



MEETING POSTING

TOWN OF NANTUCKET

Pursuant to MGL Chapter 30A, § 18-25

All meeting **notices and agenda** must be filed and time stamped with the Town Clerk's Office and posted at least 48 hours prior to the meeting (excluding Saturdays, Sundays and Holidays)

RECEIVED

2022 DEC 05 AM 10:18
NANTUCKET TOWN CLERK
Posting Number:T 1079

Committee/Board/s Parks and Recreation Commission

Day, Date, and Time Thursday, December 8, 2022 at 4:00 PM

Location / Address ☐ REMOTE PARTICIPATION VIA ZOOM
The meeting will be aired at a later time on the Town's Government TV YouTube Channel <https://www.youtube.com/channel/UC-sgxAlfdoxteLNzRAUHixA>
☐

Signature of Chair or Authorized Person Charlie Polachi, Parks & Recreation Manager

WARNING: IF THERE IS NO QUORUM OF MEMBERS PRESENT, OR IF MEETING POSTING IS NOT IN COMPLIANCE WITH THE OML STATUTE, NO MEETING MAY BE HELD!

AGENDA

Please list below the topics the chair reasonably anticipates will be discussed at the meeting

Join Zoom Meeting

<https://us06web.zoom.us/j/87268119822?pwd=QkxSMk1kY0tPRGFrT0U4c1p1RUJSZz09>

Meeting ID: 872 6811 9822

Passcode: 190160

Call to Order

This meeting is being audio and video recorded

Approval of Agenda for December 8, 2022

Approval of Minutes from November 10, 2022

Proposed Meeting Schedule for Parks and Recreation Commission 2023- Meetings will be held via Zoom until March 31, 2023 with possible changes after April 1, 2023. January 12, February 9, March 9, April 13, May 11, June 8, July 13, August 10, September 14, October 12, November 9 and December 14

Discussion of Current Fee Schedules for Events at Children's and Jetties Beaches and Proposed Changes with Marina Dzvonic

Parks and Recreation Manager Charlie Polachi Updates

Nobadeer Fields Athletic Support Building

Nobadeer Field Expansion Proposed to Capital Program Committee (CapCom)

Capital Request for Security Cameras

Concession Planning

Proposed Delta Field Layout

Review and Discuss Areas of Focus

Adjournment

Parks and Recreation Commission proposed 2023 meeting schedule, second Thursday at 4:00 PM.
Meetings will be held via Zoom until March 31, 2023 with possible changes on April 1, 2023.

January 12

February 9

March 9

April 13

May 11

June 8

July 13

August 10

September 14

October 12

November 9

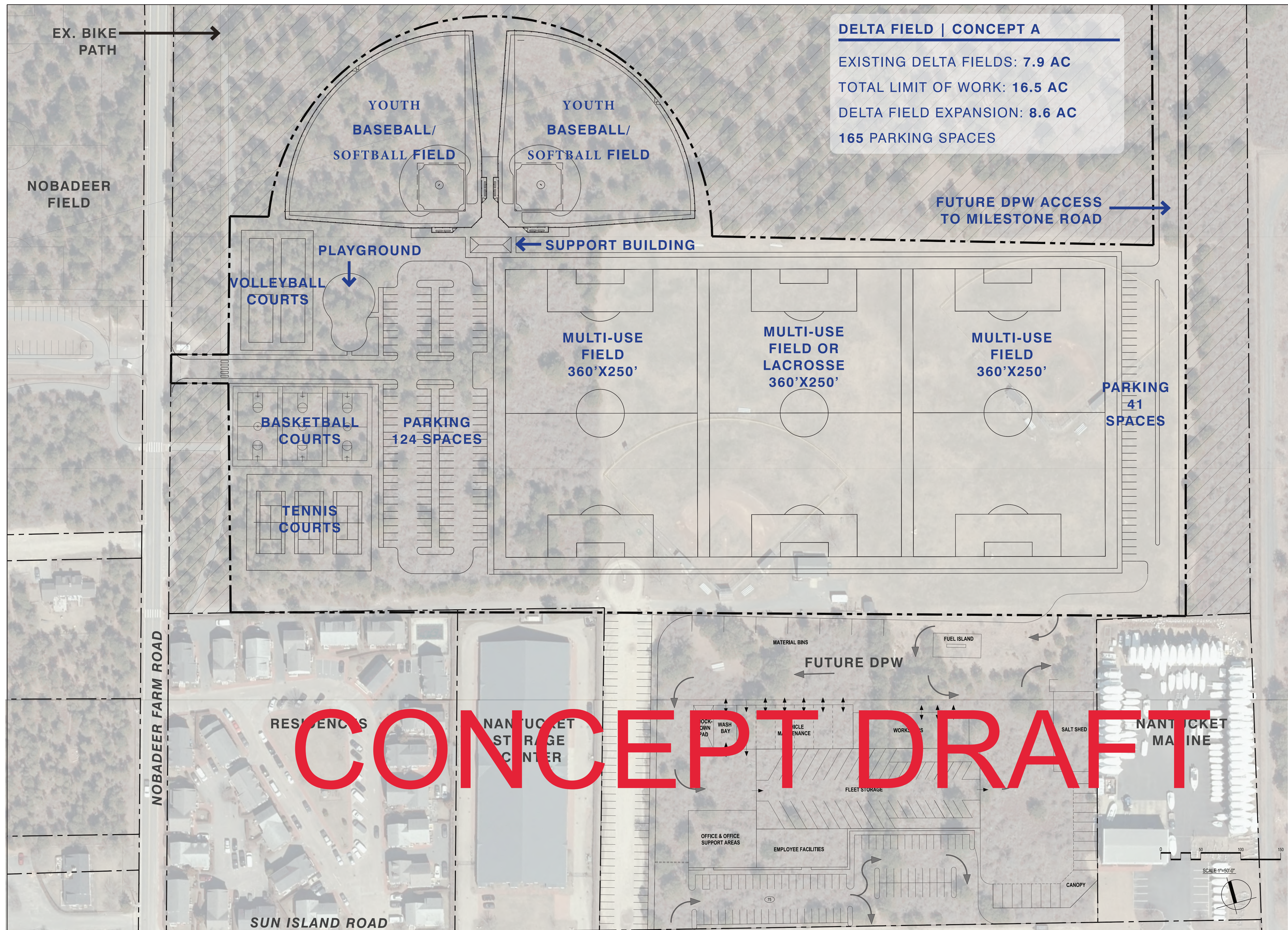
December 14

Parks and Rec Master Plan areas of focus:

1. Nobadeer Field Expansion: Addition of a third grass field, rejuvenating the other two grass fields, expanding parking.
2. Delta Field Layout and Expansion: **Think about what items you might like to see aside from multi use fields and ball fields here.**

2a. Tom Nevers: There will be a multi project approach to Tom Nevers, there is a project in the works to remove the debris from the beach and some of the buried debris from around the site. The first recreation part of the project out here will be to bring the two ball fields up to a level that they can house the little league during the reconstruction of the Delta Fields. This will entail fencing in the eastern field, construction of proper dugouts at both fields, redoing the infields with proper baseball infield "dirt". **Once the solid waste project is finished, we will be looking to expand offerings for Tom Nevers Park, what items should we be looking to add in this area?**

3. Jetties and Childrens are both subject to a concessions study involving the coastal resiliency planning so some improvements are on hold there until the coastal items are addressed. Playground would be brought up to ADA compliance when reconstructed.
4. Coffin Park, is currently an open space. **What could be added here? First thing that comes to mind is parking and an ADA playground. Would there be pushback from neighbors?**



Project:
TOWN OF NANTUCKET



DELTA FIELDS
WABADEER FARM ROAD
DANTUCKET, MA 02554

Weston & Sampson™

427 Main Street,
Suite 400, Worcester, MA 01608
978.977.0110 800.SAMPSON
www.westonandsampson.com

Consultants:

Seal:

Revisions:

Rev	Date	Description
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Issued For: **BIDDING**

SCALE: AS NOTED

Date: SEPTMEBER, 2020

Drawn By: JC

Reviewed By: BK

Approved By: BK

W&S Project No: 200124

Drawing Title:

OPTION A
NO OVERLAPPING

Sheet Number:



Town & County of NANTUCKET, MA

Community Recreation – Deposit & Fee Schedule

Deposit & Fee Schedule

Adult Leagues:

Fee: \$200 per team

Fee is due in full prior to the start date of the program. Please submit as one check inclusive of all teams.

Youth Leagues:

Deposit: \$200 Deposit (to be applied to total fee).

Fee: \$10 per registrant

Fee is due in full prior to the start date of the program. Please submit as one check inclusive of all teams.

Youth Camps:

Deposit: \$200 Deposit (to be applied to total fee).

Fee: 15% of gross revenue

Fee is due in full at completion of the program. A Camp Roster with per person charge must be submitted with the final check. Please submit as one check inclusive of all camp sessions and sections.

Hourly Rates:

\$25/hour for one day events.

Nantucket Public Schools
10 Surfside Road
Nantucket, MA 02554

Facilities Use Application Form - External use

Appendix A

Schedule of Fees:

Facility Name	A usage day	B usage p/h	B usage day	C usage p/h	C usage day
NHS Auditorium	\$0.-	\$300.-	\$1200.-	\$500.-	\$2000.-
NHS ARR	\$0.-	\$100.-	\$250.-	\$120.-	\$500.-
Cafeterias	\$0.-	\$60.-	\$250.-	\$100.-	\$400.-
NHS LGI	\$0.-	\$100.-	\$250.-	\$120.-	\$500.-
Gymnasiums	\$0.-	\$60.-	\$200.-	\$120.-	\$500.-
Kitchens	\$0.-	\$60.-	\$250.-	\$100.-	\$400.-
Football Field	\$0.-	\$100.-	\$400.-	\$150.-	\$600.-
Athletic Field	\$0.-	\$60.-	\$250.-	\$150.-	\$600.-
Lobby	\$0.-	\$50.-	\$200.-	\$90.-	\$350.-
Hallway	\$0.-	\$50.-	\$200.-	\$90.-	\$350.-
Conference Rooms	\$0.-	\$40.-	\$150.-	\$80.-	\$300.-
CPS Dance Studio	\$0.-	\$40.-	\$250.-	\$80.-	\$300
Classrooms	\$0.-	\$40.-	\$150.-	\$80.-	\$300.-

Notes for fees:

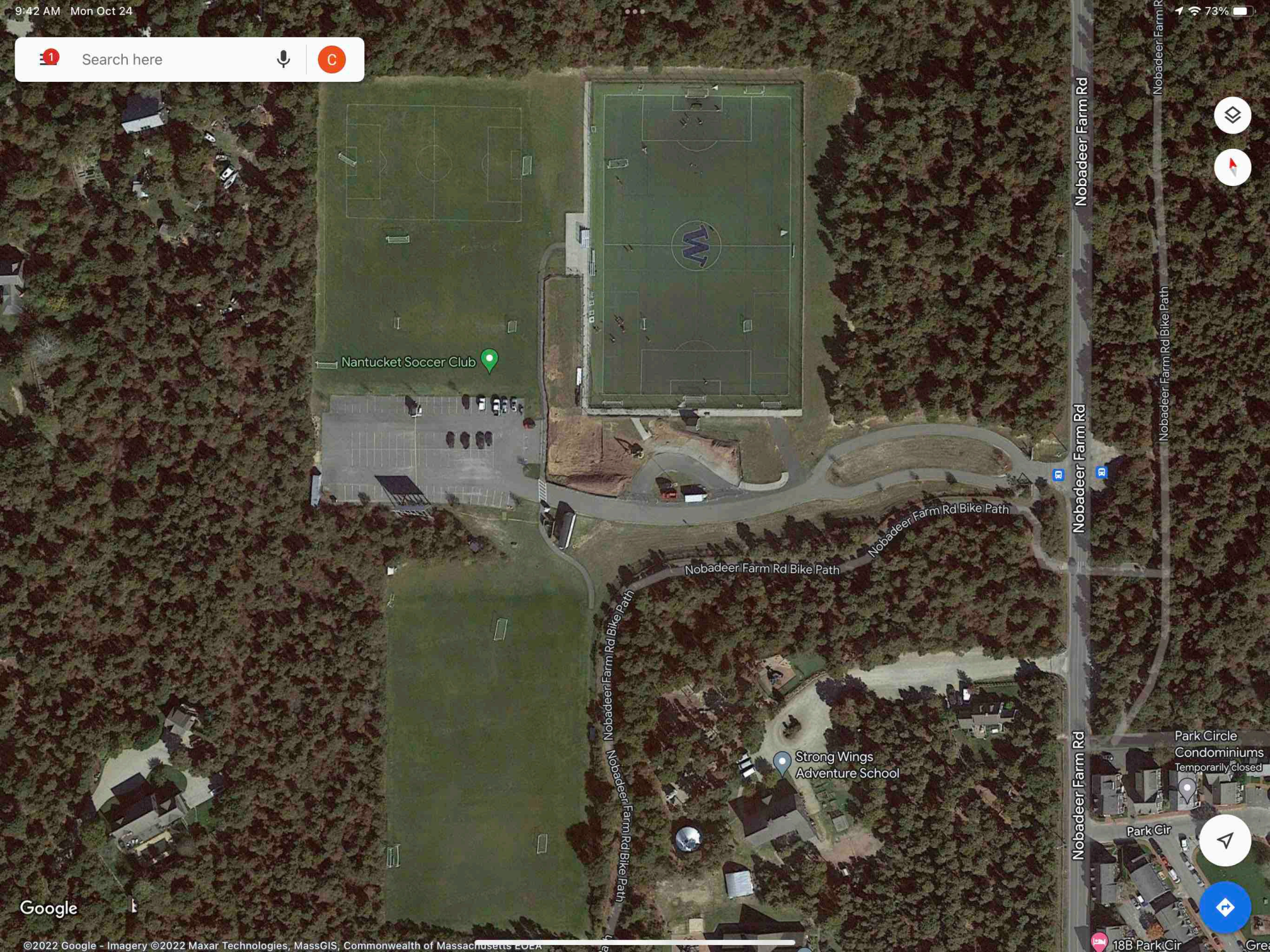
1. A usage applies to all school related events.
2. B usage applies to non-profits not raising funds.
3. C usage applies to non-profits raising funds and for-profit users.
4. Full Day applies to events greater than three (3) hours and not to exceed specified Facility closing time.
5. Hourly applies to events up to and including three (3) hours.

1

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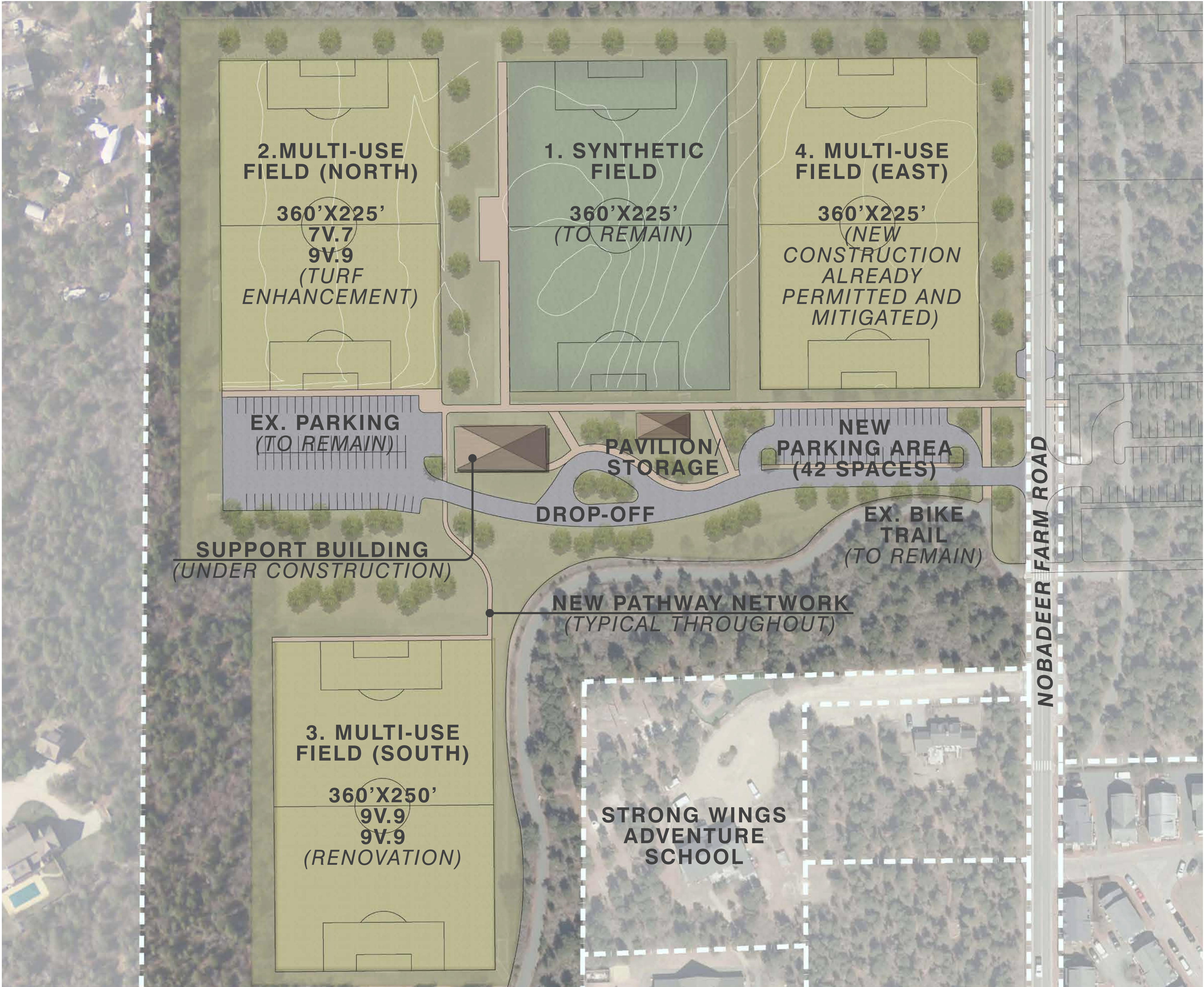




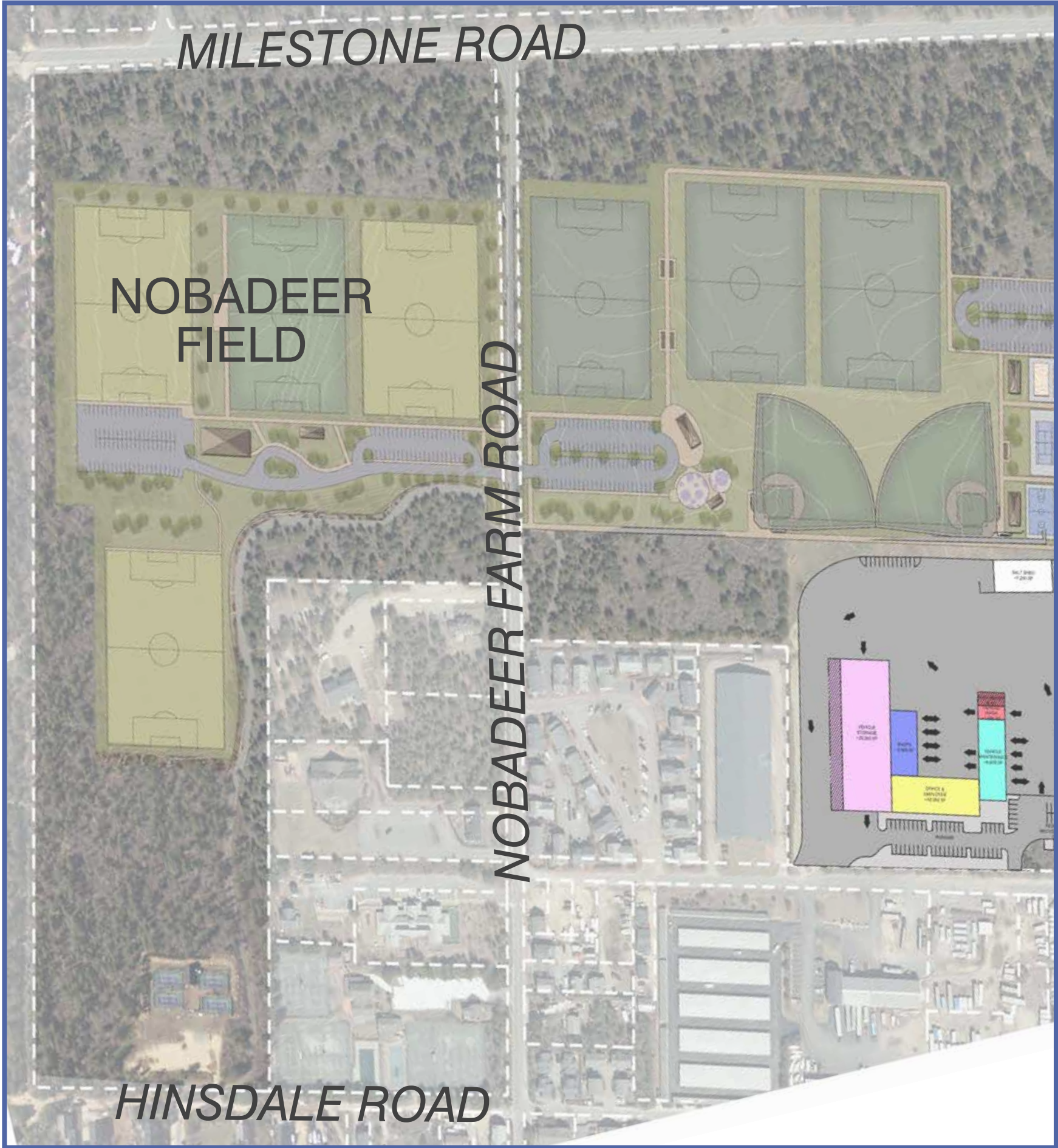




NOBADEER FIELD | MASTER PLAN CONCEPT



KEY MAP



PROPOSED FIELD USE MATRIX

- FIELD TYPE:
- 1. SYNTHETIC TURF FIELD
 - 2. MULTI-USE RECTANGULAR FIEL (NORTH)
 - 3. MULTI-USE RECTANGULAR FIEL (SOUTH)
 - 4. MULTI-USE RECTANGULAR FIEL (EAST)

- USES:
- NANTUCKET SOCCER CLUB
 - NANTUCKET YOUTH LACROSSE
 - SOCCER PLUS
 - SUMMER SOCCER LEAGUE
 - OTHERS (TBD)



DRAFT

NANTUCKET, MA
PARKS AND RECREATION MASTER PLAN
2022



Weston & Sampson
design studio



Security IP Cameras for Parks in Nantucket

Prepared for:

Nantucket Mass Parks & Recreation Dept

Charles Polachi
cpolachi@nantucket-ma.gov

Prepared by:

setronics
■■■■■ security integrators

Andy Wilder
awilder@setronics.com

Monday, October 24, 2022

Nantucket Mass Parks & Recreation Dept
Charles Polachi
2 Bathing Beach Road
Nantucket, MA 02554
cpolachi@nantucket-ma.gov

Dear Charles,

Thank you for the opportunity to present the following Proposal # 22-003538.

The following detail outlines the scope of work for the sale and installation of IP cameras installed at (8) Nantucket Parks for surveillance

Scope of Work:

- Provide and install (1) NEMA enclosure with (1) PoE Network switch and (2) 360 Degree IP cameras at Tom Nevers Field
- Provide and install (1) NEMA enclosure with (1) PoE Network switch and (1) 270 Degree IP camera and (1) Fixed IP camera at Winter Park
- Provide and install (1) NEMA enclosure with (1) PoE Network switch and (2) 360 Degree IP cameras at North Jetties Beach
- Provide and install (1) NEMA enclosure with (1) PoE Network switch and (1) 360 Degree IP and (1) 5MP Fixed IP camera at Children's Beach
- Provide and install (1) NEMA enclosure with (1) PoE Network switch and (1) 270 Degree IP camera at Delta Fields
- Provide and install (1) NEMA enclosure with (1) PoE Network switch and (1) 360 Degree IP camera at Nobader Field
- Provide and install (1) NEMA enclosure with (1) PoE Network switch and (1) 360 Degree IP camera at Surfside Beach concession area
- Provide and install (1) PoE Network switch and (1) 360 Degree IP camera at the Salt Shed that has internet connection and is tied into the DPW Network
- Provide and install (6) UPS for power outages so staff will not have to go around and reset the PoE switches in case of these power outages
- Provide and install (11) Exacq Enterprise IP camera licenses for these added IP cameras that will be programmed back to the Nantucket Police Dept Exacqvision NVR
- Provide and install Cat 6 cable and connectors for IP cameras

Customer Responsibilities:

- Provide username and passwords for existing devices
- Need the MAC address for the Nantucket Police Dept Exacqvision NVR
- Need Nantucket IT dept to open ports and program in the IP cameras back to the Exacqvision NVR at the Police Station once Setronics has installed and powered up the PoE Network switch

Sincerely,

NVR w/4TB of Storage



Andy Wilder
Senior Sales Executive
Setronics Corp.

Project Price

Qty	Description
10	4MP IP 4X Multisensor, 2.8mm, Indoor/Outdoor, IP66, IK10, TDN, TWDR
2	5MP IP Vandal Dome Camera w/IR & 2.8mm Lens
10	Multisensor Wall Mount, White
10	Outside Corner Bracket for use w/ADLOMARM/ADCBMARM
2	Wall Mount Accessory
2	Pendant Adapter
8	8 Port PoE+ Network Switch
7	12x10x5 120 VAC Weatherproof Industrial Enclosure
8	UPS Rackmount 1000VA
11	Enterprise IP Camera License
1	IP Professional Camera License
1	Cable, Materials and Labor

Subtotal: **\$66,873.00**

Security IP Cameras for Parks in Nantucket

Prepared by:

Setronics Corp.

Andy Wilder
Main Office: 978-671-5450
Mobile: 978-835-9571
Fax 978-6715448
awilder@setronics.com

Prepared for:

Nantucket Mass Parks & Recreation Dept

2 Bathing Beach Road
Nantucket, MA 02554
Charles Polachi
(508) 228-7200
cpolachi@nantucket-ma.gov

Quote Information:

Quote #: 22-003538

Version: 2
Delivery Date: 10/24/2022
Expiration Date: 11/09/2022

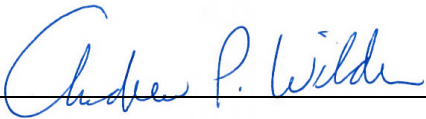
Quote Summary

Description	Amount
Project Price	\$66,873.00
Total:	\$66,873.00

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Setronics Corp.

Nantucket Mass Parks & Recreation Dept

Signature: 
Name: Andy Wilder
Title: Senior Sales Executive
Date: 10/24/2022

Signature: _____
Name: _____
Title: _____
Date: _____



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Nantucket
Conservation Commn

Sandbar at Jetties Beach
Bar & Restaurant
Temporarily closed

Bathing Beach Rd

Bathing Beach Rd

Nantucket Tennis

Nantucket Parks
& Recreation

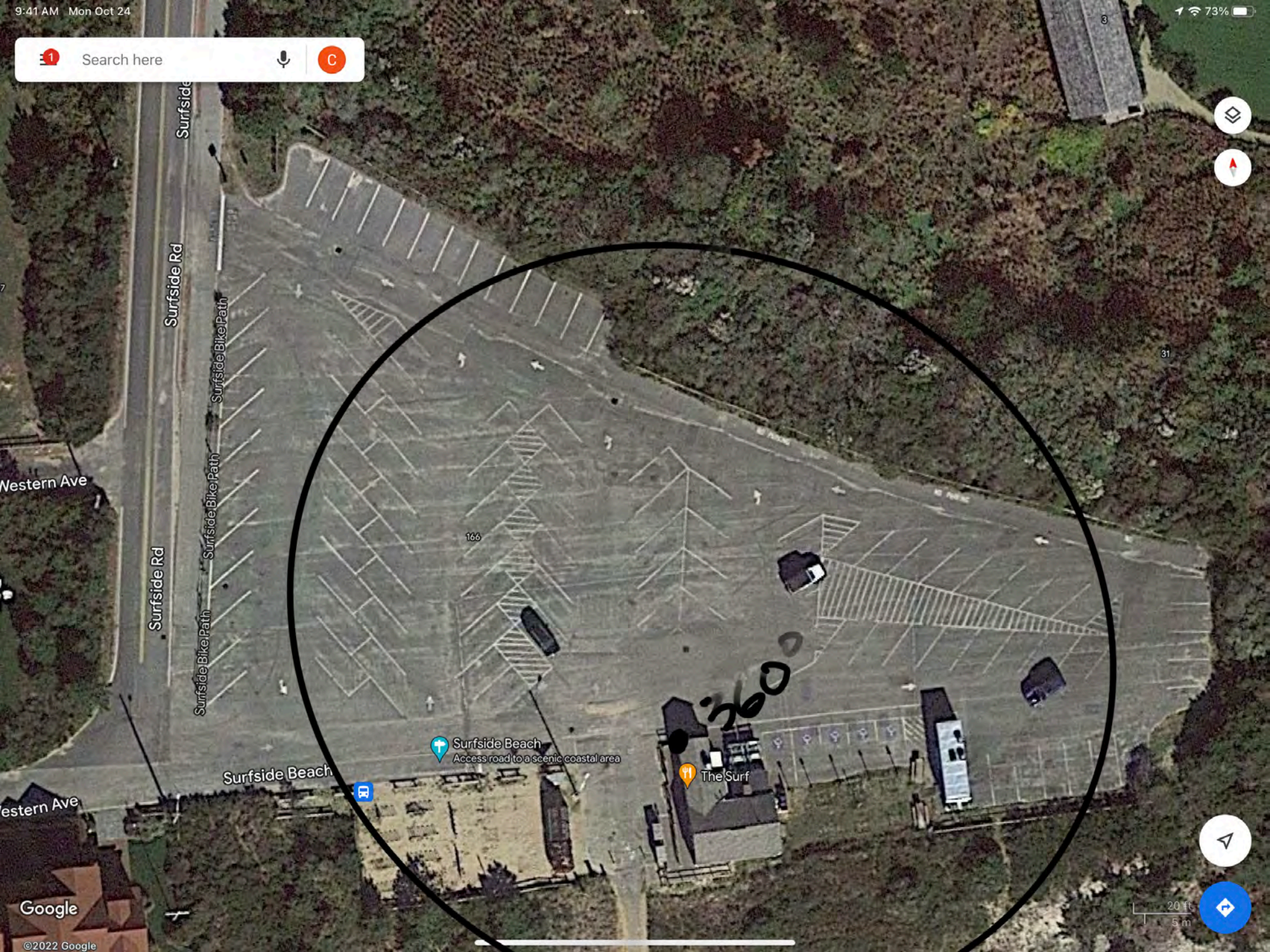
Nay

Harbor View Way

GypSea Café
Temporarily closed

3rd stand
Camera

**Children's Beach
Playground**



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Surfside Rd

Surfside Bike Path

Western Ave

Western Ave

Google

©2022 Google

Surfside Beach

Surfside Beach
Access road to a scenic coastal area

The Surf

360

20 ft
5 m



County
vation

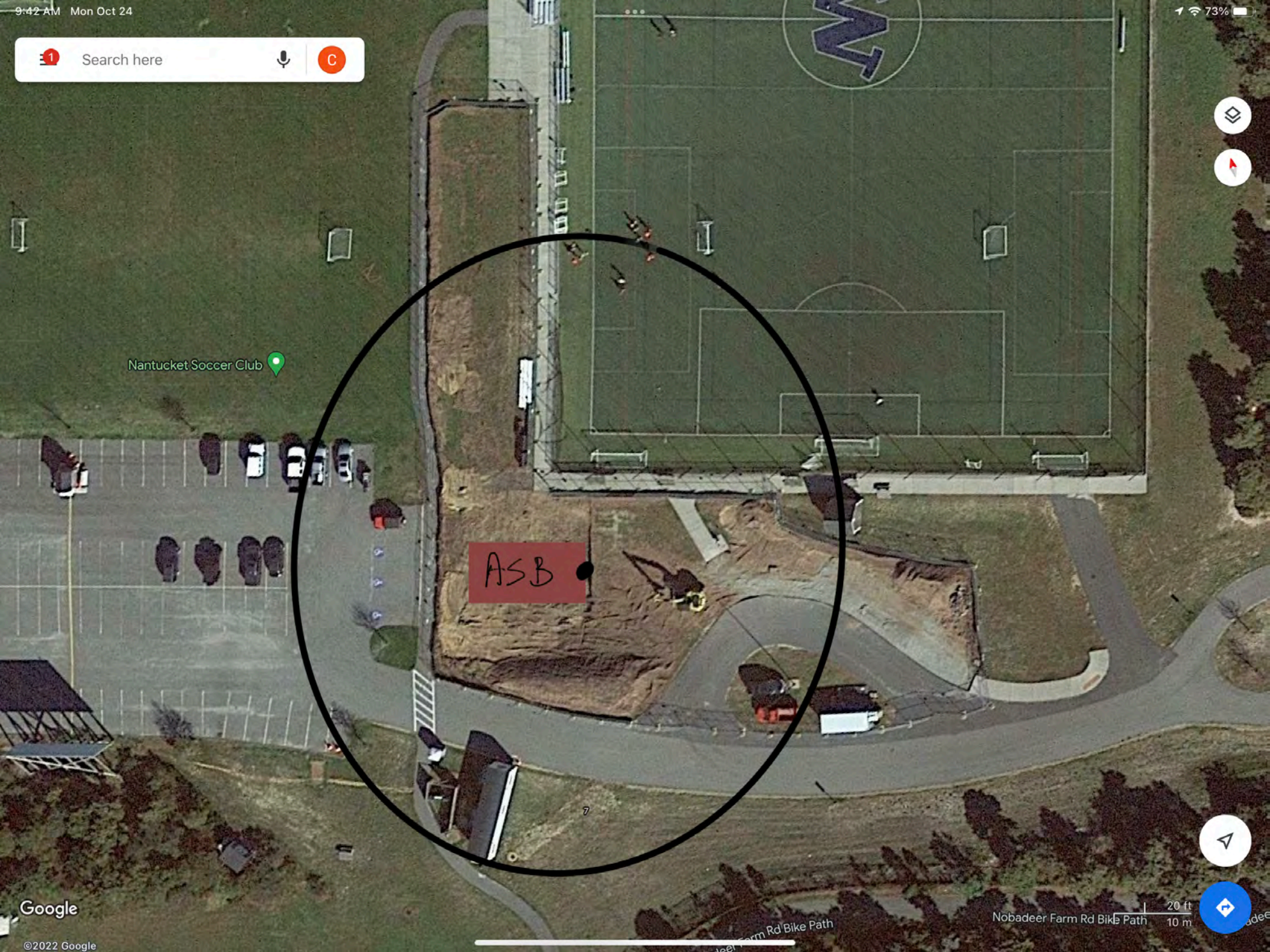
Essex Rd

Essex Rd

Essex Rd

Winter Park
and Playground

Nantucket Green Tree Inc

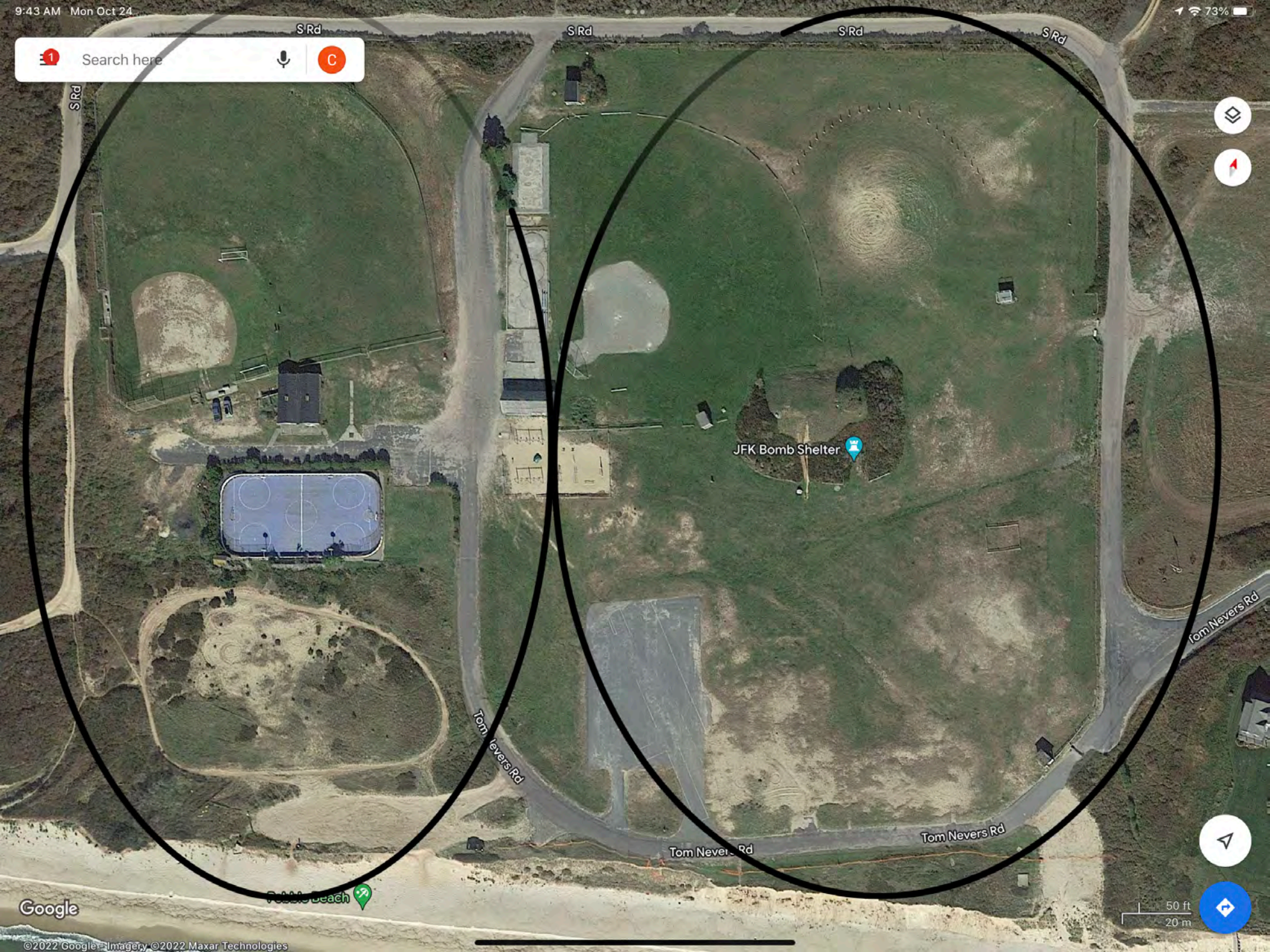
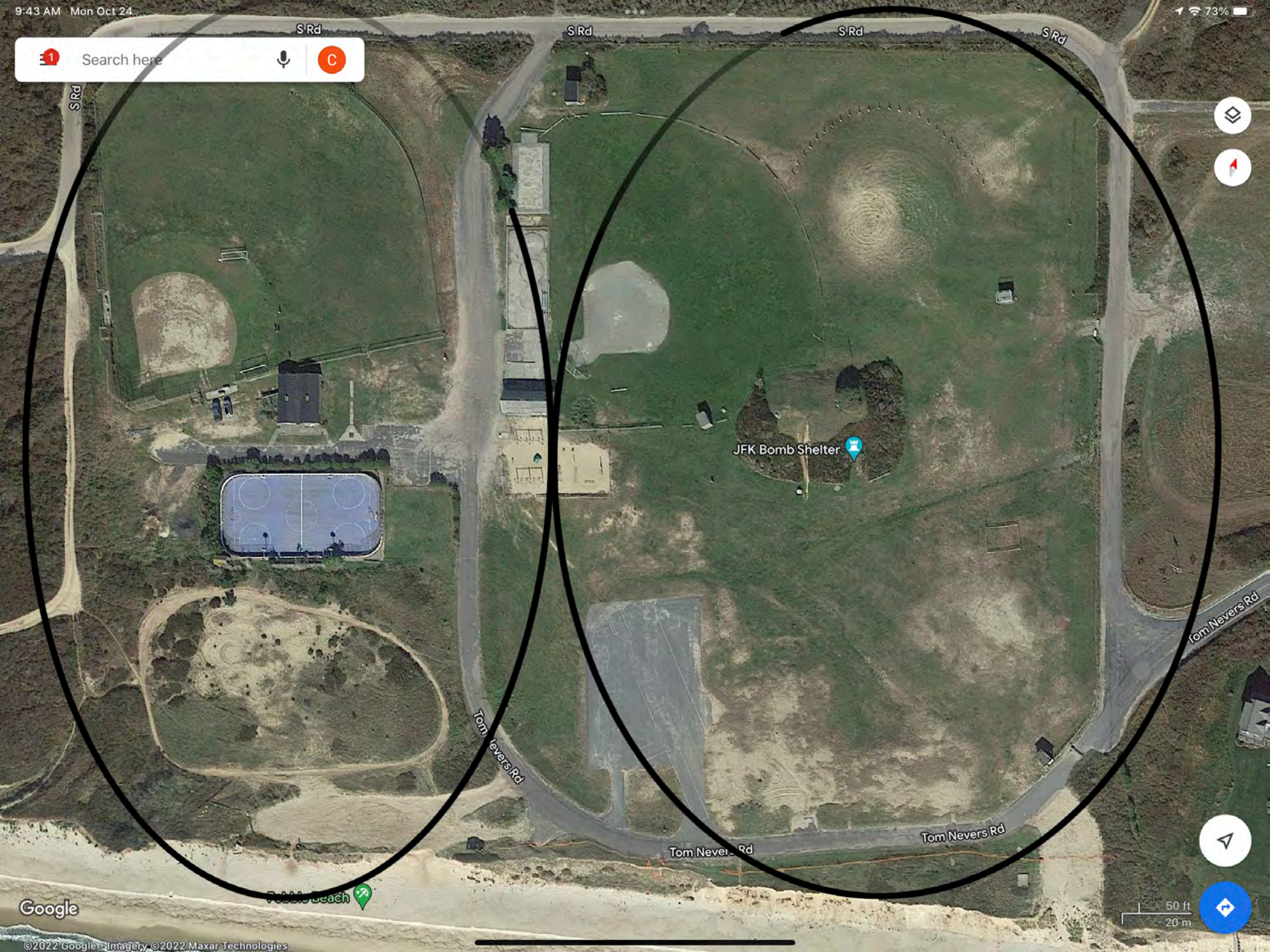




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Google





Flex Multi-Sensor

Multidirectional 4x 4MP camera with 360 degree coverage



Key Features

- Wide area coverage from a single camera
- 4x4MP multidirectional camera heads for 360 coverage
- Each camera head supports up to three streams
- H.264 addresses network and storage cost concerns
- Flexibility to choose between overview and detailed images for each stream
- Independently set up the positioning, angle and rotation of each camera head
- Field swappable lens modules.
- TWDR (Multi-shutter)
- IP66 rated
- Vandal Resistant IK10
- PoE+ / 12VDC

Monitoring multiple directions simultaneously from a single camera

The Illustra Flex multi-sensor camera is ideal for applications that require a flexible, cost-effective surveillance solution that provides wide area coverage along with detailed images.

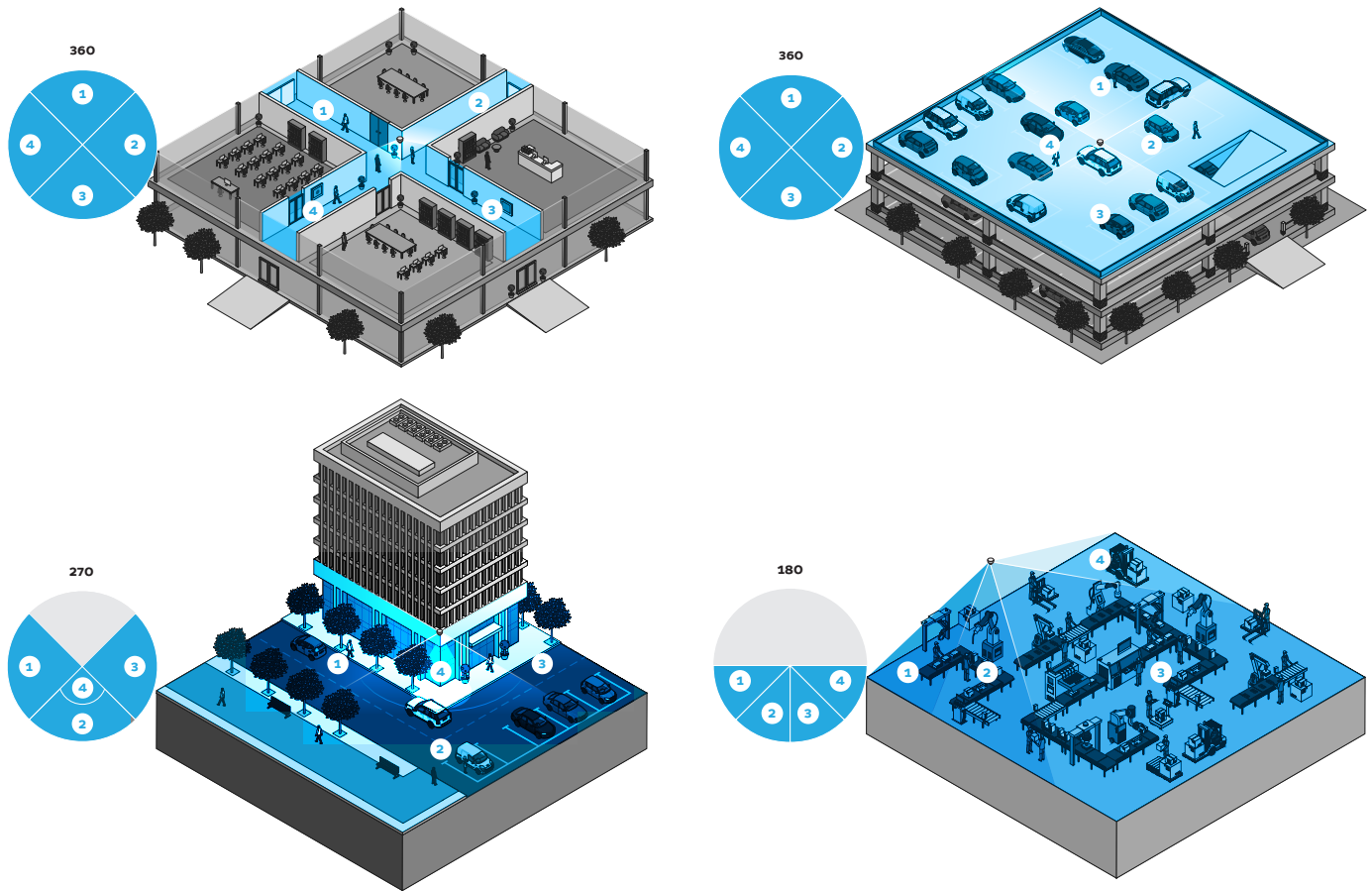
With one IP address and one network cable, the four (4x4MP) multidirectional camera heads provide a flexible, cost-effective solution for multidirectional surveillance. Camera heads can be positioned and angled independently to provide 360 degree coverage in four separate non-stitched streams.

Flexible, independent, easy camera placement and positioning

The Flex multi-sensor's magnetic base enables each sensor to be independently placed, providing operators with a multitude of configuration options. The three axis gimbal on each sensor then allows the Field of View (FoV) configuration to be fine tuned with up to 60 degree tilting and provides a total field of view of 180, 270 or 360 degrees.

Flexible use cases

Illustra Flex multi-sensor cameras have been designed to allow for personalization for multitude of use cases and any field of view (FoV). From an internal 360 degree hall way or parking lot installation to external 270 degree corner installation, and even a 180 degree assembly line installation.



Safeguard against cyber attacks across devices

The Illustra Flex Multi-Sensor has been designed with cybersecurity at the forefront. Our products exceed the standards of the Johnson Controls Cyber Solutions Product Security Program. Our security mindset starts with a holistic approach, including rapid incident response to meet comprehensive and evolving cybersecurity environments.

Powerful technology to increase confidence and savings

The Flex product family cameras feature built-in technology that ensure efficient recording. Multiple streams of H.264 and MJPEG video compression provide excellent image clarity while efficiently managing bandwidth to reduce storage costs.

Integration

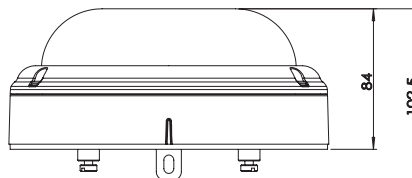
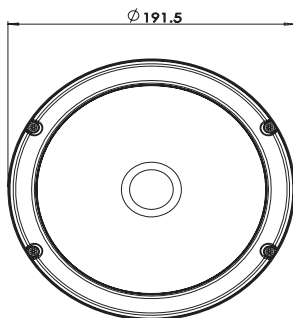
The Illustra Flex Multi-Sensor is compatible with our VideoEdge NVR, VideoEdge Hybrid, victor Unified Client, ExacqVision recorders and Clients.

Specifications

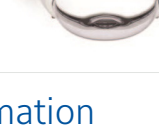
Operational	
Video Compression	H.264, MJPEG
Max Frame Rate	30 fps
Resolution & Aspect Ratio H264: Stream 1 @ 30 fps	2560x1440 16:9 2304x1296 16:9 1920x1080 16:9 (1080p) 1280x720 16:9 (720p)
Resolution & Aspect Ratio H264: Stream 2 @ 30 fps	640x480 4:3 (VGA) 704x576 D1 PAL 704x480 D1 NTSC 352x288 CIF PAL 352x240 CIF NTSC
Resolution & Aspect Ratio MJPEG: Stream 3 @ 10 fps	1280 x 720 16:9 (720p) 800x600 4:3 640x480 4:3 (VGA) 768x432 16:9 704x576 D1 PAL 704x480 D1 NTSC 352x288 CIF PAL 352x240 CIF NTSC
Video Streams	Triple Stream
Imager	4 x 4MP 1/3" CMOS Sensor
Lens Type	Fixed
Aperture	f/2
Focal Length	2.8mm
Field of View (H/V)	90° / 55°
Shutter Speed	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(1/2,1/3,1/5,1/6,1/7.5,1/10)
Minimum Illumination Color B/W	0.41 Lux 0.022 Lux
Wide Dynamic Range	True WDR 120DB
Day/Night	True Day/Night
ONVIF-Compliant	Profile S
Motion Detection Zones	Up to four areas per sensor
Privacy Zones	16 per sensor
Alarm Input/Output	1/1
Analog Video Output	CVBS 1Vp-p, 4:3 aspect ratio (test port only)
Bi-directional audio	1/1
Simultaneous Users	5
Supported Languages	English, Japanese, Korean
SD card event buffering	Yes
SD card event download	Yes
SD card continuous recording	Yes
Network	
Ethernet Interface	1000 Base-T (1Gbps)
Supported Protocols	TCP/IP, UDP, AutoIP, RTP(UDP/TCP), RTSP, NTP, HTTP, HTTPS, SSL, DNS, DDNS, DHCP, FTP, SMTP, ICMP, SNMPv1/v2/v3(MIB-2), ONVIF
Configuration Management	
WEB Server	Yes

Security	HTTPS(SSL), IP filtering, 802.1x, Digest Authentication
Onboard Storage	
Card Support	Micro SD, Micro SDHC, Micro SDXC (128GB Max)
Pre-Alarm Recording	Up to 5 seconds
Recording Format	TS
Recording Trigger	Date, Time, Event (Motion, Alarm, Network Disconnected, Temperature Critical)
Electrical	
Power Input	Power over Ethernet (PoE+) IEEE 802.3at Type 2 Class 4, 12VDC
Maximum Power Draw	PoE 17.5W, 12VDC 16.5W
Physical	
Dimensions (W x H)	Ø7.6 in x 3.3 in (Ø 192 mm x 84 mm)
Weight	4.4 lbs (2.0 kg)
Housing Color	White (Pantone RAL 9003)
Operating Temperature	-4°F to 122°F (-20°C to 50°C)
Humidity	10-90% RH(Non-Condensing)
Outdoor Rating	IP66
Vandal Resistant	IK10
Regulatory	
Emissions	FCC, Class A EN 55032, Class A
Immunity	EN 55130-4
Enclosure	IP66, IK10
Environment	RoHS
NDAA	Yes

Flex Gen 2 Multi-Sensor



Measurements in mm

Accessory Type	Image	Model Number	Description	Dimensions	Color
Wall Mount		IBWS-M-ISWB-0	Illustra Flex Multi-sensor Wall Mount, White	8.90 x 4.49 inches 226 x 114 mm	RAL 9003
Junction Mount		IBJB-M-ISWB-0	Illustra Flex Multi-sensor Junction Box, White	8.86 x 2.36 inches 225 x 60 mm	RAL 9003
In-Ceiling Recess Mount		IBCR-M-ISWT-0	Illustra Flex Multi-sensor Ceiling Recessed Mount, White	12.40 x 4.76 inches 315 x 121 mm	RAL 9003
Ceiling Pendant Mount		IBPN-M-IS12-0	Illustra Flex Multi-sensor Ceiling Pendant Mount, White	7.99 x 10.94 inches 203 x 278 mm	RAL 9003
Replacement Bubble (Clear)		IABL-M-ISC-0	Illustra Flex Multi-sensor Replacement Bubble, Clear with White trim		RAL 9003

Ordering information

Model Number	Description
IFS16-M10-BT03	Illustra Flex 4x 4MP Multisensor, 2.8mm, Indoor/Outdoor, IP66, IK10, TDN, TWDR

Accessories

Model Number	Description
IBWS-M-ISWB-0	Illustra Flex Multisensor Wall Mount, White
IBJB-M-ISWB-0	Illustra Flex Multisensor Junction Box, White
IBCR-M-ISWT-0	Illustra Flex Multisensor Ceiling Recessed Mount, White
IBPN-M-IS12-0	Illustra Flex Multisensor Ceiling Pendant Mount, White
IABL-M-ISC-0	Illustra Flex Multisensor Replacement Bubble, Clear with White trim

About Johnson Controls

Johnson Controls is a global diversified technology and multi-industrial leader serving a wide range of customers in more than 150 countries. Our 120,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities. Our commitment to sustainability dates back to our roots in 1885, with the invention of the first electric room thermostat.

For additional information, please visit www.illustracameras.com follow us on Facebook, Twitter, and LinkedIn.

QNV-8010R/8020R/8030R

5 MP Network IR Dome Camera



QNV-8010R



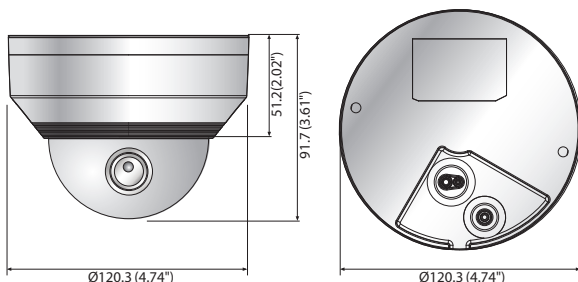
QNV-8020R/8030R

Key Features

- 5 Megapixel (2592 x 1944) resolution
- 2.8mm/4mm/6mm fixed lens
- 0.15Lux (Color), 0Lux (B/W, IR LED on)
- 30fps@5 MP (H.265 / H.264)
- H.265, H.264, MJPEG codec support, Multiple streaming
- Day & Night, WDR (120dB)
- Defocus detection, Directional/Virtual Line detection, Motion detection, Enter/Exit, Tampering
- Micro SD / SDHC / SDXC memory slot (Maximum 128GB)
- Hallway view, WiseStream II support
- IR Viewable length 20m/25m/30m
- IP66, IK10, PoE

Dimensions

Unit : mm (inch)



Accessories (Optional)



	QNV-8010R	QNV-8020R	QNV-8030R
VIDEO			
Imaging Device	1/2.8" 5 MP CMOS		
Effective Pixels	2592(H) x 1944(V)		
Minimum Illumination	Color : 0.15Lux (F2.0, 1/30sec) BW : 0Lux (IR LED on)	Color : 0.15Lux (F1.6, 1/30sec) BW : 0Lux (IR LED on)	Color : 0.15Lux (F2.0, 1/30sec) BW : 0Lux (IR LED on)
Video Out	CVBS: 1.0 Vp-p / 75Ω composite, 720 x 480 for installation		
LENS			
Focal Length (Zoom Ratio)	2.8mm fixed focal	4.0mm fixed focal	6.0mm fixed focal
Maximum Aperture Ratio	F2.0	F1.6	F2.0
Angular Field of View	H : 104.7°/V : 76.5°/D : 136.0°	H : 79.8°/V : 58.1°/D : 105.9°	H : 49.4°/V : 37.4°/D : 61.0°
Focus Control	Fixed		
PAN / TILT / ROTATE			
Pan / Tilt / Rotate Range	0°~350° / 0°~67° / 0°~355°		
OPERATIONAL			
IR Viewable Length	20m (65.62ft)	25m (82.02ft)	30m (98.42ft)
Camera Title	Displayed up to 85 characters, 5 lines, English / Numeric / Special & International characters, 6 colors, Transparency, Auto scale by resolution		
Day & Night	Auto (ICR)		
Backlight Compensation	BLC, WDR, SSDR		
Wide Dynamic Range	120dB		
Digital Noise Reduction	SSNR		
Motion Detection	4ea, polygonal zones		
Privacy Masking	6ea, rectangular zones		
Gain Control	Low / Middle / High		
White Balance	ATW / AWC / Manual / Indoor / Outdoor		
LDC	Support		
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/12,000sec)		
Video Rotation	Flip, Mirror, Hallway view (90°/270°)		
Analytics	Defocus detection, Directional/Virtual Line detection, Motion detection, Enter/Exit, Tampering		
Alarm I/O	Input 1ea / Output 1ea		
Alarm Triggers	Analytics, Network disconnect, Alarm input		
Alarm events	File upload via FTP and e-mail, Notification via e-mail, SD/SDHC/SDXC or NAS recording at event triggers, Alarm output, Handover		
NETWORK			
Ethernet	RJ-45 (10/100BASE-T)		
Video Compression	H.265/H.264 : Main/High, MJPEG		
Resolution	2592 x 1944, 1920 x 1080, 1280 x 960, 1280 x 720, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360		
Maximum Framerate	H.265/H.264 : Maximum 30fps / MJPEG : Maximum 15fps		
Smart Codec	WiseStream II		
Video Quality Adjustment	H.264/H.265 : Target bitrate level control MJPEG : Quality level control		
Bitrate Control	H.264/H.265 : CBR or VBR / MJPEG : VBR		
Streaming	Unicast (6 users) / Multicast / Multiple streaming (Up to 3 profiles)		
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP		
Security	HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1X authentication (EAP-TLS, EAP-LEAP)		
Edge Storage	Micro SD/SDHC/SDXC 1 slot maximum 128GB		
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform		
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch		

	QNV-8010R	QNV-8020R	QNV-8030R
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12, 10.13, 10.14 Recommended Browser: Google Chrome Supported Browser : MS Explorer 11, MS Edge, Mozilla Firefox (Windows 64 bit only), Apple Safari (Mac OS X only)		
Memory	512MB RAM, 256MB Flash		
ENVIRONMENTAL			
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH * Start up should be done at above -20°C		
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH		
Certification	IP66, IK10		
ELECTRICAL			
Input Voltage	PoE (IEEE802.3af, Class3)		
Power Consumption	PoE : Maximum 7.5W, typical 5.8W	PoE : Maximum 7.2W, typical 5.4W	PoE : Maximum 7.2W, typical 5.4W
MECHANICAL			
Color / Material	White / Aluminum		
RAL Code	RAL9003		
Product dimensions / weight	Ø120.3 x 91.7mm (Ø4.74 x 3.61"), 510g (1.124 lb)		

* The latest product information / specification can be found at hanwhasecurity.com

* Design and specifications are subject to change without notice.

* Wisenet is the proprietary brand of **Hanwha Techwin**.