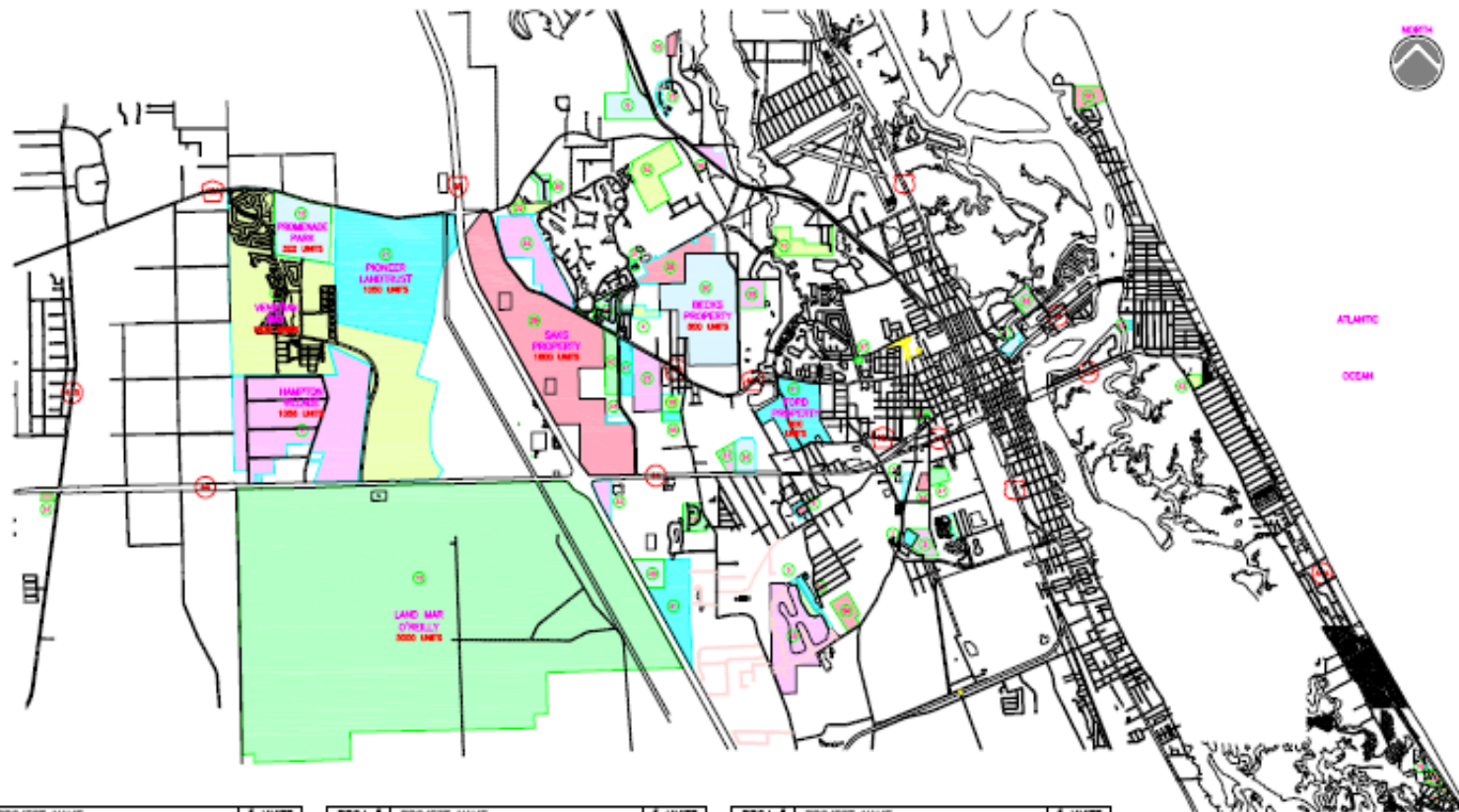


# Infrastructure Discussion

June 19, 2006



PROJ #	PROJECT NAME	# UNITS
1	HAMPTON VILLAGE	1000
2	CAPUTO DEVELOPMENT	23
3	SMYRNA SOUTH SUBDIVISION	65
4	DUPUIS PROPERTY	30
5	LAKE WATERFORD ESTATES, PHASE W	6
6	ISLAND TOWN CENTER	128
7	GOLD ROCK TRAILER PARK	36
8	HARRIS COVE	69
9	FLORIDA DAYS	75
10	HIDDEN LAKES	72
11	HOME DEPOT	85
12	PROMENADE PARK	323
13	LAKE WATERFORD ESTATES, IN FULL	10
14	LAKEWOOD TERRACE	74
15	LANOWAR, O'REILLY PROPERTY	5000
17	MINORCA, BUILDING D, F, & G	160
18	COOKS PROPERTY	60
19	OCEAN WALK CONDOMINIUM, PHASE IV	158
20	OCEAN WALK CONDOMINIUM, PHASE V	66

PROJ #	PROJECT NAME	# UNITS
21	PIONEER LANE TRUST	1000
22	MORILL PROPERTY	32
24	RACE TRACK PROJECT	100
25	RESIDENCES AT TURNBULL BAY	88
28	ROLLING HILLS	35
27	SABLE KEY	187
28	SABLE CHURCH PROPERTY	6
29	SAWS PROPERTY	1800
30	SHADOW PINES	18
31	PLASTIC ACRES, PHASE 1	127
32	SOUTHEAST INTERCHANGING	214
33	SUGAR MILL GARDENS, SUGAR MILL DRIVE & PONDICE TRAIL	107
34	SUPPER PAL-MAR	103
35	OVERLOOK AT TURNBULL BAY	128
38	TURNBULL BAY GOLF & COUNTRY CLUB, PH 2	65
37	LOWELL SUGAR MILL WATER PLANT SITE	6
39	VILLAGE STREET CONDOMINIUM	15
40	VILLAGES, SINGLE FAMILY	113

PROJ #	PROJECT NAME	# UNITS
41	VILLAGES, TOWNHOMES	180
42	VILLAGES AT CALLALISA	21
43	VENETIAN BAY	1623
44	WILLAGE PROPERTY	175
45	SUGAR MILL GARDENS, SUGAR MILL DR & PONDICE COORSDR	60
46	C & D STREET DEVELOPMENT	28
47	MISSION LAKES	76
48	OLD HIGH SCHOOL SITE	264
49	SHOWERS, PHASE I	90
50	BECKY PROPERTY	800
51	FORD PROPERTY	600
52	TROUP PROPERTY	100
53	MITCHELL PROPERTY	20
54	NEAHER PROPERTY	70
55	BOLTON ROAD PROPERTY	12
56	CHARLIE WOODS	72
57	COUNTRYSIDE II	102
58	HIGHWAY ROAD SUBDIVISION	28

TOTAL = 16,070 UNITS

**DRAFT**

UTILITIES COMMISSION  
CITY OF  
NEW SMYRNA BEACH, FLORIDA

FUTURE PROJECTS  
IN THE VICINITY OF  
NEW SMYRNA BEACH

DATE: 1/1/08 SCALE: 1"=200' SHEET 1 OF 1

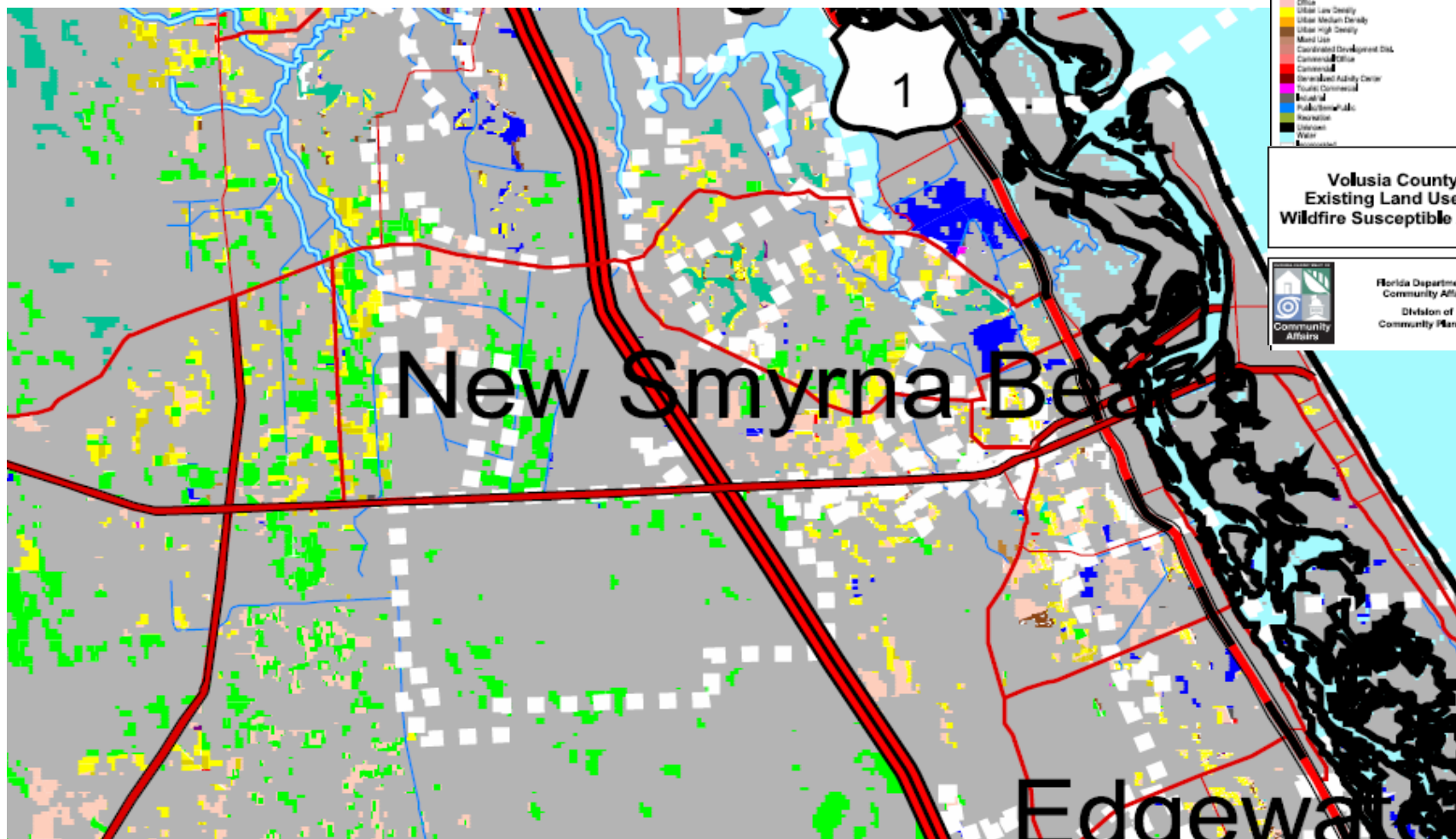
DRG. & WATER DATE: 6/15/08

APP. & REV. (BY)

DATE FILED: 1/1/08



# Existing Wildfire Susceptible Areas



**Legend**

- VOLUISA COUNTY
- UNDEVELOPED PARCELS WITHIN WILDFIRE SUSCEPTIBLE AREAS
- Agriculture
- Mining
- Other Undeveloped

**LAKES, COASTAL WATERS**

- Water Bodies

**WILDFIRE SUSCEPTIBLE AREAS**

- Outside Wildfire Susceptible Area

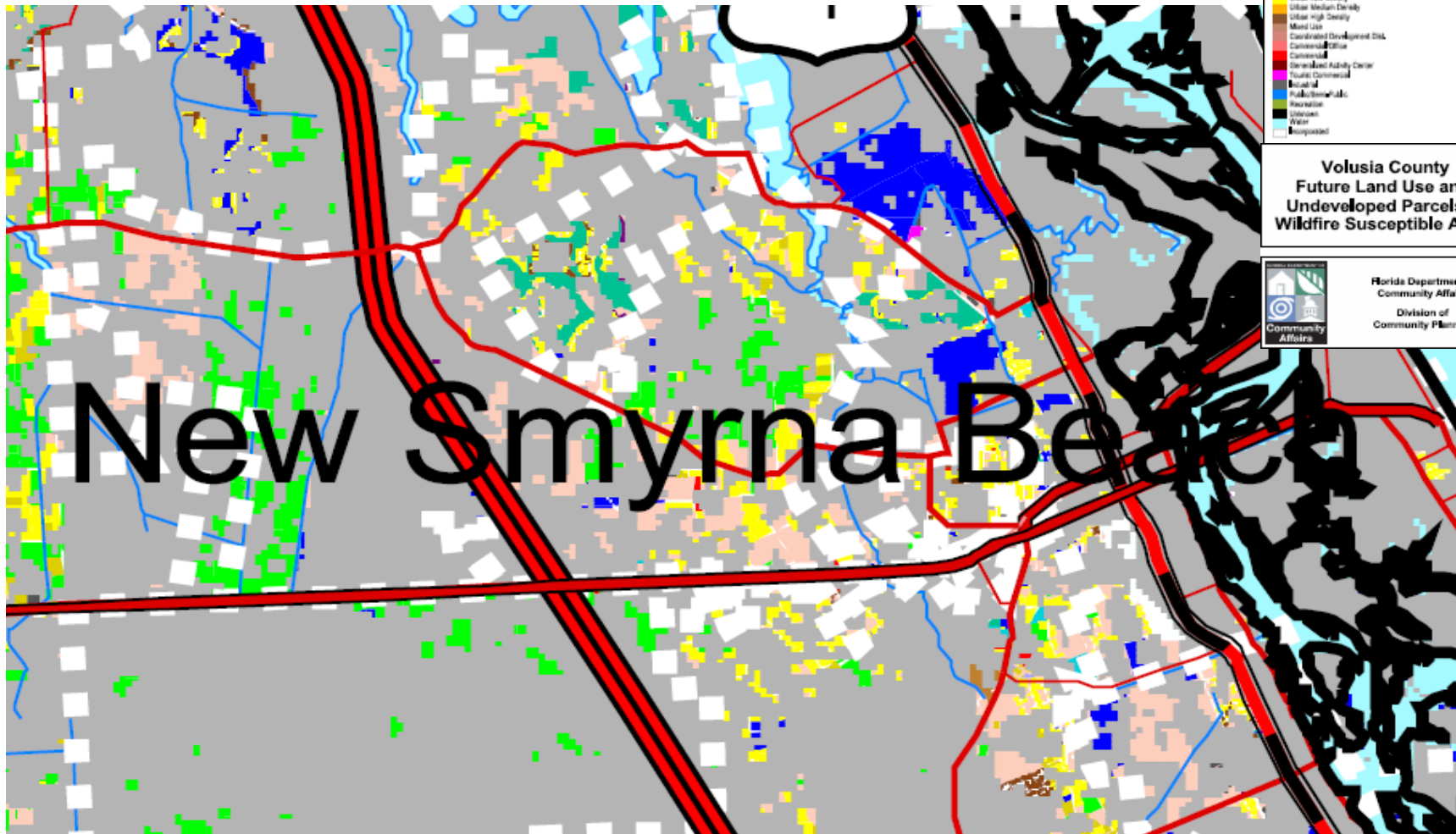
**FUTURE LAND USE WITHIN WILDFIRE SUSCEPTIBLE AREAS**

- Agriculture Resource
- Rural
- Forest Resource
- Conservation
- Environmental Sensitive Corridor
- Low Impact Urban
- Office
- Urban Low Density
- Urban Medium Density
- Urban High Density
- Mixed Use
- Constrained Development Dist.
- Commercial Office
- Commercial
- Development Activity Center
- Town Center
- Retail
- Public/Community
- Recreation
- Unknown
- Water
- Unspecified

**Volusia County  
Existing Land Use in  
Wildfire Susceptible Areas**

Florida Department of  
Community Affairs  
Division of  
Community Planning

# Future Wildfire Susceptible Areas



### Legend

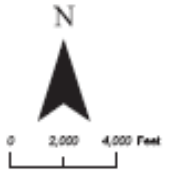
- VOLUISIA COUNTY
- UNDEVELOPED PARCELS
- Agriculture
- Mining
- Other Undeveloped
- LAKES, COASTAL WATERS**
- Water Bodies
- WILDFIRE SUSCEPTIBLE AREAS**
- Outside Wildfire Susceptible Area
- FUTURE LAND USE BY WILDFIRE SUSCEPTIBLE AREAS**
- Agriculture Resource
- Rural
- Forest Resource
- Conservation
- Environmental Systems Corridor
- Low Impact Urban
- Office
- Urban Low Density
- Urban Medium Density
- Urban High Density
- Mixed Use
- Constrained Development Dist.
- Commercial Office
- Commercial
- Development Activity Center
- Retail Commercial
- Industrial
- Public/Community
- Recreation
- Unknown
- Water
- Unmapped

**Volusia County  
Future Land Use and  
Undeveloped Parcels in  
Wildfire Susceptible Areas**

Florida Department of  
Community Affairs  
Division of  
Community Planning



- Immediate Projects**
- | ID | Description                          |
|----|--------------------------------------|
| 01 | 20' Low Pressure Transmission Main   |
| 02 | 12" Utility Extension W.M. Extension |
| 03 | 12" S.W. W.M. Extension              |
| 04 | 10" C. Kelly Rd. W.M. Extension      |
| 05 | 3' Causway Storage Tank and PS       |
- Short Term Projects, (in 2 YEARS)**
- |       |  |
|-------|--|
| 01.1  | 8" S. Gracey Water Main                                |
| 01.2  | 12" N. Causway Sub-Aquatic Crossing                    |
| 01.3  | 8" S. 8 <sup>th</sup> St. Carter Dr. W.M. Improvements |
| 01.4  | 8" Sunset Dr. W.M. Improvements                        |
| 01.5  | 12" St. M. W.M. Improvements                           |
| 01.6  | 8" Eighth St. W.M. Improvements                        |
| 01.7  | 8" Enterprise Rd. W.M. Improvements                    |
| 01.8  | 12" Pioneer Trail W.M. Extension, PART 1               |
| 01.9  | 12" Ridgely W.M. Improvements                          |
| 01.10 | 10" Hwy 41 W.M. Improvements                           |
| 01.11 | 8x4 3/4 W.M. Water Main                                |
- Long Term Projects, (in 5 YEARS)**
- |      |  |
|------|--|
| 01.1 | 12" Pioneer Trail W.M. Extension PART 2  |
| 01.2 | 12" Robinson Blvd. W.M. (South of South) |
| 01.3 | 12" Western Service Area Extension       |
| 01.4 | Western Storage Tank and Pump Station    |
| 01.5 | 12" Turnout Bay Rd. Water Main           |



- Legend**
- IMMEDIATE ——— (Red line)
- SHORT TERM ——— (Blue line)
- LONG TERM ——— (Green line)
- Water Pipes**
- Existing
- 8" (Black line)
  - 12" (Red line)
  - 10" (Green line)
  - 12" (Blue line)
  - 10" (Yellow line)
  - 24" (Orange line)
- Pumps  
 Tanks  
 Reservoirs

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

QUENTIN L. HAMPTON ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 1000 UNIVERSITY OF APPLIED SCIENCES BOULEVARD  
 PALM BEACH, FLORIDA 33409  
 PHONE: (561) 835-1100 FAX: (561) 835-1141

New Smyrna Beach  
 UC Hydraulic Analysis

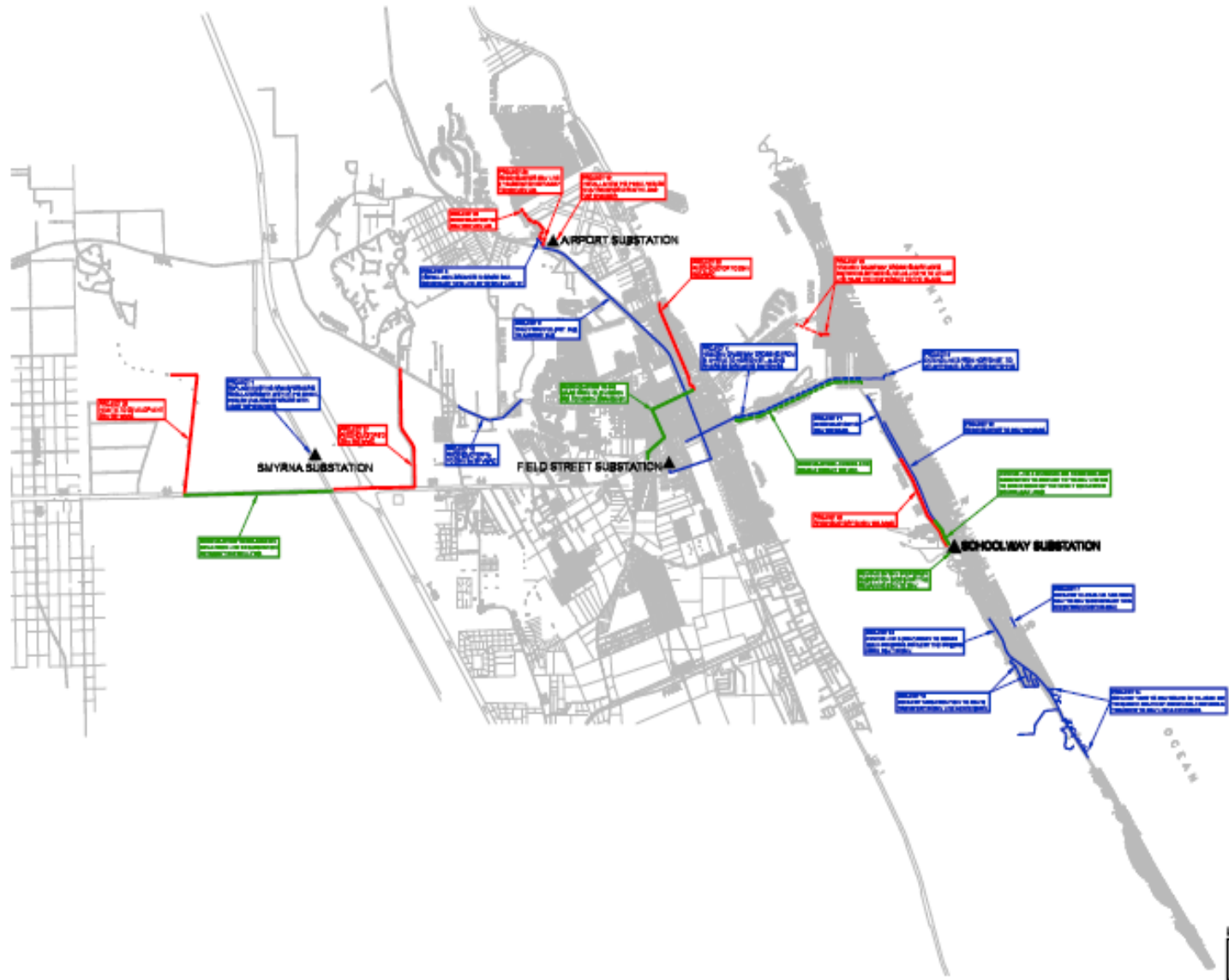
Proposed  
 Projects

FIGURE 3.6

RICHARD W. FERNANDEZ, P.E. 4732  
 MERI A. HAMPTON, P.E. 2181  
 BRUCE P. T. BLAIR, P.E. 4733  
 DAVID A. KING, P.E. 6608  
 ANDREW M. GARRICK, P.E. 4854

DESIGNED	DATE	SCALE	SHEET NO.
		AS SHOWN	1 of 1

# UCNSB TRANSMISSION & DISTRIBUTION STUDY PREFERRED PLAN MAP



# GRAPHIC APPROXIMATION OF FORMAL STUDY IMPACTS



PROJ #	PROJECT NAME	# UNITS
1	HAMPTON VILLAGE	1026
2	CAPUTO DEVELOPMENT	23
3	SMYRNA SOUTH SUBDIVISION	65
4	DUPUIS PROPERTY	30
5	LAKE WATERFORD ESTATES, PHASE V	6
6	ISLAND TOWN CENTER	129
7	GOLD ROCK TRAILER PARK	36
8	HARRIS COVE	69
9	FLORIDA DAVIS	75
10	HEEDEN LAKES	72
11	HOME DEPOT	85
12	PROMENADE PARK	322
13	LAKE WATERFORD ESTATES, IN FILL	10
14	LAKELWOOD TERRACE	74
15	LANDWAR, O'REILLY PROPERTY	5000
17	MINDORA, BUILDING D, F, & G	160
18	COOKS PROPERTY	60
19	OCEAN WALK CONDOMINIUM, PHASE IV	158
20	OCEAN WALK CONDOMINIUM, PHASE V	66

PROJ #	PROJECT NAME	# UNITS
21	PIONEER LANDTRUST	1026
22	MORILL PROPERTY	32
24	RACE TRACK PROJECT	100
25	RESIDENCES AT TURNBULL BAY	86
28	ROLLING HILLS	35
27	SMILE XRT	187
28	SMALL CHURCH PROPERTY	6
29	SAKS PROPERTY	1600
30	SHADOW PINES	16
31	PASTIC ACRES, PHASE 1	127
32	SOUTHEAST INTERCHANGE	219
33	SUGAR MILL GARDENS, SUGAR MILL DRIVE & ROADWAY TRAIL	107
34	SUPREX WAL-MART	103
35	OVERLOOK AT TURNBULL BAY	138
38	TURNBULL BAY GOLF & COUNTRY CLUB, PH 2	65
37	UNION SUGAR MILL WATER PLANT SITE	6
39	VILLAGE STREET CONDOMINIUM	15
40	VILLAGES, SINGLE FAMILY	113

PROJ #	PROJECT NAME	# UNITS
41	VILLAGES, TOWNHOMES	180
42	VILLAS AT CALLAUSA	21
43	VINEYARD BAY - PARTIAL	1623
44	WILLIAMS PROPERTY	175
45	SUGAR MILL GARDENS, SUGAR MILL DRIVE & TURNBULL GOLF COURSE	60
46	C. & S. STREET DEVELOPMENT	38
47	MISSION LAKES	78
48	OLD HIGH SCHOOL SITE	264
49	SHONDEN, PHASE I	80
50	BECKS PROPERTY	600
51	FORD PROPERTY	600
52	TROUP PROPERTY	100
53	MITCHELL PROPERTY	35
54	HEASER PROPERTY	70
55	BOLTON ROAD PROPERTY	12
56	DARFIELD WOODS	72
57	COUNTRYBROOK II	100
58	INDIAN ROAD SUBDIVISION	28

TOTAL = 16,070 UNITS

**DRAFT**



UTILITIES COMMISSION  
CITY OF  
NEW SMYRNA BEACH, FLORIDA

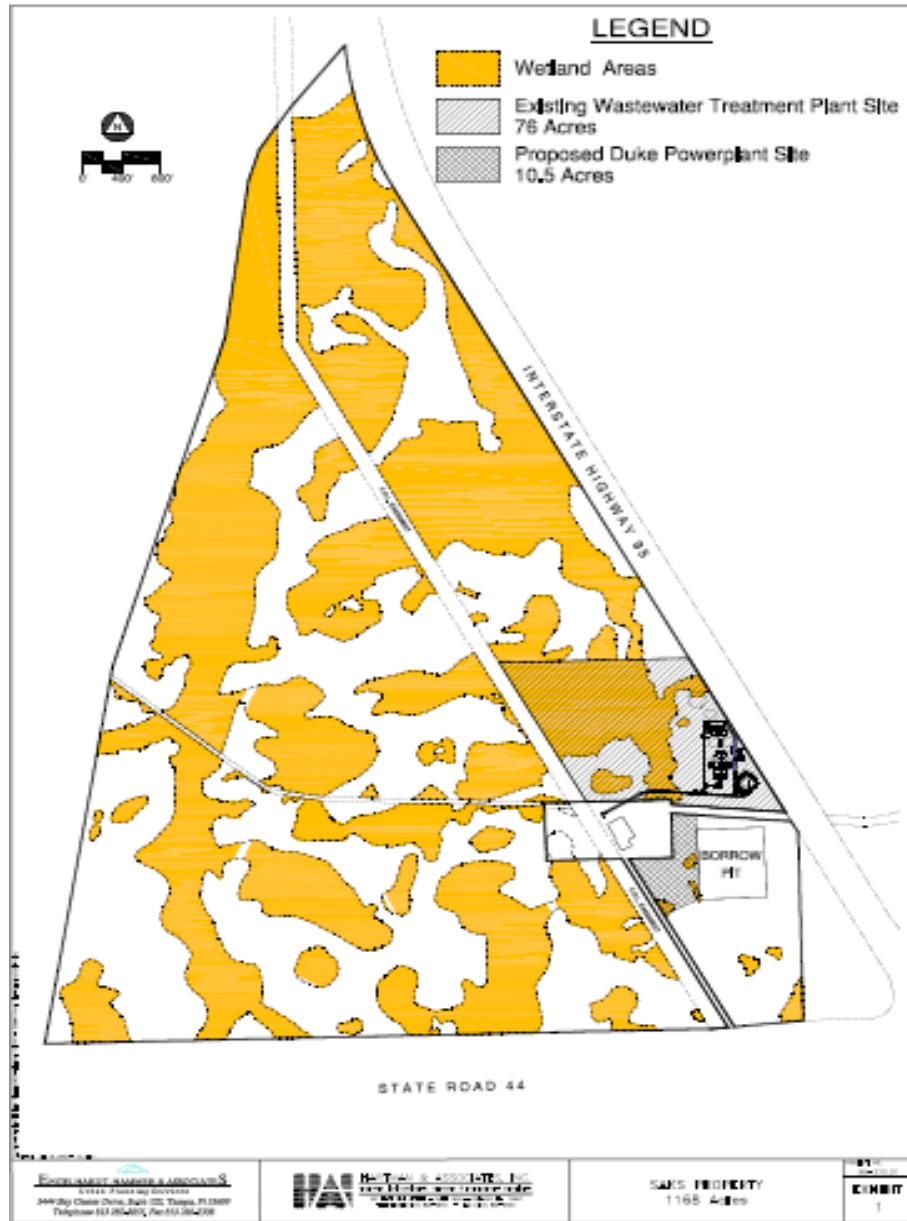
POTENTIAL CONSTRAINTS

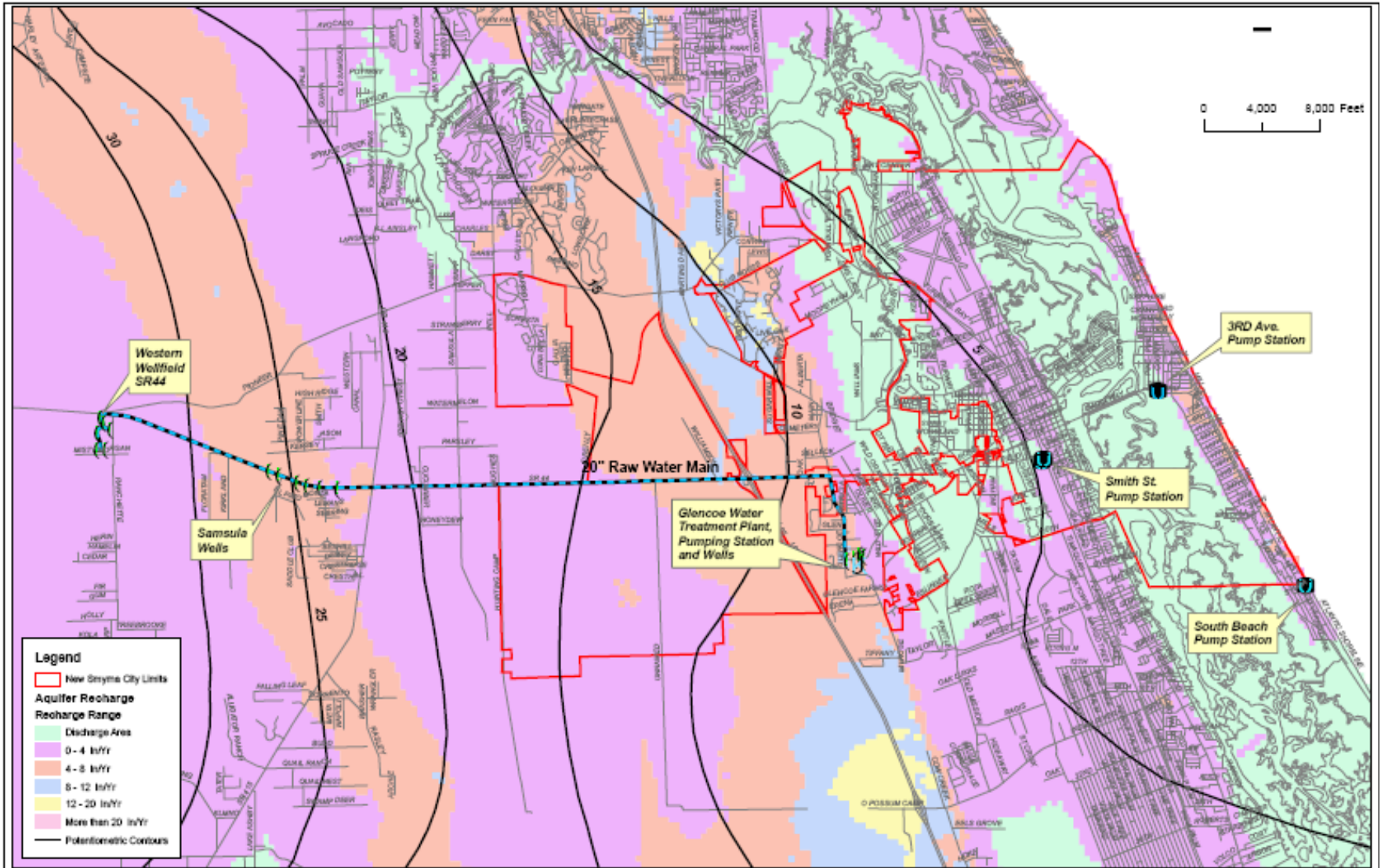
DRN. J. RIBBON	SCALE: 1"=200'	SHEET 1 OF 1
DRN. S. WILTS	DATE: 06/16/19	
APP. J. BENT	REV:	
DATE FILED: 06/16/19	ISSUED:	

## Summary Points

- The build out rate of the existing projects is unknown.
- Existing and future wildfire exposure impacts much of the UC service area.
- Detailed studies used historical growth and added new project impacts.
- The constraint map reflects immediate (1-3 years) and short-term (< 5 years) needs.
- Existing infrastructure can be significantly impacted by project growth.
- Water, wastewater, reuse water are critical determinant areas. (WW-RU study results are expected in July, 2006.)
- 20 inch LPT Main, Smith St. upgrades, and South Causeway tank and PS are essential for short-term existing system and certain project developments.
- 20/16 inch SR 44 W Main and 12/8 inch W Main are essential for Western area Projects.
- Pioneer Trail 12/8 inch are essential for infill areas west of Williams Road.
- Electric impacts are dependent upon existing growth and the type of new project load affecting substation transformer additions and conductor upgrades or additions.
- 10-Year CIP used aggressive forecast to drive the range of plan options.
- Depending upon the project, ordering of infrastructure implementation can change.

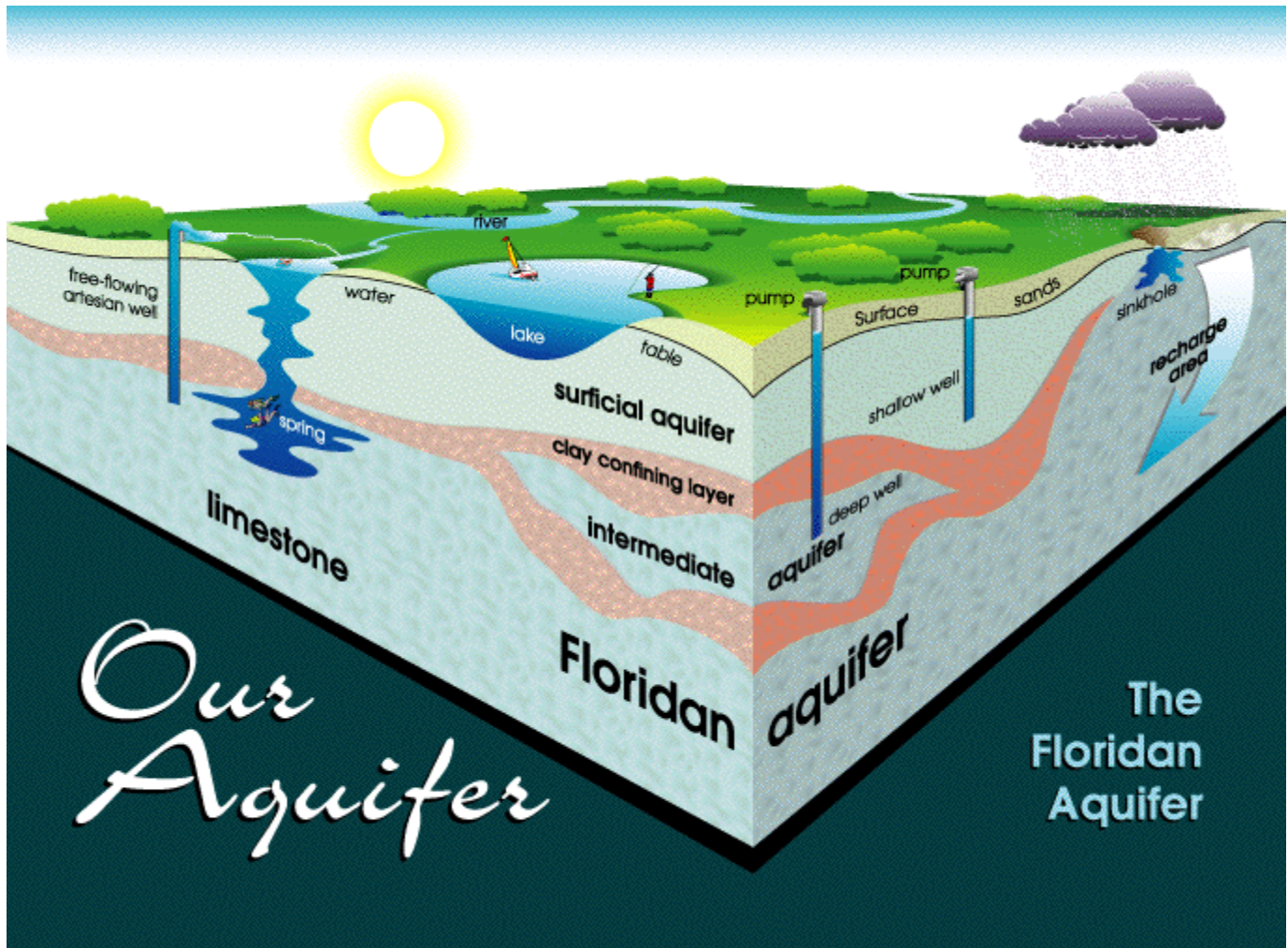






Legend	
<span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px;"></span>	New Smyrna City Limits
Aquifer Recharge	
Recharge Range	
<span style="background-color: #c8e6c9; display: inline-block; width: 10px; height: 10px;"></span>	Discharge Area
<span style="background-color: #e1bee7; display: inline-block; width: 10px; height: 10px;"></span>	0 - 4 in/Yr
<span style="background-color: #bbdefb; display: inline-block; width: 10px; height: 10px;"></span>	4 - 8 in/Yr
<span style="background-color: #fff9c4; display: inline-block; width: 10px; height: 10px;"></span>	8 - 12 in/Yr
<span style="background-color: #ffe0b2; display: inline-block; width: 10px; height: 10px;"></span>	12 - 20 in/Yr
<span style="background-color: #fce4ec; display: inline-block; width: 10px; height: 10px;"></span>	More than 20 in/Yr
<span style="border-bottom: 1px solid black; display: inline-block; width: 10px;"></span>	Potentiometric Contours

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	<b>QUENTIN L. HAMPTON ASSOCIATES, INC.</b> CONSULTING ENGINEERS <small>MEMBER ASSOCIATE OF INTERNATIONAL SOCIETY OF PROFESSIONAL ENGINEERS</small> P.O. BOX 10000, NEW SMYRNA BEACH, FLORIDA 32169 PHONE: 386.794.5611 FAX: 386.794.5612	<b>New Smyrna Potable Water Master Plan</b>	<b>EXISTING WELLS AND RECHARGE AREAS</b>	<b>FIGURE 2.1</b>	REVISIONS: P.E. 1472 DATE: 11/15/11	DRAWN: M.A. HAMPTON, P.E. 3781 DATE: 11/15/11	SCALE: AS SHOWN
										CHECKED: T. BLAIR, P.E. 4710 DATE: 11/15/11	APPROVED: M.A. HAMPTON, P.E. 4881 DATE: 11/15/11	



*Our  
Aquifer*

The  
Floridan  
Aquifer