

NATURE AND SCOPE OF WORK:
THE FIRE PROTECTION SYSTEM WILL BE A WET PIPE SYSTEM INSTALLED IN COMPLIANCE WITH NFPA 13. THE FIRE PROTECTION SYSTEM WILL BE NEW AND INSTALLED IN A NEW BUILDING.
APPROVAL OF SPRINKLER SYSTEMS:
THE ACCEPTANCE TESTING OF THE FIRE PROTECTION SYSTEM AND COMPONENTS SHALL CONSIST OF ALL APPLICABLE ITEMS SHOWN ON THESE FORMS: NFPA 13, 2013 EDITION, CHAPTER 25, CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR ABOVEGROUND PIPING; AND NFPA 13, 2013 EDITION, CHAPTER 10, CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING; SEE NFPA 13, 2013 EDITION, CHAPTERS 10 (10.10 TESTING AND ACCEPTANCE) AND 25 (25.2 ACCEPTANCE REQUIREMENTS), FOR DETAILS ON THE APPLICABLE TESTS.
WHERE THE AUTHORITY HAVING JURISDICTION REQUIRES TO BE PRESENT DURING THE CONDUCTING OF ACCEPTANCE TESTS, THE INSTALLER SHALL PROVIDE ADVANCE NOTIFICATION OF THE TIME AND DATE THE TESTING WILL BE PERFORMED.

2013 NFPA 13 CHAPTER 10 AND 25 SUMMARY (REFER TO NFPA 13 CHAPTERS 10 AND 25 FOR COMPLETE REQUIREMENTS).
ACCEPTANCE TEST CRITERIA:
FLUSHING OF UNDERGROUND CONNECTIONS:
UNDERGROUND MAINS AND LEAD-IN CONNECTIONS TO SYSTEM RISERS SHALL BE FLUSHED BEFORE A CONNECTION IS MADE TO SPRINKLER PIPING IN ORDER TO REMOVE ANY FOREIGN MATERIALS THAT HAVE ENTERED THE UNDERGROUND PIPING DURING THE COURSE OF THE INSTALLATION. FOR ALL SYSTEMS, THE FLUSHING OPERATION SHALL BE CONTINUED UNTIL THE WATER IS CLEAR.
UNDERGROUND MAINS AND LEAD-IN CONNECTIONS SHALL BE FLUSHED AT THE HYDRAULICALLY CALCULATED WATER DEMAND RATE OF THE SYSTEM.
TO AVOID PROPERTY DAMAGE, PROVISION SHALL BE MADE FOR THE DISPOSAL OF WATER ISSING FROM TEST OUTLETS.
HYDROSTATIC PRESSURE TESTS:
HYDROSTATIC PRESSURE TESTS SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS.

FIRE PROTECTION DESIGN CRITERIA IN ACCORDANCE WITH FLORIDA ADMINISTRATIVE CODE NO. 61015-32.004 (REQUIREMENTS FOR A WATER BASED FIRE PROTECTION SYSTEM):
A) POINT OF SERVICE:
THE POINT OF SERVICE IS FROM THE 6" WATER MAIN RUNNING SOUTH OF THE BUILDING. THERE IS AN 8" x 8" TEE OFF THE 6" MAIN, THERE IS A 4" BACK FLOW PREVENTION ASSEMBLY AND A TEE ON THIS FIRE SERVICE LINE.
B) APPLICABLE NFPA STANDARD TO BE APPLIED:
NFPA 13, 2013 EDITION, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS. NFPA 24, 2013 INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES.
C) CLASSIFICATION OF HAZARD OCCUPANCY FOR EACH ROOM OR AREA:
LIGHT HAZARD, OFFICES
ORDINARY HAZARD GROUP II, MERCANTILE
D) DESIGN APPROACH:

LIGHT HAZARD, OFFICES/AT/IC: WET PIPE AUTOMATIC SPRINKLER SYSTEM USING THREADABLE LIGHT WALL PIPING WITH CAST IRON THREADED FITTINGS (ALL PIPE PROVIDED WITH ALIED AFB COATING (ANTIBACTERIAL FORMULA COATING), THE USE OF THE SMALL ROOM CLAUSE IS ALLOWED.
DENSITY: 0.10 GPM/SF OVER 1500 SF
SPRINKLER HEADS: QUICK RESPONSE HEADS; PROTECTION AREA (AS PER LISTING), HEAD TEMPERATURE: 150 DEGREE F; SPACING: 20 FT. MAX. THE USE OF THE DESIGN AREA REDUCTION FOR QUICK RESPONSE SPRINKLERS IS ALLOWED.
ORDINARY HAZARD GROUP II, MERCANTILE: WET PIPE AUTOMATIC SPRINKLER SYSTEM USING THREADABLE LIGHT WALL PIPING WITH CAST IRON THREADED FITTINGS (ALL PIPE PROVIDED WITH ALIED AFB COATING (ANTIBACTERIAL FORMULA COATING), COVERAGE SHALL BE PROVIDED BY USING QUICK RESPONSE, PENDANT AND UPRIGHT HEADS.
DENSITY: 0.20 GPM/SF OVER 1500 SF, PROTECTION AREA: 130 SF, HEAD TEMPERATURE: 125 DEGREE F, SPACING: 20 FT. MAX.


DESIGN CALCULATIONS ARE TO INCLUDE 100 GPM FOR LIGHT HAZARD 250 GPM FOR ORDINARY HAZARD GROUP II, OUTSIDE FLOOD STREAM DEMANDS.
ALL EXPOSED EXTERIOR PIPING TO BE COATED FOR CORROSION PROTECTION.
ALL PIPE PROVIDED WITH ALIED AFB COATING (ANTIBACTERIAL FORMULA COATING). FLEXIBLE SPRINKLER PIPE FROM THE BRANCH LINES TO THE SPRINKLER HEAD ARE ALLOWED
E) CHARACTERISTICS OF WATER SUPPLY TO BE USED:
THE DURATION SHOULD BE ADEQUATE BASED UPON THE TEST RESULTS BELOW.
F) FLOW TEST DATA:
PERFORMED BY - NORTH COLLIER FIRE CONTROL AND RESCUE DISTRICT
DATE = 10-18-2018
STATIC: 76 PSI
RESIDUAL: 61 PSI
FIRE FLOW AVAILABLE: 4585 GPM @ 20 PSI
SEE COPY OF TEST THIS SHEET

G) VALVING AND ALARM REQUIREMENTS TO MINIMIZE THE POTENTIAL FOR IMPAIRMENTS AN UNRECOGNIZED FLOW OF WATER:
THE FIRE SPRINKLER RISER FOR THE BUILDING SHALL HAVE A WATER FLOW SWITCH WITH A LOCAL AUDIBLE ALARM AND BE CONNECTED TO A REMOTE SUPERVISING STATION. THE BACK FLOW PREVENTION DEVICE ASSEMBLY AND THE (AND ALL OTHER SYSTEM VALVES) SHALL HAVE TAMPER SWITCHES CONNECTED TO A REMOTE SUPERVISING STATION.
H) MICROBIAL INDUCED CORROSION (MIC):
IT WAS NOT DETERMINED IF CONDITIONS EXIST IN THEIR WATER SUPPLY WHICH COULD LEAD TO MIC, AS A RESULT PRECAUTIONS AGAINST MIC WILL BE SPECIFIED. ALIED AFB COATING (ANTIBACTERIAL FORMULA COATING) (TO DETERMINE MIC CONDITIONS) WILL BE SPECIFIED FOR ALL PIPING. SEE LETTER FROM WATER PURVEYOR THIS SHEET.

I) BACK FLOW PREVENTION AND METERING SPECIFICATIONS:
THE BACK FLOW PREVENTION DEVICE ASSEMBLY AND THE METERING EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE LOCAL WATER PURVEYOR. THE BACK FLOW PREVENTION DEVICE ASSEMBLY IS TO HAVE A MAXIMUM ALLOWABLE PRESSURE DROP OF 10 PSI @ 7.5 TYPICAL FLOW RATE.
J) QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS:
ALL YARD AND INTERIOR FIRE PROTECTION EQUIPMENT SHALL BE UL OR FM LISTED.

K) A DETERMINATION OF WHETHER A FIRE PUMP IS REQUIRED AND IF SO, THE SPECIFIC VOLUMETRIC FLOW AND PRESSURE RATING OF THE PUMP.
THE FLOW TEST RESULTS AND THE CHARACTERISTICS OF THE MUNICIPAL SYSTEM INDICATE THAT THE FIRE SPRINKLER SYSTEM DOES NOT REQUIRE A FIRE PUMP.
L) A VERIFICATION OF WHETHER A FIREWATER STORAGE TANK IS REQUIRED ON SITE AND IF SO, A DETERMINATION OF THE SIZE AND CAPACITY REQUIRED.
A WATER STORAGE TANK IS NOT REQUIRED.

M) OWNER'S CERTIFICATE IN STORAGE OCCUPANCIES, THE OWNER'S INFORMATION CERTIFICATE IS REQUIRED FROM THE PROPERTY OWNER AS IT CLEARLY DEFINES THE STORAGE CONFIGURATION OF THE SPACE FOR THE CURRENT AND FUTURE USE OF THE PROPERTY, AS REQUIRED BY THE CODES AND STANDARDS SET FORTH IN SUBSECTION 61015-32.002(7), F.A.C.
THIS BUILDING IS NOT A STORAGE OCCUPANCY.
**NOTE: THE BUILDING STRUCTURE HAS BEEN DESIGNED TO ACCOMMODATE THE STRUCTURAL LOAD ADDED BY THE SPRINKLER SYSTEM (DESIGNED FOR A 5 PSF SPRINKLER SYSTEM LOAD).
NOTES:
A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLES ACCUMULATE.
WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK.
CUTTING AND WELDING SHALL COMPLY WITH NFPA 1 CHAPTER 18.
SIGNAL PERMITS ARE REQUIRED FOR THE FIRE ALARM AND SPRINKLER SYSTEMS (THE ALARM DESIGN IS BY THE ELECTRICAL ENGINEER).
PLANS REVIEWED SHALL COMPLY WITH THE FLORIDA FIRE PREVENTION CODE 2017 6TH ED.
ALL COMBUSTIBLE CONCEALED SPACES SHALL BE PROVIDED WITH SPRINKLERS.
DO NOT INSTALL ANY PIPING OVER ELECTRICAL PANELS.


NORTH COLLIER FIRE CONTROL AND RESCUE DISTRICT
PREVENTION BUREAU
M. James Bone • Christopher L. Crescent • Herman E. Feder • J. Christopher Lombardo

October 18, 2018


Mrs. Tacia Hunsler-Rose
Davisona Engineering
3345 Shady Road #201
Naples, FL 34104
Email: tacia.hunsler@davisona.com

Dear Tacia,
Re: Hydrant Flow Test @ Sandbanks Development - 3126 Tansiam Trail North
(Flow Hydrant Tag #02-043 - Static Residual Hydrant Tag #02-043)

The North Collier Fire Control and Rescue District has conducted a flow test at the above location per site plan submitted. This also will serve as an invoice and receipt in the amount of \$1000.00 to cover the cost of the flow test (Check #134550).

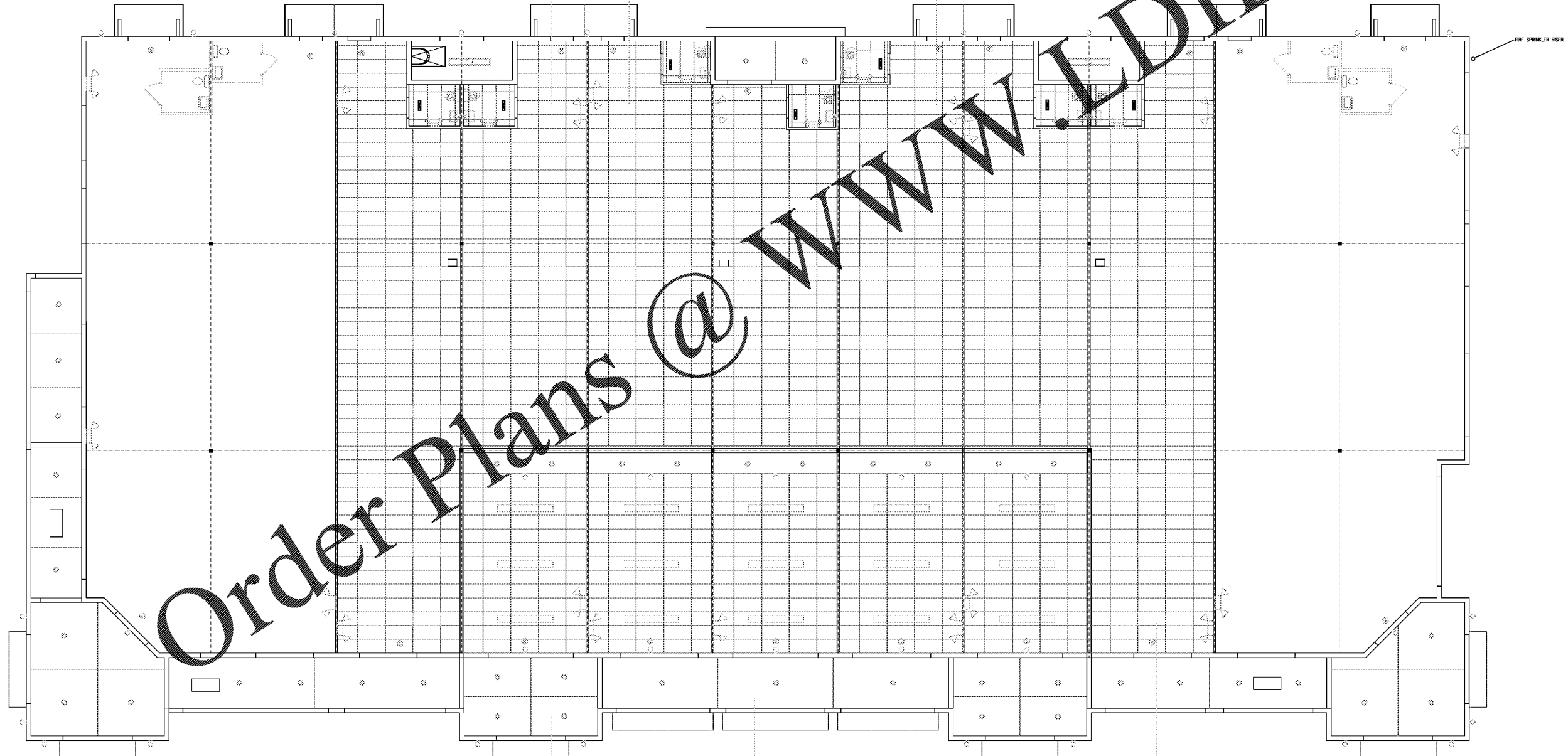
Static:	76	Residual:	61
Total Flow GPM:	2,251	Flow @ 20 PSI:	4,585
Flow @ 20 PSI GPM:	4,585	Flow @ 1.20 PM:	10-12-18

Notes:
If you have any questions, please do not hesitate to contact me @ (239) 597-6227.

Sincerely,

Eddy Rocco
Assistant Chief of Life Safety & Fire Prevention
North Collier Fire District

4895 Taylor Road Naples, FL 34109 • (239) 667-9327 • Fax (239) 597-9322 • www.northcollier.org


Dear Mr. Adam,
Per Florida Administrative Code, all fire suppression systems need to demonstrate effective design against MIC. Rule 61G15-32.042(8) states: "Microbial Induced Corrosion (MIC). The Engineer of Record shall make reasonable efforts to identify water supplies that could lead to Microbial Induced Corrosion (MIC). Such efforts may consist of discussions with the local water purveyor under the official, temporary with conditions at the local area, or laboratory testing of water supplies. When conditions are found that may result in MIC continuation of the fire protection piping, the engineer shall design corrective measures."
All public water systems are required to monitor drinking water according to the Federal Safe Drinking Water Act. The State of Florida has adopted these standards in Chapter 62-550 of the Florida Administrative Code. Collier County Water Department is currently in compliance with all state and federal drinking water standards.
Collier County Water Department has extensive testing programs to analyze the quality of the drinking water our customers receive. These programs include corrosion control water quality parameters. The Water Department monitors corrosion bi-weekly, averaging both pH and orthophosphate at both of our treatment facilities. Bi-annual water quality parameters and quarterly corrosion optimization studies are all performed by the Collier County Water Department Laboratory.
If you should have any questions, please contact me at (239) 252-7011.
Sincerely,
Elizabeth Woods
Compliance Manager, Collier County Water Division



PLAN
SCALE: 1/8" = 1'-0"

GESHAY ASSOCIATES, INC.
GA
ARCHITECT

AA 0003662
380 10th St. S., Ste 103
Naples, Florida 34102
PH: (239) 261-6949
FAX: (239) 261-6153

Consultant:

MECHANICAL DESIGN SERVICES
KEY INFORMATION: KEVIN M. JONES P.E., LICENSE # 47856, EXP. # 08/2019
DRAWN BY: MHA
CHECKED BY: MHA
DATE: 1/28/19
JOB NUMBER: 5498
REFERENCE: M1
REV:

Project:
NEW SHOPPING CENTER FOR:
SANDBANKS LLC
REDEVELOPMENT
U.S. 41, NAPLES, FL
SDP SUBMISSION

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Indicator	Date	Remarks/Revisions

Sign & Seal
Drawn by: MG
Checked by: JG
Date: 10/23/18
Project No. GA1700.15

FP1
Sheet No.