Hillsborough Board of Commissioners Agenda

7 p.m. December 12, 2016
Town Barn, 101 E. Orange St.

Compliance with the Americans with Disabilities Act interpreter services and/or special sound equipment is available on request. If you are disabled and need assistance with reasonable accommodations, call the Town Clerk's Office at 919-732-1270, ext. 71.

Please use the Bookmark Feature to navigate and view the Item Attachments.

1. PUBLIC CHARGE

The Hillsborough Board of Commissioners pledges to the citizens of Hillsborough its respect. The Board asks its citizens to conduct themselves in a respectful, courteous manner, both with the Board and with fellow citizens. At any time should any member of the Board or any citizen fail to observe this public charge, the Mayor or their designee will ask the offending person to leave the meeting until that individual regains personal control. Should decorum fail to be restored, the Mayor or their designee will recess the meeting until such time that a genuine commitment to this public charge is observed.

2. AUDIENCE COMMENTS REGARDING MATTERS NOT ON THE PRINTED AGENDA

3. AGENDA CHANGES & AGENDA APPROVAL

4. PRESENTATIONS

A. Annual Cemetery Committee Update

5. COMMITTEE REPORTS *(CRITICAL)*

6. REPORT FROM THE TOWN MANAGER

7. DEPARTMENTAL REPORTS

8. ITEMS FOR DECISION – CONSENT AGENDA

A. Minutes of the Board of Commissioners/Planning Board Oct. 20, 2016 Joint Public Hearing, Minutes of the Board of Commissioners Nov. 14, 2016 Regular Meeting, and Minutes of the Board of Commissioners Nov. 14, 2016 Regular Meeting Closed Session, Minutes of the Board of Commissioners Nov. 28, 2016 Work Session, and Minutes of the Board of Commissioners Nov. 28, 2016 Work Session Closed Session
B. Miscellaneous Budget Amendments and Transfers
C. Adoption of statement of Consistency and Ordinance amending the Unified Development Ordinance to amend Section 3.8.5.1.a to modify cultural resource documentation requirement for special use permit applicants
D. Adoption of statement of Consistency and Ordinance amending the Unified Development Ordinance to amend Section 3.13.3.d to make reference to the traffic impact study requirements in the street standards document
E. Adoption of statement of Consistency and Ordinance amending the Unified Development Ordinance to delete reference to the Design Standards manual in Section 6.2 and list this section as "reserved for future codification."
F. Adoption of statement of Consistency and Ordinance amending the Unified Development Ordinance to amend Section 6.11.7.3 to remove the sentence requiring site lighting to be extinguished when a business is closed

G. Adoption of statement of Consistency and Ordinance amending the Unified Development Ordinance to amend Section 7.5.2.1 to clarify that non-conforming residential lots are buildable
H. Authorize manager to enter into a contract with HMW Preservation to prepare an Architectural Inventory update for Hillsborough (outside the local historic district)
I. Revise purpose descriptions for Water and Sewer CFF in the Town Code Chapter 14, Appendix A, Table A-1

9. ITEMS FOR DECISION – REGULAR AGENDA

A. Fiber Network Feasibility Analysis presentation
B. Consideration of request to dedicate a small parcel of land connecting Lakeshore Drive and Forrest Street
C. Consideration of Request from Little School to amend their special use permit to construct additional parking and increase their enrollment (OC PIN 9873-25-6187)
D. Adoption of statement of Consistency and Ordinance amending the Hillsborough Zoning Map regarding request from Vouthaus, LLC to Rezone 9.75 acres at 505 Eno Street from General Industrial to Adaptive Re-Use so the building can house a wider variety of uses that are not industrial (OC PIN 9864-65-3492)
E. Receive update on Collins Ridge project and its relation to Daniel Boone Village
F. Authorize negotiation of design contract for north campus office renovations
G. Consideration of statement of Consistency and Ordinance amending the Unified Development Ordinance to amend Section 7.3, Nonconforming Characteristics of Use, to provide guidance on when a site is required to correct existing non-conforming characteristics
H. Consideration of statement of Consistency and Ordinance amending the Unified Development Ordinance to amend Section 6.20, Stormwater, to match state minimum requirements and meet the mandate for local regulations to not be more stringent than the state
I. Paid Parental Leave Policy

10. CLOSED SESSION

A. Closed Session as authorized by North Carolina General Statute Section 143-318.11(a)(5) to discuss and give direction to staff regarding negotiating terms for the possible acquisition of real property (the former Colonial Inn, 153 W. King St.)

11. ADJOURN

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Public Works

Public Hearing: ☐ Yes ☒ No

For Clerk's Use Only
AGENDA ITEM #

	4.A	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Ken Hines, Public Works Director

ITEM TO BE CONSIDERED

Subject:

Annual report from the Hillsborough Cemetery Committee by Chair Ken Ostrand

Attachment(s):

None

Brief Summary:

Chair Ostrand will report on the activities of the Hillsborough Cemetery Committee during the past year.

Action Requested:

None

ISSUE OVERVIEW

Background Information & Issue Summary:

Mr. Ostrand will provide information on projects accomplished during the past year, such as work performed in the Old Town Cemetery.

Financial Impacts:

None

Staff Recommendations/Comments:

None

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: All

Public Hearing: ☐ Yes ☒ No

Date of Public Hearing:

For Clerk's Use Only
AGENDA ITEM #

	7	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Department Heads

ITEM TO BE CONSIDERED

Subject:

Departmental Reports

Attachment(s):

Monthly Departmental Reports

Brief Summary:

n/a

Action Requested:

Accept reports

ISSUE OVERVIEW

Background Information & Issue Summary:

n/a

Financial Impacts:

n/a

Staff Recommendations/Comments:

n/a

ADMINISTRATION DEPARTMENTAL REPORT
December 2016

Human Resources Director/Town Clerk
November 2016

Meetings

- FY18 Budget Kickoff (11/9/16)
- Board of Commissioners regular meeting (11/14/16)
- Wellness Team (11/17/16)
- Board of Commissioners work session (11/28/16)
- Weekly update meetings with Town Manager
- Biweekly update meetings with Safety and Risk Management Officer
- Monthly meetings with Administration and Management Teams

Employee Events and Training

- 2017 training program and calendar is being developed

Recruitment and Selection

- Police Officer (bilingual preferred)
    - New recruitment opened (10/14/16)
    - Continuous recruitment (6 applicants to date)
- Police Officer - Trainee
    - New recruitment opened (10/14/16)
    - Recruitment closed (11/6/16) (11 applicants)
    - Interviews scheduled week of 12/5/16
- Planner
    - Recruitment opened (8/11/16)
    - Recruitment closed (8/31/16) (31 applicants)
    - New hire - start date 11/28/16
- Stormwater Program Coordinator
    - Recruitment opened (11/18/16)
    - Recruitment to be closed (12/15/16) (8 applicants to date)
- Wastewater Laboratory Supervisor
    - Recruitment opened (9/20/16)
    - Recruitment closed (10/10/16) (13 applicants)
    - New hire - start date 11/21/16
- Utility Mechanic
    - Recruitment opened (10/10/16)
    - Recruitment closed (11/6/16) (19 applicants)
    - New hire – start date 12/5/16

Pay and Benefits

- Biweekly payroll (2)

- Classification and Compensation study implemented effective 10/3/16
    - Drafting new job descriptions

Wellness

- On the Move Monthly program (start date 11/1/16)
- Wellness mini-grant program

Performance Evaluation

- Provided ongoing support for NeoGov performance evaluation system

Professional Development

- None

Miscellaneous

- Employee relations matters
- FMLA active cases/requests - 10
- Employee Handbook updates
- Ongoing implementation of contract and agenda/minutes scanning project
- Developing employee safety training requirements per position
- Working on draft proposal for Carolina Star program

Public Information Office Report: November 2016

News Releases

- Issued news releases to media and subscriber list; posted to website and social media sites; and created bulletins for government access channel:

1-Nov —	Hillsborough Requests Qualifications for Design Services for Retrofit of Town Buildings
1-Nov —	Arrest Made in Armed Robbery
4-Nov —	Town Offices to Be Closed, Solid Waste Collection Delayed due to Veterans Day
4-Nov —	Dog Park Closing Briefly for Maintenance
7-Nov —	Utility Maintenance Supervisor Retires After 28 Years
8-Nov —	Reminder: Police Holding Community Summit
9-Nov —	West King Street Sidewalk to Close for Infrastructure Repairs
9-Nov —	Trail Connecting Riverwalk to Speedway Is for Pedestrians Only
10-Nov —	Hillsborough Budget Process Kicks Off; Learn about Process Via Video
14-Nov —	An Open Letter to Orange County Residents
15-Nov —	West King Street Repairs Delayed Due to Weather
15-Nov —	Riverwalk Bridge Closed Briefly for Tree Removal
15-Nov —	Board of Commissioners Meeting Summary
16-Nov —	Hillsborough Police Discuss 21st Century Policing
17-Nov —	Town Offices to Be Closed, Solid Waste Collection Delayed due to Thanksgiving
18-Nov —	Pipe Under Faribault Lane to be Repaired
18-Nov —	Help Santa Provide Toys to Kids at Police Station
18-Nov —	Suspect Sought in Shooting and Attempted Armed Robbery

18-Nov —	Code Orange Warning Spurs Open Burning Ban
21-Nov —	Hillsborough Wastewater Collection Employee and System Receive Awards
22-Nov —	Reminder: Action Required for Water and Sewer Payments
23-Nov —	Hillsborough Holiday Parade Dec. 3; Some Downtown Streets to Be Closed
23-Nov —	Abundant Holiday Events Around Town in Coming Weeks
30-Nov —	Police Offer Holiday Food for Fines Program

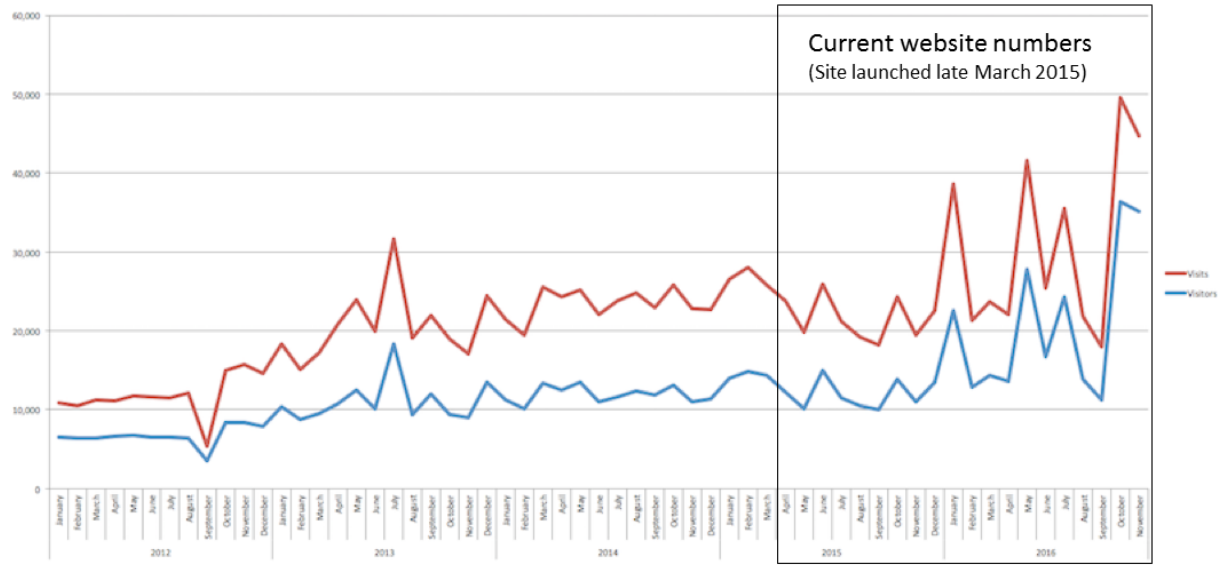
- As of Dec. 1, subscriptions are:
    - News releases — 735
    - Meeting notices — 415
    - Bid postings — 363
    - Water supply status updates — 671
    - Citizens newsletter — 699

Social Media

- Renewed effort to update social media policy.
- Removed option for reviews on Facebook page because of inability to remove reviews that are defamatory and unrelated to town-sponsored programs, services, projects, issues, events and activities.
- Posted street resurfacing album of photos on Facebook and photos on stormwater pipe repair on Facebook and Twitter.
- Made 37 Facebook posts and 37 tweets. Responded to 1 Facebook comment. Posted 2 videos to YouTube.
- As of Nov. 30:
    - Facebook: 1,849 likes (increase of 39)
    - Twitter: 843 followers (increase of 20)
    - YouTube: 285 subscribers (increase of 37)

Website/Employee Section

- Added paving video to Public Works' streets page.
- Worked on page for starting, expanding or relocating a business.
- Discussed and started planning additional police and public space pages.
- Review of website traffic shows the spike after the October arson at GOP headquarters may have increased awareness of the website as November had nearly as many visits (about 45,000 indicated by red line on chart) and visitors (about 35,000 indicated by blue line). The open letter issued after the election had 23,989 views (28 percent of 86,277 total views), with many coming from outside links. Nothing related to the GOP arson had a significant number of views in November.



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Government Access Channel/Videos

- Completed edits for budget process video and posted and distributed.
- Filmed, produced and posted monthly board meeting summary video.
- Local support made site visit Nov. 7 regarding TV channel equipment. Found streaming and broadcast issues, which resulted in a large investment of time. Time Warner visited on Nov. 16 to get the channel airing again. An Internet circuit installed for the campus' new phone system had taken the fiber line used by the channel.
- Talked with TV channel support on Nov. 18 regarding warranty renewal and timeline for replacement of hardware.
- Local support made site visit Nov. 29 regarding uninterrupted power supply for TV equipment. Replacement batteries ordered and to be installed in December.

Other Work

- Contacted News of Orange for correction regarding a pending arrest.
- Viewed submitted newsletter and third-page insert promotional materials regarding a new platform for water and sewer billing and collections. Determined most materials not usable by Public Information and all need some revision if used by Finance for inclusion in water bills, including switching out town logo for one with transparent background.
- Provided suggestions as well as photos for use in the Fiscal Year 2016 Popular Annual Financial Report.
- PIO continued correcting assignments and writing evaluations for town employees in eight-week practical writing course.
- Reviewed open letter from Orange County leaders regarding presidential election and helped set up requested interview with mayor on Nov. 14. Added Spanish translation on Nov. 16 and notified public via social media.
- Started work on winter citizens newsletter.
- Started work on drafting townwide document templates.
- Drafted townwide PowerPoint template.
- Worked on redesigning business cards for townwide use.

- Took photos at Police Department's Community Summit and of Public Works for use in releases and social media.
- Worked with Finance Department regarding communication following transfer to new platform for water and sewer billing and collection. Advised and updated frequently asked questions.
- Provided edits to fliers and created promotional materials for town programs and events.
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Meetings/Events/Training

- Met for monthly staff meeting on Nov. 1.
- Attended administration and management team meetings on Nov. 2.
- PIO and web developer/assistant PIO helped staff a joint information center set up by Orange County on Election Day, Nov. 8.
- PIO attended Police Department Community Summit on Nov. 9.
- PIO and web developer/assistant PIO met on Nov. 17 to outline ways to ensure time for professional development and web development due to increasing PIO workload.
- Participated in conference call on Nov. 29 with finance director and FATHOM representative regarding communication on new platform for water and sewer billing and collection.
- Met for monthly staff meeting on Nov. 29.
- Attended administration and management team meetings on Nov. 30.

Safety and Risk Manager Monthly Report
November 2016

Meetings Attended/Conducted

- Semi-monthly department meeting
- Meeting with Utilities Supervisor regarding web safety training

Training Attended/Conducted

- Monthly Safety Trainings
- Worked with Fleet Department on web training

Site inspections

- Gold Park
- Turnip Patch Park
- Murray Street Park
- Hillsborough Heights Park
- Cates Creek Park

Miscellaneous

- On target with 4th quarter random drug screens
- Met with AED repair technician to address recall/repair order on existing unit.
- Distributing AEDs to new locations
- Began budget process
- Worked on employee training schedule

- Working on Active Shooter Program/Training
- Distributing training certificates for AED/CPR
- Gathering information regarding Lead Safety Training/Policy
- Working with Adam/Computerbilities regarding computer issues
- Working on workers comp. incident claims
- Working on several P & L claims
- Working on completion of incident reviews (Safety Committee)
- Stocked safety gear
- Assigning and installing stickers to employee's badges for vending machine access
- Vending machine tutorials for employees, demonstrating functions and accessibility
- Working on inspection requirements with Safety Committee members
- Distributed updated safety wear
- General duties concerning facility at NC Hwy. 86 North
- Forwarded recommendations (work orders) generated from Park Inspections

TOWN OF HILLSBOROUGH

ENGINEERING STATUS REPORT

DECEMBER 2016

Kenneth P. Keel, PE; 919-732-1270 ext 75; kenny.keel@hillsboroughnc.org

PROJECT	BUDGET	STATUS
WWTP Discharge Compliance	-	**We were compliant with our discharge permit limits in October**. Our sludge management program is in good condition.
Sewer Spill Summary	-	The Town had no reportable collection system sewage spills since my last report (one so far in 2016). While we did have a report of a manhole overflow in Gold Park during Hurricane Matthew, there was no spilling or evidence of a spill when staff arrived. We did inform the NCDEQ Regional Office, but since we did not see it and could not estimate a quantity, the official status was no spill. There have been no reportable spill/bypass events at the WWTP in 2016.
West Fork of the Eno Reservoir	-	**The reservoir is about 5 inches below full, with approximately 349 days of supply remaining.** The current controlled release is meeting the minimum release for December of 2.6 cubic feet per second (1.681 MGD).
WFER Phase 2 Design Project (FY16)	$ 1,237,000	A municipal agreement is currently being negotiated between the Town and NCDOT to determine responsibilities and cost sharing of the Efland-Cedar Grove Road realignment and raising, with construction planned to begin in **2017**. The Town's share of project funds will be due to NCDOT upon contract award (approximately $500k to $600k). The road improvements design work for Mill Creek Road and Carr Store road is ongoing. The remaining dam and project design work began in September 2015, in order to complete all of the engineering and permitting required prior to construction of Phase 2 in 2017. Project construction is included in the FY17 budget. The total estimated construction cost of Phase 2 is currently at $6.7 million, plus about $910,000 in inspection & contract administration costs during construction (total of $8.3M needed for construction in FY17, which includes contingency funds). Construction is expected to begin in mid-2017.
Total Trihalomethanes (TTHM) Compliance	-	The 4th Quarter 2016 testing was performed in mid-November. These results are **21 parts per billion (ppb) lower than the 2015 4th Quarter**, decreasing our 4th Quarter average to 42 ppb, which makes our current running annual average decrease to **50** ppb (**down by 6 ppb**, annual average limit is 80 ppb). <u>The Town remains compliant with TTHM levels</u>. 1st Quarter 2017 testing is scheduled for mid-February.
Water Restrictions	-	No restrictions are in effect for Town customers, but we are currently subject to **Stage 1 withdrawal restrictions, limiting us to a withdrawal of 1.51 MGD in the absence of WFER releases**. Our usage is currently around 1.348 MGD. Lake Orange is full according to the last report received from Orange County.
Water System Flushing	-	The Fall water system flushing operations began on September 6th, and were completed on October 31st. **The total volume flushed was 5,167,895 gallons.** Spring flushing operations will begin in March 2017.
"Unaccounted-for" Water	-	We had a few relatively small leaks repaired in October on County Seat Drive, Lafayette Drive, Luther Drive & Torain Street. Miscellaneous repairs have been proceeding as needed. We will NOT have a Water Audit for FY16. Due to software issues, the Billing/Collections Department was unable to provide accurate data for several months, which compromised the integrity of the water audit.
Miscellaneous Water Projects	-	A short connection and road crossing on NC 86 North at the BP station began construction in October, **and should be completed in December.** The 6" water line along US 70 between Walgreens and Orange High School Road was substantially completed in March, and customer connections completed in May (to eliminate an old 2" galvanized pipeline).
New South Zone Water Transmission Main	$ 240,000	The utility easement for the proposed water meter vault at Davis Road has finally been acquired (on September 28th). A new meter vault, additional connections to our existing distribution system, demolition of the existing OWASA Booster Pump Station, and addressing emergency pumping issues from OWASA due to pressure zone changes are all parts of this project. The project will be primarily constructed in-house, **in early 2017**.
Waterstone Elevated Water Tank	$ 2,029,398	Tank was placed into service on June 25th, and an official opening ceremony held on June 29th. Tank construction is complete, final payment is being negotiated (due to contractor delays and liquidated damages), and close-out paperwork is being prepared. Tank construction began on 10/27/14, and final completion was scheduled by 11/9/15.
New South Zone Booster Pump Station	$ 175,000	Construction of the Forest Ridge water booster pump station (BPS) has begun, and the water line from Executive Court to I-85 (which will link Forest Ridge to the South Pressure Zone) should begin later this year. Easements for the water line are currently being finalized. The BPS project is part of the next phase of Forest Ridge, and the Town's financial contribution to the project will add capacity to the BPS planned by the developer, to boost water to the South Zone and the Waterstone Tank.
NC 86 (South) Water Improvements	$ 90,000	Design work is proceeding to extend a 12" water line from the I-85 water line crossing near Orange Mobile Estates to the entrance to Sheetz. Extension will enhance flow to and from the Waterstone Tank and areas north of I-85 in the South Zone.
Sewer Rehabilitation & Repairs and Eno River Outfall Lining	$ 250,000	**Replacement of an existing sewer main between Tryon and King Streets (just west of Cameron) was completed in November. Approximately 300 feet of deteriorated sewer main will be replaced on Wake Street in the coming weeks.** Sewer relining along the Eno River (and Riverwalk) was completed in January 2016. Some additional sewer relining will be done later this fiscal year further down the river near the WWTP (contractor difficulties has caused delays, & we are seeking new contractor).

TOWN OF HILLSBOROUGH
2016 SEWER SPILL SUMMARY *(as of December 2, 2016)*

Spill Number	Date	Location	Cause of Spill	Spill Volume (gallons)	Volume Reaching Surface Waters (gal)
1	3/9/2016	212 Mollies Court	Grease	900	400
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
			TOTAL	900	400

PRIORITY PROJECTS – STOPLIGHT REPORT
Engineering (December 2016)

Project & Key Information	Time [2]	$$$[3]	Other [4]	% Complete	Comments/Notes/Key Lessons Learned To Date
New South Zone Transmission Main Project Current Phase[1]: Construction Original Cost: $200,000 (entire project) Revised Cost: $240,000 Original Completion Date: Dec. 2015 Revised Completion Date: Winter 2016 2nd Rev. Completion Date: Spring 2017 *Delays primarily due to line crew workload. Added costs due to North Zone work which expanded project scope.*				26%	• The overall completion date has been pushed back to *Spring 2017* due to staff workload. • *Original plan included purchase of a portable booster pump for use when purchasing from OWASA. We now plan to rent a pump when needed, due to extended periods of non-use.* • The North Zone loops are under construction (Walgreens to OHS Rd is complete as of March 5th & NC 86 adjacent to BP station *is under construction, hopefully complete in December*). • Project delays due to easement acquisition & crew workload are not problematic. • The meter site easement has been attained as of September 28th. • Construction of new meter vault will begin *in 2017*, then remainder of South Zone construction work (tie-ins & OWASA PS demo). • Design of new meter vault near Davis Drive, pump connections near New Hope Creek, and various interconnections to existing Hillsborough distribution system began in early 2014. • Some additional water line was included along US70 between NC86 and OHS Road. This will create additional loops in the North Zone to improve water flow & quality. • Transfer of 16" water line through Hillsborough from OWASA was completed Sept. 2013.
WFER Phase 2 Road Design & Permitting Current Phase[1]: Design Original Cost: $458,019 1st Revised Cost: $483,799 2nd Revised Cost: $602,575 Original Completion Date: June 2015 1st Revised Completion Date: Fall 2015 2nd Rev. Completion Date: June 2016 3rd Rev. Completion Date: Dec. 2016 4th Rev. Completion Date: June 2017 *Revisions due to NCDOT delays and contract addendums to continue work to final completion for all 3 roads that require modifications.*				90%	• *Draft municipal agreement with NCDOT received and is under negotiations for Efland-Cedar Grove Road project. Construction delay is not problematic to the overall WFER project.* • A budget amendment will be needed to make funding available for project from Capital Reserve funds prior to the loan funding of the rest of the Phase 2 project in early to mid-2017. • Right-of-way is being acquired by NCDOT for Efland-Cedar Grove Road project. • 404 permit revisions were approved in June 2016, which covers the entire Phase 2 project. Timing was driven by need to proceed with Efland-Cedar Grove Road realignment project. • Final right-of-way plans for the Efland-Cedar Grove Road realignment project were submitted in late January 2016, with revisions made in May 2016. • Preliminary bridge design plans for Carr Store Road were submitted for NCDOT review in mid-October 2015. • A contract amendment was approved on July 13, 2015 for roadway & hydraulic design completion, bridge design, ROW staking, and 404 permit modification. • Discussions with NCDOT are ongoing regarding cost sharing. The Efland-Cedar Grove Road project bid was scheduled for June 2016 (NCDOT delays). Town's cost share will have to be made available to NCDOT at bid time (currently estimated around $500K). • Surveying and concrete & soils testing at the dam were done in April & May 2015. • Environmental studies and the eagle survey are complete (see Facebook page for eagle photos). A follow-up eagle study will be completed in *2017*.

					• Design is proceeding in accordance with the schedule NCDOT has set. Town schedule has been revised to match NCDOT postponement of construction (previously was scheduled for Summer 2015). • A contract amendment with Atkins, NA was approved on November 10, 2014 for the hydrologic model and flood mapping for the Phase 2 improvements. • We are partnering with NCDOT for improvements on Efland-Cedar Grove Road, which will benefit both parties. Atkins is leading this effort for Hillsborough.
WFER Phase 2 Dam & Clearing Design Current Phase[1]: Design Original Cost: $633,500 Revised Cost: Original Completion Date: Dec. 2016 Revised Completion Date:				50%	• 65% design drawings complete and reviewed with engineer on September 26, 2016. • Clearing access plan was completed in late June. • Geotechnical design of the dam area began in April. • Site visits for development of the clearing plan began in February, with help of a forestry consultant. Timber values and clearing costs are being determined. • Civil design work began in mid-September 2015. • The final design contract with Schnabel Engineering South, PC for dam & clearing design, contractor prequalification, and bidding services was approved on September 14, 2015.
NC 86 South Water Improvements Current Phase[1]: Design Original Cost: $90,000 (entire project) Revised Cost: Original Completion Date: Dec. 2017 Revised Completion Date:				75%	• Design work is proceeding to extend a 12" water line from the I-85 water line crossing near Orange Mobile Estates to the entrance to Sheetz. Extension will enhance flow to and from the Waterstone Tank and areas north of I-85 in the South Zone.

Notes:
[1] Current project phase is basis for "stoplights." Current project phases may be in study, design, implementation, or construction.
[2] Time: Green = on schedule or ahead of time; Yellow = behind schedule but not problematic; Red = behind schedule/urgent/problematic.
[3] $$$: Green = w/in 5% of current phase budget; Yellow = w/in 5% to 15% of budget; Red = more than 15% & contingency likely exhausted.
[4] Other: Green = no issues current phase; Yellow = minor issues; Red = major issues/concerns

FINANCE DEPARTMENTAL REPORT FOR NOVEMBER 2016

SUMMARY OF ACTIVITIES:

Daily Collections	$	99,038.10
Tax & Vehicle License	$	1,840,748.47
Solid Waste Disposal Tax	$	1,127.50
Beer & Wine Receipt	$	-
Franchise Tax	$	-
Sales & Use Tax	$	120,519.54
	$	2,061,433.61
Expenditures: General Fund/Water Fund	$	1,520,189.67

FINANCE:

- Compiled and submitted all monthly reports.
- Issued 31 purchase orders.
- Processed 437 vendor invoices, issued 231 accounts payable checks.
- Collected and processed 59 payments for food and beverage tax.
- Collected and processed 8 payments for fire inspection fees and permits.
- Prepared and mailed 32 delinquent fire inspection letters.
- Prepared and processed 3 payrolls.
- Issued 1 special event permits; collected no payments.

METER READING:

- Terminated no services and connected no new services upon request.
- Rechecked no meter readings, responded to no call backs.
- Installed no new meters, changed no old meters, performed no pressure tests.
- Identified no hydrant tamperings and no meter tamperings.
- Changed no meter registers.

BILLING & COLLECTION:

- Corrected bills that were rechecked before the 12-01-16 billing.
- Bills adjusted after 11-01-16: no leaks; no late fees; no pools; miscellaneous.
- Prepared water bills; processed no returned checks.
- no services, reconnected .
- Adjustments made for month: gallons totaling $.00.
- Processed utility bank drafts.
- Processed 0 debt set-off letters.
- Processed on-line bill pays.

FINANCE DIRECTOR

- Conducted All Staff Meeting November 1, 2016
- Fathom onsite for Go Live November 2-4, 2016
- Attended Management Team Meetings November 2 & 30, 2016
- Conducted Supervisor's Meeting November 7, 2016
- Attended Budgeting in Local Government Class at SOG November 8-11, 2016
- Attended Town Board Meeting November 14 & 28, 2016
- Participated in Fathom Project Team Meetings November 15 & 16, 2016
- Sat for NC Finance Officer's Exam's November 17 & 18, 2016

Finance
Departmental Report
November 2016
Due: Monday, December 05, 2016

Revenues

Collections:	$	97,063.31
NCCMT Interest:	$	1,974.79
Tax & Vehicle:	$	1,840,748.47
Solid Waste Disposal Tax:	$	1,127.50
Alcoholic Beverage Tax:	$	-
Franchise Tax:	$	-
Stormwater Fees	$	-
Sales & Use Tax:	$	120,519.54
Total:	$	2,061,433.61

Expenditures

General & Water Fund:	$	1,520,189.67	Central Depository + NCCMT account
CPF:	$	-	

Finance

Purchase Orders:	31	31 purchase orders
Vendor Invoices:	437	437 vendor invoices
A\P Checks:	231	231 accounts payable checks
Food & Bev. Pmts:	59	59 payments
Fire Inspections Fees:	8	8 payments
Delinquent Fire Insp. Letters:	32	32 delinquent fire inspection letters
Payrolls:	3	3 payrolls
Special Event Permits	1	1 special event permits
Privilege Licenses Payments:	0	no payments
Last Fridays Permits		Leave blank if no permits were issued
B/W Privilege License Billed:		Leave blank if no permits were issued
B/W Privilege License Renewals:		Leave blank if no permits were issued
Christmas Parade Permits		Leave blank if no permits were issued
Beer & Wine Priv. Lic. Letters		Leave blank if no letters were sent out

Meter Reading:

New Services Connected:		no new services
Services Terminated:		no services
Meter Readings Rechecked:		no meter readings
Call Backs:		no call backs
New Meters Installed:		no new meters
Old Meters Changed:		no old meters
Pressure Tests:		no pressure tests
Hydrant Tamperings:		no hydrant tamperings

Meter Tamperings:		no meter tamperings
Meter Registers Changed:		no meter registers

Billing & Collections

Bills corrected before 12-1-16:		no bills
Bills adjusted after 11-1-16:	Leaks:	no leaks
	Late Fees:	no late fees
	Pools:	no pools
	Misc.:	miscellaneous
Water Bills Mailed:		no water bills
Returned Checks:		no returned checks
Services Disconnected for non-pmt:		no services
Reconnected:		no services
Adjustments for Nov-2016(Gal.):		no gallons
Adjustments for Nov-2016($):		
Utility Bank Drafts:		no utility bank drafts
Debt Set-Off Letters Processed:		0 debt set-off letters
Online Bill Pays Processed:		no on-line bill pays

Town of Hillsborough Since 1754

Planning Department Report
November 2016

Advisory Board Activities
Board of Adjustment
Did not meet.

Historic District Commission
The members reviewed applications for Certificate of Appropriateness for 404 Calvin St., 226 S. Churton St., 121 W. Margaret Lane, 311 N. Occoneechee St., and 314 W. Tryon St.

Parks & Recreation Board
The members continued discussion of the Connectivity Plan update.

Planning Board
The members made recommendations to the Town Board for items discussed at the October public hearing. This includes a rezoning from Industrial to Adaptive Re-Use for the former Southern Season warehouse, a Special Use Permit modification for the Little School, and seven text amendments to the Unified Development Ordinance.

Tourism Board
The board met twice. First to interview candidates for the vacant restaurant seat, discussion of the 2017 meeting calendar, and discussion of the Tourism Plan kick-off meeting. The second meeting was a conference call with the logo design firm

Tourism Development Authority
Did not meet.

Tree Board
The members met on Riverwalk to place tree identification signs along the trail.

Revenues Collected

Development Review fees	$ 2,310.00	Code Enforcement Reimbursement	$ 50
Zoning Permits & HDC reviews	$ 4,314.53	Park Reservations	$ 340
Planning Total	***$ 6,624.53***	Affordable housing payments	$ 5,000

Other activity of note
Justin Snyder stared worked as Planner on November 28. Stephanie, Shannan, and Margaret took a field trip to Kannapolis to meet with the town manager and tour the train station. Mike Legg and his staff provided good insight into both the construction and operation of the station and have agreed to share budget information to help the town be fully prepared for our station which should be similarly sized.

Tom conducted 13 Certificate of Occupancy visits and 9 general site visits. He also held two project status meetings. Stephanie and Shannan attended a predevelopment meeting. Stephanie met with the Churton Street bid contractor to discuss possible fee reduction.

Shannan facilitated the Tourism Plan kick-off meeting. The meeting was well attended by the invited participants. She provided a brief update on economic development activities at the Assembly of Governments meeting.

Hillsborough Police Department Monthly Report November 2016

REPORTED OFFENSES - UCR															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2016	2015	2014
Part I Offenses															
Homicide	0	0	0	0	0	0	0	0	0	0	0		**0**	0	0
Rape	0	0	0	1	0	1	0	0	0	0	1		**3**	1	0
Robbery	1	0	0	1	2	1	0	0	1	1	2		**9**	3	10
Aggravated Assault	2	4	5	3	2	1	3	2	0	1	3		**26**	31	27
Burglary	2	2	4	5	6	5	3	6	6	3	2		**44**	59	39
Larceny/Theft	30	24	31	34	24	28	29	38	32	39	21		**330**	360	333
Motor Vehicle Theft	0	1	0	0	0	1	1	2	0	0	2		**7**	9	13
Total Part I	**35**	**31**	**40**	**44**	**34**	**37**	**36**	**48**	**39**	**44**	**31**	**0**	**419**	463	422
Other Offenses													2016	2015	2014
Simple Assault	9	13	8	4	11	15	8	13	10	13	5		**109**	170	152
Fraud/Forgery	5	7	4	2	3	4	3	6	1	2	2		**39**	49	43
Stolen Property	0	1	0	1	1	0	1	0	2	0	0		**6**	3	3
Damage to Property	7	9	7	12	7	12	9	8	3	1	14		**89**	91	93
Weapons Violations	0	1	0	0	2	0	1	0	0	0	0		**4**	9	8
Sex Offences	1	3	2	0	0	1	1	1	0	0	0		**9**	9	12
Drug Violations	3	2	2	5	12	4	7	7	3	0	4		**49**	34	35
Driving While Impaired	3	6	1	0	1	2	1	2	1	7	5		**29**	38	31
Liquor Law Violations	0	0	1	0	0	2	2	0	1	0	1		**7**	6	7
Trespassing	1	1	1	5	0	1	3	1	2	0	0		**15**	9	14
Domestic Related	6	15	5	8	8	11	6	9	6	13	14		**101**	na	na
Missing Persons	1	1	0	0	0	0	1	0	0	0	0		**3**	14	14

Summary of Select Offenses:

On 11/03/2016, an Aggravated Assault was reported at 600 S Churton St. A male victim was stabbed with a knife and screwdriver causing non-life threatening injuries. Kayla Noell Johnson, (w/f, 23, of S Churton St.) was charged with Felony Assault with a Deadly Weapon, and will be placed on a domestic hold with no bond.

On 11/11/2016, An Aggravated Assault was reported in the 200 block of Harper Rd. Two male relatives assaulted each other and received non-life threatening injuries. Larry Donell Alston, (b/m, 55, of Harper Rd.) was charged with Felony Assault With a Deadly Weapon and given a $2,500.00 secured bond. Carlton Alston, (b/m, 62, of Harper Rd.) was charged with Felony Assault with a Deadly Weapon and given a $2,500.00 secured bond.

On 11/12/2016, an Attempted Breaking and Entering and Damage to Property was reported to an uninhabited residence in the 200 block of Torain St. The residence had damage to the back door and 3 windows were broken causing approximately $2,200.00 in damages.

On 11/15/2016, an Armed Robbery was reported in the 200 block of Harper Rd. A male party was brought to the hospital with 3 gunshot wounds to his arm. Frank Devar Degraffenreid Jr, (b/m, 21, of Lawndale Ave.) was charged Felony Robbery, Felony Aggravated Assault, and felony Weapons Violation, he was given a $100,000.00 secured bond. Takeem Haywood Turrentine, (b/m, 21, of Durham) was charged with Felony Robbery and Felony Assault With Intent to Kill Inflicting Serious Injury, he was given a $75,000.00 secured bond.

On 11/18/2016 a blind report of a Rape was made to the police department. Both the victim and suspect are known to each other. This incident is under investigation.

Hillsborough Police Department Monthly Report November 2016

On 11/27/2016, an Attempted Strong Armed Robbery was reported at 200 Lakeside Dr. The victim advised that a male approached her, grabbed her and demanded all her money, dumped her pocketbook contents out and left without getting anything from her. This incident is under investigation.

On 11/28/2016, a Larceny of a Motor Vehicle was reported at 364 S. Churton st., Autozone. The victim had left the vehicle over a month ago, broken down, in the parking lot and it is now missing, Autozone advised they did not tow it. The vehicle is valued at $1,800.00.

On 11/28/2016, a Larceny of a Motor Vehicle was reported at 200 Cheshire Dr. The victim gave a ride to couple and their sick child, to get them some medicine. After dropping them off the male came back to the owner and requested to look for a possible lost cell phone in the vehicle. The male then took the vehicle, valued at $10,000.00. Warrants have been obtained on Carlos Cates, (b/m, 22, of Durham) for Felony Larceny of a Motor Vehicle.

On 11/29/2016, an Aggravated Assault was reported at 200 Cheshire Dr. There was a verbal disturbance that turned violent between two groups of neighbors. A teenager was struck by one party while trying to get away from the disturbance, they received non-life threatening injuries. During the incident one party drove away and crashed their vehicle sparking another physical confrontation and the window busted out by a man swinging a club. Jarquavian Lyles, (b/m, 16, of Cheshire Dr.) was charged with Misdemeanor Disorderly Conduct and given a $1,500.00 secured bond. Larry Wayne Franklin, (b/m, 62, of Cheshire Dr.) was charged with Felony Assault With Intent to Kill and Misdemeanor Injury to Personal Property, he was given a $10,000.00 secured bond.

21 Larcenies were reported at various locations including:

- 8 larcenies were shoplifting related incidents at Hampton Pointe- Walmart.
- 2 larcenies were shoplifting related incidents; 1—was at 500 S Churton St., Kangaroo Express- where a male took a beer valued at $2.99, Officers charged Ronnie Dwayne Lane, (w/m, 48, of S Churton St.) 1—was at Food Lion-A Christmas tree valued at $29.99, was taken and recovered. Officers charged Spencer Buren Markle Jr. (w/m, 33, of Cheshire Dr.) and Larry Wayne Franklin, (b/m, 62, of Cheshire Dr.)
- 2 Larcenies were tags taken from vehicles- 1— in the 100 block of Bonaparte Dr. 1— At Walmart.
- 2 Larcenies were from locked motor vehicles at Planet Fitness, 151 Mayo St. where the windows were busted out. 1—$520.00 in a purse and valuables were taken, $200 in damages to the window. 1—GPS and wallet valued at $101.00 and $200.00 in damages to the vehicle.

Narcotics/weapons related incidents:

- During the month of October, officers seized a small amount of marijuana, glass pipe and a scale from traffic stops.

ADMINISTRATIVE SUMMARY

Training

- Total Hours of Non-Mandatory training - 376

Hillsborough Police Department Monthly Report November 2016

Patrol Shift Training Conducted: 60 trainings conducted over 60 shifts (100%) Number of patrol shifts during which roll-call or other squad-level training is documented during October 2016.

Complaints related to service or conduct:

- A female caller called to report a complaint of how she was treated 7 years ago by an officer who is no longer with the department. She would not give her name, but based on the call it is believed she is the same person who filed an identical complaint about the same situation on another officer 7 years ago – and that complaint was investigated and found to be completely untrue.

- Complaint on an officer for being discourteous to a citizen. This investigation is on-going.

Resistance encounters that result in the use of some kind of force:

- 16-02739 – **Preventative Display** – An officer drew his weapon and held it at the low ready with an assault suspect who was holding a baseball bat and had just cut his brother a box cutter. The suspect dropped the bat after being given verbal commands and was taken into custody.

- 16-02784 - **Preventative Display** – An officer was looking for an armed robbery subject reported to be in an apartment. The officer searched the apartment with his weapon out and held at the low ready. As he searched the bathroom he located the subject hiding in the shower. When he pushed back the shower curtain he briefly pointed his weapon at the suspect before deescalating. The suspect obeyed all commands and was taken into custody.

- 16-02840 – **Physical Intervention and Compliance –** Officers had to carry a passively resisting Involuntary Commitment to the patrol vehicle. She passively resisted by rag dolling and dragging her feet as they carried her to the car.

- 16-02860 – **Physical Intervention and Compliance –** An officer had to physically restrain tow subjects as part of a large disturbance. In both cases minimal physical controls were used to restrain the subjects. One was interfering with officers, one was trying to fight with other parties in the disturbance.

Commendations/Compliments Received:

-

Other Notable Events/Activities/Accomplishments

-

Hillsborough Police Department Monthly Report November 2016

PATROL SUMMARY

Patrol Activities 2016	Sep	Oct	Nov
DISPATCHED CALLS	505	547	442
SELF INITIATED ACTIVITIES	351	342	370
TRAFFIC STOPS	138	139	193
TOTAL ENFORCEMENT			
n-View Felony Arrest/warrant issued	0	6	1
On-View Misd Arrest/warrant issued	11	21	18
Warrants/OFA/Summons Served	20	23	22
Traffic Citations	43	34	60
Written Warnings	56	59	67
Parking Tickets	0	2	1
DRUG/GUN ENFORCEMENT DETAIL			
Felony Drug Charge	0	1	0
Misd Drug Charge	3	4	4
Currency Seizure	0	0	0
Gun(s) Seized/Recovered	0	0	0
Schedule I Seized (gms)	.18	0	.03
Schedule II Seized (gms)	.15	.03	0
Schedule III Seized (gms)	0	0.	0
Schedule IV Seized (gms)	.71	0.	0
Schedule V Seized (gms)	0	0.	2.6
Schedule VI Seized (gms)	.1	1.4	11.55

	Sep	Oct	Nov
TRAFFIC ENFORCEMENT DETAIL			
Injury Accidents investigated	4	5	7
DWI Arrests	2	6	5
Stopsign/Stop Light Violations	5	5	14
Speeding Citations	2	0	27
Other Traffic Citations	36	28	49
Truck Route Cits/Warnings	0	0	0
License Checks	2	1	0
Traffic Directed Patrols	5	3	13
COMMUNITY ENGAGEMENT			
Non-Traffic Directed Patrols	150	133	176
School Patrols	43	41	38
Downtown Foot Patrols	32	28	30
Preventative Contacts	5	6	18
Community Meetings / Events Attended	11	10	1
Community Project/Problem Solved	2	0	1

**Corrections were made to some previous month's data due to data entry errors that were identified.*

Other Notable Events/Activities/Accomplishments

11/07- Cpl. Hemingway and Ofcr. Wilson attended the Fairview Community Watch.

11/09- Sgt. Huey, Cpl. House, Ofcr. Watson, Ofcr. Brinkley, and Ofcr. Toellen attended Community Summit meeting.

11/21- Sgt. Huey spoke with children and teachers at the ChildCare Network in Burlington.

Cpl. Chestnut and Cpl. Bradshaw attended and completed PLI training at GTCC.

Ofcr. Felts made his first DWI arrest with great SFST, according to Ofcr. Ingram.

Hillsborough Police Department Monthly Report November 2016

INVESTIGATIONS SUMMARY

Clearance Summary			
Crime	**YEAR TO DATE**		
	Reported	**Cleared**	**%**
VIOLENT TOTAL	*44*	*24*	*55%*
PROPERTY TOTAL	*319*	*135*	*42%*

CID MONTHLY WORKLOAD		
Prior Cases	56	
New Cases Assigned	38	
Cleared by Arrest	15	
Exceptionally Cleared	2	
Unfounded	1	
Closed/Inactivated	6	
Cases to Carry	70	
WARRANTS	***F***	***M***
Issued	1	10
Served	0	3

Other Notable Events/Activities/Accomplishments:

- On 11/15/16 a male subject gave a ride to several suspects from the south side of Hillsborough to the 200 block of Harper St. When they stopped at a house on Harper St, the suspects attempted to rob the victim. During the robbery attempt the victim was shot in the arm multiple times. Frank Degraffenreid, Jr. and Takeem Turrentine have both been arrested for the incident.
- On 11/27/16 there was an attempted robbery of a female near 200 Lakeside Drive. Suspects are being sought in this case and charges are likely.
- At least eight locations throughout the town received graffiti. Two juveniles, one 15 year old and a 14 year old have been identified. Juvenile petitions are being sought for both juveniles.
- On 10/07/2016, Lt. Nicolaysen and Sgt. White attended the Orange County Threat Group for 1.5 hours.

Hillsborough Police Department Monthly Report November 2016

COMMUNITY POLICING SUMMARY

Community Watch Group Interactions/Activities

Group	Type of contact(s)
Beckett's Ridge	-
Cameron St.	-
Coachwood	-
Cornwallis Hills	- Present at Summit
Fairview	- Chief Hampton and Officers attended community watch meeting.
Gateway	-
Gatemoore	-
Hampton Point	- Community Watch meeting held.
Hillsborough Heights	*- Present at Summit*
Kenion Grove	- Present at Summit
Orange St.	*- Inactive*
Patriot's Point	*- Inactive*
River Bend	-
Waterstone	-
% of Community Watch Groups Interacted with: 45% (5 of the active 11)	

Ongoing Programs Summary:

- Vial of Life – 13 residents are registered with the departments Vial of Life program
- Are You OK Program: 13 checks were made, in-home as well as by phone, on the program participants.

Community Events/ Youth Outreach:

Events	Participants
Tutoring Program	33
Safe Kids Program	16

Community Events/Engagement:

Nov 2, 2016:

A meeting was held at Gateway apartments to discuss the methods used, by the police department in the past, to handle certain issues within the apartment complex. In attendance were Coby Jansen Austin (Director of Program and Policy for Orange County), Bishop Glover (local church member), and Gateway management. Lt Whitted and Cpl Nash represented the police department.

Hillsborough Police Department Monthly Report November 2016

Nov 5, 2015: A toy drive was held at the local business, Hwy 55. Toys were collected in reference to Santa's visit to the police department in December.

Nov 7-10: Cpl King attended the yearly Crime Prevention where she serves as the Sgt at Arms. By attending this conference Cpl King receives training in crime prevention techniques and this information is shared upon her return.

Nov 9, 2016
A Community Summit held at the Orange County Library. Four community watch groups were represented at the summit. Chief Hampton conducted the summit as some of the topics discussed were; 21st Century Policing, Police Department Training, Body-Worn Cameras, Citizen Complaints and Use of Force policy and procedures. *
There were approximately 26 citizens in attendance and the police department was represented by Chief Hampton, Lt.s' Whitted, Simmons, Trimmer and Nicolaysen, Sgt.s' Huey and Winn, Investigator Kempf, Officers' Toellen, Watson, Brinkley and Ingram.

Nov 16, 2016: Lt Whitted met with the Hillsborough Chamber of Commerce in reference to the Holiday Parade scheduled for December 3, 2016. The meeting was held to discuss the participants in the parade, develop a lineup of the participants and safety issues for the event.

Nov 20, 2016: Lt Whitted attended a church service involving a "Prayer for Law Enforcement" that was hosted by Efland Presbyterian Church in Efland. The service was an assembly of five local churches; Efland Presbyterian, Efland UMC, Chestnut Ridge UMC, McCoy's Temple UHC. The service was also attended by representatives from the Orange County Sheriff's Office and the NC State Highway Patrol.
Nov 21, 2016: Applications were received and the process began for the department diversity program.

Community Concerns Summary:

The relationship between citizens and law enforcement is on the minds of most of the residents I have spoken with. Members of the police department attended a funeral service for a local resident and we were acknowledged for attending the service and several of the members made it a point to thank us personally for the job we were doing and commented on Hillsborough not having the problems that other cities were. The main concern was for our safety as police officers.

Community Problem Solving Summary:

Problem	Actions	Results

Hillsborough Public Works

November 2016 Monthly Report

Work Orders: 8 work orders completed within 2 days, 0 not completed

Asphalt Repair: Two utility cuts and four road repairs

Park Maintenance: 34 staff hours

Cemetery: 4 gravesites marked, 2 monuments marked

Christmas Decorations: 33 staff hours

Training: One staff attended ITRE Managing Conflict At Work class

Flag Installation: 12 staff hours

Loose Leaf Collection: 43 truckloads, 115 staff hours

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Administration

Public Hearing: ☐ Yes ☒ No

Date of Public Hearing:

For Clerk's Use Only
AGENDA ITEM #

8.A		
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Katherine Cathey, Human Resources Director/Town Clerk

ITEM TO BE CONSIDERED

Subject:

Minutes of the Board of Commissioners/Planning Board Oct. 20, 2016 Joint Public Hearing, Board of Commissioners Nov. 14, 2016 Regular Meeting, Minutes of the Board of Commissioners Nov.14, 2016 Regular Meeting Closed Session, Minutes of the Board of Commissioners Nov. 28, 2016 Work Session, and Minutes of the Nov. 28, 2016 Work Session Closed Session

Attachment(s):

1) Minutes of the Board of Commissioners/Planning Board Oct. 20, 2016 Joint Public Hearing
2) Minutes of the Board of Commissioners Nov. 14, 2016 Regular Meeting
3) Minutes of the Board of Commissioners Nov. 28, 2016 Work Session

Brief Summary:

None

Action Requested:

Approve minutes

ISSUE OVERVIEW

Background Information & Issue Summary:

None

Financial Impacts:

None

Staff Recommendations/Comments:

Approve minutes

MINUTES
JOINT PUBLIC HEARING
HILLSBOROUGH TOWN BOARD and
PLANNING BOARD
Thursday, October 20, 2016
7:00 PM, Town Barn

PRESENT: Mayor Tom Stevens, and Commissioners Jenn Weaver, Brian Lowen, Kathleen Ferguson, and Mark Bell, Planning Board Chair Dan Barker, Rick Brewer, James Czar, Lisa Frazier, Carolyn Helfrich, Janie Morris, Doug Peterson, Toby Vandemark, Jenn Sykes, Chris Wehrman
STAFF: Planning Director Margaret Hauth, Town Attorney Bob Hornik

ITEM #1: Call to order and confirmation of a quorum
Mayor Stevens called the meeting to order at 7 p.m. and welcomed new planning board member Carolyn Helfrich.

ITEM #2: Consideration of additions or changes to the agenda
There were none. Mayor Stevens passed the gavel to Planning Board Chair Dan Barker.

ITEM #3: Open Joint Public Hearing
Chair Barker opened the public hearing.

ITEM #4: Request from Vouthaus, LLC to Rezone 9.75 acres at 505 Eno Street from General Industrial to Adaptive Re-Use so the building can house a wider variety of uses that are not industrial (OC PIN 9864-65-3492)
Ms. Hauth reviewed this is the former Southern Season Warehouse, formerly on Flint Fabrics property and now on its own separate parcel. The Adaptive Re-Use zoning was created a few years ago to assist owners of buildings built for one purpose who now would like to house businesses of different purposes. The criteria for this zoning includes that the parcel has to be at least three acres, the building must be at least 10,000 SF, and the owner must desire at least three different uses in the building. This application meets the criteria. If the Town Board approves this rezoning, it permits everything on the list.

Scott Jennings, who owns a home at Knight and Holt Streets, said he came to hear more about the plans. He expressed concern about drawing more people to an area that has some pedestrian-traffic concerns. He cited problems with pedestrians crossing Nash Street near Hillsborough BBQ but not at the crosswalk and concern about a new wooded trail that would could cause additional pedestrian-car conflict.

Ms. Hauth explained that the town has plans to address the pedestrian traffic on Nash Street through a state project called the Congestion Mitigation & Air Quality (CMAQ) sidewalks project. That project should go out to bid soon and entails widening the sidewalks on the Hillsborough BBQ side of Nash Street, removing on-street parking, and creating a three-way stop at Nash and Eno Streets. There will be control on the parking lot side (either fence or landscaping) to encourage pedestrians to cross Nash Street at the crosswalks. As for parking in the mill village neighborhood, she said that if those three streets not already designed for no on-street parking, residents can request that. She added that the path is being constructed by the developers of the Bellevue Mill.

Ms. Hauth summarized the process regarding this application. The boards can vote to close the public hearing this night. Then the Planning Board reviews the application in November and makes a recommendation. The Town Board considers approval at its December meeting.

Ms. Hauth briefly reviewed the differences between the current list of permitted uses under current zoning and this new zoning; the General Industrial list allows industrial uses and specialty schools that need big buildings. It allows manufacturing and processing operations that might have an air quality or water quality impact. A concrete plant and a distribution warehouse are both permitted. The Adaptive Re-Use zoning allows some light industrial uses but it's also a very broad district.

MOTION: Mr. Peterson moved to close the public hearing. Commissioner Ferguson seconded.
VOTE: Unanimous

ITEM #5: Request from The Little School Development LLC to modify their approved Special Use Permit to create additional on-site parking and remove the enrollment limitation (OC PIN 9873-25-6187)
Ms. Hauth reminded everyone that for this item, speakers need to be sworn in before they speak. Ms. Hauth was sworn in.

She reviewed that The Little School had an enrollment cap established at 196 students. The school has exceeded the cap and Ms. Hauth noted that some of the management has changed at the school so the situation is more likely an inadvertent violation than a blatant one. Part of this application is to alleviate the nonconformity and bring the school back into compliance regarding the enrollment cap. The proposal to expand the parking isn't so much to address a nonconformity as it is to address operations. The site is highly constrained in a very narrow part of the Waterstone Development. Adjoining properties are not in the city limits. The school is requesting to reduce the buffer to accommodate additional parking. The master plan required 100 feet. They are proposing having 75 feet. The fire marshal didn't have concerns with the parking proposal.

Tony Whitaker, a civil engineer with Civil Consultants representing The Little School, was sworn in. He introduced Jennifer Dock from The Little School.

Mr. Whitaker acknowledged that on a daily basis, The Little School (TLS) experiences traffic congestion at morning drop off and afternoon pick up. That is normal for this type of facility. This property has an insufficient number of parking spaces. Cars stack up onto College Park Drive. It's not particularly unsafe but it's potentially unsafe.

The school proposes to go from 62 to 92 parking spaces, but some people are parking in non-designated spaces now. Probably 20 of the 30 are new spaces. The school has already taken several measures to alleviate parking congestion, Mr. Whitaker said. It has incentivized teachers and staff to carpool and park at the nearby Durham Tech park and ride lot. It happens to some degree but not a great degree. Teachers arrive and depart in shifts. They've asked parents to pick up and drop off quickly. A staff person is designated in the afternoons to help communicate to those trying to park.

Mr. Whitaker reviewed that the school is requesting several waivers but the one regarding excess parking is no longer needed. Ms. Hauth explained that at the last quarterly hearing, child care centers parking standard was changed and the application reflects that change. The other things are modifications to the Special Use Permit. One is to add more parking, to modify a buffer on eastern edge from 100 feet to 74 feet. This impacts neighboring property owner Albert Kittrel. They've met several times, Mr. Whitaker said. He was a great advocate after we suggested removing trees and then planting a double row of evergreens. His house is far from the property line and he has good screening. Mr. Whitaker said the school is also asking to remove the cap of 196 students because this facility is licensed by the state. The school is already maximized as far as building floor area and playground. To maintain a 5 star program, TLS will not be able to exceed the cap they currently have by the state and will always be regulated by the state.

Mr. Whitaker said the capacity was reached about a year after opening. The current enrollment is 239. Mr. Peterson asked if it went from a 5-star to a 4-star facility, would it changed the number of students? Mr. Whitaker said not immediately but a higher number of students could be permitted under the 4-star

rating. The licensing limit right now is around 296. Mr. Peterson said so if we lift the cap, it could go to 296. Mr. Peterson wondered why the school doesn't create a drive through drop-off/pick-up.

Wendy Vavrousek, one of the school owners, was sworn in. She said the school has contemplated that and the difficulty is staffing. Also, last year they tried having parents pick up older children at the Durham Tech campus on early dismissal days, but that was inconvenient for parents who also needed to pick up a younger child. Mr. Peterson suggested identifying the peak hour of drop-off and only staffing a drive through drop-off then. Right now you're having trouble at 239. What happens when its 250 and 260 and 290, he asked? Ms. Vavrousek said based on our square footage we could have 294. But based on our model of 9 infants, 12 1-year-olds, 15 two-year-olds, we couldn't have that many. Mr. Peterson asked what's the maximum for this model. The answer was the school is full. There is a waiting list. Chair Barker asked what is the process to change that model. Chair Barker asked could you change tomorrow to allow one more child per classroom. Ms. Vavrousek said we haven't done it in 10 years. That isn't something to be expected from us at all.

Commissioner Weaver said her two kids went to TLS and it's hard to imagine dropping off tiny kids without parents walking them in. She asked Ms. Hauth if they one day decided to close and a new school opened up with a different standard that wanted to go to the 290, what could be done. Ms. Hauth said we apply our ordinance, 1 parking spot per employee and 1 spot for 8 students. Ms. Vandemark asked if they could make the new cap the current enrollment and Ms. Hauth confirmed.

Ms. Sykes asked how the number of infants per classroom changed during the school year. Ms. Vavrousek answered the only fluctuation is they start out younger.

Jessica Larsin, school director, was sworn in. Ms. Larsin said she has done enrollment for many years. We cannot put another child in another space. We have maximized the potential. There are sixteen classrooms, three infants, three one-year olds, three two-year old. She compared math with Ms. Sykes who had figured their cap under this model was 252. Ms. Larsin said there's a classroom that can only have 6. The size of the classrooms contributes to the caps.

Chair Barker asked about Wayne Pollard, another close neighbor. Ms. Hauth indicated she had discussed the plans with Mr. Pollard, but he had not come by the office to review them in detail and did not express concern. Jennifer Adams was sworn in. Ms. Adams said this parking is not expanding toward him. We stay away from his deer blind. Chair Barker said there are piles of toys marked TLS on different areas including at the traffic circle, a tent down at the creek bed. Mr. Brewer said does this have anything to do with the application. Chair Barker said it does if it's indicative of how they conduct business. Chair Barker said there's a pile of toys with your school name now down by the hospital. Ms. Adams said they were bringing chalk to the new Cates Creek Park and as soon as Ms. Hauth asked them to stop, they did. Ms. Adams said they value the transfer of children from parent to teacher. It's a valuable few moments. We need parents to come in and be with us.

MOTION: Commissioner Ferguson moved to close the public hearing on this item. Commissioner Weaver seconded.
Chair Barker asked whether the public hearing needed to stay open for additional information regarding enrollment. Ms. Sykes said she'd concluded it was 243 under the current model and was satisfied.

VOTE: Unanimous

ITEM #6: Text Amendments to Unified Development Ordinance

a. Amend Section 6.20, Stormwater, to match state minimum requirements and meet the mandate for local regulations to not be more stringent than the state.

Ms. Hauth said the long and short of it is that these are state mandated. No option. Commissioner Ferguson asked can we say something like if the state removes those restrictions, we can revert back. Ms. Hauth answered we can go back through the process again.

b. Amend Section 7.3, Nonconforming Characteristics of Use, to provide guidance on when a site is required to correct existing non-conforming characteristics.

In answering a question, Ms. Hauth explained nonconforming characteristics are not usually based on use. We end up with tension between wanting development to conform to the ordinance and wanting existing buildings occupied and productive. A new business owner can potentially live with the existing conditions (maybe it doesn't look the way we want it to). The question is, can we really issue that permit when it has these nonconforming characteristics. We're trying to make it easier for staff to determine. The language we're proposing here sets a higher threshold that the applicant must want to do something to the property of a certain size or value in order to be required to fix the other nonconformities. The Planning Board hasn't had a lot of time to talk about it. She encouraged the Planning Board and Town Board to take this opportunity to talk about scenarios. Commissioner Ferguson suggested a 25 percent value threshold. Ms. Hauth said it could be one-quarter. She thinks someone on the board had suggested 10 percent. Mr. Czar said the wrinkle is that it's of assessed tax value. Commissioner Ferguson said she's ok with that and that's why she was thinking one-quarter and not 10 percent. Mr. Hornik said we're lowering the threshold if we go from one-third to one-quarter….just making sure people understand that.

Ms. Hauth reiterated the example of the barber shop on 70. Two loads of gravel for the parking and the new owner was ready to open. Commissioner Weaver said I'd like for things to look nice but I like for people to start small businesses and therefore likes the one-third threshold. Or one-quarter. Commissioner Ferguson said I agree I want people to do stuff. It's always easier to be more strict at first. We want to see what's coming forth. It would be easier to loosen up. There is that line of what's character versus what's desirable.

Mr. Peterson said we went to tax value which is a tangible number to get. And the Planning Board went with one-third. Commissioner Bell said there are hidden costs to opening a business that you would never see. Mr. Czar said that just speaks to the arbitrary nature of any certain number. Ms. Vandemark asked why it includes interior. Ms. Hauth said some businesses do a lot more interior. Dental practices have a high cost of internal upfit. Probably restaurants and doctor's offices have similar interior costs. Ms. Vandemark said but nonconforming characteristics pertains to the outside. If they are fixing up the inside, why would that affect the calculation for changing the outside? Ms. Hauth answered we've adopted an ordinance that says this is how we want it. Chair Barker said the connection is the interior is tied to what their total budget is. Mr. Brewer asked if bringing into compliance is cost prohibitive for a new business owner, what's their recourse. Ms. Hauth said an appeal to the Board of Adjustment, but generally they just go find another site.

c. Amend Section 7.5.2.1 to clarify that non-conforming residential lots are buildable.

Ms. Hauth explained if you own two properties side by side and are nonconforming for size, we order you to combine to get a conforming lot. But the ordinance has never said if you have two lots, put them together and still have a nonconforming lot, you can build anyway. This usually applies to residential. The division has to comply with the ordinance.

d. Amend Section 3.8.5.1.a to modify cultural resource documentation requirement for special use permit applicants.

Ms. Hauth explained when someone submits a SUP, they have to talk about cultural resources. We have learned from the state office that if it's on the list, phase 1 has already been done so there is no need to require that. The amendment is to change the text to say if phase 1 has been done, you have to document how to protect the resource.

e. Amend Section 3.13.3.d to make reference to the traffic impact study requirements in the street standards document.

Commissioner Ferguson asked to eliminate acronyms from the town's written documents. She thinks that would help citizens digest the information and it's important for transparency. Commissioner Bell said he understands but thinks it would need to be organization wide and pertain to the Website, too. Ms. Sykes suggested repeating the spelled out form at the start of each new section.

Ms. Hauth asked Mr. Hornik if an amendment to remove all acronyms form the ordinance would count as scrivener's error. Mr. Hornik indicated it would, since it wouldn't be changing the meaning. He added that at this level of detail, it's a professional looking at document. It's the lingo. A traffic engineer knows what TIA is. Commissioner Ferguson said let's keep it in mind and be watchful. Members suggested just fixing as we go along.

f. Delete reference to the Design Standards manual in Section 6.2 and list this section as "reserved for future codification"

There was no discussion.

g. Amend Section 6.11.7.3 to remove the sentence requiring site lighting to be extinguished when a business is closed.

Ms. Hauth explained Duke Power only issues contracts for site lighting that is on all night. There are no timers. The ordinance sets a standard that is impossible to meet. We would have fewer waiver requests until such time as Duke changes their processes. Chair Barker said it's a shame but reality.

MOTION: Commissioner Lowen moved to close the public hearing on the text amendments. Commissioner Ferguson seconded.
VOTE: Unanimous

ITEM #7: Adjourn
MOTION: Commissioner Lowen moved to adjourn at 8:35 p.m. Mr. Brewer seconded.
VOTE: Unanimous

Respectfully submitted,

Margaret A. Hauth

Margaret A. Hauth
Secretary

Hillsborough Board of Commissioners Regular Meeting Minutes

7 p.m., Nov. 14, 2016
Town Barn, 101 E. Orange St.

PRESENT: Mayor Tom Stevens and Commissioners Mark Bell, Kathleen Ferguson, Evelyn Lloyd, Brian Lowen, and Jenn Weaver

STAFF PRESENT: Town Manager Eric Peterson, Assistant Town Manager/Planning Director Margaret Hauth, Finance Director Heidi Lamay, Assistant to the Town Manager Jen Della Valle, Public Works Director Ken Hines, Police Chief Duane Hampton, Town Engineer/Utilities Director Kenny Keel, Human Resources Director/Town Clerk Katherine Cathey, Police Officer Chad Wilson, and Town Attorney Bob Hornik

ABSENT: None.

Open the meeting:
7:00:21 PM Mayor Stevens opened the meeting at 7 p.m.

1. PUBLIC CHARGE
Mayor Stevens did not read the public charge but asked that everyone abide by it.

2. AUDIENCE COMMENTS REGARDING MATTERS NOT ON THE PRINTED AGENDA
There were none.

3. AGENDA CHANGES & AGENDA APPROVAL
No changes. The agenda stood as presented.

4. PRESENTATIONS
A. Introduction of Police Officer Chad Wilson and public reaffirmation of his Oath of Office

Chief Hampton spoke highly of Officer Wilson's experience and ties to our community. Mayor Stevens led Officer Wilson in his public reaffirmation of his Oath of Office.

7:06:06 PM Commissioner Lloyd arrived.

5. APPOINTMENTS
A. Re-appoint Doug Peterson for a second term on the Hillsborough Planning Board with a term to expire Nov. 30, 2019

7:06:17 PM Commissioner Lowen moved approval of re-appointing Mr. Peterson. Commissioner Weaver seconded. The motion carried upon a unanimous vote of 5-0.

B. Re-appoint Ashley DeSena for a second term on the Parks and Recreation Board with a term to expire Nov. 30, 2019

7:06:32 PM Commissioner Lowen moved approval of re-appointing Ms. DeSena. Commissioner Weaver seconded. The motion carried upon a unanimous vote of 5-0.

C. Re-appoint Annie Jarabek for a second term on the Parks and Recreation Board with a term to expire Nov. 30, 2019

7:06:49 PM Commissioner Ferguson moved approval of re-appointing Ms. Jarabek. Commissioner Bell seconded. The motion carried upon a unanimous vote of 5-0.

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D. Appoint Mark Bateman to the Hillsborough Tourism Board for the vacant restaurant seat with a term to expire Nov. 14, 2018

7:07:12 PM Commissioner Ferguson moved approval to appoint Mr. Bateman. Commissioner Weaver seconded. The motion carried upon a unanimous vote of 5-0.

6. COMMITTEE REPORTS *(CRITICAL)*

Commissioner Bell shared that at the Solid Waste Advisory Group (SWAG) meeting they received the almost-final analysis of the solid waste enterprise fund and he thinks we'll hear more about that at Assembly of Governments meeting.

Mayor Stevens reminded the board that the Assembly of Governments meeting is coming up. He hopes people can make it.

Commissioner Ferguson reported there is a Triangle J Council of Governments meeting on Wednesday. The affordable housing bond passed. Empowerment wants to speak to the Town Board because they want our help getting support in the communities. Home Trust has been visited by organizations in Charlotte and South Carolina who recognize this organization as a national model. The Fairview Christmas Party is December 2. We have submitted grants for continuing care for the Partnership to End Homelessness.

7. REPORT FROM THE TOWN MANAGER

There was none.

8. DEPARTMENTAL REPORTS

7:12:02 PM Mr. Keel reported that he was at a meeting in Raleigh today, and the town and a staff member received an award. There will be an official presentation at January Town Board meeting.

9. ITEMS FOR DECISION – CONSENT AGENDA

A. Minutes of the Board of Commissioners Oct. 10, 2016 Regular Meeting, Minutes of the Board of Commissioners Oct. 10, 2016 Regular Meeting Closed Session, Minutes of the Board of Commissioners Oct. 24, 2016 Work Session, and Minutes of the Board of Commissioners Oct. 24, 2016 Work Session Closed Session
B. Miscellaneous budget amendments and transfers
C. 2017 Board of Commissioners Meeting Calendar Update
D. Adoption of Bee City resolution
E. Request for Town Sponsorship of the Holiday Parade and Tree Lighting on Saturday, Dec. 3, 2016
F. Request for Town Sponsorship of MLK Jr. Commemorative March on Jan. 16, 2017
G. Ordinance to revise Town Code Sewer Use Ordinance regarding toilet wipes
H. Approve BB&T as the Lender for Installment Purchase Financing of a Knuckle Boom Truck, Dump Truck and an Asphalt Roller
I. Adopt changes to the Town Code for new Fathom billing and collection process and security deposit process, and approve related ordinances
J. A Proclamation of Appreciation for Tinka Jordy and the Hillsborough Arts Council

7:14:06 PM Commissioner Lowen moved approval of the Consent Agenda. Commissioner Ferguson seconded. The motion carried upon a unanimous vote of 5-0.

10. ITEMS FOR DECISION – REGULAR AGENDA

A. Receive update about potential modifications to Collins Ridge Master Plan anticipated in potential Special Use Permit application for the January public hearing

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Ms. Hauth reviewed that Caruso Homes has reconsidered the best way to start the development of Collins Ridge, which would affect the Master Plan. It seems it would serve everyone's interest for them to start at the south end and work north. They also have an announcement of an additional piece of property they want to develop and work into the Collin Ridge plan.

Mayor Stevens said this is a preview before the January public hearing.

Jeff Caruso, owner and CEO of Caruso Homes, said they have a chance to add commercial and residential at the same time through tying in the Daniel Boone property.

Randy Sexton, land acquisition manager for Caruso Homes, told the board that Caruso Homes has acquired the purchase rights to Daniel Boone to redevelop it for commercial purposes. They couldn't talk about it earlier in the process due to confidentiality agreements. Originally, we had phase 1 starting to the north, and now because we have this property and both properties will be developed simultaneously, we would want to start building in the south. Both properties will be graded and developed together. James Freeland Drive will become part of the boulevard running through the Collins Ridge property. Developing the northern portion at a later date will allow NCDOT more time to determine the roadway alignment.

In addition, they plan to request a special assessment district for Daniel Boone. Commissioner Lloyd asked if they have talked with the town manager about it because it has caused problems with Waterstone. Mr. Sexton said they would hire a company that has done eight or nine of them before. It is a useful and successful tool that has been used in other states.

Commissioner Lowen asked if Caruso Homes will sell off commercial for another developer to do. Sexton said they have a partnership with Chris Reeder and Marion Uter. Doing the two together is a fantastic project for the town.

Commissioner Lowen wondered about traffic impact and asked if there will be another traffic impact analysis triggered by this. Ms. Hauth said absolutely. This totally changes the traffic impact. We have to take into account the square footage of the commercial. Mr. Sexton said they'll ask Volkert Engineering to re-analyze the traffic study.

Commissioner Ferguson asked about the experience of the partners.

Chris Reeder introduced himself. He said he and his partner, Marion Uter, have four other projects ongoing in Louisiana, Florida, and Alabama. Those are single family home developments. In Dallas his family office group has done Castle Hills, which is multi-family, single family and retail.

Commissioner Ferguson asked if she was understanding that his experience is purely retail and not headquarters light/industrial office. Mr. Reeder said there is some of that, which they sold off. Mr. Reeder said he has more than a handful of partners that he can bring in to build office. Commissioner Ferguson asked when the firm was started. He answered the family office goes back 15 years. Castle Hills started in 2001. It is north of Dallas.

Commissioner Bell asked about the colonial building that is now a Mexican restaurant. Mr. Sexton answered it stays. Also the KFC/Taco Bell, BB&T bank, and Waffle House stay. Deconstruction will be all at one time. Commissioner Ferguson asked if they are working with the Alliance in terms of preservation. Mayor Stevens said the Alliance is interested in taking inventory of what's there. Mr. Sexton said the Alliance is talking to the current family owners.

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Mayor Stevens said there are a lot of small businesses there. It's been an incubator. We want to send the message that we encourage these businesses. He had a conversation this morning to talk with Orange County Economic Development just to make sure businesses get the message that we want to keep this kind of business in Hillsborough.

7:41:20 PM Ms. Hauth said the two people we were most familiar with at Volkert are no longer there. She asked the board whether they want to go with McAdams where there is someone more familiar with the town.

Mayor Stevens said he recognizes there isn't a public process but staff can help set up town hall meetings to get buy-in. Mr. Sexton said they recognize that.

Mr. Peterson said to this day we are still handling complaints about the special assessment district in Waterstone. Residents in Waterstone feel they aren't being treated fairly. Problems come up with it that the attorney and finance department have to deal with. It's a long, slow bleed. Our plate is overflowing and this would have a major impact on our time.

Before the town starts acting as a bank for a developer, there has to be an extremely strong reason or benefit for the community. It was a big time drain and continues to be. I'm not a fan. To me, the board needs to look at the benefit this would bring us.

Mayor Stevens said we take those comments very seriously so that is a high hurdle. Mr. Sexton acknowledged that he heard that.

B. Discussion about expansion of sewer lines (discussed at 8/8/16 BOC meeting re: Faucette Mill Road)

Mr. Keel said he has identified 11 areas similar in nature. They're all in the low to moderate income range. They're in close proximity to other sewer lines that we have. He said he can't speak at all to annexation. He wanted them to have some idea of where these potential areas might lie.

Ms. Hauth said there have been changes to the state annexation laws. She highlighted the changes with red boxes in the board packets. If a neighborhood does petition the town for annexation and meets certain income requirements, the town can't turn them down and is obligated to provide utilities. The neighborhood on Faucette Mill Road did submit a petition but didn't give us their income levels, so we can only guess at what the income levels are. There's a spreadsheet in the packet with property assessments as a stand-in for incomes for the areas identified by Mr. Keel. Vacant property throws this off. The state law is two times the poverty rate. It is conceivable that the folks on Faucette Mill Road would qualify. If we had staff time, we could reach out and ask their incomes. We've only got the one neighborhood asking, but the information in her table could establish a priority for annexation if other areas started asking.

State law also says if it costs more than five percent of the revenues, then the town isn't required to provide it. This could be calculated before asking individual residents for their incomes. Mayor Stevens thought this piece of information would be helpful. Ms. Hauth added this state law also obligates the town to run the connection to the house.

Commissioner Lloyd recalled problems in the past with overflowing septic tanks where home owners refused to pay the fee for the connection to the house.

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Mr. Peterson's preference is to narrow down the focus to determining if there are areas where we are legally obligated to provide it. Otherwise, it takes too much time.

Ms. Hauth said her chart shows you that there are a few areas where if they petitioned, we may be obligated by state law to annex them.

The board would like to find out what the five percent is and then reconsider the Faucette Mill Road request.

C. Discussion/potential award of construction bid for Churton Street Access Project for approximately $790,000

Ms. Hauth said this request is slightly smaller, down $20,000. Ms. Hauth reviewed there is still DOT money. The rest is town money. The town is getting a nearly million dollar project putting less than 50 percent of the cost in.

Commissioner Ferguson said it needs to be done, it isn't going to get cheaper. Commissioner Lowen said it's already a bottle neck coming through downtown.

8:24:10 PM Commissioner Ferguson moved to award the construction project and authorize the town manager to sign the construction contract. Commissioner Lowen seconded. The motion carried upon a unanimous vote of 5-0.

D. Preparation for Town Manager's annual performance evaluation

Mr. Peterson asked if the board wants him to do it differently in any way. Commissioner Weaver suggested if Mr. Peterson comes up with a way to do it more simply that takes less of his time, just do it. The board agreed.

E. Hot Topics for the November 28, 2016 Board of Commissioners Work Session

Nothing was added.

8:27:56 PM Commissioner Bell moved to go into Closed Session. Commissioner Lloyd seconded. The motion carried upon a unanimous vote of 5-0.

11. CLOSED SESSION

A. Closed Session as authorized by North Carolina General Statute Section 143-318.11(a)(5) to discuss and give direction to staff regarding negotiating terms for the possible acquisition of real property (the former Colonial Inn, 153 W. King St. and downtown parking)

12. ADJOURN

9:55:33 PM Commissioner Lowen moved to adjourn. Commissioner Bell seconded. The motion carried upon a unanimous vote of 5-0.

Respectfully submitted,

Katherine M. Cathey
Town Clerk

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FY 2016-2017

TOWN OF HILLSBOROUGH
BUDGET CHANGES REPORT
DATES: 11/14/2016 TO 11/14/2016

	REFERENCE	CHANGE NUMBER	DATE	USER	ORIGINAL BUDGET	BUDGET CHANGE	AMENDED BUDGET
Police - Admin	10-20-5100-5300-454 C.S./C0PIER						
	Outfit 2 Police Vehicles	5945	11/14/2016	EBRADFORI	7,000.00	-4,500.00	2,500.00
Police - Admin	10-20-5100-5300-459 C.S./SANCT.DIGITAL-S. SOFTWARE						
	Southern Software License Fee Overage	5944	11/14/2016	EBRADFORI	2,000.00	910.00	2,910.00
Police - Admin	10-20-5100-5300-460 C.S./DRIVER SAFTEY TRAINING						
	Southern Software License Fee Overage	5943	11/14/2016	EBRADFORI	3,500.00	-910.00	2,590.00
Police -	10-20-5110-5300-330 DEPARTMENTAL SUPPLIES						
	Outfit 2 Police Vehicles	5947	11/14/2016	EBRADFORI	64,500.00	-7,500.00	57,000.00
Police -	10-20-5110-5700-740 CAPITAL - VEHICLES						
	Outfit 2 Police Vehicles	5948	11/14/2016	EBRADFORI	35,000.00	17,000.00	77,279.00
Police -	10-20-5120-5300-730 DRUG ENFORCEMENT OPERATIONS						
	Outfit 2 Police Vehicles	5946	11/14/2016	EBRADFORI	5,000.00	-5,000.00	0.00
Street	10-30-5600-5300-330 SUPPLIES - DEPARTMENTAL						
	To Cover Temporary Labor Expense	5938	11/14/2016	EBRADFORI	30,000.00	-1,840.00	28,160.00
Street	10-30-5600-5300-570 MISCELLANEOUS						
	To Cover Temporary Labor Expense	5939	11/14/2016	EBRADFORI	3,500.00	1,840.00	11,802.00
Solid Waste	10-30-5800-5300-310 GASOLINE						
	Funeral Service, Airfare & Rental Car	5940	11/14/2016	EBRADFORI	27,500.00	-4,845.00	22,655.00
Cemeter	10-40-6400-5300-330 DEPARTMENTAL SUPPLIES						
	Move Cemetery Monument	5941	11/14/2016	EBRADFORI	1,500.00	-400.00	1,100.00
Cemeter	10-40-6400-5300-570 MISCELLANEOUS						
	Funeral Service, Airfare & Rental Car	5834	11/14/2016	EBRADFORI	5,000.00	4,845.00	9,845.00
	Move Cemetery Monument	5942	11/14/2016	EBRADFORI	5,000.00	400.00	10,245.00
Water Distributio	30-80-8140-5700-740 CAPITAL/VEHICLES						
	Dist/Coll Vehicle Replacement Overages	5950	11/14/2016	EBRADFORI	35,000.00	21,000.00	56,000.00
Wastewater	30-80-8200-5700-740 CAPITAL/VEHICLES						
	Dist/Coll Vehicle Replacement Overages	5951	11/14/2016	EBRADFORI	35,000.00	21,000.00	448,572.00
W&S Contingenc	30-80-9990-5300-000 CONTINGENCY						
	Dist/Coll Vehicle Replacement Overages	5949	11/14/2016	EBRADFORI	200,000.00	-42,000.00	136,550.00
						0.00	

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APPROVED: 5 - 0
On: Nov. 14, 2016

VERIFIED: Katherine M. Cathey
_____

TOWN OF HILLSBOROUGH

Hillsborough Board of Commissioners Meeting Schedule — 2017

All meetings start at 7 p.m. and are in the Town Barn, located at 101 E. Orange St. on the Town Hall Campus, unless otherwise noted. Times, dates and locations are subject to change.

Monday, Jan. 9	Regular meeting
Thursday, Jan. 19	Joint public hearing with Planning Board
Monday, Jan. 23	Work session
Monday, Feb. 13	Regular meeting
Thursday, Feb. 23	Joint meeting with Orange County Board of Commissioners Whitted Human Services Center, 300 W. Tryon St.
Monday, Feb. 27	Work session
Monday, March 13	Regular meeting
Monday, March 27	Work session
Monday, April 10	Regular meeting
Thursday, April 20	Joint public hearing with Planning Board
Monday, April 24	Work session
Monday, May 8	Regular meeting
Monday, May 22	Work session
Monday, June 12	Regular meeting
Monday, June 26	Work session
Thursday, July 20	Joint public hearing with Planning Board
Monday, Aug. 14	Regular meeting
Monday, Aug. 28	Work session
Monday, Sept. 11	Regular meeting
Monday, Sept. 25	Work session
Monday, Oct. 9	Regular meeting
Thursday, Oct. 19	Joint public hearing with Planning Board
Monday, Oct. 23	Work session
Monday, Nov. 13	Regular meeting
Thursday, Nov. 16	Assembly of Governments meeting Whitted Human Services Center, 300 W. Tryon St.
Monday, Nov. 27	Work session
Monday, Dec. 11	Regular meeting

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Resolution #20161114 – 9.D

A RESOLUTION of Town of Hillsborough Board of Commissioners
designating Town of Hillsborough as a BEE CITY USA® affiliate.

WHEREAS, the mission of BEE CITY USA is to galvanize communities to sustain pollinators, responsible for the reproduction of three-quarters of the world's plant species, by providing them with healthy habitat, rich in a variety of native plants and free to nearly free of pesticides; and

WHEREAS, due in part to the tremendous diversity of wild native bees, along with the honey bees that were brought to the United States from Europe in the 1700s, we have very diverse dietary choices rich in fruits, nuts, vegetables and even dairy products--one in every three bites of food we eat is courtesy of insect pollination; and

WHEREAS, bees and other pollinators have experienced population declines due to a combination of habitat loss, use of pesticides, and the spread of pests and diseases; and

WHEREAS, pollinator-friendly communities can benefit local and regional economies through healthier ecosystems, increased vegetable and fruit crop yields, and increased demand for pollinator-friendly plant materials from local nurseries and growers; and

WHEREAS, ideal pollinator-friendly habitat:

- Provides diverse and abundant nectar and pollen from plants blooming in succession throughout the growing season;
- Provides water for drinking, nest-building, cooling, diluting stored honey, and butterfly puddling;
- Provides undisturbed spaces (leaf and brush piles, un-mowed fields or field margins, fallen trees and other dead wood) for nesting and overwintering for wild pollinators
- Is pesticide-free or has pesticide use carried out with least ill effects on pollinators;
- Is comprised of mostly, if not all, native species of annual and perennial forbs, grasses, vines, shrubs, and trees in landscapes because many wild pollinators prefer or depend on the native plants with which they co-adapted;
- Includes, where possible, designated pollinator zones in public spaces with signage to educate the public and build awareness; and,
- Provides for safe and humane removal of honey bees when required.

WHEREAS, supporting pollinators fosters environmental awareness and sustainability, and increases interactions among community stewards, backyard beekeepers, farmers, children, educators, Master Gardeners, local businesses, faith-based organizations, and nature-related organizations; and

WHEREAS, in order to enhance understanding among local government staff and the public about the vital role that pollinators play and what each of us can do to sustain them, Hillsborough chooses to support and encourage pollinator habitat creation and enhancement on both public and private land; and

WHEREAS, Hillsborough should be certified a *BEE CITY USA* community because:

- Hillsborough has installed and nurtured pollinator gardens in two city parks and hopes to expand the program to other parks and public spaces,
- Hillsborough has encouraged public awareness about the important role of pollinators through Hillsborough Tree Board outreach programs
- Hillsborough fosters partnership between groups concerned and dedicated to creating healthy habitat for pollinators such as Hillsborough Garden Club, the Master Gardeners program, and Hillsborough Tree Board

NOW, THEREFORE, Hillsborough resolves as follows:

1. The Hillsborough Planning Department is hereby designated as the BEE CITY USA sponsor.

2. The Public Space Manager of Hillsborough is designated as the BEE CITY USA liaison.
3. Facilitation of the Hillsborough BEE CITY USA program is assigned to the Hillsborough Tree Board.

4. The Tree Board is authorized to, and should:
    a. **Celebration**: Annually celebrate National Pollinator Week (third full week of June) or some other appropriate occasion with educational events, pollinator habitat plantings or restoration, proclamations or promotions that showcase Hillsborough's commitment to enhancing pollinator health and habitat.
    b. **Publicity & Information**: Install and maintain at least one authorized BEE CITY USA street sign in a prominent location, and create and maintain a webpage on the Hillsborough website which includes, at minimum, a copy of this resolution, links to the national BEE CITY USA website, contact information for the local government's BEE CITY USA liaison Public Space Manager contact information for the "Tree Board," and reports of the pollinator-friendly activities the community has accomplished the previous year(s).
    c. **Habitat**: Develop and implement a program to create or expand pollinator-friendly habitat, which can include, but is not limited to:
        i. Identification and inventory of Hillsborough real property that can be enhanced with pollinator-friendly plantings.
        ii. Creation of a recommended locally native species list to include forbs, grasses, vines, shrubs, and trees and a list of local suppliers for those species.
        iii. Creation of a least toxic pesticide management plan, and
        iv. Dissemination of informational and educational materials to the public.
        v. Tracking annual area of pollinator habitat created or enhanced by square footage and/or acreage.
    d. **Plan Review:** Review any relevant existing or future plans and documents for pesticide management policies and practices as they relate to pollinator conservation, identify appropriate locations for pollinator-friendly plantings, and consider other appropriate measures.
    e. **Renewal:** After completing the first full year as a BEE CITY USA affiliate, each January, apply for renewal of Hillsborough's BEE CITY USA designation following the format provided by BEE CITY USA, including a report of the previous year's BEE CITY USA activities, and paying the renewal fee based on Hillsborough's population.

ADOPTED by the Board of Commissioners of Hillsborough
this 14th day of November, 2016.

Mayor Tom Stevens

Attest:

Katherine Cathey
Town Clerk

Ordinance #20161114–9.G

AN ORDINANCE AMENDING CHAPTER 15, SECTION 9, PROHIBITED DISCHARGE STANDARDS

THE BOARD OF COMMISSIONERS OF THE TOWN OF HILLSBOROUGH ORDAINS:

Section 1. Chapter 15, Section 9, PROHIBITED DISCHARGE STANDARDS is hereby amended as follows:

Addition of items (b) 24-40 (additions are noted in ***bold italics***):

(a) *General prohibitions.* No user shall contribute or cause to be contributed into the POTW, directly or indirectly, any pollutant or wastewater which causes interference or pass through. These general prohibitions apply to all users of a POTW whether or not the user is a significant industrial user or subject to any national, state, or local pretreatment standards or requirements.

(b) *Specific prohibitions.* No user shall contribute or cause to be contributed into the POTW the following pollutants, substances, or wastewater:

(1) Pollutants which create a fire or explosive hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit (60 degrees Celsius) using the test methods specified in 40 CFR 261.21.

(2) Solid or viscous substances in amounts which will cause obstruction of the flow in the POTW resulting in interference, but in no case, solids greater than one-half inch in any dimension.

(3) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference or pass through.

(4) Any wastewater having a pH less than 5.0 or more than 9.0 or wastewater having any other corrosive property capable of causing damage to the POTW or equipment.

(5) Any wastewater containing pollutants, including oxygen-demanding pollutants, (BOD, etc.) in sufficient quantity, (flow or concentration) either singly or by interaction with other pollutants, to cause interference with the POTW.

(6) Any wastewater having a temperature greater than 150 degrees Fahrenheit (60 degrees Celsius), or which will inhibit biological activity in the POTW treatment plant resulting in Interference, but in no case wastewater which causes the temperature at the introduction into the treatment plant to exceed 104 degrees Fahrenheit (40 degrees Celsius).

(7) Any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and/or safety problems.

(8) Any trucked or hauled pollutants, except at discharge points designated by the POTW director in accordance with section 15-17 of this chapter.

(9) Any noxious or malodorous liquids, gases, or solids or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers for maintenance and repair.

(10) Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludge, or scum, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a substance discharged to the POTW cause the POTW to be in

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noncompliance with sludge use or disposal regulations or permits issued under section 405 of the Act; the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act, or state criteria applicable to the sludge management method being used.

(11) Any wastewater which imparts color which cannot be removed by the treatment process, including, but not limited to, dye wastes and vegetable tanning solutions, which consequently imparts sufficient color to the treatment plant's effluent to render the waters injurious to public health or secondary recreation or to aquatic life and wildlife or to adversely affect the palatability of fish or aesthetic quality or impair the receiving waters for any designated uses.

(12) Any wastewater containing any radioactive wastes or isotopes except as specifically approved by the POTW director in compliance with applicable State or Federal regulations.

(13) Stormwater, surface water, groundwater, artesian well water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, noncontact cooling water and unpolluted industrial wastewater, unless specifically authorized by the POTW director.

(14) Fats, oils, or greases of animal or vegetable origin in concentrations greater than 100 mg/l.

(15) Any sludge, screenings or other residues from the pretreatment or industrial wastes.

(16) Any medical wastes, except as specifically authorized by the POTW director in a wastewater discharge permit.

(17) Any material containing ammonia, ammonia salts, or other chelating agents which will produce metallic complexes that interfere with the municipal wastewater system.

(18) Any material that would be identified as hazardous waste according to 40 CFR 261 if not disposed of in a sewer except as may be specifically authorized by the POTW director.

(19) Any wastewater causing the treatment plant effluent to violate State Water Quality Standards for toxic substances as described in 15A NCAC 02B.0200.

(20) Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test.

(21) Recognizable portions of human or animal anatomy.

(22) Any wastes containing detergents, surface active agents or other substances which may cause excessive foaming in the municipal wastewater system.

(23) At no time, shall two successive readings on an explosion hazard meter, at the point of discharge into the system, or at any point in the system, be more than five percent nor any single reading over ten percent of the lower explosive limit (LEL) of the meter.

"(24) Any type of paper product, other than toilet paper.

(24) Any type of cloth, including diapers and wash cloths.

(26) Any type of disposable diaper or baby wipes.

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(27) Any type of disposable cleaning products, including wipes, dusters, and mops.

(28) Any type of tobacco product, including cigarettes, cigars, chewing tobacco, and snuff.

(29) Any type of condom.

(30) Any type of personal hygiene product, including tampons, sanitary napkins, wipes, and towelettes.

(31) Wood, debris, or wood product, including trees, limbs, roots, leaves, yard waste, grass clippings, or lumber.

(32) Construction material, debris, or tools, including rocks, gravel, cement, concrete, masonry bricks or block, shovels, and hand tools.

(33) Adhesives, glue, dye, or stones used in the manufacture of products.

(34) Product containers, including boxes, bottles, cans, or buckets.

(35) Appliances or parts of appliances.

(36) Vehicles or parts of vehicles.

(37) Rope, string, twine, thread, or similar materials.

(38) Material made of fabric, including carpet, blankets, sheets, sleeping bags.

(39) Trash bags, whether paper or plastic.

(40) All other solids or liquids, other than wastes from the human body, that may accumulate in sewer pipes and cause or contribute to blockages."

Section 2. All provisions of any Town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

The foregoing ordinance, having been submitted to a vote, received the following vote and was duly adopted this the 14th day of November, 2016.

Ayes: 5
Noes: 0
Absent or Excused: 0

Katherine Cathey
Town Clerk

DRAFT

Resolution #20161114-9.H

Resolution Approving Financing Terms

WHEREAS: The Town of Hillsborough (the "Town") has previously determined to undertake a project for the financing of vehicles and equipment, (the "Project"), and the Finance Officer has now presented a proposal for the financing of such Project.

BE IT THEREFORE RESOLVED, as follows:

1. The Town hereby determines to finance the Project through Branch Banking and Trust Company ("BB&T"), in accordance with the proposal dated October 27, 2016. The amount financed shall not exceed $317,000.00, the annual interest rate (in the absence of default or change in tax status) shall not exceed 1.57%, and the financing term shall not exceed five (5) years from closing.

2. All financing contracts and all related documents for the closing of the financing (the "Financing Documents") shall be consistent with the foregoing terms. All officers and employees of the Town are hereby authorized and directed to execute and deliver any Financing Documents, and to take all such further action as they may consider necessary or desirable, to carry out the financing of the Project as contemplated by the proposal and this resolution.

3. The Finance Officer is hereby authorized and directed to hold executed copies of the Financing Documents until the conditions for the delivery of the Financing Documents have been completed to such officer's satisfaction. The Finance Officer is authorized to approve changes to any Financing Documents previously signed by Town officers or employees, provided that such changes shall not substantially alter the intent of such documents or certificates from the intent expressed in the forms executed by such officers. The Financing Documents shall be in such final forms as the Finance Officer shall approve, with the Finance Officer's release of any Financing Document for delivery constituting conclusive evidence of such officer's final approval of the Document's final form.

4. The Town shall not take or omit to take any action the taking or omission of which shall cause its interest payments on this financing to be includable in the gross income for federal income tax purposes of the registered owners of the interest payment obligations. The Town hereby designates its obligations to make principal and interest payments under the Financing Documents as "qualified tax-exempt obligations" for the purpose of Internal Revenue Code Section 265(b)(3).

5. The Town intends that the adoption of this resolution will be a declaration of the Town's official intent to reimburse expenditures for the project that is to be financed from the proceeds of the BB&T financing described above. The Town intends that funds that have been advanced, or that may be advanced, from the Town's general fund, or any other Town fund related to the project, for project costs may be reimbursed from the financing proceeds.

6. All prior actions of Town officers in furtherance of the purposes of this resolution are hereby ratified, approved and confirmed. All other resolutions (or parts thereof) in conflict with this resolution are hereby repealed, to the extent of the conflict. This resolution shall take effect immediately.

Approved this 14th day of November, 2016.

By: _____
(Clerk)

By: _____
(Mayor)

TOWN OF HILLSBOROUGH
Town of Hillsborough
SEAL
NORTH CAROLINA

Ordinance #20161114-9.I

AN ORDINANCE TO AMEND TOWN OF HILLSBOROUGH TOWN CODE CHAPTER 14 REGARDING UTILITY DEPOSITS AND BILLING

THE BOARD OF COMMISSIONERS OF THE TOWN OF HILLSBOROUGH ORDAINS:

Section 1. Town Code Section 14-8(a) is amended to read as follows:

The purpose of a deposit is to provide security (money set aside) for the payment of water/sewer charges in the event a customer fails to pay. Every applicant requesting water/sewer service shall make a cash deposit with the Town. Service shall be refused until this deposit has been paid (refer to the Town's current year budget ordinance for deposit requirements).

The Town retains the right, upon 30 days of written notice, to require a customer to increase the deposit to a maximum of two times the customer's six-month bill average. A surety bond, naming the Town of Hillsborough as beneficiary, is acceptable in place of a cash security deposit when the deposit required exceeds $1,000.00.

Section 2. Town Code Section 14-13(a) is amended to read as follows:

Bills shall be mailed out not later than the first of each month and become delinquent if not paid by the close of business hours on the 25th of each month. A late penalty charge of 15 percent will be assessed on the 26th to all delinquent accounts and reminders will be issued. If the bill is not paid in full or otherwise resolved by the close of the business day on the 10th day after the reminders are issued, the meter will be turned off and locked. There will also be a delinquency fee (refer to the Town's fees, rates and charges schedule) added to the account. Service will be reconnected when the past due bills, late penalty and delinquency fee are paid in full. Termination of service for non-payment will not take place on Friday or the day before a holiday. If any tampering to the meter or service connection occurs, the meter will be locked and a tampering fee will be assessed. Subsequent tampering violation fees are four times the first charge (refer to the Town's fees, rates and charges schedule). Service will not be reconnected until all tampering fees are paid in full or a payment arrangement is approved. Repeated tampering will result in removal of the meter.

Section 3. Town Code Section 14-13(b) is amended to read as follows:

Bills shall notify customers of the provisions of subsection (a) of this section, and shall contain information about how to make contact concerning questions about a bill.

Section 4. Any Town Ordinance in conflict with this Ordinance is hereby repealed.

Section 5. This Ordinance shall take effect immediately upon adoption.

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Ordinance #20161114-9.I

The foregoing ordinance having been submitted to a vote, received the following vote and was duly adopted this 14th day of November, 2016.

Ayes: 5
Noes: 0
Absent: 0

Katherine M. Cathey, Town Clerk

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A Proclamation of Appreciation for Tinka Jordy and the Hillsborough Arts Council

WHEREAS, for six non-consecutive years, the Hillsborough Handmade Parade has delighted young, old, and everyone in-between, in a participatory event involving hundreds of participants wearing fantastical costumes, parading giant puppets, all to the beat of festive drumming and joyful music;

WHEREAS, the Hillsborough Handmade Parade requires many months of preparation, and includes numerous workshops that give diverse children and adults opportunities for artistic expression in creating costumes and puppets for the parade;

WHEREAS, the Hillsborough Handmade Parade exemplifies community building by bringing together and welcoming the diverse peoples and cultures of our citizenry for a shared activity that celebrates creativity, our collective heritage, and community spirit;

WHEREAS, the Hillsborough Handmade Parade has become a signature event for Hillsborough, organized through the Hillsborough Arts Council, and engaging support and sponsorship from business, non-profit, and public entities;

WHEREAS, Tinka Jordy has served as the creative force driving the Hillsborough Handmade Parade, who along with Mark Donley, the Hillsborough Arts Council, and many volunteers, sponsors, and participants have contributed endless volunteer hours that have benefited our community;

WHEREAS, Tinka Jordy has for many years held various leadership roles in the Hillsborough Arts Council, advocating for arts and organizing events that enrich our community, including Last Fridays, the Solstice Walk, concerts, art and craft exhibits, and creative workshops, directly engaging thousands of people and benefiting our community as a whole;

NOW, THEREFORE, the Hillsborough Board of Commissioners and Mayor, Tom Stevens, recognize Tinka Jordy and the Hillsborough Arts Council for their extraordinary contributions to the greater Hillsborough community, and on behalf of the citizens of Hillsborough extend our deep and sincere appreciation.

Presented this 14th day of November, 2016.

Tom Stevens, Mayor
Town of Hillsborough

TOWN OF HILLSBOROUGH

Hillsborough Board of Commissioners Monthly Workshop Agenda

7 p.m., Nov. 28, 2016
Town Barn, 101 E. Orange St.

PRESENT: Mayor Tom Stevens and Commissioners Mark Bell, Kathleen Ferguson, Evelyn Lloyd, Brian Lowen, and Jenn Weaver

STAFF PRESENT: Town Manager Eric Peterson, Assistant Town Manager/Planning Director Margaret Hauth, Finance Director Heidi Lamay, Assistant to the Town Manager Jen Della Valle, Public Works Director Ken Hines, Police Chief Duane Hampton, Town Engineer/Utilities Director Kenny Keel, Human Resources Director/Town Clerk Katherine Cathey, Budget Director Emily Bradford, and Town Attorney Bob Hornik

ABSENT: None.

1. Open the Workshop

7:00:56 PM Mayor Stevens opened the monthly workshop.

2. Agenda Changes & Agenda Approval

No changes. The agenda stood as presented.

3. Committee Updates and Reports

7:01:44 PM Commissioner Ferguson shared that the Town of Apex shared with Triangle J that they request their developers and builders to do a couple of things to allow for cheaper, faster retrofitting for solar energy uses. Also, she is the Triangle J alternate for the forum and she will be attending the forum this coming Friday. Also, the UNC School of Social Work UNC has asked her to share Hillsborough's ordinances related to homelessness and she's been asked to bring one area or issue to which they will apply the racial equity tool. She welcomed recommendations. That is Thursday. Finally, HUD rules have changed that landlords cannot use the criminal histories to screen potential renters (except some criminal histories such as the manufacture of illegal narcotics). This is a big deal for re-entry. The Fairview Christmas Party is this Thursday.

7:05:31 PM Mayor Stevens shared that he has been getting a number of questions about Collins Ridge. Orange County Economic Development and the Hillsborough/Orange County Chamber of Commerce are getting together with him in a couple of weeks to talk with the Daniel Boone business owners about relocation. We want to make sure we keep what we have.

7:06:35 PM Commissioner Weaver shared there was a Upper Neuse River Basin Association (UNRBA) meeting last week and the league's goals for the new year are: Oppose legislation that interferes with local management and local assets. To seek legislation that eliminates the municipal repayment of water- and sewer-related fees (having to do with a court case). To increase state level funding for infrastructure needs. To support legislation that recognizes that the management of public utilities is best left to local municipalities.

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4. Miscellaneous budget amendments and transfers

7:08:10 PM Commissioner Bell moved approval of the budget amendments and transfers. Commissioner Ferguson seconded. The motion carried upon a unanimous vote of 5-0.

5. Adoption of an amended ordinance annexing the parcel at 809 Faucette Mill Road (originally approved Sept. 12, 2016)

7:08:21 PM Commissioner Ferguson moved adoption of the amended ordinance annexing the parcel at 809 Faucette Mill Road. Commissioner Weaver seconded. The motion carried upon a unanimous vote of 5-0.

6. Mid-year update on top departmental priorities

Mr. Peterson reviewed that a year ago he gave a presentation that conveyed everyone's plates are overflowing. The draft budget in February will look slightly different from this one. He added that town staff won't be doing departmental strategy maps, which are somewhat redundant with the score card anyway.

Ms. Cathey addressed the Administration Department. She said she has employed the strategy of carving time out to get to the long-term goals that require more concentration. To that end, she has been working from home one day a week with email off. In that time, she has been creating the learning and development calendar and developing the schedule and individual sessions for the Leadership Academy. Up to this point, her department has been wrapping up the classification and pay study. Safety and risk manager David Moore and human resources analyst Sherri Ingersoll have been working on enhancing safety training.

Commissioner Weaver said with the potential threats that you have, is this a brainstorm, a ranking, or a mix of both. Ms. Cathey said initially it was a brainstorm with Mr. Peterson, Ms. Ingersoll and Ms. Della Valle. We haven't gotten to the point where we're rolling it out to employees.

Commissioner Ferguson said right now for folks interested in racial equity training, there are spots open in March and there are scholarships available. Commissioner Weaver echoed that recommendation. She suggested on the diversity and inclusion page, remove the "reverse discrimination" language. Commissioner Ferguson agreed.

Ms. Lamay addressed Finance and Billing and Collection, which has a main goal to provide accurate, timely information useful for decision making. Ms. Lamay said Orange County has almost had complete turnover so her staff is working with them to get better systems in place. Her department came up with the itinerant merchants permit which is a little different from the former privilege license and is still working on streamlining that process to make it easier for people to comply. Commissioner Ferguson asked whether it can be done online. Ms. Lamay said we can't take payments online. Commissioner Ferguson asked even through PayPal. Ms. Lamay said it's a four percent fee either to the person using the card or for us. For food and beverage, the fee would be around $12,000.

Commissioner Weaver asked if the county really understands we need the information broken down and are amenable to giving it to us the way we need it. Ms. Lamay said the old line was "well, this is how we've always done it." That old line is changing with the new staff.

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Mayor Stevens said part of the exercise was to find the thing we really need to focus on. He asked whether the focus area is making sure everyone gets a report on time or is it much more about managing or making sure the information is timely. He asked if there is a language disconnect. Ms. Lamay said it has been an area that we have sought to improve over time. Department heads have wanted to be able to pull up what they spent last week and we are working toward that. Mayor Stevens said "delivering accurate and timely information to stakeholders" more accurately reflects the goal.

Regarding FATHOM, Commissioner Ferguson encouraged engaging the Water and Sewer Advisory Committee. The engagement should be to get their thoughts and to let them know the feedback the town staff and board has been receiving. Mayor Stevens agreed and said don't let the every-other-month schedule get in the way. That is a group of citizen engagement.

Commissioner Lloyd said I had trouble with the account number. Commissioners and the mayor said they are getting feedback that people are frustrated or have misinformation about the changeover. Ms. Lamay said the FATHOM phone system was altered to bypass the request for an account numbers so that the customer could speak to a representative.

Commissioner Bell asked Ms. Lamay whether she has any insight as to how many people are confused. He asked how many have managed to pay their bill. Ms. Lamay said today would have been the last day to pay; tomorrow is the penalty day. There's a 10-day grace period. We'll find out closer to the end of the 10 days how big the list of unpaid bills is. She expects next month to be more difficult as people attempt to set up draft payments. You don't want to announce waiving cut-offs because then some people won't pay. There are about 80 people a month who get cut off. Some of those get cut off on the 26th because they get paid at the beginning of the month. The new periods should help them.

Commissioner Ferguson encouraged being very careful to supply good customer service. Also, let's not punish our staff for taking a risk. Ms. Lamay said they have been debriefing first thing in the morning to analyze how they can be more helpful.

Commissioner Lloyd shared a letter written by someone who was very upset.

There was brief discussion about a public relations response, which is in the works. Commissioner Ferguson cautioned that on the town's website now the word "outsourced" implies that the town has let staff go.

Ms. Hauth addressed Planning. The top three priorities aren't her top three. Her department took the board's three top priorities forward with the resources they had. Board members expressed that they didn't intend to supplant necessities.

Chief Hampton summarized that they identified five key areas and made community relationship as the top priority. He said we're not where I wanted to be. We realize we can't accomplish this because we don't have the staffing to accomplish it. Recruiting and retention are big focuses.

For Utilities, Mr. Keel reported that cleaning out the ponds came in way under budget.

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For Public Works, Mr. Hines said collection routes are doing fine. Collins Ridge is changing their model and considering townhomes on public streets. The town would have to provide trash service to the public streets. Mr. Peterson and board members raised concern that this would cost the town more than the town had planned.

Regarding training in the Public Works department, if one employee goes to training, then it's pretty much guaranteed that no asphalt patching or stormwater work will be done that day. There was some discussion of how to encourage employees to get training. Mr. Peterson clarified that it is more common in Public Works for people to specialize on one type of thing; not everyone wants to learn how to use a backhoe. Safety training is ongoing, Mr. Hines said.

7. Other Business

8:27:45 PM Mayor Stevens invited a motion to go into Closed Session.

8. Closed Session

8:27:51 PM Commissioner Ferguson moved to go into Closed Session. Commissioner Lloyd seconded. The motion carried upon a unanimous vote of 5-0.

8:28:05 PM Commissioner Ferguson moved to return to Open Session to complete Other Business regarding the new town banners. Commissioner Lloyd seconded. The motion carried upon a unanimous vote of 5-0.

Commissioner Lowen said he and Commissioner Lloyd hold the current banner near and dear. He isn't thinking it will always be the town banner but he doesn't like the new one. He didn't comment when he saw the design because it was already passed the deadline.

Ms. Hauth said she doesn't think they've been ordered yet but the board would need to decide soon because the downtown money from the state needs to be spent by March.

Commissioner Ferguson suggested ordering more of the current banner.

Commissioner Bell said he shares some sentiments with Commissioners Lloyd and Lowen and doesn't care for the vertical writing, but he thinks it would be good to coordinate the banners with the wayfinding signs. Commissioner Bell sees a color difference between the design suggestion and the wayfinding signs.

Ms. Hauth said it's time to update the banners. They aren't intended to stay the same.

Commissioner Lowen said he agrees it's time to refresh the banners. He just doesn't think the new design is as good as what we've got.

Ms. Hauth said the town as a whole is moving away from the clock tower image. She asked if the board is ok with the clock tower not being on the banner.

The board would like to setup a committee. Several board members expressed a desire to serve on it. There was agreement that the committee should meet only two or three times.

Mayor Stevens suggested parameters should include: not all text (some visual), the clock re-stylized, and

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matching colors and fonts with wayfinding signs.

Ms. Hauth said Carrot-Top Industries has been doing the design work.

Ms. Della Valle asked whether whatever is created as part of the banner would then be a part of the logo for all town purposes.

Ms. Hauth said the logo dates from the start of the Alliance for Historic Hillsborough in the early 1990s. It hasn't changed in 25 years, other than adding the copyright to it.

Mayor Stevens said he thinks our town logo is tired, and we need to re-do it. He doesn't think we need to get a new logo on the banners. The banners need to reflect the town spirit. He pointed to the police badge with a line drawing as an inspiration. It is not to copy exactly.

Ms. Hauth said the board would need 5-10 versions to show in advance of the first committee meeting.

Commissioner Weaver said if there is an image, perhaps something from Riverwalk, she'd be interested in seeing another option, as an alternative to clock tower.

8:48:00 PM Commissioner Lowen moved to return to Closed Session. Commissioner Weaver seconded. The motion carried upon a unanimous vote of 5-0.

a. Closed session as authorized by North Carolina General Statute Section 143-318.11(a)(3) to consult with the Town Attorney in order to preserve the attorney-client privilege (Colonial Inn)
b. Closed session as authorized by North Carolina General Statute Section 143-318.11(a)(3) to consult with the Town Attorney in order to preserve the attorney-client privilege (potential litigation)

9. Adjourn

9:59:55 PM Commissioner Bell moved to adjourn. Commissioner Ferguson seconded. The motion carried upon a unanimous vote of 5-0.

Respectfully submitted,

Katherine M. Cathey
Town Clerk

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FY 2016-2017

TOWN OF HILLSBOROUGH
BUDGET CHANGES REPORT
DATES: 11/28/2016 TO 11/28/2016

	REFERENCE	CHANGE NUMBER	DATE	USER	ORIGINAL BUDGET	BUDGET CHANGE	AMENDED BUDGET
Ruffin-Roulhac	10-10-5000-5300-110 TELEPHONE/INTERNET						
	Move Town Hall SIP expense to IT budge	5996	11/28/2016	EBRADFORI	13,500.00	-3,000.00	10,500.00
Info. Services	10-10-6610-5300-110 TELEPHONE/INTERNET						
	Move Town Hall SIP expense to IT budge	5997	11/28/2016	EBRADFORI	0.00	3,000.00	3,000.00
Police - Patrol	10-20-5110-5100-021 PERSONNEL EXPANSION - SALARIES						
	To cover vehicle upfit overages	5999	11/28/2016	EBRADFORI	10,000.00	-8,000.00	2,000.00
Police - Patrol	10-20-5110-5700-740 CAPITAL - VEHICLES						
	To cover vehicle upfit overages	6000	11/28/2016	EBRADFORI	35,000.00	8,000.00	85,279.00
						0.00	

APPROVED: 5 - 0

On: Nov. 28, 2016

VERIFIED:

Katherine M. Cathey

Town Clerk

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Ordinance No. 20160912-10.E

The following ordinance was introduced by Commissioner Bell, and duly seconded by Commissioner Ferguson.

AN ORDINANCE ANNEXING NON-CONTIGUOUS PROPERTY

WHEREAS, a petition was received requesting the annexation of the non-contiguous area totaling 8.53 acres described in Section 2 below; and

WHEREAS, a public hearing on the question of the annexation was held on Thursday, July 21, 2016 following notice of such public hearing published in the News of Orange on July 6 and 13, 2016.

NOW, THEREFORE, THE BOARD OF COMMISSIONERS FOR THE TOWN OF HILLSBOROUGH ORDAINS:

Section 1. The Board of Commissioners finds that:

a. The area described in Section 2 meets all of the standards set forth in G.S. 160A-58.1(b). More specifically:
   1. The nearest point on the proposed satellite corporate limits is less than three miles from the primary corporate limits of the Town;
   2. No point in the proposed satellite area is closer to the limits of any other city than to the primary corporate limits of the Town;
   3. The area described in Section 2 is situated such that the Town will be able to provide the same services with this area that it provides within its primary corporate limits;
   4. The area proposed for annexation is not a subdivision;
   5. The area described in Section 2, when added to the area within all other satellite corporate limits, does not exceed 10% of the area within the primary corporate limits of the Town.

b. The petition requesting annexation of the area described in Section 2 contains the signatures of all of the owners of real property within the area (except property owned by those tax-exempt and other entities specified in G.S. 160A-58.1).

c. The petition is otherwise valid.

d. The public health, safety, and welfare of the inhabitants of the Town and of the area described in Section 2 will be best served by the annexation.

Section 2. Pursuant to Part 4 of Article 4A of G.S. Chapter 160A, the following area is hereby annexed to and made a part of the Town of Hillsborough:

BEGINNING at an existing corner being a common corner with Hillsborough Tennis Club; thence S 53^0 21' 59" W 744.43' to an existing corner; thence S 53^0 17' 31" 115.97' to an iron pin set; thence N 67^0 03' 01" W 165.48' to an existing corner identified as "A" on the plat entitled "Recombination Survey for Carlton A. Laws & Lynn J. Laws. Trustees of Laws Joint Living Trust Dated 6/2/1995" and being duly recorded at Plat Book 99, Page 103, Orange County Registry; thence N 19^0 48' 23"E 909.45' to an existing corner; thence N 19^0 43' 17" E 441.72' to an iron pin set; thence S 52^0 29' 15" E 41.38' to an existing corner; thence S 19^0 43' 17" W 438.49' to an existing corner, the common corner with James Flowers, Sr.; thence S 52^0 30' 00" E 438.43' to an existing corner; thence S 52^0 25' 24" E 192.94' to an existing corner, said corner being the point and place of beginning.

Section 3. This Ordinance shall become effective October 9, 2016.

Section 4. The Town Clerk shall cause to be recorded in the Office of the Register of Deeds of Orange County and in the Office of the Secretary of State an accurate map of the annexed territory described in Section 2 together with a duly certified copy of this ordinance. Such a map shall also be delivered to the Orange County Board of Elections as required by G.S. 163-288.1.

The foregoing ordinance having been submitted to a vote received the following vote and was duly approved this 12th day of September 2016.

Ayes: 5
Noes: 0
Absent or Excused: 0

SEAL

Town of Hillsborough
Katherine M. Cathey, Town Clerk

STATE OF NORTH CAROLINA
COUNTY OF ORANGE

I, Sherri L. Ingersoll, a Notary Public of the County and State aforesaid, certify that Katherine M. Cathey personally appeared before me this day and acknowledged that she is the Town Clerk for the Town of Hillsborough, a North Carolina municipal corporation, and that she, as Town Clerk, being duly authorized to do so, executed the foregoing instrument to acknowledge that it is an Annexation Ordinance duly adopted by the Town of Hillsborough Board of Commissioners on the date indicated.

Witness my hand and official seal, this the 12th day of September, 2016.

SHERRI L. INGERSOLL
NOTARY
(Official Seal)
PUBLIC
ORANGE COUNTY, N.C.

Notary Public

My commission expires: 2/10/2018

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Administration/Budget

Public Hearing: ☐ Yes ☒ No

Date of Public Hearing: _____

For Clerk's Use Only
AGENDA ITEM #

8.B		
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT:

ITEM TO BE CONSIDERED

Subject:

Miscellaneous budget amendments and transfers.

Attachment(s):

Description and explanation for budget amendments and transfers.

Brief Summary:

To adjust budgeted revenues and expenditures where needed due to changes that have occurred since budget adoption.

Action Requested:

Consider approving budget amendments and transfers.

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

As indicated by each budget amendment.

Staff Recommendations/Comments:

To approve the attached list of budget amendments.

FY 2016-2017

TOWN OF HILLSBOROUGH
BUDGET CHANGES REPORT
DATES: 12/12/2016 TO 12/12/2016

	REFERENCE	CHANGE NUMBER	DATE	USER	ORIGINAL BUDGET	BUDGET CHANGE	AMENDED BUDGET
GF - Contingency	10-00-9990-5300-000 CONTINGENCY						
	PDHQ Roof Repair	6007	12/12/2016	EBRADFORI	150,000.00	-1,600.00	5,000.00
Police - Admin.	10-20-5100-5300-150 MAINTENANCE - BUILDING						
	PDHQ Roof Repair	6008	12/12/2016	EBRADFORI	7,585.00	1,600.00	25,511.52
Police - Admin.	10-20-5100-5300-160 EQUIPMENT REPAIR						
	Radio Repair Overages	6003	12/12/2016	EBRADFORI	500.00	62.00	562.00
Police - Admin.	10-20-5100-5300-310 GASOLINE						
	Radio Repair Overages	6004	12/12/2016	EBRADFORI	2,000.00	-62.00	1,938.00
Police - Admin.	10-20-5100-5300-330 SUPPLIES - DEPARTMENTAL						
	To Cover Departmenal Supply Overages	6005	12/12/2016	EBRADFORI	1,000.00	56.00	1,056.00
Police - Admin.	10-20-5100-5300-570 MISCELLANEOUS						
	To Cover Departmenal Supply Overages	6006	12/12/2016	EBRADFORI	1,000.00	-56.00	944.00
Police - Patrol	10-20-5110-5300-330 DEPARTMENTAL SUPPLIES						
	To Cover Uniform Overages	6010	12/12/2016	EBRADFORI	64,500.00	-467.00	56,533.00
Police - Patrol	10-20-5110-5300-350 UNIFORMS						
	To Cover Uniform Overages	6009	12/12/2016	EBRADFORI	9,100.00	467.00	9,567.00
Water Distribution	30-80-8140-5300-130 UTILITIES						
	Utility Bed Overages	6017	12/12/2016	EBRADFORI	70,000.00	-1,655.00	68,345.00
Water Distribution	30-80-8140-5300-330 DEPARTMENTAL SUPPLIES						
	To Cover Mini Excavator Overages	6013	12/12/2016	EBRADFORI	106,000.00	-6,988.00	99,012.00
Water Distribution	30-80-8140-5700-740 CAPITAL/VEHICLES						
	Utility Bed Overages	6018	12/12/2016	EBRADFORI	35,000.00	1,655.00	86,216.01
Water Distribution	30-80-8140-5700-741 CAPITAL/EQUIPMENT						
	To Cover Mini Excavator Overages	6011	12/12/2016	EBRADFORI	43,833.00	6,988.00	50,821.00
WW Collection	30-80-8200-5300-130 UTILITIES						
	Utility Bed Overages	6019	12/12/2016	EBRADFORI	72,270.00	-1,655.00	70,615.00
WW Collection	30-80-8200-5300-330 DEPARTMENTAL SUPPLIES						
	To Cover Mini Excavator Overages	6014	12/12/2016	EBRADFORI	82,000.00	-6,988.00	75,012.00
	Sewer Camera Replacement	6015	12/12/2016	EBRADFORI	82,000.00	-6,049.00	68,963.00
WW Collection	30-80-8200-5700-740 CAPITAL/VEHICLES						
	Utility Bed Overages	6020	12/12/2016	EBRADFORI	35,000.00	1,655.00	478,898.00
WW Collection	30-80-8200-5700-741 CAPITAL/EQUIPMENT						
	To Cover Mini Excavator Overages	6012	12/12/2016	EBRADFORI	43,833.00	6,988.00	50,821.00
	Sewer Camera Replacement	6016	12/12/2016	EBRADFORI	43,833.00	6,049.00	56,870.00
						0.00	

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☒ Yes ☐ No

Date of Public Hearing: October 20, 2016

For Clerk's Use Only
AGENDA ITEM #

8.C		
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Consideration of a consistency statement and ordinance to amend Section 3.8.5.1.a of the Unified Development Ordinance to modify cultural resource documentation requirement for special use permit applicants

Attachment(s):

Draft consistency statement and draft amending ordinance

Brief Summary:

This amended was discussed at the October public hearing with no public comment. The Planning Board unanimously recommended adoption of this amendment. The amendment aligns our requirements more closely with how the State Office of Historic Preservation operates.

Action Requested:

Consider adopting the consistency statement that the amendment IS consistent with the Comprehensive Plan and adopt the ordinance amending the Unified Development Ordinance.

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

Staff Recommendations/Comments:

Town Board's Statement per N.C. Gen. Stat. 160A-383

The Town of Hillsborough Town Board has received and reviewed the application of planning staff to amend the Town of Hillsborough Unified Development Ordinance as follows (insert general description of proposed amendment):

Section 3.8.5.1.a to modify cultural resource documentation requirement for special use permit applicants

The Hillsborough Town Board has determined that the proposed action is consistent /inconsistent with the Town of Hillsborough's comprehensive plan, and the Town Board's proposed action on the amendment is reasonable and in the public interest for the following reason(s):

The amendment aligns better with current practices at the State Office of Historic Preservation and therefore makes the town's requirements more meaningful.

Adopted by the Town of Hillsborough Board of Commissioners this 12th day of December, 2016.

_____

Katherine M. Cathey, Town Clerk

AN ORDINANCE AMENDING THE UNIFIED DEVELOPMENT ORDINANCE
OF THE TOWN OF HILLSBOROUGH

THE BOARD OF COMMISSIONERS OF THE TOWN OF HILLSBOROUGH ORDAINS:

Section 1. Section 3.8.5.1.a is hereby amended to delete the phrase "complete a Phase 1 analysis as part of their SUP submittal" and insert the phrase "indicate how those resources will be protected or documented if protections is not practicable as part of their development plan." as replacement language.

Section 2. All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

The foregoing ordinance having been submitted to a vote, received the following vote and was duly adopted this 12th day of December, 2016.

Ayes: _____
Noes: _____
Absent or Excused:_____

_____
Katherine M. Cathey, Town Clerk

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☒ Yes ☐ No

Date of Public Hearing: October 20, 2016

For Clerk's Use Only
AGENDA ITEM #

8.D		
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Consideration of a consistency statement and ordinance to amend Section 3.13.3.d of the Unified Development Ordinance to make reference to the traffic impact study requirements in the street standards document

Attachment(s):

Draft consistency statement and draft amending ordinance

Brief Summary:

This amended was discussed at the October public hearing with no public comment. The Planning Board unanimously recommended adoption of this amendment. By referring to the street manual, we add consistency to how and when traffic studies are prepared.

Action Requested:

Consider adopting the consistency statement that the amendment IS consistent with the Comprehensive Plan and adopt the ordinance amending the Unified Development Ordinance.

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

Staff Recommendations/Comments:

Town Board's Statement per N.C. Gen. Stat. 160A-383

The Town of Hillsborough Town Board has received and reviewed the application of planning staff to amend the Town of Hillsborough Zoning Map as follows (insert general description of proposed amendment):

Section 3.13.3.d to make reference to the traffic impact study requirements in the street standards document

The Hillsborough Town Board has determined that the proposed action is consistent /inconsistent with the Town of Hillsborough's comprehensive plan, and the Town Board's proposed action on the amendment is reasonable and in the public interest for the following reason(s):

The amendment make reference to a consistent source and helps ensure consistent application of the ordinance requirements.

Adopted by the Town of Hillsborough Board of Commissioners this 12th day of December, 2016.

_____

Katherine M. Cathey, Town Clerk

AN ORDINANCE AMENDING THE UNIFIED DEVELOPMENT ORDINANCE
OF THE TOWN OF HILLSBOROUGH

THE BOARD OF COMMISSIONERS OF THE TOWN OF HILLSBOROUGH ORDAINS:

Section 1. Section 3.13.3.d is hereby amended to insert the phrase "if required by Section 3.1 of the Street Design Standards" after "(TIA)" in the paragraph.

Section 2. All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

The foregoing ordinance having been submitted to a vote, received the following vote and was duly adopted this 12th day of December, 2016.

Ayes: _____
Noes: _____
Absent or Excused:_____

_____
Katherine M. Cathey, Town Clerk

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☒ Yes ☐ No

Date of Public Hearing: October 20, 2016

For Clerk's Use Only
AGENDA ITEM #

8.E		
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Consideration of a consistency statement and ordinance to delete Section 6.2 of the Unified Development Ordinance

Attachment(s):

Draft consistency statement and draft amending ordinance

Brief Summary:

This amended was discussed at the October public hearing with no public comment. The Planning Board unanimously recommended adoption of this amendment. The town decided to adopt design standards rather than guidelines, so this section is confusing to leave in the ordinance. However, renumbering the section would also introduce the possibility for errors in cross reference, so the amendment preserves the section number of future code writing.

Action Requested:

Consider adopting the consistency statement that the amendment IS consistent with the Comprehensive Plan and adopt the ordinance amending the Unified Development Ordinance.

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

Staff Recommendations/Comments:

Town Board's Statement per N.C. Gen. Stat. 160A-383

The Town of Hillsborough Town Board has received and reviewed the application of planning staff to amend the Town of Hillsborough Unified Development Ordinance as follows (insert general description of proposed amendment):

delete reference to the Design Standards manual in Section 6.2 and list this section as "reserved for future codification."

The Hillsborough Town Board has determined that the proposed action is consistent /inconsistent with the Town of Hillsborough's comprehensive plan, and the Town Board's proposed action on the amendment is reasonable and in the public interest for the following reason(s):

The town has decided to not develop a design manual and use standards rather than guidelines. The current section is confusing and deletion is in the public interest.

Adopted by the Town of Hillsborough Board of Commissioners this 12th day of December, 2016.

_____

Katherine M. Cathey, Town Clerk

AN ORDINANCE AMENDING THE UNIFIED DEVELOPMENT ORDINANCE
OF THE TOWN OF HILLSBOROUGH

THE BOARD OF COMMISSIONERS OF THE TOWN OF HILLSBOROUGH ORDAINS:

Section 1. Section 6.2, Design Manual is hereby deleted and the section is noted as "reserved for future codification."

Section 2. All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

The foregoing ordinance having been submitted to a vote, received the following vote and was duly adopted this 12th day of December, 2016.

Ayes: _____
Noes: _____
Absent or Excused:_____

_____
Katherine M. Cathey, Town Clerk

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☒ Yes ☐ No

Date of Public Hearing: October 20, 2016

For Clerk's Use Only
AGENDA ITEM #

8.F		
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Consideration of a consistency statement and ordinance to amend Section 6.11.7.3 of the Unified Development Ordinance to remove the sentence requiring site lighting to be extinguished when a business is closed

Attachment(s):

Draft consistency statement and draft amending ordinance

Brief Summary:

This amended was discussed at the October public hearing with no public comment. The Planning Board unanimously recommended adoption of this amendment. This amendment recognizes Duke Energy's unwillingness to contract for parking lot light contracts with dimmers or timers.

Action Requested:

Consider adopting the consistency statement that the amendment IS consistent with the Comprehensive Plan and adopt the ordinance amending the Unified Development Ordinance.

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

Staff Recommendations/Comments:

Town Board's Statement per N.C. Gen. Stat. 160A-383

The Town of Hillsborough Town Board has received and reviewed the application of planning staff to amend the Town of Hillsborough Unified Development Ordinance as follows (insert general description of proposed amendment):

Amend Section 6.11.7.3 to remove the sentence requiring site lighting to be extinguished when a business is closed

The Hillsborough Town Board has determined that the proposed action is consistent /inconsistent with the Town of Hillsborough's comprehensive plan, and the Town Board's proposed action on the amendment is reasonable and in the public interest for the following reason(s):

The requirement forces applicants to own and maintain their own parking lot lights since the electrical providers do not offer dimmers or timers. This is contrary to the public interest for efficient service provision.

Adopted by the Town of Hillsborough Board of Commissioners this 12th day of December, 2016.

_____

Katherine M. Cathey, Town Clerk

AN ORDINANCE AMENDING THE UNIFIED DEVELOPMENT ORDINANCE
OF THE TOWN OF HILLSBOROUGH

THE BOARD OF COMMISSIONERS OF THE TOWN OF HILLSBOROUGH ORDAINS:

Section 1. Section 6.11.7.3 is hereby amended by deleting "Non-security lighting shall be extinguished when the operation is closed or not in use." from the section.

Section 2. All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

The foregoing ordinance having been submitted to a vote, received the following vote and was duly adopted this 12th day of December, 2016.

Ayes: _____
Noes: _____
Absent or Excused:_____

_____
Katherine M. Cathey, Town Clerk

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☒ Yes ☐ No

Date of Public Hearing: October 20, 2016

For Clerk's Use Only
AGENDA ITEM #

8.G		
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Consideration of a consistency statement and ordinance to amend Section 7.5.2.1 of the Unified Development Ordinance to clarify that non-conforming residential lots are buildable

Attachment(s):

Draft consistency statement and draft amending ordinance

Brief Summary:

This amended was discussed at the October public hearing with no public comment. The Planning Board unanimously recommended adoption of this amendment. This amendment clarifies the practice of non-conforming lots being buildable.

Action Requested:

Consider adopting the consistency statement that the amendment IS consistent with the Comprehensive Plan and adopt the ordinance amending the Unified Development Ordinance.

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

Staff Recommendations/Comments:

Town Board's Statement per N.C. Gen. Stat. 160A-383

The Town of Hillsborough Town Board has received and reviewed the application of planning staff to amend the Town of Hillsborough Unified Development Ordinance as follows (insert general description of proposed amendment):

Section 7.5.2.1 to clarify that non-conforming residential lots are buildable

The Hillsborough Town Board has determined that the proposed action is consistent /inconsistent with the Town of Hillsborough's comprehensive plan, and the Town Board's proposed action on the amendment is reasonable and in the public interest for the following reason(s):

The amendments clarifies intended flexibility in the ordinance and supports transparency and easy understanding.

Adopted by the Town of Hillsborough Board of Commissioners this 12th day of December, 2016.

_____

Katherine M. Cathey, Town Clerk

AN ORDINANCE AMENDING THE UNIFIED DEVELOPMENT ORDINANCE
OF THE TOWN OF HILLSBOROUGH

THE BOARD OF COMMISSIONERS OF THE TOWN OF HILLSBOROUGH ORDAINS:

Section 1. Section 7.5.2.1 is hereby amended to insert "If the resultant lot is still non-conforming, it may be developed as if it was a non-conforming lot of record." at the end of the paragraph.

Section 2. All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

The foregoing ordinance having been submitted to a vote, received the following vote and was duly adopted this 12th day of December, 2016.

Ayes: _____
Noes: _____
Absent or Excused:_____

_____
Katherine M. Cathey, Town Clerk

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☐ Yes ☒ No

Date of Public Hearing: _____

For Clerk's Use Only
AGENDA ITEM #

8.H		
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Authorize manager to enter into a contract with HMW Preservation to prepare an Architectural Inventory update for Hillsborough (outside the local historic district)

Attachment(s):

Project narrative

Brief Summary:

The town received a grant from the State Historic Preservation Office to prepare an architectural inventory of resources outside the locally designated district but still in the city limits. The staff sent out requests for qualifications and recommends entering a contract with HMW. This is the same firm who assisted the town a few years ago to expand the period of significance in the local district. The contract price is $10,000, of which $5,000 is local match and $5,000 is state funding (reimbursement). The areas to be inventoried include West Hillsborough, Fairview and Daniel Boone.

This is the inventory portion of the potential book project with Orange County. The inventory component is funded in the FY17 budget.

Action Requested:

Authorize the manager to enter into a contract with HMW Preservation for $10,000.

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

Staff Recommendations/Comments:

Abstract of Proposed Project

Total Proposed Project Budget: $12,500 Town of Hillsborough share: $5,000 CLG grant: ~~$7,500~~ $5,000

The Town of Hillsborough is applying for a 2016 CLG grant to help fund a long-overdue historic resources inventory of significant properties and neighborhoods lying outside the current National Register Historic District boundaries and within the Town limits. This project encompasses approximately 2707.17 acres or 4.23 square miles and includes areas of town where no inventory work has ever been carried out. The resources to be documented will include the intact mill village and West Hillsborough, along with the traditional African American neighborhoods including Fairview, Northern Heights and Homemont, located to the west and north of the Historic District. Also included in the proposed inventory is the area where Hillsborough expanded during the post-World War II era, especially along its primary thoroughfares of US 70 and NC 86 (Churton Street). This project will for the first time assess the Town's modernist residential and commercial resources, including the iconic Daniel Boone Village complex located along South Churton Street near Interstate 85. The inventory will include descriptions of each neighborhood with detailed architectural descriptions of 35 properties that are representative of the areas in which they are located.

The documentation of key resources outside of the National Register Historic District is the logical next step in the Town's longstanding effort to complete its overall historic resources inventory. The process of identifying and documenting the Town's significant newer resources will help increase community awareness of the importance of structures not traditionally regarded as being historic. This inventory will complement the current efforts of Orange County to complete its own historic resources inventory, now starting on the area within the Hillsborough ETJ. When completed, the project will provide essential material for the proposed publication of a book depicting the Town's historic resources through a joint effort with the Orange County Historic Preservation Commission. We also plan to incorporate the findings into our current GIS mapping system for planning purposes.

The Town proposes to contract with a highly qualified consultant to carry out the necessary project tasks, including field work, digital photography, data entry into the SHPO database, preparation of written entries, and creation of property files for each resource or group of resources. The projected

scope anticipates that an estimated 35 individual resources will be documented through this effort. The Town is prepared to provide matching funds of $5,000 toward the overall project budget of $12,500. (State awarded $10,000 total).

Meeting the Goals of NC's Historic Preservation Plan for 2013-2022:

The proposed historic resources inventory of the Town of Hillsborough, outside of the National Register Historic District, meets the goals of North Carolina's Historic Preservation Plan, primarily ***Section III: Identification/Designation***, as follows:

1. The completion of this project will bring to a close an effort to thoroughly document Hillsborough's historic resources that has been underway since the early 2000's.
2. The project will document resources that were not included in the Town's earlier inventory efforts, such as African American resources and the mill village, as well as resources dating from the post-World War II era, including mid-century modernist structures and Daniel Boone Village.
3. The project will generate new historic resources data to be integrated into the Town's planning process. The final findings will be entered into the Town's GIS mapping system to allow for the future review of the impact of new projects on historic resources in areas of the Town not protected by a local historic district ordinance. New data will be shared with the HPO to be incorporated into the HPOWEB GIS service and the state's environmental review process.

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Engineering

Public Hearing: ☐ Yes ☒ No

Date of Public Hearing: _____

For Clerk's Use Only
AGENDA ITEM #

8.I		
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Kenny Keel, PE, Town Engineer/Utilities Director

ITEM TO BE CONSIDERED

Subject:

Revise purpose descriptions for Water and Sewer CFF in the Town Code Chapter 14, Appendix A, Table A-1

Attachment(s):

Proposed ordinance for revisions to Town Code Chapter 14, Appendix A, Table A-1

Brief Summary:

Our capital facilities fees are intended for additional purposes that were not listed, so this revision includes them.

Action Requested:

Approve the Ordinance for Revisions to Town Code Chapter 14, Appendix A, Table A-1

ISSUE OVERVIEW

Background Information & Issue Summary:

Staff recently reviewed our capital facilities fees, and discovered that "reservoirs" and "sewage pump stations" were not specifically listed as examples in the purpose statements for Water Capital Facilities Fees and Sewer Capital Facilities Fees. The proposed ordinance corrects this oversight.

Financial Impacts:

None

Staff Recommendations/Comments:

Approve the Ordinance for Revisions to Town Code Chapter 14, Appendix A, Table A-1

AN ORDINANCE AMENDING CHAPTER 14, APPENDIX A, TABLE A-1

THE BOARD OF COMMISSIONERS OF THE TOWN OF HILLSBOROUGH ORDAINS:

Section 1. Chapter 14, Appendix A, Table A-1 is hereby amended as follows:

Additions to items 1 and 5 (revisions are noted in ***underlined bold italics***):

> "1. Water Capital Facilities. Purpose: To recover a portion of the capital costs of providing water system facility capacity. Examples: water lines larger than 8", water pumping stations, elevated storage tanks, ***reservoirs,*** and water treatment plant***s***."
>
> "5. Sewer Capital Facilities. Purpose: To recover a portion of the capital costs of providing sewer system facility capacity. Examples: sewer lines larger than 8", outfall and intercepter sewers ***off-***premises, ***sewage pump stations,*** and wastewater treatment plants."

Section 2. All provisions of any Town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

The foregoing ordinance, having been submitted to a vote, received the following vote and was duly adopted this the 12th day of December, 2016.

Ayes: _____
Noes: _____
Absent or Excused _____

_____
Katherine Cathey
Town Clerk

SEAL

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016
Department: Information Services
Public Hearing: ☐ Yes ☒ No
Date of Public Hearing: _____

For Clerk's Use Only
AGENDA ITEM #

	9.A	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT:

ITEM TO BE CONSIDERED

Subject:

Fiber network feasibility analysis

Attachment(s):

Fiber Network Feasibility Analysis Report

Brief Summary:

The report examines the costs and feasibility of making a public investment in a fiber optic communications network that would serve Town facilities and encourage third-party service providers to deliver network services to the public.

Action Requested:

Please provide staff direction:

- Is there further information the Board would like for us to provide?
- Is this a project the Board would like to include in the upcoming (FY18) financial plan?
- Is this a project the Board is excited about and would like to figure out a way to do it now?
- Other?

Would the Board like to consider an advisory committee to guide us on this project? If so, who would you like to engage (e.g. staff, citizens, Board members, etc.)? And at what point would you like for it to commence?

ISSUE OVERVIEW

Background Information & Issue Summary:

The need for faster internet connections and better communications between Town facilities continues to be an issue. Town facilities are not connected via a single network, rather each facility has its own network. This means the ability to share files and access software housed at other sites is limited, which impedes staff's ability to do their jobs efficiently and effectively. In addition, the Town has to purchase hardware (servers, phone systems, etc.) and services (licenses, internet, phone service, etc.) for each facility rather than centralizing everything and gaining economies of scale. Building a fiber network would allow the Town to address these issues.

In addition, if the network is designed and built so as to encourage a third-party service provider to deliver network services to the public, this could increase economic development opportunities and expand service options for citizens and businesses.

Furthermore, connecting the fiber of Orange County governments is an ongoing initiative. Orange Public & Education Network (OPEN) was formed within the last year to examine ways for Orange County governmental agencies to connect their fiber networks. The TJCOG has also been looking at this for its members. Connection allows for easier sharing of information, network redundancy, disaster recovery, etc. The Town has been participating in both of these initiatives. Building out our own network would allow us to partner with other jurisdictions and take advantage of these benefits.

Financial Impacts:
While lots of people want fiber in Hillsborough, it is really expensive. The estimates provided in this analysis are just that, estimates. The detailed engineering work would help to firm up these figures, but you never know what you're going to encounter once you start digging, so the full financial impact of the project likely won't be known until it is underway. CTC estimates that Phase I, connecting the majority of Town facilities and connecting the Town to two Orange County facilities, would cost $1.37 million. Phase 2, which would extend the fiber network through the southern portion of Town to connect the Waterstone Water Tower, Cates Creek Park and the future Public Safety Facility and increase the value to potential third-party service providers, is estimated to cost an additional $1.32 million. Fully funding the project would cost an estimated $2.7 million. Estimates are provided at the facility level, so it is easy to determine the financial impact of including/not-including a particular site. The Town has been in talks with Orange County about areas where we may be able to partner. The County is currently undergoing a similar study and we anticipate that we will have several routes in common. These routes may provide us with an opportunity to cost share, thus helping reduce the costs for both organizations. $1M debt financing was included in the current budget for this project, with the first debt payment scheduled for FY18.

Staff Recommendations/Comments:
No recommendations at this time. Please see the direction requested questions listed above.

ctc technology & energy

engineering & business consulting

Fiber Network Feasibility Analysis

Prepared for the Town of Hillsborough, NC

DRAFT | November 2016

Columbia Telecommunications Corporation

10613 Concord Street • Kensington, MD 20895 • Tel: 301-933-1488 • Fax: 301-933-3340 • www.ctcnet.us

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1 Executive Summary

This report examines the cost and feasibility of making a public investment in a fiber optic communications network to serve governmental facilities and business parks, and to encourage third-party service providers to deliver network services to the public. The Town of Hillsborough's ("the Town") goals include meeting its internal communications needs, increasing economic development opportunities, and expanding service options for residents and businesses.

1.1 Background

The reliance of local governments on their data networks and the Internet to deliver basic services is growing rapidly with the adoption of new Information Technology (IT) systems, Internet-based "cloud" services, and the ongoing convergence of disparate communications applications onto common, standards-based network platforms.

The drivers for government uses of network capacity are numerous. The Internet is becoming the predominant medium for many government transactions and services; traffic control systems are maximizing the efficiency of our roadways with vast networks of sensors, traffic signals, video cameras, and other intelligent transportation system components; electronic automation and monitoring increases the efficiencies and reliability of water and sewer utilities; and public safety communications networks are increasingly providing more advanced collaboration and situational awareness for first responders.

The dependence on the underlying physical communications infrastructure and associated electronics is not diminished as local government agencies become more high-tech. On the contrary, the demands placed on these networks increase as automation expands, greater amounts of digital data are created, and network-based communications tools are leveraged as a workforce multiplier. Hillsborough is no exception, as data communications requirements have grown rapidly in recent years and continue to grow. Whether carrying Voice-over-IP (VoIP) telephone calls, public Wi-Fi traffic, video surveillance images, educational video programs, or large Geographic Information System (GIS) datasets, numerous systems and applications that serve important roles in the Town's daily operations depend on the availability of network capacity and the reliability of network connections to function properly.

The Town relies on leased telecommunications services to connect to facilities. Most of the sites are served using cable modems from Time Warner. The Town recognizes that its needs may outpace affordable options from Time Warner and other commercial providers. As such, the Town hired CTC Technology & Energy (CTC) to assess the feasibility of constructing a fiber optic communications network to meet the Town's internal connectivity needs and to potentially facilitate wide-ranging economic development strategies.

1.2 Goals and Objectives

The underlying goals driving this assessment, as expressed by the project participants, are straightforward: Minimize costs to meet data connectivity needs, now and in the future, while providing a tool to promote economic development and capture external revenue streams.

The objective of this assessment is to identify the extent to which construction of fiber optic infrastructure is feasible as an approach to meeting the Town's internal connectivity needs and expanding economic development opportunities. While this assessment does not present a specific plan for capturing revenue streams from outside sources or promoting economic development initiatives, our cost estimates are based on a technical approach aligned with these goals.

Another Town goal is to attract a partner to build a fiber-to-the-premises (FTTP) network passing all residences and businesses in the community. That FTTP infrastructure would be the foundation for potentially delivering services of 1 Gbps and beyond.

1.3 Methodology

This report was researched and prepared in the fall of 2016 by CTC. Over the course of the engagement, CTC performed the following general tasks:

1. Facilitated requirements-gathering discussions with project stakeholders
2. Developed a candidate system-level fiber optic design and construction cost estimates
3. Prepared a business case analysis based on cost avoidance for current and future commercial data transport services to connect Town facilities
4. Initiated discussions potential Internet service providers (ISPs), regarding their interest in offering services in Hillsborough

1.4 Findings and Recommendations

CTC developed a high-level technical model for cost analysis purposes based on conservative assumptions for deployment. We expect our assumptions could be honed to further support the business case for a fiber network if informed by a more in-depth analysis of factors impacting construction costs and opportunities to leverage the network to promote economic development and generate new revenue streams.

CTC examined the feasibility of fiber construction in two phases. The first phase is construction of fiber optics to Town facilities to meet the Town's internal communications needs. The second phase adds redundancy to the network and expands its footprint to reach further into neighborhoods; the expanded network footprint could potentially spur third-party service providers to build an FTTP network to serve Town residents and businesses.

The technical model applies many cost assumptions to develop an estimated cost for construction. The cost assumptions include labor rates for underground conduit installation and

hard surface restoration, informed by our experience with construction projects in North Carolina and other regions around the country.

Fiber network operating costs incorporated into our analysis include only the incremental costs likely to be incurred for maintenance of the physical fiber plant, and generally assume that network administration staffing and contract support for network electronics would be equivalent whether the Town leases commercial data transport services or operates a private fiber network. This assumption is based on the fact that little or no change to the network electronics is required to leverage the fiber and, in fact, those electronics may simplify operations at this level of the network.

1.4.1 Costs for Constructing the Fiber Optic Network

The two phases results in approximately 17.5 route miles of fiber connecting all 12 designated Town sites and two County facilities.[1] Phase One (segments 1 to 11) is 9 miles of fiber construction and connects 10 Town sites and two County facilities. Phase Two (segments 12 to 14) is 8.5 miles and connects two Town sites and provides redundancy to the network as well as expands the footprint of the network to the southern part of Town.

CTC estimates the cost of constructing all three phases of the fiber optic network to be approximately $2.7 million, inclusive of outside plant (OSP) construction labor, materials, engineering, permitting, lateral installations, and testing. The table below illustrates the estimated costs for each phase.

Table 1: Breakdown of Fiber Construction Costs

Cost Component	Segments 1-11	Segments 12-14	Estimated Cost
Engineering	$161,500	$152,800	$314,300
Project Management / Quality Assurance	61,800	58,500	120,300
General Outside Plant Construction	967,100	909,700	1,876,800
Railroad, Bridge, and Interstate Crossings	53,000	158,900	211,900
Outside Plant Fiber Splicing	67,700	34,100	101,800
Fiber Termination / Building "Entrance"	66,500	8,400	74,900
Fiber Construction Subtotals:	$1,377,600	$1,322,400	$2,700,000

[1] See Table 3 for the list of sites.

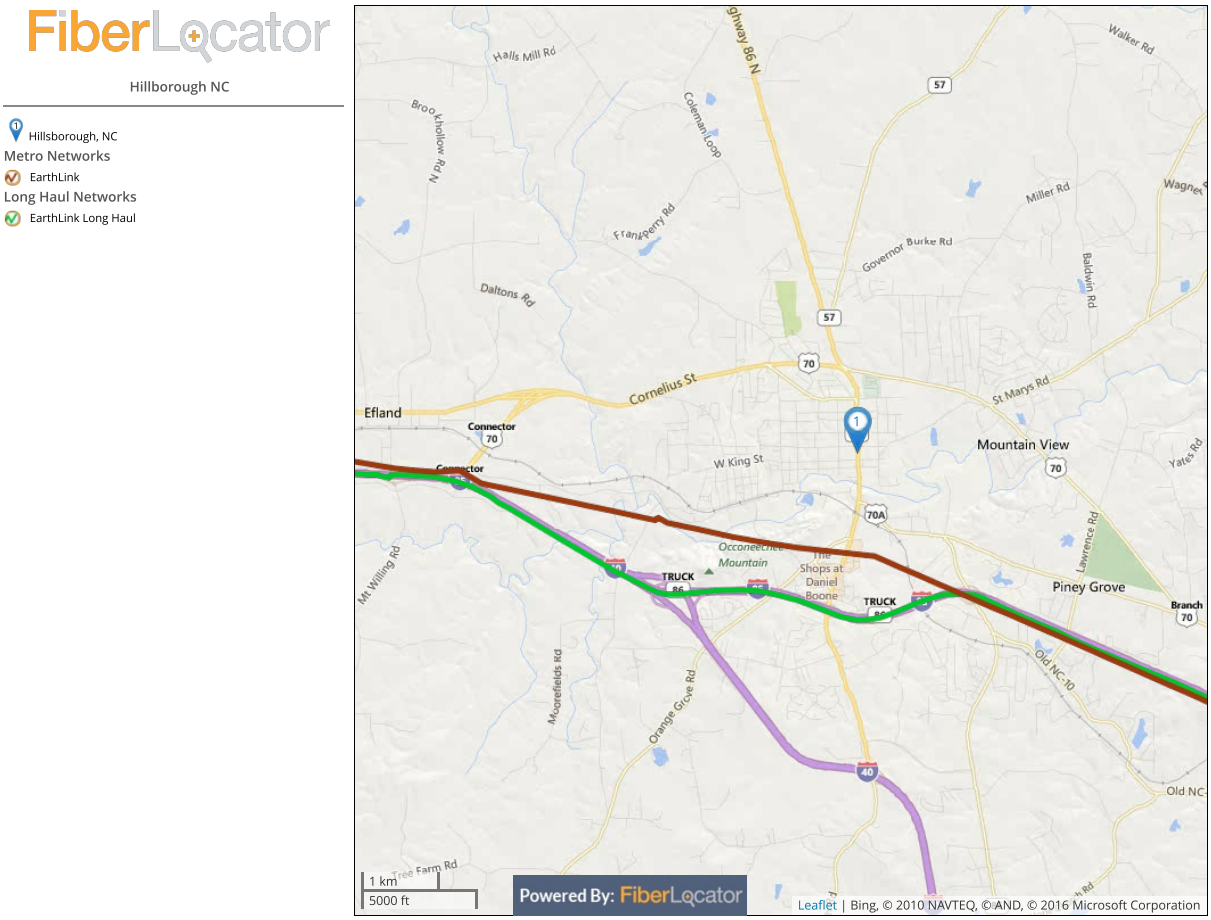
Actual costs may vary due to unknown factors, including costs of private easements, variations in labor and material costs, and subsurface hard rock. We have incorporated suitable assumptions to address these items based on our experiences in similar markets.

Please see Section 4 for more details, including a map of the proposed fiber routes.

1.4.2 Existing Fiber in Hillsborough Appears Scarce

We examined, with available data[2], what fiber exists in the region and in the Town. What we found was a Earthlink long-haul cable that is routed along I40-I85 and a Earthlink metro cable just south of US70. The identified fiber is shown in the figure below.

Figure 1: Existing Fiber in the Region



1.4.3 Building Fiber May Have Long-term Benefits for Economic Development

Building fiber may facilitate competition and delivery of advanced services by competitive service providers. By making spare fiber capacity available for lease, commercial providers may be enticed by the reduced barrier of entry into the Hillsborough market. The proposed fiber

[2] Based on data provided to FiberLocator by providers – see https://www.fiberlocator.com

would extend throughout the Town, touching nearly all subdivisions and business districts, potentially providing a backbone for delivery of residential FTTP and/or high-capacity enterprise services.

As reflected by our cost estimates and candidate network design, our recommendation is that the network be designed to facilitate fiber leasing, to the extent possible, to include fiber routes and access points to fiber and communications conduit that target business parks, and spare capacity of fiber and conduit to support the provision of future services to businesses and residents. Leasing fiber on a non-discriminatory basis might enable providers to compete over the fiber and would likely create some modest revenue. There is virtually no risk or cost to the leasing of fiber. Over time, the fiber network may serve as the basis for private investment in world-class broadband to all businesses and residences.

1.4.4 Market Demand for Broadband

As is typical of most suburban markets in the U.S., there is a range of carriers offering residential, small business, enterprise-grade, and carrier services in the Town of Hillsborough.

Service providers in the area offer, at some locations, fiber-based enterprise services. These services range from dark fiber connectivity to data transport services, with speeds that range from 1 Megabits per second (Mbps) to over 1 Gigabits per second (Gbps).

Based on what we have seen, the availability and pricing of enterprise-grade service offerings in Hillsborough appears to be on par with services in regions of similar size and urbanity. The Town has a small but reasonable mix of providers. Prices for services depend on bandwidth, location, and network configuration; whether the service is protected or unprotected; whether the service is managed; and whether the customer has a service-level agreement (SLA).[3] The pricing for enterprise-grade service has continued to drop over the last several years across the country and we expect the trend to continue in the surrounding region.

Residential and small business customers in the area have access to a range of services though individual service options depending on location. The main ISPs in Hillsborough are CenturyLink and Time Warner Cable[4].

The residential and small business services in the Town are not ubiquitous, unlike other communities that have municipal broadband service or an FTTP provider, like Ting, offering services. Though Time Warner Cable and CenturyLink offer high-speed services in Hillsborough, the availability of the service will vary based on location, and service was typically available only when there was a strong business case to warrant expansion to a particular location. Furthermore, the performance of these services appears to be less robust than those available in Holly Springs, Raleigh, and other communities in the region.

[3] An agreement between a provider and a customer that outlines certain parameters about the service an end user can expect; for example, an SLA may indicate that, in the event of an outage, the provider has a limited amount of time to restore service.
[4] Charter Communication is in process of acquiring Time Warner Cable.

In terms of pricing, we have seen communities with a municipality-backed service offering price gigabit services from $50 per month (in Longmont, Colorado) to $100 per month (in Westminster, Maryland), with low installation costs.[5] Google Fiber offers its residential 1 Gbps services at $70 per month and waives installation costs for customers that sign a 1-year contract (typically $100).[6] In comparison, Comcast's "Gigabit" service in other markets is $299.95 per month for 2 Gbps speeds, and requires a two-year contract, plus $1,000 in upfront installation and activation fees. We have not yet seen Time Warner or Charter offer a residential Gbps in their respective markets, and has been reported[7] that Charter will slow or freeze planned Time Warner Cable upgrades.

A mid-range product for business users is a key potential service gap in Hillsborough and across the country. Many businesses need greater capacity and reliability than a cable modem or digital subscriber line (DSL) can typically deliver. These businesses' connectivity needs force them to consider the typically much higher-priced enterprise service (MetroE, for example). Although these services meet their capacity and reliability needs, the one-time connection fees and recurring charges often exceed the businesses' available budget for connectivity services.

When looking at the demand for services, we need to examine what businesses and residences will need in the future. Just a few years ago, many thought that speeds of 1 Mbps would suffice for a residence or a small business. Now, these customers may require speeds from 100 Mbps to 1 Gbps. While analysts may disagree on the specific speeds required, they agree on the increasing demand for higher capacity and reliability of services. We have concerns and questions about the existing market structure's ability to support the growing needs of the residences and business in Hillsborough, especially compared to surrounding communities.

1.4.5 Residential FTTP—Example Deployment Costs

The Town may eventually consider deploying residential FTTP in addition middle mile design presented in this report. Considering this potential desire to serve residential users, whether with a Town FTTP invest or a partner, it is important to understand the potential costs associated with FTTP deployment.

We conducted a high-level analysis of the cost per passing[8] in various states in the U.S. including California, Colorado, Indiana, Kentucky, Michigan, Washington, and Wisconsin. As the name indicates, the "per passing cost" is the approximate cost to pass a premises with fiber optics. This cost does not include the cost of the drop cable or the CPEs; it is simply the cost to run fiber in front of a location. Our analysis showed an average per-passing cost of just under $1,400.

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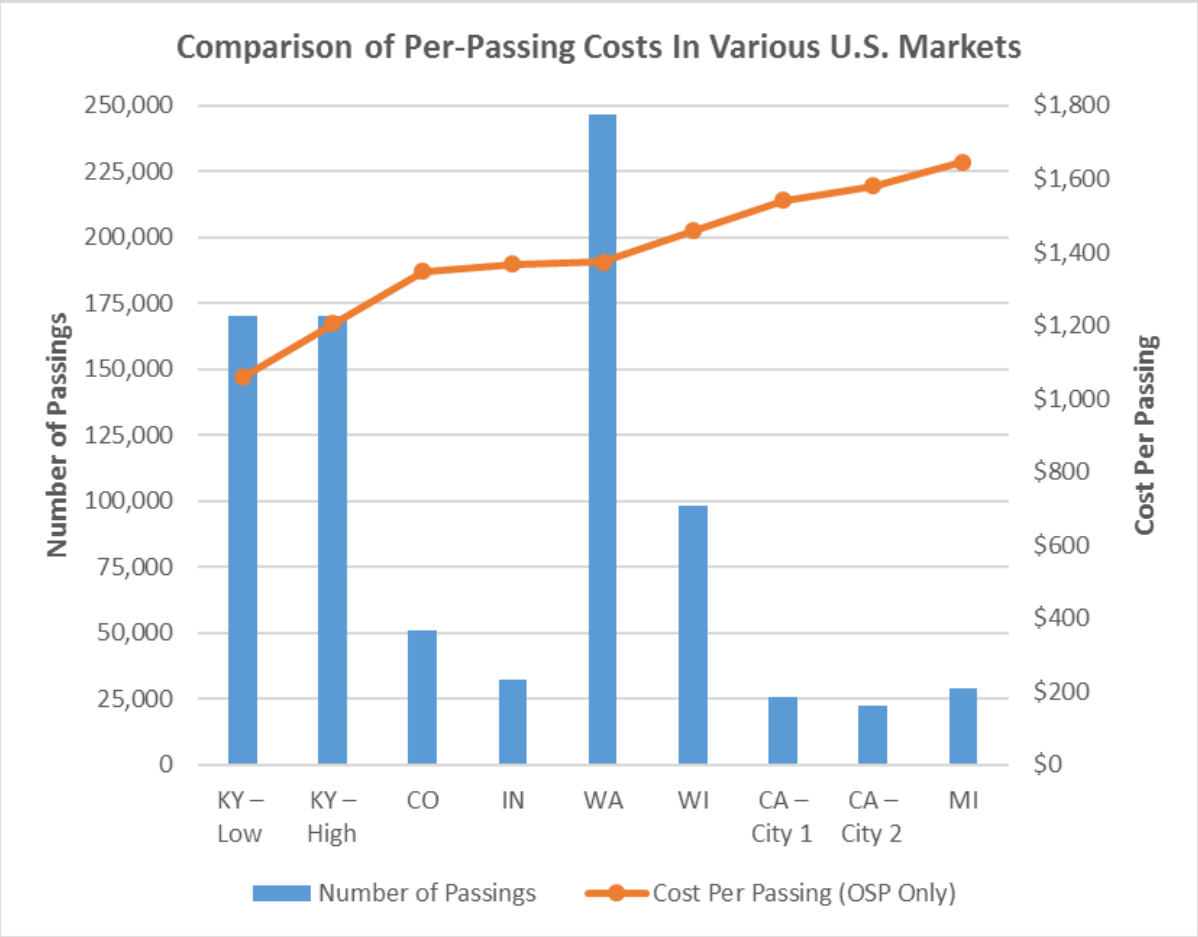
[5] In such cases, the municipality has made a substantial capital and/or operating investment in the network, which potentially enables lower service prices than scenarios of purely private investment.
[6] https://fiber.google.com/cities/kansascity/plans/
[7] http://www.dslreports.com/shownews/Charter-Confirms-Time-Warner-Cable-Broadband-Upgrades-Killed-137624
[8] A "passing" is a household or business that the fiber infrastructure passes (i.e., a potential customer).

It is important to note the per-passing costs ranged from $1,100 to more than $1,600; as such, we encourage localities to use caution when examining costs estimates from other communities. Actual costs will depend on housing densities, construction types, traffic control requirements, make-ready, and other factors.

Even with this caveat, the Town can begin to understand through other communities' experience the kinds of costs it may incur in an FTTP deployment that includes residential customers. Figure 2 below shows the range of costs that we considered from various markets throughout the U.S. Note that these examples point to a scenario in which only the FTTP outside plant (OSP) or the fiber and conduit associated with the network. These costs do not consider the expense to "light" the network, such as network electronics and customer drop cables, the fiber extension that connects a customer's premises to the fiber network.

Figure 2: Comparison of Per-Passing Costs in Various U.S. Markets



Given the above and assuming there are approximately 3,100 residential and business passings in the Town, the base FTTP investment[9] could range from $3.4 million to over $5

[9] Does not include fiber drop costs to the subscriber premises, CPEs, or network electronics.

million for a all underground network. Please note that the actual costs will vary according to a variety of unique conditions (housing density, construction type, make-ready for overhead, soil conditions, etc.) to the Town of Hillsborough. The project scope did not include a more detailed FTTP cost estimate.

1.4.6 Potential Partnerships and Next Steps

Although the community has a desire for better access to broadband, Town staff and community representatives have indicated there is little interest in seeing the Town directly enter the market as a retail service provider. In addition, we understand that existing North Carolina legislation has restrictions regarding this model.[10] Furthermore, offering retail service is complex, and in light of the partnership options potentially available, there is little reason for the Town to take on this level of risk.

There are three basic types of partnerships emerging today:

- **Private investment, public facilitation**: This model focuses on modest measures the public sector can take to enable greater private sector investment, rather than on public sector investment.
- **Private execution, public investment:** This model, which involves a substantial amount of public investment, is a variation on the traditional municipal ownership model for broadband infrastructure, but with private rather than public sector execution.
- **Shared investment and risk:** In this model, localities and private partners find creative ways to share the capital, operating, and maintenance costs of a broadband network. The evolving structure of this model, referred to as a "dark FTTP partnership," is described further below.

Discussions with Town staff and community representatives indicate that the preferred model is the "private investment, public facilitation" approach. In this approach, the Town would encourage private investment in an FTTP infrastructure by facilitating make-ready for overhead construction, streamlining permitting and rights-of-way (ROW) access, enacting dig once policies, and other actions. In addition, the "private investment, public facilitation" approach can also be encouraged with a strategic Town investment in a middle-mile fiber deployment as presented in this report. This is the model currently underway in the Town of Holly Springs, North Carolina, with its private partner Ting Internet (see case study presented in Section 3.2.1.4).

We held preliminary discussions with Ting Internet, in which company representatives expressed muted interest in exploring the possibility of constructing FTTP in Hillsborough. Based

[10] CTC does not provide legal advice; the Town should seek guidance from qualified legal counsel on issues related to State law.

on our experience exploring potential private partnerships on behalf of other public sector clients nationwide, we also expect possible interest from Axia FibreNet (see Section 3.2.1.2 for a brief overview of Axia and Ting)—though we note that neither have expressed strong interest in building in Hillsborough. We recommend that the Town initiate formal discussions with these companies to better assess their potential interests.

If the Town is unable to attract a private FTTP investment, we believe that the next model most aligned with the Town's objectives is the "dark FTTP partnership," which is a "shared investment and risk" approach. In a dark FTTP partnership, the Town would construct and own the fiber network, while a private partner would "light" the fiber with electronics and directly serve the end users. This model is currently underway in the City of Westminster, Maryland,[11] with its private partner Ting Internet (see case study presented in Section 3.2.3.1). The City of Huntsville, Alabama, announced a similar model this past summer with its private partner, Google Fiber.[12]

This model presents risk to the Town because it requires a substantial capital investment to build (or expand) and maintain the fiber network, but it also provides control because the Town will own the network. In the event that the partnership fails for any reason, the Town will own its assets and can take control of the network, either directly or by engaging a different partner.

[11] Wiley Hayes, "Westminster, Md. Partners with Private Sector to Broaden Fiber-Optic Network," *GovTech*, last modified October 26, 2015, http://www.govtech.com/dc/articles/Westminster-Md-Partners-with-Private-Sector-to-Broaden-Fiber-Optic-Network.html.

[12] Frederic Lardinois, "Google Fiber Is Coming To Huntsville, Alabama," *Tech Crunch*, last modified February 22, 2016, http://techcrunch.com/2016/02/22/google-fiber-is-coming-to-huntsville-alabama/.

2 An Overview of Local Government Interests in Fiber Initiatives

2.1 Why Local Government Users Need Fiber

Reliable high-speed networks are critical to the changing needs of local governments, with a specific emphasis on law enforcement and public safety agencies, including security around business districts, critical public infrastructure, and public recreational facilities. There are numerous applications for local officials to use in this area. In addition to the many wireless applications that can help emergency personnel cut precious seconds off their response times, robust wireline networks play a critical role in public safety due to their speed, bandwidth, and reliability.

Criminal arraignments can be conducted using videoconferencing technologies, saving the government thousands of dollars and avoiding the dangerous task of transporting prisoners. Traffic systems, including traffic signals wired with fiber optics, can be monitored and adjusted in real-time in response to traffic incidents. Highway accidents, weather events, and other emergencies can be broadcast to thousands of users simultaneously through public alert systems via email or text message. The improvement to efficiency in public safety created by high-speed network service is hard to overstate.

During large-scale regional emergencies, secure multi-party communications are often required, and wireless facilities may become overwhelmed and unusable. Many local jurisdictions nationwide have taken steps to address these needs. For example, the National Capital Region, comprising Washington, D.C. and the surrounding jurisdictions, built a fiber optic interoperability network known as NCRnet. Built for "security, reliability, and high bandwidth," NCRnet was created specifically to address the needs of first responders and emergency support personnel.[13] The high-capacity and redundancy of the fiber network structure lends itself to reliable videoconferencing capacity, ensuring the ability for real-time coordination during a regional emergency.

Aside from public safety purposes, day-to-day use of government enterprise applications deployed using virtualization, including those leveraging cloud-hosted and distributed architectures, turn reliable networks into a basic government requirement. In schools and governments for example, desktop virtualization leveraging the deployment of "thin" clients can substantially lower IT support costs, but require very robust network architectures ensuring low-latency and reliable transport of data.

The variety and scale of government applications demands the big bandwidth that fiber provides. As populations grow, institutional broadband needs will grow accordingly, and as data storage and applications move off of conventional hard drives and into the cloud, government

[13] http://www.broadband.gov/docs/ws_pshs/pshs_afflerbach_reference.pdf

institutions will become increasingly bandwidth hungry. These realities point to the need for future-proof institutional network infrastructure, which fiber provides.

2.2 Local Governments Have a Long-Term Record of Successfully Operating Fiber Networks for Government Use

Hillsborough and its institutional partners' desire to examine the feasibility of constructing fiber optic infrastructure is part of a broader trend among local governments. Indeed, localities have exercised significant leadership in broadband innovation in the United States. For more than 15 years, a significant minority of localities have chosen to build or purchase fiber for themselves.[14]

In this model, the locality negotiates, purchases, or constructs fiber optics to serve its own needs and those of its local community anchor institutions (CAIs)—connecting over fiber entities such as schools, libraries, public safety departments, and government buildings, and perhaps senior centers, public housing projects, or healthcare institutions. This is the model Hillsborough is contemplating.

Hillsborough is among hundreds of communities that have considered or implemented low-risk fiber deployment strategies. In North Carolina, these include Holly Springs, Raleigh, and Wilson. Outside North Carolina, these include San Antonio, New York City, Chicago, Los Angeles, Atlanta, Seattle, San Francisco, Washington, D.C., Boston, and hundreds of suburban and rural Cities and counties.

We anticipate that this trend, which has continued unabated over the past decade and a half, is likely to continue into the future. The Broadband Technology Opportunities (BTOP) grant program under the federal Recovery Act has, in some parts of the country, accelerated this trend by enabling localities and regional consortia to build more fiber to public sector and other anchor institutions. American communities are increasingly interested in this type of network to achieve self-reliance in communications, and treat broadband and Internet access as the critical "core utility" that it is.

2.3 The Functional and Technical Benefits of Fiber Network Ownership

The majority of the communications networking needs among the Town, the School Districts, and the Park District are currently met through leased circuits and dark fiber provided by Comcast. This approach has some benefits, for example, it does not require internal staff or contractors to maintain physical fiber optic outside plant, its upfront costs are lower than constructing fiber, and the time to deployment can be shorter. Leasing, however, has critical disadvantages that make it much less desirable than Town-owned or consortium-owned and

[14] These internally focused projects contrast to those that are public-facing: networks built by public entities for the purpose of serving residential and business consumers where the private market has failed to deliver adequate service or has failed to deliver competition.

operated fiber, particularly with respect to scalability, network security, continuity of operations, and support of public safety and emergency support services. Specifically:

- Leased services and fiber infrastructure do not offer total control and management over the network
- Commercial providers may not allow for direct evaluation of the reliability or availability of a leased circuit because critical information required for this analysis is generally considered by commercial carriers to be proprietary and confidential
- Leased services are not independent of the networks used by the public, and are therefore less secure and reliable
- Leased services and fiber infrastructure generally cannot offer the customer complete control of network security between end points

Each of these items is addressed in detail below.

2.4 Ownership Provides Control Over Facilities and Management

A network built upon leased network services obtained from a service provider cannot provide the control and management that is available in network that is owned end-to-end by the Town and/or its institutional partners.

Leased network services are a “black box” in terms of control and management. The customers are forced to rely on the provider to maintain and operate the core equipment supporting a leased service (these tasks include configuring the equipment, monitoring the hardware and physical infrastructure, and performing routine maintenance).

The internal connectivity requirements of the Town, School Districts, and Park District include video, voice, and data communications. Both voice and video services usually require dedicated bandwidth. Two-way voice and video services require dedicated bandwidth and very predictable transmission delay properties.

In other words, linking two-way radio communications systems or supporting videoconferencing or Voice-over-IP (VoIP) services requires the ability to manage bandwidth across the entire network. Although this functionality can be provisioned on the edge device when using a managed service provider for connectivity, if the Town owns and operates its own fiber network, it will have control and capability to increase bandwidth based on the Town’s time frame (in turn allowing the Town to properly plan for integration of new applications without an increase in cost for provisioning of new bandwidth). Further, it offers the ability to implement advanced Quality of Service (QoS) mechanisms that are enforced on a network-wide, end-to-end basis.

Under the leased model, each customer must request (and pay for) the private company to make changes in the core of the network for a new application, increase bandwidth, or to implement new policies for enhanced QoS. Comcast generally offers three tiers of QoS for its Metro Ethernet service offering – "Basic," "Priority," and "Premium" – meaning that in the event of congestion in the Time Warner network, certain customers' traffic will have priority over others, and some packets of data may get intentionally discarded by the network switches and routers where the congestion is occurring. This may have minimal impact to standard web-browsing, or even large file transfers over the network where periodic slowdowns can be tolerated, but it may mean dropped calls, unintelligible audio, and/or choppy or frozen video where VoIP and videoconferencing are concerned.

Under the leased model, the Town and its partners are also unable to control who manages and maintains the core of the network. The knowledge, skill set, and security background of those operating the network is often beyond the control of the Town.

With a private fiber optic network, each piece of the communications network is controlled and managed by the Town and its partners, who may choose to operate the network on their own with internal staff, or outsource the operations to a contractor. Either way, choices regarding the management of the network stay in the hands of the Town, School Districts, and Park District, not the cable company or the phone company.

2.5 Ownership Facilitates High-Availability and Reliability

The "availability" of a communications link is derived from the probability of a failure within the network between two points and the amount of time it takes to repair a problem. In a leased circuit network, the end user is not aware of all of the potential risks to availability of the network. Several key factors that affect availability, but which generally cannot be determined by the customer of leased services, include:

- Physical diversity in the outside cable plant paths
- Physical diversity in the building entrances
- Physical redundancy in the networking equipment
- Ensuring network equipment is properly configured and regularly tested to take advantage of hardware and link redundancy
- Redundancy for power and HVAC systems necessary to support network electronics
- How many facilities the circuit crosses between endpoints
- Whether the plant is located underground or aerial
- Who has access to the core networking equipment and plant
- The core equipment's age and maintenance
- How the system is monitored and maintained
- The single points of failure in the communications link

Many of the factors can be approximated and relative numbers may be obtained from the leased circuit provider, however for critical services impacting costly business functions or

public safety, the approximations and availability estimates from leased network services may not meet the availability requirements of critical traffic networks. In the case of physical architecture issues, such as the physical routes of cabling, approximations are not sufficient, and detailed maps are usually considered proprietary and confidential to a commercial provider.

In addition, lessees are subject to the provider's schedule for repair and maintenance of the circuit. Although it may be possible to include provisions in the service level agreement (SLA) for special priority service restoration, it is possible that a provider may not be able to adhere to SLAs during major disaster events, or SLAs may specifically exempt the carrier from meeting their normal obligations during these events. Furthermore, there may be no way to ensure that a leased circuit for a critical site is the first link to be repaired during a major disaster.

A similar problem can arise in both scheduled and unscheduled maintenance of a leased circuit. The timing of these maintenance windows may not correspond to convenient downtimes for the customer. In a Town-owned fiber network, maintenance downtimes can be coordinated to minimize impact, and the Town can prepare for an outage by adapting operational procedures. With a School-owned network, maintenance can be scheduled after business hours, and well away from important dates for standardized testing.

SLAs often guarantee availability and repair time, but typically are not reliable in the event of a major disaster. In addition, service providers usually rely on credits against service fees to compensate for network outages to the network—an unacceptable solution in the case of public safety, where cash cannot compensate for lost service. In other words, SLAs are incentive management frameworks, not actual guarantees against downtime, and SLA providers therefore have a financial interest in prioritizing commercial clients where the loss in compensated credits would be greater, thereby potentially delaying service restoration for public and government clients.

2.6 Private Fiber Networks Offer Independence from Public Networks

A privately owned communications network does not rely on physical infrastructure, equipment, or other resources that also carry public traffic for residents and businesses. Shared resources are used by a managed network service provider to reduce their cost by taking advantage of the statistical nature of packet-based data. In other words, commercial carriers intentionally oversubscribe the capacity of their networks to minimize costs (maximize profits), because all of their customers are not likely (statistically speaking) to simultaneously use their services to full capacity all of the time. The advantage of an independent network is that increases in public traffic on the network or public network outages do not impact privately-owned networks.

Only a network provisioned with no oversubscription can guarantee that there is always sufficient capacity to meet maximum demand of all users and applications simultaneously, rather than provisioning based on average utilization. This is less cost-effective for a commercial provider, and tends to drive costs upwards for "dedicated" services. Some leased managed

services incur charges on a metered basis for the bandwidth that is used. Typically, these services are only cost-effective when institutions have a specific understanding of their applications' bandwidth requirements. A Town-owned fiber network will provide a more reliable, higher capacity, flexible network infrastructure because it is designed to support a broad range of initiatives, and can easily and seamlessly scale to meet new bandwidth requirements.

As is the case in many major public safety incidents, public networks like the Public Switched Telephone Network (PSTN) and the Internet are often overloaded by the amount of traffic on the network. This can lead to busy signals on the PSTN and a lack of connectivity on the Internet. Privately owned networks typically do not experience the same traffic increases, and can be designed to handle any expected traffic increase during a major incident.

A private fiber network can prioritize bandwidth both in the core and at the edge. This capability allows the Town and its Partners to prioritize by location and to preempt all traffic other than for the most critical services, if necessary. More importantly, the fiber infrastructure can be allocated so that sensitive traffic always has dedicated capacity, because capacity can be readily scaled as needed for other applications.

2.7 Fiber Ownership Offers Control over Network Security

Implementation of network security on a leased circuit typically occurs at the edge of the network. Many leased network customers use end-to-end encryption to securely transmit data over networks that share infrastructure with other customers. On a privately-owned fiber network, the owner(s) can control end-to-end security throughout the network infrastructure. Traffic can be segmented among different user groups and provide more robust security without necessarily needing to rely on costly and often performance degrading encryption technologies.

In addition to data security, a privately owned network will allow the Town, School Districts, and Park District to manage physical security as well as network security. This includes:

- Access to facilities and networking rooms
- Passwords to edge equipment and firewalls
- Network access and authentication
- Monitoring of networking rooms, including security alarms, surveillance cameras, etc.
- Equipment placement and provisioning

3 The Balance of Goals, Priorities, and Partnerships

3.1 Balance of Goals and Priorities

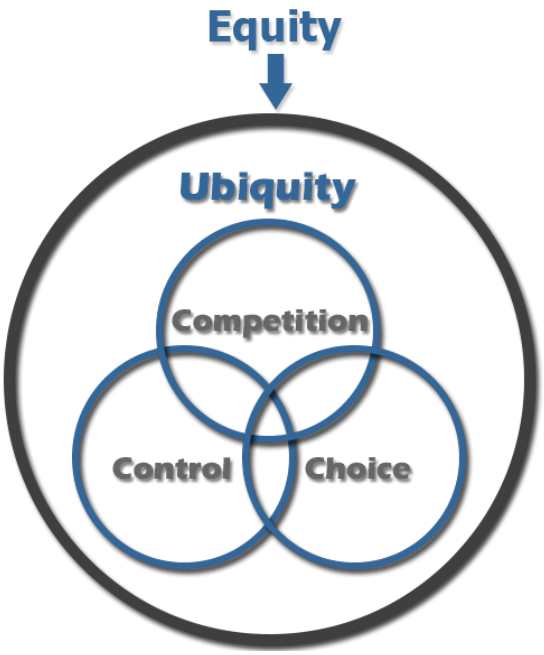
3.1.1 Community's Core Objectives

When setting specific goals and objectives for the Town, we often look at the range of goals and objectives we see across the county. These typically include:

- **Equity:** Alignment digital divide goals
- **Ubiquity:** Service is deployed to the entire Town
- **Competition in the marketplace:** Enabling multiple providers to compete
- **Consumer choice:** Citizens can purchase service from various providers
- **Control:** The Town has a long-term stake in the asset

Ubiquity, which refers to designing and building the network so that it connects every residence, business, and institution in the community, is consistent with and often upholds the community's equity initiatives. Incumbent providers have often built only to the most affluent areas of a community where they are sure to see a return on investment (ROI), a practice known as "cherry picking". Often communities aim to ensure that none of its residents, businesses, or community anchor institutions (CAIs) is excluded from access to broadband service. Ubiquity is a means to achieve equity, and is often the foundational to the community's broadband initiative.

Figure 3: Equity Informs Ubiquity, Which Aligns with Choice, Competition, and Control



Competition in the marketplace and consumer choice are complementary objectives, and are often sought through a pursuit for open access. Many communities prioritize open access as an essential, nonnegotiable objective, but at the core of the pursuit for open access is a desire for competition and consumer choice. We have noted that it may not be necessary to focus on open access in the traditional sense, and by seeking creative ways to foster competition in the marketplace, the Town potentially increase consumer choice.

Control of the assets is another important Town objective, and one that will be a fundamental aspect of any partnership agreement. It is important for the Town to understand what "ownership" really looks like, and what it considers important assets over which it would like to retain control.

3.1.2 Understanding Competition and Open Access

A desire for increased competition in the marketplace is often at the root of the goals that drive a public entity to seek ways to expand access to ultra-high speed broadband connectivity. This can potentially be achieved through "open access," which has traditionally meant one infrastructure that is available to multiple providers to offer service. Open access networks are meant to enable numerous providers to deliver service over the network, thus fostering competition, and to give consumers greater choice and flexibility in picking a provider.

Open access is most easily achieved if a community builds and owns a network itself, because it is then in a position to set terms for private lessees of its fiber that could include open access. But some forms of open access may be possible even under the pure private investment model.

It is essential to note that creating the potential for open access does not mean that actual competition will emerge over that platform, particularly over the short to medium term, given the economics of broadband competition, but the potential exists.

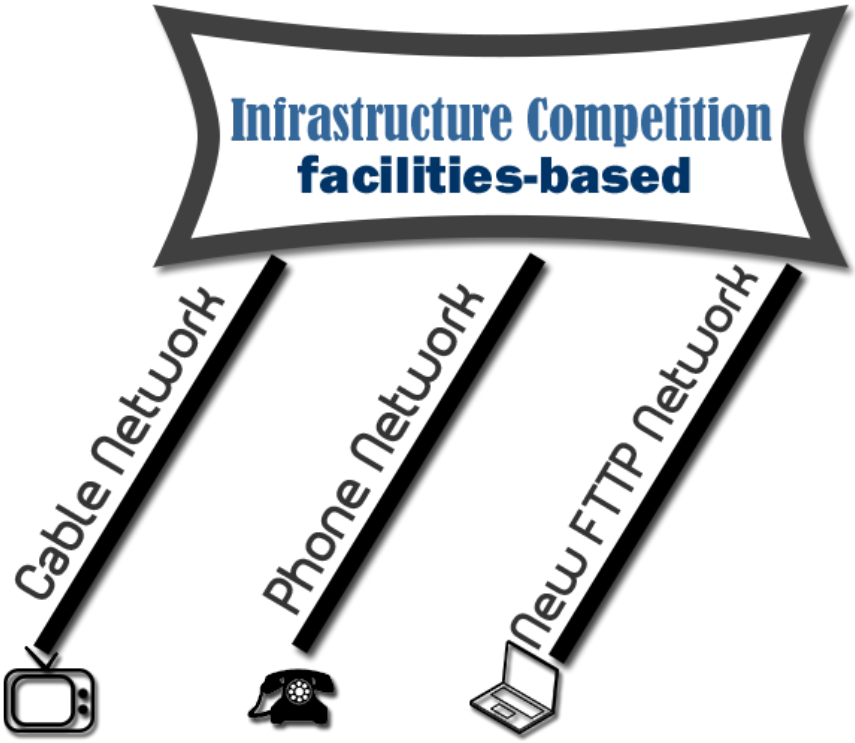
There may be other ways for the Town to achieve its open access goals, too. The Town may find that it can concede on providing infrastructure-based open access if it can ensure that the community's goals with respect to competition are met. Indeed, the primary goal of developing an open access network is to level the provider playing field to reduce monopolistic and oligopolistic practices by incumbents, and to give consumers greater choice in service providers. Pursuit of a traditional open access model may not be necessary to achieve better competition. Rather, competition over the data pipe (known as Over the Top competition) and over multiple network infrastructures (known as facilities-based competition) can serve to enable real competition, thus reducing the need to provide access to physical infrastructure in order to promote and support competition.

3.1.2.1 Facilities-Based Competition

While it is frequently derided by open access advocates and is not economically efficient, we suggest that the Town not discount the benefits of achieving competition through facilities-based competition. In this scenario, competition is achieved when multiple separate entities develop their own separate networks and physical pathways to reach the customer.

Most private providers are usually not interested in granting access to their expensive infrastructure for companies that will then compete with them over it, so each of these networks is likely to host only one Internet Service Provider—the network owner.

Figure 4: Facilities-based Infrastructure Competition



This approach is not efficient because it requires a large capital expenditure by each network owner and robust competition over separate facilities has not emerged for the most part in the U.S., unless one considers the modest duopoly-competition between phone and cable companies to constitute "competition."

But the past five years have brought new competitive networks and new competitors into the broadband market, led by a range of municipalities and by Google Fiber. For cities that have had the benefit of a third provider in the market (whether public or private), facilities-based competition has begun to work, particularly as the incumbents have started to react to competition by investing, upgrading, and improving services and prices.

As a result, we believe that Hillsborough could likely to see the benefits of competition from the development of an FTTP network through a partnership, even if open access over that network does not emerge.

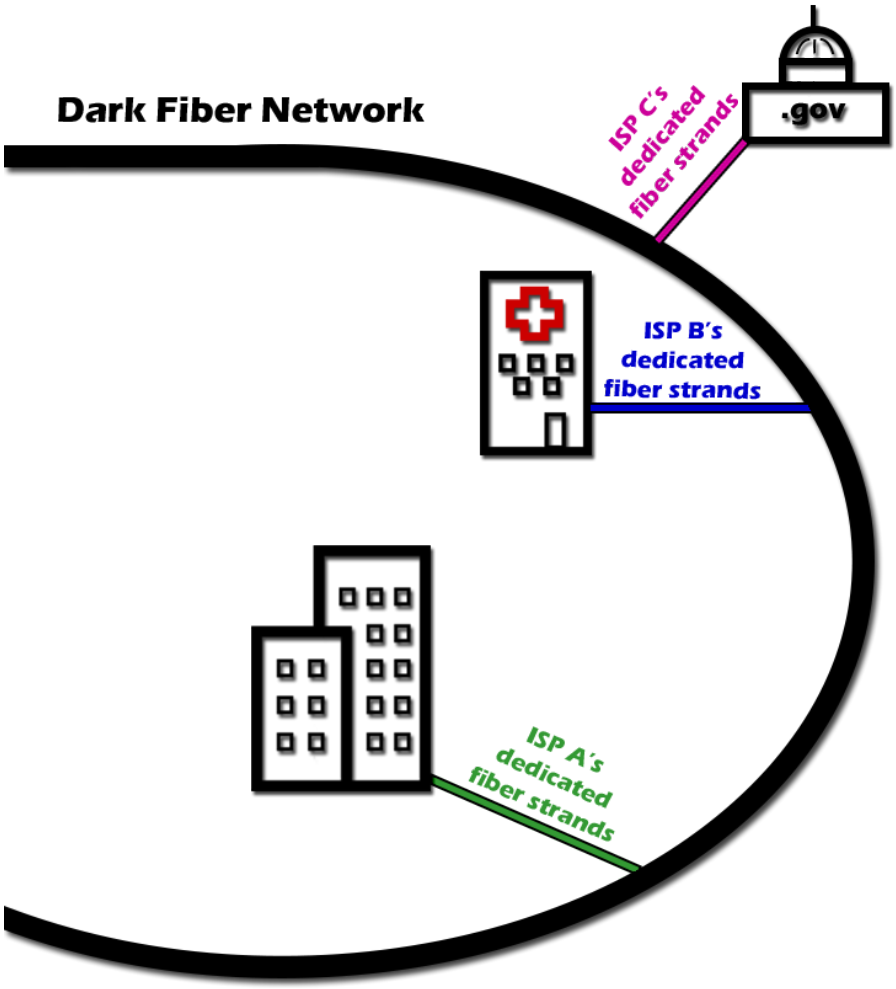
3.1.2.2 Competition at the Dark Fiber Level

Dark fiber open access enables private providers to offer services without having to construct their own infrastructure. Instead, ISPs can enter into dark fiber lease or indefeasible

right of use (IRU) agreements with the network owner, and the ISPs can then offer retail data, video, and voice services over the network.

In a dark fiber model, there is one fiber network infrastructure, and one or more ISPs pay the network owner for access to dedicated fiber strands that the ISPs can use at their discretion (Figure 9).

Figure 5: Competition Over a Dark Fiber Network



This model requires each ISP to "light" the dark fiber by investing in network electronics to provide service over the network. While the cost to install electronics is a lower upfront capital investment than paying to deploy and maintain fiber, electronics costs are still a significant expense for an ISP. This is especially true given that the equipment the ISP owns must be replaced, multiple times over the lifetime of the dark fiber. Equipment may be refreshed every five, seven, or 10 years—and possibly more frequently, depending on advances in technology.

The ISPs will face many other significant costs to compete in the market, even with access to ubiquitous dark fiber. For example, none of the traditional costs for billing, collections,

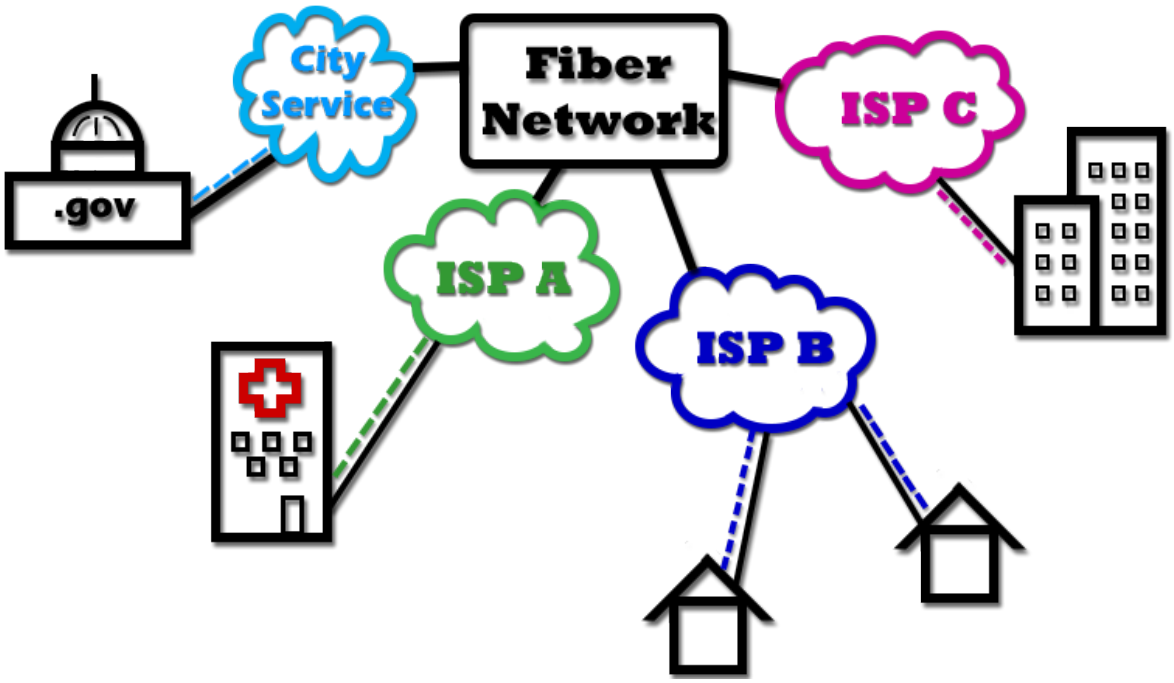
marketing, and sales are removed by dark fiber access, nor are costs for customer service. Further, this model may also require the ISP to pay some portion of the cost to install a fiber drop from the dark fiber network at the curb to the home or business of a potential customer it wishes to serve.

As a result, the ISP still has considerable costs to enter the market, thus making multiple-ISP competition at the dark fiber layer more challenging, particularly given that the market has a finite size and that each additional competitor is competing for the same set of customers currently served by the existing providers. For these reasons, we are not optimistic about the potential for multiple-ISP competition over dark fiber, at least in the short- to medium-term. In the long run, the market is likely to change dramatically, and dark fiber open access could enable all kinds of new innovators to offer competitive services.

3.1.2.3 Competition at the "Lit" Services Level

Another option to enable competition is to allow ISPs to compete over a "lit" fiber network—this lowers the barriers to market entry by removing the cost of fiber, electronics, and maintenance, thus allowing more ISPs to compete in the marketplace. In this scenario, the network owner lights the fiber and ISPs compete at the virtual network layer instead of at the physical layer (Figure 10).

Figure 6: Competition Over a Lit Network



In this model, consumers could hypothetically choose which service provider they want to engage by simply clicking a button on a Web interface from the comfort of their homes. The idea is that many ISPs will be able to compete to be a consumer's chosen service provider, and

the ISPs can enter the market without having to make large investments in fiber infrastructure or network electronics.

The underpinnings of the traditional open access model are a desire for competition and consumer choice. A lit services model can support both.

That said, it is important to note that even if the barriers to entry are reduced through this model, there is no guarantee that many new competitors will emerge in the near-term. Indeed, it may not make sense for smaller ISPs to operate in a market where there are several other competitors and where customer acquisition and retention costs are correspondingly high.

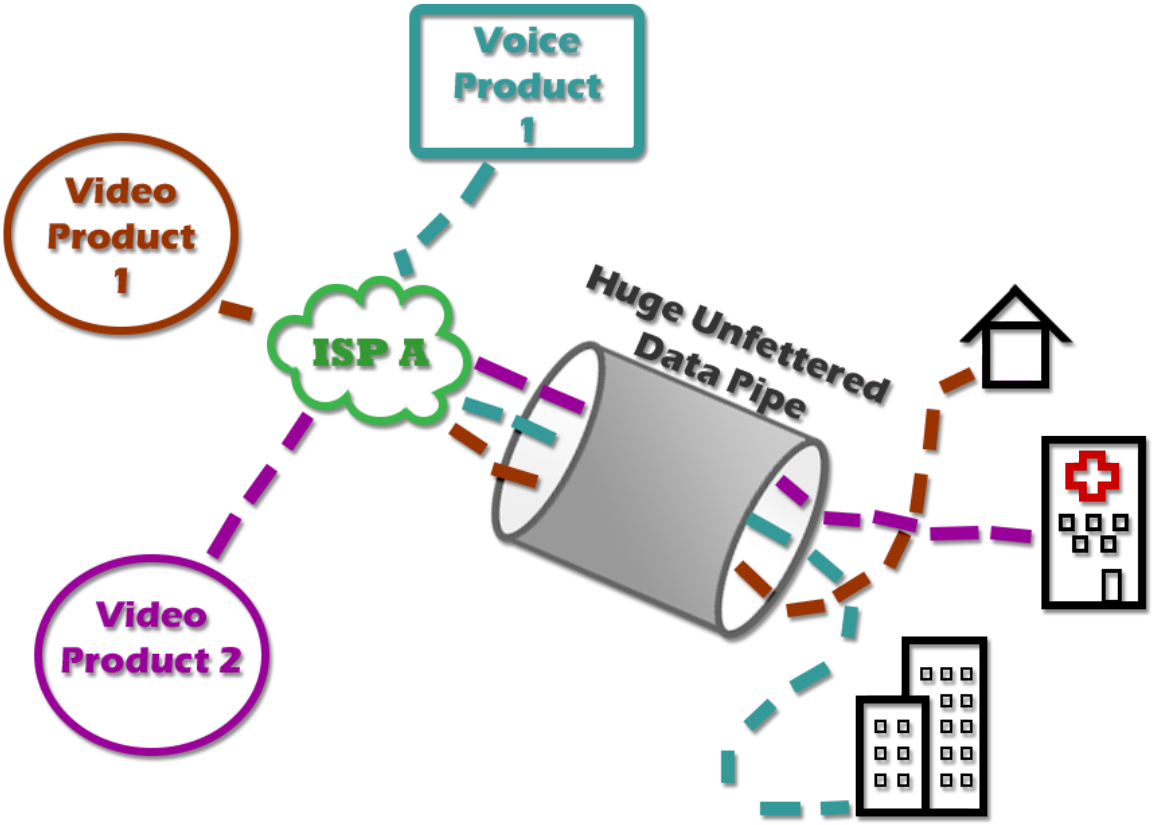
3.1.2.4 Over-the-Top Content Offers Service-Level Competition and a Variation on Open Access

Another way to potentially achieve the Town's open access goals is to enable multiple over-the-top (OTT) providers to offer various services over a high-capacity data network. OTT content (typically video and voice) is delivered over the Internet by a third-party application or service that uses a robust, (ideally unfettered) data connection.

OTT content delivery is particularly effective over ultra-high-speed fiber optic broadband networks that are provisioned for affordable data service at 1 Gbps speeds and beyond, operated by service providers that do not put constraints on consumers' access to data. Such high-capacity networks can support a variety of OTT applications to meet consumers' needs. Consumers are likely to pursue alternatives to conventional video and voice services as additional and increasingly varied content becomes available OTT, and as access to high-speed data connections becomes more prominent and affordable.

A large, unfettered data connection can thus serve to meet the competition goals typically associated with open access networks.

Figure 7: Over-the-top Competition



As OTT programming and applications become increasingly prevalent, the need for traditional open access, which relies on access to infrastructure—and all the operational details and costs associated with it—is reduced. The Town may find that it can achieve its open access goals of promoting competition and consumer choice through alternative means. If the Town builds a ubiquitous network, and then partners with a private entity to manage operations and provide an unfettered data service, this introduces a new competitor into the market and drives competition at the applications layer.

3.1.2.5 Evolving Over-the-Top Providers

The concept of OTT or "value added" services took hold in the voice market first, as consumers sought alternatives to traditional landline service without being locked into long cell phone contracts—Voice over Internet Protocol (VoIP) providers offered a middle ground. VoIP providers like Vonage emerged in the early 2000s and continued to increase in popularity along with consumers' desire for greater choice. Prior to becoming the videoconferencing-focused service it is today, Skype started with voice service that allowed consumers to make inexpensive

or free calls domestically and internationally with their computer, a data connection, and a headset.[15]

Different OTT services have begun to emerge and evolve rapidly in the video market as consumers increasingly ditch cable service in favor of streaming video,[16] and providers clamor to compete with each other in response.[17] There are numerous established services and applications that will likely continue to promote change in the cable industry and drive an increase in consumers' desire for greater choice and control over how they access content. Standalone media-streaming boxes like Apple TV and Roku have enabled consumers to stream content with applications such as YouTube, Netflix, and Hulu without a cable subscription since 2008.[18,19] These "cord-cutters" cancel their cable subscriptions in favor of accessing their favorite content via applications and services streamed over the Internet—OTT content.

Since the debut of Apple TV and Roku, similar devices like the Amazon Fire TV stick and Google Chromecast have entered the market, allowing consumers greater choice. Furthermore, consumers can now purchase smart TVs, which come with preinstalled platforms that support streaming applications and require no additional hardware. With only an Internet connection, consumers can stream movies, music, news, TV shows, movies, and even play games.

Some streaming video services strive to emulate cable television without the hefty price tag, long contracts, and notoriously subpar customer service that traditional cable providers are known for.[20] Other services specialize in one type of content, like only offering documentaries or movies. The OTT video market has exploded in recent years as consumers continue to seek alternatives to traditional video services, and content providers nimbly adapt to consumer demand. Providers like Amazon, Hulu, and Netflix have continued to tailor their approach through efforts like creating original content to supplement traditional content offerings.[21] Such content easily rivals traditional television programming; some OTT provider original series have been nominated or won Critics' Choice, Emmy, Golden Globe, People's Choice, Screen Actors Guild, and other awards. Even tech giant Apple may begin producing original content.[22]

In 2015 alone, several companies began offering standalone streaming or providing access to content through new streaming services. HBO and Showtime both began offering access to their content through directly streaming via subscription service in 2015.[23,24] In addition to an

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[15] Doug Aamoth, "A Brief History of Skype," *Time*, last modified May 10, 2011, http://techland.time.com/2011/05/10/a-brief-history-of-skype/2/.
[16] http://www.consumerreports.org/cro/tvservices/more-people-are-cutting-the-pay-tv-cord
[17] http://techcrunch.com/2016/05/02/hulu-to-compete-with-sling-tv-via-new-cable-tv-like-service/
[18] http://www.apple.com/pr/library/2008/01/15Apple-Introduces-New-Apple-TV-Software-Lowers-Price-to-229.html
[19] http://rokumodels.com/roku-models/first-generation-roku/
[20] http://www.fool.com/investing/general/2015/06/03/comcast-time-warner-cable-still-rank-worst-in-cust.aspx
[21] http://www.huffingtonpost.com/2014/01/18/netflix-hulu-amazon-prime-originals_n_4591418.html
[22] http://gizmodo.com/the-apple-original-content-rumor-is-back-1727863339
[23] http://www.pcworld.com/article/2894534/hbo-announces-hbo-now-standalone-streaming-service-with-discounted-apple-tv.html

ability to easily access sports programming, a desire for premium programming like HBO and Showtime has been a stubborn barrier to customers who want to eliminate their cable subscriptions (and to competitors that want to disrupt the market). Often, consumers would happily give up enormous cable bills in favor of more streamlined, inexpensive services—but they do not take the leap because they want specific programming that is only available with a cable subscription. It is significant when content powerhouses like HBO and Showtime take such an industry-disrupting leap.

Also in 2015, Verizon FiOS announced an "a la carte" offering called Custom TV, which allows consumers to choose from bundled packages that more appropriately reflect their programming desires and include less unwanted channels.[25] While this is not a true OTT application, it demonstrates a recognition within the incumbent market that consumers are dissatisfied with traditional content delivery and are seeking alternate choices.

As we noted, sports programming is a major barrier for many consumers who wish to cancel their cable subscription. DISH Network launched an OTT service in early 2015 called Sling TV that offers sports programming on channels such as ESPN, as well as other programming and popular TV channels. The service, called Sling TV, is streamed over the Internet.[26] Like other streaming services, Sling TV does not require additional hardware to access OTT content, including sports programming. Sling TV currently is priced at $20 per month with no time commitments, but it has experienced hiccups as its offerings are subject to limitations and restrictions that are reminiscent of traditional cable.[27] Traditional cable content providers' attempts at OTT service have seen varying degrees of success, but it is significant in the industry for these providers to even acknowledge the need for these services.

Companies that hope to compete in the video market will likely find that they must adjust their business models, marketing strategies, and understanding of consumer demands and desires. Perhaps one of the most significant illustrations of this is that, for the first time ever, Comcast's broadband subscribers outnumbered its cable subscribers in 2015—an unprecedented and major shift in the industry.[28] The Town can essentially "court" OTT providers and promote these applications by requiring a public–private partnership's data-only

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[24] http://money.cnn.com/2015/07/07/media/showtime-streaming/
[25] http://arstechnica.com/business/2015/04/verizons-new-custom-tv-is-small-step-toward-a-la-carte-pricing/
[26] http://www.nytimes.com/2015/01/06/business/media/dish-network-announces-web-based-pay-tv-offering.html
[27] http://www.pcworld.com/article/2909572/sling-tv-channel-guide-all-the-programming-and-all-the-restrictions-all-in-one-chart.html
[28] Emily Steel, "Internet Customers Surpass Cable Subscribers at Comcast," *The New York Times,* last modified May 4, 2015, http://www.nytimes.com/2015/05/05/business/media/comcasts-earnings-rise-10-driven-by-high-speed-internet.html?_r=0.

offering to provide unfettered access. The Town has already laid out unfettered access to data as a base requirement for any partnership agreement it enters. This can help the Town achieve its goals of consumer choice and competition in the market without the need for traditional infrastructure-based open access.

3.2 Public–Private Partnership Models

In this section, we outline the emerging public–private partnership models in the industry today. Although we understand that Model 1—the shared investment and risk model that entails a partner building the FTTP infrastructure—is the preferred approach, it is valuable to understand other models that may be available to the Town.

3.2.1 Model 1: Private Investment, Public Facilitation

In this approach to public–private partnership, the public sector's cost is significantly reduced. The model focuses not on a public sector investment, but on modest measures the public sector can take to enable or encourage greater private sector investment. The most prominent example of this model is Google Fiber's deployments, including its networks in Austin, Kansas City, Nashville, and elsewhere. Ting Internet[29] is taking a similar approach in smaller markets, including Holly Springs, North Carolina. We have also seen growing interest in this model from Axia FibreNet[30] and Allo Communications.[31]

This model is seen as the ideal for many communities that wish to minimize public cost. At least in Google Fiber's deployments, the private sector partner's requirements have largely focused on making local government processes more efficient. In return for these relatively low-cost public sector commitments, the communities that are partnering with Google Fiber or Ting Internet benefit from the company's deployment of FTTP infrastructure (and, in many cases, competitive upgrades by the incumbent cable and telephone companies).

This model relies on the private companies to make the investment, while partner communities take certain steps to enable them to build in an expeditious, efficient, low-cost manner. Though Google Fiber is the most prominent example, there is also significant interest among smaller companies—which have fewer resources than Google but can deliver next-generation broadband to businesses and institutions on a targeted basis.

While this model reduces the public sector's cost and risk compared to other models, there is a potential public relations risk. Public expectations can get very high with the announcement of new fiber deployment. If a local government is strongly identified as a partner, it may be held accountable by the community if something goes wrong with the private sector partner's business plan or deployment.

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[29] Ting, https://ting.com/
[30] Axia https://www.axiafibrenet.com
[31] Allo https://www.allocommunications.com

3.2.1.1 Strategies for Encouraging Private Investment

There are a number of strategies the Town can take to encourage new private investment and reduce some of the costs and time for private sector entities to deploy advanced broadband services. These can, for example, take the form of specific economic development incentives such as tax benefits to encourage providers to build new infrastructure. MetroNet,[32] a small Midwest ISP, developed a partnership with the City of Crawfordsville, Indiana, to purchase the municipal utility's fiber network.[33] The City is assisting MetroNet with financing the purchase and expanding the footprint of the fiber network.

Communities typically offer this type of benefits to new entrants in a market that are willing to invest in next-generation infrastructure, but they can offer those benefits to incumbents if the incumbents will also invest in the same kind of infrastructure.

Another key strategy is for the community to develop and strengthen the local infrastructure assets that enable the deployment of broadband.[34] These include public assets such as fiber, conduit, and real estate. For example, new network deployments can benefit enormously from access to existing government fiber strands, underground communications conduit in which fiber is placed, or real estate where equipment or exterior huts can be located.

Communities can further facilitate the underground construction of conduit and fiber by implementing a "dig-once" policy for all road and related transportation projects, and facilitating in-building access through construction specifications for new buildings.[35]

Building and expanding community infrastructure over time is a low-cost, low-risk strategy that will have real impact and expand options down the road. For example, the City of Mesa, Arizona, began a dig-once initiative in the early 2000s. The City intended to install its own rings of conduit during private sector construction projects, then sell access back to the private sector. Any time the City opened up a street, such as to install water or sewer utilities, it put in conduit.[36] In some instances, the City also added fiber to empty conduit for City purposes or to potentially lease to private providers. In total, the City installed as much as 200 miles of conduit. Mesa targeted four economic development areas in particular, with redundant conduit, fiber, and electric infrastructure. Among those areas was the land around the Phoenix-Mesa Gateway Airport, where Apple announced in early 2015 that it would build a $2 billion data center.

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[32] MetroNet https://www.metronetinc.com
[33] "MetroNet plans to expand current fiber optic system," *The Paper of Montgomery County Online,* Mar. 18, 2014, http://goo.gl/5eHuJt.
[34] "Gigabit Communities: Technical Strategies for Facilitating Public or Private Broadband Construction in Your Community," CTC Technology & Energy, Jan. 2014, p. 6–12, http://www.ctcnet.us/gigabit/.
[35] For more discussion of "dig once" policies and related collaborative strategies, see "Gigabit Communities."
[36] "Transcript: Community Broadband Bits Episode 139," Institute for Local Self-Reliance, Feb. 26. 2015, http://goo.gl/pFzN6k.

A third important strategy is to improve access to information—an asset that communities might not have considered.[37] Sharing information demonstrates a willingness to engage with the private sector to spur investment. Communities should seek to make data available wherever possible both for public and private uses.

Geographic information systems (GIS) or similar databases that hold information such as street centerlines, home and business locations, demographics, and details on existing utilities, public infrastructure, ROW, and available easements can be extremely helpful for a locality's own broadband planning, potential public–private partnerships, or a network service provider that is evaluating the deployment of new infrastructure in a community.

Access to this information may attract and speed new construction by private partners, while enabling the community to meet its goals for new, better broadband networks—and potentially to realize revenues for use of the assets.

Finally, the Town can take steps to enable broadband construction by making government processes around permitting, ROW access, and inspections more efficient and smooth.[38] In some communities, for example, permitting processes have been moved online, alleviating the need for wasteful and time-consuming paper-based processes. These actions can signal to private partners that there is an investment opportunity in the jurisdiction and that the Town will not be a bottleneck or create additional costs.

These steps should take into consideration the needs of the community, balance public interest and public safety, and account for local resources and capacity. For example, the Town can choose to be fully transparent about its permitting and ROW processes—including timelines—to enable the communications industry to expeditiously plan and deploy networks.

3.2.1.2 Potential Partners for Private Investment

An emerging group of private providers are considering investment in FTTP infrastructure in small to medium-size communities. Based on our experience exploring potential private partnerships on behalf of other public sector clients nationwide, we expect interest from Axia FibreNet, Ting Internet, and possibly Allo Communications.

3.2.1.2.1 Allo Communications

Allo Communications is based in Lincoln, Nebraska, where it currently serves more than 350,000 customers. Allo operates FTTP networks in Nebraska, where it competes with cable and telephone providers to offer voice, video, and data service. The markets Allo currently serves are much smaller than Boulder, though it is currently building in Lincoln, Nebraska.

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[37] "Gigabit Communities," p. 13–16.
[38] *Id.*, p. 14.

Allo was recently acquired by Nelnet,[39] a private equity firm that began as a student loan servicing company.[40] In light of this, Allo has significant access to capital to invest in the way it appears to be interested in. While Allo is willing to consider a ubiquitous buildout in Hillsborough, it will not directly lease its fiber to competitors in the traditional open access model.

3.2.1.2.2 Axia FibreNet

Based in Calgary, Axia Broadband claims to operate FTTP networks in Asia, Europe, and the U.S. The only U.S.-based example is its partnership with Massachusetts Broadband Institute (MBI), where Axia manages and operates the network, known as MassBroadband 123. Axia manages the relationship with several ISPs to offer service to community anchor institutions (CAIs) throughout Massachusetts.

The nearly $90 million MassBroadband 123 project was possible through a combination of a federal Broadband Technology Opportunities Program (BTOP) grant and public matching funds. That is, Axia did not make a private investment in the MassBroadband 123 project. Further, the network is primarily backbone and middle mile infrastructure, and is not an illustration of Axia's track record in the U.S. offering FTTP retail services.

Axia is willing to promote unfettered access to data, which meets the Town's goals on those items and addresses competition in the marketplace. The company is in the process of being acquired by a private investment firm, which will mean access to significant new capital. Although Axia does not have a history of direct significant investment in FTTP, this acquisition could change that.

3.2.1.2.3 Ting Internet

Ting Internet, based in Toronto and a division of Tucows Internet, got its start offering mobile service, and announced in December 2014 that it would begin offering fiber-based Internet services in Charlottesville in a private investment model. Shortly after that announcement, the City of Westminster, Maryland, announced a public–private partnership with Ting Fiber to deploy a citywide fiber network to offer services to Westminster residents. Ting is also following the private investment model in Holly Springs, North Carolina. Tucows is a publicly-traded company with sufficient access to capital.

3.2.1.3 Potential Benefits and Pitfalls

The above strategies can make a difference in the economics of buildout for a private partner. However, they will not dramatically change the underlying economics of broadband

[39] "About Allo Communications | Serving Western Nebraska," *Allo Communications*, http://allocommunications.com/about/.
[40] "About Nelnet—Who We Are and What We Do," *Nelnet,* https://www.nelnet.com/About-Nelnet/.

network construction and operation. In a best-case scenario, the public sector can reduce the cost of outside plant construction for a broadband network by up to an estimated 8 percent.[41]

Thus these measures can be substantial, but not transformative. Indeed, many incumbent providers overstate the extent to which local government and regulation are hurdles for developing next-generation broadband infrastructure.

Communities should be wary, then, of private sector entities seeking benefits without offering concrete investment proposals. From a business standpoint, for example, incumbents do not need additional support from the Town to keep maintaining (or even upgrading) their existing broadband networks and services.

3.2.1.4 Case Study: Holly Springs, NC

Over the course of many years, the Town of Holly Springs designed, engineered, and constructed a backbone fiber network to connect municipal buildings. To their great credit, Holly Springs' visionary elected officials chose to build a fiber network with dramatically higher capabilities than the need apparent at the time—knowing that a robust fiber backbone might attract interest from private ISPs that recognize the potential to leverage that backbone to more efficiently build their own FTTP infrastructure.

But a robust backbone network was not enough. The Town's government also developed policies and strategies to attract private broadband investment. As a result, Ting Internet announced in mid-2015 that it will bring "crazy fast fiber Internet" to the homes and businesses of Holly Springs. Ting plans to expand on Holly Spring's existing fiber pathways and offer symmetrical gigabit Internet access to homes and businesses.

A key factor in Ting's decision to invest in Holly Springs was the fact that the town not only was willing to lease excess fiber in its backbone, but that it also brought best practices to bear in its willingness to work with Ting and facilitate Ting's efforts. Among other things, the town offered efficient government processes, access to information and facilities, and facilitation and support—all of which boosted Ting's confidence about this community as an investment opportunity.

3.2.2 Model 2: Private Execution, Public Funding

This model, which involves a substantial amount of public investment, is a variation on the traditional municipal ownership model for broadband infrastructure—but with private rather than public sector execution. In this model, a selected private partner takes responsibility for some combination of design, construction, financing, operations, and maintenance,[42] funded by the public partner over some period of time.

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[41] "Gigabit Communities."
[42] "Financial Structuring of Public–Private Partnerships (P3s)," U.S. Department of Transportation, 2013, http://goo.gl/gCJIZK.

While this public–private partnership structure is new to broadband, it is used in Europe and increasingly in the U.S. for traditional infrastructure projects such as highways, toll roads, and bridges. The model seeks to leverage the strengths of the private sector to deliver turnkey services and solutions over an extended time of 20 to 40 years.

Unlike transportation or utility infrastructure, however, broadband does represent a somewhat competitive marketplace. Thus, applying the model to broadband in the U.S. creates political and financial risk for the public sector because public funding is used to fund an infrastructure that some residents may not want or choose to use. Indeed, if the broadband network is unsuccessful at generating revenue to cover all public sector costs, the public sector often remains on the hook for those payments. At its core, this model thus involves the public sector essentially becoming the guarantor in the event that the partnership does not secure sufficient revenue to cover all costs, including the profit margins required by the private partners.

And for communities that think this is a way to get financing without bonding, which is only partially true. The public sector partner does not have to bond, but the partnership financing will most likely be considered by auditors, state authorities, and the bond markets as counting against the public sector entity's borrowing capacity.

Despite these risks, the model offers benefits to the public sector by removing significant logistical barriers from large-scale public broadband projects and offering a comprehensive solution (including extensive turnkey private execution and private capital) for the entire community.

One of the most fascinating aspects of the huge escalation in interest in this space over the past few years (catalyzed significantly by Google Fiber) is the emergence of a group of companies that are working with traditional public–private partnership models to develop strategies for enabling local governments to get FTTP networks built.

While the field is very fast developing and constantly changing, at least three companies have emerged so far with fully articulated business models and business propositions for localities: Macquarie Capital, SiFi Networks, and Symmetrical Networks.

All three companies are proposing interesting and innovative approaches, each with the same core concept (though with considerably different detail): The public sector's willingness to contract in the long term is what will enable and secure construction of the network. To date we are not aware of any commitments that these entities have reached with a public entity to deploy an FTTP network.

These variations on the private execution, public funding model are as of yet untested; we urge caution for that reason. But we note that this model is a promising means by which to develop a network that can serve the entirety of the community, not just the parts selected by a private investor.

3.2.2.1 Macquarie Capital

Macquarie Capital and its partner companies, which have pioneered this model in the broadband market in the U.S.,[43] will provide financing, construction, operations, and service delivery over the network. To fund all this activity and investment, the locality will pay Macquarie on an ongoing basis by placing a monthly fee on all local property owners' utility bills. Macquarie intends that multiple ISPs will compete over the network, giving consumers a choice of providers and the benefits of price competition (and creating a revenue stream for ISPs, who will pay Macquarie). Macquarie projects that network revenues will grow substantially over time; as service revenues generated by the ISPs increase, Macquarie commits to sharing some of its revenues with the locality.

Macquarie is an experienced and sophisticated entity, and offers a comprehensive solution. We note, however, that its open access business model is not tested and that the utility fee is likely to prove a heavy lift politically in most American communities.

3.2.2.2 SiFi Networks

In the SiFi Networks approach to this model, a local FTTP network is built and operated by SiFi and its partners at public sector expense. SiFi will provide financing and, with its partners, turnkey construction and operations—all of which will be compensated by lease payments from the public sector partner. SiFi will then bring to the community one or more ISP partners, with which the locality will contract to provide open access services over the network.

In SiFi's vision, the ISPs will make minimum payment guarantees to the locality in return for the opportunity to provide services over the network; those amounts will be negotiated and based on the public sector partner's actual costs. If multiple competing ISPs or even a single ISP is willing to make such commitments on a long-term basis, and if those ISPs are viable entities—with commitments backed by real resources—then the model will reduce the public sector partner's risk in terms of the ongoing payments to SiFi and its partners.

The viability of the model thus hinges on the willingness of ISPs to make such commitments, and the ISPs' confidence that they can realize sufficient revenues and margins to justify the commitments.

As with the Macquarie model, the SiFi model is interesting, but, so far, untested.

3.2.2.3 Symmetrical Networks

In Symmetrical Networks' version of this model, Symmetrical and its partners will build the network, which will be operated by an ISP chosen by the public sector partner. That operator may be an ISP that is a partner to Symmetrical, it may be the public sector entity itself, or it may be any other qualified network operator.

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[43] "Macquarie Capital," Macquarie Group, http://goo.gl/uvUEjv.

Symmetrical does not follow the multiple-ISP open-access approach anticipated by SiFi and Macquarie; rather, it intends that open access will happen "over the top" (OTT), when consumers select their own application providers over an unfettered data connection with no data cap.

Symmetrical will build, finance, and provide turnkey construction for an FTTP network, and the public sector partner will make a lease payment to Symmetrical that will cover the company's debt service, operating costs, and margin. The public sector entity will, in turn, be paid by the ISP; in Symmetrical's modeling, the ISP will pay the locality an amount equal to the locality's obligations to Symmetrical.

Symmetrical believes that this model is viable based on a minimum community-wide take rate of 35 percent. To reduce the public sector partner's risk, Symmetrical will not undertake a project unless Town-wide, aggregated commitments at this level have been secured in advance.

As with the SiFi and Macquarie models, the viability of this model hinges on the selected ISP's ability to generate sufficient revenues to cover its required payment to the public sector entity (which equals the locality's required payment to Symmetrical), its costs, and, presumably, an acceptable operating margin. While Symmetrical is confident that this model is viable, it is also quite frank that the public sector entity bears the risk in the event that network revenues fall short of the obligated levels.

3.2.3 Model 3: Shared Investment and Risk (Dark FTTP Partnership)

A public–private partnership model based on shared investment and risk plays to the strengths of both the public and private sector partners. Most localities consider FTTP deployment not as a moneymaker, but as a powerful tool for education and economic development. Thus in a shared investment model, the risk is shared but the community still receives 100 percent of the benefits it seeks—recognizing that the benefits do not all appear on the project's financial statements. For the private partner, a shared investment means less upfront capital (risk), with an opportunity for future revenues.

Among other enormous benefits to this model, cities can not only provide fiber to the private sector—for compensation and to get gigabit and beyond service to the public—but can also secure extensive fiber throughout their communities for internal uses, including municipal and municipal utility operations, public safety, and emerging Smart Town and Internet of Things (IoT) applications.

This model will provide an institutional or public sector network of the future—more extensive than any network that served Town or county needs in the past, because the fiber will go everywhere in the community. It will have the potential to serve every conceivable application, from traffic signal control to air quality monitoring, from robust and secure public safety communications to high-end videoconferencing between universities and schools.

This benefit is ancillary to the core benefit of enabling a competitive gigabit (and beyond) product over fiber to every home and business in the community, but in the long run, it has the

potential to enable transformative public sector use and services. Indeed, local governments' track record of securing considerable savings and enormous operational capabilities over fiber is already demonstrated.[44]

We note, however, that while this model offers an extraordinary opportunity for innovation, it is in no way a guarantee for communities. We do not have the data points to develop the best practices necessary for success. At the moment, early actors are developing new and exciting partnerships to bring next-generation broadband to their communities. We describe some of those projects in the brief case studies below.

3.2.3.1 Case Study: Westminster, MD

The City of Westminster, Maryland, is a bedroom community of both Baltimore and Washington, D.C. where 60 percent of the working population leaves in the morning to work elsewhere.[45] The area has no major highways and thus, from an economic development perspective, has limited options for creating new jobs. Incumbents have also traditionally underserved the area with broadband.

The City began an initiative 12 years ago to bring better fiber connectivity to community anchor institutions through a middle mile fiber network. In 2010, the State of Maryland received a large award from the federal government to deploy a regional fiber network called the Inter-County Broadband Network (ICBN) that included infrastructure in Westminster.[46]

Westminster saw an opportunity to expand the last mile of the network to serve residents. At the time, though, it did not have any clear paths to accomplish this goal. Town leaders looked around at other communities and quickly realized that they were going to have to do something unique. Unlike FTTP success stories such as Chattanooga, Tennessee, they did not have a municipal electric utility to tackle the challenge. They also did not have the resources, expertise, or political will to develop from scratch a municipal fiber service provider to compete with the incumbents. As a result, they needed to find a hybrid model.

As the community evaluated its options, it became clear that the fiber infrastructure itself was the City's most significant asset. All local governments spend money on durable assets with long lifespans, such as roads, water and sewer lines, and other infrastructure that is used for the public good. The leaders asked, "Why not think of fiber in the same way?" The challenge then was to determine what part of the network implementation and operations the private sector partner would handle and what part could be the City's responsibility.

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[44] *See, for example:* "Community Broadband Creates Public Savings," Fact Sheet, Institute for Local Self-Reliance, https://goo.gl/kCEZeC.

[45] Case study is based in part on a presentation by Dr. Robert Wack, President, Westminster (Maryland) Town Council, during a webinar hosted by the Fiber to the Home Council and facilitated by CTC Technology & Energy. *See*: http://goo.gl/x82Ro7 (password required). See also: Robert Wack, "The Westminster P3 Model," *Broadband Communities Magazine* (Nov./Dec. 2015), http://goo.gl/op1XpH.

[46] "The Project," Inter-County Broadband Network, http://goo.gl/GjBC26.

The hybrid model that made the most sense required the City to build, own, and maintain dark fiber, and to look to partners that would light the fiber, deliver service, and handle the customer relationships with residents and businesses. The model would keep the City out of network operations, where a considerable amount of the risk lies in terms of managing technological and customer service aspects of the network.

The City solicited responses from potential private partners through a request for proposals (RFP). Its goal was to determine which potential partners were both interested in the project and shared the City's vision.

The City eventually selected Ting Internet, an upstart ISP with a strong track record of customer service as a mobile operator. Ting shared Westminster's vision of a true public–private partnership and of maintaining an open access network. Ting has committed that within two years it will open its operations up to competitors and make available wholesale services that other ISPs can then resell to consumers.

Under the terms of the partnership, the City is building and financing all of the fiber (including drops to customers' premises) through a bond offering. Ting is leasing fiber with a two-tiered lease payment. One monthly fee is based on the number of premises the fiber passes; the second fee is based on the number of subscribers Ting enrolls.

Based on very preliminary information, given that this is a market in development as we write, we believe this is a highly replicable model.

What is so innovative about the Westminster model is how the risk profile is shared between the City and Ting. The City will bond and take on the risk around the outside plant infrastructure, but the payment mechanism negotiated is such that Ting is truly invested in the network's success.

Because Ting will pay Westminster a small monthly fee for every home and business passed, Ting is financially obligated to the City from day one, even if it has no customers. This structure gives the City confidence that Ting will not be a passive partner, because Ting is highly incented to sell services to cover its costs.

Ting will also pay the City based on how many customers it serves. Initially, this payment will be a flat fee—but in later years, when Ting's revenue hits certain thresholds, Ting will pay the City a small fraction of its revenue per user. That mechanism is designed to allow the City to share in some of the upside of the network's success. In other words, the City will receive a bit of entrepreneurial reward based on the entrepreneurial risk the City is taking.

Perhaps most significantly, there is also a mechanism built into the contract that ensures that the two parties are truly sharing risk around the financing of the outside plant infrastructure. In any quarter in which Ting's financial obligations to the City are insufficient to meet the City's debt service, Ting will pay the City 50 percent of the shortfall. In subsequent quarters, if Ting's fees to the Town exceed the debt service requirements, Ting will be

reimbursed an equivalent amount. This element of the financial relationship made the deal much more attractive to the City because it is a clear demonstration of the fact that its private partner is invested with it.

3.2.3.2 Case Study: Garrett County, MD

The case studies presented above are incredibly promising, but those projects may be more challenging to replicate in rural communities, where the cost of fiber deployment, even in a shared-investment scenario, may still be prohibitive. The shared investment and shared risk strategy, however, is still applicable to rural communities—perhaps using other technologies that secure the benefits of broadband even if they do not result in the kinds of speeds that fiber enables.

For example, Garrett County, in far western Maryland, is a relatively remote Appalachian community bordered by West Virginia and Pennsylvania. The county has struggled to get broadband in a number of its remote, mountainous areas. Where broadband is available, it is inadequate DSL service that does not meet the Federal Communications Commission's (FCC) new speed benchmark for broadband service, let alone the requirements for home-based businesses or home schooling. The incumbent provider has not made any plans to expand or upgrade service offerings.

Though mobile broadband is available in some parts of the county, data caps mean that it is not viable for economic or educational activities. (Parents who home-school their children can run through their monthly bandwidth allotment in one day of downloading educational videos.) Beyond these challenges for residents, the county has struggled to attract and retain businesses and teleworkers.

In response, the county has gradually and incrementally built out fiber in some areas, with a focus on connecting specific institutions. And in September 2015, the County Council approved a contract with a private partner to leverage some of that fiber and additional public funding to support the deployment of a fixed-wireless broadband network that will serve up to 3,000 currently unserved homes in the most remote parts of the county. The private partner, Declaration Networks Group (DNG), will also put its own capital toward the construction of the network, and will apply its technical and operational capabilities to managing the network.

The partnership involves cost to the county, but also massive benefit for residents and businesses in the newly served areas.

The county's outlay of funds will be $750,000, which will be matched by a grant from the Appalachian Regional Commission (ARC)—and which will be more than matched by DNG's commitment of both capital and operating funds. That relatively modest county contribution (which was then leveraged for the ARC economic development funding) made the economics of this opportunity very attractive to DNG, and secured a broadband buildout for an area that would otherwise not be attractive for private sector broadband investment.

From an economic development perspective, the county's investment represents enormous value for the dollar. This investment will enable residents in 3,000 homes to buy cost-effective broadband service that they cannot access now, and that will make possible telework, home-based businesses, and home schooling. This investment will also enable the county to close the homework gap for many students in the county schools who do not currently have broadband in their homes—an increasingly critical lack of service.

As the network is deployed over the next few years, the county will reduce to nearly zero the number of homes in the county that do not have access to some kind of broadband communications options. These options may be modest—not the robust speeds available in metro markets—but they are significantly better than nothing, and a huge economic development achievement from the county's standpoint.

3.2.4 Additional Strategic Considerations for Public–Private Partnerships

As public sector entities of all sizes and capabilities evaluate potential models for public–private partnerships, it is important to approach each proposal with a healthy dose of common sense. Next-generation fiber deployment, particularly on a large scale to reach all residences and businesses in a community, is a valuable and future-proof investment. But it will not be cheap or easy. If anyone tells you otherwise, or claims that they will deliver enormous benefits at little or no cost or risk, ask for examples of projects where they have accomplished what they are promising. If it were easy, we would already have seen enormous private investment in FTTP across the country. Communities should be skeptical of rosy projections.

It is also critical to look for private sector partners that are interested in developing meaningful partnerships to deploy next-generation infrastructure. A significant risk around economic development incentives and other measures to facilitate investment is that private companies will request that localities take on additional costs as a condition of the private investment. For example, a private partner might ask the local government to hire dedicated inspectors and provide free access to real estate—and provide in return only tacit commitments for new services or technological upgrades. The goal of these partnerships is not simply to shift private sector costs to the public sector. If a company is a true partner, it will be willing to make firm commitments to invest in the community in return for the actions the locality takes to lower the cost of deploying infrastructure.

In addition, partners and partnerships will differ in different parts of the country, and with the size of a community. A primary challenge for localities seeking buildout to every residence and business is that the larger the community, the more difficult it may be for a private partner to deploy its service universally. By taking on the risk of fiber construction and finding a partner to light the network and provide service, a locality can increase the potential for a universal fiber buildout to every location.

Finally, do not underestimate the importance of the political element in tackling these challenges. Political concerns will play a huge role in finding solutions. Community and political

leaders must jointly decide to pursue a project of this scope, to solve the problems that may arise along the way, and to bring fiber and its benefits to the community.

4 Fiber Network Cost Estimates Based on a Design Targeting Town Priorities

Construction of a fiber optic network designed specifically to meet Town requirements is an alternative to commercial services that may offer long-term cost savings and provide technical advantages. In this section, we provide an overview of a technical approach and cost estimates developed to examine the feasibility of constructing a fiber network.

4.1 Technical Approach

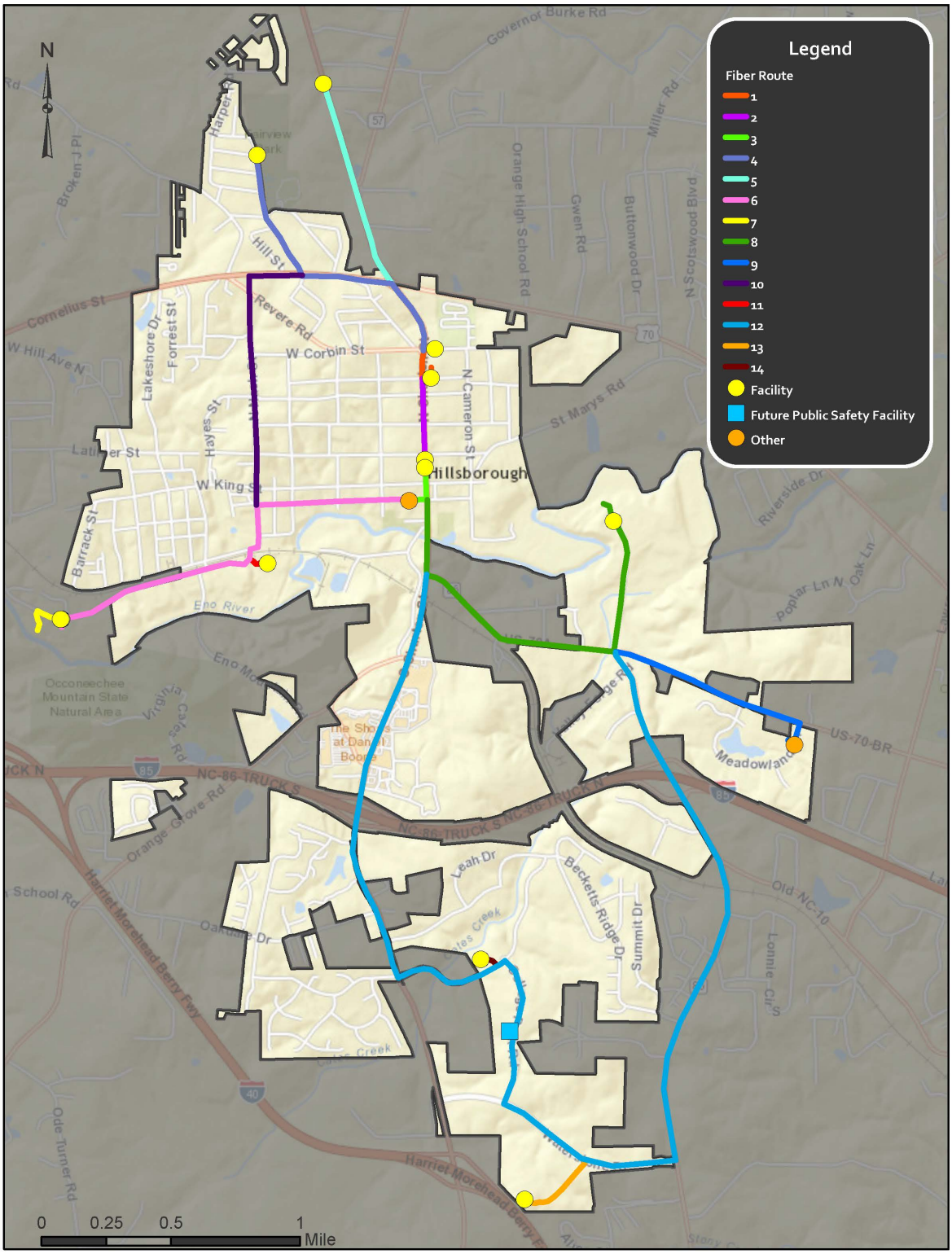
CTC developed a system-level design for a fiber optic network to serve as the basis for estimating costs. Design priorities targeted by this conceptual design include:

- Providing fiber connectivity to 12 Town facilities for which leased service fees can be avoided (see "Facility" in Figure 8)
- Providing fiber connectivity to two key Orange County facilities where the Town needs network connectivity (see "Other" in Figure 8)
- Expanding the fiber optic footprint to provide redundancy to the network and touch most neighborhoods and business districts in town to encourage investment by third party network service providers
- Minimizing costly railroad and interstate crossings to meet basic connectivity objectives.

The resulting network architecture, illustrated in Figure 8, is comprised of approximately 17.5 route miles of fiber connecting all 12 designated Town sites and two County facilities.[47] We have broken up the fiber routing by fiber segments and phases. Phase One is 9 miles of fiber construction (Segments 1-11) and connects 10 Town sites and two County facilities. Phase Two is 8.5 miles and connects two Town sites and provides redundancy to the network as well as expands the footprint of the network to the southern part of Town. The backbone path aims at providing route redundancy and diversity where reasonably practical. While not fully vetted in the manner necessary for permitting and construction, this fiber optic design is likely to closely approximate a final design meeting the stated design objectives.

[47] See Table 3 for the list of sites.

Figure 8: System-Level Fiber Network Architecture



A wide range of logical topologies are feasible given the physical architecture of the proposed network. Depending on splicing configurations, connections can be established with or without route diversity over backbone rings (where available), and provide dedicated paths between any sites without the need for "patching" between intermediate sites. The cost estimates are based on a flexible approach to splicing and fiber termination, providing a backbone consisting of a 288-strand cable occupying one of two 2-inch conduits.

Beyond the physical fiber optic cable routing, there are a number of technical design and construction attributes impacting costs, including the following:

- **Fiber strand count:** The number of individual fiber strands provided in a single cable correlates to the capacity of the cable. Due to the vast effective bandwidth of fiber, it is feasible to scale the rate of data transmission carried by even a single fiber strand to meet all of the Town's needs indefinitely; however, the cost of network electronics increases exponentially with this capacity. On the other hand, the material cost of fiber strands represents a very minor component of the overall cost of fiber construction (about $0.01 per strand per foot, compared to $15 to $20 per foot for the total cost of typical construction). It is thus prudent to install a cable of sufficient size to meet any conceivable requirements to ensure these needs can be met with a configuration of electronics that are as low-cost as possible. In fact, with sufficient fiber strands, the Town can increase network capacity many orders of magnitude above current levels with little or no change to its network electronics. While we anticipate no portion of the network will require more than a few dozen strands, cost estimates are based on the installation of a 288-count cable along most segments of the network. This will ensure sufficient capacity for nearly any conceivable expansion of internal needs, fiber leasing, or even future support of business or residential services.

- **Underground versus aerial construction:** The cost estimates anticipates completely underground construction of the fiber, with fiber cables placed in a 2-inch conduit. Cost savings may be possible by employing "aerial" construction (attaching fiber to utility poles). Since the Town does not own its own utility poles, aerial construction would require negotiating pole attachment agreements. These agreements generally require recurring fees per pole, and generally require the attacher to pay the cost of any upgrades or modifications to the utility poles necessary to support the new attachment. These "make-ready" costs can vary drastically depending on the crowding on the poles, condition and age of the poles, and the pole owner's technical standards. Aerial construction is more susceptible to damage from certain threats, in particular weather-related events, and is generally not as scalable in terms of increasing cable strand counts when compared to underground cable in conduit. The extent to which aerial construction might provide savings can only be determined with a detailed engineering analysis, thus budgetary estimates incorporate only underground construction.

- **Conduit size and quantity:** While it is possible to install fiber cable directly underground, this complicates installation and makes repairs difficult to implement without creating permanent impairments to the communications path. Instead, the cost estimates are based on the installation of two flexible plastic conduits that provides a path into which fiber cable can be installed, allowing for cable slack to be pulled to accommodate repairs, or for new cable to be installed to expand capacity. The second conduit is being installed as a spare that may be rented to third-party providers, used in case of damage to the primary, and used by an FTTP provider to separate their FTTP backbone plant from their FTTP distribution plant. While cost estimates are based on the placement of a dual 2-inch conduits, it should be noted that placing additional conduits simultaneously results in relatively minor increases in cost, within limits. Depending on material prices, 2-inch conduit is preferable along backbone routes, as it can accommodate one or more additional large-strand-count fiber cables in each, with sufficient space for placing additional smaller cables to for purposes of placing "lateral" connections to future locations.

- **Handhole placement and size:** Handholes are enclosures installed underground in which conduit terminates for the purpose of providing access to conduit for installing cable, as well as to house cable splice enclosures and cable slack loops required for future repairs. Handholes generally must be placed at intersections of multiple conduit paths, or where the conduit path makes a sharp change in direction. Handholes provide important access points to underground conduit, enabling expansion of the conduit infrastructure (i.e., installation of a lateral connection to a new network location) without disrupting conduit or installed cables. While cable can be pulled upwards of several thousand feet at a time, cost estimates for the Town network assume installation of handholes every 500 feet on average, ensuring that the infrastructure supports cost-effective expansion to new sites, including access to businesses that might be targets of commercial network operators seeking to lease Town fiber (or conduit space).

- **Right-of-way restoration and fees**: The network cost estimates assume that the Town may have to pay encroachment fees for construction along or under State roads and for railroad crossing application and licensing fees, which can total upwards of $15,000 per crossing, not including special construction costs, which generally entail steel encasement of conduit. The cost estimates assume that the Town will incur typical costs for permanent asphalt and concrete restoration required for utility "test pitting" necessary to verify the location of other utilities in the path of the fiber to prevent damage – generally this consists of excavation within small areas of less than 2 feet in diameter.

4.2 Cost Estimates

CTC estimates that the cost to construct the fiber network described in the previous section to be $2.7 million. The cost estimate is broken down between phases of construction, including lateral and fiber termination costs at Town facilities.

The phases include Segments 1-11 which connects 10 Town facilities and two County facilities (phase 1), and then Segments 12-14 (phase 2) which connects two Town facilities extends the fiber through the Southern portion of Town to help increase the value of fiber network to wireless ISPs and potential partners for an FTTP deployment.

Table 2: Summary of Fiber Construction Costs

Cost Component	Segments 1-11	Segments 12-14	Estimated Cost
Engineering	$161,500	$152,800	$314,300
Project Management / Quality Assurance	61,800	58,500	120,300
General Outside Plant Construction	967,100	909,700	1,876,800
Railroad, Bridge, and Interstate Crossings	53,000	158,900	211,900
Outside Plant Fiber Splicing	67,700	34,100	101,800
Fiber Termination / Building "Entrance"	66,500	8,400	74,900
Fiber Construction Subtotals:	$1,377,600	$1,322,400	$2,700,000

A break down of these costs by site and by phase is shown in Table 3. The total phase one cost estimate is $1.4 million, and the phase two cost estimate is $1.3 million.

Table 3: Summary of Fiber Construction Costs by Segment

Segment / Site Name	Site / Segment Classification	Anchor Sites	Construction Phase	Estimated Cost
1 - Singer Property to Town Hall	Core / Backbone	2	1	$64,500
2 - PD to Annex to Town Hall	Core / Backbone	2	1	77,100
3 - OC West Campus to PD	Core / Backbone	1	1	58,600
4 - Police Substation	Core / Backbone	1	1	199,600
5 - NC-86 Facility	Core / Backbone	1	1	146,300
6 - Water Treatment	Core / Backbone	1	1	307,300
7 - Old Water Treatment	Core / Backbone	1	1	37,800
8 - Wastewater Treatment Plant	Core / Backbone	1	1	305,000
9 - County 911 Center	Core / Backbone	1	1	163,200
10 - Northern Ring	Core / Backbone	-	2	187,900
12 - Southern Ring	Core / Backbone	-	2	1,068,200
13 - Water Tower	Lateral	1	2	48,100
11 - Gold Park	Lateral	1	1	18,200
14 - Cates Creek Park	Lateral	1	2	18,200
Total		14		$2,700,000

Appendix A contains a more detailed breakdown of estimated construction-related costs by Segment. Cost estimates are inclusive of all engineering, project management, quality assurance, and construction labor anticipated to be necessary to implement the network on a turnkey basis, and are based on relatively conservative pricing assumptions. The following summarizes the scope anticipated by each of the cost components itemized in the table above:

- **Engineering:** Includes system level architecture planning, preliminary designs and engineering field walk-outs to determine candidate fiber routing; development of detailed engineering prints and preparation of permit applications; and post-construction "as-built" revisions to engineering design materials

- **Project Management / Quality Assurance**: Includes expert quality assurance field review of final construction for acceptance, review of invoices, tracking progress, and coordination of field changes

- **General Outside Plant Construction**: Consists of all labor and materials related to "typical" underground outside plant construction, including conduit placement, utility pole make-ready construction, fiber installation, and surface restoration; includes all work area protection and traffic control measures inherent to all roadway construction activities

- **Railroad, Bridge, and Interstate Crossings**: Consists of specialized engineering, permitting, and incremental construction (material and labor) costs associated with crossings of railroads, bridges, and interstate/controlled access highways

- **Outside Plant Fiber Splicing**: Includes all labor related to fiber splicing of outdoor fiber optic cables

- **Fiber Termination/Building Entrance**: Consists of all costs related to fiber lateral installation into network sites, including outside plant construction on private property, building penetration, inside plant construction to a typical backbone network service "demarcation" point, fiber termination, and fiber testing

5 Town Fiber Network Business Case

In this section, we provide the results of a high-level analysis of the operational costs of the proposed middle-mile fiber optic network. We have also provided a high level estimate of potential fiber lease revenue and long-term avoided Town service costs.

5.1 Fiber Operating Considerations

One of the most important steps the Town can take is to ensure that it is carefully managing its assets, including conduit and fiber. Regardless of the partnership approach pursued, fiber strand management on the front end can have enormous benefits over the life of the fiber network, and can save confusion and, potentially, money in the long run.

Even—or, perhaps, especially—if the Town contracts out the construction of the fiber network, we encourage the Town to maintain detailed records of all its fiber strands and their locations. When construction to build or expand fiber begins, the Town can allocate a staff member or work with a firm to keep track of its fiber usage, which will lay the foundation for ensuring the network's long-term usability and growth.

The importance of keeping meticulous records does not cease once the network is fully constructed. On the contrary, it is critically important to document all ongoing and additional connections. Updates should be made to "as-built" and strand management documentation in real time to avoid making mistakes later, misremembering strand allocations, or simply forgetting altogether to input important items.

Documenting the network's fibers and strand usage is crucial, and making sure that Town staff has unrestricted access to its strand management tools is equally important. Even if the Town works with an outside firm to manage this process, we believe that appointing a staff person who will become knowledgeable about the location of strands on the Town's network is a worthwhile investment. Furthermore, using an intuitive and straightforward system and/or software is key for guarding against this critical knowledge becoming inaccessible to future iterations of Town staff and leadership.

We estimate the following annual operating expenses for the proposed fiber network:

- *Insurance:* $50,000 per year
- *Locates and ticket processing:* $16,000 per year ($3,750 per month for every 50 miles of underground plant)
- *General fiber maintenance:* $27,000 per year (based on 1 percent of fiber investment)
- *Record Keeping (GIS, strand maps, etc.):* $50,000 per year
- *Support allocations (HR, Finance, Legal, Administration):* $20,000 per year
- *Program management:* $20,000 per year

5.2 Dark Fiber Licenses and IRUs

Dark fiber consists of fiber strands that are unused or "un-lit" and not connected to electronics, which "light" the fiber. Dark fiber is also referred to as fiber that is provided in a "dark" state to be connected and "lit" by the customer.

Dark fiber pricing is typically based on two approaches:

- **Fixed-term license pricing**: This structure has the benefit of delivering to the fiber owner a steady annual income stream over time, but it does not deliver large front-loaded payments that could serve to bridge a difficult budget year or to finance new investment. This model is more achievable if the dark fiber licensee is unable to make a large front-loaded payment but can pay for the fiber on a recurring annual or monthly basis. As a result, this model potentially increases the number of potential dark fiber customers.

  Over the same period of time, net pricing over the term of the license tends to be considerably higher than in the upfront payment model. This model is often used for licenses with terms of one, three, and five years, and can deliver substantial revenues for a short time. This model is appropriate for private ISPs and businesses that prefer agreements for 10 years or less.

  This is the most common dark fiber approach.

- **Up-front payment, plus maintenance**: Dark fiber is often conveyed as a 10- to 20-year (most often 20) Indefeasible Right of Use (IRU). The customer pays upfront for the IRU in advance or in the early years of the term of the IRU, and pays on an ongoing, periodic basis for maintenance (typically, on an annual basis). The maintenance fee is calculated on the basis of route miles, not strand miles. The annual maintenance fee has a flat per mile fee for low strand count IRUs, and increases slightly for higher strand count IRUs. The early IRU payment covers the entire term of the IRU, while the maintenance provisions of the agreement allow for cost adjustments based on a fixed inflation factor or a Consumer Price Index (CPI).

  The benefit of this model is the substantial inflow of funds early in the IRU agreement term. These funds can help bridge any potential early-year cash shortfall while an entity is beginning operations. On the other hand, the model will not result in recurring annual revenues over the long-term, beyond the payment for maintenance costs. Long-term institutional customers, such as school districts, are good candidates for IRU agreements.

5.3 Dark Fiber Prices

Dark fiber pricing varies greatly among markets and even among carriers in the same market. Pricing is typically specific to route and location, and at times can seem arbitrary in the marketplace. Commercial pricing is typically based on a mix of factors including market competition, market demand, and the cost of building. Pricing by non-profit entities will

frequently take the same factors into account but require less or no margin. For example, some of the higher education networks around the country base their fiber pricing on a construction and operations cost-recovery model.

Generally, one can divide all fiber in the market into two categories for purposes of pricing, with some sub-categories: (1) long-haul fiber and (2) metro-area fiber.

Metro-area prices are almost always considerably higher (on a per-mile basis) than long-haul fiber, which is less costly to build. Within the metro-area category, urban routes will generally be priced significantly higher than routes in suburban and exurban areas, depending on the desirability of the market. Occasionally, an urban market will be surprisingly cost-effective, usually because a glut of fiber in the market leads to competition and drives the prices down.

5.3.1 Fixed-Term Dark Fiber Prices

Fixed-term dark fiber licenses are the most common offering. They provide customers the benefit of having dark fiber access without a large one-time investment. Pricing is typically based on a per strand, per mile, per month fee that includes both fiber access and maintenance. At times, an additional per-access site or demarcation fee is applied (i.e., for the handoff between the Town and the customer).

We have seen monthly license fees ranging from $40 per month per strand to over $1,000 per month per strand. For example, pricing that a national carrier, Zayo, charges for point-to-point dark fiber connectivity between on-net locations in the region (summarized in Table 4):

- Zayo offers point-to-point dark fiber between two on-net locations in Alexandria, Virginia for a monthly charge of $308.50 for a five-year term.

- Zayo offers point-to-point dark fiber between two on-net locations in Ashburn, Virginia for a monthly charge of $687 for a five-year term.

- Zayo offers point-to-point dark fiber between two on-net locations in Charlotte, North Carolina, for a monthly charge of $509 for a five-year term.

Table 4: National Carrier Dark Fiber Monthly License Pricing in the Region[48]

Location	Term (years)	Price per month per strand mile	Price per year per strand mile
Ashburn, VA	5	$687	$8,250
Charlotte, NC	5	$509	$6,108
Alexandria, VA	5	$308	$3,394

For the initial analysis we have assumed an average monthly license fee of $210 per month per strand mile of fiber.

5.3.2 Dark Fiber Prices

IRU pricing typically has two key components: (1) A one-time payment (or front-loaded payments in the early years) based on the total strand miles (total route miles times the number of strands) and (2) an annual maintenance charge based upon the total number of route miles (not dependent upon number of strands). The annual maintenance charge is subject to an annual increase based upon a Consumer Price Index (CPI) or a negotiated fixed percentage. These rates can also vary based on other factors, such as construction costs, length of the term of the agreement, quality of service, competitive discounts, and economic development incentives.

In major urban areas, commercial pricing for IRUs can range from a $2,000 to an over $50,000 per-mile-per-strand up-front payment for a 20-year term, depending on the provider and on whether complex routing is necessary. Annual maintenance charges range from $200 to over $300 per strand, per mile.

In the dark fiber market, most IRUs require that the grantee obtain a minimum number of strands.

The education and research network in North Carolina, MCNC (Microelectronics Center of North Carolina), offers an upfront dark fiber IRU price starting at $750 per fiber per mile, based on a 20-year term, plus the proportional cost of maintenance, set at $250 per strand mile. The fee drops as the number of strands leased increases. For example, the price is $325 per strand per mile when 12 or more strands over an entire ring are included in the IRU. These prices are extremely low when compared to more typical IRU fees. In suburban areas, typical IRU pricing is in excess of $2,000 per fiber per mile.

[48] Zayo prices on-net fiber at monthly fee, based on a quote rather than a rate card. The per mile prices above are calculated based on a quoted monthly fee divided by the estimated route miles to connect the facilities selected to obtain the quote.

For the initial analysis we have assumed an average IRU of $1,700 per fiber per mile and an annual maintenance fee $250 per route mile.

5.4 Dark Fiber License and IRU Revenue Assumptions

The first step in estimating dark fiber revenue potential is to prepare strand allocations for the fiber. Of the proposed 288-strand cable we recommend 48 strands be allocated for Town use, including maintenance spares, which would leave This leaves 240 strands for licenses or IRUs. Assuming the Town licenses or has IRUs for 24 strands, 216 remain.

For IRU revenue, we assume that the Town will enter into an IRU for 12 strands for each of the fiber phases. We assume the IRU occurs in year 2.

Next, we look at assumptions for fixed licenses. One issue with fixed dark fiber licenses is isolating strands in a given segment. For this analysis, we estimate that 50 percent of the available strands will become isolated or unusable. We assume that the Town will be able to license 11 percent of the net available strands[49]. These assumptions result in the Town obtaining licenses for 348 strand miles of fiber. We then assume that it takes three years to obtain these licenses.

Please note that the estimates above are hypothetical levels and are not based on feedback from potential licensees.

5.5 Draft Financial Projections

We assumed that the Town would bond to finance the fiber network. Bonding assumptions include a one percent issuance cost, a five percent debt service reserve, a six percent interest rate, and a 20-year term. In addition, we assume that the bond will be issued at 115 percent of the estimated construction costs, for a bond amount of $3.105 million.

The resulting projections show the enterprise maintaining a positive cash flow over the 20-year analysis period.[50] This analysis does not show the potential avoided costs for the Town for connecting their facilities. Access to fiber can substantially reduce future costs as the required speed and performance requirements increase.

The Income Statement and Cash Flow Statement are shown in Table 5 and Table 6.

[49] Not based on market research or identified opportunities. It is the percentage required for the enterprise to obtain a positive cash flow given the stated assumptions.

[50] Note that these projections are based on a flat analysis.

Table 5: Income Statement

Income Statement	Year 1	2	3	4	5	6	7	8	9	10
Revenues										
Monthly Leases	$ 19,000	$ 112,000	$ 298,000	$ 420,000	$ 466,000	$ 466,000	$ 466,000	$ 466,000	$ 466,000	$ 466,000
IRU - One Time Payment	-	357,000	-	-	-	-	-	-	-	-
IRU Maintenance Fee	-	-	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Total Revenues	$ 19,000	$ 469,000	$ 302,000	$ 424,000	$ 470,000	$ 470,000	$ 470,000	$ 470,000	$ 470,000	$ 470,000
Operating Expenses										
Insurance	$ -	$ 37,500	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Locates and Ticket Processing	-	12,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000
Pole Attachments	-	-	-	-	-	-	-	-	-	-
General Maintenance	6,750	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000
Record Keeping (GIS, strand maps, etc.)	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Support Allocations (HR, Finance, Legal, Admin)	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Program Management	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Maintenance & Support Contract	-	-	-	-	-	-	-	-	-	-
Total Operating Expenses	$ 96,750	$ 166,500	$ 183,000	$ 183,000	$ 183,000	$ 183,000	$ 183,000	$ 183,000	$ 183,000	$ 183,000
EBITDA (Revenues less operating expenses)	$ (77,750)	$ 302,500	$ 119,000	$ 241,000	$ 287,000	$ 287,000	$ 287,000	$ 287,000	$ 287,000	$ 287,000
Non-Operating Expenses										
Interest Payment	$ -	$ 162,000	$ 158,000	$ 153,000	$ 148,000	$ 143,000	$ 137,000	$ 131,000	$ 125,000	$ 118,000
Total Non-Operating Expenses	$ -	$ 162,000	$ 158,000	$ 153,000	$ 148,000	$ 143,000	$ 137,000	$ 131,000	$ 125,000	$ 118,000
Depreciation										
Fiber Depreciation	$ -	$ 101,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000
Total Depreciation	$ -	$ 101,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000
Net Income	$ (77,750)	$ 39,500	$ (174,000)	$ (47,000)	$ 4,000	$ 9,000	$ 15,000	$ 21,000	$ 27,000	$ 34,000

(EBITDA less non-operating expenses less depreciation)

Table 6: Cash Flow Statement

Cash Flow Statement	Year 1	2	3	4	5	6	7	8	9	10
Net Income	$ (77,750)	$ 39,500	$ (174,000)	$ (47,000)	$ 4,000	$ 9,000	$ 15,000	$ 21,000	$ 27,000	$ 34,000
Cash Outflows										
Financing Issuance Cost	$ 31,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Debt Service Reserve	155,000	-	-	-	-	-	-	-	-	-
Construction	2,025,000	675,000	-	-	-	-	-	-	-	-
Total Cash Outflows	$ 2,211,000	$ 675,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cash Inflows										
Funds From Loan	$ 3,105,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Debt Service Reserve	-	-	-	-	-	-	-	-	-	-
Avoided Costs	-	-	-	-	-	-	-	-	-	-
Total Cash Inflows	$ 3,105,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Cash Outflows and Inflows	$ 894,000	$ (675,000)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-Cash Expenses (depreciation)	$ -	$ 101,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000	$ 135,000
Principle Payment	$ -	$ 109,000	$ 113,000	$ 118,000	$ 123,000	$ 128,000	$ 134,000	$ 140,000	$ 146,000	$ 153,000
Net Cash	$ 816,250	$ (643,500)	$ (152,000)	$ (30,000)	$ 16,000	$ 16,000	$ 16,000	$ 16,000	$ 16,000	$ 16,000
(Net Income less cash outflows plus cash inflows plus depreciation less principle payment)										
Accumulated Cash	$ 816,250	$ 172,750	$ 20,750	$ (9,250)	$ 6,750	$ 22,750	$ 38,750	$ 54,750	$ 70,750	$ 86,750
NPV 10-Year at a 6 percent discount rate	$ 108,000									
NPV 20-Year at a 6 percent discount rate	$ 222,000									

Appendix A: Itemized Fiber Construction Cost Estimates

Segment / Site Name	Site / Segment Classification	Anchor Sites	Construction Phase (1-6)	Total Segment Footage	Segment Mileage (Total)	Conduit/Fiber OSP Engineering Cost	Project Management / Quality Control	Conduit/Fiber OSP Construction Cost	Railroad and Interstate Crossing Costs	Splicing Cost	Termination and Testing Cost	Total Cost
1 - Singer Property to Town Hall	Core / Backbone	2	1	1,603	0.30	$5,488	$2,101	$32,928	$0	$7,400	$16,570	**$64,487**
2 - PD to Annex to Town Hall	Core / Backbone	2	1	2,536	0.48	$8,685	$3,324	$52,108	$0	$7,400	$5,610	**$77,127**
3 - OC West Campus to PD	Core / Backbone	1	1	1,480	0.28	$5,068	$1,940	$30,408	$0	$7,400	$13,765	**$58,581**
4 - Police Substaion	Core / Backbone	1	1	7,491	1.42	$25,650	$9,817	$153,898	$0	$7,400	$2,805	**$199,571**
5 - NC-86 Facility	Core / Backbone	1	1	5,383	1.02	$18,434	$7,056	$110,603	$0	$7,400	$2,805	**$146,297**
6 - Water Treatment	Core / Backbone	1	1	10,392	1.97	$35,583	$13,619	$213,496	$34,380	$7,400	$2,805	**$307,284**
7 - Old Water Treatment	Core / Backbone	1	1	1,093	0.21	$3,743	$1,433	$22,459	$0	$7,400	$2,805	**$37,840**
8 - Wastewater Treatment Plant	Core / Backbone	1	1	10,927	2.07	$37,415	$14,320	$224,485	$18,600	$7,400	$2,805	**$305,026**
9 - County 911 Center	Core / Backbone	1	1	5,620	1.06	$19,245	$7,366	$115,465	$0	$7,400	$13,765	**$163,241**
10 - Northern Ring	Core / Backbone	0	2	6,900	1.31	$23,627	$9,043	$141,758	$0	$10,640	$2,805	**$187,873**
12 - Southern Ring	Core / Backbone	0	2	35,126	6.65	$120,280	$46,037	$721,666	$158,920	$21,280	$0	**$1,068,183**
13 - Water Tower	Lateral	1	2	1,964	0.37	$6,726	$2,574	$34,952	$0	$1,090	$2,805	**$48,147**
11 - Gold Park	Lateral	1	1	634	0.12	$2,170	$830	$11,275	$0	$1,090	$2,805	**$18,170**
14 - Cates Creek Park	Lateral	1	2	634	0.12	$2,170	$830	$11,275	$0	$1,090	$2,805	**$18,170**
		14	**Total:**	**91,782**	**17.38**	**$314,284**	**$120,290**	**$1,876,777**	**$211,900**	**$101,790**	**$74,955**	**$2,699,997**

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☐ Yes ☒ No

Date of Public Hearing: _____

For Clerk's Use Only
AGENDA ITEM #

	9.B	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Consideration of request to dedicate a small parcel of land connecting Lakeshore Drive and Forrest Street

Attachment(s):

Map and email

Brief Summary:

One of the family members who owns a 12' wide strip on land inquired about giving the parcel to the town. She contacted the adjoining owners, but did not hear back with interest in acquiring it. The parcel is not needed for connectivity or utility purposes.

Action Requested:

Direction

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

The family does currently receive an annual tax bill on the property of about $12.

Staff Recommendations/Comments:

Margaret Hauth

From: Jean Forrest Brooks <kodiakb@centurylink.net>
Sent: Wednesday, November 16, 2016 5:09 PM
To: Margaret Hauth
Cc: Elizabeth Hamlin; Richard Forrest
Subject: Donation of land

Margaret ,
Thank you for your phone call to clarify the process to donate land to the town.
The land my family wishes to donate is PIN 9864592724 It is a long, small strip of land "left over" during the time my father S.C. Forrest and Jame Freeland developed the area.
I made contact with the adjacent landowners as to their interest in purchasing the land. I never heard back from them.
The land fronts a road on each end and could easily be used as a public walkway.
We are hoping you will find this gift acceptable and of use to the town and community.

Sincerely,

Jean Forrest Brooks
And Ida N. Forrest heirs
Wednesday November 16, 2016
Sent from my iPad

Orange County, NC GIS

1 inch = 50 feet
Created on 12/5/2016. Orange County, North Carolina.

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☒ Yes ☐ No

Date of Public Hearing: October 20, 2016

For Clerk's Use Only
AGENDA ITEM #

	9.C	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Consideration of Request from Little School to amend their special use permit to construct additional parking and increase their enrollment (OC PIN 9873-25-6187).

Attachment(s):

Table detailing staffing and students, Draft PB minutes, draft resolution of approval

Brief Summary:

The applicant applied to modify their Special use Permit to allow the construction of additional on-site parking and remove the current enrollment cap. This request was discussed at the October public hearing with little comment outside responding to board questions. The request triggers a number of waivers and master plan amendments to accommodate the creation of additional on-site parking. The applicant requested the enrollment cap be removed. The Planning Board recommended approval of the modification, with the condition that instead of removing the enrollment cap, the applicant submits information annually to document their continued compliance with the parking requirement. Two planning board members had concern about the setback waiver, but not sufficient enough to oppose the entire request.

Action Requested:

Consider approving the resolution of approval.

ISSUE OVERVIEW

Background Information & Issue Summary:

The attached table was provided by the applicant following the Planning Board meeting. It indicates the various arrangements of staff and student scenarios that allows the site to be in compliance for parking. Enrollment at the schools shifts as the children ages and that impacts staffing and parking. A strict enrollment cap is unlikely to be effective to ensure parking compliance.

Financial Impacts:

civil consultants
LAND DEVELOPMENT CONSULTANTS

PARKING SUMMARY

The Little School
304 College Park Road
Hillsborough, NC

Number of Parking Spaces: **92** Minimum number of parking spaces = one per staff member plus one for each eight students

Number of Staff Members:	55	56	57	58	59	60	61	62	63	64	65
Maximum Enrollment:	300	292	284	276	268	260	252	244	236	228	220

ITEM #6: Recommendation to Town Board regarding request from the Little School Development LLC to Modify their approved Special Use Permit to create additional on-site parking and remove the enrollment limitation (OC PIN 9873-25-6187).

Ms. Frazier said her daughter is employed by The Little School. Mr. Hornik advised that is not a legal conflict of interest but if she feels uncomfortable, she may recuse herself. Ms. Frazier said she doesn't feel uncomfortable participating in this conversation. No one on the board felt that she needed to be excused from this item.

Ms. Hauth reviewed the request and that speakers employed by The Little School spoke at the public hearing. The waiver regarding the number of parking spaces is no longer needed because the school has the exact number of spaces now required under the Unified Development Ordinance (UDO).

Ms. Morris asked about the number of employees. Wendy Vavrousek of The Little School said 65-66 including teachers, chef, and administration.

Regarding Waivers 1, there was general consensus to grant so that The Little School would not be required to plant trees throughout the parking lot. First, Mr. Czar expressed that he did not support granting this waiver. The intention of islands with trees is to provide shade and reduce heat in the summer. If the waiver wasn't granted, then the school would lose four parking spaces and would need the waiver regarding the number of parking spaces. Another board member said the islands with trees doesn't add much to the current parking lot. The trees will be moved to the edge near the parking.

Regarding Waiver 2, also requiring shade trees, there was general consensus to grant the waiver.

Regarding Waiver 3, there was agreement to grant the waiver and reduce the side setback from 20 feet to 10 feet. First, Ms. Helfrich shared that in a couple of daycares she's seen a u-shaped drop-off lane that would accommodate 6 to 9 cars. Chairman Barker advised that the layout was approved when the original parking was approved. The 20 foot setback would take away one or two parking spaces.

Regarding Waiver 4, there's a portion of the travel aisle where the width is less than 25 feet. Regarding Waiver 5, it's also related to landscaping in the parking area. Waiver 6 no longer applies. Regarding Waiver 7, Ms. Hauth said if it's in the range of 25 and 50 percent, it's been permissible.

There was discussion that the concerns are for safety and for appropriate setback when the land is developed next door (possibly by Habitat for Humanity). Tony Whitaker, a civil engineer with Civil Consultants representing The Little School, said the 10-foot setback is well landscaped and does conform to the landscape requirement and offers some buffering to that adjacent property that is only 60 feet wide. He doesn't think a building would be built on that 60-foot strip. He didn't think it would harm any other property to make this request. Specifically, if this waiver isn't granted, the school loses one parking space.

Mr. Whitaker said for the affordable housing special use permit, that driveway is a current requirement. It is essential for the circulation pattern and for what Ashton Woods requires.

Chairman Barker moved the discussion on to the request to remove the enrollment cap.

Mr. Whitaker said 294 is the theoretical cap for licensing but is not the practical one. The existing SUP allows 196 and current population is 239 all day and 14 additional after-school children. The original approval was for enrollment.

The board discussed thoughts on this, recognizing that The Little School has comfortably operated at this capacity that is beyond their SUP cap for some time.

Mr. Whitaker clarified that if the star rating dropped the school would not be allowed to enroll more than 294 children.

Mr. Hornik suggested requiring that the school report each year on the enrollment. It was agreed that when the school annually reports its enrollment to the star rating program, the school will also report to the town.

Ms. Hauth said if the staff is 66, there's only parking for 208 students. Chairman Barker asked The Little School how many staff members are present at one time. (The 66 is the number of names under The Little School's payroll). The requirement is one parking space for every 8 students. Mr. Whitaker pointed out the 14 after-school students have parents who need to pick up younger siblings at the school anyway. Ms. Hauth pointed out at the enrollment of 239, with 66 employees (who are probably not all there at once), the school would be shy 3 parking spaces in this proposal. The 66 employees are not all there at once.

Chairman Barker took straw polls of who was concerned about what. Two were concerned about reducing the 20 foot setback.

MOTION: Ms. Sykes moved to recommend that the Town Board grant the waivers and grant the SUP modifications, eliminate enrollment and replace with an annual report of parking compliance.

DISCUSSION:

Mr. Czar noted there were two more modifications on the application including the play structure and the sign location. Chairman Barker asked if the play structures were permitted. Mr. Whitaker said staff is contacting Orange County inspections to figure out what needs permitting. The electrical work for the outbuildings was inspected, he said. It was clarified that the modification request to the SUP is out of an abundance of caution. The buildings are play equipment or play structures.

Mr. Whitaker said when staff realized the sign location was nonconforming, that was added to the request.

VOTE: Unanimous

TOWN OF HILLSBOROUGH BOARD OF COMMISSIONERS

RESOLUTION MODIFING A SPECIAL USE PERMIT SUBJECT TO SPECIAL CONDITIONS AFFECTING 4.97 ACRES OF LAND IDENTIFIED AS OC PIN 9873-25-6187

WHEREAS, the Town of Hillsborough Board of Commissioners has received an application from The Little School Development Group, LLC to modify their Special Use Permit to operate a day care facility at 325 College Park Road on the parcel known as OC PIN 9873-25-6187; and

WHEREAS, the Town of Hillsborough Planning Board and the Board of Commissioners conducted a joint public hearing to consider the application on October 20, 2016 after giving notice thereof as required by law; and

WHEREAS, at the aforesaid public hearing, the Applicant and all others wishing to be heard in connection with the Application were given an opportunity to do so; and

WHEREAS, the Town of Hillsborough Planning Board has made it's recommendation to the Town of Hillsborough Board of Commissioners regarding the Application;

WHEREAS, the Town of Hillsborough Board of Commissioners has considered the recommendation of the Planning Board and all the information and testimony presented to it at the public hearings.

NOW, THEREFORE, BE IT RESOLVED by the Town of Hillsborough Board of Commissioners, on motion of _____, seconded by _____, this 12th day of December, 2016 as follows;

1. The Board of Commissioners has considered all the information presented to it both in support of and in opposition to the application at the October public hearing;

2. The Board of Commissioners finds that the requested permit is within its jurisdiction according to the Table of Permissible Uses, that the application is complete, and that if the proposed development is completed as proposed in the application, subject to the Special Conditions attached hereto, it will comply with the requirements of the Unified Development Ordinance.

3. The Special Conditions attached hereto are intended to preserve and/or promote the health, safety and welfare of the surrounding areas and the Town of Hillsborough in general, and to insure that the provisions established by Section 3.8 and 5.2.9.2 of the Unified Development Ordinance are met.

4. Upon adoption of this Resolution, the Town of Hillsborough shall issue a Special Use Permit modification in the standard form with the Special Conditions attached and notice of

this decision and issuance of the special use permit shall be transmitted forthwith in accordance with Section 3.8.16 of the Unified Development Ordinance.

5. The Special Conditions applying to this Special Use Permit modification are:
   a. The conditions attached to the October 14, 2008 approval remain in effect except as specifically modified below.
   b. Waivers 1, 2, 3, 4, 5, and 7 detailed in the August 16, 2016 application materials are hereby granted as requested.
   c. The one hundred foot perimeter buffer shown on the original SUP and Waterstone Master Plan can be modified to allow encroachments for parking as shown in the October 5, 2016 site plan accompanying the modification request.
   d. The enrollment cap of 196 students included in the original Special Use Permit submittal information is hereby replaced with a requirement that the applicant provide annual documentation to the Hillsborough Planning Department confirming they are in compliance with the town's parking requirement of one space per employee and one space per eight students based on the enrollment and employment information provided to the state as part of determining its star rating annually.
   e. The October 5, 2016 site plan package becomes the approved site and special use permit compliance drawings for the property, including documentation of current play structures and signage.

The foregoing Resolution was put to a vote of the Town of Hillsborough Board of Commissioners, the results of which vote are as follows:

Ayes:

Noes:

Absent or Excused:

Dated: _____ _____

Katherine M. Cathey, Town Clerk

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☒ Yes ☐ No

Date of Public Hearing: October 20, 2016

For Clerk's Use Only
AGENDA ITEM #

	9.D	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Adoption of statement of Consistency and Ordinance amending the Hillsborough Zoning Map regarding request from Vouthaus, LLC to Rezone 9.75 acres at 505 Eno Street from General Industrial to Adaptive Re-Use so the building can house a wider variety of uses that are not industrial (OC PIN 9864-65-3492).

Attachment(s):

Draft consistency statement and draft amending ordinance

Brief Summary:

The request was discussed at the October public hearing. As a general purpose rezoning, no conditions can be imposed. Since there was some public hearing discussion and Planning Board concern about traffic, this item is on the regular agenda rather than consent. The Planning Board did unanimously recommend approval of the amendment.

Action Requested:

Consider adopting the consistency statement that the amendment IS consistent with the Comprehensive Plan and adopt the ordinance amending the Unified Development Ordinance.

ISSUE OVERVIEW

Background Information & Issue Summary:

One neighbor spoke at the public hearing. The applicant made no presentation. The Planning Board's recommendation was unanimous, but two members considered voting against it due to the lack of opportunity to discuss impacts of uses, particularly to traffic in the vicinity, since most uses in ARU are by right.

Financial Impacts:

Staff Recommendations/Comments:

MINUTES
PLANNING BOARD
Thursday, November 17, 2016
7:00 PM, Town Barn

PRESENT: James Czar, Chairman Dan Barker, Lisa Frazier, Janie Morris, Carolyn Helfrich, Jenn Sykes
ABSENT: Rick Brewer, Doug Peterson, Vice Chair Toby Vandemark, Chris Wehrman

STAFF: Planning Director Margaret Hauth, Town Attorney Bob Hornik

ITEM #1: Call to order and confirmation of a quorum
Chairman Barker called the meeting to order at 7 p.m. and confirmed a quorum with six members present.

ITEM #2: Consideration of additions or changes to the agenda
There were none.

ITEM #3: Approval of minutes from September meeting and October public hearing
MOTION: Ms. Morris made a motion to approve the minutes from both meetings as submitted. Ms. Frazier seconded.
VOTE: Unanimous

ITEM #4: Approval of 2017 meeting calendar
MOTION: Mr. Czar moved to approve the calendar. Ms. Sykes seconded.
VOTE: Unanimous

ITEM #5: Recommendation to Town Board regarding request from Vouthaus, LLC to Rezone 9.75 acres at 505 Eno Street from General Industrial to Adaptive Re-Use so the building can house a wider variety of uses that are not industrial (OC PIN 9864-65-3492).
Ms. Hauth said she didn't have any additional information. There was one speaker at the public hearing who asked questions that were not directly related to the application and those questions were answered at the hearing. The applicant did not attend the public hearing.

Ms. Sykes expressed concern about potential traffic impacts in that area. Ms. Hauth said there's unlikely to be an impact to Nash Street. The driveway access is on Eno Street and the driveway is very wide. Ms. Sykes expressed concern about adding to traffic on Eno Street but she is not opposed to the types of uses permissible in Adaptive Re-Use. Mr. Czar spoke in favor of Adaptive Re-Use. Ms. Morris agreed it seemed like a good fit. Ms. Frazier said she has concerns about traffic around Gold Park and the school over there. Ms. Helfrich said the re-zoning seems reasonable to her but she understands concerns about traffic.

MOTION: Mr. Czar moved to recommend that the Town Board approve rezoning this property to Adaptive Re-Use. Ms. Morris seconded.
VOTE: Unanimous

Town Board's Statement per N.C. Gen. Stat. 160A-383

The Town of Hills borough Town Board has received and reviewed the application of Vouthaus LLC to amend the Town of Hillsborough Zoning Map as follows (insert general description of proposed amendment):

to rezone 9.758 acres currently zoned General Industrial to Adaptive Re-Use
(OC PIN 9864-65-3492)

The Hillsborough Town Board has determined that the proposed action is consistent /inconsistent with the Town of Hillsborough's comprehensive plan, and the Town Board's proposed action on the amendment is reasonable and in the public interest for the following reason(s):

The Adaptive Re-Use district is more consistent with the town's adopted long term uses for this property than the current industrial designation.

Adopted by the Town of Hillsborough Board of Commissioners this 12th day of December, 2016.

_____
Katherine M. Cathey, Town Clerk

AN ORDINANCE AMENDING THE ZONING MAP
OF THE TOWN OF HILLSBOROUGH

THE BOARD OF COMMISSIONERS OF THE TOWN OF HILLSBOROUGH ORDAINS:

Whereas an application has been made for the rezoning of the property herein; and

Whereas the application has been referred to the Town Planning Board for its recommendation and the Planning Board has provided the Town Board with a written recommendation addressing the consistency of the proposed rezoning with the Town's comprehensive plan and such other matters as the Planning Board deemed appropriate; and

Whereas the Town Board has, prior to acting on the application, adopted a statement describing the consistency of the proposed rezoning with the Town's comprehensive plan and explaining why the action contemplated by the Town Board as reflected herein is reasonable and in the public interest.

NOW, THEREFORE, be it ordained as follows:

Section 1. The Zoning Map of the Town of Hillsborough is hereby amended to rezone 9.75 acres at 505 Eno Street from General Industrial to Adaptive Re-Use (OC PIN 9864-65-3492).

Section 2. All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

The foregoing ordinance having been submitted to a vote received the following vote and was duly ADOPTED/DENIED this 12th day of December, 2016.

Ayes:
Noes:
Absent or Excused:

_____
Katherine M. Cathey, Town Clerk

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☐ Yes ☒ No

Date of Public Hearing: _____

For Clerk's Use Only
AGENDA ITEM #

	9.E	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Receive update on Collins Ridge project and its relation to Daniel Boone Village

Attachment(s):

Development timeline provided by Caruso

Brief Summary:

In November, the board received an update on Collins Ridge indicating that applicant team had put the Daniel Boone property under contract. It was their stated intent to develop the properties concurrently and shift access for Collins Ridge south to be along James J. Freeland Memorial Drive.

The applicants still have the Daniel Boone properties under contract, but need to delay construction activity on the Boone properties until after they have acquired the property. Therefore, the initial site access revert to Orange Grove Road. The development of land will still begin south of the powerline easement. With the time it will take to design and construct the primary access road (which will connect Orange Grove Road to James J. Freeland Memorial Drive), the applicants expect to be very close to closing on the Daniel Boone property before they get very far along with actual parcel development in Collins Ridge. The applicants have submitted their first Special Use Permit application for parcels B, C, D, E and the southern portion of F (approximately 2/3 of the area) as shown in the master plan. The modifications to the master plan will be more minor than discussed in November.

Action Requested:

None

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

Staff Recommendations/Comments:

November 2016 – We submitted the SUP (Special Use Permit) application to the Town of Hillsborough.

January 2017 – Town of Hillsborough will hold a Public Hearing regarding our SUP application.

February 2017 – The Town Planning Board will hold a meeting to review our SUP application.

March 2017- The Town Board of Commissioners will review our application and consider the recommendation of the Planning Board. NOTE: This may slide into April or May.

August 2017 – We will receive approval of our construction drawing plans from Town of Hillsborough / Orange County. NOTE: This may be June or July but we anticipate August.

February 2018 – Finish the construction of the first phase of infrastructure (roadway and utilities).

April 2018 – We will purchase "Daniel Boone Village" on or before April 2018.

April / May 2018 – We will begin construction of the James J. Freeland Memorial Drive from Churton, connecting into the main roadway of "Collins Ridge".

Per our "Conditions of Approval" from the Town of Hillsborough, Section 8 (E) states that we shall be permitted to construct (450) units within Phase 1 of Collins Ridge Master Plan, provided that the following access points are constructed:

1. A permanent access from Orange Grove Road into "Collins Ridge".
2. A second temporary access through the power line easement to Churton Street at least twenty (20) feet wide and graveled in accordance with Town Standards.

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☐ Yes ☒ No

Date of Public Hearing: _____

For Clerk's Use Only
AGENDA ITEM #

	9.F	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Authorize negotiation of design contract for north campus office renovations

Attachment(s):

Qualifications from RND Architects

Brief Summary:

The town published a Request for Qualifications for the north campus renovation project on November 1. Nine firms submitted proposals by the December 1 deadline. Staff recommends the town negotiate a contract with RND Architects from Durham.

Action Requested:

Authorize staff to negotiate design services contract for the north campus renovation project with RND Architects

ISSUE OVERVIEW

Background Information & Issue Summary:

Nine well-qualified firms responded to our request. The proposals were reviewed by Stephanie Trueblood, Jen Della Valle, and Margaret Hauth. Each of the three had RND architects in their top two firms. The proposal from RND provided significant detail in how the firm would address the Hillsborough projects while many of the proposals described a more general approach. The firm has a strong and long history in government renovation projects. The firm also had strong partners to cover engineering aspects of the project. The firm is located in Durham, so quick response is expected. The project manager is a Hillsborough resident and former volunteer.

There is not yet an established budget for this project. Design services have to be selected on qualifications, not price. The board will have final approval and authorization for any contract.

Financial Impacts:

Staff Recommendations/Comments:

qualifications for the

HILLSBOROUGH TOWN BARN, TOWN HALL ANNEX & PUBLIC MEETING ROOM

Town of Hillsborough, NC

12.01.2016

RND

architects

RND
architects

3608 University Drive
Suite 204
Durham North Carolina 27707

T 919 490 1266
F 919 490 1396

www.RNDarchitects.com

November 28, 2016

Margaret Hauth
Town of Hillsborough, Planning Director

RE: RFQ for the Hillsborough Town Barn, New Town Hall Annex and Public Meeting Room

Dear Ms. Hauth:

RND Architects is pleased to present our qualifications for the Hillsborough Town Barn, New Town Hall Annex and Public Meeting Room. We are excited by this opportunity because it will engage our firm's strengths in both renovation and local government work. Our dedicated team has worked on similar projects for nearly three decades. This length term of collaboration has refined us into a well-organized team of professionals uniquely suited for your project. Our team includes:

Architecture/Interiors: RND Architects, PA
MEP Engineering: Edmondson Engineers, PA
Structural Engineering: Gardner and McDaniel, PA
Civil/Landscape Arch.: Coulter Jewell Thames, PA

As renovation experts, 90% of our portfolio involves this nature of work. We are uniquely skilled to identify the most efficient and economical uses for existing facilities, which maximizes your budget and helps realize your project goals without compromise. We understand the level of investigation and assessment necessary to deliver renovation projects on schedule and within budget and are eager to assist your mission with our knowledge.

We understand your budget for this project may be limited and we have responded by proposing a project team with an experienced principal to lead the efforts while much of the documentation and ground work will be performed by technically proficient yet more economical staff. This approach will provide value to the design process and enable your budget to be maximized on improved space for the town staff and residents.

We appreciate the opportunity to submit our proposal and thank you for your considerations. We are confident our team is well suited for your project and welcome the opportunity to further discuss or demonstrate our abilities with renovations of this scope. Please let me know if there is any additional information we can provide.

Best regards,

David B. Daniel, AIA, LEED AP
Principal, RND Architects, PA

TEAM PROFILES 02

We are pleased to present the following team of design consultants to provide professional services for this project. These are highly qualified and respected design consultants with whom RND has completed many successful projects.

RND Architects, PA	Project Management, Architecture, Interior Design
Edmondson Engineers, PA	MEP Engineering
Gardner & McDaniel, PA	Structural Engineering
Coulter Jewell Thames, PA	Site Planning/Landscape Architecture

RND Architects, PA

Project Management • Architecture • Interior Design

RND Architects, PA will lead the design team and will be the legal entity that enters a contract with the Town of Hillsborough. David Daniel, Vice President and Principal Architect, will be the authorized signatory to the design agreement. Our design team will provide architectural and interior design services for the Town Barn, Town Hall Annex, and Public Meeting Room.

Our professional staff includes five registered architects, one talented interior designer, dedicated support personnel, and seasoned construction administrators. Having completed renovations in the Town of Hillsborough in the past, we are extremely familiar with the city and it's local procedures and requirements.

This project's diverse challenges will be matched by our diverse skillsets. We have extensive experience in the renovation and new construction of offices, conference spaces, IT rooms, administrative spaces, and restrooms. We also are fluent in ADA upgrades, code remediation, cost estimation, feasibility studies, and comprehensive mechanical and electrical system replacements.

RND ARCHITECTS, PA RELATED PROJECTS:

- Alamance County Health and Human Services Masterplan
- Alamance County EMS Station Renovation
- Alamance County 911 Call Center Renovation
- Alamance County Family Justice Center Renovation
- Alamance County Courthouse Renovation
- City of Durham City Hall Renovation
- City of Durham City Hall Annex Renovation
- City of Durham Police Headquarters Renovation
- City of Durham Fire Maintenance Facility Renovation
- City of Durham Fire Station #12 Renovation
- Duke University Human Services Relocation
- NC Department of Justice Western Regional Crime Lab Renovation
- Person County Tax Office Renovation

Location:
Durham, NC

Phone:
919.490.1266

Team:
11 Employees
5 Registered Architects
4 LEED Professionals

Contact:
David B. Daniel
Principal/Architect
License #11381
919.490.1266
David@RNDpa.com

Edmondson Engineers, PA

Mechanical Engineering • Electrical Engineering • Plumbing Engineering

Edmondson Engineers is a locally owned consulting engineering firm in Research Triangle Park, NC. Since the firm's inception in 1993, our design teams have worked intimately with their engineer professionals. Together, we have completed numerous renovations for our local governments, including a three-phased renovation to Durham's City Hall.

The engineers at Edmondson are fluent in both new construction and renovation projects. They are accustomed to performing major equipment replacements and building improvements within restricted budgets and timeless. For your project, they will provide all the necessary mechanical, electrical, and plumbing engineering services.

Location:
Durham, NC

Phone:
9919.544.1936

Team:
22 Employees

Contact:
Dennis Hayes
Principal Engineer
License #28869
Dennis.Hayes@
edmondsonengineers.com

Gardner & McDaniel, PA

Structural Engineering

Gardner & McDaniel is a woman-owned structural engineering firm located in Durham, NC. They have provided structural engineering services to the architectural profession since 1953. More than six decades of design work has molded this firm into with both technical expertise and practical experience.

Their engineering team has completed projects of all scales and types, including both new construction and renovation projects. They are knowledgeable of all framing and foundation systems and are skilled in using proven materials such as concrete and steel in their designs as well as more modern techniques such as tied caisson walls and composites.

RND has an extensive working history with Gardner and McDaniel. Consequently, we are confident in our ability to work collaboratively towards your goals.

Location:
Durham, NC

Phone:
919.489.0926

Team:
4 Employees

Contact:
Bill Easterling
Principal Engineer
License #28335
Bill@GMengrs.com

COULTER JEWELL THAMES, PA

Civil Engineering • Landscape Architecture

Coulter Jewell Thames, PA is a professional engineering, land surveying, and landscape architecture firm located in Durham, NC. Their design philosophy is simple- they examine all physical, political, and market factors to develop innovative solutions for their clients. Their design teams excel in leverage opportunities out of project constraints.

The client base of Coulter Jewell Thames includes both local and city governments, county governments, higher education facilities, and private developers. For your project, they will provide site design, surveying, site plans, water and sewer system design, grading, storm drainage, and landscape design as needed.

Location:
Durham, NC

Phone:
919.682.0368

Team:
19 Employees

Contact:
Dan Jewell
Landscape Architect
License #576
djewell@cjtpa.com

TEAM RESUMES

03

Margaret Hauth
PLANNING DIRECTOR
Town of Hillsborough

David B. Daniel
AIA, LEED AP BD + C
PRINCIPAL IN CHARGE / DESIGN PRINCIPAL
RND Architects, PA

DESIGN TEAM

Karylee Laird
ARCHITECTURAL TECHNICIAN
RND Architects, PA

Elisabeth Baird
ARCHITECTURAL DESIGNER
RND Architects, PA

Vicki Shafer
ASSOC. IIDA
INTERIOR DESIGNER
RND Architects, PA

CONSULTANT TEAM

Dennis Hayes
PE
ELECTRICAL ENGINEER
Edmondson Engineers, PA

Bill Easterling
PE
STRUCTURAL ENGINEER
Gardner & McDaniel, PA

Dan Jewell
PLA
LANDSCAPE ARCHITECT
Coulter Jewell Thames, PA

Charles Crowl
PE
MECHANICAL ENGINEER
Edmondson Engineers, PA

TEAM RESUMES

03

David Daniel, AIA, LEED AP BD+C
RND Architects, PA
Project Role: *Design Principal / Project Manager*

Since joining RND in 2007, David has worked on a variety of project types including local and state government, higher education, healthcare, and retirement community projects. David served as Principal-In-Charge of the new NC Department of Justice Western Regional Crime Lab and the renovation of the State Crime Lab in Raleigh.

In addition, David is active in his local community and has served on the Planning Board for the Town of Hillsborough, NC, where he resides.

RELATED PROJECT EXPERIENCE:

- Durham City Hall Renovation
- Western Regional Crime Lab
- State Crime Lab Renovation
- DOJ Old Education Building Renovation

Karylee Laird
RND Architects, PA
Project Role: *Architectural Technician*

Karylee joined our team in 2015. She is an expert in Revit and BIM technology, which has greatly enhanced our firm's technical performance. As your Architectural Technician, she will generate a highly accurate 3D model of your existing Town Barn and Town Hall.

These models will enable our design and consultant teams to produce highly accurate 2D construction details and a precise bid set. Our accuracy will result in accurate material and cost estimates and direct cost savings.

RELATED PROJECT EXPERIENCE:

- Durham Solid Waste Management Renovation
- UNC Taylor Hall Renovation
- Chapel Hill Bible Church Renovation and Addition

Elisabeth Baird
RND Architects, PA
Project Role: *Architectural Designer*

As a junior Architectural Designer, Elisabeth will assist our design team in developing schematic and design development concepts and drawings. With a keen eye for design and graphics, she produces renders and diagrams to communicate the design team's ideas. She also assists during construction documentation in the development of construction details and drawings.

RELATED PROJECT EXPERIENCE:

- Chapel Hill Bible Church Renovation and Addition
- NCSU Wolf Ridge Renovation
- UNC CH Taylor Health Renovation

TEAM RESUMES 03

Vicki Shafer, Assoc. IIDA
RND Architects, PA
Project Role: *Interior Designer*

Vicki has over forty years of specialized interior design experience. Her award-winning portfolio is rich with projects of various scopes. However, many of her most notable transformations have served government facilities.

For your project, Vicki will advise our design team and the owner in selecting appropriate finishes, lighting solutions, and furniture systems that are comfortable and durable. As a resident of Hillsborough, she is also extremely familiar with the historical and physical contexts of the project.

RELATED PROJECT EXPERIENCE:

- Durham City Hall Renovation
- Alamance County Courthouse Renovation
- Chapel Hill Bible Church Addition and Renovation

Dennis Hayes, PE
Edmondson Engineers, PA
Project Role: *Senior Electrical Engineer Principal*

Dennis has over twenty-two years of electrical engineering project experience. Throughout his career, he has worked on all major electrical building systems, including the design of power distribution, interior lighting, site lighting, fire alarm systems, and telecommunication systems.

Dennis is highly experienced with projects pertaining to government facilities. He has worked with our design team in most our municipal work, including the Durham City Hall Renovation.

RELATED PROJECT EXPERIENCE:

- Alamance County EMS Facility Renovation
- Durham Police Station Renovation
- Alamance County Family Justice Center
- Alamance County Courthouse Renovation

Charles Crowl, PE
Edmondson Engineers, PA
Project Role: *Senior Mechanical Engineer Principal*

Charles has provided extensive HVAC and fire protection design services throughout his thirty-year career as a mechanical engineer. He has designed mechanical systems for court houses, administration offices, laboratories, university dormitories, and more. His knowledge and expertise is not limited to specific systems, as he has extensive experience with chilled water and DX cooling systems, hot and steam water heating systems, and numerous types of air distribution systems.

RELATED PROJECT EXPERIENCE:

- Alamance County EMS Facility Renovation
- Durham Police Station Renovation
- Alamance County Family Justice Center
- Alamance County Courthouse Renovation

TEAM RESUMES

03

Bill Eastering, PE
Gardner & McDaniel, PA
Project Role: *Senior Structural Engineer*

Bill has been the design engineer for a variety of government, medical, and higher education clients throughout North Carolina. As a partner at Gardner & McDaniel, his responsibilities include the design and analysis of structures, field supervision and inspections, and shop drawing review.

RELATED PROJECT EXPERIENCE:

- Durham City Hall Renovation
- Chapel Hill Bible Church Renovation
- Durham EMS Center Renovation

Dan Jewell, PLA
Coulter Jewell Thames, PA
Project Role: *Landscape Architect*

As a Principal of Coulter Jewell Thames, Dan has over 33 years of experience as a registered Landscape Architect. The majority of his portfolio consists of government projects. As a result, he has an intimate knowledge of state and local codes and procedures.

For your project, Dan will use his knowledge to perform as a liaison with local governments, to produce site and landscape design concepts, as well as produce site analyses and cost estimates.

RELATED PROJECT EXPERIENCE:

- Durham EMS Station
- Alamance County EMS Station
- Durham Center for Senior Life
- Alamance County Courthouse Renovation

BILLING RATES

04

RND ARCHTIECTS, PA

Principal	$ 165 per hour
Project Manager	$ 135 per hour
Project Architect	$ 110 per hour
Interior Designer	$ 120 per hour
Intern Architect/Designer 1	$ 100 per hour
Intern Architect/Designer 2	$ 90 per hour
Clerical	$ 65 per hour

EDMONDSON ENGINEERS, PA

Principal Engineer	$ 165 per hour
Project Engineer	$ 150 per hour
Engineer Designer	$ 140 per hour
CAD Technician	$ 95 per hour
Clerical Support	$ 50 per hour

GARDNER & MCDANIEL, PA

Principal Engineer	$ 165 per hour
Project Engineer	$ 150 per hour

COULTER JEWELL THAMES, PA

Principal Engineer	$ 160 per hour
Principal Landscape Architect	$ 160 per hour
Principal Surveyor	$ 160 per hour
Professional Engineer	$ 150 per hour
Landscape Architect	$ 150 per hour
Professional Land Surveyor	$ 125 per hour
2-Man Survey Crew	$ 135 per hour
1-Man Survey Crew	$ 95 per hour
Engineer In Training	$ 100 per hour
Assoc. Landscape Architect	$ 100 per hour
Field Inspector	$ 85 per hour
CAD Operator	$ 85 per hour
Secretarial	$ 55 per hour

PROJECT APPROACH 05

Though we have completed projects of this scope in the past, we understand that no two renovation projects are identical. Consequently, we look forward to meeting with the project manager and project stakeholders to define our design approach more accurately. As renovation experts, however, we recommend the following outlined project approach:

01. ANALYSIS OF EXISTING CONDITIONS

As renovation experts, we understand the success of a project of this scope is dependent on thorough analysis and comprehensive investigation. During this first stage of the project, our team will engage in a detailed investigation with the aid of our trusted consultant team.

We understand the Town desires to retain as many of the existing walls, spaces, and cabinetry as possible while creating new offices and meeting rooms. In order to accomplish this, our teams will extensively document the facilities and produce accurate 3D models. This will ensure we minimally alter the structure to accomplish your goals.

Following our research, we will compile and prioritize the information gathered from each team member and prepare it for presentation to the project owner.

02. DESIGN PHASE

During schematic design, our designers will propose new floorplan layouts using sketches, renderings, and diagrams. Our strategies will be accompanied by accessibility upgrades, finish recommendations, and a preliminary project cost analysis with alternate options to ensure the project remains within budget.

We will also prepare documents for demolition permits and renovation permits, as necessary. As a result of our intimate relationship with the State Construction Office, we are able to identify documentation errors and conflicts prior to their submission, thus minimizing the project's length.

03. CONSTRUCTION DOCUMENTS

Once the Design Development submission is approved, we will prepare construction documents to serve in a public competitive bidding process. All drawings will be produced by Revit, a Building Information Modeling program.

In addition to generating detailed and accurate construction details, Revit also quantifies materials. This will enable our team to produce highly accurate cost estimates and construction documents for bid.

DESIGN METHODOLOGY

Team Leadership:
RND Architects will provide overall project leadership. Our experience leads us to suggest a bi-weekly design meeting minimum, beginning in the initial planning stages. This will create and maintain project momentum.

Integrated Project Delivery:
Our design methodology embraces the Integrated Project Deliver (IPD) method. This team-oriented process unites all disciplines into one firm from the start of the project.

It is our experience that this approach fosters mutual trust, promotes creativity, and results in faster delivery times and lower costs.

Building Information Modeling:
Building Information Modeling (BIM) fully integrates building design, construction, and management processes through the creation of accurate and detailed three-dimensional models. This represents all architectural and engineering elements as well as information about these elements' properties and behavior.

Each member of our design team is fluent in BIM technology. We will use our model to create 3D presentation images, material counts and costs, and detailed construction documents.

04. PERMITTING, REVIEWS, AND APPROVALS

Our team's extensive involvement as applicants of local municipal planning boards will be instrumental during this project phase. We will assist your Contractor with permit questions and efficiently resolve any review questions to obtain permits to begin construction.

As a result of our diligence in the previous project phases, the potential roadblock of permitting, reviews, and approvals will not deter the project. We will use our knowledge and experience to guide the project through this phase and into construction.

05. BIDDING

We use an efficient electronic platform to share our bids. The project files are hosted in one central location, which makes it easy for all interested parties to access without discrimination. The platform also allows us to track the distribution of the documents, thereby reducing errors in the transfer of information, reducing paper waste, and ensuring bidders have access to the most recent documents.

06. CONSTRUCTION ADMINISTRATION & PROJECT CLOSEOUT

During construction, we strive to promote respect, demonstrate effective leadership, and foster a spirit of *"Yes, we can accomplish anything together if we share the same goal."* Our goal is to exceed your expectations.

RND's proposed professional team consists of individuals highly skilled in both design and construction administration. Principal David Daniel will serve your project as a Construction Administrator during this critical project phase.

As a resident of Hillsborough, there will be no charge for the travel expenses accumulated with site visits. In addition, David's close proximity to the project site will enable him to make frequent inspections and visits, ensuring the design is executed with care and efficiency.

While David will remain your point of contact during this phase, we believe all team designers and consultants should remain involved with each project from inception through final inspection. This ensures the continuity of design intent and a heightened ability to provide problem solving assistance, while maintaining the original project goals.

At substantial completion, the design team will inspect the work, prepare punch lists, conduct the final inspection, and coordinate the closeout documentation and procedures. We ensure the work is completed prior to certifying the Final Payment. We will take the time to properly close out our projects, as we stake our reputation on serving our clients well throughout the entire project lifecycle.

DESIGN METHODOLOGY

Cost Control:
We understand that when appropriating funds for any municipal project, the budget is a determining factor in the design of the facility. To control this, we carefully review the project budget and scope simultaneously, while openly communicating the feasibility of our design solutions.

We will produce cost estimates in house. We maintain a database of past renovation projects that we use to refine the anticipated costs, as well as construction industry current cost data. Maintaining your project's budget is our top priority.

Scheduling:
Our design teams are proficient in delivering projects on schedule because of their intimate knowledge of the State Construction office, as well as the local procedures and codes of our surrounding cities.

As a result of our intimate relationships with the proposed consultant teams, we are able to efficiently communicate information and work together towards effective and efficient design solutions. We will work diligently to ensure your project is delivered on schedule.

Location:
Alamance County, NC

Date:
2011 - 2012

Cost:
$10,000,000

Design Team:
RND Architects, Edmondson Engineers, Gardner & McDaniel

Reference:
Richard Hill
Project Manager
Alamance County
(336) 570.6750

ALAMANCE COUNTY DEFERRED MAINTENANCE BUNDLE

Alamance County commissioned our design teams to perform a variety of renovation services for six city-owned buildings. The following facilities were included within the project:

- Family Justice Center
- Historic Courthouse
- Human Services Center
- County Office Building Annex
- Cedarock Park
- Criminal Courts Building

The programs effected within these facilities included, but were not limited to, offices, administrative support spaces, and conference rooms. We provided extensive interior finish upgrades, ADA upgrades, code remediation services, HVAC system replacements, and landscape upgrades.

Our design team received the Preservation North Carolina Award for the success of the Courthouse Renovation.

Location:
Durham, North Carolina

Date:
2005 - 2015

Cost:
$17,000,000

Design Team:
RND Architects, Surface 678, Edmondson Engineers, Gardner & McDaniel

Reference:
John Paces-Wiles
Project Manager
City of Durham
(919) 560.4197
john.paces-wiles@durhamnc.gov

DURHAM CITY HALL INTERIOR RENOVATION

This mutli-phased project included site improvements, an interior renovation, and exterior envelope repairs. In the first phase of the project, our design teams provided a space needs assessment, master planning, and interior finish upgrades for 172,000 square feet of office space.

Thirteen of Durham's public departments were housed within this space. Our team engaged in a collaborative project approach in which they analyzed and documented the building through site visits and staff interviews. During construction, we orchestrated each department's relocation and managed their movement.

In addition, the vast majority of the building received new space layout and signage, interior finishes, and updated electrical, communications, HVAC, and fire protection services.

Location:
Raleigh, NC

Date:
2004 - 2006

Cost:
$2,400,000

Design Team:
RND Architects, Edmondson Engineers, Gardner & McDaniel

Reference:
Dana Phillips
Project Manager
NC Dept. of Justice
(919) 525.4154
dphillips@NCDOJ.gov

OLD EDUCATION BUILDING RENOVATION

This renovation, led by our design team, involved comprehensive upgrades and renovation design services for the NC Dept. of Justice's Old Education Building in Raleigh.

The project scope involved the modernization of five elevators, mechanical system upgrades, and a 6,000 square foot renovation to create a multi-use conference and training room.

In addition, our teams strategized a project phasing schedule that enabled the building to remain occupied without interruption to services. In its completion, the project infused new life into the outdated government facility.

Location:
Durham, North Carolina

Date:
2008 - 2009

Cost:
$400,000

Design Team:
RND Architects

Reference:
Kevin Easter
Project Manager
City of Durham
(919) 560.4570

BIRCHWOOD COMMUNITY CENTER RENOVATION

The City of Durham commissioned our design experts to renovate the City's Birchwood Community Center, an important cultural gathering place. Our design team worked intimately with the City of Durham's Community Development Department to produce engaging environments for both small and large gatherings.

The project's scope included extensive interior and exterior finish upgrades which transformed the shuttered and lifeless building into a thriving and welcoming center. Today, the building is used for a variety of group activities for seniors, adults, and children.

This project was recognized by the City of Durham's Golden Leaf Award for Community Spaces.

Location:
Raleigh, NC

Date:
2016 - 2017

Cost:
$450,000

Design Team:
RND Architects, Edmondson Engineers

Reference:
Lisa Keel
Project Manager
NC State University
(919) 515.8066
llkeel@ncsu.edu

NCSU WOLF RIDGE STUDENT HEALTH RENVOATION

RND Architects was recently selected by NC State University to renovate one of their campus dormitories into a satellite Student Health Center. The renovation will re-program the existing apartments into exam rooms, waiting areas, and administrative offices.

The most significant project challenge is to retain as many of the existing walls, cabinets, and utilities in the new design. This will reduce the project budget as well as expedite the construction schedule.

Location:
Cary, NC

Date:
2014 - 2015

Cost:
$1,800,000

Design Team:
RND Architects, Coulter Jewell Thames, Edmondson Engineers

Reference:
Joe Godfre
Project Manager
Town of Cary
(919) 462.3863

NEW HOPE CHURCH ROAD TRAILHEAD

The New Hope Church Road Trailhead Park is an important stop along the American Tobacco Trail. Our design team was asked to design a new restroom and picnic facility as well as integrate parking onto the site.

The design of the structure was inspired by the vernacular barn and shelter precedents of the surrounding area. Our design team integrated these features with vibrant complementary colors.

In its completion, the rest area now has parking for cars and trailers, a restroom, a picnic shelter, and public art displays on the open lawn.

Location:
Roxboro, NC

Date:
2006 - 2007

Cost:
$450,000

Design Team:
RND Architects, Edmondson Engineers

Reference:
Lacy Winstead
Project Manager
Jack Reynolds and Associates
(336) 599.3500

PERSON COUNTY TAX OFFICE RENOVATION

RND Architects provided architectural and interior design services for the conversion of an empty retail store into flexible office space for the Person County Tax Office.

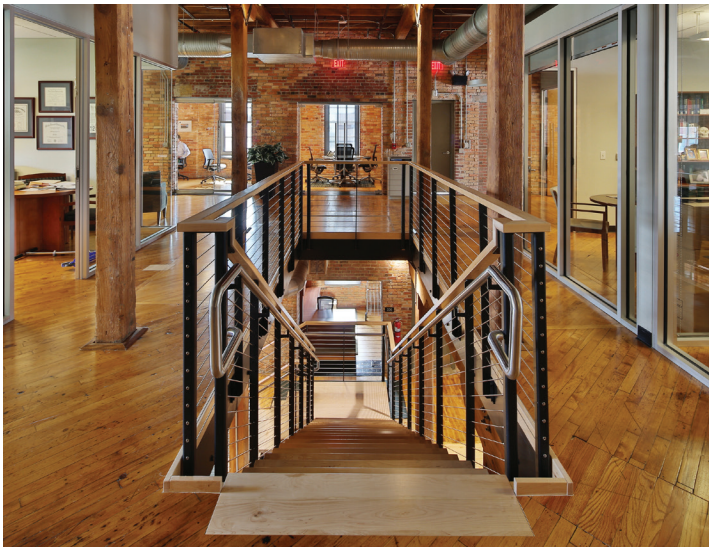
The project's program includes reception areas, administrative offices, and common areas. We worked intimately with the owner to design finishes and layouts that met their dynamic needs.

This project received the Award of Merit for Best Adaptive Reuse Project in the NC Main Street Awards.

EXAMPLE PROJECTS

06

HUDSON WEST **RENOVATION** (Duke University Medical Center)



OFFICE OF LEGAL COUNCIL **RENOVATION** (Duke University)

DURHAM ARMORY **RENOVATION** (City of Durham)

STUDENT TERRACE **RENOVATION** (NC State University)

ARTS WEST BUILDING (Elon University)

DURHAM BULLS ATHLETIC PARK **RENOVATION** (City of Durham)

CONTACT REFERENCES 07

In order to testify to our past performance on similar projects, we encourage you to contact one of our references for addition information about RND and our team members. Each one of the listed individuals can attest to recent or on-going project relationships forged by our professionals.

The space has literally changed the face of recruitment for this department. I have people coming to work happy.

- Robert Joyner
(on the Durham City Hall Renovation)
Development Group Manager, City of Durham

I served on the committee for the [Alamance County Courthouse Historic Renovation] and I know many hours of research were dedicated to choosing the best materials and designs to match the original architectural style, while also taking into account the needs of today's technology driven users.

The designers made the building very energy efficient and technologically friendly, while preserving the moldings, architecture, color pallets, and materials of its original designer, whom I believe would be more than pleased.

- Jennifer Talley
Alamance County Historic Commission

RND understands the budget restraints of a municipality and explore creative, cost-effective solutions to issues.

Besides their flexibility and knowledge, RND understands the City's needs and variety of stakeholders and responds well to timely and often unusual, time-sensitive requests. I cannot imagine completing the project with another firm!

I personally look forward to my next opportunity to work with them again.

- Doreen Sanfelici
Former Senior Project Manager, City of Durham

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TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☒ Yes ☐ No

Date of Public Hearing: October 20, 2016

For Clerk's Use Only
AGENDA ITEM #

	9.G	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Consideration of a consistency statement and ordinance to amend Section 7.3 of the Unified Development Ordinance to provide guidance on when a site is required to correct existing non-conforming characteristics

Attachment(s):

Draft consistency statement and draft amending ordinance

Brief Summary:

This amendment was discussed at the October public hearing. There was no public comment, although the board members discussed the proper threshold and metric for one of the standards. The Planning Board came to consensus over 30% of the structures tax value and recommended adoption of the amendment with that standard.

Action Requested:

Consider adopting the consistency statement that the amendment IS consistent with the Comprehensive Plan and adopt the ordinance amending the Unified Development Ordinance.

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

Staff Recommendations/Comments:

Town Board's Statement per N.C. Gen. Stat. 160A-383

The Town of Hills borough Town Board has received and reviewed the application of planning staff to amend the Town of Hillsborough Unified Development Ordinance as follows (insert general description of proposed amendment):

Section 7.3, Nonconforming Characteristics of Use, to provide guidance on when a site is required to correct existing non-conforming characteristics

The Hillsborough Town Board has determined that the proposed action is consistent /inconsistent with the Town of Hillsborough's comprehensive plan, and the Town Board's proposed action on the amendment is reasonable and in the public interest for the following reason(s):

This amendment continues the town's long standing efforts to balance the public interest of strict ordinance compliance with encouraging active commercial use of existing buildings to support the economy.

Adopted by the Town of Hillsborough Board of Commissioners this 12th day of December, 2016.

_____

Katherine M. Cathey, Town Clerk

AN ORDINANCE AMENDING THE UNIFIED DEVELOPMENT ORDINANCE
OF THE TOWN OF HILLSBOROUGH

THE BOARD OF COMMISSIONERS OF THE TOWN OF HILLSBOROUGH ORDAINS:

Section 1. Section 7.3, Nonconforming Characteristics of Use, is hereby amended to insert a new section as section 7.3.3, as follows:

7.3.3 NONCONFORMING CHARACTERISTICS OF NONRESIDENTIALLY ZONED PROPERTIES

An applicant seeking a Zoning Compliance Permit for a change of use will not be required to correct identified non-conforming characteristics when all of the following are met on a non-residentially zoned site:

a) The non-conformities are related to non-compliance with provisions of Section 6 (excluding section 6.20).
b) The use is permitted by right in the district and does not require a modification to a Conditional Use or Special Use Permit to occupy the location in question.
c) The applicant either does not need a site plan or meets the site plan threshold for Planning Director only review.
d) The non-conforming characteristics are not being expanded or made more non-conforming in any way
e) No new non-conformity is being established
f) The site complies with requirements in Section 5.2 for the requested use (if applicable)
g) The renovation proposed by the applicant to occupy the building (including interior upfit) does not exceed thirty percent of the existing structure's value listed for tax purposes.

Section 2. All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

The foregoing ordinance having been submitted to a vote, received the following vote and was duly adopted this 12th day of December, 2016.

Ayes: _____
Noes: _____
Absent or Excused:_____

_____
Katherine M. Cathey, Town Clerk

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: December 12, 2016

Department: Planning

Public Hearing: ☒ Yes ☐ No

Date of Public Hearing: October 20, 2016

For Clerk's Use Only
AGENDA ITEM #

	9.H	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Margaret Hauth, Planning Director

ITEM TO BE CONSIDERED

Subject:

Consideration of a statement of Consistency and Ordinance to amend Section 6.20 of the Unified Development Ordinance to match state minimum requirements and meet the mandate for local regulations to not be more stringent than the state

Attachment(s):

Letter from Department of Environmental Quality confirming the current UDO language is in compliance with HB44, SL 2015-246

Brief Summary:

After the public hearing, the town received word from the state Department of Environmental Quality that we were NOT obligated to make these amendments as our ordinance met the requirements of the session law. The Planning Board received this information before making their recommendation. They unanimously recommended NOT adopting these amendments if we were not obligated to.

Action Requested:

Announce the withdrawal of the ordinance amendment request.

ISSUE OVERVIEW

Background Information & Issue Summary:

Financial Impacts:

Staff Recommendations/Comments:

Water Resources
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

S. JAY ZIMMERMAN
Director

December 2, 2016

Town of Hillsborough
Stormwater Management Division
Attn: Terry L. Hackett
PO Box 429 East Orange Street
Hillsborough, NC 27278

Subject: **Rescission of the Town of Hillsborough's Revisions to Section 6.20.17 of the existing Unified Development Ordinance**

On November 14, 2013, the Town of Hillsborough (Town) received delegated authority to enforce the Neuse Riparian Buffer rules. On January 28, 2016, the Town submitted a request to modify their ordinance to satisfy the requirements in SL 2015-246 to the Division of Water Resources (Division), which was approved September 6, 2016.

On November 23, 2016, the Town requested the Division rescind the Ordinance Revisions Approval, based on an email sent to local governments on November 17, 2016, describing a determination made by the Department of Environmental Quality that the ordinance approved in 2013 complies with SL 2015-246.

The Division hereby rescinds the September 6, 2016 approval letter. The Ordinance approved by the Division on November 14, 2013 remains in effect.

If you have any questions, please contact Shelton Sullivan at (919)-807-6361 or shelton.sullivan@ncdenr.gov.

Sincerely,

Karen Higgins

Karen Higgins, Supervisor
401 & Buffer Permitting Branch

File name: 2016-11-28_Hillsborough_Modification_Rescission Request

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: Dec. 12, 2016

Department: Administration

Public Hearing: ☐ Yes ☒ No

Date of Public Hearing:

For Clerk's Use Only
AGENDA ITEM #

	9.I	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Katherine Cathey, Human Resources Director

ITEM TO BE CONSIDERED

Subject:

Paid Parental Leave Policy

Attachment(s):

1) Draft Policy
2) FMLA Qualifying Events Chart
3) Local Paid Parental Leave Policies

Brief Summary:

Family-friendly paid parental leave policies are becoming more prevalent in the private as well as the public sector. The purpose of the town's proposed paid parental leave policy is to allow up to six weeks of paid leave for town employees for parental care of a newborn, a child placed for adoption, foster care, or guardianship within 12 months of the qualifying event. To qualify for paid parental leave, an employee must qualify for Family Medical Leave under the Family Medical Leave Act (FMLA). The FMLA provides job protection in a paid or unpaid status, but does not address the lack of income experienced by many during periods of necessary leave. Therefore, the paid parental leave will be paid leave that may be used prior to an employee taking accrued vacation and sick leave and will run concurrently with leave approved under the FMLA.

Action Requested:

Discuss and consider approval of the proposed paid parental leave policy.

ISSUE OVERVIEW

Background Information & Issue Summary:

The town currently has a policy of granting regular employees a leave of absence without pay for up to one year by the town manager for reasons of personal or family disability, including maternity leave.

In order to avoid going into leave without pay, employees who anticipate a need for maternity or paternity leave tend to limit vacation time and/or work overtime to accrue compensatory time off prior to the birth of a child. This practice may have adverse impacts on an employee's wellbeing and productivity in the workplace due to missed opportunities for rest and relaxation prior to the birth or placement of a child. In addition, new mothers and fathers may return to work earlier than desired after the birth of a child due to limited accrued leave and/or the desire to preserve leave balances for future absences. Following the birth or placement of a child, the employee's daily routine and sleep schedule may be disrupted in a manner that adversely affects an employee's wellbeing and productivity in the workplace.

The town currently has 96 regular employees. 26% are women and 74% are men. The average age is 44.38. In 2016, human resources staff has tracked 22 FMLA-qualifying events. Nine (41%) of these events were for maternity or paternity leave, a substantial increase over the one to two maternity or paternity leave requests that were made in each of the preceding three years (see attached chart for additional details).

The proposed paid parental leave policy aligns with the town's commitment to taking care of what we already have (employees) and investing in Hillsborough's future (serves as a recruitment and retention tool for top talent). It also enriches the total compensation package provided to town employees.

Key considerations are outlined below. The attached chart outlines the key provisions of policies adopted by other local jurisdictions in our area. A National Partnership for Women & Families Report provides details regarding paid family/parental leave policies for municipal employees.

- Qualifying reasons: For the birth, adoption, foster placement, or in loco parentis placement of a child is a common provision of paid parental leave policies and mirrors the language of the FMLA.
- Eligibility: Employee must be a regular, full-time or part-time benefits-eligible employee who also is eligible for Family Medical Leave under the FMLA. This is a common provision of paid parental leave policies and aligns with the town's current approach to the provision of benefits.
- Maximum duration: Six weeks in a rolling 12-month period is the most common duration of other paid parental leave policies and corresponds with the typical period of disability for a routine delivery.
- Interaction with FMLA: Running paid parental leave concurrently with FMLA is the most common practice.
- Definition of a child: The FLMA defines a child as under 18 years of age. Two local jurisdictions define child differently for the purpose of paid parent leave (under five years of age and under 12 months of age).
- Intermittent leave option: Providing paid parental leave as a block of continuous leave is the most common practice.
- Return to work provision: Return to work is a provision of other local policies. An employee who fails to remain in an active status for a minimum of 12 months after returning from paid parental leave will be required to reimburse the town for any paid parental leave received.
- Effective date: January 1, 2017

A broader policy of providing paid family leave, rather than a more narrowly-focused paid parental leave policy may be considered in the future. Paid family leave may be found to be a fairer and more equitable approach, as it may apply to personal serious health conditions as well as family member's serious health conditions. Staff will continue to consider options and monitor developments in the implementation of these initiatives.

Financial Impacts:
As parental leave already occurs, costs to cover the absence are already factored into departmental budgets. There may be impacts on leave accrual liabilities and leave usage patterns as a result of implementing paid parental leave, but they are difficult to calculate.

Staff Recommendations/Comments:
The Town of Hillsborough Employee Handbook authorizes the town manager to implement a paid parental leave policy. Due to the significance of this new policy, the town manager seeks board feedback regarding the proposed policy.

Paid Parental Leave

I. PURPOSE:

The Town of Hillsborough believes that strong families benefit both the local community and the workplace. For this reason, the town offers the option of paid parental leave to parents for the birth, bonding and care of a child.

The purpose of paid parental leave is to allow up to six weeks of paid leave for town employees for parental care of a newborn, a child placed for adoption, foster care, or guardianship within 12 months of the qualifying event. To qualify for paid parental leave, an employee must qualify for Family Medical Leave under the Family Medical Leave Act (FMLA). The FMLA provides job protection in a paid or unpaid status, but does not address the lack of income experienced by many during periods of necessary leave. Therefore, the paid parental leave will be paid leave that may be used prior to an employee taking accrued vacation and sick leave and will run concurrently with leave approved under the FMLA.

II. POLICY STATEMENT:

A. Eligibility

A regular full-time or part-time, benefit-eligible employee who qualifies for Family Medical Leave under the Family Medical Leave Act may request paid parental leave. Paid parental leave must be requested and used within 12 months of the date of the qualifying event. Qualifying events include any one of the following:

- Birth of a child of the employee;
- The legal placement of a child with the employee for adoption, foster care or guardianship; or
- The placement of a child with the employee for whom the employee permanently assumes and discharges parental responsibilities (in loco parentis).

An employee who has not yet completed the new hire probationary period or is not yet eligible for leave under the FMLA will not be eligible for paid parental leave. If an employee is not eligible for FMLA, the employee may be approved for a leave of absence to use other paid leave and/or leave without pay for the qualifying event.

B. Amount of Paid Parental Leave

An employee may only receive paid parental leave for one qualifying event within a rolling 12-month period. The amount of paid parental leave for any one person shall not exceed six weeks in a rolling 12-month period.

If both parents are employed by the town and have one qualifying event, each parent is eligible for the six weeks of paid parental leave. Each parent can use their allocated six weeks of paid parental leave, either consecutively or intermittently.

C. Process to Request Paid Parental Leave

In order to request and/or receive paid parental leave, the employee must submit to human resources the request for FMLA leave, including supporting documentation.

The request for paid parental leave and the supporting documentation should be provided at least 30 days prior to the birth, adoption or placement if foreseeable or as soon as practicable.

D. Approval of Paid Parental Leave

Once the request for paid parental leave is received, the employee will be notified within five business days if the paid parental leave is approved. In addition, the employee's supervisor and/or department head shall be notified. In the event that an employee is not eligible for paid parental leave, he or she may be eligible to use other paid time off or request leave without pay, provided that the conditions of those leave benefits are satisfied.

E. Use of Paid Parental Leave

Paid Parental Leave cannot be used on an intermittent basis and time off must run consecutively. If an employee utilizes only four workweeks of the six weeks provided for one qualifying event, he or she would not be eligible to use the remaining two workweeks for a different qualifying event, even if that event occurred within the same 12-month period.

F. Benefits, Leave and Pay during Paid Parental Leave

Benefits during leave

The following outlines employee benefits while on paid parental leave:

- *Health Insurance*: The town will continue to make contributions on behalf ofthe employee previously enrolled in a health plan with the town. The employee and his/her dependents will continue to be covered as long as the employee pays for any required contributions. During paid parental leave, all contributions will continue to be deducted from the employee's paycheck. If on leave without pay, the employee must make arrangements to pay any employee contributions to ensure continued coverage.

- *Retirement Benefits*: Retirement contributions and retirement service credit will continue to accrue during the paid parental leave period.

- *Accrual of Leave*: Vacation leave and sick leave will continue to accrue during the period of paid parental leave.

Timekeeping during leave

The employee's departmental timekeeper must code approved paid parental leave on the town's timesheet for all time off during the paid parental leave period.

Concurrent to leave under FMLA

Paid parental leave shall run concurrently with FMLA leave.

G. Return from Paid Parental Leave

An employee must return from paid parental leave, after the duration of any approved Family Medical Leave for this particular qualifying event.

An employee who fails to remain in an active status for a minimum of 12 months after returning from paid parental leave will be required to reimburse the town for any paid parental leave received. The value of the paid parental leave received will be deducted from the employee's final paycheck, including any vacation leave to be paid out, in compliance with the Fair Labor Standards Act.

H. Exhaustion of Paid Parental Leave

After paid parental leave has been exhausted, employees will be required to use accrued paid leave, in accordance with the Town of Hillsborough leave policy, before requesting leave without pay to continue care for a newborn child, a child placed for adoption, guardianship or foster care.

III. DEFINITIONS:

Benefit-eligible – Regular full-time and part-time employees who are eligible for coverage and participation in the town's benefit programs.

Paid parental leave - The period of time in which a regular employee may receive up to six (6) weeks of paid leave for parental care of a newborn, a child placed for adoption, foster care, or guardianship within one year of the qualifying life event.

Child - A biological, adopted or foster child, stepchild, legal ward or a child of a person standing in loco parentis, who is under age 18.

Parent - Any of the following: (1) the biological parents of a child; (2) a person who has legal custody of a child; or (3) a person who assumes day-to-day responsibilities to care for or financially support a child regardless of whether he or she has been appointed legal guardian.

Employee - An employee who has worked for the town for at least 12 months and qualifies for Family Medical Leave under the Family Medical Leave Act may request paid parental leave.

Family Medical Leave Act (FMLA) - The FMLA of 1993, as amended, allows eligible employees to take job-protected, unpaid leave for up to a total of 12 workweeks in any 12 months for FMLA qualifying reasons, which include the birth of a child, to care for the newborn child and for the placement of a child with the employee for adoption or foster care; for the employee's own serious health condition; to care for the employee's spouse, child or parent who has a serious health condition, a qualifying exigency arising out of the employee's spouse, child or parent; or to care of the employee's spouse, child, parent, or next of kin (nearest blood relative) who has incurred an injury or illness in the line of duty while on active duty.

IV. APPLICABILITY:

This policy applies to all employees who are regular, full time or part time that is eligible for benefits and who meet the requirements for Family Medical Leave under the town's FMLA policy. An

employee is eligible for paid parental leave only if the qualifying event occurs on or after the effective date of this policy.

V. PROCEDURE RESPONSIBILITY AND MANAGEMENT:

Employee Responsibility

- The employee is responsible for requesting FMLA in accordance with the Town of Hillsborough FMLA policy.
- The employee is responsible for complying with any/all notifications as outlined in this policy or the Town of Hillsborough's FMLA policy.

Supervisor Responsibility

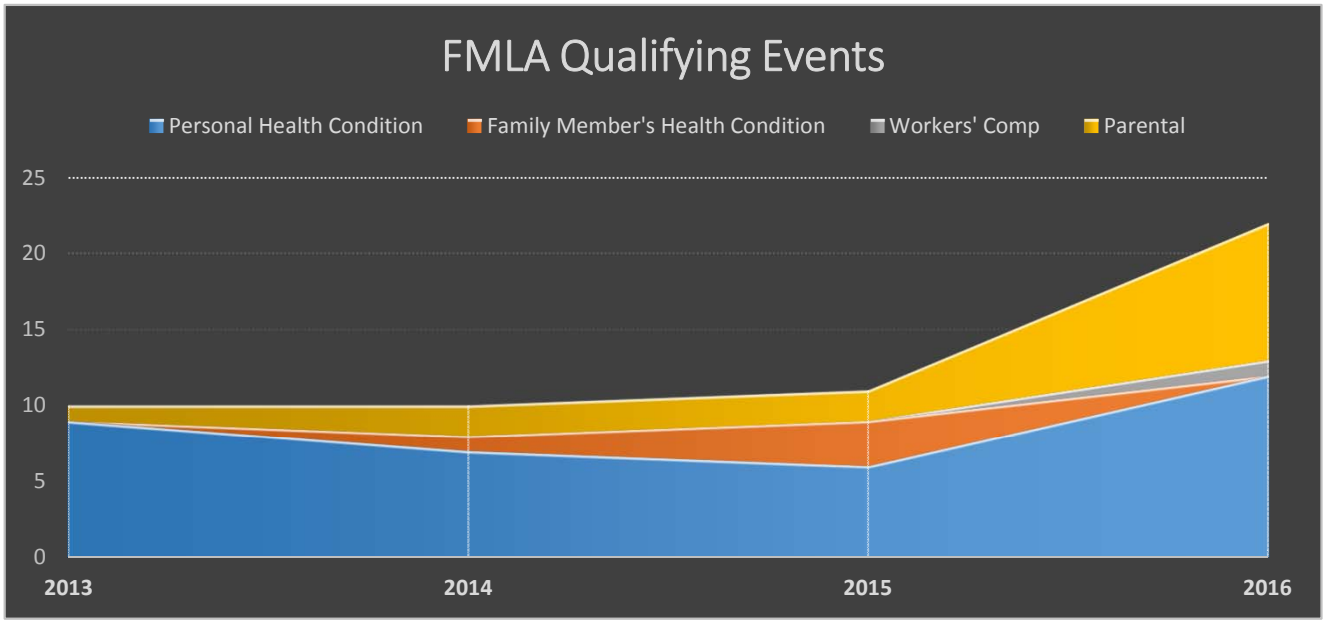
- The supervisor should help communicate Town of Hillsborough policies and procedures; if aware of a potential FMLA need, the supervisor should refer the employee to the policy and human resources.
- The supervisor may not deny an employee the ability to use FMLA leave or paid parental leave, if the employee has been approved for FMLA leave and complies with policies.
- The supervisor must review an employee's timesheet to ensure the accurate coding of time worked and/or absences from work.

Human Resources Responsibility

- Human resources is responsible for the benefits and leave administration of this policy.
- Human resources is responsible for administrative management of Town of Hillsborough benefits.
- Human resources communicates changes or updates in benefits to all department supervisors and employees.
- Human resources communicates this policy through email messages, the town's employee website and other electronic means. When requested a paper copy will be provided to the employee.

FMLA-Qualifying Events

	2013	2014	2015	2016
Personal Health Condition	9	7	6	12
Family Member's Health Condition	0	1	3	0
Workers' Comp	0	0	0	1
Parental	1	2	2	9
Maternity	*0*	*0*	*0*	*2*
Paternity	*1*	*2*	*2*	*7*
Total	**10**	**10**	**11**	**22**



Local Paid Parental Leave Policies

Organization	Qualifying Reasons	Employee Eligibility	Maximum Duration	Interaction with FMLA	Definition of Child	Intermittent Leave Option	Return to work provision	Effective Date
Hillsborough (proposed)	Birth, adoption, foster placement, or *in loco parentis* placement	Full-time and part-time, benefits-eligible; FMLA-eligible	6 weeks	Concurrent	Under 18 years of age	No	12 months	1/1/17
Durham County	Birth, adoption, foster placement, or *in loco parentis* placement	All who accrue leave	3 months	Not concurrent	Under 5 years of age	No	None	10/1/16
Greensboro	Birth, adoption, foster placement, or *in loco parentis* placement	Full-time and part-time, benefits-eligible; employed at least 12 months	6 weeks	Concurrent	Under 18 years of age	No	None	9/1/16
Orange County	Birth, adoption or foster placement	FMLA-eligible	3 days	Concurrent	Under 5 years of age	No	None	Unknown
OWASA	Birth or adoption	Full-time, permanent employees who have completed at least one year of continuous, uninterrupted service with OWASA	6 weeks (maternity), 3 weeks (paternity)	Not concurrent	Under 12 months of age	No	12 months	7/1/01
Wake County	Birth, adoption, foster placement, or *in loco parentis* placement	Full-time and part-time, benefits-eligible; employed at least 12 months; FMLA-eligible	6 weeks	Concurrent	Under 18 years of age	Yes	12 months	1/1/17

Currently discussing paid family/parental leave policies:

- Cary
- Chapel Hill
- Mecklenburg County