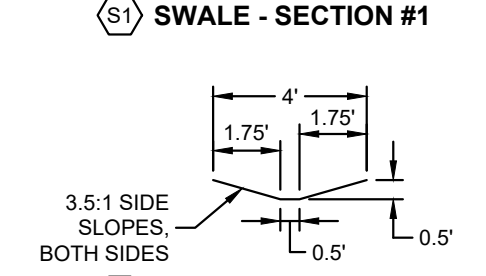
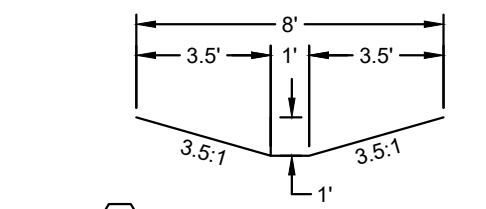
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SEE SHEET 5 FOR CONTINUATION

SEE SHEET 9 FOR CONTINUATION



KEY MAP
N.T.S.



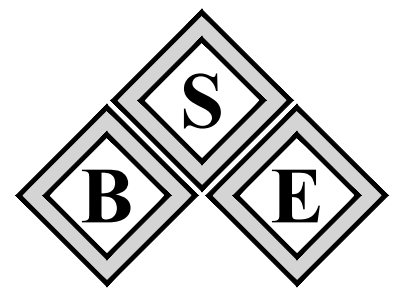
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- OR
- FULL DEPTH RECLAMATION MAY BE UTILIZED

- PAVER DRIVEWAY REPLACEMENT:
- ADDITIONAL CARE SHALL BE TAKEN TO NOT DAMAGE EXISTING PAVERS DURING REMOVAL
- REINSTALL REMOVED PAVERS
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 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180

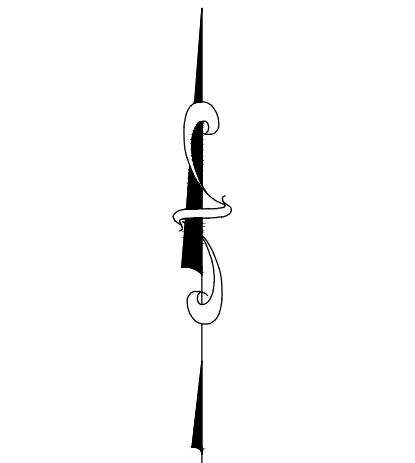


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BUSINESS AUTHORIZATION: #605
CERTIFICATE OF LAND SURVEYING
BUSINESS AUTHORIZATION: LB0004905

SCOTT M. GLAUBITZ, P.E. & P.L.S.
STATE OF FLORIDA, No. 33659, No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



(IN FEET)
VERTICAL DATUM: NAVD83

DATE: 11/01/24
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE
**BASIN 1
DRAINAGE
IMPROVEMENTS**

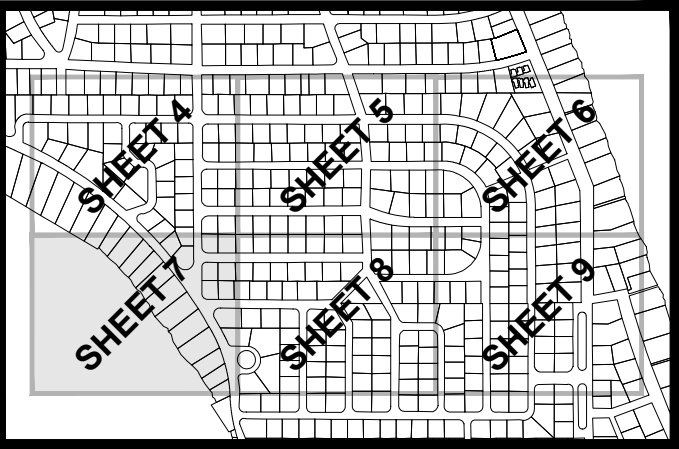
SHEET TITLE
DRAINAGE PLAN

PROJECT NO.
11440.25

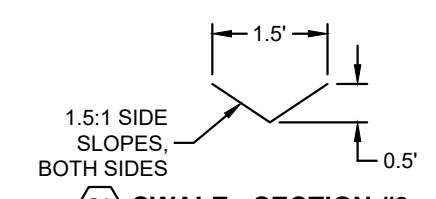
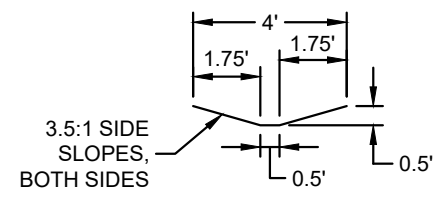
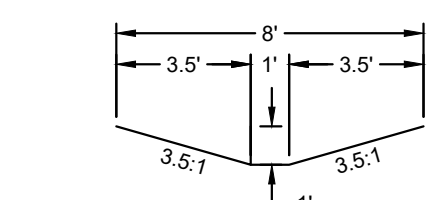
DRAWING NO.
1144025_400_006

SHEET
6 of 9

SEE SHEET 4 FOR CONTINUATION

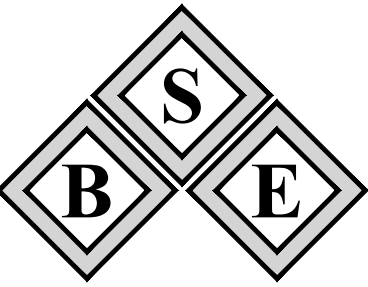


KEY MAP
N.T.S.



NOTE: SWALE LOCATIONS SHOWN ARE APPROXIMATE; CONTRACTOR SHALL CONSTRUCT SWALES WHERE SHOWN FOLLOWING THE PLAN INDICATORS AND THE DETAIL SECTIONS ABOVE. CONTRACTOR TO MINIMIZE IMPACTS TO EXISTING TREES, SHRUBS, AND LANDSCAPED AREAS UNLESS NOTED OTHERWISE. WHERE EXISTING CONDITIONS DICTATE, SWALE CONSTRUCTION MAY UTILIZE A COMBINATION OF THE ABOVE SECTION DESIGNS (I.E. LARGER "S1" SECTION MAY TRANSITION TO A "S2" SECTION)

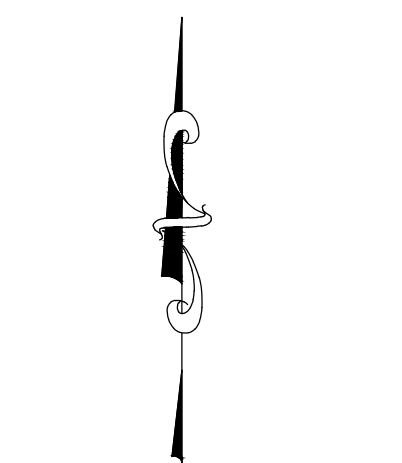
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- ASPHALT DRIVEWAY REPLACEMENT:
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- OR
- FULL DEPTH RECLAMATION MAY BE UTILIZED
- PAVER DRIVEWAY REPLACEMENT:
- ADDITIONAL CARE SHALL BE TAKEN TO NOT DAMAGE EXISTING PAVERS DURING REMOVAL
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BUSINESS AUTHORIZATION: 4905
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STATE OF FLORIDA, No. 41951



(IN FEET)
VERTICAL DATUM: NAVD83

DATE: 11/01/24

DESIGN/DRAWN: SMG/DRB

PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE

DRAINAGE PLAN

PROJECT NO.
11440.25

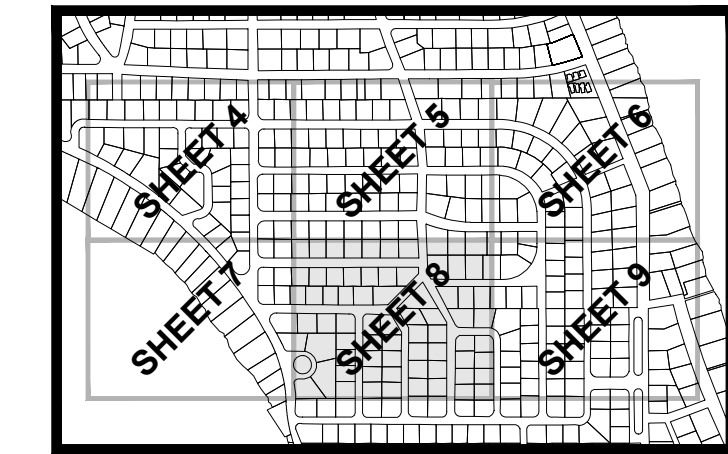
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1144025_400_007

SHEET
7 of 9

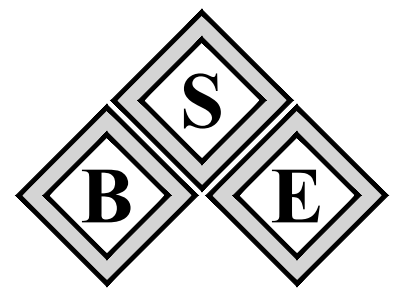
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SEE SHEET 5 FOR CONTINUATION



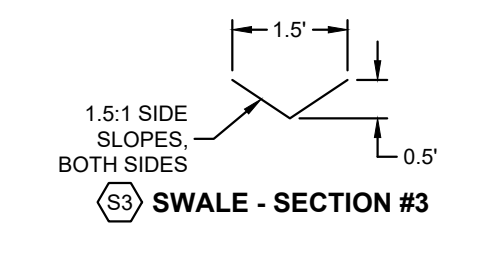
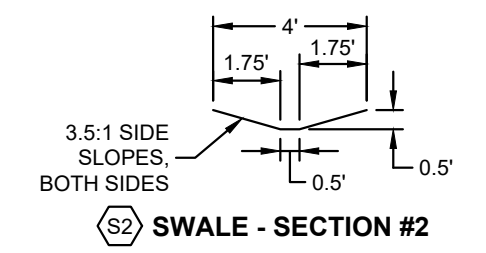
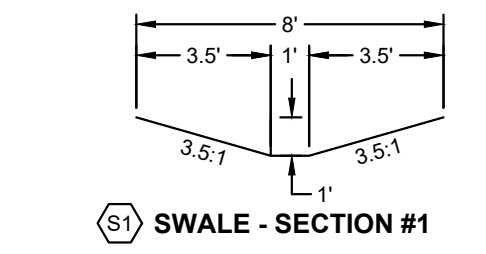
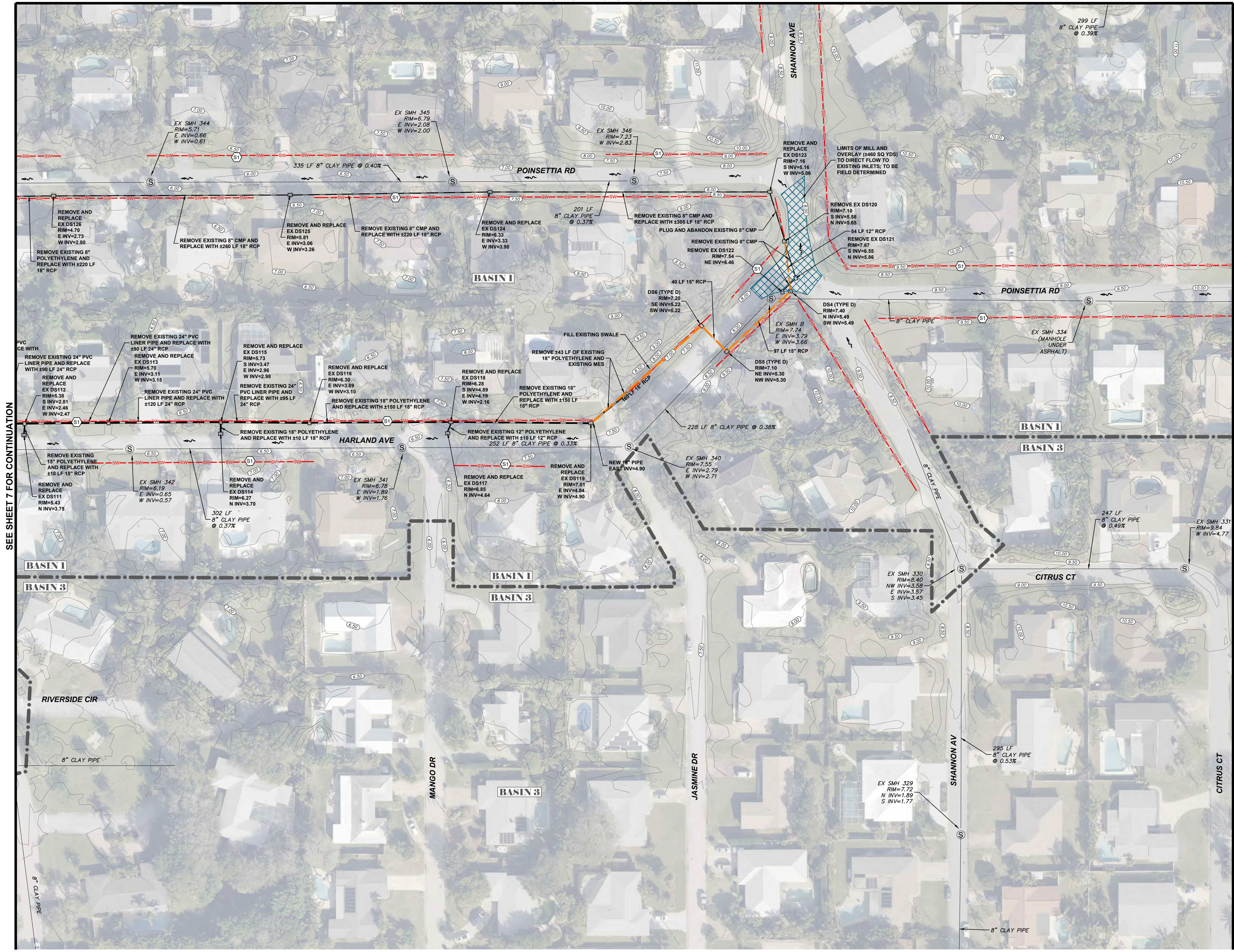
KEY MAP
N.T.S.



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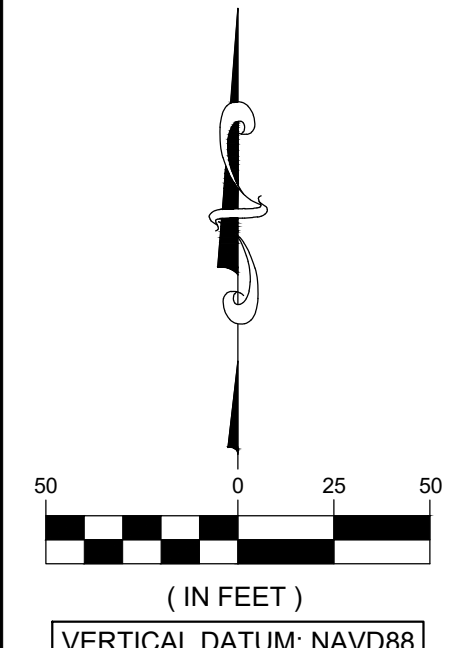
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(IN FEET)
VERTICAL DATUM: NAVD83

SEE SHEET 7 FOR CONTINUATION

SEE SHEET 9 FOR CONTINUATION

DATE: 11/01/24
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE
**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE
DRAINAGE PLAN

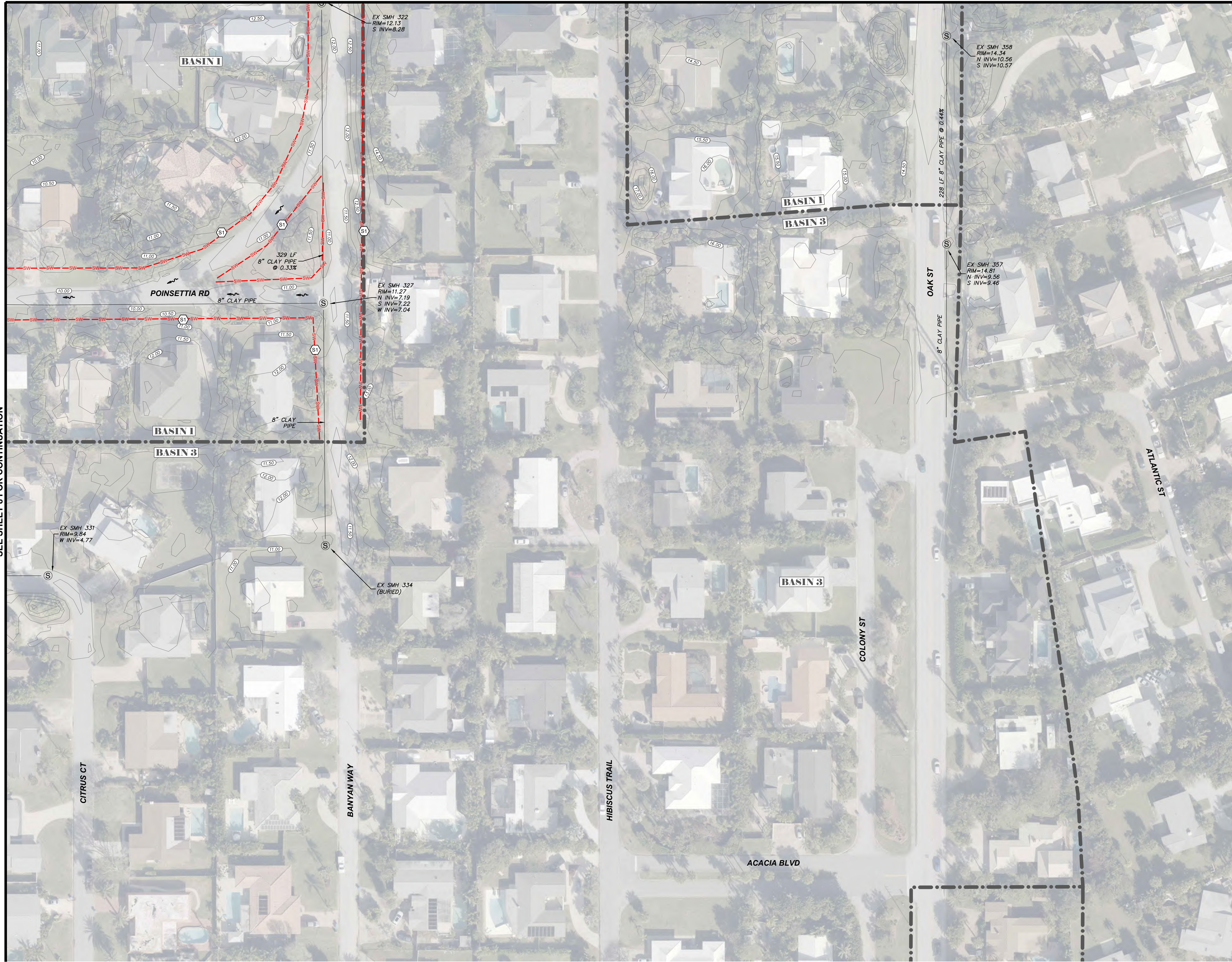
PROJECT NO.
11440.25

DRAWING NO.
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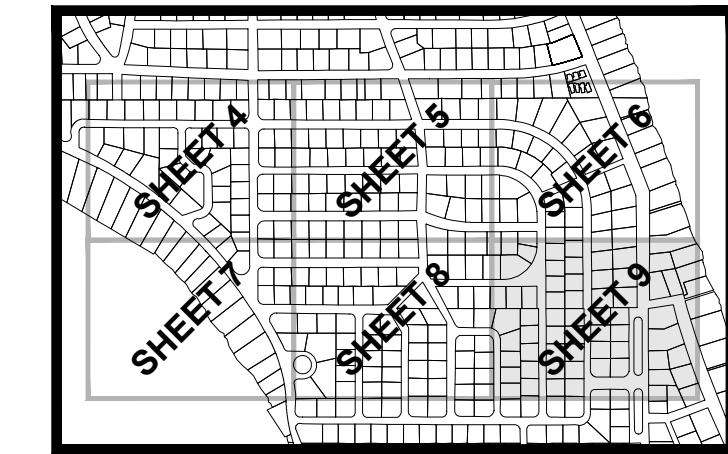
SHEET
8 of 9

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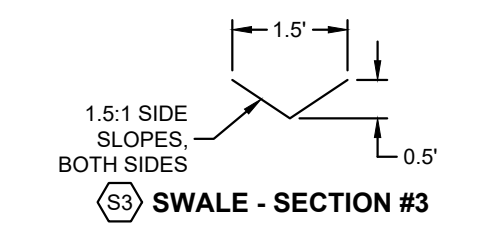
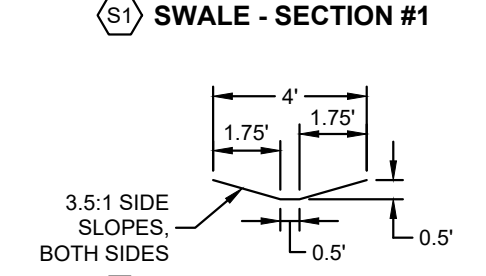
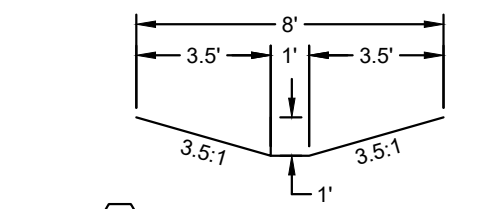
SEE SHEET 6 FOR CONTINUATION



SEE SHEET 8 FOR CONTINUATION

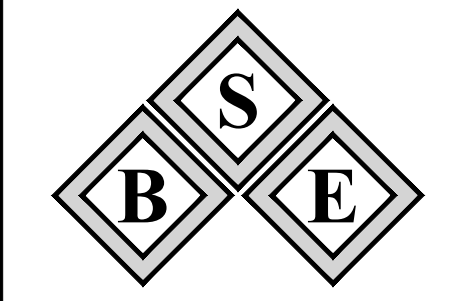


KEY MAP
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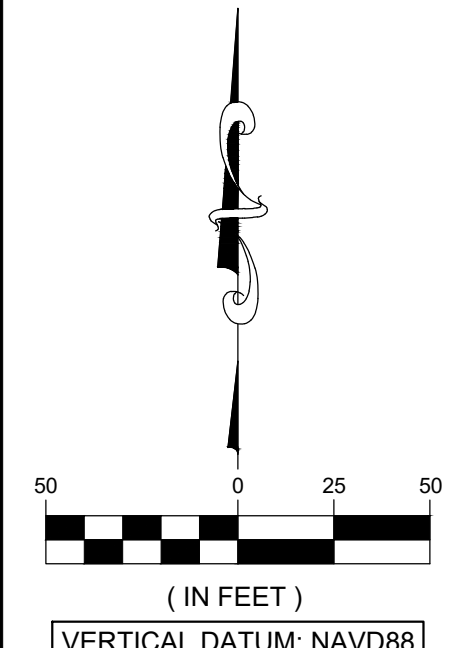
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(IN FEET)
VERTICAL DATUM: NAVD88

DATE: 11/01/24
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE

DRAINAGE PLAN

PROJECT NO.
11440.25

DRAWING NO.
1144025_400_009

SHEET

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