RFP Response V2

EnSight Parking Guidance EcoSystem Proposal

Simple, Smart, Scalable Parking Guidance for: La Jolla Coastal Access and Parking Advisory Board

January 15, 2021

EnSight Technologies
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La Jolla Coastal Access and Parking Advisory Board
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EnSight TECHNOLOGIES

Executive Summary

The La Jolla Coastal Access and Parking board ("La Jolla") is soliciting proposals for a unified Parking occupancy management and centralized wayfinding system to present parkers with accurate space availability for 4 garages as well as provide realtime and historical management data of the 4 parking assets. EnSight is pleased to present our cutting edge camera based car tracking, scanning and counting technology to achieve the goals stated in the RFP.

Our EnSightful system will enhance the visitor experience by providing space availability information to inform visitors coming to the village of available off-street parking. In addition to enhancing the parker experience, the EnSightful system will provide key stakeholders valuable business intelligence of realtime and historical parking occupancy data. By advertising available parking in the under utilized public parking garages, parkers will be able to quickly spot convenient off-street parking options.

We understand there are options when choosing a partner for this project and on-going support of the village, but after the review of our proposal and our unique differentiators which, we believe EnSight is the best long term solutions partner for La Jolla and stands head and shoulders above on the designated scoring criteria.

Why Choose EnSight?

1. Local San Diego Owned and Headquartered
    - Project and support from a San Diego headquartered company. Long after project delivery we not only support remotely, but are a 20-minute drive away if on-site support is needed. You will deal with EnSight Direct, not through a local representative or Local reseller.

2. Experience

- **Our background** is in Machine Vision technology. Our Principles have been developing installing and servicing Machine Vision systems globally for over 17 years.
- **Local SD and LA References -** One Paseo, Hotel Del Coronado, Navy Headquarters, Manhattan Village Mall (3 garages), 2nd and PCH Mall (3 Garages), Hollywood Park Retail garage, Westin Anaheim Hotel, San Manual Casino.
- **Municipal work-** EnSIght was just awarded 3 garages for the City of Redwood City after a demo site competition with a competitor, OptiPark. EnSight was given one garage and our competitor was given another. After the demo sites were completed and through an RFP process EnSight and our teaming partners were awarded the project.


Local Support Matters!
University of California San Diego
La Jolla Shores Park
orrey Pines Rd & Prospect St
23 min
19.7 miles
34 min
24 miles
28 min
24.4 miles
Santee
1955 Cordell
Mission Trails Regional Park
EnSight
El Cajo
Mission Bay Park
Tecolote Canyon Natural Park and Nature...
Costco Wholesale
Grossmont
La Mesa
Casa De Oro-Mount Helix

3. Systems ability to be expanded in the future

- If the La Jolla wants to scale the system, additional garages or surface lots can be added down the road.
- License Plate Recognition ("LPR")- with EnSight you can layer on an LPR module ("Ensight Plates") to allow you to add additional business intelligence metrics to your EnSightful Portal, such as dwell times, capture rates, VIPs, frequent visitors or Hotlists. You can also integrate this information to mobile payment apps via an API integration.
- Surface lot or on-street space monitoring- Much like the Redwood Smart City Project, EnSight with it's partner CleverCiti (https://www.cleverciti.com/), can layer on the most sophisticated Surface and On-street space monitoring technology on the market.

4. Software driven, not mechanical

- EnSight unlike some of its competitors leverages its own counting software. We do not rely on camera providers or Third parties to build our counting algorithm, which allows us to constantly improve our system to ensure the highest possible accuracy levels and system support.
- The EnSight system is driven by advanced software using neural networks and deep learning which eliminates the need for unsightly counting technology and allows for continuous system improvement.

5. Proactive remote support and troubleshooting

- Once commissioned, the system is easy to adjust/troubleshoot remotely. EnSight monitors all hardware and software devices through our EnSightful Cloud Portal. If there is a hardware device or software application that goes offline or malfunctions, an automated alert is sent to our support team and the client.
- All sites are routinely checked and audited by our support team to verify accuracy.

6. Continual improvement and system support

- The EnSight Platform is supported through an annual Software and Support Services Agreement ("SSSA"). The SSSA ensures the system performance is maintained and continually improved through software updates, feature upgrades and proactive monitoring. Our system gets smarter as time goes on.

7. Remotely accessible from anywhere, anytime, any device.

- The front-end portal is cloud based and does not require clunky remote desktop applications.
- The Cloud portal allows you to see live and historical metrics to allow you to make key parking management decisions from your PC or Phone.

Qualifications and Experience

Company History

EnSight Technologies, LLC was formally launched 2018. Our founder members built and sold a company called APS Technology Group in 2012 that developed and delivered Optical Character Recognition Systems to track, scan and identify containerized cargo globally for 12 years. Our founding members took our collective experience developing and building optical vision systems to the parking market in 2018.

About EnSight

Our mission at EnSight is simple: to provide the smart, simple, and scalable parking occupancy management systems that work for every parking provider. Building our software foundation on our proprietary machine vision software and off the shelf cameras, we believe in smart simplicity to provide the most accurate zone counting system in the parking market.

At the end of the day, we're making parking guidance smart, simple, and scalable. All while keeping it affordable for the everyday parking providers.

Our solution delivers instant occupancy counts, customizable dynamic signage, and an open API infrastructure, all within a smart, economical and flexible parking occupancy management system. Working across many industries with clients big and small, we're giving parking providers a solution that's tailored to their operation.

Reference Stories and Clients of Note

See Next Page...

2nd and PCH – Long Beach, California

2nd and PCH developed and managed by CenterCal properties sits at the gateway between Orange County and Long Beach, one of the most highly desirable areas in Southern California. With tremendous visibility on the corner of the iconic Pacific Coast Highway and 2nd Street there are more than 100,000 car trips passing the intersection daily. This Whole Foods anchored center has become the social hub and community gathering place with its spectacular views and enviable setting directly across from Alamitos Bay and the Long Beach Marina.

EnSight Technology's intelligent camera-based solution counts vehicles entering and exiting each level of each garage and transmits that occupancy information to signs located at garage entrances and the entrance of each parking level. Altogether, 31 strategically located dynamic LED Display signs will provide real-time information about how many parking spaces are available on each floor. The parking guidance technology will monitor all 1,100 parking spaces in the complex's three garages.

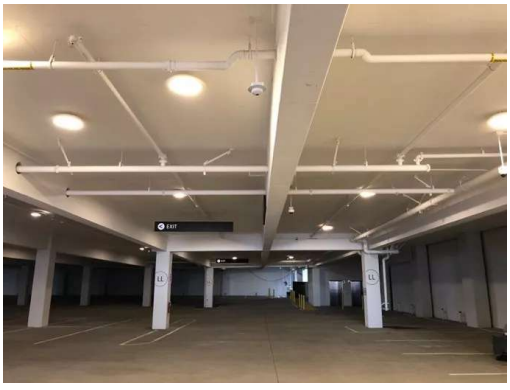
The Class A open air Lifestyle Center has two 3-level garages at opposite ends of the property connected via additional rooftop parking with the EnSight Parking Guidance EcoSystem for Level count wayfinding and specialty parking management.

Manhattan Village Mall- Manhattan Beach, Ca

Manhattan Village Mall is undergoing $180 million revitalization and expansion of the 38-year-old property, which will see the center grow from 573,000 square feet to 648,000. The Mall is managed by JLL and owned by RREEF. As a part of the remodel 3 new parking structures are being built. EnSight is deploying the EnSight Parking Guidance EcoSystem to do level count guidance for all three garages which will be centrally managed by one server. One Structure is complete and operation with garage two set for a December 2019 go-live and garage three coming on-line October 2020.

Project Highlights:

- 4 Level Garage with 6 EnSight FLI cameras to manage entry/exits and level changes
- 3 – 4 level monuments signs on exterior of the garage to present level occupancy



EnSight TECHNOLOGIES

One Paseo – Del Mar, California

One Paseo developed and managed by Kilroy Reality is a 23.6-acre mixed-use development in Del Mar, San Diego, at the southwest corner of Del Mar Heights Road and El Camino Real. One Paseo opened March 2019 and full build out will have a total of 96,000 square feet of retail and restaurants, 280,000 square feet of office space and 608 luxury apartments.

The Mixed-use build has a 3-level garage with the EnSight Parking Guidance EcoSystem for Level count wayfinding and specialty parking management. Project Highlights:

Level 1

- 3 entrances with EnSight FLI Cameras to monitor counts
- 15 LED Sensors to monitor and enforce up-front 30-minute parking spaces (see picture below).
- 3 Monument Signs showing level counts on Digital LED Displays on the exterior of the garage.
- 3 Interior Wayfinding signs to show L1 counts, Upper Level counts and 30-minute Parking.

Level 2

- EnSight FLI Camera to monitor Level counts
- Interior wayfinding Sign with L2 count and Upper level Counts

Level 3

- EnSight FLI Camera to monitor Level counts to the roof

Other Clients of Note:

Hotel del Coronado

DOSTART DEVELOPMENT COMPANY, LLC

CENTERCAL PROPERTIES, LLC

WINCOME HOSPITALITY

OhioHealth

SAN MANUEL CASINO

PARK CITY 1884

EnSight EcoSystem Overview

The EnSight Ecosystem is designed with simplicity and flexibility at heart. By utilizing the power of deep learning and neural network technology, we've built a new parking guidance solution to bring your parking into the future. Based on a smaller hardware footprint, we've cut out complexity and replaced it with intelligent technology. The result? A better, simpler parking experience.

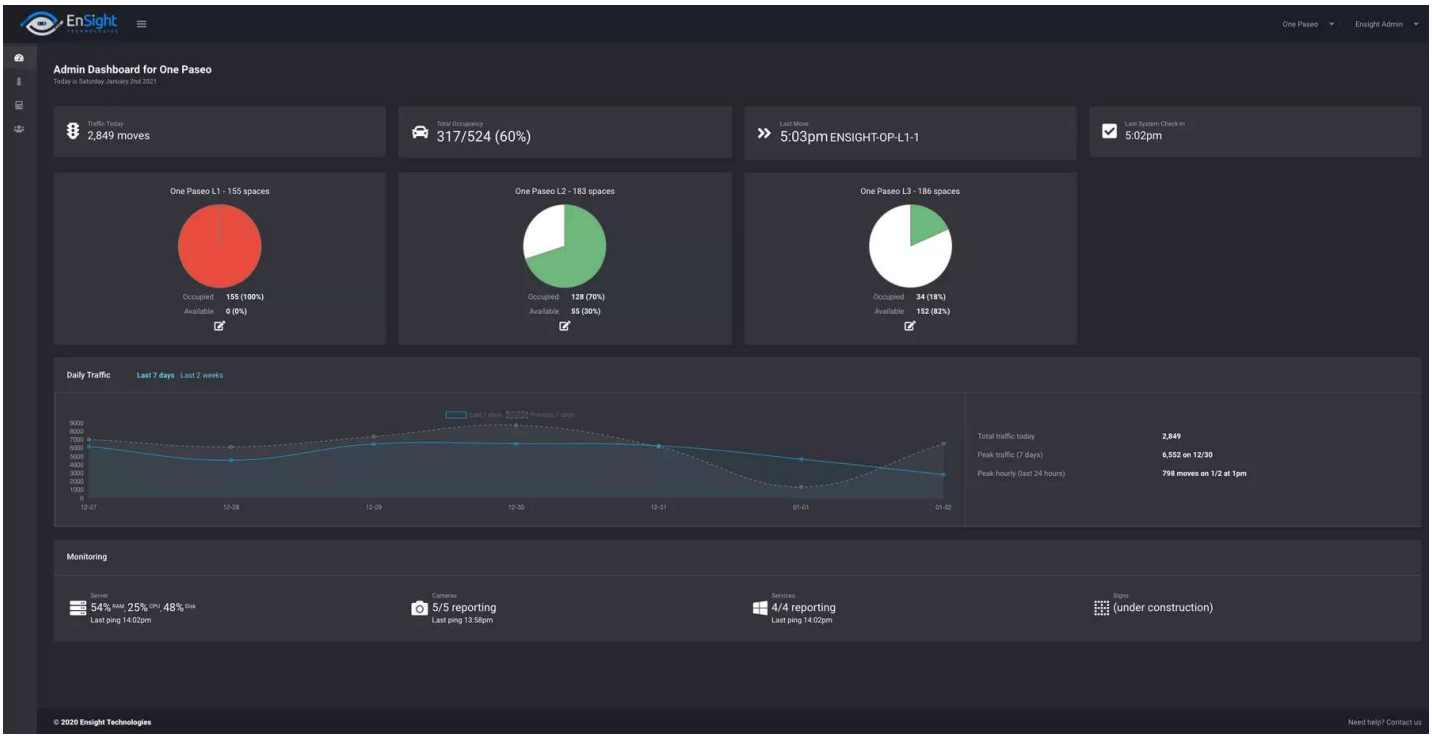
DIAGRAM OF THE ENSIGHT ECOSYSTEM

The EnSightFul Portal

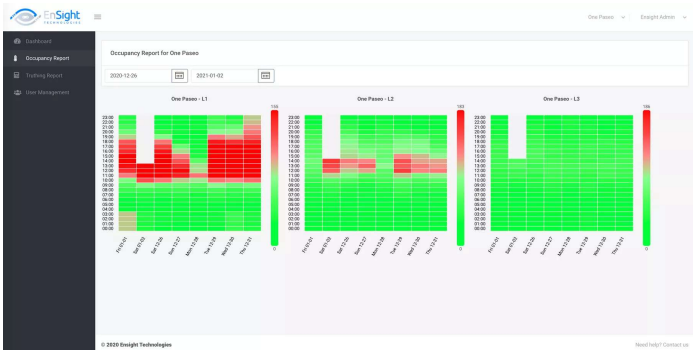
At the center of the ecosystem is our intelligent software that communicates to the local site to pull data from all of your hardware and API integrations. This data is compiled into a centralized, online cloud management portal called EnSightful.

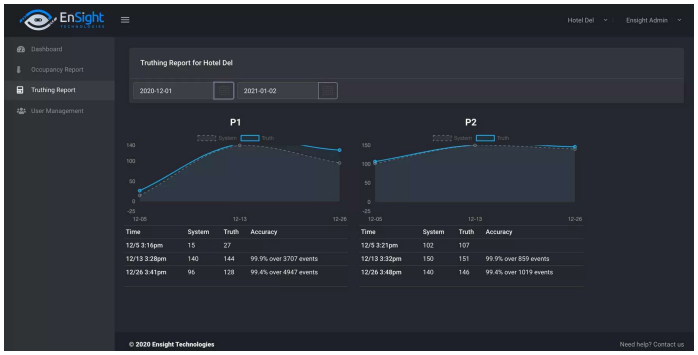
The parking guidance Ecosystem starts with a site server located that employs an Aggregator software to connect to all hardware devices on-site. The Aggregator runs the video feed(s) for the configured cameras through EnSight's Fluid Learning Intelligence (FLI) engine which runs on the same server. FLI will do all processing needed to detect and count cars and moving objects that enter or exit through the defined field of view. The Aggregator detects applicable counts from cameras and sensors, logs the event and images, then adjusts the counts on all configured LED signs. The data is stored, and results are pushed to the EnSightful Portal ran on the Azure cloud.

EnSightful will receive data from the server(s) located on-site via a network connection with simple internet access. EnSightful utilizes user accounts and profiles so that access to the data that can be viewed or edited can be controlled for each location. The EnSightful Portal will also receive and display operational information, as well as alerts (if configured) via email is there is an issue with the count hardware. EnSight will monitor and receive alerts when hardware issues are detected as part of the Software and Support Services Agreement (SSSA).



ENSIGHTFUL MAIN DASHBOARD (DARK MODE)



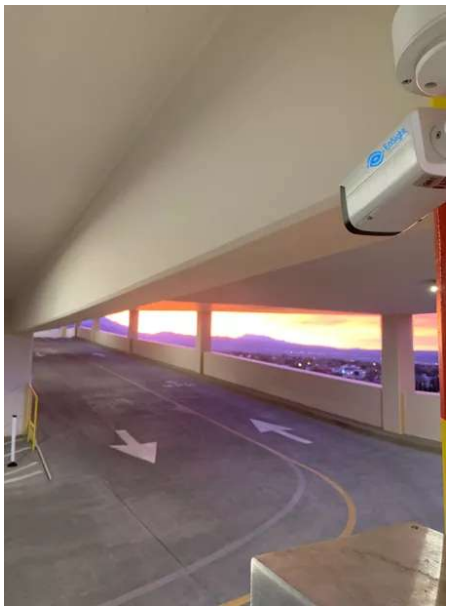


OCCUPANCY REPORT (LIGHT MODE) and TRUTHING REPORT (DARK MODE)

EnSight TECHNOLOGIES

Intelligent Cameras powered by FLI

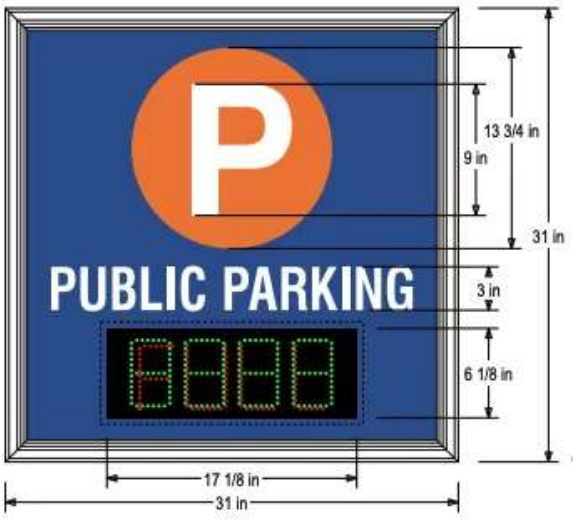
Rethinking the way you count parking occupancy, we use the power of our neural network-based engine, FLI, which enables our cameras to accurately track parking counts. Since EnSight develops their own tracking, scanning and detection models, EnSight has the ability to continuously improve and fine tune our core engine, FLI. Over time, FLI will get smarter and more accurate.



FLI Counting Car Software and Ramp Camera

Dynamic signage

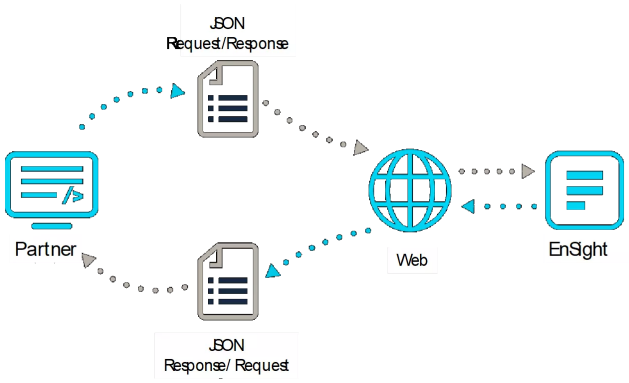
Guide your drivers towards a better parking experience. Driver-friendly parking count displays show accurate occupancy in an instant. Below are the sample sign designs based upon the mock ups in the RFP.



EnSight TECHNOLOGIES

API integration

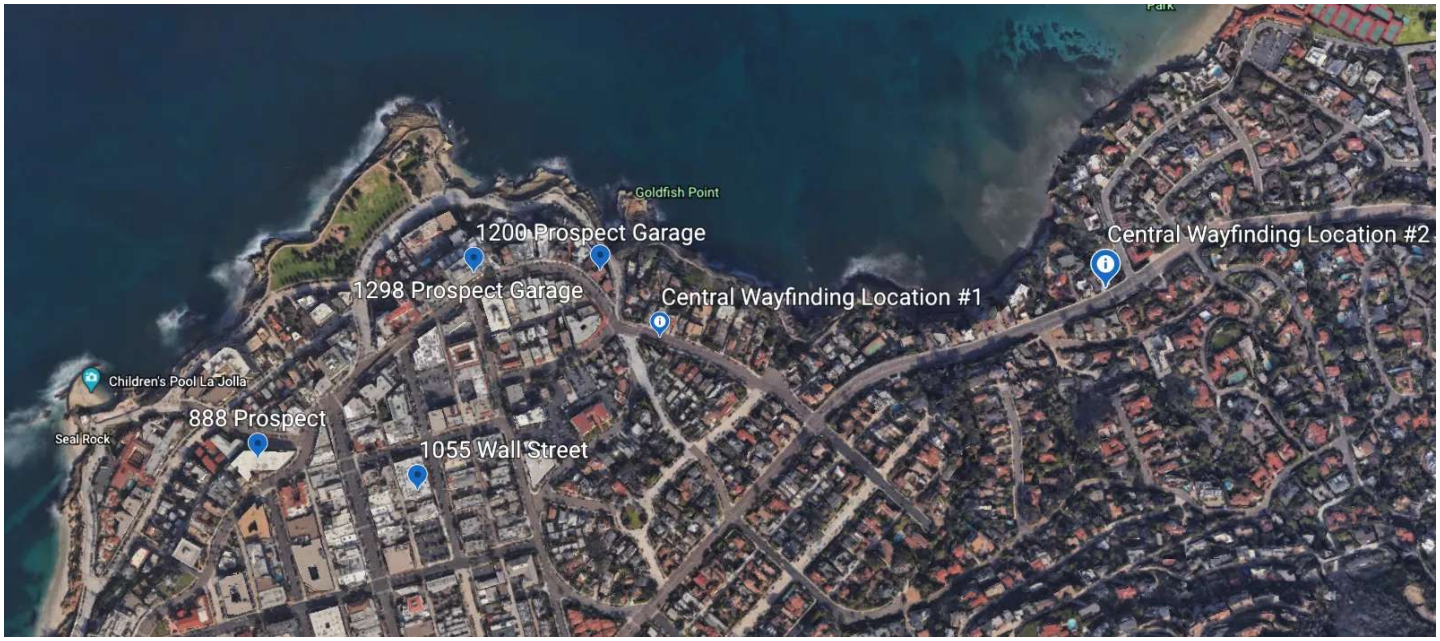
Enable all your parking systems to move together. The EnSight API is built with REST + JSON simplifies the way we interact with third parties. Our API allows us to share or expose our data, pulling external data into EnSightful or both. The API allows can be configured for push and pull in either near real time or scheduled durations.



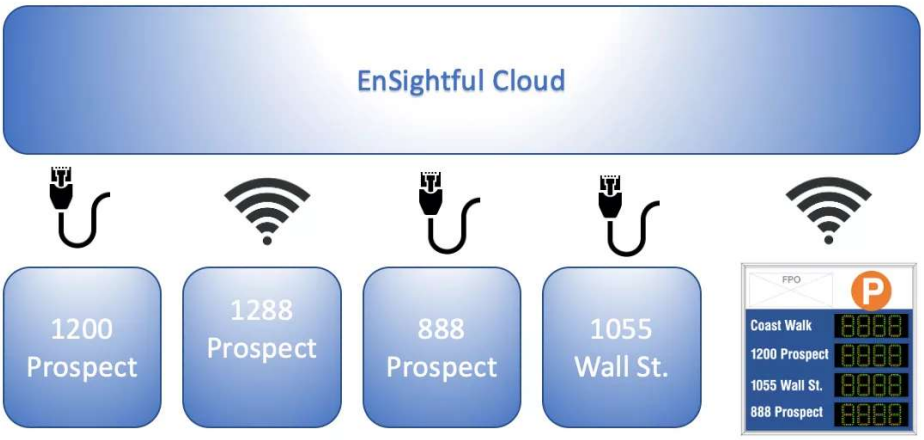
La Jolla Village Project Scope

This section will provide a detailed scope of the project for La Jolla. The total project consists of 5 separate, but integrated components:

1. 1200 Prospect Garage
2. 1298 Prospect Garage
3. 888 Prospect Garage
4. 1055 Wall Street Garage
5. Centralized, solar powered wayfinding sign



Each of four garages will count cars using a single camera connected to the EnSight Edge server. While counting locally the available spaces will be sent to the signs via a low voltage wired connection. The system will run locally independent of internet access. Internet is required to get count data from the servers to the EnSightful Management portal for live and historical count reporting as well as aggregate all space availability by garage. The aggregated counts will then be pushed from the cloud wirelessly to the main, centralized wayfinding sign. Below is an architecture diagram of the system connections.

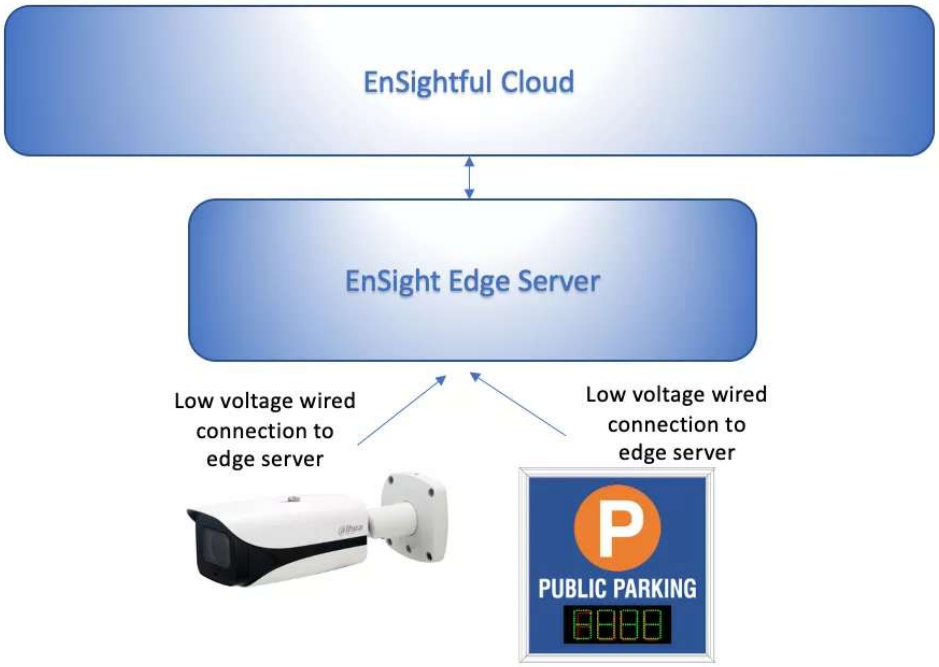


Internet connection Approach for Each Location

Internet connection existing at site. EnSight to patch into existing router.

No Internet. EnSight to provide LTE cellular device

Each garage location will have the same configuration, but different sign packages which will be described by location on the following pages. Below is a summary of the site specific set up with a camera and sign connection to the EnSight Edge Server.



1200 Prospect

The proposed scope for the 1200 Prospect:

- 1- EnSight Edge Server to perform local processing and to push data the EnSightful cloud via internet connection
- 1- FLI Camera
- 1 - Blade mounted dual sided Space availability sign.
- Internet connection provided by the site.
- Conduit and wiring to camera and sign.

1298 Prospect

The proposed scope for the 1298 Prospect:

- 1- EnSight Edge Server to perform local processing and to push data the EnSightful cloud via internet connection
- 1- FLI Camera
- 1 - Wall mounted single sided Space availability sign.
- 1- Industrial LTE Connection kit.
- Conduit and cabling to camera and sign.

*Sign Not to Scale. Dimensions of quoted sign 31”Hx31”W. Sign to be single sided.

888 Prospect

The proposed scope for the 888 Prospect:

- 1- EnSight Edge Server to perform local processing and to push data the EnSightful cloud via internet connection
- 1- FLI Camera
- 1 - pole mounted (Post Mount) dual sided Space availability sign. EnSight will core from building to sign location for dedicated connection to the sign avoiding solar power for more reliable uptime.
- Internet connection provided by the site.
- Conduit and wiring to camera and sign. EnSight will piggy back off parking equipment conduits that home run to network room.

1055 Wall Street

The proposed scope for the 1055 Wall Street:

- 1- EnSight Edge Server to perform local processing and to push data the EnSightful cloud via internet connection
- 1- FLI Camera
- 1 - Blade mounted dual sided Space availability sign.
- Internet connection provided by the site.
- Conduit and wiring to camera and sign. EnSight will piggy back off parking equipment conduits that home run to network room.

*Sign Not to Scale. Dimensions of quoted signs 31”Hx31”W. Sign to be double faced for bi-directional viewing

Centralized Wayfinding Sign

The proposed scope for the Centralized Wayfinding Sign

- 1- four insert sign to display space availability for each garage.
- 1- standard two leg pole mount kit to support weight of sign (Base Mount)
- 1 - Solar kit with mounting pole, batteries and battery housing.
- 1- Industrial LTE Connection kit

EnSight will work with the client on exact location for the sign. Based upon final location, if a single pole mount is deemed necessary, EnSight will work to provide optional mounting approaches to client. EnSight is also flexible in the signs that they integrate with and can provide options for edge to edge variable message boards, if La Jolla wants to look at options beyond a digital insert sign board.

Project Plan and Performance

Prep and Installation

Prior to mobilizing on-site, EnSight and the customer will agree upon the functional specification of the system and all use case for how the system will operate.

Once the functional specification is agreed to, EnSight will order all the equipment for the project. The Equipment arrives at the EnSight Office where it is programmed and undergoes factory acceptance testing. Once configured, the installation start date will be agreed to with the customer.

EnSight will mobilize an Install team of two. For a project this size, install should take approximately 1 week per location considering the garages are operational.

Commissioning

Once all of the equipment is installed the commissioning process begins. Commissioning consists setting the fields of view for all cameras, installing the FLI Software module for counting, confirming all cameras are generally counting and pushing the data to Aggregator and the rough count data is being acknowledged by the signage, and the data is being pushed to the EnSightful portal. During commissioning the signage will say “OPEN,” count data will be pushed to the signage on the back end to confirm connectivity, but we won't push counts until the accuracy has been fine tuned and approved by the customer.

Fine Tuning

Once the system is commissioned, fine tuning begins. During Fine Tuning (typically 2-3 weeks) our team tests and audits the system results. Once accuracy rates are optimized, EnSight will agree on a go-live date with the customer, where the signs will be turned on to display parking occupancy. During go-live EnSight will have a resource on-site. Go-live monitoring on-site typically last 2-5 days.

Scope and Pricing

Below is a pricing break out to model the two year capital expenditure and the ongoing monthly software and support services agreement ("SSSA") per building following year two. The SSSA will be billed annually to the building owners after year 2.

La Jolla Village Pricing Intial Project Price	
Location	**2 year Project Price**
1200 Prospect	$ 18,190
1289 Prospect	$ 16,200
888 Prospect	$ 20,290
1055 Wall St	$ 16,990
Wayfinding Signage	$ 24,720
Total Price	**$ 96,390**

Project will be billed on a milestone basis:

- 60% deposit due upon signature of contract
- 30% due a upon installation completion by site
- 10% due upon substantial completion of the project

Below represents the Monthly SSSA which begins upon start of year 3 and will be billed to responsible party.

La Jolla Village Pricing	
Location	**Monthly Reoccuring SSSA Fee per location**
1200 Prospect	$ 425
1289 Prospect	$ 425
888 Prospect	$ 425
1055 Wall St	$ 425
Wayfinding Signage	$ 250

SSSA Includes:

- Cloud License for EnSightful Portal
    - EnSight will provide access to the EnSightful cloud Portal. From here users will be able to visualize a live dashboard of counts and run historical reports.
    - Includes all portal upgrades planned through EnSight's software releases.
    - Access to 40 hours of development time for reports and data visualization. If the request is determined to take more that the hours allocated herein, EnSight will produce a Request for Functionality Document ("RFF") with the level of effort beyond the annual hours
- EnSight Fluid Learning Intelligence (FLI) Camera Licenses
    - Software license to run EnSight's FLI software. License includes all new releases of the FLI module to enhance counting logic and predictive analytics.
- Remote Monitoring and Support
    - Access to EnSight help desk for daily remote support
    - Monitoring hardware and software devices.
    - User refresher training on the EnSightful Portal and access to the EnSight training library
- Quarterly Preventative Maintenance
- Extended 5 year equipment warranty. Excludes all solar devices.
- Standard API Module

Proposal Assumptions

Below are base proposal assumptions and exclusions.

- Customer will assign a project manager on their end.
- Customer will help coordinate garage access and safe working conditions.
- For garages with existing internet the customer to provide adequate internet connection and speed per EnSight Specification but no less than 15Mbps up and 15Mbps down.
- Solar powered equipment is never as reliable as direct power. During winter months, there is a possibility and likelihood of outages to the sign during mutli-day periods without sun. EnSight will provide a spare set of charged batteries.
- Proposal does not account for any rework or remobilization caused by 3rd parties. Such events will be billed at T&M.
- Both LTE devices are priced with a 10gb plan. LTE service fee per required location will be billed annually in advance to the customer.
- Annual Software and Support Services Contract required after year 2 for a 5 year term minimum to ensure Integrity, accuracy rates, and upkeep of the camera counting system.

Exclusions:

- Excludes Union Labor and any prevailing wage rates
- Overnight work
- Lifting equipment will be billed back at actuals
- Scanning or X-Raying
- Bonds, permits, certifications, engineered drawings, foundation design, wind loading studies, etc.